

Water Right Number 2254-3

1. Considered MAY 21, 1975
2. Name of Applicant JAMES H. COLE
3. Post Office Address HUDSON
4. Amount of Water claimed 2.1
5. Source of Water supply GROUND WATER 49' WELL
6. Water to be used for IRRIGATION

Acres to be irrigated 150

7. Water to be diverted and used in LINCOLN County
about W EDGE miles of HUDSON

8. Proof of Publication

Received 5-19-75

Not Received _____

9. Application

Approved _____

Subject to _____

Not Approved _____

Action Deferred _____

10. Remarks:

WATER RIGHT APPLICATION APPROVAL

The Water Resources Commission hereby approves Water Right Application No. 2254-3
JAMES COLE HUDSON
 (Applicant) (Post Office Address)
SOUTH DAKOTA 57034 With the following modification:
 (State)

The irrigation well approved under this Permit will be located near domestic wells and other ~~irrigation~~ wells which may obtain water from the same aquifer. The irrigation well owner, under this Permit, shall control his irrigation withdrawals so there is not a reduction of needed water supplies in existing domestic wells or in ~~irrigation~~ wells having prior water rights.

Date of first receipt of application APRIL 28 19 75
 Date of return to applicant for correction, amendments or changes required APRIL 18 19 75
 Date of receipt of corrected application APRIL 28 19 75
 Approved MAY 21 19 75 Recorded in Book 13 Page 298
 WATER RIGHT PERMIT NO. 2254-3

The Water Resources Commission hereby grants and issues this Water Right Permit No. 2254-3 authorizing the construction of the water use system and the putting of water to beneficial use as stated in the Application and as modified in the Water Right Application approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is APRIL 11 19 75
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before NOVEMBER 21 19 77
3. The whole of said work is to be completed on or before MAY 21 19 80
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is MAY 21 19 83
5. The water appropriated shall be used for the purpose of IRRIGATION
6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.
7. The amount of the appropriation herein granted shall not exceed 2.1 cubic feet per second; neither shall it exceed the capacity of the above described water supply system, nor shall it exceed the amount of water needed for beneficial uses served, and if for the irrigation purposes said appropriation must be limited to not more than 3 acre feet per acre per year and be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied for irrigation on or before MAY 21 19 83; said water to be used during the following described annual period: APRIL THRU OCTOBER

Witness my hand this 28TH day of MAY 19 75

WATER RESOURCES COMMISSION

By Wm. W. Brulce
 Acting Chief Engineer, Executive Officer

Certificate of Construction Issued _____ 19 ____

Water License Issued _____ 19 ____

ORIGINALLY
REC'D. 4.11.75Map No. 1646.3 Water Division No. 3 BIG SIOUX RIVER District 15
(Block to be filled by the Engineer for the W. R. C.)

APPLICATION FOR PERMIT

RECEIVED
APR 28 1975
8:26STATE WATER RIGHTS COMM
PIERRE, SOUTH DAKOTA

To appropriate Water within the State of South Dakota

(NOTE - Draw a line through items not applicable.)

1. Name of Applicant James Cole
Post-office address Nelson State South Dakota
If a corporation show date and place of incorporation _____
2. Method of accomplishing work (contract, employment of others, or by direct labor) Direct Labor
3. Name of diversion work James Cole Irrigation Project #1
4. Amount of water claimed (cubic feet per second) 2.1
5. Source of water supply Well
6. Location of point of diversion 1270' N 45° E of SW corner Sec 13-96-48

- County Lincoln
7. Annual period or periods during which water is to be used April through October
8. Use to be made of water (irrigation, industrial, municipal, commercial, recreation, etc.) Irrigation
9. For irrigation use, Total number of acres to be irrigated 150

List below each forty acre subdivision, or lot, or fraction thereof and show number of acres to be irrigated in each.

Land Description	No. Acres Irr.	Land Description	No. Acres Irr.
<u>SW 1/4 of SW 1/4 Sec 13-96-48</u>	<u>38</u>		
<u>SE 1/4 of SW 1/4 Sec 13</u>	<u>36</u>		
<u>NW 1/4 of SW 1/4 Sec 13</u>	<u>36</u>		
<u>NE 1/4 of SW 1/4 Sec 13</u>	<u>40</u>		

Attach sheet if more space is needed

10. Time required to complete construction of water supply system Five years. Additional time required to complete application of water to the proposed beneficial use three years.
11. Choice of newspaper for Notice of Intent to Appropriately Water publication Three Star Sioux Valley News
12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source:

well with electrically driven turbine pump

B. Works proposed to transport water to place of use.

closed conduit

C. Works proposed to apply water to beneficial use.

Center Pivot Irrigation MachineEstimated Total Cost \$40,000Attachment: (Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map.)
(See instructions concerning preparation.)

STATE OF SOUTH DAKOTA

County of BrookingsI, James H. Cole, the applicant, certify that I have read the foregoing application and have examined the attached map and that the matter therein stated is true and that I intend, if unable to complete the necessary constructionSigned James H. ColeSubscribed and sworn to before me this 24 day of April 1975

Notary Public (or other qualified official)

NOTICE OF WELL CONSTRUCTION

WELL CONSTRUCTION

Location of well: 1/4 1/4 Section Township Range

Well owner James Calk (Name) Hudson (Address)

Date well drilling completed June 75 Purpose of well (domestic, irrigation, municipal, industrial, other)

Layers, top to top in foot	Description of layer
1 - 4	Top Soil
4 - 2.5	Fine Gravel
2.5 - 3.7	Coarse Gravel & Rocks
3.7 - 4.5	Well Grained Blue
4.5 - 4.9	Gravel

Depth to top of water producing aquifer 30 ft.
Depth to static water level 30 ft.
Name of producing aquifer (if known) _____
Total depth of drill hole 149 ft.
Depth to bottom of casing 49 ft.

Casing Information: In the space below show kind, size, weight, lengths per diameter, etc., for production casing and surface casing, if used.

Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.

Screen information in the space between casing perforations.

If a flowing well, flow of completed well _____ O.P.H.

A A A Oil Co
Name of Drilling Contractor

Company name and size of pump W. C. C. Pump Co. _____ G.P.M.
Type of pump W. C. C. Pump Co. Capacity of installed pump 250
Depth of pump placement _____ ft., Date of pump installation June 75

WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

measuring tube, when installed _____ ft., tube diameter _____.

On some wells an air-tight _____
WELL CONSTRUCTION STANDARDS.
Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____,
tube material _____.

Name of Pump Installation Contractor

AAA WELL CO.
Paul C. Worn
123 Lakovlow Court
PIERRE, S. DAK. 57501

NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Location of well _____ 1/4 _____ 1/4 _____ Section _____ Township _____ Range _____
 Well owner James Cole (Name) Hudson & Robt (Address)
 Date well drilling completed 17 June 75 Purpose of well _____ (domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer
1-4	Top Soil
4-6	clay
6-2.5	Sand & Gravel
2.5-3.9	Gravel with Shale
3.9-4.5	Gravel
4.5-4.7	Shale

Attach sheet if more space is needed

Depth to top of water producing aquifer 2.7 ft.
 Depth to static water level 2.9 ft.
 Name of producing aquifer (if known) _____
 Total depth of drill hole 4.7 ft.
 Depth to bottom of casing 4.7 ft.

Casing information: In the space below show kind, size, weight, length, per diameter, etc., for production casing and surface casing, if used.

32 ft 16" A.C. Cement

Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.

15 ft 1 1/2" Johnson Well Screen

If a flowing well, flow of completed well _____ G.P.M.

AAA Well Co
 Name of Drilling Contractor

(2) PUMP INSTALLATION

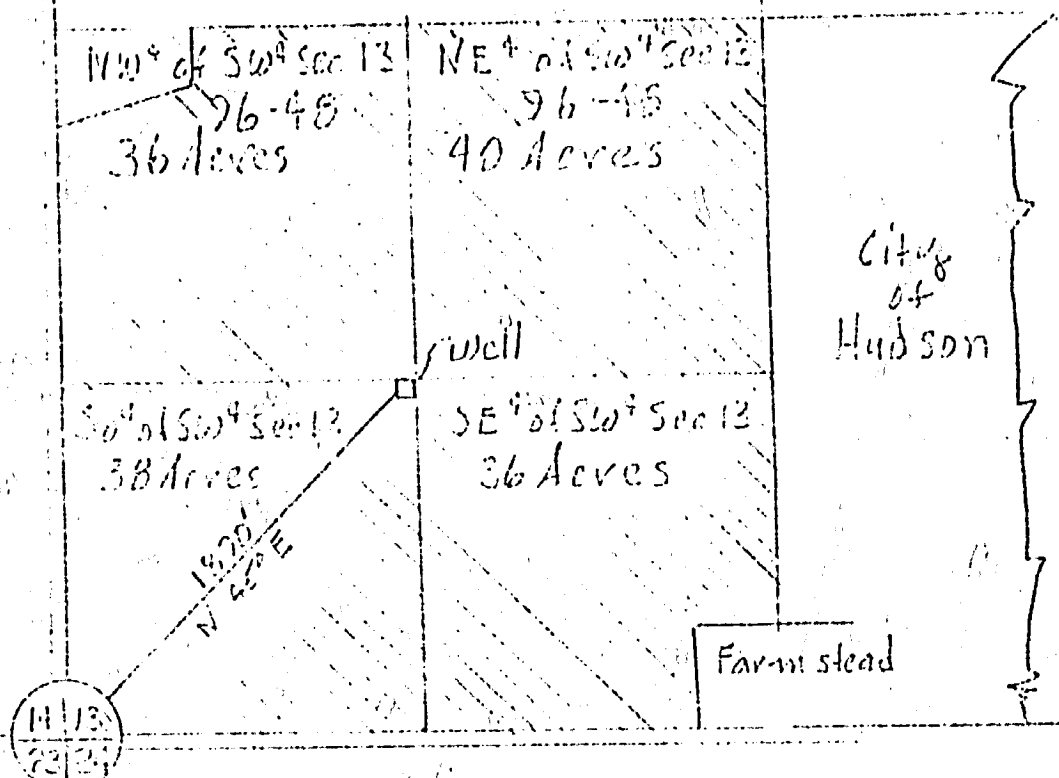
Company name and size of pump Valley 6" HP 7 1/2
 Type of pump sub-turbine Capacity of installed pump 350 G.P.M.
 Depth of pump placement _____ ft., Date of pump installation June 75

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____, tube material _____.

Paul C. Worn
 AAA WELL CO.
 Paul C. Worn
 123 Lakeview Court
 PIERRE, S. DAK. 57501



Point of Diversion - 1870' N 45° E
of SW corner sec 13 - 96-48
Cross-hatch indicates irrigated area
Scale - 8" = 1 Mile

JAMES COLE
IRRIGATION PROJECT #1
Hudson South Dakota Lincoln County

Acres Irrigated - 150
Water Claimed - 2.1 cfs

Surveyor's Certificate

I, John L. Wiernsma, do hereby certify that
this map identifies a reasonably accurate
recovered of the land of:

James Cole

Hudson South Dakota

Drawn by J.L.W.

John L. Wiernsma

Black Mt. S. Dak
5/10/66

4-18-79

P.E. #1916

MAP NO 1646-3 APP NO 2254-3

12. Principal Features of the Proposed Water Supply System (continued.)

D. Well Information or Estimates.

- (1) Drill Hole, Diameter 18", Depth 49'
- (2) Casing, Type Steel (wood, concrete, steel, etc) Diameter 16" Thickness 3/16"
- (3) Perforated Screen.
Type Continuous slot, Diameter 16", Length 10'
- (4) Gravel Pack, Thickness 1", Length of gravel pack 20'

E. Dugout Information or Estimates.

- (1) Surface dimensions _____, Depth _____

F. Fill out for Either a Well or a Dugout.

- (1) Water Bearing Materials. (Please attach a copy to test well log if available.)

Character of Water bearing materials Hard Sand & Gravel

Depth to top of water bearing material 20'

Depth to bottom of water bearing material 49'

Thickness of water bearing material 29'

Depth to water (ground surface to water level) 20'

- (2) Distance to nearest existing household or livestock watering wells.

On some owner's property 90 rds. On property owned by others 95 rds.

G. Water Storage Dams.

If the proposed water use system contains one or more water storage dams, please show in the space below, the height, maximum water depth, surface area and storage capacity of each storage dam. The location of each water storage dam should be shown on the water right map.

James H. Cole
Signature of Applicant

April 4, 1975

Mr. James H. Cole
Hudson
South Dakota 57034

Dear Mr. Cole:

Enclosed please find a copy of the report of analysis of your sample #75-201, submitted here March 26. This original copy is yours to keep.

You will also find enclosed a copy of Extended Circular 654 with the quality of this water for irrigation purposes approximately designated by the encircled red cross on the outside back cover. You will note that it is quite good water from its low to medium total salt content and very low sodium proportion.

We have received your WI-1 form and a copy of this letter, plus the WI-1 form plus a copy of the water analysis are being forwarded to the State Conservation Commission. You should have no difficulty irrigating with this water, but if there is any problem, please get in touch with someone in the Water Resources section or the Plant Science Department.

Sincerely yours,

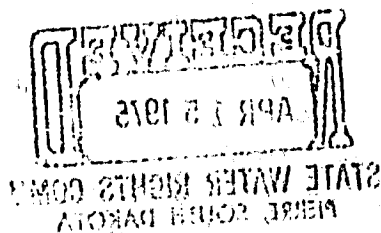
L. O. Fine

L. O. Fine
Water Quality Lab

LOF:MRB

Enclosures

cc: State Conservation Commission
Larry Tidemann, Lincoln County Agent
Darrel Pahl



Conservation
Commission
Form WI #1

STATE CONSERVATION COMMISSION
SUPPORTING INFORMATION
FOR APPROPRIATION OF GROUND WATER IN ACCORDANCE
WITH SDCL 46-6-3 AS AMENDED

(This Form Required for Proposed Well Irrigation Only)

FOR COMMISSION USE ONLY

Irrigation System: _____

Water Quality: _____

Soils Capability: _____

Approved: 11/18/11
411/1/2/11

Disapproved: _____

NAME: James H. Cole

ADDRESS: Hudson

COUNTY: Lincoln

LEGAL DESCRIPTION

1. WELL LOCATION: Center of SW $\frac{1}{4}$, Sect. 13, Twp. 96, Range 48
2. AREA TO BE IRRIGATED: SW $\frac{1}{4}$, Sect. 13, Twp. 96, Range 48

TYPE OF IRRIGATION

3. GRAVITY SPRINKLER (Indicate Type): Center Pivot, Water Drive
4. CROPS TO BE IRRIGATED: Corn

LAND CAPABILITY FOR IRRIGATION

5. PERCENTAGE OF SLOPE: 0-2%
6. PHYSICAL SOILS CLASSIFICATION FOR IRRIGATION: Alsester Silty Clay Loam
Tutake Family 1.0, Graceville Silty Clay Loam Tutake Family 0.5

WATER QUALITY (TO BE COMPLETED BY COMMISSION)

7. SAMPLE NO.: 75-201
8. SALINITY: EC = 541 μ mhos/cm (medium)
9. SODIUM: SAR = 0.24 (low)

I do hereby certify that a chemical analysis of the ground water to be
acquired for irrigation from South Dakota State University and:

the land capability for irrigation information has been acquired from

Lincoln County A.S.C. office

and:

that the legal description for the location of the well and land to be
irrigated is true and correct.

James H. Cole

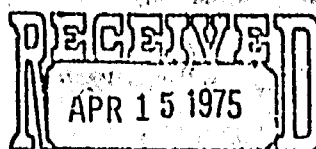
Subscribed and sworn before me this

12th day of April 1975.

A. L. [Signature]

Notary Public

(Title)



STATE WATER RIGHTS COMM.
PIERRE, SOUTH DAKOTA

REPORT OF ANALYSIS
Water Quality Laboratory
Water Resources Research Institute
South Dakota State University
Brookings, South Dakota 57006

Submitted by: James H. Cole
 Address: Hudson, SD 57034

Date Rec'd March 26, 1975
 Sample No. 75-201
 Identification 1011-
Box, Sec. 13, T 96N, R 48W

WATER ANALYSIS

Calcium (Ca)	80	ppm*	4.00	me/l**
Magnesium (Mg)	24	ppm	1.97	me/l
Sodium (Na)	10	ppm	0.42	me/l
Potassium (K)	2	ppm	0.06	me/l
Sulfate (SO ₄)	36	ppm	0.76	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	14	ppm	0.39	me/l
Bicarbonate (HCO ₃)	256	ppm	4.20	me/l
Carbonate (CO ₃)		ppm		me/l
Iron (Fe)		ppm		me/l
Fluoride (F)		ppm		me/l
Hardness (EDTA as CaCO ₃)		ppm		g.p.g.***
Alkalinity (Methyl Orange)	210	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	541	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	0.24			
Sodium	6.51	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	7.68			
Others:				

*ppm=parts per million
 **me/l=milliequivalents per liter

***g.p.g.=grains per gallon

COMMENTS: Total cations 6.45 me/l
 Total anions 5.35 me/l

By: Shirley Witten

Service Performed	Amount Due
Irrigation analysis	\$5.00
Make checks payable to: Water Quality Laboratory	
Cut along dotted line and return the lower portion with payment	
Sample No. <u>75-201</u>	Amount Enclosed \$
	Signed

12. Principal Features of the Proposed Water Supply System (continued.)

D. Well Information or Estimates

- (1) Drill Hole, Diameter 18", Depth 49'
(2) Casing, Type Steel Diameter 16" Thickness 3/16"
(3) Perforated Screen.
Type Continuous Slot Diameter 16" Length 10'
(4) Gravel Pack, Thickness 1' Length of gravel pack 2-0'

E. Dugout Information or Estimates.

- (1) Surface dimensions _____, Depth _____

F. Fill out for Either a Well or a Dugout.

- (1) Water Bearing Materials. (Please attach a copy to test well log if available.)

Character of Water bearing materials Mixed Sand & Gravel

Depth to top of water bearing material 20'

Depth to bottom of water bearing material 49'

Thickness of water bearing material 29'

Depth to water (ground surface to water level) 2-0'

- (2) Distance to nearest existing household or livestock watering wells.

On same owner's property 90 rds. On property owned by others 9.5 rds.

G. Water Storage Dams.

If the proposed water use system contains one or more water storage dams, please show in the space below, the height, maximum water depth, surface area and storage capacity of each storage dam. The location of each water storage dam should be shown on the water right map.

James H. Cole
Signature of Applicant

HARRY MILLER

HUDSON, S.D.



CALLED - 5-187-75

NOT PROTESTING AS
SUCH - WANTS TO BE
SURE CITY SUPPLY IS
PROTECTED

June 5, 1975

Joe E. Clarey, Jr.
Clarey Farm Service
Sibley, Iowa 51249

Dear Mr. Clarey:

Reference is made to your letter of protest to an irrigation well proposed by James H. Cole under Application No. 2254-3 and to be located in the SW $\frac{1}{4}$, Section 13, T96N, R48W.

The Commission considered your letter and also the concern of the City of Hudson when considering the application. The application was approved with the following qualification:

" The irrigation well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The irrigation well owner, under this Permit, shall control his irrigation withdrawals so there is not a reduction of needed water supplies in existing domestic wells or in wells having prior water rights."

In the type of aquifer the wells are to be in, it is not anticipated that interference will occur, but it is felt the qualification gives you safeguards against reduction of needed water supplies.

Should you have further questions, feel free to contact this office.

Sincerely,

BURTON F. JONES
Water Rights Specialist

BFJ/bw

Clarey FARM SERVICE

SIBLEY, IOWA 51249

FARM MANAGEMENT

RURAL APPRAISING

FARM REAL ESTATE

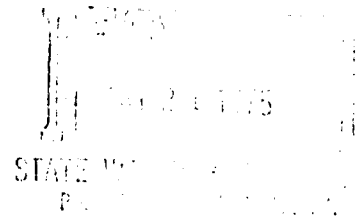
INSURANCE

JOE E. CLAREY, JR., A. F. M. MEMBER OF THE AMERICAN SOCIETY OF FARM MANAGERS AND RURAL APPRAISERS

PHONE 712 751-2356

May 19, 1975

Department of Natural Resource Development
Water Right Commission
Office Building #2
Pierre, South Dakota 57501



ATTENTION: Mr. Donald Driscoll, Chief Engineer

Dear Mr. Driscoll:

Reference is made to my letter dated March 24 to your office and your reply dated March 31.

I manage a farm owned by Mrs. Maynard Smith and Dr. Jerry Earll operated by Earl Clary and legally described as the NW $\frac{1}{4}$, Sec. 24, T96N R48W, Lincoln County, South Dakota. This land is adjacent to the town of Hudson and directly south of the proposed site for an irrigation well and water system.

I understand there will be a public hearing in your office at 2:30 Wednesday, May 21, 1975. As I will be unable to attend in person, I wish to file a protest by letter to the construction of this irrigation well.

Because we do not feel there would be an adequate supply of underground water, I believe that the necessary volume required for an irrigation system would seriously damage the house and livestock well on the premises that I manage. Our farm buildings are located approximately a half mile southeast of the proposed irrigation well site.

If findings by the State or Federal Agencies show that adequate water would be available for all parties concerned, we would then, of course, not protest the construction of the irrigation facility.

Sincerely yours,

Joe E. Clarey, Jr.
CLAREY FARM SERVICE

JEC:ab

cc: Mrs. Maynard Smith
Dr. Jerry Earll

2234-3

Publish first publication, on or before May 8, 1975

**NOTICE
INTENT TO APPROPRIATE WATER**

Pierre, South Dakota 57501

April 29, 1975

Notice is hereby given that James Cole

whose post office address is Hudson, South Dakota, has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use

2.1 cubic feet of water per second of time from the ground water through the James Cole Irrigation Project #1, the point of diversion of which is to be located in the

Center of the SW¹

of Section 13, Twp. 96N, Range 48W. Said water to be used for the purpose of providing irrigation on the following described land:

SW¹, Section 13, T96N, R48W

This application No. 2254-3 will be considered by the Water Resources Commission at their office at Pierre upon the 21st day of May, 1975, at 2:30 P. M. All interested persons may appear and be heard.

WATER RESOURCES COMMISSION

By:

**BURTON F. JONES
Water Rights Specialist**

BFJ/bw

cc: James Cole, Hudson, S.D. 57034

April 17, 1975

James H. Cole
R.R. #1
Hudson, South Dakota 57034

Dear Mr. Cole:

Your application dated April 10, 1975, for a permit to appropriate water from ground water through the James Cole Irrigation Project was received April 11, 1975 and has been duly filed under the temporary number of 2254-3. The application will be examined in regular order as soon as practical, after which you will be notified as to further action on your part.

Statutes provide that we charge \$8.00 for each application. Also, we are returning the aerial photo submitted with the application, with the request that you submit a map in accordance with the enclosed instruction sheet. Upon receipt of the above, processing of your application will proceed.

Sincerely,

BURTON F. JONES
Water Rights Specialist

BFJ/bw
Encl: As stated

March 31, 1975

Mr. Joe E. Clarey, Jr.
Clargy Farm Service
Sibley, Iowa 51249

Dear Mr. Clarey:

Reference is made to your letter dated March 24, 1975, in which you state that an individual may be planning to install three wells for irrigating three separate 160-acre units close to the Town of Hudson.

Up to the present, the Water Rights Commission has not received any water right applications proposing irrigation with ground water near Hudson.

The Water Rights Commission does hold open hearings before issuing irrigation permits. Objections to approval of such permits may be made orally at the hearing or by written letter or petition submitted to the Commission prior to, or at the public hearing.

Enclosed for your information are lists showing the steps necessary to make a water right application and to complete the process of obtaining a water right.

Sincerely,

Donald Driscoll
Chief Engineer
Water Rights Commission

DD:mb
Enc: As stated

"PROFESSIONAL FARM MANAGEMENT FOR HIGHER PROFITS AND A BETTER FARM"

Clarey FARM SERVICE

SIBLEY, IOWA 51249

FARM MANAGEMENT

RURAL APPRAISING

FARM REAL ESTATE

INSURANCE

JOE E. CLAREY, JR., A. F. M. MEMBER OF THE AMERICAN SOCIETY OF FARM MANAGERS AND RURAL APPRAISERS

PHONE 712 751-2356

March 24, 1975

Mr. Vern Butler
Department of Natural Resources
Pierre, South Dakota 57501

Dear Mr. Butler:

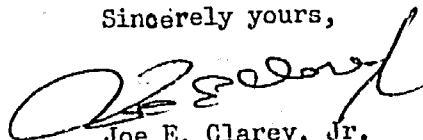
I am managing three farms near Hudson, South Dakota. One of these is described as the NW $\frac{1}{4}$, Sec. 24 and that portion of NE $\frac{1}{4}$ west of the railroad, Sec. 24, T96N R48W.

The tenant of this farm has advised me that an individual is planning to install three wells for irrigating three separate 160 acre units close to the town of Hudson.

As we do not feel there is adequate water in this particular area for irrigation, several people are quite concerned over their farm wells and I understand the town of Hudson is worrying about the future of their town water supply.

Please advise if your department holds open hearings before issuing irrigation permits and what the legal procedure is on objecting to such permits. This would seem to be an entirely different type of situation than irrigating in the Missouri River bottom where adequate water is available throughout the Missouri River Valley area.

Sincerely yours,


Joe E. Clarey, Jr.
CLAREY FARM SERVICE

JEC:ab

RECEIVED

MAR 26 1975

DEPT. OF NATURAL
RESOURCE DEVELOPMENT

THE AMERICAN SOCIETY OF FARM MANAGERS AND RURAL APPRAISERS awards the titles of ACCREDITED FARM MANAGER (A. F. M.) and ACCREDITED RURAL APPRAISER (A. R. A.) to those members who have had years of experience, are technically trained, have passed rigid examinations, and subscribe to a high code of ethics.

No. 2254-3Water Division No. 3 Big Sioux River

(Blanks to be Filled by the Engineer for the W. R. DISTRICT

APR 11 1975

STATE WATER RIGHTS COMM.
PIERRE, SOUTH DAKOTA

APPLICATION FOR PERMIT

To Appropriate Water within the State of South Dakota

(NOTE—Draw a line through items not applicable.)

1. Name of applicant James H. ColePostoffice address RR1 Hudson, County Lincoln, State S. D.~~I. If a corporation:~~~~(a) Name of same~~~~(b) Date and place of incorporation~~~~(c) Amount of capital stock~~~~(d) Amount paid in~~~~(e) Names and addresses of directors~~

(NOTE—A certified copy of articles of incorporation must accompany the application.)

II. Method of accomplishing the work and financial resources of the applicant:

(a) Method of accomplishing work (Whether by contract, ~~employment of others~~, or by direct labor)employment of others

(b) Cash on hand, \$

(c) Treasury stock, \$

(d) Bonds to be issued, \$

(e) Other resources, \$

2. Name of diversion work Irrigation Well3. Amount of water claimed 132 Acre ft. cubic feet per second 1.9 cfs 9.00 Gals. Per Min.4. Source of water supply Irrigation well5. Location of point of diversion Center of S.W. 1/4 Sec. 13 96/48on Lincoln bank Lincoln County.6. Annual period or periods during which water is to be used June, July, August

7. To be used for:

I. Irrigation or domestic use: Gravity, overhead sprinkling or combination system? sprinkler(a) Number of acres to be irrigated 132 acres.(b) Legal subdivisions to be irrigated SW 1/4 Sec. 13 96/48

(NOTE—A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Same must also be shown on accompanying map.)

(c) Statement as to domestic use (giving location, etc.) Irrigation of corn onSW 1/4 Sec. 13 96/48

-II- Stockwatering, mining, milling, power, fish culture, fire protection and public recreation:--

(a) Nature of use _____
Name any of the above uses claimed

(b) Amount of power to be generated _____ horse power.

Amount claimed for engine cooling _____

(c) Location of plant _____

(d) Method of developing power _____

(e) Point where water will be returned to stream _____

MAP NO 1646-3

8. Estimated cost of work:

(a) Head Gates, \$-----

(c) Fluming, \$-----

(e) Other structures

(d) Canal-earth, \$-----

(b) Pumping plant, \$8000

Rock, \$500

Total, \$8500

9. Description of diversion works:

I. Nature of works: (Reservoir, dam, ditch, flume, pumping plant, etc.)

pumping plant for irrigation

II. Dimensions of works:

(a) Dam: Height-----feet; length at bottom-----feet; length at top-----feet; thickness at bottom-----feet; thickness at top-----feet; slope at front water face-----; slope at back face-----

material used in construction-----

(b) Reservoir: Capacity when filled-----acre feet. Surface area at highwater mark-----acres.

DEPTH AT OUTLET-Feet	SURFACE AREA AT EACH DEPTH AT OUTLET--ACRES	FEET	ACRE-Feet CAPACITY

(c)* Head gate: Width-----feet; height-----feet; Material-----

(d) Canal: Total length-----miles.

LOCATION BELOW HEADGATE	DEPTH	BOTTOM WIDTH	WIDTH AT WATER-LINE	GRADE PER MILE
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet
At ----- Mile	----- feet	----- feet	----- feet	----- feet

(Give dimensions where reductions in size are made.)

10. Time required for completion of work-----years.

11. Time required for complete application of water to the proposed beneficial use-----years.

12. Choice of newspaper for publication of notice of intention to appropriate-----
Sioux Valley News, Canton, S.D.

STATE OF SOUTH DAKOTA

County of Lincoln

I, James H. Cole, being first duly sworn on my oath depose and say: That my relation to the above described undertaking is that of owner, that I have read the above foregoing statement, examined the map accompanying the same, and that I know of my own personal knowledge that the matters therein stated and shown are true.

Signed James H. Cole

Subscribed and sworn to before me this 16th day of April 1925

Notary Public (or other qualified officer.)

Remarks by State Water Resources Commission:

STATE OF SOUTH DAKOTA }
County of ----- } as.

Pierre, South Dakota, -----, 19-----

This is to certify that the foregoing application was received by the Commission at ----- o'clock
----- m. upon the ----- day of -----, 19-----

State Water Resources Commission

By:

Chief Engineer, Executive Officer

Number of permit -----

Date of first receipt of application -----, 19-----

Date of return to applicant for correction, amendments or changes required as follows: -----, 19-----

Date of receipt of corrected application -----, 19-----

Date from which applicant may claim right -----, 19-----

Approved -----, 19-----, Recorded in Book ----- Page -----

This is to certify that we have examined the foregoing application for a permit to appropriate water of the State of South Dakota, and we hereby grant the same as stated herein, subject, however, to the following limitations and conditions:

1st. The equivalent of at least one-fifth of the work above specified is to be completed on or before -----, 19-----

2nd. The whole of said work is to be completed on or before -----, 19-----

3rd. The limit of time for proof of beneficial use of water appropriated in accordance herewith is -----, 19-----

4th. The water appropriated shall be used for the purpose of -----

5th. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.

6th. The amount of the appropriation herein granted shall not exceed ----- cubic feet per second; neither shall it exceed the capacity of the above described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops in the exercise of the best husbandry; and further, said appropriation must be limited to not more than one-seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually

and beneficially applied for irrigation on or before -----, 19-----; said water to be used during the following described annual period:

Witness my hand this ----- day of -----, 19-----

State Water Resources Commission

By:

Chief Engineer, Executive Officer

Certificate of Construction Issued -----, 19-----

Water License issued -----, 19-----

9. (Continued)

III. Well Specifications

(a) Hole and casing

Size of drill hole or excavation 30", Depth 50'
 Type of casing asbestos cement
 (wood, concrete, steel, etc.)
 Size of casing 16", Thickness of casing 3/4"
 Length of casing 75'. If collection gallery, length, size and depth of
 gallery _____

(b) Screens

Type of perforated screen Johnson Wire Rap
 Size of perforated screen 16" (diameter) 15' (length)
 Thickness of gravel pack 13", length of gravel pack 50'

(c) Water Bearing Materials

Distance to water 20' Character of water bearing materials Coarse gravel and porous sand

 Thickness of water bearing material 40'

(d) Pump and Motor

Type of pump Turbine
 (centrifugal, propeller, mixed flow, etc.)
 Name of pump Workington, size 900 GPM
 Kind of motor electric
 (gasoline, electric, diesel, etc.)
 Horsepower 60 HP., Name of Motor U.S.

(e) Complete well

Capacity 900 GPM at drawdown of 8' Estimated cost \$8000.00

(f) Owner of land upon which well is located Tames H. Cole
 Name
Hudson, S.D.
 Address

(g) Distance to nearest existing wells

On same owner's property 120 rods. On property owned by others 150 rods

#2254-3
#2256-3
#3566-3

 **Department of
Water & Natural Resources**

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

February 17, 1989

James Cole
RR 1, Box 227
Hudson, SD 57034

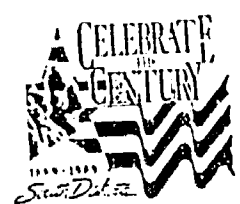
Dear Mr. Cole:

On October 6, 1988, the Water Management Board adopted rules to implement a 1988 law for application of chemicals through irrigation systems. The rules establish equipment standards, performance standards and installation requirements for irrigation systems that apply chemicals (fertilizers, insecticides, or herbicides) with irrigation water.

You have indicated on your 1988 Water Management Board Irrigation Questionnaire that you do apply chemicals with irrigation water. A copy of the new rules for chemigation are enclosed for your information.

The new standards include:

- * a check valve between the irrigation pump and the point of chemical injection;
- * a vacuum relief valve on top of the pipeline between the irrigation pump and the irrigation pipeline check valve;
- * a low-pressure drain on the bottom of the pipeline between the irrigation pump and the irrigation pipeline check valve;
- * a chemical injection line check valve between the chemical injection pump and the point at which the chemical is injected into the irrigation line; a second check valve is required if the chemical injection pump is not a positive displacement pump;
- * an interlock system which ensures that the chemical injection pump will stop whenever the irrigation pump stops;
- * an inspection port between the irrigation pump and the check valve on the irrigation line;

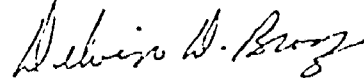


Each of these equipment requirements are discussed more thoroughly in Sections 74:02:09:05 through 74:02:09:10 of the enclosed rules. Appendix A contains diagrams of the arrangements of these anti-pollution devices.

The equipment must be installed according to the manufacturer's specifications, calibrated, and maintained in good working condition. All chemical product labels must be followed and warning signs must be posted. These rules also require reporting of all spills, accidents, and system malfunctions. A 24-hour telephone number is provided.

The chemigation rules contain notification and record keeping requirements. Prior to using chemigation, notification must be given to the Chief Engineer on the enclosed Form 1C. Information that must be provided in this notification includes the water permit or right number, the name, address, and telephone number of the water permit or right holder and of the system operator, and the legal description of the lands on which the system is located. A record of the name, quantity, dates and hours of each chemical applied must be provided to the Chief Engineer on Form 2C. A copy of this form is also enclosed for your information. It will be mailed with the annual irrigation questionnaire and must be returned with the questionnaire by the date specified. If you have any questions regarding these rules or need additional copies of the forms, please contact Susan Bowar, Water Rights Engineer (605-773-3352).

Very truly yours,



for JOHN HATCH, Chief Engineer
Water Rights Division

2254-3



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

October 9, 1997

Permit No. 3566-3

James Cole
29509 488th Ave.
Hudson, SD 57034

Dear Mr. Cole:

The investigation of your water use system, including the extent of application of water to beneficial use, as developed under Water Permit Nos. 2254-3 and 3566-3, has been completed. Your final water right document, the Water License, can now be issued. Upon licensing, the applicable portions of Water Permit No. 2254-3 will be incorporated into 3566-3.

Statutes require that we charge a \$50.00 fee for the investigation and issuance of the Water License. Upon receipt of the \$50.00 fee from you, we will begin processing your Water License.

Please remit fee to:
Department of Environment & Natural Resources
Water Rights Program
523 E. Capitol
Pierre, SD 57501-3181

South Dakota Water Law 46-5-30.1 requires that a permit holder may not divert water until the \$50.00 license fee has been paid. Please contact us if you have any questions.

Sincerely,

Cheryl F. Frost
Secretary
Water Rights Program
(605) 773-3352

NOTE: On check or money order, please specify your permit number. This will insure proper handling of the fee.

2254-3



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501 3181

JAN 07 1998

2256-3
3566-3

James Cole
29509 488th Ave.
Hudson, SD 57034

Dear Mr. Cole:

Enclosed are Water License Nos. 2256-3 and 3566-3. These are the final water right documents completing your process of obtaining a Water Right. Enclosed are Receipt Nos. 415519 and 415520 in the amount of \$50.00 each which you paid for the investigation and issuance of the Water Licenses.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the wells authorized by Water Right Nos. 2256-3 and 3566-3, 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.

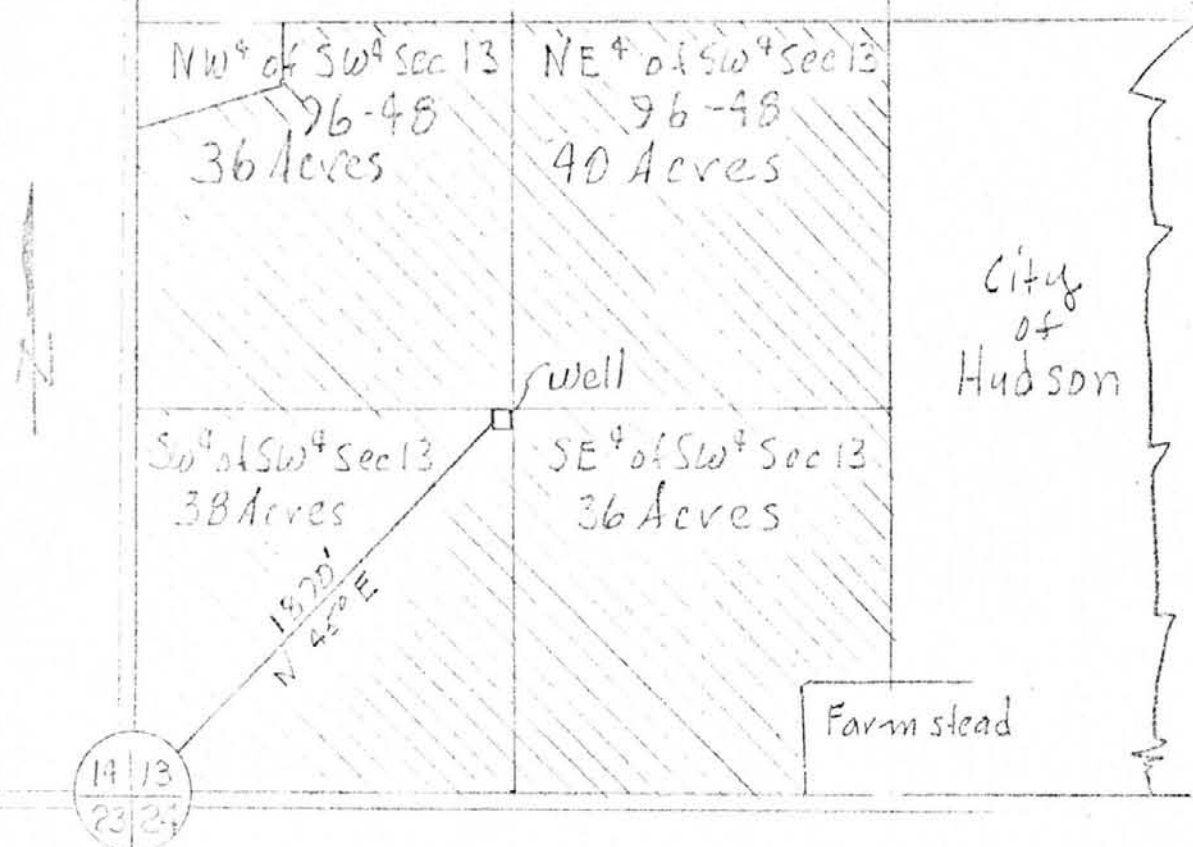
As long as you use the water beneficially, as stated in the Water Licenses, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
(605) 773-3352

ks
enclosures

NOTE: The applicable portions of Water Permit No. 2254-3 are incorporated into Water Permit No. 3566-3.



Point of Diversion - 1870' N 45° E
of SW corner sec 13 - 96-48

Cross hatch indicates irrigated area

Scale - 8" = 1 Mile

JAMES COLE

IRRIGATION PROJECT #1

Hudson South Dakota Lincoln County

Acres Irrigated - 150

Water Claimed - 2.1 cfs

Surveyor's Certificate

I, John L. Wiersma, do hereby certify that this map identifies a reasonably accurate record of the land of:

James Cole

Hudson, South Dakota

Drawn by J.L.W.

John L. Wiersma

Brookings S. Dak.
57006

4-18-74

P.E. #1916