

1. Considered January 25 19 77
2. Name of Applicant R. E. Ina and Scott Mahne
3. Post Office Address Watertown, S.D.
4. Amount of Water Claimed Two - 170' deep wells
5. Source of Water Supply irrig.
6. Water to be used for 312 maximum
7. Acres to be irrigated 8/2 ant acre feet
8. Water to be diverted and used in Watertown County
about 19 miles north of Watertown
9. PROOF OF PUBLICATION Received 12-30-77

Not Receive'

APPLICATION

Approved

Subject to

Not Approved

Action deferred 1-25-77 & 1-31-79

Sub 6/30/80

Priority

Date

Received 10-27-77 Application Complete (yes) no FEE 375⁰⁰

Remarks

Date information and/or
fee or corrected Application received _____
Period of Annual use _____

WATER
QUALITYReceived (yes) 11/7/77 no (APPROVED) CONDITIONAL (Circle one)W-1 Description same as application (yes) no Remarks

Disapproved

Returned

Diversion Point

Centers of NE¹ and SE⁴11-120-52

Lands to be irrigated

E 1/2 Section 11-120-52

WELL
LOGRemarks two nearly identical wells - have 3A form

Driller

Unknown

Licensed yes no

Depth

170' deep

MAP Map No. 3412-3 Map located in Water Right X Map file _____
 Type of Map Aerial Prepared by W. Nelson

+++++

REVIEWED This Application was reviewed within 30 days of date received, accepted as complete, Number assigned and written up for advertisement before the Board on Jan. 23, 1978.
Betty M. [Signature]
 (Signed)

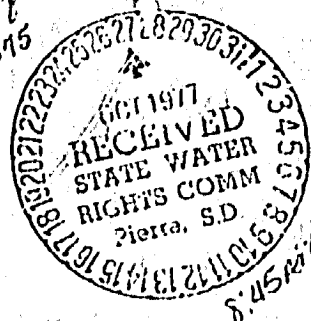
+++++

X PROTESTS Letters/Petitions in File - yes _____ no _____ Remarks _____

REMARKS Date
 F.F. & C Final Decision, including F.F. & C of Law were adopted _____
 OF LAW, Date
 FINAL Final Decision mailed to parties and/or parties notified that Final Decision
 DECISIONS was adopted _____
 ETC.

Remarks _____

REPRODUCTION: REDUCED 25% FILE NO. 3412-3

No. 4184-3Map No. 3412-3 Water Division No. 3 BIG SIOUX RIVER District
(Blanks to be filled by the Engineer for the W. R. C.)

APPLICATION FOR PERMIT

To Appropriate Water within the State of South Dakota

(NOTE—Draw a line through items not applicable)

1. Name of Applicant R. E. J. Ing & Scott Kahnk e.
 Postoffice address 405-5th A NW Waterloun, 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) Contract Direct Labor
3. Name of diversion work R. E. J. Ing & Scott Kahnk e. Irrigation Project #1
4. Amount of water claimed (cubic feet per second) 4.4
5. Source of water supply 2 nearly identical wells.
6. Location of point of diversion Well #1 - 1860' N 135° W of NE corner Sec 11-120-52
Well #2 - 1860' N 45° W of SE corner Sec 11-120-52
 County Grant
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 312

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>NW 1/4 NE 1/4 Sec 11-120-52</u>	<u>39</u>	<u>NW 1/4 SE 1/4 Sec 11-120-52</u>	<u>40</u>
<u>NE 1/4 " " " "</u>	<u>38</u>	<u>NE 1/4 " " " "</u>	<u>39</u>
<u>SW 1/4 " " " "</u>	<u>40</u>	<u>SW 1/4 " " " "</u>	<u>39</u>
<u>SE 1/4 " " " "</u>	<u>39</u>	<u>SE 1/4 " " " "</u>	<u>38</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 Appropriate Water publication Waterloun Public Opinion
12. Principal Features of the Proposed Water Supply System.
- A. Works proposed to divert water from its natural source. 2 wells with deep well turbines pumps.
- B. Works proposed to transport water to place of use. closed conduit
- C. Works proposed to apply water to beneficial use. center pivot irrigation machines

Estimated Total Cost \$ 100,000Attachments: 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, R. E. Kahnk e. the applicant, certify that I have read the foregoing application and have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction.Signed R. E. Kahnk e.Subscribed and sworn to before me this 13 day of Oct, 1922

Notary Public (or other qualified officer)

WATER RIGHT APPLICATION APPROVAL

The Water Rights Commission hereby approves Water Right Application No. 4184-3
RE, INA & ROSS KAHNKE 405 5TH AVE NW, WAT. RTOWN
 (Applicant) (Post Office Address)
SOUTH DAKOTA 57201 With the following modifications:
 (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 adequate domestic wells or in irrigation wells having prior water rights.

This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

Date of first receipt of application OCTOBER 27, 19 77
 Date of return to applicant for correction, amendments or changes required —, 19 —
 Date of receipt of corrected application NOVEMBER 7, 19 77
 Approved FEBRUARY 4, 19 82, Recorded in Book — Page —

WATER RIGHT PERMIT NO. 4184-3

The Water Rights Commission hereby grants and issues this Water Right Permit No. 4184-3 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 OCTOBER 27, 19 77
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before AUGUST 4, 19 84
3. The whole said work is to be completed on or before FEBRUARY 4, 19 87
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is FEBRUARY 4, 19 90
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 4.4 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 FEBRUARY 4, 19 90; said water to be used during the following described annual period: APRIL THRU OCTOBER

Witness my hand this 17TH day of MARCH, 19 82

WATER RIGHTS COMMISSION

By:

John Hatch
 (Chief Engineer, Executive Officer)

Certificate of Construction Issued —, 19 —

Water License Issued —, 19 —

2 nearly identical wells

Form 2A - Wells, Dugouts or Water Storage Dams (Supplement to form 2)

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

D. Well Information or Estimates

- (1) Drill Hole, Diameter 24", Depth 170'
- (2) Casing, Type SPCL (wood, concrete, steel, etc) Diameter 14" Thickness 1/4"
- (3) Perforated Screen.
Type Johnson, Diameter 14", Length 30'
- (4) Gravel Pack. Thickness 4", Length of gravel pack Entire length

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 0' to 3' cap soil; 3' to 105' mixed
yellow clay; 105' to 170' water bearing sands
mixed with lens of gravel; 170' to 180'
blue clay

Depth to top of water bearing material 105'

Depth to bottom of water bearing material 170'

Thickness of water bearing material 65'

Depth to water (ground surface to water level) 15'

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

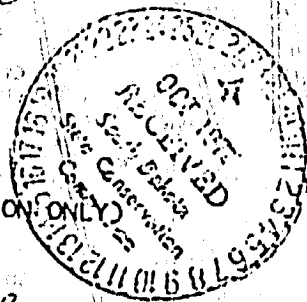
On same owner's property well #1 - 120 90
well #2 - 80 rds. On property owned by others 170 rds.

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.

RE Kahle
Signature of Applicant

STATE CONSERVATION COMMISSION
SUPPORTING INFORMATION
FOR APPROPRIATION OF GROUND WATER IN ACCORDANCE
WITH SDCL 46-6-3 AS AMENDED
(THIS FORM REQUIRED FOR PROPOSED GROUND WATER IRRIGATION ONLY)



NAME R.E. Ina, & Scott Kahne
ADDRESS 405-5th Ave N.W. Watertown South Dakota
COUNTY Grant

LEGAL DESCRIPTION

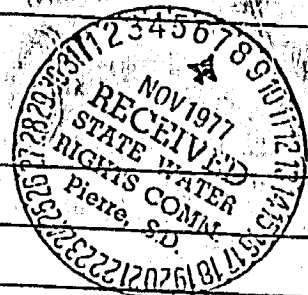
1. WELL LOCATION Center of NE² & Center of SE² Sec 11 - 120-52
2. LOCATION OF AREA TO BE IRRIGATED E² of Sec 11 - 120-52

TYPE OF IRRIGATION

3. GRAVITY _____ TOWLINE _____ CENTER PIVOT ☒ _____ GUN _____
4. CROPS TO BE IRRIGATED Corn & alfalfa

WATER QUALITY

5. SAMPLE NUMBER 77-1527
6. SALINITY (EC X 10⁶) 1032
7. SODIUM (SAR) 0.67
8. RESIDUAL SODIUM CARBONATE (meq/l.) 0.0



I do hereby certify that a chemical analysis of the ground water representative of that used to irrigate shall be acquired from South Dakota State University and; the soils information has been acquired from _____ Conservation District, County Extension office or Soil Conservation Service.

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

RE Kahne
APPLICANT'S SIGNATURE

SUBSCRIBED AND SWORN BEFORE ME THIS
18 DAY OF Oct 19 77

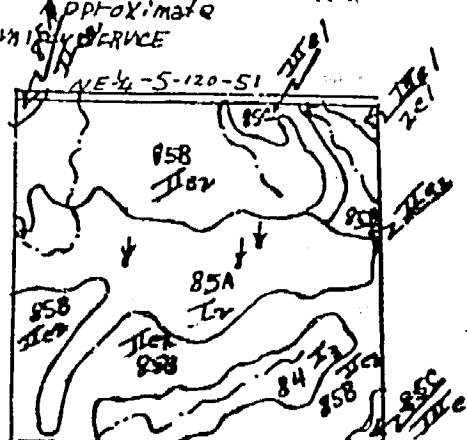
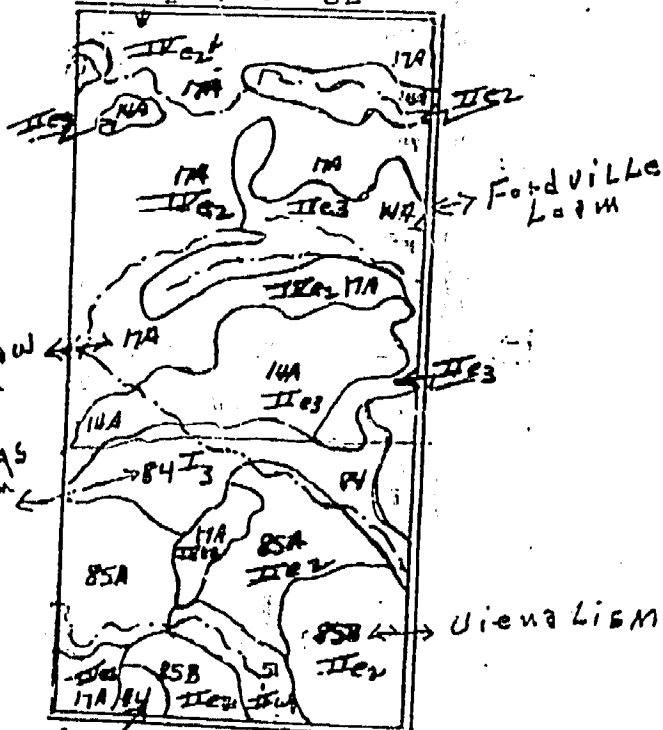
John Swalesma
(TITLE OR SEAL)

Albert J. Hoff
APPROVED

SOIL AND CAPABILITY MAP
 GRANT COUNTY Conservation District and
 DEAN DECKLEVER Cooperating
 OWNER DEAN DECKLEVER operator SAME
 County GRANT State SD. TRAK Photo NO. CR0-1FF-2258227
 Date prepared _____ Scale: 8"=1 mile. Acreage = 480
 Approximate

PREPARED BY U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE

E₂-11-120-52



Panshaw
Loam

rookings
ilt Loam

Uienalio Mire silt Loam.

Flow Loam

Uienalio Mire silt Loam.
rookings
silt Loam

Signed

IRRIGATION SURVEY REPORT - Dean Decklever

Location: Grant County, E $\frac{1}{2}$ 11 - 120-52 & NE $\frac{1}{2}$ 5 - 120-51

Mapping unit 2C1 - This unit consists of Barnes-Svea loams, 6 to 9 percent slopes. This unit consists of deep gently undulating, well drained soils on uplands. The Barnes soils are on knoll tops and on mid and upper sideslopes. The Svea soils are on footslopes and in slight concave swales. These soils have moderate permeability in the surface layer and subsoil and moderately slow permeability in the underlying material. Available water capacity is high. Both soils are in the 0.5 intake family and have a moderately slow intake rate.

Mapping unit 12A - This unit consists of Divide loam with slopes from 0 to 2 percent. This soil is underlain by sand and gravel at moderate depths and has moderate permeability in the upper part and rapid permeability in the underlying sand and gravel. Available water capacity is low or moderate. A water table is at depths of 3 to 5 feet in the spring and during periods of heavy rainfall. This soil is in the 0.5 intake family and has a moderately slow water intake rate.

Mapping unit 14A - This unit consists of Fordville loam, 0 to 2 percent slopes. These are moderately deep, well drained soils formed in loamy alluvium underlain by sand and gravel at depths of 20 to 40 inches. Permeability is moderate in the soils and rapid in the underlying sand and gravel. The available water capacity is moderate to high depending on depth to the underlying sand and gravel. Fordville soils are in the 1.0 intake family and have a moderate water intake rate. This soil is well suited for irrigation in regard to available water capacity and internal drainage.

Mapping unit 17A - This unit consists of Renshaw loam, 0 to 2 percent slopes. These are shallow, somewhat excessively drained soils formed in loamy alluvium underlain by sand and gravel at depths of 10 to 20 inches. Renshaw soils have moderately rapid permeability in the upper part and rapid permeability in the sand and gravel. Available water capacity is low, averaging between 4.50 to 5.50 in the 5 foot depth with the majority being in the portion above the sand and gravel. Renshaw soils are suited to irrigation, but are considered droughty and normally require frequent periods of irrigation to realize the maximum benefit.

Mapping unit 17B - This unit consists of Renshaw loam, 2 to 6 percent slopes. Excepting for slopes, these soils are like those described in mapping unit 17A. This unit would have a moderate water erosion hazard.

Mapping unit 51 - This unit consists of Flom loam. This is deep, nearly level, somewhat poorly drained soil on low flats, in swales and along shallow drainage ways. Slopes are from 0 to 2 percent. Permeability is moderately slow and available water capacity is high. Surface runoff is slow and soil is wet for short periods due to runoff from adjacent soils.

Mapping unit 84 - This unit consists of Brookings silt loam, 0 to 2 percent slopes. This is deep nearly level, moderately well drained soil. This soil has moderate permeability in the surface layer and subsoil and moderately slow or moderate permeability in the underlying material. The available water capacity is high. Brookings soil is in the 0.5 intake family and has a moderately slow water intake rate.

Signed _____

Mapping unit 85A - This unit consists of Vienna-Lismore silt loams, 0 to 2 percent slopes. These are deep gently sloping well drained and moderately well drained soils. These soils have moderate permeability in the surface layer and subsoil and moderately slow permeability in the underlying material. Surface runoff is medium and the available water capacity is high. Both soils are in the 0.5 intake family and have moderately slow water intake rate.

Mapping unit 85B - This unit consists of Vienna-Lismore silt loam, 2 to 6 percent slopes. Excepting for slopes this soil is the same as described in mapping unit 85A.

Mapping unit 85C - This unit consists of Vienna-Lismore silt loam, 6 to 9 percent slopes. Excepting for slopes, this soil is the same as described in mapping unit 85A.

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

Submitted by: R. E. Kahnke
 Address: Watertown, SD 57201

Date Rec'd: October 17, 1977
 Sample No. 77-1527
 Identification Well 170'
E1, Sec. 11, T 120N, R 52W

WATER ANALYSIS

Calcium (Ca)	117	ppm*	5.85	me/l**
Magnesium (Mg)	49	ppm	4.02	me/l
Sodium (Na)	34	ppm	1.48	me/l
Potassium (K)	2	ppm	0.05	me/l
Sulfate (SO ₄)	44	ppm	0.92	me/l
Nitrate (as N)		ppm		me/l
Chloride (Cl)	49	ppm	1.37	me/l
Bicarbonate (HCO ₃)	449	ppm	7.36	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)	368	ppm (as CaCO ₃)		
Alkalinity (Phenolphthalein)	0	ppm (as CaCO ₃)		
Electrical Conductivity	1032	micromhos per cm at 25° C.		
Sodium Adsorption Ratio	0.67			
Sodium	12.98	% of cations		
Residual sodium carbonate	0.00	me/l		
pH	8.08			
Others:				

*ppm=parts per million
 **me/l=millequivalents per liter
 ***g.p.g.=grains per gallon

COMMENTS: Total cations 11.40 me/l
 Total anions 9.65 me/l

By: Shirley Kittel

Service Performed

Amount Due

Irrigation analysis

\$15.00

Make checks payable to: Water Quality Laboratory

Cut along dotted line and return the lower portion with payment

Sample No. 77-1527

Amount Enclosed \$

Signed

SOUTH DAKOTA DEPARTMENT OF AGRICULTURE
DIVISION OF CONSERVATION

(RECOMMENDED MANAGEMENT)

NAME OF APPLICANT R. E. Kahnke, 405 5th Ave. NW, Watertown, SD (Grant)

RECOMMENDED MANAGEMENT:

1. Water should not be applied more than 1, 2, 3, 4, 5, times during the irrigation season. NE $\frac{1}{4}$ - 4, 5 or more times
SE $\frac{1}{4}$ - 2 or 3 times
2. Each uninterrupted application (one rotation of center pivot) should be of at least 1, 2, 3, 4, inches of water.

3. ☐ Yes ☐ No Surface drainage suggested
4. ☐ Yes ☐ No Subsurface drainage suggested
5. ☒ Yes ☐ No Specific land areas that should be avoided

Flom Loam has excess sodium in the soil profile. Drowning of crops, getting stuck, and traction problems will need to be overcome for the towers that travel that travel through this depression.

6. ☐ Deep tillage (For the purpose of aiding movement of water through dense subsoils)
7. ☐ Heavy full application of irrigation water

Actual.....EC - 1032 SAR - .67

Permitted EC - 1200 to 1900

Approximately 80% of NE $\frac{1}{4}$ is Reushaw, permitted EC would be 1500-1900.
Approximately 70% of SE $\frac{1}{4}$ is Vienna-Lismore, permitted EC would be 1200-1500.

Of the two quarters, the NE $\frac{1}{4}$ quarter will take water readily. Fertilizer leaching to the sandy subsoils would be a concern. On the SE $\frac{1}{4}$ application rates will be much less to insure adequate intake on the less permeable soils and subsoils.

It will be beneficial to chisel soils in the fall, after crop removal SE $\frac{1}{4}$, to permit nature's freeze-thaw action to work for you. The extent, frequency, spacing, & depth will be dictated by experience.

Copy to Applicant - 1
Copies to Water Rights - 2
Copy to File - 1

Publish first publication, on or before January 5, 1978

NOTICE OF HEARING ON
APPLICATION TO APPROPRIATE WATER

Pierre, South Dakota 57501

December 15, 1977

Notice is hereby given that R.E. Ina & Scott Kahnke whose post office

address is Watertown, South Dakota, has made an application in accordance with the provisions of SDCL 46-1-1 thru 46-1-8; 46-2-9 thru 46-2-11, 46-2-13; 46-5-1 thru 46-5-8, 46-5-10 thru 46-5-22, 46-5-41, 46-6-3, 46-6-5, 46-6-6.1, 46-6-10, 46-6-14 and Commission Rules ARSD 52:01:01:01 thru 52:01:01:13, for a permit to appropriate for beneficial use 4.4 cubic feet of water per second of time from ground water (2 wells)

through the R.E. Ina & Scott Kahnke, the point of diversion of which ~~are~~^{are} to be located in the Irr. Project #1

centers of the NE $\frac{1}{4}$ and the SE $\frac{1}{4}$

of Section 11, Twp. 120N Range 52W. Said water to be used for the purpose of providing irrigation on portions of the following described land:

E $\frac{1}{2}$, Section 11-T120N, R52W.

This Application No. 4114-3 will be considered by the Water Rights Commission at

Pierre, South Dakota upon the 25th day of January, 1978 at 10 A.M. The Commission is authorized to make a determination on this application at the hearing. All interested persons may appear and be heard. Any person who may be affected by a Commission decision who desires to present evidence or cross-examine witnesses according to SDCL 1-26 may notify the Commission in writing prior to the hearing or orally at the hearing.

NOTE: Final Proof of publication
must be received by the hearing
date for the Commission to take
action.

WATER RIGHTS COMMISSION

BETTY WESTLAND

Water Rights Specialist

cc: R.E. Ina and Scott Kahnke, 405 5th Ave. NE, Watertown, SD 57201

Form 8 - Proof of Publication - Notice of
Intent to Appropriate Water

No. 4-184-3

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Grant) ss.

I, Clarence Justice hereby

certify that the annexed printed copy of Notice of Intent to Appropriate

Water was taken from the Grant County Review

A newspaper which during the whole time of publication of said notice
herein after stated, has been and is printed and published in the _____

City of Milbank

County of Grant and State of South Dakota;
that the said notice was published in said newspaper on the following
two dates:

Dec 21, 1977

Dec. 28, 1977

Clarence Justice
(Signature)

foreman

(Title)

12-29-77

(Date Signed)

NOTICE OF HEARING ON
APPLICATION TO
APPROPRIATE WATER

December 15, 1977
Pierre, South Dakota 57501

Notice is hereby given that
R.E. Ina & Scott Kehnke whose
post office address is Water-
town, South Dakota, has made
an application in accordance
with the provisions of SDCL
46-1-1 thru 46-1-8; 46-2-1 thru
46-2-11, 46-2-13; 46-5-1 thru 46-5-
8, 46-5-10 thru 46-5-22, 46-5-42,
46-6-3, 46-6-5, 46-6-6.1, 46-6-10, 46-
6-14 and Commission Rules
ARSD 52:01:01:01 thru 52:01:
01:13, for a permit to ap-
propriate for beneficial use 4.4
cubic feet of water per second
of time from ground water (2
wells) through the R.E. Ina &
Scott Kehnke, the points of di-
version of which are to be lo-
cated in the Irr. Project No.1
centers of the NE¼ and the
SE¼ of Section 11, Twp. 120N
Range 52W. Said water to be
used for the purpose of pro-
viding irrigation on portions of
the following described land:
E½, Section 11-T120N, R52W.

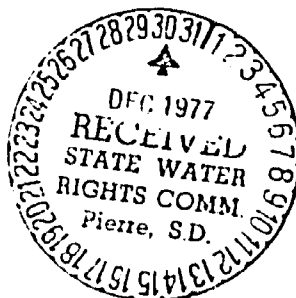
This Application No. 4184-3
will be considered by the Water
Rights Commission at Pierre,
South Dakota upon the 25th day
of January, 1978 at 10 a.m. The
commission is authorized to
make a determination on this
application at the hearing. All
interested persons may appear
and be heard. Any person who
may be affected by a Com-
mission decision who desires to
present evidence or cross-
examine witnesses according to
SDCL 1-26 may notify the Com-
mission in writing prior to the
hearing or orally at the hear-
ing.

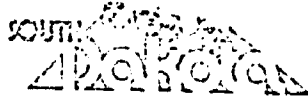
WATER RIGHTS
COMMISSION

BETTY WESTLUND
Water Rights Specialist

Dec. 21

Dec. 26





4180-3, 4181-3, 4182-3,
No. 4183-3 & 4184-3

Department of Natural Resource Development

WATER RIGHTS COMMISSION

Joe Foss Building, Pierre, South Dakota 57501

Phone 605/224-3151

January 30, 1978

R. E. Kahnke
405 5th Ave NW
Aberdeen SD 57401

Dear Mr. Kahnke:

The Water Rights Commission deferred action on your Application
4180-3, 4181-3, 4182-3,
No. 4183-3 & 4184-3 at the January 25-26, 1978

Commission meeting, pending investigation by the Commission Staff.

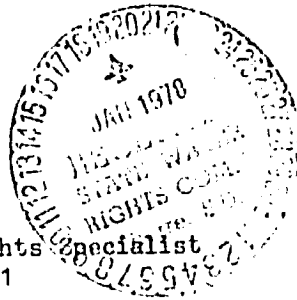
If you have any questions, feel free to contact this Office.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Commission

JH/LW

4184-3



Summit, S. D. k.
January 16, 1978

Water Rights Commission
James Winerton, Water Rights Specialist
Pierre, South Dakota 57501

Dear Sirs:

We the following individuals, as well as members of the Upper Sioux River Basin Conservancy Council are filing a protest on R. E., Ina and Scott Kahnke Irrigation project # 1, application # 4184-3 located SE $\frac{1}{4}$ and NE $\frac{1}{4}$ of Sec. 11 Twp. 120, Range 52, said water to be used for the purpose of providing irrigation on described land above.

We the undersigned are definitely convinced that local irrigation has and will continue to lower the aquifer until our domestic wells are in very definite danger on our family farms. Our domestic wells and flow in streams must be protected for human use as well as livestock and local firefighting protection.

For these reasons we the following are in definite protest of this irrigation permit and any other permits to be issued by the Water Commission in this area.

Signed By:

1. Ann Brennan, 1-16-78 Summit S. Dak.
2. Walter Brennan 1-16-78 Summit S. Dak.
3. Melvin Stone 1-16-78 Summit S. Dak.
4. Edward Brennan 1-16-78 Summit S. Dak.
5. Alfred Redlin " Summit S. Dak 57266
6. Ray Bunde " South Shore S. Dak
7. Donald Kozz " Summit S. Dak 57266
8. Oscar Hagedorn " Estley, S. Dak.
9. Wallace Redlin " Summit S. Dak
10. Dana Craig " Watertown, S. Dak.
11. Edgar Bunde " Watertown, S. Dak.
12. Earl H Bunde " South Shore S. Dak
13. Ray Amehle " South Shore, S. Dak.
14. Clayton Zimlicka " Watertown, S. D.

app. # 1184-3

-X 15	Nick / O'Brien	1-16-1978	Wetmore S. Park
-X 16	Orvil Stormo	1-16-78	Summit S. Park
- 17	Eleanor Bunde	1-16-78	
- 18	Jeannette Hogstad	1-16-78	Wetmore, S. Park
- 19	Alma Amundsen	1-16-78	Ortley, S. D.
-X 20	Betty Bunde	1-16-78	South Shore, S.D.
-X 21	Gene Monahan	1-16-78	South Shore, S.D.
- 22	Shirley Stormo	1-16-78	Summit, S.D. 57266
-X 23	Gene Monahan	1-16-78	South Shore S.D. 57263
-X 24	Ralph Peeper	1-17-78	Ortley S.D. 57256
-X 25	Josephine Peeper	1-17-78	Ortley S.D. 57256
-X 26	Myrlene Peeper	1-17-78	Ortley S.D.
27			
28			
29			
30			

4184-3

Department of Natural Resource Development

WATER RIGHTS COMMISSION
Joe Foss Building, Pierre, South Dakota 57501
Phone 605/773-3151

January 16, 1979

TO: Persons interested in Deferred Water Right Applications West of South Shore in Codington and Grant Counties

FROM: John Hatch, Chief Engineer, Water Rights Commission

SUBJECT: Reconsideration of Deferred Applications

The Water Rights Commission will reconsider deferred Water Right Applications in the area west of South Shore in Codington and Grant counties at 1:30 p.m., January 31, 1979 at the South Dakota Education Association Building, 411 E. Capitol, Pierre, South Dakota.

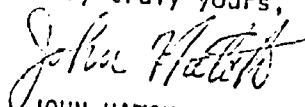
This reconsideration hearing will be conducted in accordance with the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-14; 46-2-9 thru 46-2-11, 46-2-13; 46-5-1 thru 46-5-8, 46-5-10 thru 46-5-22, 46-5-41; 46-6-3, 46-6-3.1, 46-6-5, 46-6-6.1, 46-6-10, 46-6-14 and Commission Rules ARSD 52:01:01.01 thru 52:01:01:13.

These applications were deferred by the Water Rights Commission during 1977 and 1978, pending Staff investigation.

After reconsideration of the deferred applications, the Commission can approve, defer or deny all or part of any of these applications.

This hearing is an adversary proceeding. Any person has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing. Decisions of the Commission may be appealed to the courts as provided by law.

Very truly yours,



JOHN HATCH, Chief Engineer
Water Rights Commission

JH/gy



Department of Natural Resource Development

WATER RIGHTS COMMISSION

Joe Foss Building, Pierre, South Dakota 57501
Phone 605/224-3151

February 13, 1979

TO: Persons from Codington & Grant Counties in attendance at Water Rights Commission Meeting, January 31, 1979.

The Water Rights Commission at its meeting January 31, 1979 approved the following applications:

3327-3 Falk Farms, Inc.
3225-3 Clifford Grinols
3226-3 Clifford Grinols
3342-3 Joseph P. Ahmdahl

3745-3 Owen Thacker
3502-3 Bernard L. Lee
3503-3 John La Barr

The above applications were approved with the following qualifications:

The irrigation well(s) 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 adequate domestic wells or in irrigation wells having prior water rights.

The specific capacity of the well(s) shall be determined by test pumping the well(s) prior to connecting the well(s) to the irrigation system and a record of the specific capacity filed with the Commission office.

At the January 31, 1979 meeting the Water Rights Commission also deferred action on the following applications:

4135-3 Falk Farms, Inc.

4184-3 R. E. Ina & Scott Kahuke

South Dakota Statutes provide that the decision by the Commission may be appealed to the courts.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Commission

JH:kjw



Department of Water & Natural Resources

Joe Foss Building
Pierre, South Dakota 57501

January 19, 1982

NOTICE

To : Persons Interested In Applications In southern Grant County

From : John Hatch, Chief Engineer, Water Rights Division *John Hatch*

Subject: Reconsideration of Deferred Applications No. 4153-3, Falk
Bros; 4184-3, R.E. Kahnke and 4637-3, Bernard Lee

The Water Management Board will reconsider these deferred water permit applications at 1:30 p.m., February 3, 1982, at Meeting Room #1, Knelp Building, Church and Illinois, Pierre, South Dakota.

This reconsideration hearing will be conducted in accordance with the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-14, 46-2-9 thru 46-2-11, 46-2-13, 46-5-1 thru 46-5-8, 46-5-10 thru 46-5-22, 46-5-25, 46-5-41, 46-5-43, 46-6-3.1, 46-6-5, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14 and Board Rules ARSD 52:01:01:01 thru 52:01:01:13.

These applications were previously deferred by the Board pending staff investigation.

After reconsideration of the deferred applications the Board can approve, conditionally approve, defer, or deny all or part of the applications.

This hearing is an adversary proceeding. Any person has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing. Decisions of the Board may be appealed to the Courts as provided by law.

Any handicapped person wishing to attend this hearing can contact the Water Rights Division, DWNR, Joe Foss Building, Pierre, SD, prior to the hearing date for assistance to assure access to the hearing.

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c11903ks.wr

Technical Report On
Aquifer Pump Test Southwest Grant County
Using Falk Irrigation Well

December, 1978

Location: The irrigation well is located in the center of the NE $\frac{1}{4}$ Section 23, T120N, R52W reservation.

General

Comments: The source of water is a buried glacial outwash deposit of sand and gravel under artesian conditions.

The hydraulic gradient (direction of water movement) is toward the southwest at approximately 5 feet per mile in the vicinity of the production well.

The thickness and lateral extent are variable although test holes indicate an areal extent of at least 66 square miles at an average thickness of 20-30'. The thickness can vary dramatically in a few miles, from more than 45 feet at observation well GT-76C to only 3 feet at CD-77A. The artesian head is 100 feet or more at nearly any location. Flowing wells may be obtained below a land surface elevation of 1800.0 feet. Observation wells have been located into the aquifer over a great distance from north to south but not east to west. The eastern boundary can be established with some reliability but not the western boundary. Drilling was confined to areas where a flow would not be obtained. Any widening of the aquifer to the west increases its size tremendously.

See sketches I, II, III, IV

Also relevant well log data is included.

Purpose: The purpose of the aquifer test was to determine the hydrogeological characteristics of the aquifer.

Test: Pumping began Monday, April 24, 1978 at 3:00 p.m. and continued for 72 hours. During this period 13 observation wells and 4 domestic wells were monitored after shutdown recovery data was obtained from these sources as well. The primary wells were:

- 1). Irrigation well #2
- 2). Service well
- 3). Temporary observation well
- 4). GT-76B
- 5). Falk domestic

A 6" flow meter borrowed from the USGS was used to measure the rate of discharge. The discharge remained constant over the entire test averaging 1010 gpm. Six Water Rights Commission Staff were present to monitor the test.

Data: All data was plotted in a conventional manner. Time-drawdown curves were constructed for each primary observation using the type-curve

(Theis) method and the modified non-equilibrium formula (Jacob) method. Recovery data was also plotted using the Jacob method. These methods should define the aquifer characteristics transmissivity (T) and storage coefficient (S). Also distance - drawdown plots were constructed for different time intervals and these T and S values calculated. (See figures 1 thru 17)

Table listing T and S values

	T	S	(A) Recovery
Irrigation well	1) 32,150 2) 43,000	can not be calculated	
Service well	1) 54,600 2) 45,600	1) 6.26×10^{-5} 2) 2.70×10^{-4}	T) 43,000 S) 3.87×10^{-4}
Temporary Observation well	1) 46,700 2) 42,300	1) $.93 \times 10^{-5}$ 2) 1.98×10^{-5}	T) 39,800 S) 2.19×10^{-5}
GT-76B	1) 53,800 2) 54,700	1) 4.77×10^{-5} 2) 4.08×10^{-5}	T) 49,200 S) 6.12×10^{-5}
Falk domestic	1) 57,900 2) 64,300	1) 1.36×10^{-4} 2) 1.10×10^{-4}	did not plot

- 1) Theis method
2) Jacob method

A) recovery data handled using Jacob method only

T and S values determined by distance-drawdown

Time	T	S	r_o
1 hour	61,300	2.95×10^{-5}	5,100
10 hours	53,300	5.5×10^{-5}	11,000
24 hours	53,300	5.7×10^{-5}	16,600
67 hours	49,400	1.20×10^{-4}	18,500

This is that amount of time passed since the beginning of pumping.

r_o is the distance in feet from the production well that the cone of depression extends to at the given time.

Distance from to	Service	Temp Obs. Well	GT-76B	Falk domestic	GT-77A	CD-76D	GT-75C
Production Well	36	700	1,920	4,800	9,100	10,000	14,100

Discussion of Data
and Procedures:

Was the Testing Period long enough? This can be shown to true by
the following calculation.

$$t_{SL} = 1.35 \times 10^5 r^2 S/T$$

t_{SL} = Time needed to Elapse
 r = Distance from Production
Well to Observation Well

For Temp Obs. Well $t_{SL} = (1.35 \times 10^5)(700^2)(1.43 \times 10^{-5}) / 43,700$

$$t_{SL700} = 15.14 \text{ minutes}$$

For GT-76B $t_{SL1920} = (1.35 \times 10^5)(1920^2)(4.96 \times 10^{-5}) / 53,800$

$$t_{SL1920} = 447.56 \text{ minutes} \\ 7.49 \text{ hours}$$

For Falk Domestic $t_{SL4800} = (1.35 \times 10^5)(4800^2)(1.36 \times 10^{-4}) / 57,900$

$$t_{SL4800} = 7305.95 \text{ minutes} \\ 121.77 \text{ hours} \\ 5.07 \text{ days}$$

Calculations of T and S are valid for wells out through GT-76B using the Jacob Method. Calculations for the Falk Domestic well may not be accurate because the test should have been run 5 days in order to evaluate T and S at that distance.

Examination of the values of T and S show good correlation. Predictions using this data can be made. However care must be taken when calculating theoretical drawdowns over long periods of time in this case. In all instances the predicted water levels will be lower than the actual measured level. This is the effect of recharge to the system. Predictions assume no recharge. This accounts for the discrepancies in water level measurements and predictions. Since this problem shows up in 3 days, imagine what is happening after 60 days or longer. (See Figures A,B,C,D)

What is the specific capacity of the irrigation well?

$$\text{Actual } Q_s = 1010 / 46.49 = 20.83 \text{ gallons/foot}$$

$$\text{Calculated } T = 54,600 \quad S = 6.26 \times 10^{-5} \quad t = 4310 \quad (\text{Service Well}) \quad r_w = 36$$

$$Q_s = T / [264 \text{ LOG } (Tt / 2693 r_w^2 S) - 65.5]$$

$$Q_s = 22.37 \text{ gal/ft}$$

What is the permeability of the aquifer?

$$T = kb$$

b = saturated thickness
k = permeability

$$k = T/b = 54,600 / 20 = 2730 \text{ gpd/ft}^2$$

This indicates an apparent velocity of approximately .25 feet per day.

Is there any vertical leakage?

Examination of figures 1 thru 17 do not indicate any significant leakage problem.

A possible value for leakage (maximum) can be calculated:

$$p' = \frac{Tm' (r/b)^2}{r^2} = \frac{(50,000)(110')(.001^2)}{36^2} = .004 \text{ gpd/ft}^2$$

This shows there is very little leakage at the well site.

Was there a pronounced barometric effect?

No.

How much water is there?

To evaluate this question I decided to simplify this system. A 16 square mile area was chosen with the production well near the center. (See Figure 18)

The amount of water moving through this area and that amount in storage can be calculated.

Volume moving through under natural conditions:

$$Q = TIL \quad (\text{Darcy Equation}) \quad \begin{array}{l} Q = \text{Discharge} \\ T = \text{Transmissivity} \\ I = \text{Hydraulic Gradient} \\ L = \text{Width of Aquifer} \end{array}$$

$$Q = (50,000)(5 \text{ ft/mile})(4 \text{ mile})$$

$$Q = 1,000,000 \text{ gpd}$$

$$3.07 \text{ A.F./Day} \quad \text{or} \quad 1120 \text{ A.F./Year}$$

Notice: A change in the hydraulic gradient of 1 ft/mile increases or decreases the amount of water movement by 200,000 gpd. (.61 AF/Day)

Inducing a one foot increase in gradient by pumping would supply 1/7 of the daily withdrawal of a single irrigation well.

Volume in storage:

To calculate this quantity of water the entire aquifer under 16 square miles was dewatered.

First, consider storage in artesian head or V_{SA}

$$V_{SA} = S (\text{Surface Area})(\text{Thickness})$$

$$V_{SA} = (5.0 \times 10^{-5})(16)(5280^2)(100)$$

$$V_{SA} = 2,230,000 \text{ Ft}^3, 16,684,000 \text{ gallons, } 51.20 \text{ A.F.}$$

Second, consider storage remaining in gravel or V_{SWT}

$$V_{SWT} = S (\text{Surface Area})(\text{Thickness})$$

$$\left[\begin{array}{l} \text{Very conservative} \\ \text{Could be .2} \end{array} \right] V_{SWT} = (.1)(16)(5280^2)(25)$$

$$\left[\begin{array}{l} * \text{ used .2 for } S \end{array} \right] V_{SWT} = 1,115,136,000 \text{ Ft}^3, 8,340,000,000 \text{ gallons, } 25,600 \text{ A.F.}$$

$$51,200 \text{ A.F.}$$

$$T = V_{SA} + V_{SWT} = \underline{\underline{25,650 \text{ A.F.}}} \quad \text{or} \quad \underline{\underline{51,250 \text{ A.F.}}}$$

Notice that the amount of water tied up as artesian pressure is not significant when compared to the total amount.

How do present withdrawals compare to the amount of water available?

There are 4 irrigation wells within the boundaries of the study area which can pump about 3300 gpm.

$$\text{Pumping 1 well for 60 days at 1000 gpm yields } 265 \text{ A.F.}$$

$$\text{Pumping 3 wells for 60 days at 1000 gpm yields } 795 \text{ A.F.}$$

$$\text{Pumping 1 well for 60 days at 300 gpm yields } 79 \text{ A.F.}$$

$$\text{Total 4 wells } 874 \text{ A.F.}$$

Actual pumpage-

1977 535 A.F.

1978 270 A.F.

Note: If no recharge occurred then the entire volume of water tied up as artesian head would be removed in 3.5 days at 3300 gpm. Of course this doesn't happen. In fact, the recharge under normal conditions is significant.

It has been shown that 1120 A.F. move through this area during 1 year under normal gradient. Simple arithmetic shows that 1 more irrigation well may be allowed inside this area without changing any water levels. (See Figure 19) Also, it has been shown that increasing the gradient simply increases the amount of water drawn in. Pumping stimulates the recharge. To allow a decrease of water levels in this portion of the aquifer could be a good management tool. Also, the amount of water appropriated is much larger than the amount being put to use.

How should individual wells be spaced?

The time for the drawdown to reach equilibrium at any distance from a well can be calculated.

$$T_E = a^2 S / [112 T_E \text{ Log } (2a/r)^2]$$

a = Distance to recharge area

For r = 36' $T_E = 26$ days

r = Any distance from well
E = Constant

For r = 1900' $T_E = 52$ days

These figures indicate stability would never occur during any one irrigation season.

Figure 20 is an attempt to contour drawdowns inside the present well field after 30 days continuous pumping at 3300 gpm. Notice that the further away from the well the more predictable the configuration.

This solution ignores recharge, boundary conditions and other geo-hydrologic factors, therefore care must be used when analyzing this figure. Drawdowns inside the well field should theoretically exceed 55' at GT-76B. Looking at the hydrograph of GT-76B this never happens under field conditions. Actually 20' during this 30 day period may be realistic. The difference between these two values can be attributed to the increase in the rate of recharge due to increasing the hydraulic gradient by the increase in drawdowns.

This is important to consider when spacing wells. The distance between 2 wells is not as important as the total number of wells allowed. A 10,000 feet spacing between individual wells would maintain the pumping level at least 10' from the top of the aquifer. This assumes no recharge and a 90 day pumping period at 1000 gpm for each well.

10,000 feet is 1.89 miles. Geometrically this allows 4 wells inside this area under no recharge conditions.

Remember in order to maintain a pumping level in an irrigation well there must be an allowance of 60 feet within the pumped well and then allow for the affect the other wells will have on the one being pumped. (From time-drawdown curve of production well-Figure 1) The natural recharge during 90 days is 270 A.F. and certainly is greater than this under heavy pumping.

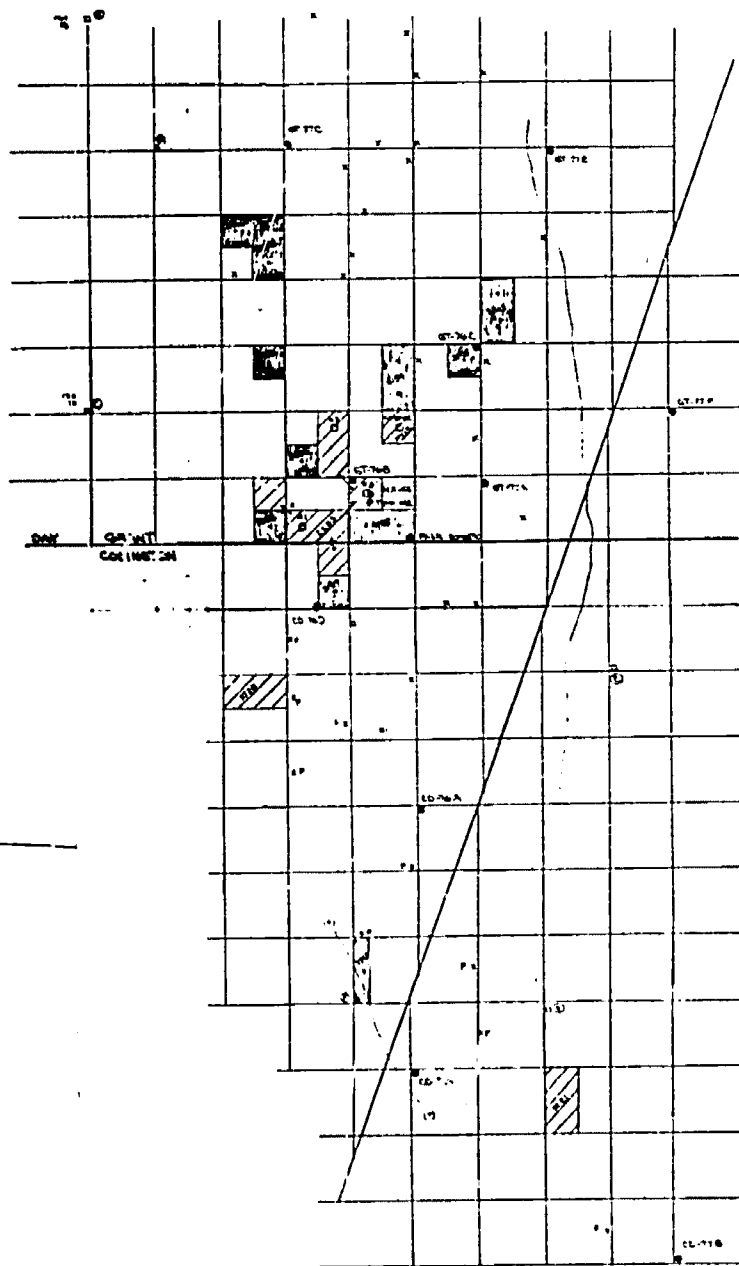
Conclusions:

- 1). Predictions of water levels can be made especially in the vicinity of the production wells. These predictions can be checked against the historical observation well hydrographs.
- 2). Estimates of quantities of water in storage and moving through the area can be made.
- 3). Spacing of individual is not as important as considering the entire aquifer system in relation to total withdrawals. Spacings of less than 1.89 miles could begin to cause a decline in the water level which will be permanent when these withdrawals exceed the induced inflow. This may be the proper approach because a decline such as this simply increases the recharge.
- 4). For every mile increase in width (4 miles) in the aquifer the amount of water moving through increases by .75 A.F./Day or 274 A.F./Yr. Each successive increase in the aquifer width by 1 mile would supply an irrigation well, 1000 gpm for 60 days with only pumping season effects upon the water level.
- 5). All predictions are conservative

Suggestions:

- 1). Further delineate aquifer boundaries to west by drilling more test holes.
- 2). Locate recharge area.
- 3). Stress aquifer by locating more large capacity wells.
- 4). Provide more observation wells in order to further develop contour maps.
- 5). Attempt to duplicate field conditions in a working model.

JAMES A. GOODMAN, Hydrologist



SKETCH I

ALL IN BLIND OUTWASH

- IRRIGATION WELL
- OPERATIVE WELL
- × DOMESTIC WELLS
- × F FLOWING EVAPORATIVE WELLS
- ▨ LAND UNDER PERMIT
- SOME OR WAC TEST WELLS LOG AVAILABLE
- LAND UNDER DEFERRED APPLICATION

SCALE: 1 INCH PER MILE

SKETCH II

NORTH TO SOUTH PROFILE

ST-77C
(7)

ST-76C

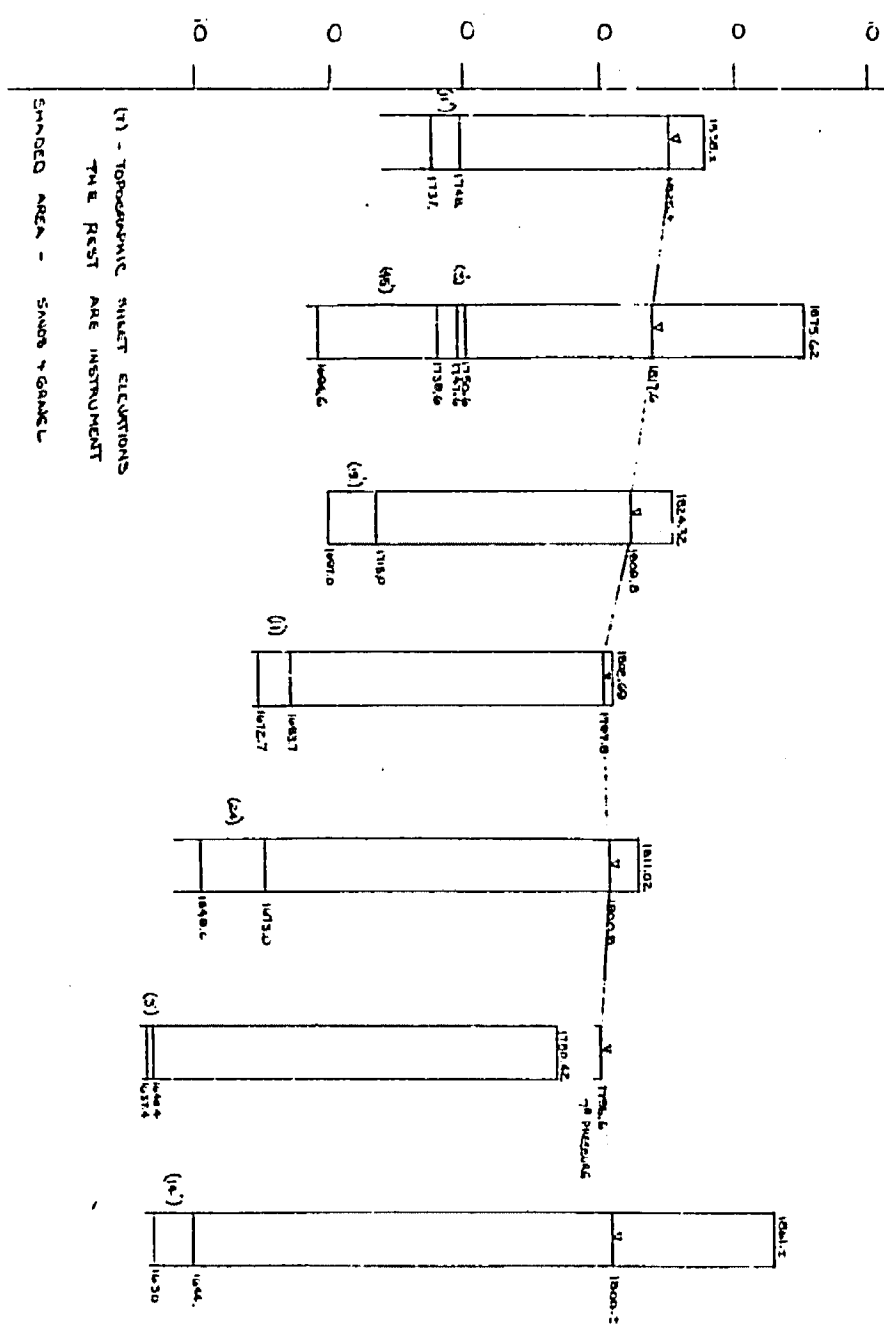
ST-76B

CD-76D

CD-76A

CD-77A

CD-77C
(7)

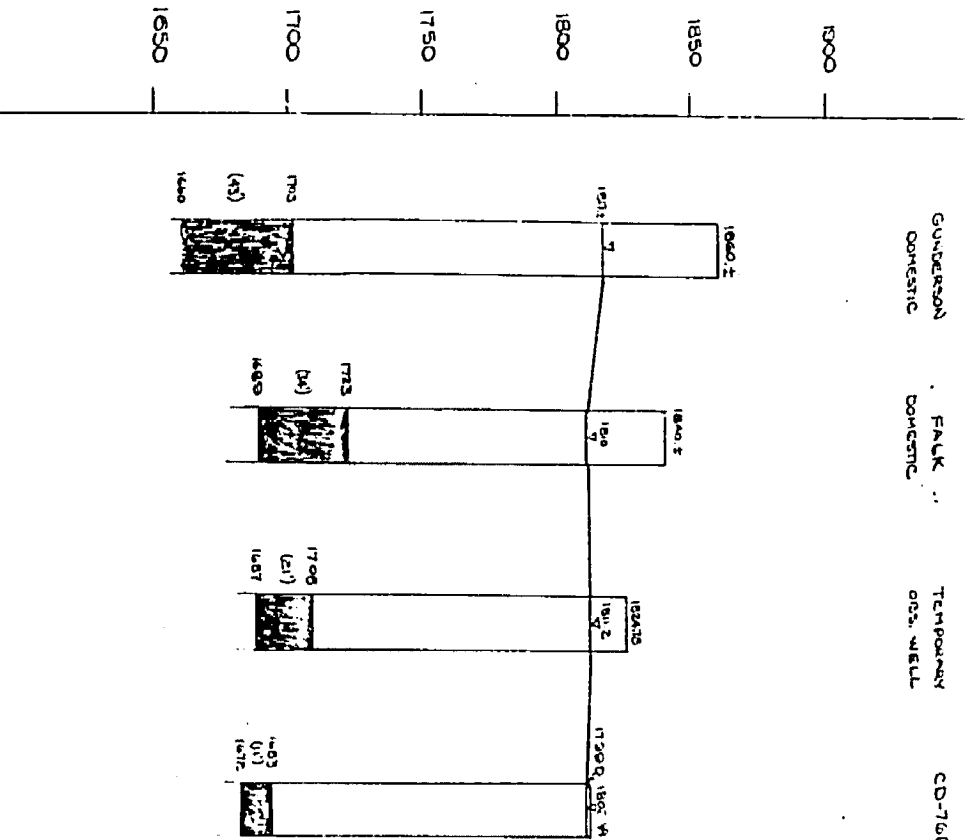


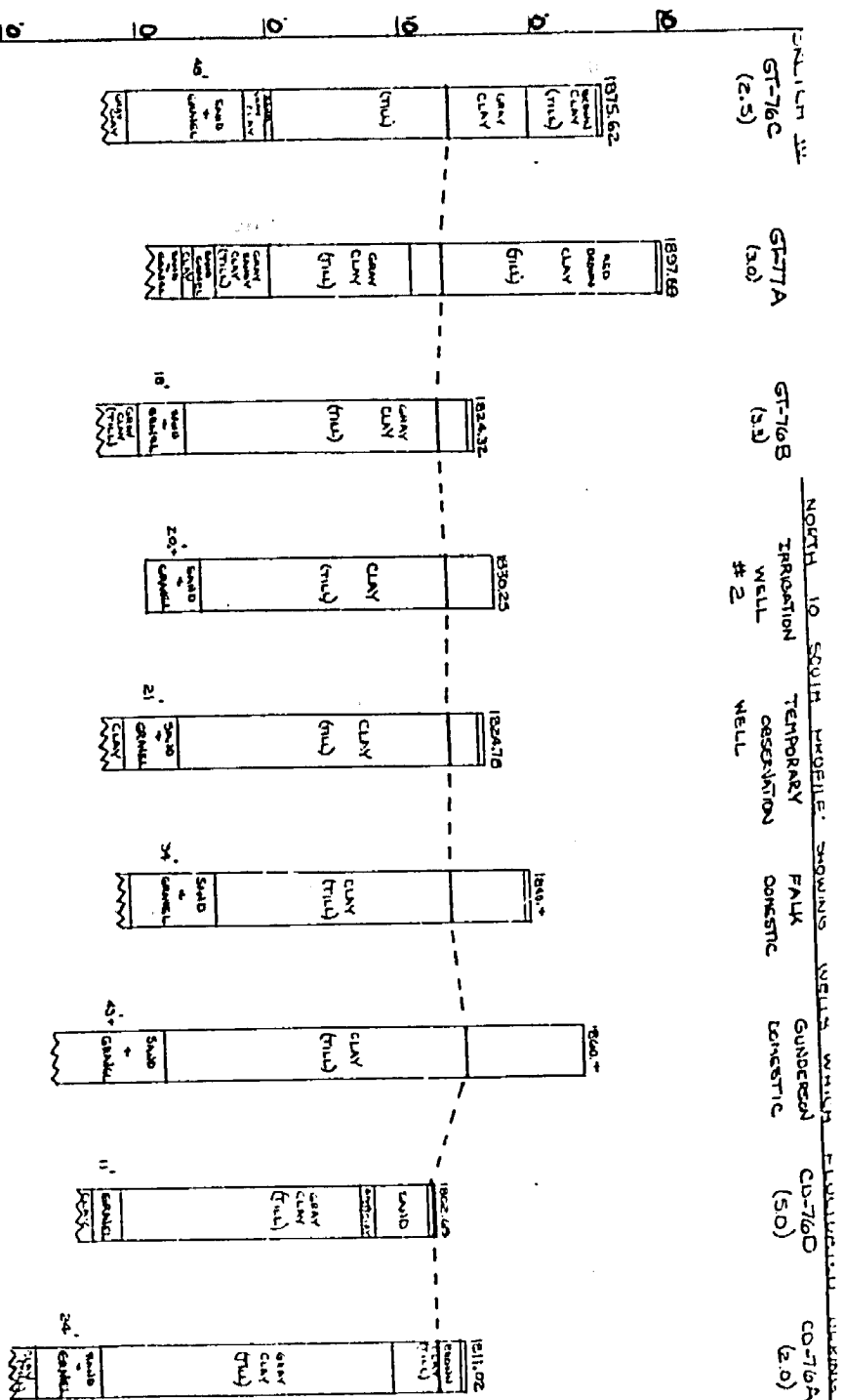
(7) - TOPOGRAFC SURVEY ELEVATIONS
THE REST ARE INSTRUMENT

SKETCH III

EAST TO WEST PROFILE

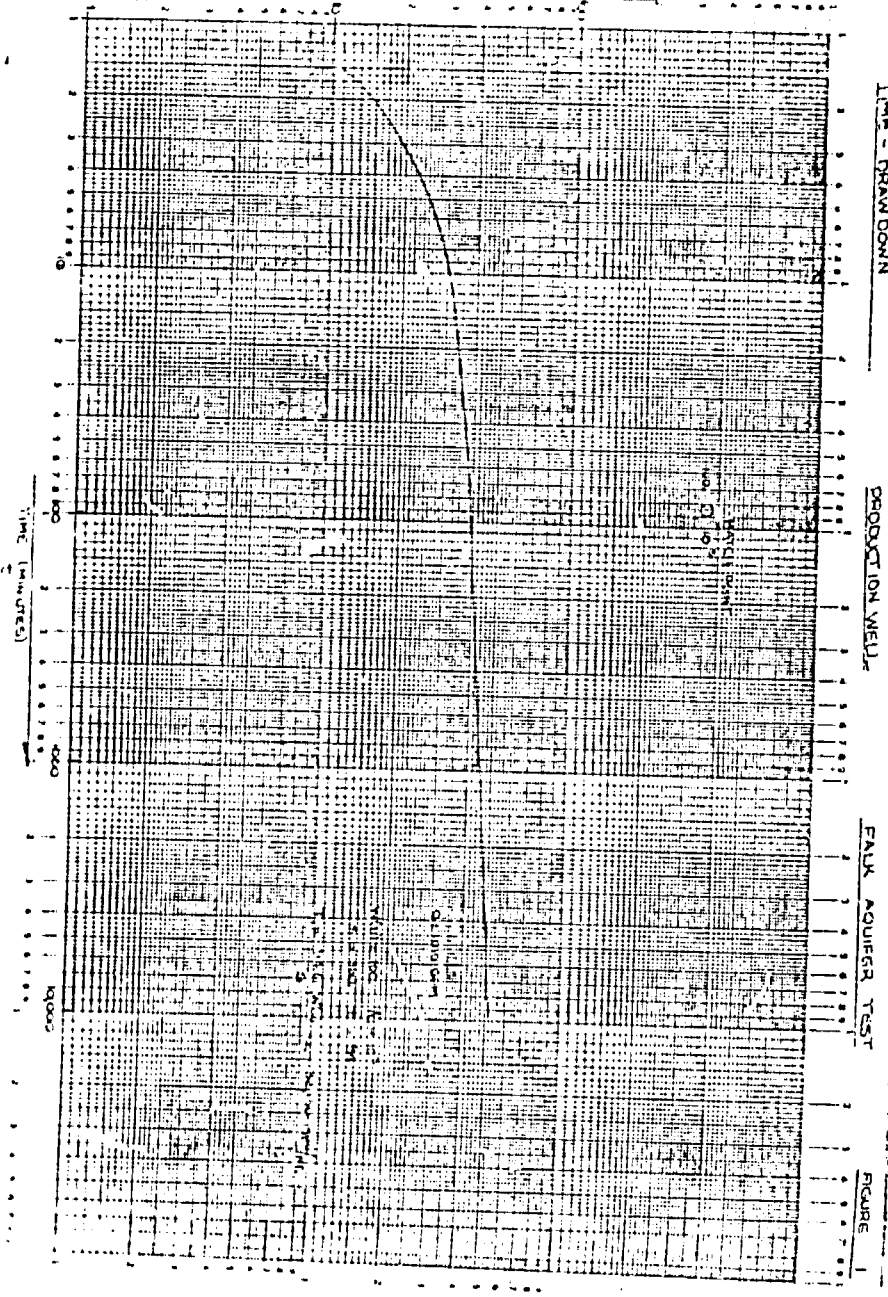
GUNDERSON FALK TEMPORARY CO-76D
DOMESTIC DOMESTIC OCS. WELL





ALL WATER LEVELS TAKEN
PRE-PUMP TEST 4-24-78

DATE: 11/17/64
DRAWING: 64-17-1

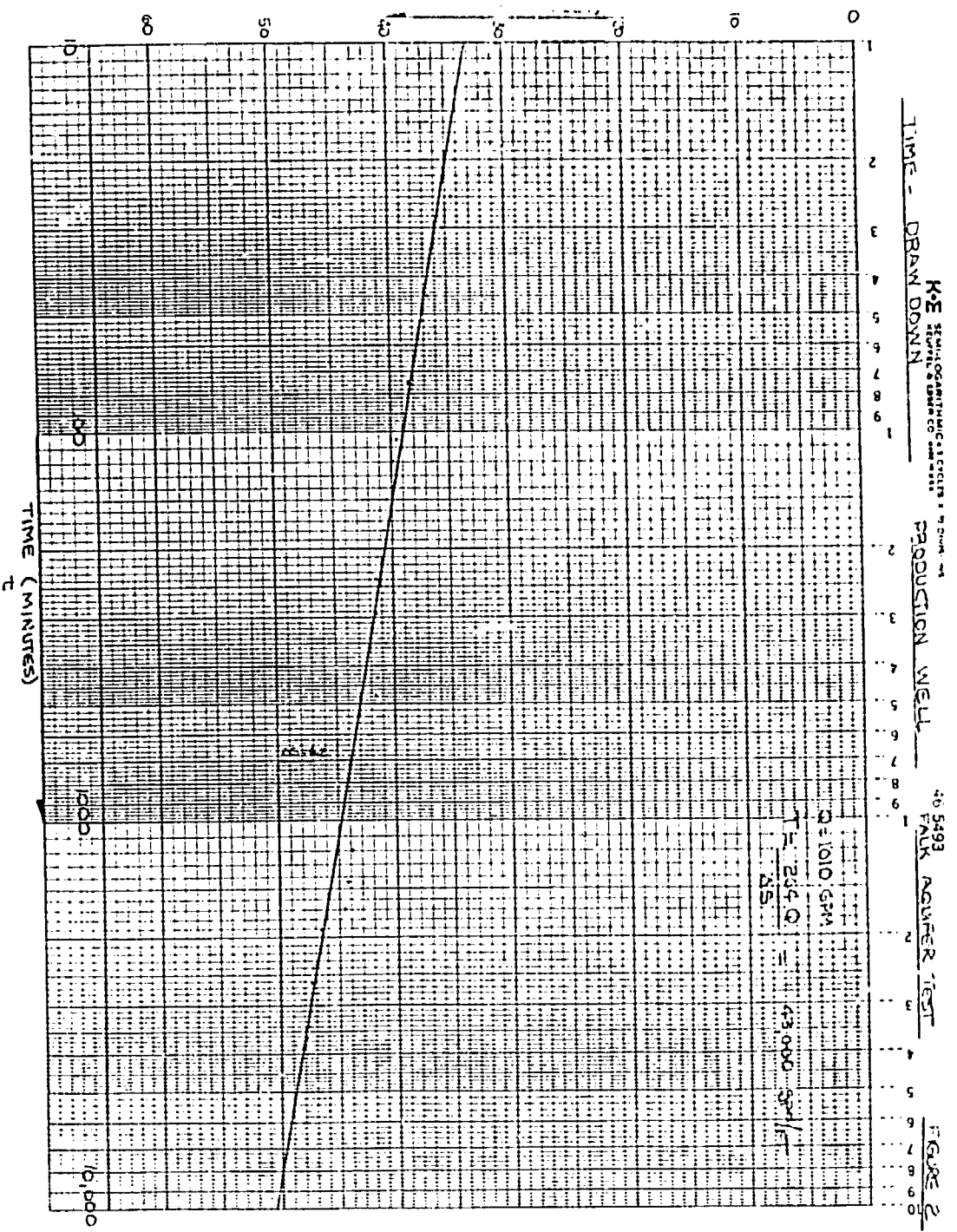


TIME - DRAW DOWN

PRODUCTION WELL

FAUX ACQUISITION TEST

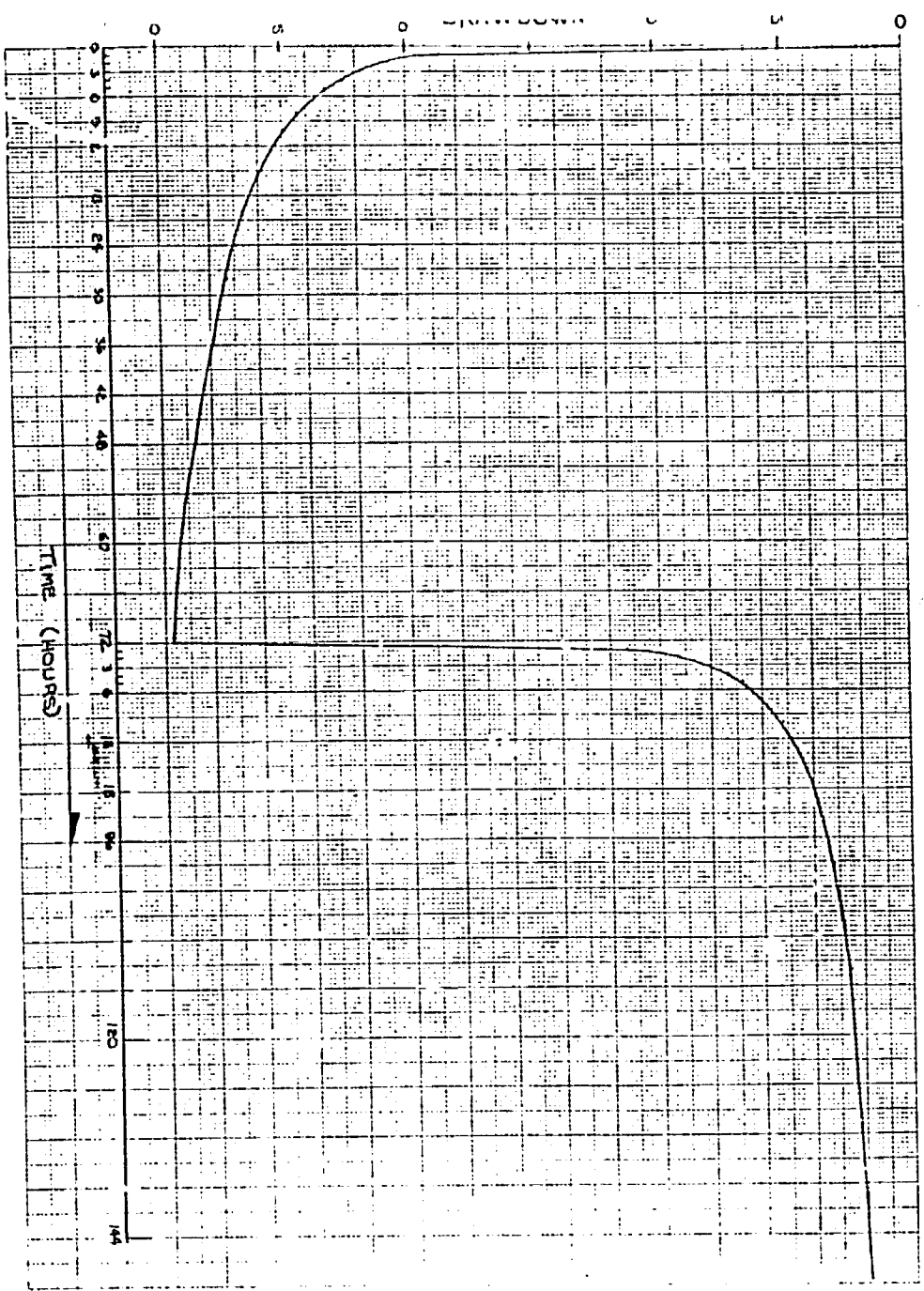
PICURE

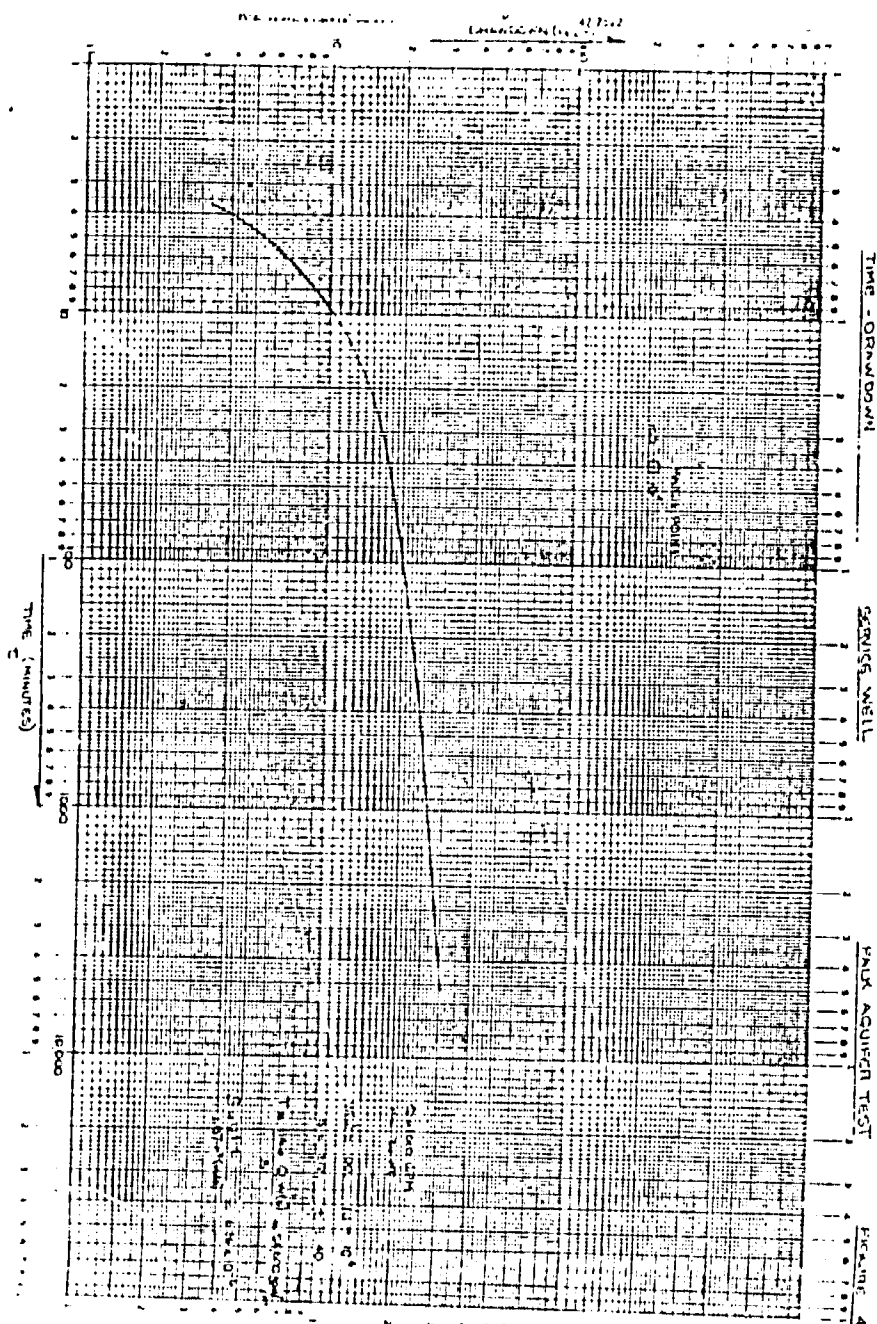


U.S. GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

SERVICE WELL HYDROGRAPH FIGURE 3





K&E SEMI-LOGARITHMIC CYCLES & DIVISIONS
HEWLETT & PACKARD CO. MODEL 511

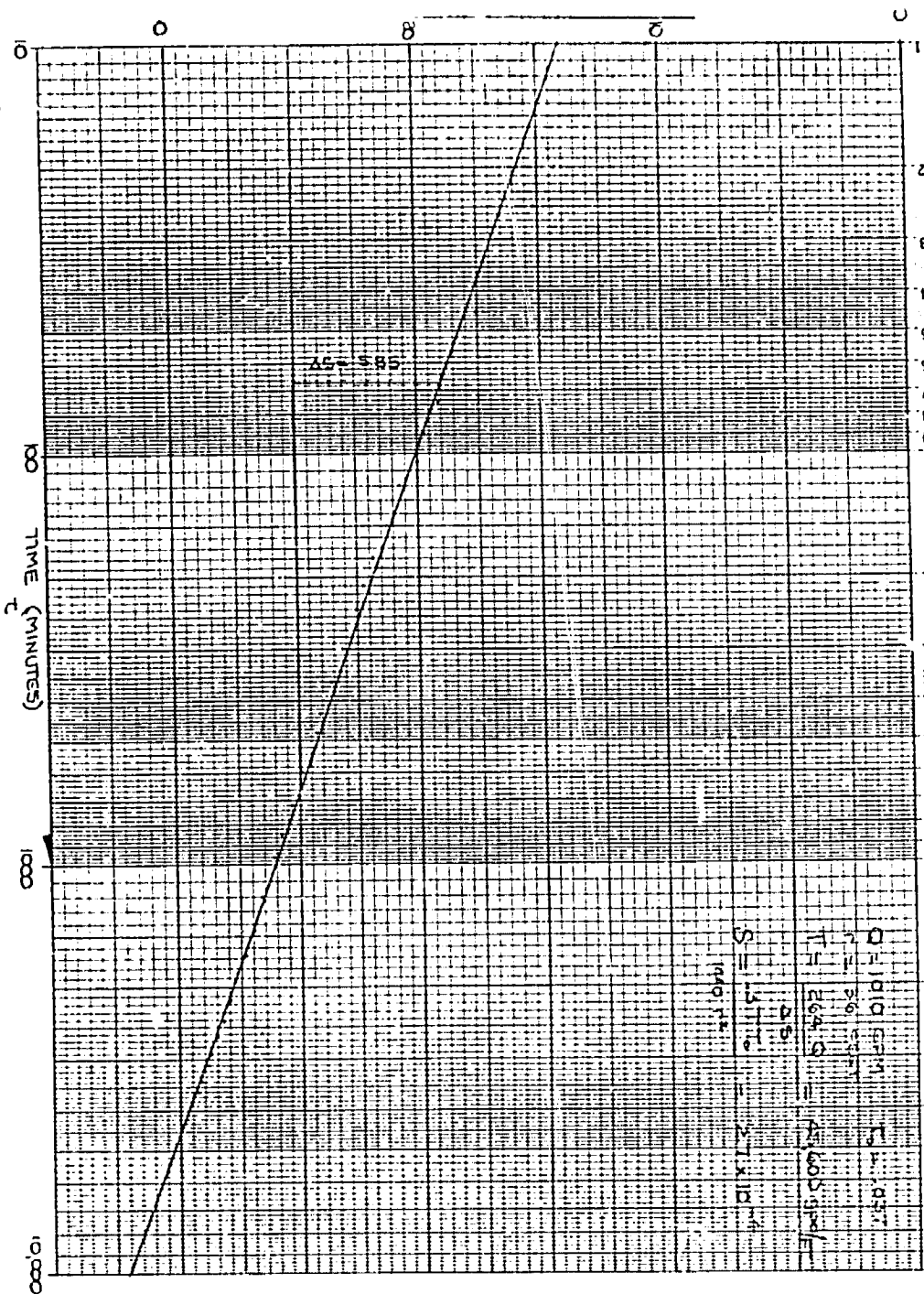
46 5493

TIME - DRAWDOWN

SERVICE WELL

FAUK AQUIFER TEST

FIGURE 5



Q = 100 GPM
C = 0.037
T = 264.9 = 4.605 10⁴
S = 0.1116 = 2.7 x 10⁻⁴
100 ft

K-E SEMI-LOGARITHMIC PLOTTER & DIVISIONS
HIDVILL & COMPANY CO. 1960-1961

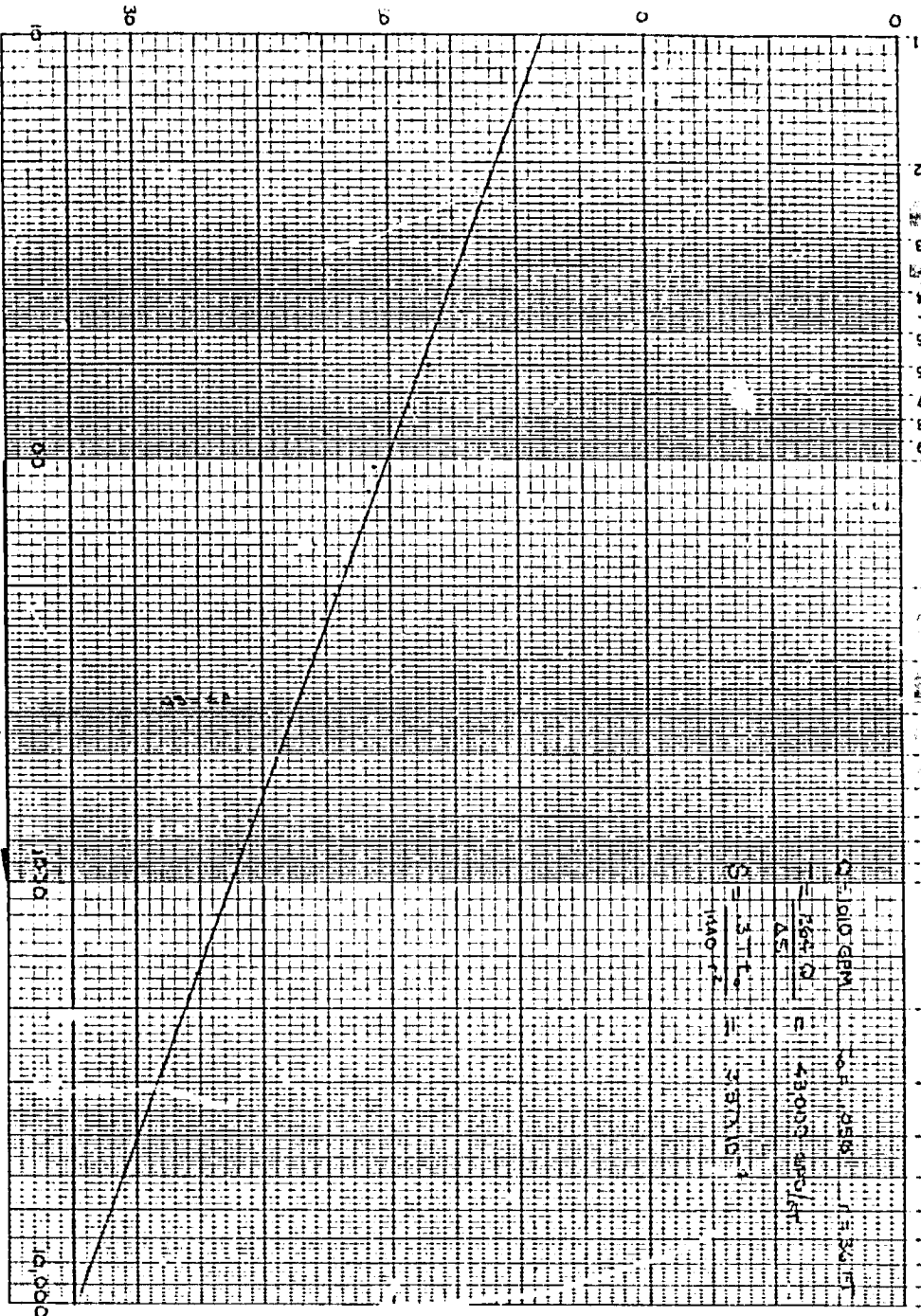
RECOVERY

SERVICE WELL

FAK AQUIFER TEST

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FIGURE 6



Q = 1010 GPM
 $\frac{Q}{AS} = \frac{1010}{48000} = 0.021$
 $\frac{Q}{AS} = \frac{1010}{48000} = 0.021$
 $\frac{Q}{AS} = \frac{1010}{48000} = 0.021$

TIME (MINUTES)
 t

K-2 20 X 20 TO THE INCHES
HYDRAULIC PRESSURE CO. 20000000

461242

TEMPORARY OBSERVATION WELL

HYDROGRAPH

FIGURE 7

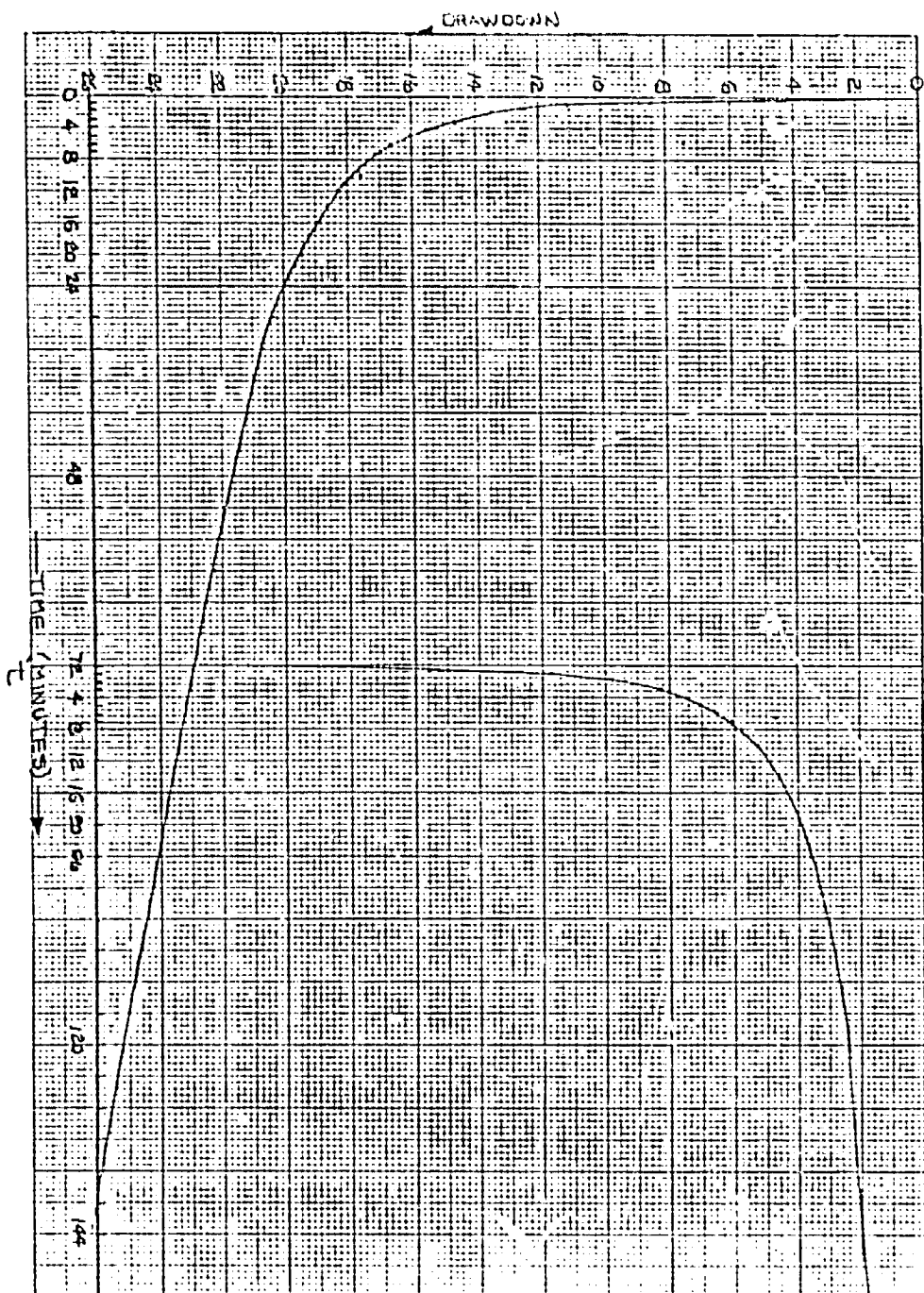
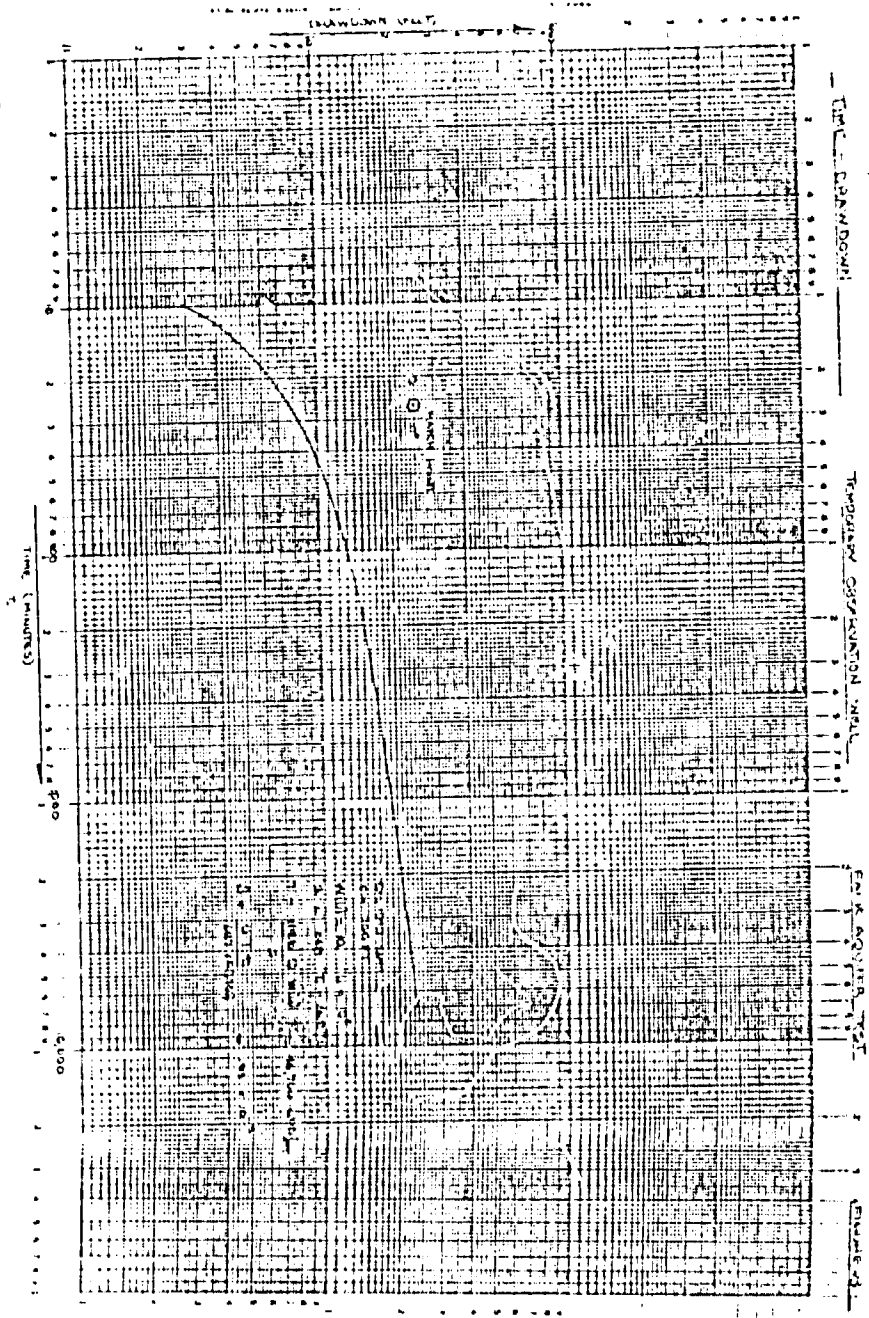
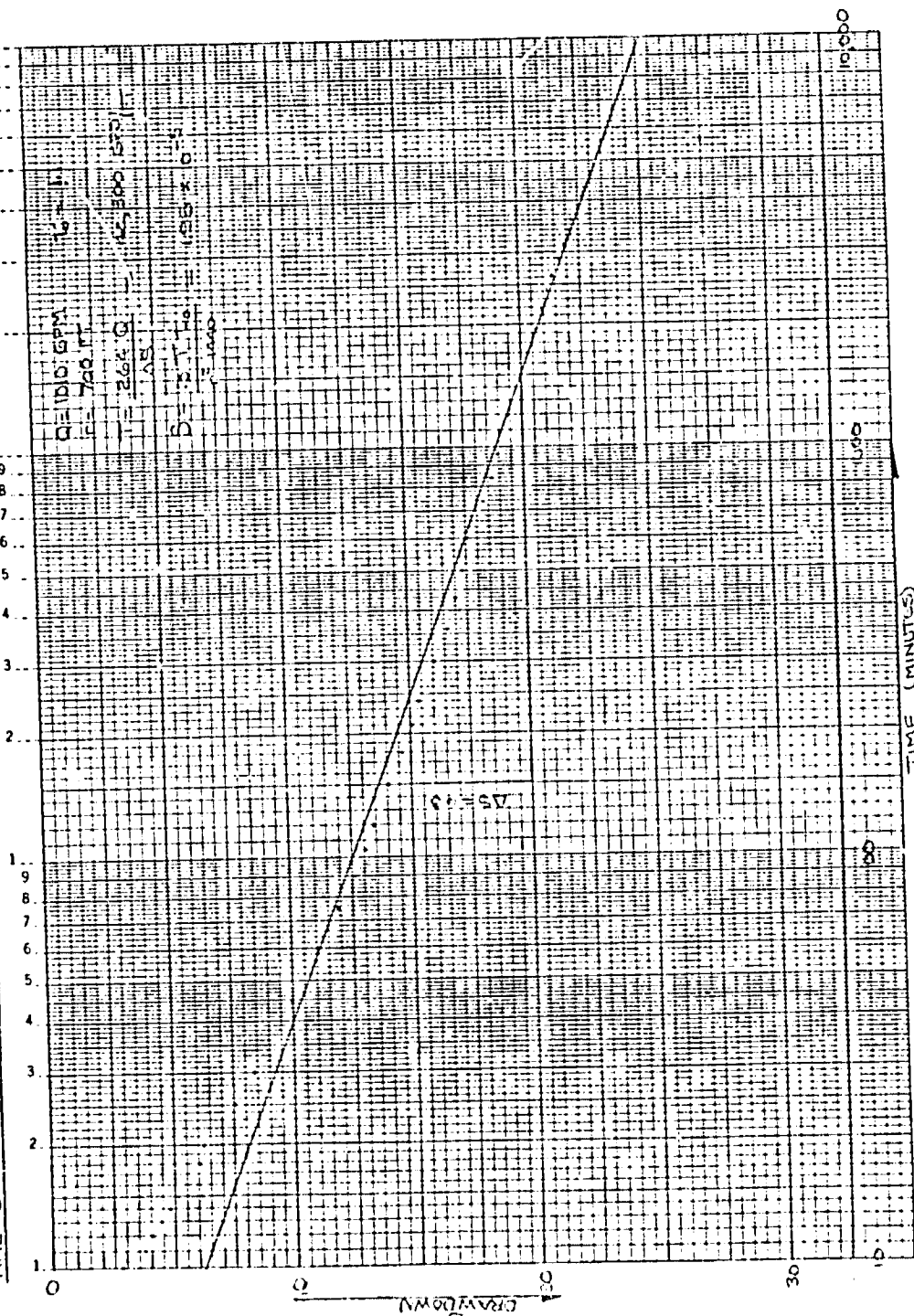
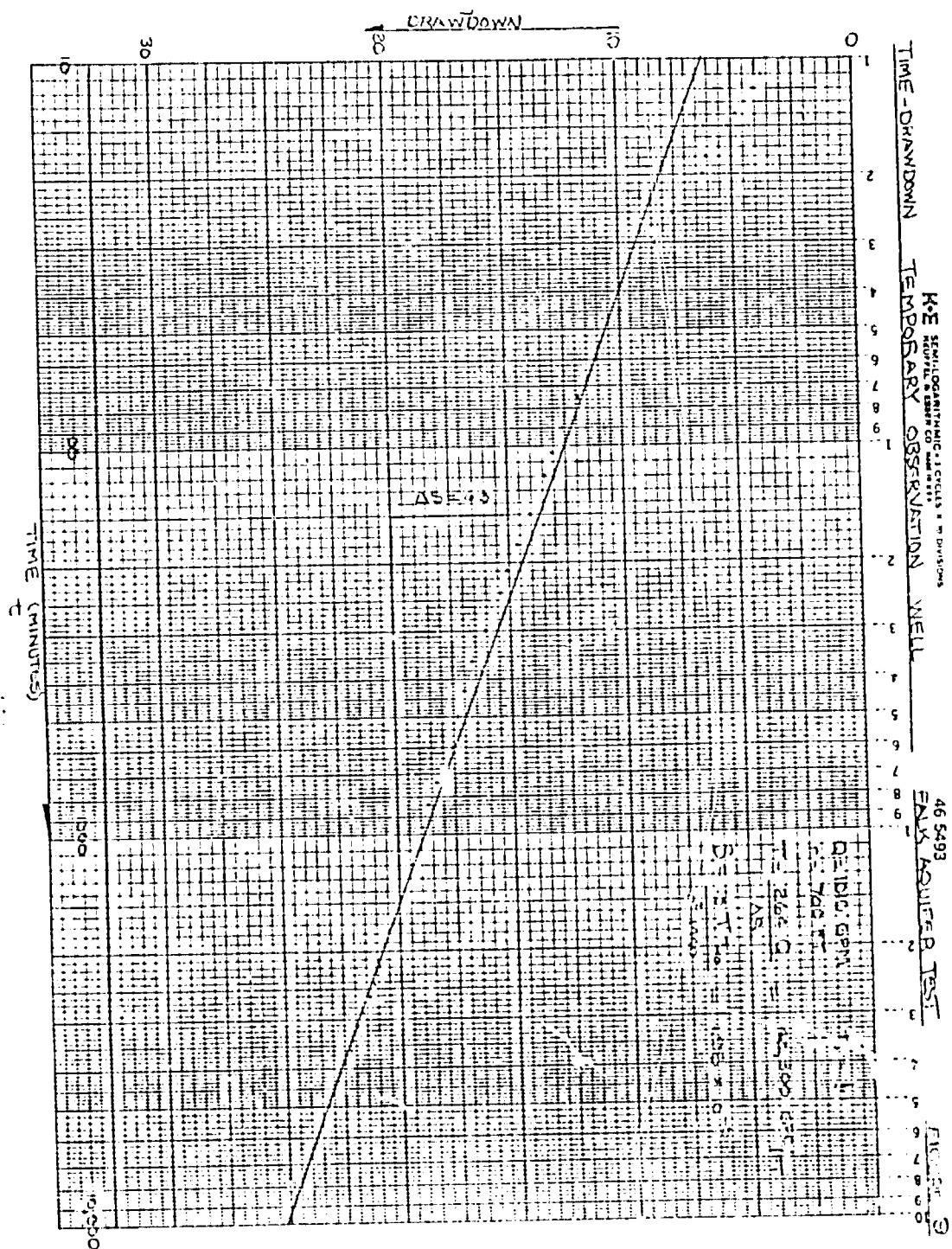


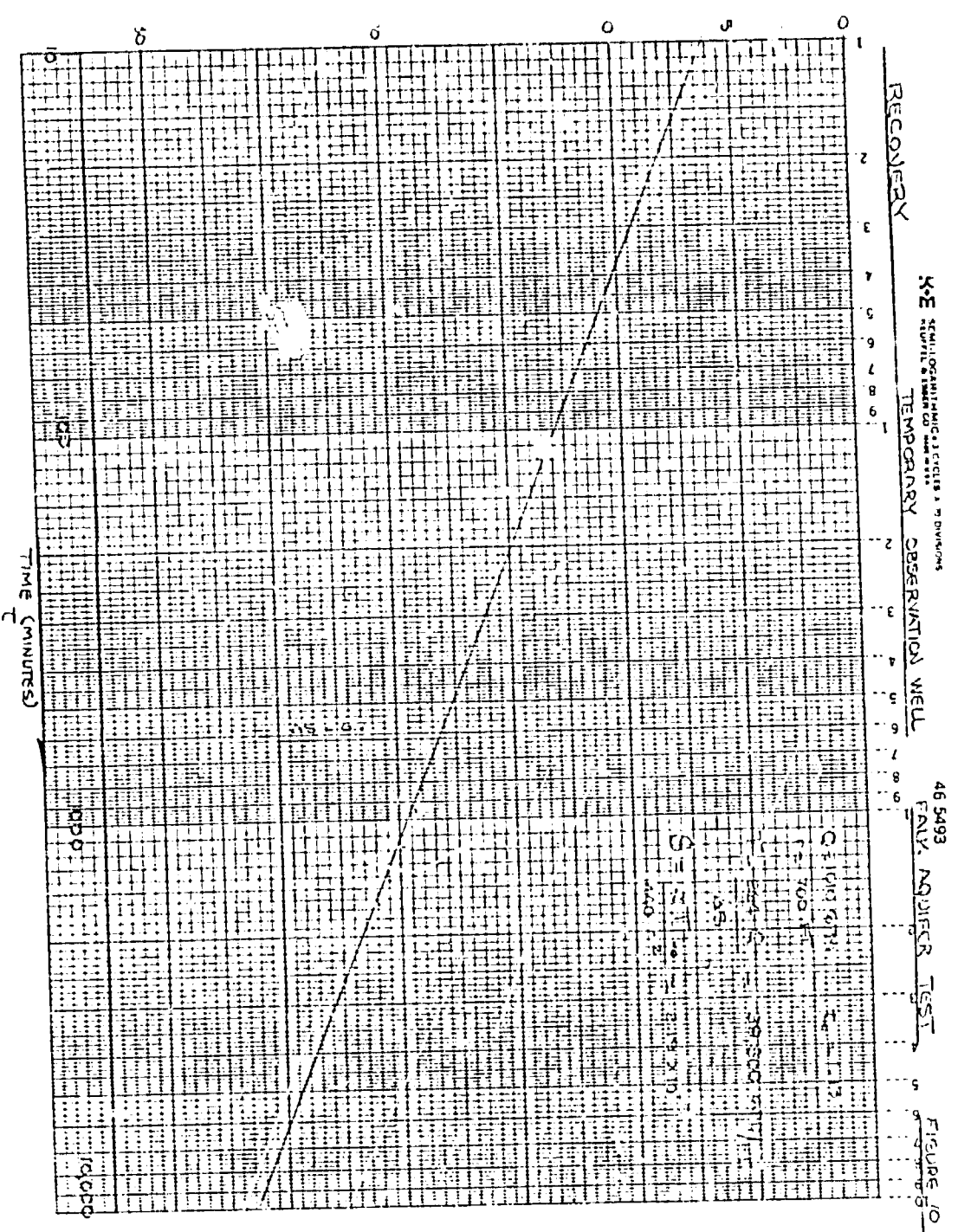
FIG 7



TIME-DRAWDOWN TEMPOBARY OBSERVATION WELL







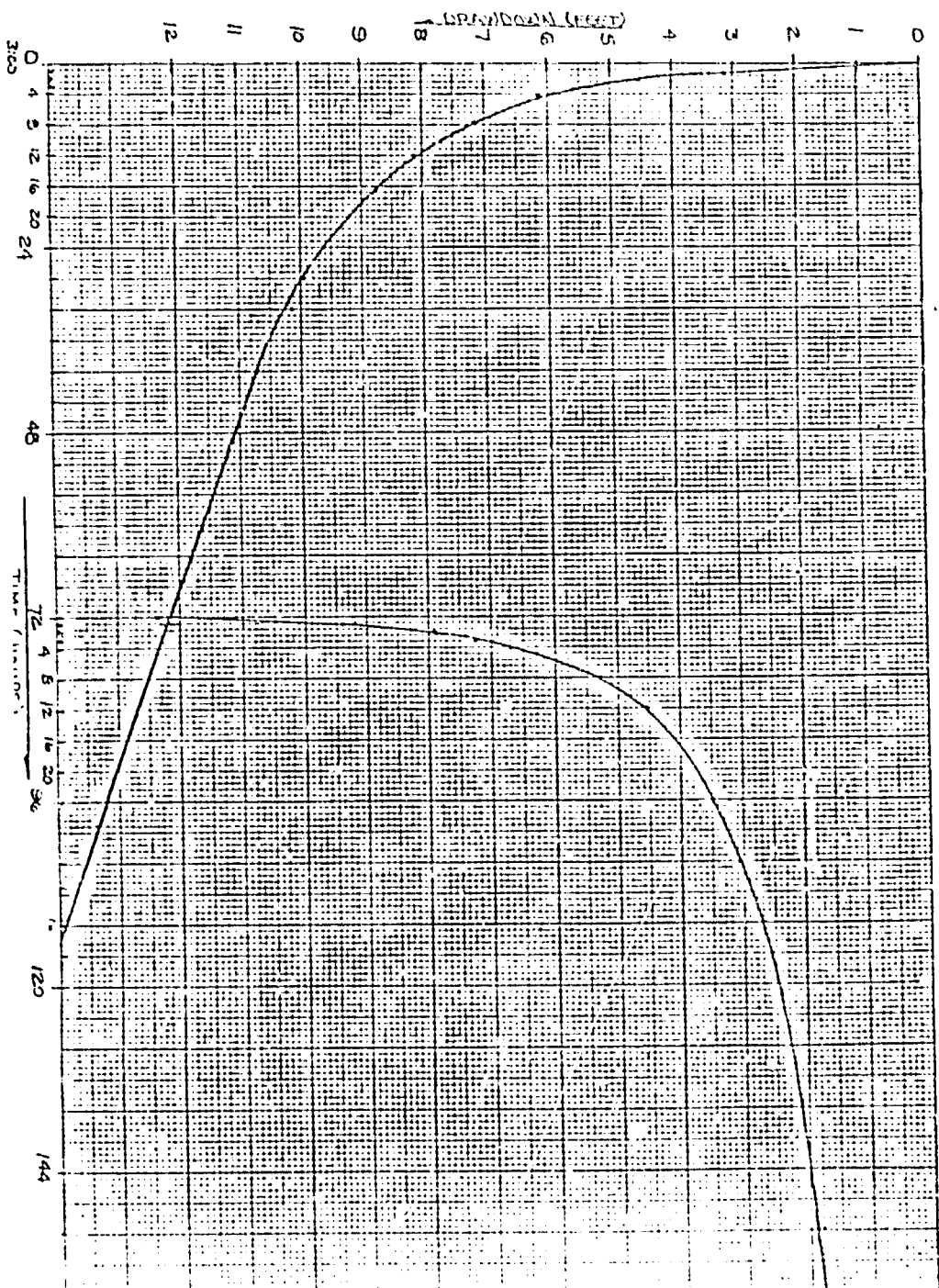
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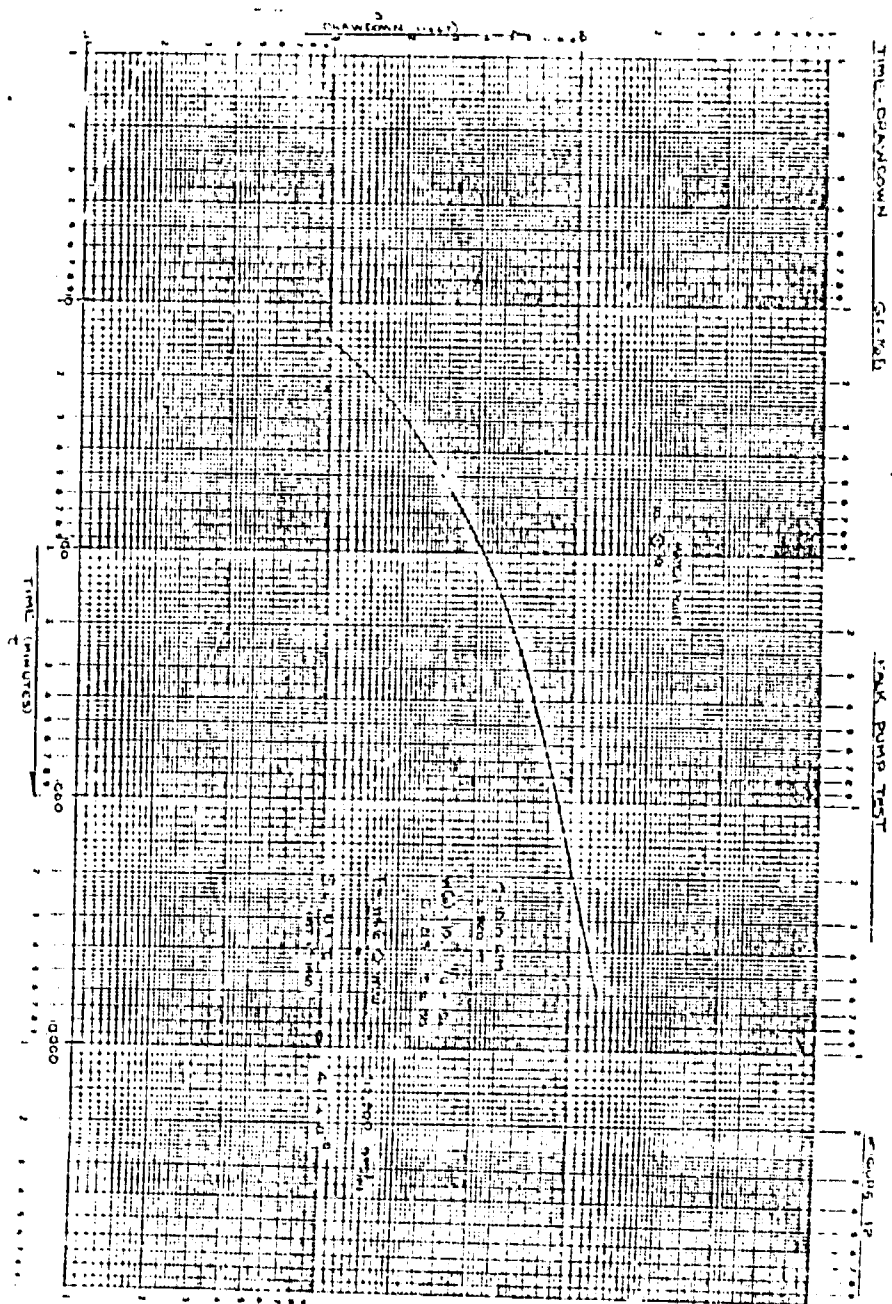
46 1242

GT-76B HYDROGRAPH

PAK MAYER TEST

FIGURE 11





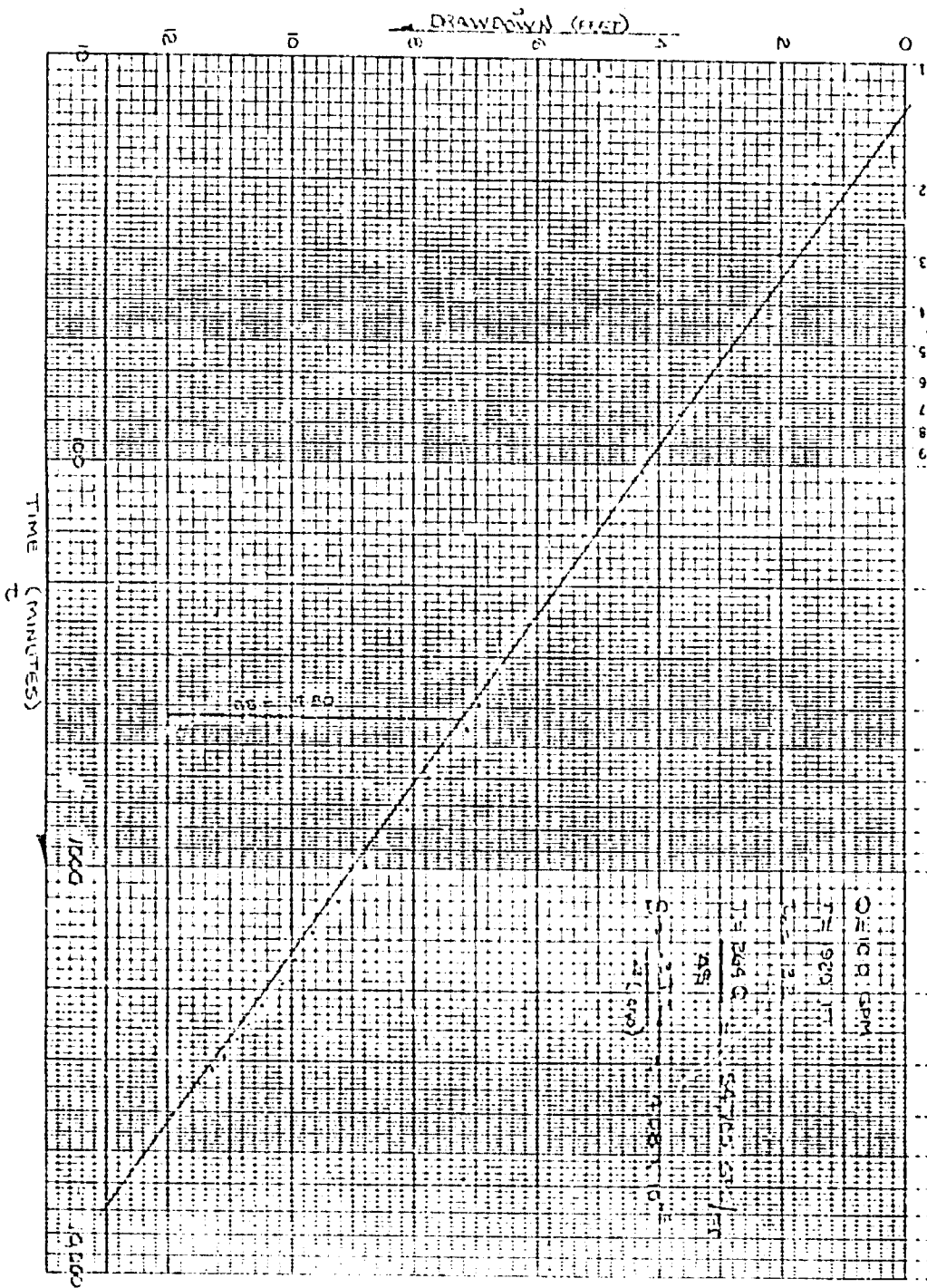
TIME - DRAW DOWN

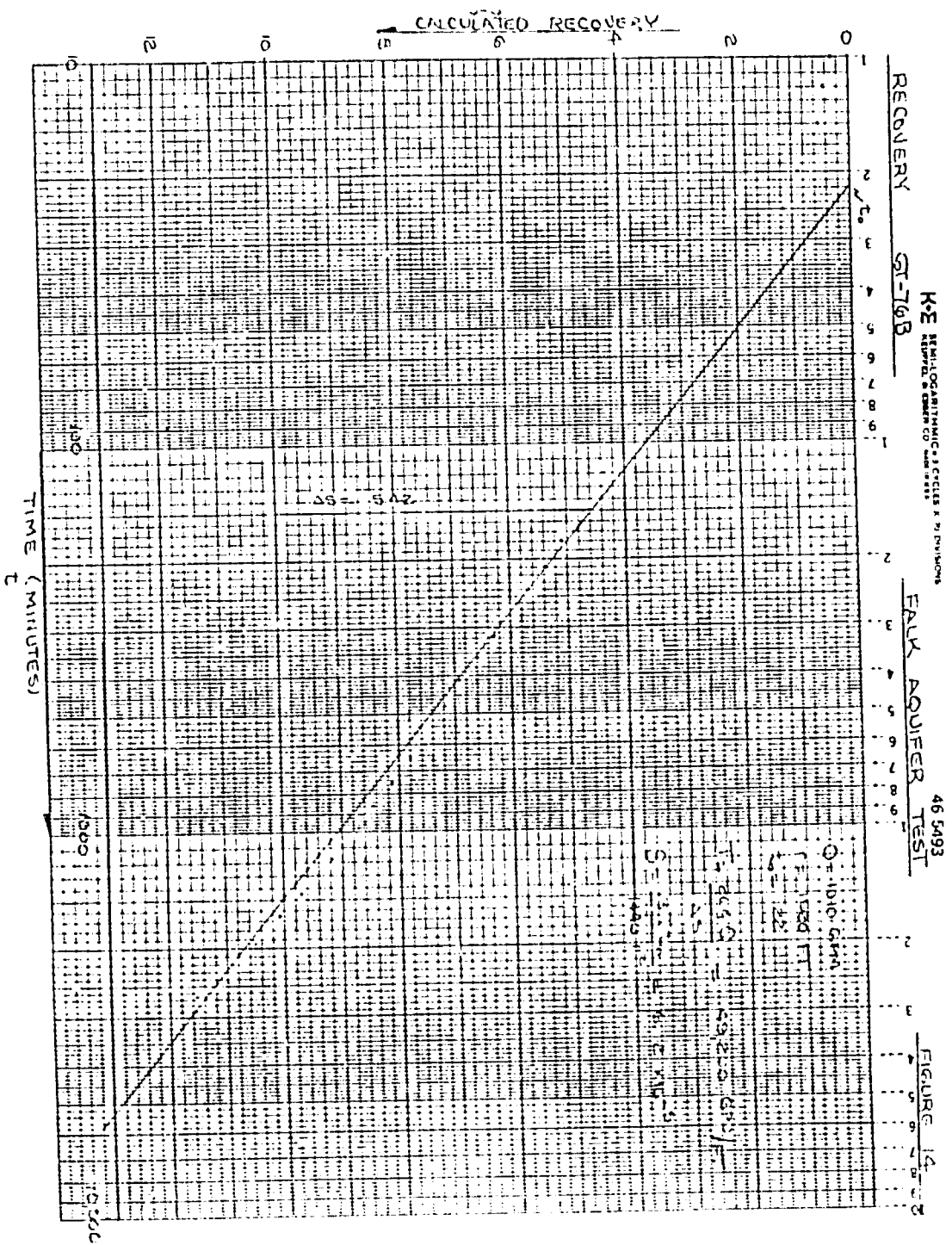
KE SEMI-LOGARITHMIC 3 CYCLES - 4 DIVISIONS
REPEAT & REPEAT CD NAME - ...

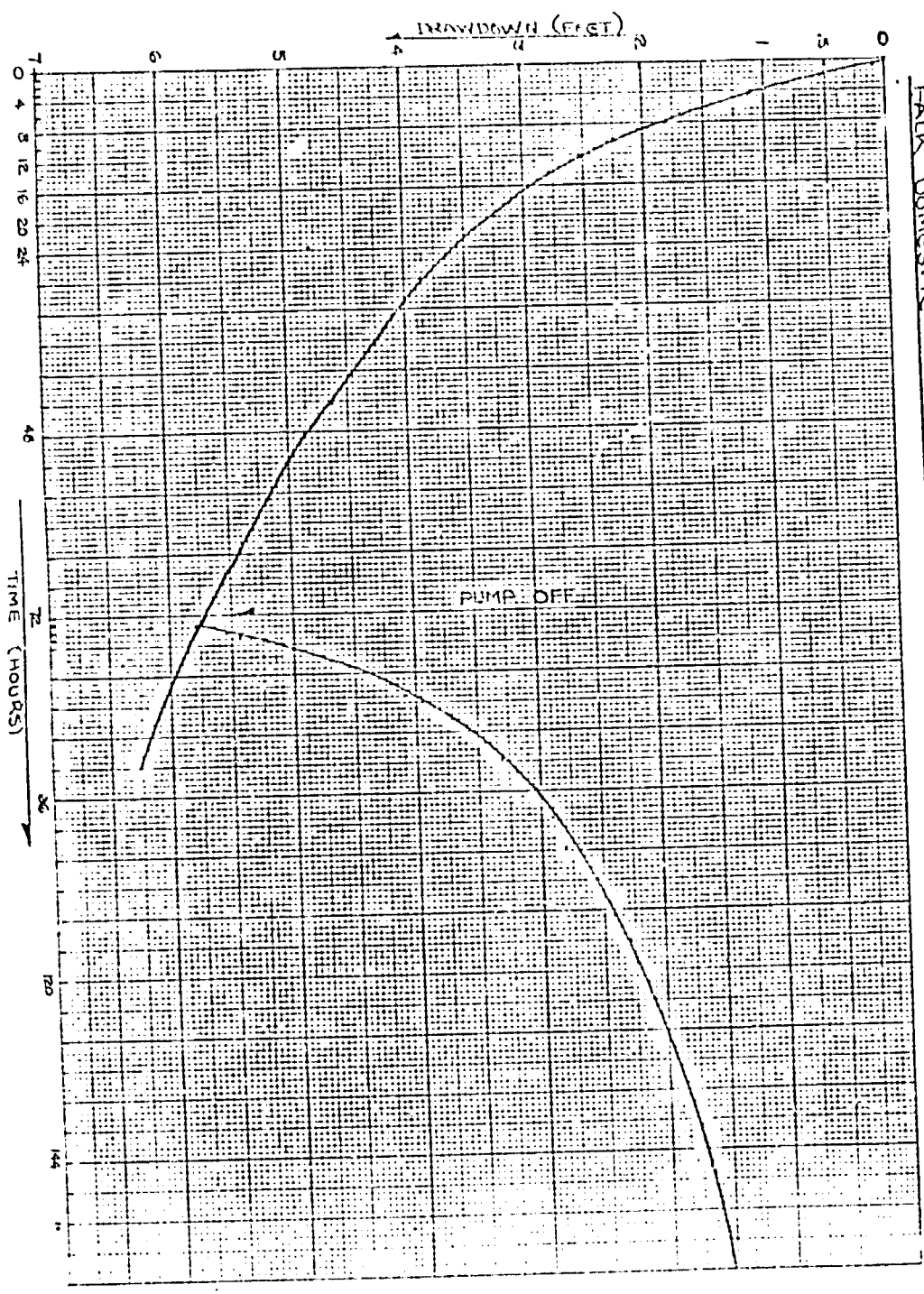
FAIR ACQUICK TEST

46 5493

FIGURE 13







FALK DOMESTIC HYDROGRAPH

KE 20 X 20 TO THE INCHES
REDACTED & BOUND BY THE WATER

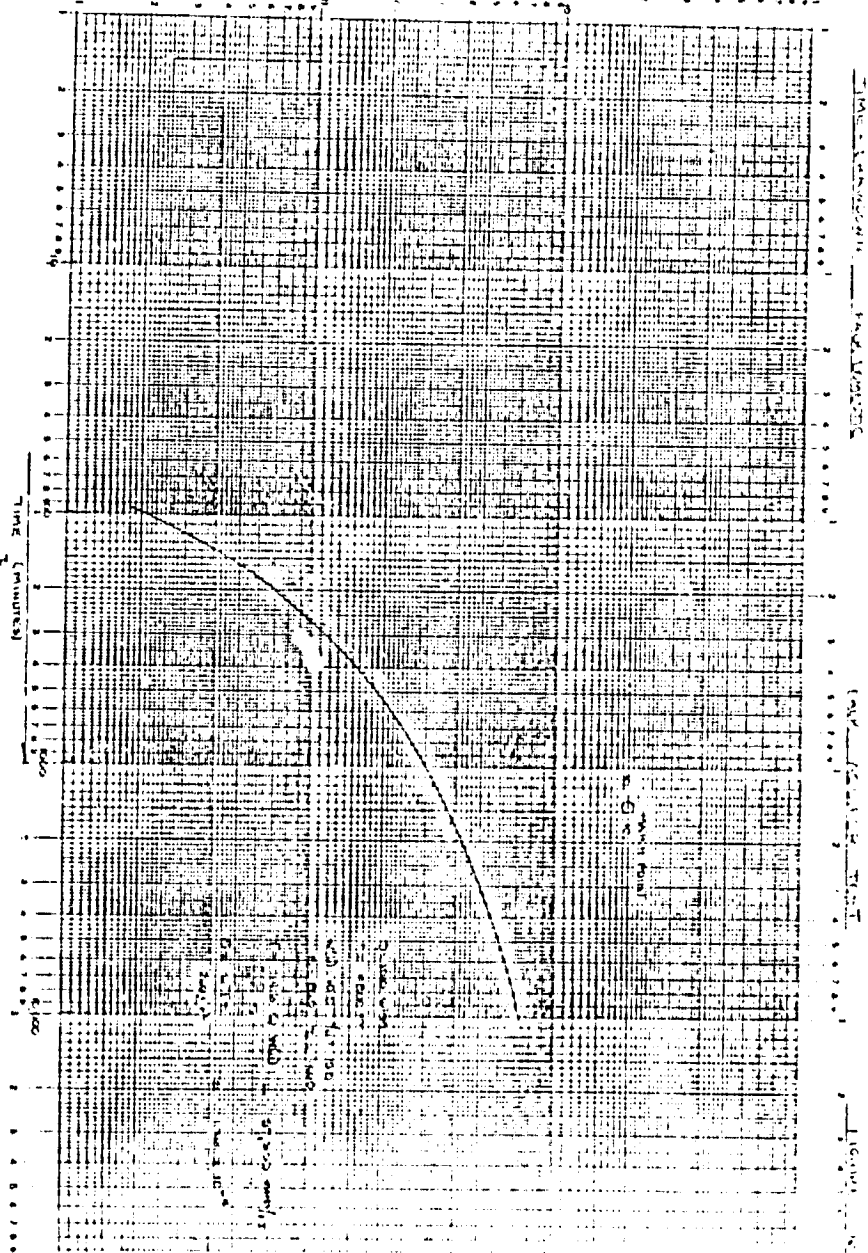
FALK AQUIFER TEST

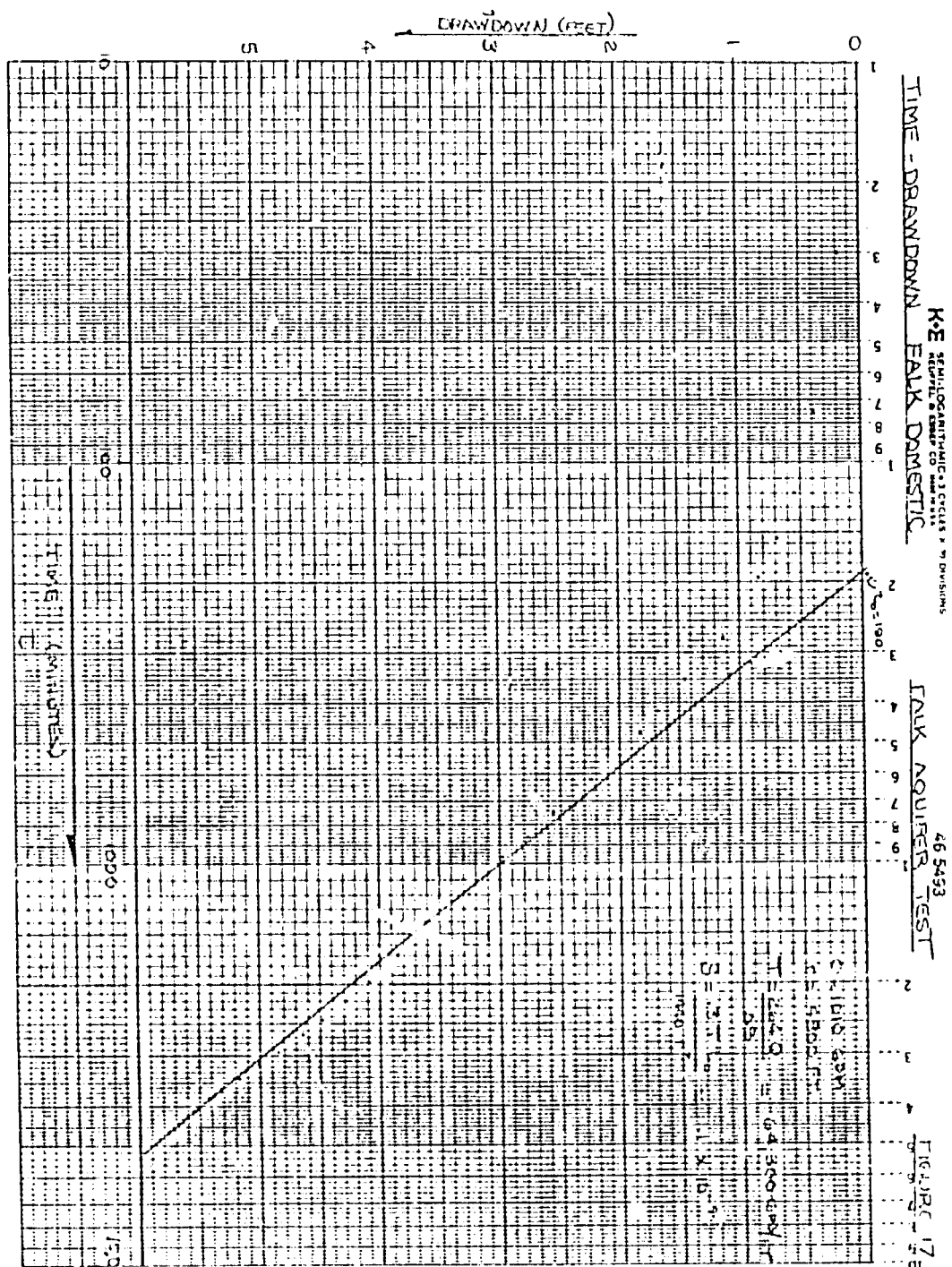
46 1252

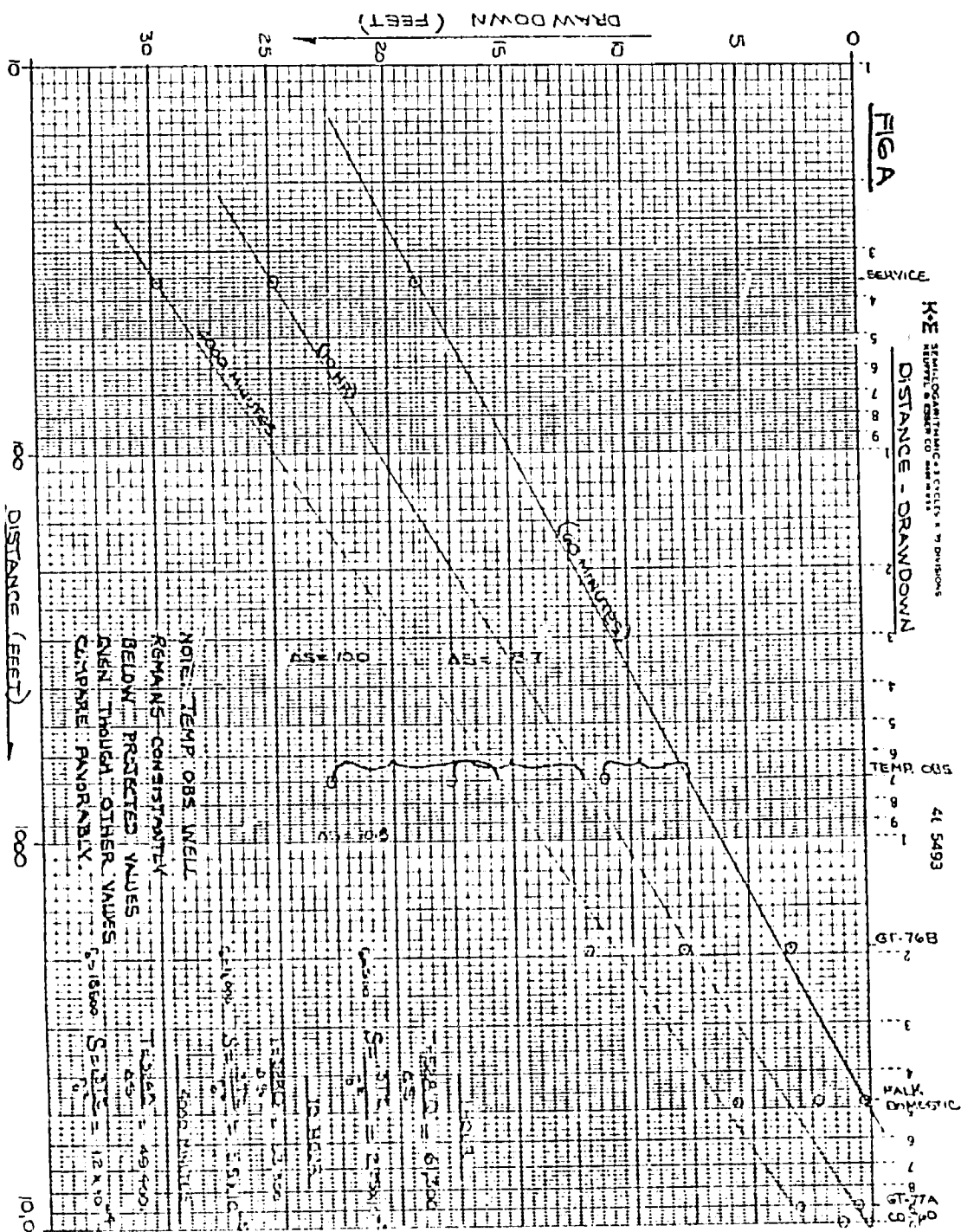
FIGURE 15

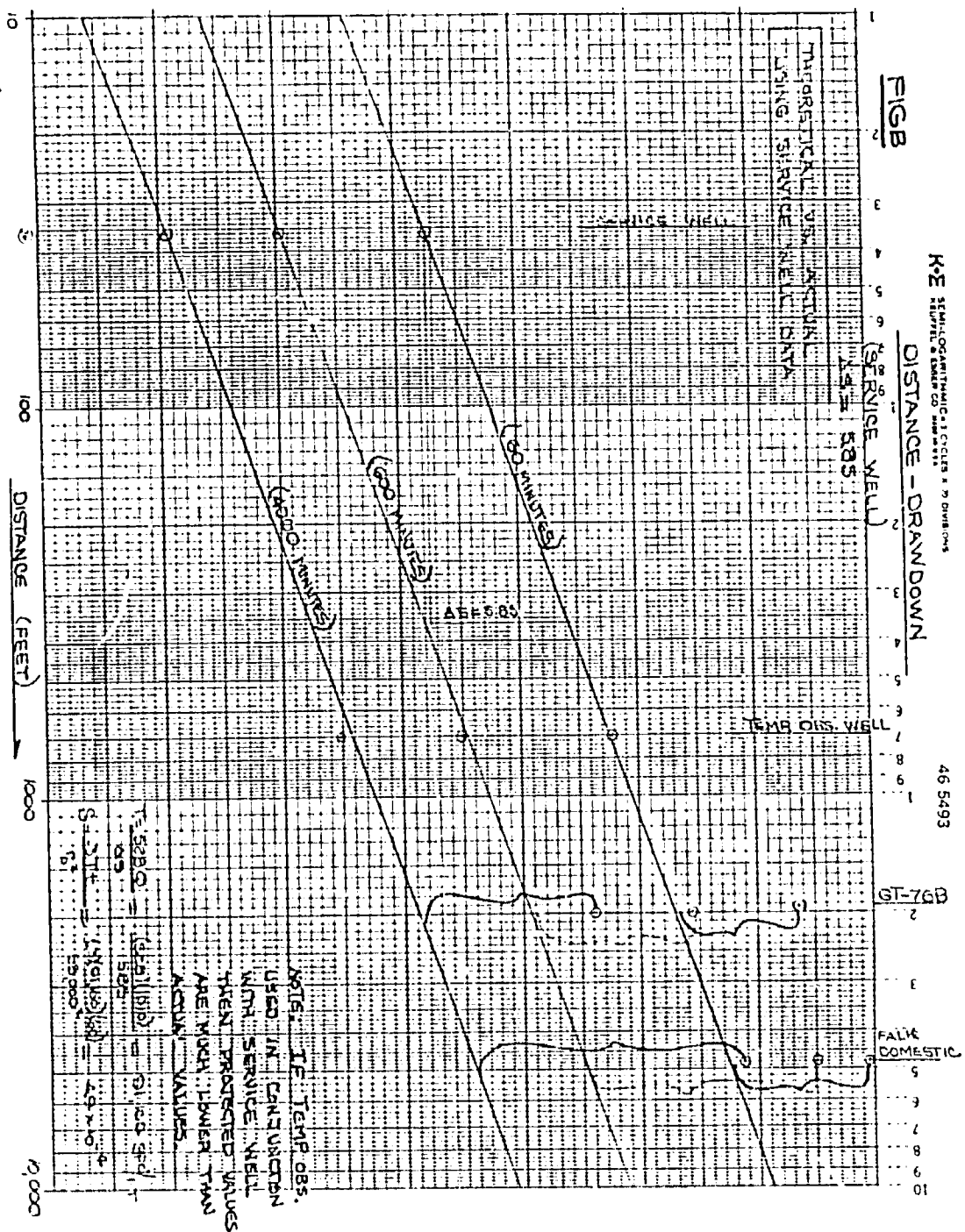
HEIGHT (feet)
DOWN (feet)

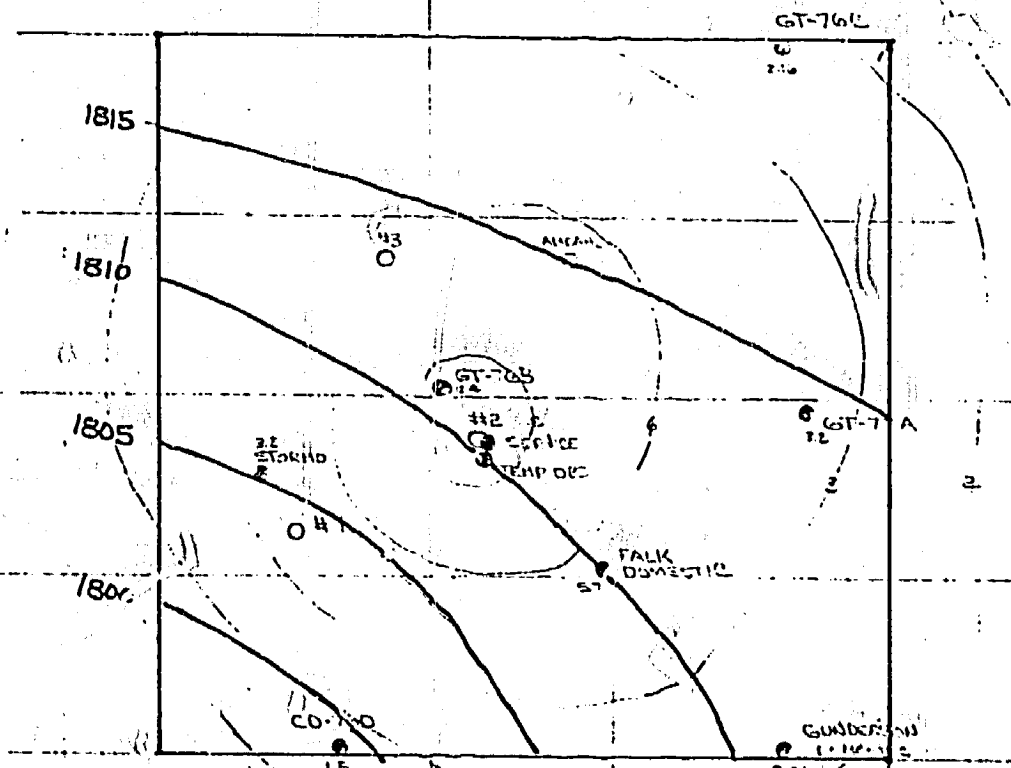
477522











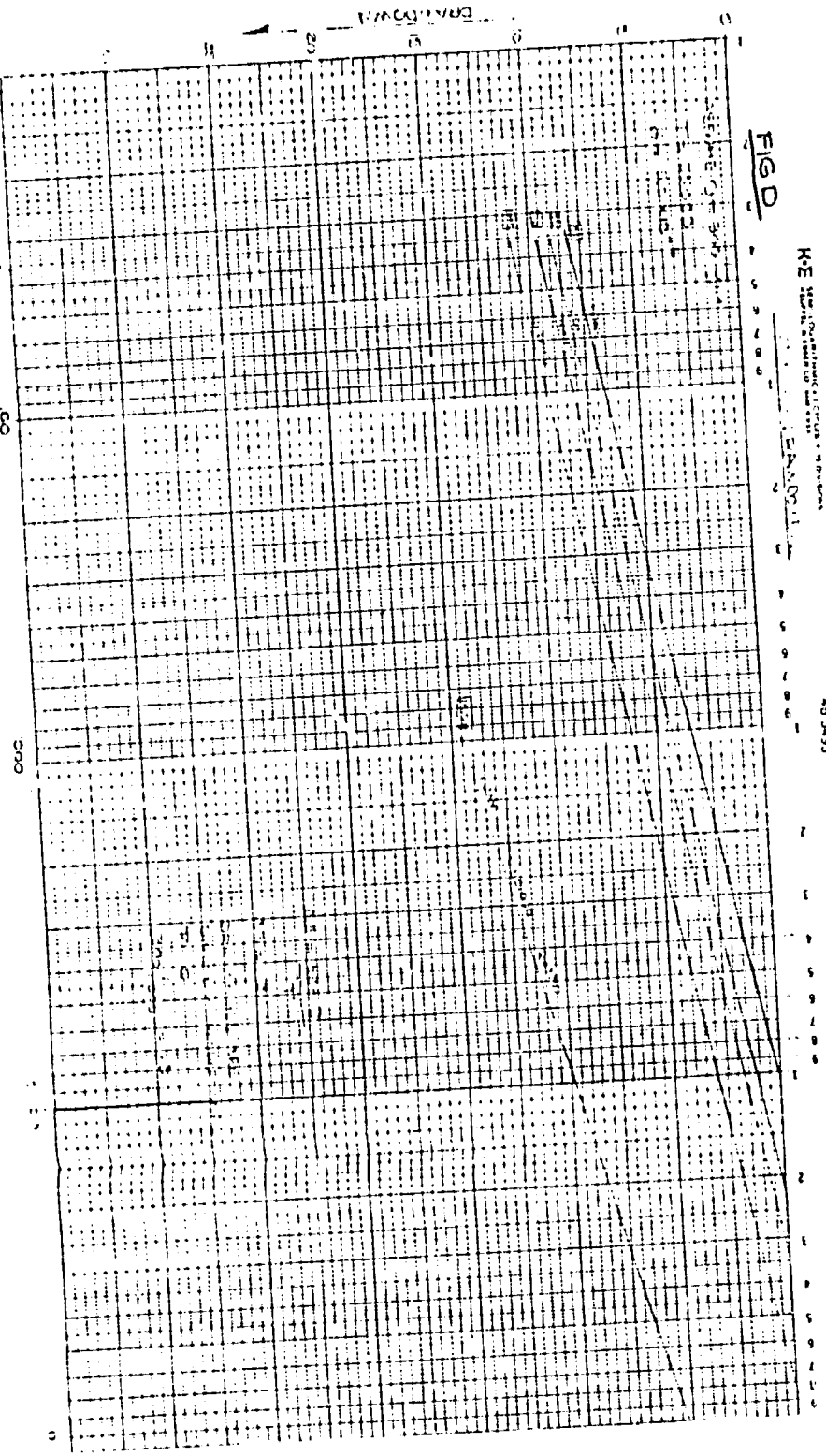


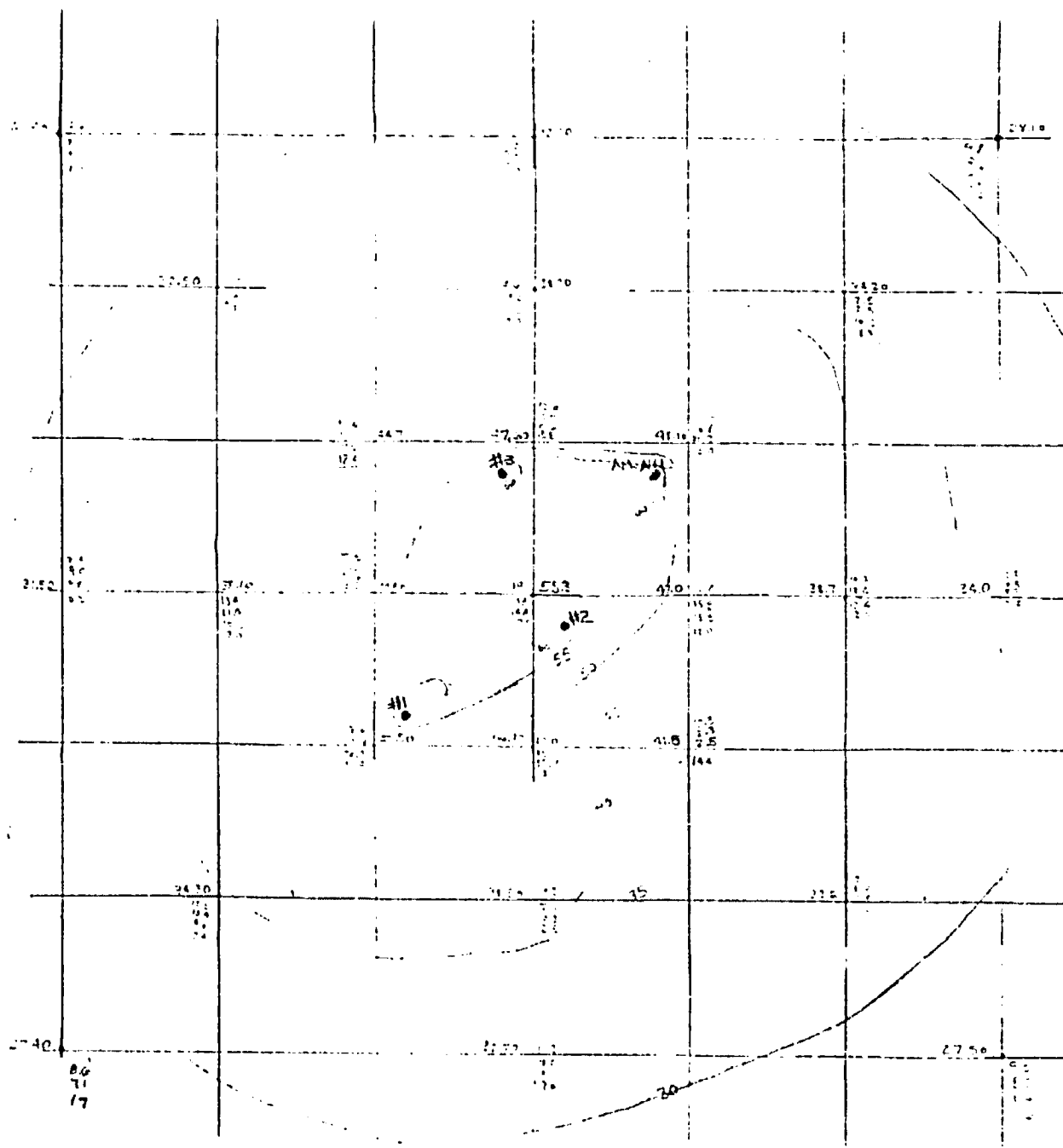
FIG. 1

RELATIONSHIP BETWEEN CONCENTRATION AND TIME

45 5493

3

NO. 6. 16. 52. - 1000. 17. 52. 1000. 18. 52. 1000. 19. 52. 1000. 20. 52. 1000. 21. 52. 1000. 22. 52. 1000. 23. 52. 1000. 24. 52. 1000. 25. 52. 1000. 26. 52. 1000. 27. 52. 1000. 28. 52. 1000. 29. 52. 1000. 30. 52. 1000. 31. 52. 1000. 32. 52. 1000. 33. 52. 1000. 34. 52. 1000. 35. 52. 1000. 36. 52. 1000. 37. 52. 1000. 38. 52. 1000. 39. 52. 1000. 40. 52. 1000. 41. 52. 1000. 42. 52. 1000. 43. 52. 1000. 44. 52. 1000. 45. 52. 1000. 46. 52. 1000. 47. 52. 1000. 48. 52. 1000. 49. 52. 1000. 50. 52. 1000. 51. 52. 1000. 52. 52. 1000. 53. 52. 1000. 54. 52. 1000. 55. 52. 1000. 56. 52. 1000. 57. 52. 1000. 58. 52. 1000. 59. 52. 1000. 60. 52. 1000. 61. 52. 1000. 62. 52. 1000. 63. 52. 1000. 64. 52. 1000. 65. 52. 1000. 66. 52. 1000. 67. 52. 1000. 68. 52. 1000. 69. 52. 1000. 70. 52. 1000. 71. 52. 1000. 72. 52. 1000. 73. 52. 1000. 74. 52. 1000. 75. 52. 1000. 76. 52. 1000. 77. 52. 1000. 78. 52. 1000. 79. 52. 1000. 80. 52. 1000. 81. 52. 1000. 82. 52. 1000. 83. 52. 1000. 84. 52. 1000. 85. 52. 1000. 86. 52. 1000. 87. 52. 1000. 88. 52. 1000. 89. 52. 1000. 90. 52. 1000. 91. 52. 1000. 92. 52. 1000. 93. 52. 1000. 94. 52. 1000. 95. 52. 1000. 96. 52. 1000. 97. 52. 1000. 98. 52. 1000. 99. 52. 1000. 100. 52. 1000.



NOTE:- THEORETICAL W/L AT GT-76E - 69.3' 55.2' (NO. 000000)

AT 67-162 - 92.2

AT GT-77A - '21.7

GT-76C AFTER 30 CA

ACTUAL MEASUREMENT AT GT-76B AFTER 30 DAYS (SEE WELL HYDROGRAPH)
INDICATE 15' DRAWDOWN, FAC 12' IN 3 DAYS DURING AQUIFER TEST.

LOGS OF OBSERVATION WELLS, TEST HOLES, DOMESTIC WELLS, IRRIGATION WELLS

TEST HOLE C

DRILLER SDGS

LOCATION 0000 SEC 12 T 120N R 3W RES.

0-4 TOPSOIL

4-18 TILL, YELLOW CLAY, GRAVELLY

18-25 TILL, GRAY CLAY

25-27 TILL, YELLOW CLAY

27-30 GRAVEL COARSE

30-46 TILL, YELLOW CLAY

46-58 GRAVEL, COARSE

58-75 TILL, YELLOW CLAY

75-130 TILL, GRAY CLAY

130-140 TILL, GRAY, VERY GRAVELLY

* 140-170 GRAVEL, WITH LIGHT GRAY CLAY

170-257 TILL, GRAY CLAY

257-284 GRAVEL, TIGHT

284-385 TILL, GRAY

385-395 TILL, GRAY, WITH HARD BROWN CLAY

395-433 TILL, GRAY

433-480 GRAVEL, HIGH SHALE PEBBLE CONTENT

480-700 SHALE, BLACK, BLOCKY

700-720 SHALE, LIGHT GRAY, CALCAREOUS

TEST HOLE A

DRILLER SDGS

LOCATION 8888 SEC 18 T 121N R 52W RES.

0-27 TILL, BROWN

27-39 TILL, GRAY

39-63 TILL, TAN TO LIGHT GRAY, VERY SILTY

63-65 GRAVEL

65-96 TILL, YELLOW BROWN

* 96-124 GRAVEL AND SILT LAYERS

124-128 TILL, GRAY, SILTY

128-245 TILL, GRAY TO BROWN

245-281 TILL, LIGHT BROWN

281-312 SAND AND GRAVEL, ROCKS

312-497 TILL, BROWN AND GRAY

497-505 GRAVEL

505-530 SHALE

GT-77E - OBSERVATION WELL

DRILLER - SDGS

LOCATION - BBBB SEC. 29, T12N R51W REG.

WATER LEVEL - 77.

0-5 TILL, YELLOW CLAY, OXIDIZED

5-10 TILL, OXIDIZED, GRAVELLY

10-17 TILL, YELLOW CLAY

17-28 TILL, GRAY, VERY SILTY (LACUSTRINE?)

28-110 TILL, YELLOW CLAY, OXIDIZED

110-132 TILL, GRAY CLAY, GRAVELLY

132-137 GRAVEL, COARSE

137-220 TILL, GRAY CLAY, GRAVELLY IN SPOTS

* 220-227 GRAVEL, COARSE

227-245 TILL, GRAY CLAY

APPLICATION 3342-3 TEST HOLES

DRILLER - EMPIRE

LOCATION - E $\frac{1}{2}$ SEC. 33, T12N R52W

WATER LEVEL - 43' (REPORTED)

NE $\frac{1}{4}$

0-98 TILL

98-119 SAND WITH CLAY

119-130 SAND

130-134 CLAY

* 140-155 SAND MEDIUM

155-162 CLAY

* 158-170 SAND MEDIUM

170-174 CLAY

* 174-177 SAND COARSE

177 CLAY

SE $\frac{1}{4}$

0-2 TOPSOIL, BLACK

2-14 GRAVEL

14-119 TILL

* 119-150 SAND MEDIUM

150-160 CLAY

LOGS CONTINUED

GT-76C OBSERVATION WELL
DRILLER SDGS
LOCATION ANAA SEC. 12 T120N R52W RES

0-.5 TOPSOIL, BLACK
.5-122 TILL, OXIDIZED CLAY
122-125 SAND, MEDIUM TO COARSE
125-133 TILL, GRAY CLAY
* 133-178 SAND AND GRAVEL, MEDIUM TO COARSE
178-185 TILL, GRAY CLAY

GT-76B OBSERVATION WELL
DRILLER SDGS
LOCATION BBBB SEC. 23 T120N R52W RES
WATER LEVEL 13'

0-1 TOPSOIL, BLACK
1-30 TILL, YELLOW OXIDIZED CLAY
30-106 TILL, GRAY CLAY
* 106-124 SAND AND GRAVEL, MEDIUM TO COARSE
124-140 TILL, GRAY CLAY

TEST HOLE B

DRILLER SDGS
LOCATION CCCC SEC. 20 T121N R52W RES.

0-2 TILL, YELLOW CLAY
2-5 GRAVEL, COARSE
5-22 TILL, YELLOW OXIDIZED CLAY
22-27 TILL, YELLOW GRAVELLY
27-85 TILL, LIGHT GRAY
85-146 TILL, GRAY CLAY
146-154 SAND, WITH CLAY
154-165 TILL, GRAY CLAY
165-200 TILL, GRAY SHALEY CLAY, HARD DRILLING, ROCKS AT 195

FALK #3

DRILLER EMPIRE

LOCATION CENTER NE $\frac{1}{4}$ SEC. 15 T120N R52W RES

0-2 TOPSOIL

2-57 SAND AND GRAVEL

57-70 TILL, GRAY CLAY

70-114 TILL, YELLOW CLAY

* 114-130 SAND AND GRAVEL

6" CASING

130 TILL, GRAY CLAY

TEST HOLE - APPLICATION 3225-3

DRILLER STADHIEM

LOCATION NEAR CENTER NE $\frac{1}{4}$ SW $\frac{1}{4}$ SEC. 15 T120N R52W RES

0-1 TOPSOIL

1-22 GRAVEL

22-105 TILL

* 105-125 GRAVEL

125-140 TILL

AMDAHL IRRIGATION

DRILLER

LOCATION CENTER NE $\frac{1}{4}$ SEC. 14 T120N R52W RES

0-2 TOPSOIL, BLACK

2-37 TILL, YELLOW CLAY

37-122 TILL, GRAY CLAY

* 122-182 GRAVEL

182 TILL

TEMPORARY OBSERVATION WELL

DRILLER STADHIEM

LOCATION 700' SOUTH OF CENTER NE $\frac{1}{4}$ SEC 23 T120N R52W RES

WATER LEVEL 13'

0-114 TILL CONTACT AND GRAVEL THICKNESS OK.

* 114-135 GRAVEL

FALK #2 (ALSO SAME FOR SERVICE WELL)

WATER LEVEL 18'

DRILLER EMPIRE

LOCATION CENTER OF NE $\frac{1}{4}$ SEC 23 T120N R52W RES.

0-2 TOPSOIL

2-5 TILL, SANDY

5-15 SAND AND GRAVEL

15-35 TILL, YELLOW CLAY

35-115 TILL, GRAY CLAY

* 115-134(?) SAND AND GRAVEL (DID NOT COMPLETELY PENETRATE)

LOCATION CCCC SEC. 27 T120N R52W K55
WATER LEVEL - 4'

0-2 TOPSOIL, BLACK

2-20 SAND

20-25 SAND WITH CLAY

25-114 TILL, GRAY CLAY

114-125 GRAVEL, WHITE COARSE

125-126.5 TILL, GRAY CLAY

*

CD-77A OBSERVATION WELL

DRILLER STADHIEM

LOCATION PBBB SEC. 18, T118N R52W

WATER LEVEL - FLOWING 7'-8"

0-2 TOPSOIL, BLACK

2-5 GRAVEL, BROWN COARSE

8-19 TILL, BROWN CLAY

19-140 TILL, GRAY CLAY

* 140-143 GRAVEL, MEDIUM

143-178 TILL, GRAY CLAY, GRAVELLY

178-180 TILL, BROWN-OLIVE CLAY

TEST HOLE F

DRILLER STADHIEM

LOCATION BBBB SEC 35 T118N R52W RES.

0-1 TOPSOIL (BLACK)

1-18 TILL, YELLOW BROWN - VERY SILTY, LOESS (?)

18-21 TILL, BROWN, GRAVELLY

21-91 TILL, GRAY

91-132 TILL, BROWN - SANDY

132-176 TILL, GRAY

176-178 TILL, BROWN - CARBONACEOUS - OILY

178-200 TILL, GRAY - HARD

DRILLER S.D.G.S

LOCATION B0BC SEC 5 T11N R52W

0-2 TOPSOIL, BLACK

2-42 TILL, YELLOW CLAY, OXIDIZED

42-84 TILL, GRAY CLAY, WOOD AT 63'

84-92 TILL, YELLOW CLAY, OXIDIZED

92-108 TILL, GRAY CLAY

101-170 TILL, GRAY CLAY, LOTS OF WOOD AT 115'

CD-76A OBSERVATION WELL

DRILLER S.D.G.S

LOCATION B0BB SEC. 13 T11N R51W RES.

WATER LEVEL 10'

0-1 TOPSOIL, BLACK

1-25 TILL, YELLOW OXIDIZED CLAY

25-36 TILL, GRAY CLAY

* 136-160 GRAVEL, MEDIUM TO COARSE

160-170 TILL, GRAY CLAY

GT-77F OBSERVATION WELL

DRILLER S.D.G.S

LOCATION B0BB SEC 26 T12N R52W

WATER LEVEL - 52'

0-2 TOPSOIL, BLACK

2-3 GRAVEL

3-16 TILL, YELLOW CLAY

16-32 SAND AND GRAVEL, WITH CLAY

32-104 TILL, GRAY CLAY

104-124 TILL, GRAY CLAY, HARD

124-131 TILL, BROWN CLAY

131-137 TILL, GRAY CLAY, VERY SILTY, HARD

137-179 TILL, BROWN CLAY

179-182 SAND AND GRAVEL, WITH CLAY

182-197 TILL, GRAY CLAY, GRAVELLY

* 197-201 GRAVEL, COARSE

201-230 TILL, GRAY CLAY

LOG CONTINUED

OBSERVATION WELL CD-77G

DRILLER EDGE

LOCATION CCCC SEC 26 T 118N R 52W

WATER LEVEL 61'

0-2 TOPSOIL, BLACK

2-30 TILL, BROWN CLAY

30-48 TILL, GRAY CLAY

48-56 TILL, BROWN TO GRAY CLAY

56-85 TILL, GRAY CLAY

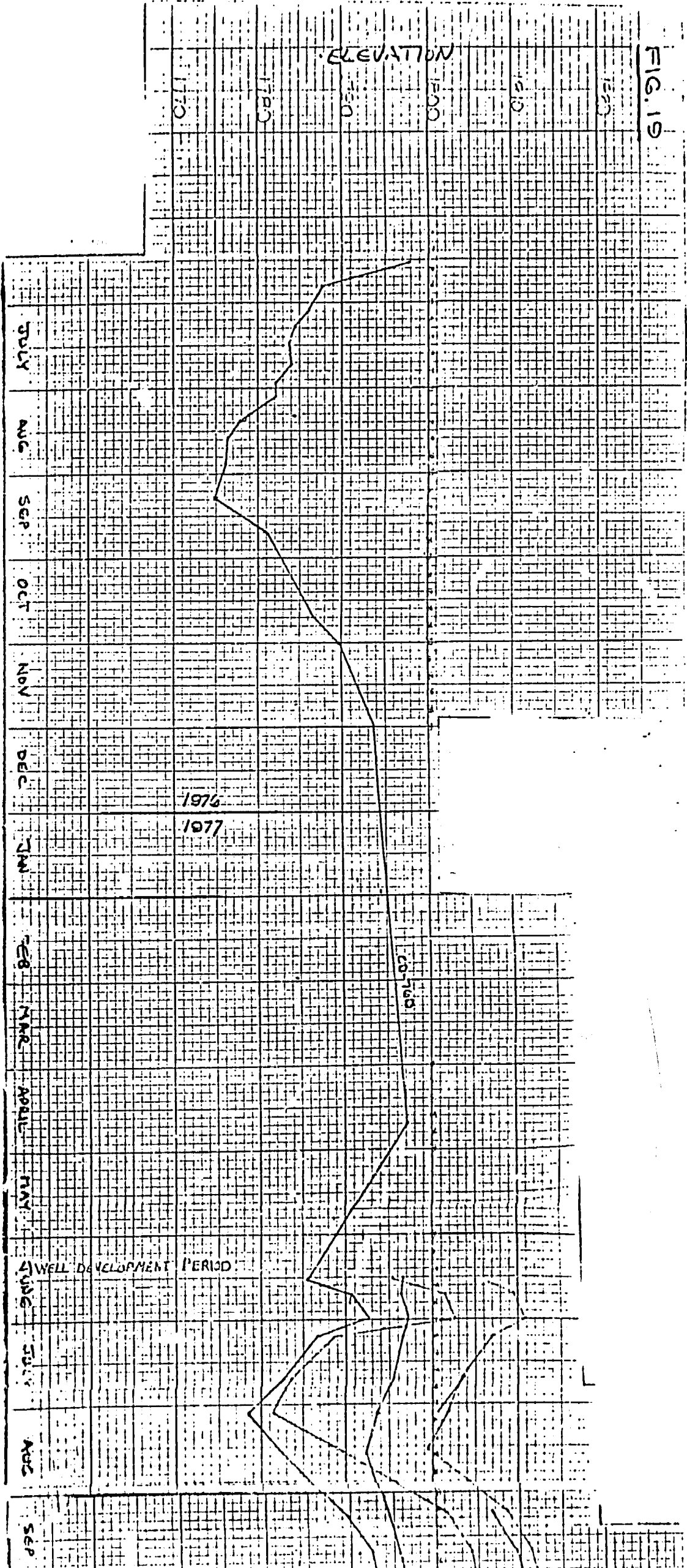
85-92 TILL, GRAY CLAY, HARD

92-217 TILL, GRAY CLAY

* 217-231 SAND, MEDIUM TO COARSE

231-245 TILL, GRAY CLAY

FIG. 19



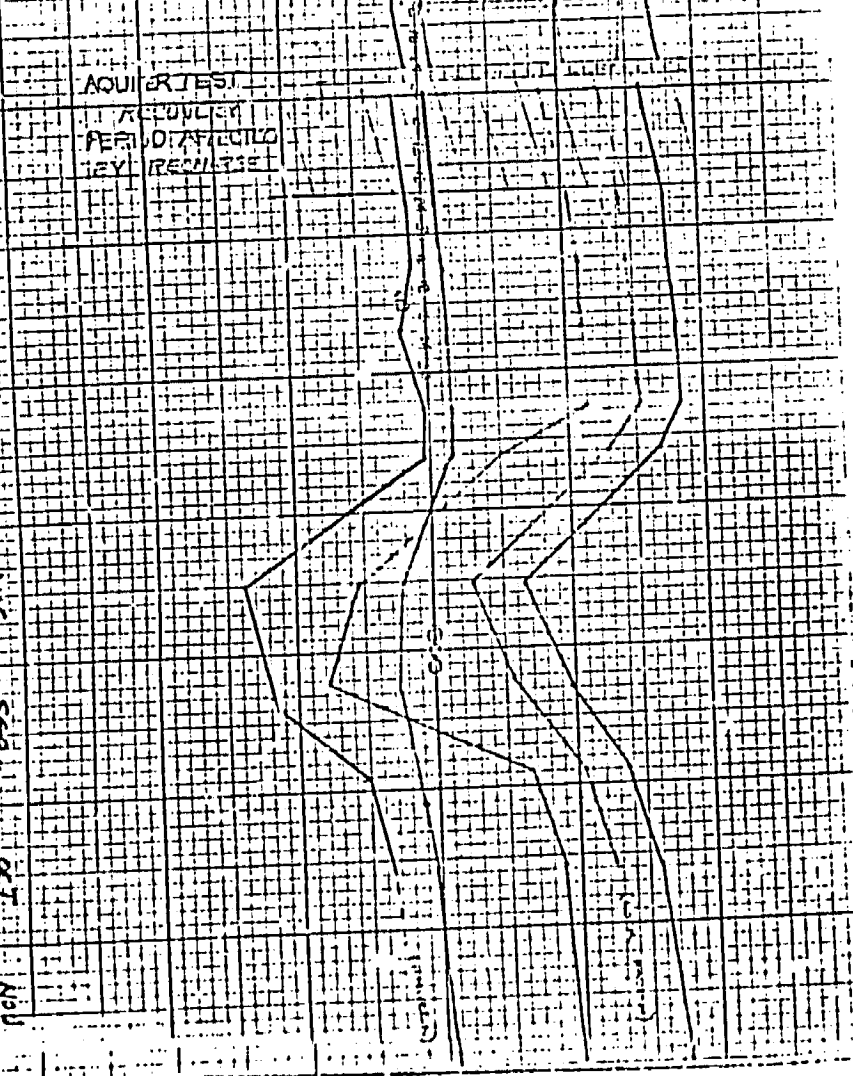
Aug
1977



APRIL
MAY

AQUIFER TEST
REPUBLICAN
PERIOD AFFILIATION
KEY RESULTS

JUNE
JULY
AUG
SEP
OCT
NOV



Falk Farms, Inc.

R. R. South Shore, S. Dak.

57263

are the renters of this land

Will you kindly send "data sheet" for
recording irrigation water use to
Falk Farms at the above address?

Permit # 4184-3

R E Kohlen



Department of Water & Natural Resources

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

January 29, 1988

FALK FARMS INC-LEASOR
RR #1 BOX 62
SOUTH SHORE, SD 57263

NOTICE

Re: Violation of Water Permit No(s). 4184-3

Our records indicate that the 1987 Irrigation Questionnaire has not been received for Permit No(s). 4184-3. The request for the Questionnaire was dated October 8, 1987. The Water Management Board has directed that owners of water permits who have not submitted 1987 Irrigation Questionnaires be given notice of permit violation and of hearing(s) before the Board. The hearing(s) will be held to determine action to be taken by the Board for violation of Water Permit No(s). 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

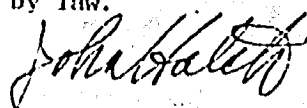
The hearing(s) will be at 9:30 am, March 2, 1988, Room 216, Joe Foss Building, 523 E Capitol, Pierre SD.

The hearing(s) will be conducted pursuant to the provisions of SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to procedures contained in SDCL 1-26.

Following the hearing(s) the Water Management Board can:

1. Suspend Permit No(s). 4184-3 until either the 1987 Questionnaire is submitted or for a period of up to one year;
2. Postpone any action;
3. Take no action.

The hearing(s) is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.


JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

cc: R E Kahnke, 405 5th Ave NW, Watertown, SD 57201

NOTE: If the questionnaire(s) is received in this office before the March 2 hearing date, you will no longer be in violation of your permit(s) and your name will be deleted from the agenda pertaining to these hearings.

**South Dakota Department of
Water & Natural Resources**

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

February 9, 1988

2477-3	2827-3
4153-3	4180-3
4184-3	4417-3

Warren Falk
RR 1, Box 59
South Shore SD 57263

Dear Mr. Falk:

I am writing to acknowledge receipt of your 1987 Irrigation Questionnaire(s). A notice was sent to you January 29, 1988 regarding the requirement to submit the Irrigation Questionnaire(s) for Water Permit No. 2477-3, 2827-3, 4153-3, 4180-3, 4184-3, 4417-3 and the hearing date before the Water Management Board.

Since your questionnaire was received prior to the March 2, 1988 Water Management Board Meeting, your name has been deleted from the Board Meeting agenda. If you have any questions, please contact us.

Very truly yours,

John Hatch
JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

cc: R E Kahnke
405 5th Ave NW
Watertown SD 57201

South Dakota Department of
Water & Natural Resources

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

July 19, 1988

4184-3

R.E., Ina & Ross Kahnke
405 5th Ave NW
Watertown SD 57201

Dear Sirs:

During the week of July 12-15 an investigation of domestic well complaints was conducted in Codington and Grant Counties. In all instances, the domestic wells were completed into the Prairie Coteau Aquifer (artesian aquifer) and the water levels were being affected by irrigation withdrawals. One of the complaints was that irrigation systems were wasting water by spraying on county roads and highways. This is not necessary and needs to be prevented. Not only is this a hazard to motorists with potential liability for the irrigator, but it is poor public relations.

I am requesting that you prevent the end guns from spraying on the county roads and highways. Technically, spraying roads is a waste of water and legislation could be introduced and passed by the Legislature that could be difficult to live with.

Very truly yours,

for 
JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352





DEPARTMENT OF WATER & NATURAL RESOURCES
Joe Foss Building
525 East Capitol
Pierre, South Dakota 57501-3181

January 22, 1991

4184-3

Ina Kahnke
405 5th Ave NW
Watertown, SD 57201

Dear Ms Kahnke:

The inspection of your water use system and the inspection of the extent of application of water to beneficial use, as developed under Water Permit No. 4184-3, has been completed. Your final water right document, the Water License, can now be issued.

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

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.

Water Permit No. 4184-3 is currently listed as R E, Ina & Scott Kahnke. If ownership of the permit should be listed in name(s) other than the above, please complete the enclosed "Notice of Transfer" and return it to our office. The form will need to be signed in the presence of a notary. A \$2.50 filing fee is required for filing a change of ownership.

Sincerely,

Genny McMath
Natural Resources Analyst
(605) 773-3352

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

Watertown, S.D.
Jan. 22, 1991

Beauy McMath, Dept of WNR
523 East Capitol
Pierre, S.D.

Dear Mr McMath,

As specified in your letter of Jan 22, 1991,
I enclose check in the amount of
\$50.00 license fee for water permit #4184-3.

I am also enclosing check of \$1.50
to transfer to my name. The land
was held in joint ownership and my
husband passed away July 20, 1989.

Sincerely,
Ina C. Kahn



NOTICE OF TRANSFER OF OWNERSHIP

No. 4184-3

TO: Chief Engineer
Water Rights Division, DWR
523 East Capitol
Pierre, SD 57501-3181

Date: _____

I/We request that Water Permit/Right No. 4184-3

formerly owned by: RE Kahake & Inc. C. Kahake

be transferred to: (name & address) Inc. C. Kahake

PO Box 691, Watertown, SD 57201

(telephone No.) 605-886-3395

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

N 1/2 Sec. 30, T116N, R53W

Corbett County, South Dakota

I/We understand that the validity of Water Permit/Right No. 4184-3 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

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

A fee of Two Dollars and Fifty Cents (\$2.50) is attached to cover the filing fees as required under SDCL 46-2-13.

STATE OF SOUTH DAKOTA

County of Corbett

I/We Inc. C. Kahake 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, and that I know of my own personal knowledge that the information herein stated is true.

Inc. C. Kahake
(Signed)

Subscribed and sworn to before me this 29th day of January 1991.

[Signature]
(Notary Public)
My Comm. Expires September 11, 1992

NOTE: Water permits may be cancelled for nonconstruction within the five year construction period. Once a water permit is developed and the water used, the permit becomes a water right. A water right may be lost for three reasons:
1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Location of well: 1/4 184 25 Section 184 Township 184 Range 25

~~Wall cover.~~

Date well drilling completed 9/11/78 Purpose of well Domestic, irrigation, industrial, stock and other

WELL LOG

Layer, top to bottom	Description of layer
1	...
2	...
3	...
4	...
5	...
6	...
7	...
8	...
9	...
10	...
11	...
12	...
13	...
14	...
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62	...
63	...
64	...

Case 1:19-cv-00001

25 | 0104

5.011 SURGEY (1111)

2430	6000
------	------

[illegible]

Depth is 8000 - 10000 fathoms

Name of producing dealer (if known) _____

Total debt of 1913: \$1,361,000

Depth to bottom of cutting: 100 ft.

Leave information in the space below show and, size, weight, length to
weight, etc. for armor - all casing and surface casing, if used

6-30162711 0000

[illegible]

Screen information in the spaces below show length of street below curb

10-10-1944

100-351610-75

10-10-1964

Since 1994, the following

None of the following Contractors:

(2) PUMP INSTALLATION

Company name and size of pump _____

Type of pump 7-11111 9/17/54

Depth of pump placement 25 ft., Date of pump installation 11-7-52

(3) WATER SURFACE MEASURING TUBE

WATER SURFACE MEASURING TUBE
On some wells an in-leigh, water surface measuring tube is required. See Section 46-406 of Chapter 46, MINIMUM
WELL CONSTRUCTION STANDARDS.

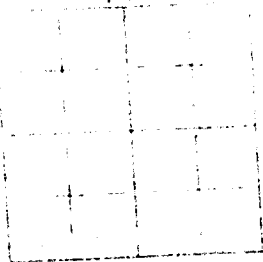
Well Construction Standards
Show exact vertical length of water surface measuring tube, when installed in well, tube diameter _____
tube index of _____

~~Page of Camp Information Columns~~

SOUTH DAKOTA WATER WELL COMPLETION REPORT

10 85

Well No. 11-1125-1 R



Well Completion Date 11-11-85

PROPOSED USE

☐ Domestic
☐ Irrigation

☐ Industrial
☐ Livestock

☐ Other
☐ Other

Method of Drilling

CASING DATA

☒ Steel

Other casing material

PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER

10 11 11 12 18

10 11 11 12 18

10 11 11 12 18

10 11 11 12 18

SHOULDER

Well to well point ☐ Yes ☒ No

To what depth

At what depth

At what depth

At what depth

What was the well used for

Other ☐ Domestic ☒ Industrial

Other ☐ Domestic ☒ Industrial

Other ☐ Domestic ☒ Industrial

Other ☐ Domestic ☒ Industrial

Well No. 11-1125-1 R

Topsoil	0	2
gravel	2	8
yellow clay	8	10
gravel	10	35
gassy tight	35	48
yellow clay	48	49
blue clay	49	56
yellow clay	56	90
blue clay	90	101
gravel & clay layers	101	154
clay layers (soft)		
through formation		
blue clay	154	168
	19	

Well material

Well material

Well material

Well material

Well material

Well material

Well material

Well material

Well material

Well material

Well material

Well material

Well material

Permit No. 4184-3BIG SIOUX RIVER Water District**Report Of Examination Of Works And/Or Application Of Water To Beneficial Use**

TO: Chief Engineer, Division of Water Rights, DWR, Foss Bldg., Pierre, SD 57501

I have this day made a thorough examination of the water use system constructed by RE, JAMES SCOTT
KAHNKE (705 5th Ave NW) of WATERTOWN SD holder of
 Permit No. 4184-3, bearing the priority of OCTOBER 27 19 77 authorizing
 the diversion of 4.4 cu. ft. per second of the waters of GROUND WATER
 for IRRIGATION purposes, in GRANT County.

I have to report on the conditions of the same as follows:

- A. Works used to divert the water: A 10" PEELESS PUMP WITH A 1200 GPM CAPACITY
- B. Works used to transport water to place of use: 20' of 8" ALUMINUM PIPE AND 2640' of 6" PVC PIPE
- C. Works used to apply water to beneficial use: A 1280' VALLEY CENTER PILOT AND A 1180' VALLEY CENTER PILOT

The system is in the following condition GOODThe point of diversion is located FROM THE NE CORNER OF SECTION 11-T120N-R52W
(1350' W and 1320' S of the NE corner)The works are capable of diverting and conveying to the place of use 2.67cu. ft. per second of water which is to be used for IRRIGATIONWater has been put to beneficial use to the maximum extent as follows: ALL LANDS LOCATED IN

<u>SECTION 11-T120N-R52W</u>	<u>NW 1/4 NE 1/4 - 33ac</u>	<u>NW 1/4 SE 1/4 - 34ac</u>
	<u>NE 1/4 NE 1/4 - 33ac</u>	<u>NE 1/4 SE 1/4 - 29ac</u>
	<u>SE 1/4 NE 1/4 - 33ac</u>	<u>SE 1/4 SE 1/4 - 19ac</u>
	<u>SW 1/4 NE 1/4 - 33ac</u>	<u>SW 1/4 SE 1/4 - 29ac</u>

comprising a total of 243 acres of land and the license should be issued for 2.67 cfsApplicable permit qualifications have been complied with X Yes NoExceptions to compliance are: Date 8/16/90

11/16/90
11/16/90

LICENSE FOR PERMIT NUMBER 4184-3

1. Legal location of wells: FROM THE NE CORNER OF SECTION 11-T130N-R52W
1350' WEST AND 1320' SOUTH
dams & structures: _____

2. Well Information: Well Drilling Firm KAIZER

Completion Report Yes X No _____ No. of Wells 1 Depth 154
Casing a) diameter 14" Screen a) type STAINLESS STEEL
b) length 124' b) length 30'
c) type STEEL Static Water Level 19'
Pump a) make FEERLESS Motor a) make GE
b) model _____ b) model No. 5K6255XH502B
c) size 10" c) horsepower rating 75
d) capacity 1200 gpm
e) turbine pump - no. of stages _____
f) operating PSI 70

3. Distribution lines or canals

a) size 8" / 6"
b) type ALUMINUM / PVC
c) length: 20' / 2640'

4. Dam Information:

a) height to crest _____ m) Outlet tubes:
b) height to primary spillway _____ 1) diameter _____
c) height to secondary spillway _____ 2) type _____
d) crest width _____ 3) valved (Y/N) _____
e) crest length _____ 4) valve type _____
f) spillway length _____ 5) location on structure _____
g) spillway width _____
h) apprx. storage _____ n) Category of Dam _____
i) approx. storage to crest _____
j) date constructed _____
k) inspection sheet completed (Y/N) _____
l) Name of Contractor _____

5. System Type a) sideroll:

- 1) length _____ feet
- 2) diameter of pipe _____
- 3) make, model & number of sprinklers _____
- 4) spacing of sprinklers _____
- 5) nozzle size _____

c) gun

- 1) make _____
- 2) nozzle size _____
- 3) capacity (GPM) _____
- 4) hose size _____
- 5) hose length _____

e) gated pipe

- 1) length _____
- 2) diameter _____
- 3) spacing of gates _____

f) portable boom

- 1) make _____
- 2) nozzle size _____
- 3) capacity (GPM) _____

b) towline:

- 1) length _____ feet
- 2) make, model & number of sprinklers _____
- 3) spacing of sprinklers _____
- 4) nozzle size _____

d) center pivot NORTH / SOUTH

- 1) make VALLEY / VALLEY
- 2) number of towers 7 / 6
- 3) distance between towers _____
- 4) overall length 1280 / 1170
- 5) end gun (Y/N) Y / Y
- 6) high or low pressure H₁ / H₁
- 7) make & size of nozzles RAIDRID / RAIDRID
- 8) capacity (GPM) 1200 / 1100

g) siphons

- 1) size _____
- 2) number _____

NOTE: For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date constructed, well driller and if a well log is available.

Indicate any other permit(s) which are associated with project _____

Yes	No	Check Items
<u>X</u>	---	1. Soil and water permit lands agree with lands being irrigated and lands listed on permit?
<u>X</u>	---	2. Special qualifications to permit being abided by?
<u>X</u>	---	3. All structures, wells and lands on map?
<u>X</u>	---	4. Irrigation Questionnaires checked to determine if permit owner started irrigation by end of construction period?
---	<u>Y</u>	5. Is chemigation used?
---	<u>NA</u>	6. If yes, does equipment comply with chemigation rules?

REMARKS:

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 4184-3

(1) R.E., Ina & Scott Kahnke of 405 5th Avenue NW, Watertown, SD 57201 made Application No. 4184-3, October 27, 1977 for a water permit to appropriate 4.4 cubic feet of water per second from groundwater, Grant County, South Dakota for irrigation purposes. Permit No. 4184-3 with a priority date of October 27, 1977 was approved February 4, 1982 and issued to applicant(s) for diversion of water with construction of the described water supply system to be completed on or before February 4, 1987 and for the application to beneficial use of said water on or before February 4, 1990.

On January 31, 1991, Water Permit No. 4184-3 was transferred to Ina Kahnke.

(2) It is certified that the applicant 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 2.67 cubic feet of water per second for beneficial use. The location of the diversion point is: 1350'W and 1320'S of the NE corner of Section 11, T120N, R52W (SE1/4 NE1/4).

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

T120N, R52W Section 11	NW1/4 NE1/4	33	acres
	NE1/4 NE1/4	33	"
	SE1/4 NE1/4	33	"
	SW1/4 NE1/4	33	"
	NW1/4 SE1/4	34	"
	NE1/4 SE1/4	29	"
	SE1/4 SE1/4	19	"
	SW1/4 SE1/4	29	"

Total 243 acres

(4) Pursuant to Section 46-5-30.1 Ina Kahnke of PO Box 694, Watertown, SD 57201 the holder(s) and/or owner(s) of Water Permit No. 4184-3 is issued a license to appropriate water, the right to use 2.67 cubic feet of water per second from groundwater (one well) with a priority date of October 27, 1977 from the location specified in (2) of this license. The water is to be conducted to and upon lands specified in (3) of this license for the purpose of irrigation. This license is subject to any limitations or qualifications listed in Water Permit No. 4184-3 and subject to South Dakota State Law.


JOHN HATCHER, Chief Engineer
Water Rights Division
Department of Water and Natural
Resources

MAR 28 1991



DEPARTMENT OF WATER & NATURAL RESOURCES

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

GREAT FACES GREAT PLACES.

MAR 28 1991

4184-3

Ina Kahnke
PO Box 694
Watertown, SD 57201

Dear Ms. Kahnke:

Enclosed is Water License No. 4184-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 412520 in the amount of \$52.50 which you paid for the inspection and issuance of the Water License, and for the transfer. Our records now show you as the owner of Water Right No. 4184-3.

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. 4184-3, 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.

Very truly yours,

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

enclosures

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

Pierre, _____, 19____

RECEIVED OF _____

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct works and to put water to beneficial use _____

Fee for Application for Permit No. _____ to Appropriate Water for Future Use _____

Fee to retain Future Use Permit No. _____ after period of seven years. _____

Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____

Fee for Filing Transfer Form _____

Fee for Filing Extension Request _____

Fee for Certified Copy of _____

Fee for Print Copy of Map _____

Fee for Certifying _____

Fee for _____

(Any Other Work Provided by Law)

Total

By _____

Chief Engineer



DEPARTMENT OF WATER & NATURAL RESOURCES
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

February 1, 1991

WARREN FALK, OPERATOR
RR 1 BOX 59
SOUTH SHORE SD 57263

NOTICE

RE: Violation of Water Permit No(s) 4180-3, 2477-3, 2827-3, (4184-3) and 1990 Irrigation Questionnaire Requirements

Our records indicate that the 1990 Irrigation Questionnaire has not been submitted for Permit No(s) 4180-3, 2477-3, 2827-3, 4184-3. The request for the Questionnaire was dated October 12, 1990. The Water Management Board has directed that owners of water permits who have not submitted the 1990 Irrigation Questionnaire be given notice of permit violation and a hearing to be held by the Board. The hearing will be held to determine action to be taken by the Board for violation of Water Permit No(s) 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will also be to determine if Permit No(s) 4180-3, 2477-3, 2827-3 should be amended with the qualification to require the Questionnaire to be submitted each year. The hearing will be held at 9:15 am, February 27, 1991, at the Governor's Inn in the meeting room, 700 West Sioux Avenue, Pierre SD.

The hearing will be conducted pursuant to the provisions of SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to procedures contained in SDCL 1-26. Following the hearing, the Water Management Board can:

1. Suspend Permit No(s) 4184-3 until the 1990 Irrigation Water Use Questionnaire is submitted or for a period of up to one year;
2. Amend Permit No(s) 4180-3, 2477-3, 2827-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaires are received in this office before the February 27th hearing date, you will no longer be in violation of your permit and your name will be deleted from the agenda for the hearing.

Very truly yours,

Ron Duvall, Natural Resources Engineer IV
Water Rights Division
605 773-3352

cc: Ina Kahnke, 405 4th Ave NW, Watertown SD 57201



DEPARTMENT OF WATER & NATURAL RESOURCES
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

February 6, 1991

4184-3

Warren & Eloise Falk
Falk Farms Inc.
RR #1 Box 59
South Shore, SD 57263

Dear Mr. & Mrs. Falk:

I am writing to acknowledge receipt of your 1990 irrigation questionnaires for Water Permit Nos. 2477-3, 2827-3, 4180-3, (4184-3), 4417-3, 4637-3, 5269-3, 5271-3. You may disregard the February 1, 1991, Notice of failure to submit the 1990 irrigation questionnaires and the Notice of failure to report chemical use. With receipt of the questionnaires, your name has been deleted from the February Water Management Board meeting agenda.

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

Sincerely,

Ron Duvall, Natural Resources Engineer IV
Water Rights Division

cc: Ina Kahnke, 405 5th Ave NW, Watertown, SD 57201



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

FALK FARMS INC-LEASOR
RR #1 BOX 59
SOUTH SHORE SD 57263

NOTICE

RE: Violation of Water Permit No(s) 4184-3

Our records indicate that the 1991 Irrigation Questionnaire has not been submitted for Permit No(s) 4184-3. The request for the Questionnaire was dated October 18, 1991. The Water Management Board has directed that owners of water permits who have not submitted the 1991 Irrigation Questionnaire be given notice of permit violation and a hearing to be held by the Board. The hearing held by the Board will determine the action to be taken for violation of Water Permit No(s) 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at 9:15 am, March 4, 1992, in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol, Pierre SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to SDCL 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4184-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is(are) received in this office before the March 4th hearing date, you will no longer be in violation of your permit and your name will be deleted from the Board agenda.

Very truly yours,

Ron Duvall, Natural Resources Engineer IV
Water Rights Division
605 773-3352

cc: Ina Kahnke, PO Box 694, Watertown, SD 57201



4184-3

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 7, 1992

Warren Falk
RR #1 Box 59
South Shore, SD 57263

RE: Irrigation Questionnaires: 2477-3, 2827-3, 4180-3, (4184-3),
4417-3, 5269-3 and 5271-3

Dear Mr. Falk:

I am writing to acknowledge receipt of your 1991 irrigation questionnaires for Water Permit Nos. 2477-3, 2827-3, 4180-3, 4184-3, 4417-3, 5269-3 and 5271-3. You may disregard the January 27, 1992, Notice of failure to submit the 1991 irrigation questionnaire. The questionnaires were received prior to the Water Management Board meeting and your name was deleted from the agenda.

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

Sincerely,

Genny McMath
Natural Resources Analyst
Water Rights Division

cc: Ina Kahnke, 405 5th Ave NW, Watertown, SD 57201

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Ina Kahnke
PO Box 694
Watertown SD 57201

4a. Article Number

P 906 557 838

4b. Service Type

- | | |
|---|---|
| ☐ Registered | ☐ Insured |
| ☒ Certified | ☐ COD |
| ☐ Express Mail | ☐ Return Receipt for Merchandise |

7. Date of Delivery JAN 31 1992

Ina Kahnke
5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form 3811, November 1990 • U.S. GPO: 1991-287-065

DOMESTIC RETURN RECEIPT

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

FALK FARMS INC-LEASOR
RR #1 BOX 59
SOUTH SHORE, SD 57263

4a. Article Number

P 906 557 758

4b. Service Type

- | | |
|---|---|
| ☐ Registered | ☐ Insured |
| ☒ Certified | ☐ COD |
| ☐ Express Mail | ☐ Return Receipt for Merchandise |

7. Date of Delivery

1-30-92 CC

5. Signature (Addressee)

Murray Falk

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

4184-3

2827-3

4184-3

**WATER RIGHTS PROGRAM
FILE DOCUMENTATION**

NAME OF PERSON OR FILE: Jabe Kahnke

DATE: July 16, 1998 **TELEPHONE:** (310) 534-6210 or (310) 541-8113

RE: ownership/operator status of Water Right Nos. 2827-3 & 4184-3

COMMENTS:

Warren Falk notified us that he did not rent Ina Kahnke's land in 1997. Mr. Falk said Ina still owned the land but was living with her son in California.

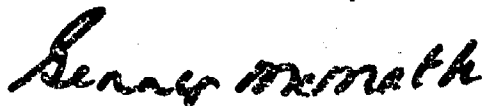
On July 16th, I was able to reach Jabe Kahnke (Ina's son) concerning the water rights. He indicated that his mother still owned the land, however she had a different leasor last year and this year because Mr. Falk had sold off all his equipment.

Jabe indicated his mother had spent the winter with him and was now back in Watertown for the summer. He said the land was now leased or operated by: James Wohlleber, dba Blooming Valley Grain Farms. He suggested I call Ina Kahnke at (605) 886-3395. He wanted me to also be aware that his mother was in poor health and he was not sure how much longer she could take care of things.

address : James Wohlleber, 1305 N Broadway, Watertown, SD 57201
Phone: 886-4388 Cell Phone: 881-3795

I contacted James Wohlleber and he said he needed me to check further with Ina Kahnke before sending him anything. I tried reaching Mrs. Kahnke at her Watertown phone number several times, no answer.

On October 7, 1998, I called and spoke with Jabe Kahnke again, he said his mother had spoke with Mr. Wohlleber this summer and told him the questionnaires would be forwarded to him. They would work with him to complete the forms. Mrs. Kahnke is now living with Jabe for the winter.



Genny McMath
Environmental Scientist



41184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

October 7, 1998

2827-3
4184-3

James Wohlleber
1305 N Broadway
Watertown, SD 57201

Dear Mr. Wohlleber:

I am writing in regard to Water Rights held by Ina Kahnke of Watertown, SD. I spoke with you earlier this summer about the water rights and you confirmed that you did rent the land from Mrs. Kahnke; however, requested that I get in touch with her prior to sending you any correspondence.

I spoke with Jabe Kahnke this morning and he indicated that his mother has visited with you about the water rights and the annual irrigation questionnaires. By the end of next week, we will be mailing the questionnaires to irrigators in South Dakota. The forms request information on the amount of water pumped during this specific crop season.

Prior to sending them out, I wanted to send you a copy of the water rights to assist you in completing the forms. Each form pertains to a specific water right and corresponds to a specific legal description. I am also including a "sample" copy of the questionnaire. You do not need to return the sample copy or the copies of the water rights. You may keep them for your records.

If after receiving the irrigation questionnaires, you have any questions or concerns, please get in touch with me.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352

encl



4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/den:

August 24, 1999

Jabe Kahnke
4003 Palos Verdes Dr S
Rancho Palos Verdes, CA 90275-0065

Dear Mr. Kahnke:

The purpose of my letter is to obtain information from you regarding your mother's water rights. We have six water rights listed in Ina's name. Below is a chart describing each water right.

No.	Priority date	Use	Legal Description
2827-3	June 22, 1976	irrigation	130 acres - SW 1/4 Section 12, T118N, R52W
4180A-3	Dec. 15, 1975	irrigation	392 acres - E 1/2 SW 1/4, W 1/2 SE 1/4 Section 36, T119N, R52W; NE 1/4, S 1/2 NW 1/4, SW 1/4, N 1/2 SE 1/4 Section 1, T118N, R52W
4181-3	Oct. 16, 1974	irrigation	156 acres - N 1/2 Section 3, T116N, R53W
4182-3	Sept. 29, 1975	irrigation	132 acres - S 1/2 NE 1/4, SE 1/4 Section 12, T117N, R54W
4183A-3	Oct. 27, 1977	commercial	4 wells - N 1/2 NE 1/4 Section 3, T116N, R53W (used for trailer court)
4184-3	Oct. 27, 1977	irrigation	243 acres - E 1/2 Section 11, T120N, R52W

I am in the process of trying to update the water rights as far as ownership and operator status is concerned. Do you wish to have the ownership of these water rights transferred to your name or into that of an estate? If the land has been sold, I can forward the appropriate transfer forms to the new owner(s).

With regard to operator status for each water right, I have CSS Farms, Watertown, SD operating all the land except the portion covered under Nos. 2827-3 and 4184-3. I have James Wohlleber, Watertown, SD listed as operating the land in Sections 11 & 12 (2827-3 & 4184-3). If this has changed, please let me know.

Please take a few minutes and review the chart above and then get in touch with me concerning ownership and/or operator status for the water rights. If you would, please respond by September 10th. You may call, write or email me with the information. My email address is: genny.mcmath@state.sd.us

Thank you in advance for your help.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME/: Jabe Kahnke, 4003 Palos Verdes Dr S, Rancho Palos Verdes, CA 90275-6065

DATE: October 8, 1999

TELEPHONE: (310) 541-8113 (home)
(310) 534-6209 (work)
(310) 841-3098 (pager)

RE: ownership and operator status for Water Permit & Right Nos. 2827-3, 4180A-3, 4181-3, 4182-3, 4183A-3 and 4184-3 (listed in the name of Ina Kahnke)

COMMENTS:

Mr. Kahnke called in response to my letter of August 24th asking for information on the ownership and operator status of his mothers water permits and rights. He said that for the time being, they should all be placed in the "estate" name. Somewhere down the road, they would be transferred to a trust as soon as a trust is established and the estate settled.

The following are the operator changes for the water permits/rights:

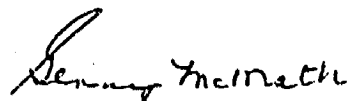
2827-3	James Wöhlleber, 1305 N Broadway, Watertown, SD 57201 (605) 881-3795 - cell; (605) 886-4773 - phone
4180A-3	"
4184-3	"

4181-3	Virgil Borns, 1218 34 th St SW, Watertown, SD 57201 (home) (605) 882-4931 13 2 nd St SE, Watertown, SD 57201 (office) (605) 882-3365
4182-3	"

4183A-3	Henry Nicmann, PO Box 694, Watertown, SD 57201-0694 (operator for trailer park) (605) 886-6990
---------	---

RECOMMENDED ACTION:

Send transfer forms to Jabe for transferring water permits/rights to the estate name. Get in touch with the operators to straighten out the irrigation questionnaire mailing.



Genny McMath
Environmental Scientist



4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

October 13, 1999

Jabe Kahnke
4003 Palos Verdes Dr S
Rancho Palos Verdes, CA 90275-6065

Dear Mr. Kahnke:

Thank you for contacting me in regard to Water Rights listed in the name of Ina Kahnke. Enclosed, as we discussed are partially completed "Notice of Transfer of Ownership" forms for use in filing an ownership change with the water rights.

It is my understanding that the water rights will be transferred to a "trust" for the time being. I left that part of the forms blank to allow you to fill in how you wish the water right(s) to read. Please review the forms and complete as needed. Upon completion, please sign the forms in the presence of a notary and return them to us with a required filing fee of \$2.50 each (total of \$15.00).

If you have any questions concerning completion of the forms or with the water rights in general, please contact me.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352

enclosures



January 22, 1999

4184-3

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

NOTICE

TO: JAMES WOHLLEBER, OPERATOR, 1305 N BROADWAY, WATERTOWN, SD 57201

FROM: Ron Duvall, Natural Resources Engineer
for John Hatch, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 1998 Irrigation Questionnaires

Our records indicate that the 1998 Irrigation Questionnaires have not been submitted for Permit Nos. 4184-3, 2827-3. The request for the Questionnaires was dated October 16, 1998. The Water Management Board has directed that owners of water permits who have not submitted the 1998 Irrigation Questionnaires be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine if Permit No(s) 2827-3 should be amended to require the Questionnaire to be submitted each year and to determine action to be taken for violation of Water Permit No(s) 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at 9:45 am, March 3, 1999 in Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol, Pierre, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4184-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Amend Permit No(s) 2827-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

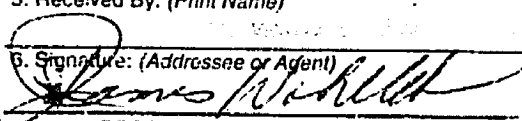
If the questionnaires are received in this office on/or before March 1, 1999, you will no longer be in violation of your permit and your name will be deleted from the Board agenda. If you have questions or need assistance in completion of the irrigation questionnaire(s), please contact Genny McMath (605) 773-3352.

c: INA C KAHNKE, PO BOX 694, WATERTOWN, SD 57201-0694

Note: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.

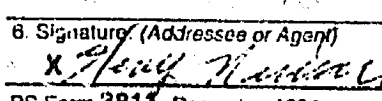
4184-3

Is your RETURN ADDRESS completed on the reverse side?

SENDER: ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. ☐ Addressee's Address 2. ☐ Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: JAMES WOHLLEBER, OPERATOR 1305 N BROADWAY WATERTOWN SD 57201	4a. Article Number P 378 080 748	
	4b. Service Type ☐ Registered ☒ Certified ☐ Express Mail ☐ Insured ☐ Return Receipt for Merchandise ☐ COD	
	7. Date of Delivery 1-23-99	
5. Received By: (Print Name) 	8. Addressee's Address (Only if requested and fee is paid)	
6. Signature: (Addressee or Agent) 		

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER: ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. ☐ Addressee's Address 2. ☐ Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: Ina or Jabe Kahnke PO Box 694 Watertown, SD 57201-0694	4a. Article Number P 378 080 749	
	4b. Service Type ☐ Registered ☒ Certified ☐ Express Mail ☐ Insured ☐ Return Receipt for Merchandise ☐ COD	
	7. Date of Delivery	
5. Received By: (Print Name) 	8. Addressee's Address (Only if requested and fee is paid)	
6. Signature: (Addressee or Agent) 		

Thank you for using Return Receipt Service.



4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

January 14, 2000

NOTICE

TO: JAMES WOHLLEBER, OPERATOR, 1305 N BROADWAY, WATERTOWN, SD 57201
FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 1999 Irrigation Questionnaires

Our records indicate that the 1999 Irrigation Questionnaires have not been submitted for Permit Nos. 4180A-3 & 4184-3, 2827-3. The request for the Questionnaires was dated October 7, 1999. The Water Management Board has directed that owners of water permits who have not submitted the 1999 Irrigation Questionnaires be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine if Permit No(s) 2827-3 should be amended to require the Questionnaire to be submitted each year and to determine action to be taken for violation of Water Permit No(s) 4180A-3 & 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at 1:30 pm, March 1, 2000 in Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol, Pierre, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4180A-3 & 4184-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Amend Permit No(s) 2827-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaires are received in this office on/or before February 28, 2000, you will no longer be in violation of your permit and your name will be deleted from the Board agenda. If you have questions or need assistance in completion of the irrigation questionnaire(s), please contact Genny McMath (605) 773-3352.

c: JABE KAHNKE, 4003 PALOS VERDES DR S, RANCHO PALOS VERDES, CA 90275

Note: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.

4184-3

SEND TO: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

JAMES WOHLLEBER, OPERATOR
1305 N BROADWAY
WATERTOWN SD 57201

COMPLETE THIS SECTION FOR DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature

X *James Wohlleber* ☐ Agent ☒ Addressee

D. Is delivery address different from item 1? ☐ Yes ☒ No
If YES, enter delivery address below:

3. Service *7100*
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Copy from service label)

2 227 670 300

4184-3

DATE 2-15-00

To - Ron Duvall
Subject - Water Reporting Requirements

In Sept. of 1999 I contacted your office by phone. I discussed our situation with a lady in your office. At that time I filled out the Questionnaires the best I could and returned them to your office. If you didn't receive them please Advise me what to do.



Grooming Valley Grain Farm
Jane Wohlbein Sr.
605-881-3795

4184-3
File No. 2827-3

4180A-3

4184-3

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME & ADDRESS: James Wohlleber, Blooming Valley Grain Farms

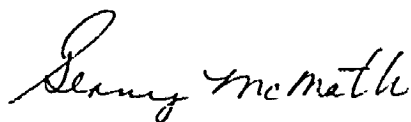
DATE: February 15, 2000

TELEPHONE: 605 881-3795

RE: 1999 irrigation questionnaires

COMMENTS:

In response to a letter received from Mr. Wohlleber concerning his irrigation questionnaires, I called him to obtain the information over the phone. He gave me the figures for Water Right Nos. 4180A-3 and 4184-3. The land described in No. 2827-3 was not irrigated in 1999. He said the system needed work before he could start using it again.



Genny McMath
Environmental Scientist



4184-3

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 19, 2001

NOTICE

TO: JAMES WOHLLEBER, OPERATOR, 1305 N BROADWAY, WATERTOWN, SD 57201

FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2000 Irrigation Questionnaires

Our records indicate that the 2000 Irrigation Questionnaires have not been submitted for Permit Nos. 4180A-3, 4184-3 & 2827-3. The request for the Questionnaires was dated October 20, 2000. The Water Management Board has directed that owners of water permits who have not submitted the 2000 Irrigation Questionnaires be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine if Permit No. 2827-3 should be amended to require the Questionnaire to be submitted each year and to determine action to be taken for violation of Water Permit Nos. 4180A-3 & 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at 10:00 am, March 7, 2001 in Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol, Pierre, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit Nos. 4180A-3 & 4184-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Amend Permit No. 2827-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaires are received in this office on/or before March 2, 2001, you will no longer be in violation of your permit and your name will be deleted from the Board agenda. If you have questions or need assistance in completion of the irrigation questionnaire(s), please contact Genny McMath (605) 773-3352.

c: JABE KAHNKE, 4003 PALOS VERDES DR S, RANCHO PALOS VERDES, CA 90275

Note: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

March 8, 2001

2827-3
4180A-3
4184-3

James Wohlleber
1305 N Broadway
Watertown, SD 57201

Dear Mr. Wohlleber:

I am writing to acknowledge receipt of your 2000 irrigation questionnaires. You may disregard the January 19, 2001, "Notice" concerning reporting requirements for Water Right Nos. 2827-3, 4180A-3 and 4184-3.

I completed questionnaires for you based on our March 7th telephone conversation. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

Thank you for calling and if you have any questions, please contact me.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352

c: Jabe Kalinke



January 16, 2002

NOTICE

4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

www.state.sd.us/denr

TO: JAMES WOHLLEBER, OPERATOR, 1305 N BROADWAY, WATERTOWN, SD 57201

FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2001 Irrigation Questionnaires

Our records indicate that the 2001 Irrigation Questionnaires have not been submitted for Permit Nos. 4180A-3 & 4184-3, 2827-3. The request for the Questionnaires was dated October 12, 2001. The Water Management Board has directed that owners of water permits who have not submitted the 2001 Irrigation Questionnaires be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine if Permit No(s) 2827-3 should be amended to require the Questionnaire to be submitted each year and to determine action to be taken for violation of Water Permit No(s) 4180A-3 & 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at 10:00 am, March 13, 2002 in the Visitor Center (west side of Capitol Lake), 650 E Capitol Avenue, Pierre, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4180A-3 & 4184-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Amend Permit No(s) 2827-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaires are received in this office on/or before March 8, 2002, you will no longer be in violation of your permit and your name will be deleted from the Board agenda. If you have questions or need assistance in completion of the irrigation questionnaire(s), please contact Genny McMath (605) 773-3352.

c: JABE KAHNKE, 4003 PALOS VERDES DR S, RANCHO PALOS VERDES, CA 90275

Note: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.

4184-3

SENDER COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

Article Addressed to:

JAMES WOHLLEBER, OPERATOR
1305 N BROADWAY
WATERTOWN SD 57201

COMPLETE THIS SECTION ON DELIVERYA. Received by (Please Print Clearly) FRANCIS B. Date of Delivery 1-17-00C. Signature James Wohlleber ☐ Agent ☐ AddresseeD. Is delivery address different from item 1? ☒ Yes
If YES, enter delivery address below: ☒ No

3. Service Type

☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

7001 2510 0004 4797 5583

PS Form 3311, July 1999

Domestic Return Receipt

102595-99 M 1789



4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

March 6, 2002

2827-3
4184-3
4180A-3

Jim Wohlleber
1305 N Broadway
Watertown, SD 57201

Dear Mr. Wohlleber:

I am writing to acknowledge receipt of your 2001 irrigation questionnaires. You may disregard the January 16, 2002, "Notice" concerning reporting requirements for Water Right Nos. 2827-3, 4180A-3 and 4184-3.

I completed questionnaires for you based on our telephone conversation. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

Thank you and if you have any questions, please contact me.

Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352



4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

November 14, 2002

Mark Kienast, Farm Manager
1308 10th Ave SW
Watertown SD 57201

RE: Water Right Nos. 2827-3, 4180A-3, 4181-3, 4182-3 & 4184-3

Dear Mr. Kienast:

Thank you for calling to let us know that you are the new farm manager for the Kahnke property. Enclosed are copies of the water rights we have in Ina Kahnke's name.

I included some of the most recent correspondence. Most of the correspondence actually relates to more than one of the water rights.

As you requested, I will list your name with the files as that of farm manager and send all further correspondence to you until notified otherwise. The only thing we are currently waiting on is the irrigation questionnaires for Water Right Nos. 2827-3, 4180A-3 and 4184-3.

If I can answer any questions for you, please get in touch with me.

Sincerely,

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

enclosures



4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 20, 2005

NOTICE

TO: MARK KIENAST, FARM MGR, 1308 10TH AVE SW, WATERTOWN, SD 57201

FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2004 Irrigation Questionnaires

Our records indicate that the 2004 Irrigation Questionnaires have not been submitted. The request for the Questionnaires was dated October 22, 2004. The Water Management Board has directed that owners of water permits who have not submitted the 2004 Irrigation Questionnaires be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine if Permit No(s) 2827-3 should be amended to require the Questionnaire to be submitted each year and to determine action to be taken for violation of Water Permit No(s) 4180A-3, 4181-3, 4182-3 & 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at 8:30 am, March 2, 2005 in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4180A-3, 4181-3, 4182-3 & 4184-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Amend Permit No(s) 2827-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaires are received in this office on/or before February 25, 2005, you will no longer be in violation of your permit and your name will be deleted from the Board agenda. If you have questions or need assistance in completion of the irrigation questionnaire(s), please contact Genny McMath (605) 773-3352.

c: JABE KAHNKE, 4003 PALOS VERDS DR S, RANCHO PALOS VERDES, CA 90275

Note: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



4184-3

Track & Confirm

Current Status

You entered 2301 0370 0000 7541 4869

Your item was delivered at 1:10 pm on January 21, 2005 in WATERTOWN, SD 57201. The item was signed for by D SSROUP.

[Shipment Details >](#)

Track & Confirm

Enter label number:

[Track & Confirm FAQs](#)

Notification Options

▶ Track & Confirm by email

[What is this?](#)

[Go >](#)

▶ Request Proof of Delivery

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U.S. Postal Service Signature Confirmation Receipt

SIGNATURE CONFIRMATION NUMBER:
2301 0370 0000 7541 4869

MARK KIENAST, FARM MGR
1308 10TH AVE SW
WATERTOWN SD 57201

Postmark
Here

POSTAL CUSTOMER:

Keep this receipt. For Inquiries:
Access internet web site at
www.usps.com
or call 1-800-222-1811

CHECK ONE (POSTAL USE ONLY)

- ☐ Priority Mail
☐ Package Services

(See Reverse)

PS Form 153, February 2001



4184-3

Track & Confirm

Current Status

You entered 2301 3460 0000 8516 2227

Your item was delivered at 1:11 pm on January 24, 2005 in RANCHO PALOS VERDES, CA 90275. The item was signed for by S MADRIGAL.

[Shipment Details >](#)

Track & Confirm

Enter label number:

[Track & Confirm FAQs](#)

Notification Options

▶ Track & Confirm by email

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U.S. Postal Service Signature Confirmation Receipt

SIGNATURE CONFIRMATION NUMBER:
2301 3460 0000 8516 2227

JABE KAHNKE
4003 PALOS VERDES DR S
RANCHO PALOS VERDES CA 90275

Waiver of Signature ☐ YES ☐ NO

Postmark
Here

POSTAL CUSTOMER:

Keep this receipt. For inquiries:
Access internet web site at
www.usps.com
or call 1-800-222-1811

CHECK ONE (POSTAL USE ONLY)

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☐ Package Services

(See Reverse)

PS Form 153, July 2001



4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 18, 2005

Mark Kienast, Farm Mgr
1308 10th Ave SW
Watertown SD 57201

RE: Water Right Nos. 2827-3, 4180A-3, 4181-3, 4182-3 and 4184-3

Dear Mr. Kienast:

I am writing to acknowledge receipt of your 2004 irrigation questionnaires. You may disregard the January 20, 2005, "Notice" concerning reporting requirements for Water Right Nos. 2827-3, 4180A-3, 4181-3, 4182-3 and 4184-3.

The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

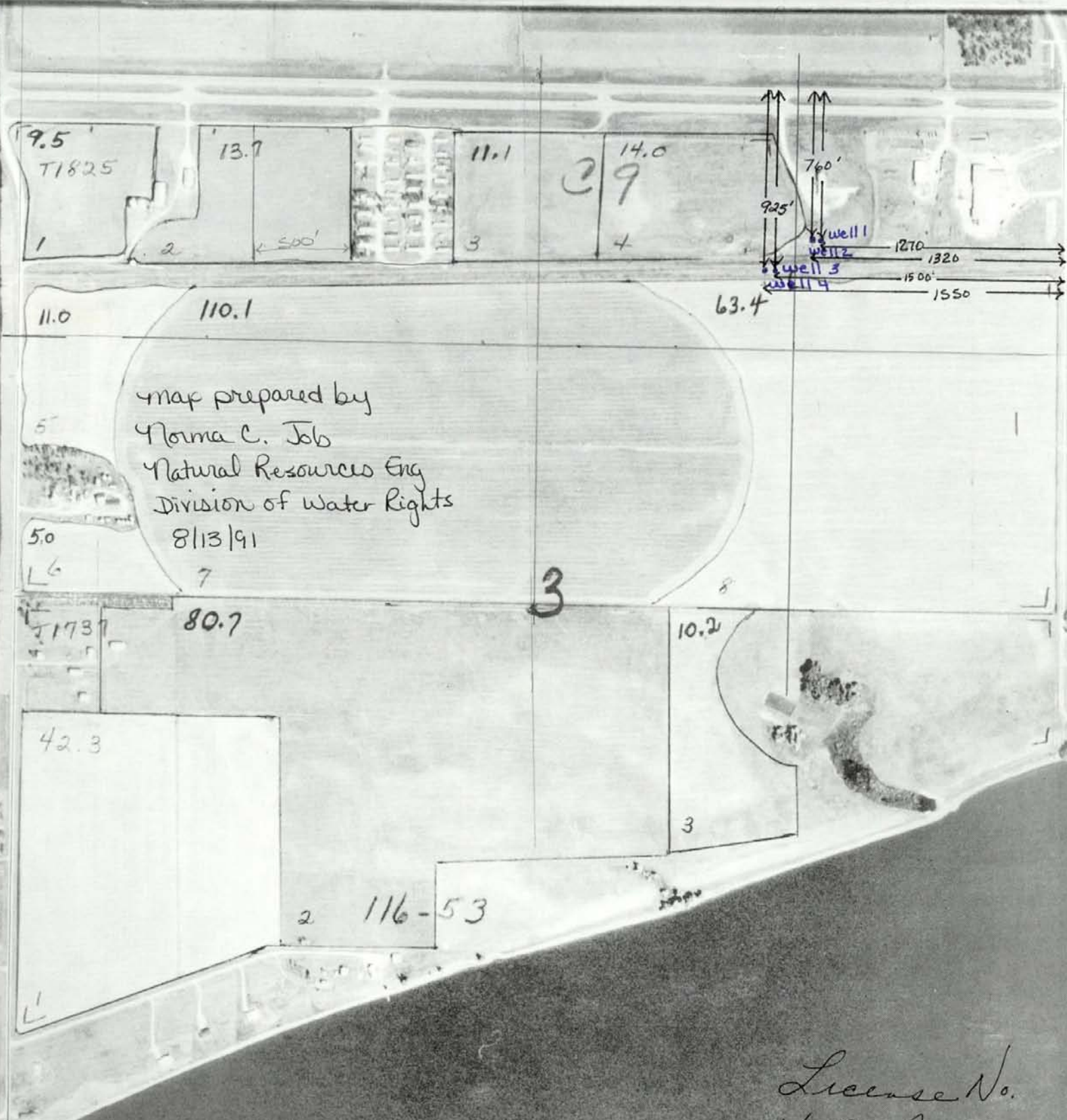
Sincerely,

Genny McMath
Environmental Scientist
Water Rights Program
(605) 773-3352

c: Jabe Kahnke

permit No. 4183-3
4183A-3

NOT TO SCALE

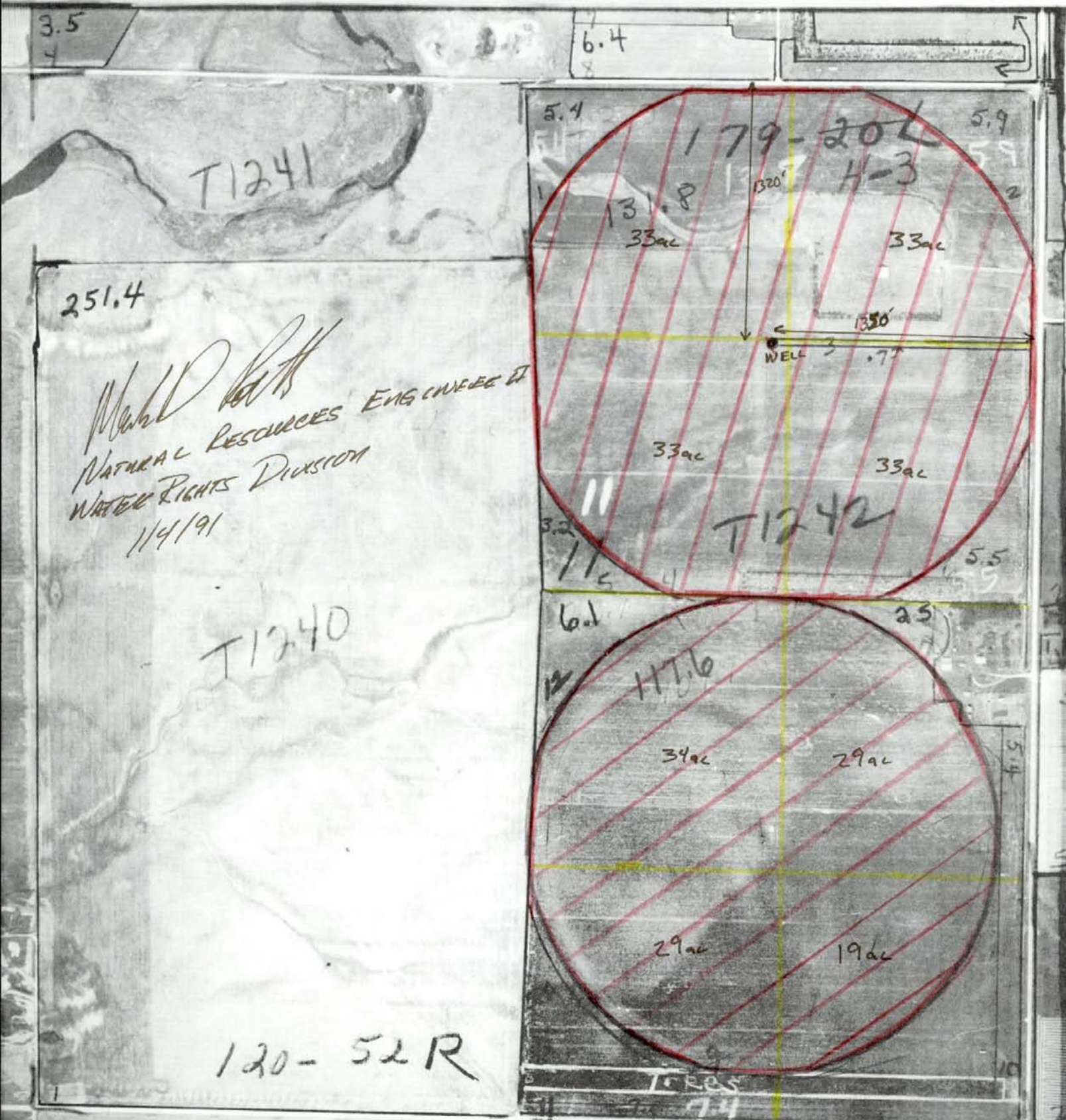


License No.
4183A-3

Lake Park

4184-3

NOT TO SCALE



Water Right
No. 4184-3

N. E. SEC. COR.

SEC. LINE

ASSUMED NORTH

1/4 COR. I.P.



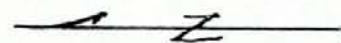
DRAWING SHOWING IRRIGATION WELL LOCATIONS
(IN THE N.E. 1/4 OF SEC. 3 T116N R53W OF
THE FIFTH P.M., CODINGTON COUNTY, S.D.)

OWNER — MRS. R. E. KAHNKE (INA KAHNKE)

2099.6' N 39° 31' W
2128.7' N 40° 31' W

SURVEYORS CERTIFICATE

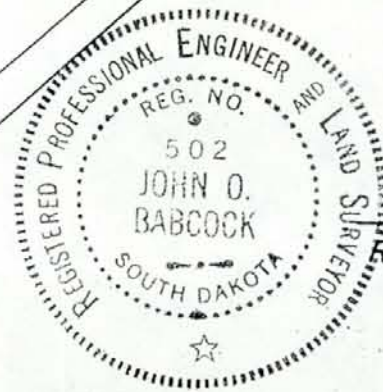
I, JOHN O. BABCOCK, A DULY REG. P.E.
AND LAND SURVEYOR IN THE STATE
OF SOUTH DAKOTA, HEREBY CERTIFIES
THAT HE SURVEYED THE WELL LOCATIONS
AND PREPARED THE DRAWING HEREON



1" = 200'

WELL # 1

WELL # 2

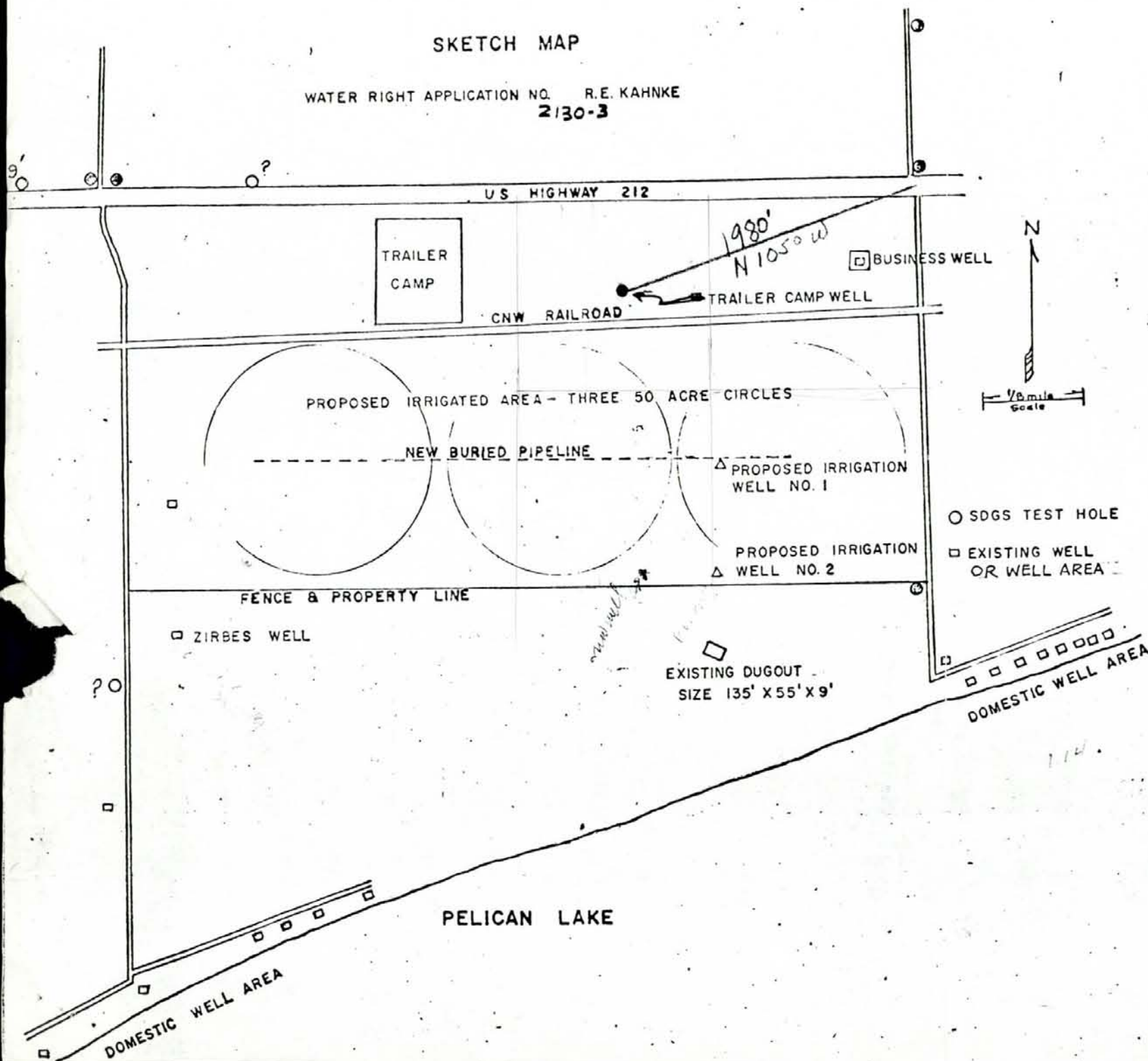


John O Babcock
REG. P.E. AND LAND SURVEYOR

9-27-90

SKETCH MAP

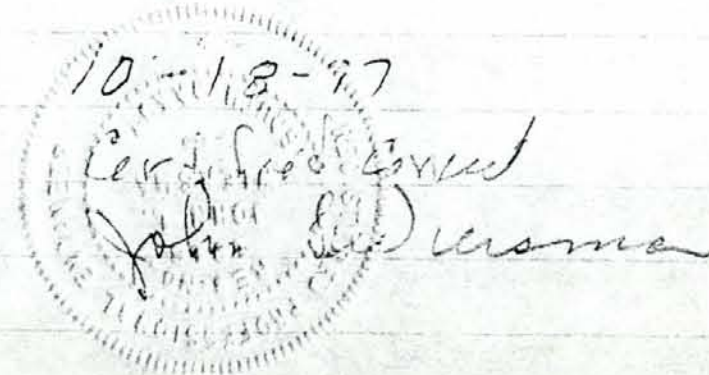
WATER RIGHT APPLICATION NO. R.E. KAHNKE
2130-3



Pelican Plaza Mobile Home Court
R.E. Ina, & Scott Kahnke
405-5th Ave N. W. Watertown

Water for Mobile Home Court
Water claimed - 0.15 cfs.

Point of Diversion - 1980' N 105° W at
NW corner Sec 3 - 116 - 53



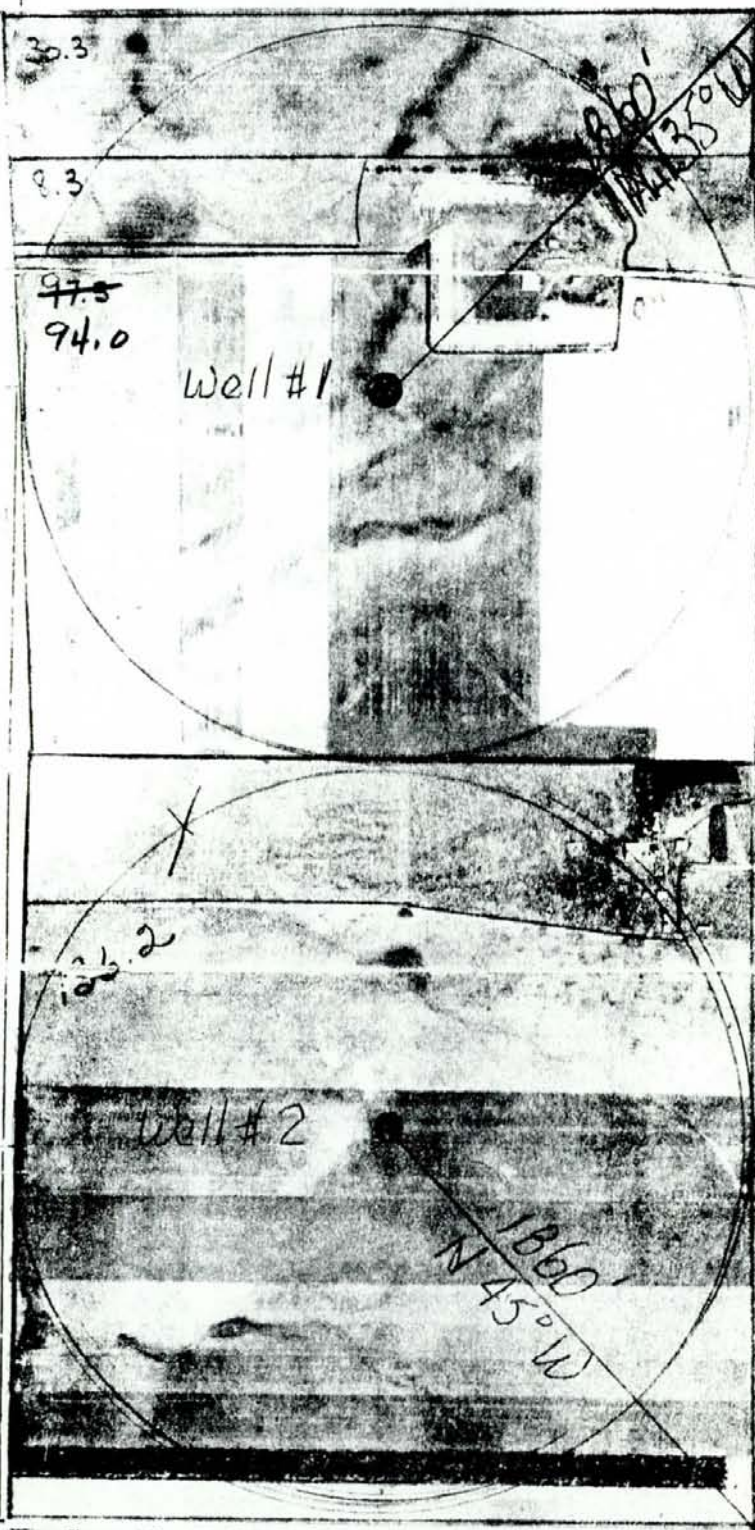
~~WATER RIGHT~~ 3 APPL NO 4183-3

74 HENRY K. GROSS 481 416
9
00 SUMMIT, SD 57266
503 26 0541-1

Tract No. _____
Farm No. _____
Operator _____
Owner _____

100 SAME
9

R.E. Ina + Scott Kahmke
Irrigation Proj # 1
405 50' Sec NW Water Right in
South Dakota
Land in Grant County
Area Irrigated $E^2 - 11 - 120 - 52$
Water Channel 4.4 cfs.



~~10 16 77~~
10 16 77
Credited to
John L. Williams
APOL 524184-3

Legal Description _____

4184-3



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

October 25, 2007

4180A-3
4181-3
4182-3
4184-3

Mark Kienast, Farm Mgr
1326 42nd ST SW
Watertown SD 57201

Dear Mr. Kienast:

Enclosed is a "Notice" dated October 19, 2007 concerning your 2007 irrigation questionnaires. The notice was originally mailed to 1308 10th Ave SW, Watertown SD. The post office notified us that your address has changed and I will update our records accordingly.

If you have any questions, please contact me.

Sincerely,

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

enclosures



4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 23, 2009

NOTICE

TO: MARK KIENAST, FARM MGR, 1326 42nd ST SW, WATERTOWN, SD 57201 7036
FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2008 Irrigation Questionnaire(s)

Our records indicate that the 2008 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 4180A-3, 4181-3, 4182-3 & 4184-3. The request for the Questionnaire was dated October 24, 2008. The Water Management Board has directed that owners of water permits who have not submitted the 2008 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 4180A-3, 4181-3, 4182-3 & 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at **10:00 am, March 11, 2009** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4180A-3, 4181-3, 4182-3 & 4184-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office on/or before **March 6, 2009**, you will no longer be in violation of your permit and your name will be deleted from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352. If you prefer, you can complete the questionnaire on-line at the following link:

<https://www.state.sd.us/eforms/secure/eforms/E0455V7-IQ.pdf>

c: JABE KAHNKE, 4003 PALOS VERDES DR S, RANCHO PALOS VERDES, CA 90275

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.

4184-3

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MARK KIENAST, FARM MGR
1326 42nd ST SW
WATERTOWN SD 57201 7036

Waiver of Signature ☐ YES ☐ NO

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JABE KAHNKE
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RANCHO VERDES CA 90275

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www.state.sd.us/denr

February 19, 2009

4180A-3
4181-3
4182-3
4184-3

Mark Kienast, Farm Mgr
1326 42nd St SW
Watertown SD 57201-7036

Dear Mr. Kienast:

I am writing to acknowledge receipt of your 2008 irrigation questionnaires. You may disregard the January 23, 2009, "Notice" concerning reporting requirements for Water Right Nos. 4180A-3, 4181-3, 4182-3 and 4184-3.

The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Genny McMath".

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



4184-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
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PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 21, 2011

NOTICE

TO: MARK KIENAST, FARM MGR, 1326 42nd ST SW, WATERTOWN, SD 57201 7036

FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2010 Irrigation Questionnaire(s)

Our records indicate that the 2010 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 4180A-3, 4181-3, 4182-3 & 4184-3. The request for the Questionnaire was dated October 15, 2010. The Water Management Board has directed that owners of water permits who have not submitted the 2010 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 4180A-3, 4181-3, 4182-3 & 4184-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at **10:00 am, March 9, 2011** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4180A-3, 4181-3, 4182-3 & 4184-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office on/or before **March 4, 2011**, you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. If you prefer, you can complete the questionnaire online at the following link: <http://denr.sd.gov/iq.aspx>

c: JABE KAHNKE, 4003 PALOS VERDS DR S, RANCHO PALOS VERDES, CA 90275

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.

4184-3

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JABE KAHNKE
4003 PALOS VERDS DR S
RANCHO PALOS VERDES CA 90

Waiver of Signature ☐ YES ☐ NO

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- Notice Left, January 22, 2011, 12:48 pm, WATERTOWN, SD 57201
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- Sorting Complete, January 22, 2011, 7:22 am, WATERTOWN, SD 57201
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United States Postal Service
2010 January 27, 11:37 AMUnited States Postal Service
2010 January 27, 11:37 AM

SIGNATURE CONFIRMATION NUMBER: 2303 2160 0000 0802 0263	MARK KIENAST, FARM MGR 1326 42nd ST SW WATERTOWN SD 57201 7036	
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4184-3



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www.state.sd.us/denr

February 16, 2011

Mark Kienast
1326 42nd St SW
Watertown SD 57201 7036

RE: Water Right Nos. 4180A-3, 4181-3, 4182-3 & 4184-3

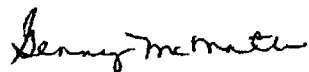
Dear Mr. Kienast:

I am writing to acknowledge receipt of the 2010 irrigation questionnaires for the Kahnke land.

You may disregard the January 21, 2011, "Notice" concerning reporting requirements for Water Right Nos. 4180A-3, 4181-3, 4182-3 and 4184-3. The information was received in our office prior to the Water Management Board meeting and the issue has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,


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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

(via email)

February 17, 2011

Mark Kienast
1326 42nd St SW
Watertown SD 57201 7036

Dear Mr. Kienast:

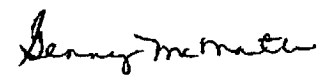
I am forwarding you partially completed "Notice of Transfer of Ownership" forms for filing the ownership changes on Water Right Nos. 4180A-3, 4181-3, 4182-3, 4184-3 and 4183A-3. No. 4183A-3 is the water right for the trailer park.

Please complete the forms and return them to us with a required filing fee of \$50.00 each (\$250 total). The check or money order for the fee can be made payable to the Water Rights Program.

If you would like copies of the water rights, you can actually download them from our website at: <http://denr.sd.gov/des/wr/wr.aspx> Once you get to this link, go to the left side of the page and scroll down until you see "databases". The first database listed will be water rights. Follow that link and you can look up any of the water rights and print them off.

If you have any questions, please contact me.

Sincerely,


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

RECEIVED
JAN - 7 2014
WATER RIGHTS
PROGRAM

NOTICE OF TRANSFER OF OWNERSHIP

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

No. 4184-3

Date: _____

I/We request that Water Right No. 4184-3

formerly owned by: Ina C Kahnke

be transferred to: (name & address) Jabe Kahnke

1326 42nd St S.W. Watertown S.D. 57201

Telephone No. 605 881-0927

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

243 acres - E 1/2 Section 11, T120N, R52W

I/We understand that the validity of Water Right No. 4184-3 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

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

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

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

Jabe Kahnke By [Signature] POA.
(Signed by new owner)

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

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

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/7, 20 14

RECEIVED OF Kahnke Farms 1326 42nd St SW Watertown SD 57201

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	50	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form <u>4184-3</u>		
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	50 00

No. **06601**

By *Jeanne Hoodman*
Chief Engineer

4184-3



**DEPARTMENT of ENVIRONMENT
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www.denr.sd.gov

January 15, 2014

Mark Kienast
1326 42nd St SW
Watertown SD 57201

RE: Water Right Nos. 4180A-3, 4181-3, 4182-3, 4183A-3 & 4184-3

Dear Mr. Kienast:

Thank you for following up on the ownership changes for the above listed water rights. The ownership changes have been completed.

The water rights formerly held by Ina C Kahnke are now listed as follows:

- No. 4181-3 & 4183A-3: Pelican Plaza, PO Box 694, Watertown SD 57201, and
- Nos. 4180A-3, 4182-3 and 4184-3: Jabe Kahnke, 1326 42nd St SW, Watertown SD 57201

As noted on the transfer forms, since you have power of attorney for Jabe Kahnke, I listed you as the contact person for all of the water rights.

Enclosed for your records are the receipts for the filing fees you paid. If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

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

enclosures



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



March 26, 2014

4184-3

Jabe Kahnke
c/o Mark Kienast
1326 42nd St SW
Watertown, SD 57201

Dear Mr. Kienast:

Water Right No. 4184-3 appropriates 2.67 cubic feet per second (cfs) from a single diversion point consisting of one well completed into the Prairie Coteau aquifer. This well is approximately 170 feet deep in the center of the NE ¼ of Sec 11, T120N R52W and used to irrigate 243 acres in the E ½ of this same section.

You requested authorization to construct an additional well in the SW ¼ NE ¼ of Section 11, T120N-R52W. The new well will be used to supplement the flow rate from the original well during times when the original well cannot supply the amount of water appropriated by Water Right No. 4184-3.

Upon review of the request and pursuant to SDCL 46-5-13.1, the addition of a diversion point is authorized without application or publication of a notice of hearing pursuant to SDCL 46-2A-4. No increase in the authorized diversion rate of 2.67 cfs or the total acres irrigated has been requested. If the total diversion rate or the total number of acres irrigated increases, a new water permit will need to be obtained from the SD DENR Water Rights Program.

In granting this additional well, DENR recognizes that Water Permit No. 7242-3 held by Rollin Morehouse appropriates 4.29 cubic feet of water per second from four wells spaced along the north-south quarter section line in Section 11, T120N-R52W. The Morehouse permit has not yet been developed. The additional well that is authorized for Water Right No. 4184-3 is proposed to be located within 600 – 700 feet of one of the proposed Morehouse well sites. DENR encourages both parties to communicate with each other with the understanding that if each landowner moves their respective well locations away from the quarter section line dividing the properties the potential for adverse well interference will be minimized.

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

Sincerely,

Jeanne Goodman
Chief Engineer
Water Rights Program

Cc: Rollin Morehouse

REPORT TO THE CHIEF ENGINEER

On the Matter of a Request for an Additional Well for Water Right No. 4184-3

Jabe Kahnke c/o Mark Kienast

March 24, 2014

Water Right No. 4184-3 authorizes groundwater diversion from the Prairie Coteau aquifer at a maximum rate of 2.67 cubic feet of water per second (cfs) from one well. The well that supplies this water right is approximately 170 feet deep and located in the center of the NE¼ of Section 11, T120N-R52W in Grant County within the former boundaries of the Sisseton Wahpeton Indian Reservation. Water is used to irrigate 243 acres located in the E½ of Section 11, T120N-R52W. This water right has a priority date of October 27, 1977.

The water right holder is requesting to add an additional well approximately 170 feet deep and located in the SW¼ NE¼ of the same section. No increase in maximum diversion rate or acres irrigated is requested. This additional well is expected to be completed into the same Prairie Coteau aquifer.

South Dakota Codified Law 46-5-13.1

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional points may be approved if the new or additional point of diversion is from the same source of water, no additional water is appropriated, and no new land is to be irrigated. The change in location of diversion points may be allowed without application or publication pursuant to SDCL 46-2A-4 if the chief engineer finds that the change does not increase the potential for interference with existing diversions.

HYDROGEOLOGY:

The Prairie Coteau aquifer is a group of discontinuous outwash deposits collectively considered an aquifer due to their similarities. The depth and thickness of these deposits can vary widely. The Prairie Coteau aquifer is composed of brown to gray, coarse to very coarse sand and fine gravel (Hansen, 1990). The aquifer underlies approximately 184,500 acres, mostly in Roberts, Grant, and Codington Counties (Stonesifer, 2013). This aquifer is found in the 1,600 to 1,720 foot above mean seal level (msl) altitude interval and is 10 to 40 feet thick (SD Geological Survey, 2014). The potentiometric surface in the aquifer ranges from flowing to 90 feet below ground surface, at an elevation generally ranging from 1,725 to 1,875 feet msl. The aquifer appears to be under artesian conditions throughout and groundwater flows in a southerly direction (Water Rights, 2014a). Recharge to this Prairie Coteau aquifer occurs through leakage from till and inflow from surrounding aquifers. Discharge from this Prairie Coteau aquifer occurs primarily by well withdrawals (Hansen, 1990).

INTERFERENCE POTENTIAL:

Existing Rights:

There are no domestic wells on file within 1.5 miles of the proposed well site (Water Rights, 2014c). The nearest appropriative user is Water Permit No. 7242-3, Rollin Morehouse (Water Rights, 2014b).

Water Permit No. 7242-3 authorizes groundwater diversion from the Prairie Coteau aquifer at a maximum rate of 4.29 cubic feet of water per second (cfs) from four wells. The wells are expected to be approximately 165 feet deep and located in the center of the E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 11, T120N-R52W in Grant County within the former boundaries of the Sisseton Wahpeton Indian Reservation. Water will be used to irrigate 300 acres located in the SW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 11 and the E $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 10, T120N-R52W. This water permit has a priority date of April 11, 2011 (Water Rights, 2014b).

Water Right No. 4184-3 (Kahnke) proposed well site has been indicated on a map submitted. Water Permit No. 7242-3 (Morehouse) proposed well sites are assumed to be at the eastern most test hole sites. A map of these wells is shown in Figure 1.

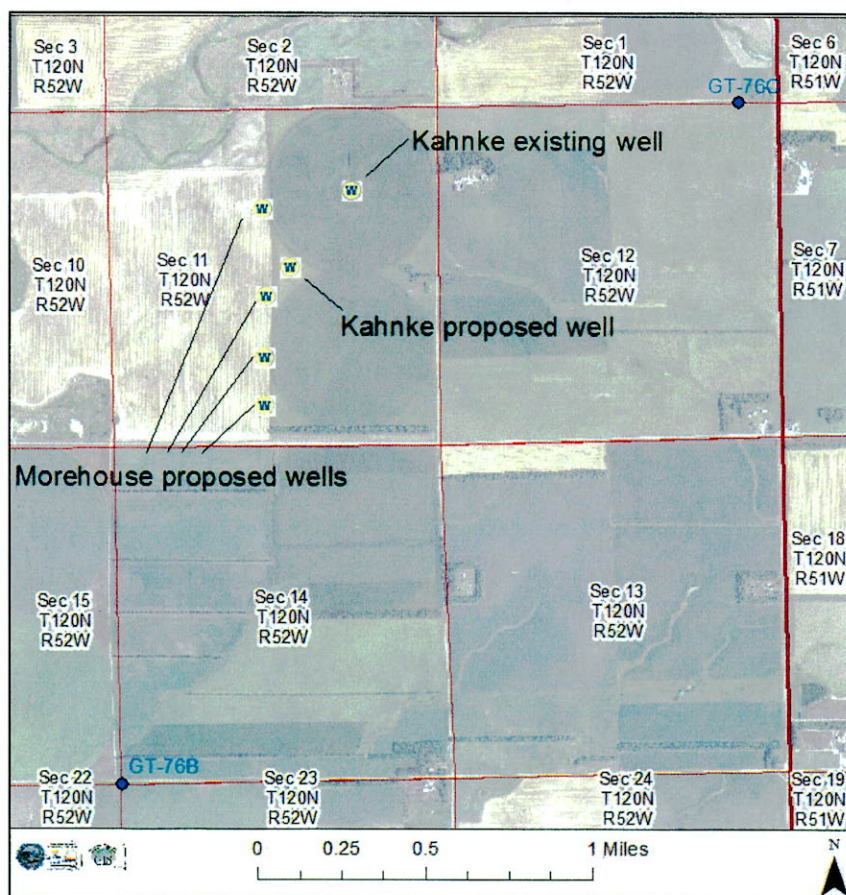


Figure 1: Map of locations of Kahnke and Morehouse wells and nearby observation wells

Drawdown:

The impact of the proposed additional well was evaluated by assuming all diversion authorized by Water Right No. 4184-3 (Kahnke) will be from the well completed at the proposed well site and the diversion authorized by Water Permit No. 7242-3 (Morehouse) will be evenly distributed between the four wells shown in Figure 1.

The distances between each of these five wells to each other, shown in Table 1, was estimated to the nearest 100 foot interval using ArcGIS 10.1. Kahnke 2 is Kahnke's proposed well. Morehouse 1, 2, 3, and 4 are Morehouse's proposed wells, in order from north to south.

Table 1: Distances between Kahnke and Morehouse wells

Well	Distance from wells (ft)				
	Kahnke 2	Morehouse 1	Morehouse 2	Morehouse 3	Morehouse 4
Kahnke 2		1000	600	1500	2200
Morehouse 1	1000		1500	2500	3300
Morehouse 2	600	1500		1000	1800
Morehouse 3	1500	2500	1000		800
Morehouse 4	2200	3300	1800	800	

The transmissivity and storativity of the Prairie Coteau aquifer was estimated to be the average values determined by Goodman (1978). The aquifer had an average transmissivity 49,500 gallons per day per foot (gpd/ft) and storativity of 8.7×10^5 (Goodman, 1978).

The Theis equation was used to determine the drawdown in each well due to pumping in the well in addition to the cumulative drawdown at each well due to pumping from the four other wells at a time interval of 30 days of continuous pumping. These results are shown in Table 2.

The duration of 30 days of continuous pumping at the maximum diversion rate of 2.67 cfs diverted solely from the additional Kahnke well in addition to pumping at the maximum diversion rate of 4.29 cfs from Morehouse's wells provides a 'worst case scenario' of drawdown.

Table 2: Drawdown in wells applying Theis equation

		Drawdown in well (ft) at 30 days continuous pumpage				
Pumping Well		Kahnke 2	Morehouse 1	Morehouse 2	Morehouse 3	Morehouse 4
	Kahnke 2	65.02	23.70	26.53	21.45	19.33
	Morehouse 1	9.50	26.06	8.60	7.46	6.84
	Morehouse 2	10.63	8.60	26.06	9.50	8.19
	Morehouse 3	8.60	7.46	9.50	26.06	9.99
	Morehouse 4	7.74	6.39	8.19	9.99	26.06
	Total drawdown	101.49	72.21	78.88	74.46	70.41

Water Levels:

Observation wells GT-76B and GT-76C are the nearest Prairie Coteau aquifer observation wells to Kahnke's and Morehouse's proposed wells, shown in Figure 1. The hydrographs of these wells are shown in Figures 2 and 3. These hydrographs display the temporal effects of nearby pumping in the aquifer.

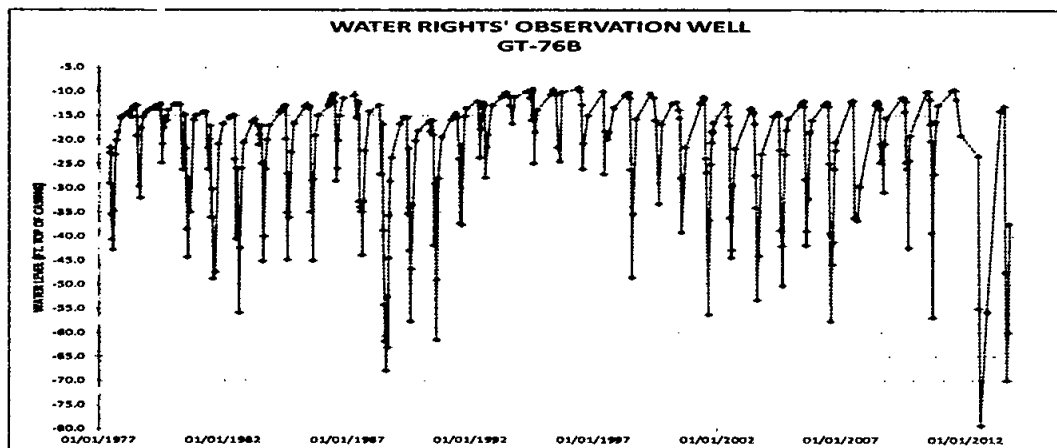


Figure 2: Hydrograph for observation well GT-76B (Water Rights, 2014a)

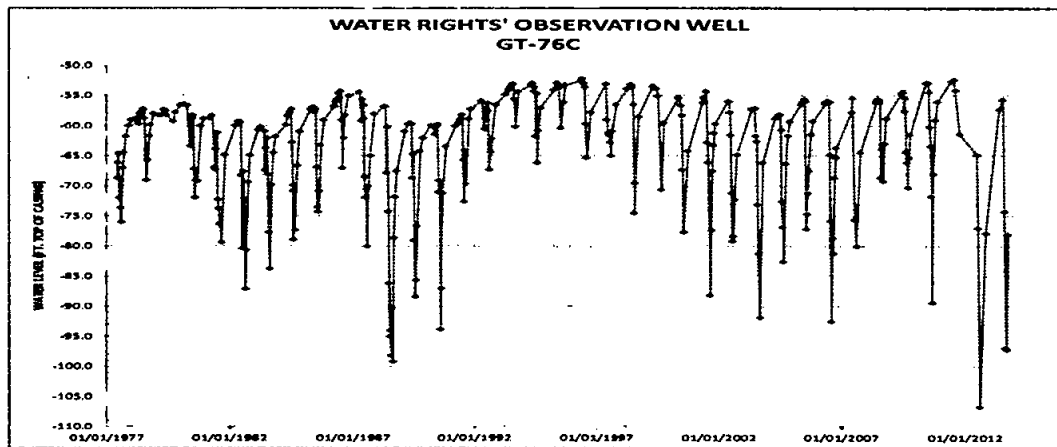


Figure 3: Hydrograph for observation well GT-76C (Water Rights, 2014a)

The pre-pumping water level elevation over the periods of record deviates approximately 10 feet in both wells. Applying the hydraulic gradient of the aquifer between these two wells to the location and elevation of the well field based on a topographic map provides an estimated pre-pumping water level elevation at the well field plus or minus 5 feet.

The elevations of the aquifer materials was determined using the same topographic map and the test hole logs submitted, plus or minus 10 feet considering the approximated deviation of pre-pumping water level of 5 feet and possible error in the topographic map of 5 feet.

The drawdown in each well due to pumping in the well in addition to the pumping from the four other wells determined by the Theis equation was applied to the pre-pumping water levels to determine the water levels in each well after 30 days of continuous pumping. These results are shown in Figure 4.

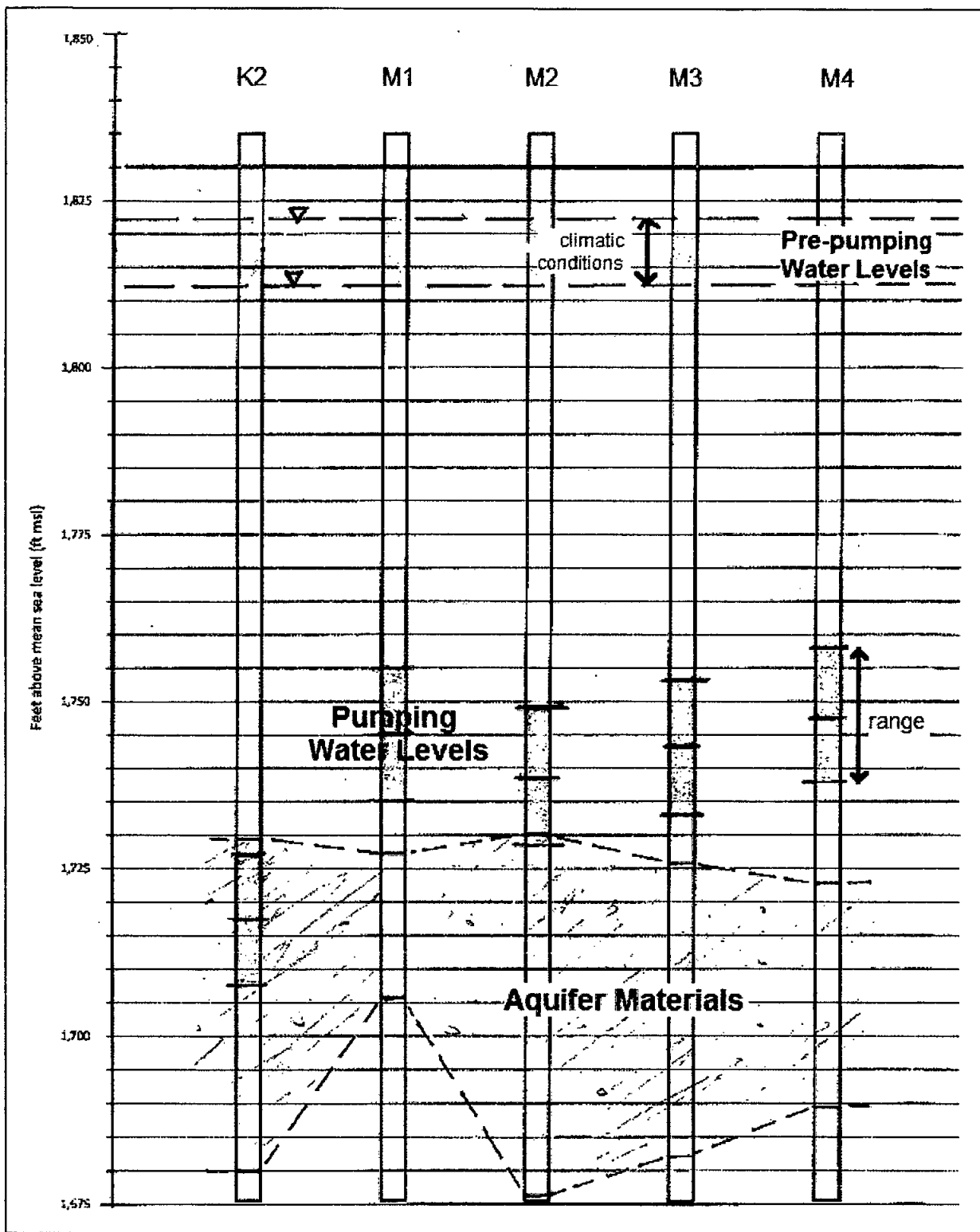


Figure 4: Water levels in the aquifer at the proposed wells before and after 30 days of continuous pumping applying the Theis equation

Conclusions:

SDCL 46-6-6.1 does not protect artesian head pressure as a means of delivery. And any increase in operating expenses that result from interference between wells, specifically lowering pumps, is not considered an adverse impact. The production capability of a well decreases when water levels lower below the top of an aquifer. This reduced production capability could be considered an adverse impact of a water right/permit.

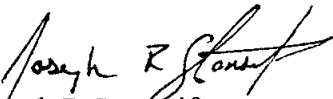
The Theis equation indicated the cumulative impact from 30 days of continuous pumping in the 5 wells is expected to cause water levels to lower beyond the top of the aquifer in Morehouse's well 2 when considering the possible range.

SDCL 46-5-13.1 states the change in location of diversion points may be allowed if the change does not increase the potential for interference with *existing diversions*. Because Morehouse's wells have not been constructed at this time and are not considered existing diversions, the increase for potential interference of his existing water right/permit is not considered.

Therefore, Kahnke's proposed additional well at the proposed site is not expected to adversely impair nearby existing wells. In some conditions, Kahnke's proposed well at the proposed site could impact Morehouse's wells in the future. Because Morehouse's wells are not currently existing diversions, he is not afforded protection at this time. In the future, because Morehouse has the junior water right/permit, Kahnke's existing and proposed wells would be afforded protection if impairment issues occur.

SUMMARY:

1. Water Right No. 4185-3 (Kahnke) is requesting to add an additional well from the same source of water. No increase in maximum diversion rate or acres irrigated is requested.
2. The change in location of diversion points may be allowed without application or publication pursuant to SDCL 46-2A-4 if the chief engineer finds that the change does not increase the potential for interference with existing diversions.
3. There is NOT an increase in the potential for interference with existing diversions. Because Morehouse's wells are not currently existing, he is not afforded protection.
4. There is an increase in the potential for interference with proposed wells for a water right/permit with a junior priority date. Because Morehouse has the junior water right/permit, Kahnke's existing and proposed wells would be afforded protection if impairment issues occur.



Joseph R Stonesifer
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

Goodman, J.A. 1978. Technical Report On Aquifer Pump Test Southwest Grant County Using Falk Irrigation Well.

Hansen, D.S. 1994. Major Aquifers in Codington and Grant Counties, South Dakota. Water-Resources Information Pamphlet No.47 SD DENR-Geological Survey, Vermillion, South Dakota.

SD Geological Survey. 2014. Lithologic Logs Database, SD DENR-Geological Survey, Vermillion, South Dakota.

Stonesifer, J.R. 2013. Report on Water Permit Application no. 7629-3, William Bucklin. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2014a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2014b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2014c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

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. _____	(office use only) Hydrologic Unit _____
	Basin _____	
	Newspaper _____	

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 4184-3
 (Use predates Mar 2, 1955)

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

Addition Diversion Add Helper Well No Increase in Acres

1. Name to Appear on Irrigation Permit Sabe Kahake c/o Mark Kienast
 (check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent
 (name and complete address if different than above name)

Mailing Address 1326 42nd St S.W. Watertown S.D. 57201
 (Address) (City) (State) (Zip Code)

Home Phone _____ Cell 605 881-0927 Email mKienast@OE Hotmail .com

2. Amount of water claimed _____ *CFS or 1200 **GPM _____ ***AF Total Acreage 243
 (*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well

4. Location of point of diversion _____
 (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Grant

5. County or counties where water will be used Grant

6. Annual period during which water is to be used April - September

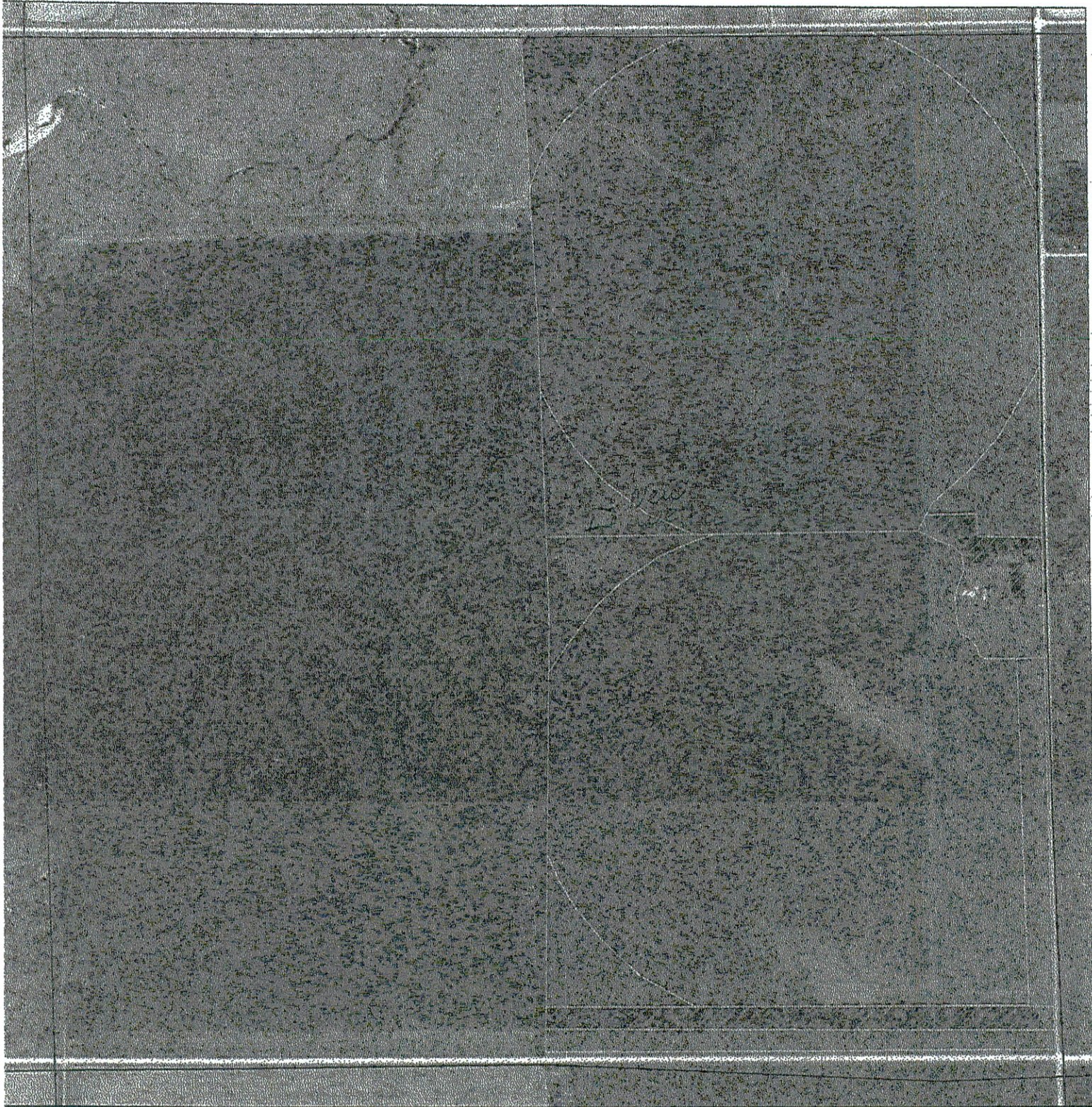
7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
 (Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres

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

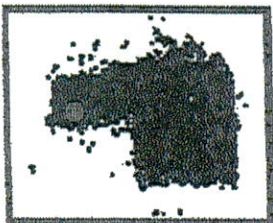
would just like to add a helper well. No increase in water use or acres watered

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



United States Department of Agriculture
Farm Service Agency

November 03, 2011



Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area.
Refer to your original determination (CPA-026 and attached maps) for exact wetland
boundaries and determinations, or contact NRCS.

2010 Ortho-Photography - Not to Scale

WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME & ADDRESS: Rollin Morehouse, 8920 W 28th St, St. Louis Park, MN

DATE: March 24, 2014

TELEPHONE: (952) 546-1003

RE: In regards to the change of diversion point for Water Right No. 4184-3

COMMENTS:

Eric Gronlund, Joe Stonesifer, and Bracken Capen spoke to Mr. Morehouse on March 24, 2014 in regards to the addition of diversion point application submitted for Water Right No. 4184-3 by Mark Kienast (operator of the land and water right owned by Jabe Kahnke). The new diversion point will be located in the southwestern corner of NE ¼ of Section 11, T120N-R52W. Mr. Morehouse was informed that this location is in close proximity (approximately 700 feet) from his proposed well location for Permit No. 7242-3 (located in the southeast of the NW ¼ of the same section) and is senior to his permit. He was also informed that the SDCL 46-5-13.1 states that a change of, or additional diversion point may be approved if it does not increase the potential for interference of existing diversions. Since Mr. Morehouse has not yet constructed the wells associated with Water Permit No. 7242-3, the Water Rights Program does not consider them to be existing diversions. In light of this, the Water Rights Program staff will recommend to the Chief Engineer approval of the request for additional diversion points for Water Right No. 4184-3.

Mr. Morehouse was informed of the proposed new diversion point location for Water Right No. 4184-3, and should interference of this well occur as a result of pumping from his yet to be completed wells, he may be required to limit his withdrawals to non-interfering levels.



Bracken Capen
Water Rights Program

SOUTH DAKOTA WATER WELL COMPLETION REPORT

4184-3

07-92

Location SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec 11 Twp 120 Rg S2
 County Grant North

Please mark well location with an "X"

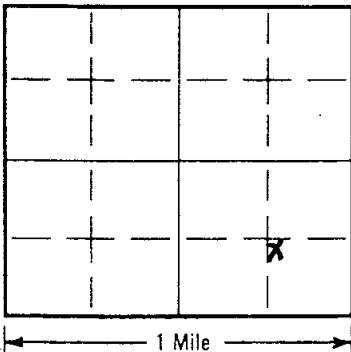
Lura

W

E

Well Completion Date

6/10/14



LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 2000 ft. from Sewer (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Forward Rotary

CASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
SDR-21 LB/FT	10 IN	0 FT	132 FT	15 IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
Neat Cement	_____	15 lb./gal	0 ft	25 ft
Bentonite	_____	_____ lb./gal	25 ft	115 ft

Describe grouting procedure Pressure Grout4" Tremie PipeSCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 10" P.S. IN Length 30 FEETMaterial Stainless Steel - JohnsonSlot Size 70 Set From 132 Feet to 162 FeetOther information plate bottomWAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

☒ YES, How: Chlorinesolution

Laboratory sent to for water quality analysis

Irrigation

Well Owner: Jabe Kahnke / Ina Kahnke Estate
 Business Name: c/o Mark Kienast
 Address: 1326 42nd St. SW
Watertown, SD 57201

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Topsoil Black	0	1
Gravel & clay yellow	1	15
clay yellow	15	53
clay Grey	53	88
clay Blue	88	115
Sand & Gravel - Yellowish	115	162
clay Blue	162	

STATIC WATER LEVEL 20' Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ PumpedDescribe: Air Compressor☐ Bailed☐ Other

Pumping Level Below Land Surface

100 ft. After 5 Hrs. pumped 1200 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate 800 GPM

REMARKS

RECEIVED

DEC 18 2014

WATER RIGHTS PROGRAM

This well was drilled under license # 63

And this report is true and accurate.

Drilling firm Lee Well Drilling IncSignature of License Representative: [Signature]

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

12-18-14