

WATER PERMIT NO. 2879-2

Name of Applicant: **Weinreis Brothers**

Address: **12284 Horse Creek Loop, Edgemont SD 57735**

Phone: **605-745-3261**

Amount of Water Claimed: **0.50 cfs**

Total Acres: **75**

Source of Water Supply: **Groundwater**

Water to be used for: **Irrigation**

County: **Fall River**

Type of Waste Disposal System:

Location: **Approx. 13 miles southeast of Edgemont SD**

PRIORITY Date Received: **05-15-24**

Application/License Fee: **\$950.00**

Corrected Application Received: **05-24-24**

Period of Annual Use: **May 1 – September 30**

Remarks: **Converting existing test well to irrigate**

Diversion Point: **SE 1/4 NE 1/4 Sec 22-T10S-R04E**

Land to be Irrigated: **SE 1/4 SE 1/4 Sec 22, NE 1/4**

NE 1/4 Sec 27; all in T10S-R04E

22

Depth of Well: **3,640**

Well Driller: **MJ Drilling**

Remarks:

Type of Map: **aerial**

Reviewed and the Number Assigned on: **05-31-24**

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 2879-2**

Date of first receipt of application May 15, 2024.

Date of return to applicant for corrections, amendments or changes May 16, 2024.

Date of receipt of corrected application June 10, 2024.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2879-2 to Weinreis Brothers, 12284 Horse Creek Loop, Edgemont SD 57735, authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 2879-2 appropriates 0.50 cubic feet of water per second from one existing well completed into the Madison Aquifer (approximately 3,640 feet deep) located in the SE 1/4 NE 1/4 Section 22 for irrigation of 75 acres located in the E 1/2 SE 1/4 Section 22, NE 1/4 NE 1/4 Section 27; all in T10S-R4E. Water may be diverted from the well directly to the area to be irrigated or to a livestock wastewater pond located in the W 1/2 NE 1/4 Section 27-T10S-R4E and then to the irrigated area. This site is located approximately 13 miles southeast of Edgemont SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is May 15, 2024.
4. The date of approval of Permit No. 2879-2 is August 12, 2024.
5. One-fifth of the construction is to be completed on or before February 12, 2027.
6. All construction is to be completed on or before August 12, 2029.
7. Water is to be put to beneficial use on or before August 12, 2033.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 2879-2 is issued for a twenty-year term. Pursuant to SDCL 46-2A-21, the twenty-year term may be deleted at any time during the twenty-year period or following its expiration. If the twenty-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 2879-2 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.
2. The well may be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. Any diversion of water from the well to the livestock wastewater pond is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-36.2 or 34A-2-112 or 34A-2-124.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Eric Gronlund
Eric Gronlund, Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

SEP 04 2024
date



FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>2879-2</u> (office use only)
	Hydrologic Unit <u>10120108</u>
	Basin <u>Cheyenne Lower</u>
	Newspaper <u>Edgemont + Fall River Co. Herald</u> <u>Rapid City Journal</u>

RECEIVED

MAY 15 2024

OFFICE OF
WATER

Application For Permit To Appropriate Water For Irrigation

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

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

Conversion of a drilled test well to an irrigation well

1. Name to Appear on Irrigation Permit Weinreis Brothers

Note: The "Name to Appear on Irrigation Permit" must be the name in which the property to be irrigated is held in.

Mailing Address 12284 Horse Creek Loop Edgemont SD 57735
(Address) (City) (State) (Zip Code)

Phone 605-745-3261 Mobile 605-745-3261 Email garrett@cowtonwusa.net

2. Amount of water claimed 0.50*CFS or 225**GPM ***AF Total Acreage 75
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Converting an existing test well to irrigation

4. Location of point of diversion One well located in SENE Sec 22 T10S R04E
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Fall River5. County or counties where water will be used Fall River6. Annual period during which water is to be used May to September³⁰

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

Land Description	Acres	Land Description	Acres
<u>NE 1/4 SE 1/4</u> SESE Section 22 T10S R04E	<u>30</u>		
NENE Section 27 T10S R04E	<u>45</u>		

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

An existing test well will be converted to an irrigation well which will be piped with 4" or 6" underground pipe from the wellhead south, directly to a pivot or to the existing wastewater pond on the east side of the feed lot located in the north half of section 27 T10S R04E, where water would then be piped to the pivot.

I, Remelle E Burton, P.G. agent _____, the applicant, certify under
Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

Supplemental Information

(type or print)

1. Well Information (check one or both as applicable) ☐ Drilling new well(s) ☒ Using existing well(s)a) If new wells, how many ____ Have test holes been drilled ☒ Yes ☐ No Drilled by MJ Drilling
(if yes, please provide copies of logs)b) If existing wells, how many 1 Provide copy of log(s), if available. Drilled by _____

For either Existing or Proposed Wells:

c) Well Depth (required) 3640 Depth to Top of Water Bearing Material 3276 Depth to Water from Surface plus 150 ftd) Distance to nearest domestic well on applicant's property 300 ft Property owned by others _____**2. Wastewater Disposal System Information**

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

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions _____ Depth _____

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

4. Water Storage Dams

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

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

Settje Agri-Services & Engineering
15460 NW 48th St
Raymond, NE 68428

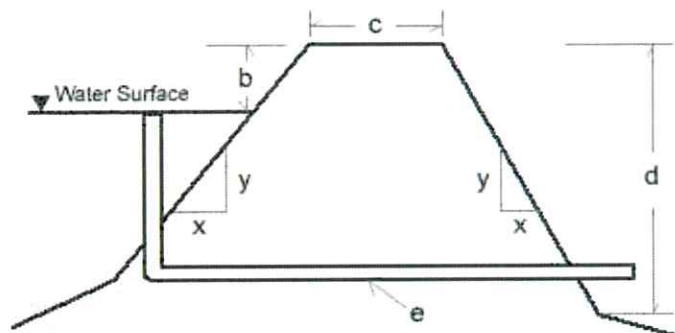
b) Freeboard 2.0 feetc) Crest Width 10 feetCrest Length 555 feetd) Height 10 feete) Primary Outlet Capacity n/a

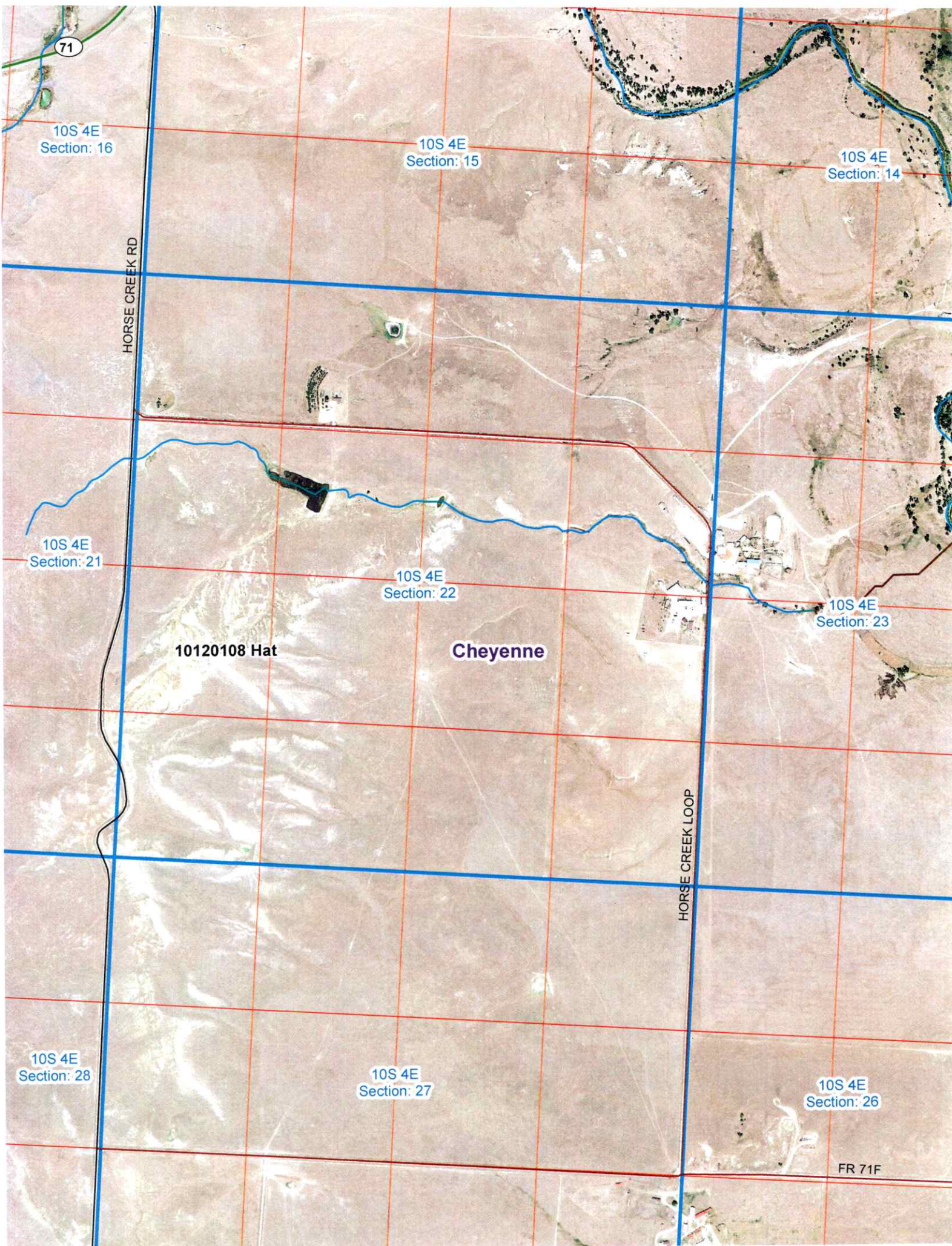
If pipe, diameter _____

f) Secondary Spillway Capacity n/a

Spillway Width _____

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

Upstream 4:1Downstream 4:1h) Surface Area of Impoundment 4 acresi) Storage 28.58 Acre Feetj) Drainage Area Above Dam 51.4 Acres



71

10S 4E
Section: 16

10S 4E
Section: 15

10S 4E
Section: 14

HORSE CREEK RD

10S 4E
Section: 21

10S 4E
Section: 22

10S 4E
Section: 23

10120108 Hat

Cheyenne

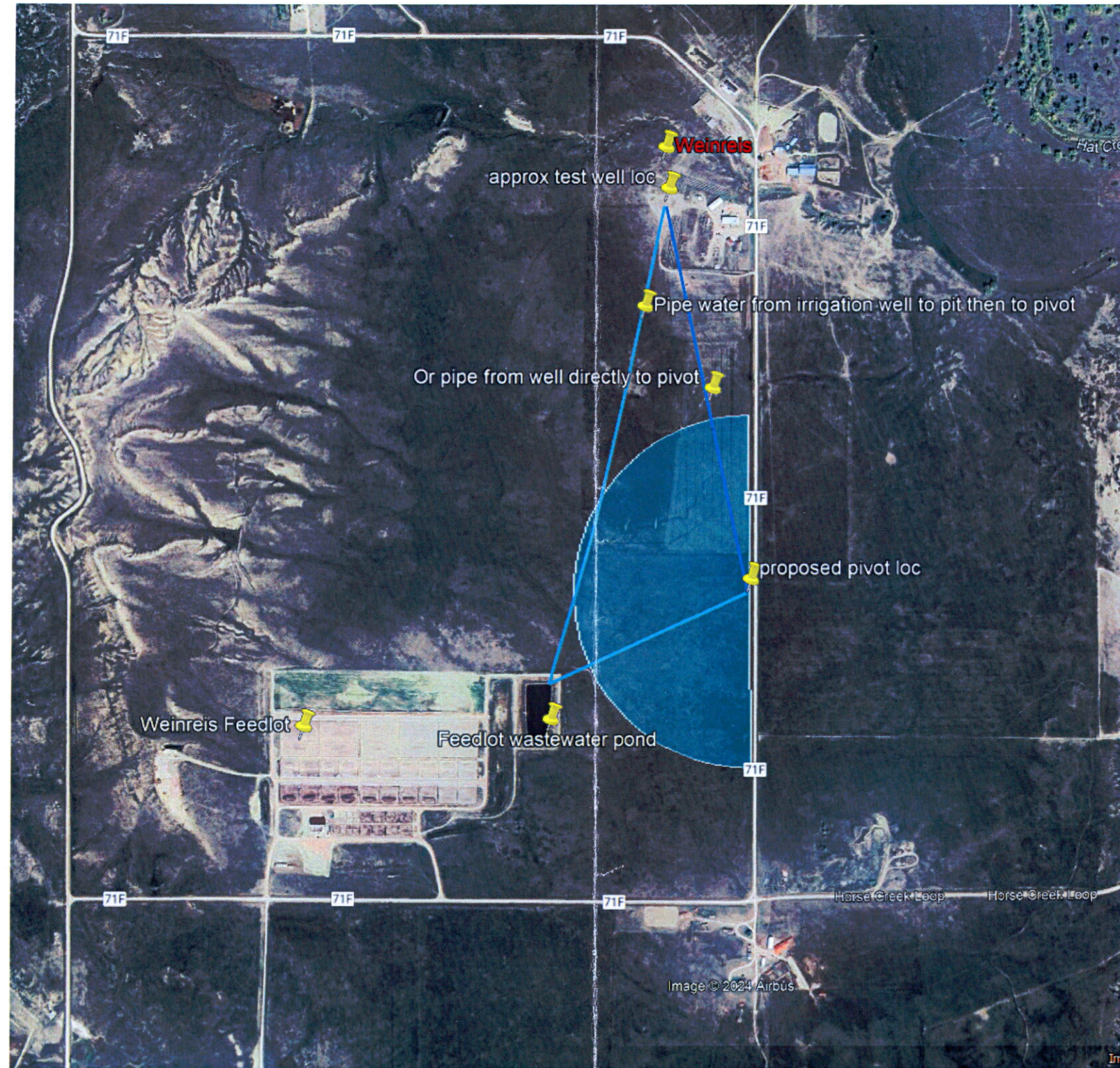
HORSE CREEK LOOP

10S 4E
Section: 28

10S 4E
Section: 27

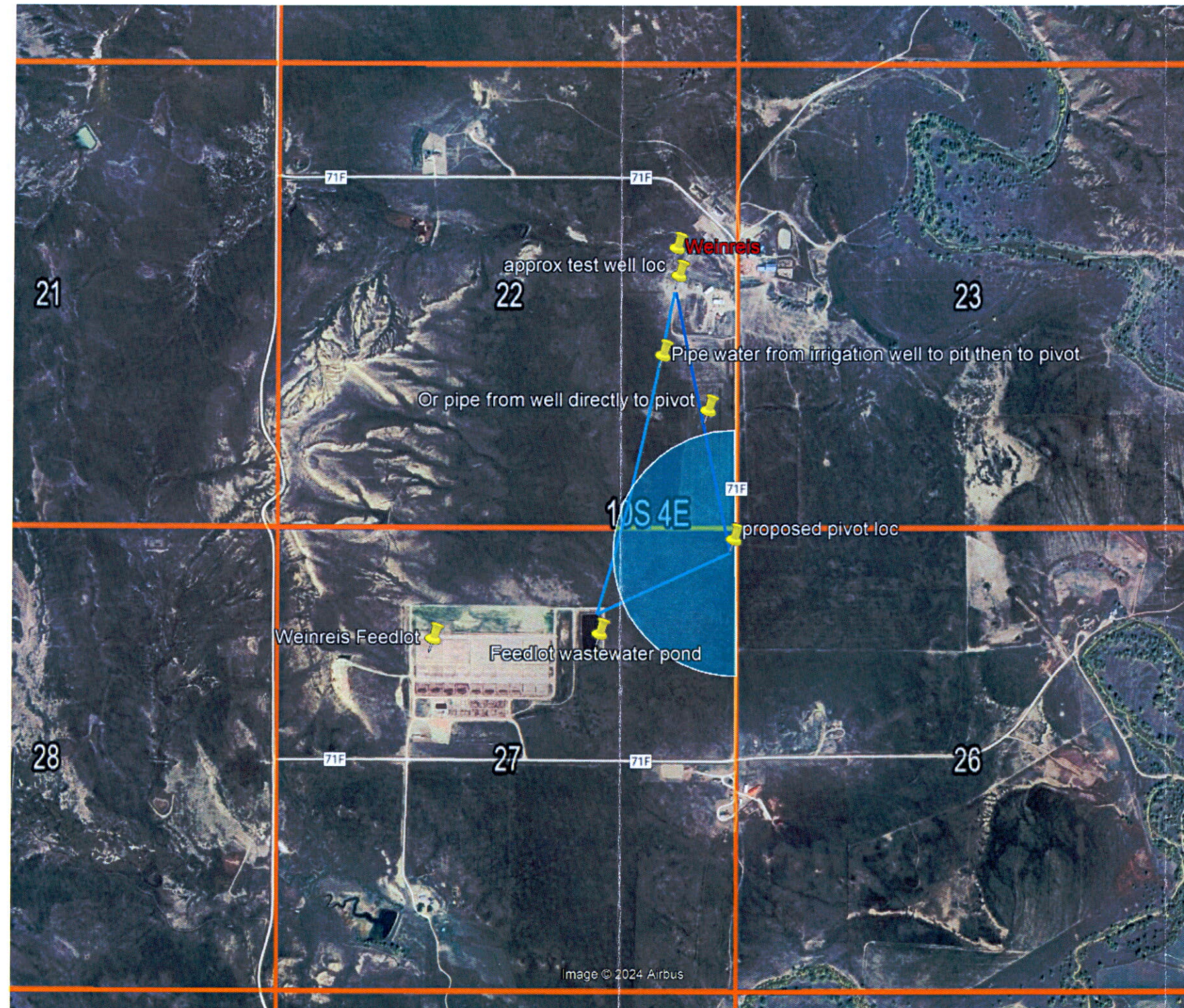
10S 4E
Section: 26

FR 71F

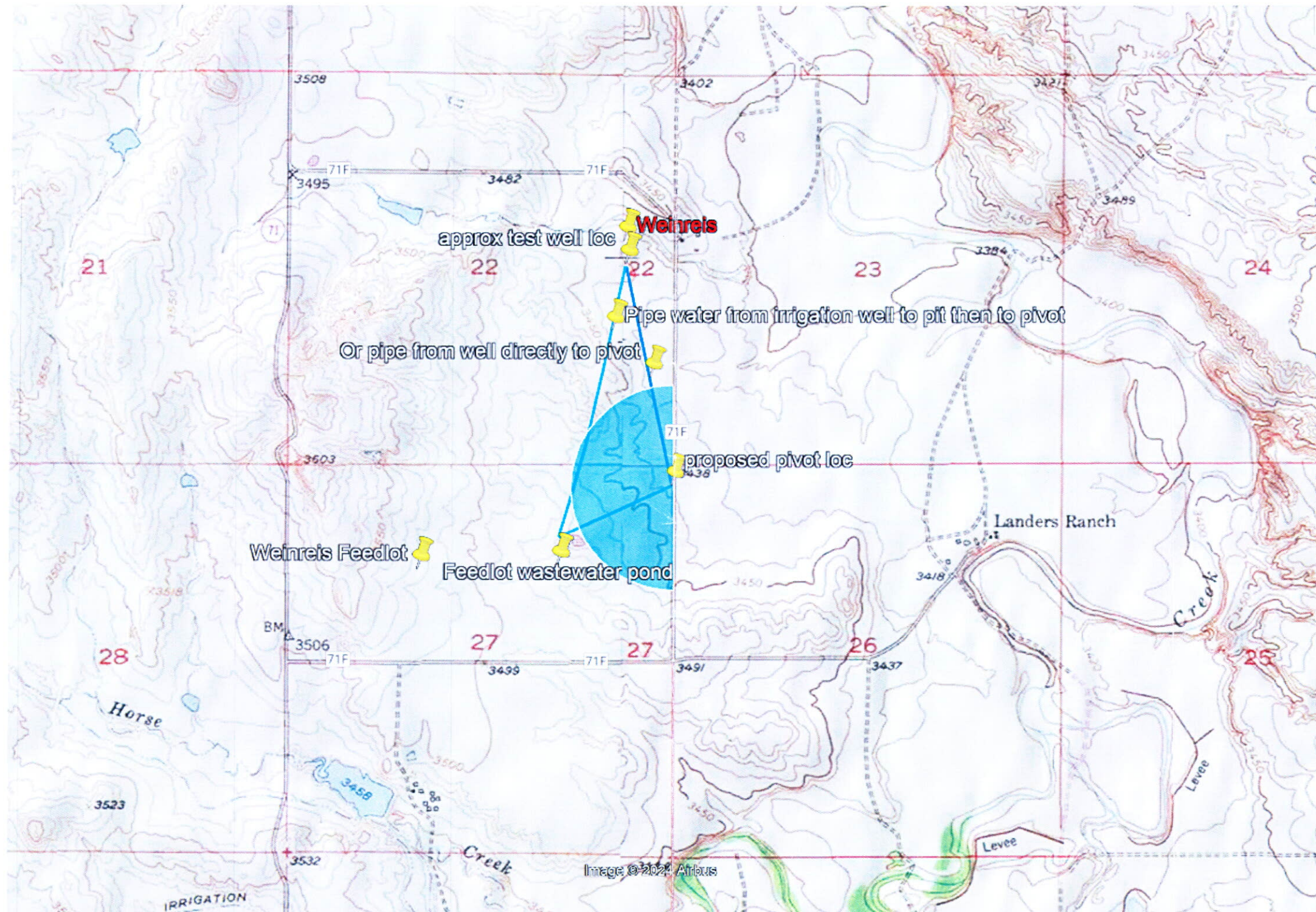


Weinreis Brothers two different irrigation options:

1. Pipe water from well directly for irrigation or 2. Pipe to feedlot's wastewater pond prior to irrigation.



Weinreis Brothers, 12284 Horse Creek Loop, Edgemont, SD 57735
Approximate location of Madison Test Well and irrigation area.



Topographic Map
Weinreis Brothers, T10S, R4E, SESE Section 22 and NENE Section 27

Scale: 1 inch = 667 feet

925

Feet



DANR
SOUTH DAKOTA

Completed by:

Ron Duvall
Ron Duvall, Engineer III
SD DANR, Water Rights Program

Date:

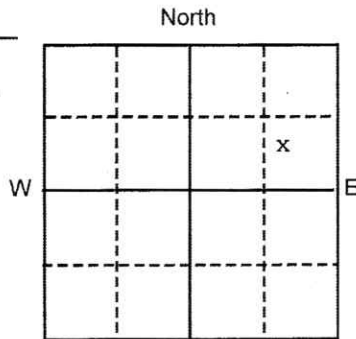
Application No.

2879-2

SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE 1/4 NE 1/4 Sec 22 Twp 10S Rg 04ECounty Fall RiverPlease mark well
location with an "X"

Well Completion Date

1-09-24

1 Mile

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

5,280.0 ft. from Feedlot (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
40.5 LB/FT	10.75 IN	0.0 FT	46.0 FT	14.75 IN
23.0 LB/FT	7.00 IN	46.0 FT	2,000.1 FT	9.88 IN
23.0 LB/FT	7.00 IN	2,000.1 FT	3,331.1 FT	8.75 IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
API "G"	200	15.5 Lb/gal	0.0 Ft	3,331.0 Ft
XTREME LT	400	13.0 Lb/gal		

Describe grouting procedure

Pressure grouted bottom to surface

SCREEN:

☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information Open hole 3331 to 3668 feet @ 6.25"

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

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

Energy Labs

Well Owner: Weinreis BrothersBusiness Name: Weinreis BrothersAddress: 12284 Horse Creek LoopCity, State, Zip: Edgemont SD 57735

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Lakota	1204	
Morrison	1374	
Sundance	1456	
Spearfish	2028	
Minnekahta	2214	
Opeche	2259	
Minnelusa	2326	
Madison	3276	
Precambrian	3640	

STATIC WATER LEVEL

FEET

If flowing: closed in pressure 65.00 PSIGPM flow 39.0 through _____ Inch pipeControlled by ☒ Valve ☐ Reducers ☐ Other

Reduced flow rate _____ GPM

Can well be completely shut in? YES

WELL TEST DATA:

☒ Pumped Describe: Air Lift☐ Bailed☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Air lifted 50 gpm f/1100'

This well was drilled under license # 836 and this
report is true and accurate.Drilling firm: MJ Drilling, Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

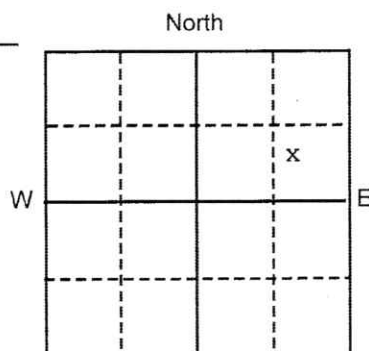
RECEIVED

APR 15 2024

Date: 04/03/2024OFFICE OF
WATER

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE 1/4 NE 1/4 Sec 22 Twp 10S Rg 04ECounty Fall RiverPlease mark well
location with an "X"

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1 Mile

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METHOD OF DRILLING:

CASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
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XTREME LT	400	13.0 Lb/gal		

Describe grouting procedure

Pressure grouted bottom to surface

SCREEN: ☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information Open hole 3331 to 3668 feet @ 6.25"WAS A PACKER OR SEAL USED? ☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

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

Energy Labs

Well Owner: Weinreis BrothersBusiness Name: Weinreis BrothersAddress: 12284 Horse Creek LoopCity, State, Zip: Edgemont SD 57735

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
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Spearfish	2028	
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Opeche	2259	
Minnelusa	2326	
Madison	3276	
Precambrian	3640	

STATIC WATER LEVEL _____ FEET

If flowing: closed in pressure 65.00 PSIGPM flow 39.0 through _____ Inch pipeControlled by ☒ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: Air Lift☐ Bailed☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Air lifted 50 gpm f/1100'

This well was drilled under license # 836 and this report is true and accurate.Drilling firm: MJ Drilling, Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: _____



Trust our People. Trust our Data.

Residential Analytical Results

Client: Tim Barritt
Address: Not Indicated
Client Sample ID: Weinreis

Test Kit:
www.energylab.com
G23090019-001

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Tests that Impact Health					
Fluoride	1.4	 Satisfactory	EPA Secondary	Not Detected or less than 0.7 (mg/L) 0.7 to 1.5 (mg/L) 1.5 to 2 (mg/L) 2 to 4 (mg/L) 4 or more (mg/L)	Satisfactory: Concentrations below 0.7 mg/L are out of the ideal range for protection of tooth enamel. Consult with your dental professional if you have concerns about fluoride. Satisfactory: Ideal range for development and protection of tooth enamel. Monitor: Concentrations above 1.5 mg/L are out of the ideal range for protection of tooth enamel. Objectionable: Fluoride was detected below the EPA maximum contaminant level but is high enough to possibly cause tooth discoloration. Consult with your dental professional. Warning: Health risk exists; consider water treatment and/or alternative water sources. Consult with your dental professional.

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Nitrate + Nitrite (measured as Nitrogen)	0.04	 Satisfactory	EPA Primary	Not Detected or less than 1 (mg/L) 1 to 4 (mg/L) 4 to 10 (mg/L) 10 or more (mg/L)	Satisfactory: No action necessary unless a change is suspected. The Environmental Protection Agency (EPA) recommends testing annually to monitor for contamination. Monitor: Potential pollution source exists. Continue to monitor annually for changes. Monitor more regularly if infants under the age of 1 year are consuming the water and consider testing again for Nitrite alone. Monitor: Above Normal Natural Levels - probable pollution source exists. Continue to monitor annually for changes. Monitor more regularly if infants under the age of 1 year are consuming the water and consider testing again for Nitrite alone. Warning: Health risk exists, discontinue use of water for infants under 1 year of age and persons with cardiovascular conditions. Do not boil! This can increase the Nitrates concentration.
Potassium	15	 Satisfactory		Not Detected or less than 100 (mg/L) 100 or more (mg/L)	Satisfactory: No action necessary. Typical drinking water range is 0.5 to 8 mg/L. Monitor: If your doctor has prescribed a salt restricted diet and the level of Potassium is greater than 100 mg/L, you should inform your doctor. High Potassium is usually found with water softening that uses Potassium salt.
Sodium	103	 Monitor		Not Detected or less than 100 (mg/L) More than 100 (mg/L)	Satisfactory: Sodium is common in drinking water supplies and can range from 1 to 1,900 mg/L. Monitor: If your doctor has prescribed a sodium restricted diet and the level of Sodium is greater than 100 mg/L, you should inform your doctor. Water above 200 mg/L may have a salty taste.
Tests that Impact Quality - Taste & Color					
Chloride	136	 Satisfactory	EPA Secondary	Not Detected or less than 250 (mg/L) 250 or more (mg/L)	Satisfactory: No action necessary. Objectionable: Water may have a salty taste.

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Iron	15.4	 Monitor	EPA Secondary	Not Detected or less than 0.3 (mg/L) 0.3 or more (mg/L)	Satisfactory: No action is necessary. Objectionable: High iron can cause discoloration of fixtures and/or clothing and can support iron bacteria growth leading to taste and odor problems; if troublesome, consider treatment.
Sulfate	380	 Monitor	EPA Secondary	Not Detected or less than 250 (mg/L) 250 or more (mg/L)	Satisfactory: No action necessary. Objectionable: Water may have a salty taste.
Tests that Impact Quality - Corrosion & Scaling					
Alkalinity, Total as CaCO ₃	162	 Satisfactory		Less than 100 (mg/L) 100 to 200 (mg/L) 200 to 500 (mg/L) More than 500 (mg/L)	Corrosion Potential: Alkalinity does not pose a direct health risk. If pH is less than 6.5 there is increased potential for corrosion of pipes to release metals into the water. Satisfactory: Ideal range to minimize corrosion and scaling. Scaling Potential: Safe to drink. Scaling can occur in pipes and water heaters but may also prevent corrosion of pipes. High Scaling Potential: Likely to cause excessive scaling in plumbing systems, resulting in reduced heat transfer to the water and causing greater power consumption. Consider water treatment.
Calcium	146	 Satisfactory		Any Value	Satisfactory: Calcium is used to calculate Hardness.

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Corrosivity	0.1	 Satisfactory	EPA Secondary	Less than -2.5 -2.5 to -0.5 -0.5 to 0.5 0.5 to 2.5 More than 2.5	Warning: High Corrosion Potential - Corrosive water can leach metals from the earth or from pipes and fixtures; treatment and/or testing for metals is recommended. Monitor: Moderate Corrosion Potential - Water can leach metals from the earth or from pipes and fixtures; treatment and/or testing for metals is recommended. Satisfactory: Ideal range to minimize corrosion and scaling. Monitor: Moderate Scaling Potential - Moderate potential for scaling in pipes and hot water heaters; consider treatment. Warning: High Scaling Potential - Water will cause scaling in pipes and hot water heaters; treatment is recommended.
Hardness (as CaCO3)	520	 Monitor		Not Detected or less than 60 (mg/L) 60 to 120 (mg/L) More than 120 (mg/L)	Soft Water: Unless your doctor has you on a restricted salt diet, soft water is safe to drink but may be more corrosive and may be harmful to plants. Moderately Hard Water: Safe to drink and a good level to avoid corrosion and scaling. Hard Water: Safe to drink but harder water can cause scaling in pipes and hot water heaters; if scaling is troublesome, consider softening.
Hardness (as CaCO3) - Grains	30.4	 Monitor		Not Detected or less than 3.5 (gpg) 3.5 to 7 (gpg) More than 7 (gpg)	Soft Water: Unless your doctor has you on a restricted salt diet, soft water is safe to drink but may be more corrosive and may be harmful to plants. Moderately Hard Water: Safe to drink and a good level to avoid corrosion and scaling. Hard Water: Safe to drink but harder water can cause scaling in pipes and hot water heaters; if scaling is troublesome, consider softening.
Magnesium	38	 Satisfactory		Any Value	Satisfactory: Magnesium is used to calculate Hardness.
pH	7.3	 Satisfactory	EPA Secondary	Less than 6.5 (s.u.) 6.5 to 8.5 (s.u.)	Objectionable: pH slightly out of the ideal range is not a direct health threat but can affect corrosivity which can leach metals from the earth or from pipes. Satisfactory: pH of groundwater does not generally change rapidly so retesting is not necessary unless a change is suspected.

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results	
Total Dissolved Solids (TDS)	917		Monitor	EPA Secondary	More than 8.5 (s.u.)	Objectionable: pH slightly out of the ideal range is not a direct health threat but can affect corrosivity which can leach metals from minerals in the earth or from pipes.
					Not Detected or less than 500 (mg/L)	Satisfactory: Total Dissolved Solids should not change significantly through time; retest if a change is suspected.
					500 or more (mg/L)	Objectionable: High total dissolved solids do not generally pose a serious health risk but can cause water to be colored, taste poor, stain, and cause diarrhea in people not accustomed to the water.
Tests that Impact Plants & Landscaping						
Conductivity	1440		Monitor		Less than 750 (umhos/cm)	Low Salinity Water: Generally safe for watering plants and landscaping.
					750 to 2000 (umhos/cm)	Moderate Salinity Water: Can be used if there is soil drainage.
					More than 2000 (umhos/cm)	High Salinity Water: Likely to harm plants unless soil is coarse and very well-drained and plants are salt tolerant.
Sodium Adsorption Ratio (SAR)	2.0		Satisfactory		Less than 6	Low Sodium Water: Generally safe for watering plants, grass and landscaping.
					6 to 20	Medium to High Sodium Water: Can be used if there is soil drainage and plants are not salt-sensitive.
					More than 20	Very High Sodium Water: Likely to harm plants unless soil is coarse and very well-drained and plants are salt tolerant. If water is softened, do not apply to house plants or landscaping.

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Tests that Impact Livestock Suitability					
Livestock Suitability - based on Total Dissolved Solids	917	 Satisfactory		Less than 1000 (mg/L) 1000 to less than 3000 (mg/L) 3000 to less than 5000 (mg/L) 5000 to less than 7000 (mg/L) 7000 or more (mg/L)	Satisfactory: Based on the mineral content only, the water is suitable for all classes of livestock. Monitor: The water is suitable for all classes of livestock. Poultry may experience mild transient diarrhea. Monitor: The water is suitable for livestock use except for poultry which may experience decreased performance and mortality. Monitor: The water is suitable for livestock use. Not suitable for poultry. Warning: The water is not suitable for livestock use.

Residential Analytical Results

Client: Tim Barritt
Address: Not Indicated
Client Sample ID: Weinreis

Test Kit:
www.energylab.com
 G23090019-001

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Tests that Impact Health					
Fluoride	1.4	 Satisfactory	EPA Secondary	Not Detected or less than 0.7 (mg/L) 0.7 to 1.5 (mg/L) 1.5 to 2 (mg/L) 2 to 4 (mg/L) 4 or more (mg/L)	Satisfactory: Concentrations below 0.7 mg/L are out of the ideal range for protection of tooth enamel. Consult with your dental professional if you have concerns about fluoride. Satisfactory: Ideal range for development and protection of tooth enamel. Monitor: Concentrations above 1.5 mg/L are out of the ideal range for protection of tooth enamel. Objectionable: Fluoride was detected below the EPA maximum contaminant level but is high enough to possibly cause tooth discoloration. Consult with your dental professional. Warning: Health risk exists; consider water treatment and/or alternative water sources. Consult with your dental professional.

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Nitrate + Nitrite (measured as Nitrogen)	0.04	 Satisfactory	EPA Primary	Not Detected or less than 1 (mg/L)	Satisfactory: No action necessary unless a change is suspected. The Environmental Protection Agency (EPA) recommends testing annually to monitor for contamination.
				1 to 4 (mg/L)	Monitor: Potential pollution source exists. Continue to monitor annually for changes. Monitor more regularly if infants under the age of 1 year are consuming the water and consider testing again for Nitrite alone.
				4 to 10 (mg/L)	Monitor: Above Normal Natural Levels - probable pollution source exists. Continue to monitor annually for changes. Monitor more regularly if infants under the age of 1 year are consuming the water and consider testing again for Nitrite alone.
				10 or more (mg/L)	Warning: Health risk exists, discontinue use of water for infants under 1 year of age and persons with cardiovascular conditions. Do not boil! This can increase the Nitrates concentration.
Potassium	15	 Satisfactory		Not Detected or less than 100 (mg/L)	Satisfactory: No action necessary. Typical drinking water range is 0.5 to 8 mg/L.
				100 or more (mg/L)	Monitor: If your doctor has prescribed a salt restricted diet and the level of Potassium is greater than 100 mg/L, you should inform your doctor. High Potassium is usually found with water softening that uses Potassium salt.
Sodium	103	 Monitor		Not Detected or less than 100 (mg/L)	Satisfactory: Sodium is common in drinking water supplies and can range from 1 to 1,900 mg/L.
				More than 100 (mg/L)	Monitor: If your doctor has prescribed a sodium restricted diet and the level of Sodium is greater than 100 mg/L, you should inform your doctor. Water above 200 mg/L may have a salty taste.
Tests that Impact Quality - Taste & Color					
Chloride	136	 Satisfactory	EPA Secondary	Not Detected or less than 250 (mg/L)	Satisfactory: No action necessary.
				250 or more (mg/L)	Objectionable: Water may have a salty taste.

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Iron	15.4	 Monitor	EPA Secondary	Not Detected or less than 0.3 (mg/L) 0.3 or more (mg/L)	Satisfactory: No action is necessary. Objectionable: High iron can cause discoloration of fixtures and/or clothing and can support iron bacteria growth leading to taste and odor problems; if troublesome, consider treatment.
Sulfate	380	 Monitor	EPA Secondary	Not Detected or less than 250 (mg/L) 250 or more (mg/L)	Satisfactory: No action necessary. Objectionable: Water may have a salty taste.
Tests that Impact Quality - Corrosion & Scaling					
Alkalinity, Total as CaCO ₃	162	 Satisfactory		Less than 100 (mg/L) 100 to 200 (mg/L) 200 to 500 (mg/L) More than 500 (mg/L)	Corrosion Potential: Alkalinity does not pose a direct health risk. If pH is less than 6.5 there is increased potential for corrosion of pipes to release metals into the water. Satisfactory: Ideal range to minimize corrosion and scaling. Scaling Potential: Safe to drink. Scaling can occur in pipes and water heaters but may also prevent corrosion of pipes. High Scaling Potential: Likely to cause excessive scaling in plumbing systems, resulting in reduced heat transfer to the water and causing greater power consumption. Consider water treatment.
Calcium	146	 Satisfactory		Any Value	Satisfactory: Calcium is used to calculate Hardness.

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Corrosivity	0.1	 Satisfactory	EPA Secondary	Less than -2.5	Warning: High Corrosion Potential - Corrosive water can leach metals from the earth or from pipes and fixtures; treatment and/or testing for metals is recommended.
				-2.5 to -0.5	Monitor: Moderate Corrosion Potential - Water can leach metals from the earth or from pipes and fixtures; treatment and/or testing for metals is recommended.
				-0.5 to 0.5	Satisfactory: Ideal range to minimize corrosion and scaling.
				0.5 to 2.5	Monitor: Moderate Scaling Potential - Moderate potential for scaling in pipes and hot water heaters; consider treatment.
				More than 2.5	Warning: High Scaling Potential - Water will cause scaling in pipes and hot water heaters; treatment is recommended.
Hardness (as CaCO3)	520	 Monitor		Not Detected or less than 60 (mg/L)	Soft Water: Unless your doctor has you on a restricted salt diet, soft water is safe to drink but may be more corrosive and may be harmful to plants.
				60 to 120 (mg/L)	Moderately Hard Water: Safe to drink and a good level to avoid corrosion and scaling.
				More than 120 (mg/L)	Hard Water: Safe to drink but harder water can cause scaling in pipes and hot water heaters; if scaling is troublesome, consider softening.
Hardness (as CaCO3) - Grains	30.4	 Monitor		Not Detected or less than 3.5 (gpg)	Soft Water: Unless your doctor has you on a restricted salt diet, soft water is safe to drink but may be more corrosive and may be harmful to plants.
				3.5 to 7 (gpg)	Moderately Hard Water: Safe to drink and a good level to avoid corrosion and scaling.
				More than 7 (gpg)	Hard Water: Safe to drink but harder water can cause scaling in pipes and hot water heaters; if scaling is troublesome, consider softening.
Magnesium	38	 Satisfactory		Any Value	Satisfactory: Magnesium is used to calculate Hardness.
pH	7.3	 Satisfactory	EPA Secondary	Less than 6.5 (s.u.)	Objectionable: pH slightly out of the ideal range is not a direct health threat but can affect corrosivity which can leach metals from the earth or from pipes.
				6.5 to 8.5 (s.u.)	Satisfactory: pH of groundwater does not generally change rapidly so retesting is not necessary unless a change is suspected.

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results	
Total Dissolved Solids (TDS)	917		Monitor	EPA Secondary	More than 8.5 (s.u.)	Objectionable: pH slightly out of the ideal range is not a direct health threat but can affect corrosivity which can leach metals from minerals in the earth or from pipes.
					Not Detected or less than 500 (mg/L)	Satisfactory: Total Dissolved Solids should not change significantly through time; retest if a change is suspected.
					500 or more (mg/L)	Objectionable: High total dissolved solids do not generally pose a serious health risk but can cause water to be colored, taste poor, stain, and cause diarrhea in people not accustomed to the water.
Tests that Impact Plants & Landscaping						
Conductivity	1440		Monitor	Less than 750 (umhos/cm)	Low Salinity Water: Generally safe for watering plants and landscaping.	
				750 to 2000 (umhos/cm)	Moderate Salinity Water: Can be used if there is soil drainage.	
				More than 2000 (umhos/cm)	High Salinity Water: Likely to harm plants unless soil is coarse and very well-drained and plants are salt tolerant.	
Sodium Adsorption Ratio (SAR)	2.0		Satisfactory	Less than 6	Low Sodium Water: Generally safe for watering plants, grass and landscaping.	
				6 to 20	Medium to High Sodium Water: Can be used if there is soil drainage and plants are not salt-sensitive.	
				More than 20	Very High Sodium Water: Likely to harm plants unless soil is coarse and very well-drained and plants are salt tolerant. If water is softened, do not apply to house plants or landscaping.	

Analysis	Result	Rating	Advisory Source	Advisory Range	Understanding Your Results
Tests that Impact Livestock Suitability					
Livestock Suitability - based on Total Dissolved Solids	917	 Satisfactory		Less than 1000 (mg/L) 1000 to less than 3000 (mg/L) 3000 to less than 5000 (mg/L) 5000 to less than 7000 (mg/L) 7000 or more (mg/L)	Satisfactory: Based on the mineral content only, the water is suitable for all classes of livestock. Monitor: The water is suitable for all classes of livestock. Poultry may experience mild transient diarrhea. Monitor: The water is suitable for livestock use except for poultry which may experience decreased performance and mortality. Monitor: The water is suitable for livestock use. Not suitable for poultry. Warning: The water is not suitable for livestock use.



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Page ____ of ____

Account Information (Billing information)

Company Name <u>Tyco</u>		
Contact <u>Tim Barnett</u>		
Phone <u>307-680-3549</u>		
Mailing Address <u>Box 50</u>		
City, State, Zip <u>Upson</u>		
Email		
Receive Invoice ☐ Hard Copy ☐ Email	Receive Report ☐ Hard Copy ☐ Email	
Purchase Order	Quote	Bottle Order

Report Information (If different than Account information)

Company Name	
Contact	
Phone	
Mailing Address	
City, State, Zip	
Email	
Receive Report ☐ Hard Copy ☐ Email	
Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other	

Comments

--

Project Information

Project Name, PWSID, Permit, etc.	
Sampler Name	Sampler Phone
Sample Origin State	EPA/State Compliance ☐ Yes ☐ No
Lab provided preservatives were used ☐ Yes ☐ No	
MINING CLIENTS, please indicate sample type. *(if one has been processed or refined, call before sending.)	
☐ Byproduct 11 (e2 material) ☐ Unprocessed ore (NOT ground or refined)*	

Matrix Codes

- A - Air
- W - Water
- S - Soils/ Solids
- V - Vegetation
- B - Bioassay
- O - Other
- DW - Drinking Water

Analysis Requested

DOMESTIC

See Attached

All turnaround times are standard unless marked as RUSH.

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

Sample Identification (Name, Location, Interval, etc.)	Collection		Number of Containers	Matrix (See Codes Above)	Analysis Requested										RUSH TAT	ELI LAB ID Laboratory Use Only
	Date	Time														
1 WEINREIS	9/1/23	1100	1													023090019
2																
3																
4																
5																
6																
7																
8																
9																
10																

Custody Record MUST be signed	Relinquished by (print) <u>TIM BARNETT</u>	Date/Time <u>9-1-23 1450</u>	Signature <u>[Signature]</u>	Received by (print) <u>[Signature]</u>	Date/Time <u>9/1/23</u>	Signature <u>[Signature]</u>
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature

LABORATORY USE ONLY									
Shipped By <u>[Signature]</u>	Cooler ID(s)	Custody Seals <u>Y N C B</u>	Intact <u>Y N</u>	Recept Temp <u>25.4</u>	Temp Blank <u>Y N</u>	On Ice <u>Y N</u>	Payment Type CC Cash Check	Amount \$	Receipt Number (cash/check only)

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-05/08 v.2



GAMMA-NEUTRON

MADISON TEST WELL #1

COMPANY	:WEINREIS BROTHERS	OTHER SERVICES: NONE NONE NONE
WELL	:MADISON TEST WELL #1	
FIELD	:N	
COUNTY	:FALL RIVER	
STATE	:SD	
LSD	:SE NW	
SECTION	:22	
TOWNSHIP	:10S	
RANGE	:4E	
LICENSE NO.	:NA	
UNIQUE WELL ID.	:NA	
PERMANENT DATUM	:GL	ELEVATION KB :NA
LOG MEASURED FROM	:GL	ELEVATION DF :NA
DRL MEASURED FROM	:GL	ELEVATION GL :NA
DATE	:06/09/23	RIG NUMBER :NA
DEPTH DRILLER	:510	LOGGER TD :505.51
BIT SIZE	:2.25	ARRIVAL TIME :18:30
LOG TOP	:16.50	DEPARTURE TIME :NA
LOG BOTTOM	:3353.30	CIRC STOPPED :NA
CASING OD	:NA	
CASING DRILLER	:NA	
CASING TYPE	:STEEL	
BOREHOLE FLUID	:WATER	
RM TEMPERATURE	:NA	
MUD RES	:NA	
MUD WEIGHT	:NA	
WITNESSED BY	:M.PAPPY	
RECORDED BY	:D.STEWART	
REMARKS 1	:CLIENT APPROVED PRESENTATION	
REMARKS 2	:LOGGED THROUGH DRILL PIPE, ID 2.25	

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

5 INCH LOG MADISON TEST WELL #1 06/09/23

LOG PARAMETERS

MATRIX DENSITY : 2.71

NEUTRON MATRIX : LIMESTONE

MATRIX DELTA T : 49

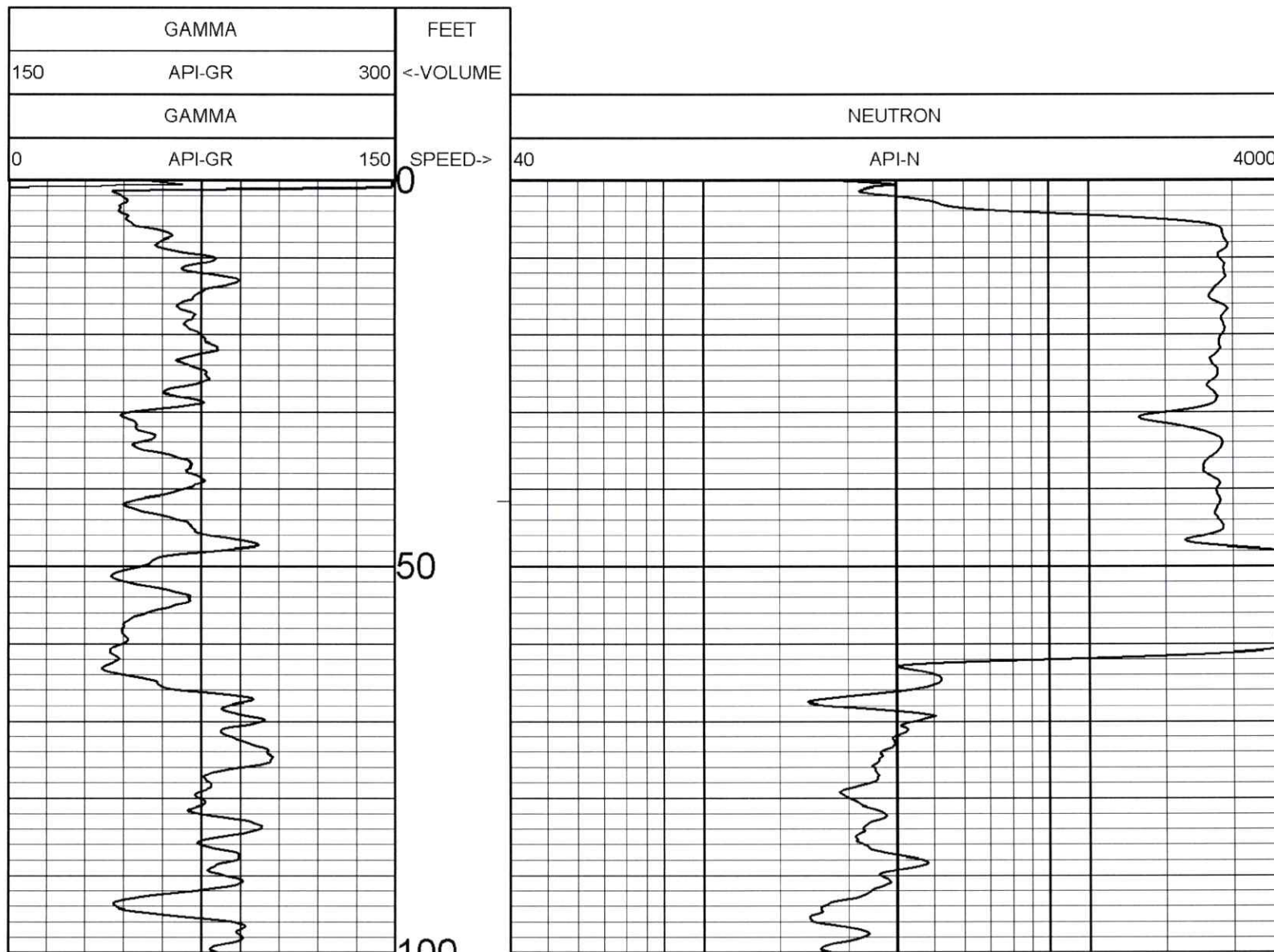
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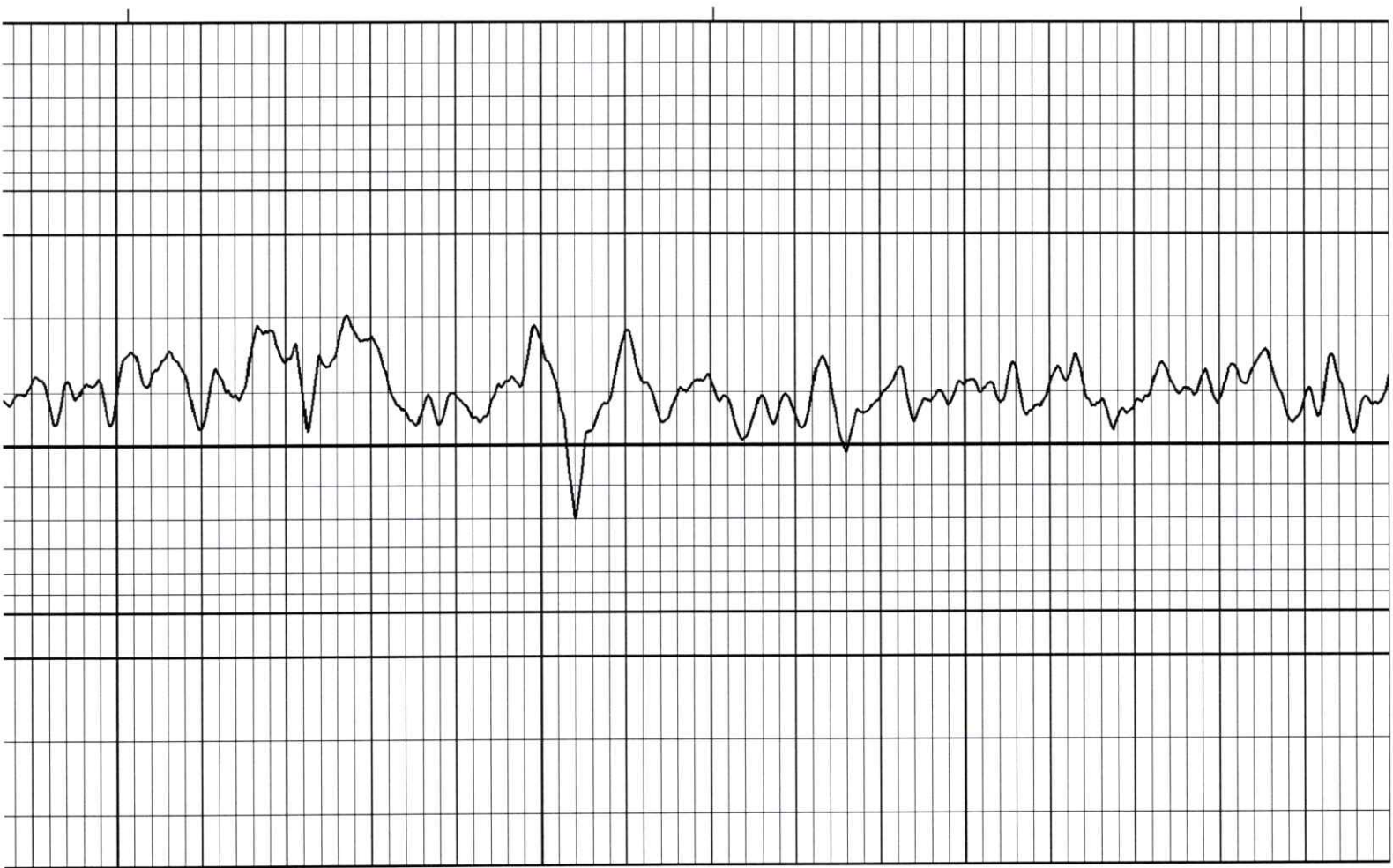
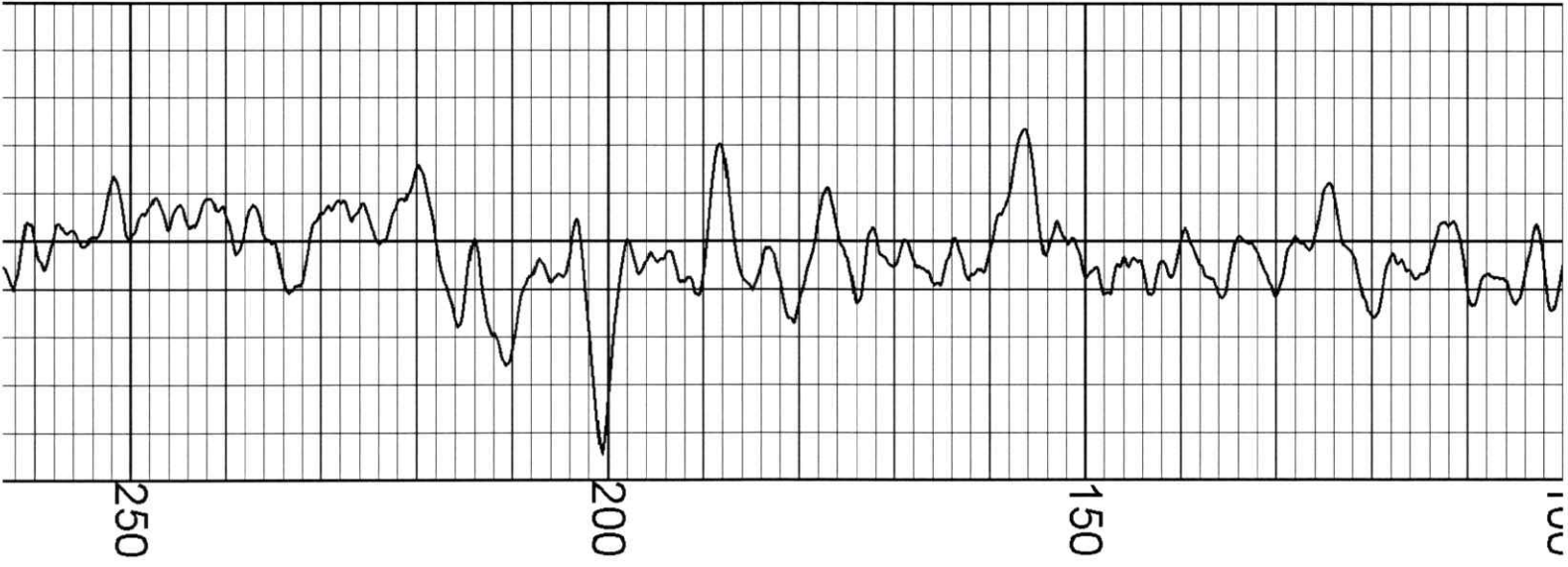
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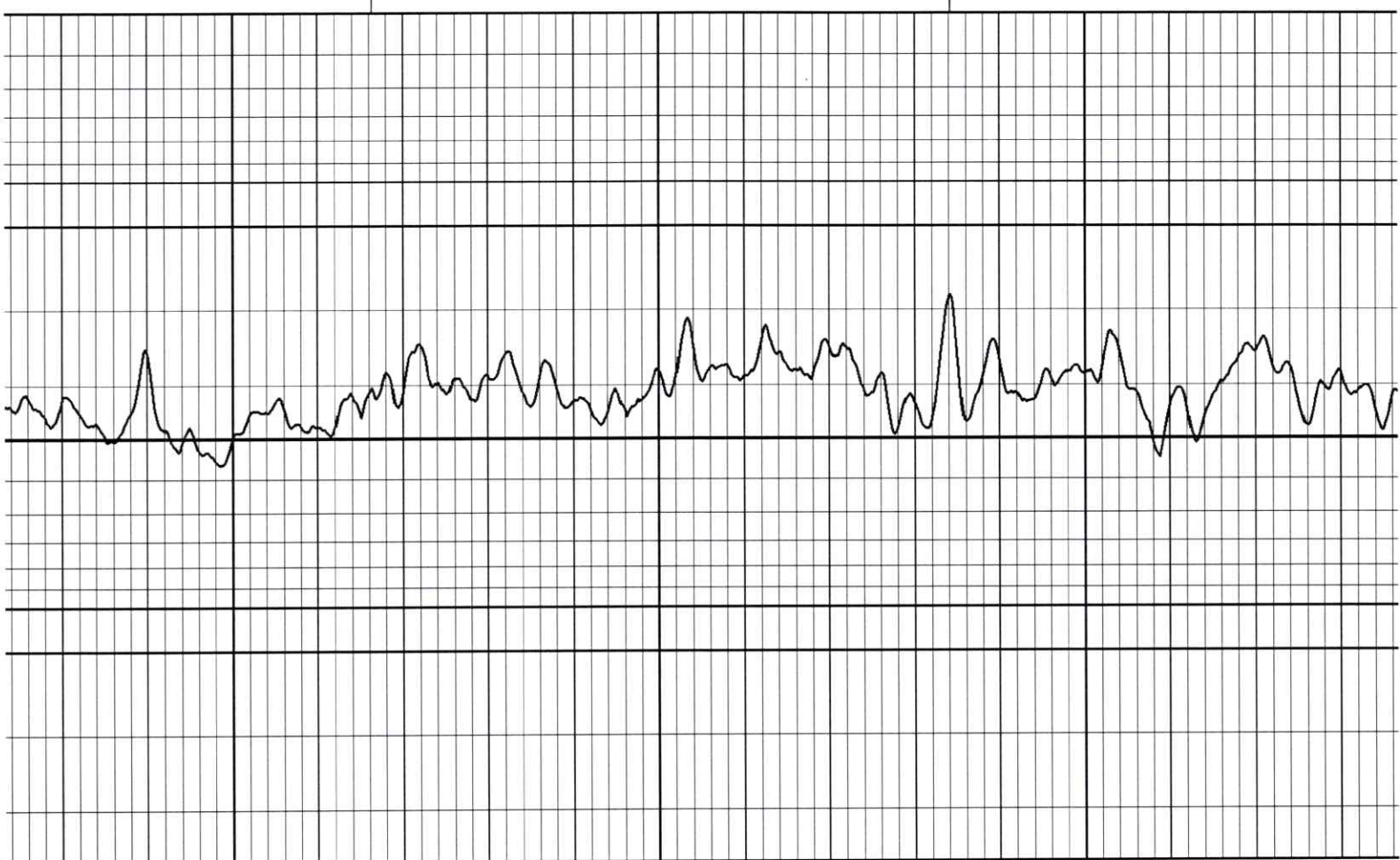
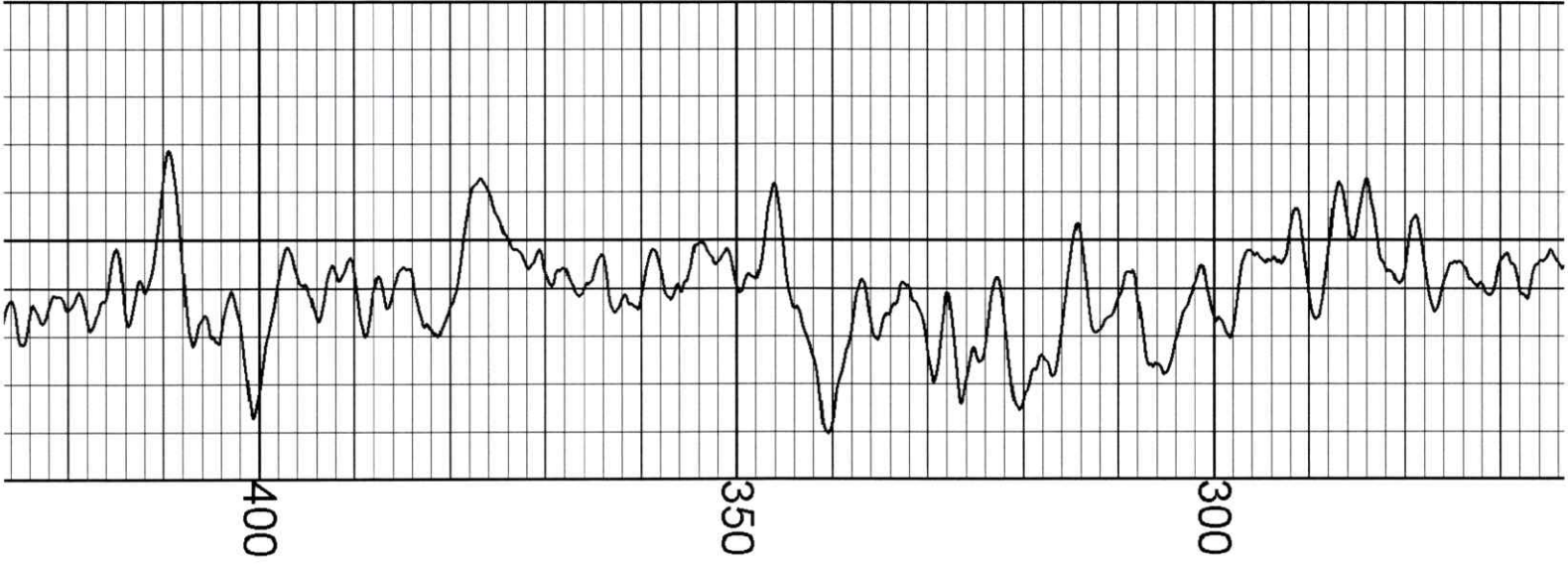
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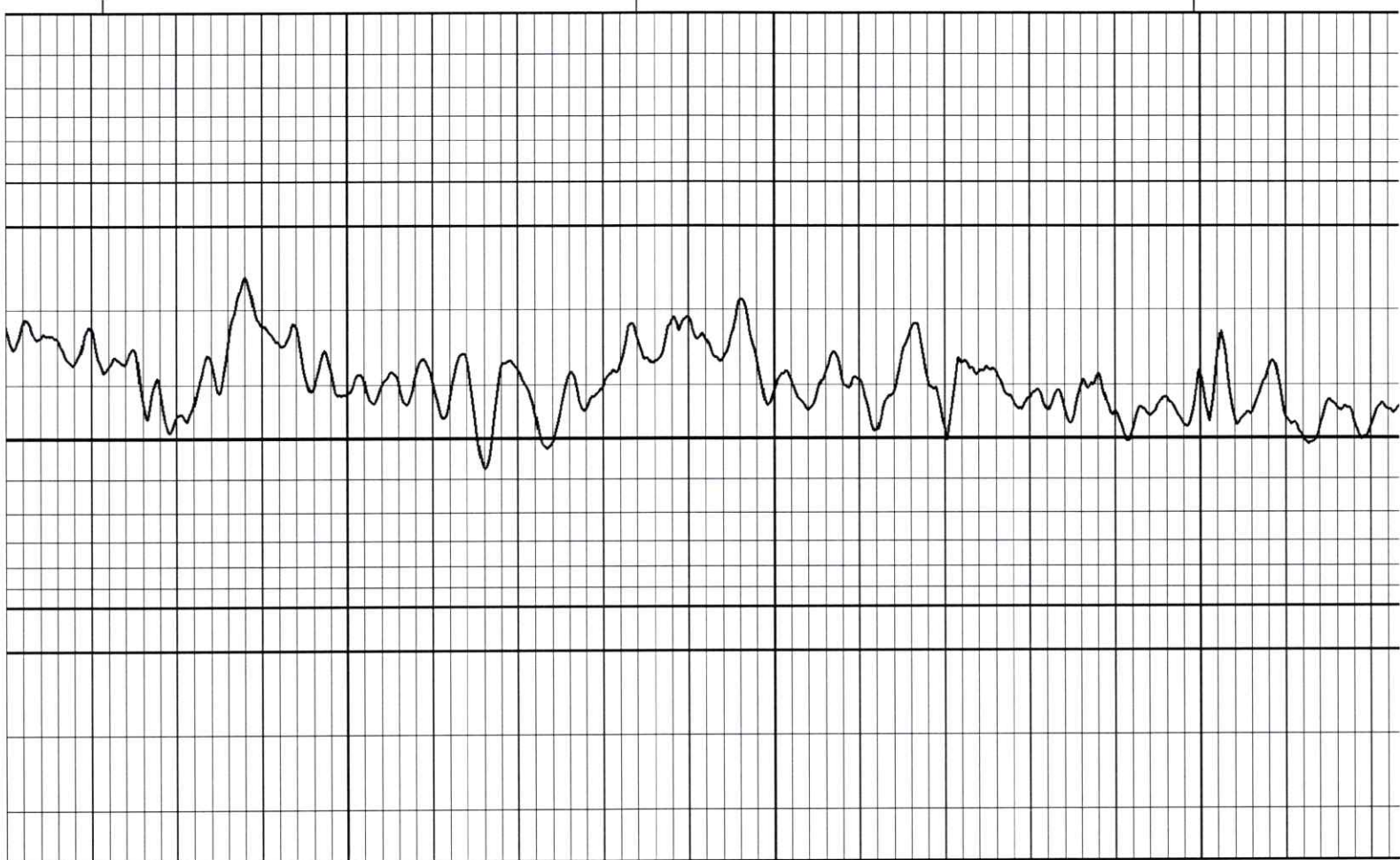
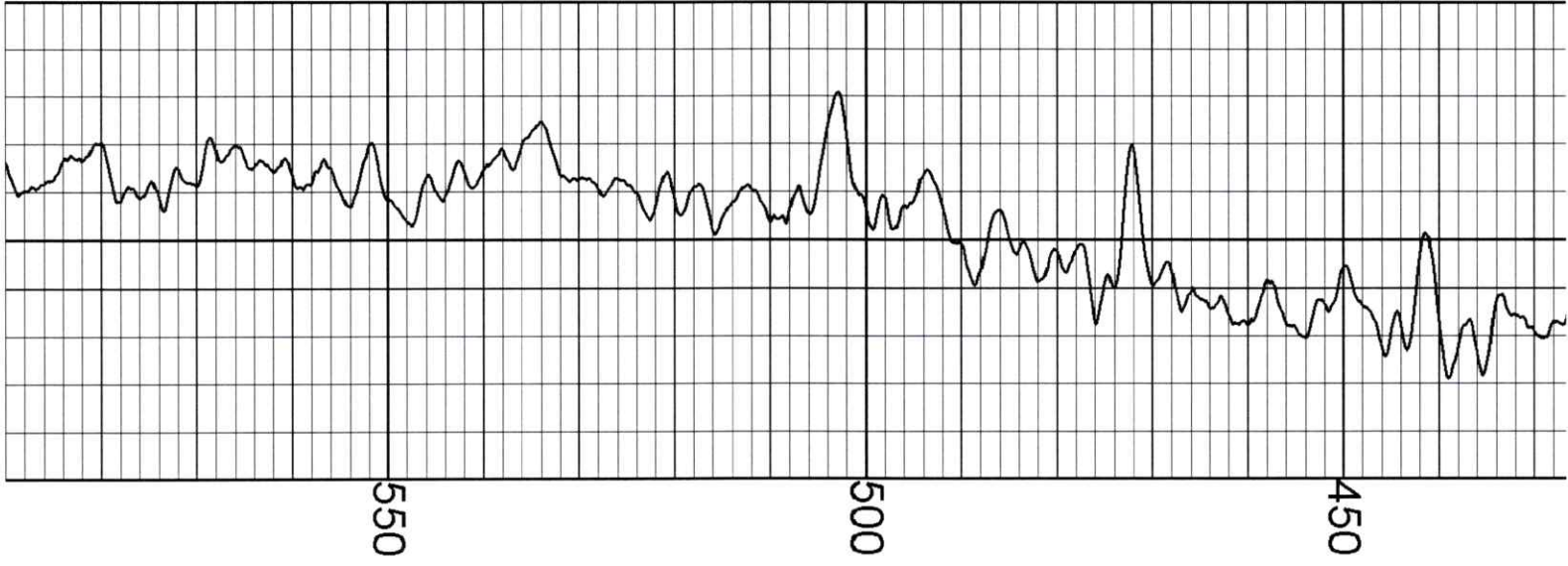
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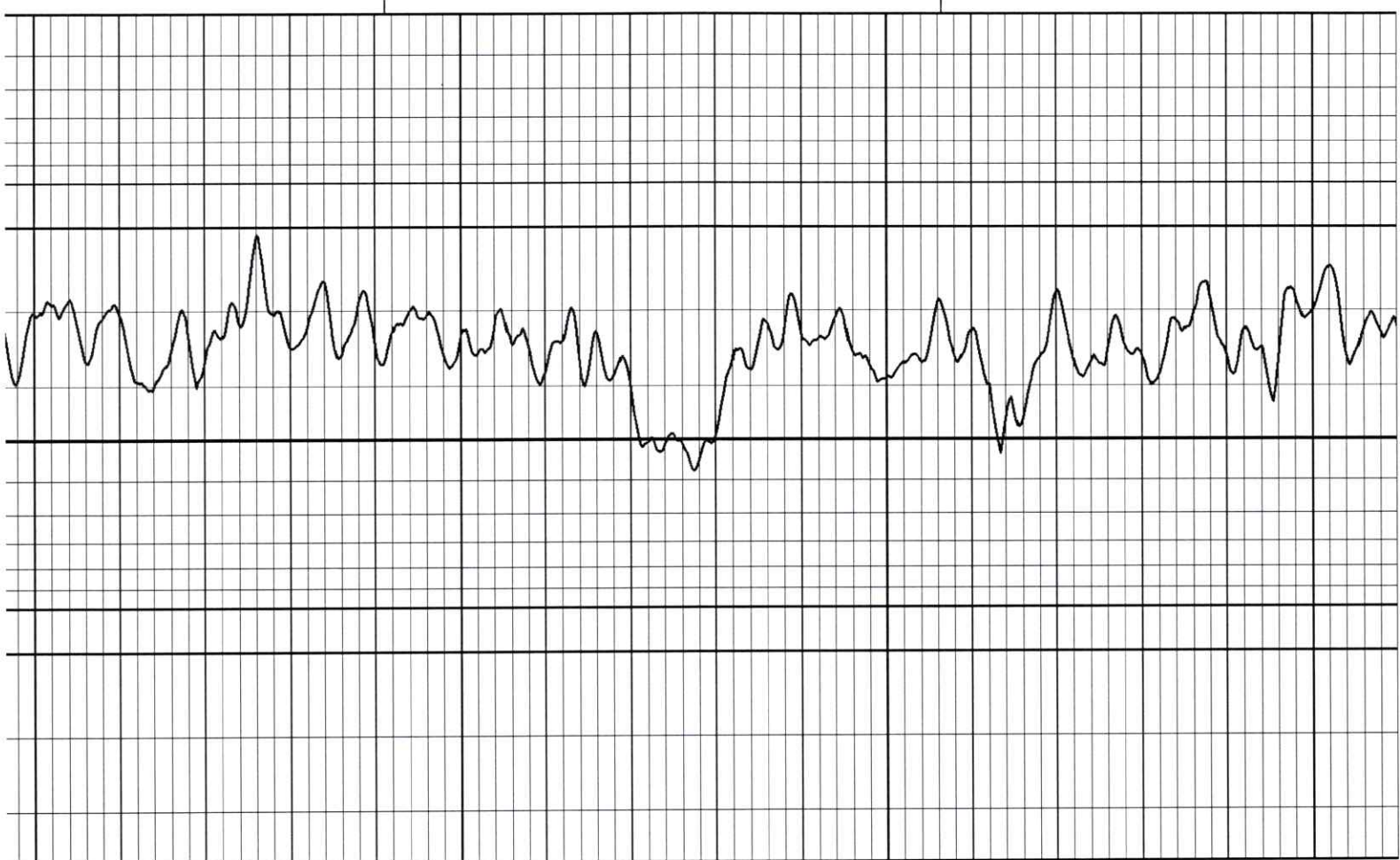
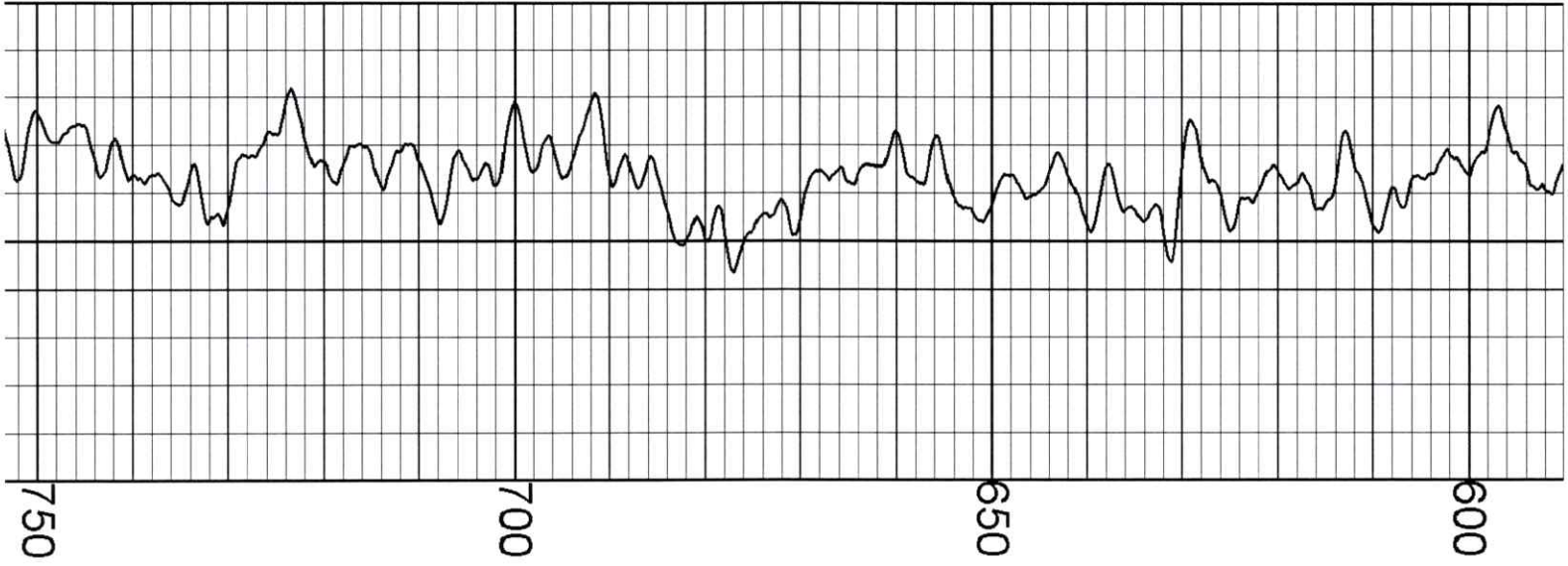
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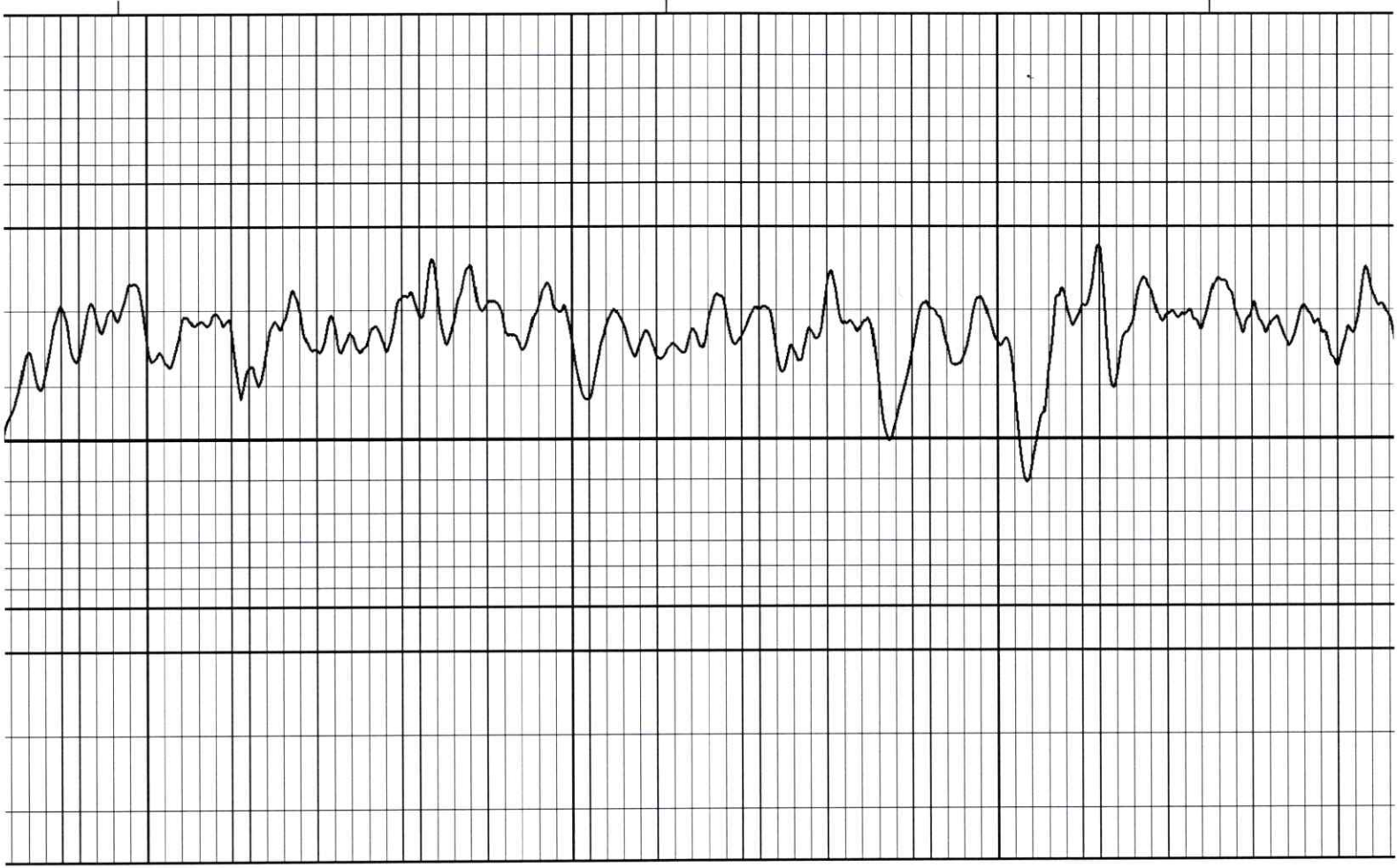
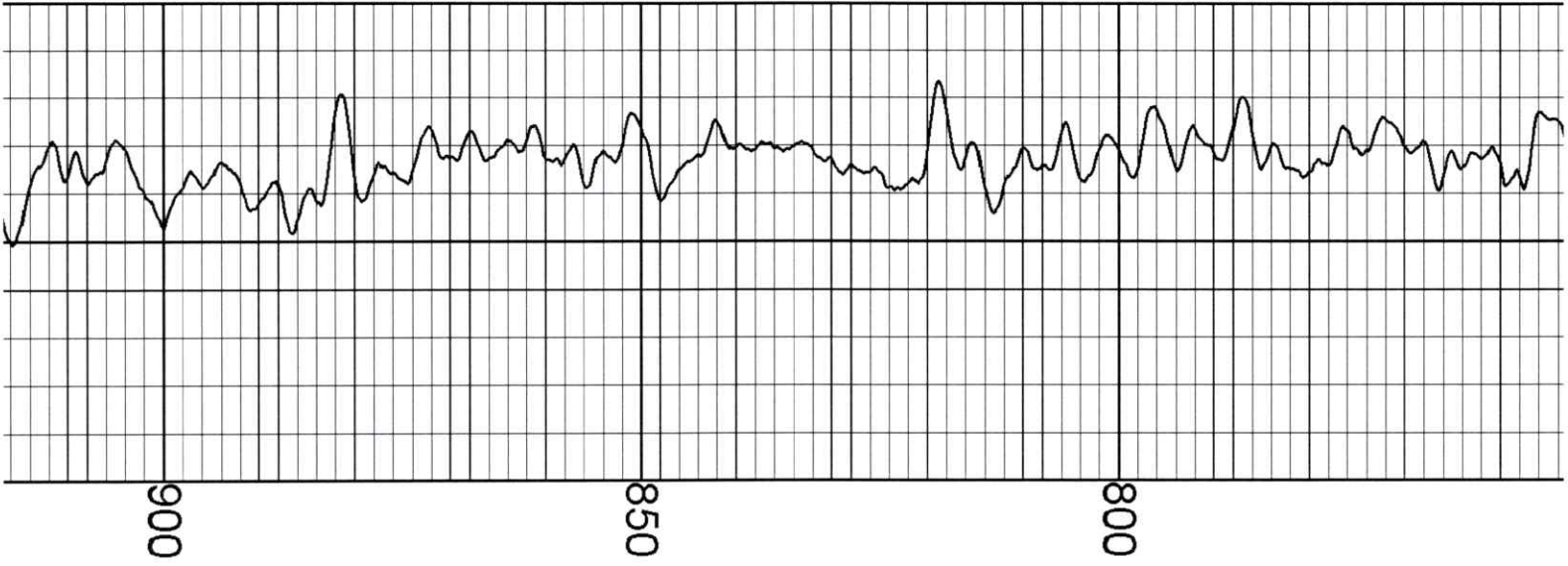


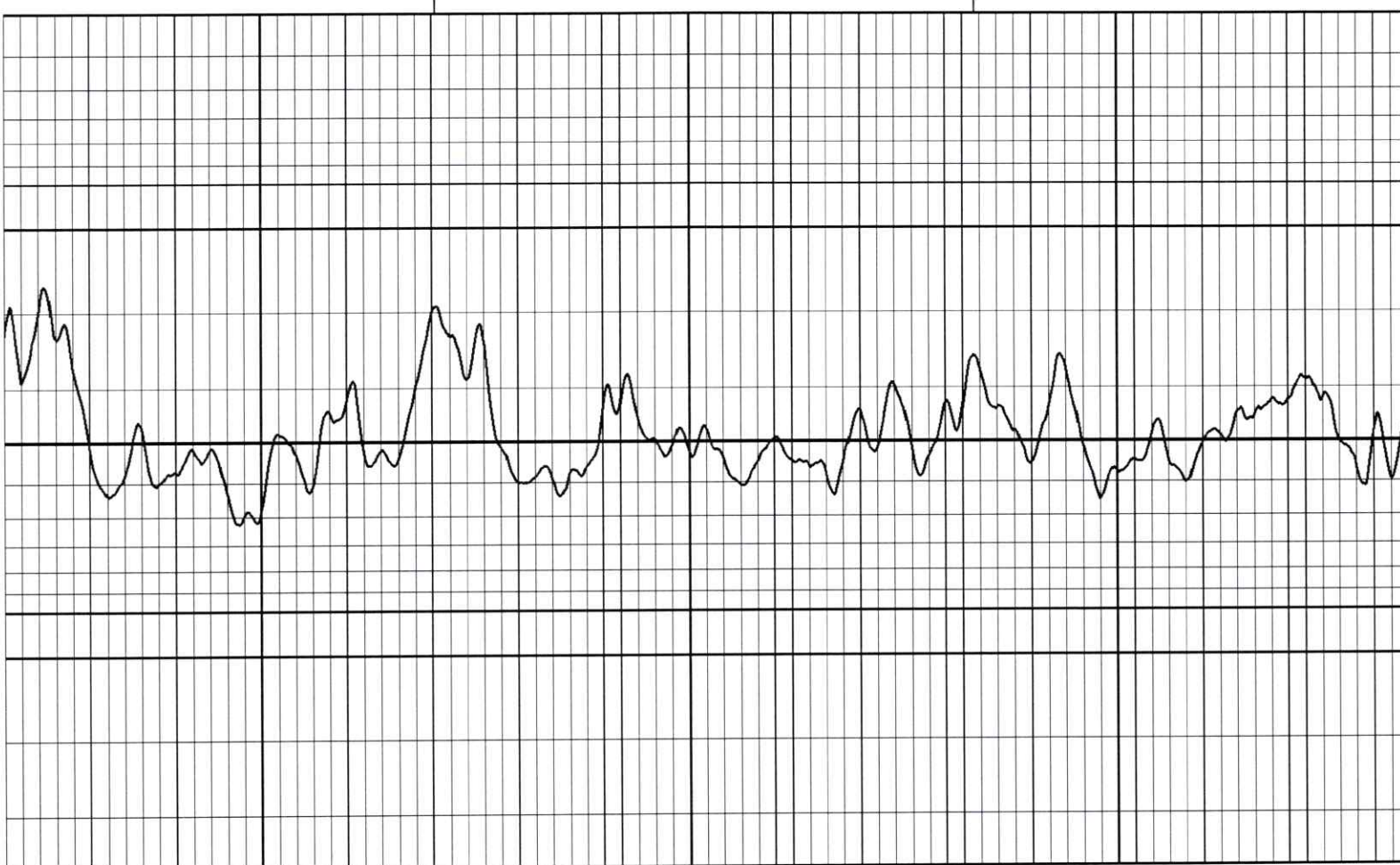
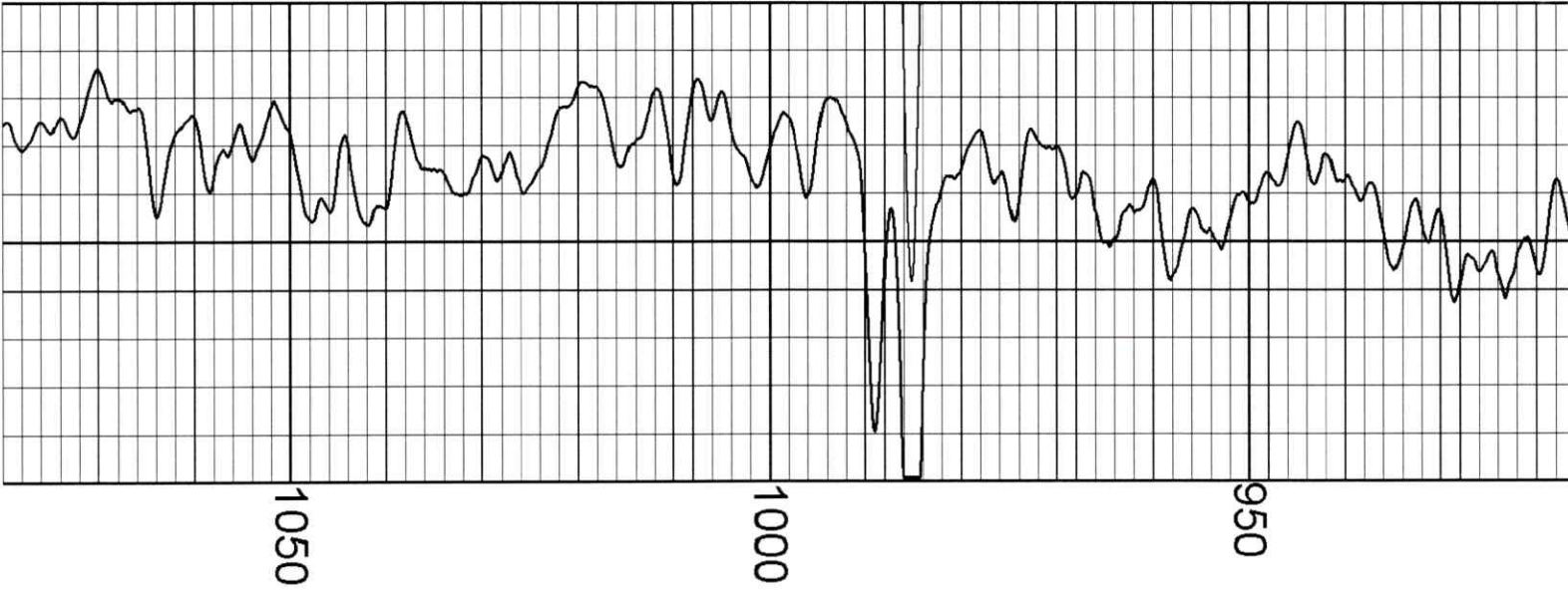


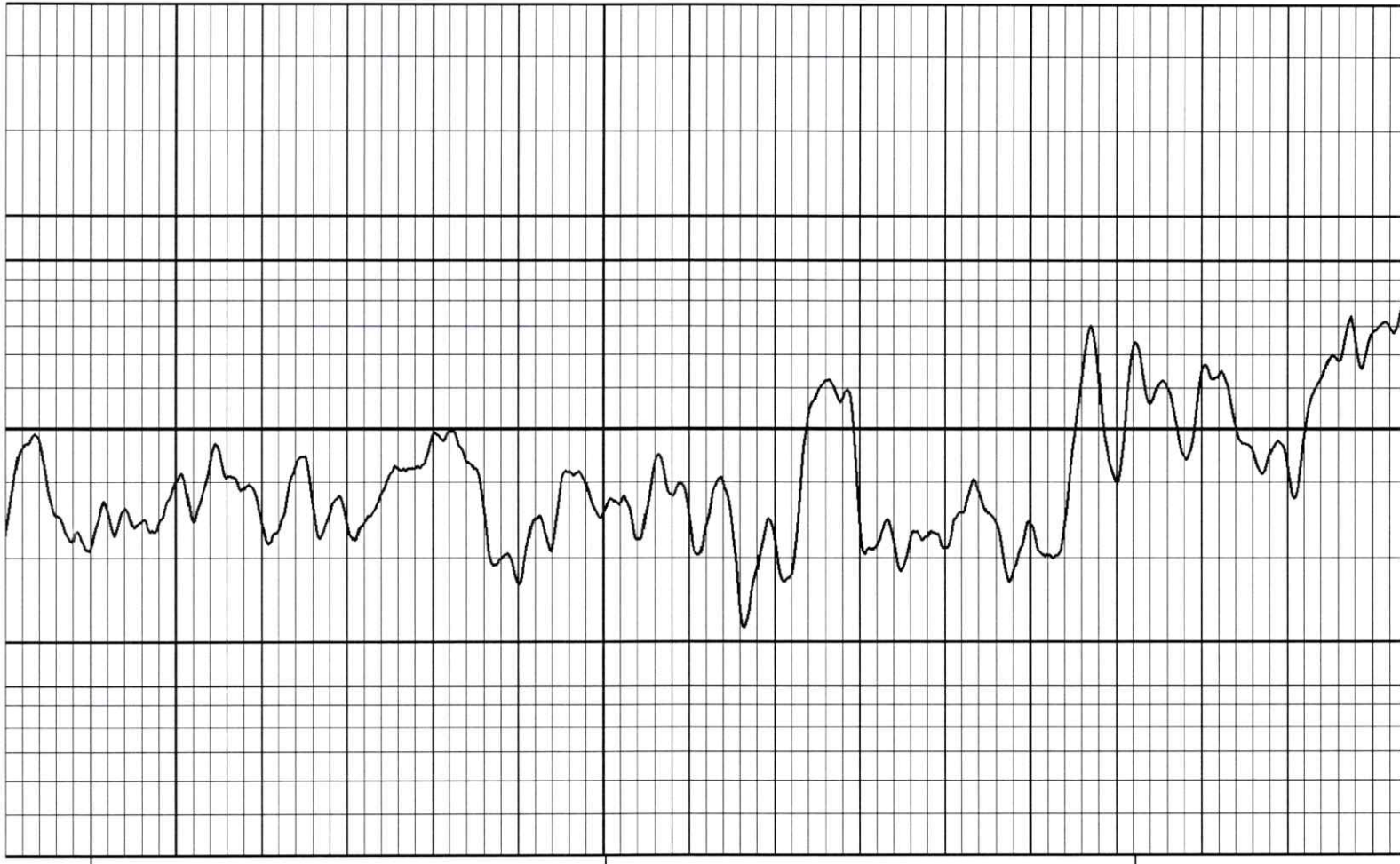








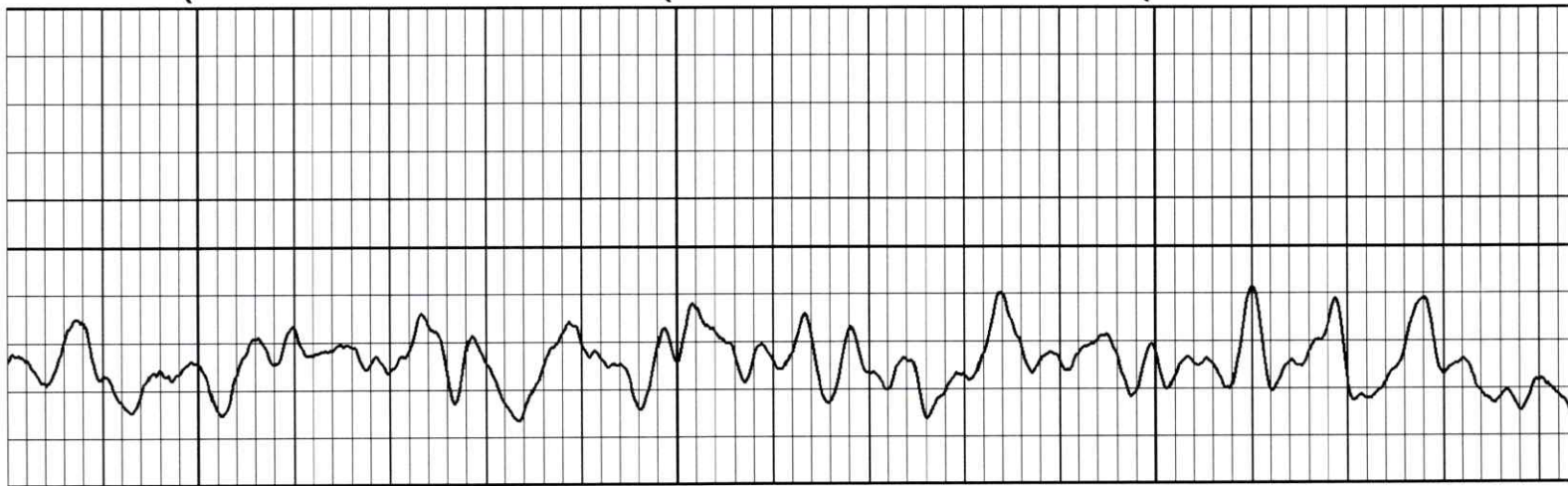


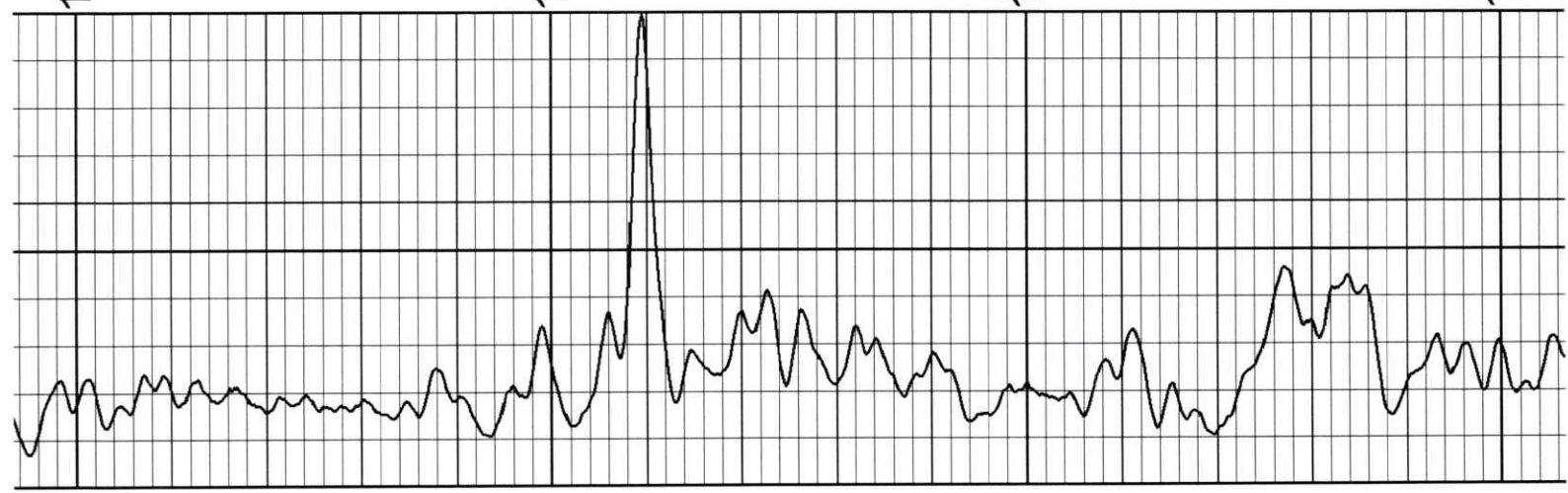
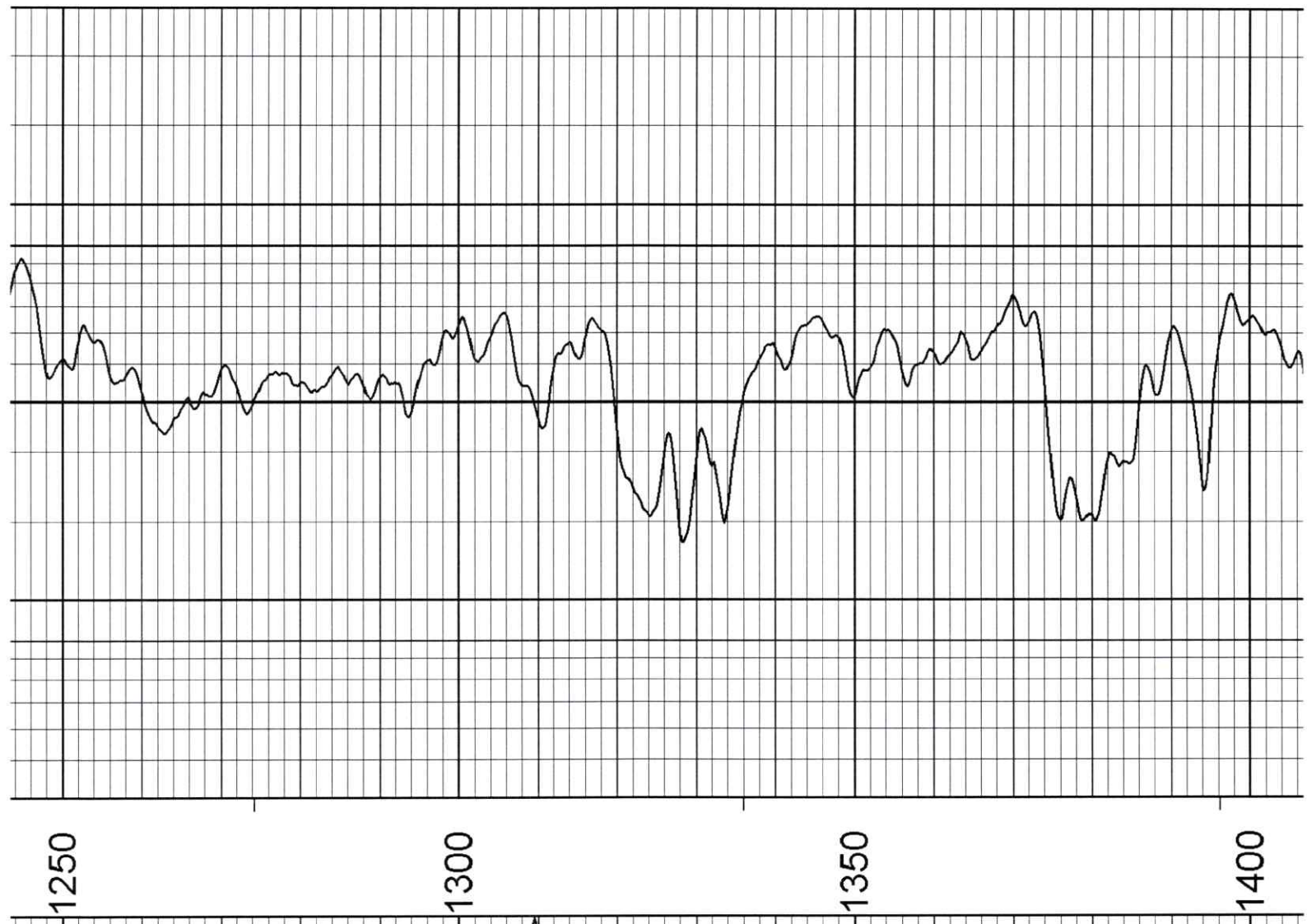


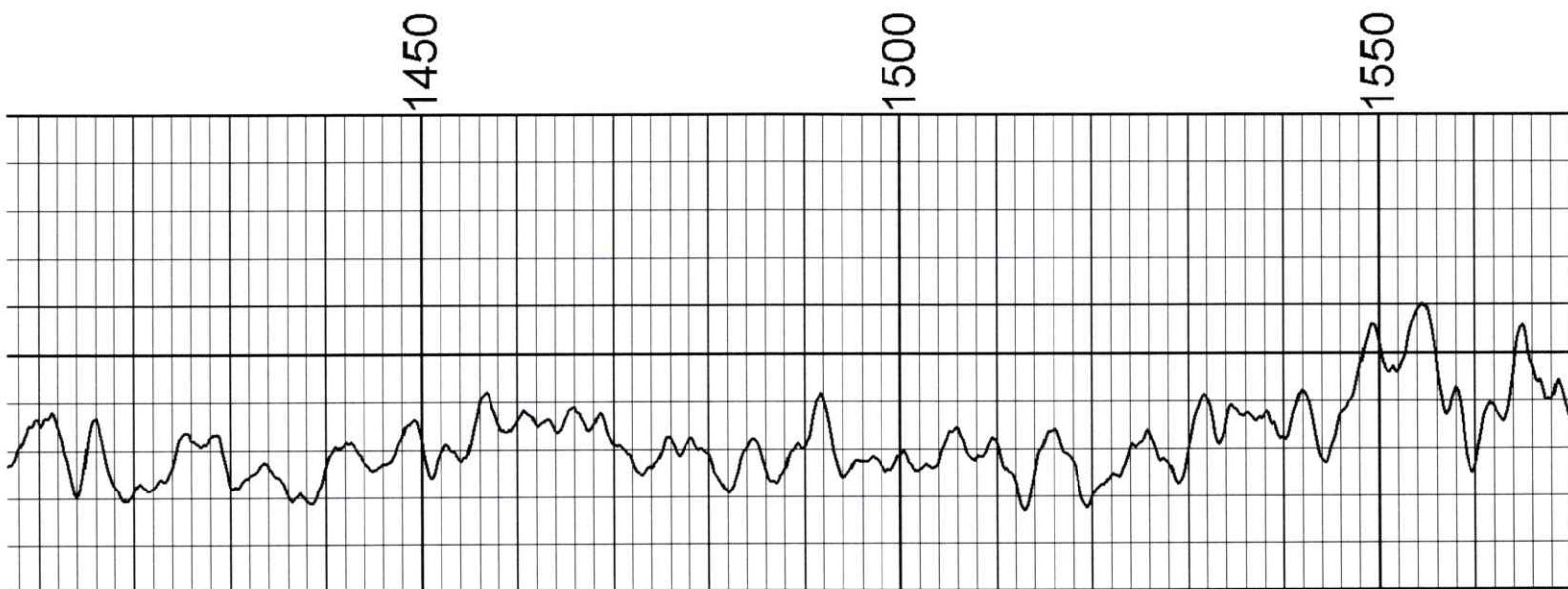
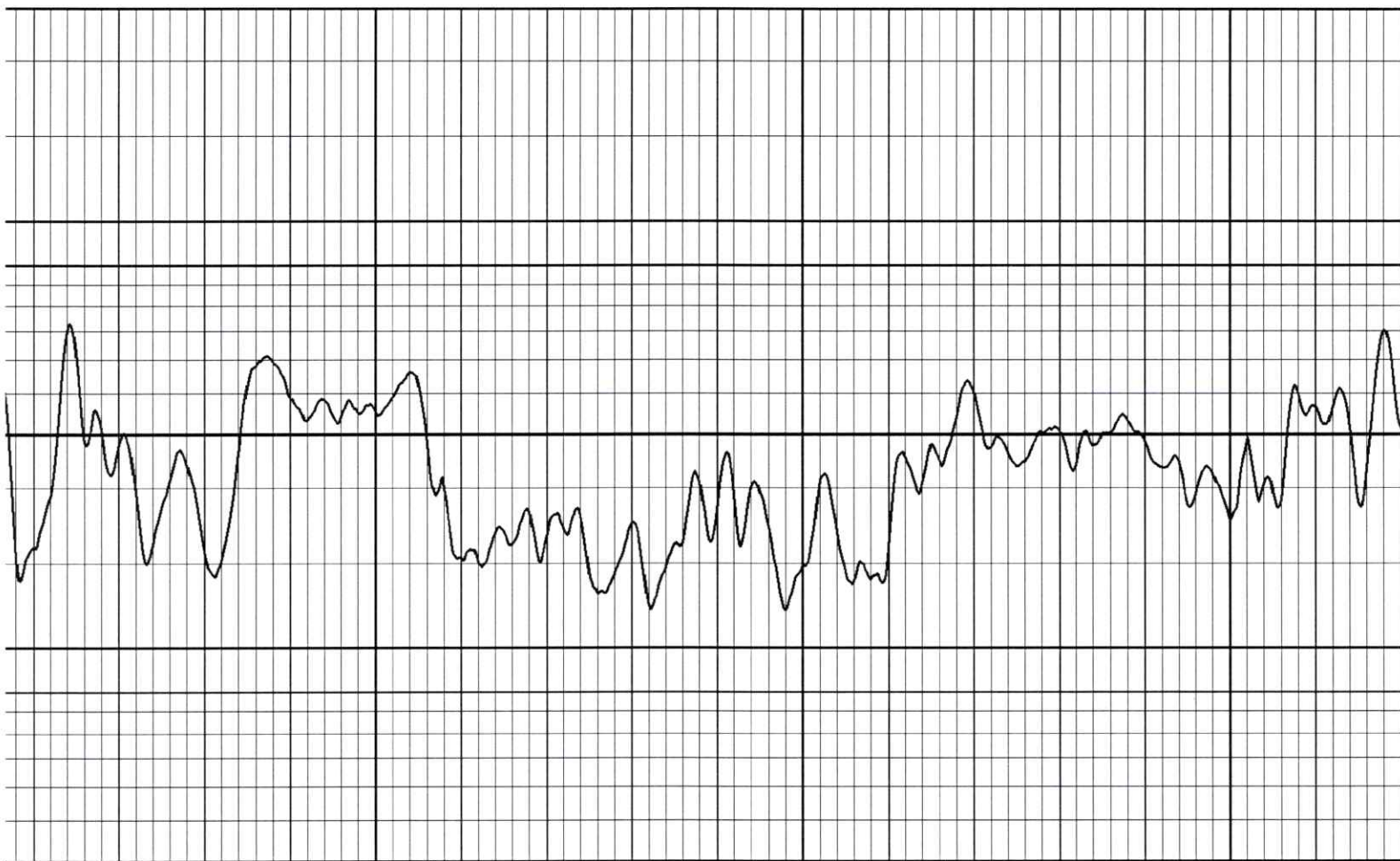
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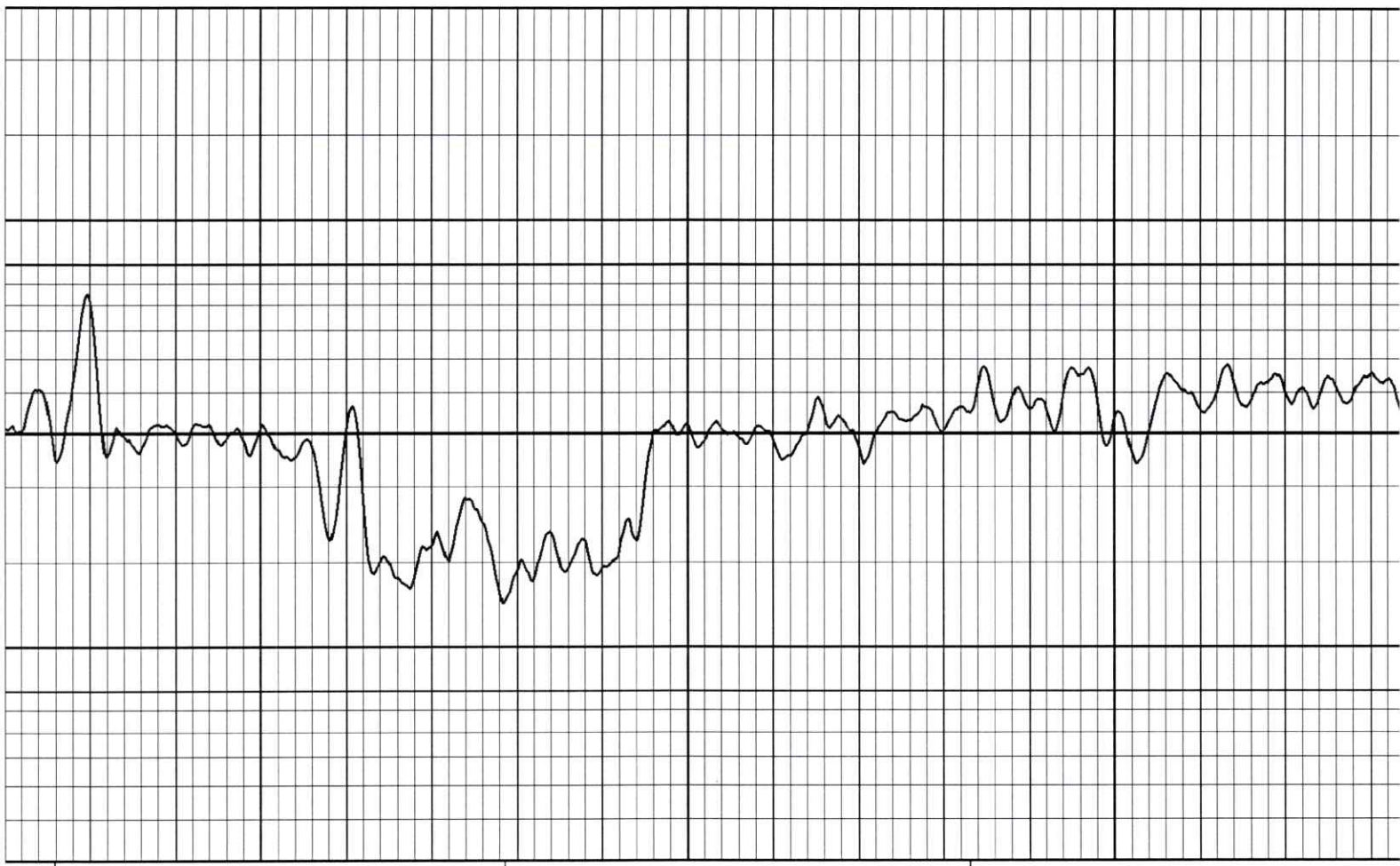
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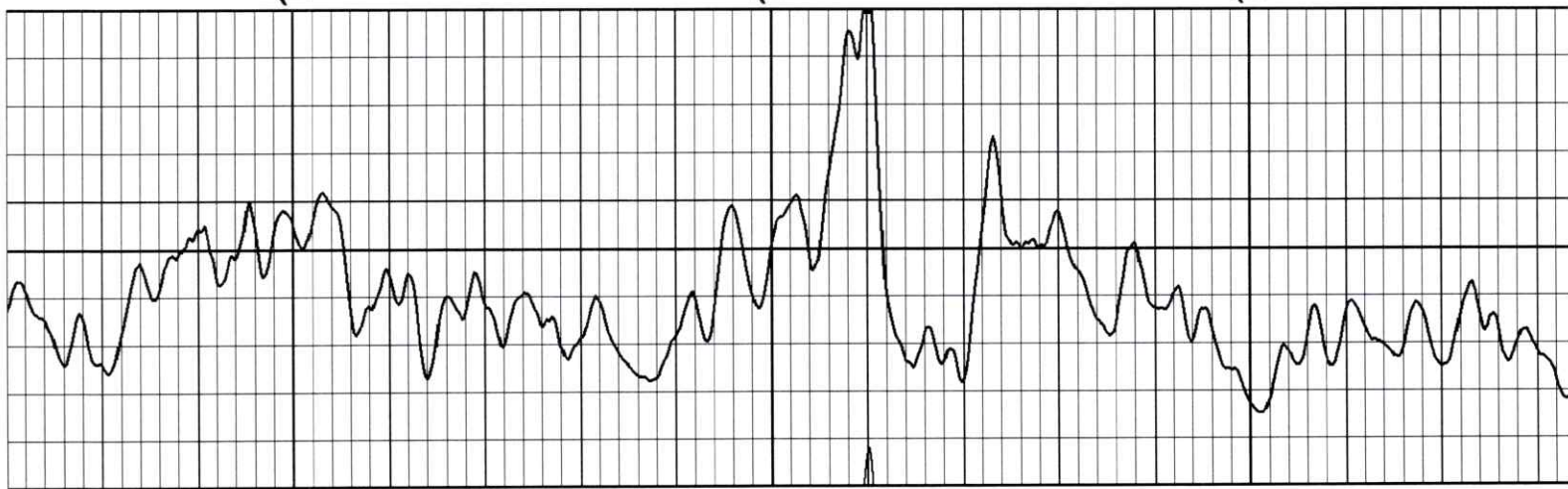


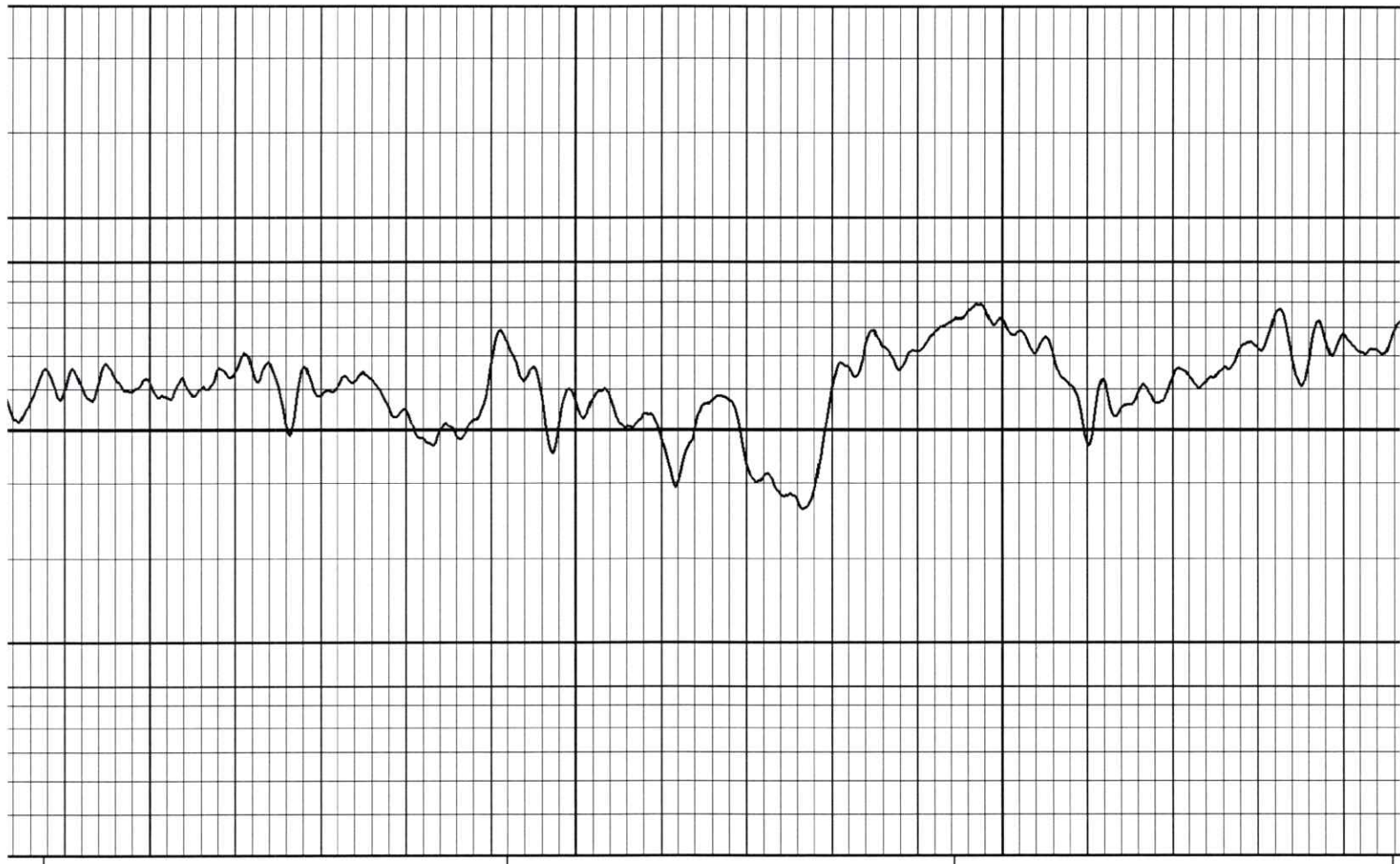


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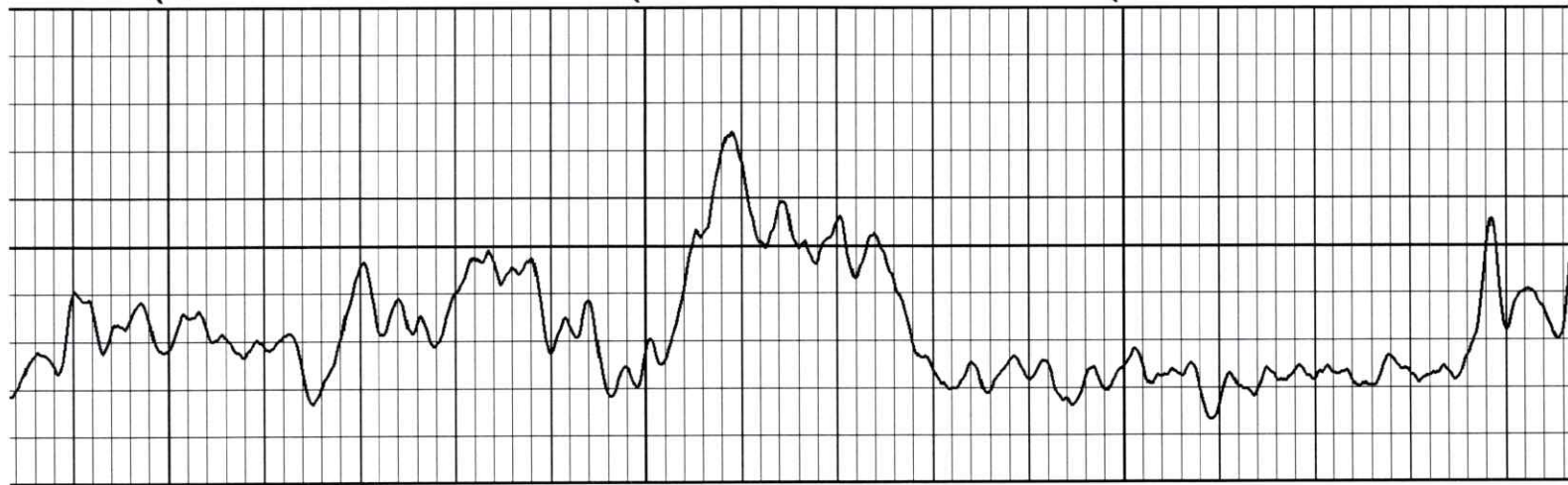


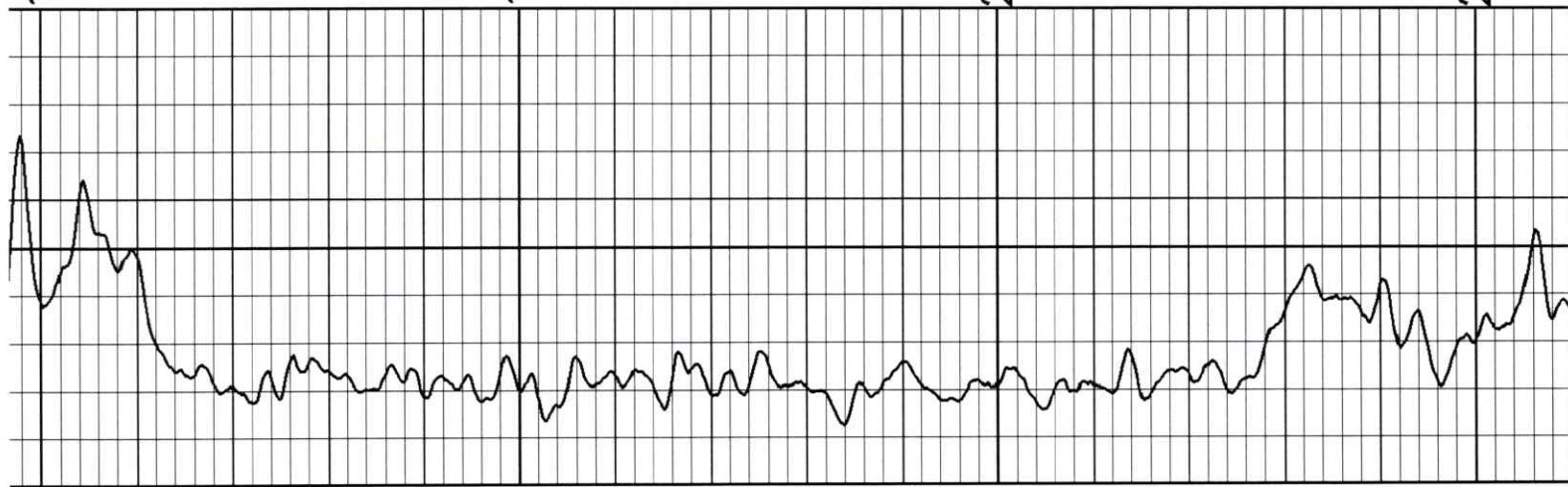
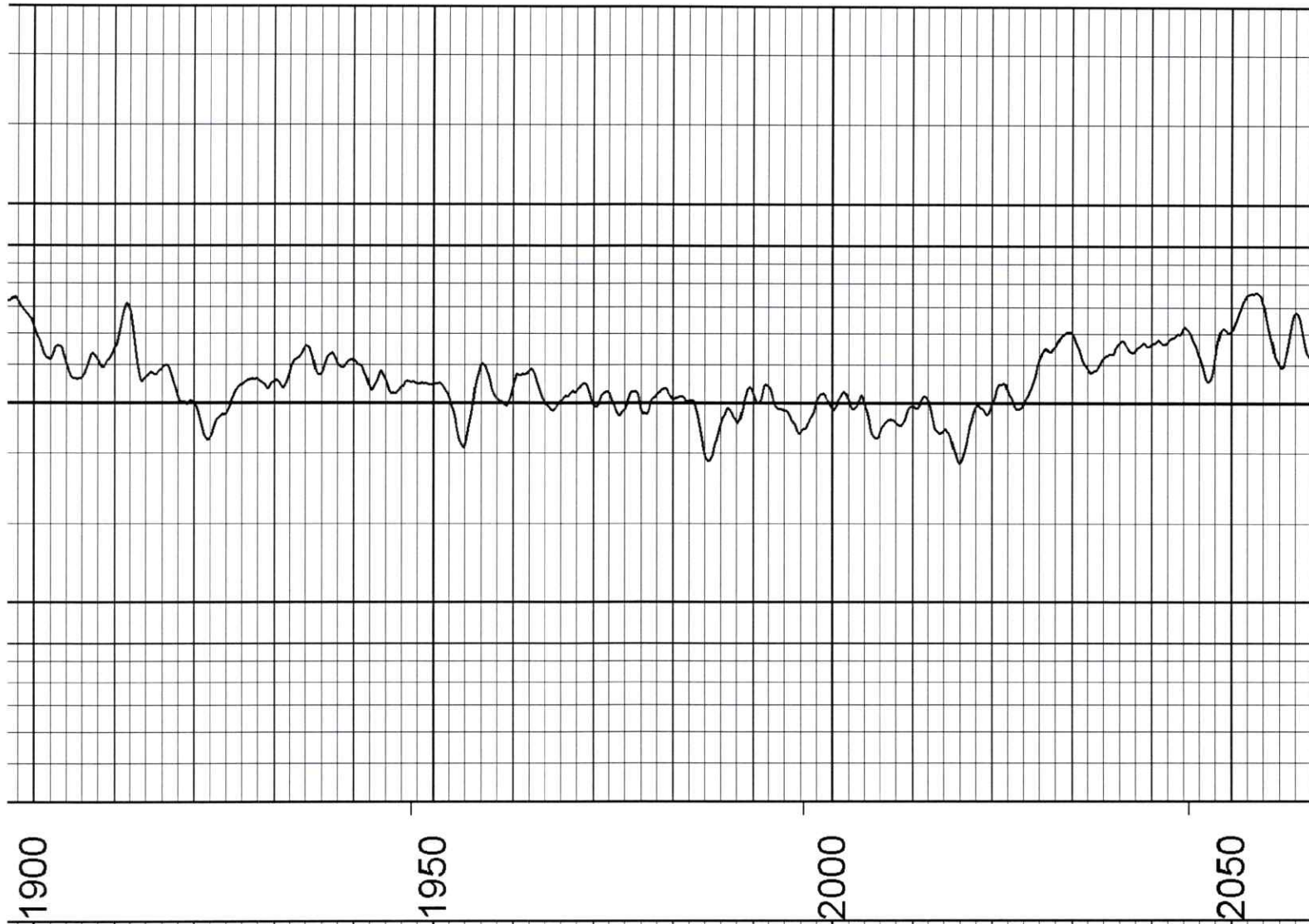


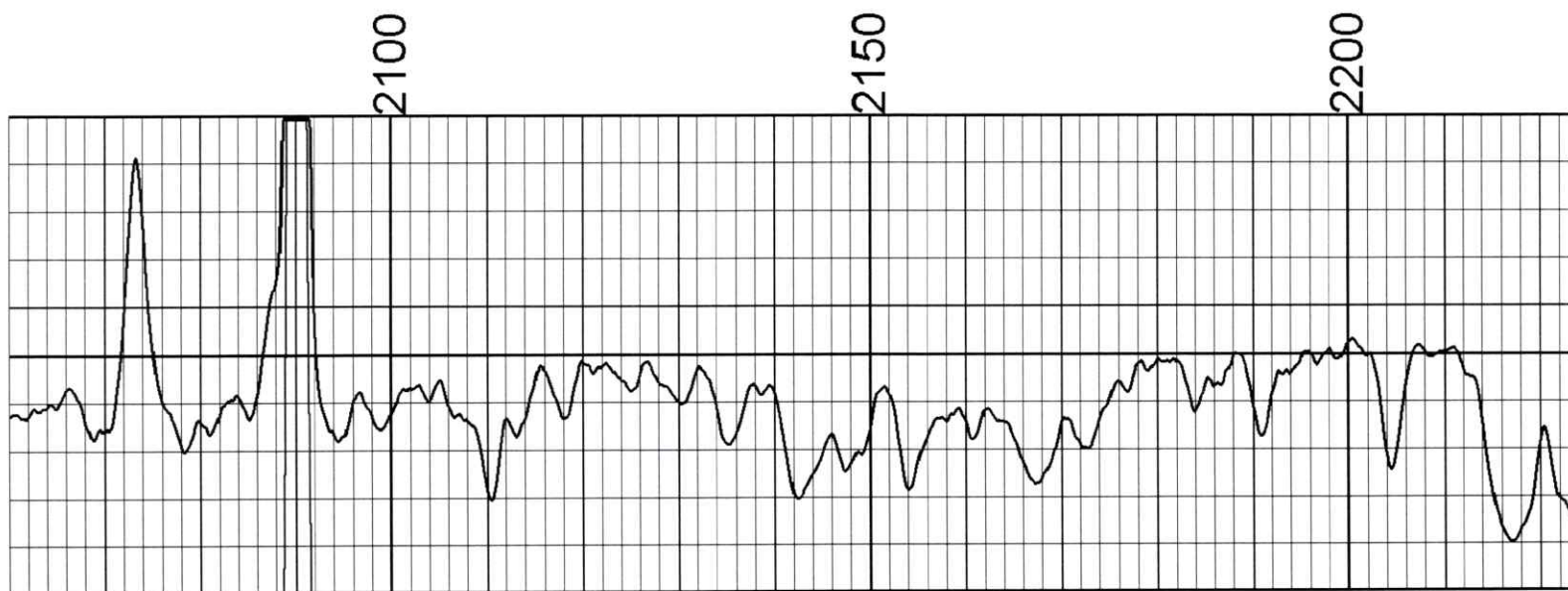
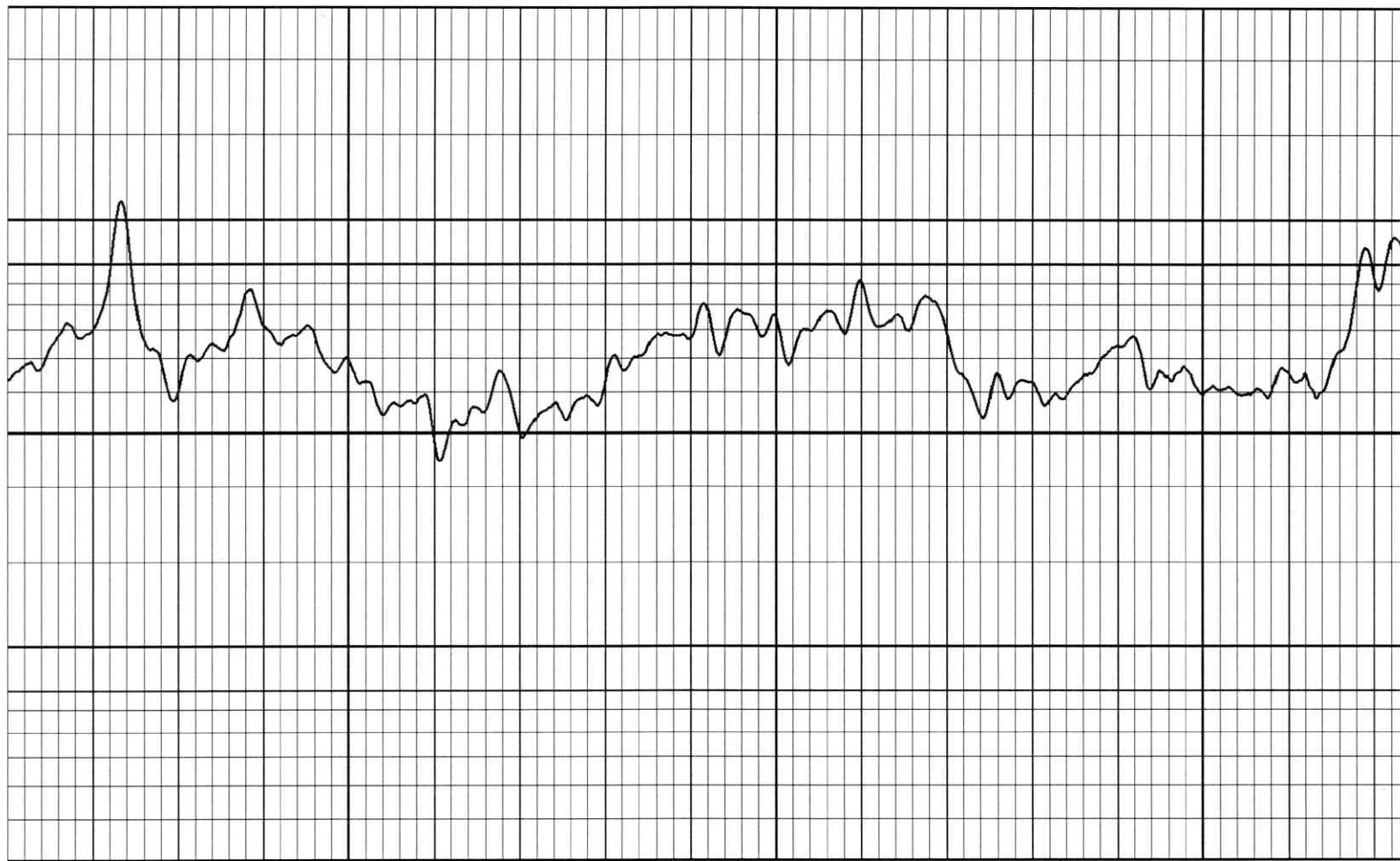
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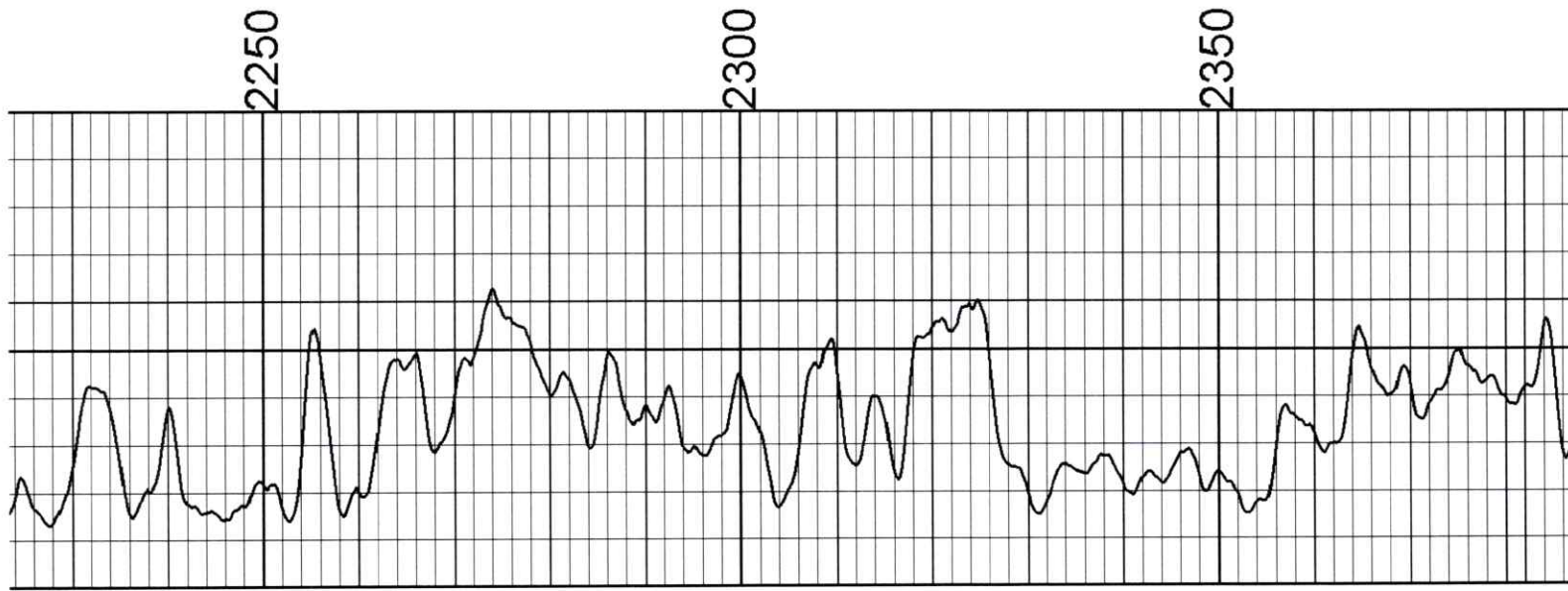
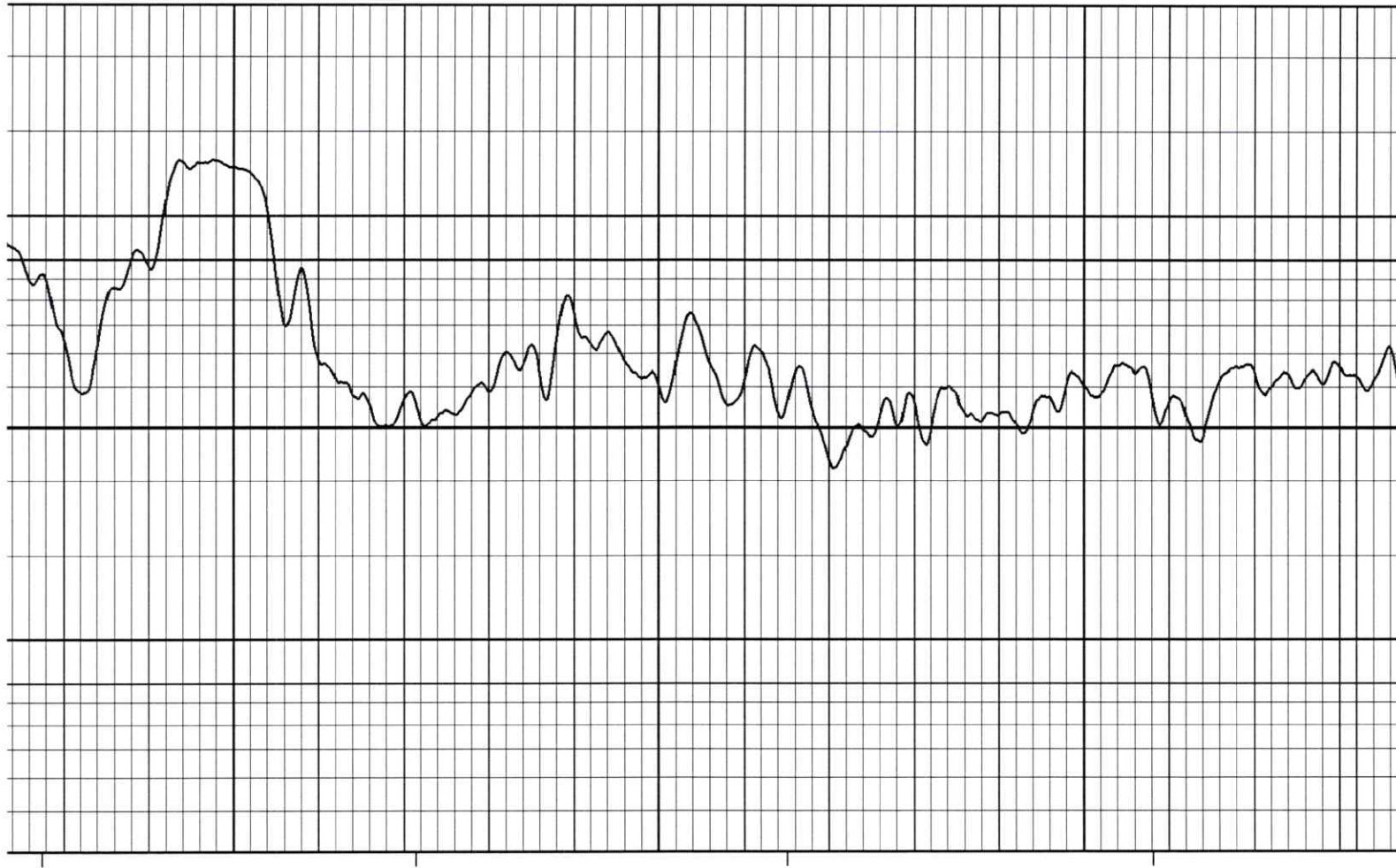
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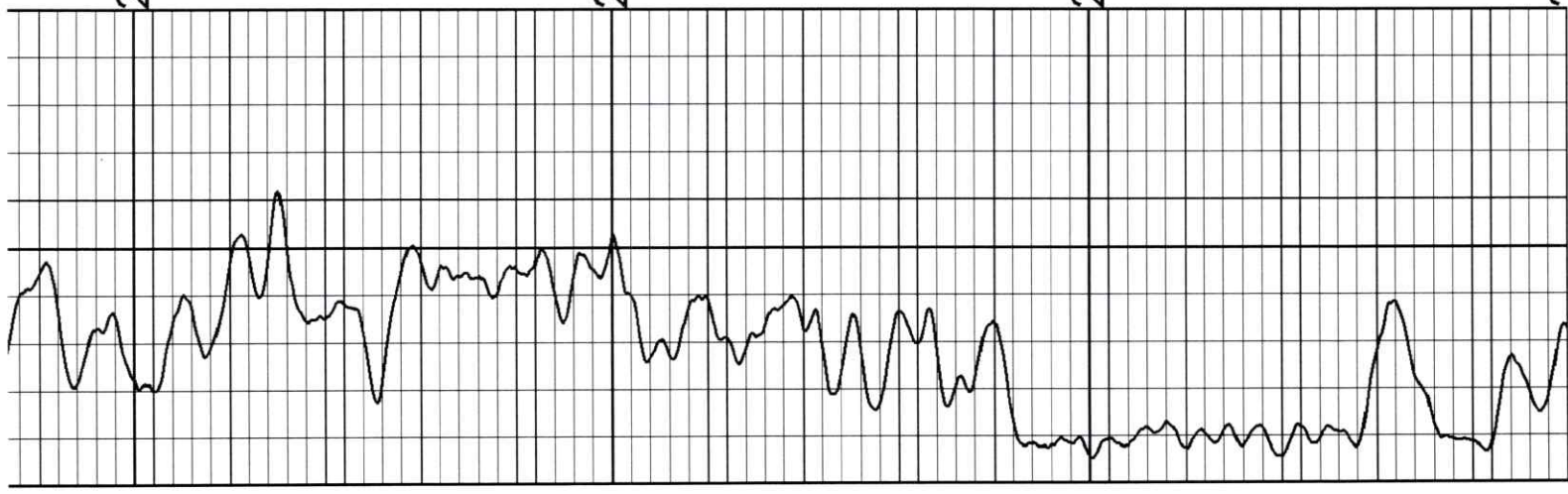
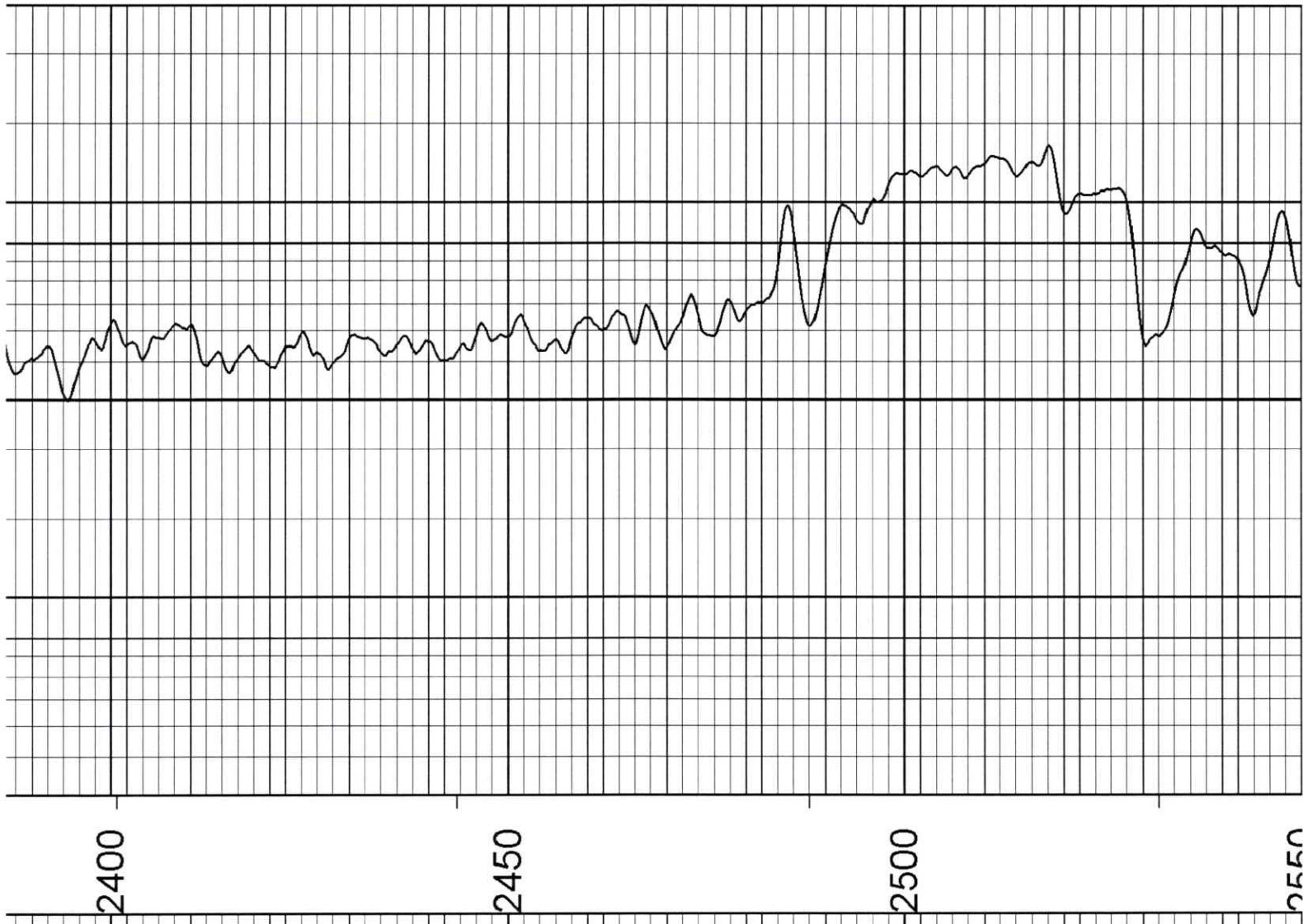
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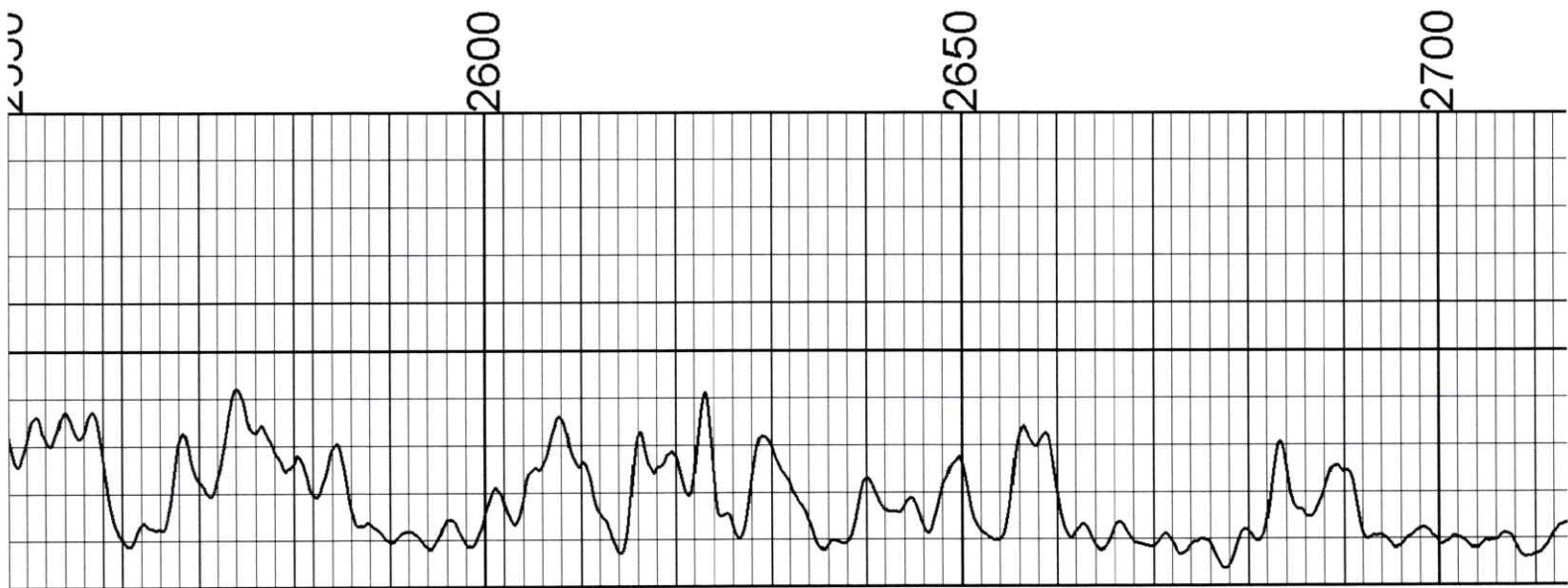
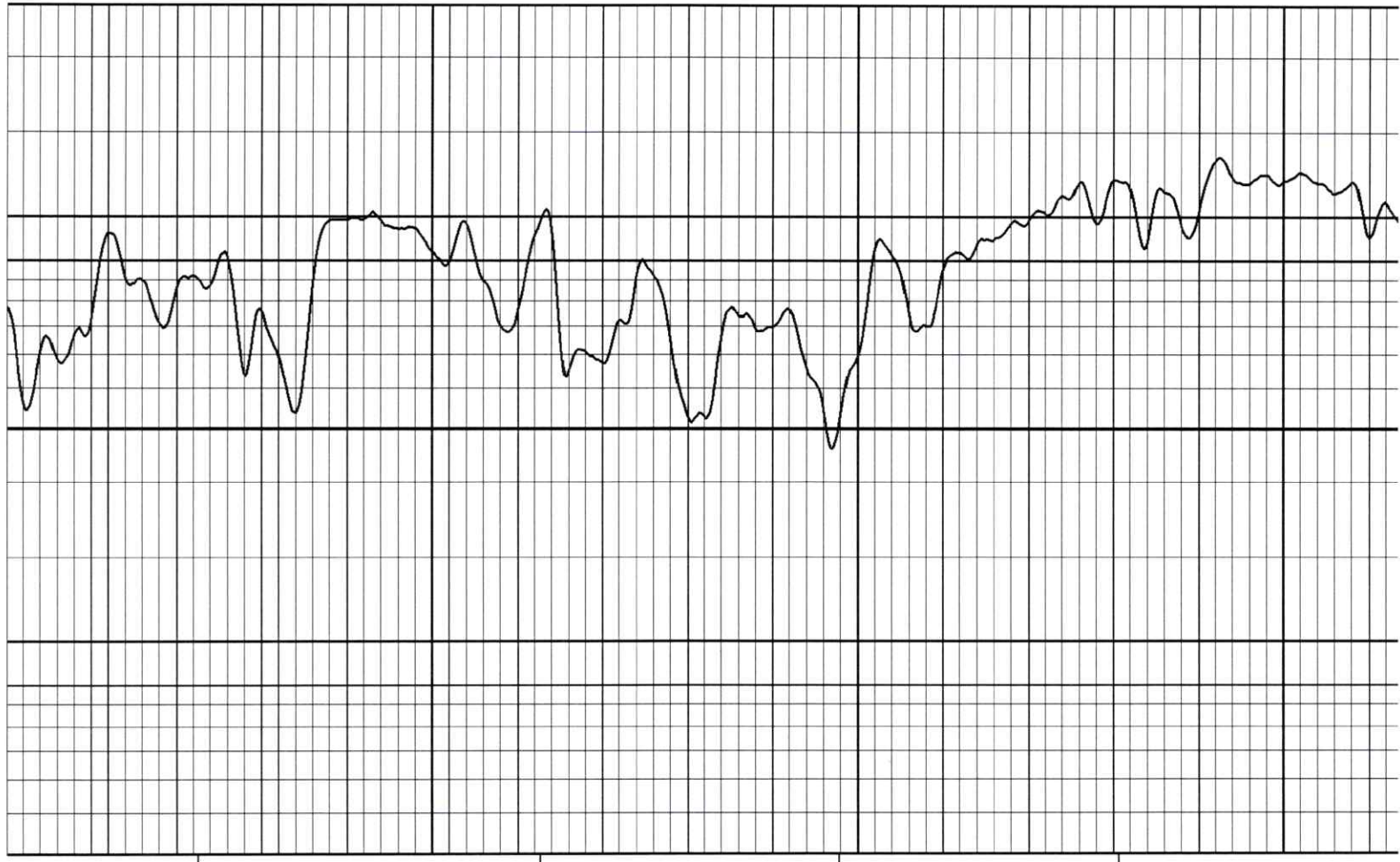


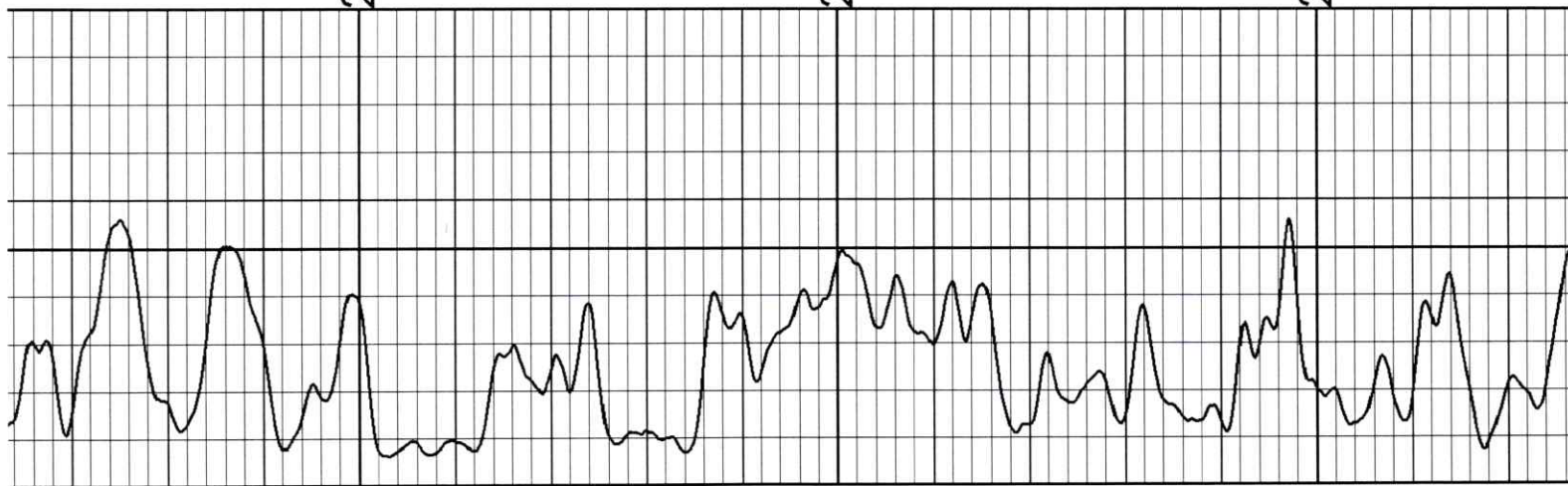
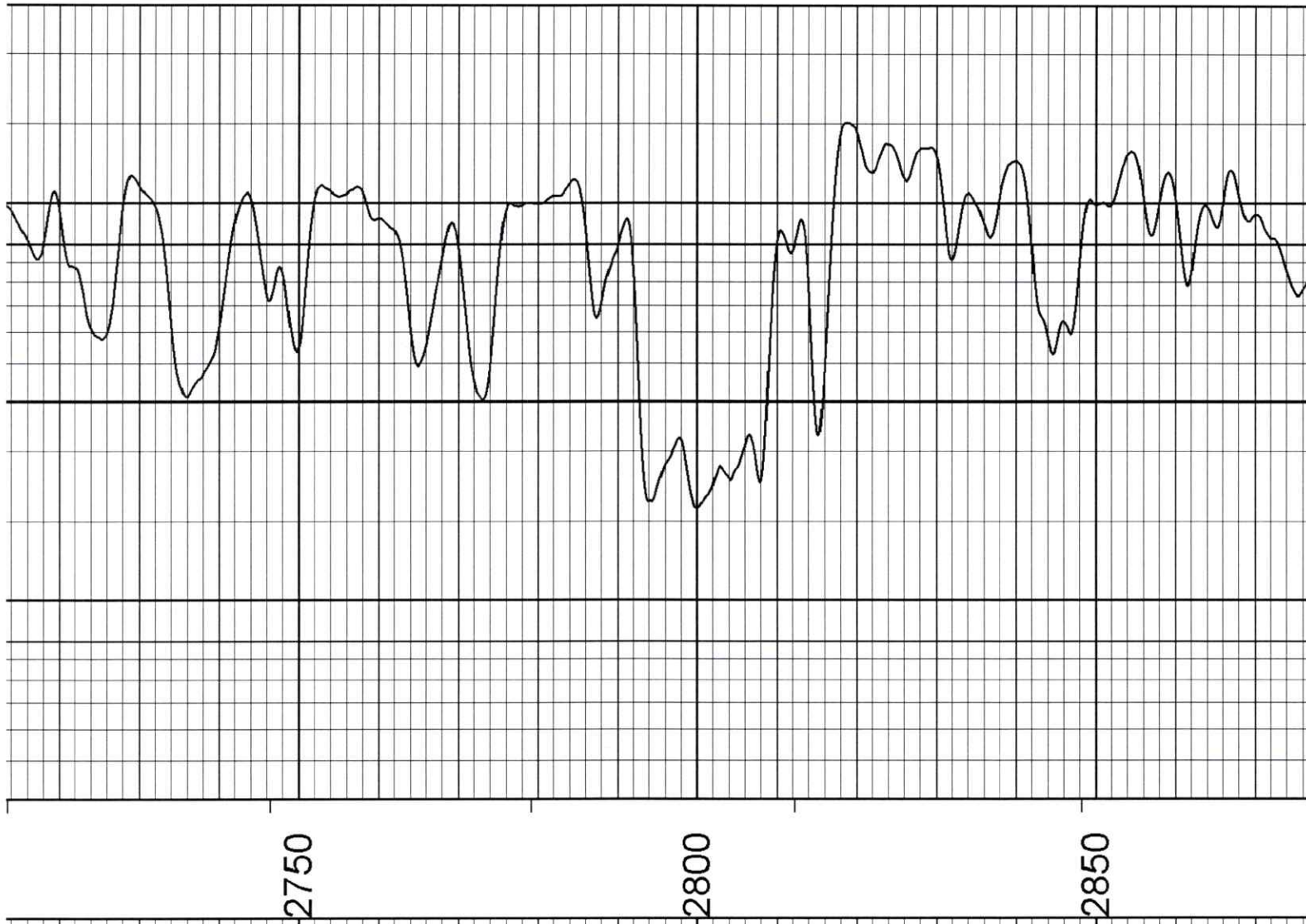


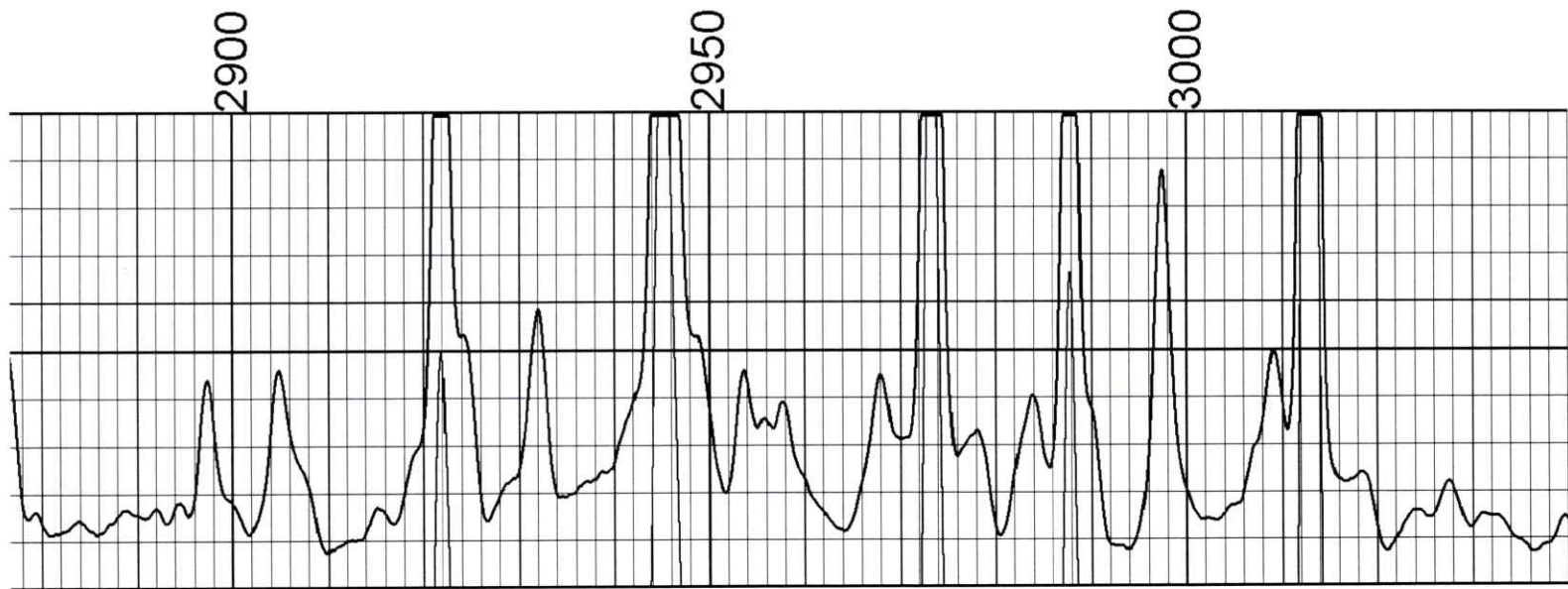
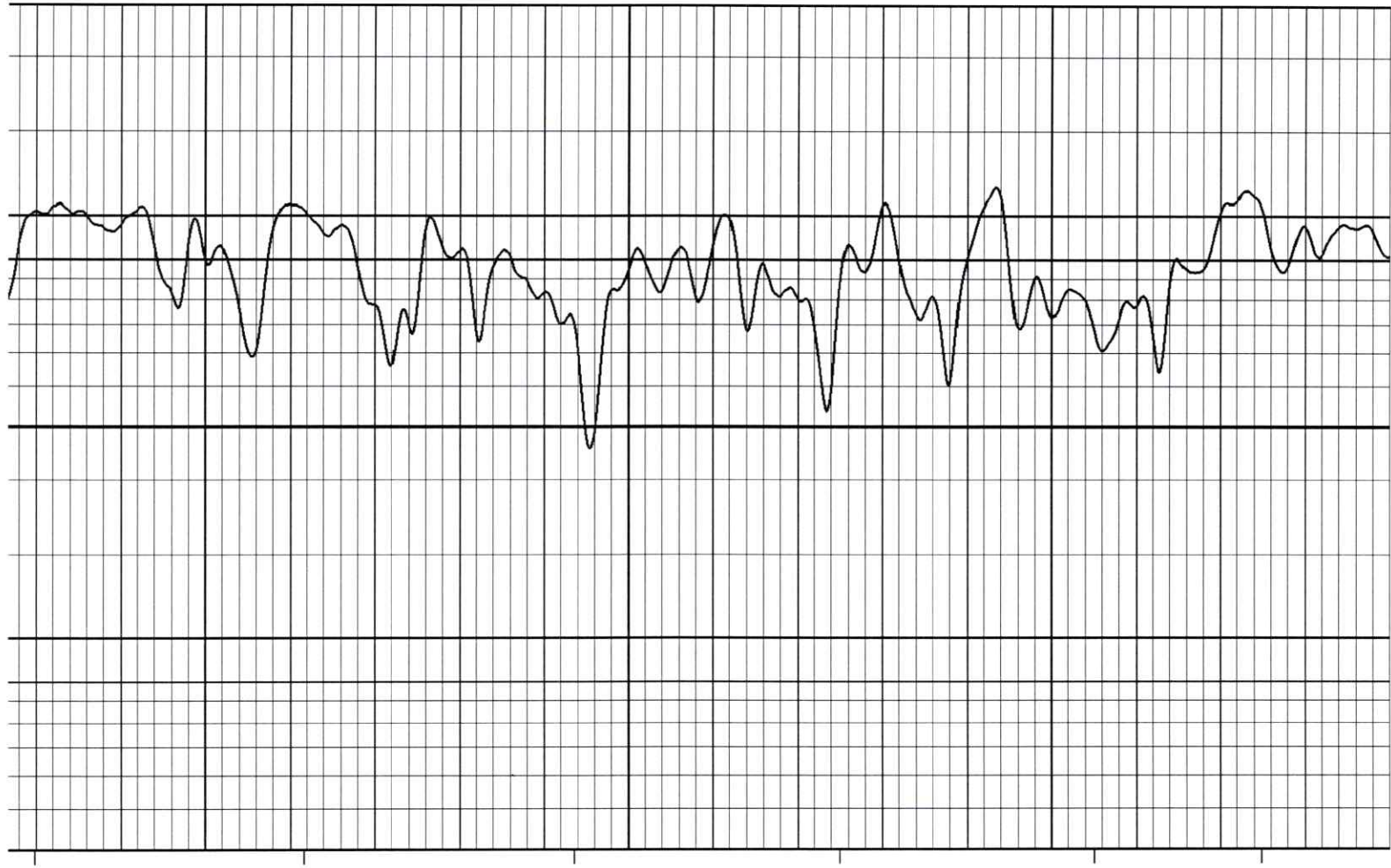


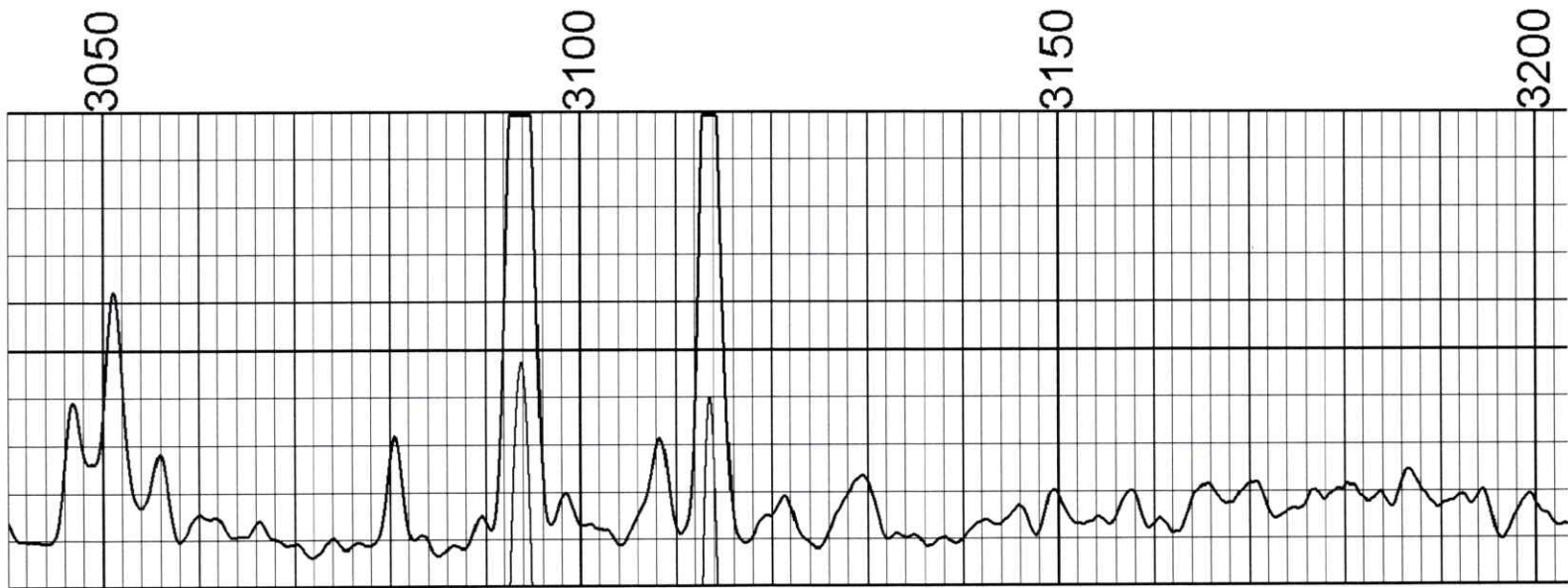
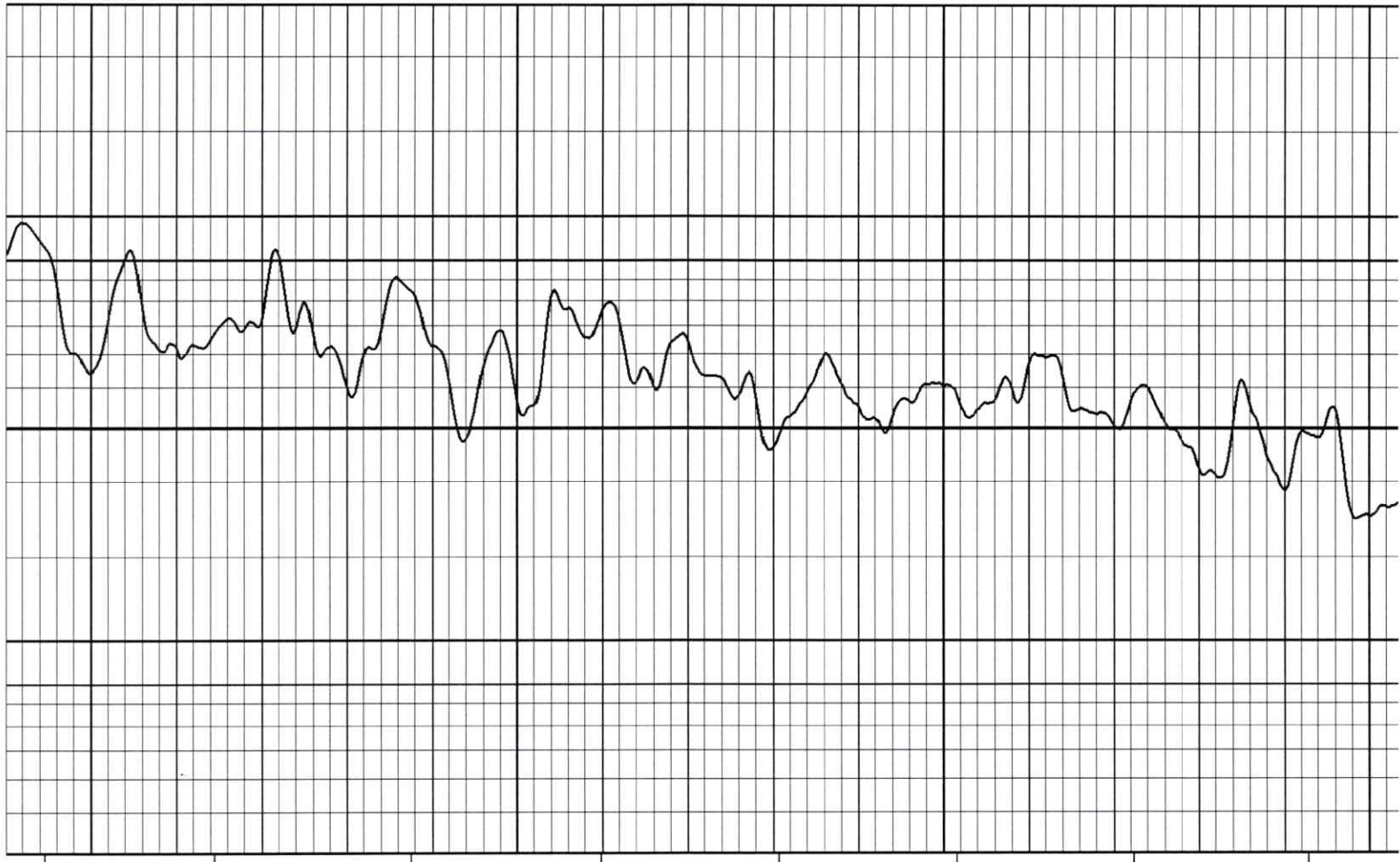










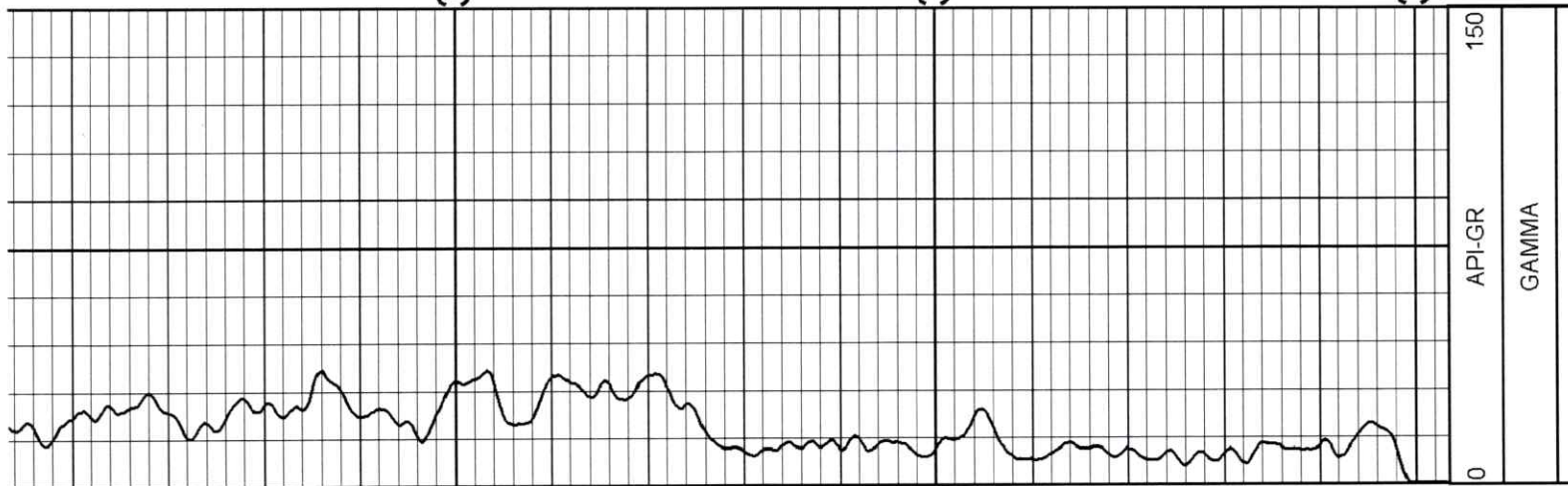
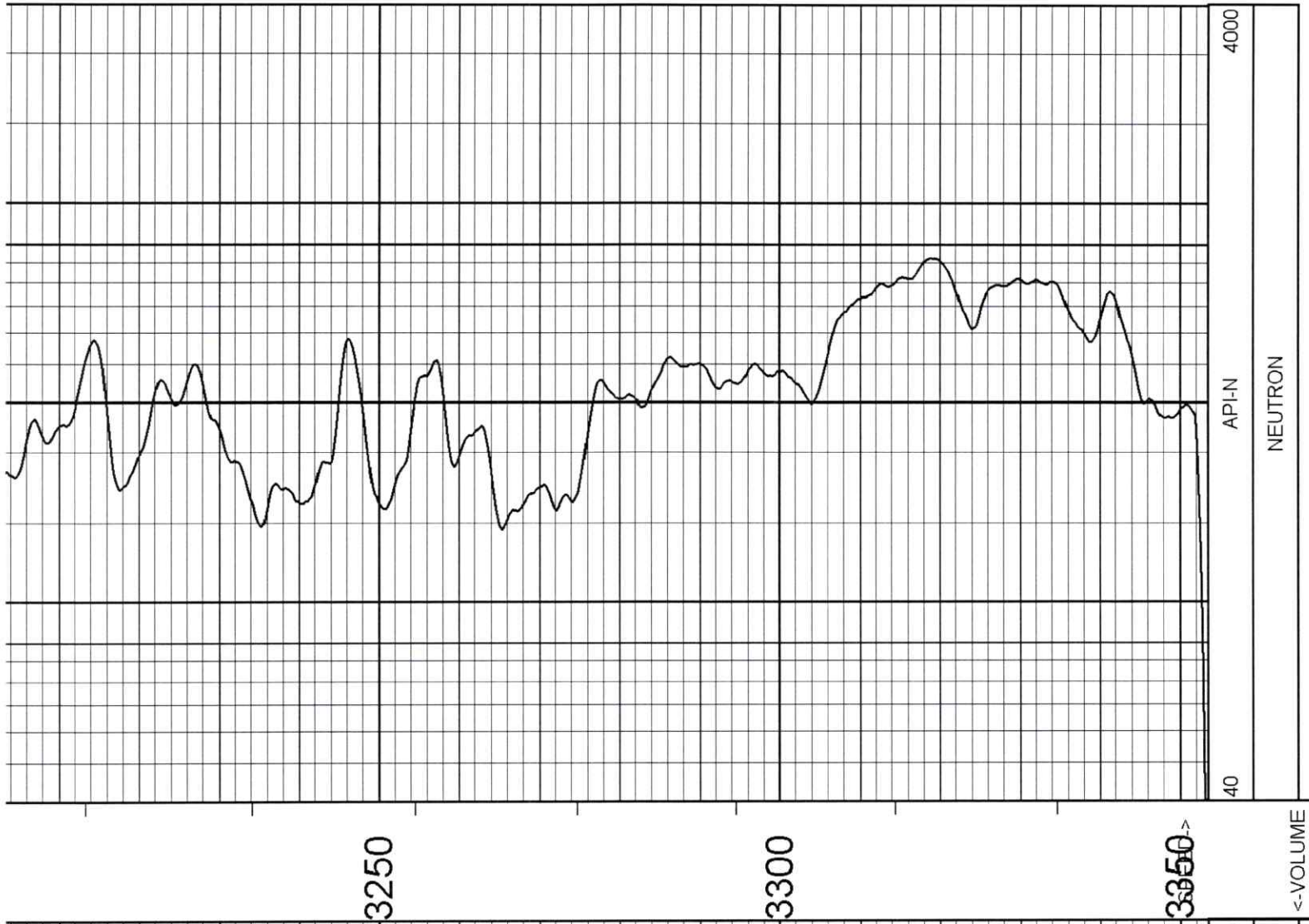


3050

3100

3150

3200



150	API-GR	300
	GAMMA	FEET

5 INCH LOG MADISON TEST WELL #1 06/09/23

LOG PARAMETERS

MATRIX DENSITY : 2.71 NEUTRON MATRIX : LIMESTONE MATRIX DELTA T : 49
 MAGNETIC DECL : 0 ELECT. CUTOFF : 99999 BIT SIZE : 2.25
 PRESENTATION NAME/DATE = MJ DRILLING NEUT EDMONT.0 06/09/2023 VERSION = 3.64KF

TOOL CALIBRATION MADISON TEST WELL #1 06/09/23 20:22
 TOOL 9051A TM VERSION 2003
 SERIAL NUMBER 97

	DATE	TIME	SENSOR	STANDARD	RESPONSE
1	Jun09,23	15:15:18	GAMMA	1.000 [API-GR]	0.000 [CPS]
	Jun09,23	15:15:18	GAMMA	340.000 [API-GR]	331.000 [CPS]
2	Jun09,23	15:15:27	NEUTRON	Default [CPS]	Default [CPS]
	Jun09,23	15:15:27	NEUTRON	271.000 [API-N]	79.000 [CPS]
3	Jul05,21	12:31:14	CCL	Default [CPS]	Default [CPS]
	Jul05,21	12:31:14	CCL	Default [CPS]	Default [CPS]
4	Jun09,23	15:15:32	POROSITY	79.000 [CPS]	

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date May 24, 2024

RECEIVED OF Weinreis Brothers Land, LLP 12284 Horse Creek Loop Edgemont SD 57735

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

Fee for Application for Permit No. <u>2879-2</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>750.00</u>
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>2879-2</u>	\$ <u>200.00</u>
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	
TOTAL	\$ <u>950.00</u>

By Eric Gronlund
Chief Engineer
Sk



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

August 1, 2024

Weinreis Brothers
12284 Horse Creek Loop
Edgemont SD 57735

Dear Mr. Weinreis:

Enclosed is a revised recommendation concerning the application to irrigate 75 acres from a Madison aquifer well and to supply water to a livestock wastewater pond. The revision adds another qualification to the recommendation to approve the application. The added qualification is labeled No. 3 in the enclosure and concerns complying with any requirements of the General Water Pollution Control Permit administered by the Livestock Services Program in DANR.

This revision to the recommendation will NOT affect the content of the public notice which is being published August 1 in the Rapid City Journal and Fall River County Herald provided the papers were contacted and authorized to proceed with publishing the notice.

If you have any questions, please let me know.

Thank you,

Ron Duvall, Engineer
Dept. of Agriculture & Natural Resources
Office of Water, Water Rights Program
605.773.3352

enclosure

Duvall, Ron

From: Duvall, Ron
Sent: Thursday, August 1, 2024 8:38 AM
To: Remelle Burton; garrett@cowtownwusa.net
Subject: Water Permit Application No. 2879-2, Weinreis Brothers - Revision to Recommendation to Approve
Attachments: 2879-2_rec.pdf

Garrett and Remelle,

Attached is a revised recommendation concerning the application to irrigate 75 acres from a Madison aquifer well and to supply water to a livestock wastewater pond. The revision adds another qualification to the recommendation to approve the application. The added qualification is No. 3 in the attached PDF and concerns complying with any requirements of the General Water Pollution Control Permit administered by the Livestock Services Program in DANR.

This revision to the recommendation will NOT affect the content of the public notice which should be published today in the Rapid City Journal and Fall River County Herald provided the papers were contacted and authorized to proceed with publishing the notice.

If you have any questions, please let me know.

Thank you,

Ron Duvall
Dept. of Agriculture & Natural Resources
Office of Water, Water Rights Program
605.773.3352
danr.sd.gov



DANR
SOUTH DAKOTA

Duvall, Ron

From: Remelle Burton <Remelle.Burton@EAengineers.com>
Sent: Monday, June 10, 2024 2:00 PM
To: Duvall, Ron
Subject: Re: [EXT] Water Permit Application for Weinreis Brothers

OK, that second one looks great. According to the testing, the well can stay at 225 gpm, as well.

Sent from my Verizon, Samsung Galaxy smartphone
Get [Outlook for Android](#)

From: Duvall, Ron <Ron.Duvall@state.sd.us>
Sent: Monday, June 10, 2024 12:46:38 PM
To: Remelle Burton <Remelle.Burton@EAengineers.com>
Subject: RE: Water Permit Application for Weinreis Brothers

The first snip in this email string (see below) shows the pivot in the approximate location as submitted with the application. The second snip I sent in this email string shows the pivot moved northward as requested. My question was whether that second screen snip better represented the location of the pivot.

From: Remelle Burton <Remelle.Burton@EAengineers.com>
Sent: Monday, June 10, 2024 1:12 PM
To: Duvall, Ron <Ron.Duvall@state.sd.us>
Subject: RE: [EXT] Water Permit Application for Weinreis Brothers

Did you send me corrected pivot moved more north into farmed area? I have the one that shows it south but Garrett kept moving my drawing more north...

MS. REMELLE BURTON, PG (WY)

1949 Sugarland Drive, Suite 205 | Sheridan, WY 82801 | Website: eaengineers.com
Direct: (307) 683-5696 | Cell: (307) 751-0454 | Email: Remelle.Burton@EAengineers.com



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From: Duvall, Ron <Ron.Duvall@state.sd.us>
Sent: Monday, June 10, 2024 12:07 PM
To: Remelle Burton <Remelle.Burton@EAengineers.com>
Subject: RE: Water Permit Application for Weinreis Brothers

Yes, still waiting on approval to make the change to the legal description of acreage to be irrigated and confirmation of sticking with 225 gpm for the diversion rate.

Thank you,

Ron

From: Remelle Burton <Remelle.Burton@EAengineers.com>
Sent: Monday, June 10, 2024 12:53 PM
To: Duvall, Ron <Ron.Duvall@state.sd.us>
Subject: RE: [EXT] Water Permit Application for Weinreis Brothers

Hi Ron, I'm not sure if I responded to your last email. I was on the road up the mountain so not sure. Are you still waiting on my reply?

Remelle

MS. REMELLE BURTON, PG (WY)

1949 Sugarland Drive, Suite 205 | Sheridan, WY 82801 | Website: eaengineers.com
Direct: (307) 683-5696 | Cell: (307) 751-0454 | Email: Remelle.Burton@EAengineers.com



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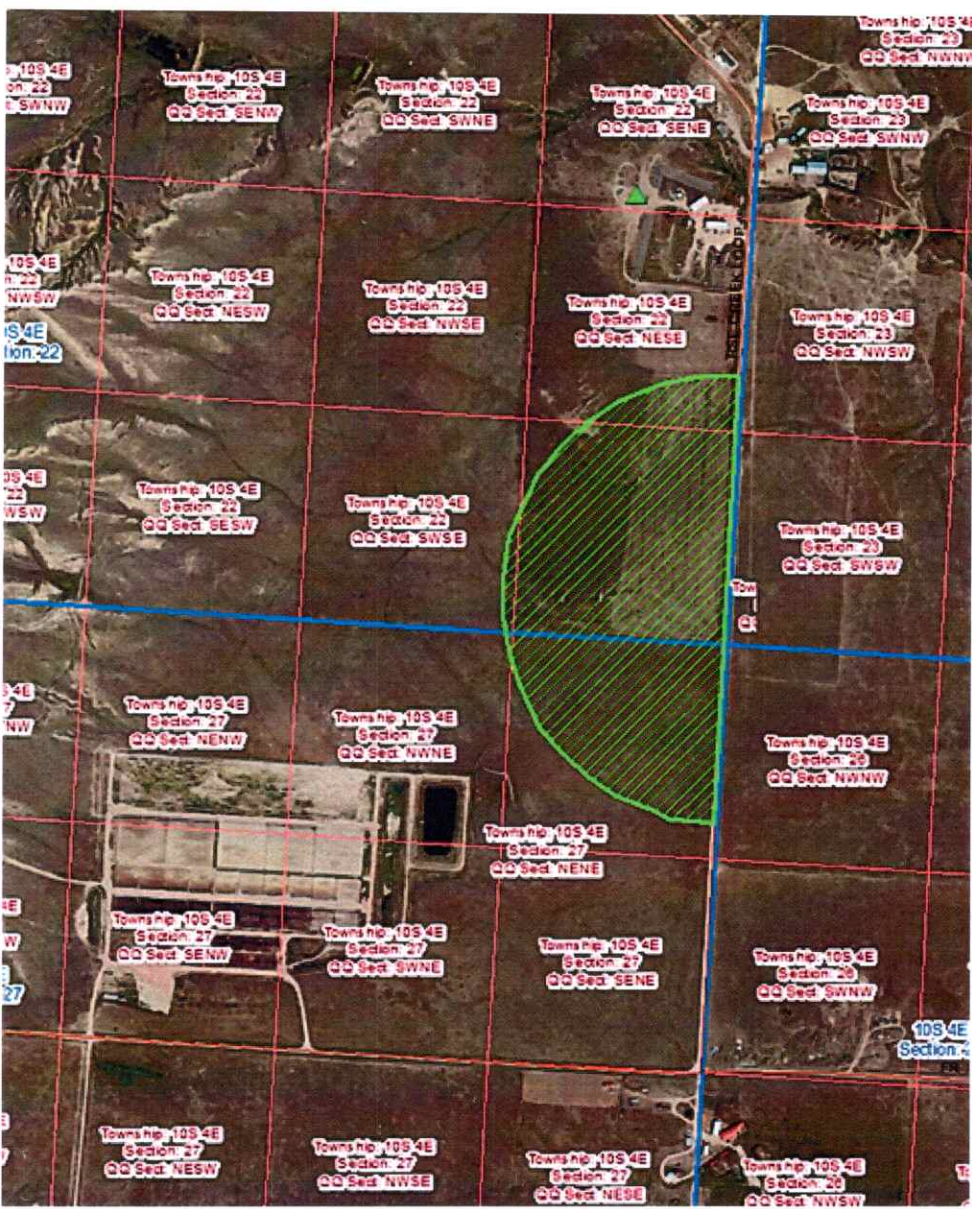
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From: Duvall, Ron <Ron.Duvall@state.sd.us>
Sent: Wednesday, June 5, 2024 1:06 PM
To: Remelle Burton <Remelle.Burton@EAengineers.com>
Cc: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Subject: RE: Water Permit Application for Weinreis Brothers

Remelle,

I tried two variations of email addresses for Garrett and got a mail failure both times so not sure what it is. Here is another snip of a map with the pivot shifted north. If that looks OK we can add in the NE1/4 SE1/4 section 22 and leave

the total number of acres the same as applied for – 75 acres. It is also possible to slightly adjust the location of developed acres as long as the total number of acres is not exceeded. It is OK if the rate from the pond is unknown. Ultimately, we need the rate from the well whether directly to the pivot or the pond. I will say that 225 gallons per minute seems on the very low side of what it takes to run a center pivot but, if limited to that amount as that is what the well can produce, then 225 gpm is the correct number to apply for. If the well is capable of producing a higher number of gpm, then you may want to think about increasing that number.



Thank you,

Ron

From: Remelle Burton <Remelle.Burton@EAengineers.com>
Sent: Wednesday, June 5, 2024 11:25 AM
To: Duvall, Ron <Ron.Duvall@state.sd.us>
Cc: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Subject: FW: [EXT] Water Permit Application for Weinreis Brothers

Apparently Garrett’s email doesn’t work for me, so I am re-sending to you without adding Garrett back in.

3

From: Remelle Burton <Remelle.Burton@EAengineers.com>
Sent: Wednesday, June 5, 2024 9:59 AM
To: Duvall, Ron <Ron.Duvall@state.sd.us>
Cc: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Subject: Re: Water Permit Application for Weinreis Brothers

Hi Ron, I think Garrett would rather we move it north into ne-se 22 instead. And yes let's use up his fees based on whatever acreage he has paid for. He may expand feedlot some day so probably should avoid the southern sections. We could capture the rest of his existing field in 22. As far as gpm from feedlot pond goes, that was just an idea he had and may not go that route so I have not even guessed those numbers. I'm sure it will differ annually if used. Is there a max we could put in to cover a year he tries it?

I'm on vacation today but will continue replying to emails so feel free to respond etc. Thank you!

Remelle Burton

Sent from my Verizon, Samsung Galaxy smartphone
Get [Outlook for Android](#)

From: Duvall, Ron <Ron.Duvall@state.sd.us>
Sent: Wednesday, June 5, 2024 9:22:54 AM
To: garrett@cowtonwusa.net <garrett@cowtonwusa.net>; Remelle Burton <Remelle.Burton@EAengineers.com>
Cc: Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>
Subject: Water Permit Application for Weinreis Brothers

Good morning,

I am looking over the application to use a Madison well for irrigation. In reviewing the application, I am wondering if you want to expand the legal description of the area to be irrigated. The legal description indicates 45 acres in the NE1/4 NE1/4 section 27. Since most quarter quarters are around 40 acres, it appears that some of those acres are in the SE1/4 NE1/4 section 27 based on the map I worked up (see below). Do you agree with me adding the SE1/4 NE1/4 section 27 to the application?



Also any idea what the application rate (gallons per minute) to the pivot from the wastewater pond will be?

Thank you,

Ron

Rodriguez, Rachel

From: Garrett Weinreis <garrett@cowtownusa.net>
Sent: Thursday, May 16, 2024 9:15 PM
To: Rodriguez, Rachel
Subject: Re: [EXT] Water Permit Application - Agent

Yes I agree.

Garrett.

Sent from my iPhone

On May 16, 2024, at 12:05 PM, Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us> wrote:

Just a quick question, you agree with your agent's submission on your behalf, correct? We just need it documented.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us
<image001.png>

From: Rodriguez, Rachel
Sent: Thursday, May 16, 2024 9:39 AM
To: garrett@cowtownusa.net
Cc: remelle.burton@eaengineers.com
Subject: Water Permit Application

Good morning,

I am in receipt of your application for a water permit. Everything looks good, I just need the following:

Application fee \$750.00
Inspection fee \$200.00

Once I receive payment, I can begin processing your application. The fees may be submitted in the form of a check made payable to "SD Water Rights Program" or by calling our Fiscal Office at 605.773.4216 and paying over the phone with a card. However, there is a fee associated with credit card payment, I believe 2.5%.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us
<image001.png>

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, May 16, 2024 1:05 PM
To: garrett@cowtownusa.net
Cc: remelle.burton@eaengineers.com
Subject: RE: Water Permit Application - Agent

Just a quick question, you agree with your agent's submission on your behalf, correct? We just need it documented.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



From: Rodriguez, Rachel
Sent: Thursday, May 16, 2024 9:39 AM
To: garrett@cowtownusa.net
Cc: remelle.burton@eaengineers.com
Subject: Water Permit Application

Good morning,

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Application fee \$750.00
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Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



ENGINEERING ASSOCIATES
CONSULTING ENGINEERS & SURVEYORS
ENGINEERINGWYOMING.COM

May 13, 2024

DENR – Water Rights
523 E. Capitol Ave
Pierre, SD 57501-3182

RECEIVED

MAY 15 2024

OFFICE OF
WATER

RE: Application for Water Permit for Irrigation-Weinreis Brothers, 12284 Horse Creek Loop, Edgemont, SD

DENR-Water Rights Department,

Please find attached, the application for a permit to convert a Madison test well to an irrigation well for Weinreis Brothers in Edgemont, Fall River County, South Dakota.

Included with this letter are:

1. The permit application Forms 2 and 2A
2. 3 maps
3. Water quality analysis
4. Completion Report
5. Log of the well
6. Jump drive with digital copies of all of the above

As an agent for Weinreis Brothers, we are not sending the application fee, as Weinreis Brothers will be mailing that to you under separate cover. If you find this application complete except for payment, please either let me or Garrett Weinreis know the amount due, and that check will be mailed immediately to your office. Also, please mail the publication notice to Garrett Weinreis at the following address, so that he can call his newspaper to authorize publication.

Weinreis Brothers
Attn: Mr. Garrett Weinreis
12284 Horse Creek Loop
Edgemont, SD 57735

Sincerely,

Ms. Remelle Burton
Hydrogeologist
Remelle.Burton@eaengineers.com



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

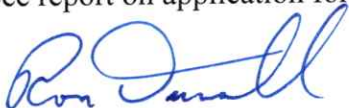
**REVISED RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2879-2, Weinreis Brothers**

Pursuant to SDCL 46-2A-2, the following is the revised recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 2879-2, Weinreis Brothers, 12284 Horse Creek Loop, Edgemont SD 57735.

The Chief Engineer is recommending APPROVAL of Application No. 2879-2 with a twenty-year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 2879-2 is issued for a twenty-year term. Pursuant to SDCL 46-2A-21, the twenty-year term may be deleted at any time during the twenty-year period or following its expiration. If the twenty-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 2879-2 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.
2. The well may be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. Any diversion of water from the well to the livestock wastewater pond is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-36.2 or 34A-2-112 or 34A-2-124.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.


for Eric Gronlund, Chief Engineer
July 31, 2024



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2879-2, Weinreis Brothers**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 2879-2, Weinreis Brothers, 12284 Horse Creek Loop, Edgemont SD 57735.

The Chief Engineer is recommending APPROVAL of Application No. 2879-2 with a twenty-year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 2879-2 is issued for a twenty-year term. Pursuant to SDCL 46-2A-21, the twenty-year term may be deleted at any time during the twenty-year period or following its expiration. If the twenty-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 2879-2 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37.1 and ARSD 74:02:01:37.
2. The well may be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Eric Gronlund, Chief Engineer
July 18, 2024

Report to the Chief Engineer
Water Permit Application No. 2879-2
Weinreis Brothers
06/25/2024

Water Permit Application No. 2879-2 proposes to irrigate 75 acres at a maximum diversion rate of 0.5 cubic feet of water per second (cfs) from one existing well completed into the Madison aquifer (3,640 feet deep), located in the SE 1/4 NE 1/4 Section 22-T10S-R4E. The land to be irrigated is located in the E 1/2 SE 1/4 Section 22 and NE 1/4 NE 1/4 Section 27; all in T10S-R4E. Water may be diverted from the well directly to the area to be irrigated or to a livestock wastewater pond located in the W 1/2 NE 1/4 Section 27-T10S-R4E, and then to the irrigated area. This site is located approximately 13 miles southeast of Edgemont, South Dakota in Fall River County.

AQUIFER: Madison Limestone (MDSN)

HYDROGEOLOGY:

The Madison Group in South Dakota is a Lower Mississippian and Upper Devonian aged group of formations that, in the Black Hills, consists of the Englewood and Pahasapa Limestone formations (Fahrenbach et al., 2010). The Pahasapa Limestone is a “white, light-gray to tan, fine- to medium-grained limestone and dolomite containing brown to gray chert” (Martin et al., 2004). The Englewood Limestone is a “pink to lavender to light-gray, thin- to medium-bedded, fine- to medium-grained, argillaceous, dolomitic limestone” (Martin et al., 2004). The Madison aquifer consists of the permeable and porous portions of the Madison Group that are sufficiently saturated to deliver useful quantities of water. The Madison aquifer extends over more than 210,000 square miles in Montana, Wyoming, North Dakota, South Dakota, and Nebraska (Downey, 1984) although, it may not be suitable as a source of water in all those areas due to extreme depth to the aquifer and poor water quality far from the outcrops (Carter et al., 2002). It crops out in the Black Hills and is buried elsewhere in South Dakota (Downey, 1984). The Madison aquifer may be hydrologically connected to the underlying Deadwood aquifer. It is also hydrologically connected to the overlying Minnelusa aquifer (Long and Putnam, 2002). The Minnelusa aquifer overlies the Madison unconformably (Fahrenbach et al., 2010), which means there was a period of erosion or weathering between when the Madison Group and the Minnelusa Formation were deposited. Transmissivity in the Madison aquifer mainly comes from secondary porosity features such as solution cavities, faults, and fractures (Long and Putnam, 2002). Because most of the transmissivity in the Madison aquifer comes from secondary porosity features, aquifer characteristics in the Madison aquifer vary greatly from location to location (Long and Putnam, 2002).

The applicant submitted a well completion report with this application. On the application, the Madison aquifer was encountered 3,276 feet below grade and continued at least to 3,640 feet below grade with casing and grout down to 3,331 feet. The well had a closed in pressure of 65 psi at the time of completion in January 2024. It would flow without use of a pump if it was allowed to.

South Dakota Codified Law (SDCL)

Water Permit Application No. 2879-2 proposes to appropriate water from the Madison Limestone aquifer. The probability of unappropriated water being available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires:

“No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the Greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems.

The Madison Limestone aquifer is stratigraphically lower than the Greenhorn Formation, however the water for this application would not be used for a water distribution system.

Pursuant to SDCL 46-2A-9, “A permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant’s proposed use, that the diversion point can be developed without unlawful impairment of existing domestic water uses and water rights, and that the proposed use is a beneficial use and in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by SDCL 46-2-9 and 46-2-11.” This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic water uses and water rights within the Madison Limestone aquifer.

Pursuant to SDCL 46-2A-20:

“Notwithstanding §§ 46-1-14 and 46-2A-7, no water permit for construction of works to withdraw water from the Madison formation in Butte, Fall River, Custer, Lawrence, Meade and Pennington counties may be issued for a term of more than twenty years, unless the Water Management Board determines, based upon the evidence presented at a hearing that:

- (1) Sufficient information is available to determine whether any significant adverse hydrologic effects on the supply of water in the Madison formation would result if the proposed withdrawal were approved; and*
- (2) The information, whether provided by the applicant or by other means, shows that there is a reasonable probability that issuance of the proposed permit would not have a significant adverse effect on nearby Madison formation wells and springs.”*

In addition to the other requirements, the Water Management Board must consider the effect this application may have on nearby Madison aquifer wells and springs. This application is subject to a 20-year term limit.

HYDROLOGIC BUDGET

Recharge

The Madison aquifer receives recharge from infiltration of precipitation and streamflow on the outcrop area and may also receive inflow from the underlying Deadwood aquifer (Carter, Driscoll and Hamade, 2001). There are several reports available estimating recharge to the Madison aquifer.

Woodward-Clyde Consultants (1981) estimated recharge to the outcrop of the Madison aquifer in the Black Hills as part of an environmental impact statement for the ETSI Coal Slurry Pipeline Project. The upper-bound estimate of recharge in the Woodward-Clyde Consultants report is approximately 400,000 ac-ft/yr, assuming almost all of the precipitation that falls on the outcrop infiltrates into the aquifer (1981). Woodward-Clyde Consultants (1981) produced a lower-bound recharge estimate of 140,000 ac-ft/yr based on the Rahn and Gries (1973) report. However, the Rahn and Gries report (1973) estimated recharge for all Paleozoic limestone in the Black Hills, which includes the Madison Group, the Minnelusa Formation, and the Minnekahta Formation. Rahn and Gries (1973, p. 15) reported that 146.6 cfs was their minimum estimated recharge rate for the Paleozoic limestone from infiltration of precipitation, which converts to approximately 106,000 ac-ft/yr for all Paleozoic formations. The Woodward-Clyde Consultants report did not acknowledge the fact that the Rahn and Gries (1973) report estimated minimum recharge for a larger group of formations than the Woodward-Clyde Consultants report (1981) covers, and therefore was likely to overestimate recharge to the Madison aquifer under the assumptions made.

Carter, Driscoll, and Hamade (2001) analyzed streamflow and precipitation data from water years 1931 to 1998 in the Black Hills area in South Dakota and Wyoming to determine the average annual recharge to the Madison and Minnelusa aquifers. They estimated a combined average annual recharge to both aquifers to be 344 cfs, or approximately 249,000 ac-ft/yr, not including possible flow from the Deadwood aquifer (Carter, Driscoll and Hamade, 2001). Carter, Driscoll, and Hamade (2001) estimated that approximately 55% of the recharge goes to the Madison aquifer, so the total estimated average recharge to the Madison aquifer from the outcrop in the Black Hills is approximately 137,000 ac-ft/yr, not including possible inflow from adjacent aquifers or from the Madison aquifer outside of South Dakota. The Carter, Driscoll, and Hamade (2001) report uses more years of data, more recent data, and better assumptions than the Woodward-Clyde Consultants (1981) and Rahn and Gries (1973) reports. Therefore, the best estimate of recharge to the Madison aquifer is based on the Carter, Driscoll, and Hamade (2001) report.

Discharge

Discharge from the Madison aquifer in South Dakota is mainly by outflow to other aquifers when the hydraulic head in the Madison aquifer is higher than the other aquifers, outflow to springs and seeps, and withdrawals by domestic and appropriative wells (Carter, et al., 2001). Due to the presence of overlying aquifers and water distribution systems in many areas of the aquifer, domestic well withdrawals are a negligible portion of the hydrologic budget of the

Madison aquifer. There are 172 water rights/permits currently authorized to withdraw from the Madison aquifer and 11 future use water rights/permits reserving water from the Madison aquifer (Water Rights, 2024c). Table 1 lists the future use permits.

Permit No.	Name/Business	County	Use	Priority Date	Amount Reserved (ac-ft/yr)
2028-1	Bear Butte Valley Water, Inc	MD	RWS, WDS	03/23/2023	440
369-1	City of Belle Fourche	LA	MUN	12/10/1958	620
2086-2	City of Rapid City	PE	MUN	05/18/1989	4,075
439-2	City of Rapid City	PE	MUN	09/22/1956	3,367
1872-1	City of Spearfish	LA	MUN	11/13/2006	2,704
2560-2	Fall River Water Users District	FR	RWS	05/16/2005	358
2560A-2	Fall River Water Users District	FR	RWS	05/16/2005	0
2560B-2	Fall River Water Users District	FR	RWS	05/16/2005	0
2580-2	Southern Black Hills Water System	FR	RWS	03/02/2006	1,474
1833-2	Weston Heights Home Owners	MD	RWS	02/18/1983	211
1995-1	Black Hawk Water User District	MD	RWS	04/15/2020	1,300
Total					14,549
FR - Fall River, LA - Lawrence, MD - Meade, PE - Pennington					
MUN - Municipal, RWS - Rural Water System, WDS - Water Distribution System					
*This permit reserves water from multiple aquifers but is assumed to withdraw solely from the Madison for estimation of the hydrologic budget					

Table 1. Future Use Permits from the Madison aquifer (Water Rights, 2024c)

Water Right/Permit Nos. 1096A-1, 1496-1, and 1670-1 are all authorized to withdraw from the same well and one dam. Water Right Nos. 1096A-1 and 1670-1 authorize diversion of water for irrigation use and Water Right No. 1096A-1 and Water Permit No. 1496-1 authorize diversion of water for rural water system use. Documentation in the administrative file for Water Right No. 1670-1 indicates that the well is not valved such that it can be shut off when not in use for the beneficial uses listed on the permits. A letter dated September 9, 1988, indicates that when the water for that well is not being used for the beneficial uses described in the permits, it is used for fish and wildlife propagation. The person writing the letter indicated they would prefer the Water Management Board not order the well to be shut off when not used for irrigation or rural water system use. Therefore, at a flow rate of 1.33 cfs, the well withdraws approximately 963 ac-ft/yr from the Madison aquifer.

Of the 172 active water rights/permits, 31 primarily for irrigation (Water Rights, 2024c). When there are more than 10 years of irrigation reports available, the average reported irrigation was used to estimate irrigation withdrawals. When there were fewer than ten years of irrigation reports available, irrigators are assumed to apply two feet of water for every acre irrigated; although, actual usage is likely less for non-turf irrigation. Non-irrigation withdrawals from permit holders with irrigation also being a permitted use are assumed to withdraw at their maximum instantaneous diversion rate 60% of the time, and this withdrawal is added to the

irrigation withdrawals. In the case of Water Right No. 1885-1, that would have caused the total estimated withdrawal to exceed the rate they were physically capable of withdrawing, so their total estimated withdrawal is 100% of their maximum instantaneous diversion rate. The total estimated withdrawals for all permits with a primary or secondary irrigation use are listed on Table 2.

Water Right No. 1650-1 does not require the water right holder to report annual withdrawals and allocates no acreage. It provides supplemental water supply from a flowing well for Water Right No. 1231-1. Water Right No. 1231-1 permits a 110 acre-ft dam to provide water for a commercial livestock operation and irrigation of 134 acres. Water Right No. 1650-1 allows for direct irrigation from a Madison aquifer well of up to 2 acre-ft per acre for the land permitted by Water Right No. 1231-1. Kilts estimated that Water Right No. 1650-1 withdraws 55.9 ac-ft/yr (Kilts, 2019). This water right was transferred to a new owner in 2021. For the 2023 irrigation season, the owner reported using 85.36 ac-ft of water for irrigation. As this is the only year this owner has reported, the value of 55.9 ac-ft/yr will be used as their average until more years of reporting can establish an average.

Of the 172 Madison aquifer water rights/permits, 138 are for non-irrigation use (Water Rights, 2024c). Table 3 summarizes the 138 non-irrigation water rights/permits authorized to appropriate water from the Madison aquifer with the estimated annual use for each water right/permit as determined by their limiting diversion rate or annual volume. The use type determined for each water right/permit was based on the primary use categorized for each water right/permit as some permits have additional uses (Water Rights, 2024c). Historically, average water use by non-irrigation appropriations limited by an instantaneous diversion rate have been assumed to be pumping 60% of full time at the respective permitted diversion rate. Water rights/permits limited by an annual volume are assumed to withdraw their entire respective annual volume limitation. This is a standard method used by the DANR-Water Rights Program for estimating annual withdrawals by non-irrigation appropriations from an aquifer (Water Rights, 2024c).

Table 2. Estimated total withdrawals from permits with irrigation listed as a primary or secondary use. (Water Rights, 2024a, Water Rights, 2024c)

PERMIT NO	Name/Business	STATUS	Diversion rate (cfs)	Acres Licensed/ Permitted	Average Report (ac-ft/yr)	Years of Irrigation Reports	Estimated average irrigation (ac-ft/yr)	Est. Non-irr. Use (ac-ft/yr)	Total Est. Withdrawal (ac-ft/yr)
2773-2	ARROWHEAD COUNTRY CLUB	PE	1.110	100	0	6	200	0	200
1635-1	BLACK HILLS NATIONAL CEMETERY	LC	0.820	54.5	89.8	28	89.8	356.2	446
1452-1	BLACK HILLS STATE COLLEGE	LC	3.330	25.4	20	35	20	1,446.6	1,466.6
1009-1	DONALD F/ANN J BRADY	LC	0.780	53.7	29	42	29	338.8	367.9
1185-1	DONALD F/ANN J BRADY	LC	0.380	22.5	109.1	42	109.1	***	109.1
2313-2	COCA-COLA BOTTLING	LC	0.330	3	6.5	29	6.5	143.4	149.9
1725-2	JANICE R CROWSER	LC	1.070	75.1	0.9	26	0.9	0	0.9
1842-1	TOM C DAVIS	LC	0.440	330	0	19	0	0	0
1899-1	DAVIS RANCHES INC	LC	1.430	100	0	15	0	0	0
2673-2	DIOCESE OF RAPID CITY	LC	0.120	7	8.3	11	8.3	0	8.3
1931-1	ELKHORN RIDGE @ FRAWLEY RANCHES LLC	LC	0.170	3.3	3.1	11	3.1	73.8	76.9
1707A-1		PE	3.705	100	0	4	0	1,609.5	1,609.5
1707E-1		PE	0.000	0	14.2	17	14.2	0	14.2
1945-1	FRAWLEY RANCHES LLC	PE	1.110	265	51.2	10	51.2	0	51.2
1858-1	GLENCOE CAMP RESORT II LLC	LC	0.860	34	0	18	0	373.6	373.6
2593-2	HART RANCH DEVELOPMENT	LC	0.490	72.5	26.8	17	26.8	212.9	239.6
1911-2	HART RANCH DEVELOPMENT CO	LC	0.880	124	117.8	30	117.8	382.3	500.1
2012-1	JESSE HORSTMANN	PE	0.500	43.5	0	2	87	0	87
1670-1	BUDDY L. PEGGY A. KAMI S IRELAND	LC	3.610	253	45.8	26	*	*	*
2286-2	DONALDKONECHNE	LC	0.100	38.5	10.2	30	10.2	0	10.2
858-2	JOHN & HEIDI MCBRIDE	LC	9.360	655.8	6.4	40	6.4	0	6.4
1960-1	ONE DIAMOND INC	LC	1.280	150	134.3	8	300	556	856.0
1223-1	P & L WATER AND HAY LLP	LC	0.670	263	186.1	42	186.1	0	186.1
1923-1	ROGER & JEAN RANSCHAU	LC	0.110	3	0.7	13	0.7	47.8	48.5
2458-2	CITY OF RAPID CITY	LC	0.800	107	104.6	23	104.6	0	104.6
2106-2	STUART RICE	LC	0.080	2.8	0.8	32	0.8	34.8	35.5
2013-1	SANTA MARIA LAND & CATTLE CORP	PE	2.220	460	0	1	920	0	920
2002-1	CITY OF SPEARFISH	PE	1.330	40	0	3	80	0	80
1363-1	SPEARFISH CANYON CNTRY CL	LC	0.900	80.1	64.3	37	64.3	0	64.3
2741-2	TUBBS LAND & CATTLE LLC	PE	3.340	567	169.8	5	1,134	0	1,134
1885-1	JOHN T & VERONICA WIDDOSS	LC	0.110	22	18.07	7	44	47.8	79.7
1096A-1	BUTTE MEADE SANITARY DIST	PE	1.880	0	N/A	0	*	*	963.5
419-2	WIND CAVE NATIONAL PARK	LC	0.150	6	N/A	0	12	65.2	77.2
1650-1	DENNIS L MILLER	LC	0.890	0	85.4	1	*	*	55.9
	TOTAL:		44.36	4,061.7	1,217.7	630	3,627	5,688	10,323

*Discussed in text. ** gives additional time to develop 1707A-1. *** Reports all use types in irrigation report

Additionally, the seven water rights/permits that are authorized to appropriate water from the Madison aquifer, that are identified as being connected to a rural water system (RWS) and likely maintain their wells for standby purposes (Drinking Water Program, 2024; Water Rights, 2024c); as such, the average annual water use for these water rights has been estimated to be zero acre-feet per year on Table 3. Overall, the average annual withdrawal rate for the Madison aquifer non-irrigation water rights/permits is approximately 44,397 acre-feet per year (Table 3) (Water Rights, 2024c).

Use Type	No. of Water Rights/Permits	Appropriation of Water Rights/Permits limited by Diversion Rate (cfs)	Appropriation of Water Rights/Permits limited by volume (ac-ft/yr)	Total Estimated Use (ac-ft/yr)
RWS	20	3.85	5,152	6,826
SHD	40	7.25	324.2	3,471
REC	1	1	N/A	434
COM	14	1.93	1,064.3	1,903
DOM	4	0.22	71	167
GEO	2	1.43	N/A	621
INS	2	0.2	N/A	87
IND	11	4.88	301.3	2,421
MUN	36	16.82	18,156.0	25,463
WDS	11	N/A	3,003.8	3,004
TOTAL:	141	37.58	28072.6	44,397
RWS: Rural Water System, SHD: Suburban Housing Development, REC: Rectreation,				
COM: Commercial, DOM: Domestic, FWP: Fish & Wildlife Propagation, GEO: Geothermal,				
INS: Institutional, IND: Industrial, MUN: Municipal				

Table 3. Summary of the non-irrigation water rights/permits authorized to appropriate from the Madison aquifer with estimated annual use determined by their respective diversion rate or annual volume (Drinking Water Program, 2024; Water Rights, 2024c)

In addition to the potential withdrawals by future use permits described above, one other application is deferred. Water Permit Application No. 2585-2, for Southern Black Hills Water System, proposes to appropriate 1,600 ac-ft/yr but is deferred for further study. Water Permit Application No. 2685-2, for Powertech, Inc., is held in abeyance pending federal permitting and proposes to appropriate 889 ac-ft/yr.

Hydrologic Budget Summary

The estimated average annual recharge rate to the Madison aquifer is approximately 137,000 acre-feet per year. The estimated average annual withdrawal rate from the Madison aquifer is approximately 71,908 acre-feet per year (listed on Table 4). This application proposes to withdraw up to 150 ac-ft/yr, if approved, assuming the applicant applies two acre-feet per

authorized acre. Therefore, based on the statewide hydrologic budget, there is reasonable probability unappropriated water is available for this application.

Table 4. Estimated use from Madison aquifer

Type of Water Right/Permit	Estimated Use (acre-feet/year)
Future Use Reservations	14,549
Irrigation	10,323
Non-Irrigation	44,397
Deferred/Abeyance	2,489
Water Permit Application No. 2879-2, <i>if approved</i> , assuming 2 acre-feet per authorized acre	150
Total	71,908

Local Hydrologic Budget

Carter, Driscoll, Hamade, and Jarrell (2001) used streamflow, precipitation, spring flow, estimated ground water flow, and well withdrawal data from 1987 to 1996 for hydrologic budgets for subareas of the Minnelusa and Madison aquifers. This application is in Subarea 8 of their report. The boundaries of the Carter, Driscoll, Hamade, and Jarrell's (2001) subareas were designed to minimize flow across subarea boundaries. Carter, Driscoll, Hamade, and Jarrell (2001) estimated the total recharge to the Madison and Minnelusa aquifers in Subarea 8 was 46.1 cfs. Assuming 55% of the recharge goes to the Madison aquifer, the estimated recharge to the Madison aquifer in Subarea 8 is 25.355 cfs, or approximately 18,357 ac-ft/yr (Carter et. al, 2001). Carter, Driscoll, Hamade, and Jarrell (2001) do not provide values for the recharge area of the Madison and Minnelusa formations for each subarea in their report, so it is possible the proportion of recharge area to those two aquifers is different within each subarea. There are nine water rights/permits authorized to withdraw from Subarea 8 and two future use permits reserving water from Subarea 8. Domestic well withdrawals are negligible on the scale of this hydrologic budget. Using the same methods as described in the Statewide Discharge section, the total estimated withdrawal from Subarea 8 is 2,269 ac-ft/yr as compared to the estimated recharge of 18,390 ac-ft. This application proposes to withdraw up to 150 ac-ft/yr, if approved, assuming the applicant applies two acre-feet per authorized acre. Therefore, based on the local hydrologic budget in combination with other information available, there is reasonable probability unappropriated water is available for this application.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires that the Water Management Board shall rely upon the record of observation well measurements, in addition to other information, to determine that recharge exceeds withdrawals to approve an application. Observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The DANR-Water Rights Program monitors 25 observation wells completed into the Madison aquifer (Water Rights, 2024b). The nearest observation well to the application is

FR-92A, located approximately 19 miles away (Water Rights, 2024b). The hydrograph for the observation well is displayed in Figure 1 (Water Rights, 2024b).

The water level data for FR-92A may not be fully representative of the specific water level changes in the immediate vicinity of this application, since it's so far away from the well site. However, the water level in the observation well shares the same general shape as the other observation wells completed into the Madison aquifer. The hydrograph displays the amount of recharge to the aquifer exceeds the natural discharge from the aquifer. Therefore, based on observation well analysis, there is reasonable probability unappropriated water is available for this application.

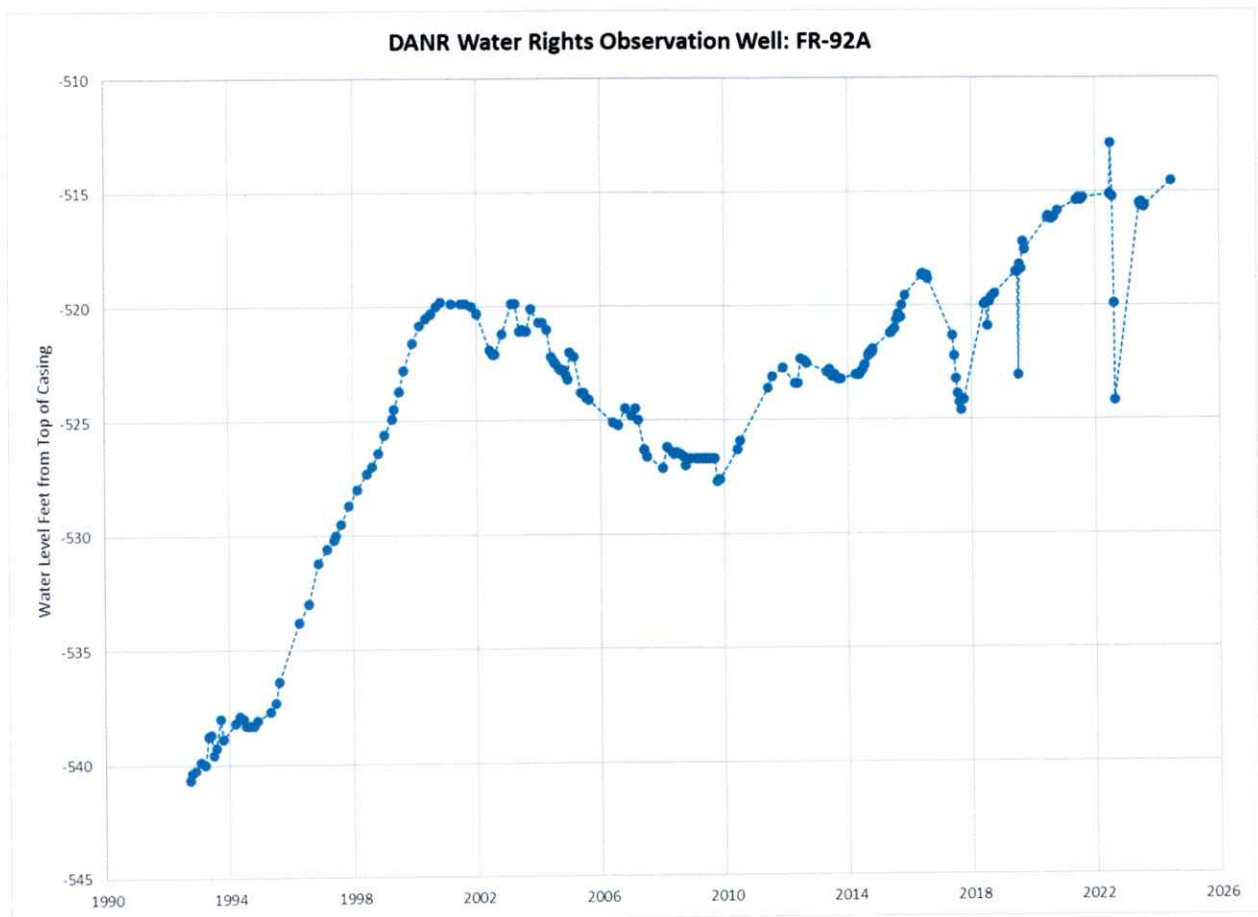


Figure 1: Water levels in Observation Well FR-92A (Water Rights, 2024b)

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 172 water rights/permits appropriating water from the Madison aquifer within South Dakota (Water Rights, 2024c). The nearest water right/permit is Water Right No. 1850-2 held by Provo Township located approximately 12.1 miles northwest of the applicant's well site (Water Rights, 2024c). The future use area for Future Use Permit No. 2560-2 for the Fall River Water Users District is located approximately 9.5 miles north-northeast of the applicant's well site (Water Rights, 2024c). The aquifer at the existing well site has a saturated

thickness of 364 feet with 65 psi of closed in pressure at land surface. That means the well will flow if allowed to do so.

There are domestic wells on file with the DNR-Water Rights Program that are completed into the Madison aquifer, with the closest domestic well on file (not held by the applicant) located approximately 12.5 miles northwest of the proposed diversion point (Water Rights, 2024d).

There could potentially be other domestic wells completed into the Madison aquifer near the well the applicant proposes to use that are not on file with the DNR-Water Rights Program. The location of the domestic wells in the well completion report database maintained by the Water Rights Program is based on the location listed by the driller on the well completion report.

The Madison aquifer is primarily under confined conditions, except where it outcrops in the Black Hills (SDGS, 2024; Water Rights, 2024b and 2024d). Based on the submitted well completion report, well completion reports on file for nearby wells completed into the aquifer, and lithologic logs on file for nearby observation wells, the Madison aquifer is confined at the existing well location (SDGS, 2024; Water Rights, 2024b and 2024d). Drawdown created by pumping a well generally does not extend far from the pumped well in an unconfined aquifer; however, in a confined aquifer, drawdown from pumping could extend a distance from the diversion point. The exact drawdown behavior of a well cannot be known without an aquifer performance test; however, observation wells completed into the Madison aquifer near licensed/permitted diversion points can provide some insight on how the aquifer responds to pumping.

Observation well CU-91A (approximately 26.5 miles northeast of existing well location) has 2 high-yield (assumed to be a well with an authorized diversion rate greater than 0.2 cfs) wells within approximately 3 miles of it (Water Rights, 2024b and 2024c). The drawdown from pumping can be seen on the hydrograph for CU-91A, along with the aquifer returning to pre-pumping conditions seasonally (Figure 2) (Water Rights, 2024b). The lithologic log on file for CU-91A noted the well was drilled approximately 1,165 feet below the ground surface, has a casing stick up height of 0 feet, and the top of aquifer materials at approximately 1,050 feet below the ground surface (SDGS, 2024). The lowest recorded static water level on the hydrograph is approximately 10 feet below the top of the well casing, which indicates there was still approximately 1,040 feet of artesian head pressure in CU-91A even during a drier period when wells are expected to be pumping more water and when water levels are generally naturally lower in response to drier conditions (SDGS, 2024; Water Rights, 2024b).

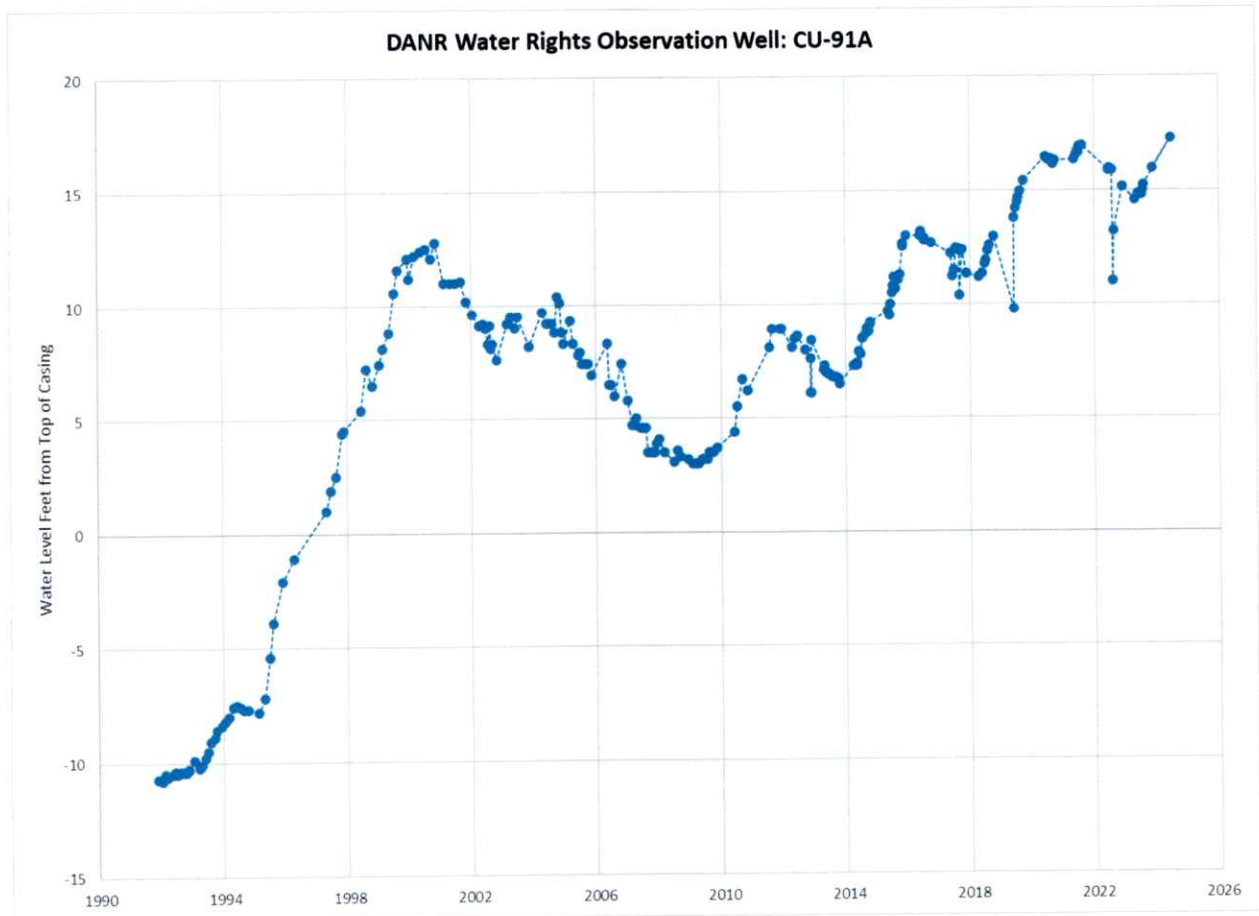


Figure 2: Water levels in Observation Well CU-91A (Water Rights, 2024b)

At the existing well site, the Madison aquifer has an average saturated thickness of approximately 364 feet with the depth to top of aquifer materials approximately 3,276 feet below grade according to the well completion report submitted with Water Permit Application No. 2879-2 (Water Rights, 2024d). At the time of completion this well had closed in pressure of 65 psi and flowed at 39 gallons per minute meaning there is over 3,276 feet of head pressure. There is sufficient thickness to allow for a pump to be placed 20 feet below the top of the aquifer, which is required for the well to be considered adequate under ARSD 74:02:04:20(6). Any drawdown as a result of the diversion for this application is not expected to unlawfully impair nearby adequate wells. In Custer and Fall River Counties, there are no substantiated complaints on file with the DANR-Water Rights Program regarding well interference for adequate wells completed into the Madison aquifer (Water Rights, 2024e).

The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Water Management Board defined an “adequate well” and an “adversely impacted adequate well” in ARSD 74:02:04:20 as:

(6) “...a well constructed or rehabilitated to allow various withdrawal methods to be used to, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet

(7) “...a well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs

The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use during the issuance of Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Board adopted the Findings of Facts and Conclusions of Law that noted the reservation of artesian head pressure for delivery of water would be inconsistent with SDCL 46-1-4 which states, “general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable...” (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production as a result of impacts on artesian head pressure by legitimate users is to be considered as an unlawful impairment, it would also conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to install or lower pumps depending on the specific characteristics of the Madison aquifer at their location.

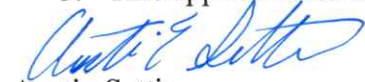
However, when considering the statutes (SDCL 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20(6) and (7)), the significant amount of artesian head pressure above the top of aquifer, and the lack of well interference complaints from the Madison aquifer in the area, any drawdown created from the proposed diversion is not expected to cause an unlawful impairment on existing water right/permit holders or domestic users with adequate wells. Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments on existing users with adequate wells.

Springs

The nearest major spring supplied by the Madison aquifer is the Cascade Springs, located approximately 13 miles northeast of this application (Naus, 2001). Upon considering the deferral of Water Permit Application No. 2585-2 for Southern Black Hills Water System, the Water Management Board adopted a conclusion of law stating in part, “...The only protection South Dakota law provides when considering an application for an underground water permit for flow from an artesian spring is under the public interest criteria” (SD Water Management Board, 1997). Given the distance between the proposed well site and the nearest springs, there is reasonable probability this application can be developed without noticeably impacting spring flow from the Madison aquifer.

CONCLUSIONS:

1. Water Permit Application No. 2879-2 proposes to irrigate 75 acres at a maximum diversion rate of 0.5 cfs from one well (3,640 feet deep) completed into the Madison aquifer located in the SE 1/4 NE 1/4 Section 22-T10S-R4E.
2. Based on the hydrologic budget and observation well analysis, there is reasonable probability unappropriated water is available for this application.
3. There is a reasonable probability this application can be developed without noticeably impacting spring flow from the Madison aquifer.
4. There is a reasonable probability this application can be developed without unlawful impairment of existing domestic water uses and water rights.
5. This application is subject to a 20-year term limit.



Austin Settje

Natural Resources Engineer I
SD DANR - Water Rights Program



Adam Mathiowetz, PE

Natural Resources Engineer IV
SD DANR - Water Rights Program

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**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

July 23, 2024

Weinreis Brothers
c/o Remelle Burton
12284 Horse Creek Loop
Edgemont SD 57735

Dear Ms. Burton:

Water Permit Application No. 2879-2 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Fall River County Herald printed in Edgemont SD (Ph # 605 745-3930) and the Rapid City Journal printed in Rapid City SD (see attachment for contact number). You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(605) 773-3352

enclosures

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

NOTICE OF APPLICATION NO. 2879-2 to Appropriate Water

Notice is given that Weinreis Brothers, 12284 Horse Creek Loop, Edgemont SD 57735 has filed an application for a water permit to appropriate 0.50 cubic feet of water per second from one existing well completed into the Madison Aquifer (approximately 3,640 feet deep) located in the SE 1/4 NE 1/4 Section 22 for irrigation of 75 acres located in the E 1/2 SE 1/4 Section 22, NE 1/4 NE 1/4 Section 27; all in T10S-R4E. Water may be diverted from the well directly to the area to be irrigated or to a livestock wastewater pond located in the W 1/2 NE 1/4 Section 27-T10S-R4E and then to the irrigated area. This site is located approximately 13 miles southeast of Edgemont SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2879-2 with a twenty-year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by August 12, 2024.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by August 12, 2024.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of _

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, July 23, 2024 8:59 AM
To: ads.frcherald@gmail.com
Subject: 2879-2 Weinreis Brothers
Attachments: 2879-2 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on August 1, 2024.

Weinreis Brothers, 12284 Horse Creek Loop, Edgemont SD 57735, 605-745-3261, has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol Ave, Pierre SD 57501.

Let me know if you have questions. **Please acknowledge receipt of this email.**

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, July 23, 2024 9:02 AM
To: RCY Legals
Subject: 2879-2 Weinreis Brothers
Attachments: 2879-2 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on August 1, 2024.

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Let me know if you have questions. **Please acknowledge receipt of this email.**

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



AFFIDAVIT OF PUBLICATION

Rachel Rodriguez
Department of Agriculture and Natural Resources
523 E Capitol Avenue
State of Pennsylvania, County of Lancaster, ss:

Hayden Lipsky, being first duly sworn, deposes and says: That (s)he is a duly authorized signatory of Column Software, PBC and duly authorized agent of The Rapid City Journal, a corporation of Rapid City, South Dakota, a legal and daily newspaper printed and published in Rapid City, in said County of Pennington, and has full and personal knowledge of all the facts herein stated as follows: that said newspaper is and at all of the times herein mentioned has been a legal and daily newspaper with a bonafide paid circulation of at least Two Hundred copies daily, and has been printed and published for at least one year prior to the first date of the published notice.

This affidavit is a true and corrected copy of notice which appeared in said newspaper on the following dates:

PUBLICATION DATES: August. 1 2024

NOTICE ID: DvZoXldmGtnfptp1O0WF
PUBLISHER ID: COL-SD-0635
NOTICE NAME: 2879-2 Weinreis Brothers
TOTAL AD COST: \$84.54
FILED ON: Jul. 23, 2024

(Signed) Hayden Lipsky

VERIFICATION

State of Pennsylvania
County of Lancaster

Commonwealth of Pennsylvania - Notary Seal
Nicole Burkholder, Notary Public
Lancaster County
My commission expires March 30, 2027
Commission Number 1342120

Subscribed in my presence and sworn to before me on this: 08/02/2024

Nicole Burkholder

Notary Public
Notarized remotely online using communication technology via Proof.

**NOTICE OF APPLICATION NO.
2879-2 to Appropriate Water**

Notice is given that Weinreis Brothers, 12284 Horse Creek Loop, Edgemont SD 57735 has filed an application for a water permit to appropriate 0.50 cubic feet of water per second from one existing well completed into the Madison Aquifer (approximately 3,640 feet deep) located in the SE 1/4 NE 1/4 Section 22 for irrigation of 75 acres located in the E 1/2 SE 1/4 Section 22, NE 1/4 NE 1/4 Section 27, all in T10S-R4E. Water may be diverted from the well directly to the area to be irrigated or to a livestock wastewater pond located in the W 1/2 NE 1/4 Section 27-T10S-R4E and then to the irrigated area. This site is located approximately 13 miles south-east of Edgemont SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2879-2 with a twenty-year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the

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(Published August 1, 2024 for a total approximate cost of \$84.54 and may be viewed for free at www.sd-publicnotices.com)
Legal No: COL-SD-0635

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of FALL RIVER) SS

I, SHERYL GRIMES

certify that the attached printed Notice was taken

from the FALL RIVER COUNTY
HERALD STAR

printed and published in HOT SPRINGS

County of FALL RIVER and

state of South Dakota. The notice was published

in the newspaper on the following date:

AUGUST 1, 2024

Cost of Printing \$54.00

Sheryl Grimes
(Signature)

PRODUCTION MANAGER
(Title)

8-1-24
(Date Signed)

RECEIVED

AUG 05 2024

OFFICE OF
WATER

Notice of Application

NO. 2879-2 to Appropriate Water

Notice is given that Weinreis Brothers, 12284 Horse Creek Loop, Edgemont SD 57735 has filed an application for a water permit to appropriate 0.50 cubic feet of water per second from one existing well completed into the Madison Aquifer (approximately 3,640 feet deep) located in the SE 1/4 NE 1/4 Section 22 for irrigation of 75 acres located in the E 1/2 SE 1/4 Section 22, NE 1/4 NE 1/4 Section 27; all in T10S-R4E. Water may be diverted from the well directly to the area to be irrigated or to a livestock wastewater pond located in the W 1/2 NE 1/4 Section 27-T10S-R4E and then to the irrigated area. This site is located approximately 13 miles southeast of Edgemont SD.

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Published once at the total approximate cost of \$54.02
and can be viewed free of charge at www.sdpublicnotices.com
Published: Aug. 1, 2024

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, July 23, 2024 9:55 AM
To: remelle.burton@eaengineers.com
Cc: garrett@cowtownusa.net
Subject: 2879-2 Weinreis Brothers - Public Notice
Attachments: 2879-2 Rec.pdf; 2879-2 Ltr.pdf; 2879-2 PubNotice.pdf; [EXT] Notice Order Confirmed

Good morning,

Attached is a copy of the report, chief engineer's recommendation, and information regarding the public notice for your water permit application. As stated in the letter, **please contact the paper(s) as soon as possible to authorize publication and arrange for payment.** Please note that the Rapid City Journal has an online portal, see attached email. If you click on the "View Notice" you can view and pay for the publication. This information is also being mailed to you today.

Let me know if you have questions. Please acknowledge receipt of this email.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

SEP 04 2024

Weinreis Brothers
c/o Garrett Weinreis
12284 Horse Creek Loop
Edgemont SD 57735

Dear Mr. Weinreis:

Enclosed is Water Permit No. 2879-2 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
Posting on DANR Website**

Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

Application No.: 2879-2

Name of Applicant: Weinreis Brothers

Date of Posting: 7/29/2024

Date of Removal: 9/4/2024

Ron Duvall, Engineer III

9/4/2024

Date

Subscribed and sworn to before me, a notary public, this 4th day of Sept., 2024.

Notary Public - South Dakota

My commission expires Rachel Rodriguez
My Commission Expires
May 16, 2029

(SEAL)



2879-2

RECEIVED

MAR 16 2026

OFFICE OF
WATERNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 3-12-2026TO: Water Rights Program, DANR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Weinreis Brothers

(name)

12284 Horse Creek Loop

(address)

Edgemont, SD 57735

(city, state, zip)

605-745 3261

(phone)

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

Water Permit No. 2879-2 states that the water use system is to be constructed byAugust 12, 2029
(date), and water is to be put to beneficial use by August 12, 2033
(date)The water use system was completed on May 10, 2025
(date)Applying the water to beneficial use was completed on June 1, 2025
(date)

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

Charles Weinreis
(signature)



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

March 16, 2026

2879-2

Weinreis Brothers
12284 Horse Creek Loop
Edgemont, SD 57735

Dear Weinreis Brothers:

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

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

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

Sincerely,

Shannon Konst
Water Rights Program
(605) 773-3352
email: Shannon.konst@state.sd.us