

WATER PERMIT NO. 2028-1

Name of Applicant: **Bear Butte Valley Water, Inc.**

Address: **PO Box 351, Sturgis SD 57785** Phone: **605-206-0703**

Amount of Water Claimed: **440 AF** Total Acres:

Source of Water Supply: **Madison Formation**

Water to be used for: **Rural Water System** County: **Meade**

Type of Waste Disposal System:

Location: **Approximately ²4 miles east of Sturgis**

PRIORITY Date Received: **3-23-2023** Application/License Fee: **\$95**

Corrected Application Received: Period of Annual Use: **Jan 1 – Dec 31**

Remarks: **future use area**

Diversion Point: **Sections 5,6,7,8 Sec 9 W 1/2**
Sections 16, 17, 18, 19, 20, 29, 30, 31, 32; T5N-
R6E; Sections 5, 6; T4N-R6E

Land to be Irrigated:

Depth of Well: **3,625**

Well Driller: **Weston Engineering**

Remarks:

Type of Map: **aerial**

6	5				
7	8	9			
18	17	16			
19	20				
30	29				
31	32				
4	5				

Reviewed and the Number Assigned on: **3-24-2023**

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
FUTURE USE PERMIT NO. 2028-1**

Date of first receipt of application March 23, 2023.

The Chief Engineer, on behalf of the Water Management Board, issues Future Use Permit No. 2028-1 to Bear Butte Valley Water, Inc., c/o Bruce Weyrich, PO Box 351, Sturgis SD 57785 subject to the following limitations, conditions and qualifications:

1. Future Use Permit No. 2028-1 reserves for future use 440-acre feet of water from the Madison aquifer for a rural water system and water distribution system use. The future use area will include Sections 5, 6, 7, 8, W 1/2 Section 9, W 1/2 Section 16 and Sections 17, 18, 19, 20, 29, 30, 31, 32; all in T5N-R6E; Sections 5 and 6; both in T4N-R6E. This site is located approximately 3 miles east of Sturgis SD.
2. The water appropriated shall be used for the purpose of water distribution use and may not exceed the amount of water needed for beneficial use.
3. The water is reserved for use during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 2028-1 is June 20, 2023.
5. The date from which applicant may claim right is March 23, 2023.
6. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. Future Use Permit No. 2028-1 reserves 440 acre-feet of water annually from the Madison aquifer.
2. Future Use Permit No. 2028-1 is approved with the stipulation that this Permit is subject to review by the Water Management Board as to accomplishment in developing reserved water upon expiration of seven (7) years. This Permit shall be subject to cancellation if the Water Management Board determines during the review that the holder cannot demonstrate a reasonable need for the Permit.
3. At such time as definite plans are made to construct works and put the water reserved by this permit to beneficial use, specific application for all or any part of the reserved water must be submitted prior to construction of facilities pursuant to SDCL 46-5-38.1.

WATER MANAGEMENT BOARD

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

JUL 11 2023
date



MAR 23 2023

FORM 2: Application for uses other than irrigation
(type or print)OFFICE OF
WATER

PAID

MAR 23 2023

Ck# 033296

Rec't#

Mail to:

DENR - Water Rights
523 E Capitol Ave
Pierre, SD 57501-3182
ph. (605) 773-3352

No. 2028-1 (office use only) Hydrologic Unit 10120202
 Basin Belle Fourche
 Newspaper Faith Independent 967-2161
Black Hills Pioneer 642-2761

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

Check use(s) of water:

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

Type of Application:
(check one)

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

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

In anticipation of system growth, applying to reserve for future use an additional an additional 440 acre-feet (880 acre-feet total annual appropriation).

- Name to Appear on Water Permit Bear Butte Valley Water, Inc.
 Mailing Address P.O. Box 351 Sturgis SD 57785
(Address) (City) (State) (Zip Code)
 Phone 605-206-0703 Mobile _____ Email dennisk.bbvwater@gmail.com
- Amount of water claimed _____ *CFS or _____ **GPM and 440 (future) ***AF or _____ Gallons
Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use)
- Source of water supply Madison Formation Aquifer (groundwater)
- Location of point of diversion New well(s) at sites TBD, south of existing wells (Sec 5-T5N-R6E) in Meade
the area identified on the attached DRAWING 1.
 If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☐ No
 If "Yes," where will water be used? future use area: see attached list
(example - NW1/4 section 12-T104N-R53W)
- County or counties where water will be used Meade
- Annual period during which water is to be used January 1 - December 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

BBVW is an active and growing rural water system. This application seeks to increase water rights (future use reservation) in response to increased demand trends in and around the existing BBVW service territory, and to allow for anticipated system expansion. See attached water rights memo for demand projections.

New well(s) would be built in the vicinity of Fort Meade Way, to the south of the existing BBVW well field and to the north of Pleasant Valley Road. Specific well site(s) within the corridor are TBD and are dependent upon aquifer characteristics and the availability of land and the proximity to existing infrastructure. See attached map (DRAWING 1) for existing well locations and proposed project corridor for new well(s). See attached map (DRAWING 2) for townships currently served by the BBVW system.

I, B. Weyant President, 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 n/a Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many 2 Provide copy of log(s), if available. Drilled by #1 - Weston Engineering - 2015 (log attached)
#2 - Water Systems Drilling Inc - 2023
(under construction)

For either Existing or Proposed Wells:

c) Well Depth (required) 3625' Depth to Top of Water Bearing Material 3080' Depth to Water from Surface 200'

d) Distance to nearest domestic well on applicant's property 1000' Property owned by others 2000'

2. Wastewater Disposal System Information

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

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions _____ Depth _____

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

4. Water Storage Dams

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

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

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

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

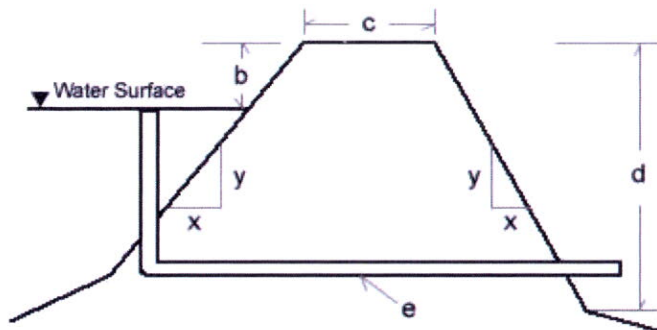
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

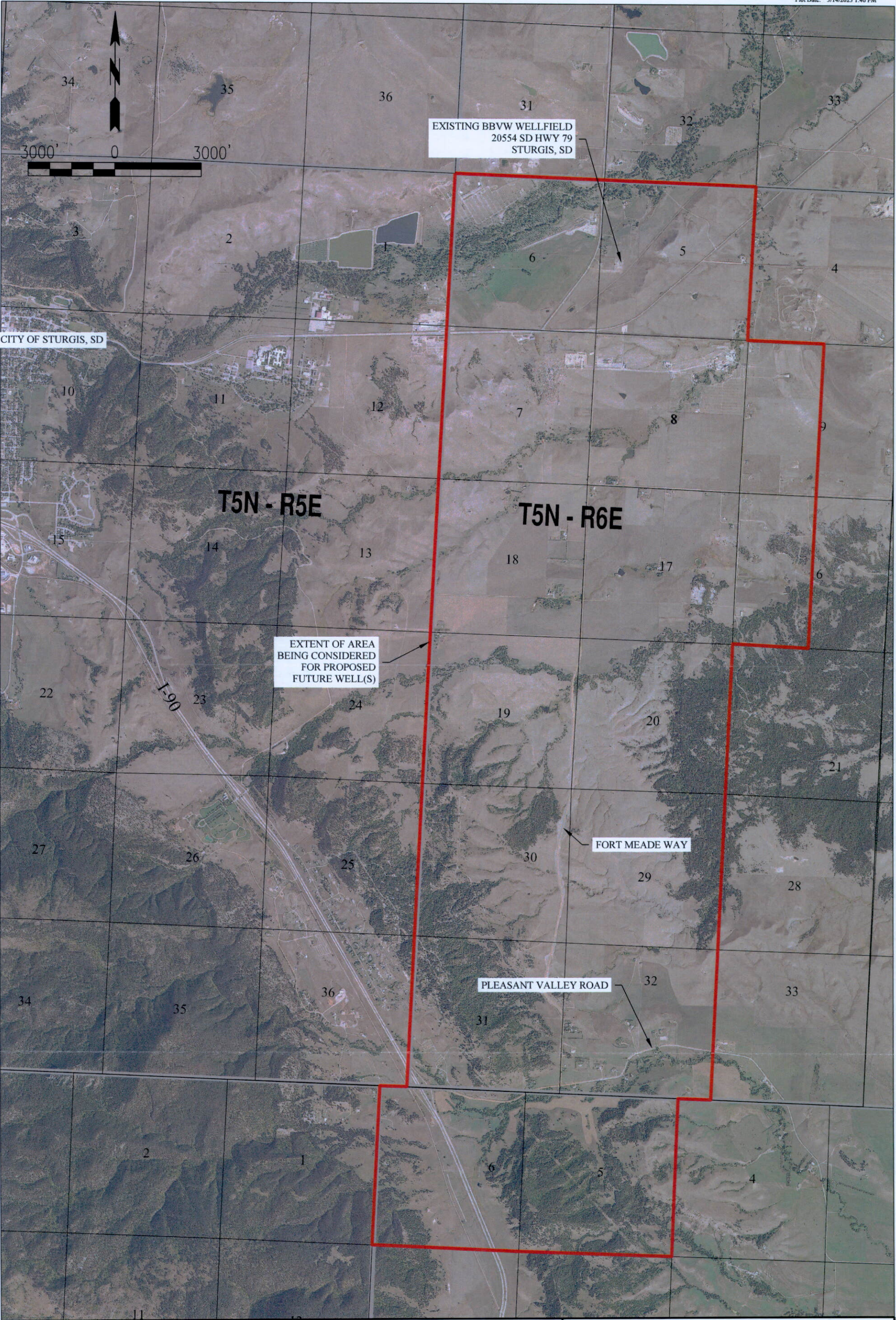
i) Storage _____ Acre Feet

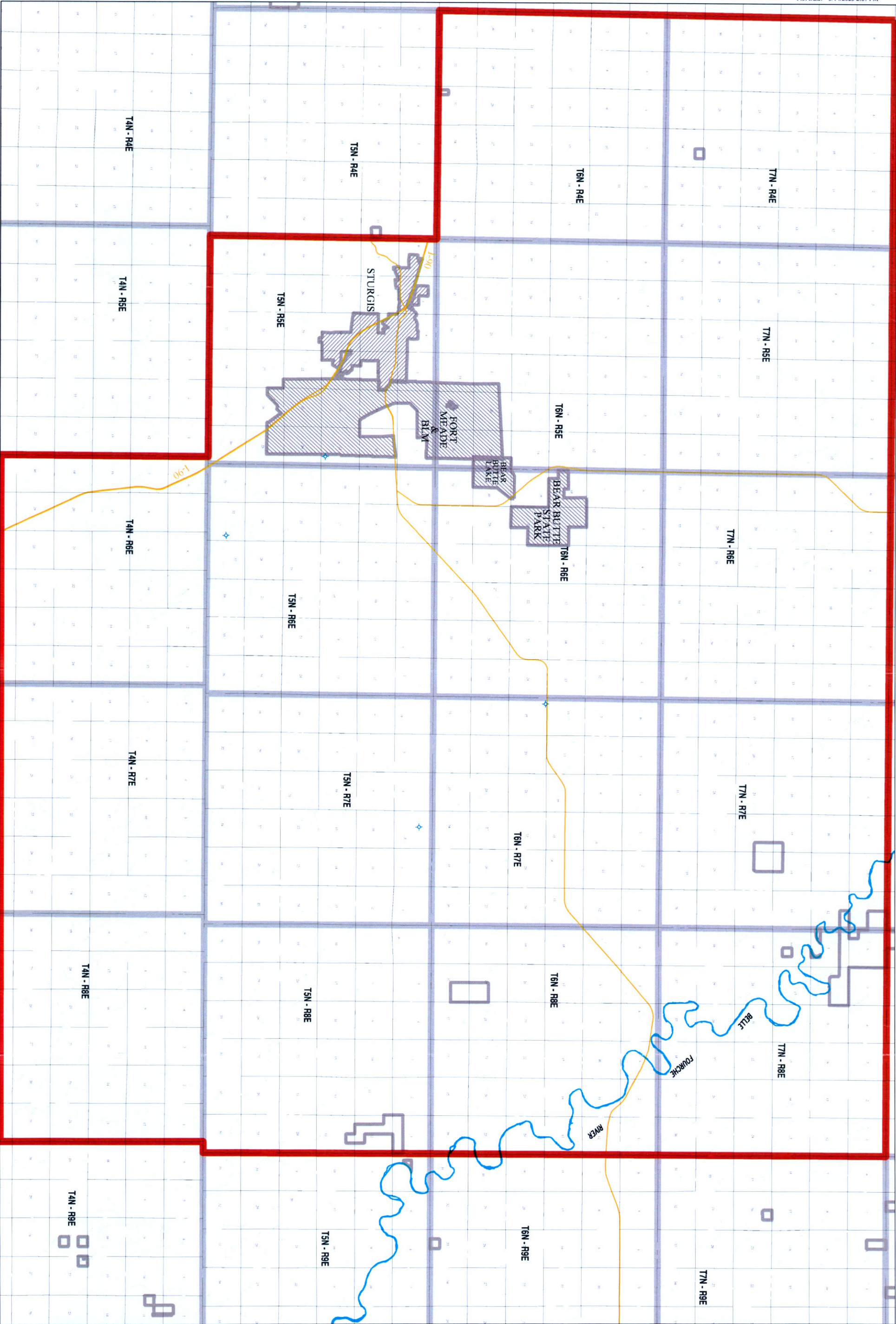
j) Drainage Area Above Dam _____ Acres



Area of future use as outlined on the map submitted with the applications includes:

Sections 5, 6, 7, 8, W 1/2 Section 9, W 1/2 Section 16, 17, 18, 19, 20, 29, 30, 31, 32; T5N-R6E; Sections 5 & 6; T4N-R6E





11-02

Date: 1-29-15

Preliminary Fee Calculation

March 2023 Water Rights Application (Future Use)

Bear Butte Valley Water, Inc.

Additional Appropriation: 440 ac-ft

	1st	120 ac-ft @	\$	500 =	\$	500.00	
	2nd	120 ac-ft @	\$	250 =	\$	250.00	
Each additional	(2) x	120 ac-ft @	\$	100 =	\$	200.00	
					\$	950.00	Equivalent Fee
					x	10%	
					\$	<u>95.00</u>	Future Use Fee

Memo



TO: Bear Butte Valley Water, Inc.

FROM: Mitch Vogt, EI

DATE: March 16, 2023

RE: Summary and Recommendations for Water Rights (Future Use)

Existing Permits

Table 1: Summary of the BBVW's beneficial water right permits.

Permit No.	Approval	Additional Diversion Rate	Additional Annual Appropriation
1928-1	2012	0.51 cfs*	-
1997-1	2020	0.89 cfs	200 ac-ft
2020-1	2022	1.40 cfs	240 ac-ft
TOTAL Existing		2.80 cfs = 1,257 gpm = 1.508 MGD (20-hr production day)	440 ac-ft = 143,374,440 gal = 392,807 GPD (annual average)**

* Originally permitted @ 1.00 cfs, modified to 0.51 cfs due to error during licensing.

** Existing total Annual Appropriation $\approx$ 26% of existing Diversion Rate.

Permit No.	Additional Diversion Rate	Additional Annual Appropriation
Existing Permits	2.80 cfs	440 ac-ft
This Application (Future Use)		440 ac-ft
GRAND TOTAL	2.80 cfs = 1,257 gpm = 1.508 MGD (20-hr production day)	880 ac-ft = 286,748,880 gal = 785,613 GPD (annual average)***

*** Proposed total Annual Appropriation $\approx$ 52% of existing Diversion Rate (2.80 cfs). 40% target could be achieved by increasing Diversion Rate to 3.80 cfs.

Growth

A growth rate for the system was estimated by analyzing trends in user additions, water production, and consumption records from 2017 to 2022 (see Figures 1–3). The system experienced growth of approximately 10.3 new connections per year for an annual growth of approximately 4%. However, usage trends have increased much faster with average day demands growing in excess of 14% per year.

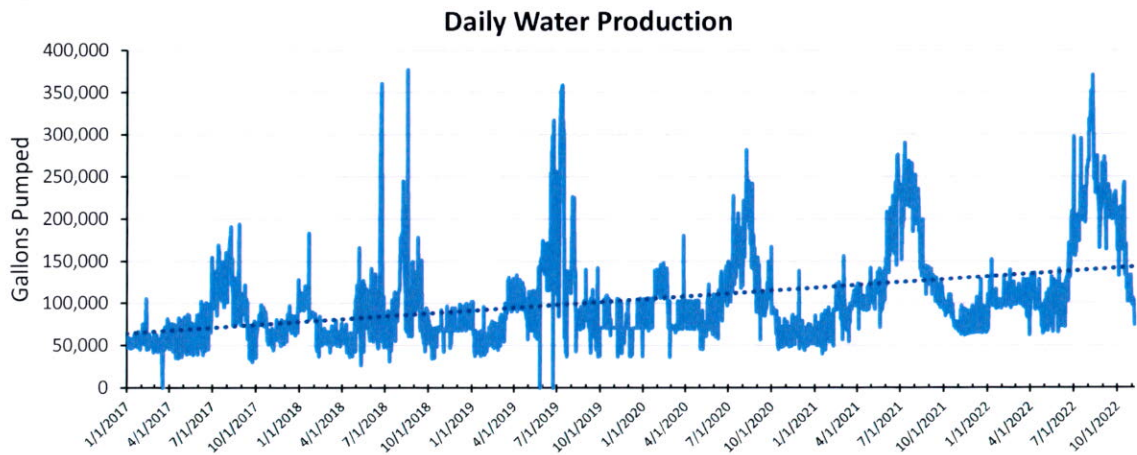


Figure 1: BBVW Historic Daily Raw Water Production, with Trend.

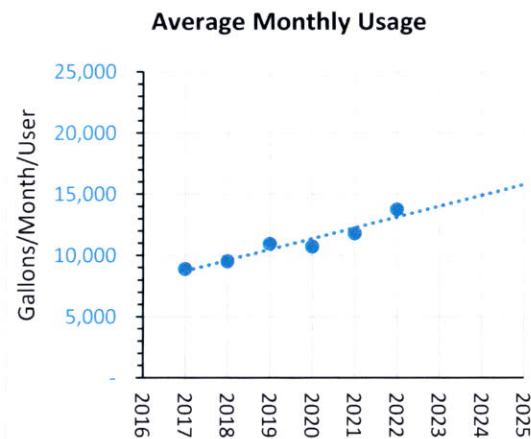


Figure 2: BBVW Historic Average Monthly Usage per Connection, with Trend.

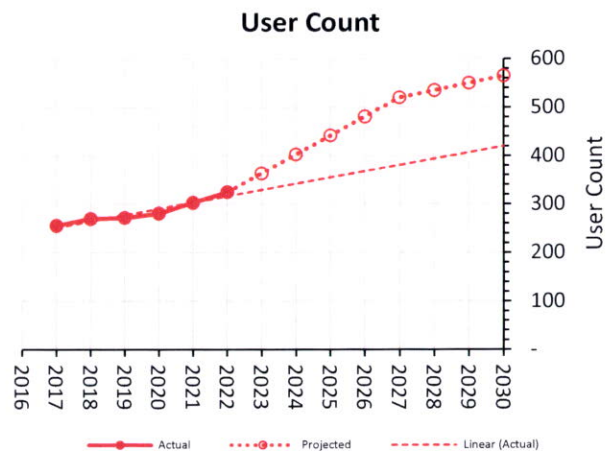


Figure 3: BBVW Historic and Projected User Counts

Over the past 2 years, BBVW has received approximately 20–30 individual new user requests per year. Furthermore, the System also has projects under design or construction that will add an additional 120–140 additional customers over the next 3–5 years. As shown in Figure 3, the number of customers served by BBVW is therefore projected to increase from 325 users today, to between 475–525 in the immediate 3–5 years. All trends considered, a tempered composite growth rate of 7% was chosen to conservatively project the average and peak demands for the next 20 years.

As shown in Figure 1, peak months for the system generally occur in the summer months between June and September. Peak usage is highly dependent on local rainfall and the effect is has on availability of water at stock dams, and large population flux due to tourism events such as the Sturgis Rally. Peaking factors were calculated for actual years by dividing peak day demand by average day demand within the respective year:

2017	2.55
2018	4.40
2019	3.61
2020	2.80
2021	2.44
2022	2.49

A 6-year average peaking factor of 3.05 was selected to conservatively project future peak demands. 23 of the 120–140 new customers referenced above will be served by the Alkali Road project, scheduled for 2023/24 construction. These 23 users are estimated to have a 125,000 gpd peak demand, based on the type and number of taps and demand requirements of livestock. The solid blue line in Figure 6 shows the projected peak day demand including the new Alkali Road users' daily demand.

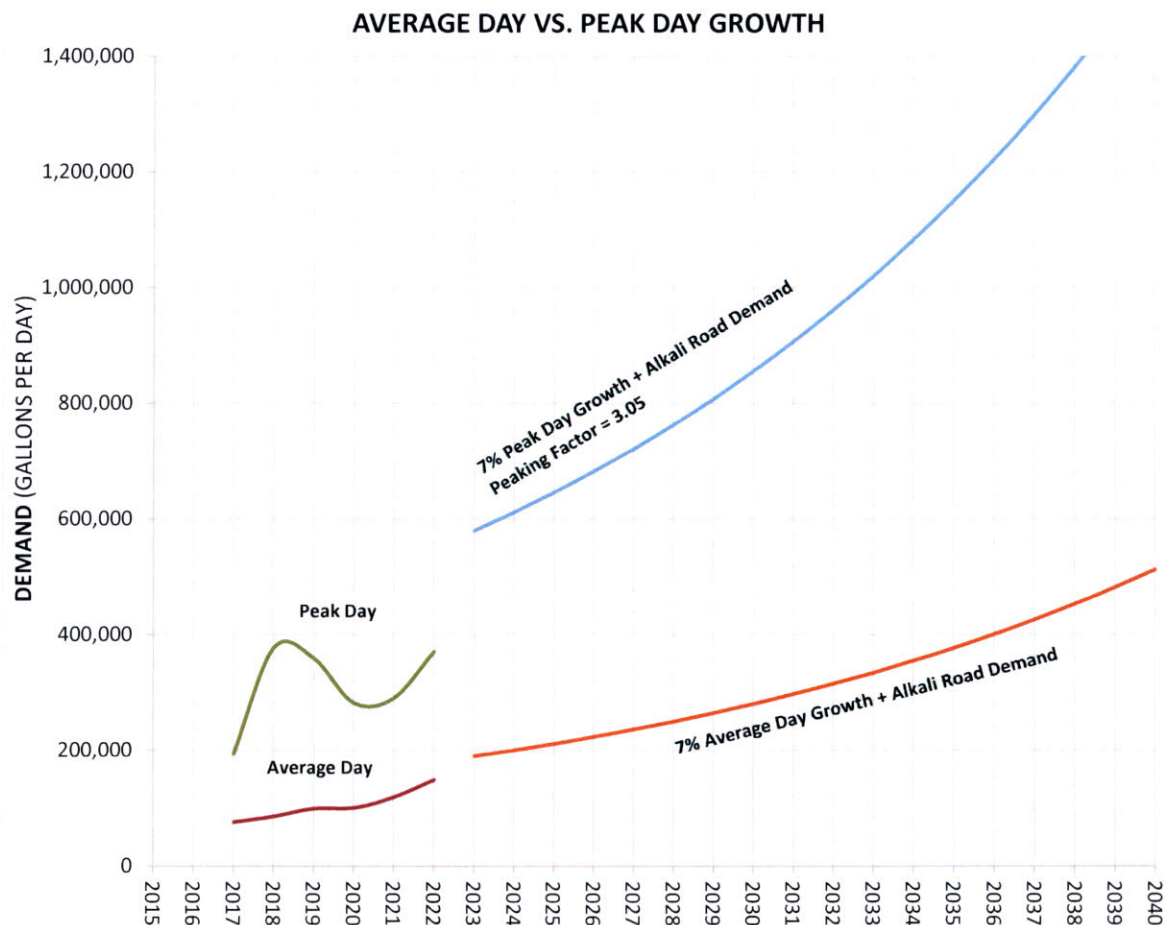


Figure 4: Projected Average Day Demand and Peak Day Demand of Growth of BBVW.

Recommendations:

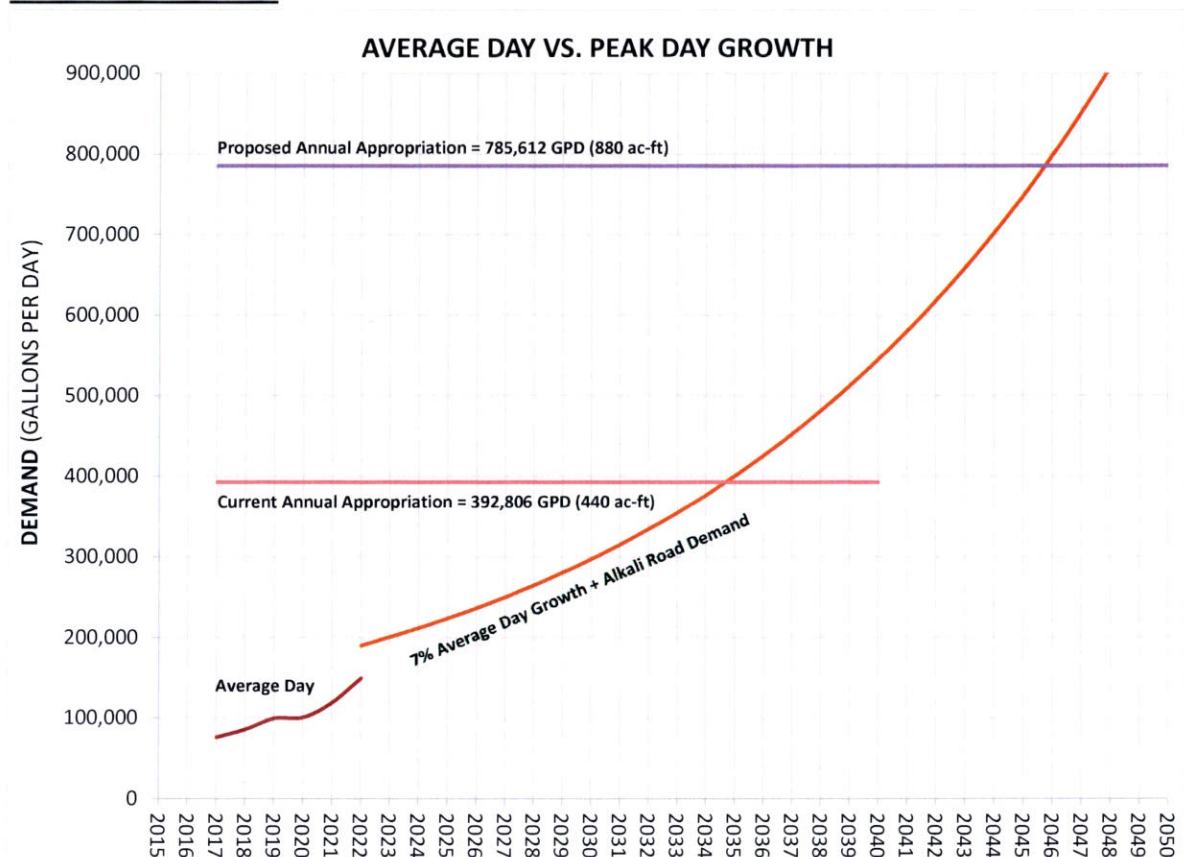


Figure 5: Projected average daily growth of Alkali Road Expansion and the annual appropriation of BBVW.

The present annual appropriation was increased from 200 ac-ft to 440 ac-ft in 2022 via approval of Permit No. 2020-1, allowing BBVW to accommodate short-term growth associated with the Alkali Road Expansion Project. However, at the new annual appropriation of 440 ac-ft, the daily average growth is projected to exceed current limits between 2030 and 2035. By reserving the right to increase the annual appropriation, BBVW can accommodate the growth both from added connections and increased demand, while also planning for future system expansion.

Recommendation:

- 1.) DGR recommends reserving for future use (this application) an additional annual appropriation of 440 ac-ft to meet the needs of current and projected users. At 7% forecasted annual growth, a total annual appropriation of 880 ac-ft would be adequate to provide for 20 to 30 years of projected growth in water demands at current growth rates.

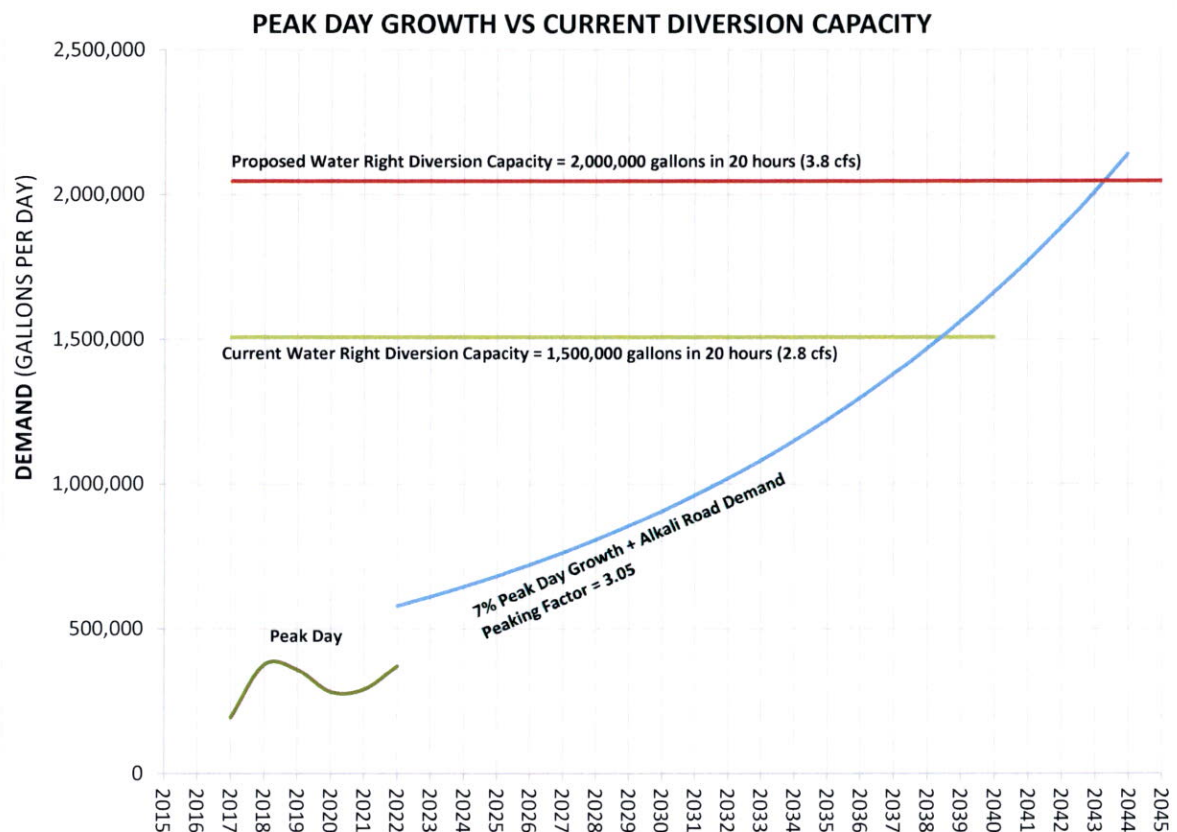


Figure 6: Projected peak day growth and the current diversion capacity for BBVW.

The current water right diversion capacity in place for the Bear Butte Valley Water, Inc allows for withdrawals of approximately 1,500,000 gallons per day if the well pump is operated for 20-hours. The present diversion capacity was increased from 750,000 gallons per day in 2022 via approval of Permit No. 2020-1. However, the projected peak day growth will likely still exceed current diversion capacity limits in approximately 15 years.

Recommendation:

- 2.) DGR recommends planning for additional wells to meet projected demands by adding 1.00 cfs in future diversion capacity, as needed. At 7% forecasted annual growth, a total of 3.80 cfs in diversion capacity would be adequate until approximately 2043. 3.80 cfs approximates a 40% Appropriation/Diversion Rate ratio.

DGR Engineering

By 
Mitch Vogt, EI

Bear Butte Valley Water Well

Lithologic Log

Depth (feet)		Geologic Unit	Principal Lithology	Description (listed in order of decreasing abundance; cuttings logged wet)	Comments
From	To				
0	70	Belle Fourche Shale		No sample	
70	100		Shale	Olive-black firm, calcareous shale	
100	130		Shale	Olive-black firm, calcareous shale	
130	154		Shale	Olive-black firm, moderately calcareous shale	
154	183		Shale	Olive-black firm, moderately calcareous shale	
183	213		Shale	Olive-black firm shale	
213	245		Shale	Olive-black soft shale	
245	276		Shale	Olive-black firm, weakly calcareous shale	
276	307		Shale	Olive-black hard, weakly calcareous shale	
307	338		Shale	Olive-black and olive-gray soft shale	
338	369		Shale	Sample missing	
369	400		Shale	Olive-black soft, fissile shale	
400	437		Shale	Olive-black soft, fissile shale	
437	463		Shale	Olive-black soft, fissile shale	
463	494		Shale	Olive-black soft, fissile shale	
494	526		Shale	Olive-black soft, fissile shale	
526	557		Shale	Olive-black soft, fissile shale	
557	587		Shale	Olive-black soft fissile shale; brown-gray soft, fissile shale	
587	620		Shale	Olive-black soft fissile shale; brown-gray soft, fissile shale	
620	651		Shale	Olive black firm shale; light olive-gray soft shale	
651	681		Shale	Olive black firm, splintery shale; light olive-gray soft shale	
681	713	Mowry Shale	Shale	Olive black firm shale; light olive-gray soft shale	
713	744		Shale	Olive-black soft, fissile shale	
744	773		Shale	Olive-black and minor brown-gray soft, fissile shale	
773	805		Shale	Olive-black soft shale	

Depth (feet)		Geologic Unit	Principal Lithology	Description (listed in order of decreasing abundance; cuttings logged wet)	Comments
From	To				
805	836	Mowry Shale	Shale	Olive-black firm shale	
836	868		Shale	Olive-black fissile shale	
868	890	Skull Creek Shale	Shale	Olive-black fissile shale; minor yellow-brown fissile shale	
890	900		Shale	Olive-black to olive-gray fissile shale	
900	915		Shale	Olive-black to olive-gray splintery, fissile shale	
915	930		Shale	Olive-black firm shale	
930	961		Shale	Olive-black hard shale	
961	976		Shale	Olive-black to olive-gray weakly calcareous, splintery shale	
976	993		Shale	Olive-black to olive-gray weakly calcareous, splintery shale	
993	1025	Fall River Formation	Shale and Sandstone	Olive-black to olive-gray weakly calcareous, splintery shale; light olive-gray very fine-grain, weakly cemented, silty sandstone	
1025	1055		Shale and Sandstone	Olive-black to olive-gray weakly calcareous, splintery shale; light olive-gray fine-grain, bedded, calcite cemented, subangular, subrounded sandstone	
1055	1086		Shale and Siltstone	Black splintery shale; light olive-gray bedded siltstone; light olive-gray fine-grain, bedded, calcite cemented, subangular, subrounded sandstone	
1086	1118		Shale	Black splintery shale; light gray weakly cemented, fine-grain, silty sandstone and sandy siltstone; moderate red-brown shale; rare light gray medium-grain, friable, rounded, quartz sandstone	
1118	1149	Lakota Formation	Siltstone and Shale	Pale yellow-gray soft, bedded siltstone; black splintery shale; rare moderate red-brown shale	
1149	1181		Siltstone and Shale	Pale yellow weakly calcareous, soft bedded siltstone; black fissil shale; pale olive-gray mudstone; rare moderate red-brown shale	
1181	1212		Shale and Siltstone	Black splintery fissile shale; yellow-gray finely bedded, soft siltstone; black carbonaceous shale	
1212	1243		Shale and Mudstone	Black splintery, fissile shale; yellow-gray to brown-gray soft mudstone	
1243	1274		Shale and Sandstone	Gray-black to black splintery, fissile shale; yellow-gray medium-grain (rounded quartz) to very fine-grain, bedded, hard, porous sandstone; minor light brown-gray well indurated siltstone; rare moderate red-brown shale	

Depth (feet)		Geologic Unit	Principal Lithology	Description (listed in order of decreasing abundance; cuttings logged wet)	Comments
From	To				
1274	1304	Lakota Formation	Shale and Sandstone	Brown-black to black to medium light gray shale; yellow-gray fine-grain, rounded, calcite cemented, bedded, quartz sandstone	
1304	1320	Morrison Formation	Shale	Olive-gray, brown-gray, and black calcareous, splintery shale	
1320	1336		Shale	Olive-gray, brown-gray, and black calcareous, splintery shale; white calcite	
1336	1367		Siltstone	Green-gray soft siltstone with very fine-grain sand	
1367	1398		Limestone and Siltstone	Yellow-gray finely bedded, finely crystalline limestone; green-gray bedded siltstone with very fine-grain sand	
1398	1430		Mudstone and Limestone	Moderate red-brown mudstone; olive-gray soft shale; yellow-gray finely bedded, finely crystalline limestone	
1430	1461		Mudstone	Green-gray moderately indurated, calcareous mudstone	
1461	1493		Mudstone	Green-gray moderately indurated, calcareous mudstone; minor moderate red-brown mudstone	
1493	1524		Mudstone	Green-gray moderately indurated, calcareous mudstone	
1524	1556		Siltstone	Olive-gray soft, finely bedded, calcareous siltstone; minor white calcite	
1556	1618		Siltstone	Olive-gray soft, finely bedded, calcareous siltstone; minor white calcite	
1618	1648		Siltstone	Olive-gray soft, finely bedded, calcareous siltstone; light olive-gray soft shale; minor white calcite	
1648	1679		Shale	Olive-gray to dark green-gray splintery, fissile, calcareous shale; rare white calcite; rare moderate red-brown shale	
1679	1710	Sundance Formation	Shale and Sandstone	Olive-gray to dark green-gray splintery, calcareous shale; medium light gray fine-grain, well cemented (calcite), rounded, quartz sandstone; rare moderate red-brown shale	
1710	1742		Sandstone and Shale	Light olive-gray fine-grain, glauconitic, subangular, calcite cemented, bedded, silty sandstone; black splintery shale; light brown soft mudstone	
1742	1774		Shale	Dark green-gray fissile, calcareous shale; moderate red-brown soft mudstone	

Depth (feet)		Geologic Unit	Principal Lithology	Description (listed in order of decreasing abundance; cuttings logged wet)	Comments
From	To				
1774	1805	Sundance Formation	Sandstone	Light olive-gray and moderate red-brown, very fine-grained, finely bedded, friable sandstone; white to pink-gray gypsum; dark green-gray fissile, calcareous shale	
1805	1836		Sandstone	Light green-gray fine-grain, glauconitic, calcite cemented, bedded, rounded, quartz sandstone; dark green-gray calcareous, splintery shale; rare light orange gypsum	
1836	1867		Shale	Dark green-gray fissile shale; green-gray calcareous, soft silty shale; rare moderate red-brown shale	
1867	1900		Shale	Light olive-gray fissile, calcareous shale; dark olive-gray splintery shale; red-brown-gray soft fissile shale; minor moderate red-brown shale	
1900	1930		Shale	Light olive-gray fissile, calcareous shale; dark olive-gray splintery shale; red-brown-gray soft fissile shale; white to yellow-gray anhydrite; minor gray-green soft shale; minor moderate red-brown shale	
1930	1961		Shale and Sandstone	Light olive-gray fissile, calcareous shale; dark olive-gray splintery shale; minor gray-green soft shale; light red-brown fine to very fine-grain, bedded sandstone; yellow-gray to white calcite	
1961	1992		Shale and Siltstone	Light olive-gray fissile, calcareous shale; dark olive-gray splintery shale; minor gray-green soft shale; light red-brown bedded siltstone with very fine-grain sand; yellow-gray to white calcite	
1992	2024		Sandstone	Moderate red-brown with minor pale red fine-grain, bedded, friable, silty sandstone; olive-gray soft, fissile shale	
2024	2054	Spearfish Formation	Siltstone	Moderate red-brown, bedded, friable, sandy siltstone; rare pink-gray medium-grain, calcite cemented, rounded, quartz sandstone	Green-gray shale is present in all samples to a depth of 3,100 feet and is not included in sample description below.
2054	2086		Siltstone	Moderate red-brown, bedded, friable, sandy siltstone	
2086	2117		Siltstone	Moderate red-brown, bedded, friable, sandy siltstone with parting and veins of white anhydrite	
2117	2149		Siltstone	Moderate red-brown bedded, calcareous, sandy siltstone with partings of white anhydrite	
2149	2180		Shale	Moderate red-brown calcareous, soft shale with partings and veins of white anhydrite	
2180	2211		Shale	Moderate red-brown calcareous, soft shale with partings and veins of white anhydrite	

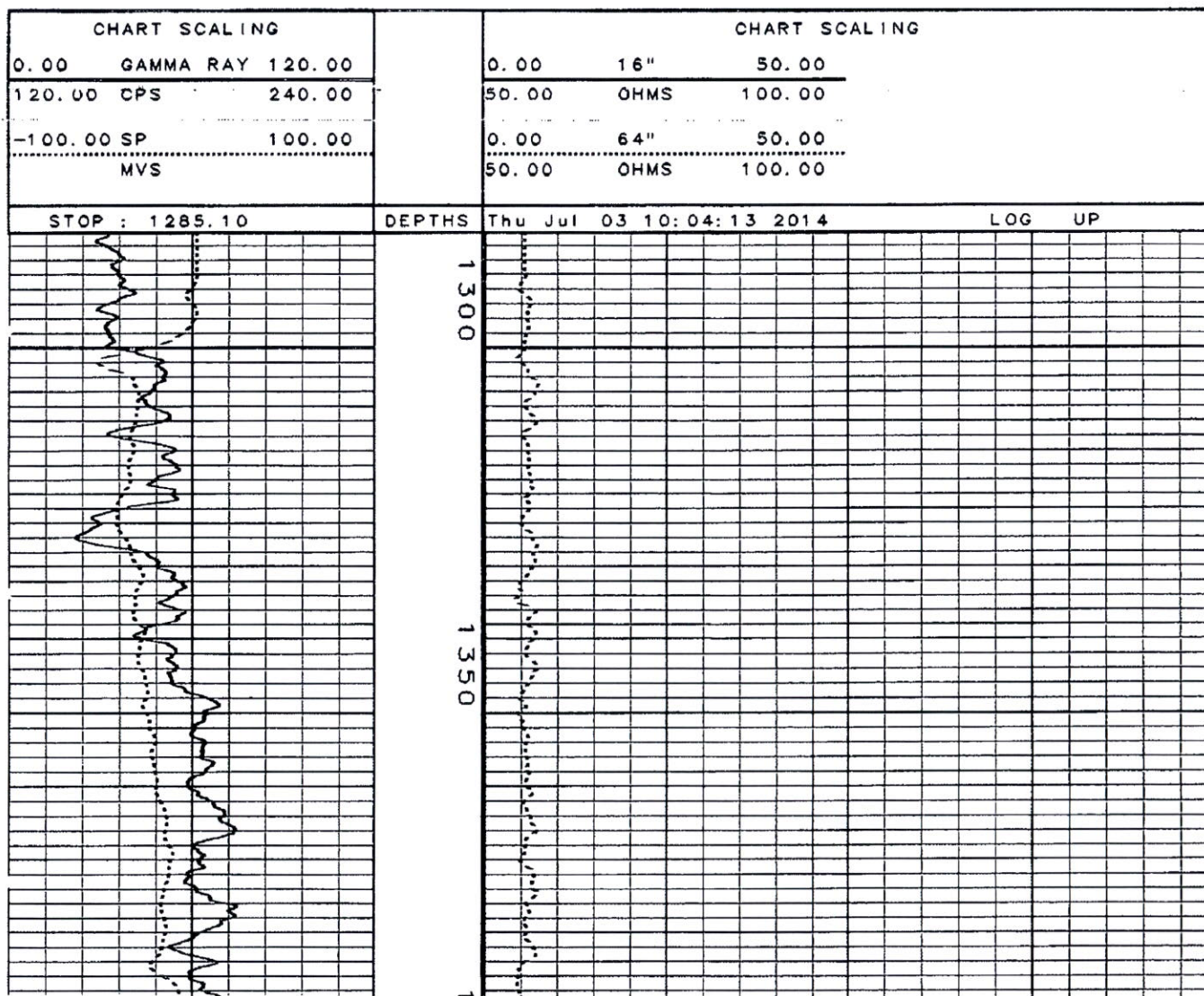
Depth (feet)		Geologic Unit	Principal Lithology	Description (listed in order of decreasing abundance; cuttings logged wet)	Comments
From	To				
2211	2243	Spearfish Formation	Shale	Moderate red-brown calcareous, soft shale with partings and veins of white anhydrite	
2243	2274		Shale	Moderate red-brown calcareous, soft shale with partings and veins of white anhydrite	
2274	2306		Shale	Moderate red-brown calcareous, soft shale with minor white anhydrite	
2306	2337		Shale	Moderate red-brown calcareous, soft shale with minor white selenite	
2337	2369		Shale	Moderate red-brown calcareous, soft shale with minor white selenite	
2369	2400		Shale	Moderate red-brown calcareous, soft shale with minor white selenite	
2400	2431	Minnehata Limestone	Limestone	Pale yellow-brown finely crystalline, bedded limestone; moderate red-brown calcareous, soft shale	
2431	2463	Opeche Shale	Shale and Limestone	Moderate red-brown, brittle, calcareous shale; pale yellow-brown finely crystalline, bedded limestone	
2463	2494		Shale and Limestone	Moderate red-brown soft, fissile shale; yellow-brown limestone; pale yellow-gray crystalline, bedded limestone	
2494	2526		Shale and Limestone	Moderate red-brown soft, fissile shale; yellow-brown limestone; pale yellow-gray crystalline, bedded limestone	
2526	2557		Shale and Limestone	Moderate red-brown soft, fissile shale; yellow-brown limestone; pale yellow-gray crystalline, bedded limestone	
2557	2589	Minnelusa Formation	Limestone and Shale	Pink-gray finely crystalline limestone; moderate red-brown soft, fissile shale; white anhydrite	
2589	2619		Dolomite	Pink-gray finely crystalline dolomite	Moderate red-brown shale persists in all samples to a depth of 3,100 feet and is not included in sample descriptions below.
2619	2650		Dolomite	Pale red finely crystalline dolomite	
2650	2712			Samples missing	
2712	2744		Limestone	Pale red and pink-gray crystalline limestone; white calcite	
2744	2775		Limestone	Pale red and pink-gray crystalline limestone; white calcite	

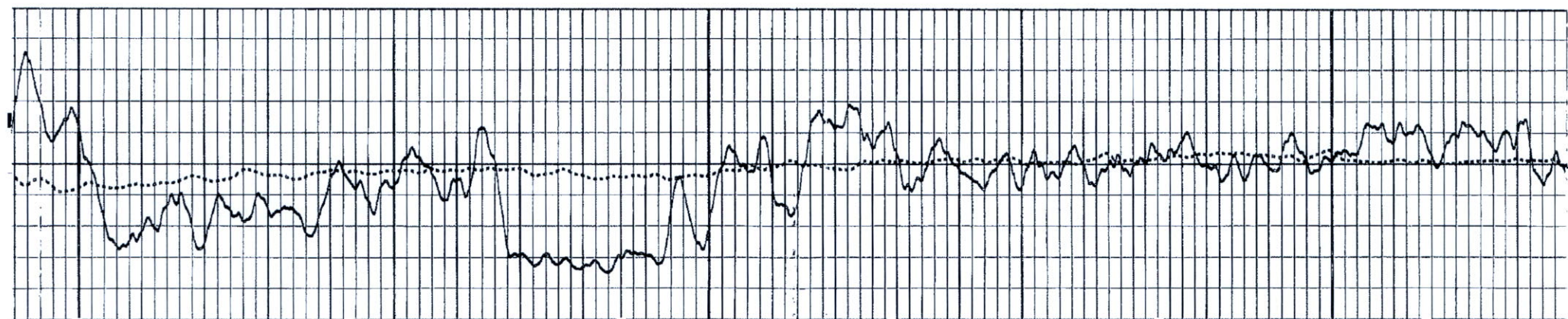
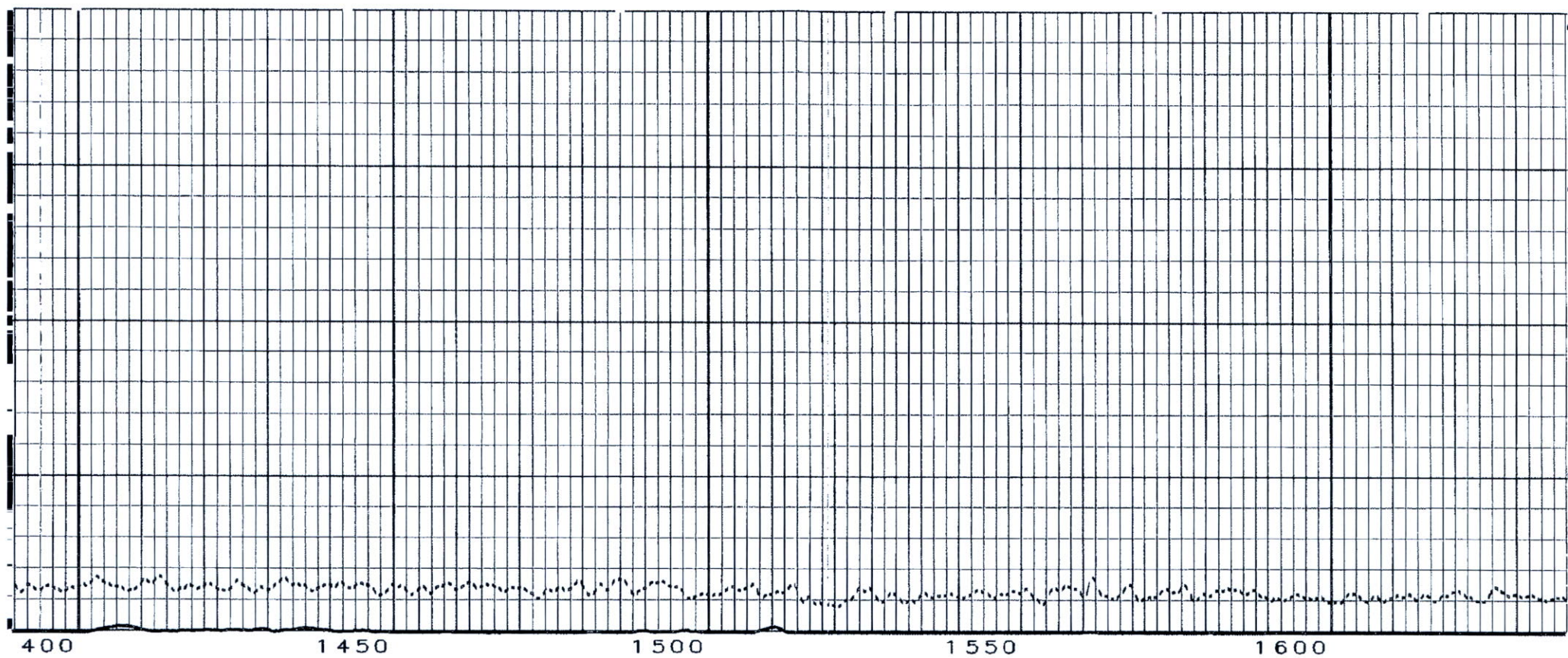
Depth (feet)		Geologic Unit	Principal Lithology	Description (listed in order of decreasing abundance; cuttings logged wet)	Comments
From	To				
2775	2800	Minnelusa Formation	Limestone	Pink-gray crystalline limestone; white selenite veins	
2800	2810		Limestone	Pale red and pink-gray crystalline limestone; white calcite	
2810	2820		Dolomite and Limestone	Pale red bedded, finely crystalline to granular dolomite; pink-gray finely crystalline limestone	
2820	2830		Dolomite and Limestone	Pale red bedded, finely crystalline to granular dolomite; pink-gray finely crystalline limestone; moderate brown soft calcareous shale	
2830	2840		Dolomite and Limestone	Pale red bedded, finely crystalline to granular dolomite; pink-gray finely crystalline limestone; moderate brown soft calcareous shale	
2840	2850		Dolomite and Limestone	Pale red shaley dolomite; pink-gray finely bedded, finely crystalline limestone	
2850	2860		Limestone	Pink-gray finely bedded, finely crystalline limestone	
2860	2870		Dolomite	Pink-gray bedded, granular dolomite	
2870	2880		Dolomite	Yellow-gray, bedded, cryptocrystalline dolomite	
2880	2890		Sandstone	Light red-orange fine-grain, well cemented, rounded, frosted quartz sandstone	
2890	2900		Dolomite	Pale red finely bedded dolomite; yellow-gray cryptocrystalline massive dolomite	
2900	2910		Dolomite	Pink-gray, finely bedded, granular dolomite	
2910	2920		Sandstone	Yellow-gray, very fine to fine-grain, calcite cemented, finely bedded, subrounded, quartz sandstone	
2920	2930			Sample missing	
2930	2940		Dolomite	Pale red finely bedded, finely crystalline dolomite	
2940	2950		Dolomite	Pink-gray finely bedded, finely crystalline dolomite	
2950	2960		Dolomite	Pale red finely bedded, granular dolomite; yellow-gray granular dolomite	
2960	2970		Sandstone and Dolomite	Pale red very fine-grain, angular, calcite cemented, bedded sandstone; yellow-gray finely bedded dolomite	
2970	2980		Dolomite	Yellow-gray finely bedded, crystalline dolomite; granular pale yellow-gray calcite	
2980	2990		Dolomite	Yellow-gray very finely bedded, finely granular dolomite	

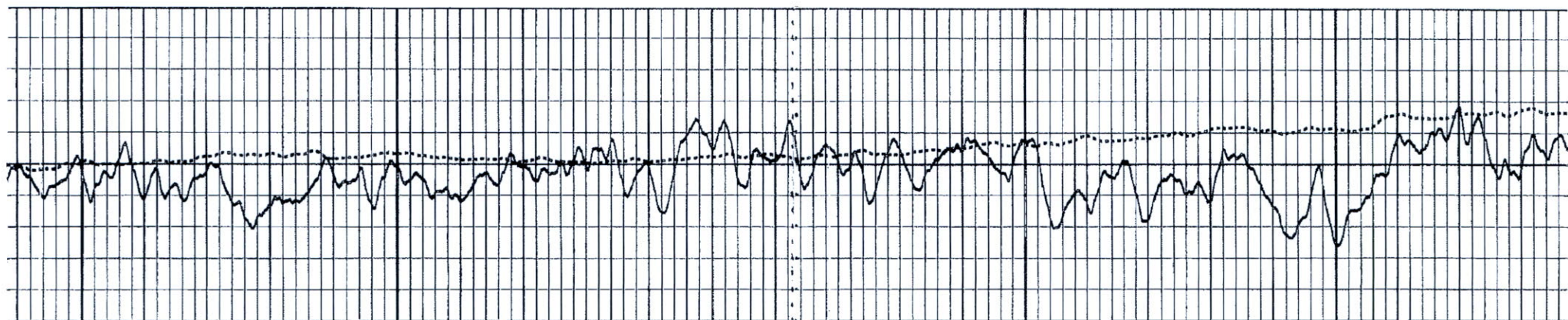
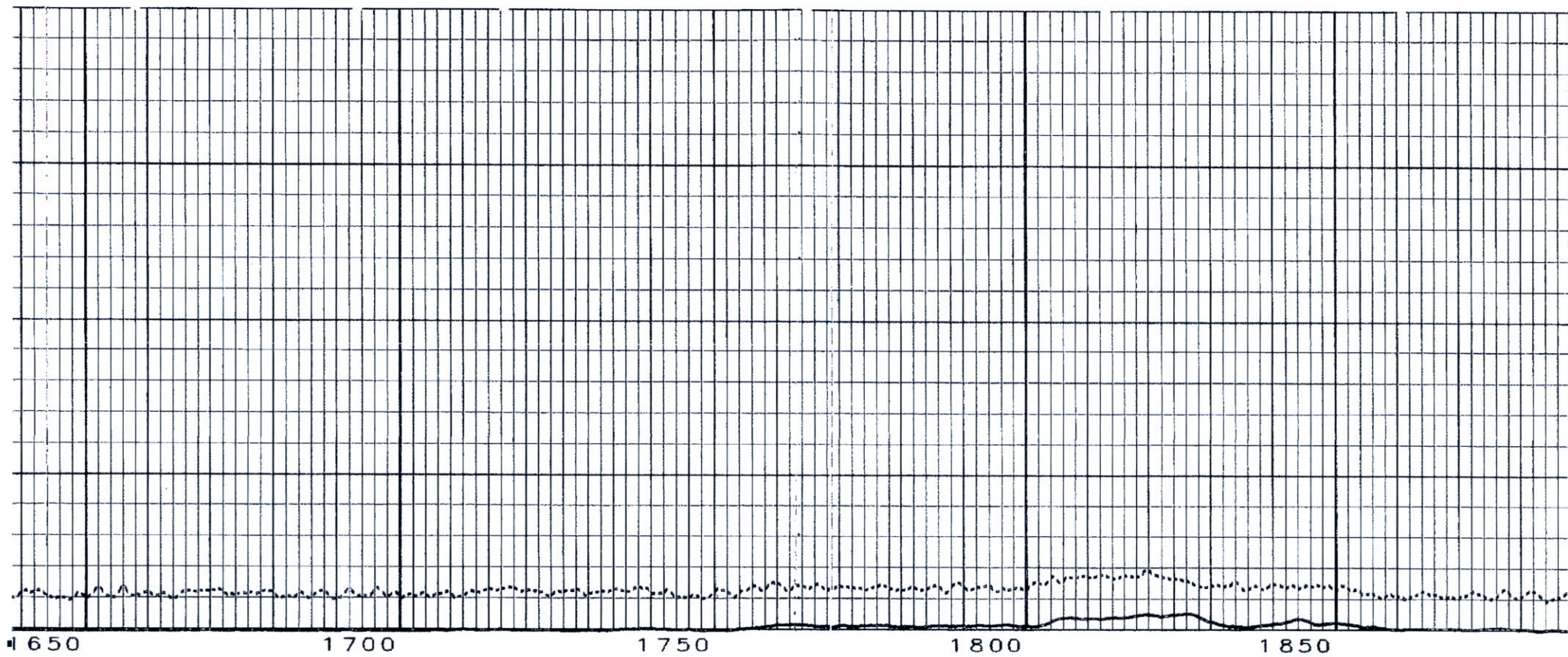
Depth (feet)		Geologic Unit	Principal Lithology	Description (listed in order of decreasing abundance; cuttings logged wet)	Comments
From	To				
2990	3000	Minnelusa Formation	Shale and Dolomite	Moderate red-brown soft, fissile shale; yellow-gray very finely bedded, finely granular dolomite; white calcite	
3000	3010		Limestone and Shale	Yellow-gray massive limestone; moderate red-brown soft, fissile shale;	
3010	3020		Shale	Moderate red-brown to pale yellow-orange soft, fissile shale	
3020	3030		Shale	Moderate red-brown to pale yellow-orange soft, fissile shale; moderate orange gypsum	
3030	3040		Shale	Moderate red-brown to pale yellow-orange soft, fissile shale; moderate orange gypsum	
3040	3050		Shale	Moderate red-orange to moderate red-brown soft, fissile shale; pale red splintery shale	
3050	3060	Madison Limestone	Limestone	Pale yellow-gray bedded, granular limestone; rare pale red finely crystalline dolomite	
3060	3070		Limestone	Yellow-gray finely bedded, finely crystalline limestone; minor white bedded gypsum	
3070	3080		Limestone	Yellow-gray and pale brown-gray finely bedded, finely crystalline limestone; minor white bedded gypsum; rare pale red finely bedded dolomite	
3080	3085		Limestone	Yellow-gray and pale brown-gray finely bedded, finely crystalline limestone; minor white bedded gypsum; rare pale red finely bedded dolomite	
3085	3090		Limestone	Yellow-gray and pale brown-gray finely bedded, finely crystalline limestone; minor white bedded gypsum; rare pale red finely bedded dolomite	
3090	3100		Limestone	Yellow-gray finely bedded, crystalline limestone	
3100	3280		Limestone	No samples	
3280	3311		Limestone	Pale yellow-gray granular limestone	Sample is ground into coarse sand
3311	3343		Limestone	Pale yellow-gray granular limestone	Sample is ground into coarse sand
3343	3374		Limestone	Pale yellow-gray granular limestone	Sample is ground into coarse sand
3374	3405		Limestone	Pale yellow-gray with minor pale brown-gray granular limestone; white calcite	Sample is ground into coarse sand
3405	3436		Limestone	Pale yellow-gray with minor pale brown-gray finely granular limestone; white calcite	Sample is ground into coarse sand

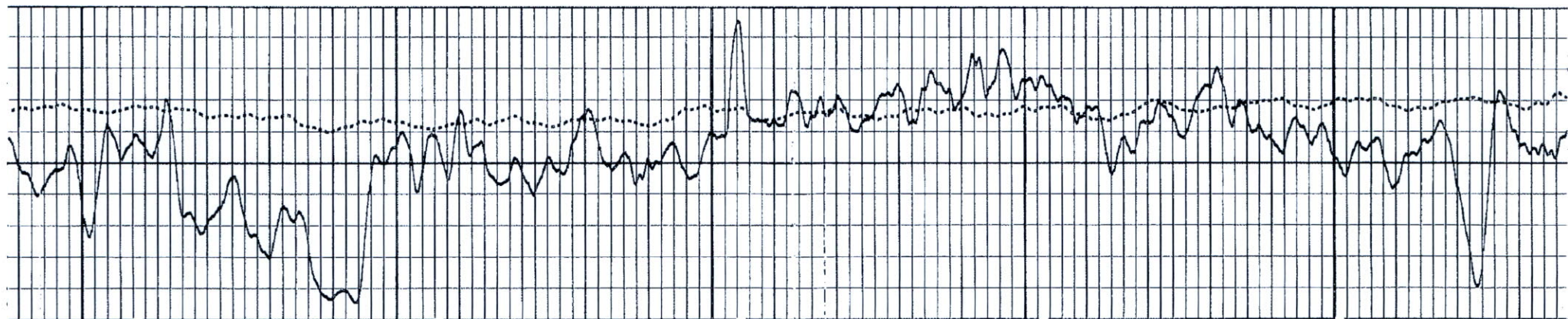
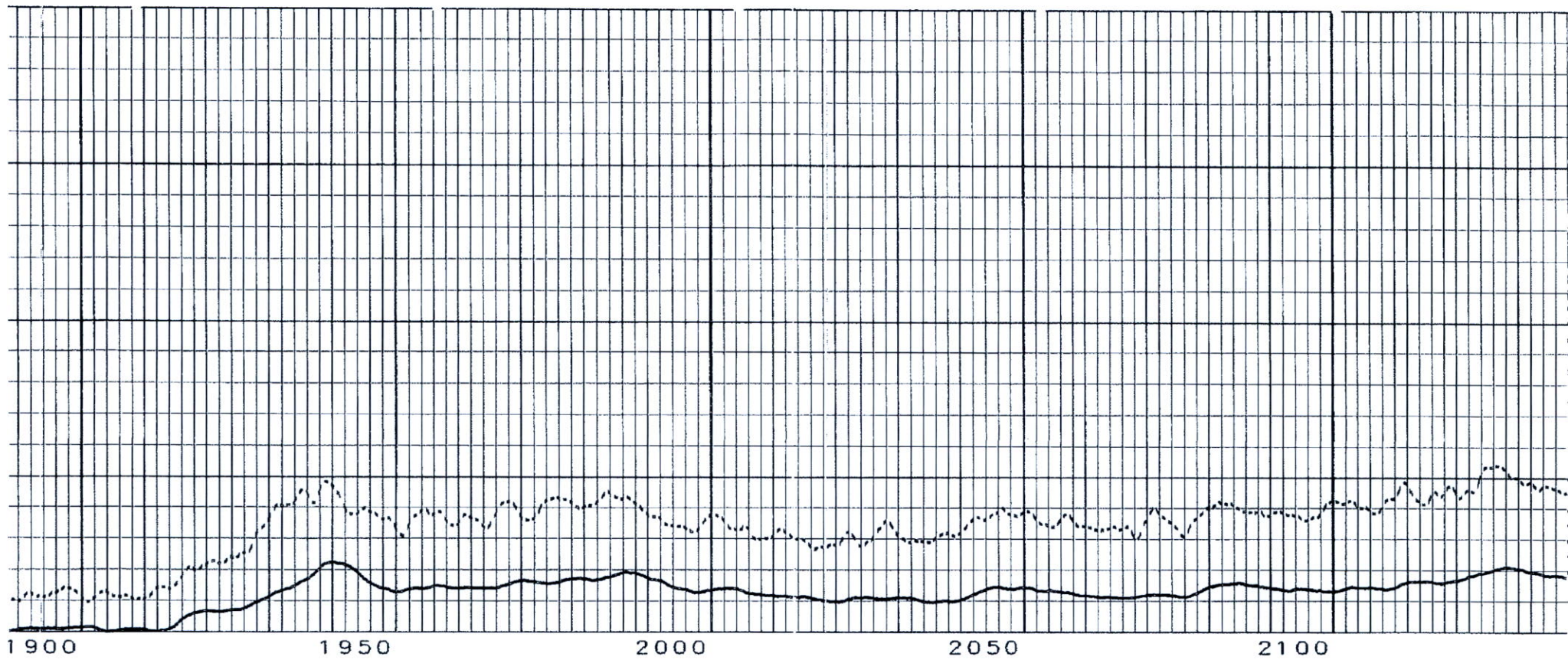
Depth (feet)		Geologic Unit	Principal Lithology	Description (listed in order of decreasing abundance; cuttings logged wet)	Comments
From	To				
3436	3520	Madison Limestone	Limestone	No sample	
3520	3530		Limestone	Pale yellow to white finely granular limestone with white calcite	Sample is ground into fine to coarse sand
3530	3540		Limestone	Pale yellow to white finely granular limestone with white calcite	Sample is ground into fine to coarse sand
3540	3550		Limestone	Pale yellow finely granular limestone with abundant white calcite	Sample is ground into fine to coarse sand
3550	3560		Limestone	Pale yellow finely granular limestone with abundant white calcite	Sample is ground into fine to coarse sand
3560	3570		Limestone	Pale yellow finely granular limestone with abundant white calcite	Sample is ground into fine to coarse sand
3570	3580		Limestone	Pale yellow finely granular limestone with abundant white calcite	Sample is ground into fine to coarse sand
3580	3590		Limestone	Pale yellow finely granular limestone with abundant white calcite	Sample is ground into fine to coarse sand
3590	3600		Limestone	Pale yellow and minor gray-orange finely granular limestone with abundant white calcite	Sample is ground into fine to coarse sand
3600	3610	Englewood Formation	Limestone	Pale yellow, gray-orange, and minor pink-gray finely granular limestone with abundant white calcite	Sample is ground into fine to coarse sand
3610	3623		Limestone	Gray-red finely bedded, finely crystalline limestone; pink gray and yellow-gray finely granular limestone; white calcite	Sample is ground into fine to coarse sand

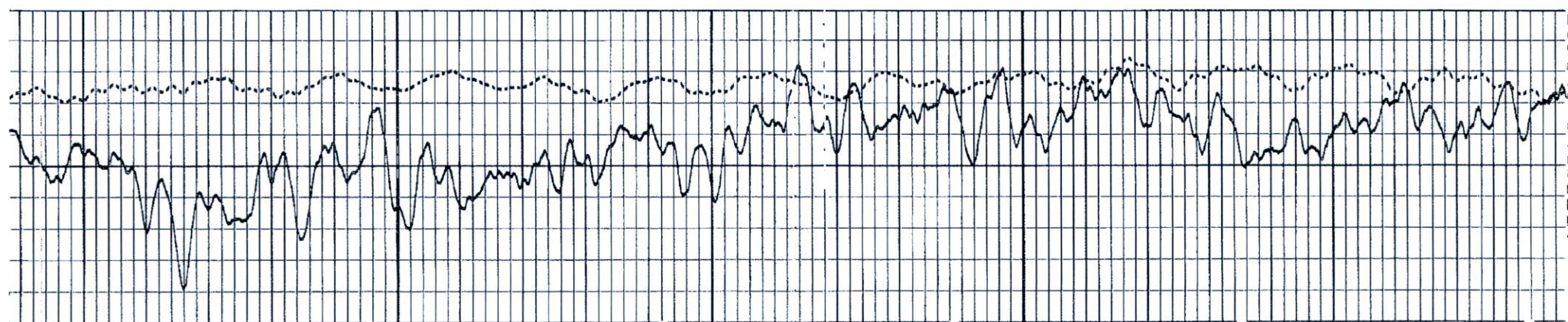
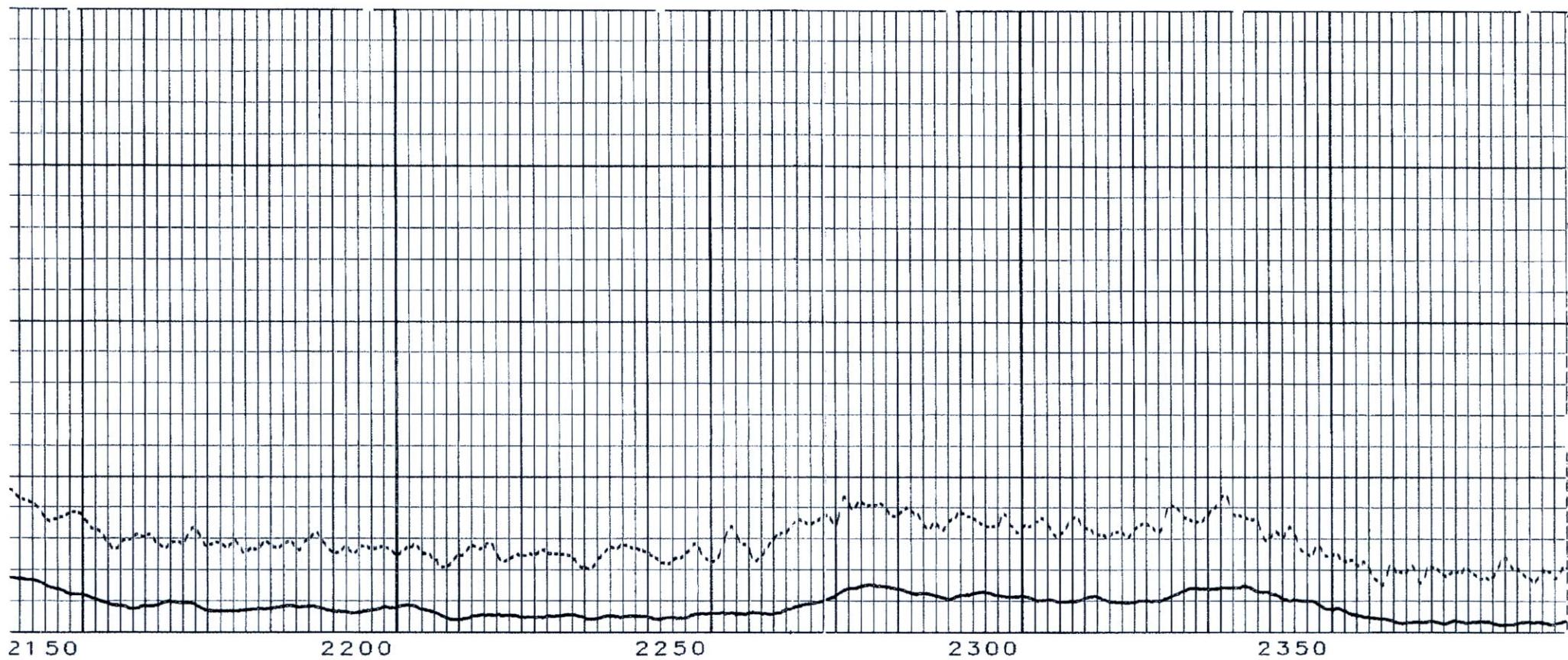
Total Depth - 3,623 feet

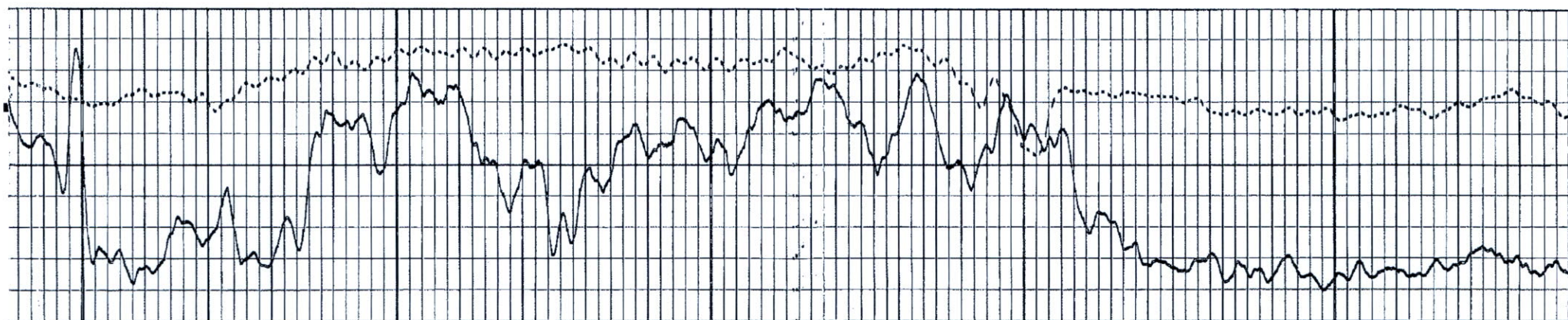
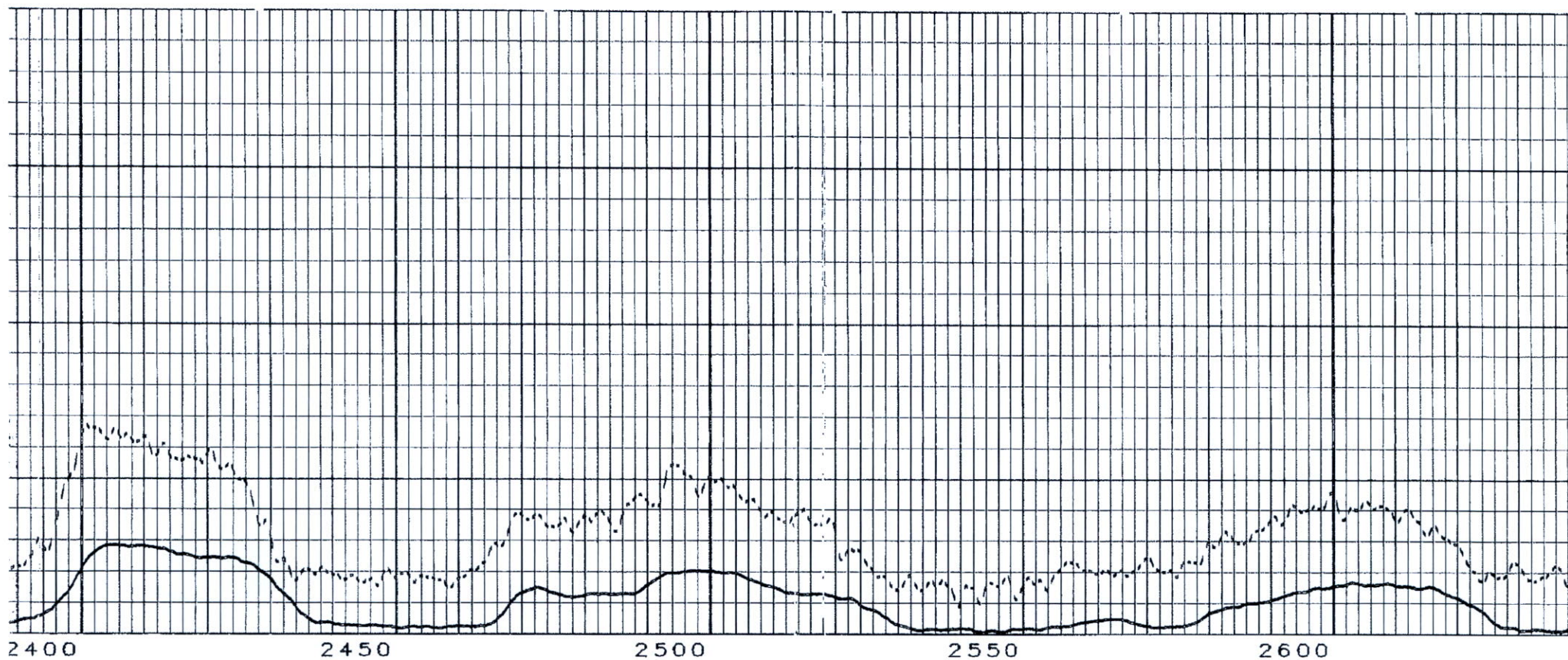


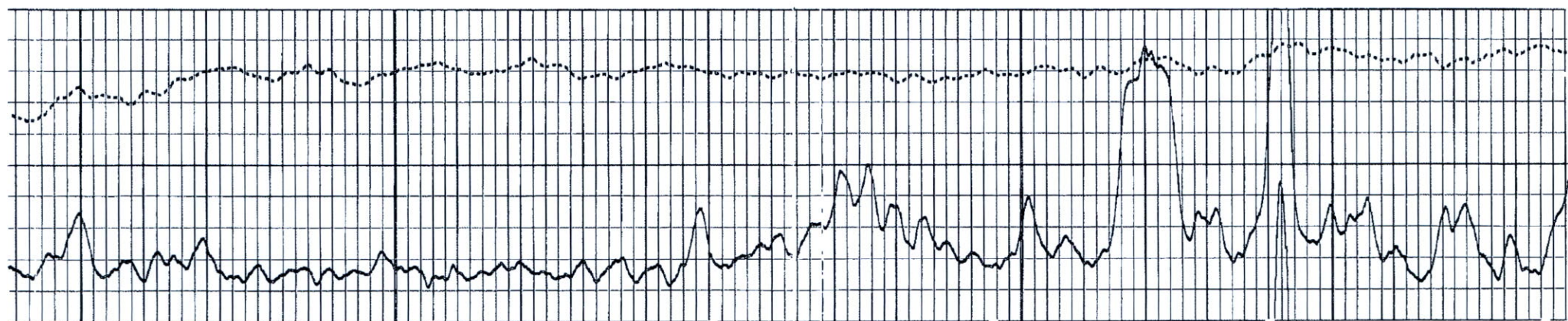
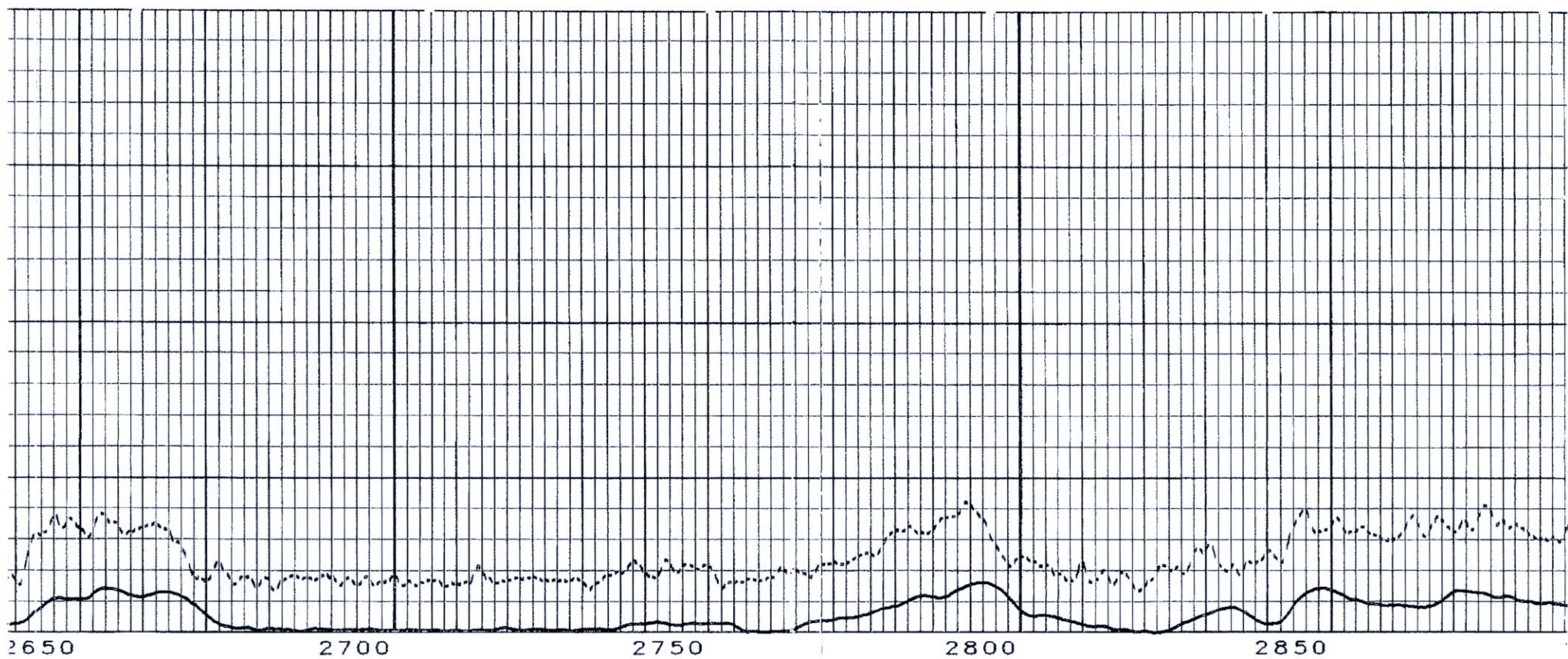












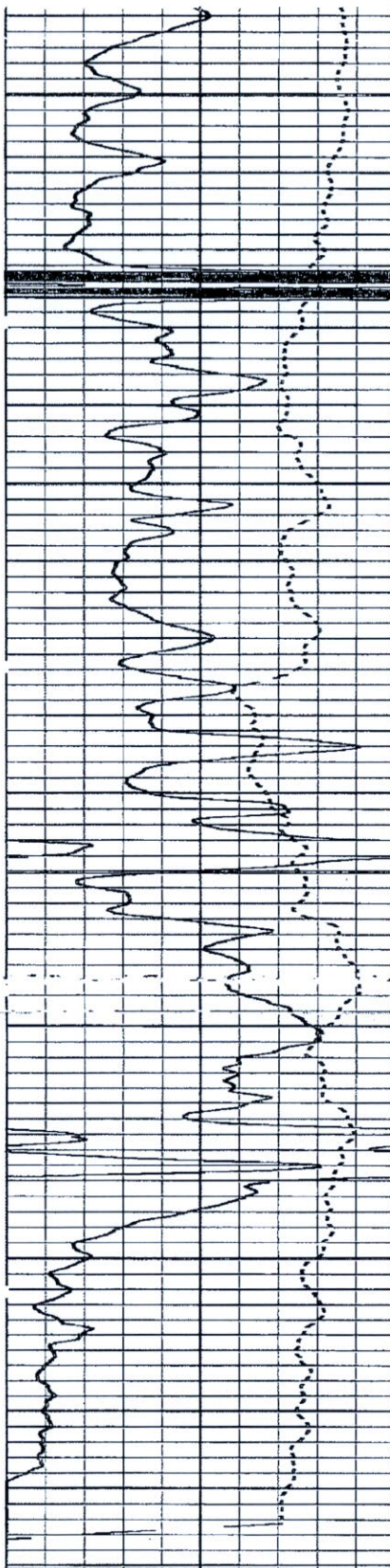


CHART SCALING			
0.00	GAMMA RAY	120.00	
120.00	CPS	240.00	
-100.00	SP	100.00	
	MVS		

START DEPTH: 3090.31

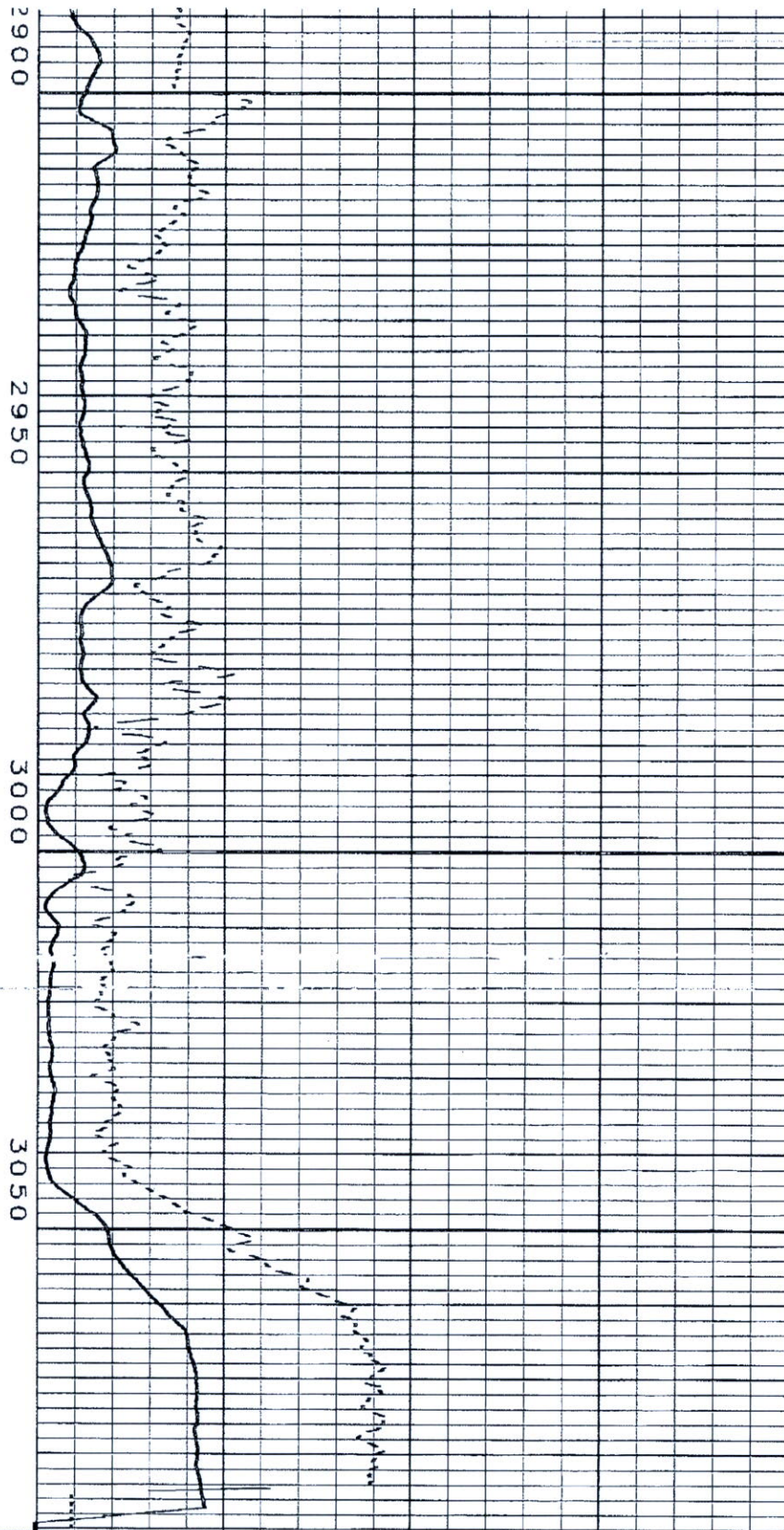


CHART SCALING			
0.00	16"	50.00	
50.00	OHMS	100.00	
0.00	64"	50.00	
50.00	OHMS	100.00	

DEPTHS Thu Jul 03 09:22:30 2014 LOG UP

Goodwell Incorporated

G/R - CAL - NEUTRON

SP-16"-64" RESISTIVITY

COMPANY Weston Engineering
WELL Bear Butte Valley Water Ir
FIELD
COUNTY Meade STATE S. Dak

LOCATION:

OTHER SERVICES

SEC

TWP

RGE

NOTES

RECEIVED

JUL 21 2014

WATER RIGHTS
PROGRAM

PERMANENT DATUM GL ELEVATION
LOG MEAS. FROM GL ABOVE PERM DATUM
DRILLING MEASURED FROM GL

K. B.
D. F.
G. L.

DATE	07/09/2014	07/09/2014
RUN NO.	ONE	TWO
TYPE LOG	SP 16 64	GR/Cal
DEPTH-DRILLER	3469'	3469'
DEPTH-LOGGER	3469'	3469'
BTM LOGGED INTERVAL	3469'	3469'
TOP LOGGED INTERVAL	3080'	16'
TYPE FLUID IN HOLE	WATER	WATER
LOGGED ON BOTTOM		
EQUIPMENT		
LOCATION		
MAX. REC. TEMP. DEG C.		
RECORDED BY	B. Hall	B. Hall
WITNESSED BY	J. Hunt	J. Hunt

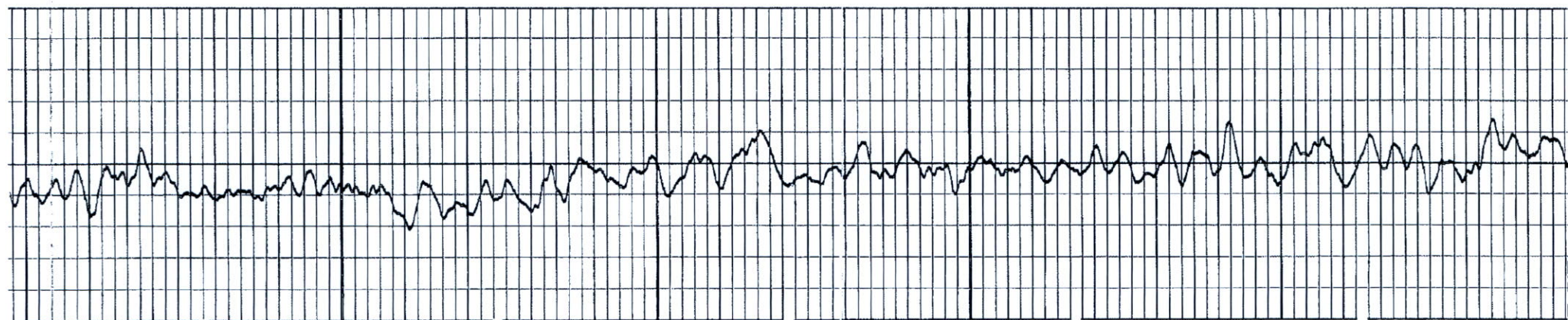
REMARKS

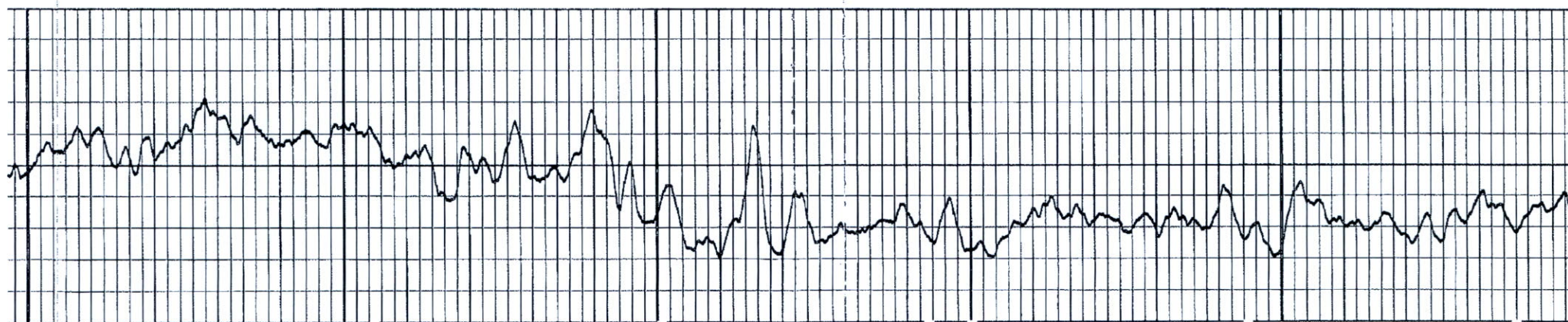
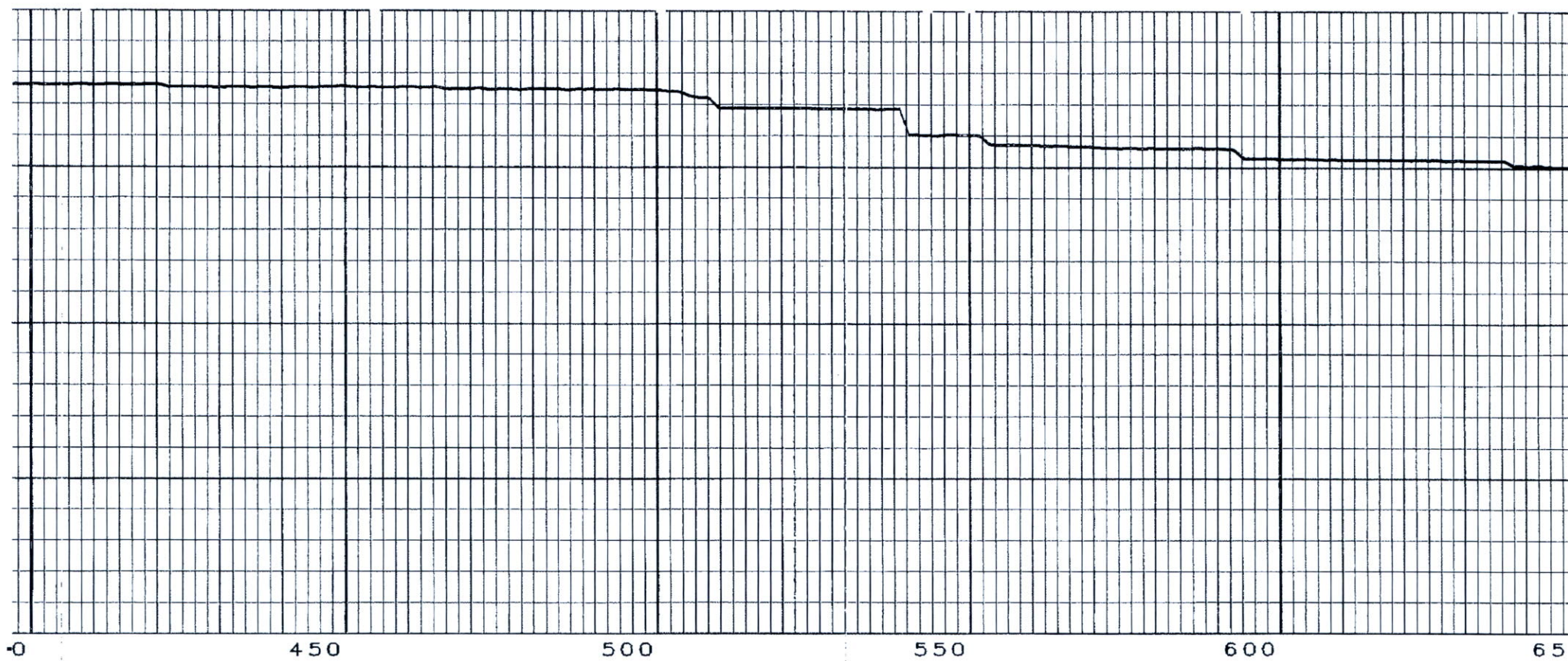
CASING RECORD

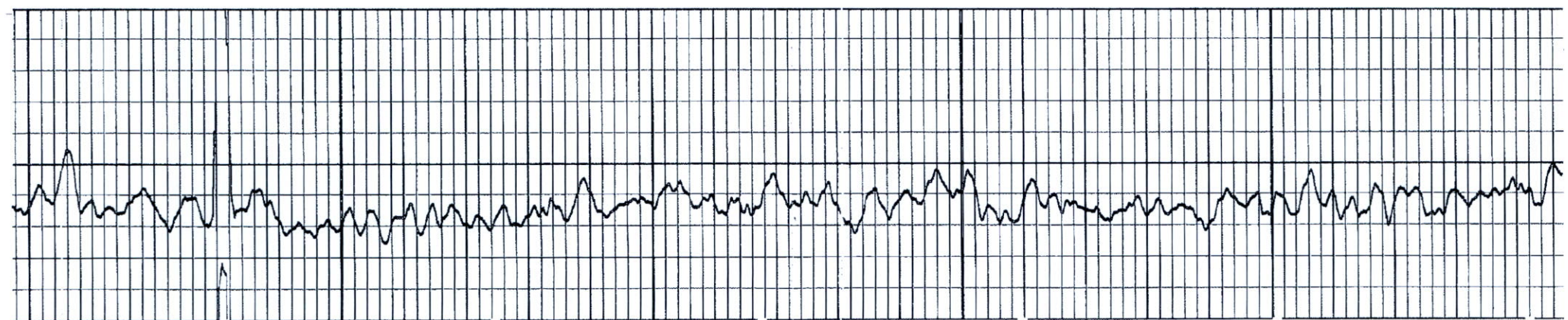
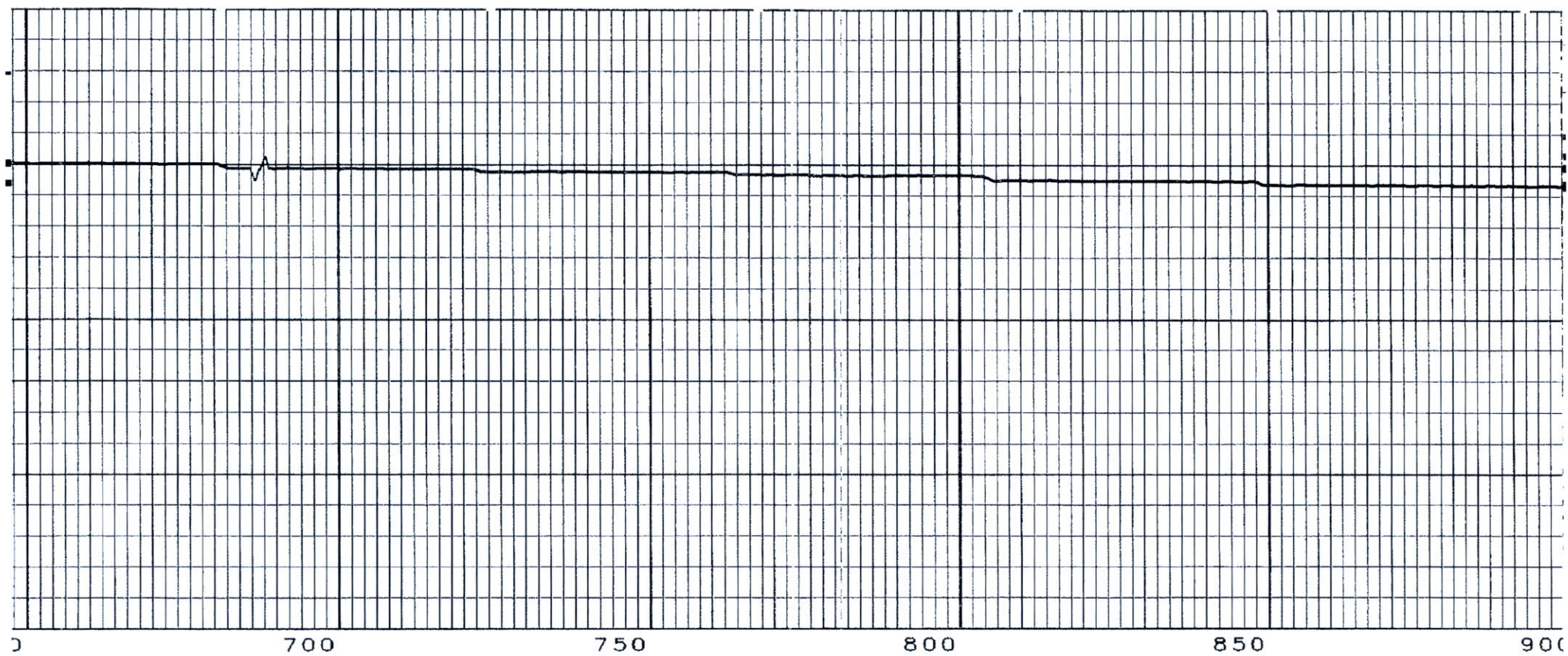
BOREHOLE RECORD

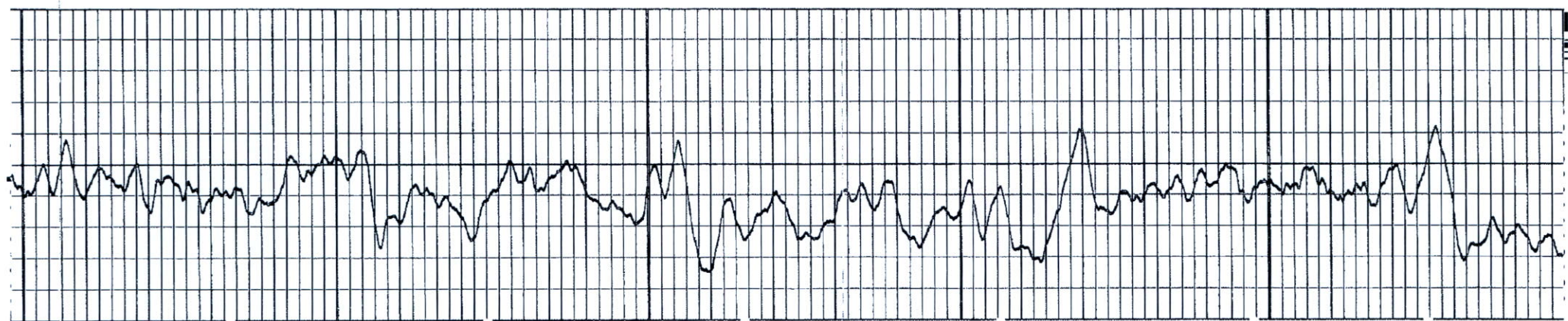
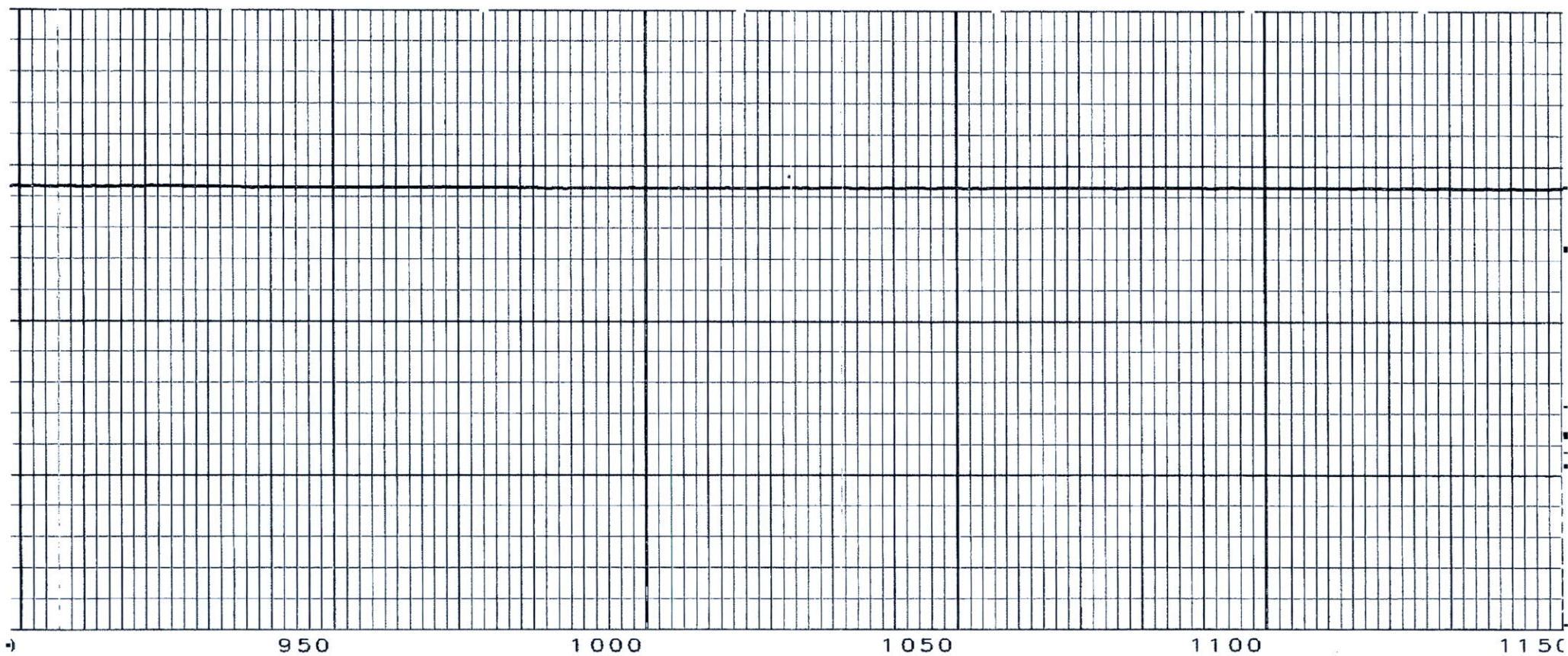
RUN

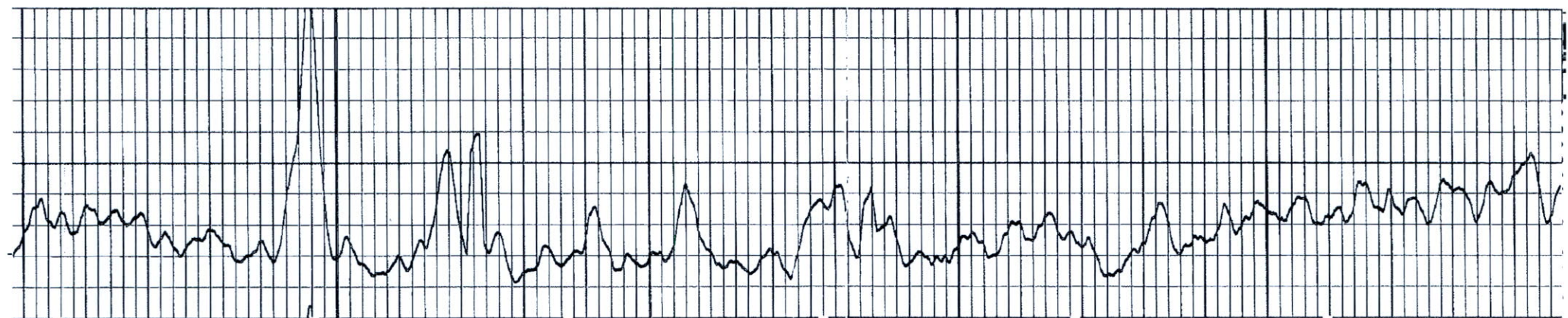
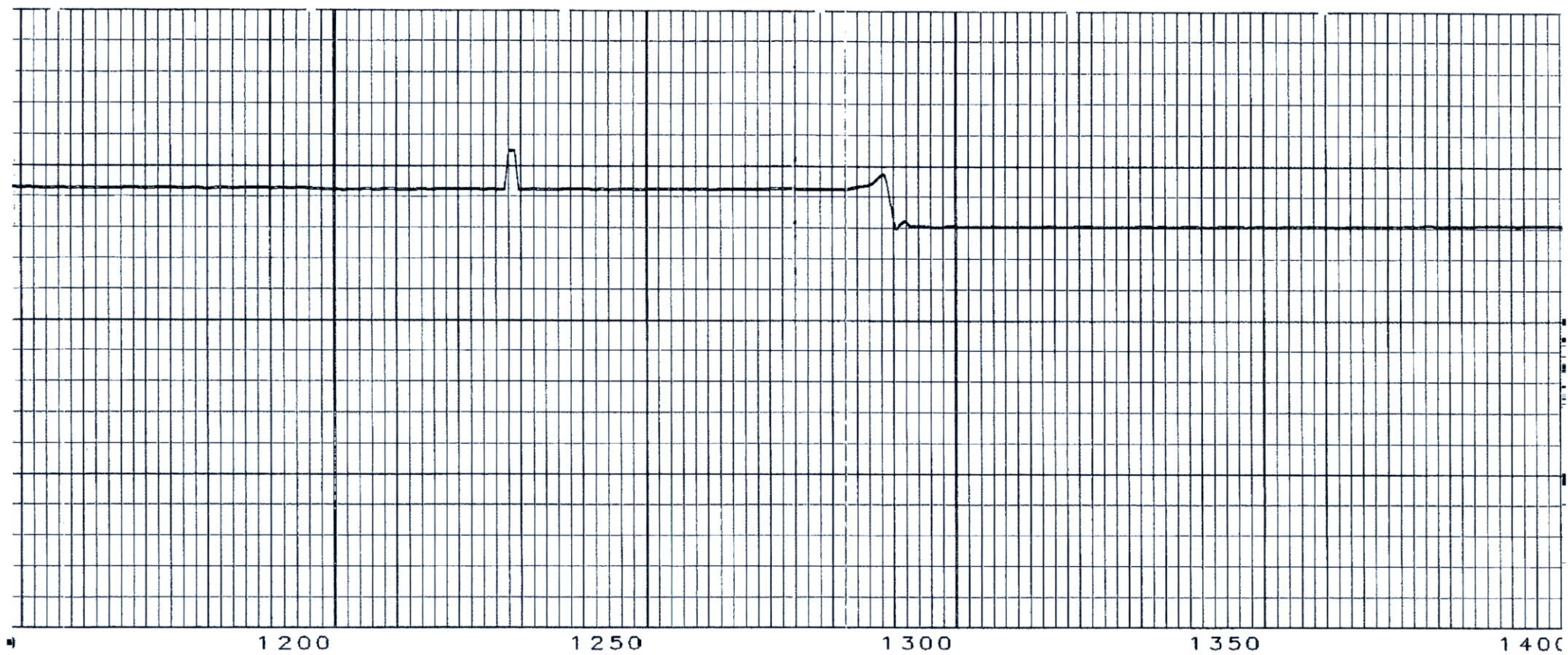
NO.	BIT	FROM	TO	SIZE	WEIGHT	FROM	TO
1	17.5	0	51'	16"		0	51'
2	12.25	51'	1310'	10.75		51'	1310'
3	9.75	1310'	3100'	7"		1310'	3095'
4							

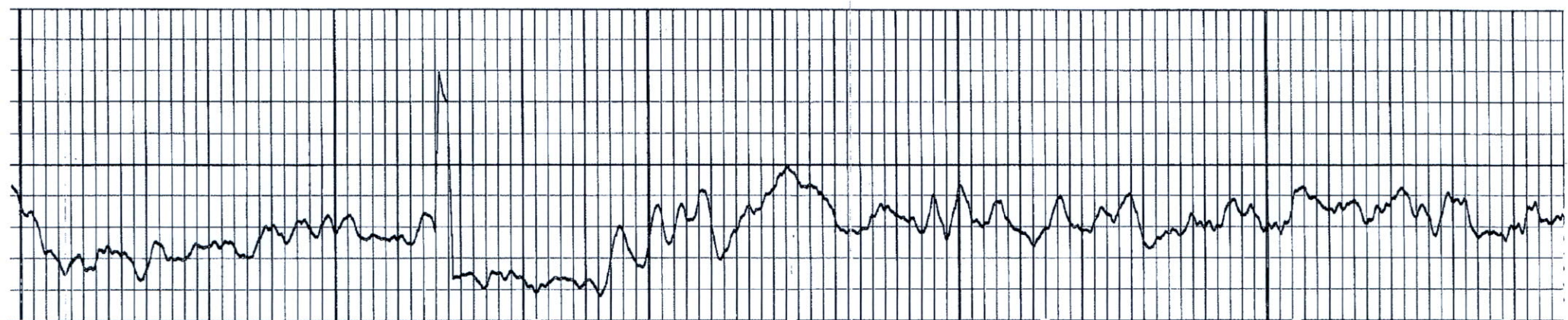


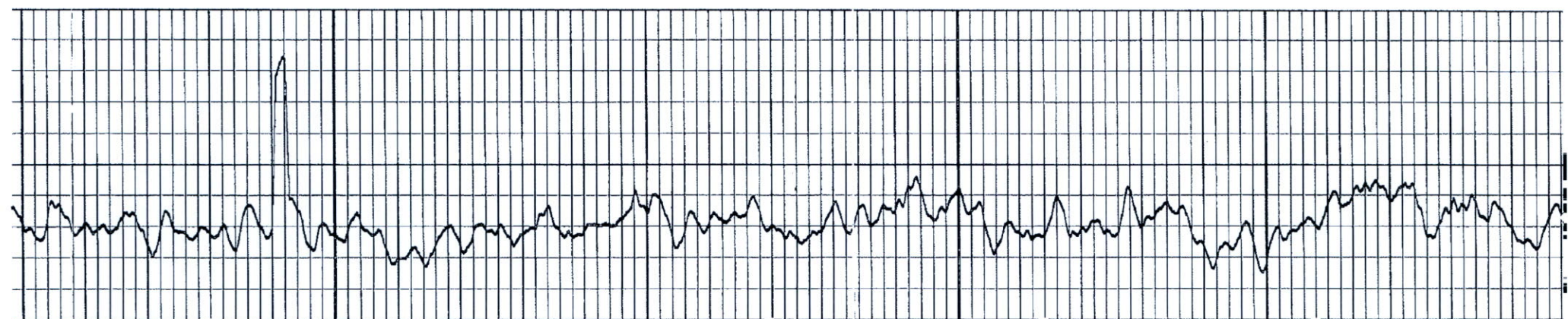
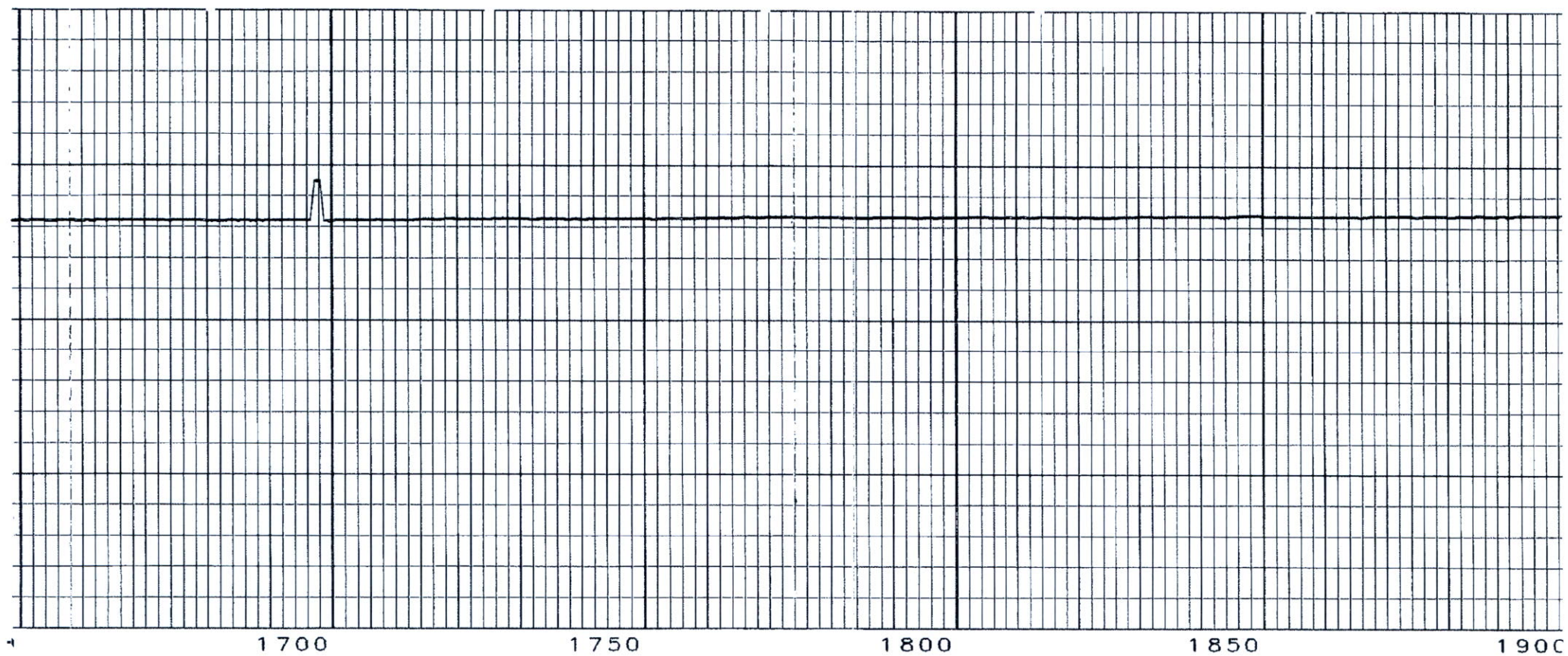


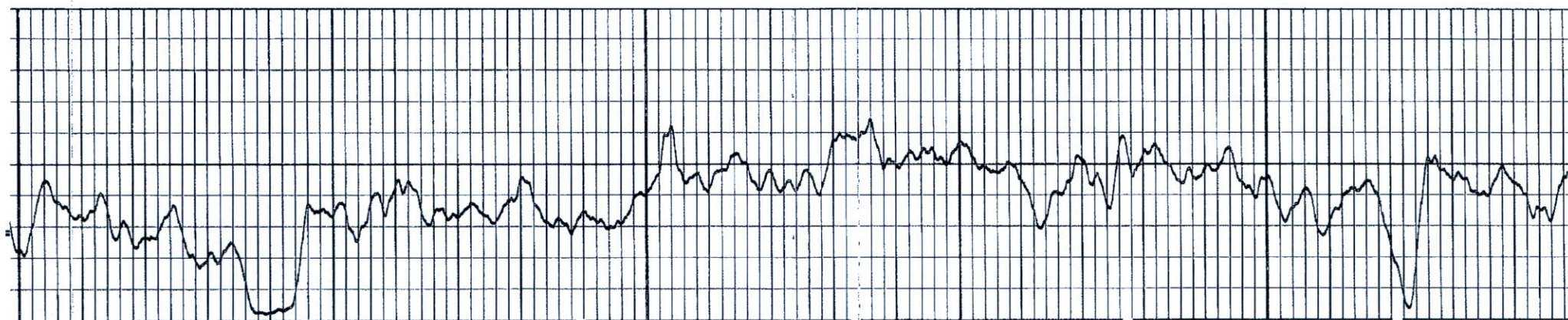
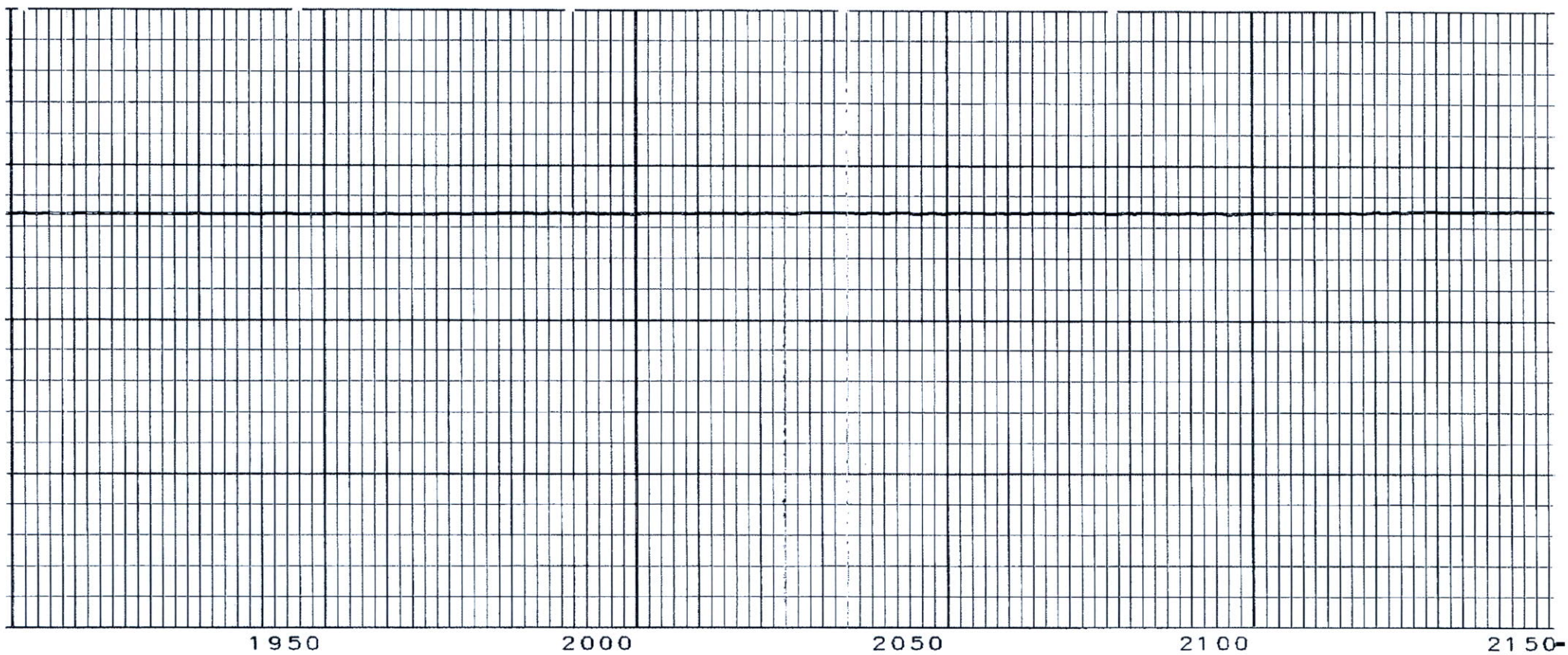


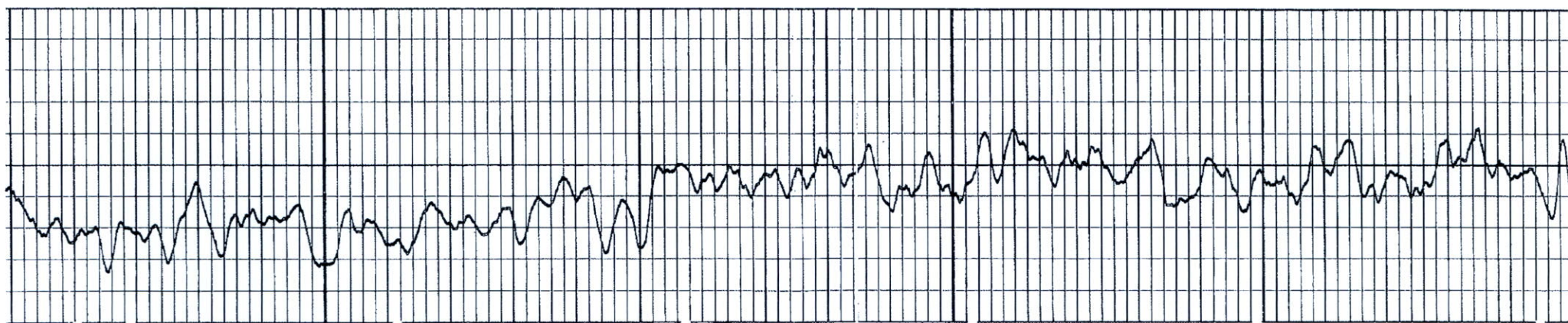
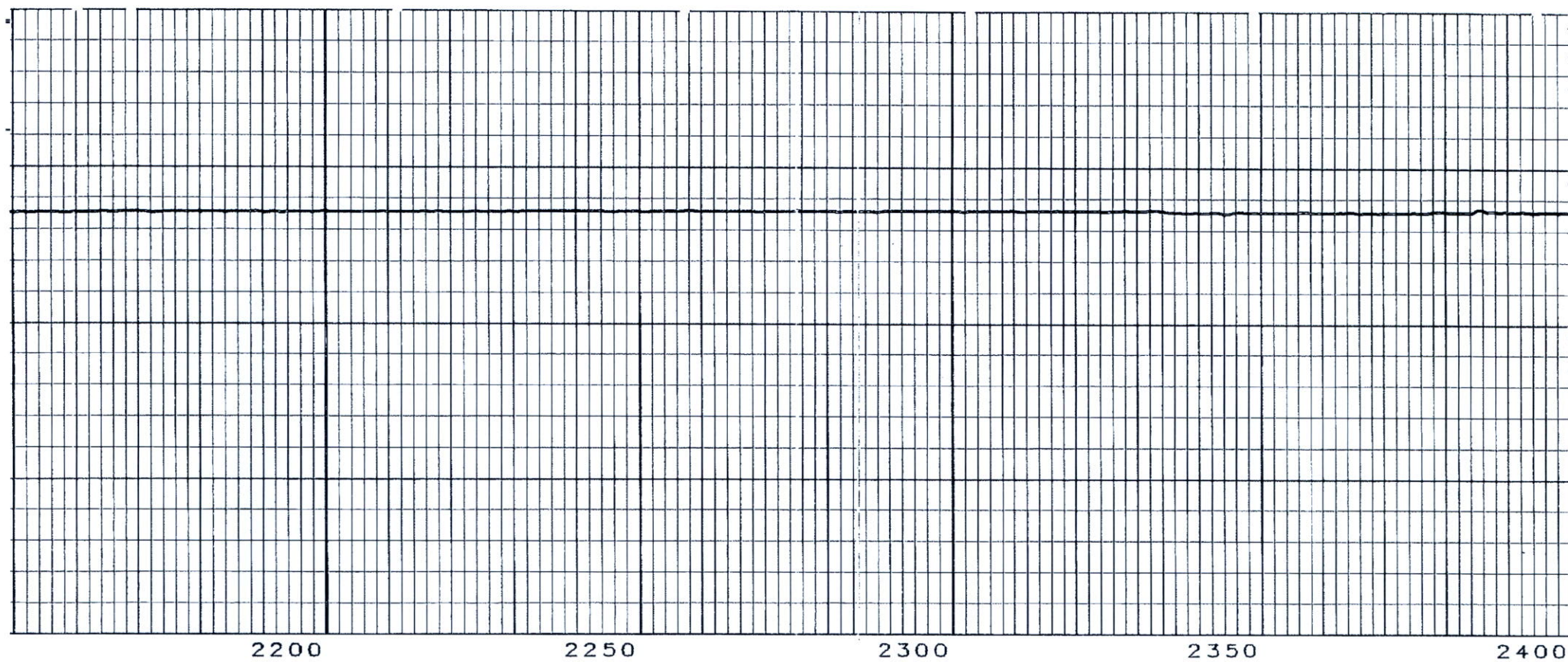


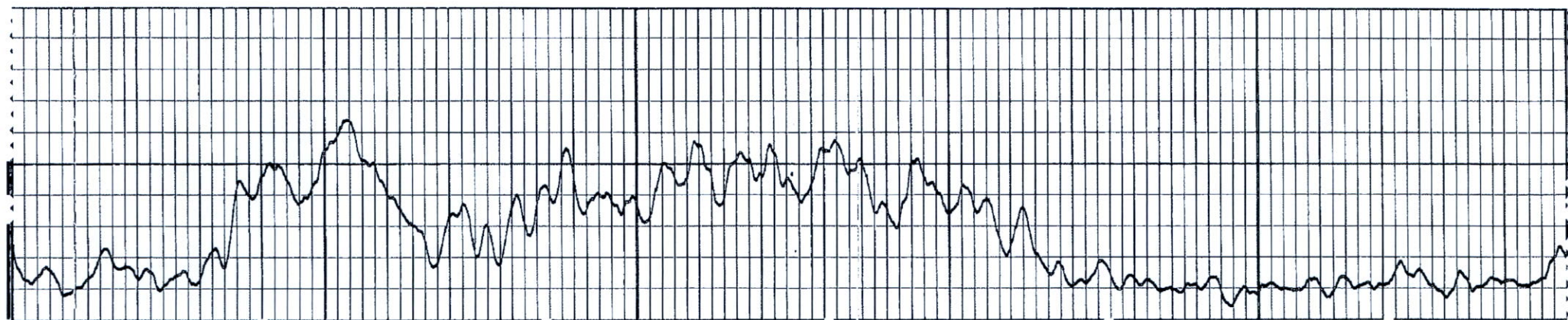
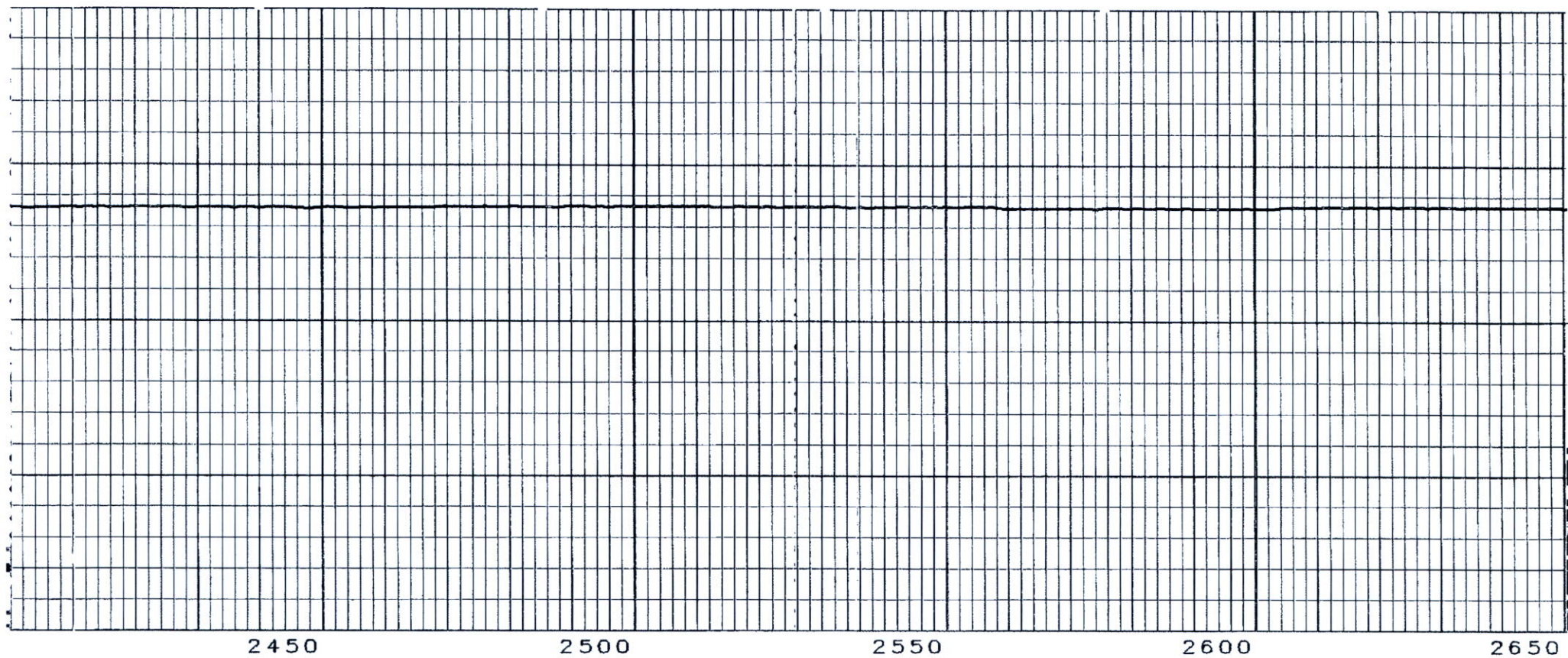


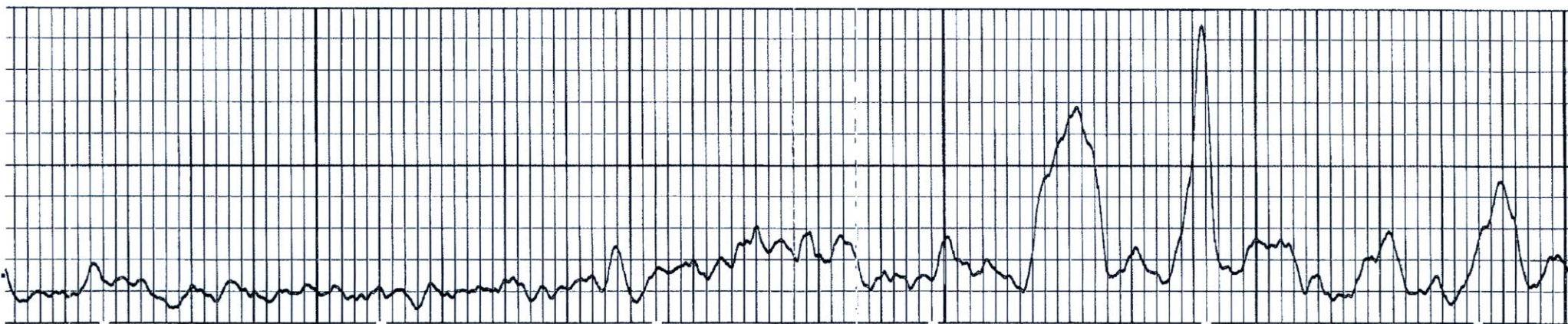
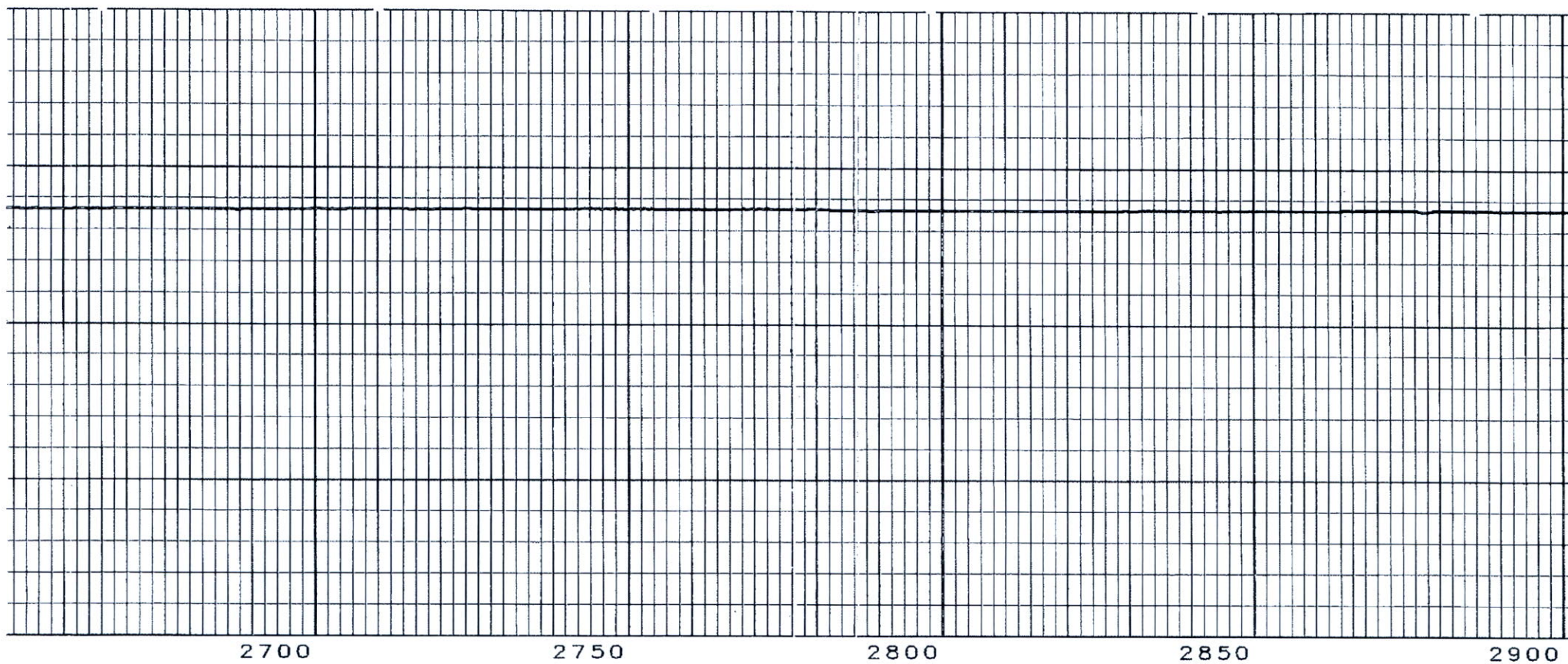


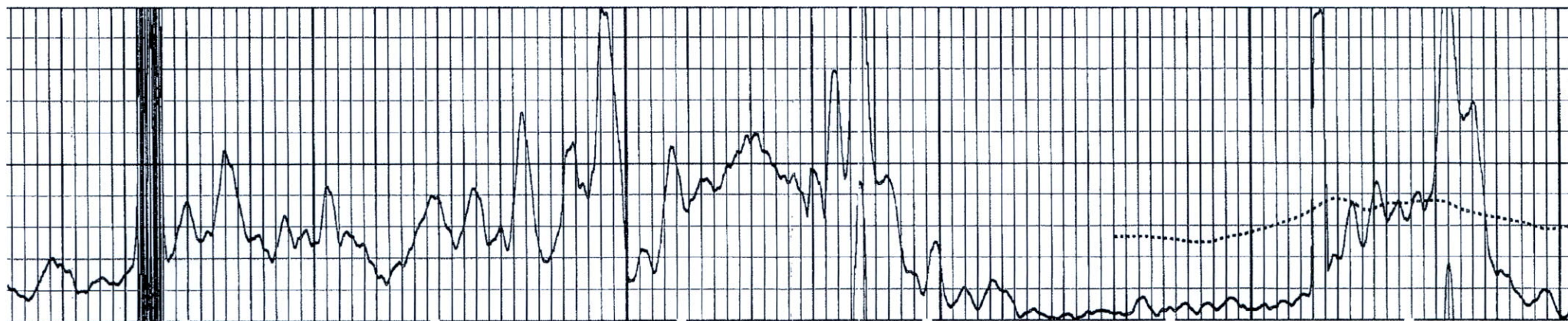
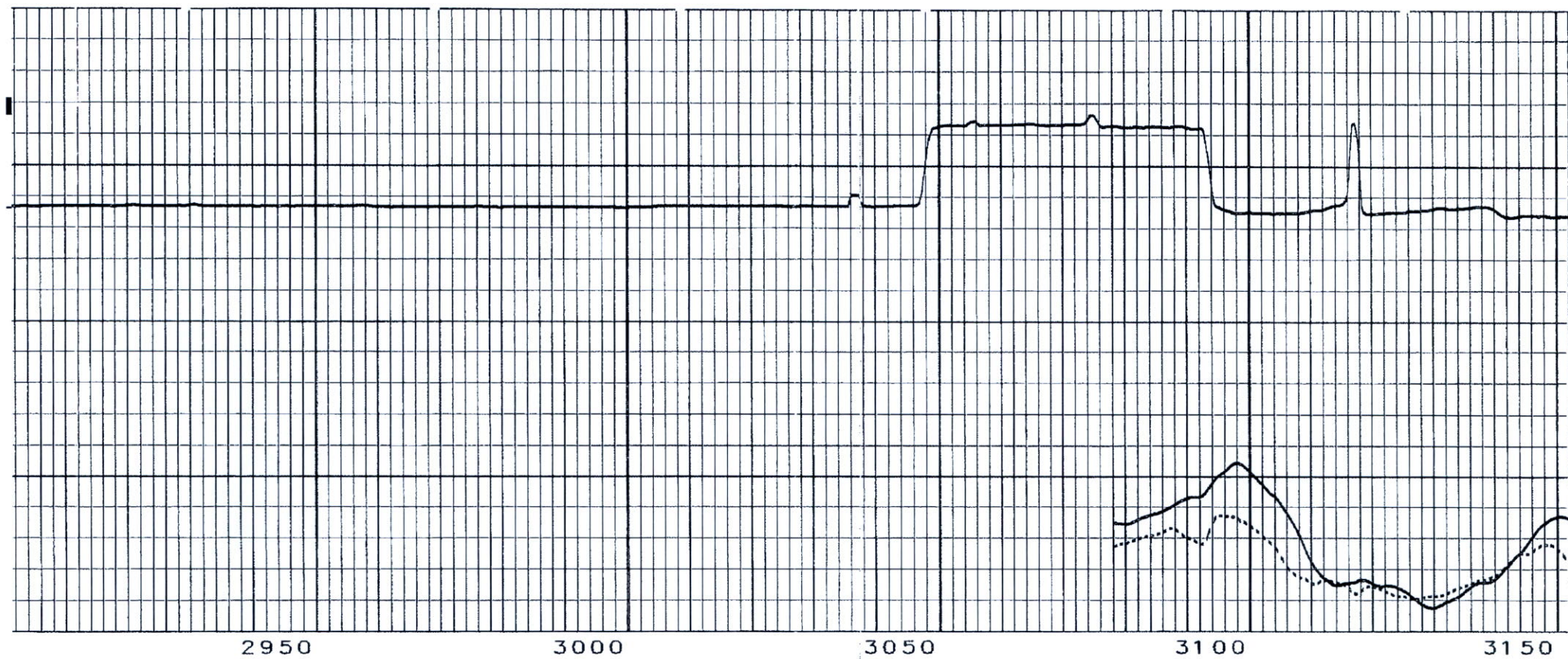


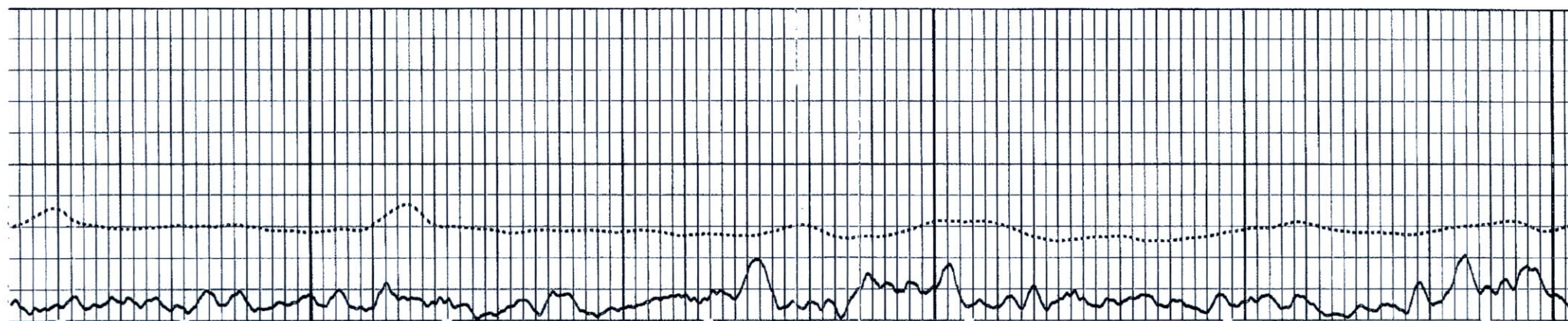
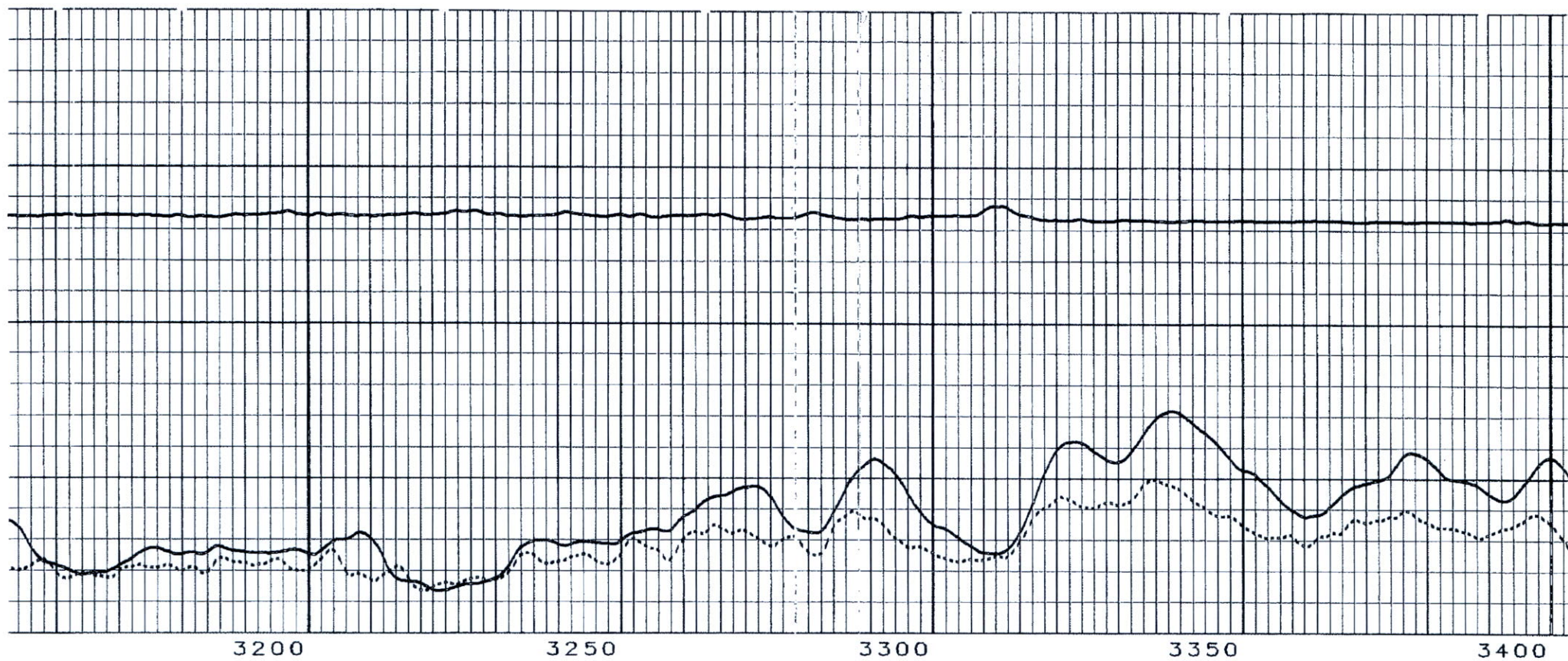


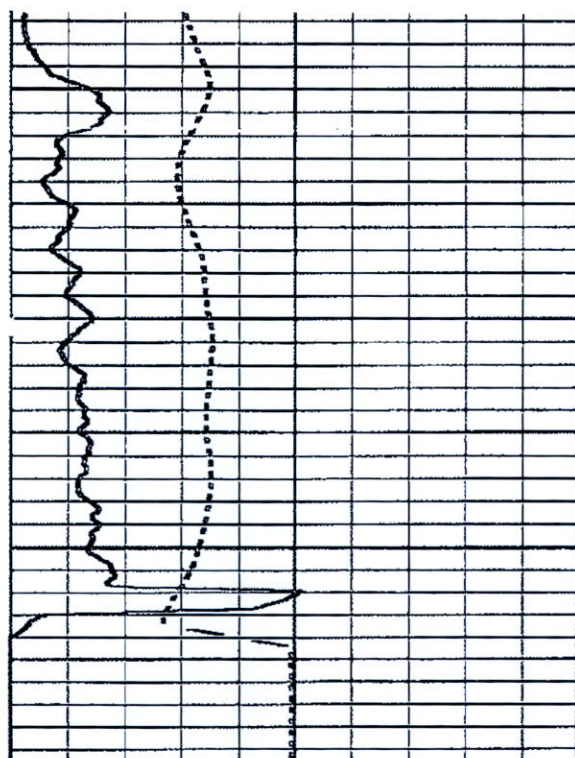












3450

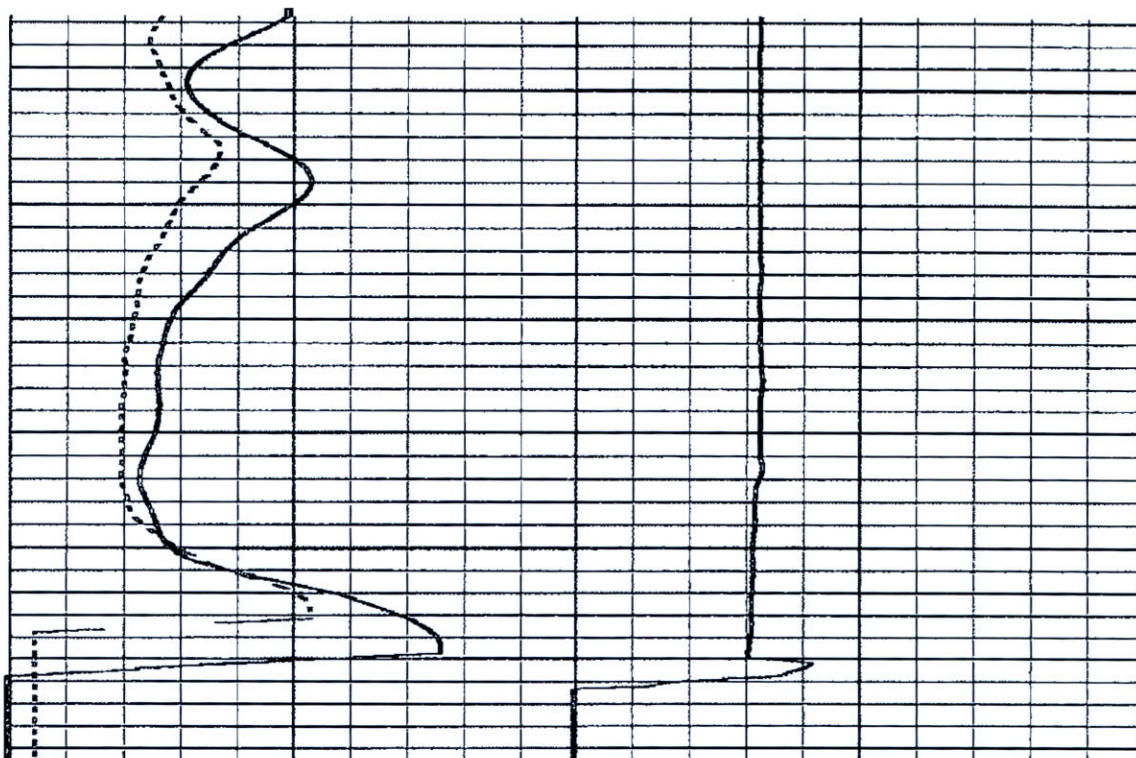


CHART SCALING

0.00	GAMMA RAY	120.00
120.00	CPS	240.00
-500.00	SP	500.00
MVS		

CHART SCALING

0.00	16"	100.00
100.00	OHMS	200.00
0.00	64"	100.00
100.00	OHMS	200.00

3.00	CALIPER	12.00
INCHES		

START DEPTH: 3469.16

DEPTHS Wed Jul 09 20:09:31 2014

LOG UP

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Agriculture and Natural Resources

Date March 23, 2023

RECEIVED OF DGR Engineering for Bear Butte Valley Water, Inc. PO Box 511 Rock Rapids IA 51246

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	\$ _____
Fee for Application for Permit No. <u>2028-1</u> to Appropriate Water for Future use	\$ <u>95.00</u>
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$ _____
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
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>95.00</u>

By Eric Gronlund
Chief Engineer vm



531516632

ANNUAL REPORT

Secretary of State
500 E. Capitol Ave
Pierre, SD 57501-5070
(605) 773-4845

Domestic Nonprofit Corporation
SDCL 47-24-6, 59-11-24

Filing Fee: \$10

2022
FILING YEAR

Please Type or Print Clearly in Ink
Please submit one Original
Make payable to the SECRETARY OF STATE

Total Fee: \$10

1. Business ID and Name:

NS014020
BUSINESS ID

BEAR BUTTE VALLEY WATER, INC.
BUSINESS NAME

2. The jurisdiction under whose law it is formed **SOUTH DAKOTA**

3. The address of the principal executive office (business address):

Actual Street Address

20550 HWY 79
STURGIS, SD 57785-6305

Mailing Address

PO BOX 351
STURGIS, SD 57785-6305

4. The South Dakota Registered Agent's Name:

South Dakota law permits the registered agent to be either (a) a noncommercial registered agent, (b) a commercial registered agent, or (c) an office holder.

(a) The South Dakota Noncommercial Registered Agent's name

Name **Clair Rowett**

Actual Street Address in this State

20373 GRAVEL ROAD
STURGIS, SD 57785

Mailing Address in this State

20373 GRAVEL ROAD
STURGIS, SD 57785

5. The names and addresses of its principal officers.

Title	Name	Address
President	Bruce Weyrich	20080 145TH AVENUE, STURGIS, SD, 57785
Vice President	Ed Blair	19599 Bear Butte Road, Sturgis, SD 57785
Secretary	Bob Kaufman	12324 Crackerjack Road, Whitewood, SD 57793
Treasurer	Bob Kaufman	12324 Crackerjack Road, Whitewood, SD 57793

6. The names and addresses of its directors (governors).

Name	Address
Clair Rowett	20373 Gravel Road, Sturgis SD 57785
Randy Hallock	1745 Davenport Street, Sturgis, SD 57785
Brook Loobey	12907 Big Horn Road, Whitewood, SD 57793
RICH GROSCH	19958 AVALANCHE ROAD, WHITEWOOD, SD, 57793



7. Beneficial Owners (optional): A beneficial owner is a person who has or in some manner controls an equity security. Please consult an attorney for legal advice if you have any questions concerning this entry. Any question under this heading is considered a request for legal advice and the secretary of state's office is, by statute, not permitted, to provide legal advice.

No person may execute this report knowing it is false in any material respect. Any violation may be subject to a civil and/or criminal penalty (SDCL 47-1A-129; 22-39-36).

07/18/2022

Dated

Email (Optional)

Lisa A Symonds

Signature of an Authorized Person

Lisa A Symonds

Printed Name

B0227-8591 07/18/2022 6:02AM Rec'd by SD SOS

Schlaak, Karen

From: Mitchell Vogt <mitchell.vogt@dgr.com>
Sent: Tuesday, March 21, 2023 3:45 PM
To: Duvall, Ron; Dan Nebelsick
Cc: Nathan Brandenburg; Travis Featherston; Schlaak, Karen; Rodriguez, Rachel; Gronlund, Eric; Tirzah Starr
Subject: RE: [EXT] Future Use Permit Request - Bear Butte Valley Water
Attachments: 03.21.2023_Application_MAILED.pdf

Hi Ron,

I've revised the BBVW, Inc. application as per your recommendations. The original signed application and \$95 fee payment is in the mail, and I've attached a PDF for your convenience.

Please let us know if you need anything else for consideration.

Thanks!

Mitch Vogt – EI, MBA, CPCU®

 1302 South Union Street
Rock Rapids, IA 51246
phone: 712-472-2531
cell: 712-541-5399
www.dgr.com

Trusted. Professional. Solutions.

From: Duvall, Ron <Ron.Duvall@state.sd.us>
Sent: Wednesday, March 15, 2023 4:17 PM
To: Dan Nebelsick <dan.nebelsick@dgr.com>
Cc: Mitchell Vogt <mitchell.vogt@dgr.com>; Nathan Brandenburg <nathan.brandenburg@dgr.com>; Travis Featherston <travis.featherston@dgr.com>; Schlaak, Karen <Karen.Schlaak@state.sd.us>; Rodriguez, Rachel <Rachel.Rodriguez@state.sd.us>; Gronlund, Eric <Eric.Gronlund@state.sd.us>
Subject: RE: Future Use Permit Request - Bear Butte Valley Water

Dan,

Present-day future reservations only identify a volume (acre-feet) and no diversion rate so the 1.00 cfs can be removed from the application. A diversion rate and volume are both applicable later when an application is filed to place water to beneficial use from the reservation. The application fee is based on 120 acre-feet increments (see SDCL 46-2-13(2), or portion thereof, so the application fee is 10% of \$950.00 = \$95.00. The \$200.00 license fee is NOT applicable to a future use reservation. The \$200.00 license fee will apply later when an application is filed to place water to use that has been reserved by this application.

I suppose you could also check the "Water Distribution System" type of use just to take away any argument that hooking up a separate water distribution system sometime in the future is not covered by "Rural Water System" - your choice. On the "Supplemental Information" page you have included information about the number of new wells which is not applicable since you are applying to reserve water not to construct additional wells (that comes later) but we still do need to have some information about the water source so the estimated depth and existing well completion reports are helpful to document that.

I think that is about it. The application will also get a thorough review once submitted so, if anything else needs addressing, we will let you 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

From: Dan Nebelsick <dan.nebelsick@dgr.com>
Sent: Wednesday, March 15, 2023 3:02 PM
To: Duvall, Ron <Ron.Duvall@state.sd.us>
Cc: Mitchell Vogt <mitchell.vogt@dgr.com>; Nathan Brandenburg <nathan.brandenburg@dgr.com>; Travis Featherston <travis.featherston@dgr.com>
Subject: [EXT] Future Use Permit Request - Bear Butte Valley Water

Ron,

Bear Butte Valley Water is receiving a significant increase in water use requests, and has asked me to help them apply for a future use permit to secure additional water rights. We have prepared the attached application and are ready to present it to the BBVW board for approval. Before we officially submit the application, would you be willing to review the application to see if you recommend any changes.

I believe BBVW's 2022 total water use was around 150 acre feet. With the current project under construction, I anticipate that will increase to over 200 acre feet once these construction projects are complete. We are requesting 440 acre feet of future use, which would be 2x their current appropriation.

Please let me know if you have any comments / suggested edits on the proposed application before BBVW officially submits their application.

Thanks,

Dan

Daniel D. Nebelsick, P.E.

DGR
ENGINEERING
Trusted. Professional. Solutions.

1302 South Union Street
Rock Rapids, IA 51246
phone: 712-472-2531
cell: 712-348-4847
www.dgr.com

RECEIVED

MAR 23 2023

OFFICE OF
WATER



Letter of Transmittal

TO: DANR - Water Rights
523 E Capitol Ave
Pierre, SD 57501-3182

DATE: 3/21/2023

RE: Bear Butte Valley Water, Inc.

DGR PROJECT NO.: 804002.23

We are sending you attached:

Copies	Description
1	Application For Permit To Appropriate Water (Future Use Reservation) Within The State Of South Dakota
1	\$95.00 Fee (Check No. 033296)

THESE ARE TRANSMITTED as checked below:

☒ For approval
☐ For your information/file
☐ As requested

☒ For review and comment
☐ For your signature
☐ _____

REMARKS:

Submitted in the interests of Bear Butte Valley Water, Inc.
Fee calculation included in Page No. 4 of application.

DGR Engineering

By _____

Mitch Vogt, EI



RECEIVED

FEB 03 2015

WATER RIGHTS
PROGRAM

1401 Highway 16 East
P.O. Box 260
Upton, Wyoming 82730

January 29, 2015

Water Rights Program
523 East Capitol
Pierre, South Dakota 57501-3181

RE: Completion Report – Bear Butte Valley Water, Inc.

Dear Mr. Buhler:

Enclosed please find the completion report and lithologic log for Bear Butte Valley Water.

Should you have any questions or concerns, please call our office.

Thank you for your attention to this matter.

Sincerely,

Julie Abbott, Secretary
Weston Engineering, Inc.



**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 FUTURE USE WATER PERMIT
APPLICATION NO. 2028-1, Bear Butte Valley Water, Inc.**

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 Future Use Water Permit Application No. 2028-1, Bear Butte Valley Water, Inc., PO Box 351, Sturgis SD 57785.

The Chief Engineer is recommending APPROVAL of Application No. 2028-1 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) Bear Butte Valley Water, Inc. has demonstrated a reasonable need for the water reserved, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. Future Use Permit No. 2028-1 reserves 440 acre-feet of water annually from the Madison aquifer.
2. Future Use Permit No. 2028-1 is approved with the stipulation that this Permit is subject to review by the Water Management Board as to accomplishment in developing reserved water upon expiration of seven (7) years. This Permit shall be subject to cancellation if the Water Management Board determines during the review that the holder cannot demonstrate a reasonable need for the Permit.
3. At such time as definite plans are made to construct works and put the water reserved by this permit to beneficial use, specific application for all or any part of the reserved water must be submitted prior to construction of facilities pursuant to SDCL 46-5-38.1.

See report on application for additional information.

Eric Gronlund, Chief Engineer
May 23, 2023

NOTE: Approval of Future Use Permit No. 2028-1 does not preclude approval of subsequent appropriations by other persons within the future use area identified on No. 2028-1. Approval of any such appropriations will have a priority date junior to No. 2028-1. However, future siting of wells by the Bear Butte Valley Water to place water to beneficial use within the future use area will be subject to review during the application process to place to beneficial use regarding the likelihood of well interference between Bear Butte Valley Water wells and wells of other users within the future use area.

**Report to the Chief Engineer on
Water Permit Application No. 2028-1**
Bear Butte Valley Water, Inc.
12 May 2023

Water Permit Application No. 2028-1 seeks to reserve 440 acre-feet of water annually from the Madison Aquifer for future use as a rural water system and water distribution system for Bear Butte Valley Water, Inc. The future use area will include Sections 5, 6, 7, 8 W ½ Section 9, W ½ Section 16 and Sections 17, 18, 19, 20, 29, 30, 31, and 32; all in T5N-R6E; Sections 5 and 6 in T4N-R6E, Black Hills Meridian. The future use area is located approximately 3 miles east of Sturgis, South Dakota and overlies part of the city limits of Buffalo Chip, South Dakota.

Aquifer: Madison Limestone (MDSN)

Hydrogeologic Characteristics

The Madison Group in South Dakota is a Lower Mississippian and Upper Devonian group of formations that in the Black Hills consist of the Englewood and Pahasapa Limestone formations [1]. The Pahasapa Limestone is a “white, light-gray to tan, fine- to medium-grained limestone and dolomite containing brown to gray chert” [2]. The Englewood Limestone is a “pink to lavender to light-gray, thin- to medium-bedded, fine- to medium-grained, argillaceous, dolomitic limestone” [2]. 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 [3], although it may not be suitable as a source of water in all of those areas due to extreme depth to the aquifer and low water quality far from the outcrops [4]. It crops out in the Black Hills and is buried elsewhere in South Dakota [3]. The Madison aquifer may be hydrologically connected to the underlying Deadwood aquifer. It is also hydrologically connected to the overlying Minnelusa aquifer [5]. The Minnelusa aquifer overlies the Madison unconformably [1], 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 [5]. 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 [5].

The applicant submitted a well completion report drilled by Weston Engineering for Water Right No. 1928-1 and Water Permit Nos. 1997-1, and 2020-1 which is completed in the NW ¼ SW ¼ Section 5-T5N-R6E on October 16, 2014. The lithologic log attached with that well completion report indicates the Madison Limestone occurs from 3,050 to 3,600 feet below grade at that location. The static water level at the time that well was completed was 197 feet below grade. The water level in a well completed into a confined aquifer is a representation of the pressure, or hydraulic head, in the aquifer and not a representation of quantity of water. Based on the static water level at the time the applicant’s first well was completed, the hydraulic head in the Madison aquifer was approximately 2,850 feet above the top of the aquifer. Figure 1 shows the future use area for this application.

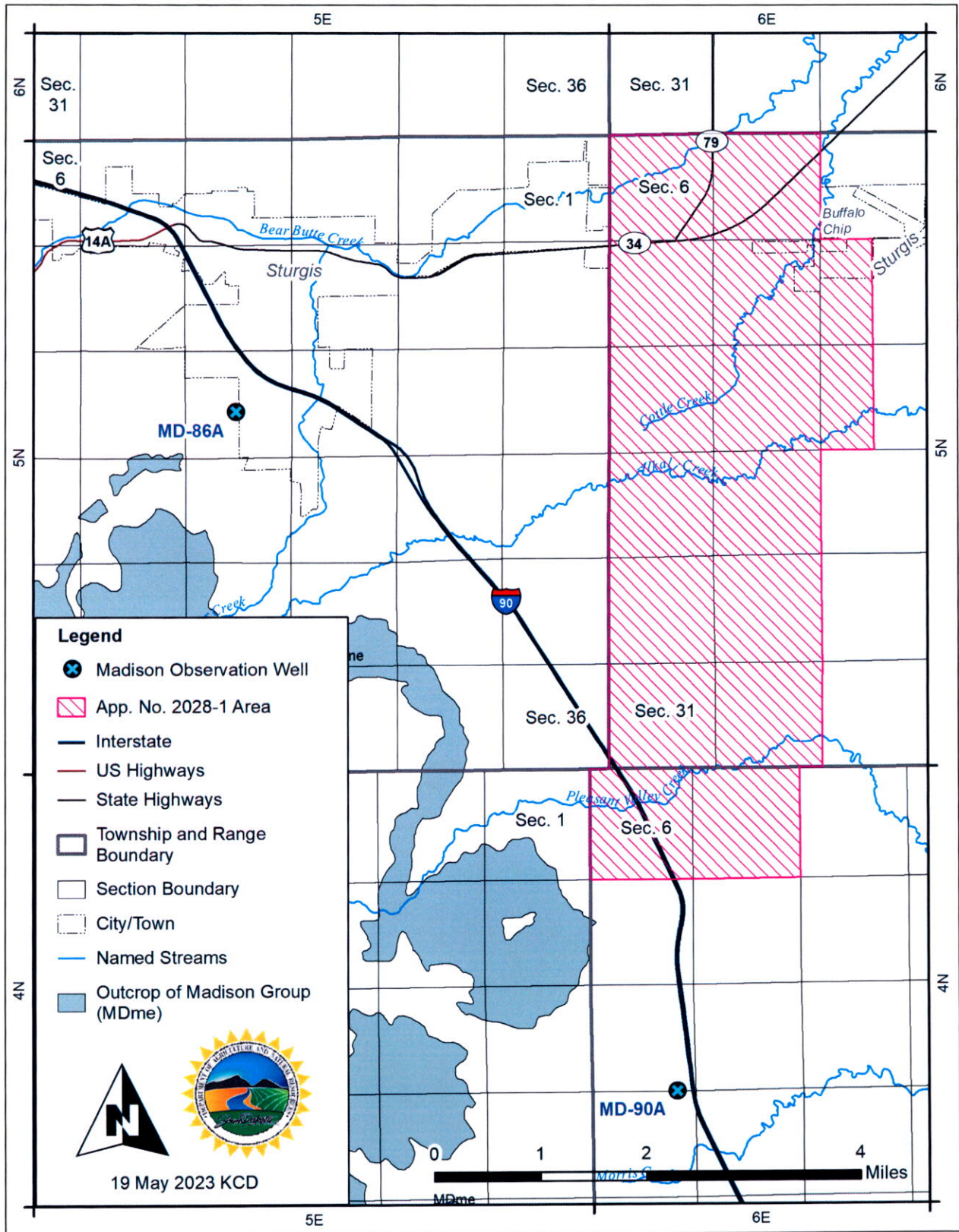


Figure 1: Area surrounding this application, including nearby observation wells [6]

Applicable South Dakota Codified Law (SDCL)

Pursuant to SDCL 46-2A-10 a reservation for future use may be approved only if there is a reasonable probability that unappropriated water is available for this application, that the quantity of water will be needed by the entity, and that the proposed use will be a beneficial use and in the public interest. The applicant has submitted correspondence and a memorandum from an engineer with DGR Engineering in the application that supplies reasoning for the quantity of water requested. This report will address the availability of unappropriated water only.

Pursuant to SDCL 46-6-3.1, 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 the water to the groundwater source. An exception allows water distribution systems to withdraw from groundwater sources older or stratigraphically lower than the Greenhorn Formation regardless of the results of a hydrologic budget. The applicant is a water distribution system as defined in SDCL 46-1-6(17). The Madison aquifer is older and stratigraphically lower than the Greenhorn Formation. Therefore, the Water Management Board's authority to approve this application is not restricted by whether recharge exceeds withdrawals. However, a statewide and local hydrologic budget is included in this report for the information of the Chief Engineer and the Water Management Board.

Availability of Water

Statewide Hydrologic Budget

Statewide 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 [5] [9]. There are several reports available estimating recharge to the Madison aquifer.

Woodward-Clyde Consultants [10] 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 [10] report is approximately 400,000 ac-ft/yr, assuming almost all of the precipitation that falls on the outcrop infiltrates into the aquifer. Woodward-Clyde Consultants [10] produced a lower-bound recharge estimate of 140,000 ac-ft/yr based on the Rahn and Gries [11] report. However, the Rahn and Gries [11] report 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 [11] reported that 146.14 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 [10] report did not acknowledge the fact that the Rahn and Gries [11] report estimated minimum recharge for a larger group of formations than the Woodward-Clyde Consultants [10] report covers, and therefore is likely to overestimate recharge to the Madison aquifer.

Carter, Driscoll, and Hamade [9] 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 [9] 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 137,000 ac-ft/yr, not including possible inflow from adjacent aquifers. The Carter, Driscoll, and Hamade [9] report uses more years of data, more recent data, and better assumptions than the Woodward-Clyde Consultants [10] and Rahn and Gries [11] reports. Therefore, the best estimate of recharge to the Madison aquifer is based on the Carter, Driscoll, and Hamade [9] report.

Statewide 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 those aquifers, outflow to springs and seeps, and withdrawals by domestic and appropriative wells [7] [12]. 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 166 water rights/permits currently authorized to withdraw from the Madison aquifer and 10 future use water rights/permits reserving water from the Madison aquifer [12]. Table 1 shows the future use permits reserving water from the Madison aquifer [12].

Table 1: Future Use Permits reserving water from the Madison aquifer [12]

Permit No.	Name/Business	County	Use	Priority Date	Amount Reserved (ac-ft/yr)
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					14,109
FR – Fall River, LA – Lawrence, MD – Meade, PE – Pennington					
MUN – Municipal, RWS – Rural Water System					
* Expands or corrects Permit No. 2560-2					

Of the 166 active water rights/permits, 101 are primarily for some type of water distribution system (rural water system, municipal, etc), 31 primarily for irrigation, 14 primarily for commercial use, 11 primarily for industrial use, four primarily for domestic use, two for geothermal use, two for institutional use, and one for recreation [12]. Estimated withdrawals for irrigation use are shown in Table 2 [12] [13].

When there were more than 10 years of irrigation reports available, the average reported irrigation was used to estimate irrigation withdrawals. When there were fewer than 10 years of irrigation reports available, withdrawals are assumed to equal two acre-feet per acre, although actual usage is likely to be less for non-turf irrigation. Non-irrigation withdrawals from permit holders with irrigation as a permitted use are assumed to withdraw at their maximum instantaneous diversion rate 60% of the time for non-irrigation uses. For 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. Water Right/Permit Nos. 1096-1, 1096A-1, 1496-1, and 1670-1 are all authorized to withdraw from the same well and one dam. Water Right Nos. 1096-1, 1096A-1, 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, 1998, 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 withdrawals. It is likely the well continues to flow uncontrolled; thus, at the flow rate listed in Water Right No. 1096A-1 of 1.33 cfs [12], that well withdraws approximately 964 ac-ft/yr from the Madison aquifer.

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 authorized by Water Right No. 1231-1. Water Right No. 1231-1 permits a 110 ac-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 ac-ft per acre for the land permitted by Water Right No. 1231-1. Kilts [14] estimated that Water Right No. 1650-1 withdraws 55.9 ac-ft/yr.

There are 43 water rights/permits that have a volume limit listed in their permit or have had their total withdrawal limited by a subsequent water right/permit held by the same person/entity. While many of those water rights/permits are required to report their withdrawals, they may develop their permits further to withdraw up to the limit on their permit, so the volume limit listed on their permits is assumed to be their total appropriation. The total volume limit listed by such permits is 24,536 ac-ft/yr [12].

There are 89 non-irrigation water rights/permits that do not have a volume limit listed in their permit and are not discussed above. They are estimated to withdraw up to their maximum instantaneous diversion rate 60% of the time, for a total estimated withdrawal of 16,897 ac-ft/yr. Based on Water Rights Staff experience, this estimate is likely to be higher than the actual withdrawals by those water rights/permits.

Report on Future Use Permit App. No. 2028-1

Table 2: Permits with irrigation listed as one beneficial use, or are connected to an irrigation permit [12] [13]

Permit No.	Name/Business	Priority	Diversion rate (cfs)	Acres Licensed/ Permitted	Average Report (ac-ft)	Number of 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	07/27/2017	1.110	100.0	0.0	5	200.0	0.0	200.0
1635-1	Black Hills National Cemetery	04/02/1990	0.820	54.5	94.7	27	94.7	356.4	451.2
1452-1	Black Hills State College	12/19/1988	3.330	25.4	20.3	34	20.3	1,447.5	1,467.7
1670-1	Buddy L, Peggy A, Kami S Ireland	06/09/1998	3.610	253.0	45.6	25	*	*	*
1096A-1	Butte Meade Sanitary Dist	04/16/1976	1.330	0.0	N/A	0	*	*	963.5
2458-2	City Of Rapid City	03/30/2001	0.800	107.0	109.4	22	109.4	0.0	109.4
2002-1	City Of Spearfish	12/28/2020	1.330	40.0	0.0	2	80.0	0.0	80.0
2313-2	Coca-Cola Bottling	04/08/1994	0.330	3.0	7.2	28	7.2	143.4	150.6
1899-1	Davis Ranches Inc	08/25/2008	1.430	100.0	0.0	14	0.0	0.0	0.0
1650-1	Dennis L Miller	04/03/1997	0.890	0.0	N/A	0	*	*	55.9
2673-2	Diocese Of Rapid City	05/27/2011	0.120	7.0	8.1	10	14.0	0.0	14.0
1009-1	Donald F/Ann J Brady	02/01/1974	0.780	53.7	29.7	41	29.7	0.0	29.7
1185-1		01/18/1979	0.380	22.5	112.8	41	112.8	***	112.8
2286-2	Donald Konechne	04/28/1993	0.100	38.5	10.2	29	10.2	0.0	10.2
1707A-1	Elkhorn Ridge @ Frawley Ranches LLC	01/06/2000	3.705	100.0	0.0	4	0.0	1,610.5	1,610.5
1707E-1**		01/06/2000	0.000	0.0	12.6	16	12.6	0	12.6
1931-1		08/17/2012	0.170	3.3	3.1	10	6.6	73.9	80.5
1945-1	Frawley Ranches LLC	02/10/2014	1.110	265.0	53.6	9	530.0	0.0	530.0
1858-1	Glencoe Camp Resort II LLC	03/08/2006	0.860	34.0	0.0	17	0.0	373.8	373.8
2593-2	Hart Ranch Development	06/15/2006	0.490	72.5	26.9	16	26.9	213.0	239.9
1911-2	Hart Ranch Development Co	09/27/1984	0.880	124.0	120.2	29	120.2	382.5	502.7
1725-2	Janice R Crowser	08/20/1980	1.070	75.1	1.0	24	1.0	0.0	1.0
2012-1	Jesse Horstmann	01/10/2022	0.500	43.5	1.0	1	87.0	0.0	87.0
858-2	John & Heidi McBride	02/05/1965	9.360	655.8	6.5	39	6.5	0.0	6.5
1885-1	John T & Veronica Widdoss	04/09/2007	0.110	22.0	17.2	6	44.0	35.7	79.7
1960-1	One Diamond Inc	04/11/2016	1.280	150.0	142.1	7	300.0	556.4	856.4
1223-1	P & L Water and Hay LLP	03/10/1981	0.670	263.0	190.6	41	190.6	0.0	190.6
1923-1	Roger & Jean Ranschau	02/15/2011	0.110	3.0	0.9	11	0.9	47.8	48.7
2013-1	Santa Maria Land & Cattle Corp	01/18/2022	2.220	460.0	N/A	0	920.0	0.0	920.0
1363-1	Spearfish Canyon Country Club	09/15/1986	0.900	80.1	65.4	36	65.4	0.0	65.4
2106-2	Stuart Rice	06/06/1990	0.080	2.8	0.8	31	0.8	34.8	35.6
1842-1	Tom C Davis	04/05/2005	0.440	330.0	0.0	18	0.0	0.0	0.0
2741-2	Tubbs Land & Cattle LLC	08/20/2018	3.340	567.0	248.0	4	1,134.0	0.0	1,134.0
419-2	Wind Cave National Park	12/29/1955	0.150	6.0	N/A	0	12.0	65.2	77.2
Total			43.805	4,061.7	43.805	597	4,136.7	5,340.9	10,497.0

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

In addition to the potential withdrawals by future use permits described above, three other applications are deferred, held in abeyance, or pending review. Water Permit Application No. 2585-2 for Southern Black Hills Water System seeks 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 seeks to appropriate 889 ac-ft/yr. Water Permit Application No. 2850-2 seeks to appropriate up to 145 ac-ft/yr and is approved by the Water Management Board but pending approval of the Findings of Facts, Conclusions of Law, and Final Decision.

Summary of Statewide Hydrologic Budget

The best available estimate of recharge to the Madison aquifer in South Dakota is approximately 137,000 ac-ft/yr [9]. The estimated withdrawals as described in the Statewide Discharge section are summarized in Table 3. The total estimated withdrawal, including withdrawals reserved for future use and held, or deferred applications is approximately 68,673 ac-ft/yr. This application would reserve 440 ac-ft/yr, if approved. Therefore, based on the statewide hydrologic budget, there is reasonable probability unappropriated water is available for this application.

Table 3: Summary of withdrawals from Madison aquifer rounded to the nearest 1 acre-foot.

Type	Count	Est. Rate (ac-ft/yr)
Irrigation (Table 2)	34	10,497
Volume limit	43	24,536
Diversion rate limit	89	16,897
<i>Subtotal (authorized to withdraw)</i>	166	51,930
Future use (Table 1)	10	14,109
Deferred/held/pending	3	2,634
Grand total	179	68,673

Local Hydrologic BudgetCarter, et al.

Carter, et al. [7] used streamflow, precipitation, spring flow, estimated ground water flow, and well withdrawal data from 1987 to 1996 for the hydrologic budgets. This application is in Subarea 2 of their report. The boundaries of the Carter et al. [7] subareas were selected to minimize flow across subarea boundaries. Carter et al. [7] estimated the total recharge to the Madison and Minnelusa aquifers in Subarea 2 was 37.9 cfs. Assuming 55% of the recharge goes to the Madison aquifer, the estimated recharge in Subarea 2 is 20.8 cfs, or approximately 15,100 ac-ft/yr [9] [7]. Carter, et al. [7] 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 38 water rights/permits authorized to withdraw, and 1 future use permit reserving water, from the Madison aquifer in Subarea 2 [12]. Domestic well withdrawals are negligible on the scale of this hydrologic budget. Using the same methods as in the Statewide Discharge section, estimated withdrawals within Carter, et al. [7] Subarea 2 are 10,731 ac-ft/yr (Table 4). This application would reserve 440 ac-ft/yr, if approved. It is likely that the withdrawal estimates are higher than the true average annual withdrawal and the recharge estimates (including induced recharge from outside the study area or subarea) are lower than actual recharge to the subarea of the Madison aquifer. Even so, the estimated recharge to the subunit exceeds the estimated average annual withdrawal.

Table 4: Estimated withdrawals in Carter et al. [7] Subarea 2

Type	Count	Est. Use (ac-ft/yr)
Irrigation	9	3,274
Volume Limit	10	2,319
Diversion rate limit	19	2,434
Subtotal (authorized to withdraw)	38	8,027
Future Use	1	2,704
Pending/Deferred/held	0	0
Grand total	39	10,731

Observation wells

Administrative Rule of South Dakota 74:02:05:07 requires that the Water Management Board rely upon the record of observation wells, in addition to other information, to determine that recharge exceeds withdrawals to approve an application. The Water Rights Program maintains 25 observation wells completed into the Madison aquifer [6]. The nearest observation wells to this application that are completed into the Madison aquifer are Observation Wells MD-86A and MD-90A, shown in Figure 1. Water level elevations for those two wells are shown in Figure 2 and Figure 3 [13]. The fluctuations in these two wells represent the general behavior of the Madison aquifer. In general, water levels rise during periods of higher-than-average rainfall and decline during periods of lower-than-average rainfall [16]. This means that recharge and natural discharge are the dominant effects in the aquifer and natural discharge is available for capture. Therefore, based on observation well analysis, there is reasonable probability unappropriated water is available for this application.

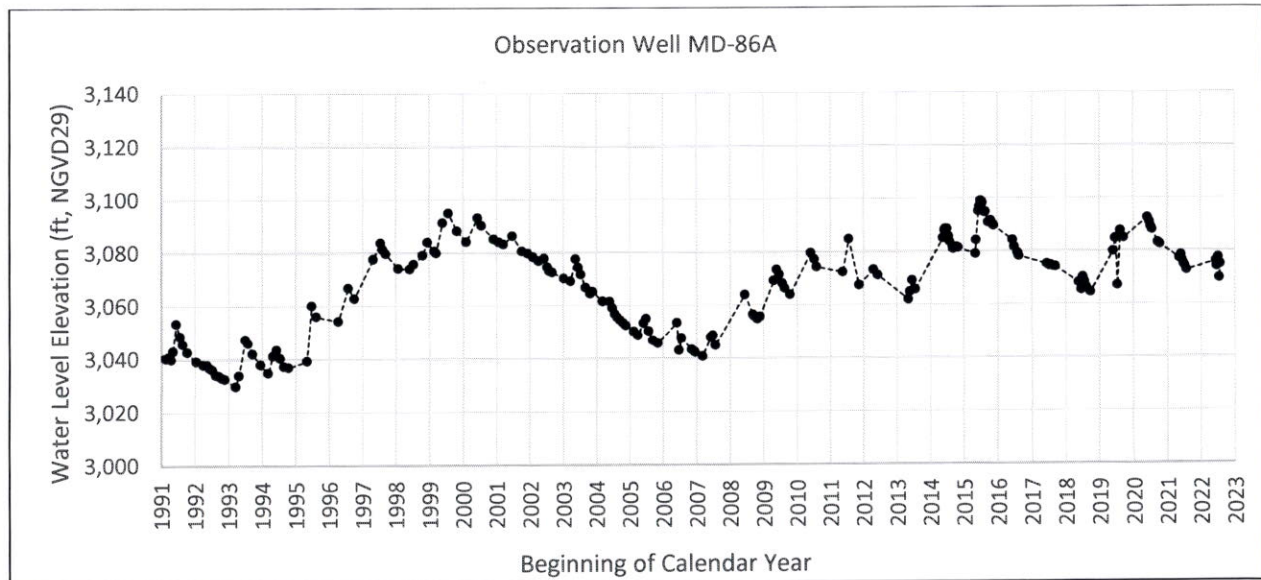


Figure 2: Water level elevations in Observation Well MD-86A [13]

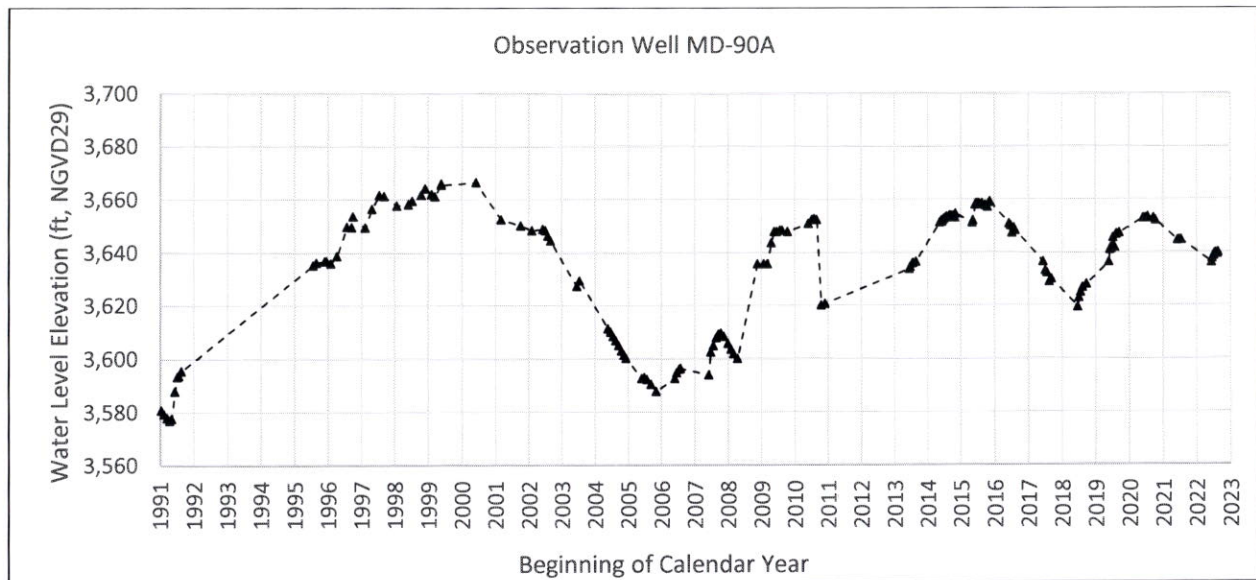


Figure 3: Water level elevations in Observation Well MD-90A [13]

Potential for Unlawful Impairment of Existing Water Rights

Pursuant to SDCL 46-2A-10, future use applications are not reviewed for the potential for unlawful impairment of existing rights since approval of a future use reservation does not authorize construction of works or application of water to beneficial use. If this application is approved and an application is filed to put the reserved water to beneficial use, then there will be a review of the potential for unlawful impairment of adequate domestic wells and existing water rights/permits with adequate wells.

Conclusions

1. Future Use Permit Application No. 2028-1 seeks to reserve 440 acre-feet of water annually from the Madison Aquifer for future use as a rural water system and water distribution system for Bear Butte Valley Water, Inc. The future use area will include Sections 5, 6, 7, 8 W $\frac{1}{2}$ Section 9, W $\frac{1}{2}$ Section 16 and Sections 17, 18, 19, 20, 29, 30, 31, and 32; all in T5N-R6E; Sections 5 and 6 in T4N-R6E, Black Hills Meridian.
2. Based on the hydrologic budget and record of observation wells, there is reasonable probability unappropriated water is available for this application even though this conclusion is not required pursuant to SDCL 46-6-3.1.

Kimberly C. Drennon, E.I.
Natural Resources Engineer II – DANR Water Rights Program

References

- [1] M. D. Fahrenbach, F. V. Steece, J. F. Sawyer, K. A. McCormick, G. L. McGillivray, L. D. Schulz and J. A. Redden, "South Dakota Stratigraphic Correlation Chart," SD DANR Geological Survey Program, Vermillion, South Dakota, 2010. Oil and Gas Investigation 3.
- [2] J. E. Martin, J. F. Sawyer, M. D. Fahrenbach, D. W. Tomhave and L. D. Schulz, "Geologic Map of South Dakota," SD DANR Geological Survey Program, Vermillion, South Dakota, 2004. General Map 10.
- [3] J. S. Downey, "Geohydrology of the Madison and associated aquifers in Parts of Montana, North Dakota, South Dakota, and Wyoming," United States Geological Survey, Reston, Virginia, 1984. Professional Paper 1273-G.
- [4] J. M. Carter, D. G. Driscoll, J. E. Williamson and V. A. Lindquist, "Atlas of water resources in the Black Hills area, South Dakota," United States Geological Survey, Reston, Virginia, 2002. Hydrologic Atlas 747.
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- [6] SD DANR Water Rights Program, "Observation wells," Pierre, South Dakota, 2023.
- [7] J. M. Carter, D. G. Driscoll and G. R. Hamade, "Estimated recharge to the Madison and Minnelusa aquifers in the Black Hills Area, South Dakota and Wyoming, Water Years 1931-98," United States Geological Survey, Reston, Virginia, 2001. Water-Resources Investigations Report 00-4278.
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- [9] P. H. Rahn and J. P. Gries, "Large springs in the Black Hills, South Dakota and Wyoming," SD DANR Geological Survey Program, Vermillion, South Dakota, 1973. Report of Investigations 107.
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- [11] SD DANR Water Rights Program, "Water right permit file database," SD DANR Water Rights Program, Pierre, South Dakota, 2023.
- [12] SD DANR Water Rights Program, "Irrigation reports," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota, 2022.
- [13] W. K. Kilts, "Report to the Chief Engineer on Water Permit Application No. 1987-1," DANR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota, 2019.
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**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

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

May 26, 2023

Bear Butte Valley Water Inc.
c/o Bruce Weyrich
PO Box 351
Sturgis SD 57785

Dear Mr. Weyrich:

Water Permit Application No. 2028-1 for future use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Faith Independent printed at Faith SD (Ph # 605 967-2161) and the Black Hills Pioneer printed at Spearfish SD (Ph # 605 642-2761). 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. 2028-1 to Appropriate Water

Notice is given that Bear Butte Valley Water, Inc., c/o Bruce Weyrich, PO Box 351, Sturgis SD 57785 has filed an application for a future use permit. Application No. 2028-1 proposes to reserve for future use 440-acre feet of water from the Madison aquifer for a rural water system and water distribution system use. The future use area will include Sections 5, 6, 7, 8, W 1/2 Section 9, W 1/2 Section 16 and Sections 17, 18, 19, 20, 29, 30, 31, 32; all in T5N-R6E; Sections 5 and 6; both in T4N-R6E. This site is located approximately 3 miles east of Sturgis SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2028-1 with qualifications because 1) there is reasonable probability that unappropriated water is available for the applicant's proposed use, 2) the quantity of water reserved will be needed, 3) it is a beneficial use of water, and 4) it is in the public interest. 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 June 20, 2023.

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 June 20, 2023.

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: Friday, May 26, 2023 8:55 AM
To: faithind@faithsd.com
Subject: 2028-1 Bear Butte Valley Water Inc - Public Notice
Attachments: 2028-1 public.shortFUnewappl_final.docx; FORM8.FRM.doc

Attached is a notice to be published on June 7, 2023

Bear Butte Valley Water, Inc., c/o Bruce Weyrich, PO Box 351, Sturgis SD 57785, (605-206-0703) 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, 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: Friday, May 26, 2023 8:57 AM
To: legals@bhpioneer.com
Subject: 2028-1 Bear Butte Valley Water Inc - Public Notice
Attachments: 2028-1 public.shortFUnewappl_final.docx; FORM8.FRM.doc

Attached is a notice to be published on June 7, 2023.

Bear Butte Valley Water, Inc., c/o Bruce Weyrich, PO Box 351, Sturgis SD 57785, (605-206-0703) 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, 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



RECEIVED

JUN 12 2023

OFFICE OF
WATER

Affidavit of Publication ✓

STATE OF SOUTH DAKOTA:

COUNTY OF LAWRENCE:

Letitia Lister of said County and State being first duly sworn, on her oath says: That the BLACK HILLS PIONEER is a legal daily newspaper of general circulation, printed and published in the City of Spearfish, in said County and State by Letitia Lister, and has been such a newspaper during the times hereinafter mentioned; and that said newspaper has a bonafide circulation of at least 200 copies weekly, and has been published within said County in the English language for at least one year prior to the first publication of the notice herein mentioned, and is printed in whole or in part in an office maintained at the place of publication; and that I, Letitia Lister, the undersigned, am the Publisher of said newspaper and have personal knowledge of all the facts stated in this affidavit; and that the advertisement headed:

Notice Of Application
No 2028-1

a printed copy of which is hereto attached, was printed and published in said newspaper for 1 successive and consecutive weeks, the first publication being made on the 7th day of June, 2023 and the last publication on the _____ day of _____, _____, that the full amount of fees charged for publishing same, to-wit: The sum of \$ 39.31, insures solely to the benefit of the publisher of the BLACK HILLS PIONEER, that no agreement or understanding for a division thereof has been made with any person and that no part thereof has been agreed to be paid to any other person whomsoever.


Subscribed and sworn to before me this 9th day of June, 2023



Notary Public, Lawrence County, South Dakota

My commission expires: 7-18-2025

**NOTICE OF
APPLICATION NO.
2028-1 to
Appropriate Water**

Notice is given that Bear Butte Valley Water, Inc., c/o Bruce Weyrich, PO Box 351, Sturgis SD 57785 has filed an application for a future use permit. Application No. 2028-1 proposes to reserve for future use 440-acre feet of water from the Madison aquifer for a rural water system and water distri-

Wedn

bution system use. The future use area will include Sections 5, 6, 7, 8, W 1/2 Section 9, W 1/2 Section 16 and Sections 17, 18, 19, 20, 29, 30, 31, 32; all in T5N-R6E; Sections 5 and 6; both in T4N-R6E. This site is located approximately 3 miles east of Sturgis SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2028-1 with qualifications because 1) there is reasonable probability that unappropriated is water available for the applicant's proposed use, 2) the quantity of water reserved will be needed, 3) it is a beneficial use of water, and 4) it is in the public interest. 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 June 20, 2023.

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

esday, June 7, 2023

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 June 20, 2023.

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 \$40.27 and can be viewed free of charge at www.sd-publicnotices.com.

**#479
Jun 7**

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SS
County of Meade)

I, Kris Stocklin-Johnson

certify that the attached printed Notice was taken
from the Faith Independent

printed and published in Faith

County of Meade and

state of South Dakota. The notice was published
in the newspaper on the following date:

06/07/2023

Cost of Printing \$37.08

Kris Stallen-Johnson
(Signature)

Editor
(Title)

06/07/2023
(Date Signed)

USDA/Farm Service Agency News

The Corson, Dewey, Meade, Perkins & Ziebach County FSA offices would like to keep you informed of the following items important to USDA programs. If you have any questions, please contact the following offices at:

- Corson County FSA: 605-273-4506 Extension 2
- Dewey County FSA: 605-865-3522 Extension 2
- Meade County FSA: 605-347-4952 Extension 2
- Perkins County FSA: 605-244-5222 Extension 2
- Ziebach County FSA: 605-365-5179 Extension 2.

FSA Calendar Deadlines:

June 15, 2023: Dewey and Ziebach Counties-ECP Signup begins for Fence Repair or Replacement

June 15, 2023: Nomination Period begins for County Committee Elections

June 19, 2023: Service Center Closed in observance of Juneteenth Day.

July 14, 2023: ERP Phase 2 application period ends.

July 14, 2023: PARP application period ends.

July 15, 2023: Dewey and Ziebach Counties-Final date to submit a Cost Share Request for ECP Fence Repair or Replacement

July 17, 2023: 2023 acreage reporting deadline for spring seeded alfalfa seed, forage seeding, CRP, perennial forage not covered under NAP and all other crops not required to be reported by a previous reporting date.

August 1, 2023: Last day to file nomination forms at your local FSA Office.

Sept. 1, 2023: NAP application closing date for fall and spring seeded Canola and all Value Loss Crops.

Sept. 30, 2023: NAP application closing date for all perennial forage, fall and spring seeded garlic, rye, speltz, triticale, wheat, and mixed forage crops. Please note that the acreage reporting date for your NAP covered crops is the earlier of the established FSA acreage reporting date for the crop or 15 calendar days before the onset of harvest or grazing of the specific crop acreage being reported.

October 15, 2023: Grazing Period Ends

November 6, 2023: Ballots mailed to eligible voters.

December 4, 2023: Last day to return voted ballots to your local FSA Office.

December 29, 2023: Application closing date for the Emergency Grain Storage Facility Assistance Program

January 1, 2024: Newly elected County Committee members take office.

FSA State and County Newsletter

Interested in our GovDelivery newsletter? Sign up by clicking the link: <https://public.govdelivery.com/accounts/USFSA/subscriber/new/>

Office Notes

Emergency Conservation Program (ECP): A statewide

ECP signup for Replacing or Restoring Permanent Fences has been announced. Each County will establish the signup period for their individual county. Dewey and Ziebach Counties have established their ECP Signup for Replacing or Restoring Permanent Fence as June 15, 2023 – July 15, 2023. For more information, please contact your local FSA Office.

2023 Acreage Reporting: The appointments have been scheduled and maps have been mailed out. Please review and complete the maps prior to your appointment. It is very important that you include the following information on your maps:

- Crop
- Crop Type
- Intended Use
- Planting Date
- Shares; ie 100% Mr. Producer

or the shares and respective producer if more than 1 person is certifying to an interest in the same acreage.

• If you have failed acres those acres should also be reported, and a Notice of Loss filed. If the failed crop does not have NAP coverage you must file a Not for NAP Notice of Loss, if the crop has NAP then you must file a Notice of Loss. A Notice of Loss cannot be filed if you have not completed your acreage report.

• If you have NAP coverage you must report your acres in order to have coverage on your acres. At the time you acquire NAP coverage you only have coverage on the specific crops, type and intended uses you selected. NO Acres are covered unless or until you report those acres to your FSA office.

If you are unable to make your scheduled appointment, please contact your local FSA Office.

Notice of Loss: A Notice of Loss is required for multiple FSA Programs. If you do not timely file a Notice of Loss for the appropriate program, you may not be eligible for benefits. All Livestock Notices of Loss must be filed within 30 calendar days of the loss becoming apparent. A separate and distinct Notice of Loss is required for:

- Livestock Indemnity Program (LIP)
- Emergency Livestock Assistance Program (ELAP)

Livestock Indemnity Program (LIP)

Notice of Loss must be filed within 30 days of when the loss is apparent.

Emergency Livestock Assistance Program (ELAP) notice of loss must be filed within 30 days of when loss is apparent for **livestock and farm-raised fish losses.**

ELAP notice of loss must be filed within 15 days of when loss is apparent for **honeybee losses.**

June Interest Rates: Interest rates for Operating and Ownership loans for June 2023 are as follows:

- Farm Operating Loans (Direct): 4.500%

Continued on page 12

NOTICE OF APPLICATION NO. 2028-1 to Appropriate Water

Notice is given that Bear Butte Valley Water, Inc., c/o Bruce Weyrich, PO Box 351, Sturgis SD 57785 has filed an application for a future use permit. Application No. 2028-1 proposes to reserve for future use 440-acre feet of water from the Madison aquifer for a rural water system and water distribution system use. The future use area will include Sections 5, 6, 7, 8, W 1/2 Section 9, W 1/2 Section 16 and Sections 17, 18, 19, 20, 29, 30, 31, 32; all in T5N-R6E; Sections 5 and 6; both in T4N-R6E. This site is located approximately 3 miles east of Sturgis SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2028-1 with qualifications because 1) there is reasonable probability that unappropriated is water available for the applicant's proposed use, 2) the quantity of water reserved will be needed, 3) it is a beneficial use of water, and 4) it is in the public interest. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duval 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 June 20, 2023.

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 June 20, 2023.

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 June 07, 2023 at the approximate cost of \$37.08 and may be viewed free of charge at www.sdpublishing.com.

MEADE SCHOOL DISTRICT 46-1 MEETING MINUTES, Wednesday, May 17, 2023 6:00 PM Amended_Special Board Meeting - Executive Session Board Room, Williams Administration Building

Board Member Present: Aaron Odegaard: Present, Charlie Wheeler: Present, Darrell Vig: Present, Holly Good: Present, Joseph Urbaniak: Present, Justin Jutting: Present, Lee Spring: Present, Sandy Cass: Present, Terry Koontz: Present.

Others Present: Wayne Wormstadt, Eric Nies, student and student family. **Regular board meeting called to order at 6:00 PM**

Call meeting to order/roll call
Pledge of Allegiance
Appointment School Attorney, Eric Nies as hearing officer

MOTION by Vig, seconded by Jutting, and Carried to appoint School Attorney, Eric Nies as the hearing officer.

SDCL 1-25-2 Executive or closed meetings-Purposes-Authorization-Violation as misdemeanor. Executive or closed meetings may be held for the sole purposes of: View SDCL 1-25-2 for all reasons for executive session.

School board members will enter into executive session to discuss Student Related Matters (SDCL-1-25-2.2).

MOTION by Vig, seconded by Jutting, and Carried to enter into executive session to discuss Student Related Matters (SDCL-1-25-2.2) at 6:02 pm.

Board chair declared to leave executive session at 7:57 pm.

MOTION by Good, seconded by Vig, and Carried with unanimous decision that HW is suspended from attendance in the District for a period of 90 school days. However, she is granted the right to be reinstated early if she fulfills the following conditions:

1. She undergoes a mental health evaluation at her cost and provides a copy of the same to the Superintendent.
2. The Superintendent concludes, based on the mental health evaluation, that HW is not a danger to herself or others.
3. HW will regularly attend counseling with a District counselor as long as the Superintendent deems it necessary – at a minimum through the fall Semester of 2023."

Adjournment
MOTION by Urbaniak, seconded by Spring, and Carried to adjourn at 7:59 pm.

Charles M. Wheeler, President

Wayne Wormstadt, Superintendent

Charles M. Wheeler, Recorder

Published June 07, 2023 at the approximate cost of \$31.30 and may be viewed free of charge at www.sdpublishing.com.

MEADE SCHOOL DISTRICT 46-1 MEETING MINUTES, Tuesday, May 16, 2023 4:00 PM Special Board Meeting - Executive Session Board Room, Williams Administration Building

Board Member Present: Aaron Odegaard: Present, Charlie Wheeler: Present, Darrell Vig: Present, Holly Good: Present, Joseph Urbaniak: Present, Justin Jutting: Present, Lee Spring: Present, Sandy Cass: Present, Terry Koontz: Present.

Others Present: Wayne Wormstadt, Eric Nies, student and student family. **Special board meeting called to order at 4:02 PM**

Call meeting to order/roll call
Pledge of Allegiance
Appointment School Attorney, Eric Nies
MOTION by Vig, seconded by Jutting, and Carried to appoint school attorney, Eric Nies, as the hearing officer.

SDCL 1-25-2 Executive or closed meetings-Purposes-Authorization-Violation as misdemeanor. Executive or closed meetings may be held for the sole purposes of: View SDCL 1-25-2 for all reasons for executive session.

School board members entered into executive session to discuss Student Related Matters (SDCL-1-25-2.2).

MOTION by Cass, seconded by Urbaniak, and Carried to enter into executive session to discuss Student Related Matters (SDCL-1-25-2.2) at 4:02 pm. Board chair declared to leave executive session at 8:23 pm.

MOTION by Good, seconded by Jutting, and Carried with unanimous decision that JJ shall be expelled from attendance in the District for a period of 12 months from May 16, 2023, as recommended by the Superintendent. However, the Board grants him the opportunity to be reinstated early if the Superintendent determines he has fulfilled all of the following conditions:

1. JJ must successfully complete an inpatient group program designed to assist him in improving self-control and anger management. Such program must be at least 6 months in duration; and,
2. After successfully completing such group program, JJ must be assessed for mental health by a psychologist or other mental health professional chosen by the Superintendent; and,
3. Such psychologist or other mental health professional shall verify in writing that JJ is not a threat to himself or others (including other students or staff in an educational setting); and,
4. JJ must complete an anger management curriculum acceptable to the Superintendent; and,
5. JJ must continue in counseling for the period beginning May 16, 2023, and continuing through his application for reinstatement; and,
6. JJ must not assault or physically threaten any other individual (including a family member) during the period beginning May 16, 2023, and continuing through his application for reinstatement."

Adjournment
MOTION by Jutting, seconded by Vig, and Carried to adjourn at 8:26 pm.

Charles M. Wheeler, President

Wayne Wormstadt, Superintendent

Charles M. Wheeler, Recorder

Published June 07, 2023 at the approximate cost of \$36.40 and may be viewed free of charge at www.sdpublishing.com.

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, May 26, 2023 9:03 AM
To: 'dennisk.bbvwater@gmail.com'
Subject: 2028-1 Bear Butte Valley Water Inc - Public Notice
Attachments: 2028-1.pdf; 2028-1 public.shortFUnewappl_final.docx; 2028-1 Ltr.pdf

Attached is a copy of the report, chief engineer 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.** This information is being mailed to you today.

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

JUL 11 2023

Bear Butte Valley Water, Inc.
c/o Bruce Weyrich
PO Box 351
Sturgis SD 57785

Dear Mr. Weyrich:

Enclosed is Future Use Permit No. 2028-1 as approved by the Water Management Board.

When plans for facilities are prepared to put any portion of the water granted in the future use permit to beneficial use, an application covering such facilities and water use should be submitted to this office before construction is initiated.

Sincerely,

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

enclosure



**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
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.: 2028-1

Name of Applicant: Bear Butte Valley Water, Inc., Bruce Weyrick

Date of Posting: 6/6/2023

Date of Removal: 7/11/2023



Ron Duvall, Water Rights Permitting Administrator

7/14/23

Date

Subscribed and sworn to before me, a notary public, this 14 day of July, 2023.



Notary Public - South Dakota
My commission expires:

**Rachel Rodriguez
My Commission Expires
May 16, 2029**

(SEAL)

