

WATER PERMIT NO. 1837-1

Name of Applicant: Guy Mann

Address: PO Box 3530, Rapid City SD 57709

Phone: 605 342-8530

Amount of Water Claimed: 0.44 cfs

Total Acres: na

Source of Water Supply: groundwater (one well)

Water to be used for: suburban housing development

County: Meade

Type of Waste Disposal System:

Location: 8 miles east of Piedmont

PRIORITY

Date Received: 2-28-05

Application/License Fee: \$300

Corrected Application Received:

Period of Annual Use: January 1 – December 31

Remarks:

Diversion Point: SW ¼ NW ¼ Sec 13-T3N-R7E

Land to be Irrigated: NA

Depth of Well: 1690 feet deep

Well Driller: : Cimarron Drilling, Inc.

Remarks:

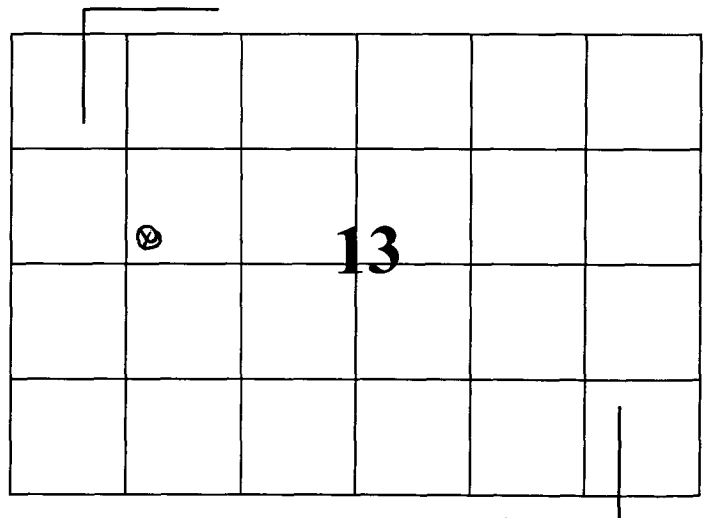
Type of Map: plat

Prepared by: Timothy Grosz, PE

Reviewed and the Number Assigned on: 2-28-05

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>1837-1</u> (office use only) Hydrologic Unit <u>10120111</u>
	Basin <u>Upper Cheyenne</u>
	Newspaper <u>Meade Co. Times-Tribune, Sturgis</u>

RECEIVED
FEB 28 2005
WATER RIGHTS
PROGRAM

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

Check use(s) of water:

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

Type of Application: (check one)

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

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

- Name of Applicant Guy Mann (check one) ☒ Owner ☐ Tenant/lessee Phone 605-342-8530
Mailing Address PO Box 3530, Rapid City State SD 57709
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 0.44 *CFS or 200 **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply Lakota Formation
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Meade
1 well located in the SW1/4 of the NW1/4 of Section 13
Township 3 North, Range 2 East
- County or counties where water will be used Meade
- Annual period during which water is to be used year round Jan 1-Dec 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)
Water Supply for approximately 200 homes at full build out
to be constructed over 4 phases. Individual lots with
Septic Systems - Prairie Haven Subdivision.

STATE OF SOUTH DAKOTA)

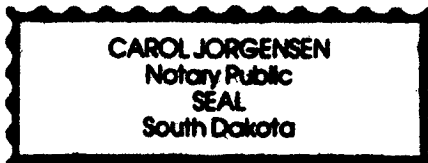
County of Meade) SS

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

I, Guy Mann, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature Guy Mann

Subscribed and sworn to before me this 25 day of FEBRUARY 20 05



Notary Public signature
[Signature]
my Commission ENDS
Oct. 15, 2010

SOUTH DAKOTA
WATER PERMIT NO. 1837-1

Date of first receipt of application February 28, 2005.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1837-1 to Guy Mann, PO Box 3530, Rapid City SD 57709 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 1837-1 appropriates 0.44 cubic feet of water per second from one well to be completed into the Inyan Kara Aquifer (approximately 1690 feet deep) located in the SW ¼ NW ¼ section 13-T3N-R7E.
2. The water appropriated shall be used for the purpose of suburban housing development use at Prairie Haven Subdivision and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 1837-1 is June 6, 2005.
5. The date from which applicant may claim right is February 28, 2005.
6. One-fifth of the construction is to be completed on or before December 6, 2007.
7. All construction is to be completed on or before June 6, 2010.
8. Water is to be put to beneficial use on or before June 6, 2014.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Prairie Haven Subdivision shall report to the Chief Engineer annually the amount of water withdrawn each year from the Inyan Kara Aquifer.

WATER MANAGEMENT BOARD

By: Garland Erbele

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

JUN 23 2005

date



(type or print in ink)

1. Well Information - Proposed Construction

See attached Well Log

- a) Drill Hole Diameter 8 3/4 Depth 1690
- b) Casing Type Steel Diameter 7 inch Thickness 23 lb/ft
- c) Screen Type Jet Perforated Diameter 7 inch Thickness NA
- d) Gravel Pack NA Length of Gravel Pack NA
- e) Depth to Top of Water Bearing Material 600' after 2 Hrs @ 350 gpm
- f) Depth to Water (ground surface to water level) 120 (static)
- g) Distance to nearest existing domestic well:

On applicants property None On property owned by others 1/2 mile to southwest

2. Wastewater Disposal System Information

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

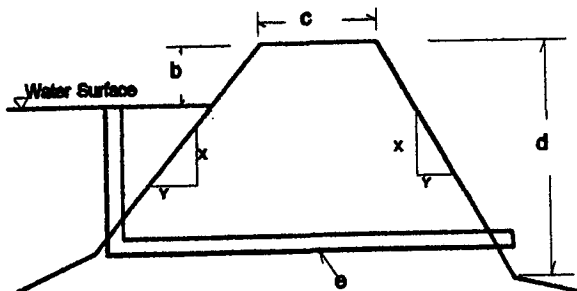
3. Dugout Information

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

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

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date February 28,, 2005

RECEIVED OF Prairie Haven Land Company LLC, PO Box 353C, Rapid City SD 57709

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

Fee for Application for Permit No. <u>1837-1</u> to Appropriate Water, to construct and to put water to beneficial use	25C	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>1837-1</u>	5C	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	300.00

No.

00179

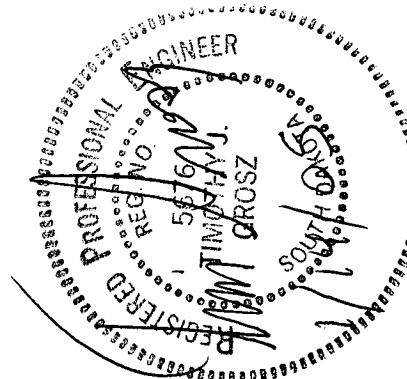
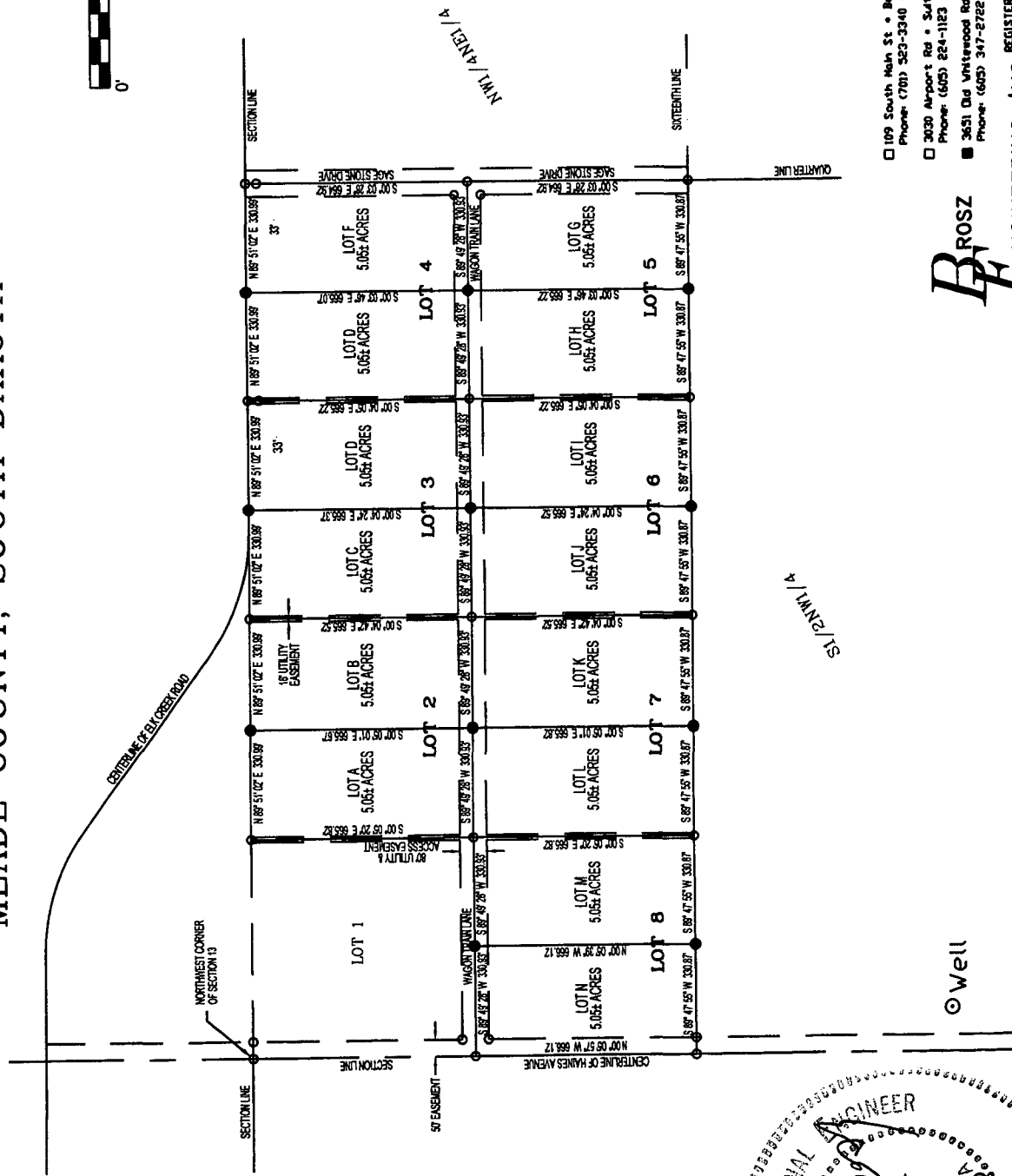
By

Darlene A. White

Chief Engineer

gm

WELL LOCATION FOR THE PRAIRIE HAVEN SUBDIVISION MEADE COUNTY, SOUTH DAKOTA LOCATED IN THE SW1/4 NW1/4 OF SECTION 13, TOWNSHIP 3 NORTH, RANGE 7 EAST OF THE B.H.M. MEADE COUNTY, SOUTH DAKOTA



- 109 South Main St. • Box 357 • Bismarck, ND 58623
Phone: (701) 523-3340 • Fax: (701) 523-3243
- 3030 Airport Rd. • Suite A • Box 23 • Pierre, SD 57501
Phone: (605) 224-1123 • Fax: (605) 224-0655
- 2651 Old Veterans Rd. • Box 636 • Sturgis, SD 57783
Phone: (605) 347-2722 • Fax: (605) 347-2822

BROSZ
ENGINEERING, INC.
REGISTERED IN NORTH DAKOTA, SOUTH DAKOTA, MONTANA AND WYOMING

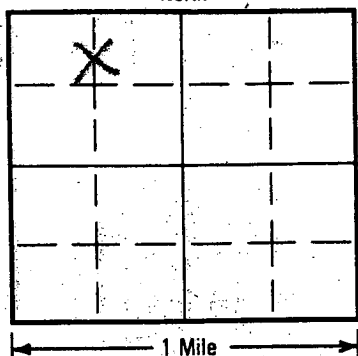
© well

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW 1/4 Sec 13 Twp 3-N Rg 7-E
 County North

Please mark well location with an "X"



Well Completion Date

Oct. 30-04

LOCATION:

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

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary - Mud

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other, describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>23 LB/FT</u>	<u>7 IN</u>	<u>0 FT</u>	<u>1690 FT</u>	<u>8 3/4 IN</u>
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA

Grout Type Portland No. of Sacks 200 Grout Weight 94 lb./gal From 0 ft. To 1690 ft.
 Type ITT lb./gal. ft. ft.
 Describe grouting procedure Pressure grout thru casing displacing water to surface pump

SCREEN:

☒ Perforated pipe ☐ Manufactured
 Diameter Perf. Gun IN Length 20 FEET
 Material Steel
 Slot Size Set From Feet to Feet
 Other information Goodwell Perforated.

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material?

Describe packer(s) and location?

DISINFECTION: Was well disinfected upon completion?

☒ YES, How:

☐ NO, Why Not?

Laboratory sent to for water quality analysis

owner to complete

Well Owner: GUY MANN
 Business Name: PRAIRIE HAVEN ESTATES LLC
 Address: P.O. 3530
Rapid City S.D. 57709

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Blue Shale	0'	1200'
Ben. Gray Clay & SS. Shale	1200'	1380'
Blue Shale	1380'	1480'
Green & Maroon Shale	1480'	1560'
Light Ben. & Gray Clay	1560'	1600'
White Sandy Clay	1600'	1630'
Green Stick Clay	1630'	1690'

STATIC WATER LEVEL

120

Feet

If flowing: closed in pressure

PSI

GPM flow through

inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced Flowrate

GPM

Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe: Air developed
☐ Bailed
☒ Other
 Pumping Level Below Land Surface
200 ft. After 2 Hrs. Blow 60 GPM
800 ft. After 2 Hrs. Blow 450 GPM
600 ft. After 2 Hrs. Blow 350 GPM
 If pump installed, pump rate 2 (2) Blow

REMARKS

Good well logged
& shot 20 shots @ 1226'
logg. enclosed. to 1246'

This well was drilled under license # 562

And this report is true and accurate.

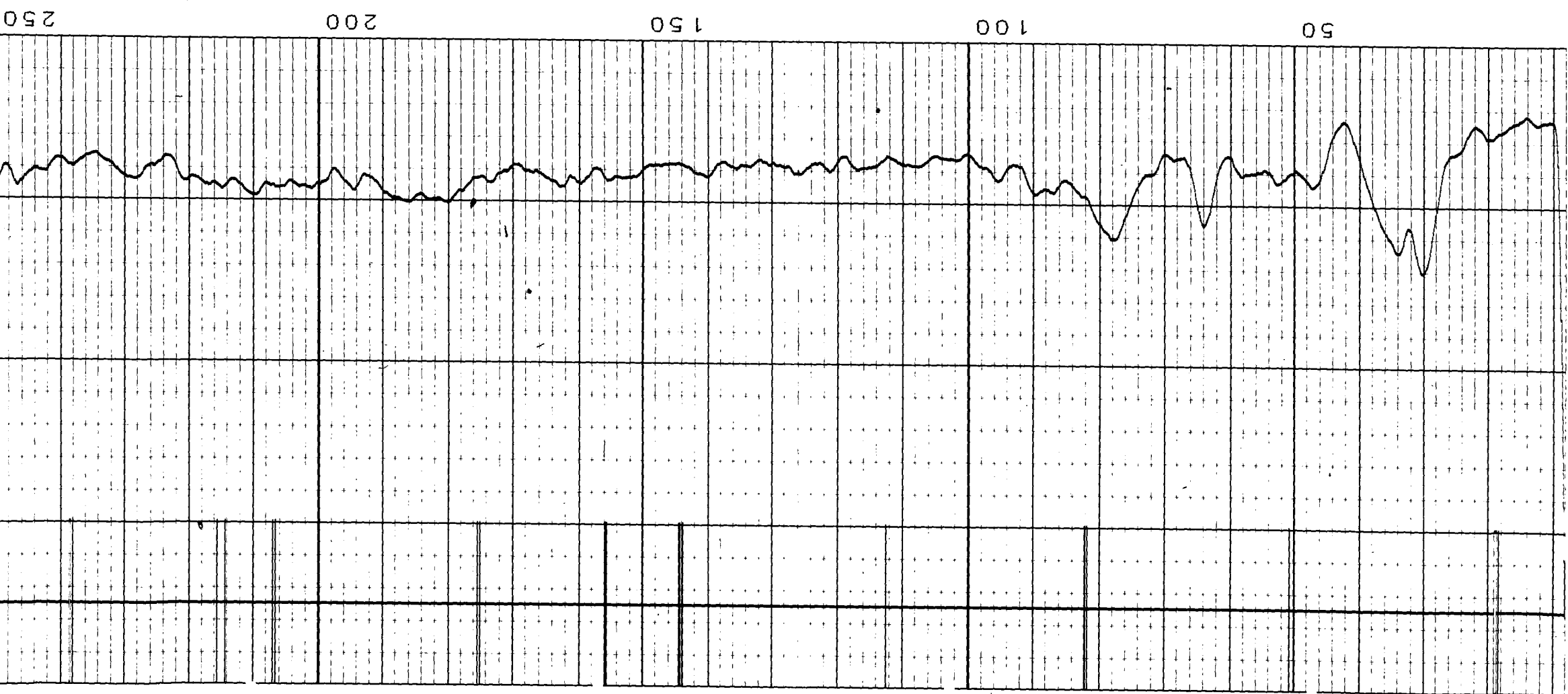
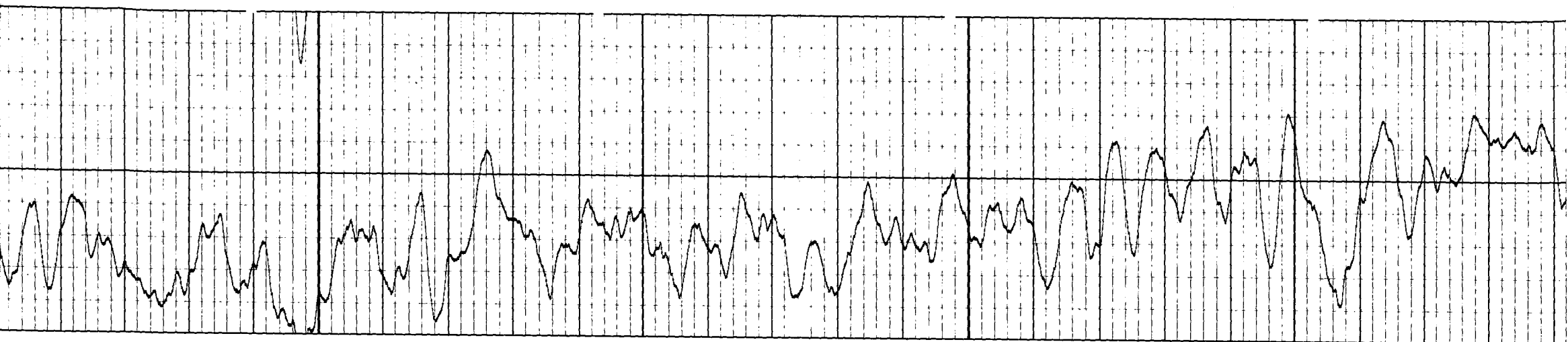
Drilling firm CINARON Drilling Inc.

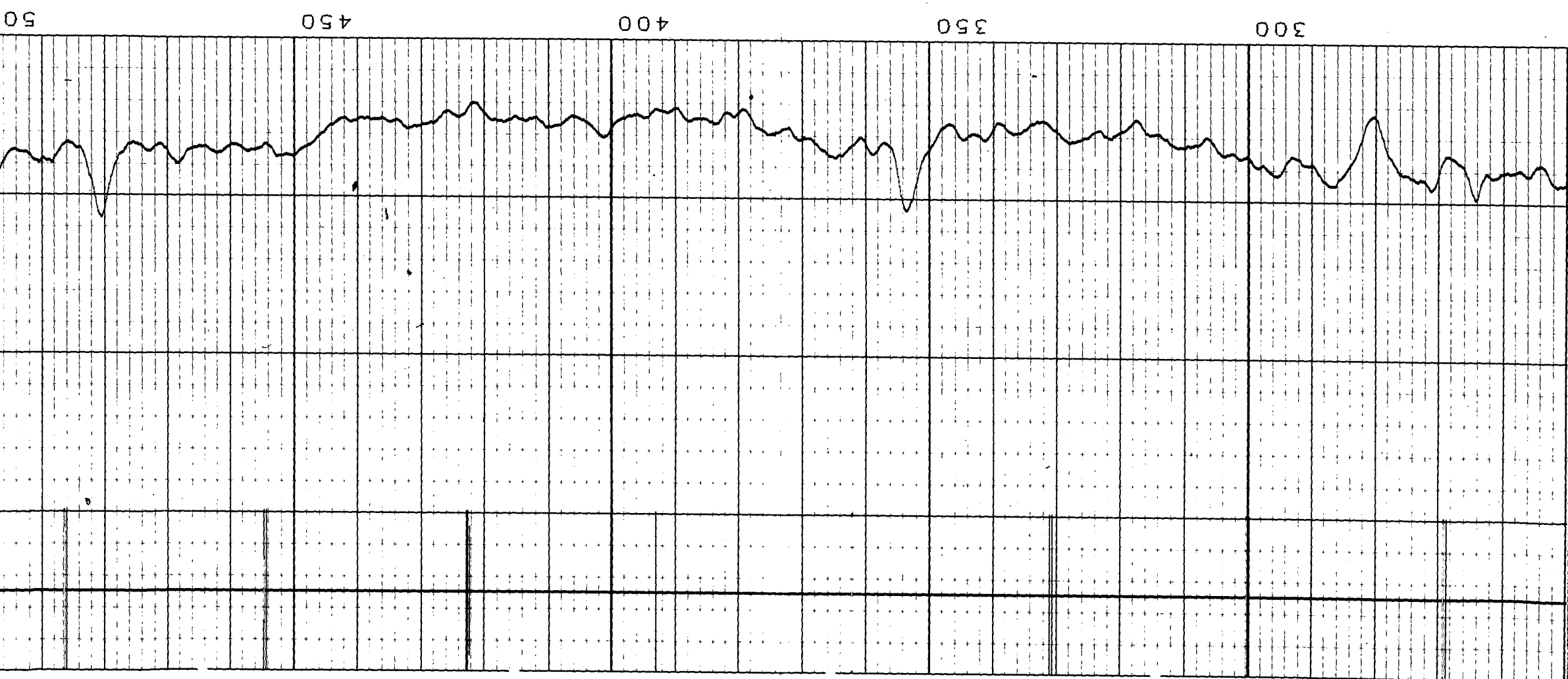
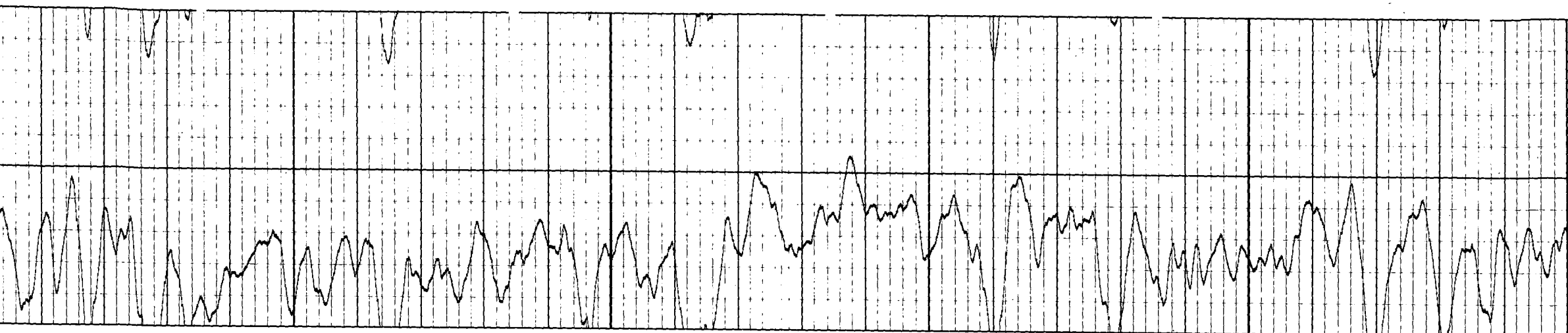
Signature of License Representative:

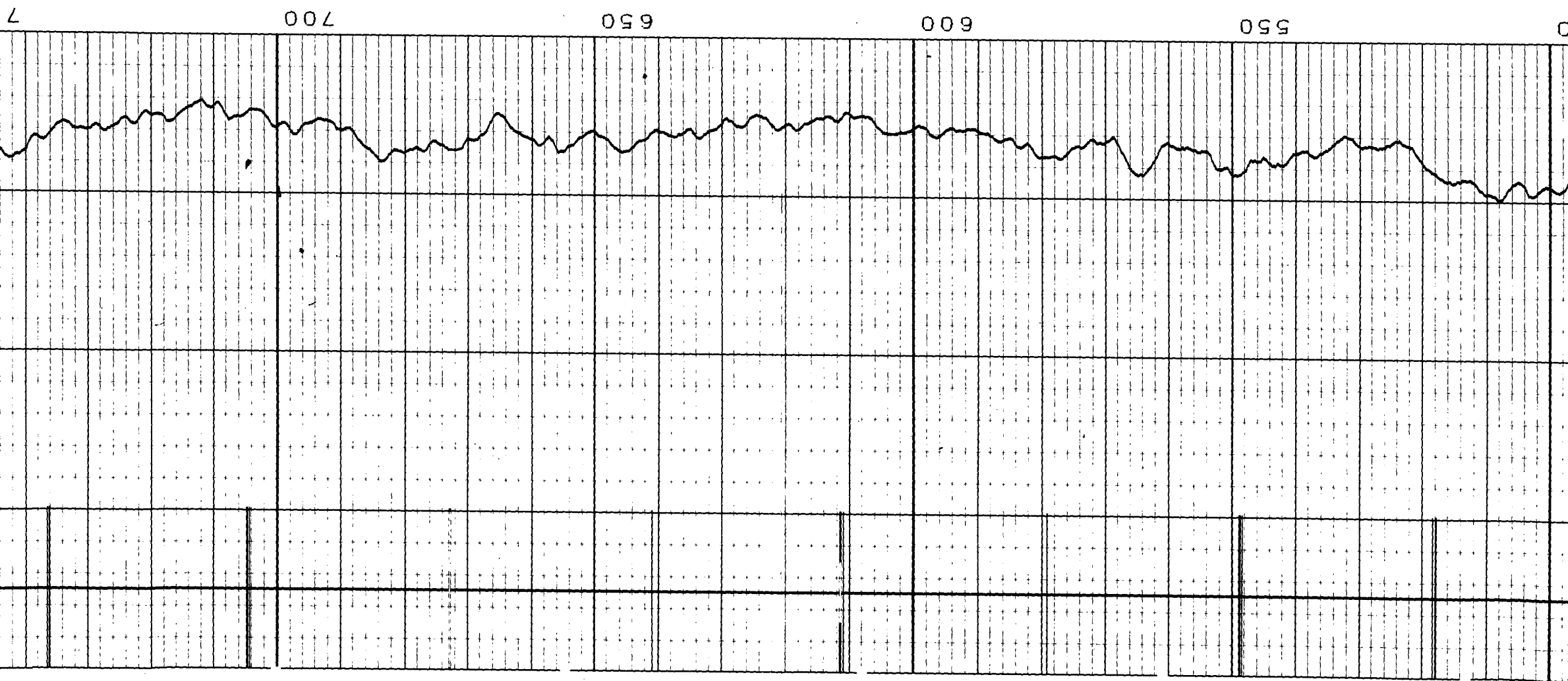
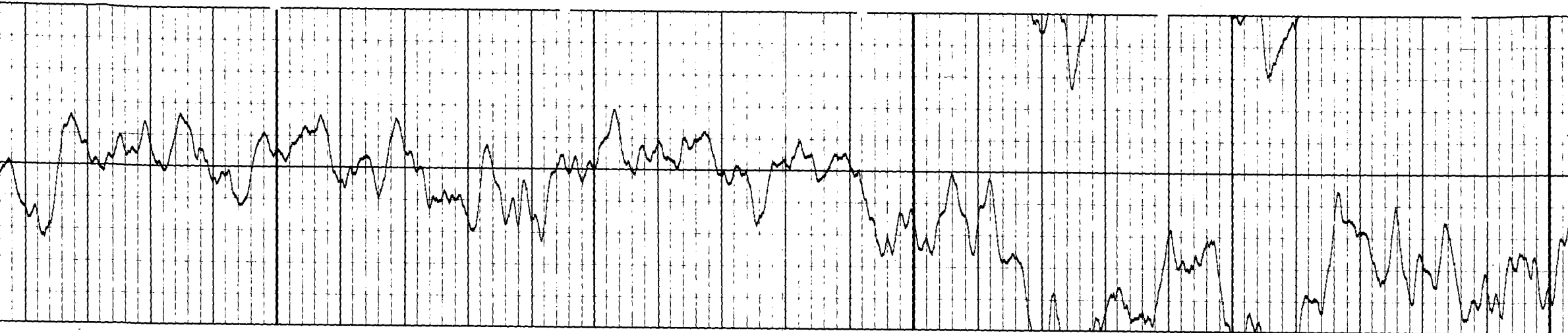
Michael J. Dutcher

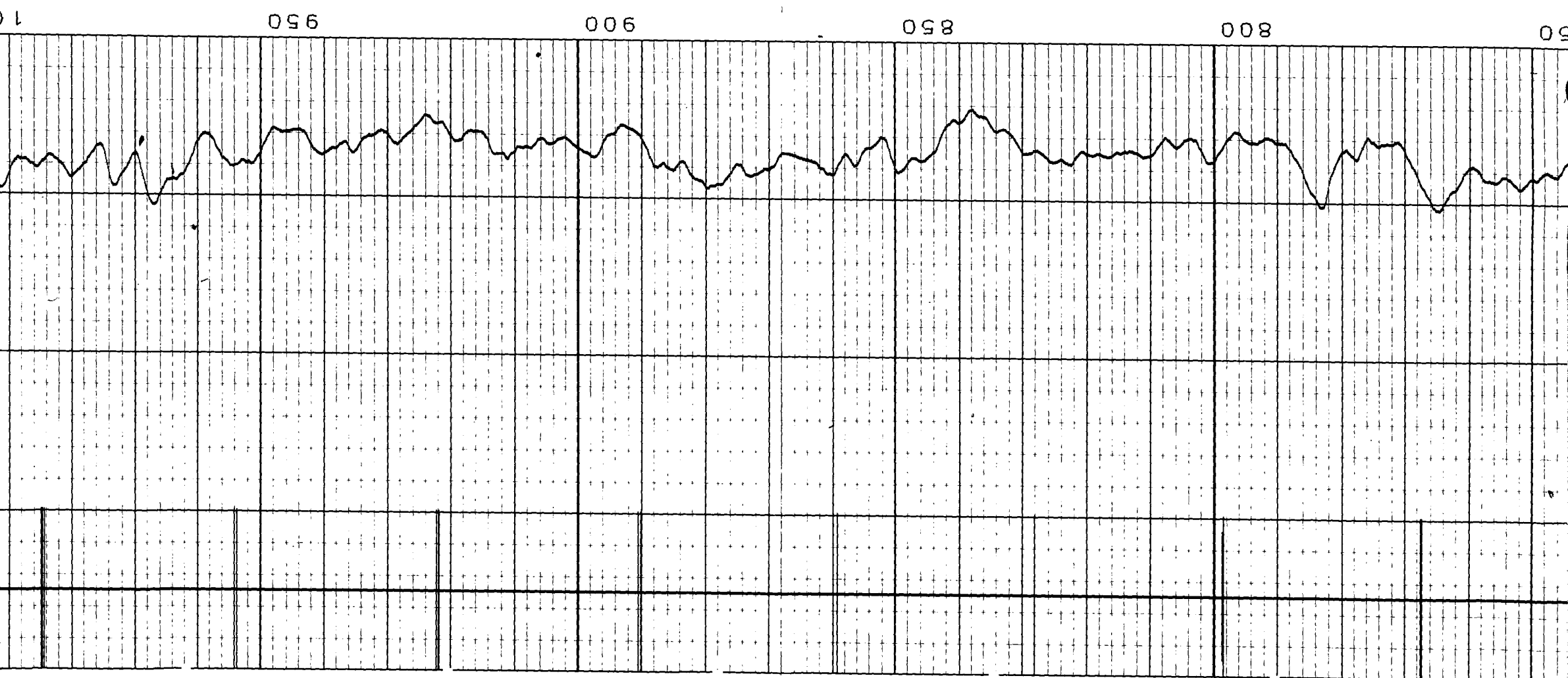
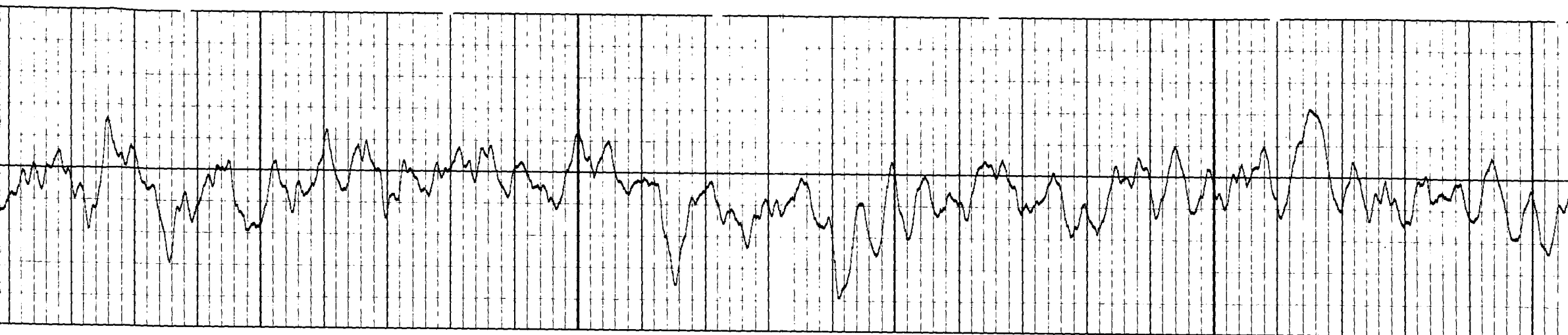
Signature of Well Owner or Equitable Property Holder:

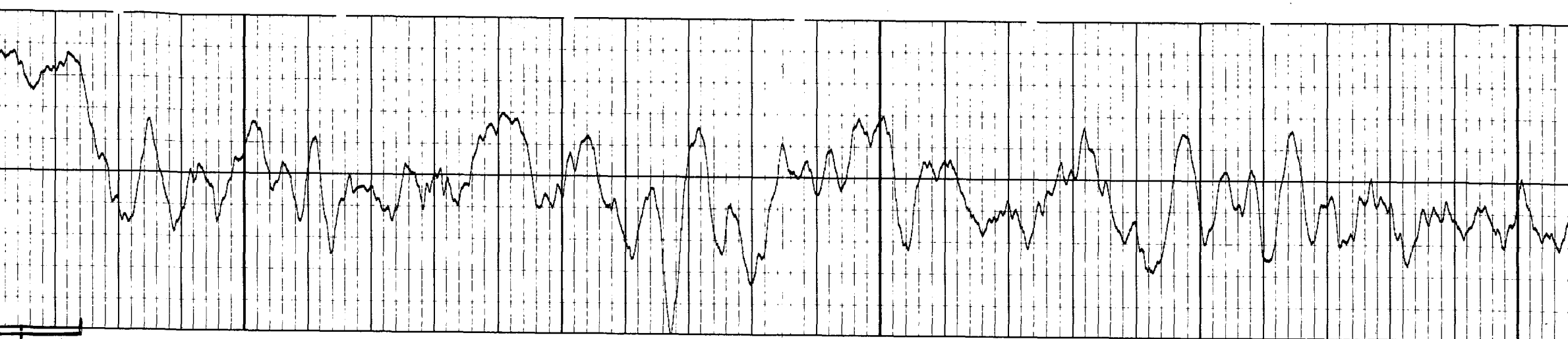
Date:



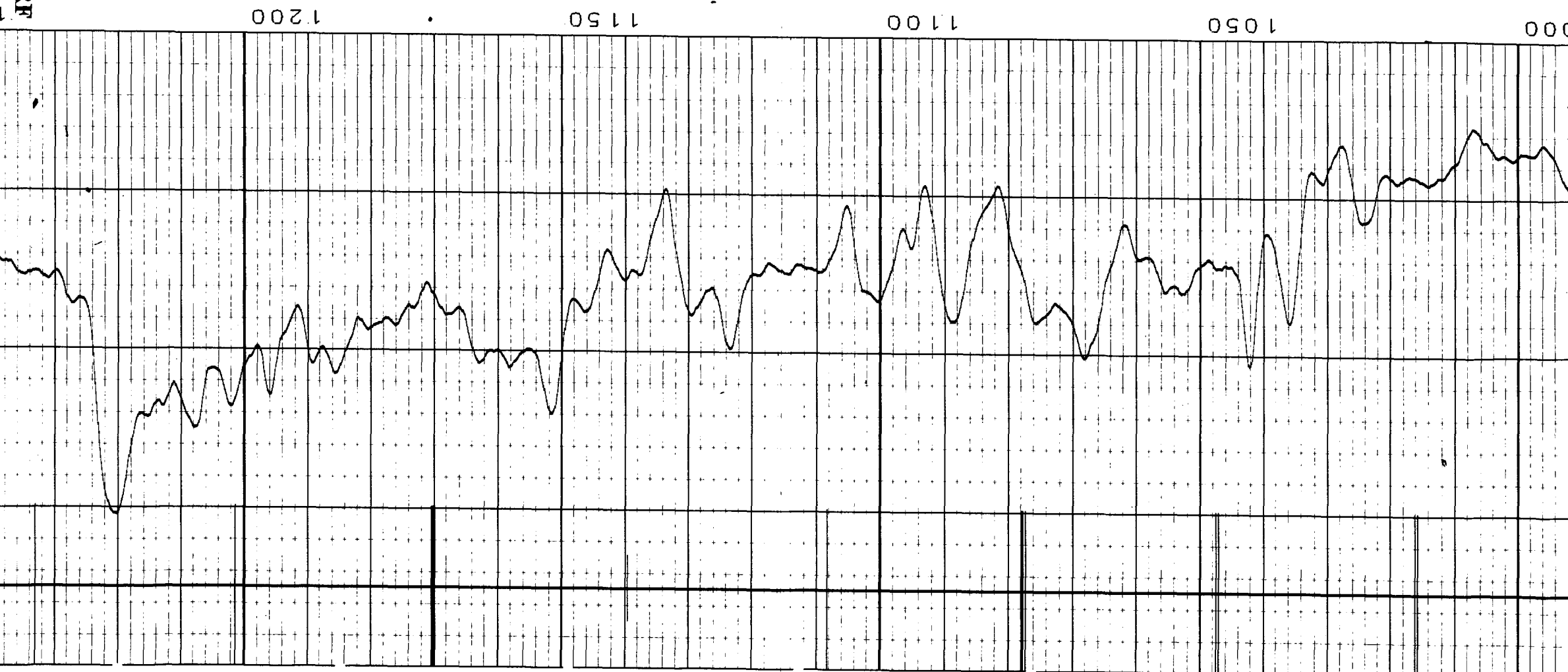


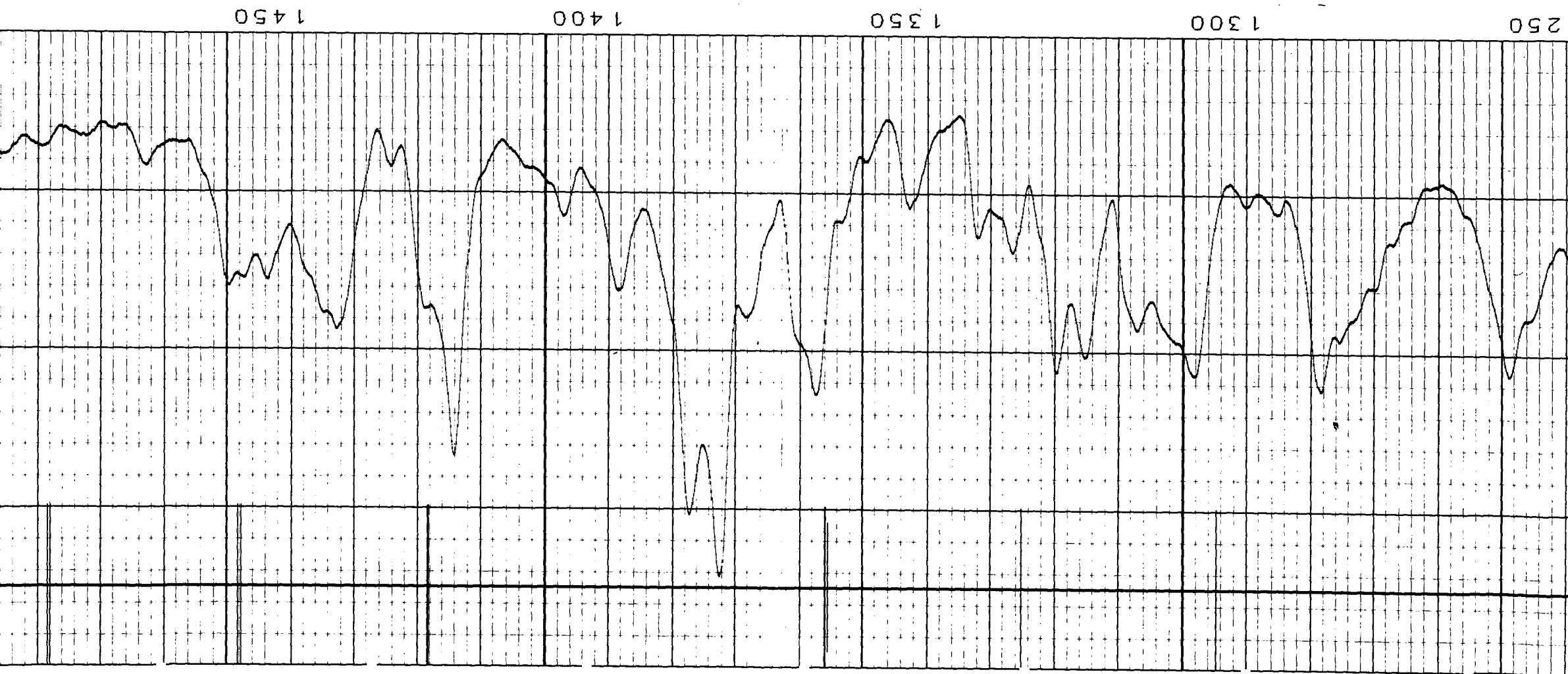
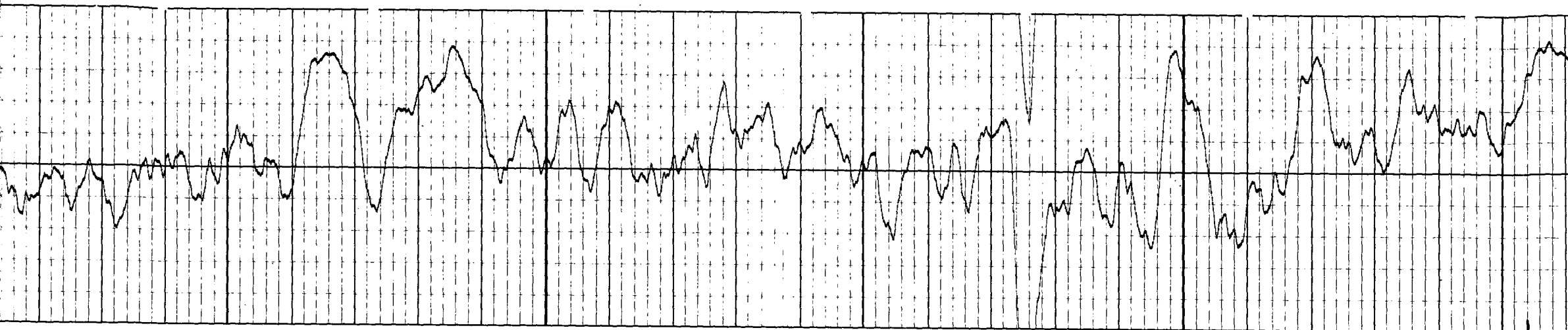


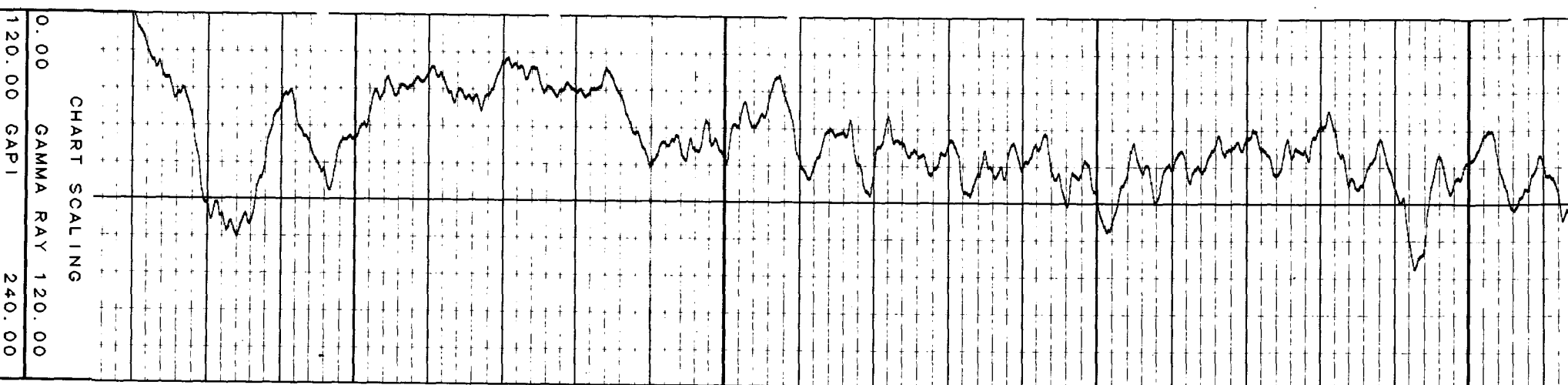




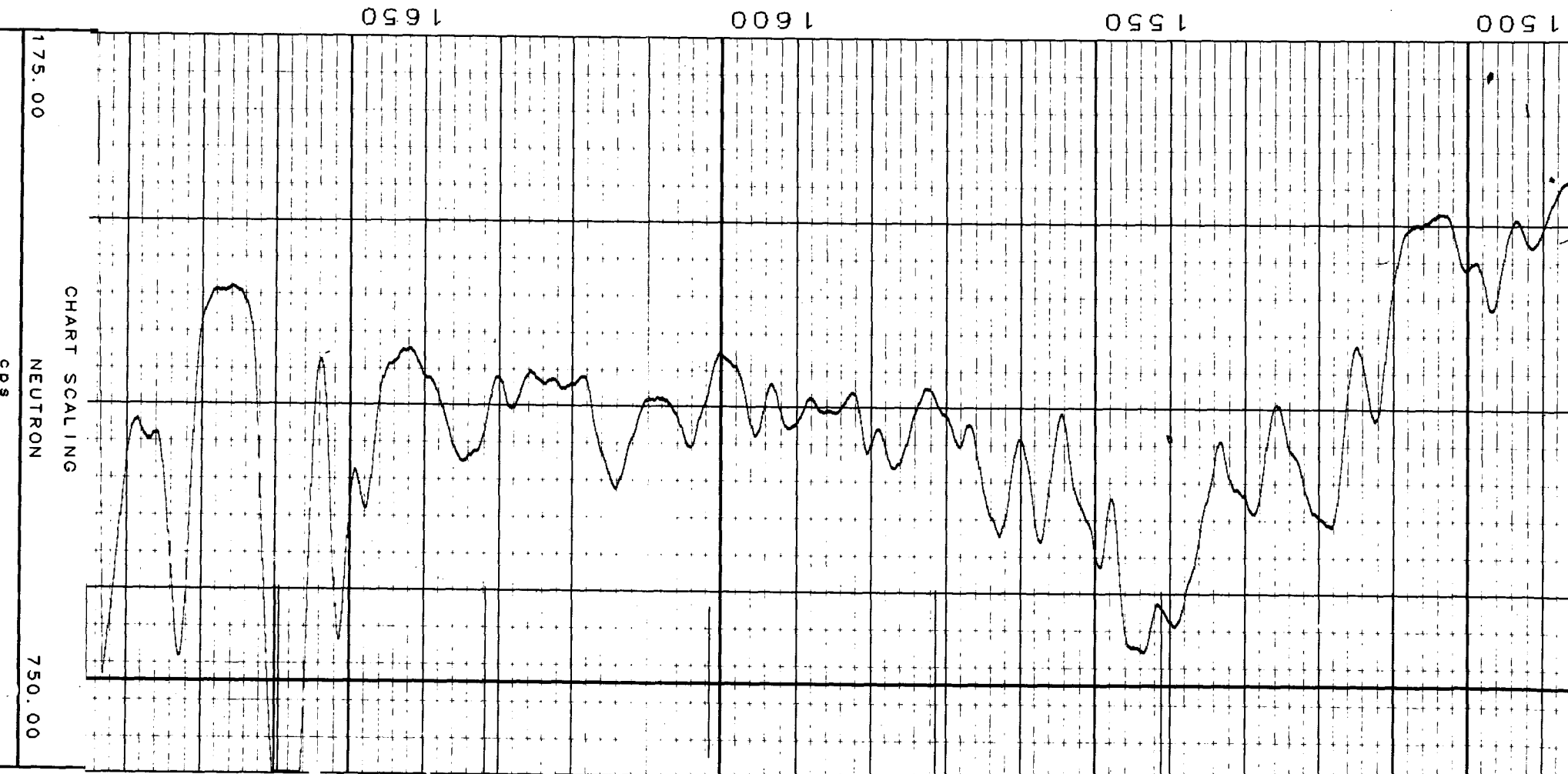
PERF







START DEPTH: 1685.38



DEPTHS

Thu Oct 28 08:39:40 2004

LOG UP



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

September 28, 2004

Mike Deutsch
Cimarron Drilling, Inc.
9017 S. Ridge Trail
Sturgis, SD 57785

Dear Mr. Deutsch:

As requested, pursuant to South Dakota Well Construction Standard 74:02:04:21, Cimarron Drilling Co. is authorized to construct a test well for Prairie Haven Subdivision (Guy Mann) prior to approval of a water permit. The test well is to be completed into the Inyan Kara aquifer in the N $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 13, T3N-R7E. The test well must be constructed in accordance with the SD Well Construction Standards. Any test holes that are abandoned must be plugged pursuant to the SD Well Construction Standards.

A SD Water Permit must be obtained before water from this well can be used. Approval of this test well does not assure issuance of a water permit. Following review of a Water Permit Application; and assessing the availability of water, the potential impacts to existing users, the beneficial use, and the public interest of a permit, the Chief Engineer will make a recommendation to the Water Management Board regarding the application. The recommendation to approve, deny, or defer the application will be publicly noticed and an opportunity afforded for the public to intervene. A public hearing may be required to consider the water permit.

Very truly yours,

JAMES A. GOODMAN, P.E.
Natural Resources Engineer
for GARLAND ERBELE, Chief Engineer
Water Rights Program
(605) 773-3352



Timberline Enterprises

7005 Timberline Rd., Black Hawk, SD 57718
Phone: (605) 787-5653 • Cell: (605) 484-7934
email: estriebe@rap.midco.net

February 21, 2005

Mr. Ken Buhler
South Dakota Department of Environment and Natural Resources
Division of Water Rights
Joe Foss Bldg, 523 East Capitol
Pierre, SD 57501

RECEIVED

FEB 21 2005

WATER RIGHTS
PROGRAM

Subject: Application For Permit to Appropriate Water Within The State of South Dakota
Prairie Haven Estates
Meade County, South Dakota

Dear Mr. Buhler:

Pursuant to the Administrative Rules of South Dakota, Chapter 74:02:04:21, and on behalf of the Prairie Haven Estates, LLC, c/o Mr. Guy Mann, PO Box 3530, Rapid City, SD 57709, please consider this Application For Permit to Appropriate Water Within The State of South Dakota. As required by the permit application we have attached two copies of Form 2 and Form 2A, as well as two copies of the South Dakota Well Completion Report for the subject well, drilled and completed by Cimarron Drilling, Inc, (SD Well Drillers License #568). Although not required by the permit application we have also attached a Radioactivity Log of the well for your review. We have also attached two copies of the plat of the proposed project, as completed, signed and stamped by Brosz Engineering, Inc., Sturgis, South Dakota.

As required by South Dakota Statutes we have enclosed a check for \$300.00 to be paid toward filing fees (\$250.00) and final inspection fees (\$50.00). We also understand that, subject to permit approval, notice of the application must be published in one local county newspaper for two consecutive weeks and that the public notice will be sent to the newspaper by the Water Rights Program. We further understand that the cost of the publication will be the responsibility of the Prairie Haven Estates.

Thank you for your consideration regarding this application. If you have any questions or require additional information please feel free to contact me at 605-787-5653.

Respectfully

Edmund L. Striebel
Timberline Enterprises
SD Well Drillers Licence #714

RECEIVED

FEB 28 2005

WATER RIGHTS
PROGRAM

cc: Guy Mann

WATER PERMIT APPLICATION NO. 1837-1

GUY MANN

April 25, 2005

Water Permit Application No. 1837-1 proposes to appropriate 0.44 cubic feet of water per second (200 gallons per minute) from one well completed into the Inyan Kara aquifer, located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec.13, T3N-R7E, Meade County. The water is for suburban housing development use at Prairie Haven Subdivision.

AQUIFER: Inyan Kara

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Inyan Kara aquifer consists of the Fall River Formation and the underlying Lakota Formation. The two formations are probably hydraulically connected and therefore can be considered a single aquifer. In general, the Inyan Kara aquifer consists of interbedded sandstone (thin bedded to massive), siltstone, and shale. The aquifer is areally extensive, underling over 36,000 square miles of western South Dakota (Allen and others, 1985). The aquifer underlies 2,107,520 acres and contains an estimated 36,354,720 acre-feet of recoverable water in storage in Meade County alone (Allen and others, 1985). Recharge to the aquifer occurs primarily through infiltration of precipitation at the outcrop. Average annual recharge to the Inyan Kara aquifer from 1950 through 1998, is estimated to be 11,600 acre-feet annually (Driscoll and Carter, 2001).

The Inyan Kara outcrops about three and one-half miles west of this well site (Strobel and others, 1999). The completion report of the well that is to be used to supply this appropriation suggests that top of the Inyan Kara aquifer is around 1,200 feet below grade. This depth corresponds well with the aquifer's structure contour map (Strobel and others, 1999) which estimates the Inyan Kara top to be around 1,000 feet below grade. The Inyan Kara is estimated to be nearly 250 feet thick in this area (Allen and others, 1985). The base of the Inyan Kara can be interpreted to be 1,380 feet below grade from the well log. The completion report submitted for this well indicates the static water level of this well is 120 feet below grade.

Observation Well Data

The Water Rights Program monitors seven observation wells completed into the Inyan Kara aquifer in the Black Hills area. Water Rights' Observation Well MD-99A is located about three miles west of this well, Observation Well PE-95E is located about six miles south of this well. The hydrographs for the wells are shown below (figure 1-2).

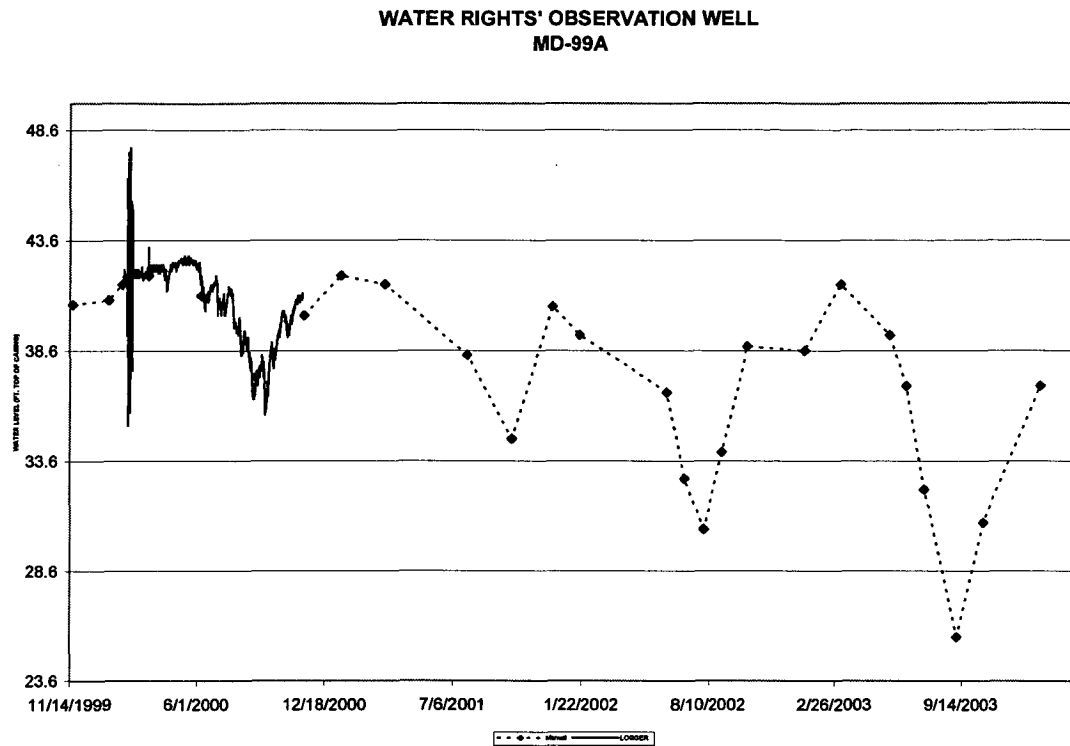


Figure 1. Hydrograph of an observation well completed into the Inyan Kara aquifer approximately three miles west of 1837-1

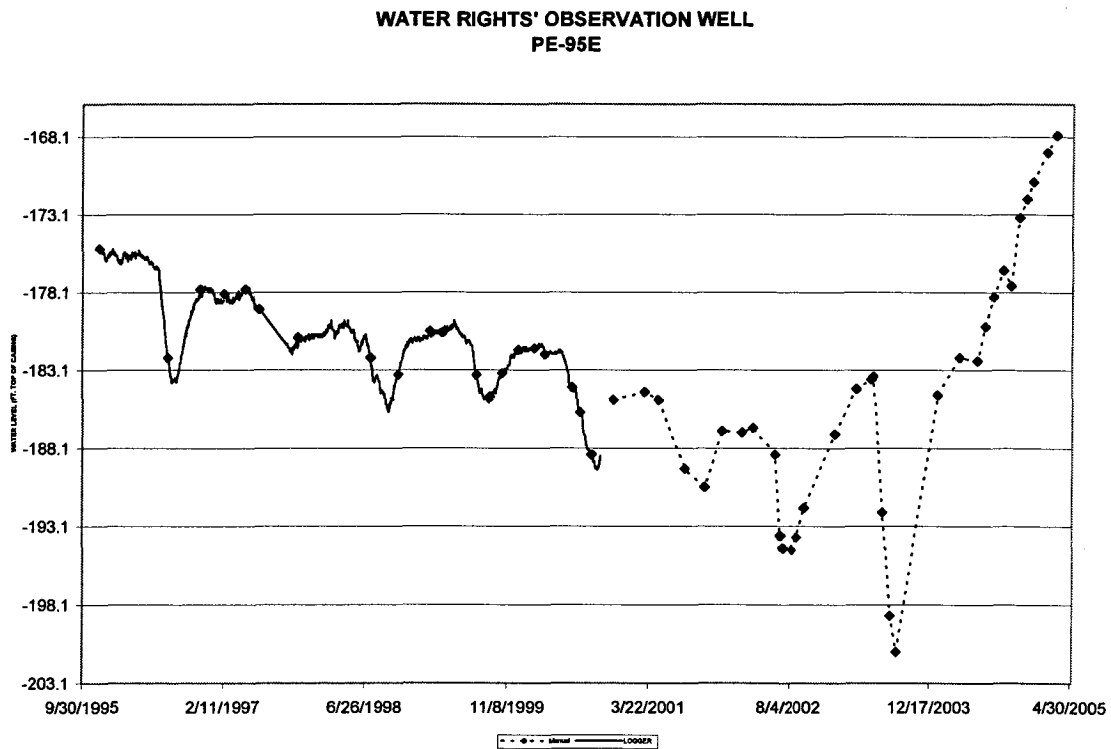


Figure 2. Hydrograph of an observation well completed into the Inyan Kara aquifer approximately six miles south of 1837-1

The hydrographs document that the water level of the aquifer has fluctuated over the period of record. In general, water levels of the aquifer have remained relatively constant however. It is clear from the data that the aquifer recharges readily (Water Rights, 2005b). Hydrographs of Water Rights' observation wells indicate the Inyan Kara Aquifer is in dynamic equilibrium showing minor changes in water level corresponding with seasonal or climatic conditions only. The hydrographs indicates water is available for this appropriation.

EXISTING WATER RIGHTS:

The Inyan Kara aquifer has been developed in at least 23 counties in South Dakota with 149 Water Rights/Permits and one Future Use Permit (Weston). The total appropriation from the Inyan Kara is 32.29 cfs for non-irrigation (SHD, RWS, MUN, INS, IND, GEO, FWP, DOM, and COM) uses. There are 12 water rights/permits appropriating 1,065.6 ac-ft/yr water from the Inyan Kara for irrigation purposes.

The actual amount of water used annually from the Inyan Kara is considerably less than the amount appropriated. For example, the average of the annual reported irrigation usage from the Inyan Kara between 1982 and 2003 was 41.26 ac-ft/yr with a maximum of 224.6 ac-ft/yr reported in 1985. The average annual withdrawals from the aquifer from the Black Hills area, where the majority of water rights are located, for the period from 1950-1998 was estimated to be 1,400 acre-feet/year (Driscoll and Carter, 2001).

There are 31 rights/permits appropriating water from the Inyan Kara aquifer in Meade County (Water Rights, 2005c). Ten Water Rights/Permits appropriate water from the Inyan Kara aquifer within four miles of the well that is to be used to supply this appropriation, they are shown in table 1.

PERMIT NO	NAME	USE	CFS
1587-2	WESTON DEVELOPMENT INC	SHD	0.11
1597-1	CROOKED OAKS CANYON	SHD	0.10
1656-1	LOFTY PINES HOMEOWNERS	SHD	0.09
1664-1	BUFFALO RIDGE WATER USERS	SHD	0.10
1700-1	HART'S ELK CREEK	SHD	0.11
1793-1	KASKI HOMES INC	SHD	0.17
1794-1	VITA ROYAL PRODUCTS INC	COM	0.17
1796-1	DENNIS OR ANN BECKHAM	SHD	0.10
1812-1	RDT WATER ASSOCIATION LLC	SHD	0.17
1826-1	GOLDEN VALLEY WATER COMPANY LLC	SHD	0.27

Table 1. Groundwater appropriations within four miles of 1837-1

The nearest Inyan Kara Water Permit to the well that is to be used to supply water for this appropriation is No. 1794-1, Vita Royal Products, Inc., located approximately one-half mile south of this well. The completion report for the Vita Royal well identifies the top of the Inyan Kara aquifer at 793 feet below ground surface, and reports a static water level of 30 feet below grade. Water Permit No. 1826-1, Golden Valley Water Company, is located about one and one-quarter miles northwest of 1837-1. The completion report for the Golden

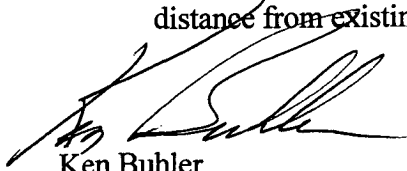
Valley well shows the top of the Inyan Kara aquifer is 800 feet below grade and is a flowing well. Other Water Rights/Permits appropriating water from the Inyan Kara aquifer are at least two and one-half miles from the proposed Mann Well.

Since the Inyan Kara is under confined (artesian) conditions in this area, pumping from an individual well may cause a decline in the potentiometric surface over a fairly widespread area. The distances from existing Water Rights/Permits from the Inyan Kara aquifer will minimize the affects of pumping this well to nearby wells, and the impact of this appropriation on existing water rights is not likely to be significant, especially when considering the several hundred feet of artesian head pressure in the area.

There are a number of domestic wells in this area supplied from the Inyan Kara aquifer. The potential affect of this appropriation on domestic wells must be considered. An "Adversely impacted domestic well" is defined by ARSD 74:02:04:20(7), as a well that was constructed to allow the pump intake to be set at least 20 feet below the top of the aquifer, in which the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner's needs. It is likely that even if a domestic well completed into the Inyan Kara aquifer in this area experienced interference, it would still be capable of delivering sufficient water with a pump inlet placed near the top of the aquifer. Therefore adverse impact to domestic wells is not probable.

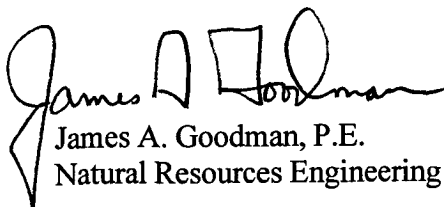
CONCLUSIONS:

1. The Inyan Kara Aquifer is a viable aquifer in this area, and water is available for this appropriation. Comparison of the estimated annual recharge to the aquifer with the water use estimated from the aquifer, and the observation well data indicate unappropriated water is available from the Inyan Kara aquifer.
2. Well interference should not be a problem at the proposed well site because of the distance from existing wells.



Ken Buhler
Natural Resources Engineering Specialist

approved by



James A. Goodman, P.E.
Natural Resources Engineering Director

REFERENCES:

- Allen, J.C., Iles, D.L., and Petres, A.K., 1984, Analysis of Groundwater and Streamflow Data Western Dakotas Region of South Dakota, Tasks 3A.B.C. and 4A.B.: Groundwater Resource Inventory: South Dakota Department of Water and Natural Resources,
- Driscoll, D.G., and Carter, J.M., 2001, Hydrologic Conditions and Budgets for the Black Hills of South Dakota, Through Water Year 1998: U.S. Geological Survey Water-Resources Investigations Report 01-4226, 143 p.
- Strobel, M.L., Jarrell, G.J., Sawyer, J.F., Schleicher, J.R., and Fahrenbach, M.D., 1999, Distribution of Hydrogeologic Units in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-743, 3 sheets, scale 1:100,000
- Strobel, M.L., Galloway, J.M., Hamade, G.R., and Jarrell, G.J., 2000, Potentiometric Surface of the Inyan Kara Aquifer in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-745, 3 sheets, scale 1:100,000
- Water Rights, 2005a, "Domestic Well Log Files" DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights, 2005b, "Observation Well Files" DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights, 2005c, "Water Permit Files" DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1837-1, Guy Mann**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 1837-1, Guy Mann, PO Box 3530, Rapid City SD 57709.

The Chief Engineer is recommending APPROVAL of Application No. 1837-1 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Prairie Haven Subdivision shall report to the Chief Engineer annually the amount of water withdrawn each year from the Inyan Kara Aquifer.

See report on application for additional information.

Garland Erbele, Chief Engineer
May 11, 2005



AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA COUNTY OF MEADE

Pam Buhler, being duly sworn, says: That the M during all times hereinafter mentioned, is a legal published in Sturgis, Meade County, South Dakot said times, was employed as an Accounting Clerk knowledge of the facts stated in the affidavit, that t is attached, was published in said newspaper for s

<u>May 18</u>	200	<u>5</u>
<u>May 25</u>	200	<u>5</u>
_____	200	_____
_____	200	_____
_____	200	_____

that the full amount of the fee charged for publish solely to the benefit of the publisher of said ne division of the fee has been made with any perso to any other person.

NOTICE OF APPLICATION NO. 1837-1 to Appropriate Water

Notice is given that Guy Mann, PO Box 3530, Rapid City SD 57709 has filed an application for a water permit to appropriate 0.44 cubic feet of water per second from one well to be completed into the Inyan Kara Aquifer (approximately 1690 feet deep) located in the SW 1/4 NW 1/4 section 13-T3N-R7E. The water is for suburban housing development use at Prairie Haven Subdivision.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1837-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605

Black Hills Press is, and CL 17-2-2, as amended, idavit is and during all of vspaper and has personal ent, a printed copy which following dates:

_____	200	_____
_____	200	_____
_____	200	_____
_____	200	_____
_____	200	_____

of \$ 34.81, insures or understanding for the as been agreed to be paid

Subscribed and sworn to before me this

26 day of May, 2005
Pamela Beebler
Notary Public, South Dakota

RECEIVED
JUN - 8 2005
WATER RIGHTS
PROGRAM

Account No. 60005557
Total Amount \$ 34.81

NOTICE OF APPLICATION NO.

1837-1 to Appropriate Water

Notice is given that Guy Mann, PO Box 3530, Rapid City SD 57709 has filed an application for a water permit to appropriate 0.44 cubic feet of water per second from one well to be completed into the Inyan Kara Aquifer (approximately 1690 feet deep) located in the SW 1/4 NW 1/4 section 13-T3N-R7E. The water is for suburban housing development use at Prairie Haven Subdivision.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1837-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605

773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 6, 2005.

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

Publ. May 18, 25, 2005
Meade County Times-Tribune

Instruction to Newspaper - Publish first Notice on May 18, 2005 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 1837-1 to Appropriate Water

Notice is given that Guy Mann, PO Box 3530, Rapid City SD 57709 has filed an application for a water permit to appropriate 0.44 cubic feet of water per second from one well to be completed into the Inyan Kara Aquifer (approximately 1690 feet deep) located in the SW ¼ NW ¼ section 13-T3N-R7E. The water is for suburban housing development use at Prairie Haven Subdivision.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1837-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 6, 2005.

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

May 12, 2005

Meade Co Times-Tribune
PO Box 69
Sturgis SD 57785-0129

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 1837-1 to Appropriate Water to be published twice. Please publish the first notice on May 18, 2005 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Guy Mann, PO Box 3530, Rapid City SD (Ph # 605-342-8530).

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

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

No. 1837-1

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

Date _____

We are in receipt of your letter of May 12, 2005 enclosing Notice to Appropriate Water by Application No. 1837-1 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

May 12, 2005

Guy Mann
PO Box 3530
Rapid City SD 57709

Dear Mr. Mann:

Water Permit Application No. 1837-1 for suburban housing development use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Meade Co. Times-Tribune printed at Sturgis, SD (Ph # 605-347-2503). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JUN 23 2005

Guy Mann
PO Box 3530
Rapid City SD 57709

Dear Mr. Mann:

Enclosed is Water Permit No. 1837-1 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures

1837-1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW 1/4 NW 1/4 Sec 13 Twp 3-N Rg 7-E
 County Meade

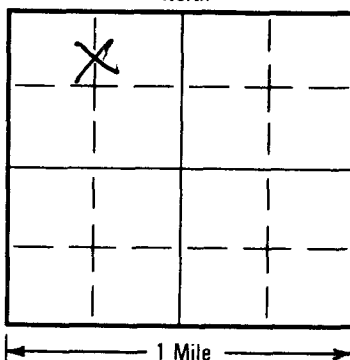
Please mark well location with an "X"

W

E

Well Completion Date

Oct. 30-04



LOCATION:

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

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary - Mud

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe

PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER
23 LB/FT 7 IN 0 FT 1690 FT 8 3/4 IN
 _____ LB/FT _____ IN _____ FT _____ FT _____ IN
 _____ LB/FT _____ IN _____ FT _____ FT _____ IN

GROUTING DATA

Grout Type Portland No. of Sacks 200 Grout Weight 94 1/2 lb./gal From 0 ft. To 1690 ft.
Type I-II _____ lb./gal _____ ft. _____ ft.

Describe grouting procedure Pressure grout thru casing displace w water to surface pump

SCREEN: ☒ Perforated pipe ☐ Manufactured

Diameter Perf. Gun IN Length 20 FEET
 Material steel

Slot Size _____ Set From _____ Feet to _____ Feet

Other information Goodwell Perforated.

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material?

Describe packer(s) and location?

DISINFECTION: Was well disinfected upon completion?

☒ YES, How: _____

 Laboratory sent to for water quality analysis _____ NO, Why Not? _____

owner to complete

Well Owner:

Business Name:

Address:

WELL LOG:

DEPTH

FORMATION	FROM	TO
Blue Shale	0'	1200'
Ben, Grey Clay & SS. Strata	1200'	1380'
Blue Shale	1380'	1480'
Green & Maroon Shale	1480'	1560'
Light Ben & Grey Clay	1560'	1600'
White Sandstone Clay	1600'	1630'
Green Stick Clay	1630'	1690'

STATIC WATER LEVEL

120 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped Describe: Air developed
☐ Bailed
☒ Other _____

Pumping Level Below Land Surface

200 ft. After 2 Hrs. Blew 60 GPM
800 ft. After 2 Hrs. Blew 450 GPM
600 ft. After 2 Hrs. Blew 350 GPM
 If pump installed, pump rate 2 Blew 350 GPM

REMARKS

Goodwell logged
& Shot 20 shots @ 1,226'
logg. enclosed. To 1,246'

This well was drilled under license # 568

And this report is true and accurate.

Drilling firm CIMARRON Drilling Inc.

Signature of License Representative:

Michael J. Dauter RECEIVED

Signature of Well Owner or Equitable Property Holder:

JAN 25 2005

WATER RIGHTS PROGRAM

Date:

Permit No. 1837-1
Upper Cheyenne River - Water District

Report of Examination of Works and/or Application of Water to Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, **August 29, 2012**, made a thorough examination of the water use system constructed by **Guy Mann** of **PO Box 3530, Rapid City, SD 57709** holder of Permit No. **1837-1**, bearing the priority of **February 28, 2005** authorizing the diversion of **0.44** cu. ft. per second of water from the **Inyan Kara Formation** for **Suburban Housing Development** purposes, in **Meade** County.

Inspection contact & relationship **Guy Mann**
to permit holder, if applicable:

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: **Cimarron Drilling Inc.**
- 2) No. of Wells **1**
- 3) Depth(s) **1,690** feet
- 4) Well log is available **Y**

Casing:

- 1) Diameter **7** inches
- 2) Length **1,690** feet
- 3) Type **Steel**

Screen:

- 1) Type **Perforated Pipe**
- 2) Length **20** feet
- 3) Static water level **120** feet

Pump:

- 1) Make **Hitachi**
- 2) Model **Unknown**
- 3) Size **10 hp**
- 4) Capacity **100** GPM

Motor:

- 1) Make **Unknown**

B. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period NA
- 3) Exceptions to compliance are: None

The system is in Good condition with the point(s) of diversion located as follows:

Approximately 2,115 feet south and 130 feet east of the NW corner of Section 13-T3N-R7E
(N 44.22193, W -103.23117) (SW ¼ NW ¼)

The works are capable of diverting and conveying to the place of 0.22 cu. ft. per second of water which is to be used for a Suburban Housing Development. Water has been put to beneficial use to the maximum extent as follows:

On November 14, 2013, I contacted Guy Mann regarding this permit. There were questions regarding water use and if the housing development had started construction. I was informed that there were three houses using water from the well and the water use was approximately 9,000-10,000 gal/month for the three homes. His intentions are to still add more homes into the development.

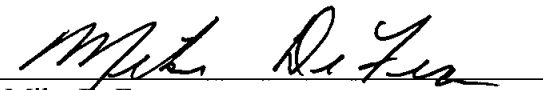
I also asked Mr. Mann about a water use "file doc" in which he informed Karen Schlaak that his water use for the 2012 year was 295,300 gallons. He explained the excessive water use was because a 'float' stuck open at the well and water 'free-flowed' for a number days before he found the problem.

This permit requires the permit holder to report annually the amount of water used.

The license should be issued for 0.22 cfs.

All structures, wells and lands on map Y

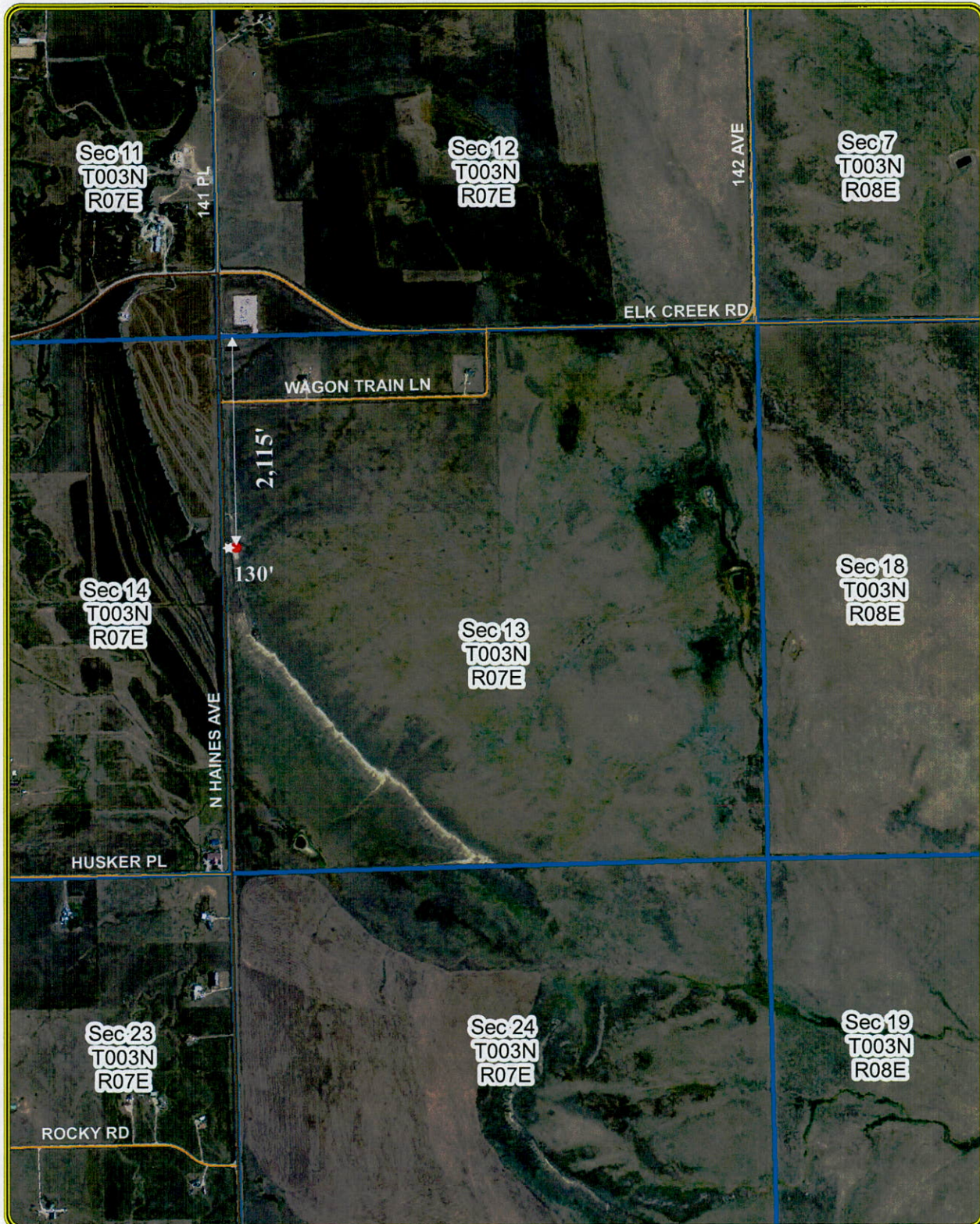
Comments or other permit(s) associated with the project:



Mike DeFea
Natural Resources Engineer II
DENR, Water Rights Program

Date report completed: November 14, 2013

Guy Mann
Prairie Haven Subdivision
Permit No. 1837-1



0 0.275 0.55 1.1 Miles

Mike DeFea

Mike DeFea
Natural Resources Engineer II
DENR, Water Rights Program
November 6, 2013





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

DEC 20 2013

1837-1

Guy Mann
PO Box 3530
Rapid City SD 57709

Dear Mr. Mann:

Enclosed is Water License No. 1837-1. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 1837-1, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 1837-1

(1) Guy Mann, PO Box 3530, Rapid City SD 57709 made Application No. 1837-1, February 28, 2005 for a water permit to divert 0.44 cubic feet of water per second from ground water (one well – Inyan Kara Aquifer), Meade County, South Dakota for suburban housing development purposes. Permit No. 1837-1, with a priority date of February 28, 2005 was approved June 6, 2005 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before June 6, 2010 and for the application to beneficial use of said water on or before June 6, 2014.

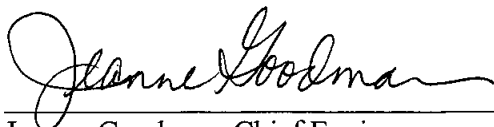
(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 0.22 cubic feet of water per second for beneficial use. The location of the diversion point is 2,115 feet south and 130 feet east of the NW corner of Section 13, T3N, R7E (SW ¼ NW ¼).

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use for suburban housing development use at Prairie Haven Subdivision.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Guy Mann, PO Box 3530, Rapid City SD 57709 the holder and/or owner of Water Right No. 1837-1 is issued a license to appropriate water, the right to use 0.22 cubic feet of water per second from ground water (one well – Inyan Kara Aquifer) with a priority date of February 28, 2005 from the location specified in (2) of this license.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 1837-1 and subject to the following qualifications:

- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- Prairie Haven Subdivision shall report to the chief engineer annually the amount of water withdrawn each year from the Inyan Kara Aquifer.



Jeanne Goodman, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

DEC 20 2013

date

