

File No.....

T. 14 N R. 19 West

DUPLICATE

County Missoula

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JUN 28 1963

STATE ENGINEER

Notice of Completion of Groundwater Appropriation
Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater June 24, 1963

P. O. Box 618

Owner Walter E. Dodd Address Missoula, Mont.

Contractor (if any) None

Address of Contractor

Date Started Prior to Date Completed 1908*

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable. Natural flowing spring dug out by hand to a depth of approximately 4 (four) feet and presently curbed up with a section of culvert 3 feet in diameter. Water rises to the surface and flows thru a 3/4 inch pipe.

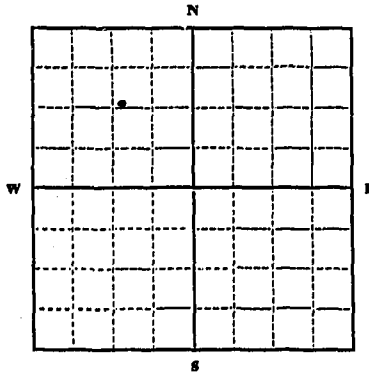
Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent

estimate approximate lengths of periods of use. Water flowing thru pipe for a period of two hours measured 105 gal. on June 20, 1963.

Water is used for stock water during the time cattle are out on pasture, usually from May 1, until the last of November.

Signature of Owner Walter E. Dodd

Date June 24, 1963



NE 1/4 of NW 1/4 20 Sec. T. 14 R. 19 W.

Indicate point of appropriation and place of use, if possible.

This form to be prepared by contractor (if any), otherwise by the owner.

Three copies of this notice are to be filed with the County Clerk and Recorder of the county in which the works are located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

* This spring was first developed by William Kale for household use and in 1908 when my Grandfather bought the place he used it for stock water. Since that time it has been cleaned out and repaired many times. Two years ago I bought the section of culvert that is now in the spring.

WED

#199 Copy 207735

I received and filed this instrument
record on the 26th day of June 1963
at 9:24 o'clock P.M., permanent file
of Missoula County, State of Montana
Witness my hand:
MARTIN S. BEHNER, County Recorder
By *W. J. Sherman* Deputy
Fee \$0.00 Paid

MISSOULA COUNTY
RECORDERS OFFICE

File No.

T. 14 N 19 W

DUPLICATE

County

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

REC'D
DEC 30 1963

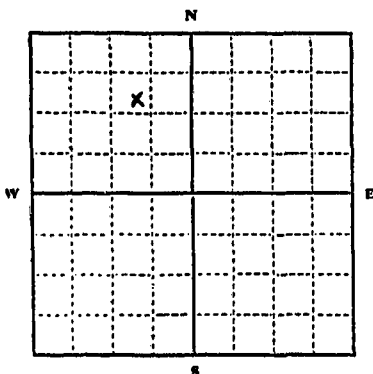
Declaration of Vested Groundwater Rights ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1. GRANT CREEK RANCH CORPORATION, of P. O. Box 1519
(Name of Appropriator) (Address) (Town)

County of MISSOULA State of MONTANA

have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 Sec 20 T4N R19W

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based Stock water
3. Date or approximate date of earliest beneficial use; and how continuous the use has been Continuous use since about 1860
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 10 inches
5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof not applicable
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Pipe, trenching, and natural flow; located in NE 1/4 NW 1/4 Section 20-14N-19W
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Development and improvement of spring has been continuous for more than one hundred years
8. The depth of water table not applicable
9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater not applicable
10. The estimated amount of groundwater withdrawn each year 10 inches
11. The log of formations encountered in the drilling of each well if available
12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

GRANT CREEK RANCH CORPORATION
Signature of Owner Charlotte Reed Market
Secretary-Treasurer
Date 19 December 1963

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.

666 215645

I received and filed this instrument for
record on the 14th day of Dec 1963
at 4:45 o'clock P.M., permanent files
of Missoula County, State of Montana.
Witness my hand:
Walter S. Bihner, County Recorder
By John Deputy
For \$ 2.00 Paid

File No. _____

T. 14^N R. 17^W 20

DUPLICATE

County _____

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 30 1963

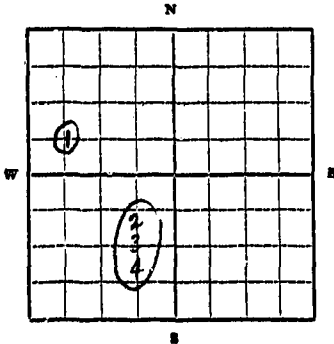
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1951)

STATE ENGINEER

1. GRANT CREEK RANCH CORPORATION, of P. O. Box 1519 MISSOULA
(Name of Appropriator) (Address) (Town)

County of MISSOULA State of MONTANA
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec. 20, T14N R. 17W

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

- 2. The beneficial use on which the claim is based Stock water and irrigation water
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been Continuous use since the date of early settlers in the Missoula area, about 1860
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) Total for four springs - 55 inches (see below for detail)
- 5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof Undetermined acreage on hillsides and in fields adjacent to springs, owned by Grant Creek Ranch Corporation
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Pipe, trenching, and natural flow. Locations: see below

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Development and improvement of springs has been continuous for more than one hundred years

8. The depth of water table not applicable

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater not applicable
Amount claimed Spring 1 SW 1/4 NW 1/4 Section 20-14N-17W 10 inches
and locations Spring 2 SE 1/4 SW 1/4 " " " " 15 inches
of springs: Spring 3 SE 1/4 SW 1/4 " " " " 15 inches
Spring 4 SE 1/4 SW 1/4 " " " " 15 inches

10. The estimated amount of groundwater withdrawn each year Same as claimed - 55 inches

11. The log of formations encountered in the drilling of each well if available _____

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record _____

GRANT CREEK RANCH CORPORATION

Signature of Owner Charlotte Reed Markert
Secretary-Treasurer
Date 19 December 1963

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

667 215046

I received and filed this instrument for
record on the _____ day of _____ 19____
at _____ o'clock _____ M., permanent office
of Lincoln County, State of Montana
Witness my hand
M. S. BEHNER, County Recorder
By _____ Deputy
Fee \$ _____ Paid

File No. _____

SE 1/4 SW 1/4 SE 1/4 of Section 20

T 14 N R 19 W

DUPLICATE

County Missoula

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 30 1963

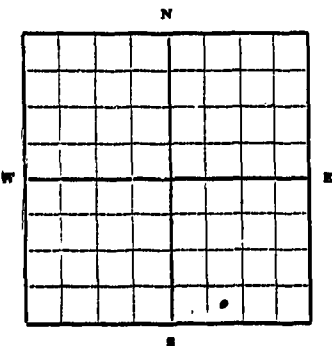
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. LAWRENCE L. WHITE, of Grant Creek/ Missoula,
(Name of Appropriator) (Address) (Town)

County of Missoula, State of Montana,
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec. T. R.

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

2. The beneficial use on which the claim is based Irrigation, garden and stock water.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1945 and continuously thereafter.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 2400 gallons per hour.

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof Approximately 30 acres of pasture and grain land owned by Lawrence L. White.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal An electric pump used to convey water into galvanized pipe.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1945.

8. The depth of water table Approximately 20 feet.

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater Approximately 3 feet by 4 feet and approximately 20 feet deep.

10. The estimated amount of groundwater withdrawn each year 2400 gallons per hour, continuously.

11. The log of formations encountered in the drilling of each well if available NONE

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record There are two water supplies in the SE 1/4 SW 1/4, Section 20, Township 14 North, Range 19 West. We have numbered them; this is Number 1. Number 2 is also filed.

Signature of Owner Lawrence L. White

Date December 24th 1963.

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

559

314861

copy

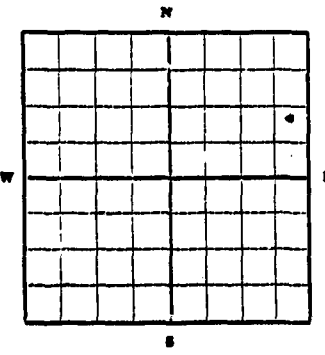
I received and filed this instrument for
record on the *26* day of *Dec* *1963*
at *10* o'clock *A.M.*, permanent files
of *Miscoula* County, State of Montana
Witness my hand:
MARTIN S. BEHNER, County Recorder
By *Martin S. Behner* Deputy
Fee \$ *1.00* Paid

File No. _____ NE 1/4 SE 1/4 NE 1/4 of Section 20 T. 14 N. R. 19 W. _____
DUPLICATE County of Missoula

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights RECEIVED
(Under Chapter 237, Montana Session Laws, 1961) DEC 30 1963

1. LAWRENCE L. WHITE, of Grant Creek Dr. Missoula, (Name of Appropriator) (Address) (Town)
County of Missoula, State of Montana, have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec. T. R.
Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

- 2. The beneficial use on which the claim is based Irrigation and stock water
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1948 and continuously thereafter
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) 30,000 gallons an hour
- 5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof 20 acres of crop land for irrigation of grain and hay
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal: An electric pump conveys the water into a galvanized pipe which carries the water in a southerly direction to and upon such lands.
- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1948
- 8. The depth of water table 22 feet
- 9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater About 3 feet by 3 feet
- 10. The estimated amount of groundwater withdrawn each year 30,000 gallons per hour
- 11. The log of formations encountered in the drilling of each well if available NONE
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record. None

Signature of Owner Lawrence L. White
Date December 24, 1963

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

561

114863

Copy

I received and filed the record on the 26 day of Dec 1963 at 10:32 o'clock A. M., permanent files of Missoula County, State of Montana
Witness my hand.
MARTIN S. BEHNER, County Recorder
By Martin S. Behner Deputy
Fee \$ 2.00 Paid

File No. SE 1/4 SW 1/4 SE 1/4 of Section 20 T. 14 N. R. 19 W.

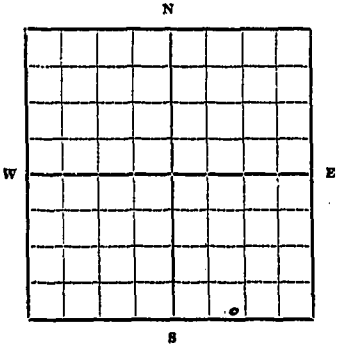
DUPLICATE County of Missoula.

STATE OF MONTANA ADMINISTRATOR OF GROUNDWATER CODE OFFICE OF STATE ENGINEER

RECEIVED DEC 30 1963

Declaration of Vested Groundwater Rights (Under Chapter 237, Montana Session Laws, 1961) STATE ENGINEER

1. LAWRENCE L. WHITE, of Grant Creek Drive, Missoula, (Name of Appropriator) (Address) (Town) County of Missoula, State of Montana, have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec. T. R. Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

- 2. The beneficial use on which the claim is based For domestic use, house water and stock water.
3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1909 and continuously to the present time.
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 2400 gallons per hour.
5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof A small acreage surrounding the house, used as a lawn irrigated by this water, as well as house use.
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal A pipe runs from the spring in a northeasterly direction about 530 feet to the dwelling house.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1909 and continuously to the present time.
8. The depth of water table 22 feet.
9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater An electric pump pumps the water into a galvanized iron pipe running toward the house and water trough.
10. The estimated amount of groundwater withdrawn each year 2400 gallons per hour continuously.
11. The log of formations encountered in the drilling of each well if available NONE.
12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record There are two water supplies in the SE 1/4 SW 1/4, Section 20, Township 14 North, Range 19 West. We have numbered them; this is Number 2. Number 1 is also filed.

Signature of Owner Lawrence L. White

Date December 24, 1963.

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located. Please answer all questions. If not applicable, so state, otherwise the form will be returned. Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

560

314862

Copy

I received and filed this instrument for record on the 26 day of Dec, 1963 at 10:30 o'clock A.M., permanent files of Missoula County, State of Montana

Witness my hand:
MARTIN S. BEHNER County Recorder
 By Martin S. Behner Deputy
 Fee \$ 2.00 Paid

NOT TO BE RECORDED
 THIS INSTRUMENT IS NOT TO BE RECORDED IN THE PUBLIC RECORDS OF MISSOULA COUNTY, MONTANA, UNTIL THE 26th DAY OF DECEMBER, 1963, AT 10:30 A.M.

RECEIVED

County Miss. 21

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION BY MEANS OF WELL

Developed after January 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller. Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Owner Ward Powell
Dept. of For. Langs.
 Address Univ. of Montana
Missoula, Mt. 59801
 Date well started April 21
 completed April 23

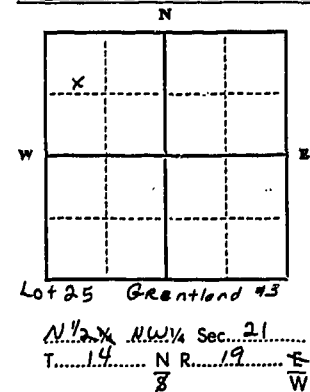
For Administrator's Use
File <u>331612; 2476</u>
<u>1774y. 4. 1973.</u>
GW 1 <u>4:14 p.m.</u>

Type of well drilled
 (Dug, driven, bored or drilled)
 Equipment used rotary
 (Churn drill, rotary or other)
 Water Use: Domestic Municipal Stock Irrigation
 Industrial Drainage Other * Garden/Lawn

*Describe
 USE: If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition).

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
<u>7 7/8"</u>	<u>6 5/8"</u> <u>17W.</u>	<u>0</u>	<u>507</u>	<u>4 X 5"</u>	<u>460</u>	<u>480</u>



Static water level 140 ft.*
 Pumping water level 540 ft.*
 at 3 gallons per minute,
 measured 3 minutes after pumping
 began.
 *Measured from ground level.
 Well developed by Air
 for 3 hours.
 Power..... Pump..... HP
 Remarks: (Gravel packing, cementing,
 packers, type of shutoff)

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature C. D. Miller
 Driller's Address Box 977 Hamilton
Montana LICENSE NO. 125

Top of Ground		(Elev. above sea level)
From (Feet)	To (Feet)	
<u>0</u>	<u>15</u>	<u>Top Soil</u>
<u>15</u>	<u>260</u>	<u>Blue Shale</u>
<u>260</u>	<u>280</u>	<u>Broken Sand Stone</u>
<u>280</u>	<u>300</u>	<u>SAND STONE</u>
<u>300</u>	<u>350</u>	<u>II</u>
<u>350</u>	<u>400</u>	<u>II</u>
<u>400</u>	<u>460</u>	<u>SAND STONE Blue</u>
<u>460</u>	<u>500</u>	<u>Broken Rock Bed</u>
<u>500</u>	<u>560</u>	<u>water</u>
		<u>Broken Rock</u>

560 Show exact depth of bottom

2476

331612

I received and filed this instrument for record on the 4th day of May, 1973 at 4:14 o'clock P. M., permanent files of Missoula County, State of Montana.

Witness my hand:
 Dorothy L. Head, County Recorder
 By M. M. Conroy, Deputy
 Fee \$2.00 Paid cash

037

2501
 11/10/73
 11/10/73
 11/10/73

44

210
110

110
110
110

110
110
110

not registered
 not indexed
 not recorded
 not recorded and indexed

RECEIVED

County Missoula

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION BY MEANS OF WELL

Developed after January 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Owner William Welland

Address Box 511

Bonner, Montana 59823

Date well started March 9, 1973

completed March 13, 1973

For Administrator's Use	
File	<u>2461; 330690</u>
Date	<u>April 16, 1973</u>
GW	<u>1 2:20 P.M.</u>

Type of well Drilled

(Dug, driven, bored or drilled)

Equipment used Churn Drill

(Churn drill, rotary or other)

Water Use: Domestic Municipal Stock Irrigation

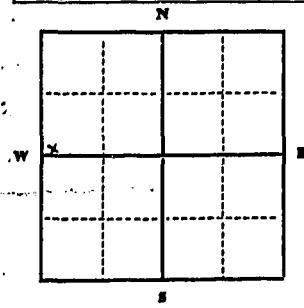
Industrial Drainage Other * Garden/Lawn

*Describe

USE: If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition).

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6" ID	6" ID 17 lb per ft.	1' 6" above g.l.	49'	Mills Knife 3/8 x 3"	33'	34 1/2'
				4 rds. to the rd.	5 holes	
				Total	20 cuts	



Static water level 9 ft.*
Pumping water level 19 ft.*
at 50 gals per minute,
measured 1 minutes after pumping
began.
*Measured from ground level.
Well developed by RRRRRRRR
for 15 hours.
Power Does not pump HP
Remarks: (Gravel packing, cementing,
packers, type of shutoff)

SX 1/4 NW 1/4 Sec. 21
T. 14 N R. 15 E

Lot 54 Grantland Ten

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature Glenn Camp

Driller's Address CAMP WELL DRILLING & PUMP SUPPLY
1522 S. 14th W., Missoula, Montana 59801

Top of Ground (Elev. above sea level)		
From (Feet)	To (Feet)	
0	15	Clay, Gravel & Boulders
15	18	Clay, gravel & sand of water
18	20	Clay, gravel & water (25 gpm)
20	32 1/2	Clay, Gravel & Boulders
32 1/2	34 1/2	Clay, gravel Water
34 1/2	49	Clay, Gravel & Broken Rock

LICENSE NO. 7

49' Show exact depth of bottom

52,939

246

330690

I received and filed this instrument for
record on the 16th day of April 1973
at 2:20 o'clock P.M., permanent files
of Missoula County, State of Montana
Witness my hand:
Dorothy L. Head, County Recorder
By M. M. Conway Deputy
Fee \$ 2.00 Paid 6

RECEIVED

File No.

T. 14N R. 19W 21

JUN 10 1970

DUPLICATE

County MSLA

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARD

Notice of Completion of Groundwater
Appropriation by Means of Well
DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

WILFRIED L ROYER Missoula R.F.R.

Owner: **FRITZ ROYER** Address:

Driller: **KEN WILLIAMS WELL DR.** Address: **1556 So. 5th. W.**

Date of Notice of appropriation of groundwater: **MISSOULA, MONT.**

Date well started: **MAY 25, 70** Date completed: **MAY 28, 70**

Type of well: **drilled** Equipment used: **Churn**
(Dug, driven, bored or drilled) (Churn drill, rotary or other)

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

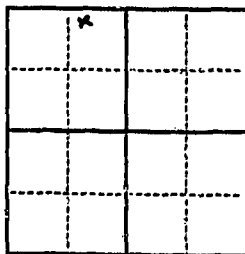


Top of Ground
(Elev. above sea level.....)

0L tan clay, sand & gravel
15' sand of surface water
15' Bedrock
53'

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6" ID	6-5/8" od 17 lbs. 1/4" side wall	ground level	53 ft.			

Doc. No. 291709
Filed for record this 1 day of June
A. D. 19 70, at 10:32 o'clock A.M.



Static Water Level for non-flowing well 5 feet.
Shut-in Pressure for Flowing Well.....
Pumping Water Level..... 22 feet
at 9 gal. per minute.
Discharge in gal. per min. of flowing well

How Tested: ball test
Length of Test: 6 hrs
Remarks: (Gravel packing, cementing, packers, type of shutoff).....

15 1/4 NW 1/4 Sec. 21 T. 14N R. 19W
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

USE—If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e.: Lot, Block and Addition).

Show exact depth of bottom.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Driller's License Number 151

Driller's Signature: Ken Williams

46563

1993

RECORDED

291709

I received and filed this instrument for record on the 1 day of December, 1972, at 10:30 o'clock A.M., permanent files of Missouri County, State of Missouri. Witness my hand:
 Virginia R. Keenan, County Recorder
 By Mary Schalko, Deputy
 Fee \$ 2.00 cash

STATE OF MISSOURI
 DEPARTMENT OF REVENUE
 OFFICE OF THE COMPTROLLER
 COLUMBIA, MISSOURI

Notice of Completion of Acquisition of Real Property by Means of ACR

RECEIVED

45-277-2

MISSOURI
 DEPARTMENT OF REVENUE
 OFFICE OF THE COMPTROLLER
 COLUMBIA, MISSOURI

Special Assessment for Acquiring ACR
 State Assesment Fee for non-housing ACR

20000

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

RECEIVED

NOTICE OF COMPLETION OF GROUNDWATER
APPROPRIATION BY MEANS OF WELL

Developed after January 1, 1962

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

(Under Chapter 237 Montana Session Laws, 1961, as amended)

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Ronald S Perrin & Janet R Perrin

Owners **Grant Creek Ranches Corp**

Address **Grant Creek, Missoula**

Montana 59801

Date well started **Feb. 19, 1973**

completed **Feb. 20, 1973**

Type of well **Drilled**

Equipment used **Churn Drill**

Water Use: Domestic Municipal Stock Irrigation

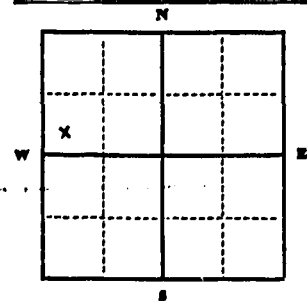
Industrial Drainage Other Garden/Lawn

*Describe

USE: If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition).

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Foot)	To (Foot)	PERFORATIONS		
				Kind Size	From (Foot)	To (Foot)
6" ID	6" ID 17 lb per ft. G.I.	1'	29'			



Static water levelft.*
Pumping water level **22**.....ft.*
at**15**.....gallons per minute,
measured **15**.....minutes after pumping
began.

*Measured from ground level.
Well developed by **last pump**.....
for **3**.....hours.
Power **5.5**..... Pump **5**..... HP
Remarks: (Gravel packing, cementing,
packers, type of shutoff)

S.W. 1/4 NW 1/4 Sec 21
T. **14** N. R. **19** E

Lot 61 Grantland Ten

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE.
EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature *Glen Camp*

Driller's Address **1522 S. 14th St., Missoula, Montana 59801**

LICENSE NO. **7**

Top of Ground		(Elev. above sea level)
From (Foot)	To (Foot)	
0	17' 2"	Clay, Gravel & Boulders
17' 2"	20	Clay, Gravel & Water
20	22	Clay, Gravel & Boulders
22		Clay, Gravel & Water

29' Show exact depth of bottom

#462

330691

I received and filed this instrument for
record on the 16 day of Apr. 1973
at 2:30 o'clock P. M., permanent files
of Missoula County, State of Montana
Witness my hand:
Dorothy L. Head, County Recorder
By [Signature], Deputy
Fee \$2.00 Paid

#2234 312504

I received and filed this instrument for
record on the 7 day of Feb 1972
at 9:00 o'clock A.M. permanent files
of Missouri County State of Missouri
Witness my hand
Vernon B. Green County Recorder
By *Barbara A. Green* Deputy
Fee \$ 2.00 Paid

File No. _____

Drill for c/o Chester Dolan

MONTANA WATER RESOURCES BOARD

T. 14 R. 17

DUPLICATE

RECEIVED

County Missoula

LOG

NOV 29 1967

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground _____

(Elev. above sea level _____)

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

0-3 Tan yellow clay

3-5 Clay & Gravel

5-7 Boulders, gravel

7-12 Boulders, gravel, Yellow clay

Mrs. Bethel D. Cochran Address Grantland, Missoula
1522 S. 14th

12-15 Tan Clay & Gravel

Driller Glenn Camp Address Missoula, Montana

Date of Notice of appropriation of groundwater _____

15-17 Boulders, Tan Clay & Gravel

Date well started Oct. 23, 1967 Date completed Nov. 3, 1967

17-20 Tan yellow clay & Gravel

Type of well Drilled Equipment used Churn Drill
(Dug, driven, bored or drilled) (Churn drill, rotary or other)

20-22 Seep of water (2 GPM) yellow clay, Gravel

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

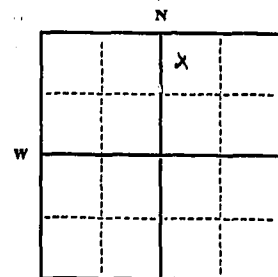
Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

22-28 Yellow Clay & Gravel

28-110 Gray unconsolidated rock & clay

110-159 Seep of water, Gray rock & Clay

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	5" I.D. 17 lb per ft.	0	87'	5" liner perforated		
5"	5" I.D. liner 14 lb per ft.	84'	159'	burnt	109'	159'



Static Water Level for non-flowing well 15 feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level 156 feet
with 141 gal. per minute.

Discharge in gal. per min. of flowing well _____

How Tested Test Pump

Length of Test 3 hours

Remarks: (Gravel packing, cementing, packers, type of shutoff) _____

714 1/2 Sec. 21 T. 14 R. 17
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

USE—If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e.: Lot, Block and Addition).

Show exact depth of bottom.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

License # 7
Driller's License Number

Glenn Camp
Driller's Signature Glenn Camp

1763

266071

I received and filed this Instrument for
 record on the 27 day of Nov, 1967
 at 2:50 o'clock P.M., permanent files
 of Missoula County, State of Montana
 Witness my hand:
 Varance R. Clouse, County Recorder
 By Mary A. Shalaby, Deputy
 Fee \$ 2.50 Paid

File No. MONTANA WATER RESOURCES BOARD

T. 14 R. 19

DUPLICATE

RECEIVED

County Missoula

LOG DEC 27 1967

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground _____
(Elev. above sea level.....)

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)
Well at Grantland

0 to 20' Red mud & gravel
20' to 40' Yellow mud & gravel
40' to 50' Grey mud & gravel & clay
49' to 50' water & gravel
51' to 60' Yellow clay & gravel

Owner Walter Deines Address 102 Cohasset Drive

Driller Glenn Camp 705 Alder Address Missoula, Mont

Date of Notice of appropriation of groundwater.....

Date well started 12/5/67 Date completed 12/8/67

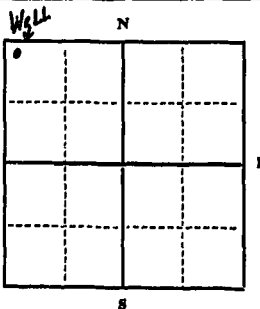
Type of well Drilled Equipment used Churn drill
(Dug, driven, bored or drilled) (Churn drill, rotary or other)

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" I.D. 17# to feet	1' above G.L.	1' above G.L.			52' 11"

Well is Specifically Located on N.W. CORNER OF LOT 10 OF GRANTLAND TRACTS, A PLATTED SUB-DIVISION OF MISSOULA COUNTY, MONTANA.



N. 1/4 (or) Sec. 21, T. 14 N. R. 19 W.
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

Static Water Level for non-flowing well 41 feet.

Shut-in Pressure for Flowing Well.....

Pumping Water Level 42 feet at 16 gal. per minute.

Discharge in gal. per min. of flowing well Test pumped for 1 1/2 hours

How Tested Baller test 24 G.P.M.

Length of Test 1 1/2 hours

Remarks: (Gravel packing, cementing, packers, type of shutoff).....

(Continue on reverse side)

USE—If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e.: Lot, Block and Addition).

Show exact depth of bottom.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

License # 7

Driller's License Number

Glenn Camp
Driller's Signature.

42,695

1766 200674

I received and filed this Instrument for
rd on the 17 day of Dec 1907
at 11:15 o'clock A.M. permanent files
of Missoula County, State of Montana
Witness my hand:
Vermae R. Crouse, County Recorder
By *[Signature]* Deputy
Fee \$*[Amount]* Paid *[Signature]*

[Faint handwritten notes]

County Clerk
Printed here for the purpose of
this paper for the purpose of

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

NOTICE OF COMPLETION OF GROUNDWATER
APPROPRIATION BY MEANS OF WELL

Developed after January 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Owner Richard L. Ellison

Address Grant Creek

Missoula, Montana

Date well started March 15, 1971

completed March 19, 1971

For Administrator's Use	
File	<u>302774</u>
	<u>May 19, 1971</u>
	<u>9:15 AM</u>
GW 1	

Type of well Drilled
(Dug, driven, bored or drilled)

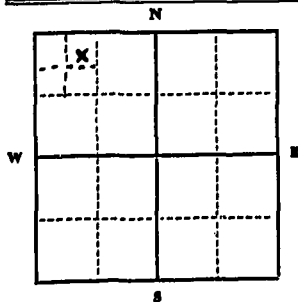
Equipment used Churn drill
(Churn drill, rotary or other)

Water Use: Domestic Municipal Stock Irrigation
Industrial Drainage Other * Garden/Lawn

*Describe _____
USE: If used for Irrigation, Industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition). _____

ESTIMATED ANNUAL WITHDRAWAL 3,000,000 gal.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" 17#	1 up	45			
6"	5" 14#	43	53	Burred 1/8x4	45	53



Static water level 38 ft.*
Pumping water level 38 ft.*
at 20 gallons per minute,
measured 60 minutes after pumping
began.
*Measured from ground level.
Well developed by fast pump.....
for 4 hours.
Power..... Pump..... HP
Remarks: (Gravel packing, cementing,
packers, type of shutoff)

NE 1/4 NW 1/4 NW 1/4 Sec. 21
T. 14 N R. 19 W

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE.
EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature Charles F. Hultstrom

Driller's Address C.K.C. Drilling, P.O. Box 670,

Missoula, Montana LICENSE NO. 185

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

Top of Ground		(Elev. above sea level)
From (Feet)	To (Feet)	
0	2	Topsoil
2	24	Tan clay and gravel
24	39	Gray clay and gravel
38	38	Static water level
39	40 1/2	Tan clay, gravel and water
40 1/2	53	White clay and rock

53 Show exact depth of bottom

2133

302774

I received and filed this instrument for
record on the 19th day of May, 1971
at 9:15 o'clock P.M., permanent files
of Missoula County, State of Montana
Witness my hand.
Vernice R. Creuse, County Recorder
By *M. M. Crease*, Deputy
Fee \$2.00

File No. _____

T. 14N R. 19W *21*

DUPLICATE

MONTANA WATER RESOURCES BOARD
RECEIVED

County Missoula

LOG

JUN 24 1969 ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground

(Elev. above sea level 3295)

**Notice of Completion of Groundwater
Appropriation by Means of Well**

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

0-3 Topsoil
3-20 Yellow clay and brown broken rock

Owner Grant Creek Ranch Corporation Address Route w2, Missoula, Montana

Driller G.K.C. Drilling Address Box 670, Missoula

20-47 Light gray clay and gray broken rock

Date of Notice of appropriation of groundwater _____

Date well started Nov. 15, 1968 Date completed Nov. 25, 1968

35 Static water level

Type of well Drilled Equipment used Churn drill
(Dug, Driven, bored or drilled) (Churn drill, rotary or other)

47-73 Seeps of water, gray and brown rock

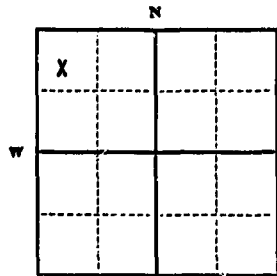
Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

73-85 Blue gray rock with traces of brown

85 Bottom of well

Size of Drilled Hole	Size and Weight of Coating	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	5"	17'	1' up	37'		



Static Water Level for non-flowing well 35 feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level 85 feet at 9 gal. per minute.

Discharge in gal. per min. of flowing well _____

How Tested Test Pump

Length of Test 30 hours

Remarks: Gravel packing, cementing, packers, type of shutoff

1/4 Sec. 24 T. 14N R. 19W
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

USE—If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e.: Lot, Block and Addition).

Lot 31, Grantland Four

Show exact depth of bottom.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

185

Driller's License Number

Charles F. Hultine
Driller's Signature

45,355

1907

2523 22

I received and filed this instrument for
 record on the 20th day of June 1907
 at 3:35 o'clock P.M. permanent file
 of Missoula County, State of Montana
 Witness my hand
 Vermae R. Crouse, County Recorder
 By [Signature] Deputy
 Fee \$ 2.00 [Signature] Paid

RECEIVED
 MISSOULA COUNTY RECORDER'S OFFICE

MISSOULA COUNTY RECORDER'S OFFICE

269

306664

I received and filed this instrument for
 record on the 20 day of Aug, 1971
 at 3:15 o'clock P.M., parchment file
 of Missoula County, State of Montana
 Witness my hand
 Verance R. Cruse, County Recorder
 By [Signature] Deputy
 Fee \$ 2.00 Paid

RECEIVED
 MONTANA WATER RESOURCES BOARD
 AUG 26 1971

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CONTROL AND WATER RESOURCES BOARD
MONTANA WATER RESOURCES BOARD

DRILLER'S LOG

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION BY MEANS OF WELL
Developed after January 1, 1962

RECEIVED
AUG 26 1971

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

(Under Chapter 237 Montana Session Laws, 1961, as amended)

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller. Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Owner D. A. England
Address Rattle Canyon Drive
Missoula, Montana
Date well started Aug. 4, 1971
completed Aug. 13, 1971

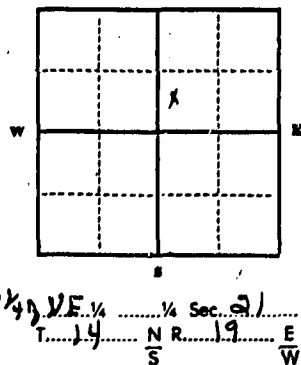
For Administrator's Use	
File	<u>3066 L.S.</u> <u>August 30, 1971</u> <u>3:20 P.M.</u>
GW 1	

Type of well Drilled
(Dig, drives, bored or drilled)
Equipment used Churn Drill
(Churn drill, rotary or other)
Water Use: Domestic Municipal Stock Irrigation
Industrial Drainage Other Garden/Lawn

*Describe
USE: If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition).

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Coupling	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6" I.D.	6" I.D. 17 lb above per ft. g.l.	1'	29'			
8" I.D.	8" I.D. liner plastic 16 lb per ft.	28'	100'		none	



Static water level 35 ft.*
Pumping water level 20 ft.*
at 3 gallons per minute,
measured 3 minutes after pumping
began.
*Measured from ground level.
Well developed by test pump
for 12 hours.
Power 500 Pump 3/4 HP
Remarks: (Gravel packing, cementing,
packers, type of shutoff)
Water is still steady

W $\frac{1}{4}$ S.E. $\frac{1}{4}$ Sec. 21
T. 14 N.R. 19 E
S W

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature Edmund Camp
Camp Well Drilling & Pump Supply
Driller's Address 1522 S. 14th W., Missoula, Montana

Top of Ground (Elev. above sea level)		
From (Feet)	To (Feet)	
0	2	Topsoil
2	20	Sandstone
20	30	Yellow Clay
30	35	Gray Gravel
35	40	Gray Shale
40	45	Blue Gray Shale
45	70	Gray Rock
70	100	Gray Rock

271

306665

I received and filed this instrument for
 record on the 20 day of Aug, 1971.
 at 3:20 o'clock P.M. pursuant to the
 of Missouri County State of Missouri
 Witness my hand
 Verance A. Creben, County Recorder
 By Linda D. Johnson, Deputy
 Fee \$2.00 Paid

REC'D
 AUG 26 1971

File No.

T.14N.....R.19W.....

DUPLICATE

MONTANA WATER RESOURCES BOARD

County Missoula

LOG

RECEIVED

STATE OF MONTANA

ADMINISTRATOR OF GROUNDWATER CODE

OFFICE OF STATE ENGINEER

Top of Ground

JUN 24 1969

(Elev. above sea level 3500 ft.)

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Formations Log:

0 - 2 Black dirt.
2 - 9 Tan clay with some rock imbedded. Seeps of water. Owner Grant Creek Ranch Corp. Address Missoula, Montana

9 - 12 Yellow clay with some gravel and coarse sand imbedded. Seeps of water. Driller Liberty Drilling Co. Address Missoula, Montana
Date of Notice of appropriation of groundwater None filed
Date well started 4/18/69 Date completed 4/26/69

12 - 23 Silty sand and gravel. Water: Type of well Drilled. Equipment used Cable. Tools
23 - 32 Silty sand and gravel. Some silty water. Water use: Domestic [x] Municipal [] Stock [] Irrigation [x]
Industrial [] Drainage [] Other []

32 - 3 1/2 Sand and gravel imbedded in brown clay. Seeps of silty water. Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

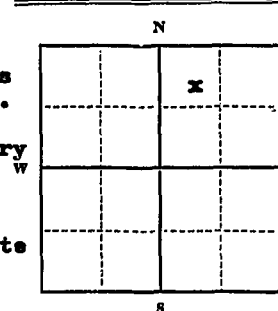
Table with columns: Size of Drilled Hole, Size and Weight of Casing, From (Feet), To (Feet), PERFORATIONS (Kind Size, From (Feet), To (Feet)). Row 34 1/2 - 37: 6 inch hole, 6 5/8 inch OD casing, +3 to 58 feet, perforations NONE.

65 1/2 - 69 1/2 Light gray rock with a few thin seams of brown rock. Water. 1/2 GPM. Static Water Level for non-flowing well 5 feet. Shut-in Pressure for Flowing Well Non-f. Pumping Water Level 8 1/2 feet.

69 1/2 - 70 1/2 Light gray very fine grained rock. Discharge in gal. per min. of flowing well at 6 gal. per minute. How Tested pump test. Length of Test 8 hours.

70 1/2 - 77 Blue - gray rock with white quartz seams. Blue - gray rock with seams of white quartz and brown rock. 3 1/2 GPM. Remarks: (Gravel packing, cementing, packers, type of shutoff) All water entering well is coming from crack and seams in the rock from 65 feet to 83 feet.

83 - 93 Blue - gray rock with a few scattered white quartz seams. No increase in water. (Continue on reverse side)



W 1/4, NE 1/4, E 1/4, Sec. 21, T. 14 N, R. 19 W. Indicate location of well and place of use, if possible. Each small square represents 40 acres.

USE—If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e.: Lot, Block and Addition).

Lot 12, Grantland Two

Show exact depth of bottom. Bottom of well 93'.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Driller's License Number 52
Driller's Signature William Calver

45,351

282318

Received and filed this instrument for
and on the 20 day of June 1967
at 3:30 o'clock P.M. permanent files
of Missoula County, State of Montana
Witness my hand:
Vernice H. Crouse, County Recorder
By Walter D. Butler Deputy
Fee \$ 2.00 Paid

RECEIVED

JUN 24 1968

MISSOULA WATER RESOURCES BOARD

1	2	3	4	5	6	7	8	9	10

Printed on Recycled Paper
Special Purchase for Recycled Paper
1967

File No.

T14N R19W 21

DUPLICATE

MONTANA WATER RESOURCES BOARD
RECEIVED

County Missoula

LOG

JUN 24 1969

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground

(Elev. above sea level Approx. 3500 ft.)

**Notice of Completion of Groundwater
Appropriation by Means of Well**

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Formations Log:

- 0 - 2 Brown topsoil.
- 2 - 19 Tan to brown clay with broken rock mixed in.
- 19 - 24 Gray clay with multicolored broken rock mixed in.
- 24 - 30 Tan clay with fine multicolored cuttings.
- 30 - 36 Gravel imbedded in tan clay. Seeps of water.
- 36 - 37 1/2 Tan clay with few large gravels mixed in. Some water.
- 37 1/2 - 38 Reddish brown clay with gravel imbedded.
- 38 - 39 1/2 Brown clay.
- 39 1/2 - 40 1/2 Tan clay with gravel imbedded.
- 40 1/2 - 43 Soft white rock.

Owner Grant Creek Ranch Corp. Address Missoula, Montana

Driller Liberty Drilling Co. Address Missoula, Montana

Date of Notice of appropriation of groundwater None filed.

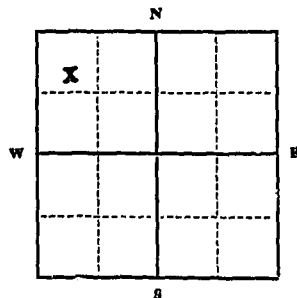
Date well started 6/7/69 Date completed 6/14/69

Type of well drilled Equipment used Cable tools
(Dug, Driven, bored or drilled) (Churn drill, rotary or other)

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6 5/8" OD x 1/4"	+2'4"	30'	5 9/16" shop-made screen	30'	38'
A blank tailpipe with solidly closed bottom extends to 43'.						



Static Water Level for non-flowing well 25 feet.

Shut-in Pressure for Flowing Well Non-f.
Pumping Water Level 30 feet
at 1.2 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested Non-flowing pump test
Length of Test 9 hours

Remarks: (Gravel packing, cementing, packers, type of shutoff) All water entering well is coming through perforations in screen.

Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

USE—If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e.: Lot, Block and Addition).

Lot 39, Grantland Six

Show exact depth of bottom.

Bottom of well 43'.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Driller's License Number

William F. Colome
Driller's Signature

45,352

1904

282319

I received and filed this instrument for
 record on the 20 day of June 1904
 at 3:32 o'clock P.M. permanent files
 of Missoula County, State of Montana
 Witness my hand:
 Vermae R. Crouse, County Recorder
 By Montana M. Dalton
 Fee \$ 2.00 Paid

RECORDED
 MISSOULA COUNTY RECORDERS OFFICE

MISSOULA COUNTY RECORDERS OFFICE
 MISSOULA, MONTANA

File No. _____

MONTANA WATER RESOURCES BOARD
RECEIVED

T. 14N R. 19W 21

DUPLICATE

County Missoula

LOG

JUN 24 1969

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground

(Elev. above sea level Approx. 3500 ft.)

**Notice of Completion of Groundwater
Appropriation by Means of Well**

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Formations Log:

- 0 - 1 Black top-soil.
- 1 - 24 Tan to brown clay with broken rock mixed in.
- 24 - 41 Gray clay with multi-colored broken rock mixed in. Some water 26-28 and 32-35 ft.
- 41 - 45 Gravel imbedded in tan clay. Seeps of water.
- 45 - 50 Tan to brown clay with some gravel imbedded.
- 50 - 149 Light gray rock.

Owner Grant Creek Ranch Corp. Address Missoula, Montana

Driller Liberty Drilling Co. Address Missoula, Montana

Date of Notice of appropriation of groundwater None filed.

Date well started 6/5/69 Date completed 6/6/69

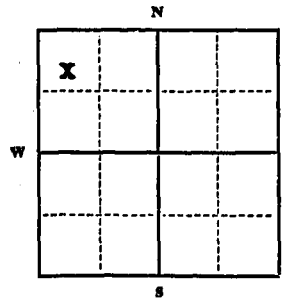
Type of well Drilled Equipment used Cable tools
(Dug, Driven, bored or drilled) (Churn drill, rotary or other)

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	8 5/8" OD x 1/2"	+1'6"	57'8"	Mills knife	32' 46'	35' 47'

Water rises in well 22 ft.



Static Water Level for non-flowing well 22 feet.

Shut-in Pressure for Flowing Well Non-f

Pumping Water Level 31 feet
at 8 gal. per minute.

Discharge in gal. per min. of flowing well

Non-flowing:

How Tested pump test

Length of Test 24 hours

Remarks: (Gravel packing, cementing, packers, type of shutoff) All water entering well is coming through these perforations.

NW 1/4 Sec 21 T14N R19W
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

USE—If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e.: Lot, Block and Addition).

Lot 39, Grantland Six

Show exact depth of bottom.

Bottom of well 149'.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Driller's License Number 52

William F. Adams
Driller's Signature

45,353

1905

282320

I received and filed this instrument for record on the 20th day of June, 1905, at 3:34 o'clock P.M. permanent files of Missoula County, State of Montana
 Witness my hand:
 Vermae R. Crouse, County Recorder
 By M. M. Coningham Deputy
 Fee \$2.00 paid

RECEIVED
 MISSOULA WATER RECORDERS BOARD

THIS INSTRUMENT WAS RECORDED ON

File No. _____

MONTANA WATER RESOURCES BOARD
RECEIVED

T. 14N R. 19W 21

DUPLICATE

County Missoula

LOG

JUN 24 1969

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

**Notice of Completion of Groundwater
Appropriation by Means of Well**
DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground
(Elev. above sea level 3790)

0- 1 Topsoil

1-36 Yellow clay and gravel

36-40 Gravel and gray clay

40-48 Boulders, gravel and gray clay

45 Static water level

48-53 Yellow clay and gravel (water coming in at about 50' at 3 1/2 G.P.M.)

53-73 Blue gray rock with seams of clay and brown rock. Some signs of washed gravel.

73-86 Blue gray rock with seams of clay

86 Bottom of hole

Owner Grant Creek Ranch Corporation, Box 1519, Missoula

Driller C.K.C. Drilling Address Box 670, Missoula

Date of Notice of appropriation of groundwater _____

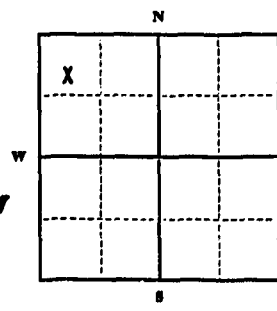
Date well started Nov. 7, 1968 Date completed Nov. 30, 1968

Type of well Drilled Equipment used Churn drill
(Dug, Driven, bored or drilled) (Churn drill, rotary or other)

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" 17#	1' up	46'	1/8 X 4 inch burned	43'	86'
	5" 14#	45'	86'			



Static Water Level for non-flowing well 45 feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level 86 feet at 3 1/2 gal. per minute.

Discharge in gal. per min. of flowing well _____

How Tested Test Pump

Length of Test 60 hours

Remarks: (Gravel packing, cementing, packers, type of shutoff) _____

NW 1/4 Sec. 21 T. 14N R. 19W
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

USE—If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e.: Lot, Block and Addition).

Lot 22, Grantland Three

Show exact depth of bottom.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

185
Driller's License Number
Chas. F. Hillenstein
Driller's Signature

45,354

1906

282321

I received and filed this instrument for
 record on the 20th day of June 1909
 at 3:30 o'clock P.M. permanent files
 of Missoula County, State of Montana
 Witness my hand.
 Veranda H. Brown, County Recorder
 By *M. M. Conroy*, Deputy
 Feb 12.00

RECEIVED
 MISSOULA COUNTY RECORDER'S OFFICE

MISSOULA COUNTY RECORDER'S OFFICE

File No.

T. 14^N R. 19^W S. 21

DUPLICATE

County

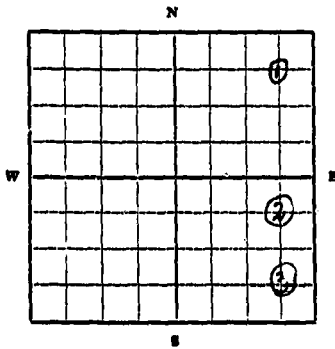
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 30 1963
STATE ENGINEER

Declaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1961)

1. GRANT CREEK RANCH CORPORATION, of P. O. Box 1519 MISSOULA
(Name of Appropriator) (Address) (Town)
County of MISSOULA State of MONTANA

have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec. 21, T14N R. 19W

Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

- 2. The beneficial use on which the claim is based Stock water and irrigation water
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been Continuous use since the date of early settlers in the Missoula area, about 1860
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) Spring No. 1 10 inches
" " 2 10 inches Total-30 in.
" " 3 10 inches
- 5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof Undetermined acreage on hillsides and in fields adjacent to springs, owned by Grant Creek Ranch Corporation
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Pipe, trenching, and natural flow.
Location: see below

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Development and improvement of springs has been continuous for more than one hundred years

8. The depth of water table not applicable

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater not applicable

Location of springs: Spring no. 1 NE 1/4 NE 1/4 Section 21-14N-19W
" " 2 NE 1/4 SE 1/4 " " " "
" " 3 SE 1/4 SE 1/4 " " " "

10. The estimated amount of groundwater withdrawn each year Same as groundwater claimed - 30 inches

11. The log of formations encountered in the drilling of each well if available

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

GRANT CREEK RANCH CORPORATION

Signature of Owner Walter Reed Markert

Secretary-Treasurer

Date 19 December 1963

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

File No. _____

T. 14N R. 19W

DUPLICATE

JUN 17 1970

County MISSOULA Dud

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARD

Notice of Completion of Groundwater
Appropriation by Means of Well
DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

Top of Ground
(Elev. above sea level _____)

0- 2 Topsoil

2-13 Fine broken rock
and tan clay

10 Static water
level

13-17 Cobblestones, gravel
and tan clay

17-20 Water, sand and
gravel

20-28 Yellow clay, sand
and gravel

28-29 Water, sand and
gravel

29 Exact depth of
bottom

Owner Phillip M. Heffner Address Missoula, Montana

Driller O.K.C. Drilling Address Box, 670, Missoula

Date of Notice of appropriation of groundwater _____

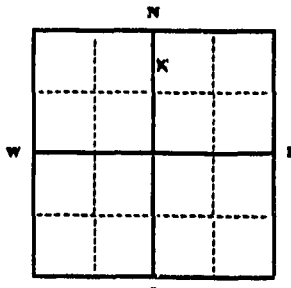
Date well started June 10, 1970 Date completed June 11, 1970

Type of well Drilled Equipment used CHURN drill
(Dug, driven, bored or drilled) (Churn drill, rotary or other)

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

Size of Drilled Hole	Size and Weight of Casing	From (Foot)	To (Foot)	PERFORATIONS		
				Kind Size	From (Foot)	To (Foot)
6"	6" 17#	1 up	29	---	-----	---



Static Water Level for non-flowing well
_____ 10 _____ feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level _____ 16 _____ feet

at _____ 25 _____ gal. per minute.

Discharge in gal. per min. of flowing well

How Tested Bailer and test pump

Length of Test _____ 3 hours

Remarks: (Gravel packing, cementing, packers, type of shutoff) _____

Doc. No. 292191
Filed for record
this 15 day of June
A. D. 19 70, at 3:00
o'clock P.

NW 1/4 Sec. 21 T14N R19W
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

USE—If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e.: Lot, Block and Addition).

Show exact depth of bottom.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, tissue copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form will be returned.

185

Driller's License Number

Charles F. Hollenstein
Driller's Signature.

46579

2002 292191

I received and filed this instrument for
record on the 15th day of August 1970
at 3:00 o'clock P.M. Permanent files
of Missoula County, State of Montana
Witness my hand:
Veramo B. Crouse, County Recorder
By W. J. Crouse, Deputy
Fee \$2.00 PAID

MISSOULA COUNTY CLERK

RECEIVED

County.....MISSOULA 21

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE NOV 1 1971
MONTANA WATER RESOURCES BOARD

NOTICE OF COMPLETION OF GROUNDWATER
APPROPRIATION BY MEANS OF WELL

Developed after January 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller.

Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Owner Lynn Heppler

Address 706 Janice Drive
Missoula, Montana 59801

Date well started Sept. 27, 1971
completed Sept. 28, 1971

Type of well Drilled

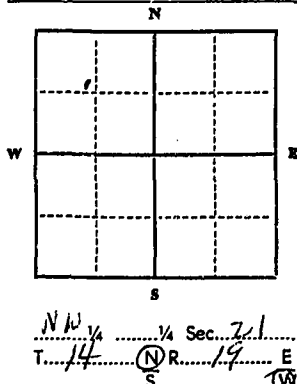
Equipment used Churn Drill

Water Use: Domestic Municipal Stock Irrigation
Industrial Drainage Other * Garden/Lawn

*Describe _____
USE: if used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition). _____

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled	Size and Weight	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6" ID	17 lb per ft.	1' above g.l.	36'			none



Static water level 26 ft.*
Pumping water level 31 ft.*
at 12 gallons per minute,
measured 7 minutes after pumping began.
*Measured from ground level.
Well developed by gravel pump
for 1 hours.
Power 1.00 Pump 2 HP
Remarks: (Gravel packing, cementing, packers, type of shutoff) _____

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature Camp Well Drilling & Pump Supply
Driller's Address 1522 S. 14th W., Missoula, Montana 59801

Philip G. Bohle LICENSE NO. 7

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

Top of Ground (Elev. above sea level)		
From (Feet)	To (Feet)	WELL: GRANTLAND
0	12	Clay Gravel & Cobblestones
12	16	Clay & Gravel
16	18	Yellow clay, Gravel
18	26	Swamp of Water
26	34	Clay Gravel & Sandstone
34	35 1/2	Yellow Clay & Gravel
35 1/2	36	Sand Gravel & Water

36 Show exact depth of bottom

49295

#2193

308862

I received and filed this instrument for
record on the 22 day of Oct 1921.
at 1:15 o'clock P.M. permanent file
of Missoula County State of Montana
Witness my hand
Vermon R. Crouse, County Recorder
By W. C. [Signature]
Fee \$ 2.00 [Signature] Paid

RECORDED
INDEXED
OCT 24 1921
MISSOULA, MONT.

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

County Missoula

RECEIVED

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION BY MEANS OF WELL

Developed after January 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller. Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Owner Lynn & Francis Hapler

Address 706 Janice Drive

Missoula, Montana

Date well started Nov. 2, 1971

completed Nov. 7, 1971

For Administrator's Use	
File	<u>310499</u>
	<u>December 10, 1971</u>
	<u>1:38 PM</u>
GW 1	

Type of well Drilled
(Dug, driven, bored or drilled)

Equipment used Churn Drill
(Churn drill, rotary or other)

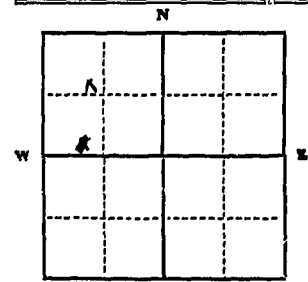
Water Use: Domestic Municipal Stock Irrigation
Industrial Drainage Other * Garden/Lawn

*Describe

USE: If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block and Addition).

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
<u>6" I.D.</u>	<u>6" I.D. 17 lb per ft.</u>	<u>casing pulled</u>		<u>none</u>		



Static water levelft.*
Pumping water levelft.*
atgallons per minute,
measuredminutes after pumping
began.

*Measured from ground level.
Well developed by
forhours.

Power..... Pump..... HP
Remarks: (Gravel packing, cementing,
packers, type of shutoff)

CASING PULLED - Hole
filled

N.W. 1/4 Sec. 21
T. 14 N.R. 19 R. 2
S. W.

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature Edmund Camp

Driller's Address CAMP WELL DRILLING & PUMP SUPPLY
1522 S. 4th W., Missoula, Montana 59801

Top of Ground (Elev. above sea level)		Well # 1
From (Feet)	To (Feet)	
<u>0</u>	<u>7</u>	<u>Black Dirt & Gravel</u>
<u>7</u>	<u>14</u>	<u>tan clay & gravel</u>
<u>14</u>	<u>19</u>	<u>tan clay gravel & cobbles</u>
<u>19</u>	<u>21</u>	<u>boulder</u>
<u>21</u>	<u>25</u>	<u>tan clay & gravel</u>
<u>25</u>	<u>31</u>	<u>gray clay gravel & boulders</u>
<u>31</u>	<u>43</u>	<u>gray clay, gravel & broken rock</u>
<u>43</u>	<u>45</u>	<u>gray clay, gravel, seep of water 1/2 gpm</u>
<u>45</u>	<u>64</u>	<u>gray clay, gravel & broken rock</u>
<u>64</u>	<u>87</u>	<u>rock</u>
<u>87</u>	<u>90</u>	<u>rock & seep of water 1 gpm</u>
<u>90</u>	<u>184</u>	<u>Rock</u>

LICENSE NO. 7

184 - hole 136 exact depth of bottom

49599

#2213

310498

I received and filed this Instrument for
record on the 10 day of Dec 1971
at 1:30 o'clock P. M. permanent time
of Michoud County State of Missouri
Witness my hand
Vernon R. Greer, County Recorder.
By Paul D. Greer Deputy
Fee \$ 2.00 Paid

2389

326320

I received and filed this instrument for
record on the 28th day of Dec. 1922
at 11:40 o'clock P.M. permanent files
of Missoula County, State of Montana
Witness my hand.
Verance A. Cress, County Recorder
By Wm. C. Cress Deputy
Fee 1.25 Paid del

2085 299061

I received and filed this instrument for
record on the 29th day of Jan. 1971.
at 8:45 o'clock P.M. permanent files
of Missoula County, State of Montana
Witness my hand.
Vernon R. Crouse, County Recorder
By *M. M. Pennington* Deputy
Fee \$..... Paid