

T 4S R 4E

County Gallatin

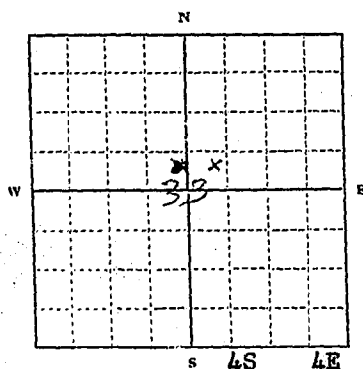
RECEIVED
MAY 20 1964

MAY 20 1964

STATE ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1 Conrad J. Jones Permittees, of Box 79 Gallatin Gateway
(Name of Appropriator) (Address) (Town)
County of Gallatin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE $\frac{1}{4}$ Sec. 33 T48 R46

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 Domestic
3. Date or approximate date of earliest beneficial use; and how continuous the use has been July 3, 1962
Continuous
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 20 gal. per minute
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
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. Commenced July 26, 1961
Completed July 3, 1962
8. The depth of water table. 55 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. Depth 78 1/2 feet - 6" casing
10. The estimated amount of groundwater withdrawn each year.
11. The log of formations encountered in the drilling of each well if available. Sand & Gravel - Gravel & Sand to 67 feet
Gravel & Sand to 78 1/2 feet
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.

Correct Times
 Remona Jones
 Date Mar 18 1964

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.

Bureau of
38,04

#1850

State of Montana }
County of Gallatin } ss.

Filed May 18 1964

at 4:40 o'clock P. M.

EARL WALTON
COUNTY CLERK & RECORDER

By [Signature]
DEPUTY

Fee \$ 2.00 pd

GW 2

Approved Stock Form—State Publishing Co., Helena, Montana—40472

File No.

DUPLICATE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER
OFFICE OF STATE ENGINEER

OCT 16 1964

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

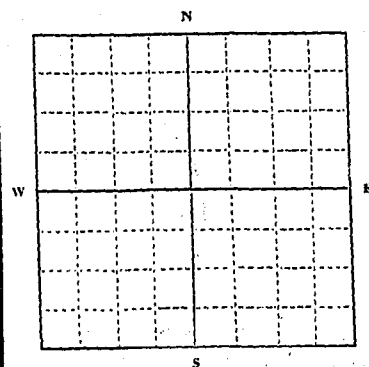
Owner HARRY C. WIDOM Address Ballwin, IdahoDriller Harold Hulbert Address 1st on Big HornDate of Notice of Appropriation of Groundwater —Date well started Oct 1, 1964 Date Completed Oct 12 1964

Type of well drilled Equipment Used Hyman
(dug, driven, bored or (Churn, drill, rotary or
drilled) other)

Water Use: Domestic ☒ Municipal ☐ Other ☐ Irrigation ☐
Industrial ☐ Drainage ☐ Stock ☐

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 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)
7"	6 5/8" 19 lb	0	61'	none		



1/4 Sec. 33, T. 46 R. 4E
Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Lot 4, Castle Rock Tracts
Show exact depth of bottom.

Static Water Level for non-flowing Well 52 feet.Shut-in Pressure for Flowing Well —Pumping Water Level 52 feet at 10 gal. per minute.Discharge in gal. per min. of flowing well —How Tested Boiler Length of Test 2 hrs

Remarks: (Gravel packing, cementing, packers, type of shutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of acres irrigated, if used for irrigation) none

Driller's License Number 47Driller's Signature Harold B. Hulbert

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.

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.

38562

File No.

T. 45 R. 4E

33

DUPLICATE

LOG

MONTANA WATER RESOURCES BOARD

RECEIVED

AUG 19 1968

County Golden

STATE OF MONTANA

ADMINISTRATOR OF GROUNDWATER CODE

OFFICE OF STATE ENGINEER

Top of Ground

(Elev. above sea level)

0-2 soil rock
 2-15 rock
 15-25 gravel & rock
 25-46 rock
 46-48 sand
 48-55 clay gravel & very little water
 55-56 sand gravel
 & very little water
 56-57 clay
 57-59 sand & gravel
 59-61 gravel water
 61 Bottom of well

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

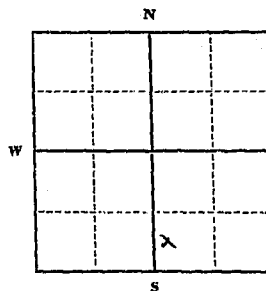
Driller Harold Hulbert Address Route 1 Bozeman, Mont

Date of Notice of appropriation of groundwater

Date well started July 20 1968 Date completed Aug. 15 1968Type 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.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
7"	6 5/8 O. D. 19 lb	2 above	61	none		

Static Water Level for non-flowing well 47 feet.

Shut-in Pressure for Flowing Well

Pumping Water Level 47 1/2 feetat 20 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested Railer & pumpLength of Test 4 hrs

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

Castle Rock Tracts 45

SE 1/4 Sec. 33 T. 45 R. 4E
 Indicate location of well and place of use, if possible. Each small square represents 40 acres.

47

47

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

Driller's Signature

44,510

75711

2185

State of Montana
County of Gallatin

Filed August 16, 1968
at 3:45 o'clock P.M.

Carl L. Stucky
County Clerk & Recorder

By Betty Rose Griggs
Deputy

Fee \$ 2.00 pd

GW 2

Approved Stock Form—State Publishing Co., Helena, Montana—38496

File No.

T. 4S R 4E

DUPLICATE

County GALLATIN

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEERRECEIVED
DEC 28 1962Top of Ground
1 ft Top Soil APPROXIMATELY
(Elev. above sea level 5000)Notice of Completion of Groundwater
Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

2-49 Rock
Water comes very small outflow
49-50 Hard clay
50-65 Rock
65-67 Clay
Water comes
Rained to 56 ft

Bottom 67'

Owner Jack and John Cain Address R.T. BOZEMAN MONT

Driller Harold Hulbert Address R.T. Bozeman Mont

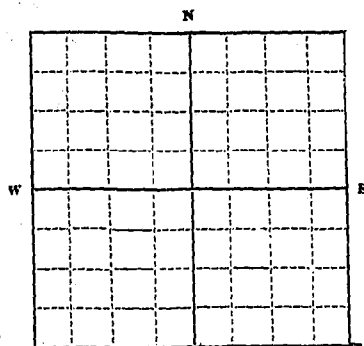
Date of Notice of Appropriation of Groundwater

Date well started Oct 29, 1962 Date Completed Dec 18, 1962

Type of well Drilled Equipment Used Churn
(dug, driven, bored or (Churn, drill, rotary or
drilled) other)Water Use: Domestic ☒ Municipal ☐ Other ☐ Irrigation ☐
Industrial ☐ Drainage ☐ Stock ☐

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 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)
5"	4 1/2 O.D. 8 lb	0	64	—		



CASTLE ROCK TRACT #7

SE 1/4 Sec 34 T.4S. R.4E

Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.

Static Water Level for non-flowing Well 56' feet.

Shut-in Pressure for Flowing Well —

Pumping Water Level 58 feet at 70 gal. per minute.

Discharge in gal. per min. of flowing well —

How Tested Bailers Length of Test 2 hrs

Remarks: (Gravel packing, cementing, packers, type of shutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of acres irrigated, if used for irrigation)

None

Driller's License Number 47

Driller's Signature Harold B. Hulbert

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.

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.

2901

[illegible]

State of Montana ss.
County of Gallatin
Filed December 27 1962
at 2:17 o'clock P. M.
EARL WATSON CLERK & RECORDER
By Ch. J. Morrow
DEPUTY
Fee \$ 2.00 Pd.

[illegible][illegible]

$\frac{7}{8} = \frac{0.875}{1}$

1. The first step in the process of identifying a problem is to determine the nature of the problem. This involves a thorough understanding of the situation and the people involved. It is important to gather all relevant information and to consider the perspectives of all stakeholders. Once the nature of the problem is understood, the next step is to identify the causes of the problem. This involves a detailed analysis of the situation and the people involved. It is important to consider all possible causes and to identify the most likely ones. Once the causes of the problem are identified, the next step is to develop a plan to address the problem. This involves identifying the goals of the plan and the steps that need to be taken to achieve those goals. It is important to consider all possible solutions and to choose the one that is most likely to be successful. Once a plan has been developed, the next step is to implement the plan. This involves putting the plan into action and monitoring the progress. It is important to be flexible and to make adjustments as needed. Finally, the last step in the process is to evaluate the results of the plan. This involves assessing the impact of the plan and determining whether the goals have been achieved. It is important to learn from the experience and to use the results to improve future plans.

GW 2

Approved Stock Form—State Publishing Co., Helena, Montana—41933

STATE WATER CONSERVATION BOARD

File No. _____

JUL 23 1966

T. 4 S. R. 4 E.

DUPLICATE

County Gallatin

Billie _____ McDermott _____
 Butzerin _____ McNelly _____
 Coyle _____ Marlon _____
 Darlington _____ Sullivan _____
 Dickert _____

STATE OF MONTANA

ADMINISTRATOR OF GROUNDWATER CODE

OFFICE OF STATE ENGINEER

Top of Ground

(Elev. above sea level.....)

0-2 soil
 2-25 rock & gravel
 25-32 clay & rock
 32-34 rock
 34-36 clay
 36-38 clay
 38-44 clay & rock
 44-45 rock
 45-49 rock
 49-50 water & sand
 40-58 rock
 58' Bottom of well

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner Harry C. Wilcox & Marie E. Wilcox Address Gallatin Gateway

Driller Harold Hulbert Address Route 1 Bozeman

Date of Notice of Appropriation of Groundwater.....

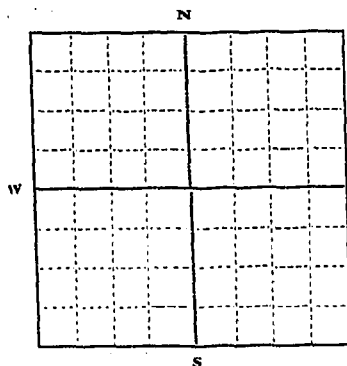
Date well started July 1966 Date Completed July 15 1966

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

Water Use: Domestic ☒ Municipal ☐ Other ☐ Irrigation ☐
 Industrial ☐ Drainage ☐ Stock ☐

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 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)
7"	6" I. D. 19 lb	I above	40	None		



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

Tract 21 of Castle Rock Tracts
 Show exact depth of bottom.

Static Water Level for non-flowing Well 47 feet.

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

Pumping Water Level 57 feet at 5 gal. per minute.

Discharge in gal. per min. of flowing well.....

How Tested Pump Length of Test 2 hrs

Remarks: (Gravel packing, cementing, packers, type of shutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of acres irrigated, if used for irrigation).....

47
 Driller's License Number

Harold B. Hulbert
 Driller's Signature

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.

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.

41241

2018

State of Montana } ss.
County of Gallatin }
Filed July 18, 1966
at 3:15 o'clock P.M.
Carl L. Stucky
County Clerk & Recorder
By *Deputy H. C. [Signature]*
Deputy
Fee \$ 2.00 pd.

GROUNDWATER INDEX

Page 1 of 4

County Gallatin Twp. 45 Rge. 2E

[illegible]

File No.

T. 4 S. R. 5 E

DUPLICATE

County Gallatin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 10 1963
STATE ENGINEER

Notice of Completion of Groundwater Appropriation Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater..... 1930

United States of America

Owner (Pasant Service) Address Bozeman, Montana

Contractor (if any) N/A

Address of Contractor N/A

Date Started..... 1930 Date Completed..... 1930

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable.....

Spring

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.....

BLACK SPRING - 6 G.P.M. - measured flow, and timed.

Use Period: Grazing season, approximately four months annually.

UNITED STATES OF AMERICA

Signature of Owner..... By [Signature]

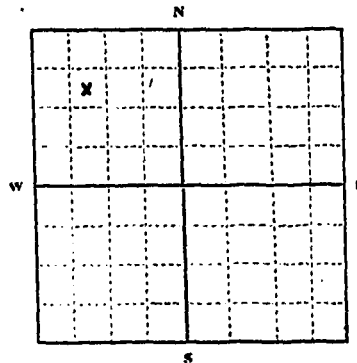
Date..... 12/4/63

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.



Section 14 Sec. 14 T. 48 R. 5E

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

BLACK SPRING

#824

State of Montana }
County of Gallatin } ss.

Filed December 9, 1963

at 11:54 o'clock A. M.

EARL WALTON

COUNTY CLERK & RECORDER

By

Lucille A. Mayne

DEPUTY

Fee \$ 2.00

GROUNDWATER INDEX

Page 1 of 6

County Nebraska Twp. 4S Rge. 6E

[illegible]

GW 2

Approved Stock Form—State Publishing Co., Helena, Montana—3908.

File No.

HOOD WELL NO. 1

T. 48

R. 62

DUPLICATE

County Gallatin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED

DEC 10 1963

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

United States of America

Owner Forest Service

Address Boseman, Montana

Van Dyken Drilling

Driller Company

Address Boseman, Montana

Date of Notice of Appropriation of Groundwater 10-05-63

Well started 9-24-63

Date Completed 10-05-63

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

Equipment Used Churn drill.
(Churn, drill, rotary or other)

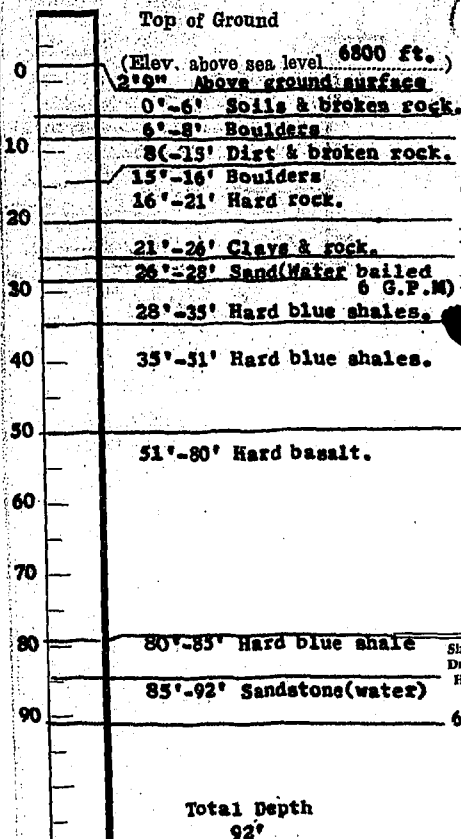
Water Use: Domestic ☒ Industrial ☐

Municipal ☐ Drainage ☐

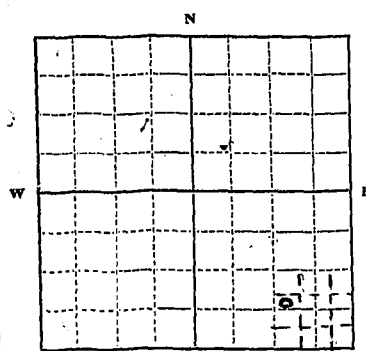
Other ☐ Stock ☐

Irrigation ☐

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 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" - 19 lb.	2'-9" Above ground surface	51'	N O N E		



SW 1/4 Sec. 15 T. 48 R. 62

Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.
92'

Static Water Level for non-flowing Well 45 feet.

Shut-in Pressure for Flowing Well N/A

Pumping Water Level 51 feet at 35 gal. per minute.

Discharge in gal. per min. of flowing well N/A

How Tested Pumping Length of Test 1 hour

Remarks: (Gravel packing, cementing, packers, type of shutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of acres irrigated, if used for irrigation)

License No. 1
Driller's License Number

Bert Van Dyken
Driller's Signature

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.

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.

8284

DISPOSITION

#815

State of Montana }
County of Gallatin } ss.
Filed December 9 1963
at 11:45 o'clock A.M.
EARL WALTON
By *Lucy G. A. Mayfield* COUNTY CLERK / RECORDER
DEPUTY
Fee \$ 2.00

File No.

T. 43 R. 61

DUPLICATE

County Gallatin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

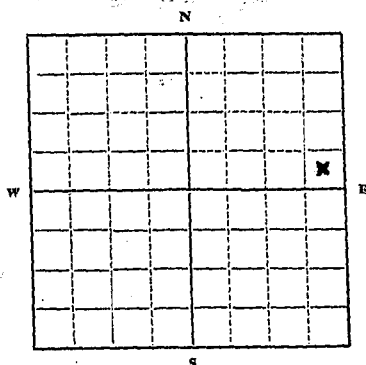
RECEIVED
DEC 10 1963

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. United States of America (Forest Service), of Bozeman
(Name of Appropriator) (Address) (Town)
County of Gallatin State of Bozeman, Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



2. The beneficial use on which the claim is based.....
Domestic
3. Date or approximate date of earliest beneficial use; and how continuous the use has been. Continuous use 1940 to 1947.
Capped off in 1947. Future domestic use intended.
4. The amount of groundwater claimed (in miner's inches or gallons per minute)..... Unknown.
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.....
N/A
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal.....
(Drilling) Drilled well

~~Section 16~~ Sec. 16 T. 43 R. 61

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

Well. Hyalite Dam Campsite.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater.....
1940
8. The depth of water table..... Unknown
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.....
Unknown
10. The estimated amount of groundwater withdrawn each year..... Unknown
11. The log of formations encountered in the drilling of each well if available.....
not 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.....

UNITED STATES OF AMERICA

By: Signature of Owner. Robert A. AlbanyDate December 4, 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.

8326

#835

State of Montana }
County of Gallatin } ss.

Filed December 9, 1963

at 12:06 o'clock P. M.

EARL WALTON

COUNTY CLERK & RECORDER

By Levick A. Maxwell

DEPUTY

Fee \$ 2.00

File No. _____

DUPLICATE

T. 4S R. 6E

County _____

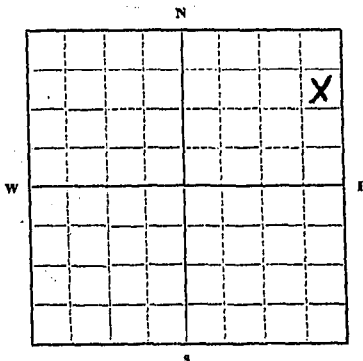
RECEIVED
DEC 10 1963STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. United States of America (Forest Service) of Bozeman
(Name of Appropriator) (Address) (Town)
County of Gallatin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SHINING

1/4 Sec. 22 T. 4S R. 6E

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

WELL - Hyalite Jr. Camp

2. The beneficial use on which the claim is based.....
Domestic

3. Date or approximate date of earliest beneficial use; and how con-
tinuous the use has been..... July 8, 1952

4. The amount of groundwater claimed (in miner's inches or gallons
per minute)..... 83 G. P. M.

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

N/A

6. The means of withdrawing such water from the ground and the
location of each well or other means of withdrawal.....
Drilled well.

7. The date of commencement and completion of the construction of the well, wells, or other works for with-
drawal of groundwater..... July 8, 1952

8. The depth of water table..... 29 ft.

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..... Drilled, 6" casing.
Depth of well - 50 1/2 ft.

10. The estimated amount of groundwater withdrawn each year..... 9000 gallons

11. The log of formations encountered in the drilling of each well if available.....
0' to 6' Gravel and shale
6' to 50' Red clay and sand
Water level raised 21 feet in casing.

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..... N/A

Unknown

UNITED STATES OF AMERICA

Signature of Owner..... [Signature]Date..... December 4, 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.

83.25

#834

State of Montana } ss.
County of Gallatin }

Filed December 9, 1963

at 12:05 o'clock P. M.

EARL WALTON

COUNTY CLERK & RECORDER

By Paul A. Maxwell

DEPUTY

Fee \$ 2.00

GROUNDWATER INDEX

Page 1 of 2

County Gallatin Twp. 5 S Rge. 4 E

[illegible]

File No.

Garnet Mt. Lookout Spring

T. 55 R. 4E

DUPLICATE

County Gallatin

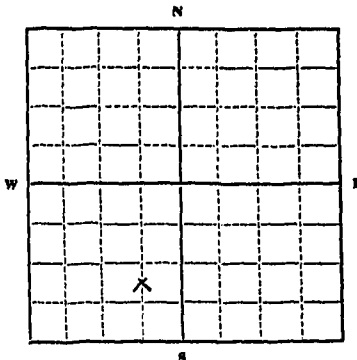
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
OCT 8 1963
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. United States of America of Gallatin Gateway
(Name of Appropriator) (Address) (Town)
County of Gallatin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SE 1/4 SW Sec. 2 T. 55 R. 4E

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 stockwater and domestic use for fire lookout
3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1962
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 2 gallons per minute
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 concrete spring box SE 1/4 SW Section 2, T. 55, R. 4E
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1962
8. The depth of water table shallow
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 concrete spring box approximately 3' x 4' pipe and trough
10. The estimated amount of groundwater withdrawn each year 400,000 gallons
11. The log of formations encountered in the drilling of each well if available not applicable
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 unknown

Signature of Owner

United States of America
by: John E. Bee
Date October 3, 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.

#724

State of Montana }
County of Gallatin } ss.

Filed October 2, 1963

at 11:28 o'clock A. M.

EARL WALTON

COUNTY CLERK & RECORDER

By Paul A. Mawer

DEPUTY

Fee \$ 2.00

OW 3

Approved Stock Form—State Publishing Co., Helena, Montana—42199

File No. _____

T. 55 R. 4E

DUPLICATE

County Gallatin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 26 1963

Notice of Completion of Groundwater Appropriation **STATE ENGINEER**
Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater December 23, 1963Owner T. S. Hardie, Jr. Address _____

Contractor (if any) _____

Address of Contractor _____

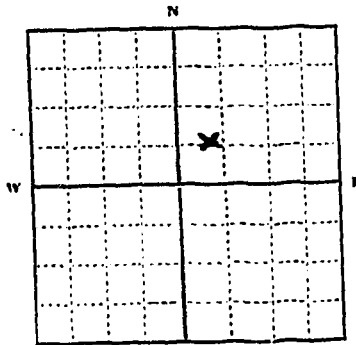
Date Started _____ Date Completed _____

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable. GRAVITY FALL

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 20 YRS.

SE. NW. 1/4 NE. 1/4 Sec. 25 T. 55 R. 4E
Indicate point of appropriation
and place of use, if possible.



T 55 R 4E

Sec 25

Range No? N? or S?

Date December 23, 1963Signature of Owner T. S. Hardie, Jr.

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.

12124

1004

State of Montana } ss
County of Gallatin }
Filed Dec 23 1969
at 509 o'clock P. M.
Carl Walton
COUNTY CLERK & RECORDER
By ESR
Fee \$ 5.00 DEPUTY

GROUNDWATER INDEX

Page 1 of 6

County Gallatin Twp. 65 Rge. 3E

[illegible]

GW 2

Approved Stock Form—State Publishing Co., Helena, Montana—48557

File No. _____

MONTANA WATER RESOURCES BOARD

T. 6 S. R. 3 E.

DUPLICATE

RECEIVED

County Gallatin

LOG

APR 2 1971

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)

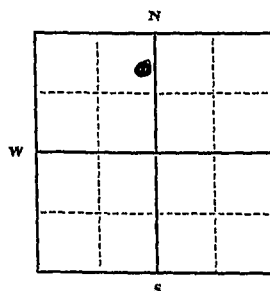
Owner BIG SKY OF MONT. INC. Address BOZEMAN, MONTANADriller VAN DYKEN DRILLING CO. Address BOZEMAN, MONTANADate of Notice of appropriation of groundwater noneDate well started 8/9/70 Date completed 8/14/70Type of well Drilled Equipment used Cable tools
(Dug, driven, bored or drilled) (Churn drill, rotary or other)Water use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐
Industrial ☐ Drainage ☐ Other ☐ **Test hole**

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" O.D. 17# per ft. tested	0	42'	1"x2" slots	21 33	27 38

T.D. 42'

WELL NO. 7.

Static Water Level for non-flowing well 6' feet.Shut-in Pressure for Flowing Well nonePumping Water Level 10' feet
at 30 gal. per minute.Discharge in gal. per min. of flowing well noneHow Tested BailerLength of Test 2 hoursRemarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings outside of casing.NE 1/4 NW Sec. 35 T. 6 S. R. 3 E
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 NO. 1

Driller's License Number

Driller's Signature

Doc. No. 2362
Filed for record July 22 day of April
this 1971 at 12:55
A. D. 19 71 M.
o'clock 2

48291

2362

State of Montana } ss.
County of Gallatin }

Filed April 1, 1971

at 12:55 o'clock P.M.

Carl L. Stucky

County Clerk & Recorder

By Alvin M. Hansen
Deputy

Fee \$ 2.00

layers, medium compact
saturated
SAND, clayey; with scattered
loose

32.0



GREAT FALLS • MISSOULA • BILLINGS MONTANA • BOISE IDAHO

LOG OF EXPLORATION BORING

HOLE NO. DH-W-7

JOB NO. 70-31

SHEET 1 OF 1

DRILL TYPE: SOIL Cable Tool		PROJECT	
ROCK Cable Tool		Big Sky of Montana	
SIZE, TYPE OF BIT 5"		UNIT	
		Water Supply - Meadow Village	
CASING: SIZE 6" LENGTH 42'		LOCATION	
		On North Fork, 1/4 mi. South of guest ranch	
TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		NAME OF DRILLER	
Disturbed 0 Undisturbed 0		Van Dyken	
TOTAL NO. CORE BOXES 0		ELEVATION: TOP OF HOLE 6482 GROUNDWATER -5.0'	
TOTAL CORE RECOVERY FOR BORING (%)		THICKNESS OF OVER-BURDEN 42.0'	
		DEPTH DRILLED INTO ROCK 1.0'	
		TOTAL DEPTH OF HOLE 43.0'	
REMARKS		DATE HOLE	
Classification by driller generally confirmed by inspector		Started 8-13-70 Completed 8-21-70	
		SIGNATURE OF INSPECTOR	

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
	1.0		Top Soil			
	10.0		SAND, clayey; some boulders to 19', medium firm to soft, dry to wet			
	19.0					
	21.0		GRAVEL, clayey; some clean layers, medium compact, saturated			
	32.0		SAND, clayey; with scattered gravel, saturated, loose,			
	39.0		CLAY, Gravelly; wet			
	42.8		SHALE; claystone			
	43.8		Bottom of Hole			
						See additional sheet for pumping test data

GW 2

File No.

DUPLICATE

MONTANA WATER RECORDS Approved Stock Form—State Publishing Co., Helena, Montana—4855

RECEIVED

T. 6 S. R. 3 E.

APR 2 1971

County Gallatin

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)

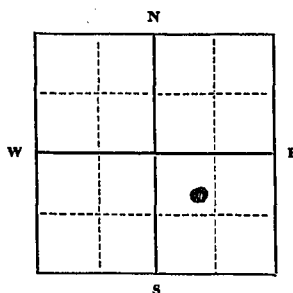
Owner BIG SKY OF MONT. INC. Address BOZEMAN, MONTANADriller VAN DYKEN DRILLING CO Address BOZEMAN, MONTANADate of Notice of appropriation of groundwater NoneDate well started 8/4/70 Date completed 8/6/70Type of well Drilled Equipment used Cable tools
(Dug, driven, bored or drilled) (Churn drill, rotary or other)Water use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐
Industrial ☐ Drainage ☐ Other ☐ Test hole

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" O.D. 17# per ft. tested	0	44'		29	31
				1"x2" slots	32	33
					37	38
					38	43

T.D. 44'

WELL NO. 5

Static Water Level for non-flowing well 7' feet.Shut-in Pressure for Flowing Well nonePumping Water Level 19' feet
at 20 gal. per minute.Discharge in gal. per min. of flowing well noneHow Tested BailerLength of Test 2 hoursRemarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings outside of casing.

NW 1/4 Sec. 35 T. 6 S. R. 3 E.
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 NO. 1

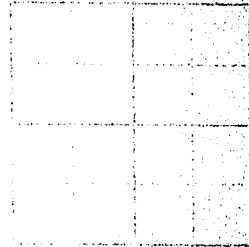
Driller's License Number

Driller's Signature

48290

2361

State of Montana } ss.
County of Gallatin }
Filed April 1, 1971
at 12:50 o'clock P.M.
P. J. P. S. 1
County Clerk & Recorder
By Alta M. Hargan
Deputy
Fee \$ 2.00 Ad.



GRAVEL, Sandy; clean, sand
lenses saturated, medium
loose, becomes angular
at 38.0'

31.0

NORTHERN
TESTING
LABORATORIES

GREAT FALLS • MISSOULA • BILLINGS • MONTANA

LOG OF EXPLORATION BORING

35

JOB NO. 70-31

HOLE NO. DH-W-5
SHEET 1 OF 1

DRILL TYPE: SOIL ROCK	Cable Tool Cable Tool	PROJECT Big Sky of Montana
SIZE, TYPE OF BIT 5"		UNIT Water Supply - Meadow Village
CASING: SIZE 6" LENGTH 44'		LOCATION Downstream of proposed dam location
TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		NAME OF DRILLER Van Dyken
Disturbed 0 Undisturbed 0		ELEVATION: TOP OF HOLE 6332 GROUNDWATER 8.5'
TOTAL NO. CORE BOXES 0	TOTAL CORE RECOVERY FOR BORING (%)	THICKNESS OF OVER-BURDEN 44.0' DEPTH DRILLED INTO ROCK 1.0' TOTAL DEPTH OF HOLE 45.0'
REMARKS Classification by driller generally confirmed by inspector		DATE HOLE Started 8-4-70 Completed 8-6-70
		SIGNATURE OF INSPECTOR Vischer

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% CORE RECOV. ERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
	1.0		Top Soil			
	9.0		CLAY, Gravelly; with boulders, dry, medium compact			
		GWL				
	20.0		GRAVEL, Sandy; considerable clay, moist, water at 19', medium compact			
	31.0		GRAVEL, Sandy; clean, sand lenses saturated, medium loose, becomes angular at 38.0'			
	44.0		SHALE; claystone hard			
	45.0		Bottom of Hole			
						Casing perforated 38'-29' 11 rows of 4 slots Bailing test at 45', 30 g.p.m., 10' drawdown

File No. _____

T 6 S R 3 E

DUPLICATE

County Gallatin

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARDNotice of Completion of Groundwater
Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

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

BIG SKY OF MONT.

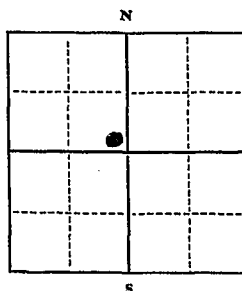
Owner INC. Address BOZEMAN, MONTANADriller VAN DYKEN DRILLING CO. Address BOZEMAN, MONT.Date of Notice of appropriation of groundwater noneDate well started 7/26/70 Date completed 7/27/70Type of well Drilled Equipment used Cable tools
(Dug, driven, bored or drilled) (Churn drill, rotary or other)Water use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐
Industrial ☐ Drainage ☐ Other ☐ Test hole

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 (Feet)	From (Feet)	To (Feet)
6"	6 5/8" O.D. 17# per ft. tested	0	45'	1"x2" slots	34'	44'

T.D. 45'

WELL NO. 1


 Dec. No. 3357
 Date for record
 this 1st day of April
 A. D. 19 71, at 12:30
 o'clock P M.
Static Water Level for non-flowing well 8' feet.Shut-in Pressure for Flowing Well nonePumping Water Level 18' feet
at 45 gal. per minute.Discharge in gal. per min. of flowing well noneHow Tested BailerLength of Test 2 hoursRemarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings outside of casing.

SE 1/4 NW Sec 35 T 6 S R 3 E

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 NO. 1

Driller's License Number

Driller's Signature

48286

2357

State of Montana }
 County of Gallatin } ss.
 Filed April 1, 1971
 at 12:30 o'clock P.M.
Carl S. Smith
 County Clerk & Recorder
 By Alta M. Hargan
 Deputy
 Fee \$ 2.00 Ad.

Bailing test with hole at
 40' - 20 g.p.m

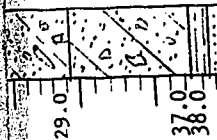
Perforated 19 rows of 4
 slots each 44' - 34'
 hole at 45', bailing
 test 45' g.p.m.,
 10' drawdown

CLAY, gravelly, silty, sandy,
 wet, soft

SAND, silty; with gravel,
 wet, medium loose

SHALE, hard
 SANDSTONE, medium hard,

NETT 40' 7



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APR 2 1971

LOG OF EXPLORATION BORING

HOLE NO. DH-W-1

JOB NO. 70-31

SHEET 1 OF 1

DRILL TYPE: SOIL Cable Tool ROCK Cable Tool		PROJECT Big Sky of Montana	
SIZE, TYPE OF BIT 5"		UNIT Water Supply - Meadow Village	
CASING: SIZE 6" LENGTH 46'		LOCATION west of North Fork Bridge	
TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		NAME OF DRILLER Van Dyken	
Disturbed 0	Undisturbed 0	ELEVATION: TOP OF HOLE 6410 GROUNDWATER 8.0'	
TOTAL NO. CORE BOXES 0	TOTAL CORE RECOVERY FOR BORING (%)	THICKNESS OF OVER-BURDEN 37.0'	DEPTH DRILLED INTO ROCK 8.0' TOTAL DEPTH OF HOLE 45.0'
REMARKS Classification by driller generally confirmed by inspector		DATE HOLE Started 7-23-70 Completed 7-27-70	
		SIGNATURE OF INSPECTOR Diekman	

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% CORE RECOVERY	BOX OR SAMPLE NO	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
	3.0		Top Soil			
	8.0		GRAVEL, clayey; with boulders and cobbles, compact			
	14.0		CLAY, Sandy; some gravel, wet, compact			
	22.0		CLAY, gravelly; some sand, wet, soft			
	29.0		SAND, silty; with gravel, wet, medium loose			Bailing test with hole at 40' - 20 g.p.m.
	37.0		SHALE, hard			Perforated 19 rows of 4 slots each 44' - 34'
	38.0		SANDSTONE; medium hard, fine grained; andesite at 44.5			hole at 45', bailing test 45' g.p.m., 10' drawdown
	45.0		Bottom of Hole			
			Casing left in place.			See additional sheet for pumping test data.

File No.

Approved Stock Form—State Publishing Co., Helena, Montana—48557

RECEIVED

T. 6 S. R. 3 E.

DUPLICATE

APR 2 1971

County Gallatin

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARDNotice of Completion of Groundwater
Appropriation by Means of Well
DEVELOPED AFTER JANUARY 1, 1962

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

Owner BIG SKY OF MONT. INC. Address BOZEMAN, MONTANADriller VAN DYKEN DRILLING CO Address BOZEMAN, MONTANADate of Notice of appropriation of groundwater NONEDate well started 8/7/70 Date completed 8/9/70Type 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 ☐ Test hole

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 6230)

0'—1' Soils

1'—12' Clays & silts. Wet at 12'

12'—19' Wheat & pea size gravels. Claybound. Larger gravels @ 13' 10 GPM @ 17'.

19'—21' Very fine tight claybound sands. Little water.

21'—23' Same as above but more clays. Wet.

23'—24' Fine sands & gravel (dirty). Clean gravels lense @ 24'.

24'—31' Cleaner fine sands & gravels. 20 G.P.M. @ 28'.

31'—34' Smooth pea size gravels. Dirty. Not much water.

34'—38' Very loose coarse, clean gravels. 40 G.P.M. Water.

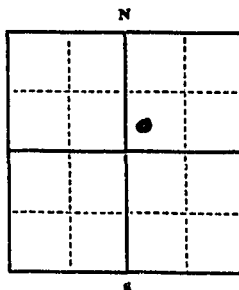
38'—41' Sands. Little amount of gravels.

41'—44' Loose clean gravels fine to coarse. Lots of water.

44'—50' Fine to coarse sand & gravels. Dirty & tight. Water @ 47' not much @ 50'.

50'—? Shales.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6 5/8" O.D. 17# per ft. tested	0	50'	1" x 2" slots	27	31
					34	38
					41	44

Static Water Level for non-flowing well 11' feet.Shut-in Pressure for Flowing Well NONEPumping Water Level 19 feet at 200 gal. per minute.Discharge in gal. per min. of flowing well NONEHow Tested Turbine test pump

Length of Test

Remarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings outside of casing.SW 1/4 NE Sec 36 T. 6 S. R. 3 E.
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

T.D. 50'

WELL NO. 2360Doc. No. 6

Filed for record

this 1st day of AprilA.D. 19 71o'clock P M.

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).

(Continue on reverse side)

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 NO. I

Driller's License Number

Best Van Dyken

Driller's Signature

44289

2360

State of Montana } ss.
County of Gallatin }

Filed April 1, 1971
at 12:45 o'clock P.M.

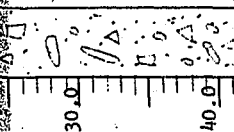
Carl L. Stucky
County Clerk & Recorder

By Alta M. Langen
Deputy

Fee \$ 2.00 Ad.

Battling test-45 g.p.m.
at 1' drawdown

some sandy lenses, and
some clayey seams saturated
medium loose





GREAT FALLS • MISSOULA • BILLINGS MONTANA • BOISE IDAHO

LOG OF EXPLORATION BORING

HOLE NO. DH-W-6

JOB NO. 70-31

SHEET 1 OF 1

DRILL TYPE: SOIL Cable Tool	PROJECT
ROCK Cable Tool	Big Sky of Montana
SIZE, TYPE OF BIT	UNIT
5"	Water Supply - Meadow Village
CASING: SIZE 6" LENGTH 50'	LOCATION
TOTAL NO. OF OVERBURDEN SAMPLES TAKEN	North of West Fork West of Crail Ranch
Disturbed 0 Undisturbed 0	NAME OF DRILLER
TOTAL NO. CORE BOXES 0 TOTAL CORE RECOVERY FOR BORING (%)	Van Dyken
REMARKS	ELEVATION: TOP OF HOLE 1250 GROUNDWATER 11.0'
Classification by driller generally confirmed by inspector	THICKNESS OF OVERBURDEN 50' DEPTH DRILLED INTO ROCK 1.0' TOTAL DEPTH OF HOLE 51.0'
	DATE HOLE
	Started 8-11-70 Completed 8-12-70
	SIGNATURE OF INSPECTOR
	Vischer

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% CORE RECOVERY	BOX OR SAMPLE NO	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
	1.0		Top Soil			
			CLAY, Silty; damp to wet medium firm			
	11.0					
	12.0	GWL				
			GRAVEL, Clayey; medium loose, some sand lenses, saturated			Hole at 19.0' bailing test-10 g.p.m.
	23.0					Hole at 38' bailing test-40 g.p.m
			GRAVEL, Sandy; clean with some sandy lenses, and some clayey seams saturated medium loose			Hole at 50' bailing test-45 g.p.m. at 1' drawdown
	30.0					
	40.0					
	50.0		SHALE; claystone			
	51.0		Bottom of Hole			See additional sheet for pumping test data

GW

Approved Stock Form—State Publishing Co., Helena, Montana—48557

File No.

MONTANA WATER RESOURCES BOARD
RECEIVED

T. 6 S. R. 3 E

DUPLICATE

County Gallatin

APR 2 1971

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARD

Top of Ground

(Elev. above sea level 6239)**Notice of Completion of Groundwater
Appropriation by Means of Well**

DEVELOPED AFTER JANUARY 1, 1962

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

0'--6' Soils, and boulders.

6'--24' Clay bound sands and
wheat size gravels.
Boulders @ 14'.

24'--27' Shale.

27'--? Shale

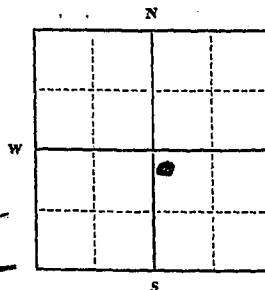
Owner BIG SKY OF MONT. INC. Address Bozeman, Mont.Driller VAN DYKEN DRILLING CO Address BOZEMAN, MONTANADate of Notice of appropriation of groundwater noneDate well started 7/30/70 Date completed 8/3/70Type of well Drilled Equipment used Cable tools
(Dug, driven, bored or drilled) (Churn drill, rotary or other)Water use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐
Industrial ☐ Drainage ☐ Other ☐ **Test hole**

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.

T.D. 27'

WELL NO. 4.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6 5/8" O.D. 17# per ft. tested	0	27'	1/2" x 2" slots	19'	23 1/2'

Static Water Level for non-flowing well
16' feet.Shut-in Pressure for Flowing Well nonePumping Water Level 22' feet
at 20 gal. per minute.Discharge in gal. per min. of flowing well
noneHow Tested BailerLength of Test 2 hoursRemarks: (Gravel packing, cementing, pack-
ers, type of shutoff) Drill cuttings
outside of casing.NW 1/4 Sec. 36 T. 6S. R. 3E
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 Addi-
tion).

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 NO. 1

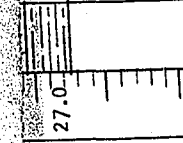
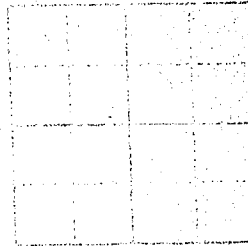
Driller's License Number

Driller's Signature

48288

2759.

State of Montana } ss.
County of Gallatin
Filed April 1 1971
at 12:40 o'clock P.M.
Carl L. Stucky
County Clerk & Recorder
By Alto M. Haugen
Deputy
Fee \$ 20.00



SHALE, gray, layered, firm, damp

See additional sheet for
column test data

NORTHERN
TESTING
LABORATORIES

GREAT FALLS • MISSOULA • BILLINGS MONTANA • BOISE IDAHO

LOG OF EXPLORATION BORING

HOLE NO. DH-W-4

JOB NO. 70-31

SHEET 1 OF 1

DRILL TYPE: SOIL <u>Cable Tool</u>		PROJECT	
ROCK <u>Cable Tool</u>		Big Sky of Montana	
SIZE, TYPE OF BIT		UNIT	
<u>5"</u>		Water Supply - Meadow Village	
CASING: SIZE <u>6"</u> LENGTH <u>24'</u>		LOCATION	
TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		Condominium area, west end	
Disturbed <u>0</u> Undisturbed <u>0</u>		NAME OF DRILLER	
		Van Dyken	
TOTAL NO. CORE BOXES <u>0</u>		ELEVATION: TOP OF HOLE <u>6239</u> GROUNDWATER <u>16.0'</u>	
TOTAL CORE RECOVERY FOR BORING (%)		THICKNESS OF OVER-BURDEN <u>24.0'</u>	
		DEPTH DRILLED INTO ROCK <u>3.0'</u>	
		TOTAL DEPTH OF HOLE <u>27.0'</u>	
REMARKS		DATE HOLE	
Classification by driller generally confirmed by inspector		Started <u>7-30-70</u> Completed <u>8-3-70</u>	
		SIGNATURE OF INSPECTOR	
		Diekman	

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
	5.0		Top Soil			
			CLAY, Gravelly; boulders medium loose, dry			
			CLAY, Gravelly; damp to wet medium loose			Perforated 23 1/2' - 19'
	16.0		GWL			7 rows - 4 slots each row
			some boulders at 14'			Bailing test with hole at 27' - 20 g.p.m.
	24.0		SHALE; gray layered firm, damp			
	27.0					
						See additional sheet for pump test data

GW 2

Approved Stock Form—State Publishing Co., Helena, Montana—48557

File No.

T. 6S R. 3E

DUPLICATE

County Gallatin

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARD

Top of Ground

(Elev. above sea level 6178)Notice of Completion of Groundwater
Appropriation by Means of Well
DEVELOPED AFTER JANUARY 1, 1962

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

Owner BIG SKY OF MONT. INC. Address BOZEMAN, MONTANADriller VAN DYKEN DRILLING CO. Address BOZEMAN, MONTANADate of Notice of appropriation of groundwater noneDate well started 7/27/70 Date completed 7/28/70Type 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 ☐ Test hole

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.

0'--6' Soils, boulders & clays.

6'--21½' Claybound sand & gravels. Sandy @ 15'. 5 G.P.M.

21½'--23' Clean pea gravels. 15 G.P.M.

23'--25' Fine sands. Not much water.

25'--30' Wheat size gravels and sands. Dirty. 10 G.P.M. @ 26'

30'--30½' Coarse dirty gravels. Little water.

30½'--33' White color sticky clays embedded with small gravels.

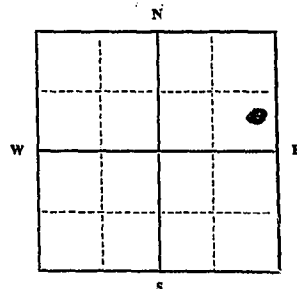
33'--34' Shale.

34'--36' Very fine sands. Little water.

36'--? Colorado shale.

T.D. 36'

WELL NO. 3



Doc. No. 3358
 Filed for record 1st day of April
 this 12 day of April
 A.D. 19 71, at 12:35
 o'clock P M.

SE¼NE Sec. 36, T. 6S, R. 3E...
 Indicate location of well and place of use, if possible. Each small square represents 40 acres.

Static Water Level for non-flowing well 7' feet.Shut-in Pressure for Flowing Well nonePumping Water Level 13' feet at 45 gal. per minute.Discharge in gal. per min. of flowing well noneHow Tested BailerLength of Test 2 hoursRemarks: (Gravel packing, cementing, packers, type of shutoff) Drill cuttings outside of casing.

(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 NO. 1

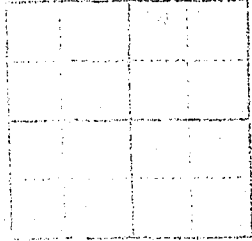
Driller's License Number

Driller's Signature

48287

2358

State of Montana }
County of Gallatin } ss.
Filed April 1, 1971
at 12:35 o'clock P.M.
Carl L. Stucky
County Clerk & Recorder
By Alta M. Mangum
Deputy
Fee \$ 2.00



2358
COUNTY OF GALLATIN
FILED
APR 1 1971
CLERK OF DISTRICT COURT
MONTANA
JUDICIAL DISTRICT NO. 1
BUTTE, MONTANA



GREAT FALLS • MISSOULA • BILLINGS MONTANA • BOISE IDAHO

LOG OF EXPLORATION BORING

36

HOLE NO. DH-W-3

JOB NO. 70-31

SHEET 1 OF 1

DRILL TYPE: SOIL Cable Tool		PROJECT	
ROCK Cable Tool		Big Sky of Montana	
SIZE, TYPE OF BIT		UNIT	
5"		Water Supply - Meadow Village	
CASING: SIZE 6" LENGTH		LOCATION	
TOTAL NO. OF OVERBURDEN SAMPLES TAKEN		East of Crail Ranch animal pens	
Disturbed 0 Undisturbed 0		NAME OF DRILLER	
TOTAL NO. CORE BOXES 0		Van Dyken	
TOTAL CORE RECOVERY FOR BCRING (%)		ELEVATION: TOP OF HOLE 6178 GROUNDWATER 8.2'	
REMARKS		THICKNESS OF OVER-BURDEN 33.0'	
Classification by driller generally confirmed by inspector		DEPTH DRILLED INTO ROCK 3.0	
		TOTAL DEPTH OF HOLE 36.0	
		DATE HOLE	
		Started 7-30-70 Completed 7-31-70	
		SIGNATURE OF INSPECTOR Diekman	

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
	1.0		Top Soil			
	6.0		CLAY, Gravelly; some boulders, dry, compact			
	8.2	GWL	CLAY, Gravelly; considerable sand, medium firm, moist then wet			Bailing test with hole at 17'; 5 g.p.m. No drawdown.
	21.5		GRAVEL, Sandy; gravel small sand lenses, medium loose, saturated, some clayey seams			Bailing test with hole at 25'; 15 g.p.m. No drawdown.
	30.5					Perforations: 25.0' - 30.0'
	33.0		CLAY, Silty; dry			
	36.0		SHALE; then poorly cemented sand stone			
			Bottom of Hole			
			Casing left in place			See additional sheet for pumping test date

GROUNDWATER INDEX

Page 1 of 4

County *Gallatin*

Twp. 65

Rge. 4 E

Sec.	Name of Appropriator	Type of Form	County File No.	Remarks
1	Burch Edgar L	HW 2	3237	-
1	Carlson Harold W.	HW 4	1368	-
	Karst Ranch			
1	Carlson Harold W. &	HW 2	2302	-
	Carlson Esther J.			
1	Carlson Harold W.	HW 4	1367	-
	Karst Ranch			
1	Dale James H.	HW 2	2095	-
1	Kelsey Jim & Marie	HW 2	3199	-
1	McQuire Jack & Mary	HW 2	2997	-
1	Miller David H. and	HW 2	2181	-
	Miller Dorne L.			
1	Miller Sherman	HW 2	3377	-
1	United States of America	HW 4	726	-
1	Ricks Wagon	HW 2	1239	-
12	Durran Ed & Isabelle	HW 3	948	-
12	McCracken Florence M.	HW 2	1026	-
12	McCracken Florence M.	HW 2	1027	-
12	Seibel Robert Carl	HW 2	2986	-
	Seibel Ann M.			
22	McCracken J. Tom	HW 3	665	-
22	McCracken J. Tom	HW 2	2146	-
27	Van Dyke Elanett	HW 1	1874	-
31	Cory Mildred L &	HW 2	3193	-
	Cory Austin W.			
31	Nickel Mark	HW 2	3105	-
31	Hintypete Barbara R.	HW 2	2984	-
31	Hintypete Barbara R.	HW 2	2313	-
31	Lawrence L. A.	HW 3	1861	-
31	Lawrence Larry L. and	HW 3	2101	-
	Lawrence Ann J.			
31	Mertz Edna Belle	HW 3	1865	-
31	Mertz Edna Belle Mrs.	HW 2	3072	-
31	Rehn Russell &	HW 2	3243	-
	Rehn Berne T.			
31	Robertson and	HW 2	2305	
31	Robertson W. A. W. and	HW 2	2305	-
	Robertson Blanche Mrs.			
31	Vogel W. Glenn	HW 3	2242	-
31	Vogel W. Glenn	HW 3	2241	-
31	Ward Nellie H. Mrs.	HW 2	1871	-
31	Ward Lucille B.	HW 3	2301	-

[illegible]

RECEIVED

65-4E
County Gallatin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

JUN 1 1973

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 Edgar L. Burch

Address 225 W. Main St.

Bozeman, Mont. 59715

Date well started April 25, 1969

completed April 27, 1969

For Administrator's Use
File <u>3237</u>
<u>May 30, 1973</u>
GW 1 <u>9:30 A.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 ☐

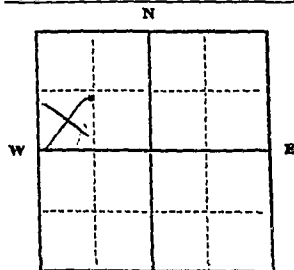
Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*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"	6 5/8 OD x 17 1/2	1' above ground	27'			



Lot 4, Karst Subdiv. No. 2

SE 1/4 NE 1/4 Sec. 1
T. 68 N. R. 4E

Static water level 15 ft.*
Pumping water level 21 ft.*
at 12 gallons per minute,
measured 60 minutes after pumping
began.

*Measured from ground level.

Well developed by pump
for 1 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 Milton E. Jones

Driller's Address 2103 Bridger Drive

Bozeman, Montana

LICENSE NO. 17

Top of Ground (Elev. above sea level)		
From (Feet)	To (Feet)	
0	16	Clay & Rock
16	26	Clay & Gravel
26	31	Clay & Gravel
31		Rock

31' Show exact depth of bottom

53,337

3237

State of Montana } ss.
County of Gallatin }
Filed May 30, 1973
at 9:36 o'clock A.M.
Donald A. Bridges
County Clerk & Recorder
By Carl L. Stucky
Deputy
Fee \$ 2.02 pd

GW

Approved Stock Form—State Publishing Co., Helena, Montana—42234

File No. _____

T 68 R 4 E

DUPLICATE

County Gallatin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 16 1964

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

Karst Ranch

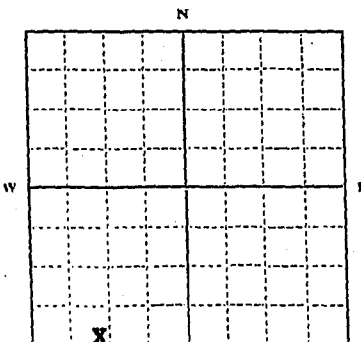
1. Harold W. Carlsen, doing business as of Gallatin Gateway
(Name of Appropriator) (Address) (Town)

County of Gallatin

State of

Montana

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



Lot 2

1/4 Sec. 1 T. 68 R. 4 E.

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 a guest ranch, commercial operation, cafe, bar & household, and irrigation.
3. Date or approximate date of earliest beneficial use; and how continuous the use has been first used 1905
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 900 gallon 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
Used to irrigate about 3 acres in Karst Homestead Entry, E. Sec. 1, T. 68, R. 4 E. Gallatin County Harold W. Carlsen
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal spring located in SE corner of Lot 2, from there water piped to homestead location.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater pipe line first completed about 1910.

8. The depth of water table surface

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 pipe line is about 1000' long; at spring is wooden spring box with overflow control.

10. The estimated amount of groundwater withdrawn each year 2,000,000 gallons

11. The log of formations encountered in the drilling of each well if available not 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 none

Signature of Owner

Date

Harold W. Carlsen
Dec 30, 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.

35682

1368

State of Montana (ss.
County of Gallatin)

Filed 12-30, 1963

at 3:01 o'clock P. M.

Carl W. Hutton

COUNTY CLERK & RECORDER

By Theresa J. Jones

DEPUTY

Fee \$ 2.00

GW 2

File No.

DUPLICATE

LOG

Top of Ground
(Elev. above sea level.....)
0 - 12 feet
Coarse Dirty overburden
11 feet
Static Water Level
12 feet
trickle of water
12 - 22 feet
Coarse dirty overburden
22 - 27 feet
Sand and Gravels

Approved Stock Form - State Publishing Co., Helena, Montana - 485

T 6S R 4E
County Gallatin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARD

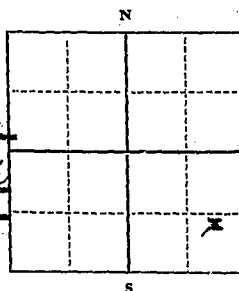
Notice of Completion of Groundwater Appropriation by Means of Well DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237 Montana Session Laws, 1961, as amended)
Harold W. & Esther J. CARLSEN Canyon Route
Owner Harold Carlsen Address Gallatin Gateway, Mont.
Driller Botts Drilling and Dev. Address R.R. #1, Bozeman, Montana
Date of Notice of appropriation of groundwater.....
Date well started July 13, 1970 Date completed July 15, 1970
Type of well drilled Equipment used cable tool
(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.	+2	25			

Doc. No. 2302
Filed for record
this 14 day of August
A. D. 1970, at 12:20
o'clock P. M.



Static Water Level for non-flowing well
11 feet.

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

Pumping Water Level 12 feet

at 30 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested Pumped

Length of Test 1 hour

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

SE 1/4 Sec. 1 T. 6S R. 4E

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.

150

Driller's License Number

Harold A. Potts
Driller's Signature.

417368

Page 16 of 17

RECEIVED

المؤلفون: د. محمد عبد الحليم عبد الله

100

1

1997

1997

1. *Introduction*

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains.

#7302

State of Montana }
County of Gallatin } ss.

Filed August 14, 1970
at 12:20 o'clock P.M.

Caryl L. Stucky
County Clerk & Recorder

By Heidi A. Wapner Deputy

Fee \$ 7.00

File No.

T. 6 S R 4 E

DUPLICATE

County Gallatin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

JAN 16 1964

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Harold W. Carlsen, doing business as Karst Ranch of Gallatin Gateway
(Name of Appropriator) (Address) (Town)

County of Gallatin State of Montana

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

Lot 9

1/4 Sec. 1, T. 6S. R. 4 E.

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 a guest ranch, commercial operation, cafe, bar & household, and irrigation.
3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1905, continuous ever since.
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 2000 gallon per hour of continuous operation
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 irrigates about one acre on Lot 9, Section 1, Township 6 South, Range 4 East, Gallatin County, Montana, owner is Harold W. Carlsen, doing business as Karst Ranch.
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal electric 1 horse power pump located beneath main building
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater well dug in 1905 and completed same year.
8. The depth of water table 32 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 well cased with 4 foot steel casing to depth of 12 feet, concreted, and 1 1/2" pipe with sand point below that to depth of 34'.
10. The estimated amount of groundwater withdrawn each year 5,000,000 gallon
11. The log of formations encountered in the drilling of each well if available not 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 none

Signature of Owner

Date Dec. 30, 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.

35681

1367

State of Montana } ss.
County of Gallatin }

Filed 12-30, 1963

at 3:00 o'clock P

Carl McAllister
COUNTY CLERK & RECORDER

By Deanna Deane
DEPUTY

Fee \$ 2.00

File No. _____

STATE WATER CONSERVATION BOARD

T. 6S R. 4E

DUPLICATE

MAY 2 1967

County Callahan

LOG

Bill _____ McDermott _____ STATE OF MONTANA
 But _____ Administrator of GROUNDWATER CODE
 Coy _____ Barton _____ OFFICE OF STATE ENGINEER
 Sullivan _____

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)

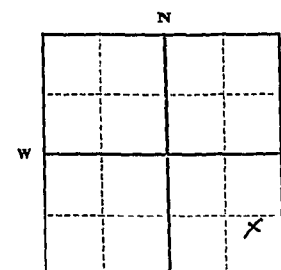
Owner James H. Daly Address Cairo, IllinoisDriller M.E. Jones Address Bellevue

Date of Notice of appropriation of groundwater _____

Date well started Aug. 22, 1966 Date completed Aug. 26, 1966Type 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" X 2.1"	1' 0"	18'			



Static Water Level for non-flowing well _____ feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level 28 1/2 feet at 20 gal. per minute.

Discharge in gal. per min. of flowing well _____

How Tested BailerLength of Test 1 1/2

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

54454 Sec. 1 T. 6S R. 4E
 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

Driller's Signature

41,952

2095

DEPARTMENT

NOV 29

602

SHOULD BE FOR

PROF. AND SUNDAY (1967)

RECEIVED TO SUNDAY (1967)

FOR STATE OF MONTANA

RECEIVED TO SUNDAY (1967)

FOR STATE OF MONTANA

RECEIVED TO SUNDAY (1967)

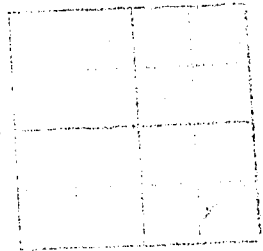
State of Montana } ss.
County of Gallatin

Filed May 1, 1967
at 11:30 o'clock A.M.

Carl L. Stucky
County Clerk & Recorder

By Paul A. Maple
Deputy

Fee \$ 2.00



RECEIVED TO SUNDAY (1967)

RECEIVED TO SUNDAY (1967)

Type of well?
Equip used?
Water use?

RECEIVED

MAR 9 1973

T. U.S. R. H.E.

County Gallatin

DEPARTMENT OF NATURAL
RESOURCES AND CONSERVATION

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, 1968

(Under Chapter 237, Montana Session Laws, 1961)

Owner Jim & Marie Kelsey Address Canyon Route
Gallatin Gateway
Driller Harold Hulbert Address Rt. 1, Bozeman, Mont.
water

Date of Notice of appropriation of groundwater

Date well started Oct 2, 1968 Date completed Oct 4, 1968

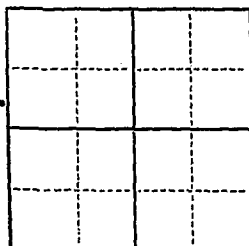
Type of well (Dug, driven, bored or drilled) Equipment used (Churn drill, rotary or other)

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)
7 "	19 lb 6/ 5/8 O. D.	2 above	24		None	

Doc. No. 3199
Filed for record
this 5th day of MARCH
A. D. 1973 at 10:45
Clock. A.M.



Karsts Subdivision #2

Lot 2 Sec. 1 T. 6 R. 4
Indicate location of well and
place of use, if possible. Each
small square represents 40
acres.

Static Water Level for non-flowing well
17 feet.

Shut-in Pressure for Flowing Well
Pumping Water Level 24 feet
at 12 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested Pump & bailer
Length of Test 2 hrs pumping
2 hrs bailing

Remarks: (Gravel packing, cementing, pack-
ers, 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 Addi-
tion).

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

Driller's Signature

53,583

RECEIVED

Approved Stock Form—State Publishing Co., Helena, Montana—45642

T. U S R H E

DUPLICATE

MAR 9 1973

County Gallatin

LOG

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground

(Elev. above sea level.....)

0-2 clay Rock
2-6 clay
6-8 rock
8-10 rock
10-14 clay & rock
14-16 gravel & water
16-17 gravel rock & clay
17-29 rock
29-30 gravel sand & water
30+ Bottom of well

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Owner Jim & Marie Kelsey Address Canyon Route

Driller Harold Hulbert Address Rt 1 Bozeman, Mont

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

Date well started Oct 2, 1966 Date completed Oct 4, 1966

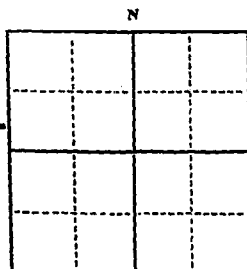
Type of well..... Equipment used.....
(Dug, driven, bored or drilled) (Churn drill, rotary or other)

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.

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				Kind Size	From (Feet)	To (Feet)
7"	19 lb 6/5/8 O. D.	2 above	24		None	

Doc. No. 3199
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this 5th day of MARCH
A.D. 1973 at 10:45
A.M.



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at 12 gal. per minute.

Discharge in gal. per min. of flowing well.....

How Tested Pump & bailer

Length of Test 2 hrs pumping

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.

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

47
Driller's License Number

Driller's Signature

52,583

#3199

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f
T
a

State of Montana } ss.
County of Gallatin
Filed March 5, 1973
at 10:00 o'clock A.M.
County Clerk & Recorder
By Alta Hangan
Deputy
Fee \$ 2.00

