

File No.

T. 22N. R. 3E.

DUPLICATE

County Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

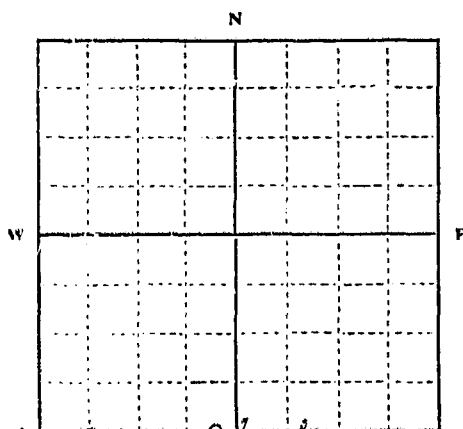
RECEIVED
JAN 17 1963

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Elola B. Rada, of P.O. Box 191A Hamilton
(Name of Appropriator) (Address) (Town)
County of Cascade State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



Part of Lot 15 - Block 1
15th addition to St. Falls

Not available
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, House
yard well water
3. Date or approximate date of earliest beneficial use; and how continu-
ous the use has been, March 1952
Continuous
4. The amount of groundwater claimed (in miner's inches or gallons
per minute) 10 inches 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
House use
6. The means of withdrawing such water from the ground and the loca-
tion of each well or other means of withdrawal Patchers pump

7. The date of commencement and completion of the construction of the well, wells, or other works for with-
drawal of groundwater March 1, 1952
8. The depth of water table 6 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 6 inch casing and patchers pump
10. The estimated amount of groundwater withdrawn each year 28000 gallons
11. The log of formations encountered in the drilling of each well if available mostly sand
and grubs
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 records not available in County
records

Signature of Owner Elola B. RadaDate 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.

37169

4713

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on

JAN 16 1964

Date

at 8:59 o'clock 9 M

J. L. LENNON

County Clerk and Recorder.

By B. H. H. H. Deputy.

File No.

T 20 R 3 East

DUPLICATE

County Cascade

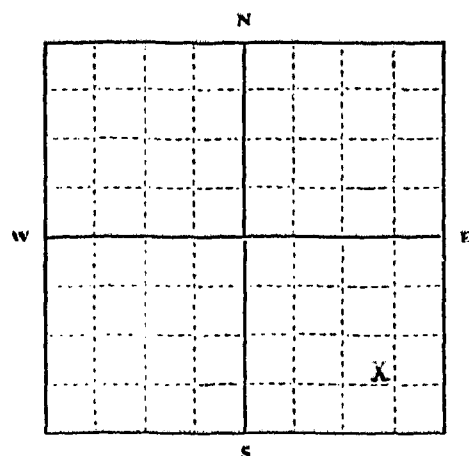
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

JAN 9 1964
STATE ENGINEER

1. Joe L. Roberts, of 1400 - 7th Street So. Great Falls
(Name of Appropriator) (Address) (Town)
County of Cascade State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 Sec. 13 T. 20 R. 3 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 household, irrigation for 1.2 acres of garden and lawn, and use of 25,000 gallon swimming pool.
3. Date or approximate date of earliest beneficial use; and how continuous the use has been continuous since June 1958.
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 40 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 One and two tenths acres, owned by Joe L. Roberts & wife, situated as described herein.
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal by electric pump situated in west side of land described herein.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Commenced in October 1957 and finished in June 1958. Only one well.
8. The depth of water table Twenty Seven 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 is approximately four by four feet by thirty one feet in depth; cement cribbing from surface down seven feet to sandstone; natural rock formation on down to bottom.
10. The estimated amount of groundwater withdrawn each year One million (1,000,000) gallons.
11. The log of formations encountered in the drilling of each well if available Seven feet of sand and gravel, twenty-four feet of sandstone.
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 The description of the plot of land on which this claim is made is recorded in Vol. 219 of Deeds, page 179 and Vol. 328 of Deeds, Page 511.

Signature of Owner

Date December 26, 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.

27760

3771

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in the office on

DEC 26 1969

Date

at _____ o'clock _____ M

J. L. LEHMAN

County Clerk and Treasurer

By _____

Deputy.

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

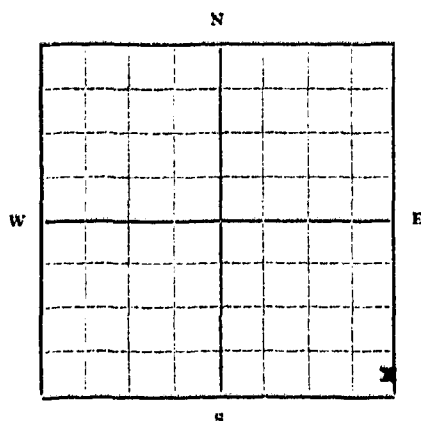
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

Arnold Soennichsen and

1. Lucille Soennichsen, Husband and wife of 2300-13th Street South Great Falls, Montana
(Name of Appropriator) (Address) (Town)

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



Lot 3 Block 16 Park Place Addition.
SE 1/4 Sec. 13 T. 20N R. 3E

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 Household use and lawn and garden irrigation
3. Date or approximate date of earliest beneficial use; and how continuous the use has been June 29, 1960
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 12 gallon 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 Lots 1 through 6 Park place addition, Block 16 Great Falls, Montana Arnold Soennichsen and Lucille Soennichsen, husband and wife.
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Submersible pump Lot 3 Block 16 Park Place Addition. SE 1/4 Sec. 13 T. 20N R. 3E.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Commencement June 24 Completion June 29.
8. The depth of water table Depth 178 to 318 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 with rotary rig, Size 6", Depth 318 Ft. 40 Ft. 6" casing cemented from 0 to 40 Ft. Static water level 108 Ft.
10. The estimated amount of groundwater withdrawn each year 750,000 gallons.
11. The log of formations encountered in the drilling of each well if available 0 to 7 Ft. Clay, 7 to 18 Sandstone, 18 to 58 Red bed, 58 to 97 Shalerock, 97 to 114 Sandstone, 114 to 178 Shalerock & Sandstone ledges, 178 to 192 Sandstone (3 Gal. Per Min.) 192 to 226 Shalerock, 226 to 247 Shalerock & Sandstone ledges 247 to 293 Shalerock, 293 to 318 Sandstone & Shalerock ledges (water) Bailed 12 Gal. per min.
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 Drilled by Soennichsen Drilling Co. Contractors License No. 51 Issued under new law. of 1961.

Signature of Owner Arnold Soennichsen

Date January 15, 1962

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 School of Mines and Quadruplicate for the Appropriator.

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within instrument was filed in this office on
JAN 16 1962

Date
at 4:50 o'clock P.M.

J. L. LERMON
County Clerk and Recorder

By B. S. S. Deputy.

File No.

T. 20 R3 East

DUPLICATE

County Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

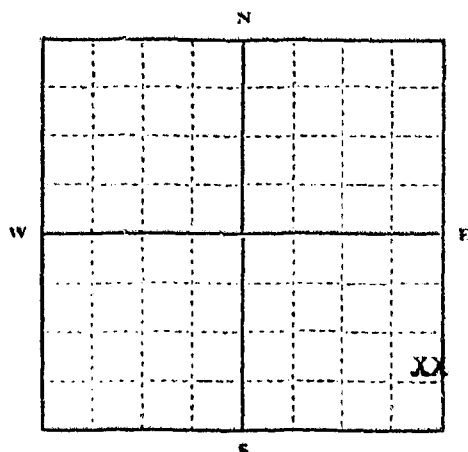
RECEIVED
JAN 4 1964

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Jack L. Stroop, of 1500- 7th St. So., Great Falls,
(Name of Appropriator) (Address) (Town)

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



NE &
NW $\frac{1}{4}$ Sec 13 T. 20 R3 East

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 household,
and irrigation
3. Date or approximate date of earliest beneficial use; and how continu-
ous the use has been January 1950 and continuous
ever since.
4. The amount of groundwater claimed (in miner's inches or gallons
per minute) 40 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
1.15 acres of residence property owned by
Jack L. Stroop & wife
6. The means of withdrawing such water from the ground and the loca-
tion of each well or other means of withdrawal Water is with-
drawn by electric pump from two wells located
on the property as described.
7. The date of commencement and completion of the construction of the well, wells, or other works for with-
drawal of groundwater First well was completed prior to January 1950 and the
second well was completed in July 1954.
8. The depth of water table Forty-two 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 First well is drilled well with 4 inch casing;
second well is dug well four feet by four feet 47 feet in depth, with
four feet by six feet by seven foot cement casing at the top.
10. The estimated amount of groundwater withdrawn each year 750,000 gallons.
11. The log of formations encountered in the drilling of each well if available Seven feet of sand
and gravel and forty feet of sand stone.
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 The description of the land on which
this right is claimed is more clearly described in Book 213 of Deeds.
Page 503 and Vol. 220 of Deeds, Page 576

Signature of Owner Jack L. Stroop

Date 12/30/63

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.

29152

4165

RECEIVED
OFFICE OF THE ATTORNEY GENERAL
STATE OF TEXAS
SAN ANTONIO, TEXAS
JAN 30 1962
3-22
f.
J. J. [unclear]
[unclear]
[unclear]

File No. _____

STATE WATER CONSERVATION BOARD Lots 12 to 15 T. 26 N. R. 3 E
ADD 13 Part Place Addition
 County Cascade

DUPLICATE

JUL 17 1967

LOG _____
 State of Montana
 ADMINISTRATOR OF GROUNDWATER CODE
 STATE WATER CONSERVATION BOARD

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, as amended)

Owner Frank J. Ulsh and/or 2324-11th Ave. S.
Lola Fern Ulsh Address Great Falls, Mont.

Driller Pat Byrne Address Great Falls, Mont.

Date of Notice of appropriation of groundwater _____

Date well started 5-29-1967 Date completed 6-4-1967

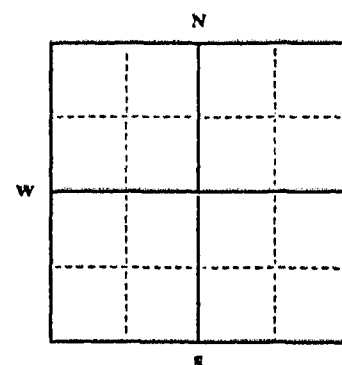
Type of well Drilled Equipment used Churn drill
 (Dug, driven, bored or drilled) (Churn drill, rotary or other)

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.

0	Top soil	5'
10	Red shale	14'
20	Hard Red Rock	25'
30	Shale	31'
40	Hard Pink shale	38'
50	Hard sand	43' 50'
60	gray shale	
70	sandy shale	45'
80	unstratified shale	70' 50'
90	Hard gray lime	92'
100	sandstone	98'
110	Black shale	100'
120	gray shale	105'
130	unstratified	109'
140	sand	
150	water	
160	gray lime	143'
170	sandstone	145'
180	sandstone	155' T.O.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
8"	7" 17'	0	35	Not perforated		
6-5/8"		35	155			



Static Water Level for non-flowing well 90 feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level 155 feet
 at 8 gal. per minute.

Discharge in gal. per min. of flowing well _____

How Tested Bailer

Length of Test 1 hour

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

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

135

Driller's License Number

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, tissue copy to be retained by driller.

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

1/3, 137

5028

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within instrument was filed in this office on

JUL 11 1967

Date

at 11:20 o'clock AM

J. L. LENNON

County Clerk and Recorder

By

R. E. Bateman

Deputy

GW.

Approved Stock Form—State Publishing Co., Helena, Montana, 1957

File No.

T. 22 R. 3E

DUPLICATE

County Cascade

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 to 35' Muddy ClayOwner Bennie Wingen Address 1202 5th St. So. Great Falls, Mont.Driller Thomas E. Franklin Address Great Falls, Mont.Date of Notice of appropriation of groundwater Jan. 25-1970Date well started Feb. 1-1970 Date completed Feb. 23-197035 to 70' Gray ShaleType 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 ☐70 to 83' Hard Red Rock

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.

83 to 87' Fine Red Rock87 to 90' Hard Heavy SandstoneGray Shale, 6" from 35' to 202'
90 to 115' Sandstone

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
8" to 35'	35' of 6" casing 15 lbs per ft	5"	168'	Kind Size	From (Feet)	To (Feet)
6" from 35' to 202'	168' of 5" casing 8 lbs per ft	from Surface to 168'		1/4 x 3" Slotted	140'	168'

115 to 135' Hard Red Rock135 to 140' Soft Sandstone140 to 145' Heavy Shale145 to 153' Heavy Sandstone153 to 158' Red Shale

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

Beginning S.W. corner of said lot 15, Block 1, and running thence East along the South line of said lot 350 feet to a point; thence North 150 feet to the point of beginning; (Continue on reverse side) thence North 150 Ft. thence West 80 ft.; thence South 150 ft.; thence East 80 feet to the point of beginning.

158 to 202' Sandstone

Show exact depth of bottom.

202

Static Water Level for non-flowing well 50 feet.Shut-in Pressure for Flowing Well NonePumping Water Level 202 feet at 2 gal. per minute.Discharge in gal. per min. of flowing well NoneHow Tested BailerLength of Test 2 hrsRemarks: (Gravel packing, cementing, packers, type of shutoff) None

Lot 15, Block 1, Fifteenth Addition to Great Falls, Cascade County, Montana.

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).

Drainage of lot or lots.

84

Driller's License Number

Thomas E. Franklin
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, tissue copy to be retained by driller.

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

46290

5214

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on
APR 2 1970

Date

at 2:40 o'clock P M

J. L. LENNON

County Clerk and Recorder

By *[Signature]* Deputy.

File No.

T. R.

DUPLICATE

County

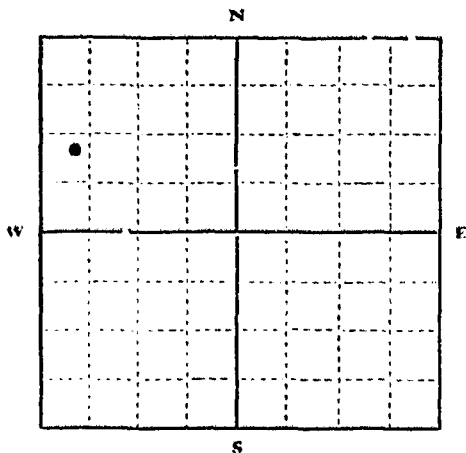
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

Highwood Corporation, of Country Club Tower, Great Falls, Mont.
(Name of Appropriator) (Address) (Town)

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



S.W. 1/4 NW 1 Sec. 14 T. 20 R. 3 East

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 The irrigation of lawns on lots within City of Great Falls, Montana.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been. July 18, 1957, earliest date. Water has been pumped for irrigation from May 1 October 1 of each year.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 125 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 Lots 5, 6, 7, 10, 11, 12, 13, 14, 15 in Block 1 and part of Block 3, Country Club Addition, Great Falls, Montana. Owner, Highwood Corporation. 4 acres

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Water withdrawn by an electric pump back of Tower Apartments.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Construction of only well began in June 1957 and completed about July 18, 1957.

8. The depth of water table Water level is about eight feet from surface of ground.

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 is encased with concrete culvert pipe eight feet in diameter and about 20 feet deep.

10. The estimated amount of groundwater withdrawn each year Nine hundred thousand gallons.

11. The log of formations encountered in the drilling of each well if available From zero to two feet is dark brown clay loam which was fill-in dirt. From 2 to 6 feet is brown clay loam. From 6 to 8 feet is sandy loam and wet. From 8 to 24 feet is grey sand (quick sand) and water-bearing.

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 This well was dug for reason that City of Great Falls refused in 1956 to provide water with which to irrigate because of shortage of water from city water plant. Volume 202 of Deeds page 250 on May 23, 1949.
Highwood Corporation

Signature of Owner V.P.

Date December 26, 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.

27783

3794

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within instrument was filed in this office on

DEC 27 1963

Date

at 10:01 o'clock 1 M.

J. L. LENNON

County Clerk and Recorder.

By B. Lewis
Deputy.

File No.

T. 26 N. R. 3 E

DUPLICATE

County

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

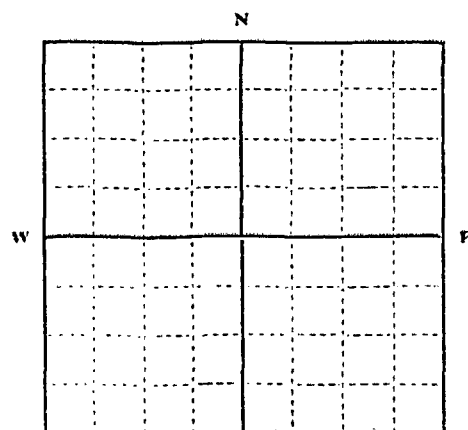
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

RECEIVED
JUN 8 1964
STATE ENGINEER

1., of
(Name of Appropriator) (Address) (Town)

County of State of
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.

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

4. The amount of groundwater claimed (in miner's inches or gallons per minute). 16 gal per min

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. 1 1/2 hp submersible pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. March 1960

8. The depth of water table. 50'

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. 5" dia. 20' deep at 50' water table

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

11. The log of formations encountered in the drilling of each well if available. cc red clay 10' in section of hole 3' dia

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.

Signature of Owner

Date

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.

28545

4558

RECORDED
TIME 3:53 PM
DOCUMENT NO. _____

J. L. LENNON
CLERK AND RECORDER
CASCADE COUNTY, MONTANA

BY [Signature]
DEPUTY

File No.

T. 20 R. 3E

DUPLICATE

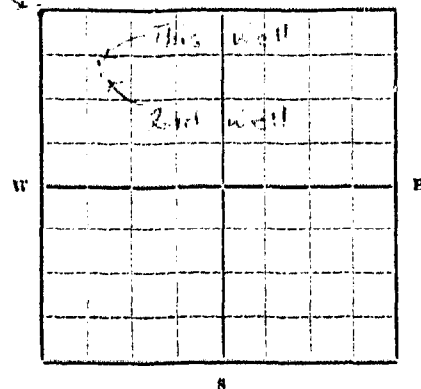
County Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. Victor C. Fischer of P.O. Box 1357 Great Falls
(Name of Appropriator) (Address) (Town)
County of Cascade State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

NW CORNER OF NE 1/4 OF NW 1/4



1/4 Sec. 15 T 20N R 3E

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 Household and yard irrigation for 30 family units, is in conjunction with 2nd well.
3. Date or approximate date of earliest beneficial use; and how continuous the use has been April 1961 is used intermittently continuous 24 hours daily
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 20 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 Yard irrigation only about a total of 2 or 3 acres.
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal 220 volt 3 phase Jacuzzi jet type pump located in below ground concrete pump room.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Drilling begun April 3 1961 and was completed April 6 1961
8. The depth of water table Well depth 67 feet, water in well to 34 foot depth
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 deep well type, 6 inch cased from 0 feet to 40 feet 5 inch cased from 40 to 67 feet. the depth of the well is 67 feet.
10. The estimated amount of groundwater withdrawn each year 1,500,000 gallons this well.
11. The log of formations encountered in the drilling of each well if available 0 to 6 sandy loam 6-18 quick sand 18-40 Gumbo 40-51 sand rock (10 gpm) 51-54 dark shale 54-56 sand rock 56-61 grey shale 61-67 sand rock "water".
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

Victor C. Fischer

December 17, 1961

Date

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.

#3216

RECEIVED
FEDERAL BUREAU OF INVESTIGATION

DATE: OCT 19 1962
TIME: 11:51 AM

By: *Heis*
Special Agent in Charge

File No.

DUPLICATE

T. 20 R. 3 E

County Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground

(Elev. above sea level 3460 ...)

0-2 ft. loam
2-18 ft. sandy silt
18-48 ft. silt
48-54 ft. sand rock (6 gpm)
54-62 ft. grey shale
62-64 ft. sand rock
64-66 ft. grey shale
66-68 ft. sand rock water
68-70 ft. grey shale

Owner FISCHER BROS., INC.Address 100 Box 1357 G.F.Driller J. D. Rafferty Address 927 10th ave. SW G.F.

Date of Notice of Appropriation of Groundwater

Date well started Feb. 6 1962 Date Completed Feb. 10 1962

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

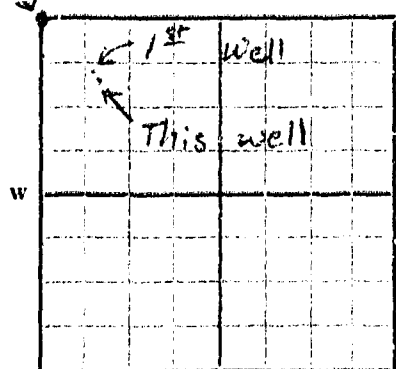
File
this 9th day of MARCH
A.D. 1973 at 11:50
Clock A.M.

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)
5 inch	5 inch	44 1/2	70'	Slots	48	54
6 5/8 "	14 lb to ft			1/4 X 10"	62	64
	6 5/8 " O.D.	0'	49'	Casing driven open end to top of sand rock.		
	12 lb to ft					

(NW CORNER OF NE 1/4 OF NW 1/4)



1/4 Sec. 15 T. 20N R. 3E

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

70 feet.

Show exact depth of bottom.

Static Water Level for non-flowing Well 34 feet.

Shut-in Pressure for Flowing Well

Pumping Water Level 34 feet at 10 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested pump Length of Test 8 hours

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) yard

irrigation only about a total of 2-3 acres.

Driller's License Number 28Driller's Signature J. D. Rafferty

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 School of Mines and Quadruplicate for the Appropriator.

52,553

5463

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on

MAR 9 1973

at 11:56 o'clock PM

J. L. LEMMON

County Clerk and Recorder

By

J. E. Bateman

Deputy.

File No.

T. 20 R. 3E

DUPLICATE

County Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater
Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground

(Elev. above sea level 3460)

0-2 ft. loam
2-18 ft. sandy silt
18-48 ft. silt
48-54 ft. sand rock (6 gpm)
54-62 ft. gray shale
62-64 ft. sand rock seep
64-66 ft. gray shale
66-68 ft. sand rock water
68-70 ft. gray shale

Owner Victor C. Fischer Address P.O. Box 1357 C.P.Driller E.D. Rafferty Address 927 10th ave SW C.P.

Date of Notice of Appropriation of Groundwater

Date well started Feb. 8 1962 Date Completed Feb. 10 1962

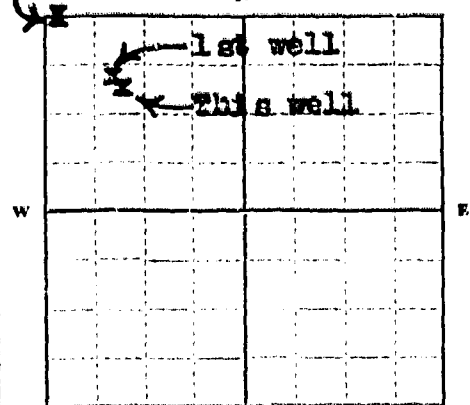
Type of well Drilled Equipment Used Churn drill
(dug, driven, bored or (Churn, drill, rotary or
drilled) other)

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 inch	5 inch	44'	70'	Slots	48	54
6 5/8"	14 lb to ft			10"	62	64
	6 5/8" OD	0'	49'	Casing driven open end to top of sand rock.		
	12 lb to ft					

NW CORNER OF SEC. 15 OF T. 20N R. 3E



1/4 Sec. 15 T. 20N R. 3E

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

70 feet
Show exact depth of bottom.

Static Water Level for non-flowing Well 34 feet.

Shut-in Pressure for Flowing Well

Pumping Water Level 34 feet at 18 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested Pump Length of Test 8 hours

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)

Yard irrigation only about a total of

2 to 3 Acres.

28

Driller's License Number

E. D. Rafferty
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 B. Mines and Geology and Quadruplicate for the Appropriator.

#3215

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on

DEC 12, 1962

at 11:50 o'clock 6 M.

J. L. LENNON

County Clerk and Recorder.

By B. Davis
Deputy.

File No.

DUPLICATE

T. A. R.

County.

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

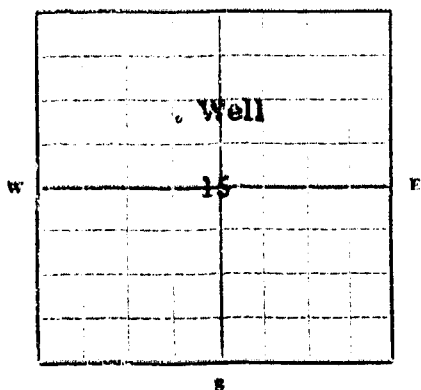
STATE ENGINEER

1. **HERMAN'S FLOWERS, INC.** of **Great Falls**
(Name of Appropriator) (Address) (Town)

County of **Cascade** State of **Montana**

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

NW corner of NE1/4NW1/4 of Sec 15, T20N, R3E,



SE 1/4NW1/4 Sec. 15, T20N R3E East

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

Floraculture

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

About August 1, 1900, - continuous

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

35 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

35,000 sq. ft. greenhouse plus

1 acre irrigation - Herman's Flowers, Inc.

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

Electric Driven Pump

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

About July 1, 1900, to About August 1, 1900.

8. The depth of water table

150 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

Drilled well - 8 inch casing - 150 feet deep.

Jet pumps 5 H.P. Motor

10. The estimated amount of groundwater withdrawn each year

1-1/2 to 2 million gals per year

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.

NOTE: Well is located in NE1/4SE1/4NW1/4 of Sec 15, T20N, R3E, MPM, Cascade County About 858' East and 1537' South of NW corner of NE1/4NW1/4 of Sec 15, T20N, R3E.

HERMAN'S FLOWERS, INC.

Signature of Owner: **BY: President**

Date

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.

713123
STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on
JUN 1 - 1962

at 3:30 Date _____
o'clock P. M.

J. L. LENNON
County Clerk and Recorder.

By D. S. S.
Deputy.

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.

Richard A. and/or Barbara J. Hughes

Owner

Address

Grant Falls, Montana

Date well started 10-18-1972

completed 10-20-1972

Type of well Drilled

(Dug, driven, bored or drilled)

Equipment used Churn drill

(Churn drill, rotary or other)

Water Use: Domestic ☒ Municipal ☐ Stock ☐ Irrigation ☐

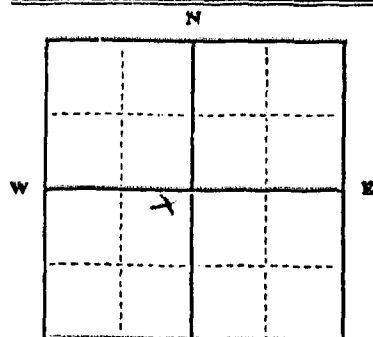
Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*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)
7"	5 1/2" 15'	0	80	Torch	59	60



Static water level 42 ft.*
Pumping water level 75 ft.*
at 10 gallons per minute,
measured minutes after pumping
began.

*Measured from ground level.

Well developed by Miller

for 1 hours.

Power Pump HP

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

University Addition

Block 5 1/4 Sec. 15

T. 20N N R. 3E

S W

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

Driller's Signature

Driller's Address 2112-7th Ave. South

Grant Falls, Montana

LICENSE NO. 135

County JACOB

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	29	Brown loam
29	34	Broken red rock
34	48	Gray shale
48	52	Brown sandrock
52	55	Hard gray shale
55	60	Gray shale with sandrock
60	72	Red shale
72	80	Hard red rock

80 Show exact depth of bottom

51,764

5429

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in
strument was filed in this office on

OCT 31 1972

at 1105 ^{Date} o'clock A M

J. L. LENNON

County Clerk and Recorder.

By J. S. Wilson
Deputy

File No.

T. 20 R. 3E 1S

DUPLICATE

County. Cascade

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)
1515 16th St SW.

Top of Ground

(Elev. above sea level. 5324)

Doc. No.

Filed for record

this 19 day of October

A. D. 1971, at 10:30

o'clock A. M.

0-20' Clay

Owner. Bob Kolaki Address. Great Falls, Mont.

Driller. Thomas B. Franklin Address. Great Falls, Mont.

Date of Notice of appropriation of groundwater. Nov. 25, 1965

Date well started Nov. 29, 1965 Date completed Dec. 10, 1965

20'-42' Heavy Shale

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.

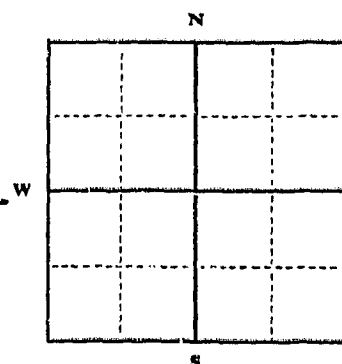
42'-50' Red Shale

50'-56' Sandstone

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
7 1/2"	6 5/8" O.D. 10 lbs. per ft.	Surface	46	None	None	None

56'-80' Heavy Shale

80'-93' Red Shale

Static Water Level for non-flowing well
90 feet.

Shut-in Pressure for Flowing Well. None

Pumping Water Level. 10.8 feet
at 10 gal. per minute.Discharge in gal. per min. of flowing well
None

How Tested. Bailor

Length of Test. 2 hrs

Remarks: (Gravel packing, cementing, packers, type of shutoff) None

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

(University Addn)

well located at 1515 16th St. S.W. University Addition
Cascade County (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).

93'-108' water bearing Sandstone

also used for some irrigation of trees and shrubs etc.

Show exact depth of bottom.

108

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.

84
Driller's License NumberThomas B. Franklin
Driller's Signature.

49323

MONTANA WATER RESOURCES BOARD

RECEIVED

T. _____ R. _____

County _____

LOG

OCT 26 1965

STATE OF MONTANA

ADMINISTRATOR OF GROUNDWATER CODE

STATE WATER CONSERVATION BOARD

Top of Ground

(Elev. above sea level _____)

Filed for record

this 19 day of OctoberA. D. 19 71, at 10:30o'clock A. M.

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

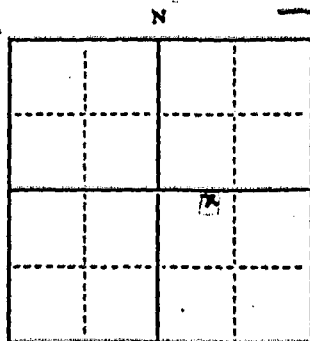
(Under Chapter 237 Montana Session Laws, 1961, as amended)

1515 16th st S.W.Owner Bob Kolski Address Great Falls, Mont.Driller Thomas B. Franklin Address Great Falls, Mont.Date of Notice of appropriation of groundwater Nov. 25, 1965Date well started Nov. 29, 1965 Date completed Dec. 12, 1965Type of well Drilled Equipment used Call 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.

0-20' Clay20'-42' Heavy Shale42'-50' Red Shale50'-56' Sandstone56'-80' Heavy Shale80'-93' Red Shale93'-108' Water Bearing Sandstone

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
<u>7 1/2"</u>	<u>6 5/8" O.D.</u> <u>10 lbs. per ft.</u>	<u>Surface</u>	<u>46</u>	<u>None</u>	<u>None</u>	<u>None</u>

in SE 1/4

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

(University Addn)

Well located at 1515 16th st S.W. University Addition
Cascade County (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).

also used for some irrigation of tree shrubs etc.

Show exact depth of bottom.

108

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.

84
Driller's License Number

Thomas B. Franklin
Driller's Signature

49553

File No.

T. 3E R. 3E

DUPLICATE

County CASCADE

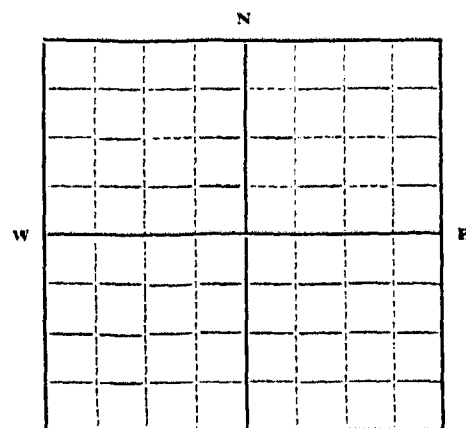
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
SEP 2 1963

Declaration of Vested Groundwater Rights STATE ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1. Emil E. Krause, of Riverside Cabins, Great Falls
(Name of Appropriator) (Address) (Town)
County of CASCADE State of MONTANA
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



IN NENE, 50 OF Riv. Ry (RR F)

1/4 Sec. 15 T. 20 R. 3E

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

- The beneficial use on which the claim is based PRIVATE
RESIDENCE and Motel
- Date or approximate date of earliest beneficial use; and how continuous the use has been Approx 1932 and
continuous usage since that date
- The amount of groundwater claimed (in miner's inches or gallons per minute) 5 gal. per minute
- 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
- The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
deep well pump, electrically operated,
located at Riverside Cabins
- The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater commenced and completed approx. 1932
- The depth of water table 130 feet
- 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 is 135 feet deep, other information is not
available
- The estimated amount of groundwater withdrawn each year 2,700,000 gallons
- The log of formations encountered in the drilling of each well if available
Not Available
- 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

Signature of Owner

Mrs. Emil E. Krause
Aug 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.

2588 #

#3356

STATE OF MONTANA, }
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on
AUG 30 1968

at 10:30 o'clock 9 M.

J. L. LENNON
County Clerk and Recorder.

By B. Hall Deputy

File No.

DUPLICATE

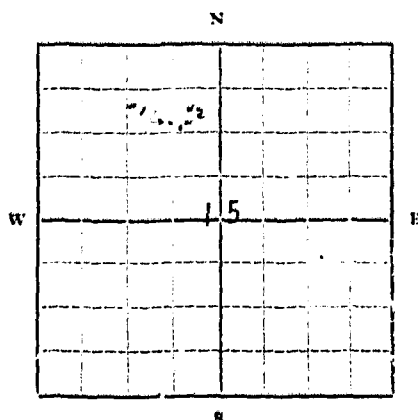
T. 20 N. R. 3 E. S. 1. M.

County. Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. Gerald L. Shepherd of 1501-13th Ave. S. W., Great Falls
(Name of Appropriator) (Address) (Town)
County of Cascade State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1. E. 1/4 of Sec. 15, T20, R. 3E.

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 use, Lawns, Garden, Trees, Irrigation

3. Date or approximate date of earliest beneficial use; and how continuous the use has been November, 1931. Continuous use, every day since November, 1931.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 24 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 2.534 acres. Sandy soil. Owners, Gerald L. and Helen M. Shepherd

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Electric Jet Pump. The well (2) for the house, garden, etc. is on former Lot 20, Blk 20 of Univ. Add. Old well (1) is on former Lot 7, Blk 20 of Univ. Add. Now turned back to acreage.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Month of November, 1931. Former owner has moved out of the state. Wells were on the property when purchased October, 1939.

8. The depth of water table 40'

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 Both wells are drilled wells. 6" casing. First well #1 is 60' deep and 40' down to water. Second well #2 supply for the house, etc. is 55' deep and 30' down to water.

10. The estimated amount of groundwater withdrawn each year 1,338,150 gallons

11. The log of formations encountered in the drilling of each well if available Not available. Former owner said well #2 had blue colored shale in bottom of well. #1 or first well - rock was encountered and yellow oil in water.

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

Signature of Owner Gerald L. Shepherd

Date December 16, 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.

29410

3955

STATE OF MONTANA, } ss.
County of Cascade. }

I hereby certify that the within in-
strument was filed in this office on

DEC 17 1968

at 11:43 o'clock A.M.

J. L. LEITCH

County Clerk and Recorder.

By

A. C. [Signature]
Deputy.

County 2003E 15

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 Volk Construction, Inc. For Administrator's Use

Address 1505-14th St. S. File 5436

Great Falls, Ontario Nov. 13/1972 9:02

Date well started 11-3-1972 GW 1

completed 11-1-1972

Type of well Drilled

(Nuc. d'oven. bored or drilled)

Equipment used Chain drill

(Churn drill, rotary or other)

Water Use: Domestic ☒ Municipal ☐ Stock ☐ Irrigation ☐

Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

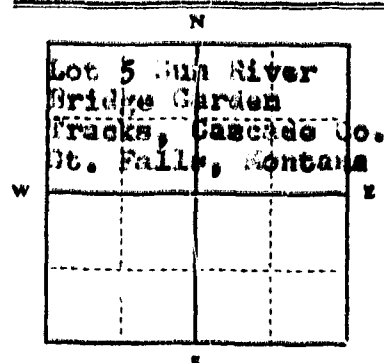
*Describe

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)
7"	7" 17	0	52	Not perforated		
	5 1/2" 14	50	70	Coroh	52	54



Static water level 42 ft.

Pumping water level 65 ft.*

at 6 gallons per minute,

measuredminutes after pumping

began.

*Measured from ground level.

Well developed by Miller.....

for 2 hours.

Power..... Pump..... HP

Remarks: (Gravel packing, cementing,

..... $\frac{1}{4}$ $\frac{1}{4}$ Sec.

T. $\frac{N}{S}$ R. $\frac{E}{W}$

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

Driller's Signature [Signature]

Driller's Address 2112-7th Ave. S.

Great Falls, Montana LICENSE NO. 145

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)	
1	15	Top soil & sand
15	23	Gravel silt
23	36	Gravel silt
36	47	Brown broken sandstone later 47
47	53	Red shale hard
53	58	Gray shale
58	67	Horizontally bedded shale
67	70	Red rock

70 Show exact depth of bottom:

5,966

5436

STATE OF MONTANA, }
County of Cascade.

I hereby certify that the within in-
strument was filed in the office of

NOV 13 1972

at 9:02

12

J. E. J. J.

County Clerk

Alb. Baleman

Deputy

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 Holt Construction, Inc.

Address 1515-14th St. S.

Great Falls, Montana

Date well started 11-3-1972

completed 11-1-1972

*For Administrator's Use

File 5436

Nov. 13/1972 9:02 a.m.

GW 1

Type of well Drilled

(Dug, driven, bored or drilled)

Equipment used Shank drill

(Churn drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

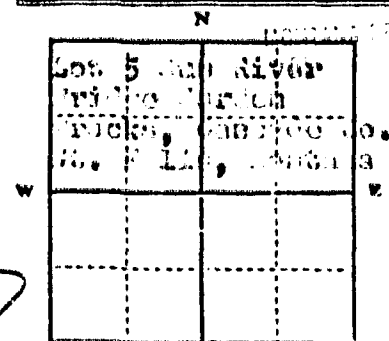
Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*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)
7"	7" 17	0	52	no perforations		
	5" 14	50	70	foroh	52	54



Static water level 11 ft.*
Pumping water level 65 ft.*
at 0 gallons per minute,
measured 0 minutes after pumping
began.

*Measured from ground level.

Well developed by 1 hours.

Power 1 Pump 1 HP

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

M* - 5 1/4 Sec. 15
T. 20 N. R. 3 E.

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

Driller's Signature [Signature]

Driller's Address 2112-7th Ave. S.

Great Falls, Montana LICENSE NO. 125

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)	
15	17	soil
17	20	clay
20	25	clay
25	27	clay
27	28	clay
28	30	clay
30	32	clay
32	33	clay
33	34	clay
34	35	clay
35	36	clay
36	37	clay
37	38	clay
38	39	clay
39	40	clay
40	41	clay
41	42	clay
42	43	clay
43	44	clay
44	45	clay
45	46	clay
46	47	clay
47	48	clay
48	49	clay
49	50	clay
50	51	clay
51	52	clay
52	53	clay
53	54	clay
54	55	clay
55	56	clay
56	57	clay
57	58	clay
58	59	clay
59	60	clay
60	61	clay
61	62	clay
62	63	clay
63	64	clay
64	65	clay
65	66	clay
66	67	clay
67	68	clay
68	69	clay
69	70	clay
70	71	clay
71	72	clay
72	73	clay
73	74	clay
74	75	clay
75	76	clay
76	77	clay
77	78	clay
78	79	clay
79	80	clay
80	81	clay
81	82	clay
82	83	clay
83	84	clay
84	85	clay
85	86	clay
86	87	clay
87	88	clay
88	89	clay
89	90	clay
90	91	clay
91	92	clay
92	93	clay
93	94	clay
94	95	clay
95	96	clay
96	97	clay
97	98	clay
98	99	clay
99	100	clay

70 Show exact depth of bottom

51.96

File No.

T 20 R 3 E

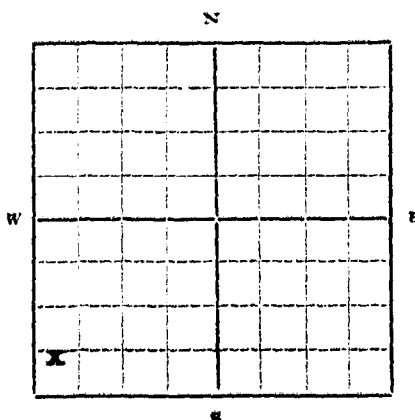
DUPLICATE

County Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. H Winn and Edith M. Wolverton of Route 1 West Great Falls
(Name of Appropriator) (Address) (Town)
County of Cascade State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

SW $\frac{1}{4}$ 17 Sec 17 20 R 3 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 House and stock watering
3. Date or approximate date of earliest beneficial use; and how continuous the use has been Continuously since 1932
4. The amount of groundwater claimed (in miner's inches or gallons per minute) ten gallons
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 Non irrigation
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Jet electric pump
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Prior to 1900
8. The depth of water table 100 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 drilled, 6" casing - 100 feet deep
10. The estimated amount of groundwater withdrawn each year 500,000 gallons
11. The log of formations encountered in the drilling of each well if available Unknown
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 because not required at time of land purch. in 1932

Signature of Owner H. Winn WolvertonDate February 19, 1962

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.

Miss # 3031

STATE OF MONTANA, ss.
County of Cascade

I hereby certify that the within in-
strument was filed in this office on
the _____ day of FEB 19 1962
at _____ o'clock P.M.

J. L. Lennan
County Clerk and Recorder.

By _____ Deputy.

File No.

T. 20 R. 3 E

DUPLICATE

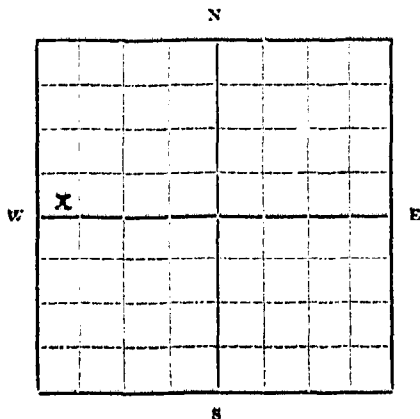
County Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. H. Winn & Edith M. Wolverton of Route 1 West Great Falls
(Name of Appropriator) (Address) (Town)
County of Cascade State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 Sec 17 T20 R3 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 Watering stock
3. Date or approximate date of earliest beneficial use; and how continuous the use has been Continuously since 1932
4. The amount of groundwater claimed (in miner's inches or gallons per minute) ten gallons
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 Non irrigation
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Cylinder pump gasoline driven engine
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Prior to 1900
8. The depth of water table 58 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 Drilled, 6" casing - 58 feet deep
10. The estimated amount of groundwater withdrawn each year 500,000 gallons
11. The log of formations encountered in the drilling of each well if available Unknown
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 because not required at time of purchase of land in 1932

Signature of Owner H. Winn & Edith M. Wolverton

Date February 19, 1962

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.

Mine # 3032

STATE OF MONTANA, ss.
County of Cascade

I hereby certify that the within instrument was filed in this office on the _____ day of FEB 19 1962 at _____ 2:46 o'clock P M.

J. L. Lennon
County Clerk and Recorder.
By _____ Deputy.

File No.

T. R.

DUPLICATE

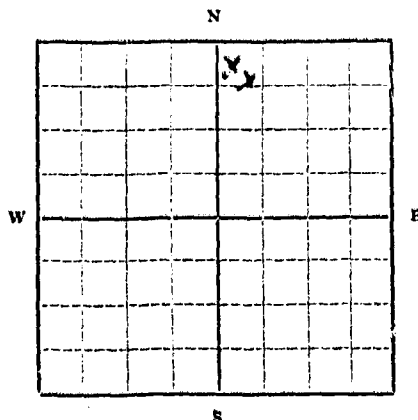
County.

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Rebecca Briggs Trust of Airport Bench Rt 1 W. Great Falls
(Name of Appropriator) (Address) (Town)
County of Cascade 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 T24 R3E

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 House hold and livestock
3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1906 and been in continuous use
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 35 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 Does not apply
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Jet pump and F.B. Stationary unit
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1906 / 1959
8. The depth of water table 33 ft to water, 56 ft to water
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
8" hole 93 ft
4" hole 93 ft
10. The estimated amount of groundwater withdrawn each year 50,000
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
Records filed in Cascade County
Rebecca Briggs Trust
Ralph B. Briggs
Signature of Owner Rebecca Briggs

Date July 26 1962

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 School of Mines and Quadruplicate for the Appropriator.

noted 8/1/62. noted 8/1/62

noted 8/1/62. noted 8/1/62

#3158
STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on
JUL 27 1962

9:11 a M

By B. J. [Signature]

Deputy.

File No.

T. 20 R. 3 E

DUPLICATE

County CASCADE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 17 1963

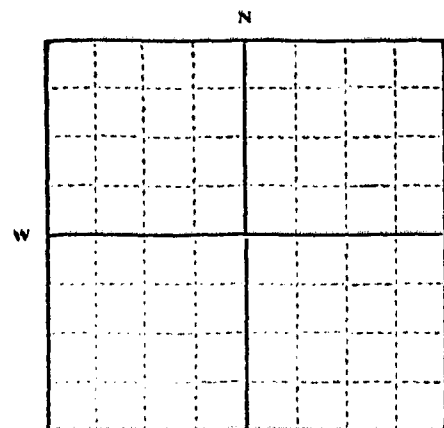
STATE ENGINEER

Notice of Completion of Groundwater Appropriation
Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater 1951Owner Mary M. Clark Address 528 13th Ave So
St Falls Mont.Contractor (if any) noneAddress of Contractor not applicableDate Started 1-51 Date Completed 1951

Describe means of obtaining groundwater without a well "as by
sub-irrigation and other natural processes". Include depth to
water when applicable. Irrigation for a depth of 60 feet



In S/204 by M&B (Mk 38) Lot 13

1/4 Sec 20 T. 3E R. 1-Indicate point of appropriation
and place of use, if possible.

Too small a plot to
indicate

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. Intermittent
use for irrigation during growing season

Signature of Owner Mary M. ClarkDate December 14, 1963This form to be prepared by contractor (if any), otherwise by the owner. by 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.

\$3511

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on

DEC 16 1968

Date

at 11:55 o'clock AM

F. L. LANNON

County Clerk and Recorder.

By B. B. B. Deputy

File No.

T 20 N. R 3 E. East

DUPLICATE

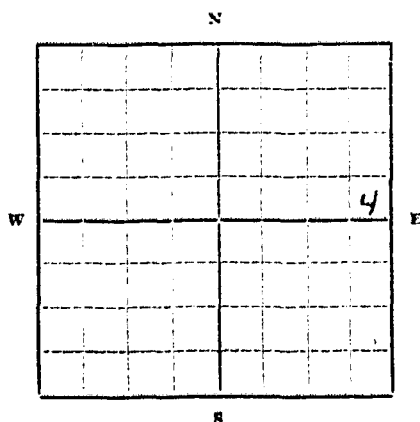
County Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Mr. Mrs. Howard DeRusha of West Great Falls
(Name of Appropriator) (Address) (Town)
County of Cascade State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



S.E. 1/4 NE 1/4 Sec. 8 T. 20 N. R. 3 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 Domestic
3. Date or approximate date of earliest beneficial use; and how continuous the use has been May 10, 1958
city
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 14 gals per Min
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 used for irrigation
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
Surface Pump
S.E. 1/4 of the N.E. 1/4, Sect 8, T. 20 North, Range 3E.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater April 19, 1958
8. The depth of water table 35 ft. from Top
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 well
Drilled to 92 ft. casing to 85 ft. casing 5 inch.
Water well
10. The estimated amount of groundwater withdrawn each year Unknown
11. The log of formations encountered in the drilling of each well if available
0-2' loam
2-40' Boulders & Silt
40-73' quick sand & Silt
73-74' lime gravel
74-85' Red Shale
85-92' grey shale
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
Mortgage Recorder July 8, 1958. Book 175 of Mortgages
page 323

Signature of Owner

Howard R. DeRusha
Hilda T. DeRusha

Date October 23, 1962

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.

#3188

STATE OF MONTANA,
County of Glacier.

I hereby certify that the within
document was filed in this office on

12:55

12:55

By *B. Davis*

Deputy.

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 Wilbur Kitterman

Address RR 1, Box 235

Great Falls, Montana
59401

Date well started 28 June 1972

completed 30 June 1972

Type of well Drilled

(Dug, driven, bored or drilled)

Equipment used Churn Drill

(Churn drill, rotary or other)

Water Use: Domestic ☒ Municipal ☐ Stock ☒ Irrigation ☒

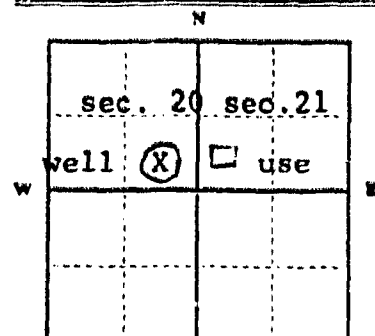
Industrial ☐ Drainage ☐ Other ☐ Garden/Lawn ☒

*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). 10 Acres or less, SW $\frac{1}{2}$, SW $\frac{1}{2}$ Sec. 21,
T20N R3E.

ESTIMATED ANNUAL WITHDRAWAL 2 million to 4 million gals

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS
8 inch	6 5/8 14 psi	0	60	1/8 x 10" slots gravel placed behind casing to cover the perforations.



SE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 20
T. 20 N. R. 3 E.

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

Driller's Signature E. D. Rafferty

Driller's Address 927-104 Ave. S.W.

LICENSE NO. 28

County Cascade

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	Sandy Loam
2	14	Yellow Shale
14	48	Yellow Sand Rock
48	54	Grey Sand Rock
54	55	Dark Shale
55	60	Water Gray Sand Rock

60 ft. show exact depth of bottom

59,859

5386

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on

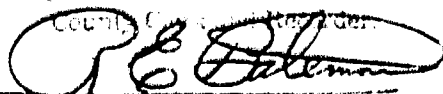
JUL 3 1972

at 8:45 o'clock PM

J. E. GILBERTSON

County Clerk and Ex. Sec.

By



Deputy.

RECEIVED
MAY 17 1960

T. 20 N R 3 E

County. Cascade

STATE ENGINEER MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

Owner. Mrs. Glen Kitterman Address. Rt. 1 N. Great Falls

Driller. J. A. Wells Address. Rt. 1 N. Great Falls

Date Started. Feb. 1946 Date Completed. Feb. 13 1946

Location: Sec. 20 T. 20 N R 3 E $\frac{1}{4}$ sec. SW $\frac{1}{4}$ of SW $\frac{1}{4}$

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

Water use: Domestic ☒ Municipal ☐ Stock ☒ Irrigation ☒
Industrial ☐ Drainage ☐ Other: _____

Casing: surface ft. to 34 ft. Type steel Size 4 $\frac{1}{2}$ O.D.

Casing: _____ ft. to _____ ft. Type _____ Size _____

Casing: _____ ft. to _____ ft. Type _____ Size _____

Perforated or Screened: Ft. _____ to ft. _____ Ft. _____ to ft. _____

Type of screen or perforations: _____

Static Water level, for non-flowing well: 40 _____ feet.

Shut-in pressure, for flowing well: _____ lb./sq. in. on: _____ (date)

Pumping water level: 40 _____ feet at 10 _____ gal. per min.

How tested: ran pump continuously at 10 gal. per min

Length of test: for 7 days without stopping

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

(over)

Log of Well

[illegible]

File No.

T. 20 R 3 E

DUPLICATE

County

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 9 1964

Declaration of Vested Groundwater Rights

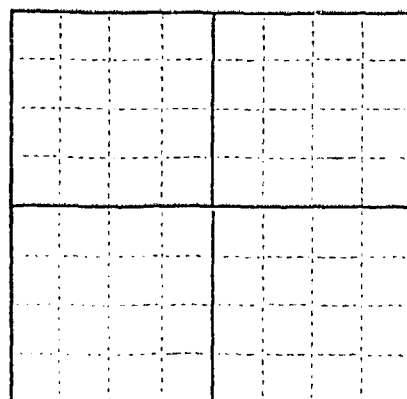
(Under Chapter 237, Montana Session Laws, 1961)

1. Edward A. Tiffany, of 2606-3rd Ave So., Gt. Falls
(Name of Appropriator) (Address) (Town)

County of Cascade

State of Montana

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



Tract known as Lot #22 of
Midkiff Green Acres Tracts

SW 1/4 Sec. 4 T. 20 R. 3 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 Domestic
use plus irrigation

3. Date or approximate date of earliest beneficial use; and how continu-
ous the use has been August 14-1950 and
continuous there after

4. The amount of groundwater claimed (in miner's inches or gallons
per minute) About 50 Gal Per Min.
Measured at Time of Drilling

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
Tract #22 of Midkiff Green
Acres Tracts, 171 North West
Great Falls, 200 Ft X 385 Ft Tract

6. The means of withdrawing such water from the ground and the loca-
tion of each well or other means of withdrawal Pumped
with power pump - Located
on Tract #22 of Midkiff Green
Acres Tracts.

7. The date of commencement and completion of the construction of the well, wells, or other works for with-
drawal of groundwater Well Drilled & Cased by Mr. E.D. Rafferty
of Gt. Falls, Drilled between Aug. 10 + Aug. 14 of 1950

8. The depth of water table Gravel & Water Struck Between 66' + 68'
Water Raised To within 6' ft. of 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 Well Depth - 68'; Cased with
5 1/2" (O.D.) casing

10. The estimated amount of groundwater withdrawn each year Unknown - Domestic + Irrigation
use

11. The log of formations encountered in the drilling of each well if available 0' to 10' - Loam, 10' to 17'
Quick Sand, 17' to 64' silt, 64' to 66' quick sand, 66' to 68' Gravel
and water

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 known, only Record
of Driller M.E.D. Rafferty License #28

Signature of Owner

Edward A. Tiffany

Date

Dec. 31-1963

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.

28489

4502

CHECK AND RETURN
TO THE DIRECTOR
FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C. 20535
MAY 14 1964

209

J. E. LEMMON

J. E. LEMMON

T. 20 R. 3 E
County. Cascade

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

Owner. Albert F. Bergmann Address. R.R. #1 West
Driller. Euell L. Flood Address. Great Falls, Mont. ?
Date Started. August 9, 1956 Date Completed. April 12, 1957
Location: Sec. 21 T. 20 R. 3 E 1/4 sec. Pt. N.E. 1/4

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

Water use: Domestic ☒ Municipal ☐ Stock ☐ Irrigation ☐
Industrial ☐ Drainage ☐ Other: Lawn, Flowers, Shrubs.

Casing: ft. to ft. Type. Size.

Casing: ft. to ft. Type. Size.

Casing: ft. to ft. Type. Size.

Perforated or Screened: Ft. to ft. Ft. to ft.

Type of screen or perforations.

Static Water level, for non-flowing well: 159 feet.

Shut-in pressure, for flowing well: lb./sq. in. on: (date)

Pumping water level: feet at gal. per min.

How tested: Bailing Test

Length of test.

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

A complete copy of the log as presented to me by Mr Flood attached to
the back of this form.

(over)

Log of Albert F. Bergmann's Water Well
August 9th. 1956

0 to 60ft. = Quick Sand. (Silt Dry)
60" 105 = Red Shale
105 " 112 = Sand Rock (Grey)
112 130 = Shale Blue
130 175 = Sand Rock (Grey)
175 185 = Sand Rock (Red)
185 205 = Shale Red
205 220 = Sand Grey
220 233 = Shale Blue
233 240 = Sand Rock Dark Grey
240 286 = Sand Rock Light Grey
286 290 = Shale Red
290 301 = Shale Blue
301 322 = Lime Rock Grey
322 336 = Shale Blue
336 365 = Sand Rock Grey
365 375 = Shale Blue
375 = Total Depth. on completion of this drilling

32 Gallons of water per bailing test at 132 Ft.)
140 " " " " " " at 282 ") Per Hour.
385 " " " " " " at 358 ")

The 5 & $\frac{1}{8}$ inch casing comes up in bottom of 7 inch casing 15 $\frac{1}{2}$ Ft.
This 5 $\frac{1}{8}$ inch pipe is V thread

68 ft. O.D. casing
24 ft. O.D. casing
1 Steel Shoe
316 ft. 5 $\frac{1}{2}$ inch O.D. casing
6 joints perforating casing

E.L. Flood

April 12 th, 1957

375 to 385 ft. = Blue Shale
385 " 396 " = Sand Rock
396 410 = Shale
410 437 = Madison Lime

On three bailing test's this well dropped to only 90 gal. per hour

65 ft. of 5 & 9/16 inch casing

Static water level 159 ft. from surface. (April 9 th. test)
Bottom of 5 & 9/16 O.D. casing is now at 385 ft.
19 twenty one ft. joints of 2 inch drop pipe set, bottom of drop pipe is
407 ft. from surface.

Evell L. Flood

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on

DEC 3 - 1957
Date

at 2:41 o'clock P. M.

J. L. THURMON
County Clerk and Recorder.

By B. B. B.
Deputy.

W 3

STATE WATER CONSERVATION BOARD

Approved Stock Form—State Publishing Co., Helena, Montana—42262

File No.

RECEIVED
AUG 6 1965

T. 20 N. R. 3 E.

DUPLICATE

REFERRED TO

County. Cascade

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater Appropriation
Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater..... July 22, 1965

Owner..... A. F. & Leone..... Address..... Rt. 1 West
Bergmann Great Falls, Montana

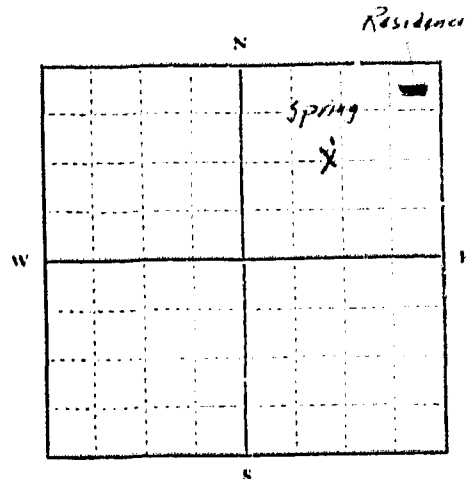
Contractor (if any) None - Developed by State Highway
Commission

Address of Contractor ..None

Date Started..... July 22, 1965 Date Completed..... July 22, 1965

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

center of NE 1/4 Sec. 21, T.20N., R.3E., in Cascade
County, Montana



NE 1/4 Sec. 21 T.20 R. 1W
Indicate point of appropriation
and place of use, if possible.

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..... 150 minutes

inches - continuous use - arrived at by State

Highway Engineer contractor

Signature of Owner..... A. F. Bergmann

Date..... August 3, 1965

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.

29396

#4862

STATE OF MONTANA, } ss.
County of Cascade.

I hereby certify that the within in-
strument was filed in this office on

AUG 3 - 1965

Date

at 4:00 o'clock P.M.

J. L. LENNON

County Clerk and Recorder.

By [Signature]

Deputy.

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 TEXACO INC.

Address GORE HILL

TEXACO STATION

GREAT FALLS.

Date well started 4-1-72

completed 4-15-72

For Administrator's Use	
File	
GW 1	

Type of well DRILLED

(Dig, driven, bored or drilled)

Equipment used Rotary

(Cable drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

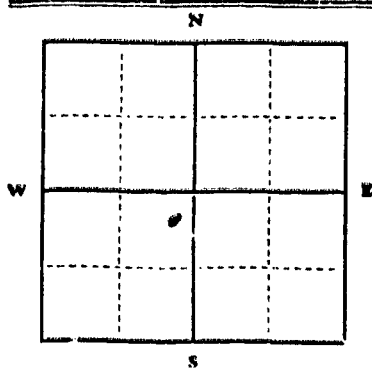
Industrial ☐ Drainage ☐ Other ☒ Garden/Lawn ☐

*Describe SERVICE STATION

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 3/4	Pasrik 4"	0	320	1 1/2" Holes	200	320



Static water level 60' ft.*
Pumping water level 220' ft.*
at 15 gallons per minute,
measured 5 minutes after pumping
began.
*Measured from ground level.
Well developed by PUMPING
for 4 hours.
Power 220 Pump 5 HP
Remarks: (Gravel packing, cementing,
packers, type of shutoff)

In NE 1/4 Sec. 21
T. 20 N. R. 32 E. S. 3 W.

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

Driller's Signature Clay Mendenhall

Driller's Address 4020 3rd Ave So

Great Falls, Mt.

LICENSE NO. 199

County CASCADE

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	4	Soil
4	36	SANDSTONE
36	70	Sand + Shale
70	92	Black Sand + Shale
92	160	Shale
160	242	CLAY Shale
242	268	Red Shale
268	308	Shale
308	320	Black Sand

320 Show exact depth of bottom

50,724

50,724

Water Resources and Conservation
Resources Division
Filing Bureau
Water Section
W. Mitchell Building
Helena, Montana 59601

Owner Texaco, Inc.
Address Core Hill Station - Gt Falls
Location T. 20N R. 3E Sec. 21
Doc. No.

As the Administrator of the Groundwater Code for the State of Montana, please take note of the following special instructions, in order to properly protect your groundwater right.

Special Instructions:

Please provide the county filing information for the attached form.

Thank you.

FILE NUMBER 5360
FILED- MAY 8 1972
TIME- 1:00 P. M.

Equipment Used ROTARY (Churn drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

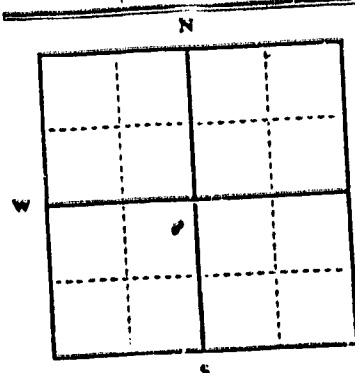
Industrial ☐ Drainage ☐ Other ☒ Garden/Lawn ☐

*Describe SERVICE STATION

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 3/4	Pasvik 4"	0	320	1/2" Holes	200	320



Static water level 60 ft.*
Pumping water level 220 ft.*
at 15 gallons per minute,
measured 5 minutes after pumping
began.

*Measured from ground level.

Well developed by PUMPING

for 4 hours.

Power 220 Pump 5 HP

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

T. 20 N. 3E Sec. 21
S. 20 R. 3E E. W

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

Driller's Signature Strong Frederickson

Driller's Address 4020 3rd Ave So

Gt Falls, Mt.

LICENSE NO. 199

320

Show exact depth of bottom

50,724

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 227 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 TEXACO INC.

Address GORE HILL

TEXACO STATION

GREAT FALLS.
Date well started 4-1-72

completed 5-15-72

Type of well Drilled

(Dug, driven, bored or drilled)

Equipment used Rotary

(Cable drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

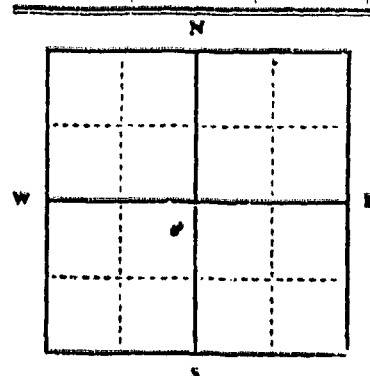
Industrial ☐ Drainage ☐ Other ☒ Garden/Lawn ☐

*Describe SERVICE STATION

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	Power (Horsepower)	To (Feet)	PERFORATIONS
6 3/4	Plastic 4"	0	320	Kind Size From (Feet) To (Feet)
				1 1/2" Holes 200 320



Section 21 T. 20 N. R. 3E S. W

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

Driller's Signature James Henderson

Driller's Address 4020 3rd Ave So

Great Falls, Md.

LICENSE NO. 199

County CASCADE

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)	
2	4	Soil
4	26	SANDSTONE
36	70	Sand & Shale
70	87	Shale Sandstone
87	100	Shale
100	202	CLAY SHALE
202	240	Shale Sandstone
240	260	Shale
260	320	SANDSTONE

320 Show exact depth of bottom

50,724