

1182

Copy
I received and filed this instrument for
record on the 11th day of Dec. 1963
at 7:05 o'clock P.M., permanent files
of Missoula County, State of Montana
Witness my hand:
By Martin A. Belmer County Recorder
Fee \$ 2.00 Paid

File No.....

T 12 N R 19 W

DUPLICATE

County Missoula

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 19 1963

Notice of Completion of Groundwater Appropriation Without Well

(Under Chapter 237 Montana Session Laws, 1961)

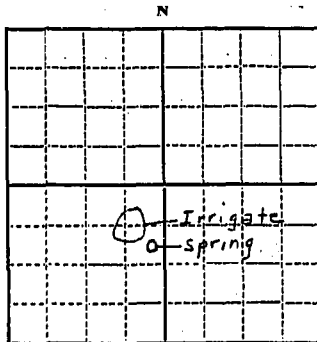
Date of Appropriation of Groundwater..... 1939

Owner Ruth Bulen Benson Address Missoula, Montana
(at date of appropriation)

Contractor (if any) I had none.

Address of Contractor None

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. Development of surface springs which head on the property at point indicated by use of one h.p. electric pump from spring through 1 1/2" pipe to land to be irrigated, approximately 1000 gal. per hour can be developed in sprinkler system.

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.....

NE 1/4 SW Sec. 12.. T.12N R. 19W

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

Sufficient for 12 hours per day for irrigation of lawn, hay, trees and orchard.

Signature of Owner Edna D. Lumbly

Date..... December 3, 1963

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.

10-1-3-5

437

214457

I received and filed this instrument for
record on the 18 day of Dec 1963
at 1:12 o'clock P.M., permanent files
of Missoula County, State of Montana
Witness my hand:
MARTIN S. BEHNER, County Recorder
By Ethel Lane Deputy
Fee \$ 2.00 Paid

File No.

T. 12^N R. 19^W

TRIPLICATE

County Missoula

STATE OF MONTANA **RECEIVED**
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER DEC 13 1963

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Upper Miller Creek Hill

Owner: Don W. Davis Address: 1811 Dixon Missoula

Driller: Glenn Camp 705 Alder Address: Missoula, Mont

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

Date well started..... 11/29/62 Date Completed..... 12/12/62

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

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

0 to 2' Top soil

2' to 44' Clay, sand, & gravel

44' to 108' Decomposed granite, clay & gravel

108' to 127' Clay some sand

127' to 156' Clay, decomposed granite, some gravel

156' to 168' Clay, sand, gravel & water

168' to 172' Clay & gravel

172' to 199' Sand, gravel & water

199' to 201' Clay

201' to 205'-5" Gravel water some sand.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" I.T. seamless	2'	above G.L.			
	19 lbs to foot		to 207'-5"	None		

Static Water Level for non-flowing Well..... 155' from G.L. feet.

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

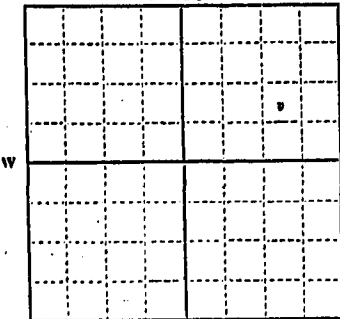
Pumping Water Level..... 175 feet at 25 gal. per minute.

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

How Tested..... Baller Length of Test..... 3 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).....

None



NE 1/4 Sec. 12 T. 12N R. 19W

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

Show exact depth of bottom.

License # 7

Driller's License Number

Glenn Camp
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.

393

214148

I received and read this instrument for
record on the 11 day of Dec, 1963
at 11:00 o'clock A.M., permanent files
of Missoula County, State of Montana
Witness my hand:
MARTIN S. BEHNER, County Recorder
By Martin S. Behner Deputy
Fee \$ 1.00 Paid

File No. _____

JUL 3 1975

T. _____ R. _____

DUPLICATE

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

County _____

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground

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



- 0 to 30' Sand & gravel
- 30' to 35' Clay & gravel
- 35' to 45' Gravel
- 45' to 49' Clay
- 49' to 82' gravel
- 82' to 91' Sand & gravel (water with iron)
- 91' to 110' Gravel & water

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Well on Upper Miller Creek road

Owner Harold Masah Address 4214 Barbara Lane

Driller Glenn Camp 705 Alder Address Missoula, Mont

Date of Notice of appropriation of groundwater _____

Date well started 3/26/75 Date completed 3/27/75

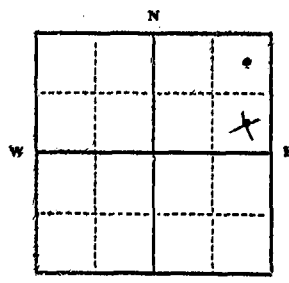
Type of well Drilled Equipment used Churn drill
(Dug, driven, bored or drilled) (Churn drill, rotary or other)

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" I.D.	6" above G.L.				
	1 1/2"	to 110'	None			

334248, 2559
June 29, 1975
10:40 A.M.



Static Water Level for non-flowing well 69 feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level 73 feet at 12 gal. per minute.

Discharge in gal. per min. of flowing well _____

How Tested Test Pump

Length of Test 2 1/2 hours

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

1/4 NE 1/4 Sec. 12 T. 12N R. 12W

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

(Continue on reverse side)

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

Show exact depth of bottom.

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

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

License # 7

Driller's License Number _____

Glenn Camp
Driller's Signature.

54890

#2559

339248

I received and filed this instrument for
 record on the 29 day of June
 at 10:40 o'clock A M., permanent files
 of Missoula County, State of Montana
 Witness my hand:
 Dorothy L. Head, County Recorder
 by C. [Signature] Deputy
 Fee \$ 3.00 Paid

C

Missoula County, Montana
 Recorder's Office
 Helena, Montana

File No. _____

T 12 N R 19 W 12

DUPLICATE

County Missoula

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JUN 4 1965
STATE ENGINEER



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

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

0 to 1' top soil
 1' to 38' Clay & gravel
 38' to 41' Br. clay & gravel
 41' to 52' yellow clay
 52' to 68' Tan clay
 68' to 71' Br. silty clay & gravel (a little water)
 71' to 77' Gray Silty clay & gravel a little water
 77' to 83' Green sandy clay
 83' to 103' Gray Sandy clay
 103' to 106' Tan clay & small gravel
 106' to 111' Tan clay & sand
 111' to 116' Tan clay, silt sand, Gravel & water (3 G.P.M.)
 116' to 140' Gray clay & gravel
 140' to 161' Tan clay & Gravel

Well at Linda Vista
Owner Robert Morgan Address 2207 E. Middlesex

Driller Glenn Camp 705 Alder Address Missoula, Mont.

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

Date well started 4/1/65 Date Completed 4/22/65

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

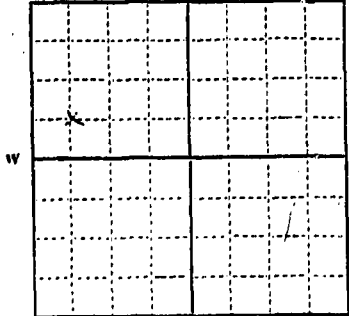
Water Use: Domestic Municipal Other Irrigation
Industrial Drainage Stock

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)
6"	6" I.D. 18.97#	1' above G.L. to 193'-9"	Mills Knives	114'	116'	3 circles, 4 holes to 6" circle total of 12 holes

161' to 164' Br. clay & gravel
164' to 171' Gray clay & gravel
171' to 180' Br clay, sand & gravel
180' to 191' Gray clay & gravel
191' to 194' Clay, gravel, silty sand & water (4 G.P.M.)
194' to 212' Tan sand & gravel

State Water Level for non-flowing Well..... 66' feet.



SW 1/4 N 1/2 Sec. 12 T. 12. R. 19
Indicate location of well and place of use, if possible. Each small square represents 10 acres.

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

Pumping Water Level..... 152' feet at..... 6 gal. per minute.

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

How Tested Test Pump Length of Test 45 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).....

3' of gravel pack in bottom of hole

Pulled casing back to 193', hole

back filled with gravel

License # 7

Driller's License Number

Glenn Camp
Driller's Signature

Show exact depth of bottom.
212' to 225' Gray clay, silt & gravel
225' to 230' Br clay silty water & gravel (too silty to be good)
230' to 245' Gray clay, silt Gravel
245' to 270' Tan clay, silt & gravel

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.

#508

237257

I received and filed this instrument for
record on the 28th day of May 1915
at 10:45 o'clock A.M. permanent files
of Missoula County, State of Montana
Witness my hand:
Vernon E. Cross, County Recorder
By *Donita W. ...* Deputy
Fee \$ *2.00* Paid *0*

pt card

File No. _____

APR 29 1966

T 12N R 19W

DUPLICATE

Billie _____ McDermott _____
Eutzsch _____ McNulty _____
Coyle _____ Morton _____
Darlington _____ Sullivan _____
Dickert _____

County Missoula

LOG

STATE OF MONTANA

ADMINISTRATOR OF GROUNDWATER CODE

OFFICE OF STATE ENGINEER

Top of Ground

Approx.

(Elev. above sea level) 3210'

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Arlene C. &/or

Owner Arthur P. Brackebush Address Missoula, Montana

Driller Liberty Drilling Co. Address Missoula, Montana

Date of Notice of appropriation of groundwater None filed

Date well started 4/8/66 Date completed 4/22/66

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

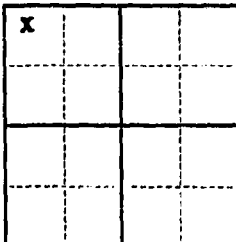
Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

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.

Formations Log:

- 0 - 3 Black dirt.
- 2 - 14 Yellow clay.
- 14 - 18 Gravel imbedded in tan clay.
- 18 - 24 Blue clay.
- 24 - 42 Gravel mixed with blue-green clay.
- 42 - 50 Gray clay.
- 50 - 62 Gravel mixed with gray clay.
- 62 - 82 Gravel mixed with blue-green clay. Water.
- 82 - 94 Blue - green clay.
- 94 - 102 Gravel mixed in gray clay.
- 102 - 120 Gravel mixed with blue-green clay.
- 120 - 123 Gravel mixed with green clay. Water.
- 123 - 170 Blue - green clay.
- 170 - 176 Sandy tan clay. Some water.
- 176 - 178 Fine brown sand & gravel.
- 178 - 200 Gravel imbedded in blue clay.
- 200 - 210 Fine sandy brown gravel. Water.
- 210 - 230 Blue clay.
- 230 - 295 Light blue - w green clay.
- 295 - 305 Blue - green clay.
- 305 - 328 Gravel mixed with blue clay.
- 328 - 332 Fine gray sand. Water.
- 332 - 338 Coarse sand and gravel. Water.
- 338 - 339 Blue clay.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6 5/8" OD x 1/4"	+1'5"	338	NONE		



Static Water Level for non-flowing well 280 feet.

Shut-in Pressure for Flowing Well None

Pumping Water Level 295 feet at 30 gal. per minute.

Discharge in gal. per min. of flowing well None

How Tested Pump Test

Length of Test Four hours

Remarks: (Gravel packing, cementing, packers, type of shutoff) All water entering well is coming through open bottom of six inch casing. Wells with open bottom completions in this area can be depended upon to produce clear sand free water year after year, as long as they are not over-pumped; i.e., they should be pumped

NW 1/4, NW Sec 18, T. 12N R. 19W
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

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

Water rises in well 280 ft. from surface

Show exact depth of bottom.

Bottom of hole 338'

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.

52
Driller's License Number

William F. Calhoun
Driller's Signature

41012

\$100

249720

I received and filed this instrument for
 record on the 27 day of April 19 66
 at 2:00 o'clock P. M., permanent files
 of Missoula County, State of Montana
 Witness my hand:
 Verance R. Cause, County Recorder
 By Martha L. Head Deputy
 Fee \$ 7.00 Paid Cash

at rates less than 25 to 50 percent of the tested capacity of the
 aquifer.

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

RECEIVED
JUL 18 1973
MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

County Missoula 18

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

DRILLER'S LOG

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

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

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

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

Owner Stephen J. Johnson
Address 217 Jerome
Missoula, Mont

For Administrator's Use	
File	<u>SWRCD, 2577</u>
Date	<u>July 12, 1973</u>
GW 1	<u>200000</u>
18-976H (info only)	<u>716</u>

Date well started 6-21-73
completed 6-30-73

Type of well DRILLED
(Dig, drives, bored or drilled)

Equipment used AIR ROTARY
(Cobra drill, rotary or other)

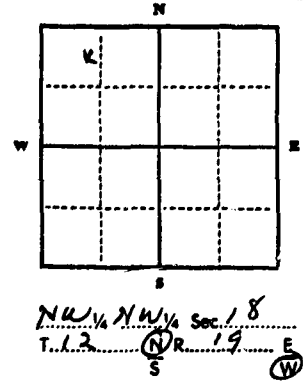
Water Use: Domestic Municipal Stock Irrigation
Industrial Drainage Other Garden/Lawn

*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).

Top of Ground		
(Elev. above sea level)		
From (Feet)	To (Feet)	
<u>0</u>	<u>20</u>	<u>GRAVEL TOPSOIL</u>
<u>20</u>	<u>80</u>	<u>SANDY CLAY</u>
<u>80</u>	<u>190</u>	<u>CLAY</u>
<u>170</u>	<u>250</u>	<u>CLAY, SILTY SAND</u>
<u>250</u>	<u>280</u>	<u>SILT</u>
<u>280</u>	<u>310</u>	<u>GRAVEL SAND WATER</u>

ESTIMATED ANNUAL WITHDRAWAL

Diameter of Drilled Hole	Diameter and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind	From (Feet)	To (Feet)
<u>6 5/8"</u>	<u>6 5/8" 250 WALL</u>	<u>0</u>	<u>310</u>	<u>NONE</u>		



Static water level 230 ft.*
Pumping water level 270 ft.*
at 10 gallons per minute,
measured 10 minutes after pumping began.
*Measured from ground level.
Well developed by AIR for 3 hours.
Power _____ Pump _____ HP
Remarks: (Gravel packing, cementing, packers, type of shutoff)

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

Driller's Signature Bill Pearson

Driller's Address Bill Pearson Well Drilling

P.O. Box 977, Hamilton LICENSE NO. 125

310 Show exact depth of bottom

56075

2599

334800

received and filed this instrument for record on the 12 day of July, 1973, at 7:00 o'clock A. M. permanent files of Missoula County, State of Montana

Witness my hand:
 Dorothy L. Head, County Recorder
 By M. W. Conroy, Deputy
 Fee \$ 2.00 paid ok

MISSOULA COUNTY RECORDERS OFFICE
 100 WEST 10TH AVENUE
 MISSOULA, MONTANA 59801
 PHONE 542-1111

Quinn

MISSOULA COUNTY RECORDERS OFFICE
 100 WEST 10TH AVENUE
 MISSOULA, MONTANA 59801
 PHONE 542-1111

MISSOULA COUNTY RECORDERS OFFICE
 100 WEST 10TH AVENUE
 MISSOULA, MONTANA 59801
 PHONE 542-1111

MISSOULA COUNTY RECORDERS OFFICE
 100 WEST 10TH AVENUE
 MISSOULA, MONTANA 59801
 PHONE 542-1111

None

MISSOULA COUNTY RECORDERS OFFICE
 100 WEST 10TH AVENUE
 MISSOULA, MONTANA 59801
 PHONE 542-1111

8/18

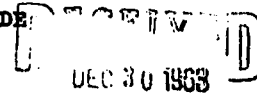
File No.

T. 12N R. 19W

DUPLICATE

County Missoula

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 1958

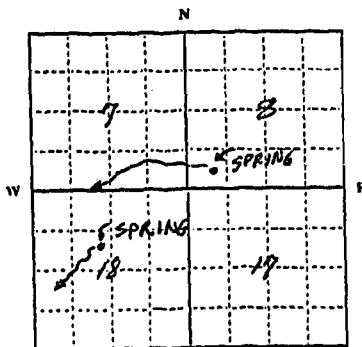
Owner HAROLD LAKE & JAY W. McAFFEE Address P.O. Box 1421 Missoula Mont.

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. domestic use and stock water.



1/4 Sec. 7, 8, 18 T. 12N R. 19W

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.....

continuous use

Signature of Owner [Signature]

Date Dec 20, 1963

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.

540

214 894

Copy
I received and filed as instrument in
the office on the 26 day of Dec 1963
at 11:34 o'clock A.M., permanent files
of Missoula County, State of Montana
Witness my hand:
MARTIN S. BEHNER, County Recorder
By: *Martin S. Behner*, Deputy
Fee \$2.00 Paid

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

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

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

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

Owner Warner G. Lundberg

Address 68 S.W. Higgins, Malm
Well drilled originally for Tom Greenfield

Date well started March 6, 1961
completed March 24, 1961

For Administrator's Use	
File	<u>301229</u>
	<u>April 8, 1971</u>
	<u>11:15 AM</u>
GW 1	

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

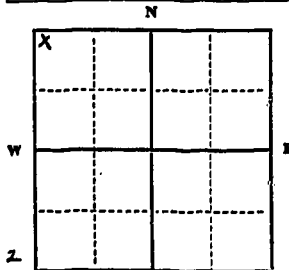
Equipment used Churn Drill
(Churn drill, rotary or other)

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

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

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
<u>6" I.D.</u>	<u>6" I.D.</u>	<u>1' above g.l.</u>	<u>346' 3"</u>			
				<u>none</u>		



South Meadow Hills Tracts

N.W. 1/4 N.W. 1/4 Sec. 18
T. 12 N. R. 17

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

Driller's Signature J. Jensen Camp
CAMP WELL DRILLING & PUMP SUPPLY
Driller's Address 1322 S. 14th St., Missoula, Montana

LICENSE NO. 7

Top of Ground (Elev. above sea level)		Well: <u>Upper Miller Creel</u>
From (Feet)	To (Feet)	
<u>0</u>	<u>1</u>	<u>Topsoil</u>
<u>1</u>	<u>12</u>	<u>Gray Clay</u>
<u>12</u>	<u>22</u>	<u>Gravel with water (4 GPM)</u>
<u>22</u>	<u>28</u>	<u>Yellow Clay</u>
<u>28</u>	<u>30</u>	<u>Gravel & Clay</u>
<u>30</u>	<u>51</u>	<u>Gray Clay with gravel</u>
<u>51</u>	<u>150</u>	<u>Green clay with gravel</u>
<u>150</u>	<u>178</u>	<u>Gravel & decomposed granite</u>
<u>178</u>	<u>194</u>	<u>Green Clay</u>
<u>194</u>	<u>198</u>	<u>Gravel & Clay</u>
<u>198</u>	<u>317</u>	<u>Green Clay</u>
<u>317</u>	<u>325</u>	<u>Sand Gravel & clay (2 gpm)</u>
<u>325</u>	<u>328</u>	<u>Green clay & gravel</u>
<u>328</u>	<u>342</u>	<u>Yellow Clay & gravel</u>
<u>342</u>	<u>345</u>	<u>Sandy brown clay - little water, wood</u>
<u>345</u>	<u>347</u>	<u>Gravel with water</u>

Static water level 225 ft.*
Pumping water level 305 ft.*
at 1.5 gallons per minute,
measured 2 minutes after pumping began.
*Measured from ground level.
Well developed by baller
for 2 hours.
Power Does Pump not app to P
Remarks: (Gravel packing, cementing, packers, type of shutoff)

347 Show exact depth of bottom

48 340

2109

301229

I received and filed this instrument for
record on the 8th day of April 1971
at 11:15 o'clock A.M. permanent files
of Missouri County, State of Missouri
Witness my hand
Vernice R. Cross, County Recorder
By J. A. [Signature] Deputy
Fee \$ 2.00 Paid [Signature]

File No. _____

T. 12 N. R. 19 W. 18

DUPLICATE

County Missoula

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

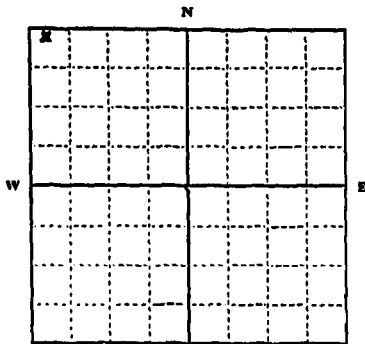
RECORDED
JAN 3 1963

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961.)

I, Eugene D. & Marian L. Polette, of Route 3 Missoula
(Name of Appropriator) (Address) (Town)

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



Sec. 18 T. 12 R. 19 W

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 stock, lawn and garden irrigation.
3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1927 and normal, continuous usage for above items since then.
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 500 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, as only irrigation is for lawn and garden.
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Deep well pump. Well located midway between house and North property line.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1927. For reference see Walter Peery, Rte 3, Missoula, Mont. or Ray Oberlander, Hot Springs, Montana.
8. The depth of water table Standing water level 114 feet, pumping level same.
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 and cased with a five inch casing, three hundred feet deep, in which a Myers submersible pump is located at present.
10. The estimated amount of groundwater withdrawn each year 310,000 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 Eugene D. Polette
Marian L. Polette Date December 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.

20015

816 21524

I received and filed this instrument for
record on the 70th day of Dec 1963
at 1:50 o'clock P.M., permanent files
of Missoula County, State of Montana
Witness my hand
M. ANN S. BEHRE Deputy Recorder
By Max J. Kite Deputy
Fee \$ 24 Paid

File No. _____

T. 12 N. R. 19 W

TRIPLICATE

County Missoula

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)

Miller Creek

Owner Dean G. Hoffman Address Missoula, Montana

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

Date of Notice of appropriation of groundwater _____

Date well started April 21, 1970 Date completed May 4, 1970

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

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

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



Top of Ground
(Elev. above sea level _____)

0- 3 Topsoil

3-100 Sand, gravel,
and clay

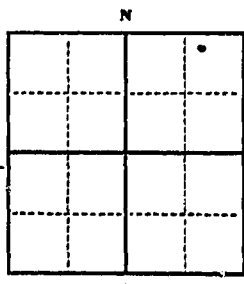
100-103 Sand and gravel

103 Static water level

103-128 Sand, gravel,
and water

128 Exact depth of bottom

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" 17 1/2	1 up	128	---	-----	-----



Doc. No. 293467
Filed for record
this 31 day of July
A. D. 19 70, at 10431
o'clock A.M.

Static Water Level for non-flowing well 103 feet.
Shut-in Pressure for Flowing Well _____
Pumping Water Level 108 feet
at 20 gal. per minute.
Discharge in gal. per min. of flowing well _____
How Tested Bailer & Test pump
Length of Test 3 hours
Remarks: (Gravel packing, cementing, packers, type of shutoff) _____

NE 1/4, Sec. 19, T. 12 N. R. 19 W.
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

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

Show exact depth of bottom.

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

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

185
Driller's License Number
Charles F. Hollenstam
Driller's Signature.

47307

2019

293467

I received and filed this instrument for
record on the 31 day of July, 19 70
at 10:30 o'clock A.M. for Missouri files
of Missouri County, State of Missouri
Witness my hand
Charles B. Cross County Recorder
By Dorothy A. Hyming, Deputy
Fee 1.25 cash

#2318 320693

I received and filed this instrument for record on the 14th day of July 1972 at 9:30 o'clock A.M. pursuant to the provisions of Article X, Section 17, of the Constitution of the State of Montana. Witness my hand and the Great Seal of the State of Montana this 14th day of July 1972.
By William B. Clark, Secretary of State

Department of Natural Resources and Conservation
Water Resources Division
Engineering Bureau
Groundwater Section
Sam W. Mitchell Building
Helena, Montana 59601

Owner Rex Paddock
Address Miller Cr. Missla, 59801
Location R. Sec.
Doc. No. 42318, 320693

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, as indicated in red on the attached form, the complete location of the well by section, township and range.

Thank you.

DO NOT WRITE IN THESE SPACES

File No. _____

T. 12N R. 19W

DUPLICATE

County Missoula

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)

Cleo Mitzel &

Owner Eldon E. Baker Address Missoula, Montana

Driller Liberty Drilling Co. Address Missoula, Montana

Date of Notice of appropriation of groundwater None filed

Date well started 9/1/65 Date completed 9/8/65

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.

Top of Ground Approx.
(Elev. above sea level 3500 ft.)

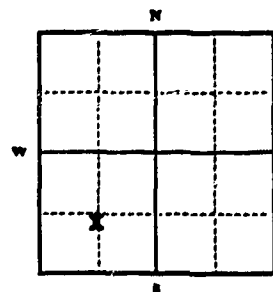
Formations Log:

- 0 - 3 Topsoil.
- 3 - 119 Sand and gravel with some gray clay mixed in.
- 119 - 120 Silty sand and gravel.
- 120 - 121 Clean sandy gravel.
- 121 - 125 Silty sand and gravel.
- 125 - 139 Gravel imbedded in tan clay.
- 139 - 147 Clean coarse sand and gravel.

Size of Drilled Hole	Size and Weight of Casing	From (Foot)	To (Foot)	PERFORATIONS		
				Kind Size	From (Foot)	To (Foot)
6"	6 5/8" OD x 1/4"	0	139	shop made screen 5 9/16"	136	147

Doc. No. 293682
Filed for record this 7 day of August A. D. 19 70 at 12:05 o'clock P.M.

Water rises in well 98 feet to surface.



Static Water Level for non-flowing well _____ feet.

Shut-in Pressure for Flowing Well None
Pumping Water Level _____ feet at _____ gal. per minute.

Discharge in gal. per min. of flowing well None

How Tested Air Lift Pump
Length of Test 3 hrs.

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

SW 1/4 Sec. 20 T. 12N R. 19W
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

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

Approximately 5 acres, Canyon Village #5, Miller Creek Road, Missoula, Montana.

Show exact depth of bottom.
Bottom of well 147 ft.

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

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

Driller's License Number 52

Driller's Signature William F. Johnson

47342

2534

334066

I received and filed this instrument for
record on the 27th day of June 1973
at 3:15 o'clock P. M. permanent files
of Missoula County, State of Montana
Witness my hand:
Dorothy L. Head, County Recorder
By M. M. [Signature], Deputy
Fee \$2.00 Paid [Signature]

File No.

T. 12N R. 19W

DUPLICATE

County Missoula

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)

Donald J. and

Owner Lois H. Ellis Address Missoula, Montana

Driller Liberty Drilling Co. Address Missoula, Montana

Date of Notice of appropriation of groundwater None filed.

Date well started 8/26/65 Date completed 8/31/65

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.

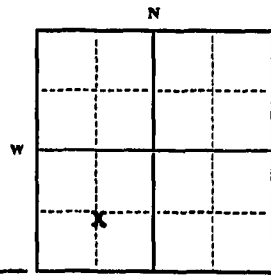
Top of Ground Approx.
(Elev. above sea level 3140 ft.)

Formations Log:

- 0 - 4 Topsoil.
- 4 - 111 Sand and gravel with some gray clay mixed in.
- 111 - 117 Sand and gravel.
- 117 - 140 Silty sand and gravel.
- 140 - 145 Fine sand and gravel.
- 145 - 146 Coarse sand and gravel.
- 146 - 150 Silty gravel.
- 150 - 153 Sand and gravel imbedded in orange clay.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6 5/8" OD x 1/4"	0	137	Shop made screen 5 9/16"	136	148

A blank tailpipe extends to bottom of hole.



Water rises in well 99 feet to surface.

Static Water Level for non-flowing well 99 feet.

Shut-in Pressure for Flowing Well ~~Non-f~~
Pumping Water Level 105 feet
at 60 gal. per minute.

Discharge in gal. per min. of flowing well
~~Non-flowing~~

How Tested Air Lift Pump
Length of Test 2 1/2 Hours

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

Doc. No. 293570
Filed for record this 7 day of August
A. D. 19 70, at 4:35 SW 1/4 Sec. 20 T. 12N R. 19W
o'clock P. M.

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).

Approximately 5 acres.

Show exact depth of bottom.

Bottom of well 153 ft.

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.

52
Driller's License Number

William F. Adams
Driller's Signature.

47313

2020

293570

I received and filed this Instrument for
 record on the 3 day of Aug 1920
 at 4:35 o'clock P.M., permanent files
 of Missoula County, State of Montana
 Witness my hand:
 Verance R. Crouse, County Recorder
 By Mary Affelberg Deputy
 Fee \$ 2.00 Paid

RECEIVED
 MISSOULA COUNTY RECORDER
 MISSOULA, MONTANA
 AUG 10 1920

MISSOULA COUNTY RECORDER
 MISSOULA, MONTANA
 AUG 10 1920

File No. _____

T. 12 N R. 19 W 20

DUPLICATE

County Missoula

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater
Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

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

- 0-7 Black Silt & Gravel
- 7-18 Clay, Gravel & Rock
- 18-28 Clay and Gravel
- 28-30 Clay, Gravel
- 30-36 Clay, Sand & Gravel
- 36-124 Clay, Rock and Gravel
- 124-133 Sand, Gravel & Water
- 133-135 Gravel and Water

Owner CHARLES GRAHAM Address Miller Creek
CAMP WELL DRILLING & 1522 S. 74th W.

Driller Philip S. Kelly Address Missoula, Montana

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

Date well started May 1, 1960 Date completed May 10, 1960

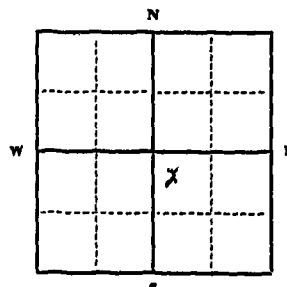
Type of well Drilled Equipment used Churn Drill
 (Dug, driven, bored or drilled) (Churn drill, rotary or other)

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.

MONTANA WATER RESOURCES BOARD
RECEIVED
 NOV 28 1969

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6" O.D.	6" I.D. 17 lb per ft. Galv.	1'	135'			none



Static Water Level for non-flowing well
no drawdown 117' feet.

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

Pumping Water Level 117' feet
 at 20 gal. per minute.

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

How Tested Water Test Pump
 Length of Test 2 hours

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

NW 1/4 SE 1/4 Sec 20 T. 12 N. R. 19
 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).
Household

Show exact depth of bottom.

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

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

License 7
 Driller's License Number
Philip Balke
 Driller's Signature
CAMP WELL DRILLING & SERVICE CO. KELLY
45-911

1952 - 286692

I received and filed this Instrument for record on the 25th day of Nov. 1969 at 1:00 o'clock P.M., permanent files of Missoula County, State of Montana
Witness my hand:
Verano J. Crouse, County Recorder
By M. M. Conroy, Deputy
Fee \$ 2.00 Paid *[Signature]*

RECORDED
NOV 25 1969

File No. _____

T. 12 R. P 19 20

DUPLICATE

County Missoula

LOG

MONTANA WATER RESOURCES BOARD

STATE OF MONTANA

RECEIVED

ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground

OCT 4 1968

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

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

0-5

Clay and chunks of rock

5-10

Clay, gravel, chunks of rock

10-110

Clay and Gravel

110-135

Sand, gravel water

Owner Charles Graham Address Miller Creek 1522 S. 14th W. Missoula, Montana

Driller Glenn Camp Address Missoula, Montana

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

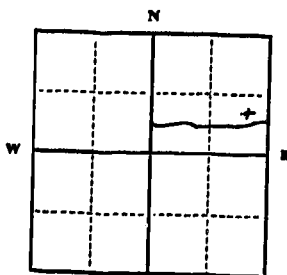
Date well started May 22, 1968 Date completed June 4, 1968

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

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6" I.D.	17 lb per ft	19 ft above G.L.	135'	NONE		



Static Water Level for non-flowing well 111 feet.

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

Pumping Water Level..... 111 feet at 30 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested..... Batter. & test pump.

Length of Test..... 2 hours

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

NE 1/4 SE 1/4 P50747 SW 1/4 Sec 21 T. 12 R. 19

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

(Continue on reverse side)

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

Show exact depth of bottom.

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

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

License # 7
Driller's License Number

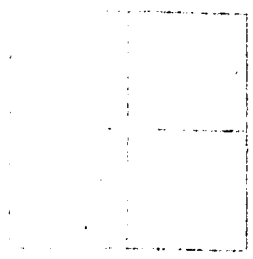
Glenn Camp
Driller's Signature. Glenn Camp

44,660

1825

275063

I received and filed this instrument for
record on the 30 day of Sept. 1968
at 11:00 o'clock A.M. permanent files
of Missoula County, State of Montana
Witness my hand:
Verance R. Crouse, County Recorder
By M. J. Conroy Deputy
Fee \$2.00 P.D. 1 Paid by



File No. _____

T. 12 R. 19 70

DUPLICATE

County Missoula

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater
Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground
(Elev. above sea level _____)

- 0-1 Gravel and topsoil
- 1-111 Clay and Gravel
- 111-128 Sand and Gravel
Water
- 128-
132'3" Gravel and
Water

Owner Carl [unclear] Address Miller Street

Driller [unclear] Address [unclear]

Date of Notice of appropriation of groundwater _____

Date well started _____ Date completed _____

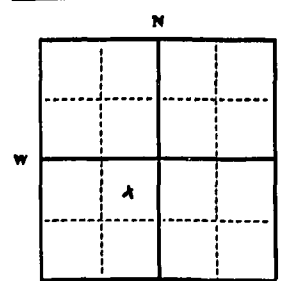
Type of well _____ Equipment used Shurflo
(Dug, driven, bored or drilled) (Churn drill, rotary or other)

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

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

Size of Drilled Hole	Size and Weight of Casing	From (Foot)	To (Foot)	PERFORATIONS		
				Kind Size	From (Foot)	To (Foot)
6" I.C.	6" I.C.	1'6"	132'3"			
	17 lb per ft.	above			none	

Doc. No. 290268
Filed for record
this 15 day of April
A. D. 19 70, at 10:00
o'clock a.M.



Static Water Level for non-flowing well _____ feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level _____ feet
at _____ gal. per minute.

Discharge in gal. per min. of flowing well _____

How Tested Test

Length of Test _____

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

Center of well is at
40' 50"
N. 2 1/4 Sec. 20. T. 12. R. 19.
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 7

Driller's Signature [Signature]

46361

1974

290263

I received and filed this instrument for
 record on the 15th day of April 70
 at 10:00 o'clock A.M. pursuant to the
 of Minniscott County, State of Minnesota
 Witness my hand
 Veronique E. Gross, County Recorder
 By J. Bellinger Deputy
 Fee \$ 2.00 Paid

RECORDED
 INDEXED

APR 15 1970

2271

316244

I received and filed this instrument for
record on the 12 day of May, 1922
at 5.00 o'clock P.M., payment filed
of Missoula County, State of Montana
Witness my hand
Vernon B. Creuse, County Recorder
By M. M. [Signature] Deputy
Fee 5.00 Paid 6.

RECEIVED

File No. _____

T. _____ R. _____

JAN 12 1973

County Missoula

DUPLICATE

LOG

MONTANA DEPARTMENT OF NATURAL RESOURCES
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground

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

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

(Under Chapter 237, Montana Session Laws, 1961)

Well at Miller Creek

0 to 5' Pit
5' to 88' Clay & gravel
88' to 94' Clay, fine gravel & sand
94' to 118' Water, sand & gravel
118' to 124' Water, sand & gravel
124' to 128' Water, sand & gravel

Owner ~~Carl M. Hanson~~ Robert W. Jones Address ~~4976 Carroll, Missoula~~ Rte 5 Miller Cr.

Driller Glenn Camp 705 Alder Address Missoula, Montana

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

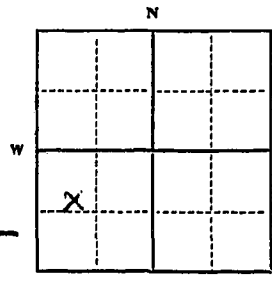
Date well started 6/15/67 Date completed 6/23/67

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

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" I.D. 17#	1'-9" above G.L.	129'-9"			



Static Water Level for non-flowing well 94 feet.

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

Pumping Water Level 94 feet
at 30 Gals test gal. per minute.

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

How Tested Compressor & Test Pump
Length of Test 3 hours

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

Doc. No. 2394-326690
Filed for record
this 5th day of Jan
A. D. 19 73, at 2:20
o'clock P. M.

NW 1/4 Sec 20 T12N R. 19W

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

(Continue on reverse side)

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

Show exact depth of bottom.

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

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

License # 7

Driller's License Number

Glenn Camp
Driller's Signature Glenn Camp

52,199

2394

32661.0

I received and filed this instrument for record on the 5 day of June 1973, at 2:26 o'clock P.M. permanent files of Missoula County, State of Montana. Witness my hand: Dorothy L. Head, County Recorder. By Thomas Spaulding, Deputy. Fee \$ 2.00 00 Paid

OFFICE OF THE COUNTY CLERK
 MISSOULA COUNTY, MONTANA

MISSOULA COUNTY, MONTANA

RECORDED
 INDEXED

File No.

T. 12^N R. 19^W 20

DUPLICATE

SEP 24 1970

County Missoula

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground

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

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

(Under Chapter 237, Montana Session Laws, 1961)

0 to 6' Pit
 6' to 27' Sandy clay & Gravel
 27' to 33' Chunks of rock & Clay
 33' to 36' Dry loose gravel
 36' to 54' Clay & gravel
 54' to 59' Clay
 59' to 102' Clay & gravel
 102' to 108' Broken rock, water.

Owner: Bill Lawrence Address: Miller Creek, Missoula
Block 18 of 14th St, P. 247
 Driller: Camp Well Drilling Address: 1522 S. 14th, Missoula
Howard W Daley

Date of Notice of appropriation of groundwater.....
 Date well started 7/21/61 Date completed 7/29/61

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

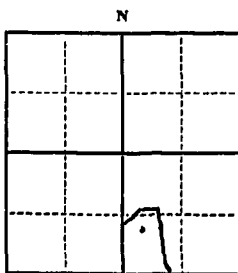
Water use: Domestic Municipal Stock Irrigation
 Industrial Drainage Other

We had to drill deeper as the water table dropped 108' to 113' Clay, gravel & water
 113' to 125' Gravel & water
 125' to 128' Soft yellow 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.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" I.D. 17 lb	0	128'			
					None	

Doc. No. 7028
 Filed for record
 this 9 day of September
 A. D. 19 71, at 3:10
 o'clock P.M.



PLAT V-3^S
 SE 1/4 Sec. 26, T. 12, R. 19W
 Indicate location of well and place of use, if possible. Each small square represents 40 acres.

Static Water Level for non-flowing well 94 feet.
 Shut-in Pressure for Flowing Well.....
 Pumping Water Level... 97 feet
 at... 15 gal. per minute.
 Discharge in gal. per min. of flowing well

How Tested: Batter
 Length of Test... 2 hours
 Remarks: (Gravel packing, cementing, packers, type of shutoff).....

(Continue on reverse side)

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

Show exact depth of bottom.

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

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

License 17
Driller's License Number

Steve Camp
Driller's Signature

47511

35

I received and filed this instrument for record on the 7th day of Sept. 1970 at 3:10 o'clock P.M. permanent files of Missoula County, State of Montana

Witness my hand:
Veranda R. Couse, County Recorder
By *[Signature]* Deputy
Fee \$ *[Signature]* Paid *[Signature]*

File No.

T. 12 N. R. 19 W.

DUPLICATE

County MISSOURI

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 3 1965

Notice of Completion of Groundwater Appropriation
Without Well

(Under Chapter 237 Montana Session Laws, 1961)

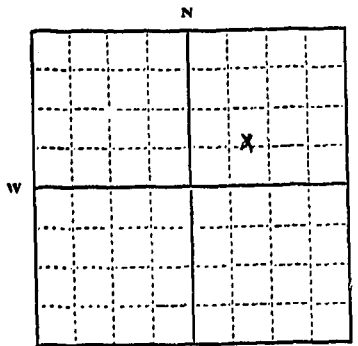
Date of Appropriation of Groundwater JUNE 1930

Owner A. D. McLaughlin Address MISSOURI, MOIT

Contractor (if any) NONE

Address of Contractor

Date Started JUNE 1930 Date Completed JUNE 1930



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

5' x 5' by 3' deep, with pipe leading to house for domestic & stock use

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. 12 M.O. USE

APPROX 3000 gallons yearly

estimated by single family use

4.500 gal 5 head of stock

Signature of Owner A. D. McLaughlin

Date 12/3/63

N 1/4, SW 1/4, Sec. 20, T. 12 N. R. 19 W.
Indicate point of appropriation and place of use, if possible.

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

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

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

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

1-218

Copy
I received this instrument for
recording at *1997 Flat P. Dec. 1963*
of *Montana* permanent files
of *Montana* State of Montana
Witness my hand
By *Martin J. Bejcek* County Recorder
Deputy
Fee \$ *1.00* I did

File No. _____

T. _____ R. _____

DUPLICATE

SEP 23 1970

County Missoula

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)

Miller Creek

Owner Robert L. Warthen Address Missoula, Montana

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

Date of Notice of appropriation of groundwater _____

Top of Ground
(Elev. above sea level _____)

0- 80 Gravel and clay

80- 87 Clay

87-107 Gravel and clay Date well started Aug. 4, 1970 Date completed Aug. 10, 1970

107 Static water level

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

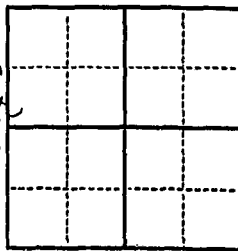
107-133 1/2 Sand, gravel, and water

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

133 1/2 Exact depth of bottom

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" 17#	1 up	133 1/2	---	---	---

Doc. No. 295112
Filed for record
This 21 day of September
A. D. 19 70, at 1:20
o'clock P.M.



S. 24 Sec. 20 T. 12N R. 19W
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

Static Water Level for non-flowing well
..... 107 feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level..... 107 feet
at..... 30 gal. per minute.

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

How Tested..... Bailer

Length of Test..... 2 hours

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

..... (Continue on reverse side)

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

Show exact depth of bottom.

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

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

185
Driller's License Number

Charles F. Hollenstein
Driller's Signature.

417543

#2043 29512

I received and filed this instrument for
 record on the 21 day of Sept 1970
 at 2 o'clock P.M. permanent
 of Missoula County, State of Montana.
 Witness my hand:
 Virginia R. Cropp, County Records
 By M. J. J. J. Deputy
 Fee \$ 2.00 Cash Paid

#2204

310032

I received and filed this instrument for
record on the 29th day of Nov. 1921
at 1:10 o'clock P.M. permanent file
of Mineral County State of Montana
Witness my hand
Vernon R. Cross, County Recorder
by George Quince, Deputy
P. S. Rock Paid

20

File No. _____

RECEIVED

T. _____ R. _____

DUPLICATE

DEC 2 1971

County Missoula

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)

Miller Creek

Owner Robert L. Warthen Address Missoula, Montana

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

Top of Ground
(Elev. above sea level _____)

0- 74 Gravel and clay

Date of Notice of appropriation of groundwater _____

74- 82 Clay

Date well started Oct. 30, 1970 Date completed Nov. 9, 1970

82-112 Gravel and
clay

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

112 Static water
level

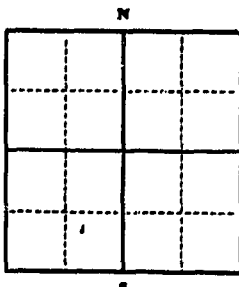
Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which the water rises in the well.

112-135 Sand, gravel,
and water

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6"	6" 17#	1 up	135	---	---	---

135 Exact depth
of bottom

Doc. No. 310033 + 2205
Filed for record
this 29 day of Nov.
A. D. 1971, at 1:15
o'clock P. M.



Static Water Level for non-flowing well
_____ 112 feet.

Shut-in Pressure for Flowing Well _____

Pumping Water Level _____ 112 feet
at _____ 30 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested _____ Bailer

Length of Test _____ 2 hours

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

S4 1/4 Sec 20 T. 22 N. R. 17 W
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

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

Show exact depth of bottom.

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

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

_____ 185
Driller's License Number

Charles Hollister
Driller's Signature.

49517

1970

MISSOURI

RECORDS

#2285

310033

I received and filed this instrument for
 record on the 29 day of Nov 1971
 at 12 o'clock P.M. permanent files
 of Missouri County State of Monroe
 Witness my hand
 Varnace R. Cross, County Recorder
 By Marie G. Gaskill, Deputy
 Fee \$ 2.00 Paid

MISSOURI
 DEPARTMENT OF REVENUE
 DIVISION OF CONSUMER PROTECTION
 STATE OF MISSOURI
 DIVISION OF CONSUMER PROTECTION
 STATE OF MISSOURI

Return per (initials) unopened, unexpired, postage
 postage of Dept. N. 10/20/71
 from Dept. of Revenue

RECEIVED

County Missoula 20

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

JAN 23 1973
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 Roger A. Werner
Address 1915 S 5th West
Missoula, Montana
Date well started 2/11/72
completed 2/18/72

For Administrator's Use	
File <u>2401, 327008</u>	
<u>Jan 17, 1973</u>	
GW 1 <u>10:00 P.M.</u>	

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

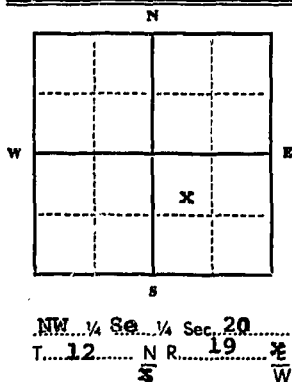
Equipment used Cable Tools
(Churn drill, rotary or other)

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). Tract 3, Block 1, Lost Mine Suburban Tracts

ESTIMATED ANNUAL WITHDRAWAL 15,768,000 gallons

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind	From (Feet)	To (Feet)
6"	6 5/8" OD x 1/2" +2'3"		137	N	O	N



Static water level 113 ft.*
Pumping water level 126 ft.*
at 30 gallons per minute,
measured 240 minutes after pumping began.
*Measured from ground level.
Well developed by Air Lift Pump
for Four hours.
Power: Gas Pump 30 HP
Remarks: (Gravel packing, cementing, packers, type of shutoff) All water entering well through open bottom of six inch casing. Wells in this area can be depended

Top of Ground approx. (Elev. above sea level) <u>3520'</u>		
From (Feet)	To (Feet)	
0	17	Gray gravels with cobblestones & boulders mixed in
17	25	Tan gravel with cobblestones & boulders mixed in
25	65	Light gray silty gravel with cobblestones and boulders
65	126	Tan gravel with cobblestones and boulders mixed in
126	131	Silty sand and gravel. Seep
131	135	Brown silty sand and gravel. Water
135	137	Light tan coarse sand and gravel. Water

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

Driller's Signature [Signature]
Driller's Address 2500 Reserve
Missoula, Montana LICENSE NO. 52

137 ft. Show exact depth of bottom water rises in the well 113 feet from surface

2401 327008

I received and filed this instrument for record on the 17th day of June 1973 at 10:00 o'clock A.M. permanent files of Missoula County, State of Montana
Witness my hand:
Dorothy L. Head, County Recorder
By [Signature] Deputy
Fee \$ 2.00 Paid [Signature]

MISSOULA COUNTY, MONTANA
COUNTY CLERK
STATE OF MONTANA
MISSOULA COUNTY, MONTANA
COUNTY CLERK
STATE OF MONTANA

upon to produce clear sand free water year after year as long as they are not overpumped, i.e., they should be pumped at rates not in excess of 50 to 60 percent of the tested capacity of the aquifer.

MISSOULA COUNTY, MONTANA
COUNTY CLERK
STATE OF MONTANA
MISSOULA COUNTY, MONTANA
COUNTY CLERK
STATE OF MONTANA

File No.

T. 12N R. 19W 21, 22

DUPLICATE

County Missoula

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Top of Ground Approx. (Elev. above sea level 3202')

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Formations Log:

- 0 - 84 Gravel mixed in tan clay.
- 84 - 86 Green & gray poorly graded gravel.
- 86 - 99 poorly graded gravel and broken rock imbedded in tan clay.
- 99 - 101 Badly broken red rock.
- 101 - 112 Badly broken red rock imbedded in tan clay.
- 112 - 113 Broken red rock
- 112 - 121 Broken red rock imbedded in tan clay.
- 121 - 129 Very silty sand & gravel. Some silty water. Too fine and dirty to successfully develop well.
- 129 - 137 Broken rock mixed in light brown clay
- 137 - 148 Very silty sand and gravel. Some silty water.
- 148 - 154 Broken rock imbedded in tan clay.
- 154 - 177 Brown silty sand and clay. Seeps of water.
- 177 - 181 Very silty sand and gravel. Some silty water.
- 181 - 201 Fractured rock. Clay in seams.
- 201 - 213 Fractured rock. Water.

Owner: Mr. Robert P. Banaugh / & Catherine H. Banaugh Address: Missoula, Montana

Driller: Liberty Drilling Co. Address: Missoula, Montana

Date of Notice of appropriation of groundwater None filed

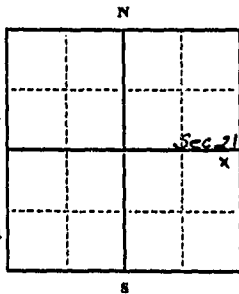
Date well started 6/12/68 Date completed 6/27/68

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

Water use: Domestic Municipal Stock Irrigation Industrial Drainage Other

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

	Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
					Kind Size	From (Feet)	To (Feet)
121 - 129	6"	6 5/8" x 1/4"	+2	209	NONE		



Static Water Level for non-flowing well 128 feet.

Shut-in Pressure for Flowing Well Non-flowing

Pumping Water Level 180 feet at 45 gal. per minute.

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

How Tested Air Lift Pump

Length of Test four & one half hrs

Remarks: (Gravel packing, cementing, packers, type of shutoff) All water entering well from fractures in the rock between 209 and 213 feet. Wells in this area can be depended upon to produce clear sand free water year after year as long as they are not overpumped, i.e., they should be pumped at rates not in excess of 40 to 50 (capacity of the aquifer) gpm.

Water rises in the well 128 feet from surface. Show exact depth of bottom.

Approx. acres

Bottom of well 213'

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

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

Driller's License Number

William P. Cohen

Driller's Signature

45,282

1892

281483

I received and filed this instrument for
record on the 23 day of May 1969
at 11:15 o'clock A.M., permanent files
of Missoula County, State of Montana
Witness my hand:
Vernice R. Cross, County Recorder
By M. G. [Signature], Deputy
Fee \$ 2.00 Cash Paid

RECEIVED

Missoula County

21

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARD

NOV 8 1972

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 Clinton E. & Sally M. Carlson

Address Route 5
Missoula, Montana

Date well started 5/21/69
completed 5/27/69

For Administrator's Use	
File #	<u>#2366; 324144</u>
Date	<u>Nov. 2/1972 2:00 PM</u>
GW #	<u>1</u>

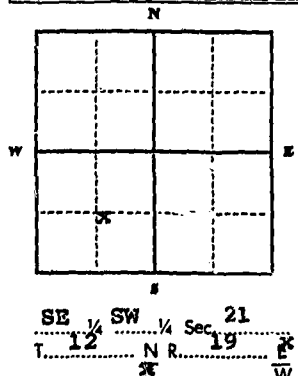
Type of well Drilled
(Dug, driven, bored or drilled)
Equipment used Table Tools & Air Rotary
(Chain drill, rotary or other)

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). Canyon Village #2, Tract #23

ESTIMATED ANNUAL WITHDRAWAL 3,679,200 gallons

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
7"	6 1/2" OD x 1/2" 4 1/2" OD x .128	+ 3 liner 53'4"	64'4" 338'9"	Torch Cut	157'4"	186'11"



Static water level 80 ft.*
Pumping water level 158 ft.*
at 180 gallons per minute,
measured 180 minutes after pumping
began.
*Measured from ground level.
Well developed by Air Lift Pump
for 180 hours.
Power Diesel Pump 150 HP
Remarks: (Gravel packing, cementing
packers, type of shutoff) All water
entering well is coming
from cracks & seams in
the rock below 152 feet
& through perforations
cont'd

Top of Ground Approx (Elev. above sea level) 3500'

From (Feet)	To (Feet)	Description
0	2	Black topsoil
2	17	Gravel, cobbles & boulders
17	45	Sand and gravel mixed in tan clay
45	50	Tan clay with gravel & cobbles mixed
50	52	Brown clay with boulders & gravel mixed
52	63	Clay & boulders mixed
63	101	Purple & gray rock
101	152	Green & gray rock
152	275	Purple and gray rock water
275	311	Green & gray rock
311	349	Purple rock
349	405	Light gray rock

Note: a test hole was drilled from 275 to 405 ft.. an additional 5 GPM of water was picked up in a series of small seeps & is available to pump

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

Driller's Signature [Signature]
Driller's Address 2500 Reserve Street
Missoula, Montana LICENSE NO. 52

405' Show exact depth of bottom water rises in well 80 feet from surface.

51,744

* 2366

324144

I received and filed this instrument
 record on the _____ day of _____ 19____
 at _____ o'clock _____ P.M., _____
 of Missouri County, State of Missouri
 Witness my hand
 Veranda E. Crouse, County Recorder
 By _____ Deputy
 Fee \$ _____ Paid

In liner.
 Note: A test hole was drilled from 275 to 405 ft.. An additional 5 GPM
 of water was picked up in a series of small seeps and developed by
 bailing the well and is available to the pump.

File No.

T. 12 N. R. 19 W

DUPLICATE

County Missoula

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
APR 23 1965
STATE ENGINEER

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

Notice of Completion of Groundwater Appropriation by Means of Well

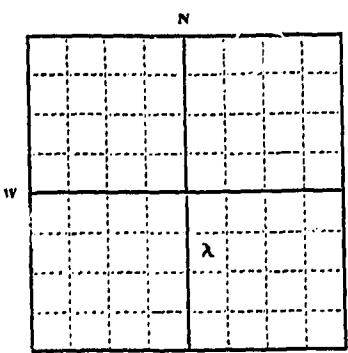
(Under Chapter 237, Montana Session Laws, 1961)

0 to 1' Topsoil
1' to 70' Broken rock & clay
70' to 110' Loose sand, gravel & CLAY
110' to 114' Sand, gravel & water
114' to 118' Clay & gravel
118' to 122' Sand, gravel & water
122' to 129' Clay & gravel
129' to 131' Sand, gravel & water.

Owner Floyd E. Deramer Address Miller Creek
Driller Glenn Camp 705 Alder Address Missoula, Mont
Date of Notice of Appropriation of Groundwater.....
Date well started 2/19/65 Date Completed 3/1/65
Type of well Drilled Equipment Used Churn drill
(dug, driven, bored or drilled) (Churn, drill, rotary or 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)
6"	6" I.D. 18.97 #	1' above G.L.	to 132'-1"		None	



NW 1/4 NE 1/4 Sec. 21 T. 12 N. R. 19 W
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 105 from G.L. feet.
Shut-in Pressure for Flowing Well.....
Pumping Water Level 105 feet at 15 gal. per minute.
Discharge in gal. per min. of flowing well.....
How Tested Tent pump Length of Test 1 hr

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 # 7
Driller's License Number
Glenn Camp
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.

39083

491

235659

I received and filed this instrument for
 record on the 22 day of April 1965
 at 11:30 o'clock A.M., permanent files
 of Missoula County, State of Montana
 Witness my hand:
 Vermae R. Crouse, County Recorder
 By *Bertie A. Crouse*, Deputy
 Fee \$2.00 Paid Cash

5115

0

Original instrument deposited in the office of the County Recorder, Missoula, Montana, on the 22 day of April 1965, for recording. Bertie A. Crouse, Deputy County Recorder.

2376

325095

I received and filed this instrument for
 record on the 27th day of March 1911
 at 11:45 o'clock P.M. permanent files
 of Missoula County State of Montana
 Witness my hand
 Varonoe R. Crease, County Recorder
 By Thomas P. Galt Deputy
 Fee \$ 2.00 Paid

RECORDED & INDEXED
 MAR 27 1911
 MISSOULA COUNTY REC'D
 MISSOULA MONT
 11:45 P.M.

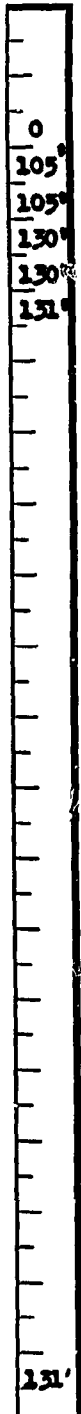
File No. _____

DUPLICATE

STATE WATER CONSERVATION BOARD
R **R** **E** **C** **E** **I** **V** **E** **D**
SEP 3 1965

T. 12N R 19W
County MISSOULA

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER



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

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

(Under Chapter 237, Montana Session Laws, 1961)

Clay Sand Gravel

Sand & Water

Water & Gravel

Owner JAMES E. FOX Address MILLER CREEK

Driller John Farrell Address ARLEN MONT

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

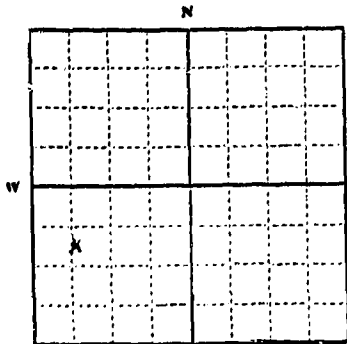
Date well started Aug 26 1965 Date Completed Aug 24 1965

Type of well Drilled Equipment Used Churn Drill
(dug, driven, bored or drilled) (Churn, drill, rotary or 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)
6"	(6" 18.97#)	0	131'			



NW 1/4 Sec. 21. T. 12N R. 19W
Indicate location of well and place of use, if possible. Each small square represents 10 acres.

131'

Show exact depth of bottom.

Static Water Level for non-flowing Well..... 104 feet.

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

Pumping Water Level..... 105 feet at 12 gal. per minute.

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

How Tested..... Pump..... Length of Test..... 1 1/2 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).....

14
Driller's License Number

John Farrell
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.

39522