

File No. 16861T. 21 R. 18E

DUPLICATE

County Fergus

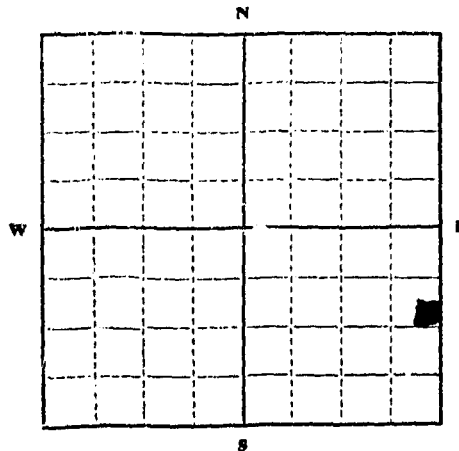
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

RECEIVED
DEC 23 1963
STATE ENGINEER

1. Joe W. Juss of Winifred Mont.
(Name of Appropriator) (Address) (Town)
County of Fergus State of Mont.
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



N. 21 1/4 Sec. 11 T. 21 R. 18E

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

2. The beneficial use on which the claim is based. Stock water and House water
3. Date or approximate date of earliest beneficial use; and how continuous the use has been. Oct. 1953
and continuous since.
4. The amount of groundwater claimed (in miner's inches or gallons per minute). 3 gpm 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. By Electric water pump.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. Started drilling in July of 1953
and completed in Sept of 1953.
8. The depth of water table. 70 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. Depth 455 ft well cased 307 ft
with 5 inch casing, 3 inch from bottom up.
10. The estimated amount of groundwater withdrawn each year. 125,000 gal.
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 Joe W. JussDate 12/11/1963

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.

11343.

16861

COPY

State of Montana, } ss.
County of Fergus.

Filed DEC 18 1963 19

at 2:00 o'clock P.M.

Way Platter
County Clerk and Recorder

*200 ph

GW

File No. **8945**

DUPLICATE

T. **21** R. **18E**
County **Fergus**

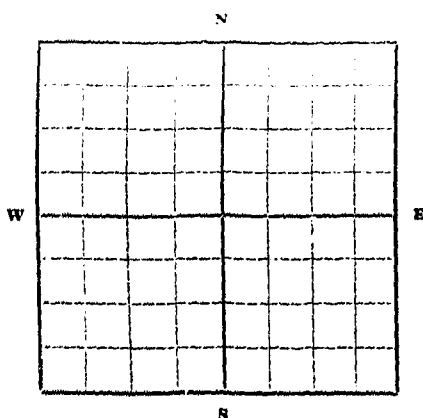
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

RECEIVED

STATE ENGINEER

1. **Edgar Schaeffer** of **Winifred**
(Name of Appropriator) (Address) (Town)
County of **Fergus** State of **Montana**
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW 1/4 Sec 18 T. 21 R. 18E

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

2. The beneficial use on which the claim is based
Stock water.
3. Date or approximate date of earliest beneficial use; and how continuous the use has been **Earliest date unknown.**
4. The amount of groundwater claimed (in miner's inches or gallons per minute) **3 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 used for irrigation.**
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal **Shallow well pump.**
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater **Information unknown.**
8. The depth of water table **14 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 **25 feet deep, 4 feet in diameter, and cased with rock.**
10. The estimated amount of groundwater withdrawn each year **10,000 gallons.**
11. The log of formations encountered in the drilling of each well if available **Log 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 other obtainable.**

Signature of Owner **Edgar Schaeffer**
Date **February 12, 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.

1728

8945

COPY

State of Montana, } ss.
County of Fergus. }

Filed MAR 15 1962 19

at 1:35 o'clock P. M.

Wray Rathbun
County Clerk and Recorder

*200 ph

File No.

DUPLICATE

LOG

MONTANA WATER RESOURCES EDITED
RECEIVED

DEC 23 1968

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

County

21N R 18E
Gerrys

Top of Ground

(Elev. above sea level)

0
80 Bentonitic Sand-Clay
Intermittent Coal
Layers (porosity water)
80-180 Bentonitic Sand
Green Clay layers
Thin Black Coal
Lenses
180-215 Hard Limy Sand
215-256 Light colored
sand stone-very
fine-poor porosity-
256-321 Dark massive type
Shale-some thin
sand streaks.
321-324 Hard Limy Basal
Sand -ropy pits
inbedded-
324-443 Dark grey sand-
variable-excellent
porosity
443-460 Dark Shale-with
lenses of Dark
Grey Sand and
Brown Clay streaks.
T.D.

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

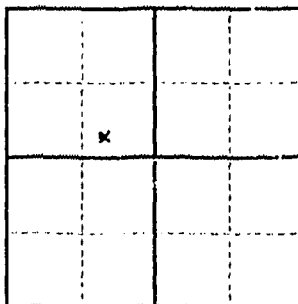
DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Owner: Thomas D. Thompson Address: Win. Greder, Mont.Driller: Munson Drilling Co. Address: Grass Range, Mont.Date of Notice of appropriation of groundwater: Not applicableDate well started: Aug. 24-'68 Date completed: Sept. 4-'68Type of well: Drilled Equipment used: Rotary
(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)
12 3/4"	85# 0.0.	0	22	22# 18. Black		
8"	4 1/2 0.0.	22	276	8.9# 18. Black		
6 3/4"	23# 0.0.	276	460			
3 7/8"		256	460	J 55.	324	443

Static Water Level for non-flowing well
12.0 feet.

Shut-in Pressure for Flowing Well

Pumping Water Level 19.0 feet
at 10 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested: pumpingLength of Test: continuous

Remarks: (Gravel packing, cementing, pack-

ers, type of shutoff) SurfaceSE 1/4 NW Sec 25 T. 21 R. 18
Indicate location of well and place of use, if possible. Each small square represents 40 acres.Packer Set @ 192' Cemented
Casing Cemented
Enter casing run with L-192' Cemented

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).

460 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.

26
Driller's License NumberDriller's Signature
B. M. Munson

44.875

File No. 17826

DUPLICATE

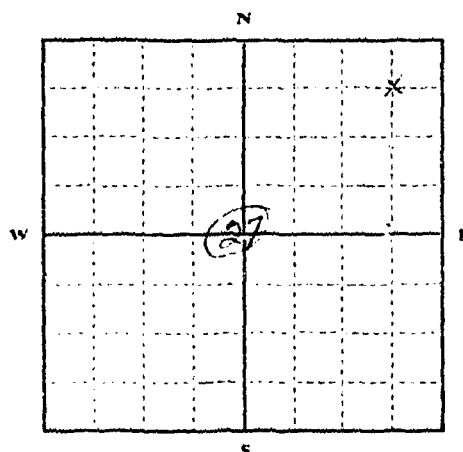
T. 21 N. R. 18
County FergusSTATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

JAN 3 1964
STATE ENGINEER

and
 We, Robert J. Heggen / Betty C. Hoggen, Box 314 Winifred
 (Name of Appropriator) (Address) (Town)
 County of Fergus State of Montana
 have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

NE $\frac{1}{4}$ Sec. 27, T. 21, R. 18

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. on domestic use and also for livestock water
3. Date or approximate date of earliest beneficial use; and how continuous the use has been. Continuous use since October, 1954.
4. The amount of groundwater claimed (in miner's inches or gallons per minute). 5 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. used to irrigate lawn and garden and flowers in and around the house
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal. electric pump
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. drilling started and completed in the first week of October, 1954.
8. The depth of water table. 21' from 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 drilled 100' deep. Tested at 5 gallons a minute. Cased with 100' 53/16 ID and 54 OD 9 1/2 foot casing; sealed with anchor packer.
10. The estimated amount of groundwater withdrawn each year. Unknown
11. The log of formations encountered in the drilling of each well if available. 100' in Judith River form. Water at 55 to 65 feet. Water at 79 to 100 feet.
12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record.

Signature of Owner

Betty C. Hoggen
Robert J. Heggen
 Date Robert J. 12/3/63

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.

19266

17830

COPY

State of Montana, } ss.
County of Fergus.

Filed JAN 2 1954 19
at 10:30 o'clock A.M.

Wm. Rathbun
County Clerk and Recorder

200-10

County... Delaware

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 Howard Elbert

Address ... Infred, Montana

Date well started Jan 4, 1971

completed Feb. 17, 1971

Type of well Drilled

(Dup, driven, bored or drilled)

Equipment used Rotary.

(Churn drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☒ Irrigation ☐

Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

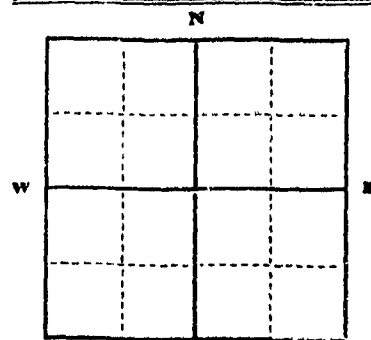
***Describe**

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

and Addition).

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Rind Size	From (Feet)	To (Feet)
5-5/8		Q	400			
	41 OD 4 1/2 ID Below			1/8"	165	185
	7# Galv. gr.			x 4"	190	220
	Steel	4	400	plots	240	400



Static water level47.....ft.*
Pumping water level190.....ft.*
at6.....gallons per minute,
measuredminutes after pumping
began.

*Measured from ground level.
Well developed by Bailing -
for 3 hrs hours Pumping -
Power 48 hrs Pump 3/4 HP
Remarks: (Gravel packing, cementing,
packers, type of shutoff)

SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 28
T. 21 N. R. 18 E. E
S W

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

Driller's Signature

Driller's Address Rte. 2, Box 4 Lewistown, Montana.

LICENSE NO. 19

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)

[illegible]

400' Show exact depth of bottom

50,030

45870

COPY

State of Montana,]
County of Fergus,] ss.
Filed MAR 10 1972
at 12:50 o'clock P. M.
May Little
County Clerk and Recorder

20 pt

File No.

17744

DUPLICATE

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		
0	1	(Elev. above sea level)
1	15	Topsoil
15	25	Yellow clay
25	120	Yellow rock
120	155	Layers of light gray rock
155	160	Sandstone Water
160	165	Brown rock
		Shale

Owner **Howard L. Ehlert** Address **Winifred, Montana**
Driller **George O. Singley** Address **Lewistown, Montana**

Date of Notice of Appropriation of Groundwater

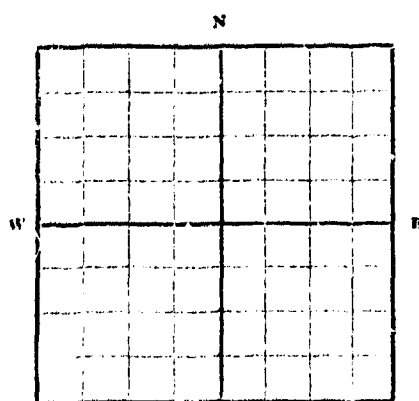
Date well started **May 1, 1962** Date Completed **May 4, 1962**

Type of well **Drilled** Equipment Used **Cable Tool**
(dug, driven, bored or (Churn, drill, rotary or
drilled) 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)
5 3/16	4 1/2 OD Plastic	0	160	Hole 1"	120	160



1/4 Sec. 28 T. 21 N. R. 18 E
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 **50** feet.

Shut-in Pressure for Flowing Well

Pumping Water Level **130** feet at **3** gal. per minute.

Discharge in gal. per min. of flowing well

How Tested **Bailing** 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)

+ save catcher packers set and sealed

19

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.

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.

19187

17744

State of Montana, } ss.
County of Fergus }

COPY

DEC 31 1963

Filed

at 2:30

o'clock P.M.

\$2.00

P.D.

MAY RATHRIN
County Clerk and Recorder

Form No. 18
8-60

T. 21 N R. 18 E
County Augusta

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

Owner Edgar Rehacffer Address Winifred, Montana
Driller George O. Singley Address Lewistown, Montana
Clean out
Date Started November 24, 1961 Date Completed Nov. 28, 1961
Location: Sec. 29 T. 21 N R. 18 E $\frac{1}{4}$ sec. SW $\frac{1}{4}$ SE $\frac{1}{4}$

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

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

Casing: 0 ft. to 100 ft. Type 3 1/2 S Size 10"
Above ground
Casing: 2 ft. to 160 ft. Type 3 1/2 S Size 5"
Casing: _____ ft. to _____ ft. Type _____ Size _____

Perforated or Screened: Ft. 100 to ft. 160 . Ft. _____ to ft. _____

Type of screen or perforations Slots

Static Water level, for non-flowing well: 31 feet.

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

Pumping water level 130 feet at 10 gal. per min.

How tested: Drilling

Length of test 2 hr.

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

Hole drilled August 1943. Driller unknown. Cleaned out and repaired.

(over)

Log of Well

[illegible]

7931

COPY

File No. 17525T. 21 N. R. 18 E.

DUPLICATE

County Fergus

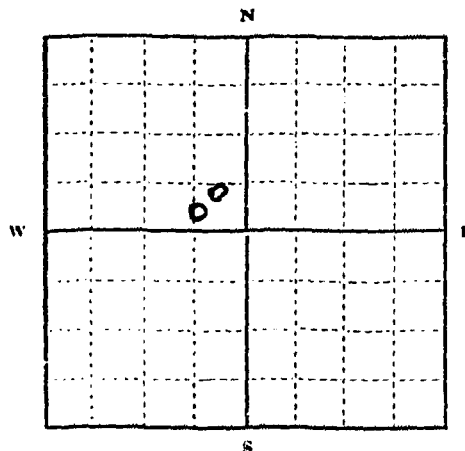
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECORDED
JAN 3 1964

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Ormel Balstad, of Winifred (Name of Appropriator) (Address) (Town)
County of Fergus State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec 30 T. 21 R. 18

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 used for livestock water
3. Date or approximate date of earliest beneficial use; and how continuous the use has been 6-1-1950
used constantly
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 2 wells - 10 gal per min each
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
shallow well electric pump
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater June 1, - 15 1950
8. The depth of water table 20 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
Hand dug wells - 6 ft diam - Depth 20 ft
10. The estimated amount of groundwater withdrawn each year 100,000 gal. each well
11. The log of formations encountered in the drilling of each well if available
Water bearing sand & gravel at 20 ft.
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 Ormel BalstadDate Dec. 23, 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.

18991

17525

State of Montana, } ss.
County of Fergus. }

COP.

Filed DEC 3 1 1963
at 12:00 o'clock P. M.
#200 PL MAY RATHBUN
County Clerk and Recorder

GW

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

File No. 17272T. 21N R. 18E

DUPLICATE

County Fergus

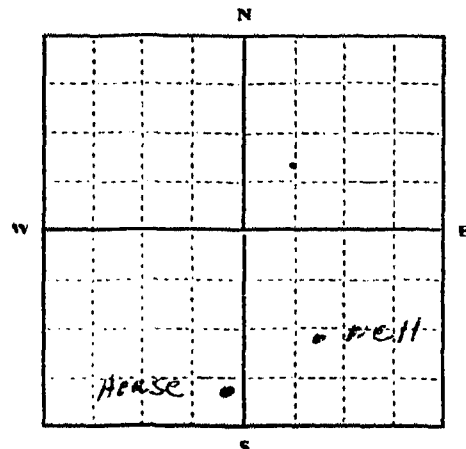
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 2 1964
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. C. B. CARLSTROM, of WINIFRED
(Name of Appropriator) (Address) (Town)
County of FERGUS State of MONT. A.M.P.
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



$5\frac{1}{2}$ $5\frac{1}{2}$
 $\frac{1}{4}$ Sec. 35 T. 21 R. 18

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 Water
3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1913
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 3976
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 NONE USED
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Shallow
well jet Elec. PUMP

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1913
Elec PUMP installed 1956
8. The depth of water table 30 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 Dug well
5 ft Dia. 32 ft Deep
10. The estimated amount of groundwater withdrawn each year 300,000
11. The log of formations encountered in the drilling of each well if available W.N. 202.136 ft
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

C. B. Carlstrom
Date Dec 30 1963

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

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

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

17202

17272

COPY

State of Montana, } ss.
County of Fergus, }

Filed DEC 30 1963

at 12:30 o'clock P. M.

Ernest R. Arthur
County Clerk and Recorder

*2nd pt.

GW

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

File No. 17840

T. 21 N. R. 18 E

DUPLICATE

County Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

R

JAN 3 1964

Declaration of Vested Groundwater Rights

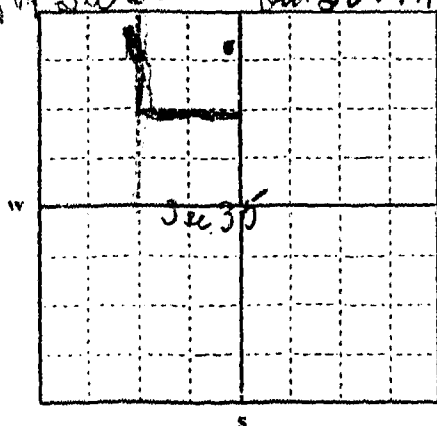
(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Fred W. Cron, of Winnifred
(Name of Appropriator) (Address) (Town)

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

NE 1/4 Sec 25 ~ Out Lot M of Winnifred



NE 1/4 Sec 30 T. 21 N. R. 18 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 & Stock Water
3. Date or approximate date of earliest beneficial use; and how continuous the use has been. 1913 To Present
4. The amount of groundwater claimed (in miner's inches or gallons per minute). Approx 1000 gal Per day
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. Electric Pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. 1913 dug well Original Home site of Palmer

8. The depth of water table. 6 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. 24 ft deep 5 ft diameter Pipe 6 ft from top of ground. Rock Wells in the Bottom. Electric Pump in Pit.

10. The estimated amount of groundwater withdrawn each year. 30000 to 40000

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

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

Signature of Owner

Fred W. Cron

Date

12-31-63

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.

19275

17840

COPY

State of Montana, } ss.
County of Fergus.

Filed JAN 2 1964 19

11:35 o'clock A. M.

Wey Clatthorn
County Clerk and Recorder

\$2.00 pr.

File No. **17526**T. **21** N. R. **26**

DUPLICATE

County.....

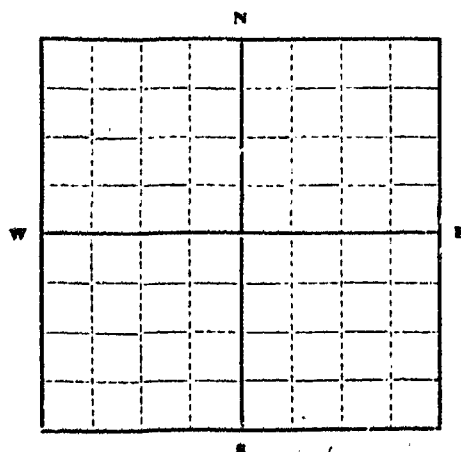
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

RECORDED
JAN 5 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. **26** 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).....
5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof.....
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal.....
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater.....
8. The depth of water table.....
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.....
10. The estimated amount of groundwater withdrawn each year.....
11. The log of formations encountered in the drilling of each well if available.....
12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record.....

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.

18992

17526

COPY

State of Montana, }
County of Fergus. } ss.

Filed. DEC 31 1963 19
at 10:00 o'clock A.M.

13th Od. MAY RATHBURN
County Clerk and Recorder

GROUNDWATER INDEX

Page 1 of 1

County Fergus Twp. 21E Rge. 19E

[illegible]

File No. 18655

DUPLICATE

T. 21 R. 17

County *Fergus*

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER
MAR 19 1964

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground
(Elev. above sea level.....)
0 1 Topsoil
1 38 Sandy shale
38 59 Sandstone Water

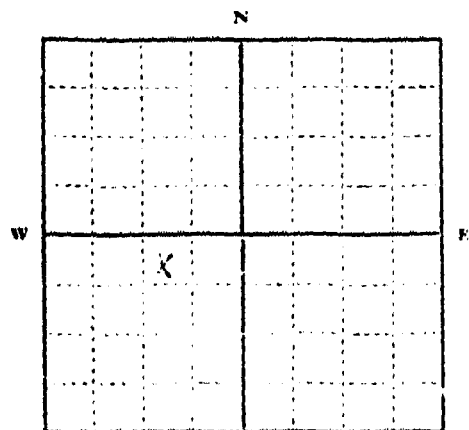
Owner Bob Simms Address Winifred, MontanaDriller George O. Singley Address Lewistown, MontanaDate of Notice of Appropriation of Groundwater NoneDate well started March 7, 1964 Date Completed March 12, 1964

Type of well Drilled Equipment Used Rotary
(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 5/8"	4 1/2" ID 4 1/2" OD 6.7# galv.	0	59	Slots 3"	38	59
	above 8.1'	59				



NE 1/4 Sec. 2 T. 21 R. 17

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 30 feet.Shut-in Pressure for Flowing Well NonePumping Water Level 45 feet at 5 gal. per minute.Discharge in gal. per min. of flowing well NoneHow Tested Air Length of Test 2 hrs.

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

acres irrigated, if used for irrigation).....

Sealed with packer

19

Driller's License Number

George O. Singley
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.

35497

18655

COPY

State of Montana,
County of Fergus, ss.

Filed. MAR 18 1964 19
at 1:25 o'clock P. M.

Wm. Blathum
County Clerk and Recorder

2-25

File No. 16791T. 21 R. 19

DUPLICATE

County Fergus

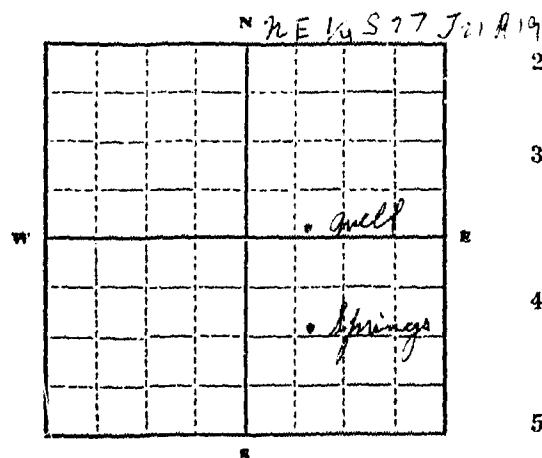
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

RECEIVED
DEC 16 1963
STATE ENGINEER

1. James J. Burnside of Minifed
(Name of Appropriator) (Address) (Town)
County of Fergus State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



S. E. 1/4 Sec. 27 T. 21 R. 19.

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

2. The beneficial use on which the claim is based. Stock
irrigation of lawn and garden
3. Date or approximate date of earliest beneficial use; and how continuous the use has been. about 1922 to present time
well about 1914 to present time
4. The amount of groundwater claimed (in miner's inches or gallons per minute). unspecified
5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof.
not applicable
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal.
pumps
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. about 1914 open well depth about 25 ft
about 4 ft in diameter
8. The depth of water table. 2 ft well 4 to 6 ft springs
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. open well depth about 25 ft and
is about 4 ft in diameter
10. The estimated amount of groundwater withdrawn each year. well about 3,000 springs rev. 200
11. The log of formations encountered in the drilling of each well if available.
does not apply or 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.

Signature of Owner J. J. BurnsideDate Dec 13 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.

9210

16791

COPY

State of Montana, } ss.
(County of Fergus)

Filed.....DEC. 13 1963 19
at 2:25 o'clock P. M.
May Rollins
County Clerk and Recorder

2nd fl.

GROUNDWATER INDEX

Page 1 of 1

County Fergus Twp. 21st Rge. 20 E

[illegible]

Form No. 18
8-60

T. 21 N R. 20 E
County Fergus

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

Owner Russell Whitmore Address Winifred, Montana
Driller George W. Winkley Address Lewistown, Montana
Date Started Dec. 1, 1961 Date Completed Dec. 4, 1961
Location: Sec. 18 T. 21 R. 20 $\frac{1}{4}$ sec. SW $\frac{1}{4}$ - SW $\frac{1}{4}$

Type of well Drilled Equipment used Cable Tool & Rotary Comb.
(Dug, driven, bored, or drilled) (Churn, drill, rotary, other)

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

Above ground

Casing: 2 ft. to 113 ft. Type S & S Size 5 - 3/16 O.D.

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

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

Perforated or Screened: Ft. 85 to ft. 108 . Ft. _____ to ft. _____

Type of screen or perforations Slots

Static Water level, for non-flowing well: 15 feet.

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

Pumping water level 30 feet at 2 gal. per min.

How tested: Drilling 7/10/61

Length of test 1 hr.

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

Cave catcher placed set above perforations

(over)

Log of Well

[illegible]

copy

7563

File No. 01615

DUPLICATE

T21N R20E 22

County Jay

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER DEC 2 1964

Top of Ground
0 to 15 (Elev. above sea level KNOWN)
15 to 61 SOIL WASH
61 to 263 SILTY Sand + carbonaceous STRIPS
263 to 266 SILTY Sand + Green Shale
266 to 279 Coal
279 to 284 Benetic Sand
284 to 292 Hard Sand - Iron pyrites
292 to 324 SILTY Sand
324 to 331 Benetic SILT
331 to 338 Benetic Sand
338 to 352 Hard Cap Rock
352 to 361 Sand (fair porosity) water
361 Benetic SILT
Carbonaceous STRIPS

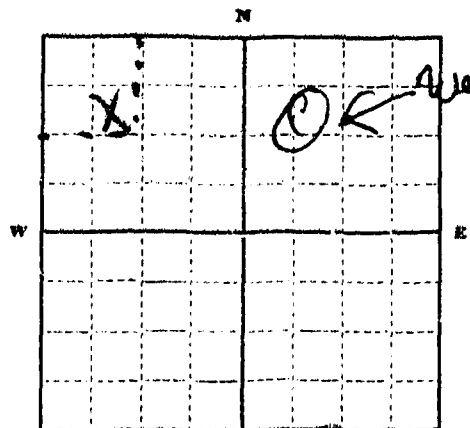
Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner E.E. Ward Address Winifred, Mont.
Driller MUNSON Drilling Co. Munsion Address Shaw Range, Mont.
Date of Notice of Appropriation of Groundwater (Not applicable)
Date well started Oct 9-1964 Date Completed Oct 16-1964
Type of well drilled Equipment Used Rotary
(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		
5 5/8	8.9 #4 1/2 AD	0	342	Kind Size	From (Feet)	To (Feet)
				Req.	334	342
					Balance	
					Open thro.	
					Water Sand	
					to TD.	



N 1/4 Sec 22 T12N R20E
Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.

361' T.D.

Static Water Level for non-flowing Well 175 feet.

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

Pumping Water Level 252 feet at 2 3/4 gal. per minute.

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

How Tested pumping Length of Test continuous

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)

Cave Catcher type packer @ 200'
Cave Catcher type packer @ 20' and
Cemented to Top.

26

Driller's License Number

B. M. Munson
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.

38192

21646

COPY

State of Montana,
County of Helena.

Filed DEC 23 1964

at 11:00 o'clock A.M.

Wray G. Galt
County Clerk and Recorder

220pt

GROUNDWATER INDEX

Page 1

County Fergus Twp. 21N Rge. 21E

[illegible]

File No.

11510

T. 21

R. 21

DUPLICATE

(Very Faulting Area)

County

Judith

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

DEC 20 1964

Notice of Completion of Groundwater
Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

1-11 Surface
11-35 (Elev. above sea level)
103 Shale - Collision Shield layers
517 Silty Shale (gaseous)
600 SILTY Sand + Shale - Hard STR-125
603 Lite grayish sand (H₂O)
670 SILTY grayish sand
Hard strata of SILTstone
728 Cauchy - SILTY Sand
821 Grayish SILTY Sand
831 Dark gray sand (H₂O)
889 Grayish sand - Hard layers
861 Grayish sand - SILTY
919 Hard sand STR-125 to Shale
983 Sandy Shale
991 Brown limo + sand STR-125
1009 SILTstone - Green sand (TYPE)
1036 Shale + sand
1047 Sand Shale
1049 Hard - Calcite + sand
1056 Dark SILTY green sand
1078 Bentonite + Shale
1168 Shale + Bentonite
20 yds T.O.

Owner E. E. Ward

Address

Winnifred

Driller MUNSON DRG. Co.

Address

Grass Range, Mont.

Date of Notice of Appropriation of Groundwater

NOT Applicable

Date well started

Sept. 24 - 1964

Completed

OCT 24 - 1964

Type of well

Drilled

Equipment Used

Rotary

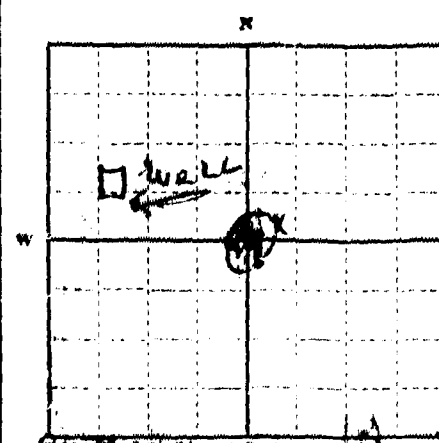
(dug, driven, bored or drilled)

(Churn, drill, rotary or other)

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

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
9"	7.00, 21"	0	106			
5 1/2"	4.50, 9.8"	0	84	Gun perfor	600	603
3 7/8"	drilled	84	1168		829	839



547 N 19
82 1/2 Sec 20 T 21 R 21
Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.

MCCULLOUGH TOOL CO. - Casper, Wyo.
Adm Gamma Ray Correlation 209
Gun perforated 600-603' and 829-839'

Static Water Level for non-flowing Well 289 feet.

Shut-in Pressure for Flowing Well Draw down @ 800 ft.

Pumping Water Level 860 feet at 1 1/2 gal. per minute.

Discharge in gal. per min. of flowing well.

How Tested Balancing pump Length of Test Continuous

Remarks: Surface cemented - Long string cemented

(Gravel packing, cement 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) Full string.

Used standard casing jets

Correlation 2095 on porosity

(a) Zones - 600-603' & 829-839'

Driller's License Number 26

B. M. Munson
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.

38791

21645

COPY

State of Montana } ss.
County of Fergus }

Filed DEC 23 1964 19

at 11:00 o'clock A.M.

Wesley R. Patton
County Clerk and Recorder

* 2nd pr

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 Ervin Smith

Address Sulfolk, Montana

Date well started July 1, 1970 GW 1

completed July 9, 1970

Type of well Drilled

(Dug, driven, bored or drilled)

Equipment used Rotary

(Chain drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☒ Irrigation ☐

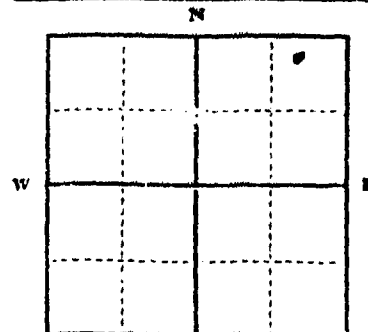
Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*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).

ESTIMATED ANNUAL WITHDRAWAL Not applicable

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS
7-7/8 4-3/4	2" galv.	0	25	Kind Size
		25	808	2 x 3" slots
		above gr. 1'	800	From (Feet)
				To (Feet)



Static water level None ft.*
Pumping water level None ft.*
at None gallons per minute,
measured --- minutes after pumping
began.

*Measured from ground level.

Well developed by ---

for --- hours.

Power --- Pump --- HP

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

Artesian Flow--cemented

26 1/4 Sec. 30

T. 21 N. R. 21 E.
S. W.

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

Driller's Signature [Signature]

Driller's Address Rte. 2, Box 4

Lewistown, Montana 59457 LICENSE NO. 19

County Fergus

DRILLER'S LOG 30

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.

From (Feet)	To (Feet)	
0	18	Surface Drift
18	170	Bear Bay Shale
170	285	Judith River formation Sandstones
285	286	Extremely hard rock
286	298	Variated shale
298	301	Coal
301	310	Brown and gray variated shale
310	312	Coal
312	321	Brown shale
321	475	Layers of rock and shale
475	476	Hard sandstone
476	510	Shale variated
510	511	Hard rock
511	527	Sandstone
527	545	Sandy shale
545	555	Sandstone
555	557	Dark brown shale
557	558	Sandstone hard
558	576	Sandstone
576	579	Hard silicate sandstone
		Water
579	595	Sandstone
595	608	Variated shale
608	609	Sandstone
609	653	Variated shale
653	710	Sandstone, Water
710	719	Extremely hard rock
		Water
719	750	Sandstone
750	751	Hard rock
751	777	Sandstone, Water
777	778	Hard rock, Water
778	800	Sandstone, Water
800	808	Shale

808 Show exact depth of bottom

77243

40116

COPY

State of Montana, } ss.
County of Fergus }

Filed JUL 27 1970

at 1:25 o'clock P.M.

My Rott
County Clerk and Recorder

920 p.d.

GROUNDWATER INDEX

Page 1 of 1

County Fergus Twp. 21 N Rge. 22 E

[illegible]

File No. **8624**

DUPLICATE

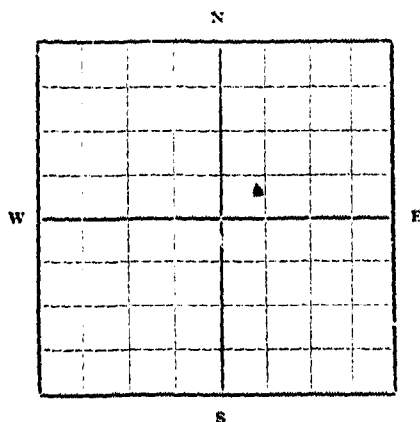
T. **21** R. **22**County **Fergus**

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. **Russell R. Murray** of **Box 376** **ROY**
(Name of Appropriator) (Address) (Town)
County of **Fergus** State of **Montana**
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW 1/4 NE 1/4 Sec 23 T21 R22

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

2. The beneficial use on which the claim is based **Stock water and home use**
3. Date or approximate date of earliest beneficial use; and how continuous the use has been **Sept 30th 1951**
continuous
4. The amount of groundwater claimed (in miner's inches or gallons per minute) **3 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 **used for our garden**
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal **Artesian**
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater **Completed Sept 30th 1951**
started work before
8. The depth of water table **370 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 **Artesian, Drilled**
10. The estimated amount of groundwater withdrawn each year **Approximately 4,000 gal**
11. The log of formations encountered in the drilling of each well if available **1 to 40' terrace gravel, 40 to 300 ft broken quartzite formations, 300 ft to 370 ft broken sandstone & bentonite & water sand good 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 **I don't know of any**

Signature of Owner

Russell R. Murray
Date **2-2-62**

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.

1484

8624

COPY

State of Montana } ss.
County of Fergus }
Filed FEB 15 1962
at 4:00 o'clock P. M.
May Rathbun
County Clerk and Recorder

\$20.00

Form No. 18
8-60

T. 21 R. 22 E
County Fergus

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

32
RECEIVED

WATER WELL LOG

STATE ENGINEER

Owner Joe D. Komarek Address Ray
Driller Wellman & Munson Address Grass Range
Date Started May 22-61 Date Completed May 25-61
Location: Sec. 32 T. 21 R. 22 $\frac{1}{4}$ sec. S.W. of NE

Type of well Drilled Equipment used Rotary
(dug, driven, bored, or drilled) (churn, drill, rotary, other)

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

Casing: 0 ft. to 100 ft. Type Steel Size 4 1/2

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: _____ feet.

Shut-in pressure, for flowing well: approx 30 lb./sq. in. on: 5/25/61
(date)

Pumping water level _____ feet at _____ gal. per min.

How tested: _____

Length of test _____

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

Formation shut off with shoe & cemented

(over)

Log of Weil

Depth, feet		Description of Material Drilled
From	To	
7	14	Surface gumbo
14	18	gravel conglomerate
18	21	Bentonite sand
21	60	" "
60	64	Hard rock
64	105	Bentonite sand
105	107	Hard rock
107	125	Bentonite sand
125	130	shaly sand brown
130	140	Bentonite sand
140	149	shaly sand Hard
149	152	Coal
152	166	Bentonite sand
166	168	Coal
168	200	Bentonite sand
200	240	Brown shaly sand
240	260	Bentonite sand
260	277	" "
277	279	Hard Rock
279	281	Sand good porosity (water)
281	294	Sand tight

6100-PL
 15.00
 MAY 31 1961
 P. M.
 19

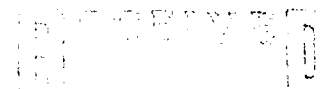
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COB

Form No. 18
8-60

T. 21 N R. 22 E
County Fergus

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana



WATER WELL LOG

STATE ENGINEER

Owner Joe D. Komarek Address Boz - Mont.
Driller Wellman & Munson Address Grass Range Mont.
Date Started June 1 - 61 Date Completed June 5 - 61
Location: Sec. 32 T. 21 R. 22 $\frac{1}{4}$ sec. SW $\frac{1}{4}$ NE $\frac{1}{4}$

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

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

Casing: 0 ft. to 100 ft. Type 11 lb. steel pipe Size 4 1/2

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: _____ feet.

Shut-in pressure, for flowing well: approx 20 lb./sq. in. on: 6/3/61
(date)

Pumping water level _____ feet at _____ gal. per min.

How tested: _____

Length of test _____

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

Cemented

(over)

Log of Well

State of Michigan,)
County of Wayne)
ss.)
Filed) JUL 31 1961
at 1:30)
O'Leary, M.
My O'Leary
County Clerk and Recorder

copy

GROUNDWATER INDEX

Page 1 of 1

County Fergus

Twp. 2170

Rge. 73 E

[illegible]

T. 21 N. R. 23 E. 18
County: Fergus

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

			X

Owner: Russell Murray Address: Ky. Mont.
Driller: H. L. Hume & W. Hume Address: Spearhead, Mont.
Date Started: July 24-61 Date Completed: July 30-61
Location: Sec. 18 T. 21 R. 23 E. 1/4 sec. NE 1/4 SE 1/4

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

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

Casing: 0 ft. to 4.5 ft. Type: Steel Pipe Size: 1 1/2
Casing: 4.5 ft. to 26.6 ft. Type: Galvanized Size: 2
Casing: _____ ft. to _____ ft. Type: _____ Size: _____

Perforated or Screened: Ft. 23.2 to ft. 26.6 Ft. _____ to ft. _____
Type of screen or perforations: 1/4" x 1/4" mesh

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

Shut-in pressure, for flowing well: approx 20 lb./sq. in. on: 7/30/61 (date)

Pumping water level: _____ feet at _____ gal. per min. 1

How tested: _____

Length of test: _____

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

Log of Well

Depth, feet		Description of Material Drilled	at	of	County of	State of
From	To					
0	10	Surface soil	9.30	Nov 7	1961	19
10	15	gravel				
15	40	shale				
40	42	carbonaceous				
42	75	fine sand				
75	84	shale				
84	94	hard sandstone				
94	97	fine sand				
97	104	hard sand				
104	109	fine sand				
109	110	carbonaceous				
110	137	fine sand				
137	140	hard sand				
140	156	fine sand				
156	160	fine sand				
160	164	carbonaceous				
164	184	brown shale				
184	187	fine sand				
187	204	fine sand				
204	226	shale brown				
226	247	fine sand				
247	251	hard sand rock				
251	255	Sand good quality (water)				
255	266	Sandy bentonite				

Filed
 NOV 7 1961
 at 9.30 o'clock A. M.
 May DeLong
 County Clerk and Recorder

COPY

7374

File No. 8625

DUPLICATE

T. 21 N. R. 23 E.

County *Fergus*

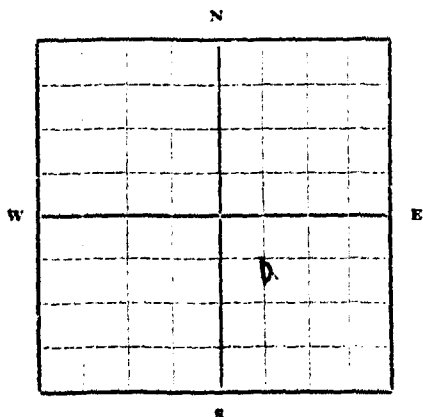
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. *Russell L Murray* of *Box 386* *Poy*
(Name of Appropriator) (Address) (Town)
County of *Fergus* State of *Mont*
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



MM 4 SE 1/4 Sec. 18 T. 21 R. 23 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 *Stock water and household use*
3. Date or approximate date of earliest beneficial use; and how continuous the use has been *July 30 - 1961 Continuous*
4. The amount of groundwater claimed (in miner's inches or gallons per minute) *1/2 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 *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 *Artesian S 18 T 21 R 23 E*
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater *Completed July 29 - 1961 Commencement July 7 - 1961*
8. The depth of water table *266 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 *Artesian Drilled (Casing) 266 ft Casing 4" 43 ft 2' galvanized 219 ft*
10. The estimated amount of groundwater withdrawn each year *107,000 gal*
11. The log of formations encountered in the drilling of each well if available *Surface soil, gravel, shale, bentonite sand, hard sandy shale, hard sand, Hard sand rock, Sandy, Contrite.*
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 *I don't know of any*

Signature of Owner

Date

Russell L Murray
2-8-62

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.

8625

COPY

State of Minnesota, } ss.
County of Fergus }

Filed FEB 15 1962 19
at 4:00 o'clock P. M.
Mary Rothman
County Clerk and Recorder

#2 W. pd

GW 2

Approved Stock Form—State Publishing Co., Helena, Montana—46905

File No.

T21N R 23E

DUPLICATE

County Fergus

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARD

Top of Ground

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

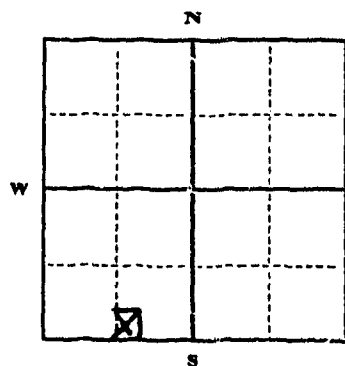
**Notice of Completion of Groundwater
Appropriation by Means of Well**
DEVELOPED AFTER JANUARY 1, 1962

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

Owner Dan Cimrhakl Address Roy, Montana
Driller Munson Drilling Co. Address Grass Range, Mont
Date of Notice of appropriation of groundwater Not applicable
Date well started 2/1/67 Date completed 2/29/67
Type of well Drilled Equipment used Rotary
(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)
13 3/4"	8 7/8" 2.8 1/4"	0	60	Cemented	0	60
6 1/4"	4 1/2" OD 9.8 1/4"	60	1612	Cemented	1400	1612
3 7/8"	2 3/8" OD 5 1/4"	1612	1868	regular	1638	1695
		1575	1868	regular	1755	1780



Static Water Level for non-flowing well

feet. approx 90 ft

Shut-in Pressure for Flowing Well

Pumping Water Level.....feet

at.....gal. per minute.

Discharge in gal. per min. of flowing well

130 gal/min

How Tested.....

Length of Test.....

Remarks: (Gravel packing, cementing, pack-

crs, type of shutoff) Long stringof 4 1/2" O.D. casing cementedthrough float shoe onbottom using mudplug and a rubber plug.

(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

B.M. Munson
Driller's Signature.

41816

See
Attached
Copies
for
logs

SW 1/4 SE 1/4 SW 1/4 Sec 22 T21N R 23E
Indicate location of well and place of use, if possible. Each small square represents 40 acres.
SW 1/4 SE 1/4 SW 1/4 Sec 22 T21N R 23E
of 4 1/2" O.D. casing cemented
through float shoe on
bottom using mud
plug and a rubber plug.

29140

COPY

State of Indiana,
County of Elkhart

Filed MAR 22 1967

12:30 o'clock P.M.

May Rathbun
County Clerk and Recorder

22nd

STATE WATER CONSERVATION BOARD
MAR 23 1967

Bike
Ba
Cott
Derrin
Dicker
Sullivan

\$5604.00

STATEMENT

Don Clarbuckl Well No. 1
1868 feet drilled

20' of 8 5/8 28 1/2/ft.

1022' of 4 1/2" C.D. 9.8 4/ft.

293' of 2 3/8" 9.8 4/ft.

\$3.00 per/ft

\$3.00 per/ft.

STATEMENT

Dan Cimrhakl Well No. 1

1868 feet drilled	\$3.00 per/ft	\$5604.00
60' of 8 5/8 28#/ft.	\$3.00 per/ft.	180.00
1622' of 4 1/2" C.D. 9.8 #/ft.	1.55 per/ft	2514.10
293' of 2 3/8" J55 Tubing		\$ 322.30
at 1.10 per/ft.	-----	\$-8750-
50 sacs type 2 cement	\$1.75 -----	\$ 87.50
Lines tree -----	\$1.00 -----	\$ 15.00
Cementing through mud pump		
Float shoe - Rubber plug-		
Drilling out plug -----		\$315.00

TOTAL EXPENSE

\$9037.80

STATE WATER CONSERVATION BOARD

MAR 23 1967

By _____
 B. _____
 C. _____
 D. _____
 Dickert _____

Fergus County Roy, Montana

0 to 558 Marine dark clay shale
558 - 561 Bentonitic sand sandy shale lignite layers
561 - 625 Bentonitic sand
625 - 628 Coal
628 - 690 Bentonitic sand sand streaks
690 - 701 Hard limey sand
701 - 780 Bentonitic sand
780 - 811 Salt & pepper sand
811 - 970 Bentonitic sand hemitite layers
970 - 1194 Bentonitic sand interbedded light colored sandstone sandy shale
1194 - 1609 Marine shale bentonite streaks becoming shale and sandy shale
1609 - 1612 Hard limey sand
1612 - 1638 Sand & hard streaks of sandy lime
1638 - 1695 sand (started flowing 30 gals./min. at 1640) fair porosity
1695 - 1701 Coal
1701 - 1728 Brown lignitic nodular sandstone to white
1728 - 1755 Friable Sand hard lime streaks
1755 - 1780 Salt & pepper sand (good porosity) Well increased to 130 gals. / min. flowing
1780 - 1783 Hard sandy lime
1783 - 1790 Sand shale streaks
1790 - 1844 Sand shale streaks bentonite
1844 - 1868 Sand shale streaks T.D.

Bearpaw Approximately 0 to 561
Judith River 561 to 1194
Claggett 1194 to 1609
Top of Eagle 1609 on

DAN CIMRHAHL Well SW₄ SE₄ SW₄ Sec. 22 R23E T21 N

Roy, Montana Drilled by Munson Drilling Co.
Grass Range, & Winnett. Mont.

File No.

MONTANA WATER RESOURCES BOARD

T. 21 - N. R. 23 - E

DUPLICATE

RECEIVED

County Langford

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)

0-18 Blk. shale
18-27 Light grey clay (sand, gravel)
27-112 Blk. sh.
112-114 fine greenish sandstone
114-116 med. hard s.s. stone
116-222 Sand to med. hard s.s.
222-223 X hard grey s.s.
223-238 fine light grey s.s.
238-195 Blk. sh. w. sandstone
195-197 Hard coal
197-111 Brown shale
111-212 med. hard s.s.
212-235 med. soft fine grey s.s.
235-269 fine light grey s.s.
269-277 fine med. soft grey s.s.
277-289 Hard light grey s.s.
289-291 X hard s.s.
291-299 med. hard grey s.s.
299-298 Hard grey shale rock
298-306 fine brown sh.
306-308 Hard rock
308-325 Brown sh. w. light s.s. sh.
325-393 Light blue sh. w. sandstone
393-427 Light blue sh. w. sandstone
427-462 med. soft fine s.s. w. hard sh.
462-469 Light blue sh. w. sandstone
469-474 Blue med. soft s.s. sh.
474-487 Hard light grey sh.
487-509 Sand grey to brown sandy
sh. to greenish grey
509-512 unconsolidated grey s.s.
s.s. w. sandstone
512-522 Light blue to brown sh.
522-532 med. hard sharp s.s.
w. soft sh.
532-561 Blue sandstone
561-581 Sandy grey sh. to coal
581-583 X hard fine grey s.s.
583-598 fine sandy green sh.
598-610 Sand med. hard grey
sandy sh.
610-646 Black sh.

Owner B. J. M. Address Leviathan
Driller Alvin Waterwell Dr. Address Blanchette, Mont.

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

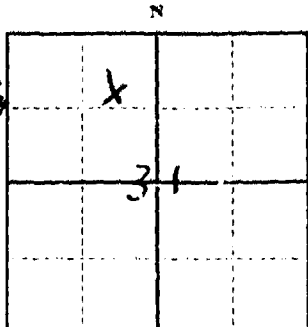
Date well started 6-17-66 Date completed 6-23-66

Type of well Drilled Equipment used Rotary
(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 1/4"	4" X 11"	-1	646	50-50	469	474
					520	561
					572	583



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

Shut-in Pressure for Flowing Well 1014.

Pumping Water Level.....feet

at.....gal. per minute.

Discharge in gal. per min. of flowing well

3-928

How Tested.....

Length of Test.....

Remarks: (Gravel packing, cementing, pack-

ers, type of shutoff)

Rubber-Packer @456' + 519'Cement Grout 430-956

(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, three copy to be retained by driller.

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

Driller's License Number

Driller's Signature

42.564

31128

COPY

State of Montana,
County of Fergus.

NOV 24 1967

Filed

1:25

clock P. M.

Gray Cathlamet
County Clerk and Recorder

2nd pd

Page 1 of 1

County Fergus Twp. 21 N Rge. 24 E

[illegible]

Form No. 18
8-60

Husky Ridge ZINZUEBRO

6

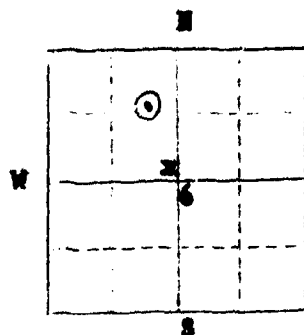
T. 21 N R. 24E
County FERGUS

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED

WATER WELL LOG

STATE ENGINEER



Owner Montana Highway Department Address Helena, Montana
Driller Cecil Clements, Mont. Hwy. Dept. Address Helena, Montana
Date Started August 12, 1959 Date Completed Oct. 17, 1959
Location: Sec. 6 T. 21 N. R. 24 E $\frac{1}{4}$ sec. 3-4 BBD

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

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

Casing: top wall 0 ft. to 97 ft. Type black iron Size 4"

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

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

Perforated or Screened: Perforated Ft. 0-bottom to ft. 141'2" Ft. 141'2 to ft. 320' top wall

Type of screen or perforations perforations in pipe

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

Shut-in pressure, for flowing well: 24 lb./sq. in. on: October 17, 1959
(date)

Pumping water level _____ feet at _____ gal. per min. 3 1/2

How tested: Pressure gauge

Length of test _____

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

(see reverse side)

Packer at 175.0' - rubber with stainless steel bands, well cemented with Type 3 cement

around 2" pipe to the packer. 4" casing cemented in from 94' to 97' at bottom of 4" pipe.

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0'	4'	Fine, brown sand
4'	17'	Damp, brown, Bear Paw shale
17'	30'	Brown sandy clay
30'	32'	Damp, Bear Paw shale
32'	64'	Hard, dry, gray shale
64'	71'	Soft strata
71'	97'	Hard, dry, gray shale
97'	117'	Bottom of 4" casing—hard dry gray shale
117'	118'	Hard, gray sandstone (1' thick)
118'	121'	Soft gray sandstone
121'	138'	Hard, gray shale
138'	155'	Medium hard, light gray, sandy shale
155'	163'	Hard, gray, sandy shale
163'	170'	Hard, gray sandstone
170'	180'	Rubber packer 4' long, top of perforated 2" pipe
180'	183'	Soft strata, gray clay with some Iron Pyrites
183'	195'	Medium hard, light gray sandstone
195'	265'	Soft, gray sandstone
265'	276'	Hard, gray sandstone
276'	283'	Soft, gray sandstone
283'	287'	Hard, gray sandstone
287'	304'	Soft, gray sandstone
304'	304'	Original hole before cleaning
304'	305'	Bottom hole in soft, gray sandstone
305'	314'	Very hard, gray sandstone
314'	316'	Bottomed hole in hard, gray sandstone

4159

13

17-1959

County Fergus

Butte, Montana

sec. 13

Owner R. L. G. ... Address ... Mont.
Driller Hilman's Men Management Address Mass. St., Mont.
Date Started April 1957 Date Completed May 1957
Location: Sec. 10 T. 21 N R. 24 E 1/4 sec. Smt S. & BAC

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

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

Casing: Surface ft. to 302 ft. Type 6.5" cd 25 lbs Size 6" I.D.

Casing: 302 ft. to 601 ft. Type 7.5" cd 40 lbs Size 4" I.D.

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 42.5 to ft. 44.6 Ft. 55.7 to ft. 6.0

Type of screen or perforations. $\frac{1}{4}$ " x 6" - 6" rectangular cutting tool

Static Water level, for non-flowing well: feet

Shut-in pressure, for flowing well: 0.4169 lb. sq. in. on: 11.7 (date) 12.59

Pumping water level..... feet at gal. per min.....

How tested:...

Length of test.

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

December 4, 1961

CC
O
C
W
C

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
1	20	Sandstone & shale
20	40	Sandstone & shale
40	285	Shale & sandstone - sandy at top
285	290	Carbonaceous shale
290	292	Coal
292	380	Sandy shale
380	387	Salt & pepper sand (coal)
387	418	Sandy limestone
418	422	Hard cap rock
422	452	Salt & pepper sand (water)
452	555	Shale & sandstone - sandy at top
555	561	Hard sandstone
561	576	Salt & pepper sand (water - a thin flow)
576	582	Hard sand & lime
582	591	Red sand (fine & increased)
591	601-T.D.	Sandy shale & limestone

Shot of Rocking
 Casing at 100 ft.
 P.D. 12 1959
 4:00 P.M.
 DORIS L. MANE
 County Clerk and Recorder
 By Mary R. [Signature]
 5044.

96943 COPY