



32

T. 31 N R. 12 E

County Hill

MONTANA BUREAU OF MINES AND GEOLOGY  
Butte, Montana

RECEIVED  
APR 18 1961

WATER WELL LOG

STATE ENGINEER


Owner Melvin Tew Address Gildford, Montana

Driller Lloyd G. Hanberg Address Box Elder, Montana

Date Started April 15, 1961 Date Completed April 17, 1961

Location: Sec. 32 T. 31 R. 12 1/4 sec NW 40 of NW 1/4

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

Water use: Domestic  Municipal  Stock  Irrigation   
Industrial  Drainage  Other: \_\_\_\_\_

Casing: 0 ft. to 76 ft. Type 10.50 Size 6" O. D.

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size \_\_\_\_\_

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size \_\_\_\_\_

Perforated or Screened: Ft. 67 to ft. 77 Ft. \_\_\_\_\_ to ft. \_\_\_\_\_

Type of screen or perforations slot

Static Water level, for non-flowing well: 25' from surface feet.

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

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

How tested: Bailer

Length of test \_\_\_\_\_

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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Melvin Tew

(over)



DOCUMENT NO. 3 83604

MELVIN TEW

TO

THE PUBLIC

WATER WELL LOG

STATE OF MONTANA, )  
COUNTY OF HILL ) ss.  
*Filed at 9:20 o'clock A.M.*

ON MAY 15 1961

G.C. YEON

COUNTY CLERK

By \_\_\_\_\_

DEPUTY

Fee \$1.00- paid

36	blue shale
38	grey shale, sandy
40	grey sandstone
50	brown shale
54	grey shale
65	blue, sandy shale
67	grey sandstone, water
72	brown shale, sandy
74	grey sandstone
77	well completed

File No. ....

T. 31N R. 12E 35

DUPLICATE

County H111

MONTANA DEPARTMENT OF MINES AND GEOLOGICAL SURVEY

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

Top of Ground AP 117383  
(Elev. above sea-level.....)

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

(Under Chapter 237, Montana Session Laws, 1951)

- 0 - 3 - Surface Soil
- 3 - 10 - Yellow Sandy Clay
- 10 - 12 - Yellow Clay & Rocks
- 12 - 40 - Yellow Clay
- 40 - 45 - Gray Clay
- 45 - 67 - Brown Clay
- 67 - 88 - Sand & Clay
- 88 - 94 - Blue Sandy Clay
- 94 - 100 - Gray Clay
- 100 - 104 - Brown Clay
- 104 - 110 - Blue Sandy Clay
- 110 - 120 - Gray Clay
- 120 - 125 - Clay & Gray Sand
- 125 - 140 - Brown Shale
- 140 - 147 - Brown Shale Sand & Shells - More Water
- 147 - 152 - Gray Shale
- 152 - 155 - Hard Gray Sand & Shells - Water
- 155 - 166 - Gray Shale
- 166 - 174 - Brown Shale
- 174 - 180 - Gray Shale

Owner Kathleen Jacobson Address Kremlin, Montana

Driller Orville Jacobson Address Kremlin, Montana

Date of Notice of Appropriation of Groundwater 4/4/68

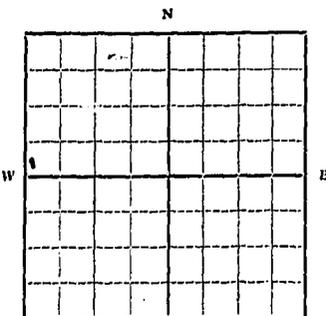
Date well started 1/25/68 Date Completed 2/15/68

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)
8 1/2 - in.	5-9/16 Steel 8 1/2 lbs. per Ft.	1 ft. above Surface	180 ft.	Slot	126	180



SW 1/4 Sec. 35 T. 31N R. 12E

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 120 feet.

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

Pumping Water Level 173 feet at 2 gal. per minute.

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

How Tested Bailer 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) .....

Cemented from 20 ft. to 27 ft. Gravel packed with 3 yards. Washed pea gravel from 60 ft. to 180 ft. Surface cemented

No. 42  
Driller's License Number

Orville Jacobson  
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.

44,054

410988

KATHLEEN NEWLAN. JACOBSON

TO

THE PUBLIC

COMPLETION OF GROUNDWATER  
APPROPRIATION

STATE OF MONTANA )  
COUNTY OF HILL )  
*Filed at 9:40 o'clock a.m.*

ON APR 15 1968

R. E. BLOM

COUNTY CLERK

By \_\_\_\_\_ DEPUTY

FEE: \$2.00 filing paid



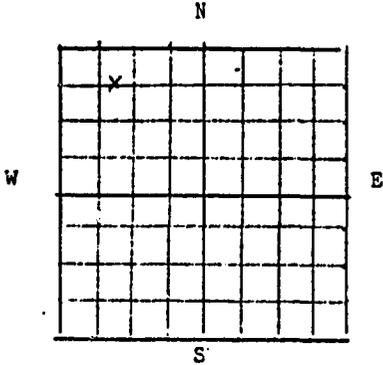
GW  
FILE NO. \_\_\_\_\_

TWP 31 N RGE 13 E COUNTY \_\_\_\_\_

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

DECLARATION OF VESTED GROUNDWATER RIGHTS  
(Under Chapter 237, Montana Session Laws, 1961)

1. Ronald & Norman Jess, of Kearlin  
(Name of Appropriator) (Address) (Town)  
County of Hell, State of Mont.  
Have appropriated groundwater according to the Montana laws in effect prior to Jan. 1, 1962 as follows:



N 31 N 13 Sec 5 T 31 R 13

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

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

3. Date or approximate date of earliest beneficial use; and how continuous the use has been  
1929 - Continuous

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

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  
Pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater  
Dec. 1929

8. The depth of water table  
170

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  
155

10. The estimated amount of groundwater withdrawn each year  
50,000

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

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 Ronald Jess

Date 12-31-63

Three copies to be filed by the owner with the County Clerk & 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 & Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

397170

DONALD & FORAN ET S

TO

THE PUBLIC

DECLARATION OF VESTED  
GROUNDWATER RIGHTS

STATE OF MONTANA, )  
COUNTY OF HILL )  
Filed at 11 o'clock am.

ON DEC 31 1963  
I. E. Blain  
COUNTY CLERK

FEE: 2.00 pd.

RECEIVED

1 1959

MONTANA BUREAU OF MINES AND GEOLOGY  
Butte, Montana

STATE ENGINEER

T. 31 N R 13 E

County HILL

WATER WELL LOG

+			.

Owner H G BAILEY Address MREMLIN

Driller E Olin A E TOWNSEND Address HAYRE

Date Started 10-23-59 Date Completed 10-26-59

Location: Sec. NW T. 31 R 13 1/4 sec. 6

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

Water use: Domestic  Municipal  Stock  Irrigation

Industrial  Drainage  Other: \_\_\_\_\_

Casing: 0 ft. to 157 ft. Type SPANG Size 5 1/2

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size \_\_\_\_\_

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size \_\_\_\_\_

Perforated ~~screened~~: Ft. 140 to ft. 157 Ft. \_\_\_\_\_ to ft. \_\_\_\_\_

Type of screen or perforations 1/4 x 2" 1 PER FT

Static Water level, for non-flowing well: 102' feet.

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

Pumping water level 155' feet at 2 1/2 gal. per min.

How tested: BALER

Length of test 2 HRS.

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

(over)



T. 31 N R. 13 E 7

County: Hill

ERNEST O. LEE, DRILLING  
1200 3RD STREET HAVRE

RECEIVED

WATER WELL LOG

STATE ENGINEER

	x		

Owner: Richard G. Yount Address: Kremlin, Montana  
 Driller: Herbert Freier Address: 281 N State St., Havre  
 Date Started: September 13, 1961 Date Completed: September 14, 1961  
 Location: Sec. 7 T. 31 N R. 13 E 7 sec. SW 1/4 of Section 7.

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

Water use: Domestic  Municipal  Stock  Irrigation   
 Industrial  Drainage  Other: \_\_\_\_\_

Casing: 0 ft. to 75 ft. Type: Spang-seamless Size: 6 5/8" OD

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type: \_\_\_\_\_ Size: \_\_\_\_\_

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type: \_\_\_\_\_ Size: \_\_\_\_\_

Perforated or Screened: Ft. 30 to ft. 74 Ft. \_\_\_\_\_ to ft. \_\_\_\_\_

Type of screen or perforations: 1/4" X 5" Perforations

Static Water level, for non-flowing well: 21 feet

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

Pumping water level: 65 feet at 10 gal. per min.

How tested: Baler

Length of test: 1 1/2 hours

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

Gravel packed outside of casing for entire depth of well with 3/4" gravel.

*Richard G. Yount*

(over)





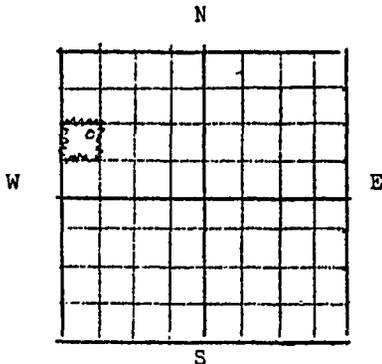
GW 4  
FILE NO. \_\_\_\_\_

TWP 31<sup>N</sup> RGE 13<sup>E</sup> 13  
COUNTY DEERBOLT  
JAN 10 1963

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. Richard M. Hurd, of KREMlin (Town)  
(Name of Appropriator) (Address)  
County of Hill, State of MONTANA  
Have appropriated groundwater according to the Montana laws in effect prior to Jan. 1, 1962 as follows:



NW 1/4 Sec 13 T 31 R 13

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  
Domesticated Farmstead

3. Date or approximate date of earliest beneficial use; and how continuous the use has been  
Started use 1926  
Used continuous until 1946

4. The amount of groundwater claimed (in miner's inches or gallons per minute)  
.25 gal/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  
None

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal  
Wind mill pump  
deep well cylinder  
NW 1/4 13 31 13

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater  
Started 1925 - completed 1926  
To be used 1944

8. The depth to water table 180'

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater  
Drilled 6" 250' deep

10. The estimated amount of groundwater withdrawn each year 36,000 gal

11. The log of formations encountered in the drilling of each well if available  
Clay - Sandstone - Clay - Sandstone  
other than this Stratiography unknown

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

Signature of Owner Richard M. Hurd

Date Dec. 31 1963

Three copies to be filed by the owner with the County Clerk & 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 & Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

397171

RICHARD M. HURD

TO

THE PUBLIC

DECLARATION OF VESTED  
GROUNDWATER RIGHTS

STATE OF MONTANA )  
COUNTY OF HILL )ss.  
*Filed at 11 o'clock a.m.*

ON DEC 31 1963  
*[Signature]*  
COUNTY CLERK

DEPUTY

FEES: \$2.00 pd.

GW.

Approved Stock Form—State Publishing Co., Helena, Montana—41328

File No. ....

T. 31 R. 12

DUPLICATE

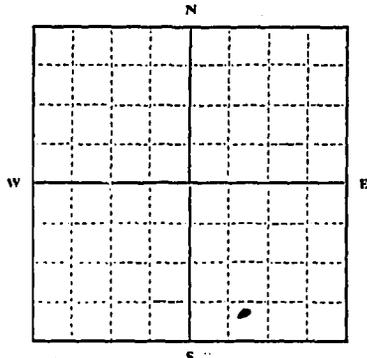
County. Hill

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
OCT 4 1963

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

1. Leon Vosen, of Kremlin Montana  
(Name of Appropriator) (Address) (Town)  
County of Hill State of Montana  
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



S. E4 Sec. 15 T. 3 R. 13  
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. all general purposes stock and home
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been. Feb 1946 continuous
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute). 1.0 gal per minute
- 5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal. Pump

- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. Feb 1946
- 8. The depth of water table. 25.6 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. 4 1/2 in casing Depth 25.6
- 10. The estimated amount of groundwater withdrawn each year. 360 000 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.

Signature of Owner. Leon Vosen  
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.

395500

LEON VOSEN

TO

THE PUBLIC

DECLARATION OF VESTED GROUND  
WATER RIGHTS

STATE OF MONTANA, )  
COUNTY OF HILL )  
Filed at 11 o'clock A.M.

ON OCT 3 1963

COUNTY CLERK

CLERK

Fee: \$2.00 pd.

File No. \_\_\_\_\_

T. 31 R. 13

DUPLICATE

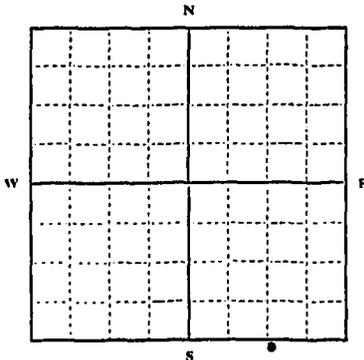
County Hill

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
OCT 4 1963

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

1. Leon Rosen, of Franklin Montana  
(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:



SE 1/4 Sec. 17 T. 31 R. 13  
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. June 1960  
Continuous Continuous

4. The amount of groundwater claimed (in miner's inches or gallons per minute). 8 gals 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. Pump

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

8. The depth of water table. 66 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. 4 1/2 in casing Depth 66 ft.

10. The estimated amount of groundwater withdrawn each year. 365,000 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.

Signature of Owner. Leon Rosen

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.

395499

LEON VOSEN

TO

THE PUBLIC

DECLARATION OF VESTED GROUND  
WATER RIGHTS

STATE OF MONTANA  
COUNTY OF HILL )  
Filed on 11/11/1953

ON 11/11/1953

\_\_\_\_\_ COUNTY CLERK

\_\_\_\_\_ DEPUTY

Fee: \$2.00 pd.

18

File No. \_\_\_\_\_

T 31 N R 13 E  
County Hill

DUPLICATE

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED

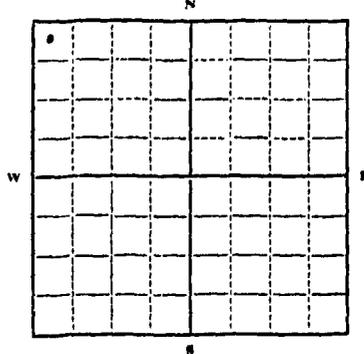
NOV 15 1963

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Richard + Nora Vasen, of Hill  
(Name of Appropriator) (Address) (Town)  
County of Hill State of Montana  
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 Sec. 18 T. 31 R. 13

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

- The beneficial use on which the claim is based. Stock water + household use
- Date or approximate date of earliest beneficial use; and how continuous the use has been. Drilled in 1944  
has been used continuously since
- The amount of groundwater claimed (in miner's inches or gallons per minute). 30 gal per minute
- If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof. none
- The means of withdrawing such water from the ground and the location of each well or other means of withdrawal. 4" diam steel casing 4 inch diameter 4" galv pipe 2 wells 2 1/2" by 1/2" galv pipe 4 inch galv pipe 4 inch galv pipe
- The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. started & completed in 1944
- The depth of water table. 130 ft
- 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 of well 160 ft
- The estimated amount of groundwater withdrawn each year. 485,000 gal.
- The log of formations encountered in the drilling of each well if available.
- Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record.

Signature of Owner Richard Vasen  
Date Nov 4, 1963

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

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

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

70.52

396036

RICHARD & NORA VOSEN

TO

THE PUBLIC

DECLARATION OF VESTED GROUND  
WATER RIGHTS

STATE OF MONTANA )  
COUNTY OF HILL )  
*Filed at 10:15'clock P.M.*

ON NOV 14 1963

R. E. Blom

COUNTY CLERK

DEPUTY

Fee: \$2.00 pd.

File No. ....

T 31 N R 13 E

DUPLICATE

County Blaine

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

JUN 11 1964

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

(Under Chapter 237, Montana Session Laws, 1961)

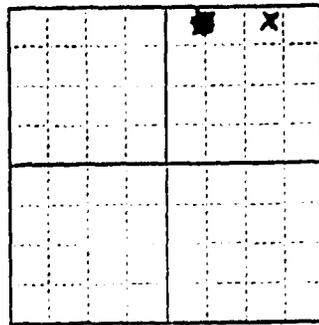
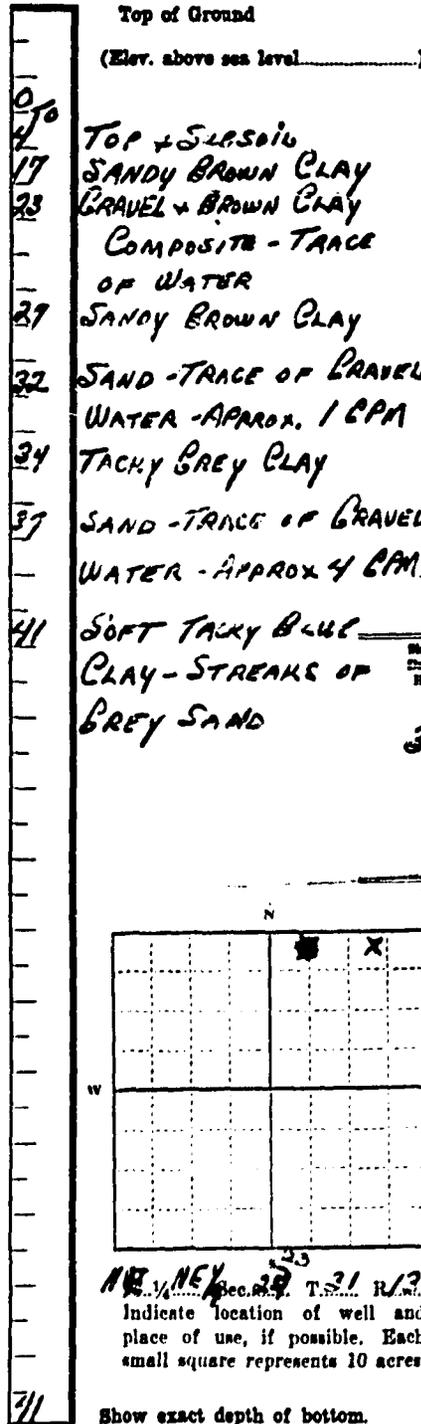
Owner WILLIAM F. BROWN Address STAMP, MT.  
Driller WILLIE DRILLING SERVICE Address HAVER, MONTANA

Date of Notice of Appropriation of Groundwater.....  
Date well started MAY 28, 1964 Date Completed JUNE 2, 1964

Type of well DRILLED Equipment Used CABLE TOOL RIG  
(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.



NE 1/4 Sec. 23 T. 31 N. R. 13 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 22 feet.

Shut-in Pressure for Flowing Well NOT APPLICABLE

Pumping Water Level 39 feet at 5 gal. per minute.

Discharge in gal. per min. of flowing well NOT APPLICABLE

How Tested BAKER 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) CONSTRUCTION

OF STANDARD 6" WELL IMPOSSIBLE DUE TO UNFAVORABLE CONDITION OF WATER BEARING SANDS WELL REAMED + DOMEDED BY GRAVEL PACKED AROUND OUTSIDE OF CURRING

Driller's License Number

Robert Arnie  
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.

Doc. No. 399090

WILLIAM E. BROWN

TO

THE PUBLIC

COMPLETION OF GROUNDWATER  
APPROPRIATION BY MEANS OF WELL

STATE OF MONTANA )  
COUNTY OF HILL )  
Filed at B. O'Leary, B. M.

ON JUN 10 1964

R. E. BLOM

COUNTY CLERK

Fee: \$ 2.00 pd.

GW-4  
FILE NO. \_\_\_\_\_

TWP 21 N RGE 13 E  
COUNTY Hill

25

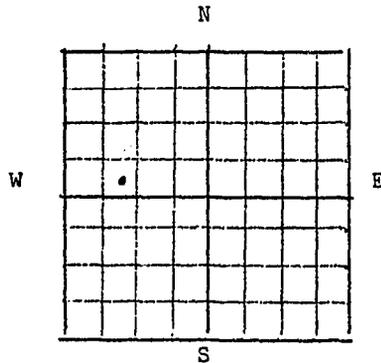
STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
JAN 7 1964

DECLARATION OF VESTED GROUNDWATER RIGHTS  
(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. William B. Kramola, of Box 652, Honorable, Idaho  
(Name of Appropriator) (Address) (Town)  
County of Hill, State of Montana  
Have appropriated groundwater according to the Montana laws in effect prior to Jan. 1, 1962 as follows:



NW  $\frac{1}{4}$  Sec 25 T31 R13

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

2. The beneficial use on which the claim is based  
Household and Stock
3. Date or approximate date of earliest beneficial use; and how continuous the use has been  
April 1953 Continuous
4. The amount of groundwater claimed (in miner's inches or gallons per minute)  
15 366 GPM
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 Pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater  
April 1953
8. The depth of water table 90 Ft
9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater  
Drilled 226 Ft 6 in. Casing
10. The estimated amount of groundwater withdrawn each year 365,000 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  
\_\_\_\_\_

Signature of Owner

William B. Kramola

Date

Dec 27, 1963

Three copies to be filed by the owner with the County Clerk & 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 & Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

26572

396851

WILLIAM B. KIEMELE

TO

THE PUBLIC

DECLARATION OF VESTED  
GROUNDWATER RIGHTS  
STATE OF MONTANA  
COUNTY OF HILL  
Filed at 11 o'clock A.M.

ON 12 2 1963  
*W. B. Kiemele*  
COUNTY CLERK

Fee: \$2.00 pd.

28

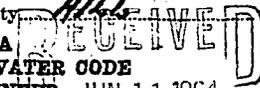
File No. ....

T. 31 N. R. 13 E

DUPLICATE

County Hill

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER JUN 11 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 to 5 TOP + SUBSOIL  
40 SANDY BROWN CLAYS  
52 SAND-TRACE OF GRAVEL  
+ COAL-TRACE OF WATER  
91 GREY CLAY + PEBBLES,  
OCCASIONAL SMALL BULDERS  
97 TACKY GREY CLAY (SOFT)  
103 GREY SAND-TRACE OF WATER  
112 SILTY GREY CLAY  
127 SANDY GREY CLAY  
133 TACKY GREY CLAY (SOFT)  
145 SANDY GREY CLAY  
147 GREY CLAY  
148 GRAVEL + SAND -  
WATER - EXCEEDING

Owner LEON VOSEN Address KREMLIN, MONTANA

Driller AIR-LINE DRILLING SERVICE Address HAVRE, MONTANA

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

Date well started MAY 21, 1964 Date Completed MAY 28, 1964

Type of well DRILLED Equipment Used CABLE TOOL RIG  
(dug, driven, bored or drilled) (Churn, drill, rotary or other)

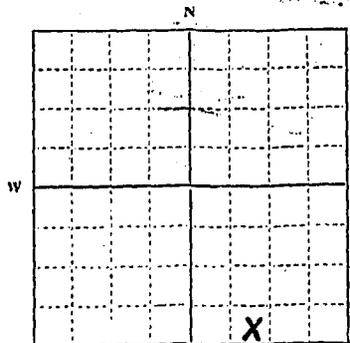
Water Use: Domestic  Municipal  Other  Irrigation   
Industrial  Drainage  Stock

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.

30 B.P.M. BY BAUER

TEST

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
7"	6" I.D. 13# PER FOOT	0	148	NO PERFORATIONS		
				WATER FEEDING		
				THRU BOTTOM OF CASING		



5 1/2 SE 1/4 Sec. 28 T. 31 R. 13

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

748 Show exact depth of bottom.

Static Water Level for non-flowing Well 56 feet.

Shut-in Pressure for Flowing Well NOT APPLICABLE

Pumping Water Level 85 feet at 5 gal. per minute.

Discharge in gal. per min. of flowing well NOT APPLICABLE

How Tested BAUER + PUMP 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).....

46  
Driller's License Number

Hubert Green  
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.

Doc. No. 399055

LEON VOSEN

TO

THE PUBLIC

COMPLETION OF GROUNDWATER  
APPROPRIATION BY MEANS OF WELL

STATE OF MONTANA, )  
COUNTY OF HILL )  
Filed at 11 o'clock a.m.

ON JUN 15 1964

R. E. BLOM

COUNTY CLERK

DEPUTY

Fee: \$ 2.00 pd.

File No. ....

T. 34<sup>N</sup> R. 13<sup>E</sup> S. 32

DUPLICATE

County HILL  
**RECEIVED**  
SEP 28 1954

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)

Owner HOWARD C. GOODIAN Address BOX ELDER, MONT.

Driller HI-LINE DRILLING SERVICE Address HANDE, MONT.

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

Date well started AUG. 14, 1964 Date Completed AUG. 21, 1964

Type of well DRILLED Equipment Used CABLE TOOL RIG  
(dug, driven, bored or drilled) (Churn, drill, rotary or other)

Water Use: Domestic  Municipal  Other  Irrigation   
Industrial  Drainage  Stock

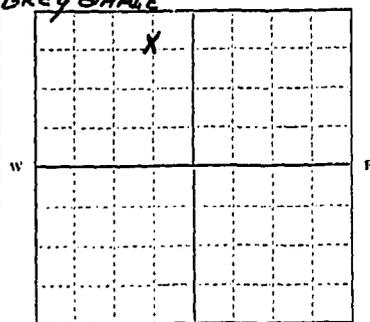
Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc. Show depth at which water is encountered, thickness and character of water-bearing strata and height to which water rises in the well.

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

670  
4  
35  
31  
43  
64  
145  
150  
162  
164  
172  
182  
184  
185 1/2  
187

TOP + SUBSOIL  
SANDY BROWN CLAY  
BROWN SAND + SILT -  
SOME COARSE GRAVEL -  
WATER, 1 3/4 GPM (CASED OFF)  
GREY CLAY  
SANDY GREY CLAY + PEBBLES  
BITS OF BLUE + GREY SHALE  
PREDOMINATELY GREY  
+ SANDY GREY CLAYS  
GREY SAND + SILT - TRACE  
OF COAL + WATER (CASED OFF)  
GREY CLAY  
HARD SANDSTONE BOULDER  
GREY CLAY  
SANDY GREY CLAY  
GREY SAND, SILT +  
COAL - WATER  
COARSE GRAVEL + CONSIDERABLE  
SILT + SAND - WATER EXCEEDING  
50 GPM.  
GREY SHALE

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
6 5/8"	6" I.D. 18 <sup>0</sup> PER FT	0	10	NO PERFORATIONS		
	6 1/8" I.D. 13 <sup>0</sup> PER FT	10	185 1/2	WATER FEEDING THRU BOTTOM OF DRIVE SHOES		



NE NW 1/4 Sec 32 T 31 N R 13 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 28 feet.

Shut-in Pressure for Flowing Well NOT APPLICABLE

Pumping Water Level 63 feet at 10 gal. per minute.

Discharge in gal. per min. of flowing well NOT APPLICABLE

How Tested BAUER 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) PER GRAVEL

PLACED INSIDE OF CASING FROM BOTTOM  
PACK TO 174 FT TO CHECK SILT PROBLEM  
SEVERE SILTING CONDITION WHEN BALED MORE  
THAN 20 GPM

Driller's License Number 46

Driller's Signature Herbert Freier

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.

38492

*Doc. No. 400405*

HOWARD C. GOODIAN

TO

THE PUBLIC

NOTICE OF COMPLETION OF  
GROUNDWATER APPROP. BY  
MEANS OF WELL

STATE OF MONTANA, )  
COUNTY OF HILL ) ss.  
*Filed at 11:45 clock A.M.*

*WIN* SEP 22 1964  
*18 Blom*  
COUNTY CLERK

By \_\_\_\_\_ DEPUTY

*See: 16 200 pd*

33

File No. ....

T. 31<sup>N</sup> R. 13<sup>E</sup>

DUPLICATE

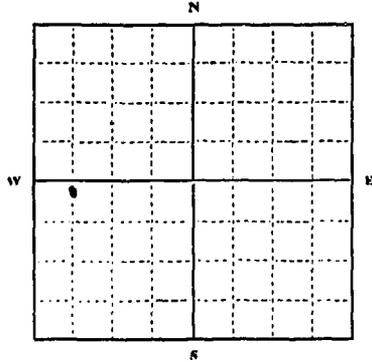
County Hill

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
DEC 20 1963  
STATE ENGINEER

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

I, Howard C. Goodwin, of Box Elder (Town)  
(Name of Appropriator) (Address)  
County of Hill State of Montana  
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



N. 15. 1/4 Sec. T. R.  
Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

- The beneficial use on which the claim is based Stock house + irrigation
- Date or approximate date of earliest beneficial use; and how continuous the use has been 1952 for stock and irrigation
- The amount of groundwater claimed (in miner's inches or gallons per minute) 10 gallon
- If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof trees and yard around house
- The means of withdrawing such water from the ground and the location of each well or other means of withdrawal electric pressure pump
- The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater in the fall of 1952
- The depth of water table about 20 ft.
- 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 42 in road culvert curb 20 ft deep
- The estimated amount of groundwater withdrawn each year 200,000 gallons
- The log of formations encountered in the drilling of each well if available gravel
- 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 Howard C. Goodwin  
Date Dec 15 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.



GW

33

File No. ....

T. 31 N. R. 13 E.

DUPLICATE

County Hill

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECORDED  
DEC 20 1963

Declaration of Vested Groundwater Rights

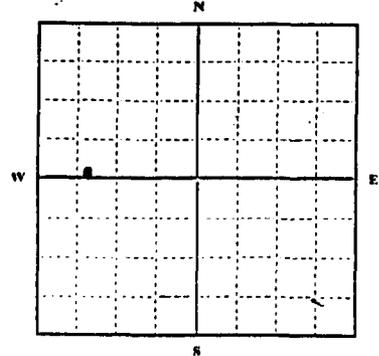
STATE ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1. Howard E. Goodwin, of Box Elder  
(Name of Appropriator) (Address) (Town)

County of Hill State of Montana

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



SE 1/4 NW Sec. 33 T. 31 R. 13

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  
since 1947

3. Date or approximate date of earliest beneficial use; and how continuous the use has been has been used for  
stock and house since 1947

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 5 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 Electric  
pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater since the fall 1957

8. The depth of water table 10 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 The well is 8 ft in diameter  
and 10 ft

10. The estimated amount of groundwater withdrawn each year 305 4 hundred thousand gal. Ann

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

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 Howard E. Goodwin  
Date Dec 15 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.

10859

396663

EDWARD J. BOZIAN

TO

THE PUBLIC

REPARATION OF 7 5/8" DEPTH  
WATER RIGHTS

STATE OF MONTANA, ss.  
COUNTY OF HILL ) P  
Filed at 11:15 o'clock        m.

ON DEC 19 1963

R. E. Blom

COUNTY CLERK

DEPUTY

Fee: \$2.00 pd.

File No. ....

T. 12 N. R. 13 E. 35

DUPLICATE

County Hill

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

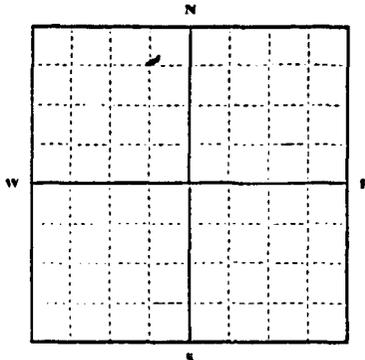
RECEIVED  
NOV 12 1963

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Clifford L. Kienle of 801 6th St. Havre  
(Name of Appropriator) (Address) (Town)  
County of Hill State of Montana  
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 NW Sec. 35 T. 12 N. R. 13 E.

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

- 2. The beneficial use on which the claim is based... Household and stock & farm use
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been... From 1945 until now
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute)... 10 gals 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... March 15 1945
- 8. The depth of water table... 170'
- 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... 170' depth 7" casing 1 1/4" pipe  
barbank more pressure pump
- 10. The estimated amount of groundwater withdrawn each year... 42000 gals
- 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

Signature of Owner... Clifford L. Kienle  
Date... 11/8/63

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.

395981

ALFRED L. KIEMELE

TO

THE PUBLIC

DECLARATION OF VESTED GROUND  
WATER RIGHTS

STATE OF MONTANA,  
COUNTY OF HULL )  
Filed at 11:45 o'clock A.M.

1963

COUNTY CLERK

CLERK

Fee: \$2.00 pd.



T. 31 N R. 14 E 4

County Hill

ERNEST O. LEE, DRILLING  
1200 3RD STREET HAVRE

RECEIVED  
STATE ENGINEER

WATER WELL LOG

		X

Owner: George Daniel Address: 427 3rd Ave., Havre, Mont.

Driller: Herbert Freier Address: 281 N State St., Havre

Date Started: October 20, 1961 Date Completed: October 24, 1961

Location: Sec. 4 T. 31 R. 14 1/4 sec. SE 1/4 of NE 1/4 of 4

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

Water use: Domestic  Municipal  Stock  Irrigation   
Industrial  Drainage  Other: .....

Casing: 1' above ground level ft. to .95 ft. Type: Spang-seamless Size: 7"

Casing: .....

Casing: .....

Perforated or Screened: Ft. .75 to ft. .95 Ft. to ft.

Type of screen or perforations: 1/4" X 5" Perforations

Static Water level, for non-flowing well: 30 feet

Shut-in pressure, for flowing well: .....

Pumping water level: 80 feet at 6 gal. per min.

How tested: Baler

Length of test: 1 hour

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

Gravel packed with 1/2" gravel for entire depth of well.

George R Daniel  
(over)





6

File No. ....

T. 31 N. R. 14 E. M.M.

DUPLICATE

County Hill

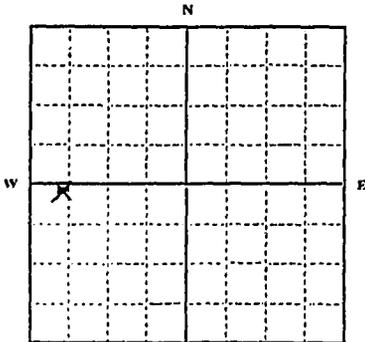
STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
JAN 7 1963  
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. FRANK SOHM of Kremlin  
(Name of Appropriator) (Address) (Town)  
County of Hill State of Montana  
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 Sec 6 T. 31N R. 14 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 continuous use for domestic consumption and domestic irrigation since approximately 1925.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been earliest beneficial use commenced approximately in 1925 and use has been continuous since that date.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 25 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 Used for irrigation of land adjacent to home owned by Appropriator in NW 1/4 of Section 6.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal The water is withdrawn by well, and such well is located approximately at the point marked "x" on the map.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater The exact date of commencement and completion of construction of well is not known and the nearest estimated date is the year 1925.

8. The depth of water table Varies from approximately 2 feet from the surface to approximately 15 feet from the 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 The well is hand dug, being approximately 20 feet in depth with a steel culvert installed for curbing purposes and with a pipe also installed for usage in connection with the electric pump by means of which the water is pumped into a pressure tank system.

10. The estimated amount of groundwater withdrawn each year 13,140,000 gallons (estimate)

11. The log of formations encountered in the drilling of each well if available No log of drilling formations is available. The ground is basically clay in formation.

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record The well is located near a reservoir near a coulee running in a southeasterly direction on which the undersigned has a claimed water right by virtue of written Notice of Appropriation.

Signature of Owner Frank Sohm

Date December 27, 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.

26569

396842

FRANK SOHM

TO

THE PUBLIC

DECLARATION OF VESTED  
GROUNDWATER RIGHTS

STATE OF MONTANA  
COUNTY OF HILL  
Filed at 12 o'clock P.M.

1977 DECEMBER 27 1963  
COUNTY CLERK

FEE: \$2.00 pd.

File No. ....

T. 31 N. R. 14 E. 12

DUPLICATE

County Hill

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

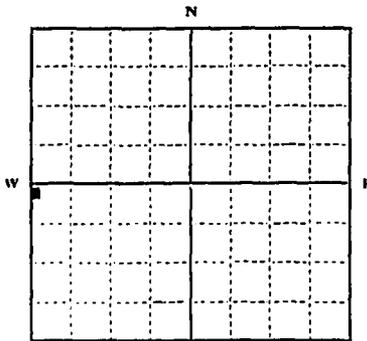
RECEIVED  
DEC 23 1963

Declaration of Vested Groundwater Rights STATE ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1. Roy Letto (Name of Appropriator), of Shamba Rt Hance (Address) (Town)

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



S.W. 1/4 Sec. 12, T. 31 N. R. 14 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 Linestock + Household

3. Date or approximate date of earliest beneficial use; and how continuous the use has been Oct 1943 Continuously

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 3 gal per minute

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Oct 1943

8. The depth of water table 150 feet

9. So far as it may be available, the type, size, and depth of each well or the general specifications of any other works for the withdrawal of groundwater 2 1/2 inch diameter 160 foot depth 4 Pipe on

10. The estimated amount of groundwater withdrawn each year 798000

11. The log of formations encountered in the drilling of each well if available 0 to 50 Yellow till 50 feet thick 50 to 71 Blue Clay 4 feet thick 71 to 110 Gray shale 19 feet thick 110 to 135 Shale 25 feet thick 135 to 150 Sandstone 15 feet thick 150 to 160 Blue shale 10 feet thick

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 Roy Letto

Date 12/11/63

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.

11548

396679

BY LOTTERY

TO

THE PUBLIC

DECLARATION OF VESTING OF MINERAL  
WATER RIGHTS

STATE OF MONTANA, ss.  
COUNTY OF HILL )  
Filed at 9 o'clock A.M.

ON DEC 20 1963

R. E. Blodgett

COUNTY CLERK

BY \_\_\_\_\_

DEPUTY

Fee: \$2.00 pd.

File No. \_\_\_\_\_

T 31 N R 14

DUPLICATE

County HILL

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

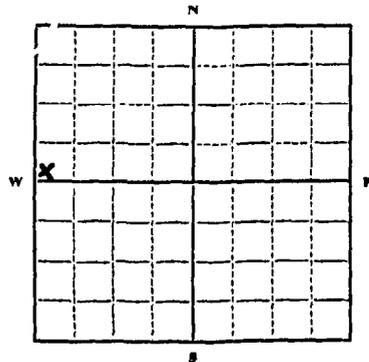
RECEIVED  
DEC 27 1963

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. William E. Brown, of Shambo Rte. Havre  
(Name of Appropriator) (Address) (Town)  
County of HILL State of MONTANA  
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



Sub. 13 Sec. 13 T. 31 R. 14

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 HAY & VAD. USE

3. Date or approximate date of earliest beneficial use; and how continuous the use has been JUNE 1944  
& HAS BEEN USED DAILY SINCE

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 5 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  
WATER IS USED ON LAWN & SMALL GARDEN

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal  
PRESSURE PUMP & ELECTRIC MOTOR

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater JUNE 15 - JUNE 25

8. The depth of water table 24 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 THE WELL WAS DUG BY HAND  
IT IS ABOUT 3 FT. IN DIAM. & 26 FT. DEEP

10. The estimated amount of groundwater withdrawn each year 45,000 GAL.

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

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

Signature of Owner William E. Brown

Date Dec 17 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.

895814

WILLIAM L. BROWN

TO

THE PUBLIC

DECLARATION OF VESTED  
GROUNDWATER RIGHTS

STATE OF MONTANA  
COUNTY OF HILL  
Filed at 2:00 o'clock P.M.

BY Blair 8 6 1963  
COUNTY CLERK

DEPUTY

Fee \$2.00

13

File No. \_\_\_\_\_

T 31 N R 14 E

DUPLICATE

County Hill

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
DEC 27 1963

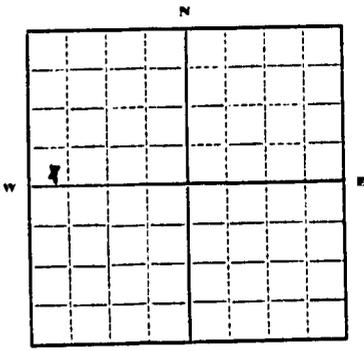
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

i. William E. Brown, of Shamba Ave. Havre  
(Name of Appropriator) (Address) (Town)

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



SW 1/4 NW 1/4 T 31 N R 14 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
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been.....  
1916 IT HAS BEEN USED DAILY SINCE
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute).....  
5 GPM 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.....  
NONE
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal.....  
PUMP JACK + ELECTRIC MOTOR

- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater.....  
EXACT DATE NOT KNOWN BUT STARTED IN 1916
- 8. The depth of water table.....  
24 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.....  
IT WAS DUG BY HAND IT IS ABOUT 3 FT. IN DIAM. + 27 FT. DEEP
- 10. The estimated amount of groundwater withdrawn each year.....  
95,000 gal
- 11. The log of formations encountered in the drilling of each well if available.....  
NONE
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record.....

Signature of Owner William E. Brown

Date Jan 17 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.

13457

396816

1963

NO

THIS PUBLIC

DECLARATION OF VET'D  
GROUNDWATER RIGHTS

STATE OF MONTANA )  
COUNTY OF HILL )  
Filed at 2:20 o'clock P.M.

ON 26 JAN 26 1963

L. E. Bl...  
COUNTY CLERK

BY \_\_\_\_\_ DEPUTY

Fee \$2.00 pd.



396512

RICHARD W. BROWN

TO

THE PUBLIC

DECLARATION OF VESTED  
GROUND WATER RIGHTS

STATE OF MONTANA, ) ss.  
COUNTY OF HILL )  
Filed at 11 o'clock A.m.

ON DEC 12 1963  
R. E. Blom  
COUNTY CLERK

Fee: \$2.00 pd.

REPUTY  
COUNTY CLERK

Form No. 18  
8-60

14

T. SW $\frac{1}{4}$  of Sec. 14,  
Twp. 31 N. R. 14 E. 14 E  
County Hill

MONTANA BUREAU OF MINES AND GEOLOGY  
Butte, Montana

RECEIVED  
OCT 21 1961

WATER WELL LOG

STATE ENGINEER

X		

Owner William I. Daniel Address Havre, Montana  
Driller Lloyd G. Hanberg Address Box Elder, Montana  
Date Started June 22, 1961 Date Completed June 27, 1961  
Location: Sec. 14 T. 31 R. 14  $\frac{1}{4}$  sec. SW

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

Water use: Domestic  Municipal  Stock  Irrigation   
Industrial  Drainage  Other \_\_\_\_\_

Casing: 116 ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size 6"

Casing: 20 ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size 4 1/2"

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size \_\_\_\_\_

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

Type of screen or perforations none

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

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

Pumping water level 12 feet at xx from surface gal. per min. 6

How tested: ~~slush bucket~~ bailer

Length of test \_\_\_\_\_

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

*W. I. Daniel*

(over)



DOCUMENT NO. 385832

WILLIAM I. DANIEL

TO

THE PUBLIC

WATER WELL LOG

STATE OF MONTANA,  
COUNTY OF HILL.

Filed OCTOBER 20th 1961

at 4:00 o'clock P.M.

G.C.YEON

COUNTY CLERK

Fee \$1.00- paid

20	runny sand, clear water
26	Sandy yellow clay
48	Sandy grey clay
52	Fat grey clay
68	Gravely grey clay
74	Sandy grey clay
108	Gravely clay
110	Sandy gravel, sand and water
115	Gray shale, top of Judith
118	Gray sandstone, water
135	Gray shale
136	Well completed
	Static water table -- 12 ft. from surface

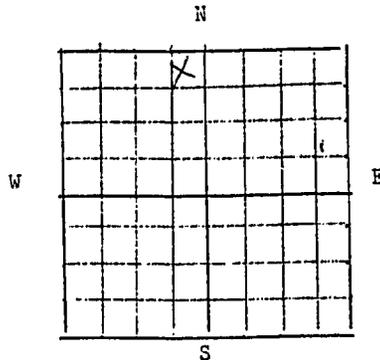
GW 4  
FILE NO. \_\_\_\_\_  
DUPLICATE

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

TWP \_\_\_\_\_ RGE \_\_\_\_\_  
COUNTY Hill  
**RECEIVED**  
JAN 10 1963

DECLARATION OF VESTED GROUNDWATER RIGHTS  
(Under Chapter 237, Montana Session Laws, 1961) STATE ENGINEER

1. Elmer Klundt, of Harre  
(Name of Appropriator) (Address) (Town)  
County of Hill, State of Mont  
Have appropriated groundwater according to the Montana laws in effect prior to Jan. 1, 1962 as follows:



NE 1/4 NW Sec 15 T.31 R.14

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

2. The beneficial use on which the claim is based  
Domestic Stock
3. Date or approximate date of earliest beneficial use; and how continuous the use has been  
Oct 21 1960
4. The amount of groundwater claimed (in miner's inches or gallons per minute)  
25 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  
Submersible Pump
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater  
Oct 21 1960
8. The depth of water table  
4 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  
6 in 16 ft deep
10. The estimated amount of groundwater withdrawn each year  
100,000
11. The log of formations encountered in the drilling of each well if available  
Elmer Klundt
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  
no

Signature of Owner Elmer Klundt  
Date Jan 9 1963

Three copies to be filed by the owner with the County Clerk & 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 & Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

391983

ELMER KLUNDT

TO

THE PUBLIC

DECLARATION OF VESTED  
GROUNDWATER RIGHTS

STATE OF MONTANA )  
COUNTY OF HILL )  
Filed at 10:20 o'clock A.M.

977 JAN 9 1963  
R. E. Blod  
COUNTY CLERK

Fee: \$2.00 pd.

GW 4  
FILE NO. \_\_\_\_\_  
DUPLICATE

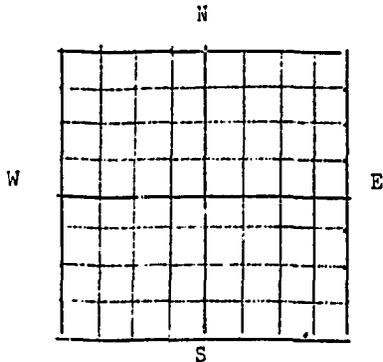
TWP 31 RGE 14  
COUNTY Hill

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
STATE ENGINEER

DECLARATION OF VESTED GROUNDWATER RIGHTS  
(Under Chapter 237, Montana Session Laws, 1961)

1. FRANK LAMMERDING, of Shambo Rte., Harro,  
(Name of Appropriator) (Address) (Town)  
County of Hill, State of Montana  
Have appropriated groundwater according to the Montana laws in effect prior to Jan.  
1, 1962 as follows:



SWSE

S-E 1/4 17 Sec 31 T 14 R E

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

- 2. The beneficial use on which the claim is based  
Household and Garden
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been  
Drilled Sept, 1946 and used since
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute)  
10 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  
Pressure system in underground pit at pump house
- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater  
Sept 1946
- 8. The depth of water table  
8 ft from ground level
- 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  
Has 121 ft of 4 1/2 in C-D casing
- 10. The estimated amount of groundwater withdrawn each year
- 11. The log of formations encountered in the drilling of each well if available  
21 to 30 ft silt and gravel - 30 to 121 ft blue gray clay and silt in layers of sand and gravel 12 ft water
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

Signature of Owner Frank Lammerding  
Date March 27-1962

Three copies to be filed by the owner with the County Clerk & 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 & Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.

DOCUMENT NO. 388012

FRANK LAMMERDING

TO

THE PUBLIC

DECLARATION OF VESTED  
GROUNDWATER RIGHTS

STATE OF MONTANA, ) ss.  
COUNTY OF HILL )

*Filed at 1:15 o'clock P.m.*

MARCH 27th 1962

ON 18-07-1962

G.C. YEON

COUNTY CLERK

By \_\_\_\_\_ DEPUTY

FEE \$2.00- paid

T. 31N R. 14E 17  
County: Hill

MONTANA BUREAU OF MINES AND GEOLOGY  
Butte, Montana

WATER WELL LOG

1/2 Shamba-Roate


Owner: F.E. Hammerding Address: Havre-Mont  
Driller: R.L. McCutcheon Address: Havre-Mont.  
Date Started: Date Completed: 1946  
Location: Sec. 17 T. 31 R. 14 1/4 sec. S.E.

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

Water use: Domestic  Municipal  Stock  Irrigation

Industrial  Drainage  Other:

Casing: 0 ft. to 121 ft. Type: 10.58" Std Pipe Size: 4" I.D.

Casing: ft. to ft. Type: Size

Casing: ft. to ft. Type: Size

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

Type of screen or perforations:

Static Water level, for non-flowing well: 8. Ft Below Surface feet.

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

Pumping water level: 15 feet at 12 to 15 gal. per min.

How tested: Baker

Length of test:

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

F. E. Hammerding  
(over)



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.

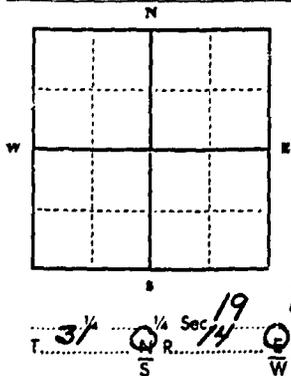
Owner ARTHUR J. REYNOLDS  
Address SHAMBO RT.  
HAURE, MONTANA  
Date well started 10/8/71  
completed 10/19/71  
Type of well DRILLED  
Equip. used CABLE TOOL RIG  
Water Use: Domestic  Municipal  Stock  Irrigation   
Industrial  Drainage  Other  Garden/Lawn

For Administrator's Use  
File 423853  
28.23.122 1:00 p.m.  
GW 1

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

ESTIMATED ANNUAL WITHDRAWAL EXCEEDING 600,000 GALLONS

Size of Drilled Hole	Size and Weight of Casing	From (Foot)	To (Foot)	PERFORATIONS		
				Kind Size	From (Foot)	To (Foot)
<u>9 3/4"</u>	<u>6 3/8" OD. (255 Wd) PVC 160#</u>	<u>6 1/2 FT. BELOW GROUND LEVEL</u>	<u>90</u>	<u>1/4"</u>	<u>80</u>	<u>200</u>
	<u>6 3/8" OD. (200 Wd) PVC 150#</u>	<u>90</u>	<u>210</u>			



Static water level 82 ft.\*  
Pumping water level 185 ft.\*  
at 120 gallons per minute,  
measured 120 minutes after pumping began.

\*Measured from ground level.  
Well developed by BALER PUMP  
for 2 hours.  
Power ELECTRIC Pump 1/2 HP  
Remarks: (Gravel packing, cementing, packers, type of shutoff)  
HOLES REARED TO 9 3/4" DIAMETER TO 210 FT. CASING INSTALLED & WELL CEMENTED FROM 210 FT. FROM RIG BACK TO 60 FT. CEMENTED DIRECTLY ABOVE GRAVEL PACK. CLAY SOIL FROM TOP OF CEMENT TO SURFACE

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

Top of Ground (Elev. above sea level)		
From (Foot)	To (Foot)	
0	3	SOIL & SUBSOIL
	7	SANDY & GRAVELLY BROWN CLAY
	45	GRAVELLY BROWN CLAY - SMALL BOULDERS
	37	GRAVELLY GREY CLAY - SMALL BOULDERS
	62	GREY SHALE
	66	LT. BROWN SHALE
	72	SANDY GREY SHALE
	74	BROWN SHALE
	83	SANDY GREY SHALE
	93	SHALEY GREY SANDSTONE - SHOWS WATER @ 85 FT.
	95	HARD SANDSTONE SHELL
	110	GREY SANDSTONE - WATER - APPROX. 2 1/2 GPM
	113	DARK GREY SHALE
	128	DARK GREY & SANDY DARK GREY SHALE
	143	DARK GREY SHALE
	145	SANDY LT. GREY SHALE
	162	BROWN SHALE - IMBEDDED IRON SHELL
	178	BROWN SHALE - THIN IRON SHELLS
	184	LT. BROWN SHALE - HARD
	185	HARD SANDY BROWN SHELL
	165	SANDY BROWN SHALE - THIN HARD RIBS
	175	MEDIUM GREY SHALE
	174	DARK BROWN SHALE
	174 1/2	COAL
	178	SANDY BROWN SHALE
	186	DARK GREY SHALE
	181	BROWN SHALE
	188	DARK BROWN SHALE
	191	SANDY BROWN SHALE
	192	DARK BROWN SHALE - SANDY
	202	GREY SANDSTONE - WATER - 7 GPM
	210	SHALEY GREY SANDSTONE - WATER - APPROX. 7 1/2 GPM
		TOTAL WATER YIELD TO 1/2 GPM BALING FROM 210 FT LEVEL.

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

Driller's Signature Robert Harris Highline Drilling Service  
Driller's Address 1173 6TH ST. NO HAURE, MONTANA 59501 PHONE 965-4210  
LICENSE NO. 46

Show exact depth of bottom 210

49,744