STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CONSERVATION
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: Bureau of Land Management
Address: Miles City, Montana

Date well started: 6/23/71
Date well completed: 6/23/71

Type of well: Drilled

Equipment used: Air Rotary

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).

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE.

EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature:

Driller's Address:

LICENSE NO. 154

Top of Ground
(Elm. above sea level)

<table>
<thead>
<tr>
<th>Depth</th>
<th>Top of Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>164 T</td>
<td></td>
</tr>
<tr>
<td>164 T</td>
<td></td>
</tr>
<tr>
<td>164 T</td>
<td></td>
</tr>
</tbody>
</table>

Show exact depth of bottom.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. Oscar Mathison
   of Montisp
   Address
   County
   State of Montana

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

2. The beneficial use on which this claim is based:

3. Date or approximate date of earliest beneficial use; and how continuous the use has been:
   July 1949 - Continuous

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:

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater:
   Commenced July 1949 - Completed July 1949

8. The depth of water table:
   870 feet

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater:
   Drilled: 40' x 40' x 200' ft - 2" - 200' ft to 180' ft
   Total depth 180' ft

10. The estimated amount of groundwater withdrawn each year:
    1,800,000 gallons

11. The log of formations encountered in the drilling of each well if available:
    0 - 40' - Sand
    40' - 80' - Clay
    80' - 1080' - 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:
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.
Declaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1961)

Adolph Matthiessen

County of
(State of)

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

2. The beneficial use on which the claim is based

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
   06/24/39

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

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

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater
   06/24-1959

8. The depth of water table
   860' to 878'

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
    262,500 gal.

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 School of Mines and quadruplicate for the Appropriator.
87-219
Wm. Hill
Adolph Mathewin
The Public
Declaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1961)

Richard Kranzler
County of: Prairie
State of Montana

Office of State Engineer
Administrator of Groundwater Code

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

Richard Kranzler
County of: Prairie
State of Montana

1. The claimant has appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

2. The beneficial use of which the claim is based is: Household

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: January 1, 1927; continuous since that time

4. The amount of groundwater claimed (in miner's inches or gallons per minute): 30 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: NA

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: 1927

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: 70 ft deep

10. The estimated amount of groundwater withdrawn each year: 5,184,000 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: Richard Kranzler
Date: 12-24-62

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; quadruplicate for the Appropriator.
Water Well Log

Richard Kemple

to

The Public
Richard Kranzler

of Mildred

County of Fairlie State of Montana

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

2. The beneficial use on which the claim is based: Stockwater

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: June 15, 1960

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

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

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

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

8. The depth of water table: 53 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: 12" Withdrawal Pipe

10. The estimated amount of groundwater withdrawn each year: 200,000 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: 

Date: 12-28-62

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.
Water Well tragic
Richard Knopfler to
The Public
# WATER WELL LOG

**Location:** Sec. 32, T. 11, R. 54, ¼ sec. NE

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Owner</strong></td>
<td>Rana Eakro</td>
</tr>
<tr>
<td><strong>Address</strong></td>
<td>Mildred</td>
</tr>
<tr>
<td><strong>Driller</strong></td>
<td>Pandy</td>
</tr>
<tr>
<td><strong>Address</strong></td>
<td>Broadus</td>
</tr>
<tr>
<td><strong>Date Started</strong></td>
<td>Sept. 15, 1953</td>
</tr>
<tr>
<td><strong>Date Completed</strong></td>
<td>Sept. 17, 1953</td>
</tr>
<tr>
<td><strong>Type of Well</strong></td>
<td>Drilled</td>
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<tr>
<td><strong>Equipment Used</strong></td>
<td>Rotary</td>
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<td><strong>Water Use</strong></td>
<td>Domestic X</td>
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<tr>
<td><strong>Industrial</strong></td>
<td>Stock</td>
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<td><strong>Drainage</strong></td>
<td>Irrigation</td>
</tr>
<tr>
<td><strong>Casing</strong></td>
<td>6 ft. to 670 ft. Type Reg. Size 4&quot;</td>
</tr>
<tr>
<td><strong>Perforated or Screened</strong></td>
<td>635 ft. to 670 ft.</td>
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<tr>
<td><strong>Static Water Level</strong></td>
<td>feet</td>
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<tr>
<td><strong>Shut-In Pressure</strong></td>
<td>18 lb/sq. in. on: Sept. 17, 1953</td>
</tr>
<tr>
<td><strong>Pumping Water Level</strong></td>
<td>feet at gal. per min</td>
</tr>
<tr>
<td><strong>How Tested</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Length of Test</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Remarks</strong></td>
<td>(Gravel packing, cementing, packers, type of shut-off, depth of shut-off)</td>
</tr>
</tbody>
</table>

(over)
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

[Name of Appropriator]

County of [County] State of Montana

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

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

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: [Signature]

Date: [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.

[Handwritten date and signature]
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

Erley Mathison, at

County of
State of

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

1. The beneficial use on which the claim is based:
   Household, Stock Watering

2. Date or approximate date of earliest beneficial use; and how continuous the use has been:
   January 1, 1959 - Continual

3. The amount of groundwater claimed, (in miner's inches or gallons per minute):
   18 gallons per minute

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

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

6. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater:
   Drilled: 1959 - Completed: 1959
   Depth: 820 feet

7. The type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater:

8. The estimated amount of groundwater withdrawn each year:
   1,500,000 gallons

9. 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: 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.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

Name of Appropriator
Oscar Mathison

Address
Wilden

County of

State of
Mullan

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

2. The beneficial use on which the claim is based
Livestock watering

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
December 1944 - continuous

4. The amount of groundwater claimed (in miner's inches or gallons per minute)
5.0 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
Drum

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
992 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

10. The estimated amount of groundwater withdrawn each year
900,000 gallons

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
Oscar Mathison

Date
Dec. 3 - 1963

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

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

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.
<table>
<thead>
<tr>
<th>Sec.</th>
<th>Name of Appropriator</th>
<th>Type of Form</th>
<th>County File No.</th>
<th>Remarks</th>
</tr>
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<tbody>
<tr>
<td>3</td>
<td>PRAIRIE COUNTY GRAZING DIST.</td>
<td>Gw-4</td>
<td>95549</td>
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<td>3</td>
<td>PRAIRIE COUNTY GRAZING DIST.</td>
<td>WATERS WELL 1</td>
<td>95549</td>
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<td>6</td>
<td>STIEBEL, ALVIN</td>
<td>Gw-4</td>
<td>84236</td>
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<td>8</td>
<td>RUTHER, HERBERT W.</td>
<td>Gw-4</td>
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<td>Gw-2</td>
<td>95868</td>
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<td>McHINNEY, EVERETTE C.</td>
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<td>14</td>
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<td>WATERS WELL 1</td>
<td>85437</td>
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<td>Gw-4</td>
<td>84236</td>
<td></td>
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<td>18</td>
<td>RUTHER, MAGDALENA S.</td>
<td>Gw-2</td>
<td>92072</td>
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<td>RUTHER, PIAR</td>
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<td>85719</td>
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<td>32</td>
<td>MATHENSON, OSCAR</td>
<td>Gw-1</td>
<td>95566</td>
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<td>34</td>
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<td>Gw-2</td>
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<td>REDRILLED WELL</td>
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<td>BUREAU OF LAND MANAGEMENT</td>
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<td>35</td>
<td>BUREAU OF LAND MANAGEMENT</td>
<td>Gw-4</td>
<td>84236</td>
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</tbody>
</table>
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

<table>
<thead>
<tr>
<th>County of</th>
<th>State of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pondera</td>
<td>Montana</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>N</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
**WATER WELL LOG**

<table>
<thead>
<tr>
<th>Owner</th>
<th>Driller</th>
<th>Date Started</th>
<th>Date Completed</th>
<th>Location: Sec. T. R.</th>
<th>Type of well</th>
<th>Water use:</th>
<th>Casing:</th>
<th>Perforated or Screened:</th>
<th>Static Water level, for non-flowing well</th>
<th>Shut-in pressure, for flowing well</th>
<th>Pumping water level</th>
<th>How tested</th>
<th>Length of test</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prairie Co-groving dist.</td>
<td>McManigal</td>
<td>22.04.58</td>
<td>28.04.58</td>
<td>11 T. 56 R. 61</td>
<td>Drilled</td>
<td>Domestic</td>
<td>0 to 56 ft</td>
<td>1.0 to 5.0</td>
<td>5.9 ft</td>
<td>39</td>
<td>6.0 feet at 1.0 gal. per min.</td>
<td>Bail, Bucket</td>
<td>6.0</td>
<td></td>
</tr>
</tbody>
</table>

**MONTANA BUREAU OF MINES AND GEOLOGY**

**STATE ENGINEER Montana**
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10</td>
<td>Top Soil</td>
</tr>
<tr>
<td>10 - 40</td>
<td>Shale</td>
</tr>
<tr>
<td>40 - 50</td>
<td>Coal Water Bearing</td>
</tr>
<tr>
<td>50 - 70</td>
<td>Shale</td>
</tr>
<tr>
<td>70 - 96</td>
<td>Water Sand</td>
</tr>
</tbody>
</table>
Declaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1961)

Alvin Stickel

(Full Name of Appropriator) (Address) (Town)

County of Montana State of Montana

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

2. The beneficial use on which the claim is based: Water

3. The date or approximate date of earliest beneficial use; and how continuous the use has been: 1929

4. The amount of groundwater claimed (in miner’s inches or gallons per minute): 10 gal. a 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: Windmill and Pump

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

8. The depth of water table: 100 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: well 10 ft. deep

10. The estimated amount of groundwater withdrawn each year: 35,000 gallons

11. The log of formations encountered in the drilling of each well if available: not available

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

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 Appropirator.
84236
Declaration of United
Amendments
Filed
To
The Public

FILED
11/21/1963
Filing Date
11/21/1963
Filing Date
11/21/1963
Filing Date
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

(Name of Appropirator) (Address) (Town)
County of State of
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

1. The beneficial use on which the claim is based:

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

3. The amount of groundwater claimed (in miner's inches or gallons per minute) 150 gallons -

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

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

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

7. The depth of water table:

8. 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:

9. The estimated amount of groundwater withdrawn each year:

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

11. 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 Appropirator.
Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1963

Under Chapter 237 Montana Session Laws, 1961, as amended

Date of Notice of appropriation of groundwater: N.A.

Date well started: 7/26/67  Date completed: 8/2/67

Type of well: Drilled  Equipment used: Cable tool

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.

<table>
<thead>
<tr>
<th>Size of Drilled Hole</th>
<th>Size and Weight of Casing</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
<th>PERFORATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;</td>
<td>6&quot; I.D.</td>
<td>+2</td>
<td>245</td>
<td>Slots 240</td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing well: 83 feet.

Shut-in Pressure for Flowing Well: N.A.

Pumping Water Level: 110 feet at 20 gal. per minute.

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

How Tested: Bazooka Length of Test: 1 hr.

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

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

Common Well (X3-R-2218)

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 Signature: [Signature]

Driller's License Number: [Number]
**STATE OF MONTANA**

**ADMINISTRATOR OF GROUNDWATER CODE**

**OFFICE OF STATE ENGINEER**

**Declaration of Vested Groundwater Rights**

(Under Chapter 237, Montana Session Laws, 1961)

---

**1.**

- **Name of Appropriator:** Everett E. McManigal
- **Address:**
- **Town:** Fallon

**County of:** Prairie

State of Montana

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

<table>
<thead>
<tr>
<th>S.E.N.E.</th>
<th>T.</th>
<th>1/4 R.</th>
<th>55</th>
</tr>
</thead>
</table>

- **Point of Appropriation:**
- **Place of Use:**

| Each small square represents 10 acres. |

2. The beneficial use on which the claim is based

- **Stock Well**

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

- May 1956 - each year from December to May

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 30 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:

   - **None**

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

   - **Windmill with 20' well cylinder, 5 HP, 25' deep, pump 10 gal. per minute**

   - **Well 11-55**

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

   - **July 15, 1956 - started**
   - **July 23, 1956 - finished**

8. The depth of water table:

   - **17 feet static 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:

   - **Drilled with Denver casing**

   - **10 feet deep**

10. The estimated amount of groundwater withdrawn each year:

    - **150,000 gal. (Estimated)**

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

    - **Top soil, sand, gravel, silt, clay, rock, blue clay, shale, 10 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:

    - **Drilled by McManigal, 1956 in Montana**

---

**Signature of Owner:**

**Date:** January 10, 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.
Declaration of Vested Groundwater Rights

(Please type in the following information)

County of Mont*... State of Montana

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

1. The beneficial use on which the claim is based:

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

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

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

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

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

7. The depth of water table:

8. 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:

9. The estimated amount of groundwater withdrawn each year:

10. The logs or descriptions encountered in the drilling of each well if available:

11. 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.
WATER WELL LOG
Butte, Montana

Owner: P. L. Mil
Address: Perry

Driller: David Stahl
Address: Helena

Date Started: May 23, 1958
Date Completed: May 31, 1958

Location: Sec. 14, T. 11, R. 65 1/4 sec. 14 52 1/2 ft.

Type of well: Drilled
Equipment used: Rotary

Water use:
- Domestic [ ]
- Municipal [ ]
- Stock [ ]
- Irrigation [ ]
- Industrial [ ]
- Drainage [ ]
- Other: [ ]

Casing:
- 0 ft. to 10 ft. Type: Iron Size: 4"

Casing:
- 10 ft. to ft.
- Type:
- Size:

Casing:
- ft. to ft.
- Type:
- Size:

Perforated or Screened:
- 5.5 ft. to 110 ft.
- Type:
- Size:

Type of screen or perforations: Cast

Static Water level, for non-flowing well: 4.5 feet

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

Pumping water level: 50 feet at: 12 gal. per min.

How tested: Hand bucket

Length of test: 1 hour

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

(over)
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>From</th>
<th>To</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15</td>
<td>0</td>
<td>15</td>
<td>Top soil</td>
</tr>
<tr>
<td>15-30</td>
<td>15</td>
<td>30</td>
<td>Shale</td>
</tr>
<tr>
<td>30-40</td>
<td>30</td>
<td>40</td>
<td>Gravel</td>
</tr>
<tr>
<td>40-50</td>
<td>40</td>
<td>50</td>
<td>Shale</td>
</tr>
<tr>
<td>50-80</td>
<td>50</td>
<td>80</td>
<td>Water sand</td>
</tr>
<tr>
<td>80-110</td>
<td>80</td>
<td>110</td>
<td>Shale</td>
</tr>
</tbody>
</table>

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

Alvin Stickel

Fallon

State of Montana

County of Prairie

Address

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

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

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, walls, 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: Alvin Stickel

Date: Dec 7, 1962

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; triplicate to the Montana Bureau of Mines and Geology, and quadruplicate for the Appropriator.
84236

(Declaration of United

BROADCAST RIGHTS

Administered to

The Public

[Stamp: FILED]

[Stamp: filed Jan 8, 1953]
Notice of Appropriation of Groundwater
(Under Chapter 237, Montana Session Laws, 1961)

1. Name of Appropriator: Magdalena S. Rothler
   Address: Box 117, Fallon
   County of: Prairie
   State of: Montana

2. The beneficial use to which water is to be applied is:
   Section 18, Township 11, Range 55 E
   (describe lands to be benefited, if for irrigation)

3. The rate of use in gallons per minute or miner's inches of groundwater claimed:
   Unknown

4. The annual period (inclusive dates) of intended use:
   Stock water 3 months

5. The probable or intended date of first beneficial use:
   June 10th, 1970

6. The probable or intended date of commencement and completion of the well or wells:
   June 10 to June 10

7. The location, type, size and depth of well or wells contemplated:
   Center of Section 18
   maximum depth 200 ft.; 6 inch size casing; deep water well

8. The probable or estimated depth of the water table or artesian aquifer:
   125 to 200 ft.

9. Name, address and license number of the driller engaged:
   Unknown

10. Give such other similar information as may be useful:
    in carrying out the policy of this act.

   ____________________________
   Signature of Appropriator
   Date: April 20, 1970

As defined in the Code Sec. 1 (e) "Well" means any artificial opening or excavation in the ground, however made, by which groundwater can be obtained or through which it flows under natural pressures or is artificially withdrawn.

Three copies of this notice are to be filed with 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.
GW2 Approved Stock Form—State of Montana—46803

File No. DUPLICATE

LOG

OCT 6 1970

Count Y

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARD

Notice of Completion of Groundwater Appropriation by Means of Well
DEVELOPED AFTER JANUARY 1, 1963
(Under Chapter 237 Montana Session Laws, 1961, as amended)

Owner: 
Address:

Driller: 
Address:

Date of Notice of appropriation of groundwater:

Date well started:

Date completed:

Type of well: 
Equipment used:

Water use:

Indicate 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.

PERMIT. REQUESTED

PERMIT GRANTED

DIRECTOR
MONTANA WATER RESOURCES BOARD

Filed for record this 5th day of October A.D. 1970 at 1:15 o'clock A.M.

Show exact depth of bottom.

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

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

Driller's License Number

Driller's Signature

10-24-70
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1981)

STATE ENGINEER

Bureau of Land Management
of Box 940, Miles City

County of
State of

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

2. The beneficial use on which the claim is based
   Livestock water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
   1944 - continuous

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

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
   Windmill - Section of Sec. 23

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater
   1964

8. The depth of water table
   120 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
   150 ft deep, standard 6" casing, 20 ft tower, 100' head

10. The estimated amount of groundwater withdrawn each year
    1,500,000

11. The log of formations encountered in the drilling of each well if available
    Not Available

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record
    Not Available

District Manager

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.
I. File No. T. 11 N. R. 55 S.

DUPLICATE

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. Bureau of Land Management, of Box 966, Miles City
   (Name of Appropriator)
   (Address) (Town)

   County of 

   State of Montana

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

<table>
<thead>
<tr>
<th>W 4 SE 2</th>
<th>Sec. 34</th>
<th>T 11 N 55 S</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Each small square represents 10 acres.

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

2. The beneficial use on which the claim is based ____________________________
   Livestock water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been ____________________________
   1946 - continuous

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

5. If used for irrigation, give the acres 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 ____________________________
   Windmill - NE 1/4 Sec. 34

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater ____________________________
   1946

8. The depth of water table ____________________________
   1021

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 ____________________________
   MONITOR 20', TOWER & 101 head.

10. The estimated amount of groundwater withdrawn each year ____________________________
    1,500,000

11. The log of formations encountered in the drilling of each well if available ____________________________
    Not Available

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

District Engineer

 Date 1-2-63

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.
Notice of Completion of Groundwater Appropriation by Means of Well
(Under Chapter 237, Montana Session Laws, 1961)

Owner: Oregon Land Management Address: Miles City, Montana

Driller: Henry Johnson Address: Box 916, Terry, Montana

Type of well: Drilled Equipment Used: Cable tool
(dug, driven, bored or drilled)

Date well started: 11/22/63 Date Completed: 11/26/63

Place of use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐
Industrial ☐ Drainage ☐ 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.

<table>
<thead>
<tr>
<th>Depth</th>
<th>Top</th>
<th>Middle</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td>33&quot;</td>
<td>Grey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50&quot;</td>
<td>Shale and coal blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60&quot;</td>
<td>Shale = blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70&quot;</td>
<td>Shale = coal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90&quot;</td>
<td>Shale and coal blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100&quot;</td>
<td>Shale = blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120&quot;</td>
<td>Sandy shale blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>137&quot;</td>
<td>Sandstone blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150&quot;</td>
<td>Water 5 gpm at bottom Sandstone blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>160&quot;</td>
<td>Bottom of hole Coal &amp; sandstone</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Static Water Level for non-flowing Well: 122 feet.
Shut-in Pressure for Flowing Well: N/A
Pumping Water Level: 160 feet at 5 gal. per minute.
Discharge in gal. per min. of flowing well: N/A
How Tested: Rolling 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)

24" x 10" stroke cylinder - windmill

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.

34869
Declaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1961)

Oscar Mathiason

County of

State of

County of

State of

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

2. The beneficial use on which the claim is based

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 names 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 Appropriate Owner.
**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.

---

**ESTIMATED ANNUAL WITHDRAWAL**

<table>
<thead>
<tr>
<th>Holes</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
<th>PERFORATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>398</td>
<td>338</td>
<td>398</td>
<td></td>
</tr>
</tbody>
</table>

- Static water level: 235 ft.
- Pumping water level: 388 ft.
- Measured from ground level. Well developed by Air Lift for 16 hours.
- Power: Pump: 1 HP
- Remarks: (Gravel packing, cementing, packers, type of shut-off)

---

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

---

**Driller's Signature:**

---

**License No. 154**
**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.

<table>
<thead>
<tr>
<th>Top of Ground</th>
<th>(Elev. above sea level)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strata</th>
<th>Depth (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10 Brown Sand</td>
</tr>
<tr>
<td>10</td>
<td>20 Blk. Sand &amp; Coal</td>
</tr>
<tr>
<td>20</td>
<td>50 Blk. Sand &amp; stringer of Coal</td>
</tr>
<tr>
<td>50</td>
<td>70 Gumbo</td>
</tr>
<tr>
<td>60</td>
<td>80 Fine Brown Sand</td>
</tr>
<tr>
<td>100</td>
<td>110 Brown Gumbo</td>
</tr>
<tr>
<td>110</td>
<td>120 Coarse Sandy Gray Clay</td>
</tr>
<tr>
<td>120</td>
<td>130 Coarse Gray Sand</td>
</tr>
<tr>
<td>130</td>
<td>140 Coarse Gray Clay</td>
</tr>
<tr>
<td>140</td>
<td>150 Coarse Gray Sand</td>
</tr>
<tr>
<td>150</td>
<td>160 Black Coal</td>
</tr>
<tr>
<td>160</td>
<td>170 Sandy Gray Clay</td>
</tr>
<tr>
<td>170</td>
<td>190 Sandy Gray Clay with stringer of shale rock</td>
</tr>
<tr>
<td>190</td>
<td>200 Gray Sand &amp; Shalestone</td>
</tr>
<tr>
<td>200</td>
<td>210 Gray Clay with 67 stringer of Coal</td>
</tr>
<tr>
<td>210</td>
<td>230 Gray Clay</td>
</tr>
<tr>
<td>230</td>
<td>240 Blk. Gumbo with stringer of coal</td>
</tr>
<tr>
<td>240</td>
<td>270 Gray Clay</td>
</tr>
<tr>
<td>270</td>
<td>310 Gray Sandy Clay</td>
</tr>
<tr>
<td>310</td>
<td>340 Brown Gumbo</td>
</tr>
<tr>
<td>340</td>
<td>350 Gray Sand</td>
</tr>
<tr>
<td>350</td>
<td>390 Gray Sand with stringer of Coal</td>
</tr>
<tr>
<td>390</td>
<td>398 Gumbo</td>
</tr>
</tbody>
</table>

**Estimated Annual Withdrawal**

<table>
<thead>
<tr>
<th>Size of Drilled Hole</th>
<th>Size and Rank of Column</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
<th>Holes</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 7/8&quot;</td>
<td>41</td>
<td>338</td>
<td>398</td>
<td>3/8&quot;</td>
<td>338</td>
<td>398</td>
</tr>
</tbody>
</table>

Static water level 236 ft.
Pumping water level 398 ft.
8 gpm.
200 minutes after pumping began.
*Measured from ground level.
Well developed by Air Lift for 16 hours.
Power: Pump: 2 HP
Remarks: (Gravel packing, cementing, packers, type of shutoff)

**Indicate Location of Well and Place of Use, If Possible.**

Each small square represents 40 acres.

Driller's Signature: [Signature]

Driller's Address: [Address]

License No.: [License No.]
**NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION BY MEANS OF WELL**

Developed after January 1, 1963

(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.

**Bureau of Land Management**

**Owner**

**Address**

**Miles City, Mont.**

**File**

**Date well started**

6/19/70

**GW 1**

**Date well completed**

6/25/70

**Type of well**

Drilled

(Deep, driven, bored or drilled)

**Equipment used**

Air Rotary

(Cham, 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**

<table>
<thead>
<tr>
<th>Item of Interest</th>
<th>Size of Hole</th>
<th>Size of Casing</th>
<th>Feet</th>
<th>To (Foot)</th>
<th>Foot</th>
<th>Foot</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7 7/8&quot; x 6&quot; ID</strong></td>
<td>18,970</td>
<td></td>
<td>398</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Top of Ground**

<table>
<thead>
<tr>
<th>Item of Interest</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PERFORATIONS**

<table>
<thead>
<tr>
<th>Item of Interest</th>
<th>Notes</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Static water level**

335 ft.

**Pumpage water level**

366 ft.

*Measured from ground level:

Well developed by: ________ for ________ hours.

Power: ________ Pump: ________

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

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

**Driller's Signature**

Terry, Montana

**Driller's Address**

**License No.**

154
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.

Bureau of Land Management
Owner
Miles City, Mont.
Address
For Administrator's Use
File No.

Date well started
6/10/70
GW1

Type of well
Drilled

Equipment used
Air Rotary

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
84,000 gpd

Top of Ground

<table>
<thead>
<tr>
<th>Depth from Ground</th>
<th>Top of Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
<tr>
<td>0</td>
<td>19 Brown Sand</td>
</tr>
<tr>
<td>19</td>
<td>50 Blue Sand &amp; Coal</td>
</tr>
<tr>
<td>50</td>
<td>95 Blue Sand with lenses of Coal</td>
</tr>
<tr>
<td>95</td>
<td>100 Blue Sand</td>
</tr>
<tr>
<td>100</td>
<td>119 Brown Gumbo</td>
</tr>
<tr>
<td>119</td>
<td>120 Charcoal Gray Clay</td>
</tr>
<tr>
<td>120</td>
<td>138 Brown Gray Sand</td>
</tr>
<tr>
<td>138</td>
<td>150 Brown Gray Clay</td>
</tr>
<tr>
<td>150</td>
<td>159 Blue Gray Clay</td>
</tr>
<tr>
<td>159</td>
<td>169 Brown Clay</td>
</tr>
<tr>
<td>169</td>
<td>179 Brown Clay with lenses of shale rock</td>
</tr>
<tr>
<td>179</td>
<td>240 Gray Sand &amp; Siltstone</td>
</tr>
<tr>
<td>240</td>
<td>270 Gray Clay with lenses of Coal</td>
</tr>
<tr>
<td>270</td>
<td>290 Gray Clay</td>
</tr>
<tr>
<td>290</td>
<td>320 Gray Sandy Clay</td>
</tr>
<tr>
<td>320</td>
<td>340 Brown Gumbo</td>
</tr>
<tr>
<td>340</td>
<td>350 Gray Hard Sandstone</td>
</tr>
<tr>
<td>350</td>
<td>399 Gray Sand</td>
</tr>
<tr>
<td>399</td>
<td>399 Gray Sand with lenses of Coal</td>
</tr>
<tr>
<td>399</td>
<td>399 Brown Gumbo</td>
</tr>
</tbody>
</table>

Measured from ground level. Well developed for __ hours. Pump __ HP. Remarks: (Gravel packing, cementing, packers, type of shutoff).......

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

Driller's Signature

Driller's Address

LICENSE NO. 154
Notice of Completion of Groundwater Appropriation by Means of Groundwater Pumping

Under Chapter 237, Montana Session Laws, 1961

Owner: Bureau of Land Management
Address: Miles City, Montana

Driller: Henry L. Johnson
Address: Terry, Montana

Date of Notice of Appropriation of Groundwater: None

Date well started: 6/23/62
Date completed: 6/30/62

Type of well: Drilled
Equipment Used: Churn

Water Use: Domestic

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.

<table>
<thead>
<tr>
<th>Size of Drilled Hole</th>
<th>Size and Weight of Casing</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
<th>PERFORATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;</td>
<td>4&quot; - 11 lb. per ft.</td>
<td>1' above</td>
<td>24'</td>
<td>6 holes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 lines of holes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14 sq ft.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3/8&quot; dia.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23.8 ft.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>243 ft.</td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing well: 152 feet

Shut-in Pressure for Flowing Well

Pumping Water Level: 212 feet at 5 gal. per minute.

Discharge in gal. per min. of flowing well

How Tested: 5 gal. bailer
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 pertinent information, including number of acres irrigated, if used for irrigation)


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: County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadrangle for the Appropriator.
Wadi Well Log
Bureau of Land Management
to
The Public

Filed
21 Dec 1962
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. Bureau of Land Management of Box 960, Miles City
   (Name of Appropriator) (Address) (Town)

   County of Custar State of Montana

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

   2. The beneficial use on which the claim is based: Livestock water

   3. Date or approximate date of earliest beneficial use; and how continuous the use has been: 1946 - continuous

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

   6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal: Water from SW1/4, SE1/4, Sec. 35, T13N, R53E

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

   7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: 1946

   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' deep, standard 5' casing, Monitor 201

   10. The estimated amount of groundwater withdrawn each year: 1,500,000

   11. The log of formations encountered in the drilling of each well if available: Not Available

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

   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.

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.