<table>
<thead>
<tr>
<th>Type of well</th>
<th>Domestic</th>
<th>Municipal</th>
<th>Stock</th>
<th>Irrigation</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth (ft)</td>
<td>0 to 223</td>
<td>ft to</td>
<td>ft</td>
<td>ft</td>
<td>ft</td>
</tr>
<tr>
<td>Capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Packing or Sealing: None to ft

Type of screen or filtrations: None

Water level for non-flowing well: 180 ft

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

Inlet water level: 169 ft

Pumping water level: 169 ft

Water level at: 12 gal per min

Testing: balier

Length of test: 4 hrs

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)
<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</td>
<td></td>
<td></td>
<td>top soil</td>
</tr>
<tr>
<td>0</td>
<td></td>
<td>2</td>
<td>yellow c.a.y.</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>26</td>
<td>gravel, yellow c.a.y.</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>62</td>
<td>sandy yellow c.a., some bulletin</td>
</tr>
<tr>
<td>42</td>
<td></td>
<td>62</td>
<td>light brown shale, silt shale</td>
</tr>
<tr>
<td>54</td>
<td></td>
<td>62</td>
<td>sandy, light brown shale</td>
</tr>
<tr>
<td>62</td>
<td></td>
<td>93</td>
<td>hard shale</td>
</tr>
<tr>
<td>34</td>
<td></td>
<td>93</td>
<td>sandy brown shale</td>
</tr>
<tr>
<td>93</td>
<td></td>
<td>103</td>
<td>grey shale, clay</td>
</tr>
<tr>
<td>103</td>
<td></td>
<td>105</td>
<td>hard shale, clay</td>
</tr>
<tr>
<td>106</td>
<td></td>
<td>12</td>
<td>light brown shale</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>32</td>
<td>grey shale, silt</td>
</tr>
<tr>
<td>132</td>
<td></td>
<td>43</td>
<td>brown shale</td>
</tr>
<tr>
<td>43</td>
<td></td>
<td>75</td>
<td>grey shale, silt</td>
</tr>
<tr>
<td>75</td>
<td></td>
<td>155</td>
<td>sandstone, trace, silt, c.a.</td>
</tr>
<tr>
<td>155</td>
<td></td>
<td>155</td>
<td>brown, tufe</td>
</tr>
<tr>
<td>153</td>
<td></td>
<td>33</td>
<td>grey, silt</td>
</tr>
<tr>
<td>33</td>
<td></td>
<td>75</td>
<td>brown shale, silt</td>
</tr>
<tr>
<td>75</td>
<td></td>
<td>176</td>
<td>grey, sandstone</td>
</tr>
<tr>
<td>176</td>
<td></td>
<td>223</td>
<td>grey, silt, silt</td>
</tr>
<tr>
<td>223</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

DECLARATION OF VESTED GROUNDWATER RIGHTS
(Under Chapter 217, Montana Session Laws, 1961)

1. Frank Garcia, of Big Sandy, 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
   - well completed July 21, 1961

4. The amount of groundwater claimed (in miner's inches or gallons per minute)
   - 12 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

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 School of Mines and Quadruplicate for the Appropriator.

4/12/63
STATE OF MONTANA

ADMINISTRATOR OF GROUNDWATER CODE

MONTANA WATER RESOURCES BOARD

NOTICE OF APPROPRIATION OF GROUNDWATER

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

After filing a notice of appropriation, in order to acquire a right based thereon, the person must, within ninety (90) days, commence actual excavation and diligently prosecute construction of a well or other means of development, file a notice of completion with the County Clerk of the county in which the appropriation is located. Three copies of this notice are to be filed with the County Clerk of the county in which the well is located.

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

1. (Name of Appropriator) Gailley Boothe
   (Address) Big Sandy
   (Town) County of Chouteau, State of Montana did appropriate groundwater in accordance with Chapter 237, Montana Session Laws of 1961.

2. The beneficial use to which water is to be applied is stock water & domestic

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

4. The estimated amount of groundwater to be used annually

5. The annual period (inclusive dates) of intended use

6. The probable or intended date of commencement and completion of the well or wells
   completed

7. The location, type, size and depth of well or wells
   NE 1/4 Sec. 13, T. N. R. 15, E
   S.W. 1/4

8. The probable or estimated depth of the water-table or artesian aquifer

9. The name, address, and license number of the driller engaged

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

For Administrator's Use

Signature of Appropriator Date

X Gailley Boothe

June 1973

*As defined in the Code Sec. 1 (c) "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 pressure or is artificially withdrawn.
DECLARATION OF VESTED GROUNDWATER RIGHTS
(Under Chapter 237, Montana Session Laws, 1961)

1. Frank Adamo, of Big Sandy
   (Name of Appropriator)
   (Address)
   (Town)

County of Chouteau, 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: irrigation.

3. Date or approximate date of earliest beneficial use and the continuous use thereafter: 1914.

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: 7 acres adjoining well.

6. The means of withdrawing such water from the ground and the location of each well: 4 inch plastic pipe—40 foot lift.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: 1914.

8. The depth of water table: 40 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: 4 inch plastic pipe, pump.

10. The estimated amount of groundwater withdrawn each year: 300 acre feet.

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

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record: none.

Signature of Owner: Frank Adamo
Date: 30 December 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
(Under Chapter 237, Montana Session Laws, 1961)

1. Arvid B. & Velsa H. Rutledge
   (Name of Appropriator)

   of
   (Address)

   Big Sandy
   (Town)

   County of Chouteau
   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

   November 1957

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

   10 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

   none

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

   windmill

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

   November 1957

   completion

   8. The depth of water table

   40 feet

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

   6 inch casing 2 feet deep

   10. The estimated amount of groundwater withdrawn each year

   known

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

   not available

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

   none

   Signature of Owner

   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.
NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater: December 21, 1963

Owner: Arvid B. and Valda R. Rutledge

Address: Big Sandy, Montana

Contractor (if any): unknown

Date Started: Aug. 1945 Date Completed: Sept. 1945

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable. bulldozed pit and reservoir

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent estimate approximate lengths of periods of use 9 months for stockwater

Signature of Owner: Arvid B. Rutledge

Date: 12-30-63

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

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; triplicate to the School of Mines 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)

Louis F. Beeler  
(Name of Appropriator)

County of  
(Town)

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:  
   Farm Use

3. Date or approximate date of earliest beneficial use; and how continuous the use has been:  
   1846 continuously

4. The amount of groundwater claimed (in miner's inches or gallons per minute):  
   30 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:  
   Gardens in SW 1/4 Sec 31
   Louis Beeler

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:  
   1946

8. The depth of water table:  
   80 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 well 80 ft deep

10. The estimated amount of groundwater withdrawn each year:  
    730,000 gallons

11. The log of formations encountered in the drilling of each well if available:  
    Shale until water was hit  
    Mostly Blue

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:  
Louis F. Beeler

Date:  
March 11, 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.
Filed Dec. 11, 1962
at 11 o'clock A. M.

George W. Harvey, Co. Clerk
By Irma M. Harris, Deputy

Fee $2.00 paid
NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater: October 1, 1948

Owner: Lester Rutledge & Jennie Rutledge

Address: Big Sandy, Montana

Contractor (if any): None

Address of Contractor: None

Date Started: Oct. 1, 1948

Date Completed: Oct. 12, 1948

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable. This is a full flowing spring.

Spring is used for livestock.

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent, estimate approximate lengths of periods of use. The water is used for livestock and there is more than the cattle will use at the present time. There should be a flow of 50 gallons per minute.

Signature of Owner: Lester Rutledge & Jennie Rutledge

Date: December 9, 1948

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

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriaor.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. Robert C. Year of Big Sandy
   (Name of Appropriator) (Address) (Town)
   County of Chouteau 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)

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1953

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1953

8. The depth of water table 140

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

10. The estimated amount of groundwater withdrawn each year 50 c.c.

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

File No. DUPLICATE

T.25 R.15
County Chouteau

JAN 7 1964
RECEIVED

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.

25947
<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>
</thead>
<tbody>
<tr>
<td>2</td>
<td>TX Ranch Co</td>
<td>GW3</td>
<td>265525</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Robert &amp; Darlington</td>
<td>GW4</td>
<td>27/1539</td>
<td>Filed in 2/4/165</td>
</tr>
<tr>
<td>7</td>
<td>J R. Barnes</td>
<td>GW2</td>
<td>3/4/299</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>J C. Barnes</td>
<td>GW4</td>
<td>37/1503</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Robert R. Darlington</td>
<td>GW3</td>
<td>37/1531</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Ruth &amp; Dunn</td>
<td>GW2</td>
<td>3/4/197</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>J O. Barns</td>
<td>GW2</td>
<td>3/4/299</td>
<td></td>
</tr>
</tbody>
</table>
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater. 6-1-71

Owner.  I X Ranch Co.

Address.  163  W. 4th, Missoula, Montana

Contractor (if any).  Thomas Maxwell

Address of Contractor.  163  W. 4th, Missoula, Montana

Date Started.  5-22-71  Date Completed.  6-1-71

Describe means of obtaining groundwater without a well “as by sub-irrigation and other natural processes”. Include depth to water when applicable.  Stockwater, non-renewable.

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent estimate approximate lengths of periods of use.  6-1-71.  7-1-71

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

Signature of Owner.

I X Ranch Co. by Arthur K. Both, Jr.

Date.  6-1-71

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

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; triplicate to the School of Mines and quadruplicate for the Appropriator.
Tons to be filed with the County Clerk and Recorder of which the following are located.

Answer all questions. Not applicable otherwise. Forms returned to the County Clerk and Recorder. Duplicate to the State Engineer.
STATE OF MONTANA.
COUNTY OF CHUTEAU.

Filed DEC 3 1971
at 11:30 o'clock A.M.

By Deputy

Fee $2.00 Paid
Notice of Completion of Groundwater Appropriation by Means of Well

(State of Montana, 1961)

Owner: J.O. Brewer
Address: Big Sandy Montana
Driller: Simpson Drilling Co., Address: Malta, Montana

Date of Notice of appropriation of ground water: 12/12/62
Date well started: 12/12/62
Date completed: 12/14/62

Type of well: Drilled
Equipment used: Drill Tools
(Dug, driven, bored, or drilled)

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

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. 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 Drilled Hole</th>
<th>Size and Weight of Casing</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
<th>Size of Pipe</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5&quot;</td>
<td>4&quot; 11 lbs</td>
<td>0</td>
<td>142</td>
<td>3/16</td>
<td>87</td>
<td>141</td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing well: 19 feet.
Shut-in Pressure for Flowing Well: 120 feet
Pumping Water Level: 120 feet at 5 gal. per minute.
Discharge in gal. per min. of flowing well: 5 gal. per minute.
How Tested: 2 hours
Length of Test: 2 hours
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)

15 acres

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 Appropriate.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. James O. Brewer
   (Name of Appropriator)  Big Sandy
   (Address)  (Town)

   County of Chouteau  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
      Stock water

   3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1955

   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 none

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

   NE 1/4 SE 1/4 NW 1/4 SW 1/4

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

   7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1955

   8. The depth of water table 30 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 300 feet, 20 gallons per minute, electric pump

   10. The estimated amount of groundwater withdrawn each year

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

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

   Signature of Owner James O. Brewer
   Date June 25, 1973

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.
The document contains a table with columns and rows, and there are handwritten notes on the right side of the page. The content of the table and the notes appear to be related to some form of data recording or analysis. The handwriting includes dates and numbers, indicating a human-recorded entry. The document seems to be a legal or administrative record, possibly related to a specific event or case.
NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater: 1965
Owner: Robert V. Darlington
Address: Big Sandy, Montana 59520
Contractor (if any): none
Address of Contractor: 
Date Started: May 1965; Date Completed: May 1965

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable: developed dug out spring w/tank and piped

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent estimate approximate lengths of periods of use

used year around - stock water

flows 2 gal per minute

Signature of Owner: Robert V. Darlington
Date: June 26, 1973

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

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; triplicate to the School of Mines and Quadruplicate for the Appropriator.
File No. 15

DUPLICATE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER FUND
OFFICE OF STATE ENGINEER

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

Owner. Ruth B. Han
Address: Big Sandy, Montana

Driller. Lloyd G. Hanberg
Address: Box Rider, Montana

Date of Notice of Appropriation of Groundwater: April 11, 1962

Date well started: April 11, 1962. Date Completed: April 18, 1962

Type of well: DUG
Equipment Used: pump
(dug, driven, bored or churn, drill, rotary or other)

Water Use: Domestic D; Municipal Q; Stock Q; Irrigation Q; Industrial Q; Drainage Q; Other Q

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 5/8&quot;</td>
<td>6&quot; OD</td>
<td>0</td>
<td>330</td>
<td>slot 300</td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing Well: 390 feet.

Shut-in Pressure for Flowing Well: none

Pumping Water Level: 290 feet at 14 gal. per minute.

Discharge in gal. per min. of flowing well: none

How Tested: bailer
Length of Test: 2 hrs.

Remarks: (Gravel packing, cementing, packers, type of shutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of acres irrigated, if used for irrigation) none

State License No. 5
Driller's License Number: [Signature]
Driller's Signature: [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.

869.
STATE OF MONTANA, 7x.
COUNTY OF CHEUTEAR.

Plead June 14 62
at 3:00

George W. Harris
County Clerk

June 14, Paid
Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner: J O Brewer, State Engineer, Montana
Driller: Simpson Drilling Co., Address: Malta, Montana

Date of Notice of appropriation of ground water: 12/10/62
Date Well Started: 12/11/62
Date Completed: 12/11/62

Type of well: Drilled
Equipment used: Cable tools
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>7&quot; x 15 lbs</td>
<td>6&quot; x 15 lbs</td>
<td>39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing well: 18 feet
Shut-in Pressure for Flowing Well: 12 feet
Pumping Water Level: 39 feet at 42 gal. per minute.
Discharge in gal. per min. of flowing well:

How Tested: Baller
Length of Test: 2 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)

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.

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 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>
</thead>
<tbody>
<tr>
<td>9</td>
<td>TV Ranch Co.</td>
<td>6.0.3</td>
<td>244533</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>J. O. Barnes</td>
<td>6.0.3</td>
<td>246798</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>J. O. Barnes</td>
<td>6.0.4</td>
<td>271904</td>
<td></td>
</tr>
</tbody>
</table>
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater ....May 23, 1972....
Owner ....I X Ranch Co....
Address ....Big Sandy, Montana....
Contractor (if any) ....Thomas Marshall....
Address of Contractor ....Big Sandy, Montana....
Date Started ....5-15-72.... Date Completed ....5-21-72....

Describe means of obtaining groundwater without a well “as by sub-irrigation and other natural processes”. Include depth to water when applicable. ....Excavation 29 ft., 0 cu. yd....

Stockwater Pit.

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent estimate approximate lengths of periods of use. ....3-6 months....

Signature of Owner ....

IX Ranch Co., by Arthur H. Keoh, Jr.
Date ....3-15-72....

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

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the School of Mines and Quadruplicate for the Appropriator.
Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner: James O. Brewer
Address: 120 Sandy, Montana

Date of Notice of Appropriation of Ground Water: Dec. 15, 1962
Date of Notice of Completion: Dec. 31, 1962

Type of Well: Drilled
Equipment Used: Churn

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 (Feet)</th>
<th>Kind of Strata</th>
<th>Kind of Strata</th>
<th>From Bottom (Feet)</th>
<th>Perforations</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>Light grey shale-soft</td>
<td>199</td>
<td>Drilled 159 179</td>
<td></td>
</tr>
<tr>
<td>401</td>
<td>Grey sandstone-water approx.</td>
<td>179</td>
<td></td>
<td></td>
</tr>
<tr>
<td>199</td>
<td>Sandy blue-grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>198</td>
<td>Brown shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>197</td>
<td>Blue shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>196</td>
<td>Blue-grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>195</td>
<td>Sandy blue-grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>194</td>
<td>Grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>193</td>
<td>Sandy grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>192</td>
<td>Blue-grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>191</td>
<td>Blue shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>190</td>
<td>Brown shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>189</td>
<td>Blue shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>188</td>
<td>Sandy shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>187</td>
<td>Grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>186</td>
<td>Blue-grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>185</td>
<td>Blue shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>184</td>
<td>Sandy shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>183</td>
<td>Grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>182</td>
<td>Blue-grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>181</td>
<td>Blue shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180</td>
<td>Sandy shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>179</td>
<td>Grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>178</td>
<td>Blue-grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>177</td>
<td>Blue shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>176</td>
<td>Sandy shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>175</td>
<td>Grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>174</td>
<td>Blue-grey shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
<tr>
<td>173</td>
<td>Blue shale</td>
<td>199</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing well: 40 ft.
Shut-in Pressure for flowing well: Not applicable
Pumping Water Level: 159 ft.

Discharge in gal. per min. of flowing well: Not applicable

Driller: Simpson Drilling Co.
Address: Malta, Montana

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

Not applicable

How Tested: Water Level Pump
Length of Test: 3 hours

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.

This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder: 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 Appropriator.
DECLARATION OF VESTED GROUNDWATER RIGHTS
(Under Chapter 237, Montana Session Laws, 1961)

1. JAMES O. BREMER, of Big Sandy,
   (Name of Appropriator) (Address) (Town)

   County of Chouteau State of Montana

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

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
   1960

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

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof
   none

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

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

8. The depth of water table
   20 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
   Gallon 4 ft. Gas engine driven pump

10. The estimated amount of groundwater withdrawn each year

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

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

   Signature of Owner: JAMES O. BREMER
   Date: June 26, 1973

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.
COUNTY OF CHUTEAU

STATE OF MONTANA

Filed JUN 29 1973

By Deputy

Fee $5.00 Paid
<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>
</thead>
<tbody>
<tr>
<td>9</td>
<td>William L. Yelen</td>
<td>C603</td>
<td>342763</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Roger DeBruyere</td>
<td>G603</td>
<td>343567</td>
<td></td>
</tr>
</tbody>
</table>
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater: November 15, 1956

Owner: William L. Nelson

Address: Dutton, Montana

Contractor (if any): None

Address of Contractor: None

Date Started: Nov. 16, 1956; Date Completed: Nov. 15, 1958

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

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent estimate approximate lengths of periods of use

Used "intermittently for domestic use in Spring, Summer and Fall.

Signature of Owner: William L. Nelson

Date: December 20, 1958

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

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; triplicate to the School of Mines and quadruplicate for the Appropriator.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL

(Under Chapter 237 Montana Session Laws, 1961)

File No. [Redacted]

Date of Appropriation of Groundwater

Owner: [Redacted] J. Lowerey Farm

Address: [Redacted]

Date Stated: 1962 Date Completed: 9-24-68

Describe means of obtaining groundwater without a well "as by irrigation and other natural processes". Include depth to water when applicable.

SW 1/4 Sec. 11, T.24N.R. 4E

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent, estimate approximate lengths of periods of use.

20 gallons per day, measured with eight gallon rain gauge

Wins Station

Signature of Owner: [Redacted]

Date: 9-24-71

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

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; triplicate to the School of Mines 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>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Tony Wellsler</td>
<td>Gas 4</td>
<td>247084</td>
<td></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)

1. [Name of Appropior] of [Address] (Town)

    County of [County], State of [State], 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 thereon:

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:

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.

26397
# Groundwater Index

<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>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Duck Bridge Well Association</td>
<td>Gw 04</td>
<td>34-4443</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Pennock and Nelson</td>
<td>3-1959</td>
<td></td>
<td>east</td>
</tr>
<tr>
<td>29</td>
<td>Fred Fishbaugh</td>
<td>1959</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Wahl Paving Company</td>
<td>1959</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Morris Master et al.</td>
<td>19-</td>
<td></td>
<td>No. 26</td>
</tr>
<tr>
<td>21</td>
<td>Morris Master et al.</td>
<td>6-144</td>
<td></td>
<td>34-0962</td>
</tr>
</tbody>
</table>

County: Chouteau

Twp: 24N

Rge: 4E
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. Buck Bridge Well Association, of Carter, Montana
   (Name of Appropriator) (Address) (Town)
   a corporation
   County of Chouteau, 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: Domestic Water and Stock Water

   3. Date or approximate date of earliest beneficial use; and how continuous the use has been: 1960 - year around

   4. The amount of groundwater claimed (in miner's inches or gallons per minute) 50,000 gals per day

   5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof: None

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

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

   8. The depth of water table: 5 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 ft. Culvert - 12 feet deep - 6 inch pump - electric thereon

   10. The estimated amount of groundwater withdrawn each year: 5 Million gals per year

   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: None

   Signature of Owner: [Signature]
   President: [President]
   Date: December 17, 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 School of Mines and Quadruplicate for the Appropriator.
**WATER WELL LOG**

**Owner:** Kettnell and Nelson  
**Address:** Carter, Montana

**Driller:** Carter, Allis-Wellers  
**Address:** Carter, Montana

**Date Started:** May 21, 1958  
**Date Completed:** Sept. 30, 1958

**Location:** Sec. 15, T. 41 N., R. 44 W., 1/4 sec. N., 1/4 sec.

---

**Type of well:** Drilled  
**Equipment used:** Churn drill

**Water use:**  
- Domestic [x]  
- Municipal [ ]  
- Stock [x]  
- Irrigation [ ]

- Industrial [ ]  
- Drainage [ ]  
- Other:

---

**Casing:**  
- 0 ft. to 73 ft. Type galv. Size 6 in. T.S.
- 73 ft. to 547 ft. Type black Size 6 in. T. S.
- [ ] 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:** about 250 ft. to water [ ] feet.

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

**Pumping water level:** unknown [ ] feet at [ ] gal. per min.

**How tested:** submersible pump

**Length of test:** 65 hours

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

---

(over)
Type of well: Dry/Drilled
Equipment used: Churn

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

Casing: 0 ft to 531 ft: Type: Black, Size: 6 in.
Casing: 531 ft to 537 ft: Type: Other

Perforated or Screened: 537 ft to [ ] ft

Type of screen or perforations

Static water level, for non-flowing well: about 250 ft, to water

Shut-in pressure, for flowing well: [ ] lb/sq in. on: [ ] (date)
Pumping water level: unknown, feet at: [ ] gal per min.

How tested: Submersible pump

Length of test: 65 hours

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

<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>80 ft. Glacier Deposit</td>
</tr>
<tr>
<td>80 ft.</td>
<td>467 ft. Shale</td>
</tr>
<tr>
<td>467 ft.</td>
<td>560 ft. Sand</td>
</tr>
<tr>
<td>560 ft.</td>
<td>568 ft. Shale</td>
</tr>
<tr>
<td>568 ft.</td>
<td>620 ft. Sand</td>
</tr>
<tr>
<td>620 ft.</td>
<td>625 ft. Shale</td>
</tr>
</tbody>
</table>
**WATER WELL LOG**

<table>
<thead>
<tr>
<th>Owner</th>
<th>Fred Fishbaugh</th>
<th>Address</th>
<th>Carter, Mont.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driller</td>
<td>O. Thatcher</td>
<td>Address</td>
<td>Stanford, Mont.</td>
</tr>
<tr>
<td>Date Started</td>
<td>Aug. 20, 1959</td>
<td>Date Completed</td>
<td>8/29/59</td>
</tr>
<tr>
<td>Location</td>
<td>Sec. 28, T., 24, R. 6 E 3/4 sec. SWSE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Type of well**: Drilled
- **Equipment used**: Rotary
  - (Churn drill, rotary, other)

- **Water use**:
  - Domestic [x]
  - Stock [ ]
  - Irrigation [ ]
  - Industrial [ ]
  - Drainage [ ]
  - Other:________________________________________

- **Casing**:
  - 0 ft. to 16½ ft. Type Galv. Size 2"
  - 16½ ft. to____ ft. Type Size
  - ____ ft. to____ ft. Type Size

- **Perforated or Screened**:
  - Ft. to Ft. Ft. to Ft.
  - Type of screen or perforations Cut with cutting torch

- **Static Water level, for non-flowing well**: _______ feet.
- **Shut-in pressure, for flowing well**: 74 lbs. lb./sq. in. on: 11/23/59 (date)
- **Pumping water level**: _______ feet at _______ gal. per min. 20
- **How tested**:________________________________________

- **Length of test**:________________________________________

- **Remarks**: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)
  - Cemented with 6 sacks cement. Shut off valve at 6 feet, 3/4 1½" valve.

(over)
## Log of Well

<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 59</td>
<td>Mud and gravel</td>
</tr>
<tr>
<td>59 to 254</td>
<td>Alt. Blue shale and sandstone</td>
</tr>
<tr>
<td>254 to 255</td>
<td>Hard sandstone</td>
</tr>
<tr>
<td>255 to 259</td>
<td>Blue shale and sandstone</td>
</tr>
<tr>
<td>259 to 260</td>
<td>Sandstone</td>
</tr>
<tr>
<td>260 to 270</td>
<td>Blue shale</td>
</tr>
<tr>
<td>270 to 335</td>
<td>Alt. Sandy shale and sandstone</td>
</tr>
<tr>
<td>335 to 473</td>
<td>Alt. Blue shale and hard sandstone</td>
</tr>
<tr>
<td>473 to 590</td>
<td>Alt. Sandstone and sandy shale</td>
</tr>
<tr>
<td>590 to 75</td>
<td>Sandy shale with thin layers of sandstone</td>
</tr>
<tr>
<td>75 to 825</td>
<td>Hard and soft sandstone</td>
</tr>
<tr>
<td>825 to 1036</td>
<td>Sandy blue shale</td>
</tr>
<tr>
<td>1036 to 1093</td>
<td>Sandy shale with thin layers of hard sandstone</td>
</tr>
<tr>
<td>1093 to 1210</td>
<td>Sandstone</td>
</tr>
<tr>
<td>1210 to 1300</td>
<td>Red shale</td>
</tr>
<tr>
<td>1300 to 1305</td>
<td>Red shale with sandy shale</td>
</tr>
<tr>
<td>1305 to 1350</td>
<td>Sandy red shale</td>
</tr>
<tr>
<td>1350 to 1377</td>
<td>Red shale and muddy</td>
</tr>
<tr>
<td>1377 to 1408</td>
<td>Red shale and muddy</td>
</tr>
<tr>
<td>1408 to 1458</td>
<td>Red shale sandy shale and sandstone</td>
</tr>
<tr>
<td>1458 to 1500</td>
<td>Alt. hard sandstone and shale</td>
</tr>
<tr>
<td>1500 to 1578</td>
<td>Sandy shale alt. hard sandstone</td>
</tr>
<tr>
<td>1578 to 1619</td>
<td>Alt. soft and hard sandstone</td>
</tr>
</tbody>
</table>
# WATER WELL LOG

<table>
<thead>
<tr>
<th>Owner</th>
<th>Dealer-Pease-Norms Address: Lewistown, Montana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driller</td>
<td>Walter Pease Address: Lewistown, Montana</td>
</tr>
<tr>
<td>Date Started</td>
<td>March 1957</td>
</tr>
<tr>
<td>Date Completed</td>
<td>May 1957</td>
</tr>
<tr>
<td>Location</td>
<td>Sec. 29 T. 34 R. 6 1/4 sec. 9 1/2 of NE 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of well</th>
<th>Drilled (drill, driven, bored, or drilled)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment used</td>
<td>Churn Drill</td>
</tr>
</tbody>
</table>

| Water use              |  | Municipal | Stock | Irrigation |
|------------------------|  |-----------|-------|------------|
| Domestic               | X|           |       |            |
| Industrial             |  |           |       |            |
| Municipal              |  |           |       |            |
| Stock                  |  |           |       |            |
| Irrigation             |  |           |       |            |

| Casing: 0 ft. to 157 ft. Type: Iron Size: 9 in. F. D. |
| Casing: 0 ft. to 535 ft. Type: Iron Size: 6 5/8 in. 0. P. |
| Casing: 0 ft. to 535 ft. Type: 0. P. Size: |

| Perforated or Screened: Ft. Name to Ft. Name to Ft. Name to Ft. Name |
| Type of screen or perforations |

| Static Water level, for non-flowing well: 250 ft. |
| Shut-in pressure for non-flowing well: None lb/sq. in. on: April 29, 1958 |
| Pumping water level: 530 feet at 20 gal. per min. |
| How tested: Saled |
| Length of test: 2 hours |

| Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off) |
| Eight-inch casing cemented in at 157 ft. and 6 5/8 casing cemented at 535 ft., allowing gas to escape and preventing entry into well of alkali and other bad water from above 51 feet. |

<table>
<thead>
<tr>
<th>(over)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth, feet</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>1 - 3</td>
</tr>
<tr>
<td>2 - 50</td>
</tr>
<tr>
<td>50 - 536</td>
</tr>
<tr>
<td>536 - 610</td>
</tr>
</tbody>
</table>
Form No. 18

T. 24 R. 6

County

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED
DEC 4, 1961

STATE ENGINEER

Owner: MINNIE WOSTER & R. D. VISCHER
Address: CARTER MONTANA

Driller: JOHN LOWE
Address: FAIRFIELD MONTANA

Date Started: JUNE 1946
Date Completed: JULY 1946

Location: Sec. 24 T. 24 R. 6 S/E sec. 26 SW

Water Well Log

Type of well drilled

Domestic[X] Municipal[X] Stock[X] Irrigation[X]

Industrial[X] Drainage[X] Other

Water use:

Casing: 528 ft. to ft. Type Iron Size 5

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or screened: Ft. 16 to ft. Ft. to ft.

Type of screen or perforations Slots in pipe

Static water level, for non-flowing well: 428 feet.

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

Pumping water level feet at gal. per min. one

How tested: Cylinder & Jack

Length of test 60 Hrs.

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

(over)