STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODES
OFFICE OF STATE ENGINEER

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

1. LeRoy L. Ellington, of Box 744, Cut Bank

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. Until 1957 - Irrigation
   Use.

4. The amount of groundwater claimed (in minces inches or gallons per minute) 10 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 The estimated amount of groundwater withdrawn each year.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. 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: LeRoy L. Ellington
Date: 12-30-63

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.

19285
DECLARATION OF VESTED GROUNDWATER RIGHTS

(Under Chapter 237, Montana Session Laws, 1961)

Earl R. Copelan
(Names of Appropriate)

of Boxing Cut Bank

(Addres)

County of Glacier

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: Well was drilled to provide water for two dwellings.

3. Date or approximate date of first beneficial use, and how continuous the use has been: July 1, 1933, and has been in continuous use ever since.

4. The amount of groundwater claimed (in inches or gallons per minute): 2 gpm.

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof: Not applicable.

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: March 1, 1933.

8. The depth of water table: 140 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 water: Wells 175 ft deep, 8 in., with Myers working head with 60' hose.

10. The estimated amount of groundwater withdrawn each year: 110,000 gpm.

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: No other information.

Signature of Owner: Earl R. Copelan

Date: 9-23-63

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

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

Richard and Ruth Rossman, of Box 321, Cut Bank
County of Glacier, 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: TEES, Household, yard, Future Livestock

3. Date or approximate date of earliest beneficial use; and how continuous the use has been from that date: MARCH, 1956

4. The amount of groundwater claimed (in inches or gallons per minute): 10 gallons per minute

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: 10 acres, 10 acres, 10 acres

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: MARCH 1956

8. The depth of water table: 220 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: 9 inch hole with 6 inch casing, 247 feet deep

10. The estimated amount of groundwater withdrawn each year: 50,000 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: Richard Rossman
Date: 2/2/63

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.

3654
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: August 1962

Owner: [Name] Address: [Address]

Contractor (if any): [Name] Address of Contractor: [Address], Montana

Date Started: [Date] Date Completed: [Date]

Describe means of obtaining groundwater without a well “as by sub-irrigation and other natural processes”. Include depth to water when applicable. Supply would flow periodically before reservoir was built, since building reservoir it flows continuously.

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.

Signature of Owner: [Signature]

Date: [Date]

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)

(Owners)
Hazel E. Selby
Florie L. McLeod
Aldene Barrington
Ethel B. MacDonald, ________

Date of Appropriation of Groundwater: January 1912
Owner: Administrator Address: Cut Bank, Montana

Contractor (if any) ________ none ________
Address of Contractor ________ X ________

Date Started ________ Date Completed ________

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable. This is a few (two or three) small natural springs in a coulee - water runs down hill possibly 1 mile, then gradually disappears in the earth.

Signature of Owner: ________ MacDonald ________

Date Oct. 15, 1962

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

1. UNION OIL COMPANY OF CALIFORNIA of Box 230 Curt Bank
   (Name of Appropriator) (Address) (Town)

   County of Glacier State of Montana

   have appropriated groundwater according to the Montana laws in effect prior to January 1, 1963, as follows:

   1. The beneficial use on which the claim is based: Industrial (Refinery and Absorption Plant cooling and process water and boiler feed water). Domestic (twelve cottages)

   2. Date or approximate date of earliest beneficial use; and how continuous the use has been: From 1932 continuously to the present.

   3. The amount of groundwater claimed (in miner's inches or gallons per minute): 500 gal/min; normal pumping rate 250 gal/min

   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 depth of water table: see attached copies of four well logs.

   6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal: Detailed on four attached water well log reports. (These logs were filed with Glacier County Clerk and Recorder in December, 1961)

   7. The estimated amount of groundwater withdrawn each year: 125-150 million gallons

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

   Two Medicine - surface formation

   Virgilia member of the Eagle Sandstone Formation, which is the water horizon.

   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: None other than the attached well logs.

   10. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: see attached copies of four well logs.

   11. The type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: see attached copies of four well logs.

   12. The type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: see attached copies of four well logs.

   Signature of Owner: 

   Date: March 15, 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.
Form No. 18

<table>
<thead>
<tr>
<th>T.</th>
<th>33 N</th>
<th>R.</th>
<th>5 W</th>
</tr>
</thead>
</table>

**County:** Glacier

**State Engineer**

MONTANA BUREAU OF MINES AND GEOLOGY

Butte, Montana

Kannelton

Water Well Log

RECEIVED 8-60 1962

Owner: **Union Oil Company of California**

Address: Box 298 Cut Bank

Driller: **M. J. Wilson**

(Banished)

Address: Cut Bank

Date Started: **July, 1952**

Date Completed: **July, 1953**

Location: Sec. 19 T. 33 N R. 5 W 1 sec. NE 4 NW 1 NE 1/4 NW 1/4 Sec 19

Type of well: **Drilled**

Equipment used: **Small Star pump**

Water use: Domestic [ ] Municipal [ ] Stock [ ] Irrigation [ ]

Industrial [X] Drainage [ ] Other [ ]

Casing: 0 ft. to 25 ft. Type [40] Size [7"

Casing: 25 ft. to 100 ft. Type [ ] Size [ ]

Casing: 100 ft. to 251 ft. Type [ ] Size [ ]

Perforated or screened: Ft. [ ] to Ft. [ ]

Type of screen or perforations: [ ]

Static water level, for non-flowing well: 164' [ ] feet.

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

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

How tested: Well not being pumped at present.

Length of test [ ]

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

Casing cemented at 251'

This well pumped at 100 gal. per minute for about two months in 1952. Pumping discontinued and pump removed due to lack of water. Well is capped at present, but well will probably have to be pumped and water treated in the near future.

# Log of Well

<table>
<thead>
<tr>
<th>Depth feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
<tr>
<td>160</td>
<td>Top of Two Medicine Sand</td>
</tr>
<tr>
<td>249</td>
<td>Top of Eagle Sand</td>
</tr>
<tr>
<td>260</td>
<td>First Water</td>
</tr>
<tr>
<td>289</td>
<td>Soft Sand</td>
</tr>
<tr>
<td>301</td>
<td>Hard Sand (well bottomed at 301)</td>
</tr>
</tbody>
</table>
Owner: Union Oil Company of California
Address: Box 198, Cut Bank

Driller: M. J. Wilson (Deceased)
Address: Cut Bank

Date started: July, 1952
Date completed: July, 1952

Location: Sec. 19, T. 33 N., R. 5 W., 1/4 sec. NE NE

Type of well: Drilled
Equipment used: Simple Star Spudder

Water well log

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

Casing:
- 0 ft. to 251 ft. Type H 40 Size 7"
- 251 ft. to 2 ft. Type [ ] Size [ ]
- 2 ft. to 2 ft. Type [ ] Size [ ]

Perforated or Screened: 2 ft. to 2 ft. Ft. to Ft.

Type of screen or perforations:

Static water level, for non-flowing well: 164' feet

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

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

How tested: Well not being pumped at present

Length of test:

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

Casing cemented at 251'

This well pumped at 100 gal. per minute for about two months in 1952. Pumping has con-
tinued and pump removed due to sulfur water. Well is capped at present but well will probably have to be pumped and water treated in the near future.

Received: Jan 2, 1962
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>160</td>
<td>Top of Two Medicine Sand</td>
</tr>
<tr>
<td>249</td>
<td>Top of Eagle Sand</td>
</tr>
<tr>
<td>260</td>
<td>First Water</td>
</tr>
<tr>
<td>289</td>
<td>Soft Sand</td>
</tr>
<tr>
<td>301</td>
<td>Hard Sand (well bottomed at 301)</td>
</tr>
</tbody>
</table>
Bertha C. Stahl, of Cut Bank, 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: dwelling, garden, yard and livestock.

2. Date or approximate date of earliest beneficial use: July, 1942. Has been Continuous.

3. The amount of groundwater claimed (in inches or gallons per minute): 5.5 gal 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: Electric Motor driven pump.

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

6. The date of commencement and completion of the construction of the well: May 1942 - completed July, 1942.

7. The depth of water table: 340'.

8. The estimated amount of groundwater withdrawn each year: 2,920,666 gal.

9. The log of formations encountered in the drilling of each well is available: Similar to logs of Humble Oil Co. wells located on NE SE SW, Sec. 30, T. 31 N., R. 5 W., Glacier County.

10. 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: 

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.
## MONTANA BUREAU OF MINES AND GEOLOGY

**Butte, Montana**

**Water Well Log**

<table>
<thead>
<tr>
<th>T</th>
<th>33 W R SW</th>
</tr>
</thead>
</table>

**County:** GLACIER  
**Date Received:** JAN 2, 1962

### Owner

| Union Oil Company of California | Box 250, Cut Bank |

### Driller

| N. J. Wilson, (Deceased) | Address Cut Bank |

### Date Started

| May 18, 1943 |

### Date Completed

| May 18, 1943 |

### Location

| 21 T. 33 N R SW 1/4 sec. SW 1/4 NWW 1/4 NWW 1/4 Sec. 21 |

### Well Information

- **Type of Well:** Drilled (drill, drive, bored or drilled)
- **Equipment Used:** Small Submersible

### Water Use

- Domestic: 
- Municipal: 
- Stock: 
- Irrigation: 
- Industrial: 
- Drainage: 
- Other: 

### Casing Information

<table>
<thead>
<tr>
<th>Depth</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ft. to 396 ft.</td>
<td>Type</td>
<td>7&quot;</td>
</tr>
</tbody>
</table>

### Perforated or Screened

<table>
<thead>
<tr>
<th>Depth</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>396 ft. to 600 ft.</td>
<td>Type</td>
<td>Size</td>
</tr>
</tbody>
</table>

### Static Water Level

Non-flowing well: 

### Shut-In Pressure

Flowing well: 

### Pumping Water Level

<table>
<thead>
<tr>
<th>Height</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 ft.</td>
<td>May 18, 1943</td>
</tr>
</tbody>
</table>

### How Tested

Timed into 54 gallon drum

### Length of Test

Three or four tests of about 40 seconds duration

### Remarks

Gravel packing, cementing, packers, type of shut-off, depth of shut-off

### Casing Bulldogged at 296 ft.

---

Redimensions made for clarification - July 22, 1962

---

(over)
## Log of Well

<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
<tr>
<td>0</td>
<td>300</td>
</tr>
<tr>
<td>300</td>
<td>308</td>
</tr>
<tr>
<td>311</td>
<td>Total depth</td>
</tr>
</tbody>
</table>

This well is known as Corripex Well #2 and is pumped by means of a 45 HP Waukesha 6 cylinder gas engine through a right angle gear box which in turn rotates a water lubricated 1" open line shaft in a 4" pipe column. The shaft is connected to a 25 stage closed impeller bell type hole pumping unit.
<table>
<thead>
<tr>
<th>Owner</th>
<th>Union Oil Company of California</th>
<th>Address</th>
<th>Box 230, Cut Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driller</td>
<td>M. J. Wilson, (Decedent)</td>
<td>Address</td>
<td>Cut Bank</td>
</tr>
<tr>
<td>Date Started</td>
<td>Apr. 11, 1950</td>
<td>Date Completed</td>
<td>Apr. 14, 1950</td>
</tr>
<tr>
<td>Location</td>
<td>Sec. 21, T. 33 N. R. SW 14 sec.</td>
<td></td>
<td>SW 1/4 NW 1/4 Sec. 21</td>
</tr>
<tr>
<td>Drilled</td>
<td></td>
<td>Equipment used</td>
<td>Small Star Spreader</td>
</tr>
<tr>
<td>Water use</td>
<td>Domestic □</td>
<td>Municipal □</td>
<td>Stock □</td>
</tr>
<tr>
<td>Type of well:</td>
<td>Drilled (Drill, driven, bored, or drilled)</td>
<td>Equipment used</td>
<td>Small Star Spreader</td>
</tr>
<tr>
<td>Casing</td>
<td>0 ft. to 239 ft. □</td>
<td>Type □</td>
<td>Size □</td>
</tr>
<tr>
<td>Perforated or Screened:</td>
<td></td>
<td>Type □</td>
<td>Size □</td>
</tr>
<tr>
<td>Static Water level, for non-flowing well:</td>
<td>250</td>
<td>feet</td>
<td></td>
</tr>
<tr>
<td>Shut-in pressure, for flowing well:</td>
<td>lb/sq. in. on: (date)</td>
<td>80-85</td>
<td>gal. per min.</td>
</tr>
<tr>
<td>Pumping water level:</td>
<td>feet at 251</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How tested:</td>
<td>Timed into 54 gallon drum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of test:</td>
<td>Three or four tests of about 60 minutes duration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)</td>
<td>Casing cemented at 259</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Red: Changed made for classification - July 21, 1950
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Top of Eagle Sandstone</strong></td>
</tr>
<tr>
<td>0 to 299</td>
<td>Two Medicine Formation - greyish gray clay</td>
</tr>
<tr>
<td>299 to 343</td>
<td>Well bottomed - 1st member of the Eagle Sandstone Formation - a buff colored sandstone and chaly sandstone - water bearing formations</td>
</tr>
</tbody>
</table>

The well is known as Corrigan Well #3 and is pumped by means of a 45 HP Warner-De carb cylinder gas engine through a right angle gear box which in turn rotates a water lubricated 1\textquoteleft open line shaft in a 9\textquoteleft pipe column - the shaft is connected to a 35 stage closed impeller bucket-style pumping unit.
<table>
<thead>
<tr>
<th>Form No. 18</th>
<th>T.</th>
<th>33 N</th>
<th>R.</th>
<th>5 W</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-60</td>
<td>County</td>
<td>GLACIER</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

CONTRIBUTION # 2
State Engineer

Date Started: May 1945
Date Completed: May 1945

Location: Sec. 11 T. 33 N R. 5 W 1/4 sec., SW 1/4 NW 1/4, Sec. 1

| Small division | 10 acres |

Table:

- **Type of well**: Drilled (drill, drive, or drilled)
- **Equipment used**: Small Star auger (chute, drill, rotary, other)
- **Water use**: Domestic, Municipal, Stock, Irrigation, Industrial, Drainage, Other
- **Casing**: 0 ft. to 0 ft. Type Size 7"

<table>
<thead>
<tr>
<th>Casing:</th>
<th>ft. to ft.</th>
<th>Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Perforated or screened**: Ft. to ft. Ft. to ft.
- **Type of screen or perforations**: None
- **Static water level, for non-flowing well**: 250 feet
- **Shut-in pressure, for flowing well**: __________ lb./sq. in. on: (date)
- **Pumping water level**: 251 feet at 60-90 gal. per min.
- **How tested**: Filled into a 54 gallon drum
- **Length of test**: Three or four tests of about 40 seconds duration
- **Remarks**: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

Casing connected at 256 ft.

(over)
<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 300</td>
<td>The Medicine Formation - greenish gray clay</td>
</tr>
<tr>
<td>300 - 300</td>
<td>Virgelle member of the Eagle Sandstone Formation - a buff colored sandstone and shaly sandstone - water bearing formation</td>
</tr>
<tr>
<td>300</td>
<td>Total depth</td>
</tr>
</tbody>
</table>

This well is known as Corrigan Well #2 and is pumped by means of a 45 HP Wisconsin 6 cylinder gas engine through a right angle gear box which in turn rotates a water lubricated 1" open line shaft in a 4" pipe column - the shaft is connected to a 35 stage closed impeller bottom hole pumping unit.
Form No. 18  
Butte, Montana  
CORRIGENDUM 8-3

Water Well Log

MONTANA BUREAU OF MINES AND GEOLOGY

Owner: UNION OIL COMPANY OF CALIFORNIA  
Address: Box 250, Cut Bank

Driller: N. J. Wilson (Deceased)  
Address: Cut Bank

Date Started: April 11, 1949  
Date Completed: April 25, 1949

Location: Sec. 21 T. 33 R. 5 W  
½ sec. SW SW NW

Small division = 10 acres

<table>
<thead>
<tr>
<th>Type of well</th>
<th>Drilled</th>
<th>Equipment used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Small Star spindler</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water use</th>
<th>Domestic</th>
<th>Municipal</th>
<th>Stock</th>
<th>Irrigation</th>
<th>Industrial</th>
<th>Drainage</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Casing:</th>
<th>0 ft. to 299 ft.</th>
<th>Type: H 40</th>
<th>Size: 7&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Casing:</th>
<th>ft. to ft.</th>
<th>Type:</th>
<th>Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Casing:</th>
<th>ft. to ft.</th>
<th>Type:</th>
<th>Size:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Perforated or screened: Ft. to Ft.  
Type of screen or perforations: None

Static water level, for non-flowing well: 250 feet.

Shut-in pressure, for flowing well: 

Pumping water level: 251 feet at 80-85 gal. per min.

How tested: Timed into 5% gallon drums.

Length of test: Three or four tests of about 40 minutes duration.

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

Casing cemented at 299 ft.

(over)

Log of Well

<table>
<thead>
<tr>
<th>Depth (feet)</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 339</td>
<td>The Medicine Formation - greenish gray clay.</td>
</tr>
<tr>
<td>339 - 343</td>
<td>Virgile member of the Eagle Sandstone Formation - a buff-colored sandstone and shaly sandstone - water bearing formation.</td>
</tr>
</tbody>
</table>

This well is known as Corrigan Well 6 3 and is pumped by means of a 45 HP Waukesha 6 cylinder gas engine through a right angle gear box which in turn rotaces a water lubricated 1" open line shaft in a 4" pipe column - the shaft is connected to a 35 stage closed capillary bottom hole pumping unit.

[Filed]
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 APPLICANT: Walter H. Christopherson
ADDRESS: 1918 S. 12th St., Butte, MT
TOWN: Butte, MT
COUNTY: Silver Bow
STATE: Montana

Declaration of Vested Groundwater Rights
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 how continuous the use has been: 1932

4. The amount of groundwater claimed (in miner's inches or gallons per minute): 9.0 gpm

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof: 80 acres, Butte S. 12th St., Butte, MT

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal: 100 ft. deep, in Butte S. 12th St., Butte, MT

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: March 1932

8. The depth of water table: 20 ft.

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: Depth of wells 175 ft.

10. The estimated amount of groundwater withdrawn each year: 30,000 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: Not available

Signature of Owner: Walter H. Christopherson
Date: March 8, 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>Date Started</th>
<th>Date Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 23, 1942</td>
<td>June 9, 1942</td>
</tr>
</tbody>
</table>

Location: Sec. 22, T. 33 N., R. 5 W., SW 1/4 sec. 15, SW 1/4 N.W. 1/4 sec. 16.

<table>
<thead>
<tr>
<th>Water well type</th>
<th>Equipment used</th>
<th>Small Star Spudder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilled</td>
<td>Small Star Spudder</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water Use</th>
<th>Industrial</th>
<th>Municipal</th>
<th>Stock</th>
<th>Irrigation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Casing:</th>
<th>21 1/2 ft. to 21 1/2 ft. Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>ft. to 21 1/2 ft. Type H 40</td>
<td>10&quot;</td>
</tr>
<tr>
<td>0</td>
<td>ft. to 23 5 ft. Type H 40</td>
<td>5 1/2&quot;</td>
</tr>
<tr>
<td>0</td>
<td>ft. to 23 5 ft. Type N 40</td>
<td>5 1/2&quot;</td>
</tr>
</tbody>
</table>

Type of screen or perforations: Torch Cut Slots

Static Water level, for non-flowing well: 189 feet.

Shut-in pressure, for flowing well: 140 lb./sq. in. on: June 27, 1942

Pumping water level: 210 feet at 80-85 gal. per min.

How tested: Timed into 5 gallon drum

Length of test: Three or four tests of about 40 seconds duration

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
<tr>
<td>0</td>
<td>242</td>
</tr>
<tr>
<td>242</td>
<td>246</td>
</tr>
</tbody>
</table>

This well is known as the 'Pasture Well' and is pumped by a 25 HP induction electric motor through a right angle gear box which in turn rotates a water lubricated 7/8" open line shaft in a 4" pipe column - the shaft is connected to a 35 stage closed impeller bottom hole pumping unit.
Form No. 18

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

PASTURE WELL

Owner: UNION OIL COMPANY OF CALIFORNIA
Address: Box 250 Cut Bank

Driller: M. J. Wilson (Deceased)
Address: Cut Bank

Date Started: May 29, 1942
Date Completed: June 9, 1942

Location: Sec. 22 T. 33 N. R. 5 W

Type of well: Drilled
Equipment used: Small Star Spreader

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

Casing: 0 ft. to 214 ft. Type: H 40 Size: 10"
Casing: 0 ft. to 235 ft. Type: H 40 Size: 14"

Perforated or screened: Ft. 211 to Ft. 214. Ft. to Ft.

Type of screen or perforations: Torch cut slots

Static water level, for non-flowing well: 200 feet.
Shut-in pressure, for flowing well: *lb./sq. in. on:

Pumping water level: 210 feet at 00-05 gal. per min.

How tested: Timed into 5-gallon drum

Length of test: Three or four tests of about 40 seconds duration

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>From 240</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>Two Calcium formation -- grayish gray clay</td>
</tr>
<tr>
<td>240</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td>Water horizon -- Wicalla member of the Eagle Sandstone Formation -- a buff colored sandstone and shaly sandstone</td>
</tr>
<tr>
<td>250</td>
<td>Top shale -- well cemented</td>
</tr>
</tbody>
</table>

This well is known as the "Feature Well" and is pumped by a 35 hp induction electric water through a right angle gear box which in turn rotates a water lubricated 1/4" open flow shaft in a 1" pipe column--the shaft is connected to a 35 stage closed impeller booster hole pumping unit.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODES
OFFICE OF STATE ENGINEER

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

1. Clyde Monroe, of Cut Bank, State of Montana,
   have appropriated groundwater according to the Montana laws in effect prior to January 1, 1963, as follows:

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

   3. Date or approximate date of earliest beneficial use; and how continuous the use has been:
      Feb 1963 Continuous

   4. The amount of groundwater claimed (in miner's in 's or gallons per minute): 5-7.5 gal per day

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

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

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

   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:
      2.46 in. Deep, 2 in. Pipe, 10,000 gal

   10. The estimated amount of groundwater withdrawn each year:
       27,000 gal

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

   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:
       Blank

   Signature of Owner: Clyde Monroe
   Date: 12-31-63

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

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

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

Lloyd A. Torgerson, of Sabrina (Town)
County of Glacier
State of Montana

1. 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: 
   Water for livestock

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: 1913; continuous from that time and still in use.

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: Not used for irrigation in the past.

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: No wells or other works for withdrawal of groundwater.

8. The depth of water table: Surface

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: No wells or other works for withdrawal at the present time.

10. The estimated amount of groundwater withdrawn each year: 100,000 gallons

11. The log of formations encountered in the drilling of each well if available: No wells.

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: Strikes extend across the entire section and it has numerous springs in it, causing a continuous flow.

Signature of the Appropriate: Lloyd A. Torgerson
Date: December 27, 1963

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

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

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology, and Quadruplicate to the Appropriator. 14 797
Mr. Lloyd A. Torgerson, Ethridge, Montana

February 26, 1964

December 27, 1963

138897

from a natural flowing stream.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Appropriation of Groundwater
(Under Chapter 237, Montana Session Laws, 1961)

1. Name of Appropriator: Breen J. Beekman
   Address: Box 182, Cut Bank, Mont.
   County of Glacier, State of Montana, intend to appropriate groundwater in accordance with Chapter 237, Montana Session Laws of 1961.

2. The beneficial use to which water is to be applied is: for household use.
   (describe lands to be benefited, if for irrigation)

3. The rate of use in gallons per minute or miner's inches of groundwater claimed: 50 gallons

4. The annual period (inclusive dates) of intended use: all year

5. The probable or intended date of first beneficial use: August 3rd

6. The probable or intended date of commencement and completion of the well or wells: July 25th commenced August 2 completed

7. The location, type, size and depth of well or wells contemplated: 4 inch casing, 125 feet

8. The probable or estimated depth of the water table or artesian aquifer: 30 feet

9. Name, address and license number of the driller engaged: George Jensen
   Box 1993, Cut Bank, Montana, No. 30

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

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

(Under Chapter 237, Montana Session Laws, 1961)

Owner: Union Oil Co. of Calif.  
Address: Cut Bank, Montana

Driller: Simpson Drilling Co.  
Address: Malta, Montana

Date of Notice of Appropriation of Groundwater: Dec. 20, 1962

Date well started: Jan. 2, 1963  
Date Completed: Jan. 19, 1963

Type of well: Drilled  
Equipment Used: Cable tool

Date of Notice of Appropriation of Groundwater: Dec. 20, 1962

Date well started: Jan. 2, 1963  
Date Completed: Jan. 19, 1963

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>Stratum</th>
<th>Depth 1</th>
<th>Depth 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell</td>
<td>0</td>
<td>30</td>
<td>Shell</td>
</tr>
<tr>
<td>Shale</td>
<td>30</td>
<td>100</td>
<td>Shale</td>
</tr>
<tr>
<td>Shale w/ sand</td>
<td>100</td>
<td>200</td>
<td>Shale w/ sand</td>
</tr>
<tr>
<td>Sand (dry)</td>
<td>200</td>
<td>300</td>
<td>Sand (dry)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Depth 1</th>
<th>Depth 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eagle 267</td>
<td>302</td>
<td>334</td>
<td>Groundwater level</td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing Well: 174 feet.

Shut-in Pressure for Flowing Well: 0 psi.

Pumping Water Level: 180 feet at 122 gal. per minute.

Discharge in gal. per min. of flowing well: 0.

How Tested: Submersible pump.

Length of Test: 48 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.

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 Appropriation of Groundwater

Under Chapter 237, Montana Session Laws, 1961

1. Union Oil Company of California, of P. O. Box 298 Cut Bank (Name of Appropriator)
   County of Glacier, State of Montana, intend to appropriate groundwater in accordance with Chapter 237, Montana Session Laws of 1961.

2. The beneficial use to which water is to be applied is secondary recovery of crude oil from Cut Bank Sand in Cut Bank Field (describe lands to be benefited, if for irrigation)

3. The rate of use in gallons per minute or miner's inches of groundwater claimed: 100 to 150

4. The annual period (inclusive dates) of intended use: 365 days per year

5. The probable or intended date of first beneficial use: April 1, 1963
   December 20, 1962

6. The probable or intended date of commencement and completion of the well or wells: December 20, 1962

7. The location, type, size and depth of well or wells contemplated: NE SW Section 29, T. 33 N., R. 5 W.
   7' casing cemented approximately 260'

8. The probable or estimated depth of the water table or artesian aquifer: 170' below ground level

9. Name, address and license number of the driller engaged: Simpson Drilling Company,
   Malta, Montana, Driller License 15, Contractor's License 2613-C

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

    Signature of Appropriator: 
    Date: December 18, 1962

* 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 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 School of Mines and quadruplicate for the Appropriator.
Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1902

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

Owner: Dennis Beaulieu
Address: Box 883, Cat Creek

Driller: George Jones
Address: 461993, Aber

Date of Notice of appropriation of groundwater: July 25
Date completed: August

Type of well: Deep well
Equipment used: (Drill, driven, bored or drilled)

Water used: 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.

---

Static Water Level for non-flowing well: feet
Shut-in Pressure for Flowing Well: feet
Pumping Water Level: feet
Discharge in g.p.m. of flowing well: gal. per minute

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

(Continue on reverse side)

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

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

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

File No. 152377

Driller's License Number: 38
Driller's Signature: George Jones

11/4/16
**Notice of Completion of Groundwater Appropriation by Means of Well**

(Under Chapter 237, Montana Session Laws, 1961)

**Owner:** Union Oil Co. of Calif.  
**Address:** Cut Bank, Montana

**Date of Notice of Appropriation of Groundwater:** Dec. 20, 1962

**Date well started:** Dec. 20, 1962  
**Date Completed:** Jan. 8, 1963

---

**Type of well:** shot-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.**

---

**Static Water Level for non-flowing Well:** 186 feet

**Shut-in Pressure for Flowing Well:** 0 on casing

**Pumping Water Level:** 162 feet at 109 gal. per minute.

**Discharge:** 10 gallons per min. of flowing well 0

**How Tested:** submerged  
**Length of Test:** 4 1/2 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)

---

**NE 1/4 Sec. 30, T 31 N, R 5 W**

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

---

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 the Appropriator.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Appropriation of Groundwater
(Under Chapter 237, Montana Session Laws, 1961)

1. I, Union Oil Company of California, of Box 258, Cut Bank
   (Name of Appropriator) (Town)
   County of Glacier State of Montana intend to appropriate groundwater in accordance with Chapter 237, Montana Session Laws of 1961.

2. The beneficial use to which water is to be applied is _secondary recovery of crude oil from Cut Bank Sand in Cut Bank Field_
   (describe lands to be benefited, if for irrigation)

3. The rate of use in gallons per minute or miner's inches of groundwater claimed 100

4. The annual period (inclusive dates) of intended use 365 days per year

5. The probable or intended date of first beneficial use April 1, 1962

6. The probable or intended date of commencement and completion of the well or wells December 20, 1962

7. The location, type, size and depth of well or wells contemplated NE. NE. Sec. 30, T. 33 N., R. 5 W 7" casing cemented, approximately 260

8. The probable or estimated depth of the water table or artesian aquifer 170' below ground level

9. Name, address and license number of the driller engaged Simpson Drilling Company
   Malta, Montana Driller License 15 Contractor's License 2813-C

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

   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 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 School of Mines and Quadruplicate for the Appropriator.
**STATE OF MONTANA**
**ADMINISTRATOR OF GROUNDWATER CODE**
**MONTANA WATER RESOURCES BOARD**

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

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

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

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

**Owner:** Bill Rose
**Address:** Mt. Bank

**Date well started:** July 29, 1965
**Date well completed:** July 6, 1973

**Type of well:** Drilled

**Equipment used:** Cable tools

**Water Use:** Domestic, Irrigation

***=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:** 2,592,000

<table>
<thead>
<tr>
<th>Top of Ground</th>
<th>From Ground</th>
<th>To Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.19</td>
<td>Surface</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Agricultural</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Chalky clay</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Sand, gravel</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Sand, gravel</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>Gravel, clay</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>Gravel, clay</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>Gravel and Drum Shale</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>Gravel and Drum Shale</td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>Gravel, clay</td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>Gravel, clay</td>
<td></td>
</tr>
<tr>
<td>116</td>
<td>Gravel, clay</td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>Gravel, clay</td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>Gravel, clay</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>Gravel, clay</td>
<td></td>
</tr>
</tbody>
</table>

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

**Driller’s Signature:** Lee E. Wicksen
**Driller’s Address:** CAT 1993, Culp, Border

**LICENSE NO.:** 185

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

Notice of Appropriation of Groundwater
(Under Chapter 237, Montana Session Laws of 1961)

1. Name of Appropriator: Union Oil Company of California, c/o Box 206
   (Address) Cut Bank
   (Town) Glacier
   County of Glacier, State of Montana, intend to appropriate groundwater in accordance with Chapter 237, Montana Session Laws of 1961.

2. The beneficial use to which water is to be applied is: Expanding the existing waterflood project
   (describe lands to be benefited, if for irrigation)

3. The rate of use in gallons per minute or miner's inches of groundwater claimed: 125 GPM

4. The annual period (inclusive dates) of intended use: 365 days

5. The probable or intended date of first beneficial use: October 1, 1963

6. The probable or intended date of commencement and completion of the well(s): September 10, 1963

7. The location, type, size and depth of well or wells contemplated: 1980' B/H, 930' W/R
   Cable tool hole with 7' casing cemented

8. The probable or estimated depth of the water table or artesian aquifer: 820' below surface

9. Name, address and license number of the driller engaged: N.M. O. Drilling Company, Box 297, Cut Bank, Montana - License Number 105

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

    Signature of Appropriator: [Signature]
    Attorney in Fact: [Signature]
    Date: August 24, 1963

* 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 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 School of Mines and duplicate for the Appropriator.
STATE OF MONTANA
Glacier County

ADMINISTRATOR OF GROUNDWATER AFFAIRS
OFFICE OF STATE ENGINEER

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

Owner: Union Oil Company
Address: Great Falls, Montana

Driller: M.H.O. Drilling Co.
Address: Great Falls, Montana

Date of Notice of Appropriation of Groundwater: 9/10/63
Date well started: 9/10/63
Date well completed: 9/26/63

Type of well: Drilled
Equipment Used: Cable Reel

Water Use: Domestic
Municipal
Other
Irrigation

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

<table>
<thead>
<tr>
<th>Size of Drilled Hole</th>
<th>Size and Weight of Reel</th>
<th>From (Fee)</th>
<th>To (Fee)</th>
<th>PERFORATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7&quot;</td>
<td></td>
<td>20 ft</td>
<td>9</td>
<td>382</td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing Well: 230 feet.
Shut-in Pressure for Flowing Well:

Pumping Water Level: 230 feet at 30 gal. per minute.
Discharge in gal. per min. of flowing well: 80 gal.

How Tested: Pump Length of Test: 3 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)

Cemented w/ 150 ft.

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

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 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)

County of GLACIER
FILE No. T 33 R 5

1. DOLLIE CORRIDOR of

(Name of Appropiorator) (Address) (Town)

County of GLACIER 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 and Stock Water

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

Since 1953

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

0 / 10 Cubic Feet per second

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 wells, or other works for withdrawal of groundwater

Approximately 1955

8. The depth of water table

6 feet of water—Well 33 feet deep

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

Private surface well, 33 feet deep, 6' water table

10. The estimated amount of groundwater withdrawn each year

Undetermined

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

Top of medium sand—200 feet
Botton of sand—322 feet
Brick of mad sand—276 feet
Top 1/2 of sand—333 feet
Top of Water—333 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

not previously recorded

Signature of Owner

Date 7/19/63

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 Appropiorator.
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...
Owner...
Address... Ethridge
Contractor (if any)... not available
Address of Contractor... not available
Date Started... (1961) Date Completed... same year

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

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... when
full well runs; about 200 feet
of cattle for about 2 years
when well runs around

Signature of Owner... Bat Hartman
Date... Dec 16 1963

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

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

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

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