## Log of Well

<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>From</th>
<th>To</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>5</td>
<td>Fill, loam</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>8</td>
<td>Sand (medium)</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>40</td>
<td>Gravel</td>
</tr>
</tbody>
</table>
Declaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1961)

VICTOR LOISELLE
(Name of Appropriator)
Route 2
(Address)
Missoula
(Town)
County of Missoula, 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,
stock watering and lawn.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been No. 1 - 1955; No. 2 - 1897

4. The amount of groundwater claimed (in miner’s inches or gallons per minute) No. 1 - 50 gals minute
No. 2 - 10 gals minute

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

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

2 H.P. electric pump for both

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater No. 1 - 1955
No. 2 - 1897

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 No. 1 - 161 feet 6 inch casing
No. 2 - 25 feet - 3 foot dug well concrete casing

10. The estimated amount of groundwater withdrawn each year one million gallons

11. The log of formations encountered in the drilling of each well if available No. 1 - gravel and quartz sand
No. 2 - gravel

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 VICTOR LOISELLE
Date December 13, 1963

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

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

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

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

Marguerita L. Miller, of Rt. #2, Grass Valley, Missoula

County of Missoula State of Montana

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

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

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
   - Well first used approximately 1862. Used intermittently since

4. The amount of groundwater claimed (in miner’s inches or gallons per minute)
   - 100 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 applicable

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater
   - Well hand excavated approximately 1862. Other information unavailable

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
   - Hand excavaed, 16 inches in diameter, approximately 25 feet in depth, cased with 18 inch C.H.P. 16 gauge. Various hand and mechanical pumps used. Gasoline powered mechanical pump last used.

10. The estimated amount of groundwater withdrawn each year
    - 15,000,000 gallons per 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: Marguerita L. Miller
Date: December 30, 1963

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

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

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

1990
I received and filed the instrument for recording on the 20th day of June, 1876, at 1:07 o'clock A.M., pursuant to the laws of Mineral County, State of Montana.

Witness my hand:

MARTIN A. ALLEN, County Recorder.

By: [Signature]

For $5.00.

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

1. Name of Appropriator: Mrs. W. & Mrs. Williams
   Address: 153 South 26th, Missoula
   Town: Missoula
   County of Missoula, State of Montana

2. The beneficial use on which the claim is based:
   Operating of plumbing fixtures and washing of trucks and equipment

3. Date or approximate date of earliest beneficial use; and how continuous the use has been:
   1932 and constant use since that time

4. The amount of groundwater claimed (in miner's inches or gallons per minute): 85 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:
   not used for irrigation

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal:
   Electric pump located in well house over the well, approx. 180 feet from the S.W. corner of the property

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater:
   Nov. 1955, Drilled well with 6 in. casing

8. The depth of water table:
   25 to 50 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:
   The well is a drilled well and has a depth of about 90 feet, water is pumped by the use of an electric pump

10. The estimated amount of groundwater withdrawn each year:
    250,000 gallons

11. The log of formations encountered in the drilling of each well if available:
    None 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: Mrs. Williams
Date: 2-7-1967

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

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

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

Owner: Nory  
Address: P. O. Box 421, Missoula

Driller: John Farrell  
Address: Carlee Montana

Date Started: Feb 17, 1958  
Date Completed: Feb 24, 1958

Location: Sec. 13, T. 11N, R. 21W, 1/4 sec. SW 1/4 SE 1/4

Type of well: Domestic

Water use: Domestic  
Municipal  
Stock  
Irrigation  
Industrial  
Drainage  
Other

Casing: 0 ft. to 146 ft.  
Type: Black  
Size: 5"  

Casing: 146 ft. to 260 ft.  
Type:  
Size:  

Casing: 260 ft. to 310 ft.  
Type:  
Size:  

Casing: 310 ft. to 340 ft.  
Type:  
Size:  

Casing: 340 ft. to 390 ft.  
Type:  
Size:  

Perforated or Screened: 0 ft. to 146 ft.  
Type:  
Size:  

Perforated or Screened: 146 ft. to 260 ft.  
Type:  
Size:  

Type of screen or perforations:  

Static Water level, for non-flowing well: 3'1  
Shut-in pressure, for flowing well: 13 lb./sq. in. on: Jul 24, 1958

Pumping water level: 60 feet at 50 gal. per min.

How tested: Compressor

Length of test: 1 hr.

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

(over)
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 18</td>
<td>Clay</td>
</tr>
<tr>
<td>18 26</td>
<td>gravel sand</td>
</tr>
<tr>
<td>26 140</td>
<td>fine sand water</td>
</tr>
<tr>
<td>140 146</td>
<td>gravel water</td>
</tr>
</tbody>
</table>
**WATER WELL LOG**

**Owner:** Alden Kooper Paper Products Co  
**Address:** Missoula, Montana

**Driller:** Glenn Camp  
**Address:** Missoula, Montana

**Date Started:** June 30, 1961  
**Date Completed:** Aug 12, 1961

**Location:** Sec. 17 T. 14 N R. 51 W 1/2 sec. 511

---

<table>
<thead>
<tr>
<th>Type of well</th>
<th>Drilled</th>
<th>Equipment used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Charn Drill</td>
</tr>
</tbody>
</table>

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

**Casing:**  
- From top of pit to 169'-4" ft.  
- Size: 16" pipe

**Perforated or Screened:**  
- From 159'-4" to 169'-4" ft.  
- Size: 3/8" by 3" slots, 12 holes to the foot

**Static Water level, for non-flowing well:** 22'-4" from top of casing in pit feet.

**Shut-in pressure, for flowing well:** ___________ lb./sq. in. on: _ (psig)

**Pumping water level:**  
- 30'-4" feet at 1300 gal. per min.

**How tested:** Test Pump

**Length of test:** 10 hours

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

**Test in exact location and date ACC 3**

Copper with County (Sign & Bond)
### Log of Well

<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>7'</td>
<td>Pit</td>
</tr>
<tr>
<td>7'</td>
<td>12'</td>
<td></td>
<td>Clay</td>
</tr>
<tr>
<td>12'</td>
<td>23'</td>
<td></td>
<td>Sand &amp; gravel</td>
</tr>
<tr>
<td>23'</td>
<td>45'</td>
<td></td>
<td>Sand</td>
</tr>
<tr>
<td>45'</td>
<td>101'</td>
<td></td>
<td>Sandy Clay</td>
</tr>
<tr>
<td>101'</td>
<td>145'</td>
<td></td>
<td>Hard packed sand with some clay</td>
</tr>
<tr>
<td>145'</td>
<td>154'</td>
<td></td>
<td>Sand &amp; gravel some clay</td>
</tr>
<tr>
<td>154'</td>
<td>159'</td>
<td></td>
<td>Sand, gravel &amp; water</td>
</tr>
<tr>
<td>159'</td>
<td>167'</td>
<td></td>
<td>Tight gravel, sand &amp; water</td>
</tr>
<tr>
<td>167'</td>
<td>169'</td>
<td></td>
<td>Loose gravel sand &amp; water</td>
</tr>
<tr>
<td>169'</td>
<td>224'</td>
<td></td>
<td>Tight clay with gravel some boulders no water</td>
</tr>
</tbody>
</table>
**WATER WELL LOG**

<table>
<thead>
<tr>
<th>Type of well</th>
<th>Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water uses:</td>
<td>Domestic</td>
</tr>
<tr>
<td>Casing:</td>
<td>ft. to ft.</td>
</tr>
<tr>
<td>Perforated or Screened:</td>
<td>ft. to ft.</td>
</tr>
<tr>
<td>Type of screen or perforations</td>
<td>Mill Drill 3/8&quot; by 1&quot; plate 10 holes to the foot</td>
</tr>
<tr>
<td>Static Water level, for non-flowing well:</td>
<td>21' from top of pipe feet</td>
</tr>
<tr>
<td>Shut-in pressure, for flowing well:</td>
<td>lb./sq. in. on:</td>
</tr>
<tr>
<td>Pumping water level:</td>
<td>feet at 1500 gal. per min.</td>
</tr>
<tr>
<td>How tested:</td>
<td>Test Pump (Turbine Pump)</td>
</tr>
<tr>
<td>Length of test:</td>
<td>8 hours</td>
</tr>
<tr>
<td>Remarks:</td>
<td>Gravel packing, cementing, packers, type of shut-off, depth of shut-off</td>
</tr>
</tbody>
</table>

---

*Owner:* Fallert-Keen & Paper Products  
*Address:* Missoula, Montana  
*Driller:* Glenn Camp  
*Address:* Missoula, Montana  
*Date Started:* May 23, 1957  
*Date Completed:* Aug 15, 1957  
*Location:* Sec. 14 T. 81 R. 21 W  

*Drill:* Hand Drill  
*Equipment used:*  
*Type of well:* Drilled  
*Type of screen or perforations:*  
*Type of well:* Domestic  
*Type of screen or perforations:* Mill Drill 3/8" by 1" plate 10 holes to the foot  
*Static Water level, for non-flowing well:* 21' from top of pipe feet  
*Shut-in pressure, for flowing well:* lb./sq. in. on:  
*Pumping water level:* feet at 1500 gal. per min.  
*How tested:* Test Pump (Turbine Pump)  
*Length of test:* 8 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>From</td>
<td>To</td>
</tr>
<tr>
<td>0</td>
<td>6'</td>
</tr>
<tr>
<td>6'</td>
<td>27'</td>
</tr>
<tr>
<td>27'</td>
<td>112'</td>
</tr>
<tr>
<td>112'</td>
<td>116'</td>
</tr>
<tr>
<td>116'</td>
<td>152'</td>
</tr>
<tr>
<td>152'</td>
<td>171'</td>
</tr>
<tr>
<td>171'</td>
<td>177'</td>
</tr>
</tbody>
</table>
### WATER WELL LOG

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>Waldorf-Boerner Paper Products</td>
</tr>
<tr>
<td>Address</td>
<td>Missoula, Montana</td>
</tr>
<tr>
<td>Driller</td>
<td>Glenn Camp</td>
</tr>
<tr>
<td>Address</td>
<td>Missoula</td>
</tr>
<tr>
<td>Date Started</td>
<td>April 30, 1957</td>
</tr>
<tr>
<td>Date Completed</td>
<td>May 21, 1957</td>
</tr>
<tr>
<td>Location: Sec. 13 T. 44 N. R. 21 W. 1/4 sec. 51W</td>
<td></td>
</tr>
<tr>
<td>Type of well</td>
<td>Drilled</td>
</tr>
<tr>
<td>Equipment used</td>
<td>Churn Drill</td>
</tr>
<tr>
<td>Water use: Domestic: [ ] Municipal: [ ] Stock: [ ] Irrigation: [ ]</td>
<td></td>
</tr>
<tr>
<td>Industrial: [ ] Drainage: [ ] Other: Paper mill</td>
<td></td>
</tr>
<tr>
<td>Casing: 2' above ft. to 174' ft. Type: Seamless 63 lbs. Size: 16 O.D. 3/8 S.W.</td>
<td></td>
</tr>
<tr>
<td>Casing: ______ ft. to ______ ft. Type: ______ Size: ______</td>
<td></td>
</tr>
<tr>
<td>Casing: ______ ft. to ______ ft. Type: ______ Size: ______</td>
<td></td>
</tr>
<tr>
<td>Perforated or Screened: Ft. 148 to ft. 168 Ft. ______ to ft. ______</td>
<td></td>
</tr>
<tr>
<td>Type of screen or perforations: Mills Knife 1/8 by 3&quot; slots 10 slots to the foot</td>
<td></td>
</tr>
<tr>
<td>Static Water level, for non-flowing well: 22 feet</td>
<td></td>
</tr>
<tr>
<td>Shut-in pressure, for flowing well: ______ lb./sq. in. on: ______</td>
<td></td>
</tr>
<tr>
<td>Pumping water level: 48 feet at 1500 gal. per min.</td>
<td></td>
</tr>
<tr>
<td>How tested: Turbine test pump</td>
<td></td>
</tr>
<tr>
<td>Length of test: 8 hours</td>
<td></td>
</tr>
<tr>
<td>Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)</td>
<td></td>
</tr>
</tbody>
</table>

(over)
## Log of Well

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7'</td>
<td>Top-soil</td>
</tr>
<tr>
<td>7'</td>
<td>30'</td>
<td>Gravel &amp; sand, some water at 25 to 30'</td>
</tr>
<tr>
<td>30'</td>
<td>80'</td>
<td>Sandy clay, some gravel</td>
</tr>
<tr>
<td>80'</td>
<td>112'</td>
<td>Sandy clay</td>
</tr>
<tr>
<td>112'</td>
<td>116'</td>
<td>Clay</td>
</tr>
<tr>
<td>116'</td>
<td>142'</td>
<td>Sandy clay</td>
</tr>
<tr>
<td>142'</td>
<td>169'</td>
<td>Big gravel, sand and water</td>
</tr>
<tr>
<td>169'</td>
<td>174'</td>
<td>Clay, gravel and boulders</td>
</tr>
</tbody>
</table>

I certify the above to be true and correct.

[Signature]

[Date]


<table>
<thead>
<tr>
<th>Form No. 18</th>
<th>8-60</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WATER WELL LOG</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Owner</strong></td>
<td>Waldorf-Hoener Paper Products</td>
</tr>
<tr>
<td><strong>Address</strong></td>
<td>Missoula, Montana</td>
</tr>
<tr>
<td><strong>Driller</strong></td>
<td>Glenn Camp</td>
</tr>
<tr>
<td><strong>Address</strong></td>
<td>Missoula, Montana</td>
</tr>
<tr>
<td><strong>Date Started</strong></td>
<td>March 7, 1957</td>
</tr>
<tr>
<td><strong>Date Completed</strong></td>
<td>April 10, 1987</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Sec. 13, T. 14 N. R. 7 W.</td>
</tr>
<tr>
<td><strong>Type of well</strong></td>
<td>Drilled</td>
</tr>
<tr>
<td><strong>Equipment used</strong></td>
<td>Churn Drill</td>
</tr>
<tr>
<td><strong>Water use</strong></td>
<td></td>
</tr>
<tr>
<td>Domestic</td>
<td>□</td>
</tr>
<tr>
<td>Municipal</td>
<td>□</td>
</tr>
<tr>
<td>Stock</td>
<td>□</td>
</tr>
<tr>
<td>Irrigation</td>
<td>□</td>
</tr>
<tr>
<td><strong>Casing:</strong> 2' above first</td>
<td>Type: Seamless</td>
</tr>
<tr>
<td><strong>Casing:</strong></td>
<td>ft. to</td>
</tr>
<tr>
<td><strong>Casing:</strong></td>
<td>ft. to</td>
</tr>
<tr>
<td><strong>Perforated or Screened:</strong></td>
<td>Ft. 147</td>
</tr>
<tr>
<td><strong>Type of screen or perforations:</strong></td>
<td>Mills Knife 3/8 by 3&quot; slots 5 holes to the foot</td>
</tr>
<tr>
<td><strong>Static Water level, for non-flowing well:</strong></td>
<td>22' - 10&quot; feet</td>
</tr>
<tr>
<td><strong>Shut-in pressure, for flowing well:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Pumping water level:</strong></td>
<td>52' feet at 1000 lb./sq. in. on:</td>
</tr>
<tr>
<td><strong>How tested:</strong></td>
<td>Turbine Pump</td>
</tr>
<tr>
<td><strong>Length of test:</strong></td>
<td>8 hours</td>
</tr>
<tr>
<td><strong>Remarks:</strong></td>
<td>(Gravel packing, cementing, packers, type of shut-off, depth of shut-off)</td>
</tr>
<tr>
<td></td>
<td>Hole was drilled to 202', Caved in from 175' to 202' during surging in developing well.</td>
</tr>
<tr>
<td></td>
<td>(over)</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>7'</td>
<td>26'</td>
</tr>
<tr>
<td>26'</td>
<td>95'</td>
</tr>
<tr>
<td>95'</td>
<td>112'</td>
</tr>
<tr>
<td>112'</td>
<td>118'</td>
</tr>
<tr>
<td>118'</td>
<td>132'</td>
</tr>
<tr>
<td>132'</td>
<td>142'</td>
</tr>
<tr>
<td>142'</td>
<td>145'</td>
</tr>
<tr>
<td>145'</td>
<td>146'</td>
</tr>
<tr>
<td>146'</td>
<td>159'</td>
</tr>
<tr>
<td>159'</td>
<td>169'</td>
</tr>
<tr>
<td>169' to</td>
<td>202'</td>
</tr>
<tr>
<td></td>
<td>Clay, gravel and boulders</td>
</tr>
<tr>
<td></td>
<td>Fill dirt &amp; gravel</td>
</tr>
<tr>
<td></td>
<td>Gravel &amp; water (water from 23 to 26'')</td>
</tr>
<tr>
<td></td>
<td>Sandy Clay</td>
</tr>
<tr>
<td></td>
<td>Sand with very small gravel &amp; water</td>
</tr>
<tr>
<td></td>
<td>Yellow Clay</td>
</tr>
<tr>
<td></td>
<td>Sandy clay</td>
</tr>
<tr>
<td></td>
<td>Small gravel, sand, clay with water</td>
</tr>
<tr>
<td></td>
<td>Sand, small gravel some water</td>
</tr>
<tr>
<td></td>
<td>Yellow clay</td>
</tr>
<tr>
<td></td>
<td>Coarse gravel &amp; sand with water</td>
</tr>
<tr>
<td></td>
<td>Yellow clay and gravel</td>
</tr>
</tbody>
</table>
Owner: Waldorf-Hoener Paper Products
Address: Missoula, Montana

Driller: Glenn Camp
Address: Missoula, Montana

Date Started: May 13, 1960
Date Completed: May 27, 1960

Location: Sec. 13 T. 14 N. R. 81 W. 1/4 sec. SW

Type of well: Drilled
Equipment used: Churn Drill

Water use: Domestic ☐ Municipal ☐ Stock ☐ Irrigation ☐

Industrial ☐ Drainage ☐ Other Paper Mill ☐

Casing: 1' above G.L. to 174' ft. Type Seamless 63 lbs Size 16 O.D. 3/8 S.W.
Casing: ________________ ft. to ________________ ft. Type ________________ Size ________________
Casing: ________________ ft. to ________________ ft. Type ________________ Size ________________

Perforated or Screened: Ft 157' to Ft. 169', Ft. ________________ to Ft. ________________
Type of screen or perforations: Mills Knife 3/8 by 3" slots 10 holes to foot

Static Water level, for non-flowing well: ________________ feet.
Shut-in pressure, for flowing well: ________________ lb./sq. in. on: ________________

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

How tested: ________________
Length of test: ________________
Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

Not tested at this time.

(over)
## Log of Well

<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>7 ft</td>
<td>Gravel fill</td>
<td></td>
</tr>
<tr>
<td>7 ft</td>
<td>26 ft</td>
<td>Gravel and sand some water at 25 ft</td>
<td></td>
</tr>
<tr>
<td>26 ft</td>
<td>80 ft</td>
<td>Sandy clay with some gravel</td>
<td></td>
</tr>
<tr>
<td>80 ft</td>
<td>112 ft</td>
<td>Sandy clay</td>
<td></td>
</tr>
<tr>
<td>112 ft</td>
<td>120 ft</td>
<td>Clay</td>
<td></td>
</tr>
<tr>
<td>120 ft</td>
<td>142 ft</td>
<td>Sandy clay</td>
<td></td>
</tr>
<tr>
<td>142 ft</td>
<td>148 ft</td>
<td>Clay and some boulders</td>
<td></td>
</tr>
<tr>
<td>148 ft</td>
<td>153 ft</td>
<td>Smaller gravel and sand (some water)</td>
<td></td>
</tr>
<tr>
<td>153 ft</td>
<td>170 ft</td>
<td>Sand, coarse gravel and water</td>
<td></td>
</tr>
<tr>
<td>170 ft</td>
<td>174 ft</td>
<td>Blue - green clay (no water)</td>
<td></td>
</tr>
</tbody>
</table>
**WATER WELL LOG**

**STATE ENGINEER**

**MONTANA BUREAU OF MINES AND GEOLOGY**

**Owner:** Waldorf - Boener Paper Products  
**Address:** Missoula, Montana

**Driller:** Glenn Camp  
**Address:** Missoula, Montana

**Date Started:** July 16, 1960  
**Date Completed:** Aug 4, 1960

**Location:** Sec. 13, T. 14 N., R. 31 W. 1/4 sec. 50

**Type of well Drilled:** (slug, drive, bored, or drilled)

**Equipment used:** Churn Drill  
(24 ft., drill, rotary, other)

**Water use:** Domestic □  
Municipal □  
Stock □  
Irrigation □  
Industrial □  
Drainage □  
Other □  

**Casing:**
- 7" above 0.02 to 183'-7" ft.  
  Type: Seamless 64 Lbs  
  Size: 16 O.D. 3/8 S.W.
- Casing: __________ ft. to __________ ft.  
  Type: __________ Size: __________
- Casing: __________ ft. to __________ ft.  
  Type: __________ Size: __________

**Perforated or Screened:**
- Ft. 152 to Ft. 170  
  Ft. __________ to Ft. __________

**Type of screen or perforations:** Mill's Knife 3/8 by 3" 220 holes

**Static water level, for non-flowing well:**  
21' ____________ feet.

**Shut-in pressure, for flowing well:**  
1 lb./sq. in. on: ____________

**Pumping water level:** 35 feet at 1200 gal. per min.

**How tested:** Turbine pump

**Length of test:** 8 hours

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

2" foot plug in bottom of casing

(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>9'</td>
</tr>
<tr>
<td>9'</td>
<td>14'</td>
</tr>
<tr>
<td>14'</td>
<td>20'</td>
</tr>
<tr>
<td>20'</td>
<td>27'</td>
</tr>
<tr>
<td>27'</td>
<td>34'</td>
</tr>
<tr>
<td>34'</td>
<td>35'</td>
</tr>
<tr>
<td>35'</td>
<td>37'</td>
</tr>
<tr>
<td>37'</td>
<td>44'</td>
</tr>
<tr>
<td>44'</td>
<td>50'</td>
</tr>
<tr>
<td>50'</td>
<td>135'</td>
</tr>
<tr>
<td>135'</td>
<td>148'</td>
</tr>
<tr>
<td>148'</td>
<td>168'</td>
</tr>
<tr>
<td>168'</td>
<td>180'</td>
</tr>
<tr>
<td>180'</td>
<td>183'</td>
</tr>
</tbody>
</table>

2' concrete plug in bottom of casing.
**WATER WELL LOG**

Owner: Waldo Williams  
Address: Missoula, Mont.

Driller: John Farrell  
Address: Missoula, Mont.

Date Started: May 2, 1960  
Date Completed: May 6, 1960

Location: Sec. 13  
T. N/4  R. W  M sec.

Type of well:  
Equipment used:  

Water use:  
- Domestic [X]  
- Industrial [ ]  
- Municipal [ ]  
- Stock [ ]  
- Irrigation [ ]

Casing:  
- 0 ft. to 6.25 ft.  
- 6 ft. to 135 ft.  
- 135 ft. to 500 ft.

Perforated or Screened:  
- Ft. to Ft.  
- Ft. to Ft.

Type of screen or perforations:

Static Water level, for non-flowing well:  
Shut-in pressure, for flowing well:  
lb./sq. in. on:  
(date) May 6, 1960

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

How tested:  
Banker

Length of test:  
1 hour

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>0' - 6'</td>
<td>Peg</td>
</tr>
<tr>
<td>6' - 28'</td>
<td>Gravel Clay</td>
</tr>
<tr>
<td>28' - 140'</td>
<td>Quick sand, water</td>
</tr>
<tr>
<td>140' - 142'</td>
<td>Water and gravel</td>
</tr>
</tbody>
</table>
Declaration of Vested Groundwater Rights

(April 4, 1966)

(Under Chapter 237, Montana Session Laws, 1961)

Gursky Bernard A
(Name of Appropriator)

of Ev. J. 2
(Address)

Missoula
(Town)

County of Missoula

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 use

3. Date or approximate date of earliest beneficial use, and how continuous the use has been: Continuous for past twenty years

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

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

6. The means of withdrawing such water from the ground and the location of such 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: Unknown

8. The depth of water table: 50 feet

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

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

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

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: Bernard A. Gursky

Date: 3-31-66

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.
I received and filed this Instrument for record on the 31st day of June, 1974 at 9:20 o'clock A.M., permanent files of Missoula County, State of Montana, Without my hand.

Vernon B. Coen, County Recorder
By: Jane Bechtold, Deputy

248793
WATER WELL LOG

Owner: Harry Kramer  Address: R 2 Missoula
Driller: John Farrell  Address: Arlee Mont
Date Started: Jul 5, 1957  Date Completed: Jul 14, 1957
Location: Sec 24  T 14  R 21  1/4 sec E 5  NE 4

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

Water use: Domestic  x  Municipal  Stock  Irrigation  Other:

Industrial  □  Drainage  □

Casing: 0 ft to 140 ft  Type: Rods  Size: 5"
Casing:  to ft  Type:  Size:
Casing:  to ft  Type:  Size:
Perforated or Screened: Ft. to Ft. to ft.

Type of screen or perforations:

Static Water level, for non-flowing well: 31'
Shut-in pressure, for flowing well: 7 lb/sq. in. on: Jul 14, 1957

Pumping water level: 60' feet at gal. per min: 30

How tested: 

Length of test: 2 hrs

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 0</td>
<td>To 27</td>
</tr>
<tr>
<td>27</td>
<td>137</td>
</tr>
<tr>
<td>137</td>
<td>140</td>
</tr>
</tbody>
</table>
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

Henry J. La Casse
(Name of Appropriator)

of
(Address)

Missoula, Montana
(Town)

County of Missoula
(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:
   - Household
   - Irrigation
   - Garden
   - Lawn
   - Water for Cattle

3. Date or approximate date of earliest beneficial use; and how continuous the use has been:
   - Nov. 1950, used
   - Steady since

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

5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof:
   - 1.2 acres of lawn and garden

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater:
   - June 1926

8. The depth of water table:
   - 12 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:
   - Screen casing
   - Steel casing

10. The estimated amount of groundwater withdrawn each year:
   - 1200

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: Dec. 31, 1962

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

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

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

**Owner:** Waldorf Paper Products Company  
**Address:** Missoula, Montana

**Driller:** A.R. Howard  
**Address:** 1108 So. 14th St  
**Missoula, Montana**

**Date Started:** April 30, 1957  
**Date Completed:** May 21, 1957

**Location:** Sec. 24  
**T. 144**  
**R. 21W**  
**1/4 sec.**  
**E53 W4**

<table>
<thead>
<tr>
<th>Type of well</th>
<th>Drilled</th>
<th>Equipment used</th>
<th>Churn drill</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**Casing:**  
- from 2 ft. above 174 ft. to ft.  
- Type: 1/8" sidewall  
- Size: 16" seamless

**Perforated or drilled:**  
- Ft. 166 to ft. 168  
- Ft. 169 to ft.

**Type of holes or perforations:**  
- Wells khife: 1/8" x 1" slots 10 holes per ft. 20' of perf.

**Static Water level, for non-flowing well:** 22 ft. from top of pipe

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

**Pumping water level:**  
- 40 ft. at 2000 gal. per min.

**How tested:**  
- Turbine pump

**Length of test:**  
- 8 hours

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

---

(over)
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>From</th>
<th>To</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>7 ft.</td>
<td>Top soil</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>30 ft.</td>
<td>Gravel and sand; some water at 23' to 30'</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>80 ft.</td>
<td>Sandy clay with some gravel</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>112 ft.</td>
<td>Sandy clay</td>
</tr>
<tr>
<td></td>
<td>112</td>
<td>116 ft.</td>
<td>Clay</td>
</tr>
<tr>
<td></td>
<td>116</td>
<td>142 ft.</td>
<td>Sandy clay</td>
</tr>
<tr>
<td></td>
<td>142</td>
<td>169 ft.</td>
<td>Gravel, sand, and water</td>
</tr>
<tr>
<td></td>
<td>169</td>
<td>17%</td>
<td>Clay, gravel, and boulders</td>
</tr>
<tr>
<td>Owner</td>
<td>Waldorf Paper Products Company</td>
<td>Address</td>
<td>Missoula, Montana</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------</td>
<td>---------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Driller</td>
<td>A. R. Newberry</td>
<td>Address</td>
<td>Missoula, Montana</td>
</tr>
<tr>
<td>Date Started</td>
<td>March 7, 1957</td>
<td>Date Completed</td>
<td>April 10, 1957</td>
</tr>
<tr>
<td>Location</td>
<td>Sec. 24, T.141, R.52W</td>
<td></td>
<td>1/4 sec. 45 NW</td>
</tr>
</tbody>
</table>

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

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

**Casing**  
- Size: 3/8 stainless  
- Type:  
- Fill level:  
- Length:  
- Perforated or Screened:  
- Type of screen or perforation: wells knit 3/8 x 3 perforation 8 holes to foot  
- Static Water level, for non-flowing well: 22 ft 10 in.

**Shut-in pressure**:  
- Date: [ ]  
- b./sq. in.: [ ]  

**Pumping water level**:  
- 52 ft from top  
- Feet at: 2000 gals  
- Gal./min: [ ]

**How tested**: Turbine pump

**Length of test**: 8 hours

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

---

(over)
<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>7 ft.</td>
</tr>
<tr>
<td>7</td>
<td>26 ft.</td>
</tr>
<tr>
<td>26</td>
<td>95 ft.</td>
</tr>
<tr>
<td>95</td>
<td>118 ft.</td>
</tr>
<tr>
<td>118</td>
<td>128 ft.</td>
</tr>
<tr>
<td>118</td>
<td>132 ft.</td>
</tr>
<tr>
<td>132</td>
<td>142 ft.</td>
</tr>
<tr>
<td>142</td>
<td>145 ft.</td>
</tr>
<tr>
<td>145</td>
<td>146 ft.</td>
</tr>
<tr>
<td>146</td>
<td>168 ft.</td>
</tr>
<tr>
<td>168</td>
<td>169 ft.</td>
</tr>
<tr>
<td>169</td>
<td>202 ft.</td>
</tr>
</tbody>
</table>
### WATER WELL LOG

- **Owner**: Waldorf Paper Products Company
- **Address**: Missoula, Montana
- **Driller**: A. R. Nowak
- **Address**: 1530 So. 14th St.
- **Date Started**: May 23, 1957
- **Date Completed**: June 25, 1957

<table>
<thead>
<tr>
<th>Type of well</th>
<th>Equipment used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drilled</td>
<td>(Churn drill, rotary, other)</td>
</tr>
</tbody>
</table>

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

- **Casing**: 21 ft. above fill to 127 ft. 4 ft. level
  - Type: 3/8" seamless
  - Size: 16"

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

- **Perforated**: Ft. 155 to Ft. 172 Ft. to Ft.

- **Type of perforations**: Wells drilled: 3/8" x 3" slots, 10 holes per ft. 16" of perf.

- **Static Water level for non-flowing well**: 23 ft. from top of pipe

- **Shut-in pressure for flowing well**: lb/sq. in. on:

- **Pumping water level**: 40 ft. from top feet at 2000 gal. per min.

- **How tested**: Turbine pump

- **Length of test**: 8 hours

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

(over)
## Log of Well

<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 6 ft.</td>
<td>Top soil</td>
</tr>
<tr>
<td>6 - 27 ft.</td>
<td>Gravel and sand; some water at 26 to 27 ft.</td>
</tr>
<tr>
<td>27 - 112 ft.</td>
<td>Sandy clay</td>
</tr>
<tr>
<td>112 - 116 ft.</td>
<td>Clay</td>
</tr>
<tr>
<td>116 - 152 ft.</td>
<td>Sandy clay</td>
</tr>
<tr>
<td>152 - 171 ft.</td>
<td>Good gravel and sand with water</td>
</tr>
<tr>
<td>171 - 177 ft.</td>
<td>Clay gravel and boulders</td>
</tr>
</tbody>
</table>
Notice of Completion of Groundwater Appropriation by Means of Well
(Under Chapter 237, Montana Session Laws, 1961)

Waldorf-Neumer Paper
Owner: Address: Deer Park, Missoula, Montana
Products Company

Driller: Giant Camp
Address: Missoula, Montana

Date of Notice of Appropriation of Groundwater
June 30, 1961

Date well started: June 30, 1961
Date completed: Aug. 22, 1961

Type of well: 14' dia., 1/2' well, Equipment used: Cable tool
(dug, driven, bored or slotted, drilled

Water Use: Domestic □ Municipal □ Other □ Irrigation □ Industrial □ Drainage □ Stock □

Note: 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.

See map on file in Missoula County Courthouse

Static Water Level for non-flowing Well... 22 feet.

Shut-in Pressure for Flowing Well...

Pumping Water Level... 30 feet at 1300 gal. per minute.

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

How Tested: Turbine pump... Length of Test... 6 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)

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 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: Waldorf-Hoerner Paper Products Company
Address: Drawer D, Missoula

Driller: Glenn Camp
Address: Missoula, Montana

Date of Notice of Appropriation of Groundwater

Date well started...July 16, 1960...Date Completed...Aug. 4, 1960

Type of well: 3/8" shot, 16" od. Equipment Used: Cable tool
(dug, driven, bored or 2 mils drilled; churn, drill, rotary or other)

Water Use: Domestic [ ] Municipal [ ] Other [ ] Irrigation [ ]
Industrial [ ] Drainage [ ] Stock [ ]

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

See log on file in Missoula County Courthouse

Drilled Wells of (Feet) (Feet) PERFORATIONS
Hole Casing Fro...To...
3/8" shot 152' 170'
3" long, 8 holes per ft.

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

Pumping Water Level...
Discharge in gal. per min. of flowing well...
How Tested...
Turbine pump Length of Test...

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)

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.

15/159
Notice of Completion of Groundwater Appropriation by Means of Well
(Under Chapter 237, Montana Session Laws, 1961)

Owner: Waldorf-Heimer Paper Products Company
Driller: Glenn Camp
Date of Notice of Appropriation of Groundwater: May 3, 1960
Date well started: May 3, 1960
Date well completed: May 27, 1960

Type of well: 16" od, 3/8" wall, Equipment Used: Cable tool

Water Use: Domestic □ Municipal □ Other □ Irrigation □
Industrial □ Drainage □ Stock □

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

<table>
<thead>
<tr>
<th>Size of Defiled Hole</th>
<th>Mix and Weight of casing</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
<th>Kind</th>
<th>Pressure (Feet)</th>
<th>To (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot; slot 3&quot; long, 8 holes per ft.</td>
<td>157'</td>
<td>169'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing well... 29 feet
Shut-in Pressure for Flowing Well...

Pumping Water Level Not pumped feet at... gal. per minute.
Discharge in gal. per min. of flowing well...
How Tested: Turbine pump Length of Test... 8 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.)

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 Montana Bureau of Mines and Geology and quadruplicate for the Appropriator.
I received and filed this instrument by record on the 15 day of April 1923 at 10:30 A.M. permanent time of Mineral County, State of Montana.

Witnessee my hand:

MARTIN E. RINER, County Recorder
by CHARLES L. BERNARD, Deputy

RECEIVED 5-5-23.
Notice of Completion of Groundwater Appropriation by Means of Well
(Under Chapter 237, Montana Session Laws, 1961)

Owner: Waldorf-Hoerner Paper Products Company
Address: Drawer C, Missoula

Driller: Glenn Camp
Address: Missoula, Montana

Date of Notice of Appropriation of Groundwater: 
Date well started: Mar. 1, 1957
Date Completed: April 10, 1957

Type of well: 16" od. 3/8" walls
Equipment Used: Cable tool
(dug, driven, bored or snail, drilled; chart, drill, rotary or drilled; other)

Water Uses: Domestic □ Municipal □ Other □ Irrigation □
Industrial □ Drainage □ Stock □

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

See log on file in Missoula County Courthouse

<table>
<thead>
<tr>
<th>Size of Drilled Hole</th>
<th>Weight of casing</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
<th>PERFORATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot; slot</td>
<td>3&quot; long, 8 holes</td>
<td>From (Feet)</td>
<td>To (Feet)</td>
<td></td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing Well: 22' 10" feet.
Shut-in Pressure for Flowing Well:
Pumping Water Level: 52' feet at 1500 gal. per minute.
Discharge in gal. per min. of flowing well:
How Tested: Turbine Pump
Length of Test: 8 hrs

Remarks: (Gravel packing, cementing, packers, type of shutoff, location of use of groundwater if not at well, and any other similar pertinent information, including number of acres irrigated, if used for irrigation)

<table>
<thead>
<tr>
<th>Sec. 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driller's License Number</td>
</tr>
<tr>
<td>Glenn Camp</td>
</tr>
</tbody>
</table>

Show exact depth of bottom: 173'9"

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.

15155
I received and filed the instrument for record on the 3rd day of Dec., 1955.

O.I.C.E. Elcho, A.H., permanent title of Minnesota County, State of Minnesota.

Witnesse my hand:

MARTIN E. BOSWELL, County Recorder

By the proper clerk.

Fee 1.00. File.
Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner: Waldorf-Heuer Paper Products Company

Driller: Glenn Camp

Date of Notice of Appropriation of Groundwater: April 30, 1967

Date well started: May 1, 1967

Date well completed: May 31, 1967

Type of well: 18" od, 3/8" wall. Equipment Used: Cable tool

Water Use: Domestic [x] Municipal [ ] Other [ ] Irrigation [ ]

Industrial [ ] Drainage [ ] Stock [ ]

Indicate on the diagram the character and thickness of the different strata met with in drilling, such as soil, clay, shale, gravel, rock or sand, etc.

Show depth at which water is encountered, thickness and character of water-bearing strata and height to which water rises in the well.

See log on file in Missoula County Courthouse.

Static Water Level for non-flowing well: 22 feet.

Shut-in Pressure for Flowing Well: 65 fps at 1500 gal. per minute.

Pumping Water Level: 148 ft.

Discharge in gal. per min. of flowing well: 8 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)

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 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: Waldorf-Hoerner Paper Products Company
Address: Missoula
Driller: Glenn Camp
Address: Missoula

Date of Notice of Appropriation of Groundwater: June 15, 1957
Date well started: May 23, 1957
Date Completed: June 15, 1957
Type of well: 16" od, 3/4" wall, driven (Churn, drill, rotary or other)

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

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

See log on file in Missoula County Courthouse.

| Size of Drilled Hole | Size and Weight of Cutting | Press (Feet) | Te (Feet) | PERFORATIONS |
|----------------------|---------------------------|--------------|-----------|
| 3/4" slot 3 ft long, 8 holes per ft. | 155 171 |

Static Water Level for non-flowing Well: 21 feet
Shut-in Pressure for Flowing Well:
Pumping Water Level: 42 feet at 1500 gal. per minute
Discharge in gal. per min. of flowing well:
How Tested: Turbine pump
Length of Test: 8 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)

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

Show exact depth of bottom: 176 6/4

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 Montana Bureau of Mines and Geology and quadruplicate for the Appropriator.
914852

I declared and filed this instrument on the 16th day of February, A.D., 1851, in the land office of Minnie County, State of Montana. Witness my hand:

MARTIN S. BEADLE, County Recorder
By:

Jan. 5, 1853
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER
Notice of Appropriation of Groundwater
(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

   (Name of Appropriator)
   (Address)
   (Town)
   County of Missoula, 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 
   Industrial 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
   20,000 gpm

4. The annual period (inclusive dates) of intended use
   Continuous

5. The probable or intended date of first beneficial use
   by April 1957

6. The probable or intended date of commencement and completion of the well* or wells
   Start in March 1957

7. The location, type, size and depth of well or wells contemplated
   Up to ten wells (10)
   160' dia., 200' deep, in the plant area per sketch

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
   Glen Camp, Missoula
   License No. 7

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

Signature of Appropriator: ____________________________
Date: December 23, 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 Quadruplicate for the Appropriator.
214859

I received and filed the instrument for record on the day of
1870
in the office of the Recorder of the County of
Counties, State of

Witneses by hand:

MARTIN R. BRINER, County Recorder
By: W. F. REED, Deputy

Paid
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater Appropriation by Means of Well
DEVELOPED AFTER JANUARY 1, 1962
(Under Chapter 237, Montana Session Laws, 1961)

Owner: HOERNER WALDOFF
Address: Missoula, Montana

Driller: CAMP WELL DRILLING & SUPPLY
Address: Missoula, Montana

Date of Notice of appropriation of groundwater: {June 19, 1970}
Date completed: {June 24, 1970}

Type of well: Drilled
Equipment used: Churn Drill
(Dig, Driven, bored or drilled)

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
Shut-in Pressure for Flowing Well
Pumping Water Level
Discharge in gal. per min. of flowing well

How Tested: Air Compressor

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

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

Show exact depth of bottom.

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

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

Driller's License Number: 06660
Driller's Signature: [Signature]

DRILLING & PUMP SUPPLY
2005

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

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

Driller's License Number: 06660
Driller's Signature: [Signature]
I received and filed this instrument for record on the 1st day of June, 1973, at 3:35 o'clock, M.S.T., in the office of the Recorder of Mines in the County of Titus, State of Montana.

Witness my hand.

Veronica R. Brown, County Recorder
By: T.J. (Deputy County Recorder)

Fee: $2.00

Paid $2
Declaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1961)

1. Warren W. Danforth of Pt 90
(Address)
(Town)
City of Missoula
State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

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

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

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

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

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

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

8. The depth of water table.

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

10. The estimated amount of groundwater withdrawn each year.

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

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

Signature of Owner: Warren W. Danforth
Date: 3/14/66

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located. Please answer all questions. If not applicable, so state, otherwise the form will be returned.

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.
I received and filed this instrument on record on the 14th day of March, 1880, at 10 o'clock a.m., permanent file at Missouri County, State of Montana. Witness my hand.

Oscar B. Jones, County Recorder

Chester H. Wing, Deputy Rec. Fee $ 0.00

248048
Notice of Appropriation of Groundwater
(Under Chapter 237, Montana Session Laws of 1961)

Waldorf - Hoerner Paper

(Name of Appropriator) (Address) (Town)

County of Missoula, 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 Industrial & Domestic supply

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

Sixteen Thousand Gallons Per Minute

4. The annual period (inclusive dates) of intended use Jan. 1, through Dec. 31,

5. The probable or intended date of first beneficial use June 1, 1966

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

Start 3/28/66; Complete one 2000 GPM unit every thirty days.

7. The location, type, size and depth of well or wells contemplated

Sec. 25, T. 14N, R. 21W

18" to 24" wells; 150' to 160' deep

8. The probable or estimated depth of the water table or artesian aquifer Aquifer, 115' - 160'; Water table approximately eight feet from surface.

9. Name, address and license number of the driller engaged Liberty Drilling & Pump Co.

William F. Gaborne, 2500 Reserve Street, Missoula, Montana. Water Well Contractor License #52, Public Contractor License #1592A

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.
I received and filed this Instrument for record on the 21st day of March 1967 at 12:30 o'clock A.M., permanent files of Missoula County, State of Montana, Witness my hand:

Vernon B. Cross, County Recorder
By: M. J. Jovin, Deputy
Rev. 4-1-67
Notice of Appropriation of Groundwater
(Under Chapter 237, Montana Session Laws of 1961)

1. I, Newer Waldorf Corporation, of Drawer D, Missoula
   (Name of Appropriator) (Address) (Town)
   County of Missoula, 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: Industrial

   (describe lands to be benefited, if for irrigation)

3. The rate of use in gallons per minute or miner's inches of groundwater claimed: 2000 GPM

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

5. The probable or intended date of first beneficial use: July 1973

6. The probable or intended date of commencement and completion of the well* or wells*: June 1973 to July 1973

7. The location, type, size and depth of well, or wells contemplated: Mill Division - Drilled - Eighteen inch - 162 ft.

8. The probable or estimated depth of the water table or artesian aquifer: 10 feet from surface


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

    Furnishing and Installing Casing & Drive Shoe as necessary, Sampling, Screening, Developing and Capacity Testing on eighteen inch well

   Drilling

File: Sec. 33 T. 14 N. R. 21 W.
Date: June 17, 1973
Time: 8:00 A.M.

Signature of Appropriator: ____________________________
Date: June 11, 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.

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.
I, Dorothy L. Head, County Recorder, on behalf of Missoula County, Montana, do hereby certify my hand to the instrument for record on the 12th day of January, 1972, at 2:00 p.m., in the office of the County Recorder, Missoula County, Montana, and in the presence of the parties to the instrument. Witness my hand.

Dorothy L. Head, County Recorder
By: [Signature]
Deputy
Fees $250.00 Paid Co.

Received and filed this instrument for record on the 12th day of January, 1972, at 2:00 p.m., in the office of the County Recorder, Missoula County, Montana, and in the presence of the parties to the instrument. Witness my hand.

Dorothy L. Head, County Recorder
By: [Signature]
Deputy
Fees $250.00 Paid Co.
**Notice of Completion of Groundwater Appropriation by Means of Well**

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

<table>
<thead>
<tr>
<th>Formations Log:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 1 1/2</td>
<td>Black dirt.</td>
<td></td>
</tr>
<tr>
<td>1 1/2 - 19</td>
<td>Sand, gravel, cobblestones &amp; boulders with some tan to gray silt mixed in.</td>
<td></td>
</tr>
<tr>
<td>19 - 27</td>
<td>Tan silt mixed with gravel &amp; cobblestones.</td>
<td></td>
</tr>
<tr>
<td>27 - 41</td>
<td>Fine brown sand mixed with a few gravels &amp; tan clay in thin alternate layers,</td>
<td></td>
</tr>
<tr>
<td>41 - 53</td>
<td>Tan sandy clay with some gravel imbedded.</td>
<td></td>
</tr>
<tr>
<td>53 - 64</td>
<td>Fine gray sand mixed with tan silt.</td>
<td></td>
</tr>
<tr>
<td>64 - 90</td>
<td>Brown sandy clay with gravel imbedded.</td>
<td></td>
</tr>
<tr>
<td>90 - 94</td>
<td>Gray sand and gravel mixed with tan silt.</td>
<td></td>
</tr>
<tr>
<td>94 - 104</td>
<td>Gravel imbedded in reddish tan clay.</td>
<td></td>
</tr>
<tr>
<td>104 - 107</td>
<td>Very fine tan silty sand, gravel &amp; cobblestones</td>
<td></td>
</tr>
<tr>
<td>107 - 110</td>
<td>Very fine tan silty sand &amp; coarse gravel imbedded in tan clay.</td>
<td></td>
</tr>
<tr>
<td>110 - 113</td>
<td>Fine tan sand mixed with very coarse gravel &amp; cobblestones.</td>
<td></td>
</tr>
<tr>
<td>113 - 121</td>
<td>Fine tan sand mixed with gravel, with fairly coarse gravels.</td>
<td></td>
</tr>
<tr>
<td>121 - 134</td>
<td>Fine tan sand with gravel classified as follows:</td>
<td></td>
</tr>
</tbody>
</table>

**Perforations**

<table>
<thead>
<tr>
<th>Depth</th>
<th>Size of Perforation</th>
<th>Size and Weight of Casing</th>
<th>From (Feet)</th>
<th>To (Feet)</th>
<th>extradition</th>
</tr>
</thead>
<tbody>
<tr>
<td>111</td>
<td>18&quot; telescope size Johnson close rodded Armco Iron well screen</td>
<td>109</td>
<td>144</td>
<td>15 feet</td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>Tail pipe with a solid closed bottom</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>Shut-in Pressure for non-flowing wells</td>
<td>1042</td>
<td>feet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Static Water Level for non-flowing well: 1042 feet.**

**Pumping Water Level: 564 feet at 2000 gal. per minute.**

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

**Non-flowing:**

**How Tested: Air Lift Pump.**

**Length of Test: 30 hours.**

**Remarks:** (Gravel packing, cementing, packers, type of shut-off) 4x-18-inch telescope size Johnson close rodded Armco iron well screen is set from 109 feet to 144 feet. The slot openings are:

- (Continue on reverse side)

**Pump & Paper Well**

**Driller's License Number:**

**Driller's Signature:**

41, 574
Formations Log contd,
134 - 139 Fine tan sand with fairly well graded gravels.
139 - 144 Fine tan sand mixed with coarse gravels and cobblestones.
144 - 152 Fine sand and coarse gravel mixed with reddish brown clay.
152 - 163 Rock. Gray Limestone.

110 - 113 90/1000 slot
113 - 121 90/1000 slot
121 - 134 100/1000 slot
134 - 139 90/1000 slot
139 - 144 80/1000 slot

The screen is fitted with a tightly swaged lead packer top and a 19 foot tail pipe with a solid closed bottom. All water entering the well is coming through the slots in this screen.

Development Log:

Well was initially developed with a solid block surge, a valved surge and sand pump until gravel pack was built up around screen and formation stabilized. Development was then completed by surging and pumping with compressed air. During the air development phase well was pumped in excess of 4000 gallons per minute.

Water Log:

Well was pumped at rates exceeding 4000 gallons per minute during development phase with compressed air. While accurate drawdown readings are not obtainable using this method of pumping all indications are that this well will produce 2000 gallons per minute with less than forty feet of drawdown from static level. When pumping was stopped well recovered nineteen minutes after pumping was stopped. Static water level at completion of well was 10'9" from surface.

The water rises in the well 10'9" from surface.
Notice of Appropriation of Groundwater

(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.