MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

Owner: Continental Oil Co.
Address: Box 678, Powell, Wyo.

Date Started: Unknown
Date Completed: 4-18-21

Location: Sec. 31, T. 15N, R. 29E, N. W. 3/4

Type of well: Drilled
Equipment used: Cable Tool

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

Industrial [ ] Drainage [ ] Other: Water Flood

Casing: Surface to 1000 ft. Type: - Size: 10"
Casing: - ft. to - ft. Type: - Size:
Casing: - ft. to - ft. Type: - Size:
Perforated or Screened: - ft. to - ft. - ft. to - ft.
Type of screen or perforations: Open hole

Static water level, for non-flowing well: feet.
Shut-in pressure, for flowing well: lb./sq. in. on: (date)
Pumping water level: 1000 feet at 2465 bpd/wo., gal. per min
How tested: Tank Test
Length of test:

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

Water to be used for water flooding. At present well is producing oil and water.
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 55</td>
<td>Black shale</td>
</tr>
<tr>
<td>55 to 60</td>
<td>Gravel (Water)</td>
</tr>
<tr>
<td>60 to 680</td>
<td>Black Shale</td>
</tr>
<tr>
<td>680 to 785</td>
<td>Greenish Shale</td>
</tr>
<tr>
<td>785 to 835</td>
<td>Water Sand</td>
</tr>
<tr>
<td>835 to 840</td>
<td>White Shale</td>
</tr>
<tr>
<td>840 to 855</td>
<td>Gray Shale</td>
</tr>
<tr>
<td>855 to 865</td>
<td>Red Shale</td>
</tr>
<tr>
<td>865 to 870</td>
<td>Blue Shale</td>
</tr>
<tr>
<td>870 to 910</td>
<td>Red Shale</td>
</tr>
<tr>
<td>910 to 920</td>
<td>Blue Shale</td>
</tr>
<tr>
<td>920 to 932</td>
<td>Red Shale</td>
</tr>
<tr>
<td>932 to 937</td>
<td>Blue Shale</td>
</tr>
<tr>
<td>937 to 985</td>
<td>Red Shale</td>
</tr>
<tr>
<td>985 to 1004</td>
<td>Sand</td>
</tr>
<tr>
<td>Sec.</td>
<td>Name of Appropriator</td>
</tr>
<tr>
<td>------</td>
<td>----------------------</td>
</tr>
<tr>
<td>17</td>
<td>Continental Oil Co.</td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Kimball Kyle</td>
</tr>
<tr>
<td>31</td>
<td>Hess P. &amp; L.</td>
</tr>
<tr>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>
### WATER WELL LOG

**Owner**: Continental Oil Co.  
**Address**: Box 878, Powell, Wyoming

**Driller**

**Date Started**: 7-31-46  
**Date Completed**: 8-11-46

**Location**: Sec. 17 T. 15N R. 30E 1/4 sec. NW SE

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

**Water use**: Industrial

**Casing**:  
- Surface: 1140 ft. to 1450 ft.  
- Type: 14 lb.  
- Size: 5 1/2 in.

**Perforated or Screened**: Open hole

**Static water level, for non-flowing well**:  
- For industrial well: feet.

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

**Pumping water level**: 1440 feet at 9,000 Bq./ho.  
**Gal. per min**: gal. per min

**How tested**: Tank test

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

- Produced water to be used for water flooding. As present well is oil and water.
### 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>820</td>
</tr>
<tr>
<td>820</td>
<td>835</td>
</tr>
<tr>
<td>835</td>
<td>920</td>
</tr>
<tr>
<td>920</td>
<td>970</td>
</tr>
<tr>
<td>970</td>
<td>1030</td>
</tr>
<tr>
<td>1030</td>
<td>1090</td>
</tr>
<tr>
<td>1090</td>
<td>1150</td>
</tr>
<tr>
<td>1150</td>
<td>1260</td>
</tr>
<tr>
<td>1260</td>
<td>1290</td>
</tr>
<tr>
<td>1290</td>
<td>1380</td>
</tr>
<tr>
<td>1380</td>
<td>1400</td>
</tr>
<tr>
<td>1400</td>
<td>1460</td>
</tr>
<tr>
<td>1460</td>
<td>1475</td>
</tr>
</tbody>
</table>
Montana Bureau of Mines and Geology
Butte, Montana

Water Well Log

Owner: Continental Oil Co.
Address: Box 876, Powell, Wyoming

Driller: [Blank]
Address: [Blank]

Date Started: 4-15-46
Date Completed: 4-23-46

Location: Sec 17 T 13N R 30E ¼ sec S6 SE

Type of Well: Drilled
Equipment Used: [Blank]

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

Casing: Surface ft. to 1400 ft. Type: [Blank] Size: 5"


Perforated or Screened: Ft. [Blank] to ft. [Blank]. Ft. [Blank] to ft. [Blank]

Type of Screen or Perforations: Open hole

Static Water level, for non-flowing well: [Blank] feet.

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

Pumping water level: 1400 feet at 110 B/gal.

How tested: Tank test

Length of test: [Blank]

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

Produced water to be used for water flooding. At present well is producing oil and water.
## Log of Well

<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Shale and gravel</td>
</tr>
<tr>
<td>908</td>
<td>Sand</td>
</tr>
<tr>
<td>980</td>
<td>Gray shale</td>
</tr>
<tr>
<td>1101</td>
<td>Red shale</td>
</tr>
<tr>
<td>1140</td>
<td>Sand</td>
</tr>
<tr>
<td>1180</td>
<td>Red and black shale</td>
</tr>
<tr>
<td>1195</td>
<td>Sand (water)</td>
</tr>
<tr>
<td>1300</td>
<td>Shale and bentonite</td>
</tr>
<tr>
<td>1395</td>
<td>Shale and bentonite sandy</td>
</tr>
<tr>
<td>1444</td>
<td>Sand</td>
</tr>
</tbody>
</table>

*Note: The document includes a handwritten note at the bottom, possibly signing or approving the log.*
**Owner:** Continental Oil Co.  
**Address:** Box 878, Powell, Wyoming

**Type of well:** Drilled  
**Equipment used:** Rotary

**Location:** Sec. 5, T. 15N, R. 30E  
**Date Started:** 2-17-46  
**Date Completed:** 3-4-46

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

**Casing:**  
- Surface: 492 feet to 1492 feet  
- Type: 23 lb.  
- Size: 7"

**Perforated or Screened:**  
- Surface: 492 feet to 1492 feet  
- Type:  
- Size: 

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

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

**Pumping water level:** 1492 feet at 50 Bp.  
**gal. per min.:**

**How tested:** Tank Test

**Length of test:**

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

Produced water to be used for water flooding. At present well is producing oil and water.

(over)
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 650</td>
<td>Shale and shells</td>
</tr>
<tr>
<td>650 - 790</td>
<td>Dark gray shale</td>
</tr>
<tr>
<td>790 - 847</td>
<td>Light gray siltstone</td>
</tr>
<tr>
<td>847 - 894</td>
<td>Sand</td>
</tr>
<tr>
<td>894 - 1010</td>
<td>Light gray siltstone</td>
</tr>
<tr>
<td>1010 - 1070</td>
<td>Bed shale</td>
</tr>
<tr>
<td>1070 - 1116</td>
<td>Variegated shale</td>
</tr>
<tr>
<td>1116 - 1136</td>
<td>Sand</td>
</tr>
<tr>
<td>1136 - 1160</td>
<td>Variegated shale</td>
</tr>
<tr>
<td>1160 - 1210</td>
<td>Light gray sandstone</td>
</tr>
<tr>
<td>1180 - 1210</td>
<td>Variegated shale</td>
</tr>
<tr>
<td>1210 - 1236</td>
<td>Sand</td>
</tr>
<tr>
<td>1236 - 1290</td>
<td>White sandstone</td>
</tr>
<tr>
<td>1290 - 1360</td>
<td>Dark gray shale</td>
</tr>
<tr>
<td>1360 - 1485</td>
<td>Dark gray and green shale</td>
</tr>
<tr>
<td>1485 - 1495</td>
<td>Dark green shale</td>
</tr>
<tr>
<td>1495 - 1500</td>
<td>Light green shale</td>
</tr>
<tr>
<td>1500 - 1525</td>
<td>Sand</td>
</tr>
<tr>
<td>1525 -</td>
<td>Gray and black shale with streaks of sand</td>
</tr>
</tbody>
</table>

Continental Oil Co.
**Owner**: Continental Oil Co.  
**Address**: Box 878, Powell, Wyoming

**Driller**:  
**Address**:  
**Date Started**: Unknown  
**Date Completed**: 12-20-45

**Location**: Sec. 17, T. 15N, R. 30E, 1/4 sec. SE SE

**Type of well**: Drilled  
**Equipment used**:  
**Cable tools**:  
**Drilling method** (Dug, driven, bored, or drilled)  
**Other**: (Churn drill, rotary, other)

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

**Casing**:
- **Surface**: ft. to 1422 ft.  
- **Type**: 14 lb  
- **Size**: 5 1/2"  
- **Date**:  
- **Depth**:  
- **Type of screen or perforations**:  
- **Bullet**:  
- **Static Water level, for non-flowing well**: feet  
- **Shut-in pressure, for flowing well**: 1403 lb./sq. in.  
- **Pumping water level**: feet at 110 ft. of 10 gpm  
- **How tested**: Tank test  
- **Length of test**:  
- **Remarks**: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)

*Produced water to be used for water flooding. At present well is producing oil and water.*

(over)
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 175</td>
<td>Shale, gravel and shells</td>
</tr>
<tr>
<td>175 to 780</td>
<td>Shale</td>
</tr>
<tr>
<td>780 to 804</td>
<td>Sand</td>
</tr>
<tr>
<td>804 to 910</td>
<td>Shale</td>
</tr>
<tr>
<td>910 to 980</td>
<td>Sand and shale</td>
</tr>
<tr>
<td>980 to 1030</td>
<td>Mud shale</td>
</tr>
<tr>
<td>1030 to 1080</td>
<td>Sand</td>
</tr>
<tr>
<td>1080 to 1120</td>
<td>Bentonite</td>
</tr>
<tr>
<td>1120 to 1170</td>
<td>Sand (water)</td>
</tr>
<tr>
<td>1170 to 1220</td>
<td>Mud shale</td>
</tr>
<tr>
<td>1220 to 1270</td>
<td>Sand</td>
</tr>
<tr>
<td>1270 to 1280</td>
<td>Shale and sand</td>
</tr>
<tr>
<td>1280 to 1310</td>
<td>Sandy shale</td>
</tr>
<tr>
<td>1310 to 1367</td>
<td>Gray and red shale</td>
</tr>
<tr>
<td>1367 to 1410</td>
<td>Sand and shale</td>
</tr>
<tr>
<td>1410 to 1428</td>
<td>Sand</td>
</tr>
<tr>
<td>1428 to 1432</td>
<td>Sand and shale</td>
</tr>
</tbody>
</table>

Continued on the next page.
### WATER WELL LOG

**Owner:** Continental Oil Co.  
**Address:** Box 878, Powell, Wyoming

**Driller:**  
**Address:**

**Date Started:** 5-14-23  
**Date Completed:** 5-29-23

**Location:** Sec. 17  
**T. 15N  
R. 30E  
Sec. 16  
N6 SE

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

**Water use:** Domestic  
**Municipal**  
**Stock**  
**Irrigation**  
**Industrial**

**Drainage**  
**Other:** Water flooding

**Casing:**  
**Surface**  
**ft. to 1040 ft.**  
**Type:** 20 lb  
**Size:** 6 5/8"

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

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

**Perforated (from to):**  
**ft. 1064**  
**to ft. 1084**  
**ft.**  
**to ft.**

**Type of screen or perforations:** Bullet

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

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

**Pumping water level:** 1064 feet at 20 ft/No.  
**gal. per min.**

**How tested:**

**Length of test**

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

Produced water to be used for water flooding. At present, well is producing oil and water.
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 20</td>
<td>Sand and gravel</td>
</tr>
<tr>
<td>20 - 780</td>
<td>Gray shale</td>
</tr>
<tr>
<td>780 - 862</td>
<td>Sandy shale</td>
</tr>
<tr>
<td>862 - 882</td>
<td>Sand</td>
</tr>
<tr>
<td>882 - 888</td>
<td>White shale</td>
</tr>
<tr>
<td>888 - 898</td>
<td>Sand</td>
</tr>
<tr>
<td>898 - 910</td>
<td>Sandy shale</td>
</tr>
<tr>
<td>910 - 1050</td>
<td>Green and red shale</td>
</tr>
<tr>
<td>1050 - 1062</td>
<td>Sandy shale</td>
</tr>
<tr>
<td>1062 - 1072</td>
<td>Sand</td>
</tr>
<tr>
<td>1072 - 1082</td>
<td>Sand</td>
</tr>
<tr>
<td>1082 - 1084</td>
<td>Sand</td>
</tr>
</tbody>
</table>
MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

<table>
<thead>
<tr>
<th>Owner: Continental Oil Co.</th>
<th>Address: Box 673, Powell, Wyoming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driller:</td>
<td>Address:</td>
</tr>
<tr>
<td>Date Started:</td>
<td>Date Completed: 10-13-22</td>
</tr>
<tr>
<td>Location: Sec. 17 T. 15M R. 30E 3/4 sec. NE.SE</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of well</th>
<th>Drilled</th>
<th>Equipment used</th>
<th>Cable tools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Aug. driven, bored, or drilled)</td>
<td>(Churn drill, rotary, other)</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Casing: Surface ft. to</th>
<th>1055 ft.</th>
<th>Type 24 lb</th>
<th>Size 8 1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing:</td>
<td>ft. to</td>
<td>Type</td>
<td>Size</td>
</tr>
<tr>
<td>Casing:</td>
<td>ft. to</td>
<td>Type</td>
<td>Size</td>
</tr>
<tr>
<td>Perforated:</td>
<td>ft. 1085 to 1092 Ft. to ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of screen or perforations: Open hole</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Static Water level, for non-flowing well:</th>
<th>feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shut-in pressure, for flowing well:</td>
<td>lb./sq. in. on: (date)</td>
</tr>
<tr>
<td>Pumping water level: 1085 feet at 120 Bbl/hr, 10 gal. per min.</td>
<td></td>
</tr>
<tr>
<td>How tested: Tank Test</td>
<td></td>
</tr>
<tr>
<td>Length of test:</td>
<td></td>
</tr>
</tbody>
</table>

| Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off) |
| Produced water to be used for water flooding. At present, well is producing oil and water. |

(over)
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>25 Gravel</td>
</tr>
<tr>
<td>25</td>
<td>70 Blue and grey shale</td>
</tr>
<tr>
<td>70</td>
<td>80 Bentonite</td>
</tr>
<tr>
<td>80</td>
<td>840 Blue and grey shale</td>
</tr>
<tr>
<td>840</td>
<td>855 Gritty shale</td>
</tr>
<tr>
<td>855</td>
<td>857 Shale</td>
</tr>
<tr>
<td>857</td>
<td>880 Sand (water)</td>
</tr>
<tr>
<td>880</td>
<td>917 Sand</td>
</tr>
<tr>
<td>917</td>
<td>926 Bentonite</td>
</tr>
<tr>
<td>926</td>
<td>950 Pink shale</td>
</tr>
<tr>
<td>950</td>
<td>985 Green shale</td>
</tr>
<tr>
<td>985</td>
<td>1065 Red and pink shale</td>
</tr>
<tr>
<td>1065</td>
<td>1070 Sand</td>
</tr>
<tr>
<td>1070</td>
<td>1085 Pink and red shale</td>
</tr>
<tr>
<td>1085</td>
<td>1092 Sandy shale</td>
</tr>
<tr>
<td>1089</td>
<td>1092 Oil sand</td>
</tr>
</tbody>
</table>
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

STATE ENGINEER

Lyle Kimble
(Name of Appropriator)
County of Petroleum
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-also stock water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: 1921 Been in continuous use since then on this place.

4. The amount of groundwater claimed (in miner's inches or gallons per minute): 100 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: artesian—free flowing

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: Started and completed in 1921

8. The depth of water table: Approx. 1200 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: 52,850,000 gal.

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

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

Signature of Owner: Lyle Kimble
Date: July 10, 1982

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, County of Pottawattamie.

Filed July 10, 1962, at 2:00 o'clock P.M.

Velma B. Merten
County Recorder.

Denise L. Stegall
Deputy.
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

STATE ENGINEER

1. R. L. Moss, also known as Robert Moss
   of [Name of Appropriator]
   [Address] [Town]

   County of [County]
   State of Montana,

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

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

   3. Date or approximate date of earliest beneficial use; and how continuous the use has been...Approximately April of 1923...and continually thereafter.

   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 applicable.

   6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal...Free flowing artesian well until 1957; thereafter pumped with gas engine and pump...Jack...situated in NE corner of Section 15-15-30...

   7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater...Commenced and completed approximately April, 1923.

   8. The depth of water table...Approximately 1000 feet to second Oak Creek sand.

   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 1000 feet 2" casing discharging into 2" pipe...thence into stock tank...Water withdrawn since 1957 by means of gas engine and pump...Jack.

   10. The estimated amount of groundwater withdrawn each year...2,628,000 gallons.

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

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

   Signature of Owner...
   [Signature]

   Also known as Robert Moss
   Date: January 3, 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.
STATE OF MONTANA
County of Petroleum

Filed April 20, 1962
at 3:05 o'clock P.M.

Helene R. Martin
County Recorder


20154
Declaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1961)

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Name of Appropriator) (Address) (Town)
County of __________ State of Montana

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

2. The beneficial use on which the claim is based
   Stock water and flood irrigation.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been.
   June, 1929, and continuously thereafter to date hereof.

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. NE NE 1/4 NE 1/4 Section 31, T. 15N R. 30W
   Indicate point of appropriation and place of use, if possible.

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal.
   Free flowing artesian well situate in NW corner of NE NE 1/4 NE 1/4, Sec. 31, Twp. 15 North, Rge. 30 East, M.P.M.--allotted grazing district lands to R. L. Moss.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater.
   Commenced and completed approximately in June of 1929.

8. The depth of water table.
   Approximately 1500 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.
   1500 feet of 6" casing into third Cat Creek sand flowing into 3" discharge pipe, thence into stock tank and across lands and premises above described for irrigation.

10. The estimated amount of groundwater withdrawn each year.
    2,628,000 gallons.

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

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

Signature of Owner
Also known as Robert Moss
Date January 3, 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.
STATE OF MONTANA
County of Petroleum
Filed April 20, 1963
at 3:00 o'clock P.M.
Selena P. Meiten
County Recorder
Dputy
<table>
<thead>
<tr>
<th>Sec.</th>
<th>Name of Appropriator</th>
<th>Type of Form</th>
<th>County File No.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Archer, Dean</td>
<td>well log</td>
<td>1907</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Archer, T. P.</td>
<td>G.W.</td>
<td>22375</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>King, John C. Inc.</td>
<td>&quot;</td>
<td>22355</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>&quot;</td>
<td>&quot;</td>
<td>22357</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Schultz, Ted</td>
<td>well log</td>
<td>94275</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>King, John C. Inc.</td>
<td>G.W.</td>
<td>22355</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>&quot;</td>
<td>well log</td>
<td>16406</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>&quot;</td>
<td>G.W.</td>
<td>22355</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>&quot;</td>
<td>&quot;</td>
<td>22361</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Bingham, William</td>
<td>&quot;</td>
<td>22354</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>King, John C. Inc.</td>
<td>&quot;</td>
<td>22362</td>
<td></td>
</tr>
</tbody>
</table>
## WATER WELL LOG

**Location:** Sec 6 T 14 R 25 

**Type of well:** Drilled

**Equipment used:** Churn

**Date Started:** Jun 11, 1958

**Date Completed:** Jun 15, 1958

**Owner:** Larry Miller

**Address:** 1127 Main St

**Driller:** E. C. Venne

**Address:** Butte, Montana

**Casing:**
- **Depth:** 5 ft. to 100 ft. **Type:** Steel
- **Size:** 6 in.

**Perforated or Screened:**
- **Start:** 30 ft. to 50 ft. **Size:** 2 in.
- **Height:** 50 ft. to 90 ft.

**Type of screen or perforations:**

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

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

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

**How tested:** Leaking

**Length of test:**

**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>20</td>
</tr>
<tr>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

19071

County of Petroleum
Signed Date of Receipt

Prentice

County Recorder
| **MONTANA BUREAU OF MINES AND GEOLOGY** |  |
| Butte, Montana |  |

**WATER WELL LOG**

| **Owner** |  |
| **Address** |  |
| **Driller** |  |
| **Address** |  |
| **Date Started** |  |
| **Date Completed** |  |

**Location:** Sec. ___ T. ___ R. ___ 1/4 sec. ___

| **Type of well** |  |
| **Equipment used** |  |

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

**Casing:**
- ft. to ___ ft. Type [ ] Size [ ]
- ft. to ___ ft. Type [ ] Size [ ]
- ft. to ___ ft. Type [ ] Size [ ]

**Perforated or Screened:**
- to ft. [ ]
- to ft. [ ]

**Type of screen or perforations:**

**Static Water level, for non-flowing well:** [ ] feet.

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

**Pumping water level:** [ ] feet at ___. [ ] 2. q. gal. per min.

**How tested:**

**Length of test:** [ ]

**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>From</td>
<td>To</td>
</tr>
<tr>
<td>45' 35&quot;</td>
<td>Mixing with 10&quot; Herring</td>
</tr>
<tr>
<td>52 ' 05&quot;</td>
<td>S. Y. T. T.</td>
</tr>
<tr>
<td>53 ' 05&quot;</td>
<td>Slotted 12&quot;</td>
</tr>
<tr>
<td>54 ' 35' 2&quot;</td>
<td>Slotted to Shallow, the rest 35&quot;)</td>
</tr>
</tbody>
</table>

---

**U.R.P.**

1907/12

---

**O.K. of Montana Oil Co.**

**Oct. 1. 1907**

**Witness**

**Chas. S. McLean**

**Secretary**
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

L. D. Archer
Teigen, Montana
(Name of Appropriator) (Address) (Town)

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

1. Lot 7
SW 1/4 SW 1/4 Sect. 6, T. 14 N, R. 25 E

2. The beneficial use on which the claim is based: stock water, house use and garden

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: 1957 drilled, used every day

4. The amount of groundwater claimed (in miner's inches or gallons per minute): 20 gallons per minute in bottom

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, only garden spot irrigated

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal: pumped out by pump jack with electric motor

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: Nov. 10, 1957 started, completed in July 1958

8. The depth of water table: 525 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: 525 ft deep, with six-inch casing

10. The estimated amount of groundwater withdrawn each year: 200 Gallons per day

11. The log of formations encountered in the drilling of each well if available: 0 to 35 ft, marly shale, used 8 ft casing to cement off bad water, 35 to 70 ft, marly shale, 75 to 525 ft, Colorado Shale, 252 to 553 ft, lacato sandstone, water

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

Signature of Owner: L. D. Archer
Date: 12-18-63

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,
County of Petroleum, 

Filed DEC. 1, 1968, at 12:00 o'clock, P.M.

Deputy of Records.

22335 File No. 1101/68

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

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

1. Joe C. King & Sons, Inc. of Box 177 Winnett
   (Name of Appropriator) (Address) (Town)
   County of Petroleum State of Montana
   have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

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

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: summer of 1952.

4. The amount of groundwater claimed (in miner’s inches or gallons per minute): 8 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: not applicable.

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: drilled and completed in summer of 1952.

8. The depth of water table: 8 feet.

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: drilled well with a 6” iron casing, about 20 feet deep.

10. The estimated amount of groundwater withdrawn each year: 300,000.

11. The log of formations encountered in the drilling of each well if available: 10 feet of surface soil and 10 feet of 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.

JOE C. KING & SONS, INC.
Signature of Owner: Joe C. King
President: January 1, 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,
County of Pondera,

Filed______
DEC 26, 1963
at 2:30 o'clock P.M.

Deputy Clerk

22355
File No. 205

[Signature]
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. Joe C. King & Sons, Inc., of Box 177, Winniet.
   (Name of Appropriator) (Address) (Town)
   County of Petroleum 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: live stock water.

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

4. The amount of groundwater claimed (in miner's inches or gallons per minute): 8 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: not applicable.

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

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

8. The depth of water table: 8 feet.

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: drilled well with a 6 inch iron casing, 17 feet deep.

10. The estimated amount of groundwater withdrawn each year: 300,000 gallons.

11. The log of formations encountered in the drilling of each well if available: about 10 feet of top soil and 7 feet of sandy 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: 

Date: December 18, 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

County of Petroleum,

Filed DEC 26 1968

at 3:40 P.M.

L. M.

[Signature]

Fee: $2.00

Deputy
<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>County</td>
<td>Fergus</td>
</tr>
<tr>
<td>Date Completed</td>
<td>Dec. 26, 1957</td>
</tr>
<tr>
<td>Type of well</td>
<td>Drilled</td>
</tr>
<tr>
<td>Equipment used</td>
<td>Drill</td>
</tr>
<tr>
<td>Water use</td>
<td>Stock</td>
</tr>
<tr>
<td>Casing:</td>
<td>10</td>
</tr>
<tr>
<td>Casing:</td>
<td>20</td>
</tr>
<tr>
<td>Perforated or Screened:</td>
<td>10</td>
</tr>
<tr>
<td>Shut-in pressure, for flowing well:</td>
<td>26</td>
</tr>
<tr>
<td>Pumping water level</td>
<td>13</td>
</tr>
<tr>
<td>How tested</td>
<td>PUMPED</td>
</tr>
<tr>
<td>Length of test</td>
<td>1 min</td>
</tr>
<tr>
<td>Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)</td>
<td>T'0D casing drove to 20'</td>
</tr>
</tbody>
</table>

(over)
## WATER WELL LOG

<table>
<thead>
<tr>
<th>Well #</th>
<th>10</th>
</tr>
</thead>
</table>

**Owner:** Ted Schmidt  
**Address:** Grass Range, Montana

**Driller:** George O. Sibley  
**Address:** Lewistown, Montana

**Date Started:** Dec. 16, 1957  
**Date Completed:** Dec. 29, 1957

**Location:** Sec. 18, T. 14 N. R. 25 E. 3/4 sec.

### Type of well

<table>
<thead>
<tr>
<th>Drilled</th>
</tr>
</thead>
</table>

### Equipment used

<table>
<thead>
<tr>
<th>Cable Tool</th>
</tr>
</thead>
</table>

### Water use

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

### Above ground

| Casing: | 2 ft. to 20 ft. Type | S. A. S  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Casing:</td>
<td>ft. to ft. Type</td>
<td>Size</td>
</tr>
<tr>
<td>Casing:</td>
<td>ft. to ft. Type</td>
<td>Size</td>
</tr>
</tbody>
</table>

### Perforated or Screened

<table>
<thead>
<tr>
<th>Ft. to Ft. Type</th>
<th>Size</th>
</tr>
</thead>
</table>

### Type of screen or perforations

| Slots |

### Static Water level, for non-flowing well:

8 feet.

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

12 lb./sq. in. on: (date)

### Pumping water level:

18 feet at 20 gal. per min.

### How tested:

Rigged

### Length of test:

1 hr.

### Remarks:

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

- 7" OD casing drove to 20 ft.
<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Topsoil</td>
</tr>
<tr>
<td>1</td>
<td>Yellow clay</td>
</tr>
<tr>
<td>10</td>
<td>Gravel, Water</td>
</tr>
<tr>
<td>20</td>
<td>Water, Blue shale</td>
</tr>
</tbody>
</table>

State of Missouri
County of Clay
Plat 7, Block 2
W. 1/2 and S. 1/2

C.O. 76
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

JOE C. KING & SONS, INC., of Box 177, Winnet

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

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

3. Date or approximate date of earliest beneficial use: July 1958 to present (1963)

4. The amount of groundwater claimed (in miner's inches or gallons per minute): 12 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: flowing artesian well at 90 pounds pressure 50 feet deep

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: commenced May 1958, completed July 1958

8. The depth of water table: not applicable - 90 psi slp

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: drilled with 4 inch iron casing, 1,027 feet deep

10. The estimated amount of groundwater withdrawn each year: 5 million gallons

11. The log of formations encountered in the drilling of each well if available: 100' Colorado Shale, 200' Newcastle, 300' Skull Creek, 450' Dakota Sand, 600' First Cat Creek Sand, 850' Kootenai Shale, 900' Second Cat Creek, 1030' Third Cat Creek TD 1027

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: well drillers report on record with Montana State Engineer

JOE C. KING & SONS, INC.

Signature of Owner: /s/ President Date: December 18, 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 Appropriorator.

15474
STATE OF MONTANA
County: Teton
Filed: DEC 2, 1933
at 3:45 P.M.
Levi L. Price
Deputy
411: 39:52
MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

<table>
<thead>
<tr>
<th>Owner</th>
<th>Address</th>
<th>Driller</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOE C. KING &amp; SONS</td>
<td>WINTHETT, MONTANA</td>
<td>U. L. LIVINGSTON</td>
<td>WINTHETT, MONTANA</td>
</tr>
</tbody>
</table>

Date Started: June 1st, 1957
Date Completed: July 25, 1957
Location: Sec. 23, T. 11 N., R. 25 E., W. 1/4 sec. SW 1/4

<table>
<thead>
<tr>
<th>Type of well</th>
<th>Equipment used</th>
<th>Water use</th>
<th>Casing:</th>
<th>Perforated or Screened:</th>
<th>Static Water level, for non-flowing well:</th>
<th>Shut-in pressure, for flowing well:</th>
<th>Pumping water level:</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td>drilled</td>
<td>rotary</td>
<td>Domestic</td>
<td>0 ft. to 1017 ft.</td>
<td>Type steel</td>
<td>Size 5&quot;</td>
<td>99 lb./sq. in. on: July 25th, 1957</td>
<td>5 ft. at</td>
<td>gravel packing, cementing, packers, type of shut-off, depth of shut-off</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stock</td>
<td>ft. to ft.</td>
<td>Type</td>
<td>Size</td>
<td>(date)</td>
<td>ft.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stock</td>
<td>ft. to ft.</td>
<td>Type</td>
<td>Size</td>
<td></td>
<td>ft.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>ft. to ft.</td>
<td>Type</td>
<td>Size</td>
<td></td>
<td>ft.</td>
<td></td>
</tr>
</tbody>
</table>

Casing is cemented in. Flows at 8 gallons per minute. Cements allowed to set 72 hours before drilling plug.
## Log of Well

<table>
<thead>
<tr>
<th>Depth, feet</th>
<th>Description of Material Drilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Top soil and gravel</td>
</tr>
<tr>
<td>20</td>
<td>Hard grey shale (Bowery)</td>
</tr>
<tr>
<td>102</td>
<td>Dark shale and shells</td>
</tr>
<tr>
<td>268</td>
<td>Hard sandy shale and sand streaks</td>
</tr>
<tr>
<td>300</td>
<td>Soft shale and bentonite</td>
</tr>
<tr>
<td>560</td>
<td>Medium hard shale and shells</td>
</tr>
<tr>
<td>620</td>
<td>Hard sand and streaks of shale</td>
</tr>
<tr>
<td>690</td>
<td>Hard sand and hard lime streaks</td>
</tr>
<tr>
<td>700</td>
<td>Medium hard sand (First Cat Creek)</td>
</tr>
<tr>
<td>723</td>
<td>Red and grey shale</td>
</tr>
<tr>
<td>816</td>
<td>Hard-bluish-grey sand</td>
</tr>
<tr>
<td>885</td>
<td>Red and grey shale and sand streaks</td>
</tr>
<tr>
<td>895</td>
<td>Light grey to white sand</td>
</tr>
<tr>
<td>925</td>
<td>Red and grey clay</td>
</tr>
<tr>
<td>930</td>
<td>Sand</td>
</tr>
<tr>
<td>960</td>
<td>Red and grey clay with streaks of hard sand and lime (some white ash) or white chalky shale)</td>
</tr>
<tr>
<td>978</td>
<td>Red and grey shale</td>
</tr>
<tr>
<td>1020</td>
<td>Firm red shale and hard redish brown lime and sand streaks (top of third C. C. sand. Flow 8 gallons per min).</td>
</tr>
<tr>
<td>1028</td>
<td>Hard soft, mud coarse sand (light grey to white)</td>
</tr>
<tr>
<td>1050</td>
<td>Hard sand and streaks of grey-buff clay.</td>
</tr>
</tbody>
</table>
## Declaration of Vested Groundwater Rights

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

### Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. **Joe C. King & Sons, Inc.**
   - **of:** Box 177
   - **Minneapolis**
   - **(Name of Appropriator)**
   - **(Address)**
   - **(Town)**
   - **County of:** Petroleum
   - **State of:** Montana

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

<table>
<thead>
<tr>
<th>N</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

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

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

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: **May 1961, continuous to present**

4. The amount of groundwater claimed (in miner’s inches or gallons per minute): **6 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: **not applicable**

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: **drilled and completed in May 1961**

8. The depth of water table: **9 feet**

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: **drilled with 8 inch iron casing, 17 feet deep**

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

11. The log of formations encountered in the drilling of each well if available: **about 12 feet of top sand and 4 feet of sandy 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:**

**Date:** December 18, 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 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)

STATE ENGINEER

1. Joe C. King & Sons, Inc., of Box 177, Winniet
   (Name of Appropriator) (Address) (Town)
County of Patroolium, State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

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

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

4. The amount of groundwater claimed (in miner's inches or gallons per minute): 5 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: not applicable

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

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

8. The depth of water table: about 8 feet

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: drilled well with a 5 inch sized pipe casing, about 17 feet

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

11. The log of formations encountered in the drilling of each well if available: about 10 feet of surface soil and 7 feet of 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

Joe C. King & Sons, Inc.
Signature of Owner

President

Date: December 23, 1963

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; triplicate to the Montana Bureau of Miner 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)

1. William Wagner, of Grass Range, Montana
   (Name of Appropriator)
   (Address)
   (Town)

County of Petroleum, 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 livestock.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: August 1, 1962.
   used every day since completion.

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

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

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. started June 1, 1950 completed July 1951.

8. The depth of water table. 680 feet.

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater. 4 inch casing drilled to depth of 740 feet.

10. The estimated amount of groundwater withdrawn each year. 225,000 gallons a year.

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... William Wagner
Date... December 29, 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)

1. Joe C. King & Sons, Inc. of Box 177 Minniet
   (Name of Appropriator) (Address) (Town)
   County of Petroleum State of Montana
   have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

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

   3. Date or approximate date of earliest beneficial use; and how continuous the use has been: approx 1945 or 1946.

   4. The amount of groundwater claimed (in miner's inches or gallons per minute): 25 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: not applicable.

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

   7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: during 1945 or 1946.

   8. The depth of water table: unknown.

   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: about 900 feet drilled.

   10. The estimated amount of groundwater withdrawn each year: 1,300,000 gallons.

   11. The log of formations encountered in the drilling of each well if available: water coming from the third Cut Creek.

   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.

   JOE C. KING & SONS, INC.
   Signature of Owner: Jan. 23, 1963

   Date: December 23, 1963

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

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

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

15498
<table>
<thead>
<tr>
<th>Sec.</th>
<th>Name of Appropriator</th>
<th>Type of Form</th>
<th>County File No.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Ore, George D.</td>
<td>WEL IAG</td>
<td>72849</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Egger, R.</td>
<td>C. W. 3</td>
<td>22092</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>H. W. Floyd &amp; Valve, S.</td>
<td>GW H</td>
<td>22288</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>King, Joe C.</td>
<td>&quot;</td>
<td>22269</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>&quot;</td>
<td>&quot;</td>
<td>22353</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>&quot;</td>
<td>&quot;</td>
<td>22357</td>
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<tr>
<td>32</td>
<td>&quot;</td>
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<td>22360</td>
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<tr>
<td>35</td>
<td>H. W. Floyd, R.</td>
<td>WEL IAG</td>
<td>72248</td>
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</tr>
<tr>
<td>35</td>
<td>H. W. Floyd &amp; Valve, S.</td>
<td>GW H</td>
<td>22380</td>
<td></td>
</tr>
</tbody>
</table>
# WATER WELL LOG

<table>
<thead>
<tr>
<th>Owner</th>
<th>George D. Oz</th>
<th>Address</th>
<th>Winnett, Mont.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driller</td>
<td>Earl Phillips</td>
<td>Address</td>
<td>Winnett, Mont.</td>
</tr>
<tr>
<td>Date Started</td>
<td>Feb. 22, 1954</td>
<td>Date Completed</td>
<td>Feb. 23, 1954</td>
</tr>
<tr>
<td>Location</td>
<td>Section 6, Township 14, Range 26 W, N11, I believe, on Lot 17, Block 15, Original Plat of Winnett, Mont.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Type of well:** 
  - **pumper**
  - **Equipment used:** 
    - **Rotary (Small)**
- **Water use:**
  - Domestic
  - Municipal
  - Stock
  - Irrigation
  - Industrial
  - Drainage
  - Other
- **Casing:**
  - One ft. to 31 ft.
  - Type about 5 in
  - Size
  - Casing:
  - Two ft. to 18 ft.
  - Type
  - Size
  - Casing:
  - Perforated the last five or six feet
  - Perforation slot in casing, believe on two sides, about one foot long, a space and then another slot in casing.
- **Static Water level, for non-flowing well:**
  - About 18 ft. down
  - not flowing
- **Shut-in pressure, for flowing well:**
  - About 18 ft. down, goes down when pumping (due to aquifer)
  - Est. 2, gal. per min.
- **Pumping water level:**
  - 18 ft. and then 14 ft. (estimated)
  - About 18 ft. down, goes down when pumping (due to aquifer)
- **How tested:**
  - Ordinary piston pump, about 14 in. size
  - Two hours or so usually, sometimes longer
- **Length of test:**
  - Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)
  - Gravel packed about half way, then packed with dirt outside to top

- 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>31 Ft.</td>
<td>Ordinary gumbo soil until about 25 feet, then struck a gravel, as I understand it, that is where the water comes from, somewhat alkali taste and only should be used for irrigating garden on the lot in a ditch. Cannot be used for sprinkling, at least on some things; used also for watering trees, shrubbery, etc.</td>
</tr>
</tbody>
</table>

---

**Log of Well**

1949
Notice of Completion of Groundwater Appropriation by Means of Well

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

DEVELOPED AFTER JANUARY 1, 1962
(Under Chapter 237, Montana Session Laws, 1961)

Notice of completion of groundwater of well.

<table>
<thead>
<tr>
<th>Top of Group</th>
<th>(Elev. above sea level)</th>
<th>Driller</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>125</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>130</td>
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<tr>
<td>165</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shale &amp; Bentonite Strata</th>
<th>Owner</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Few Porosity—flawed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2 gal. / Min.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kootenai—Reddish Shale</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date well started: Oct. 20, 1966
Date completed: Nov. 18, 1966

Indicate on the diagram the character and thickness of the different strata and height to which the water rises in the well.

- **Clayey Shale—Chern—Bad**
- **Hard Line—Top of Second Bench Second Bench 1**
- **Hard Sand—Top of First Cat Creek Sand**
- **Shale—Sand Strata**
- **Silty Sand—poor porosity**
- **Flowed 2 Gal./Min.**
- **Hard line strk. Varigated**
- **shale—silty sand strata—**
- **Lime Strks. Sand Lenses**
- **Lime Shale**
- **Salt & Pepper Sand**
- **Carnicaceous Shala—Thin Sand**
- **Lenses—Iron Pyrites—**
- **Hard Black Shale—Iron Pyrites**

### PERFORATIONS

<table>
<thead>
<tr>
<th>Size of Drilled Hole</th>
<th>Size and Weight of Cement</th>
<th>Feet</th>
<th>To (Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Static Water Level for non-flowing well:
Pumping Water Level:
Shut-in Pressure for Flowing Well:
Discharge in gal. per minute of flowing well:
How Tested:
Length of Test:
Remarks:
(Gravel packing, cementing, pack-
Surface cemented)
Indicate location of well and place of use, if possible. Each small square represents 40 acres.

WELL FLOWING: 20 Gal./Min.

(Continue on reverse side)

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, so state, otherwise the form will be returned.

Driller's License Number:
Driller's Signature:

26
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. Floyd R. Hill, of Helena, Mont.
   (Name of Appropriator) (Address) (Town)

   County of
   State of

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

   SE ¼ Sec. 25 T. 14 N. R. 26 W.
   Indicate point of appropriation and place of use, if possible. Each small square represents 10 acres.

   2. The beneficial use on which the claim is based

   3. Date or approximate date of earliest beneficial use; and how continuous the use has been
   December 2, 1950
   Continuously

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

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

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

   7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater
   Completed Nov. 2, 1950

   8. The depth of water table 1810 ft. To first water

   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
   Screened 192 ft. In 1920 ft.

   10. The estimated amount of groundwater withdrawn each year 575,600.00

   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 the State Engineer, including reference to book and page of any county record

   Signature of Owner Floyd R. Hill
   Date Dec. 5, 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,
County of Petroleum,

Filed DEC 6 1968
at 11:30 o'clock A.M.

Director of Records.

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

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

1. Joe C. King & Sons, Inc. of Box 177 Winnet
   (Name of Appropriator) (Address) (Town)
   County of Petroleum State of Montana
   have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

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

3. Date or approximate date of earliest beneficial use; and how continuous the use has been July 1961 to present

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 2 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 not applicable

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater drilled and completed in July 1961

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 4" stove pipe casing to 60 feet - drilled well

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

11. The log of formations encountered in the drilling of each well if available 10' surface clay, 17' sandy gravel, 24' sticky clay and shale, 60' shale bottom

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

JOE C. KING & SONS, INC.
Signature of Owner By: C. L. King
President Date: December 23, 1963

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

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

Original to the County Clerk and Recorder; duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.
STATE OF MICHIGAN
County of Oakland, 12th

Filed DEC 26 1963

at 3:20


Henry A. Dwyer
County Clerk

20-2-12 Deputy
JOE C. KING & SONS, INC.  
Box 177  
Winnetka, Illinois

County of  
Petroleum  
State of Montana

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

1. JOE C. KING & SONS, INC.  
   Address: Box 177  
   Town: Winnetka

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

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: June 1961 to present

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

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

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater: drilled and completed in June 1961

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: drilled 71 feet with 6 ft. screen, casing to bottom

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: 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

JOE C. KING & SONS, INC.
Signature of Owner

Date: December 3, 1963

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

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

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

Filed DEC 22 1983
at 3:15 PM
Donny L. Spagle

Su: 42.00 Deputy
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

1. Joe C. King & Sons, Inc. (Name of Appropriator) of Box 177 (Address) Winnett (Town)

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

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

3. Date or approximate date of earliest beneficial use; and how continuous the use has been: December 1960 to present

4. The amount of groundwater claimed (in miner's inches or gallons per minute): 7 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: windmill pump

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

8. The depth of water table: 8 feet

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater: drilled with 8 inch iron casing, 18 feet deep

10. The estimated amount of groundwater withdrawn each year: 300,000 gallons

11. The log of formations encountered in the drilling of each well if available: about 12 feet of top soil and 6 feet of sandy 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

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.