



File No. ....

STATE WATER CONSERVATION BOARD

T. .... R. ....

DUPLICATE

DEC 20 1966

County Petroleum

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)



Top of Ground (Elev. above sea level) \_\_\_\_\_

1 Topsoil

127 Colorado shale

262 Hard slaty shale, sand streaks, Bentonite layers

700 Top of Merry formation

750 Shale with rock stringers, some Bentonite

750 Dark brittle shale

757 Hard white rock top

778 1st. Cat Creek Sand

840 Hard brittle black shale

840 Sandstone Water

Owner Dorothy Bartlett Address Winnett, Mont.

Driller George O. Singley Address Lewistown, Montana

Date of Notice of appropriation of groundwater None

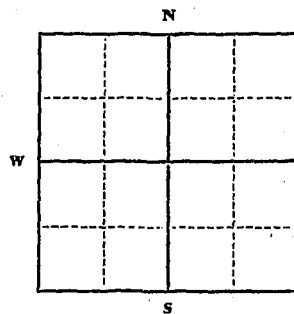
Date well started Oct. 24, 1966 Date completed Oct. 31, 1966

Type of well Drilled Equipment used Rotary  
(Dug, Driven, bored or drilled) (Churn drill, rotary or other)

Water use: Domestic  Municipal  Stock  Irrigation   
Industrial  Drainage  Other

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
4-3/4 4 1/2	2" pipe	0	805			
		805	875			
		above ground	805			



Static Water Level for non-flowing well None feet.

Shut-in Pressure for Flowing Well 70

Pumping Water Level None feet at 20 gal. per minute.

Discharge in gal. per min. of flowing well 20

How Tested Measured

Length of Test 5-10 min.

Remarks: (Gravel packing, cementing, packers, type of shutoff) 20 sacks cement used in cementing. Packer set at 805 feet.

1/4 Sec. T. R. Indicate location of well and place of use, if possible. Each small square represents 40 acres.

19

Driller's License Number

Driller's Signature

George O. Singley  
41,560

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.

Show exact depth of bottom.

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).

(Continue on reverse side)

25114 File No. 290

STATE OF MONTANA }  
County of Petroleum, } SS.

Filed DEC 16 1966 19

at 10:45 o'clock A.M.

Benjamin D. Engel  
Deputy

Free 157 no

DEPARTMENT OF HEALTH  
DIVISION OF VITAL RECORDS  
STATE OF MONTANA

OFFICE OF STATE HEALTH  
TERMINATION OF GESTATION BY  
MEANS OF PHARMACY

DEC 16 1966

1966

1966

1966

STATE OF MONTANA }  
County of Petroleum, } SS.  
I, Benjamin D. Engel, Deputy  
of the State of Montana, do hereby certify that  
the within and foregoing is a true and correct  
copy of the original as the same appears in  
my files and records.  
Witness my hand and the seal of the State of Montana  
this 16th day of December, 1966.  
Benjamin D. Engel  
Deputy

FILE NO.	DATE	TIME	PLACE	BY
25114	DEC 16	10:45	ST. PAUL	BENJAMIN D. ENGL

Form No. 18  
8-60

T. \_\_\_\_\_ R. \_\_\_\_\_

County Petroleum

MONTANA BUREAU OF MINES AND GEOLOGY  
Butte, Montana

*Probably Rich Sec 20  
654*

WATER WELL LOG


Owner Ray John Address Winnett, Montana

Driller George C. Sibley Address Lewistown, Montana

Date Started October 25, 1961 Date Completed Nov. 7, 1961

Location: Sec. \_\_\_\_\_ T. \_\_\_\_\_ R. \_\_\_\_\_  $\frac{1}{4}$  sec. \_\_\_\_\_

Type of well Drilled Equipment used Cable Tool & Rotary  
(Dug, driven, bored, or drilled) (Churn, drill, rotary, other)

Water use: Domestic  Municipal  Stock  Irrigation

**Above ground** Industrial  Drainage  Other \_\_\_\_\_

Casing: 2 ft. to 230 ft. Type S & S Size 4 1/2 ID

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 \_\_\_\_\_

Static Water level, for non-flowing well: 190 feet.

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

Pumping water level 210 feet at 10 gal. per min.

How tested: Bailing

Length of test 1 hr.

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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(over)



Form No. 18  
8-60

T. \_\_\_\_\_ R. \_\_\_\_\_

County Petroleum

MONTANA BUREAU OF MINES AND GEOLOGY  
Butte, Montana

*Producing well  
aug 30 or 31  
257*

WATER WELL LOG


Owner Harvey Corne Address Winnett, Montana

Driller George G. Singley Address Lewistown, Montana

Date Started August 4, 1961 Date Completed August 8, 1961

Location: Sec. \_\_\_\_\_ T. \_\_\_\_\_ R. \_\_\_\_\_  $\frac{1}{4}$  sec. \_\_\_\_\_

Type of well Drilled Equipment used Cable Tool  
(Dug, driven, bored, or drilled) (Churn, drill, rotary, other)

Water use: Domestic  Municipal  Stock  Irrigation

**Above ground** Industrial  Drainage  Other \_\_\_\_\_

Casing: 1 ft. to 120 ft. Type 3 & 3 Size 4 1/2 ID

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 \_\_\_\_\_

Static Water level, for non-flowing well: 40 feet.

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

Pumping water level 55 feet at 10 gal. per min.

How tested: Bailing

Length of test 2 hr.

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

Scaled with shoe Bottom of hole filled with gravel.

(over)



RECEIVED

21-13

4

GW 3 Revised 1969  
2057-1500-1/71

JUL 2 1973

County Petroleum

STATE OF MONTANA  
MONTANA DEPARTMENT OF NATURAL RESOURCES  
ADMINISTRATOR OF GROUNDWATER CODE  
MONTANA WATER RESOURCES BOARD

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL  
Developed After January 1, 1962

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

This form to be prepared by contractor (if any), otherwise by the owner.  
Three copies of this notice are to be filed with the County Clerk and Recorder of the county in which the works are located.  
Please answer all questions. If not applicable, so state, otherwise the form may be returned.

For Administrator's Use

File 27825, 394

June 29, 1973

GW 1 12:10 p.m.

Owner FRASER LAUREL LIVESTOCK CO INC

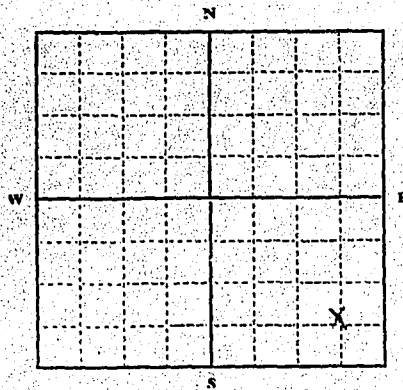
Address Box 1352 Billings, Montana

Contractor (if any) \_\_\_\_\_

Address of Contractor \_\_\_\_\_

Date Started \_\_\_\_\_ Date Completed \_\_\_\_\_

1. Describe means of obtaining groundwater (as by sub-irrigation, developed spring, drains, etc.) Spring



SE 1/4 SE 1/4 Sec. 1

T. 22 N R. 12 E

S W

INDICATE POINT OF APPROPRIATION AND PLACE OF USE, IF POSSIBLE.  
Elevation of spring, if known or estimated \_\_\_\_\_

2. Means of withdrawing water (gravity, pump, canal, etc.) \_\_\_\_\_

gravity

3. Depth of water table \_\_\_\_\_

4. Use of the water Stock water

5. Amount of groundwater claimed (in miner's inches or gallons per minute) 4 gal per minute

6. If used for irrigation, give number of acres and description of land \_\_\_\_\_

7. Estimate amount of water used each year \_\_\_\_\_

All

8. Months of year spring flows 12 months

Signature of Owner Fraser Laurel Livestock Co Inc  
Date June 29, 1973

54588



27995

7103 354

STATE OF MONTANA,  
County of Petroleum, ) ss.  
Filed JUN 29 1973 19

at 12:10 o'clock P. M.

*Orville Barber*  
Director of Records

Deputy

RECEIVED

GW 3 Revised 1969  
2057-1500-1/71

JUL 2 1973

STATE OF MONTANA

County Petroleum

ADMINISTRATOR OF GROUNDWATER CODE  
MONTANA DEPARTMENT OF LAND AND WATER RESOURCES AND MONTANA WATER RESOURCES BOARD

NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL

Developed After January 1, 1962

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

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

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

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

For Administrator's Use

File 27893, 352

June 29, 1973

GW 1 12-00-12

Owner Fraser Land & Livestock Co. Inc

Address Box 1352 Billings Montana

Contractor (if any) \_\_\_\_\_

Address of Contractor \_\_\_\_\_

Date Started \_\_\_\_\_ Date Completed \_\_\_\_\_

1. Describe means of obtaining groundwater (as by sub-irrigation, developed spring, drains, etc.) River  
Musselshell

2. Means of withdrawing water (gravity, pump, canal, etc.) Pump

3. Depth of water table \_\_\_\_\_

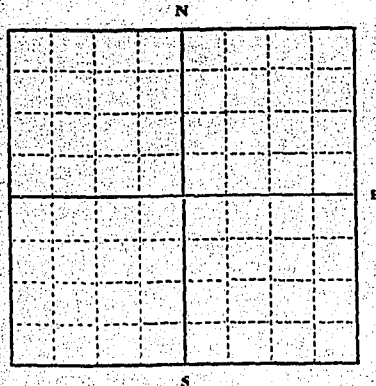
4. Use of the water Stock & Irrigation

5. Amount of groundwater claimed (in miner's inches or gallons per minute) 500 mids

6. If used for irrigation, give number of acres and description of land 180 A Sec 20 & Sec 21 & Sec 17

7. Estimate amount of water used each year \_\_\_\_\_

8. Months of year spring flows 12 months



..... 1/4 ..... 1/4 Sec.....

T..... N R..... E  
S W

INDICATE POINT OF APPROPRIATION AND PLACE OF USE, IF POSSIBLE. Elevation of spring, if known or estimated \_\_\_\_\_

Signature of Owner Fraser Land & Livestock Co. Inc  
By Gary Stanley  
Date June 29, 1973

54551

27893

GW3 352

STATE OF MONTANA  
County of Petroleum,

Filed JUN 29 1973 19

at 12:00 o'clock P. M.

*Orene Barber*

Director of Records

Deputy

RECEIVED  
JUL 2 1973

GW 3 Revised 1969  
2057-1500-1/71

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
MONTANA WATER RESOURCES BOARD

County Petroleum

**NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION WITHOUT WELL**  
Developed After January 1, 1962

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

This form to be prepared by contractor (if any), otherwise by the owner.  
Three copies of this notice are to be filed with the County Clerk and Recorder of the county in which the works are located.  
Please answer all questions. If not applicable, so state, otherwise the form may be returned.

For Administrator's Use

File 27897, 356

June 29, 1973

GW 1 12.20 p.m.

Owner Fraser Land Lumber Co. Inc

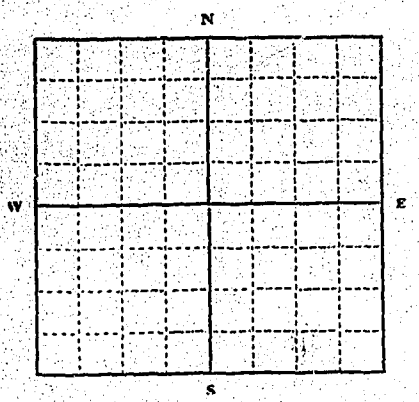
Address Box 1352 Billings Montana

Contractor (if any) \_\_\_\_\_

Address of Contractor \_\_\_\_\_

Date Started \_\_\_\_\_ Date Completed \_\_\_\_\_

1. Describe means of obtaining groundwater (as by sub-irrigation, developed spring, drains, etc.) Flat willow stock water



\_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 Sec. \_\_\_\_\_

T. \_\_\_\_\_ N R. \_\_\_\_\_ E \_\_\_\_\_  
S S W

INDICATE POINT OF APPROPRIATION AND PLACE OF USE, IF POSSIBLE.  
Elevation of spring, if known or estimated \_\_\_\_\_

2. Means of withdrawing water (gravity, pump, canal, etc.) \_\_\_\_\_  
Pump + natural
3. Depth of water table \_\_\_\_\_
4. Use of the water Stock water
5. Amount of groundwater claimed (in miner's inches or gallons per minute) \_\_\_\_\_
6. If used for irrigation, give number of acres and description of land \_\_\_\_\_
7. Estimate amount of water used each year \_\_\_\_\_
8. Months of year spring flows 12 months

Signature of Owner Fraser Land Lumber Co. Inc  
Richard S. ...  
Date June 29 1973

27897

LTW 3 356

STATE OF MONTANA,  
County of Petroleum, } ss.

Filed JUN 29 1973 19

at 12:20 o'clock A. M.

Orrin Barber  
Director of Records

Deputy

Form No. 18  
8-60

T. \_\_\_\_\_ R. \_\_\_\_\_

County Petroleum

MONTANA BUREAU OF MINES AND GEOLOGY  
Butte, Montana

RECEIVED  
NOV 2 1961

WATER WELL LOG

STATE ENGINEER


Owner D. W. Whisonant Address Winnett, Montana

Driller George C. Singler Address Lewistown, Montana

Date Started October 15, 1961 Date Completed Oct. 18, 1961

Location: Sec. \_\_\_\_\_ T. \_\_\_\_\_ R. \_\_\_\_\_  $\frac{1}{4}$  sec. \_\_\_\_\_

Type of well Drilled Equipment used Rotary  
(Dug, driven, bored, or drilled) (Churn, drill, rotary, other)

Water use: Domestic  Municipal  Stock  Irrigation   
Industrial  Drainage  Other \_\_\_\_\_

**Above ground**  
Casing: 1 ft. to 258 ft. Type s & s Size 4 1/2 in.

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size \_\_\_\_\_

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size \_\_\_\_\_

Perforated or Screened: Ft. 200 to ft. 258 . Ft. \_\_\_\_\_ to ft. \_\_\_\_\_

Type of screen or perforations Slots

Static Water level, for non-flowing well: 15 feet.

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

Pumping water level 110 feet at 10 gal. per min.

How tested: Bailing

Length of test 1 hr.

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

Rubber cave catchers set

(over)

NLD

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	1	Topsoil
1	10	Clay Gravel
10	17	Gravel
17	40	Clay and Gravel
40	215	Blue shale
215	230	Sandstone Water 10 gal min.
230	258	Blue shale

#492

19705

STATE OF MONTANA  
County of Petroleum

Filed October 27, 1947

at 1:45 o'clock P. M.

Verna R. Merz

County Recorder

*(Signature)*

Form No. 18  
8-60

T. \_\_\_\_\_ R. \_\_\_\_\_

County Petroleum

MONTANA BUREAU OF MINES AND GEOLOGY  
Butte, Montana

RECEIVED  
OCT 30 1961

WATER WELL LOG

STATE ENGINEER


Owner Stanley Wiggins Address Winnett, Montana

Driller George O. Singley Address Lewistown, Montana

Date Started Sept. 13, 1961 Date Completed Sept. 14, 1961

Location: Sec. \_\_\_\_\_ T. \_\_\_\_\_ R. \_\_\_\_\_  $\frac{1}{4}$  sec. \_\_\_\_\_

Type of well Drilled Equipment used Rotary & Cable Tool Comb.  
(Dug, driven, bored, or drilled) (Churn, drill, rotary, other)

Water use: Domestic  Municipal  Stock  Irrigation   
Industrial  Drainage  Other \_\_\_\_\_

**Above ground**  
Casing: 1 ft. to 50 ft. Type s & s Size 5- 3/16 ID

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size \_\_\_\_\_

Casing: \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Type \_\_\_\_\_ Size \_\_\_\_\_

Perforated or Screened: Ft. 30 to ft. 50 . Ft. \_\_\_\_\_ to ft. \_\_\_\_\_

Type of screen or perforations Slots

Static Water level, for non-flowing well: 20 feet.

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

Pumping water level 45 feet at approx. 10 gal. per min.

How tested: Bailing

Length of test 1 hr.

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

Sealed with rubber and cement.

(over)

NLD



### Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	1	Topsoil
1	6	Sandy clay
6	20	Sandrock
20	25	Bentionite Clay
25	45	Sandstone Water
45	50	Blue shale
<p> <span style="font-size: small;">STAFF OF MONTANA</span>  <span style="font-size: small;">County of Petroleum</span> </p> <p> <i>[Signature]</i> </p> <p> <span style="font-size: small;">4:25 o'clock P. M.</span>  <span style="font-size: small;">Filed October 27 19 61</span>  <span style="font-size: small;">Valda H. Merton County Recorder Dulles</span> </p>		
		<p>9687</p> <p># 25</p>

File No. \_\_\_\_\_

T 15N R 30E

DUPLICATE

County Petroleum WATER RESOURCES BOARD

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

MAY 20 1966

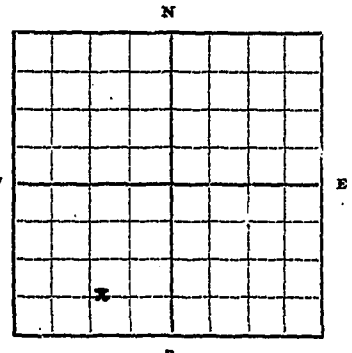
McDermott \_\_\_\_\_  
McNulty \_\_\_\_\_  
Morton \_\_\_\_\_  
Sullivan \_\_\_\_\_  
Darlimon \_\_\_\_\_  
Dickert \_\_\_\_\_

**Notice of Appropriation of Groundwater**

(Under Chapter 21, Montana Session Laws, 1965)

1. Farmers Union Central Exchange, Inc., of Box 126 Laurel, Montana  
(Name of Appropriator) (Address) (Town)  
County of Yellowstone, State of Montana, intend to appropriate groundwater in accordance with Chapter 21, Montana Session Laws of 1965.
2. The beneficial use to which water is to be applied is to water flood the Swift Sand in the Mosby Dome Field, Sec. 16, SW $\frac{1}{4}$ ; Sec. 17 SE $\frac{1}{4}$ ; Sec. 20 E $\frac{1}{2}$ NE $\frac{1}{2}$  & N $\frac{1}{2}$ NW $\frac{1}{2}$ , T15N, R30E  
(describe lands to be benefited, if for irrigation)
3. The rate of use in gallons per minute or miner's inches of groundwater claimed 44 gallons per minute
4. The annual period (inclusive dates) of intended use Continuous for 10 years
5. The probable or intended date of first beneficial use July, 1966
6. The probable or intended date of commencement and completion of the well\* or wells\* July 1, 1966
7. The location, type, size and depth of well or wells contemplated 660' from South line, 1540' from West line of Sec. 16, T15N, R30E, Abandoned Oil Well, Original total depth 1,440', plugged back total depth 1,271'.
8. The probable or estimated depth of the water table or artesian aquifer Third Cat Creek Sand, Depth from 1,115' to 1,230'.
9. Name, address and license number of the driller engaged Well was drilled in August, 1957, as an oil well.
10. Give such other similar information as may be useful

In carrying out the policy of this act This well was the Farmers Union-State Well #5-C drilled as an oil well in August, 1957. 5 $\frac{1}{2}$ " casing was set at 1415' and cemented with 183 sacks of cement. No commercial production was encountered in the Swift Sand of the Ellis Group. The Swift Sand was squeezed cemented, and the casing filled with cement from 1415' back up to 1271'. We intend to perforate the Third Cat Creek Sand and use this well as a water source well for water flooding the Swift Sand in the Mosby Dome Field. In addition, Farmers Union Central Exchange, Incorporated is the lessee of record of State of Montana oil and gas lease issued June 8, 1960, serial number 6039-60, covering, among other lands, the land on which this well is located.



SW  $\frac{1}{4}$  Sec 16 T15N R30E

Locate well or other means of development as accurately as possible on the plat.

Doc. No. 24812  
Filed for record this 26 day of May  
A. D. 19 66, at 1:40  
o'clock P.M.

**FARMERS UNION CENTRAL EXCHANGE, INCORPORATED**  
Signature of Appropriator: [Signature] **Manager**  
**Exploration & Production**  
Date May 19, 1966

\* 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.



# Farmers Union Central Exchange

INCORPORATED

EXPLORATION & PRODUCTION  
P. O. BOX 126, LAUREL, MONTANA 59044

*Petroleum*

STATE WATER CONSERVATION BOARD

May 31, 1966

JUN 1 1966

Bill	McDermott
Button	McNulty
Coye	Morton
Darlinton	Sullivan
Dickert	

Mr. Everett D. Darlinton, Engineer  
Administrator of Ground Water Code  
Office of State Engineer  
Helena, Montana

Dear Mr. Darlinton:

As per our conversation by telephone this morning regarding use of ground water, I am enclosing a water data sheet which I have worked up. This data sheet will supplement our Notice of Appropriation of Ground Water which we have already filed with your office.

If there is any further information you need for this appropriation of ground water, please let me know at your earliest convenience.

Very truly yours,

FARMERS UNION CENTRAL EXCHANGE, INC.

*John Warren*  
John Warren  
Petroleum Engineer

JW/ls

Enc.

## STATE WATER CONSERVATION BOARD

JUN 1 1966

## WATER DATA

Proposed Water Flood Project  
 Mosby Dome - Swift Sand Unit  
 Petroleum County, Montana

Blie \_\_\_\_\_ McDermott \_\_\_\_\_  
 Butzerin \_\_\_\_\_ McNulty \_\_\_\_\_  
 Coyle \_\_\_\_\_ Morton \_\_\_\_\_  
 Darlington \_\_\_\_\_ Sullivan \_\_\_\_\_  
 Dickert \_\_\_\_\_

I. Water Requirements

Daily Injection Rate - Bbls.	1,500
Time - Ten Years (3,650 days)	3,650
Total Barrels	5,475,000

5,475,000 Bbls. = 705.72 Acre Feet

705.72 Acre Feet = 1.10 feet deep over one section  
 (640 acres)

705.72 Acre Feet = 1.47 feet deep over the Unit Area  
 (480 acres)

II. Water Source - Third Cat Creek Sand

## (a) Parameters

Total Thickness	115'
Average Porosity	20%
Water Saturation	100%

(b) Volume under one acre 23 acre feet

(c) Volume under one section 14,720 acre feet

(d) Volume under Unit Area (480 acres) 11,040 acre feet

III. Comparison of Requirements to Volume Available

$$\frac{\text{Requirements (Acre Feet)}}{\text{Water under Unit Area (Acre Feet)}} = \frac{705.72}{11,040.00} = 6.39\%$$

$$\frac{\text{Requirements (Acre Feet)}}{\text{Water under 1 section (Acre Feet)}} = \frac{705.72}{14,720.00} = 4.79\%$$

The total water to be used in the estimated 10 years of flooding life is only 6.39% of the present water available under the Unit Area in the Third Cat Creek Sand.

GW1

File No. 175

T. 19 N. R. 27 E

DUPLICATE

County Petroleum

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
JUL 1 - 1963

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

STATE ENGINEER

1. I, Carl and Mae Jackson, of Stinnett, Montana  
(Name of Appropriator) (Address) (Town)  
County of Petroleum, 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 stock and drinking water.  
(describe lands to be benefited, if for irrigation)

3. The rate of use in gallons per minute or miner's inches of groundwater claimed not known.

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

5. The probable or intended date of first beneficial use upon completion.

6. The probable or intended date of commencement and completion of the well\* or wells\* April, 1960.

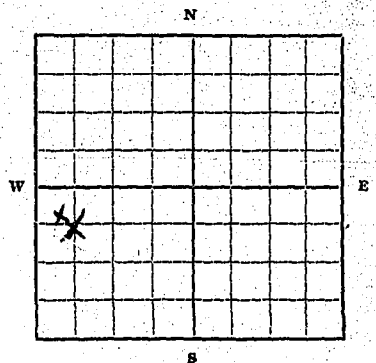
7. The location, type, size and depth of well or wells contemplated Section 25 as above, approx 12 ft deep.

8. The probable or estimated depth of the water table or artesian aquifer 12 ft.

9. Name, address and license number of the driller engaged same as appropriator.

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

6' galvanized casing



NW SW 1/4 Sec. 25 T. 19 N. R. 27 E

Locate well or other means of development as accurately as possible on the plat.

Signature of Appropriator Carl J. Jackson  
Mae Jackson  
Date.....

\* 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.

22007

4175  
BWP

STATE OF MONTANA,  
County of Petroleum

Filed JUN 28 1963 19

at 2:30 o'clock P. M.

*Donald A. Dwyer*  
County Recorder.

*Joe S. ...* Deputy

File No. 245

T. 16 R 30 E

DUPLICATE

County.....

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
JAN 3 1963  
STATE ENGINEER

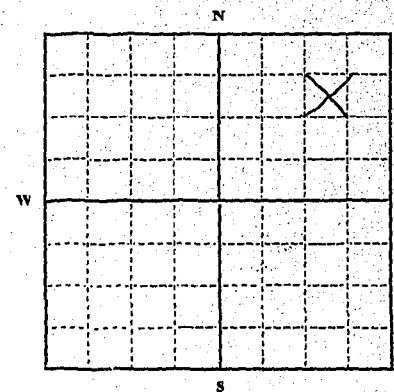
Notice of Appropriation of Groundwater

(Under Chapter 237, Montana Session Laws, 1961)

- I, COSBY E. Meserve and Dorothy M. Meserve, Cat Creek Montana  
(Name of Appropriator) (Address) (Town)  
County of Petroleum, State of Montana, intend to appropriate groundwater in accordance with Chapter 237, Montana Session Laws of 1961.
- The beneficial use to which water is to be applied is Stockwater and domestic use and also for watering livestock  
located in NE 1/4 of Sec. 32, Twp. 16 N., Range 30 E.  
(describe lands to be benefited, if for irrigation)
- The rate of use in gallons per minute or miner's inches of groundwater claimed about 15  
Ballons per minute
- The annual period (inclusive dates) of intended use year around use
- The probable or intended date of first beneficial use dug by former owner, about ten years ago.
- The probable or intended date of commencement and completion of the well\* or wells\*  
completed by former owner as stated
- The location, type, size and depth of well or wells contemplated dug down about 36 inches square and down about 20 feet, then a two inch pipe drove in the bottom and down five feet.
- The probable or estimated depth of the water table or artesian aquifer altogether about 25 Ft.
- Name, address and license number of the driller engaged dug and drilled by the then owner himself

10. Give such other similar information as may be useful

in carrying out the policy of this act.....



NE 1/4 Sec. 32 T. 16 R. 30 East  
Locate well or other means of development as accurately as possible on the plat.

Signature of Appropriator Cosby Meserve

Date Dec. 31, 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 Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

20910

22407

STATE OF MONTANA

County of Petroleum

Filed DEC 31 1963

at 2:30 o'clock

*Donald A. Smith*  
Director of Records

*W. A. ...* Deputy



File No. 248

T. 14 N. R. 29 E.

DUPLICATE

County Petroleum

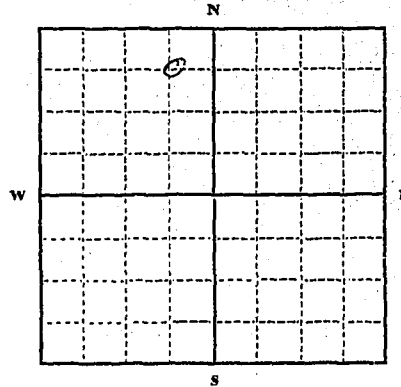
STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
JAN 3 1963

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

- I, C. W. Retterer of Winnett, Montana  
(Name of Appropriator) (Address) (Town)  
County of Petroleum, State of Montana intend to appropriate groundwater in accordance with Chapter 237, Montana Session Laws of 1961.
- The beneficial use to which water is to be applied is livestock, domestic, and irrigation, in section 18, Twp. 14 N. Range 29E.  
(describe lands to be benefited, if for irrigation)
- The rate of use in gallons per minute or miner's inches of groundwater claimed 39 Gallans per minute
- The annual period (inclusive dates) of intended use all year
- The probable or intended date of first beneficial use 1952 when drilled
- The probable or intended date of commencement and completion of the well\* or wells\* Well completed in 1952
- The location, type, size and depth of well or wells contemplated NW 1/4 of Sec. 18 two 14 Range 29 East
- The probable or estimated depth of the water table or artesian aquifer 105 Ft., four inch, casing
- Name, address and license number of the driller engaged a man named Hines drilled the well, but do not believe it was by a licensed driller, and ~~do not believe~~ do not believe a license was required then for shallow wells
- Give such other similar information as may be useful

in carrying out the policy of this act



NW 1/4 Sec. 18 T. 14 R. 29  
Locate well or other means of development as accurately as possible on the plat.

Signature of Appropriator C. W. Retterer

Date Dec. 31, 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 Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

20913

22410

STATE OF MONTANA,  
County of Petroleum, ) SS.

Filed: DEC 31 1963 JS

at 2:35 o'clock P.M.

*Donny D. Dingle*  
Director of Records

*D.H.* Deputy

24

File No. 213

T. 14 R. 28

DUPLICATE

County Petroleum

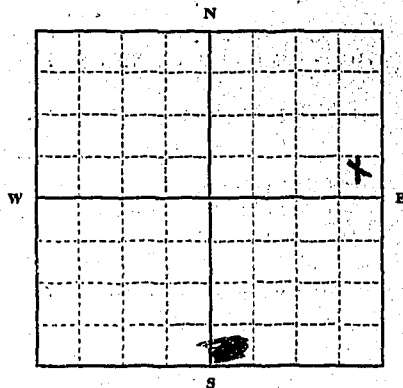
STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
JAN 8 1963  
STATE ENGINEER

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

- I, Kenneth Walter and Nick Walter of Winnett,  
(Name of Appropriator) (Address) (Town)  
County of Petroleum, State of Montana, intend to appropriate groundwater in accordance with Chapter 237, Montana Session Laws of 1961.
- The beneficial use to which water is to be applied is Stock water  
(describe lands to be benefited, if for irrigation)
- The rate of use in gallons per minute or miner's inches of groundwater claimed 5 gallons per minute
- The annual period (inclusive dates) of intended use Used 12 months per year
- The probable or intended date of first beneficial use unknown
- The probable or intended date of commencement and completion of the well\* or wells\* well was completed about 1914
- The location, type, size and depth of well or wells contemplated This is dug well, approx 15 feet
- The probable or estimated depth of the water table or artesian aquifer approx. 15 feet
- Name, address and license number of the driller engaged unknown

10. Give such other similar information as may be useful in carrying out the policy of this act. This well was on the land when purchased so most of the data is unknown



1/4 Sec. 24 T. 14 R. 28  
Locate well or other means of development as accurately as possible on the plat.

Signature of Appropriator Kenneth Walter and Nick Walter by William N. Walter

Date December 31, 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 Montana Bureau of Mines and Geology and Quadruplicate for the Appropriator.

20928

22425

STATE OF MONTANA

County of Petroleum

Filed DEC 31 1963

at 3:50 o'clock P.M.

*Donald R. King*  
Director of Records

*D. R. King* Deputy

GW 1

File No. 272

T. 14 N R. 28 E 125

DUPLICATE

County Petroleum

STATE OF MONTANA  
ADMINISTRATOR OF GROUNDWATER CODE  
OFFICE OF STATE ENGINEER

RECEIVED  
JAN 3 1963  
STATE ENGINEER

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

1. I, Kenneth W. Walter, of Linnett  
(Name of Appropriator) (Address) (Town)  
County of Petroleum, 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 Stock Water  
(describe lands to be benefited, if for irrigation)

3. The rate of use in gallons per minute or miner's inches of groundwater claimed 5 gallons per minute

4. The annual period (inclusive dates) of intended use used 12 months per year

5. The probable or intended date of first beneficial use first known use is unknown

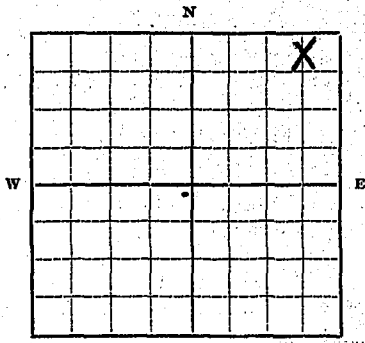
6. The probable or intended date of commencement and completion of the well\* or wells\* Approximate completion on well was 1911

7. The location, type, size and depth of well or wells contemplated Drilled well, 70 feet, 6 inch casing

8. The probable or estimated depth of the water table or artesian aquifer approx. 70 feet

9. Name, address and license number of the driller engaged well was drilled before the present owner acquired the land, so information is unknown.

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



NE 1/4 Sec. 25 T. 14 R. 28

Locate well or other means of development as accurately as possible on the plat  
Kenneth Walter by

Signature of Appropriator William H. Walter

Date December 31, 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.

20927

22424

STATE OF MONTANA,  
County of Petroleum,

Filed DEC 31 1963

at 3:45 o'clock P.M.

*Donald J. Dwyer*  
Director of Records

2.10 Deputy