

GW 2
File No.

RECEIVED
1964 R 19 5

DUPLICATE

County Jargua
STATE ENGINEER
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER
DEC 2 1964

- 0 Top of Ground
- 6 (Elev. above sea level)
- 10 Surface Soil
- 18 Red Silty Shale
- 20 Grey Clay
- 45 Sand (surface water)
- 46 Sandy Clay
- 95 Coal
- 130 Brown to Grey Shaly Clay
- 130 Green to Red Bentonite Clay
- 131 Carbonaceous
- 180 Bentonite Clay
- 206 Persistent fine silt
- 214 Sand (water flow 1/2 gal/min)
- 270 Bentonite Sand
- 310 Hard layers of sand and Bentonite sand
- 320 Site Grey sand
- 330 Artesian water 1/2 gal/min
- 350 Bent. Sand + Shaly shales
- 365 Shale shales
- 370 Carbonaceous, Brown Bentonite
- 370 Shale T. D.

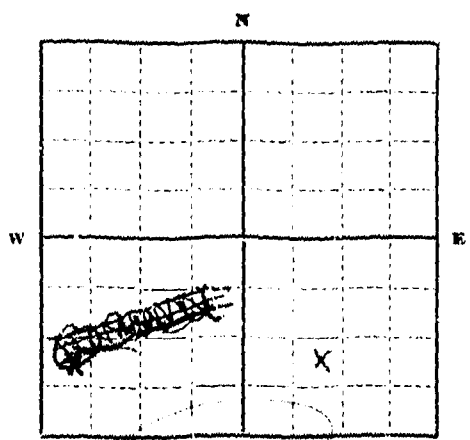
Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner Mr. William Phate Address Suffalla
Driller Munson Drilling Co. Address Grass Range, Mont.
Date of Notice of Appropriation of Groundwater Not applicable
Date well started Dec. 12-64 Date Completed Dec. 18-64
Type of well drilled Equipment Used Rotary
(aug, driven, bored or drilled) (Churn, drill, rotary or other)
Water Use: Domestic Municipal Other Irrigation
Industrial Drainage Stock

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
		0	214			
	4 1/2" O.D. #11	0	206	Cemented	0-30	
		214	370			



SW 1/4 SE 1/4 Sec. 5 T. 19 R. 19
Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.

Section number ?

Static Water Level for non-flowing Well... feet.
Shut-in Pressure for Flowing Well approx. 10*
Pumping Water Level... feet at ... gal. per minute.
Discharge in gal. per min. of flowing well 2 1/3
How Tested Measured Length of Test Continuous
Remarks: (Gravel packing, cementing, packers, type of skutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of acres irrigated, if used for irrigation)

Cement of 0-30 - Cause catches type packers 30' and 206

26
Driller's License Number
B. M. Munson
Driller's Signature

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

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

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

38193

21660 COPY

DEC 20 1964
at 1:55 P.M.
Mary Ralther
County Clerk and Recorder
20 pt

GW 2

File No. 16419

DUPLICATE

T. R. County

NOV 26 1963 STATE ENGINEER

STATE OF MONTANA ADMINISTRATOR OF GROUNDWATER CODE OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Ruby T. Olson

Owner / Ruby T. Olson Address: Suffolk, Montana

Driller: George C. Singley Address: Lewistown, Montana

Date of Notice of Appropriation of Groundwater: None

Date well started: Aug. 18, 1963 Date Completed: Aug. 27, 1963

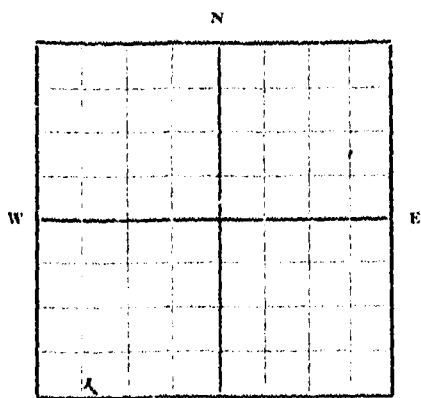
Type of well: Drilled Equipment Used: Rotary (dug, driven, bored or drilled) (Churn, drill, rotary or other)

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

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

Table with columns for depth (0-328) and geological strata: Topsoil, Clay Sand drift, Shale, White shale hard rock, White shale, Brown shale, White shale, Sandstone Hard white Silicate, Sandy shale, Sandstone Soft shale small flow water, Hard silicate, Sandstone Water, Shale grey and brown, Sandstone Water 220, Shale, Sandstone Water, White shaley rock, Brown shale sandy, Coal, Shale coal Sand broken, Sandstone Water, Shale.

Table with columns: Size of Drilled Hole (5 5/8"), Size and Weight of Casing (4 1/2 OD 11#), From (Feet) (1 foot below ground), To (Feet) (328), PERFORATIONS (Kind Size: Slots 2", From (Feet): 130, 210, 230, 289, To (Feet): 150, 225, 240, 325).



Section 9, T19R19. Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.

Static Water Level for non-flowing Well: None feet.

Shut-in Pressure for Flowing Well: 10#

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

Discharge in gal. per min. of flowing well: 10 gal. per min.

How Tested: Measured Length of Test: --

Remarks: Gravel packing, cementing, packers, type of shutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of

acres irrigated, if used for irrigation)

Packers set at 130' cemented with 5 sacks.

#19 Driller's License Number

George C. Singley Driller's Signature

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

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

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

16419

16419

COPY

State of Montana, } ss.
County of Fergus, }

Filed NOV. 22 1963 19
at 2:15 o'clock P. M.

Way Nathan
County Clerk and Recorder

200 pt

File No. **16770**

T. **19** R. **19**

DUPLICATE

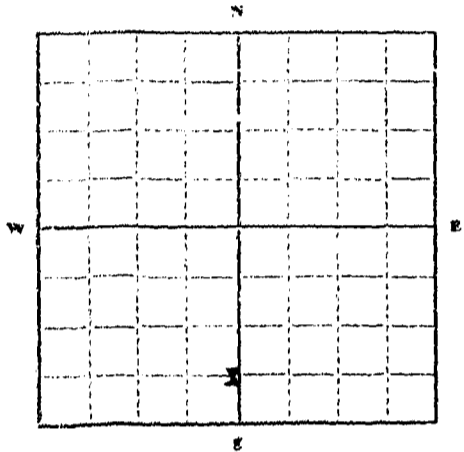
County **Fergus**

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. **PAUL DONISTHORPE and RAMONA O. DONISTHORPE** **1101 W. Washington** **Leadstown**
(Name of Appropriator) (Address) (Town)
County of **Fergus** State of **Montana**
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SE 1/4, SW Sec. 12, T19, R19

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... **stock water and domestic uses**

3. Date or approximate date of earliest beneficial use; and how continuous the use has been... **1916 - completed 1944**
continuous use since 1916

4. The amount of groundwater claimed (in miner's inches or gallons per minute)... **estimated 15 acre feet**

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
stock water

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... **1916 - 1944**

8. The depth of water table... **surface 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.

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

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... **this is a reservoir for watering livestock**

Paul Donisthorpe
Signature of Owner **Ramona O. Donisthorpe**

Date **December 11, 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.

yxc d

16770
COPY

Filed _____
at _____
DEC 12 1953 19
2:20 o'clock P. M.
Mary Plathner
County Clerk and Recorder
* 20 pt

GW

File No. 17390

T 19 R 19

County Fergus

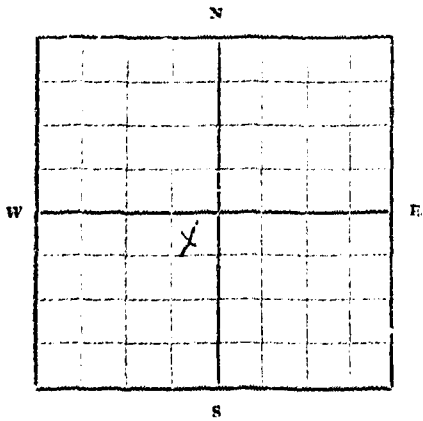
DUPLICATE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

STATE ENGINEER

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

1. Tom Sharp & Mildred Wallin (Name of Appropriator) of Christina (Town)
County of Fergus State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE 1/4 SW Sec. 15 T. 19 R. 19 E

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 Stock Water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been January 3, 1962

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

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Spudded in December 30, 1961. Completed Jan. 3, 1962

8. The depth of water table 70 Ft.

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater 5 & 5/8 - 85 Ft.

10. The estimated amount of groundwater withdrawn each year 40,000 Barrels.

11. The log of formations encountered in the drilling of each well if available Spudded into the Judith River Formation & T.D. in the same.

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 *Mildred Wallin*
Date Dec. 30, 1963

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

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

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

17316

17390

State of Montana, }
County of Fergus, } ss.

COPY

Filed DEC 20 1903 19

at 2:35 o'clock P.M.

29.00

MAY HATHBUN

County Clerk and Recorder

GWS

17389

File No.

DUPLICATE

T. 17 R. 17 E

County: Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater
Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner: M. Wood Wallin Address: Christina, Mont

Driller: O. C. Thatcher Address: Stanford, Mont

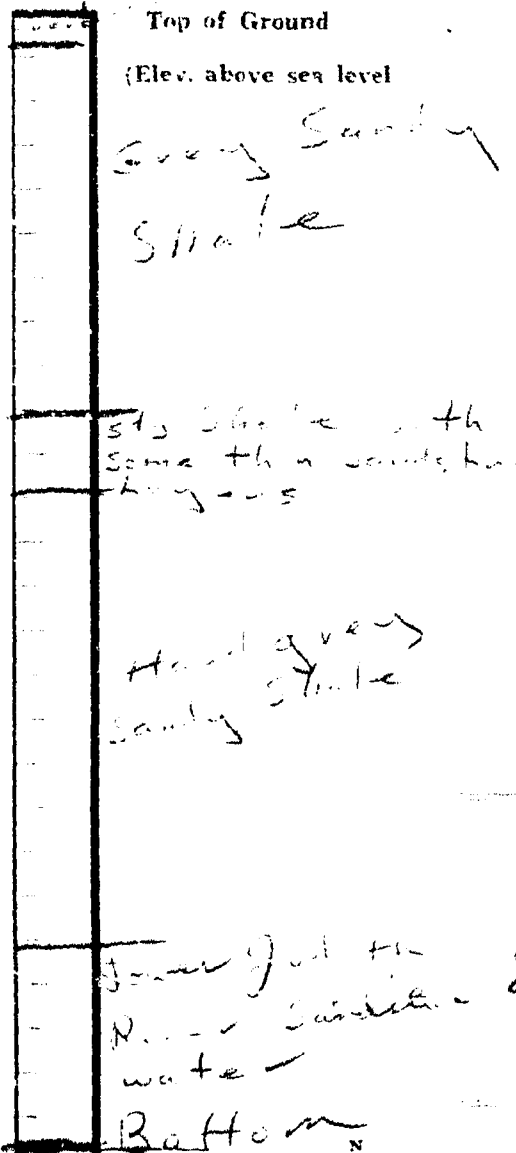
Date of Notice of Appropriation of Groundwater: Sept 4, 1963

Date well started: 8-19-63 Date Completed: 8-23-63

Type of well: Rotary
(dug, driven, bored or drilled)
Equipment Used: Rotary
(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)
8"	4 1/2" 7 lb. Galv. well casing	0	130	slots 1/4 x 1/4	45	130

Static Water Level for non-flowing Well: 25 feet

Shut-in Pressure for Flowing Well

Pumping Water Level: 125 feet at 2 gal. per minute.

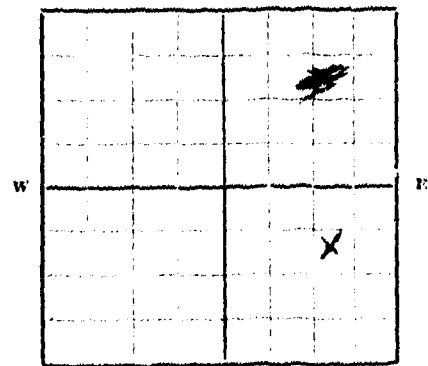
Discharge in gal. per min. of flowing well

How Tested: bailer Length of Test: 2 1/2 hrs

Remarks: (Gravel packing, cementing, packers, type of shutoff, location of place of use of groundwater if not at well, and any other similar pertinent information, including number of

acres irrigated, if used for irrigation)

Packer - set at 36'



71 E 1/4 Sec. 17 T. 17 R. 17 E

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

Show exact depth of bottom.

86
Driller's License Number

Edmund Thatcher
Driller's Signature

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

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

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

17315

17389

State of Missouri }
County of Franklin } **COPY**

Filed DEC 30 1900 19

at 3:35 o'clock P.M.

\$0.00 **MAY RATHBUN**
P.d. County Clerk and Recorder

GA

17118

APPROPRIATION OF GROUNDWATER UNDER CHAPTER 237, MONTANA SESSION LAWS, 1961

20

File No.

T. 19 R.19

DUPLICATE

County Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECORDED
DEC 28 1962

Declaration of Vested Groundwater Rights

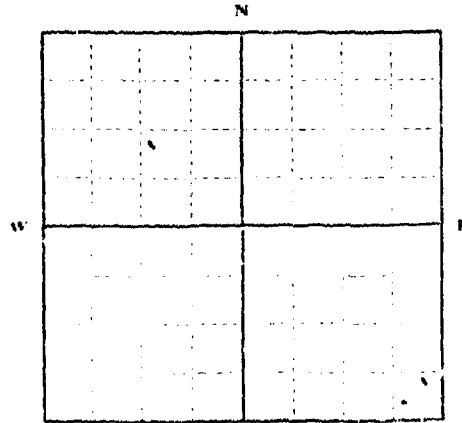
(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. James R. and Effie R. Stephens (man, wife) Lewistown, 910 W. Jancaux St.
(Name of Appropriator) (Address) (Town)

County of Fergus State of Montana

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



1/4 Sec 20 T. 19 R. 19

Indicate point of appropriation and place of use, if possible. Each small square represents 16 acres.

- 2. The beneficial use on which the claim is based **House & stock**
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been **1913 Year, continuous.**
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) **12 Gal. per minute.**
- 5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof **Has not been used for irrigation.**
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal **Elec. pump. Well no. land no. 2 S. & T. Sec. 20, T. 19-R. 19 Spring, N. W. 1, Sec. 20, T. 19, R., 19**
- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater **Year 1913.**
- 8. The depth of water table **12 ft.**
- 9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater **hand dug, depth 12 feet.**
- 10. The estimated amount of groundwater withdrawn each year **about 50,000 Gals.**
- 11. The log of formations encountered in the drilling of each well if available **dirt, gravel and rock.**
- 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 **do not have any.**

Signature of Owner *James R. Stephens*
Effie R. Stephens
Date *12-27-63*

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.

14350

Lewistown, Montana

August 12 64

17118

COPY

State of Montana, } ss.
 County of Park }
 Filed DEC 27 1963
 at 11:05 o'clock A. M.
 May Pethun
 County Clerk and Recorder

200-PT

File No. 17391

T. 19 N. R. 19 E

DUPLICATE

County Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

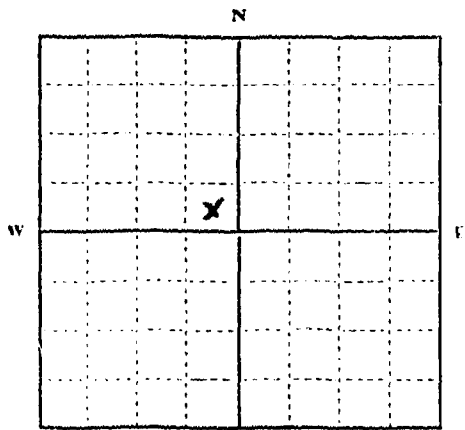
JAN 2 1964

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1951)

1. Misses H. Wallin, of Christina, Mont.
(Name of Appropriator) (Address) (Town)

County of Fergus State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1964, as follows:



SE 1/4 NW 1/4 Sec. 21, T. 19, R. 19

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. Stock and home supply

3. Date or approximate date of earliest beneficial use; and how continuous the use has been. Oct. 3, 1960 and continuous

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 7 gal. per min. At a water flowing well.

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

No.

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. Spudded in Sept. 12, 1960 - Completed Oct. 3, 1960

8. The depth of water table 12'

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. Cased with 4 1/2" galv casing to 138'

10. The estimated amount of groundwater withdrawn each year. not known

11. The log of formations encountered in the drilling of each well if available. Spudded in to the Judith River Formation - T.D. on the same. Depth 138'

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 Misses H. Wallin
Date Dec 30, 1963

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

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

Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triuplicate to the Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator

17391

State of Indiana }
County of Adams } ss.

COPY

Filed DEC 20 1963

at 3:35 o'clock P.M.

\$ 0.00

pd

MAY RATHBUN
County Clerk and Recorder

GW 2

File No. 17388

DUPLICATE

T 19 R 19 E

County Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater
Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner: M. J. & W. Waller Address: Christina, Mont.

Driller: O.K. Thatcher Address: Stanford, Mont.

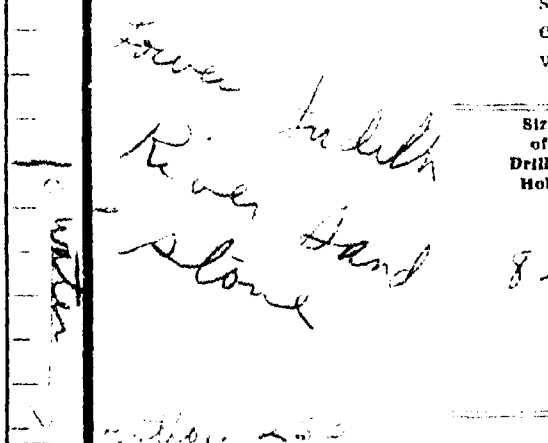
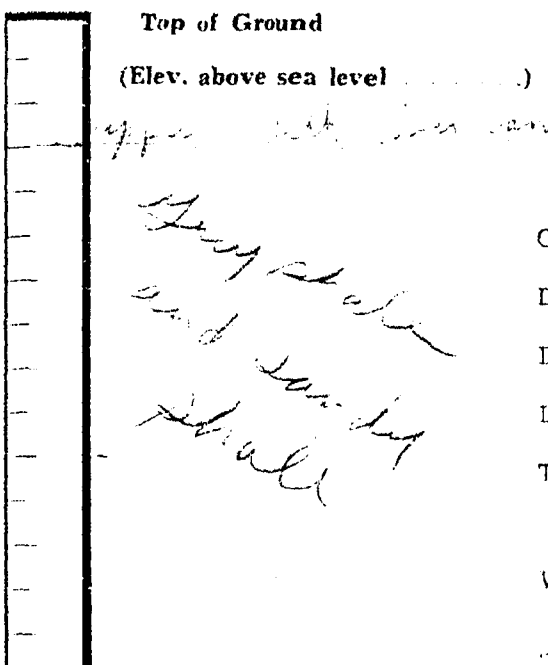
Date of Notice of Appropriation of Groundwater: Sept. 4, 1963

Date well started: 8-8-63 Date Completed: 9-3-63

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)
8 in	4 1/2" 7 lb galv.	0	253	4" Slots	170	253

Static Water Level for non-flowing Well: 65 feet.

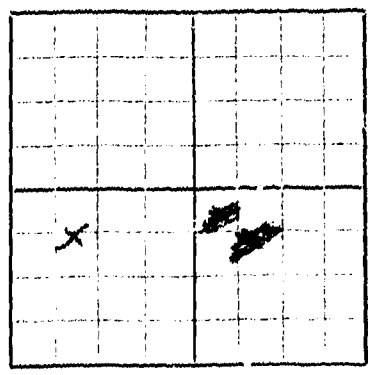
Shut-in Pressure for Flowing Well: _____

Pumping Water Level: 120 feet at 5 gal. per minute.

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

How Tested: Cailer Length of Test: 3 hrs.

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



71 W 1/4 Sec. 22 T. 19 R. 19

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

Show exact depth of bottom.

86
Driller's License Number
O.K. Thatcher
Driller's Signature

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

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

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

17314

17388

COPY

State of Montana, } ss.
County of Fergus }

Filed DEC 30 1963 19

at 3:35 o'clock P.M.

\$2.00

P.J.

Wm. R. Patton
County Clerk and Recorder

GW2

File No. 17387

DUPLICATE

South well

T. 19 R. 19 E

County *Fergus*

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

JAN 2 1964

Notice of Completion of Groundwater
Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner *Mildred Wallin* Address *Christina*

Driller *O. C. Thatcher* Address *Stanford*

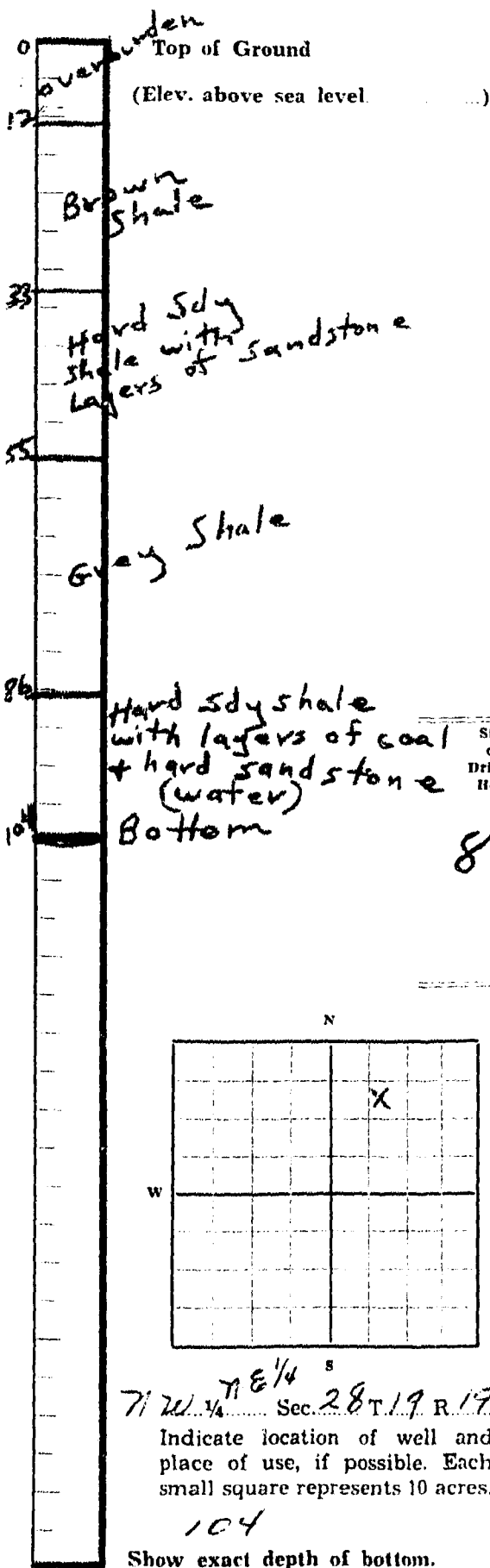
Date of Notice of Appropriation of Groundwater *Sept. 4, 1963*

Date well started *8-15-63* Date Completed *8-18-63*

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.



86
Driller's License Number

Edward Thatcher
Driller's Signature

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

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

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

17387

State of Michigan, ss. **COPY**
County of Washtenaw,
Filed DEC 30 1963
at 8:35 o'clock P.M.
\$2.00 *W. R. Rathbun*
Clerk

17147

Approved Stock Form - State Public Mine Co., Helena, Montana - 42224

File No.

T. 19 R. 19 31

DUPLICATE

County Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

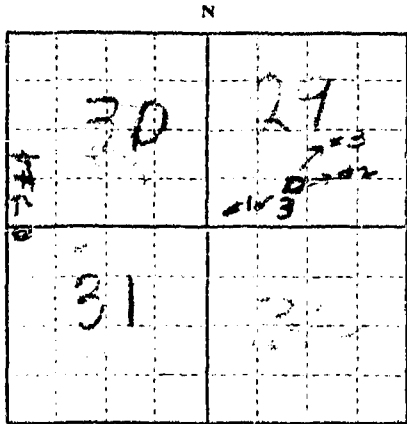
RECEIVED
DEC 20 1963
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

JAMES F BEVES, of CHRISTINA
(Name of Appropriator) (Address) (Town)

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



1-2-3 - SE 1/4 SW 1/4 - 29-19-19

4 - NW 1/4 NW 1/4 Sec. 31 T. 19 R. 19

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 + Household use

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
29-1910 - Continuous
no. 1 - 1958 - JULY - CONTINUOUS
no. 3 - 1958 - JULY - SUMMER USE - CATTLE
no. 2 - 1944 - MARCH - CONTINUOUS

4. The amount of groundwater claimed (in miner's inches or gallons per minute) #1 - 1 GAL/MIN - #2 - 3 GAL/MIN - #3 - 3 GAL/MIN - #4 - 3 GAL/MIN

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

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal PUMPS
#1 - hand pump - #3 + 4 - submersible electric pumps
#2 - electric hand cylinder type 1/2 h.p.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater #1 - 1910 - #2 - 1944
2 wells - 1958 - July - #3 + #4

8. The depth of water table 20 ft. for all wells

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

2 - 90' 5" casing drilled - #3 + #4
1 - 21' 36" Culvert casing - #1
1 - 90' 5" casing drilled - #2

10. The estimated amount of groundwater withdrawn each year
450,000 #1 - 525,000 #2 - 262,500
#3 - 1,576,000 #4 - 1,576,000

11. The log of formations encountered in the drilling of each well if available AVAILABLE
SHALE + SANDSTON

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 James Beves
Date 12/27/63

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.

17147 COPY

State of Missouri, Mo.
County of [unclear]

Filed DEC 27 1963 19
at 2:20 P.M.

Wm. Arthur
County Clerk and Recorder
\$2.00 pd.

File No. 3985

T. 7 N R. 12 E

DUPLICATE

County Beauregard

LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
STATE WATER CONSERVATION BOARD

Notice of Completion of Groundwater
Appropriation by Means of Well
DEVELOPED AFTER JANUARY 1, 1962

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

Owner Kettering Broa. Address Christina, Montana

Driller George C. Singly Address Lewistown, Montana

Date of Notice of appropriation of groundwater None

Date well started June 6, 1970 Date completed June 10, 1970

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.

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

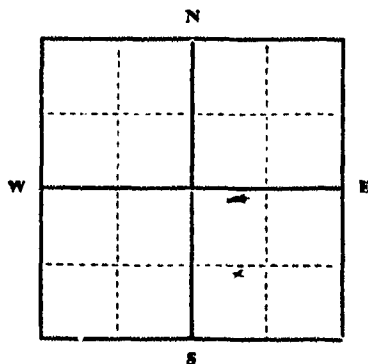
0	1	Topsoil
1	25	Clay sand gravel
25	30	Yellow sandy clay
30	35	Blue clay
35	45	Sandy clay blue
45	70	Sandstone water
70	75	Shale

Doc. No. 39805
Filed for record
this 16 day of June 1970
A. D. 19 70 at 12:00 o'clock noon

Indicate location of well and place of use, if possible. Each small square represents 40 acres.

SW 1/4 Sec. 29, T. 19, R. 9

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
7-7/8		0	25			
5-5/8		25	35			
5-1/8		35	75			
	4 1/2 OD 4 1/2 ID above 6-7# Galv. gr. L.		58	1/2 x 3 slots	40	58



Static Water Level for non-flowing well ground level feet.

Shut-in Pressure for Flowing Well None

Pumping Water Level 15 feet at 10 gal. per minute.

Discharge in gal. per min. of flowing well None

How Tested Bailer

Length of Test 1 hr.

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

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

Show exact depth of bottom.

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

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

19
Driller's License Number
George C. Singly
Driller's Signature.

46580

89805

COPY

State of Montana } ss.
County of Fergus }

Filed JUN 16 1970

at 12:50 o'clock P.M.

Way [Signature]
County Clerk and Recorder

2:00 pt

File No. 17184

T. 19 R. 19

DUPLICATE

County Fergus

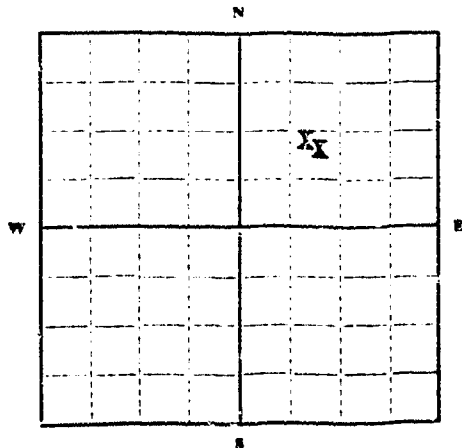
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

RECORDED
STATE ENGINEER

1. EDITH SUDEN, formerly Edith Douisthorpe of Stanford
(Name of Appropriator) (Address) (Town)
County of Judith Basin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW 1/4 NE Sec 29 T 19 R 19

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... domestic and livestock use
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been... 2 wells - 1913 and 1945 continuously
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute)... all water of said 2 wells
- 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... pump
- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater... 1913 and 1945
- 8. The depth of water table... 10 - 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... 2 dug wells - approximately 15' - 21' feet in depth - water withdrawn by pump
- 10. The estimated amount of groundwater withdrawn each year... all water for livestock and domestic use
- 11. The log of formations encountered in the drilling of each well if available... none
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record... none

Signature of Owner...
Date... Dec. 27, 1963

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

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

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

14406

17184

COPY

State of Montana, } ss.
County of Fergus.

Filed DEC 27 1963 19
at 4:45 o'clock P.M.
Way Ralther
County Clerk and Recorder
8200
2-11

GW 2

File No. 15124

DUPLICATE

RECEIVED
AUG 14 1963

T. 11 R. 19
County: Teton

STATE ENGINEER OF MONTANA
ADMINISTRATOR OF GROUNDWATER
OFFICE OF STATE ENGINEER

RECEIVED
AUG 9 1963

Notice of Completion of Groundwater Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Owner: Edith Donisthorpe Suden Address: Stanford, Montana

Driller: J. Messinger Address: Death

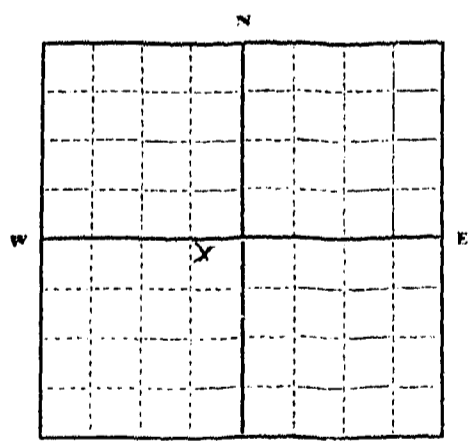
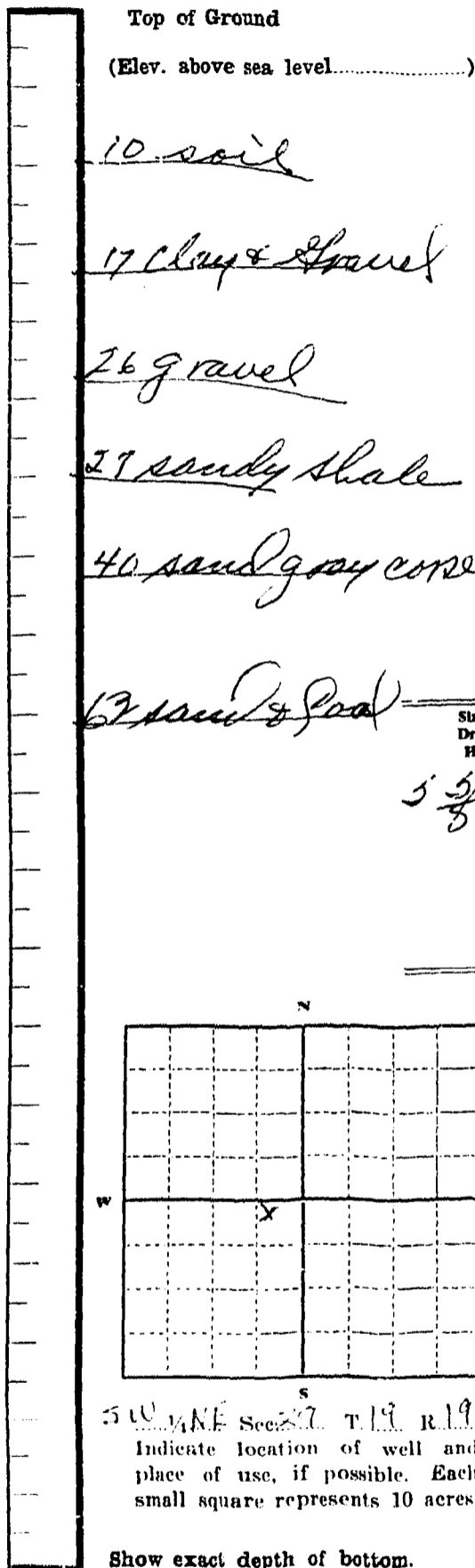
Date of Notice of Appropriation of Groundwater

Date well started: July Date Completed: July

Type of well: (dug, driven, bored or drilled) Equipment Used: (Churn, drill, rotary or other)

Water Use: Domestic Municipal Other Irrigation
Industrial Drainage Stock

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



5 W 1/4 NE Sec. 27 T. 19 R. 19
Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Show exact depth of bottom.

Static Water Level for non-flowing Well: 12 feet.

Shut-in Pressure for Flowing Well: _____

Pumping Water Level: _____ at _____ gal. per minute.

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

How Tested: gas engine pump Length of Test: Churned up

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

ap x 30 gals a min

Driller's License Number

J. Messinger
Driller's Signature

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

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

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

5329

15124

COPY

State of Montana, }
County of Fergus, }

Filed..... AUG 8 1963 79

at 10:25 o'clock A.M.

May Kathleen
County Clerk and Recorder

200 p

File No. 17234

T 19 R 19

DUPLICATE

County Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

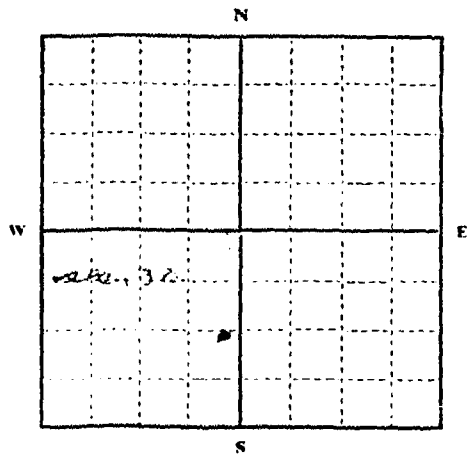
RECEIVED
JAN 2 1964

Declaration of Vested Groundwater Rights

STATE ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1. Albin Anderson, of 109 1/2 East Montana, Lewistown
(Name of Appropriator) (Address) (Town)
County of Fergus State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



N.E. 1/4 Sec. 30 T. 19 R. 19

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 For house and stock water
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been about 1928 use has been continuous
- 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 None
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal pump
- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater about 1928
- 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 8 inch hole, 40 feet deep.
- 10. The estimated amount of groundwater withdrawn each year 450,000 gallons.
- 11. The log of formations encountered in the drilling of each well if available not known.
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record none.

Signature of Owner Albin Anderson

Date 12-30-63

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

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

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

17165

17234

COPY

State of Michigan, } ss.
(County of)
Filed DEC 30 1963 19
at 10:30 o'clock A.M.
Way R. Kellum
County Clerk and Recorder
#200-*ph*

File No. 16974

T. 19 R. 19

DUPLICATE

County FERGUS

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

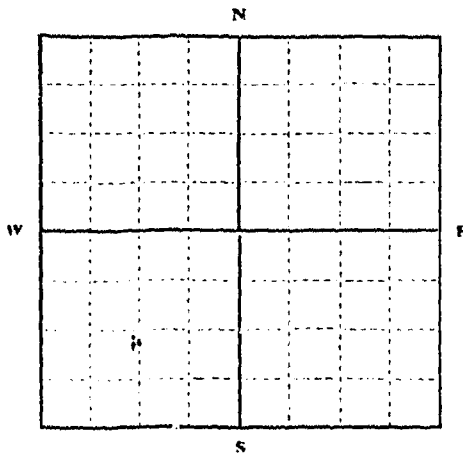
RECEIVED
DEC 23 1963

STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Raymond Stoneman, of Christina
(Name of Appropriator) (Address) (Town)
County of FERGUS State of MONTANA
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW 1/4 Sec. 30 T. 19 R. 19

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

- The beneficial use on which the claim is based. Stock water, household & garden irrigation.
- Date or approximate date of earliest beneficial use; and how continuous the use has been. 1918 continuously, 1950 continuously.
- The amount of groundwater claimed (in miner's inches or gallons per minute). 1918 well 12 gallons P.M., 1950 well 10 gallons P.M.
- If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof. Garden & lawn.
- The means of withdrawing such water from the ground and the location of each well or other means of withdrawal. PUTTIPS.
- The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. 1918 no exact dates, 1950 Nov. to Feb 1951.
- The depth of water table. 20 feet.
- 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. 1918 4ft. diameter, 30ft. deep, 1950 4ft. diameter, 30ft. deep.
- The estimated amount of groundwater withdrawn each year. 1,000,000 gallons.
- The log of formations encountered in the drilling of each well if available. dirt & gravel to sand rock.
- 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 Raymond Stoneman
Date 12/20/63

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.

16974

COPY

State of Kentucky } ss.
County of Barren }

Filed DEC 20 1963

at 2:15 o'clock P.M.

Way Nathan
Clerk and Recorder

200
at.

File No. 16553

Approved Stock Form—State Publishing Co., Helena, Montana—39089
R DEC 4 1963 T. R.

DUPLICATE

County

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

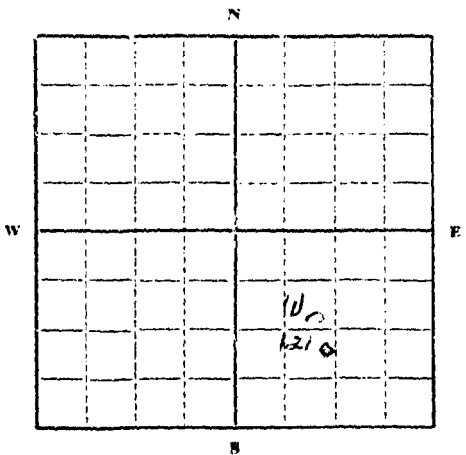
R DEC 4 1963 D

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. W. J. ... of ... (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:



NW 1/4 SE Sec 32 T. 19 R. 19

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. (1) Home and Stock Water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been. (1) 1947 continuous

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

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

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. (1) Sept 1947

8. The depth of water table. (1) 60 FT

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater. (1) Drilled Well, 6" diameter

10. The estimated amount of groundwater withdrawn each year. 175,000 gal (2) 175,000 gal (1)

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 W. J. ...

Date Nov 27, 1963

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

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

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

15553

COPY

State of Montana }
County ofergus }

Filed DEC 3 1963 19
2:15 o'clock P. M.

May Rethen
County Clerk and Recorder

8700
20

GV

17825

ATTORNEY GENERAL'S OFFICE, STATE ENGINEER, COUNTY ENGINEER, MISSOULA, MONTANA-1961

File No.

T 19 R 19

DUPLICATE

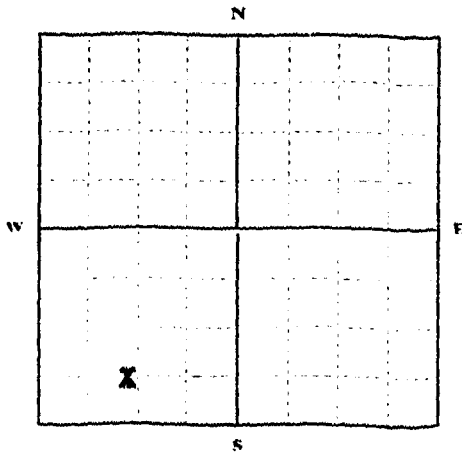
County Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. **KENNETH ARNTZEN**, of **Christina**
(Name of Appropriator) (Address) (Town)
County of **Fergus** State of **Montana**
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW 1/4 Sec. 33 T. 19 R. 19
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 **stock water and domestic use**
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been **approximately 1940 - continuously**
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) **full capacity of 1 1/2 inch pipe**
- 5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof **not used for irrigation**
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal **by pump**
- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater **approximately 1940**
- 8. The depth of water table **60 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 **deep well pump**
- 10. The estimated amount of groundwater withdrawn each year **all water used at house and domestic purposes and for stock water**
- 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 **none**

Signature of Owner *Kenneth Arntzen*

Date **December 12, 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.

19265

17825 COP

State of California
County of ...

dated 19 2 1954
at 10:00 o'clock A.M.

Wm. R. Patton
County Clerk and Recorder

2nd pd.

1

GW

17648

Approved Stock Form—State Publishing Co., Helena, Montana—2214

File No.

T R

29

DUPLICATE

County

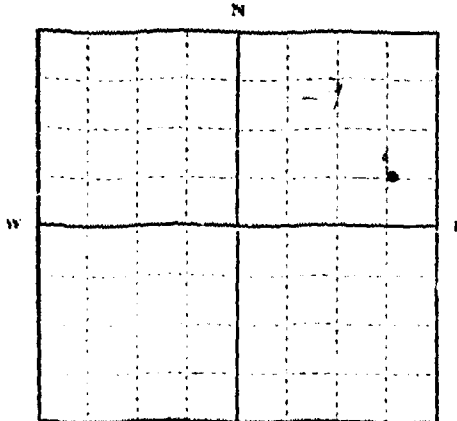
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Lee + Leah, of Bozeman (Town)
(Name of Appropriator) (Address)

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



Lot 7, Block 5, Township of
1/4 Sec 29 T. R. Christine.

Indicate point of appropriation and piece 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. continuous since then.
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) 10 gallons
- 5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof 1/2 acre of lawn immediately surrounding the well
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Deep well, jet electric pump about 1/2 H.P.

- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater July, 1962- July 1962
- 8. The depth of water table 49 foot well water now 12 feet from surface
- 9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater water well - 4 inch casing - 49 feet deep
- 10. The estimated amount of groundwater withdrawn each year 4,256,000
- 11. The log of formations encountered in the drilling of each well if available None available - shale & sandrock formations prior to 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 None

Signature of Owner Lee M. Johnson
Date 12/1/62

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. 19108

17648

State of Montana, }
County ofergus. } ss. *COPY*
Filed DEC 31 1983
at 11:30 o'clock A.M.
\$ 3⁰⁰ Ad. MAY B. BROWN
County Clerk and Recorder

GROUNDWATER INDEX

County Targui Twp. 1976 Rge. 20 E

Sec.	Name of Appropriator	Type of Form	County File No.	Remarks
3	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1114	-
10	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1107	-
11	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1109	-
15	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1108	-
19	Smith, E. S.	E. W. H.	16554	-
19	Audrey, Edith Jewell Edith Bonistrophe	E. W. H.	17183	-
23	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1111	-
23	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1110	-
23	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1106	-
23	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1116	-
24	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1113	-
26	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1117	-
27	Franklin, Emma	E. W. H.	17384	-
28	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1120	-
35	Parless Oil & Gas Company Western Ranch Division	Water Well Log	1118	-
13	Parless Oil & Gas Company Western Ranch Div.	57 log	1119	-

T. 19 N R. 20 E 3
 County Fergus

MONTANA BUREAU OF MINES AND GEOLOGY
 Butte, Montana

WATER WELL LOG

			X
			X

Peerless Oil & Gas Company
 Owner Montana Ranch Division
 Peerless Inc.
 1670 Denver Club Bldg.
 Address Denver 2, Colorado
 Driller J. L. Livingston
 Address Minnett, Montana
 Date Started _____ Date Completed _____
 Location: Sec. 3 T. 19 R. 20 1/4 sec. E 1/2 SE 1/4

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

Water use: Domestic Municipal Stock Irrigation
 Industrial Drainage Other: _____

Casing: _____ ft. to _____ ft. Type _____ Size _____
 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: _____ feet.

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

Pumping water level _____ feet at _____ gal. per min.

How tested: _____

Length of test _____

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

(over)

W. I. LIVINGSTON
P. O. Box 931
Vinnet, Montana

Horse Ranch Well No. 5 Log

1--64 surface soil and streaks of gravel
64--75 dark shale
75--110 shells and light clayey soft sandy shale
110--120 fine salt and pepper sand, streaks of shale and shells
120--130 light clayey sand
130--155 gray clayey shale and streaks of sand and coal
155--165 medium hard gray sand
165--192 medium soft gray sand, medium coarse, hard streaks
192--193 hard lime shell
193--220 dark gray sand, streaks of firm shale and lime
220--245 sand and shale, streaks of lime and coal
245--255 dark shale and oyster shells, coal
255--265 various colored shale and streaks of coal
265--330 soft gray shale and streaks of coal and sand
330--388 firm gray shale and streaks of muddy shale
388--400 various colored shales
400--420 brown and gray muddy shale
420--465 soft gray clayey shale, streaks of medium soft sand
465--472 various colored shales
472--479 soft gray sand
479--491 soft gray and brown shale and coal streaks
491--540 soft gray sand, some hard streaks
540--560 firm dark gray and green shale
560--605 soft gray sand, thin streaks of shale
605--624 gray and brown shale
624--629 gray sand
629--666 various colored shales

Ran 655 feet of 4 $\frac{1}{2}$ O.D. 11 lb. casing. Halliburton cemented same with 38 sacks from 465 feet up. Casing perforated from 491 feet to 540 feet and from 560 to 605 feet and from 622 to 624 feet. Well flowing 10 gallons per minute.

1114
COPY

State of Montana, }
County of Fergus, } ss.
MAY 23 1960
Filed _____
at 2:00 o'clock P. M.
Mary Rathburn
County Clerk and Recorder
4/100 pd.

Water Well No. 1948

Driller - Cottrell, Roy, Hartman.

Location - South side of northwest pasture;
Township 19, Range 20, Section 9.

Size of hole - 5 inches

Size of casing - 4 inches ID

Depth of hole - 632 feet

Casing - 408 feet

Cemented - Yes

Rate of flow - 15 gals per minute.



Location: Sec. 10 T. 19 R. 20 1/4 sec. SW 1/4

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

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other: _____

Casing: _____ ft. to _____ ft. Type _____ Size _____

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: _____ feet.

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

Pumping water level _____ feet at _____ gal. per min.

How tested: _____

Length of test _____

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

(over)

T. 19 ¹⁴ R. 20 ^F ¹⁰
 County Fergus

MONTANA BUREAU OF MINES AND GEOLOGY
 Butte, Montana

WATER WELL LOG

X			

Owner Peerless Oil & Gas Company Wyland Ranch Division Address Peerless Inc.
1670 Denver Club Bldg.
Denver 2, Colorado
 Driller Roy Cottrell Address Montana
 Date Started _____ Date Completed 1948
 Location: Sec. 10 T. 19 R. 20 ¼ sec. SW ¼ NW ¼

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

Water use: Domestic Municipal Stock Irrigation
 Industrial Drainage Other: _____

Casing: _____ ft. to _____ ft. Type _____ Size _____

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: _____ feet.

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

Pumping water level _____ feet at _____ gal. per min.

How tested: _____

Length of test _____

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

(over)

1107

COPY

State of Montana,
County ofergus,

Filed _____

at 2:00 o'clock P.M.

Mary Riddell
County Clerk and Recorder

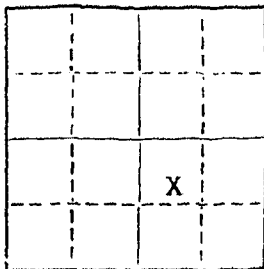
4/10/02

T. 19 R. 20

County Fergus

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG



Owner: Peerless Oil & Gas Company
Wyand Ranch Division
Peerless Inc.
1670 Denver Club Bldg.
Denver 2, Colorado

Driller: Roy Cottrell
Address: Montana

Date Started: _____ Date Completed: 1948

Location: Sec. 11 T. 19 R. 20 1/4 sec. NW SE

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

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other: _____

Casing: _____ ft. to _____ ft. Type _____ Size _____

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: _____ feet.

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

Pumping water level _____ feet at _____ gal. per min.

How tested: _____

Length of test _____

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

(over)

Log of Well
Material Drilled

Large Ranch Well No. 4 - 1943

Driller - Cottrell, Roy, Montana.

Location - Meadow pasture north of Cottonwood Coulee on fence line,
furnishing water to three pastures:
Township 19, Range 20, Section 11.

Size of hole - 5 inches

Size of casing - 4 inches ID

Depth of hole - 550 feet

Case - 212 feet

Cemented - Yes

Rate of flow - 25 gals. per minute.

ES/OT
12/21/48

CASING

COARSE SAND

FELDSPAR SAND
SOFT SANDSTONE
HARD SANDSTONE

FELDSPAR AND STONE

COAL

SAND STONE

VERY HARD SAND STONE
SOFTER SAND STONE
HARD SANDSTONE

WATER IN

WATER IN

SOFTER SAND STONE

VERY HARD SANDSTONE

WATER IN

SOFTER SAND STONE

VERY HARD SANDSTONE

HOLE

1109

COPY

State of Montana, }
County of Fergus. } ss.

Filed MAY 23 1960
at 2:00 o'clock P.M.
May Rathbone
County Clerk and Recorder

T. 19N R. 20E

13

County Fergus

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

			X

Peerless Inc.
1670 Denver Club Bldg.
Denver 2, Colorado

Peerless Oil & Gas Company
Wycana Ranch Division

Owner

P. L. Ferguson
Roundup, Montana

Driller

Date Started..... Date Completed August 6, 1953

Location: Sec. 13 T. 19N R. 20E 1/4 sec. SE 1/4 SE 1/4

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

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other:.....

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

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:.....feet.

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

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

How tested:.....

Length of test.....

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

.....

.....

.....

.....

.....

(over)

P. L. Ferguson,
1104 First St. E.,
Bozeman, Montana.

Zytana Cattle Company Horse Ranch water well location:
SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 13, T. 13, R. 20E.

Log - Well No. 14

0	-	3	surface
3	-	10	sand
10	-	15	yellow clay
15	-	20	boulders and gravel
20	-	30	gravel
30	-	37	hard sand water
37	-	45	brown shale
45	-	53	blue sandy shale
53	-	75	light blue sandy shale
75	-	100	brown shale
100	-	135	blue and brown shale and marine fossils
135	-	150	sandy shale with breakers of sand
150	-	170	sandy water
170	-	185	light blue shale
185	-	215	soap stone and light blue shale
215	-	225	sand water
225	-	250	light blue shale
250	-	275	brown shale sand streaks
275	-	280	hard sandy shale
280	-	290	soft sand more water
290	-	300	soft blue shale
300	-	310	hard dark sand
310	-	318	hard sand
318	-	325	blue shale 3 ft. coal
325	-	355	light blue sandy shale
355	-	400	sandy shale
400	-	420	porous sand
420	-	424	hard sandy shale
424	-	430	light blue sandy shale
430	-	450	soft porous sand water
450	-	455	hard sandy shell
455	-	460	porous sand
460	-	500	porous sand water

Set 65 ft. of 7 in. casing and cemented it with 20 sacks of cement. Set 495 ft. of $\frac{1}{2}$ in. O. D. casing 5 ft. off the bottom. Slot perforated $\frac{1}{2}$ in casing from 150 ft. to 170 ft. 215 ft. to 235 ft. 290 ft. to 310 ft. and from 445 ft. to 485 ft. The well was flowing 10 Gal Per minute at the time of completion.

P. L. Ferguson
P. L. Ferguson, Driller

AUG. 6, 1953
Date of completion

1119

COPY

State of Montana, }
County of Fergus } ss.

Filed.....MAY 23 1960.....
at.....2:00.....o'clock P. M.

May Kathleen
County Clerk and Recorder

#100-92 .

T. 19 ^Y R. 20 ^F
 County Fergus

MONTANA BUREAU OF MINES AND GEOLOGY
 Butte, Montana

WATER WELL LOG

		X	

Owner: **Fearless Oil & Gas Company** **Fearless Inc.**
Wytana Ranch Division **1670 Denver Club Bldg.**
 Address: **Denver 2, Colorado**
 Driller: **Frank Lebart, deceased** Address: **Lewistown, Montana**
 Date Started: _____ Date Completed: **1948**
 Location: Sec. **15** T. **19** R. **20** ¼ sec. **SW NE**

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

Water use: Domestic Municipal Stock Irrigation
 Industrial Drainage Other: _____

Casing: _____ ft. to _____ ft. Type _____ Size _____

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: _____ feet.

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

Pumping water level _____ feet at _____ gal. per min.

How tested: _____

Length of test _____

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

(over)

Description of Material Drilled

Log of Well

WAT R WELLS ON HORSE RANCH

Horse Ranch Well No. 1 - 1948

Driller - Frank Lehart, Lovistown, deceased.

Location - In meadow pasture south of Cottonwood Coales:
Township 19, Range 20, Section 15.

Size of hole - 5 inches

Size of casing - 4 inches ID

Depth of hole - 550 feet

Case - 3 1/2 feet

Completed - No .. bronze shoe.

Rate of flow - 15 gals. per minute.

1108

CO

State of Montana. } ss.
County of Ferris.

Filed _____ 1950
at _____ o'clock P. M.

Thay Radwin
County Clerk and Recorder

\$ 100.00

File No. 16554

T. 14N R. 20E

DUPLICATE

County Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECORDED
DEC 4 1963

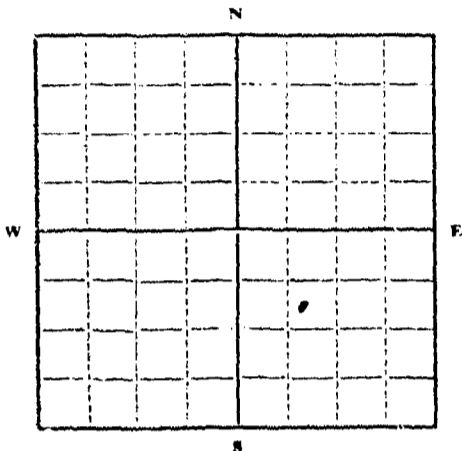
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. E. F. Greenleaf, of Christina, WY
(Name of Appropriator) (Address) (Town)

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



NW 1/4 Sec. 14 T. 14 R. 20E

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 Stockwater

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1925, 1930, 1935

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 200,000 gal per year

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 Pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Approximately 1920

8. The depth of water table 30 feet

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater dug wells approximately 6 ft depth

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

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

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

Signature of Owner [Signature]
Date 7/20 27, 1963

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

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

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

16554

COPY,

State of Montana, } ss.
(County of Park.) }

Filed DEC 3 1963 19

at 2:15 o'clock P.M.

Gray, Rathbone
County Clerk and Recorder

200-pp

17183

File No.

T. 19 R. 20

DUPLICATE

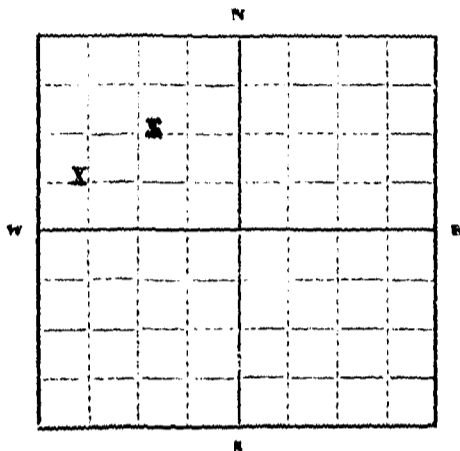
County Fergus

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

RECEIVED
DEC 30 1963
STATE ENGINEER

1. EDITH SUDEN, formerly Edith Donisthorpe of Stanford (Name of Appropriator) (Address) (Town)
County of Judith Basin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE 1/4 SW 1/4 NW Sec. 19 T. 19 R. 20

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..... domestic and stock water
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been. 2 springs - 1929 - continuously
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute)..... all water of said springs
- 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..... natural flow
- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater..... 1961 - latest development
- 8. The depth of water table..... surface
- 9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater..... pit at each spring - small dam
- 10. The estimated amount of groundwater withdrawn each year..... all springs flow
- 11. The log of formations encountered in the drilling of each well if available..... none
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record..... springs have been in use for many years - dug out and developed

Signature of Owner Edith Suden

Date Dec. 27, 1963

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

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

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

11105

17183

COPY

State of Michigan
County of [unclear]

Dated DEC 27 1967 1967
at 4:45 o'clock P.M.

Mary Bethum
County Clerk and Recorder

200 ph.

T. 19 ^N R. 20 ^E 23
 County **Fergus**

MONTANA BUREAU OF MINES AND GEOLOGY
 Butte, Montana

WATER WELL LOG

		X	

Owner **Pearless Oil & Gas Company** Address **Pearless Inc.**
Wytana Ranch Division Address **1670 Denver Club Bldg.**
 Driller **W. L. Livingston** Address **Denver 2, Colorado**
 Date Started _____ Date Completed _____
 Location: Sec. **23** T. **19** R. **20** 1/4 sec. **S00K NW, SE**

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

Water use: Domestic Municipal Stock Irrigation
 Industrial Drainage Other: _____

Casing: _____ ft. to _____ ft. Type _____ Size _____
 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: _____ feet.

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

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

How tested: _____

Length of test: _____

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

(over)

H. W. Livestock & Dairy Contractor

C. S. Sec. 23 T. 19 R. 20

Log of Horse Run well No. 6 at ranch buildings

9	to 7	ft.	-----	sandy soil
7	to 15	ft.	-----	gravel
15	to 35	ft.	-----	hard sand
35	to 45	ft.	-----	brown and grey clayey shale
45	to 60	ft.	-----	grey shale
60	to 100	ft.	-----	grey shale and coal streaks
100	to 160	ft.	-----	grey shale with thin streaks of lime
160	to 170	ft.	-----	grey and brown shale and streaks of coal
170	to 186	ft.	-----	sand with thin shale streaks
186	to 201	ft.	-----	shale
201	to 217	ft.	-----	blue and grey shale
217	to 218	ft.	-----	soft clayey sand
218	to 245	ft.	-----	grey shale and sand streaks
245	to 260	ft.	-----	soft grey shale and streaks of sand
260	to 264	ft.	-----	soft sand (clayey)
264	to 290	ft.	-----	grey shale and streaks of sand
290	to 310	ft.	-----	soft grey sand (well started flowing 6 gal per minute)
310	to 350	ft.	-----	medium to hard sand
350	to 405	ft.	-----	soft grey sand (increased water to 30 gal per minute)
405	to 435	ft.	-----	grey sand with streaks of shale

stopped at 291 feet and ran 190 feet of 6 5/8" O. D. 8 round thread casing and cemented same with 20 sacks of cement and set returns on cement. Used a 6 5/8" back pressure valve shoe on same casing. Ran 4 1/2" O. D. liner from 187 feet to 435 feet. Liner perforated from 285 feet to 315 ft. and from 450 feet to 405 feet and from 420 feet to 435 feet.

Landed 6 5/8" casing so that the top collar is 6 feet below the surface of the ground. Finished well by digging 6 foot cellar and installing 6 5/8" to 2 inch swedge and 2 inch gate valve.