

File No.

T. 12 N R 43
County Rosebud

DUPLICATE

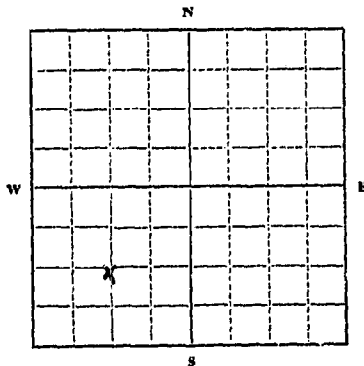
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

JAN 8 1964
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

Warren E. Ronning, of Rock Springs
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Mont.
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



S. W. 1/4 Sec. 1 T. 12 N. R. 43

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. Approx. 1956
Usually summer, sometimes spring and fall

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

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. conventional pump 1/2 Horse electric

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

8. The depth of water table. (120 Ft Deep) (water 40 Ft 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. 5 in drilled & cased

10. The estimated amount of groundwater withdrawn each year. 100-120 cows - Rented downed

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

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. Unknown

Signature of Owner Warren E. Ronning
Date Dec 29, 1963

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

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

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

27563

179790

STATE OF MONTANA, }
COUNTY OF ROSEMUND } SS:

called to order 30th day of April

1963 at 8:00 o'clock A.M.

Heward J. ...
County Clerk & Ex-Officio

by Betty M. ...
#206

27th APR 1963

APR 27 1963

RECORDED & INDEXED

14

File No. _____

T. 12 N. R. 43 E

DUPLICATE

County Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

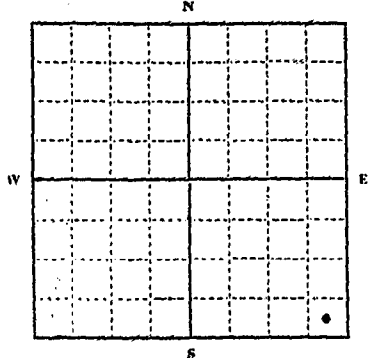
RECEIVED
JAN 8 1962
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1951)

1. Henry J. Sawtell, of 24 So. Harrison Miles City, Mont.
(Name of Appropriator) (Address) (Town)

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



SE 1/4 Sec. 14 T. 12 N. R. 43 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
1950 and on.

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

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

8. The depth of water table
25 feet.

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

10. The estimated amount of groundwater withdrawn each year

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

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

Signature of Owner Henry J. Sawtell
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 Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.

27543

180235

STATE OF MONTANA, COUNTY
OF ROSEBUD SS. FILED JAN.
6th, 1964, AT 8 AM, CO. CLERK

2nd Pd Howard Fair

18

File No.

T. 12N R. 43

DUPLICATE

County: Golden

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

JAN 3 1964

Notice of Completion of Groundwater Appropriation Without Well

(Under Chapter 237 Montana Session Laws, 1961)

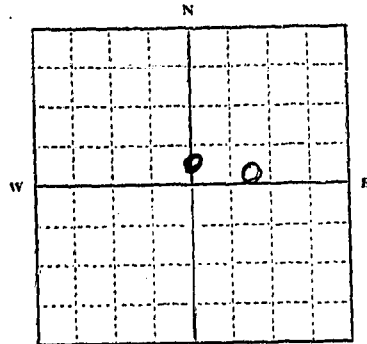
Date of Appropriation of Groundwater: Dec 1 - 1934
Owner: W. H. Miller Address: Angela Mont

Contractor (if any)

Address of Contractor

Date Started..... Date Completed.....

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



Natural Process
water supply originates in bottom of
creek and runs water for 1/4 mile
down creek.

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent

estimate approximate lengths of periods of use... year long
use.

1500 gal daily

1/4 Sec 18 T. 12 R. 43

Indicate point of appropriation and place of use, if possible.

Signature of Owner: W. H. Miller

Date: Dec 30, 1963

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

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

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

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

21203

179959

STATE OF MONTANA, COUNTY
OF ROSEBUD SS. FILED DEC.
30, 1963, AT 4:50 P.M., CO. CLERK

62.00

Howard East
David J. Hillard, Dep.

File No. _____

T. 12 N. R. 43 E

DUPLICATE

County Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

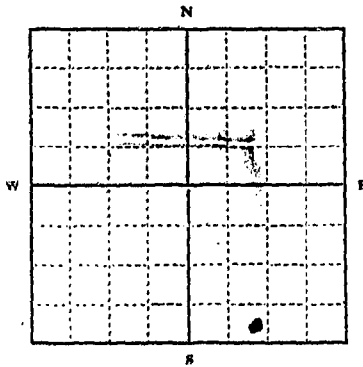
Declaration of Vested Groundwater Rights

JAN 10 1964

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

I, W. N. Miller, of Angela, MT
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Mont.
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW 1/4 Sec. 20 T. 12 N. R. 43 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 live stock water + Farmstead water supply

3. Date or approximate date of earliest beneficial use; and how continuous the use has been. 1923 July

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

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

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

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

8. The depth of water table. 20 ft

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater. Bored 6" hole cased with 4 inch galvanized casing in 1923. Recased with 4 inch black iron casing in 1954. 4 inch jet head suspended on one inch and one and one fourth inch black plastic pipe of 70 psi. Total depth - 120 ft.

10. The estimated amount of groundwater withdrawn each year. 182,500 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

Signature of Owner

W. N. Miller
W. N. Miller
Date Jan 4, 1964

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.

180290

STATE OF MONTANA,)
COUNTY OF DEERHOLM) SS.
I, Howard J. [unclear]
do hereby certify that on the 8th day of Jan
1962 at 1:00 o'clock p.m.
Howard J. [unclear]
County Clerk & Recorder
by Betty M. [unclear]
[unclear] Deputy

180290

180290

21

File No.

T. 12 N. R. 43 E

DUPLICATE

County

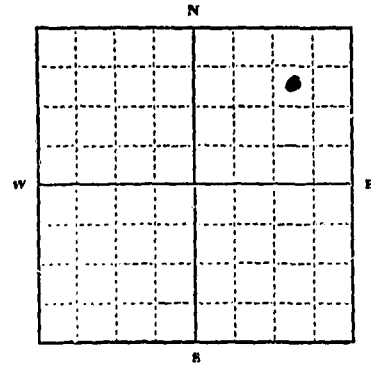
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

JAN 10 1964
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

W. H. Miller, of Argele
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Mont
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE 1/4 Sec 21 T. 12 N. R. 43 E

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. Livestock Water
- Date or approximate date of earliest beneficial use; and how continuous the use has been. 1950
- The amount of groundwater claimed (in miner's inches or gallons per minute). 5 gal per minute
- If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof.
- The means of withdrawing such water from the ground and the location of each well or other means of withdrawal. Electrically powered pump jack with 2 1/2 inch brass cylinder
- The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. 1950
- The depth of water table. 50 ft
- So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater. Drilled Hole, cased with 4 in Black Iron casing, 127 ft total depth 2 1/2 in Brass cylinder, steel pump rod, 1/4 in galvanized pipe - Pump rod and pump jack
- The estimated amount of groundwater withdrawn each year. 75,000 gal
- The log of formations encountered in the drilling of each well if available. Not available
- 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. H. Miller
W. H. Miller
Date Jan 4, 1964

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.

180289

NOTICE TO APPEAR (NTP) (S-100)

8th day of *January*

1464 8⁰⁰ o'clock *A.M.*

Howard J. ...
County Clerk & Ice Dealer

Retty M. Fontaine
Trustee

GW

File No.

T. 12N R 43E
County. Rosebud

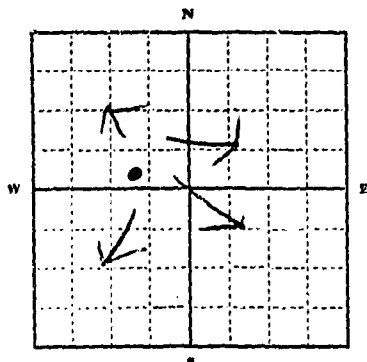
DUPLICATE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

JAN 10 1964

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

1. W.H. Miller of Angela
(Name of Appropriator) (Address)
County of Rosebud State of MONT
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 Sec 31 T. 12N R. 43E

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

- 2. The beneficial use on which the claim is based Livestock Water
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1948
Intermittent
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) 397F 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 PUMP
+ JACK

- 7. The date of commencement, and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1948
- 8. The depth of water table 70
- 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 Total Depth 110FT, Drilled Well - Cased with 4 inch black Iron casing, 1 1/2 inch cylinder, 1 1/4 inch pipe, Steel Pump Rod and Pump Head
- 10. The estimated amount of groundwater withdrawn each year 50,000 gal
- 11. The log of formations encountered in the drilling of each well if available
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including references to book and page of any county record

Signature of Owner W.H. Miller
W.H. Miller
Date Jan 7, 1964

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.

180286

180286

STATE OF MONTANA }
COUNTY OF ROSEBUD } SS.

Subscribed and sworn to before me this 8th day of Jan
1964 at 8:00 o'clock A.M.

Sheward J. Jind
County Clerk & Recorder

by Betty M. Jostine
Secretary

34

1964 JAN 15 90

180286

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1964 JAN 15 90

1964 JAN 15 90

1964 JAN 15 90

GW

Approved Stock Form—State Publishing Co., Helena, Montana—42234

File No.

T. 12 N. R. 43 E.

DUPLICATE

County Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

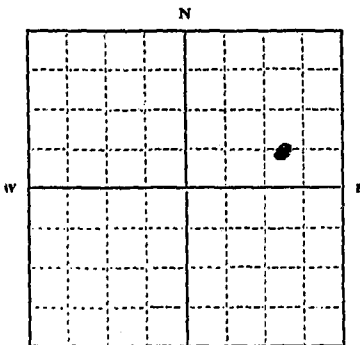
R
JAN 10 1964

Declaration of Vested Groundwater Rights

STATE ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1. W. H. Miller, of Angela
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Mont
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE 1/4 Sec 32 T. 12 N. R. 43 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 Livestock Water
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been Nov 1950
Intermittent use
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) 3981 per M.I.
- 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 Pump + Well

- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Nov 1950
- 8. The depth of water table 40 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 Total Depth 87 ft. Drilled Hole Cased with 4 inch Black Iron Pipe, 2 inch cylinder 1 1/2 pipe, steel pumped, Pump Head
- 10. The estimated amount of groundwater withdrawn each year 50,000 gal
- 11. The log of formations encountered in the drilling of each well if available
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record

Signature of Owner W. H. Miller
W. H. Miller
Date Jan 9, 1964

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.

30338

180285

STATE OF MONTANA, }
COUNTY OF ROSEBUD, } SS.

This is to certify that on the 1st day of Jan
1964 at 8:00 o'clock A. M.

Howard J. ...
County Clerk & Ex-Officio

W. William J. ...
Deputy

FILED
JAN 1 1964
ROSEBUD, MONTANA

180285

File No. _____

T. 12 N R 43 E
County Rosebud

DUPLICATE

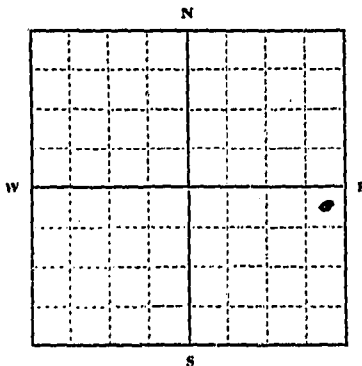
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

JAN 10 1964

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961) STATE ENGINEER

1. W. H. Miller of Angela
(Name of Appropriator) (Address)
County of Rosebud State of Mont
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE 1/4 Sec. 29 T. 12 N R. 43 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 Livestock Water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1936 - Continuous

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

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

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

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

8. The depth of water table 50 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 6 inch Drilled Hole Cased with galvanized 67.5149, 2 1/2" Brass Cylinder Steel Pump Rod, 1 1/4 inch pipe, total depth 124 FT

10. The estimated amount of groundwater withdrawn each year 75000

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. H. Miller
W. H. Miller
Date Jan 4, 1964

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.

180288

STATE OF MONTANA
COUNTY OF ROSEBUD
This day of June
1964 at 8:00 o'clock A.M.
I, David J. [unclear]
County Clerk of [unclear] for
Patty M. [unclear]
[unclear]

[Faint, illegible handwritten notes and signatures]

[Vertical handwritten notes]

File No. _____

T. 12^N R. 43^E

DUPLICATE

County Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

JAN 10 1964

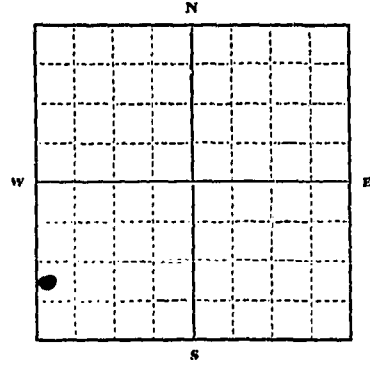
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. W. H. Miller of Angels
(Name of Appropriator) (Address) (Town)

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



SW 1/4 SW 1/4 Sec 29 T. 12^N R. 43^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 Livestock Water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been Nov 1956 - Continuous

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 5981 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 Over flow 1 x 1900's 2 1/2 Acres of grassland adjacent Fox Hay

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

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

8. The depth of water table Water originates 110 below 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 4 inch drilled seismograph hole Cased with 130 FT of 3/4 inch welded boiler pipe Total depth 150 FT TOP 14 FT of casing cemented 1/4 to 1/2 inch enlarged hole

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

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

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

Signature of Owner W. H. Miller
W. H. Miller
Date Jan 4, 1964

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.

180291

STATE OF MONTANA,)
COUNTY OF ROSSBURG) SS.

at the City of Jan
at 8:00 o'clock A.M.
Howard J. ...
County Clerk of Rossburg
by Dittie M. ...
Deputy

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200 200 200 200
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GW

Approved Stock Form—State Publishing Co., Helena, Montana—4234

320

File No. _____

T. 12^N R. 43^E

DUPLICATE

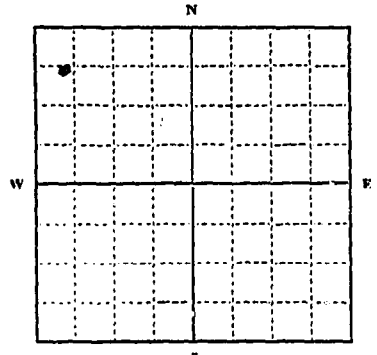
County. Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

JAN 10 1964
STATE ENGINEER

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

1. W. H. Miller of Clayton
(Name of Appropriator) (Address)
County of Rosebud State of Mont. (Town)
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 Sec. 30, T. 12^N, R. 43

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 Farmstead + livestock Water Supply
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1945 continuous
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute). 5 gpm 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
- 6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Pump and Jack

- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. 1916
- 8. The depth of water table. 56 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. Total Depth, 125 ft drilled 6 inch hole cased with 2 1/2 inch galvanized casing - 35 inch Brass Hydrant, 1 1/2 inch steel pump rod - Pump Head
- 10. The estimated amount of groundwater withdrawn each year. 75,000 Gal
- 11. The log of formations encountered in the drilling of each well if available.
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including references to book and page of any county record

Signature of Owner W. H. Miller
W. H. Miller
Date Jan 9 1964

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.

30340

180287

STATE OF MONTANA }
COUNTY OF DEERHOD } SO.

James A. [unclear]
at [unclear] o'clock
Edward [unclear]
County Clerk & Justice
Arthur M. [unclear]
D. C. [unclear]

180287

Helena Independent Record
File No. _____
DUPLICATE

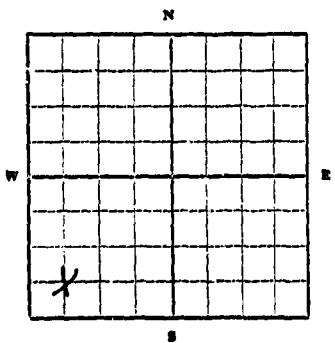
T. 12^N R. 44
County. Rosebud.

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 3 1964
ENGINEER

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

1. Jacob C. Kirsh of Exgala
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Mont
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



S. 1/4, W. Sec. 1, T. 12, R. 44
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
well
- Date or approximate date of earliest beneficial use; and how continuous the use has been Jan 1 to Jan 1st
- The amount of groundwater claimed (in miner's inches or gallons per minute) 14 gals
- 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
- The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Jump
- The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1946
- The depth of water table 160'
- 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 bar casing
- The estimated amount of groundwater withdrawn each year 300 gals a day
- The log of formations encountered in the drilling of each well if available yes
- 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 Jacob C Kirsh
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.

179891

STATE OF MONTANA, COUNTY
OF ROSEBUD SS. FILED REC.
30, 1963, AT 1:45 P.M., CO. CLERK

62.00

*Edward L. ...
Linn ...*

File No. _____

DUPLICATE

T. 12 NR 44

County Rosebud

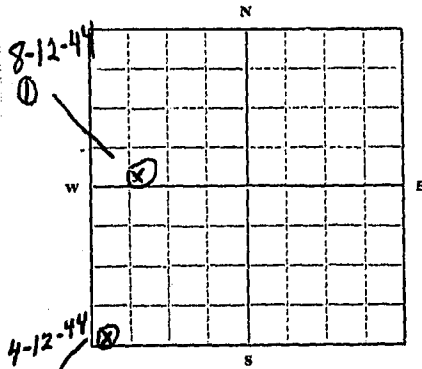
JAN 8 1964
STATE ENGINEER

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Warren E. Romning, of Rock Springs
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Mont.
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



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 Future
Stock Water

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

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

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
Conventional Pump & Haul

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Before 1930

8. The depth of water table Undetermined

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

10. The estimated amount of groundwater withdrawn each year Undetermined

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

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

Signature of Owner Warren E. Romning
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 Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.

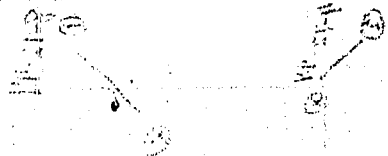
179792

STATE OF MONTANA }
COUNTY OF ROSEBUD } SS.

This is the 30th day of June
1963 at 8:00 o'clock A.M.

Harold J. ...
County Clerk & Recorder

W. Betty M. ...
82.00



SAN ...

C

G:

File No.

T. 12 N. R. 44 E. 6

DUPLICATE

County Rosebud

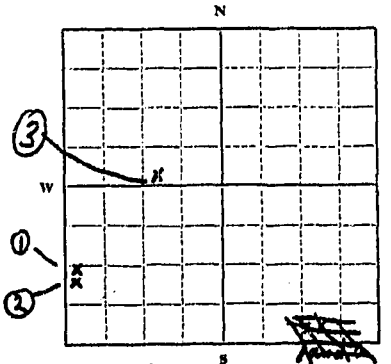
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 8 1964

Declaration of Vested Groundwater Rights ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1. Warren E. Ronning, of Rock Springs
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



S.W. 1/4 NW
1/4 Sec. 6 T. 12 R. 44

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

2 Wells

2. The beneficial use on which the claim is based. stock and home

3. Date or approximate date of earliest beneficial use; and how continuous the use has been. Stock continuous since approx 1923. Home use 1958. Home use cont. since about 1948.

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

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. 1. Net Pump & Horse. 2. Conventional Pump & Horse.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. 1. 1948. 2. approx 1923. 3. 1958.

8. The depth of water table. undetermined (40ft 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. All wells drilled & cased with 5 inch casing. 1. 120 FT. 2. 165 FT. 3. 120 FT.

10. The estimated amount of groundwater withdrawn each year. undetermined, 100 to 120 kcal/yr

11. The log of formations encountered in the drilling of each well if available. 1. Knyte Johnson Terry. 2. unknown. 3. Seismograph crew.

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. unknown to me.

Signature of Owner. Warren E. Ronning

Date. Dec 20, 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.

27564

179791

STATE OF MONTANA } SS.
COUNTY OF POSTFORD }

Subscribed and sworn to before me on the 30th day of Dec
1963 at 8:00 o'clock A.M.

Notary Public
County Clerk & Recorder
by Doty M. Dotson
62.00

RECORDED
INDEXED
MAY 21 1964
SILVER STAR

179791
Postford

File No.

T 12 N R 44 E

DUPLICATE

County Rosebud

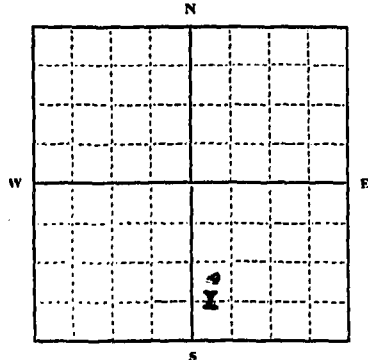
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 8 1964
STATE ENGINEER

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

1. Emil T. Hirsch of Rock Springs
(Name of Appropriator) (Address) (Town)

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



1/4 Sec. T. R.
Indicate point 14 appropriate
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 continu-
ous the use has been. 1927

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

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

6. The means of withdrawing such water from the ground and the loca-
tion of each well or other means of withdrawal
Pump Jack & Engine

7. The date of commencement and completion of the construction of the well, wells, or other works for with-
drawal of groundwater. 1927

8. The depth of water table. 165 feet.

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

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

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

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

Signature of Owner Emil T. Hirsch
Emil T. Hirsch
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 Montana Bureau of
Mines and Geology, and Quadruplicate for the Appropriator.

180233

STATE OF MONTANA, COUNTY
OF ROSEBUD SS- FILED JAN.
6th, 1964, AT 8 P M, CO. CLERK

200 pd Howard J. [unclear]

File No.

T. 12 N R 44 E

DUPLICATE

County Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

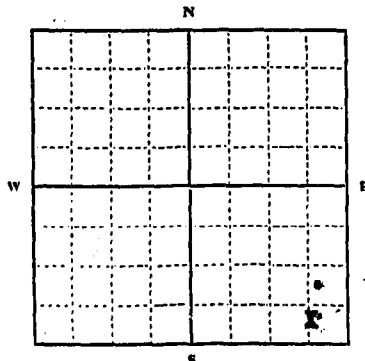
RECEIVED
JAN 8 1964
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

I, Emil T. Hirsch, of Rock Springs,
(Name of Appropriator) (Address) (Town)

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



SE 1/4 Sec. 16 T. 12N R. 44E
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.....
1935
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute).....
16 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.....
Pump Jack & Engine

- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater.....
1935
- 8. The depth of water table.....
300 feet
- 9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater.....
.....
- 10. The estimated amount of groundwater withdrawn each year.....
- 11. The log of formations encountered in the drilling of each well if available.....
Not available
- 12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record.....
.....

Signature of Owner.....
Emil T. Hirsch
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 Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.

27542

180234

STATE OF MONTANA, COUNTY
OF ROSEBUD SS. FILED JAN.
6th, 1964, AT 8 P M, CO. CLERK

202 PL Howard Jink

File No.

DUPLICATE

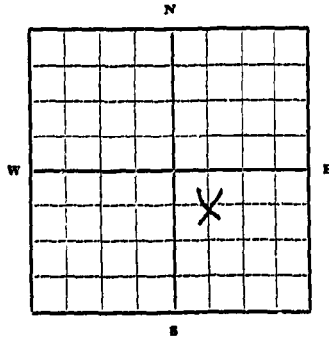
T 12 R 44
County Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 3 1964

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

1. Jacob C. Hirsch of Angela
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Mont.
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 E. Sec. 23 T. 12 R. 44

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
weed

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
Jan 1 to Jan 1

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

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 1958

8. The depth of water table 100'

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
6 in casing

10. The estimated amount of groundwater withdrawn each year 250 gals a day

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

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 Jacob C. Hirsch
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.

179893

STATE OF MONTANA, COUNTY
OF ROOSELTD SS. FILED DEC.
30, 1968, AT MSPM, CO. CLERK

50.00

Thomas L. Smith
Clara Jean Hallid, Dep.

File No.

DUPLICATE

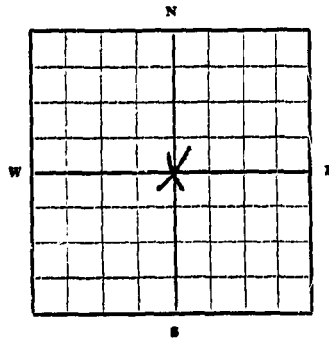
T. 12 N R. 14 E 24
County Bozeman

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 3 1964

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

1. Jacob C. Hirsch of Bozeman
(Name of Appropriator) (Address) (Town)
County of Bozeman State of Mont
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec. 24 T. 12 R. 14
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 well + personal use
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been Jan 1 to present
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) 20 gals
- 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 1942
- 8. The depth of water table 1100'
- 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 3" casing
- 10. The estimated amount of groundwater withdrawn each year 400 gals a day
- 11. The log of formations encountered in the drilling of each well if available yes
- 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 Jacob C. Hirsch
Date Dec 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.

179892

STATE OF MONTANA, COUNTY
OF ROSEBUD SS. FILED DEC.
30, 1963, AT 2:00 P. M. CO. CLERK

15-10

Howard Smith
Deed from Halted, Sup.

T. 12 N E. 26
R. 44
County Rosebud

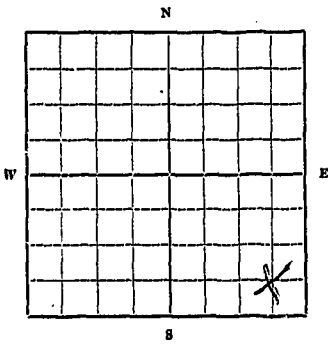
DUPLICATE

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 3 1964

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

1. Jacob C. Hirsch of Angola
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



S.E. 1/4 Sec. 26, T. 12, R. 44

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 well
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been from 1951 to present
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute) 20 gals
- 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 Hand pump
- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1953
- 8. The depth of water table 97'
- 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 6" casing
- 10. The estimated amount of groundwater withdrawn each year 300 gals.
- 11. The log of formations encountered in the drilling of each well if available yes
- 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 Jacob C. Hirsch
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.

179895

STATE OF MONTANA, COUNTY
OF ROSEBUD SS- FILED DEC.
30, 1968, AT 1:45 PM, CO. CLERK

2.00

Howard Lait
Doris Jean Helrod Day

RECEIVED
STATE OF MONTANA
COUNTY OF ROSEBUD
CLERK'S OFFICE
ROSEBUD, MONTANA
DEC 30 1968

STATE OF MONTANA
COUNTY OF ROSEBUD
CLERK'S OFFICE
ROSEBUD, MONTANA
DEC 30 1968

35

File No.....

T. 120

R. 44

DUPLICATE

County Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 3 1964

Notice of Completion of Groundwater Appropriation Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater.....

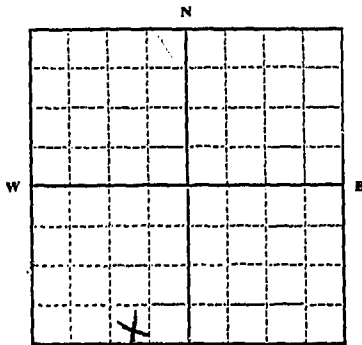
Owner Jacob C. Hirsch address Angola

Contractor (if any)

Address of Contractor

Date Started..... Date Completed.....

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable. 6 ft



S. 1/4 W. Sec. 35 T. 12 R. 44

Indicate point of appropriation and place of use, if possible.

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent

estimate approximate lengths of periods of use.....

Jan 1st to Jan 1st

Signature of Owner Jacob C. Hirsch

Date.....

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

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

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

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

File No.

T. 120 R. 44

DUPLICATE

County Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 3 1964

Notice of Completion of Groundwater Appropriation Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater.....

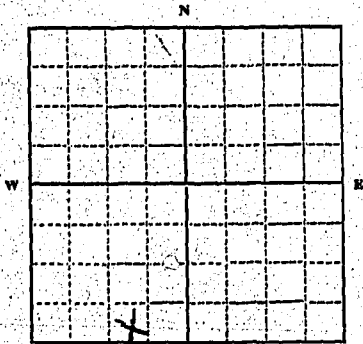
Owner Jacob C. Hirsch address Angola

Contractor (if any)

Address of Contractor

Date Started..... Date Completed.....

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable. 6 ft



S. 1/4 W. Sec. 35 T. 12 R. 44

Indicate point of appropriation and place of use, if possible.

Quantity of water developed and used with explanation of method used to measure or estimate such amount. If use is intermittent

estimate approximate lengths of periods of use.....

Jan 1st to Jan 1st.

Signature of Owner.....

Jacob C. Hirsch

Date.....

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

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

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

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

179896

STATE OF MONTANA, COUNTY
OF ROSEBUD SS. FILED, DEC.
30, 1963, AT 2⁰⁰ P.M., CO. CLERK

2⁰⁰ P.M. Howard Tit

Form No. 18
8-60

T. 11 N R. 31 E
County Rosebud

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG

31 E

11 N			

Owner Honolulu Oil Corporation Address P. O. Box 1637
Billings, Montana
Driller Brinkerhoff Drilling Company Address Denver Club Building
Denver, Colorado
Date Started April 21, 1961 Date Completed May 9, 1961
Location: Sec. 11 T. 11 N R. 31 E $\frac{1}{4}$ sec. NW SE SE

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 Oil Field Water Flood

Casing: 1936 ft. to 1948 ft. Type 54.50# smls Size 13-3/8"

Casing: 1854 ft. to 4350 ft. Type 32.0 # smls Size 8-5/8"

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

Perforated or Screened: Ft. 4251 to ft. 4288 . Ft. - to ft. -

Type of screen or perforations Four 1/2" jet perforations per foot

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

Shut-in pressure, for flowing well: 30 lb./sq. in. on: June 21, 1961
Initial flow rate: 200 barrels per day (6 GPM) (date)

Pumping water level 3247 feet at 82 gal. per min.

How tested: Submersible electric pump

Length of test 22 days. Production rate declined all through test

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

13-3/8" cemented to surface. 8-5/8" cemented 4350' to 3187'. Well acidized with

500 gallons mud cleanout acid, swabbed and then fraced with 40,000 pounds sand.

All dents measured from K. B. K. B. to ground -12.0'
(over)

T 11 N R 31 E

County Rosetud

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED

WATER WELL LOG

STATE ENGINEER

11 N

Owner: **Honolulu Oil Corporation** Address: **P. O. Box 1637 Billings, Montana**
 Driller: **Brinkerhoff Drilling Company** Address: **Denver Club Building Denver, Colorado**
 Date Started: **April 21, 1961** Date Completed: **May 9, 1961**
 Location: Sec. **11** T. **11 N** R. **31 E** 1/4 sec. **NW 31 E**

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

Water use: Domestic Municipal Stock Irrigation
 Industrial Drainage Other: **Oil Field Water Flood**

Casing: **1936** ft. to **1948** ft. Type: **54.50# smls** Size: **13-3/8"**
 Casing: **1854** ft. to **4360** ft. Type: **32.0# smls** Size: **8-5/8"**

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

Perforated or Screened: Ft. **4281** to ft. **4288** Ft. _____ to ft. _____

Type of screen or perforations: **Four 1/2" jet perforations per foot**

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

Shut-in pressure, for flowing well: **30** lb./sq. in. on: **June 21, 1961**
 Initial flow rate: **200 barrels per day (6 GPM)** (date)
3347 **82**

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

How tested: **Submersible electric pump**

Length of test: **22 days. Production rate declined all through test**

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)
13-3/8" cemented to surface. 8-5/8" cemented 4130' to 3187'. Well acidized with 500 gallons mud cleanout acid, swabbed and then fraced with 40,000 pounds sand.

All depths measured from K. B. K. B. to ground **-12.0'**

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	1130	(Bearpaw) dark gray shale, clayey, calcareous fossiliferous
1130	1400	(Judith River) interbedded light colored sandstone and sandy shales. Sandstone, gray-white, very fine grained silt, glauconitic, calcareous, friable
1400	1720	(Claggett) shale, dark gray, marine, some bentonite beds
1720	1840	(Eagle ss) sandstone, dark gray-gray buff, fine grained, glauconitic, shaly
1840	2830	Shale, dark gray, silty, slightly fissile, traces glauconitic shale, thin beds of limestone and sandstone, upper portion of this shale interval sometimes "speckled" in part.
2830	2920	(Greenhorn) thin limestones with interbedded calcareous shales. Sometimes <u>Inoceramus</u> prisms.
2920	3800	Shale, dark gray, silty, fissile
3800	3905	(Dakota silt) buff to light gray, silty to sandy and shaly zone.
3905	4015	(Dakota or 1st Cat Creek ss) sandstone, gray-white, fine grained, hard, tight, low P&F, well sorted, fairly clean, interbedded with dark shales
4015	4174	(Kootenai) shale, much maroon, dark gray and carbonaceous, some reddish brown shale and bentonite
4174	4215	(2nd Cat Creek ss) sandstone, light gray, fine-medium, clayey, black, green and rust acc.
		DST 4166-4204': ISI 30 min. Open 65 min. FSI 30 min. Weak blow. Recovered 120' watery mud. IM 2265', IS 1810' (inc.), IF 65', FF 90', FSI 1390' (inc.), FH 2265'.
4215	4240	Shale, medium to dark gray
4240	4290	(3rd Cat Creek ss) sandstone, gray, med gr/med, fair P&F, salt & pepper, fairly clean
4290	4359 (T.D.)	Shale, dark gray, maroon, green, tan, reddish brown and carbonaceous

STATE OF MONTANA,
COUNTY OF ROBERTS,
Rigged on the 17th day of
1961 at
by
Checked by
Checked by

920591

W.L.M. [Signature]

Form No. 18
8-60

T. 11N R. 31E

County Beaumont

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED
MAP 2 2 1962

STATE ENGINEER

Water Well Log

11		

Owner Pan American Petroleum Corporation Address P.O. Box 590 Powell, Montana

Driller Great Northern Drilling Co Inc Address Billings, Montana

Date Started 10-28-61 Date Completed 1-2-62

Location: Sec. 11 T. 11N R. 31E $\frac{1}{2}$ sec. C M NE

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

Water use: Domestic Municipal Stock Irrigation
Industrial Drainage Other Oil Field Waterflood

Casing: Surface ft. to 1948 ft. Type 2-35 Size 19-3/8

Casing: 1854 ft. to 4390 ft. Type 2-35 Size 8-5/8

Casing: 4191 ft. to 7317 ft. Type 2-35 Size 5-1/2

Perforated or screened: Ft. 7212 to ft. 7197 Ft. 7207 to ft. 7000

Type of ~~screening~~ perforations 2 shots per foot

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

Shut-in pressure, for flowing well: 285 lb./sq. in. on: 1-2-62
(date)

Pumping water level Flowing feet at 300,000 gal. per min. _____

How tested: Flowing into test tank

Length of test 24 hrs.

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

Water not potable

(over)

GW 2

File No.

DUPLICATE

*oil well
flow well*

T. 11 N. R. 31 E

County Rosabud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
22 1962
STATE ENGINEER

Notice of Completion of Groundwater
Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

Top of Ground

(Elev. above sea level...2892.....)

- 4988' Amsden
- 5360' Tyler "B"
- 5460' Heath
- 5680' Otter
- 6171' Charles
- 6776' Mission Canyon
- 7212' Lodge Pole
- 7250' PBD
- 7320' Total Depth

Perforations

- 7212 - 7197'
- 7103 - 7080'
- 7060 - 7045'
- 6953 - 6941'
- 6933 - 6922'
- 6904 - 6868'
- 6854 - 6827'
- 6810 - 6797'

Owner Pan American Address Box 550, Powell, Wyoming

Drill Great Northern Drig. Address Billings, Montana

Date of Notice of Appropriation of Groundwater 1-16-62

Date well started 10-28-61 Date Completed 1-2-62

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

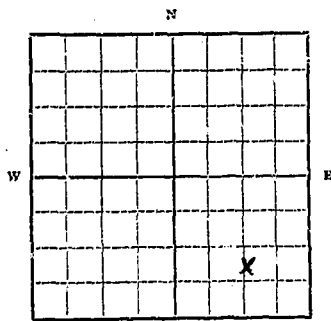
Water Use: Domestic Municipal Stock Irrigation
Industrial Drainage Other Oil Field

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.

Constituents PPM

Sodium	2511
Calcium	556
Magnesium	92
Sulphate	5140
Chloride	993
Carbonate	0
Bicarbonate	585

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
17-1/4	13-3/8 54	504	0	1948		
12-1/4	8-5/8 32	1854	4350	1/2" Jet	4251	4288
8-3/4	5-1/2 15	54191	7317	(See column for perforations)		



W SE 1/4 SE Sell T11N 31E

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.....feet.

Shut-in Pressure for Flowing Well

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

Discharge in gal. per min. of flowing well 107.8

How Tested Tank 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)

69
Driller's License Number

W. J. William
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.

174847

STATE OF MONTANA) SS.
COUNTY OF ROSEBUD)

Filed on the 21st day of March
1962 at 8:00 o'clock A.M.

Edward J. Jost
County Clerk & Recorder
By Betty M. Fontaine
Deputy

BOOK	174847
PAGE	1
FILED	1962 MAR 21 8:00 AM
COUNTY	ROSEBUD
CITY	MISSOULA
STATE	MONTANA

RECEIVED
MAY 19 1962
MAY 19 1962
MAY 19 1962

GW

File No.

DUPLICATE

T 11N R 31E

County Rosebud

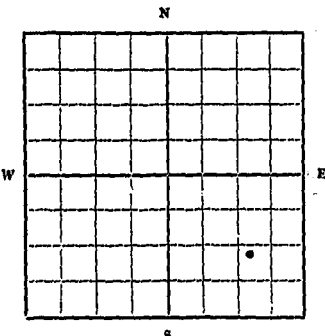
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
MAY 24 1962

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

STATE ENGINEER

1. Pan American Petroleum Corporation of P. O. Box 550 Powell
(Name of Appropriator) (Address) (Town)
County of Park State of Wyoming
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SE 1/4 SE Sec. 11 T. 11N R. 31E

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 Waterflood for secondary recovery of oil

3. Date or approximate date of earliest beneficial use; and how continuous the use has been Approximate date of use April 1, 1962

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 291.7 gallons per minute

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

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater First drilled 4-21-61 and completed 5-9-61
Redrilled 10-28-61 and completed 1-2-62

8. The depth of water table 6797' to 7212'

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 This well drilled to 7320' and plugged back to 7250'. 5-1/2" liner set in 8-5/8" casing to 7317'.

10. The estimated amount of groundwater withdrawn each year 153,300,000 gallons

11. The log of formations encountered in the drilling of each well if available 4988' Amsden, 5360' Tyler, 5460' Heath, 5680' Otter, 6171' Charles, 6776' Mission Canyon, 7212' Lodge Pole, 7250' PBD, and 7320' TD.

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 well was first drilled to 4359' and was perforated with four 1/2 jet shots per foot from 4251' to 4288'. Initial production was 6 GPM.

Signature of Owner J.M. Rembert

Date Jan 16 1962

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

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

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

1237

174196

STATE OF MONTANA,
COUNTY OF ROSEBUD, SS:

Filed on the 22nd day of January
1962 at 8:00 o'clock A. M.

Edward S. Lait
County Clerk & Recorder

By Dorothy M. Fontaine
430 Deputy

Product
Reference to 26 L. & C. 12, 13 and 14 and 15 of the Code of Montana, 1972, is hereby made.

File No.

T. 11 N. R. 32E

DUPLICATE

County Rosebud

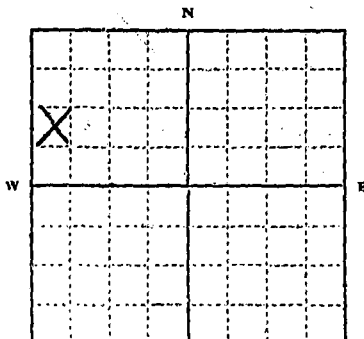
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 27 1963

Declaration of Vested Groundwater Rights STATE ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1. Edward S. Rebe, of Melstone, (Name of Appropriator) (Address) (Town)
County of Rosebud State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec. 2, T. 11, R. 32

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. 1955

4. The amount of groundwater claimed (in miner's inches or gallons per minute). 5 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. 2 inch casing

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

8. The depth of water table. 40 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. 4 inch casing

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

11. The log of formations encountered in the drilling of each well if available. shale 30ft
10ft sand

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 Edward S. Rebe

Date 12-23-1963

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

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

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

179699

STATE OF MONTANA, COUNTY
OF ROSEBUD SS. FILED DEC.
26th, 1963, AT 10:00 AM, CO. CLERK

Edward J. Lantz
by Ellen Clark
Dep.

205 p.

File No.

T. 11 R. 32

DUPLICATE

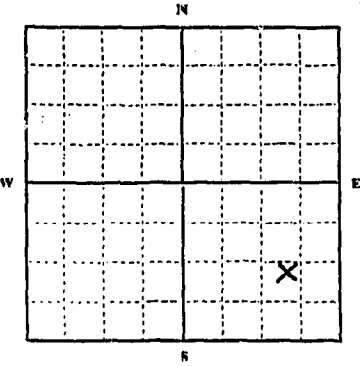
County ROBELOU

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 27 1963

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

1. Edward S. Duke of Melstone
(Name of Appropriator) (Address) (Town)
County of Robeson State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec 3 T. 11. R. 32
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. Mechanics
- 3. Date or approximate date of earliest beneficial use; and how continuous the use has been. This Spring has been used since 1914.
- 4. The amount of groundwater claimed (in miner's inches or gallons per minute). never have tested
- 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. gravity
- 7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. No Spring was sunk when I came to Melstone in 1928
- 8. The depth of water table. ---
- 9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater. ---
- 10. The estimated amount of groundwater withdrawn each year. run out and soak into the ground
- 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 Edward S. Duke
Date 12-23-1963

Three copies to be filed by the owner with the County Clerk and Recorder of the county in which the well is located.
Please answer all questions. If not applicable, so state, otherwise the form will be returned.
Original to the County Clerk and Recorder; Duplicate to the State Engineer; Triplicate to the Montana Bureau of Mines and Geology, and Quadruplicate for the Appropriator.

179698

STATE OF MONTANA, COUNTY
OF ROSEBUD SS. FILED DEC.
20th 1963, AT *Woodville*, CO. CLERK
Howard Lark
By: Ellen Clark
Dep.
21-1-63

File No. _____

T. 11 N R. 32E

DUPLICATE

County Rosebud

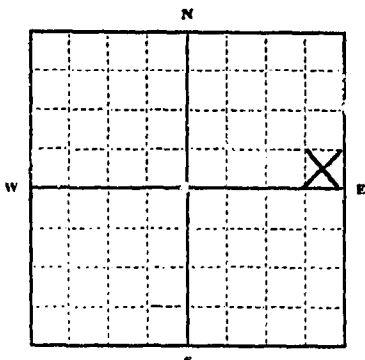
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 27 1963

Declaration of Vested Groundwater Rights STATE ENGINEER

(Under Chapter 237, Montana Session Laws, 1961)

1. Edward S. Duke, of Melstone, (Name of Appropriator) (Address) (Town)
County of Rosebud State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec. 3 T. 11 R. 32

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...
1960

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

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

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater...
Completed 1960

8. The depth of water table...
39 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...
4 in casing
2 inch P.y. filter

10. The estimated amount of groundwater withdrawn each year...
400,000 gal

11. The log of formations encountered in the drilling of each well if available...
at 29 ft - 2 ft sandrock, 10 ft water sand

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 Edward S. Duke

Date 12-23-63

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

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

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

179697

STATE OF MONTANA, COUNTY
OF ROSEBUD SS. FILED DEC.
26th, 1963, AT 10:41 AM, CO. CLERK

*Devised Title
by Ellen Clark
2000 Dep.*

File No.

T. 11 N. R. 32

DUPLICATE

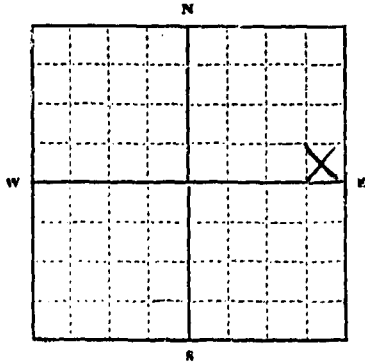
County Rosebud

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 27 1963

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

1. Edward S. Rube, of Melstone,
(Name of Appropriator) (Address) (Town)
County of Rosebud State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



1/4 Sec. 5 T. 11 R. 32
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. 1940

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

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

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal. 9 in. Pump 1 1/2 yds

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. Completed 1940

8. The depth of water table. 280 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. 4 in. Case to 280 ft
3 in

10. The estimated amount of groundwater withdrawn each year. 450,000

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

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

Signature of Owner Edward S. Rube

Date 12-23-63

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

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

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