

GROUNDWATER INDEX

Page ____ of ____

County Petrolem Twp. 17N Rge. 27E

[illegible]

File No. 182

DUPLICATE

T. 17 N. R. 27 E. 25

County Petroleum

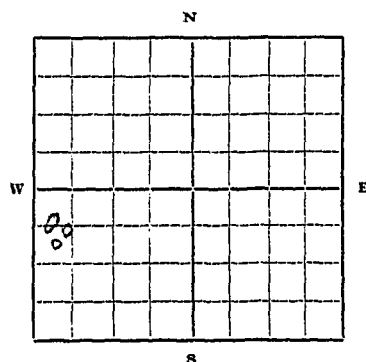
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

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

RECEIVED
SEP 17 1963
STATE ENGINEER

1. Rondall Brady, of Winnett, Mont. Winnett
(Name of Appropriator) (Address) (Town)

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



NW 1/4 Sec. 25 T. 17 N. R. 27 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 forty cows & their calves watered here & held within pasture fence.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been used 1940 & 2 or 3 months each year since then.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) One gallon 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 used for irrigation

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Water raised to the surface & overflows down the coulie.
NW 1/4 Sec. 25 T. 17 N. R. 27 E.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Three holes dug & one of them sided up with logs during the 1920

8. The depth of water table Water rises to the ground surface in each of the holes and overflows down the coulie.

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 One depress about 8 by 12 feet, slatted over poles nailed to logs so cattle can drink through. One well 3 by 5 feet 8 foot deep. One depression 5 by 10 foot with poles nailed on top of ditch logs leaving opening between poles for the cattle to drink through.

10. The estimated amount of groundwater withdrawn each year 150000 gallons

11. The log of formations encountered in the drilling of each well if available Muck on top of 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 Rondall Brady

Date 3/12/196

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.

#182

22105

STATE OF MONTANA, }
County of Petroleum. }

Filed SEP 13 1963 19

at 3:25 o'clock P. M.

Bonny L. Dengel

County Recorder.

Doris Carrell
Deputy

File No. 181T. 17 R. 27 29

DUPLICATE

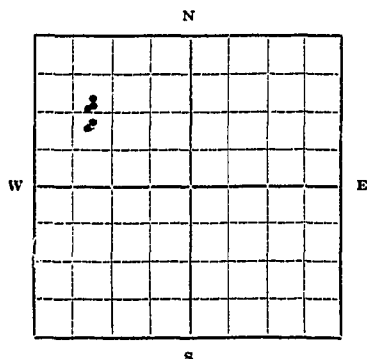
County Petroleum

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights SEP 17 1963
(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Rondell Brady, of Winnett, Mont. Winnett
(Name of Appropriator) (Address) (Town)
County of Petroleum State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 Sec 29 T. 17 N. R. 27 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 Cattle watered
3. Date or approximate date of earliest beneficial use; and how continuous the use has been Used first Feb. 1935 & each winter Since then
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 1 1/2 gal. per minute.
5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof Not applicable
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Water rises to the surface & overflows down the coulie from Oct. till July, & lowers in the wells during the hot weather. NW 1/4 sec. 29 T. 17 N. R. 27 E.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater One spring dug & cased up Feb. 28 1935 One dug & cased Oct. 10 1958 & a third one excavated Oct 12 1958.
8. The depth of water table Veins at two feet depth and a vein at 10 feet in one development
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 1935 spring 3 feet deep 3' wide by 12' long cased with timber covered with logs & dirt. 1958 spring 10' deep 10' by 5' Cased & covered. One hole excavated 1958 with dozer 4' deep 10' wide with 4 to 1 side slopes.
10. The estimated amount of groundwater withdrawn each year 259800 gallons.
11. The log of formations encountered in the drilling of each well if available Muck dr on to a rock at 10' shale
12. Such other information of a similar nature as may be useful in carrying out the purpose of this act, including reference to book and page of any county record.

Signature of Owner

Rondell Brady

Date

3-12-62

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.

5921.

#181

22104

STATE OF MONTANA, { ss.
County of Petroleum.

Filed SEP 13 1963 19

at 3:25 o'clock P. M.

Bonny L. Dengel

County Recorder.

Doris Carroll

Witness.

County of Petroleum

WINNETT, MONTANA 59087

January 30, 1968

MONTANA WATER RESOURCES BOARD

RECEIVED

FEB 7 1968

DOUGLAS DELANEY, CHAIRMAN
S. E. WIGGINS, COMMISSIONER
LESTER J. BEVIS, COMMISSIONER

Montana Water Resources Board
Sam W. Mitchell Building
Helena, Montana 59601

Dear Sirs:

On January 24, 1968, I mailed you a copy of Notice of Completion of Groundwater by Means of Well in the name of Rondall Brady, Winnett, Montana. In rechecking the description, we find there was a mistake in the reported description.

The well is located in the $\frac{SW}{4}$ $\frac{NE}{4}$ $\frac{SW}{4}$ of Section 30 Township 17 Range 27 of Petroleum County, Montana, instead of the $\frac{SW}{4}$ $\frac{SW}{4}$ as was reported.

Please change your records to agree with this new description.

Thank you.

Sincerely yours,

DIRECTOR OF RECORDS

Bonny L. Dengel
(Mrs.) Bonny L. Dengel

small square represents

Show exact depth of bottom.

Misemon Drilling

144
Driller's License Number

L. Misemon
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.

42,781

MONTANA WATER RESOURCES BOARD

RECEIVED

JAN 25 1968

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEERCounty Petroleum

Top of Ground

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

0-350-Sandy shale & sand-
Gray to white.350-610-Blue Gray to
Black shale.

610-612-Hard sand.

612-1193-Shale &

Mudstone-Gray-Lot

of bentonite in bottom

1193-1195-Hard sand-

white & limey.

1195-1215-Gray sandy

shale.

1215-1235-Gray sandy

shale-Very sandy in bottom

Bailed hole 8 hrs. could

NOT lower below 350 ft.

1235-1333-Gray Muddy

shale.

1333-1343-Fine sand.

1343-1710-Gray shale-

sandy.

1710-2210-Black to

Gray shale-Bentonite.

2210-2350-Sandy shale,

very sandy in places.

2350-2390-Black

shale & Bentonite.

Bottom-2390.

Notice of Completion of Groundwater
Appropriation by Means of Well

(Under Chapter 237, Montana Session Laws, 1961)

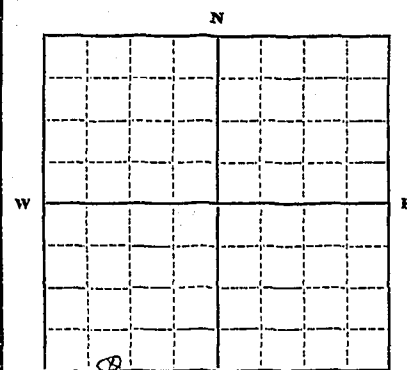
Owner Randall Brady AddressDriller K. Misamore Address Heath, Mont.

Date of Notice of Appropriation of Groundwater

Date well started Oct. 15, 1967 Date Completed Dec. 23, 1967Type of well Drilled Equipment Used Rotary(dug, 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)
6-in.	4 1/2" O.D. 9 Lb.	0	2290	Slots	2210	2390
				Torch Cut		



Section 30 T. 17 N. R. 27 E.
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 3.9 gal/min.

How Tested.....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).....

Packer set at 2170Driller's License Number 144Driller's Signature K. Misamore

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.

42, 781

256.34

W. Will # 295

STATE OF MONTANA,
County of Petroleum, } ss.

Filed JAN 24 1968

at 10:40 o'clock A.M.

Donny L. Bengel
Director of Records.

Joe. # 2, 12 Deputy

File No. 183T. 17 N. R. 27 E. 30
County Petroleum

DUPLICATE

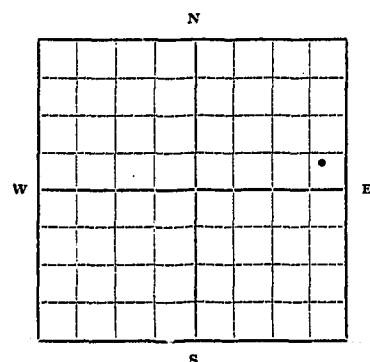
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEERRECEIVED
SEP 17 1963

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Rondall Brady, of Winnett, Montana Winnett
(Name of Appropriator) (Address) (Town)
County of Petroleum State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:

NE 1/4 Sec. 30 T. 17 R. 27

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 Water obtained for domestic & livestock use
3. Date or approximate date of earliest beneficial use; and how continuous the use has been Used since 1928. For household from 1928 till 1949 & have continued using for livestock
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 1/2 gal per minute
5. If used for irrigation, give the acreage and description of the lands to which water has been applied and name of the owner thereof No
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Electric pump hung 10' down in the well.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Well dug Sept. 1928 Electric pump installed 1956.
8. The depth of water table about 28'
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 Well is 31' deep 6" in diameter
10. The estimated amount of groundwater withdrawn each year 30000 gallons
11. The log of formations encountered in the drilling of each well if available sandy clay top 15' Shale from 15' to 31'
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

Rondall Brady
Date 3-12-62

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.

592.3

#183

22106

STATE OF MONTANA, } ss.
County of Petroleum.

Filed SEP 13 1963 19

at 3:25 o'clock P. M.

Bonny L. Dengel
County Recorder.

Doris Canell
Deputy

GROUNDWATER INDEX

Page of

County Petrozoum Twp. 17N Rge. 29E

[illegible]

Form No. 18
8-60

T. 17 R. 28
County Petroleum

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

5
RECEIVED
JUN 27 1961

WATER WELL LOG

STATE ENGINEER

Owner Grogan Ranch Address Roundup, Mont.
Driller P. L. Ferguson Address Roundup, Mont.
Date Started May 1, 1961 Date Completed May 3, 1961
Location: Sec. 5 T. 17 R. 28 $\frac{1}{4}$ sec. SW 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: 1 ft. to 71 ft. Type galv. Size 10 in.
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 40 feet at 60 gal. per min. _____

How tested: galing

Length of test 1 hr

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

(over)

Log of Well

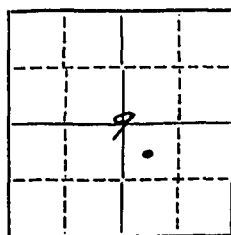
[illegible]

RECEIVED
JAN 26 1952

STATE ENGINEER

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG



Owner Wayne Bratten (Miller Ranch) Address Winnett, Montana
Driller M. L. Livingston Address Winnett, Montana
Date Started October 2, 1951 Date Completed October 11, 1951
Location: Sec. 22 T. 17 N. R. 28 E. $\frac{1}{4}$ sec. NW 1/4 SE 4

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: _____

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)

Ran 1979 feet of 4 1/2 inch C. D. 11 round 8 round thread casing; packer set at 1844 feet

(Larkin Figure 21 Packer with 16 inch rubber) perforations from 1846 feet to 1979 feet:

was flowing 3 gallons per minute.

(over)

17242

State of Montana
County of Petroleum

Filed Jan 22 1959

at 4:00 o'clock P. M.

Deane R. M. Baker
County Recorder.

Denny

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	10	surface soil
10	15	gravel
15	118	black and brown shale
118	400	black shale and shells
400	525	black shale and streaks of bentonite
525	825	black shale
825	990	black shale and shells and thin streaks of hard sand
990	1015	black shale and gypsum
1015	1050	soft to soft grey sand--lime and calcite streaks
1050	1093	black shale and bentonite
1093	1103	black shale, green shale, and soft grey clay
1103	1175	soft grey sand, grey clay, and shale streaks
1175	1230	shale, bentonite, and grey clay
1230	1255	shale and bentonite with hard sand streaks
1255	1300	black shale, bentonite, and grey clay
1300	1350	top of Claggett--dark shale and bentonite
1350	1375	black shale, bentonite, sand streaks with calcite
1375	1592	black and green shale, calcite and grey clay with shells
1592	1840	black and green shale, clay and some shells
1840	1850	black shale, bentonite, and sandy shale--Base of Claggett
1850	1855	soft sand--top of Eagle
1855	1890	shale and bentonite
1890	1950	fine, grey, soft sand
1950	1970	shale, grey clay, and sand streaks

T. 17 R. 28

County Petroleum

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED
JAN 5 1961

WATER WELL LOG

STATE ENGINEER

Owner Wayne Swanson Address Winnett

Driller W. L. Livingston Estate Address Winnett

Date Started December 29, 1960 Date Completed January 30, 1961

Location: Sec. 11 T. 17 R. 28 1/4 sec. N.E. 1/4 of the S.W. 1/4

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:

Casing: 0 ft. to 1993 ft. Type 2 & C Size 4 1/2" O. D.

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 1863 to ft. 1960 Ft. to ft.

Type of screen or perforations. Lane Wells gun perforated 51 shots from 910 to 955
51 shots from 1075 to 1095
41 shots from 1110 to 1130

Static Water level for non-flowing well: Well flooded 3 gal. per min. From 1000 increased to 5 gal. after perforating the Judith River

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)

Set Larin Figure 21 casing anchor packers. 1 at 917.58 ft. and 1 at 1061.24 ft

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	25	sand, gravel and shale
25	177	shale
177	202	black shale
202	350	black shale and grey clay
350	372	shale and clay
372	400	grey blue shale, some oyster shells
400	470	grey and black shale and bentonite
470	500	grey and black shale, bentonite and hard shell streaks
500	570	shale, bentonite and some clay
570	620	black shale, bentonite and scapstone
620	630	black shale, scapstone and sandy lime and bentonite
630	750	black shale, soft grey shale, bentonite and scapstone
750	810	black shale, some shells and grey clay
810	860	black and grey clay, hard limy sand
860	870	shale and sandy shale
870	890	shale, sandy shale and streaks of white calcite
890	900	shale, sandy shale, hard grey sand
900	936	shale, sandy shale and some medium hard sand
936	950	medium soft fine grey sand and sandy shale
950	970	medium soft grey sand, sandy shale and bentonite
970	980	sandy shale, bentonite and thin streaks hard calcite
980	1010	sandy shale, med soft sand, bentonite, hard chert and calcite
1010	1030	sandy shale, grey clay
1030	1090	Fine soft sand
1090	1130	sandy clay and shale
1130	1140	grey clay, sandy shale and chert
1140	1150	grey clay, shale, some shells
1150	1160	clay, shale and bentonite
1160	1190	sandy shale, clay and shale
1190	1230	hard sand and shale
1230	1250	hard limy sand, calcite, iron pyrites and shale
1250	1275	sandy lime, chert, shale and grey clay
1275	1310	sticky grey clay
1310	1322	black shale, limy sand streaks, bentonite and grey clay
1322	1407	black and grey clay, bentonite
1407	1763	grey and black shale, bentonite and some chert
1763	1800	light grey clay, sandy shale
1800	1860	hard sandy shale and grey clay
1860	1875	hard sandy shale
1875	1885	sandy shale and light

18816

103
U.R.M.

STATE OF MONTANA,
County of Petroleum.

Filed Dec 4 1967

at 1:45 o'clock P.M.

Deanne R. Merten
County Recorder.

Deputy.

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	25	sand, gravel and shale
25	177	shale
177	202	black shale
202	350	black shale and gray clay
350	370	shale and clay
370	400	gray blue shale, some oyster shells
400	470	gray and black shale and bentonite
470	500	gray and black shale, bentonite and hard shell streaks
500	599	shale, bentonite and some clay
599	620	black shale, bentonite and scapstone
620	630	black shale, scapstone and sandy lime and bentonite
630	780	black shale, soft gray shale, bentonite and scapstone
780	810	black shale, some shells and gray clay
810	860	black and gray clay, hard limy sand
860	870	shale and sandy shale
870	890	shale, sandy shale and streaks of white calcite
890	900	shale, sandy shale, hard gray sand
900	936	shale, sandy shale and some medium hard sand
936	950	medium soft fine gray sand and sandy shale
950	970	medium soft gray sand, sandy shale and bentonite
970	980	sandy shale, bentonite and thin streaks hard calcite
980	1010	sandy shale, red soft sand, bentonite, hard chert and calcite
1010	1080	sandy shale, gray clay
1080	1090	Fine soft sand
1090	1130	sandy clay and shale
1130	1140	gray clay, sandy shale and chert
1140	1160	gray clay, shale, some shells
1160	1190	clay, shale and bentonite
1190	1230	sandy shale, clay and shale
1230	1250	hard sand and shale
1250	1275	hard limy sand, calcite, iron pyrites and shale
1275	1310	sandy lime, chert, shale and gray clay
1310	1322	sticky gray clay
1322	1407	black shale, limy sand streaks, bentonite and gray clay
1407	1744	black and gray clay, bentonite
1744	1763	gray and black shale, bentonite and some chert
1763	1840	light gray clay, sandy shale
1840	1860	hard sandy shale and gray clay
1860	1875	hard sandy shale
1875	1885	sandy shale and light gray clay
1885	1960	Fine soft gray sand and some sandy shale and gray clay
1960	1975	black shale, gray clay, bentonite and some sand
1975	1995	black and gray shale

File No.

STATE WATER CONSERVATION BOARD

T. 17 R. 28

DUPLICATE

OCT 28 1966

County Petroleum

LOG

Billie _____ McNamee
 Burton _____ McNulty
 Coyne _____ Morton
 Darlington _____
 Dickson _____

STATE OF MONTANA

ADMINISTRATOR OF GROUNDWATER CODE

OFFICE OF STATE ENGINEER

Top of Ground

(Elev. above sea level...)

0 1 Topsoil
 1 12 Yellow clay
 12 40 Blue shale rock streaks
 40 45 Sandstone
 45 56 Shale
 56 71 Sandy shale
 71 76 Hard sandstone
 76 87 Coal streaked shale
 87 105 Light blue sandstone
 105 127 Grey shale
 127 132 Sandy shale
 132 180 Hard sandstone
 180 190 Shale

Notice of Completion of Groundwater Appropriation by Means of Well

DEVELOPED AFTER JANUARY 1, 1962

(Under Chapter 237, Montana Session Laws, 1961)

Owner Wayne Bratten Address Winnett, Lewistown, Mont.

Driller George O. Singley Address Lewistown, Mont.

Date of Notice of appropriation of groundwater None

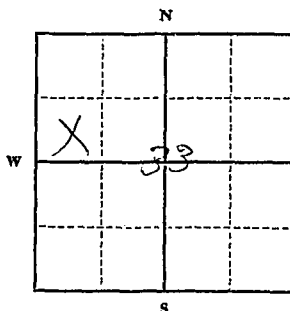
Date well started Sept. 28, 1966 Date completed Sept. 29, 1966

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

Water use: Domestic ☐ Municipal ☐ Stock ☒ Irrigation ☐
 Industrial ☐ Drainage ☐ Other ☐

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)
5-5/8	4 1/2 OD 4 1/2 ID	0	190			
		9	190			



Static Water Level for non-flowing well 130 feet.

Shut-in Pressure for Flowing Well 0

Pumping Water Level 180 feet

at 10 gal. per minute.

Discharge in gal. per min. of flowing well 0

How Tested.....

Length of Test.....

Remarks: (Gravel packing, cementing, pack-

1/4 Sec. 33 T. 17 R. 28
 Indicate location of well and place of use, if possible. Each small square represents 40 acres.

(Continue on reverse side)

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

Show exact depth of bottom.

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

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

19
 Driller's License Number

Driller's Signature
George O. Singley
 41,566

25040 File No. 285

STATE OF MONTANA,
County of Petroleum, } ss.

Filed 667 2-7 1966 19
at 2:50 o'clock P.

Donny L. Nengel
Director of Records.

Fee! \$2.00 Deputy

T. 17 R. 28 3/1
County Petroleum

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED
DEC 5 1961

#10 WATER WELL LOG STATE ENGINEER

Owner Wayne Bratten--at Spring Address Winnett, Montana
Driller George C. Singley Address Lewistown, Montana
Date Started Sept. 8, 1958 Date Completed Sept 13, 1958
Location: Sec. 34 T. 17 R. 28 1/4 sec. N. 1/4 of the N. 1/4

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

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

Above ground Casing: 2 ft. to 47 ft. Type S & S Size 5-3/16 ID
Casing: 45 ft. to 181 ft. Type S & S Size 4 1/2 ID

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

Perforated or Screened: Ft. 50 to ft. 140 Ft. _____ to ft. _____

Type of screen or perforations Slots

Static Water level, for non-flowing well: 57 feet.

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

Pumping water level 130 feet at 3 gal. per min.

How tested: Baling

Length of test 2 hr.

Remarks: (Gravel packing, cementing, packers, type of shut-off, depth of shut-off)
Sealed with 5" shoe

Log of Well

[illegible]

1981

98
D. R. M.

GROUNDWATER INDEX

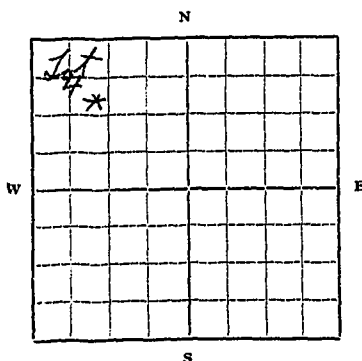
Page ____ of ____

County Petrolem Twp. 17N Rge. 29E

[illegible]

File No. 319

DUPLICATE

T. 17 N R. 29 E 13
County PetroleumSTATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEERDeclaration of Vested Groundwater Rights
(Under Chapter 237, Montana Session Laws, 1961)STATE ENGINEER
JAN 3 1962
RECEIVED1. James R. Gibson, of Mosby, Mont
(Name of Appropriator) (Address) (Town)
County of _____ State of _____
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:Lot 4 Sec. 13 T. 17 R. 29Indicate 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 and irrigation
3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1904 every year
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 20 G.P.M.
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 2 A. in Lot 4, Sec 13, T. 17, R. 29
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 1904
8. The depth of water table 15 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, 4 ft. galvanized steel casing
10. The estimated amount of groundwater withdrawn each year 10,000,000 gallons
11. The log of formations encountered in the drilling of each well if available loam to gravel
12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record Book 86 of Laws, Page 114
Records of Petroleum County, Mont.

Signature of Owner James R. GibsonDate 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.

20884

22377

#28

STATE OF MONTANA, }
County of Petroleum, }

Filed DEC 30 1963 19

at 1:30 o'clock P. M.

Bonny L. Dengel

Director of Records.

Chris Coville
Deputy

File No. 193

T. 17 N. R. 29 E.

DUPLICATE

County Petroleum

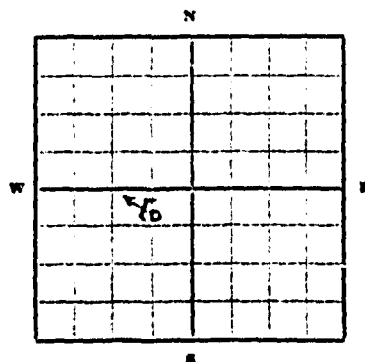
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECORDED
DEC 23 1963

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

STATE ENGINEER

1. Bureau of Land Management of Drawer 699 Lawistown
(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:



W 1/4 Sec 30 T. 17 N. R. 29 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 for livestock water
3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1961 to present
4. The amount of groundwater claimed (in miner's inches or gallons per minute) All (4 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 N/A
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal Gravity flow to catch basin
SW
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Started 4/11/61 - completed 7/7/61
8. The depth of water table Surface discharge - ground seep
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 Seep from ground collected in a 24" x 4' section of culvert - water carried by plastic pipe to stock tank
10. The estimated amount of groundwater withdrawn each year 250,000 gallons
11. The log of formations encountered in the drilling of each well if available Seepage from the Ball Creek formation - surface elevation approximately 3000'
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 Leath M. Cotton
District Manager
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.

11704

22334 File # 193/Bed

STATE OF MONTANA,
County of Park }
}

Filed DEC 19 1963

at 12:40 o'clock P.M.

Donny L. Sengel
Director of Public Safety

30:2.2 Deputy

GROUNDWATER INDEX

Page of

County Potomac Twp. 16N Rge. 24E

[illegible]

G

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

File No. 247T 16 N R 24 E

DUPLICATE

County Petroleum

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

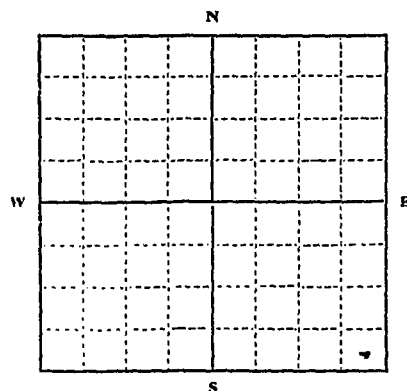
RECORDED
JAN 3 1963

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Floyd D Harris, of Grass Range Mt
(Name of Appropriator) (Address) (Town)
County of Petroleum State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SE 1/4 Sec. 7, T. 16 N. R. 24 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 & House use

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

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 2.5 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 used for irrigation except for garden

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater. Sept 10, 51 to Oct 20 - 1952
An estimate of usage is about 1/3 of the water available
It is cut down through use of a valve

8. The depth of water table. 1100 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.
This well is cased with 2 in casing to a depth of 1100 ft

10. The estimated amount of groundwater withdrawn each year. an estimated 4,680,000

11. The log of formations encountered in the drilling of each well if available.
none No log was made on this well

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 Floyd D HarrisDate Jan 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.

20912

22409

STATE OF MONTANA, }
County of Petroleum, } ss.

Filed DEC 31 1963 19__

at 2:30 o'clock P. M.

Sonny L. Styer
Director of Records.

2.00

Deputy

RECEIVED
JAN 8 1958
STATE ENGINEER

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

T. 16N R 21E
County Petroleum

WATER WELL LOG

			X

Owner Earl H. Bassett Address Grass Range, Montana
Driller W. L. Livingston Address Winnett, Montana
Date Started April 1950 Date Completed May 1950
Location: Sec. 15 T. 16 R. 24 $\frac{1}{4}$ sec. S.E.

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: _____

Casing: 0 ft. to 1070 ft. Type Black thread Size 4 1/2" O.D.
Casing: _____ ft. to _____ ft. Type coupling Size _____
Casing: _____ ft. to _____ ft. Type _____ Size _____

Perforated or Screened: Ft. _____ to ft. _____ Ft. _____ to ft. _____

Type of screen or perforations Shot Perforation

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

Shut-in pressure, for flowing well: 60 lb./sq. in. on: 1951 (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)

Ran 1067 ft of 4 1/2" O.D. casing 45 feet of perforations on bottom. Packer set

45 feet off bottom collar 5 ft below surface level. Well flowing 40 gal per minute

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	18	Shale
18	21	Gravel
21	45	shale and sand
45	160	Dark firm shale- streaks of bentonite
160	200	soft grey shale " " "
200	290	hard shale lime shells and bentonite streaks
290	315	Firm shale and straks hard grey sand
315	320	firm dark shale
320	395	dark firm shale and streaks of Bentonite
395	420	dark firm shale and streaks of bentonite
420	465	dark firm shale and streaks of bentonite
465	490	dark and light shale- some bentonite
490	495	soft sandy shale
495	520	soft grey shale
520	580	soft grey shale
580	605	various colored shales
605	610	various colored shales & sand
610	675	various colored shale and sand streaks
675	700	soft grey sand
700	705	sand and streaks of shale
705	735	dark shale
735	745	red shale
745	835	red shale- grey shale and black shale
835	885	various colored shale
885	930	Various colored shale and hard grey sand
930	960	various colored shale
960	970	soft salt and pepper sand
970	1020	Various colored shale
1020	1030	Various colored shale and hard lime shells
1030	1068	soft dark grey salt and pepper sand
1068	1070	shale.

53
U.R.M.

16311

FILED FOR MON. JAN. 7, 1958
County of Petroleum
Filed Jan. 7 1958
at 2:05 o'clock P.M.
Helena R. Mester
County Recorder.

County of Petroleum

LESTER J. BEVIS, CHAIRMAN
ROBERT E. WEINGART, COMMISSIONER
S. E. WIGGINS, COMMISSIONER

WINNETT, MONTANA 59087

February 22, 1973

Department of Natural Resources and Conservation
Helena, Montana 59601

Dear Sirs:

There is a location correction to be made on the Lewis Brothers GW 2
Document No. 27472-File No. 322-Filed July 10, 1972.

Corrected location

NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 19
T 16 N R 24 E

Yours truly,

Orino Barber

Director of Records
Petroleum County

RECEIVED
FEB 23 1973

See attached letter NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 19
T. 16 N R. 24 E

packers, type of shutoff, etc.
cemented by Halliburton
with 11.5 sks type 2
cement from 0-1098

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE.
EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature *B. M. Hanson*

Driller's Address Grass Range, Montana

LICENSE NO. 26
at 1264 specks of Hydro carbon (coal)

1210	1215	hydrocarbon
1215	1220	Sand & lime base
1220	1225	Sand strks & lime
1225	1230	chale
1230	1240	Salt & pepper sand
1240	1245	(fine) siltstone lay
1245	1250	crs
1250	1255	Salt & pepper sand
1255	1260	(good porosity) in-
1260	1265	crease in H ₂ O flow
1265	1270	Salt and Pepper. S.
1270	1275	fair porosity
1275	1280	Show exact depth of bottom
1280	1285	1268 1270 Coal & silty sand T.D.
1285	1290	TOP of MORRISON

50880

RECEIVED

County Petroleum

JUL 14 1972

DRILLER'S LOG

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES BOARDMONTANA DEPARTMENT OF NATURAL
RESOURCES AND CONSERVATIONNOTICE OF COMPLETION OF GROUNDWATER
APPROPRIATION BY MEANS OF WELL

Developed after January 1, 1962

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

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, last copy to be retained by driller. Please answer all questions. If not applicable, so state, otherwise the form may be returned.

Owner Lewis Bros.Address Grass Range, Mont.

For Administrator's Use

File # 392-27422July 16, 1972 9:00amDate well started March 21, 1972

GW 1

completed April 12, 1972Type of well Drilled

(Dug, driven, bored or drilled)

Equipment used Rotary

(Churn drill, rotary or other)

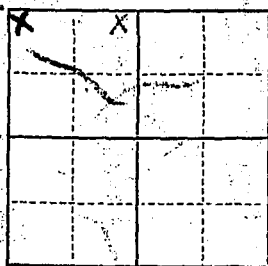
Water Use: Domestic ☐ Municipal ☐ Stock ☒ Irrigation ☐Industrial ☐ Drainage ☐ Other ☒ Garden/Lawn ☐

*Describe

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).

ESTIMATED ANNUAL WITHDRAWAL could use 10,000,000 gal.

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS
13 1/2	26#	0	40	Kind of surface cement open
6 1/2-3 7/8	8 5/8	0	40	From (Feet) To (Feet)
	4 1/2 19#	40	1270	1098 1270
		0	1098	



artesian

Static water level _____ ft.*

Pumping water level _____ ft.*

at _____ gallons per minute,

measured _____ minutes after pumping

began _____ min. shut in _____ hrs.

*Measured from ground level.

Well developed by artesian

for _____ hours.

Power _____ Pump _____ HP

Remarks: (Gravel packing, cementing,

packers, type of shutoff) casecemented by Halliburtonwith 145 sks type 2cement from 0-1098

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature B. M. MunsonDriller's Address Grass Range, MontanaLICENSE NO. 26

at 1264' speaks of Hydro carbon (coal) 1268 1270 Coal & silty sand T.D.

TOP of MORTON

50,880

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

Top of Ground

(Elev. above sea level)

From (Feet)	To (Feet)	
0	28	Unconsolidated formation, gravel-gravel shale streaks
28	40	Shale to firmer shale streaks
40	600	Light gray shales to dark gray strata and thin layers of fossil streaks, Bentonite layers
600	692	Shale with sandstone stringers
692	723	Hard dark shale, bits of sandstone, thin Bentonite streaks
723	770	Shale, tight gray sand
770	780	Fine gray sandstone with calcareous lens
780	789	Gray sandstone, good porosity H ₂ O flow
789	830	First Cat Creek Sand Sandstone layers
830	833	Black shale streaks
833	879	Red clay Top of Kootenai
879	915	Red clay and red shale, chert strata
915	960	Lime shale and red siltstone
960	965	Gray to white sand
965	1005	2nd Cat Creek Sand Red claystone
1005	1026	Black shale streaks thin limestone strata
1026	1080	Quartz sandstone with lime matrix
1080	1103	Red clay, chunky calcareous shale and lime strata
1103	1120	Limestone, some fine sugar sand grains Top of 3rd Cat Creek
1120	1130	Lime
1130	1140	Lime sand
1140	1150	Lime sand
1150	1165	Sugar sand (H ₂ O) flow
1165	1190	Salt and pepper sand (good porosity)
1190	1210	Shale, lime-few specks hydrocarbon
1210	1215	Sand thin lime base
1215	1230	Sand strata & lime shale
1230	1240	Salt & pepper sand (bits) siltstone layers
1240	1260	Salt & pepper sand (good porosity) increase in H ₂ O flow
1260	1268	Salt and Pepper S. fair porosity
1268	1270	Coal & silty sand T.D.

४३२

STATE OF MONTANA, }
County of Petroleum, } ss.

Filed JUL 10 1972 19

at 9:00 o'clock A M.

Orville Barber
Director of Records.

Dec 20⁰⁰ Deputy

December 6, 1972

Mrs. Orene Barbee
Director of Records
County of Petroleum
Winnett, Montana 59087

Dear Mrs. Barbee:

This is in response to the attached form letter, and Notice of Completion of Groundwater Appropriation By Means of Well form filed by the Lewis Brothers of Grass Range, Montana on July 10, 1972 at 9:00 AM, document number #322 - 27472.

The form letter that we sent to the Lewis Brothers stated:

"Please check the well location! T. 16 N, R. 23 E, is located in Fergus County and not Petroleum County as indicated. If the well is located in Fergus County, the appropriation should be filed in that county."

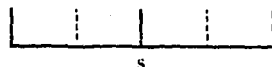
You responded with the following after Mr. Lewis had visited your office:

"Mr. Lewis was in my office and informed that the Section number on this well is wrong. It should be Sec. 19 which lies in Petroleum County. Would you please advise me what procedures to take to change this."

According to what you have stated above, Mr. Lewis' well is located in Section 19, Township 16 North, Range 23 East. This location is still in Fergus County and not Petroleum County. Changing the section number from 23 to 19 has not taken the well location out of Fergus County. Please refer to the enclosed xerox copy of a map showing a portion of Fergus County. The heavy black line represents the eastern and southern boundary of that portion of Fergus County. Sections 19 and 23, Township 16 North, Range 23 East are indicated in red.

It may be necessary to contact Mr. Lewis and recheck the location.

Any changes made on the original filing, such as the change of the section, could be done by means of an affidavit. We do not have any rules or regulations setting forth the manner in which original forms may be changed. As long as you are satisfied that the change is properly done and recorded, it should be okay.



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

T. 16 N. R. 23 E. S. 19

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE. EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature *B. M. Johnson*

Driller's Address *Grass Range, Montana*

LICENSE NO. *26*

Show exact depth of bottom

50880

S. Drene Barbee
December 6, 1972
Page 2

We would like to be notified of any changes made on originals so our records can also be kept current and accurate. Please find enclosed two copies of the pamphlet, Appropriation and Regulation of Groundwater for use in your office.

If we can be of further assistance in this matter, please feel free to contact us at any time.

Sincerely,

Ronald J. Guse
Groundwater Rights Coordinator
WATER RESOURCES DIVISION

RJG/1k

Enclosures (4)

cc: Lewis Brothers
Grass Range, Montana 59032

7

S	
1/4	1/4 Sec.
T. 15	N. R. 2 E
S	W

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE.
EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature B. M. Merson

Driller's Address Grass Range, Montana

Remarks: (Gravel packing, cementing, packers, type of shutoff) constant flow 0-10 gpm

LICENSE NO. 216

Show exact depth of bottom 50,880

Owner Lewis Brothers
Address Grass Range, MT 59032
Location T.16N R. 23E Sec. 23
Doc. No. 322-27472

Special Instructions:

Would you please advise me what procedures to take to change this.

Orene Barker
Director of Records

70	71	Red clay and sand
72	73	Red clay and sand
74	75	Red clay and sand
76	77	Red clay and sand
78	79	Red clay and sand
80	81	Red clay and sand
82	83	Red clay and sand
84	85	Red clay and sand
86	87	Red clay and sand
88	89	Red clay and sand
90	91	Red clay and sand
92	93	Red clay and sand
94	95	Red clay and sand
96	97	Red clay and sand
98	99	Red clay and sand
100	101	Red clay and sand
102	103	Red clay and sand
104	105	Red clay and sand
106	107	Red clay and sand
108	109	Red clay and sand
110	111	Red clay and sand
112	113	Red clay and sand
114	115	Red clay and sand
116	117	Red clay and sand
118	119	Red clay and sand
120	121	Red clay and sand
122	123	Red clay and sand
124	125	Red clay and sand
126	127	Red clay and sand
128	129	Red clay and sand
130	131	Red clay and sand
132	133	Red clay and sand
134	135	Red clay and sand
136	137	Red clay and sand
138	139	Red clay and sand
140	141	Red clay and sand
142	143	Red clay and sand
144	145	Red clay and sand
146	147	Red clay and sand
148	149	Red clay and sand
150	151	Red clay and sand
152	153	Red clay and sand
154	155	Red clay and sand
156	157	Red clay and sand
158	159	Red clay and sand
160	161	Red clay and sand
162	163	Red clay and sand
164	165	Red clay and sand
166	167	Red clay and sand
168	169	Red clay and sand
170	171	Red clay and sand
172	173	Red clay and sand
174	175	Red clay and sand
176	177	Red clay and sand
178	179	Red clay and sand
180	181	Red clay and sand
182	183	Red clay and sand
184	185	Red clay and sand
186	187	Red clay and sand
188	189	Red clay and sand
190	191	Red clay and sand
192	193	Red clay and sand
194	195	Red clay and sand
196	197	Red clay and sand
198	199	Red clay and sand
200	201	Red clay and sand

59,580

JUL 11 1972

County: etrolen

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES 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)

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, last copy to be retained by driller.

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

Owner James J. Smith

Address ...Grass Range, Mont.

Date well started March 21, 1972

completed 21 72 222

Type of well ...2:1:1:1:1:1

(Dug, driven, bored or drilled)

Equipment used factory

(Churn drill, rotary or other)

Water Use: Domestic ☐ Municipal ☐ Stock ☒ Irrigation ☐

Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*Describe

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).

could use

ESTIMATED ANNUAL WITHDRAWAL 10,000,000 gal.

Size of Dottle- Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Khd Size Surface Current Open	From (Feet)	To (Feet)
134	20	0	40			
	3 5/8	0	40			
1-3 7/8		40	1270			
	4-2 1/2	0	1075			

artesian
Static water level _____ ft.*
Pumping water level _____ ft.*
at _____ gallons per minute,
measured _____ minutes after pumping
began. 12 in shut in 45
*Measured from ground level.
Well developed by _____
for _____ hours.
Power. _____ Pump. _____ HP
Remarks: (Gravel packing, cementing,
packers, type of shutoff) _____

T. 15^{1/4} (N) R. 23^{1/4} Sec. 23 (E) S W

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE.
EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature _____

Driller's Address Graves Road, C. 11, T. 11, S. 11

LICENSE NO.:

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

Top of Ground

(Elev. above sea level)

From (Feet)	To (Feet)	
22	23	Dark gray clay, shaly
23	24	Dark gray clay, shaly
24	25	Dark gray clay, shaly
25	26	Dark gray clay, shaly
26	27	Dark gray clay, shaly
27	28	Dark gray clay, shaly
28	29	Dark gray clay, shaly
29	30	Dark gray clay, shaly
30	31	Dark gray clay, shaly
31	32	Dark gray clay, shaly
32	33	Dark gray clay, shaly
33	34	Dark gray clay, shaly
34	35	Dark gray clay, shaly
35	36	Dark gray clay, shaly
36	37	Dark gray clay, shaly
37	38	Dark gray clay, shaly
38	39	Dark gray clay, shaly
39	40	Dark gray clay, shaly
40	41	Dark gray clay, shaly
41	42	Dark gray clay, shaly
42	43	Dark gray clay, shaly
43	44	Dark gray clay, shaly
44	45	Dark gray clay, shaly
45	46	Dark gray clay, shaly
46	47	Dark gray clay, shaly
47	48	Dark gray clay, shaly
48	49	Dark gray clay, shaly
49	50	Dark gray clay, shaly
50	51	Dark gray clay, shaly
51	52	Dark gray clay, shaly
52	53	Dark gray clay, shaly
53	54	Dark gray clay, shaly
54	55	Dark gray clay, shaly
55	56	Dark gray clay, shaly
56	57	Dark gray clay, shaly
57	58	Dark gray clay, shaly
58	59	Dark gray clay, shaly
59	60	Dark gray clay, shaly
60	61	Dark gray clay, shaly
61	62	Dark gray clay, shaly
62	63	Dark gray clay, shaly
63	64	Dark gray clay, shaly
64	65	Dark gray clay, shaly
65	66	Dark gray clay, shaly
66	67	Dark gray clay, shaly
67	68	Dark gray clay, shaly
68	69	Dark gray clay, shaly
69	70	Dark gray clay, shaly
70	71	Dark gray clay, shaly
71	72	Dark gray clay, shaly
72	73	Dark gray clay, shaly
73	74	Dark gray clay, shaly
74	75	Dark gray clay, shaly
75	76	Dark gray clay, shaly
76	77	Dark gray clay, shaly
77	78	Dark gray clay, shaly
78	79	Dark gray clay, shaly
79	80	Dark gray clay, shaly
80	81	Dark gray clay, shaly
81	82	Dark gray clay, shaly
82	83	Dark gray clay, shaly
83	84	Dark gray clay, shaly
84	85	Dark gray clay, shaly
85	86	Dark gray clay, shaly
86	87	Dark gray clay, shaly
87	88	Dark gray clay, shaly
88	89	Dark gray clay, shaly
89	90	Dark gray clay, shaly
90	91	Dark gray clay, shaly
91	92	Dark gray clay, shaly
92	93	Dark gray clay, shaly
93	94	Dark gray clay, shaly
94	95	Dark gray clay, shaly
95	96	Dark gray clay, shaly
96	97	Dark gray clay, shaly
97	98	Dark gray clay, shaly
98	99	Dark gray clay, shaly
99	100	Dark gray clay, shaly

4-Show exact depth of bottom

50,380

GV.

Approved Stock Form—State Publishing Co., Helena, Montana—42254

File No. 213

T. 16 R. 24 E.

DUPLICATE

County _____

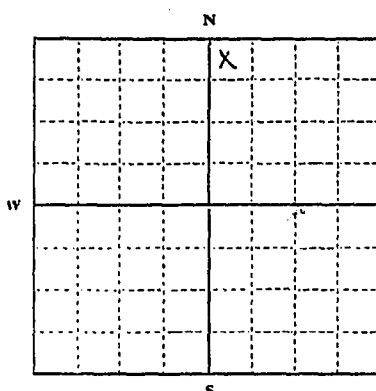
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 30 1963

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. David W. and William W. Lewis, of Burrass Range, Montana,
(Name of Appropriator) (Address) (Town)
County of Petroleum State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW 1/4 NE Sec. 20 T. 16 R. 24

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, irrigation and household use
3. Date or approximate date of earliest beneficial use; and how continuous the use has been Well drilled in September 1952
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 43 Gallons per minute when irrigating
xxx other use about five 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 We are the owners in NW 1/4 of Sec. 20,
Twp. 16 N. Range 24 East, in Petroleum Co.,
Montana, about eight acres
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal It is an artesian flow, located as shown "x"

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Commenced in Sept. 1952 and completed that month
8. The depth of water table 1160 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 Casing is two inch size at full depth
10. The estimated amount of groundwater withdrawn each year 43 Gals. per minute irrigating
about 20 days per year, other use
about five gallons per minute all
11. The log of formations encountered in the drilling of each well if available (year)
not available, but water comes from third Cat Creek 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 no record was given us doubt if he
kept any.

David W. and William W. Lewis
Signature of Owner By William W. Lewis
Date Dec. 27th 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.

15501

22368

213

STATE OF MONTANA

County of ...

Filed DEC 30 1963

at 10:33 o'clock A.M.

Donny L. Ringel

Jul. S. Co

Deputy

GW3

File No. 214

DUPLICATE

T. 16 R. 24 E. 20
21County Petroleum

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
DEC 30 1963

STATE ENGINEER

Notice of Completion of Groundwater Appropriation Without Well

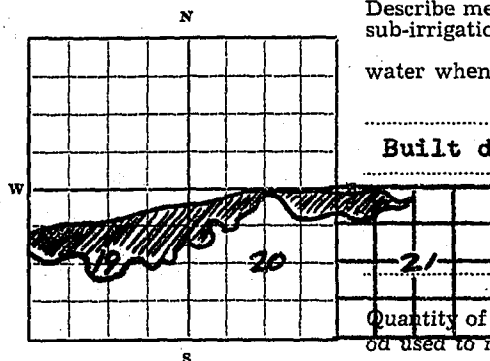
(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater About 1954
Owner David W. Lewis and William W. Lewis Address Grass Range, Mont,

Contractor (if any) _____

Address of Contractor We have done the workDate Started 1954 Date Completed 1962

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



Built dikes, which raised water level,
and sub-irrigation

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 _____

_____ 1/4 Sec. 16N 24E tent estimate approximate lengths of periods of use _____

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

shown above

all plants would take built dikes and
raising water level, which creates sub-irrigation

Signature of Owner David W. Lewis and William W. Lewis
By William W. Lewis

Date Dec. 27, 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 School of Mines and Quadruplicate for the Appropriator.

15502

22369

#214

STATE OF MONTANA,
County of Petroleum, } ES.

Filed DEC 30 1963 19
At 10:35 o'clock A.M.

Donny D. Dingle
Clerk of Records

Frederic D. Deputy



1963 12 30

Form No. 18
8-60

T. 16 N R. 24 E

County ~~Terrell~~ Petroleum

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED
NOV 7 1961

WATER WELL LOG

STATE ENGINEER

		*

Owner Earl H. Bassett Address Grass Range, Montana

Driller Wellman & Munson Drlg. Co. Address Grass Range, Montana

Date Started Sept. 1, 1961 Date Completed Sept. 26, 1961

Location: Sec. 28 T. 16 N R. 24 E $\frac{1}{4}$ sec. NE $\frac{1}{4}$ Of NE $\frac{1}{4}$

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 _____

Casing: 0 ft. to 17 ft. Type Steel, 17lb. Size 7 $\frac{5}{8}$

Casing: 0 ft. to 970 ft. Type Steel, 11 lb. Size 4 & 1/2 O. D.

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: Approx. 40 lb./sq. in. on: Sept. 26, 1961
(date)

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

How tested: _____

Length of test _____

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

Halliburton shoe at 970 ft. Cemented with Halliburton - 48 sks.

(over)

Log of Well

[illegible]

RECEIVED 16N 24E 3A
County Petroleum

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
MONTANA WATER RESOURCES 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)

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, last copy to be retained by driller.

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

Owner <u>Henry Lumbke</u>	For Administrator's Use
Address <u>Tucson</u>	File # <u>326, 27,550</u>
<u>Montana</u>	<u>Nov. 3, 1992 11:20 a.m.</u>
Date well started <u>June 15, 1953</u>	GW 1
completed <u>July 7, 1953</u>	

Type of well Drilled
(Dug, driven, bored or drilled)

Equipment used Rotary
(Churn drill, rotary or other)

Water Use: Domestic ☒ Municipal ☐ Stock ☒ Irrigation ☐

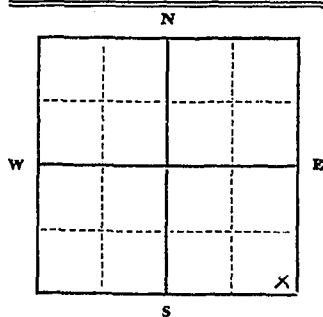
Industrial ☐ Drainage ☐ Other ☐* Garden/Lawn ☐

*Describe

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).

ESTIMATED ANNUAL WITHDRAWAL

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS		
				Kind Size	From (Feet)	To (Feet)



Static water level Flowing ft.*
Pumping water level 0 ft.*
at 9 gallons per minute,
measured minutes after pumping
began.

*Measured from ground level.

Well developed by
for hours.

Power..... Pump..... HP

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

SE 1/4 SE 1/4 Sec. 34
T. 16 N. R. 24 E. W.
Imperial Park - 526
gal. a minute
Electric 1/2 H. P. Motor

INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE.
EACH SMALL SQUARE REPRESENTS 40 ACRES.

Driller's Signature WAS M. A. Cantrel

Driller's Address

LICENSE NO.....

DRILLER'S LOG

Indicate the character, color, thickness of strata such as soil, clay, sand, gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well.

Top of Ground (Elev. above sea level) _____

[illegible]

1218 Show exact depth of bottom

51,746

27550

336

Henry Huebke

STATE OF MONTANA,
County of Petroleum, } ss.

Filed NOV 3 1972 19

at 11:20 o'clock A. M.

Orene Barber
Director of Records.

Deputy

GROUNDWATER INDEX

Page ____ of ____

County Petroleum

Twp. 16N

Rge. 2.5E

[illegible]

RECEIVED
JUN 2 1959

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

STATE ENGINEER

WATER WELL LOG

	X	

Owner E. J. Skibby Address Lewistown, Montana

Driller W. L. Livingston Address Winnett, Montana

Date Started May 8, 1959 Date Completed May 26, 1959

Location: Sec 1 T 16 N R 25 E $\frac{1}{4}$ sec. NE $\frac{1}{4}$ -NW $\frac{1}{4}$

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: _____

Casing: Ground level to 760 ft. Type Thread and coupled 4 $\frac{1}{2}$ " O.D. 9 $\frac{1}{2}$ "

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

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

Perforated or Screened: Ft. 722 to ft. 760 Ft. _____ to ft. _____

Type of screen or perforations Slot 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: Artesian - 70 gallons per minute

Length of test _____

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

Larkin figure 21 packer set at 722 feet. 2" shut off valve on top.

①

(over)

Log of Well

Depth, feet		Description of Material Drilled bushings, 3 feet above ground level.
From	To	
0	26	Surface soil, gravel and loose brown sand
26	260	Grey and black shale and bentonite
260	350	bluish black shale and hard sand streaks, some lime
350	360	Hard coarse sand
360	388	Sandy shale and hard sand streaks
388	415	Hard sand
415	430	Black shale and bentonite, some sandy streaks
430	530	Red and grey shale, bentonite, and hard sand streaks
530	550	White chalky shale and red shale
550	610	Grey shale, soft salt and pepper sand, some red shale
610	646	Quartz, hard sand, igneous rock, grey shale and tan dolomite
646	705	Hard sandy lime, red and grey shale
705	710	Whitish grey and red shale
710	715	Fine grained sand (medium soft)
715	717	Soft white clay and sand
717	724	Red and grey shale, some sand streaks
724	758 S	Soft, coarse, hard salt and pepper sand(3rd C. C.)
758	763	sandy shale (Bottom)

STATE OF MONTANA,
County of Petroleum.

Filed June 1 1959

Witness
Richard A. M.
County Recorder.

1635

70
u.s. km

File No.

DUPLICATE

RECEIVED

T. 16 N.R. 25 E

County. Petroleum

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED

Declaration of Vested Groundwater Rights

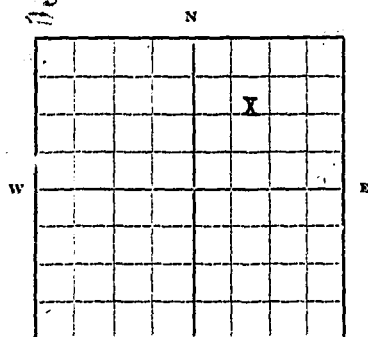
(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Edward J. Skibby of Box 123 Lewistown
(Name of Appropriator) (Address) (Town)

County of Pergus State of Montana.

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



Net, NW 1/4 Sec. I, T. 16 R. 25

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 and Irrigation
3. Date or approximate date of earliest beneficial use; and how continuous the use has been Earliest use, May 26, 1959, this well has been used constantly since that date for Livestock and Irrigation
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 70 gals. 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 3 acres, Net, NW 1/4 Sec. I, T. 16 N.R. 25E Land owned by Edward J. Skibby
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal This well is flowing thru a 4 1/2" casing at a rate of 70 gals. per. minute at 45 lbs. pressure
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Well commenced about May 5, 1959 and completed May 26, 1959
8. The depth of water table 722 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 depth of well, 760 ft., flowing thru 4 1/2" casing from 3rd and 4th Creek sand.
10. The estimated amount of groundwater withdrawn each year 15,768,000
11. The log of formations encountered in the drilling of each well if available 0 ft. to 350 ft. sand gravel 350 ft. to 415 ft. coarse hard sand, 415 ft. to 610 ft. black, red, white shale, 610 ft. to 715 ft. sands, 715 ft. to 760 ft. red and grey shale, bottom sandy shale.
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 Water very soft, temperature 55° at well head, very suitable for stock water and irrigation.

Signature of Owner

Date

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.

1336

20030

#139
V.D.

STATE OF MONTANA, } ss.
County of Petroleum. }

Filed FEB 9 1962 19

at 8:45 o'clock A.M.

Velma R. Mason

County Recorder.

Velma Mason

Deputy

File No.

DUPLICATE

Flowing

RECEIVED

T. 16 R. 25

County Petroleum

STATE ENGINEER
STATE OF MONTANA

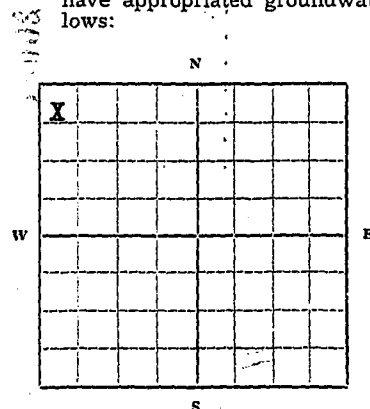
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED

STATE ENGINEER

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

1. Edward J. Skibby, of Box 123 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:



NW 1/4, NW 1/4 Sec. 7, T16 R. 25

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 irrigation
3. Date or approximate date of earliest beneficial use; and how continuous the use has been September 2, 1953
Continues flow for Stock and Irrigation
4. The amount of groundwater claimed (in miner's inches or gallons per minute) 75 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 Garden plot 200ft. x 100ft.
NW 1/4, NW 1/4 Sec 7, T16 R25 Owner, Edward J. Skibby
6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
This well is flowing, app. pressure at casing head, 1/5 lbs. per square inch.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Commenced about August 18th, Completed, September 2nd 1953.
8. The depth of water table 237 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 depth of well, 303 feet, flowing.
Size of casing, 4 3/4 inches, from 3rd Cat Creek.
10. The estimated amount of groundwater withdrawn each year app. 5,256,000 gals.
11. The log of formations encountered in the drilling of each well if available 0ft-119 ft. gravel
red and grey shale, various types of sand from 119 ft. to 299 ft.
Bottom, 303 ft., Hard sand and lime.
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.
Water of a very soft nature, a temperature of 69 at well head, very
suitable for livestock and irrigation.

Signature of Owner

Date

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.

1335

20031

140
V.D.

STATE OF MONTANA, } ss.
County of Petroleum.

Filed FEB 9 1962 19

at 8:50 o'clock A M.

Velma R. Morton

County Recorder.

Velma R. Morton
Deputy

File No.

DUPLICATE

Flowing
RECEIVED
 FEB 13 1962

T. 16N R. 25 E

County...Petroleum.....

STATE ENGINEER
 STATE OF MONTANA

ADMINISTRATOR OF GROUNDWATER CODE
 OFFICE OF STATE ENGINEER

RECEIVED
 FEB 2 1962

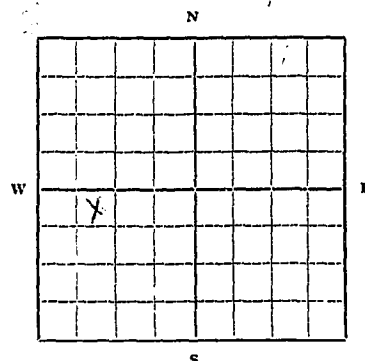
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. Edward J. Skibby of Box 123 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:



NW 1/4, SW 1/4 Sec. 7 T. 16 R. 25

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
Earliest use September 10, 1956, this well has been in use since then.
4. The amount of groundwater claimed (in miner's inches or gallons per minute)
15 gals. 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
This well is flowing at a rate of 15 gals. per. minute thru a 4 1/2" casing.
7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater
Commenced about Sept 1st., completed Sept. 16th.
8. The depth of water table
65 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
Depth of well, 96 feet, flowing thru 4 1/2" casing from second Cat. Creek sand.
10. The estimated amount of groundwater withdrawn each year
9884,000
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
Water soft, very good Stock water, temperature app. 45°.

Signature of Owner E. J. SkibbyDate Feb 1, 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.

1.37

20033

#142
V.D.

STATE OF MONTANA,
County of Petroleum.
FEB 9 1962

Filed

at 9:05 o'clock A.M.

Velma R. Merien

County Recorder.

Velma Daum

Deputy

T. 16 R. 25
County Hot Springs

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

STATE ENGINEER

WATER WELL LOG

Owner Don B. Deyoe Address Polson, Montana
Driller Livingston State Address Minnett, Montana
Date Started August 12, 1960 Date Completed August 20, 1960
Location: Sec. 9 T. 16 N R. 25 E $\frac{1}{4}$ sec. 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: _____

Casing: 0 ft. to 950 ft. Type T & C Size 1 1/2" O. D.

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

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

Perforated or Screened: Ft. 917 to ft. 950 Ft. _____ to ft. _____

Type of screen or perforations Perforations

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

Shut-in pressure, for flowing well: 30 lb./sq. in. on: Aug 24 (date)

Pumping water level: Artesian flowing feet at 1 gal. per min.

How tested: _____

Length of test: _____

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

Packer set at 851 ft.

6 1/2" hole drilled to 851 ft. 6 5/8" hole drilled from 851 ft. to 950 ft.

(over)

T. 16 R. 23
County: Liberty

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

STATE ENGINEER

WATER WELL LOG

Owner: Don B. Deyoe Address: Teigen, Montana
Driller: Livingston Estate Address: Minnetonka, Montana
Date Started: August 12, 1960 Date Completed: August 23, 1960
Location: Sec. 9 T. 16 N. R. 23 E. 1/4 sec. 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: _____

Casing: 0 ft. to 950 ft. Type: 1 1/2" Size: 1 1/2" O. D.

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

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

Perforated or Screened: Ft. 917 to ft. 950 Ft. _____ to ft. _____

Type of screen or perforations: Perforations

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

Shut-in pressure, for flowing well: 30 lb./sq. in. on: Aug 24
(date)

Pumping water level: Artesian flowing gal. per min. _____ gal. per min.

How tested: _____

Length of test: _____

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

Packer set at 881ft.

6 3/4" holes drilled to 881 ft. 5 5/8" hole drilled from 881ft. to 950 ft.

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	10	Surface Soil
10	27	Gravel
27	100	gray clay and soft black and gray shale
100	125	soft black shale
125	231	Black shale and gray clay
231	275	Black shale, gray clay and bentonite
275	300	Black shale, sandy shale and bentonite
300	340	Shale, bentonite & medium hard sharp sand
340	360	Black shale, bentonite, clay and sand
360	430	Black shale, sandy shale and clay
430	450	Black shale, clay and hard lime and sand streaks
450	471	Black shale, clay and bentonite
471	482	Hard sharp sand and sandy shale
482	490	Black shale, clay- streaks hard tan sandy lime
490	500	Hard fine sand and shale
500	590	Hard sharp gray sand
590	630	Red, hard gray sand, bentonite, Red shale
630	640	Gray sticky clay, red, green and black shale
640	700	Red shale, streaks of hard sand
700	720	Clay, shale, hard limy sand
720	740	Medium soft coarse sand and hard limy sand
740	750	White mushy sand and minny clay
750	763	Soft fine sand and white mushy oily clay
763	770	Soft fine sand and white mushy oily clay
770	775	Medium coarse soft black and tan to gray, red and black shale with hard limy sand
775	807	Hard sand, sandy lime and gray and red shale
807	890	White clay and shale
890	905	White clayish sand and some fine medium hard sand
905	916	Soft finem sand- some red shale, bentonite and gray clay
916	919	Soft salt and pepper sand
919	950	Shale and lime

18768

#13
O.R.M.

STATE OF MONTANA,
County of Petroleum.

Died September 1 1960

at 1:30 o'clock P.M.

Before R. J. Penter
County Recorder.

By J. J. Penter
Deputy.

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	10	Surface Soil
10	27	Gravel
27	100	gray clay and soft black and grey shale
100	125	soft black shale
125	234	Black shale and grey clay
234	275	Black shale, grey clay and bentonite
275	300	Black shale, sandy shale and bentonite
300	340	Shale, bentonite & medium hard sharp sand
340	350	Black shale, bentonite, clay and sand
350	430	Black shale, sandy shale and clay
430	450	Black shale, clay and hard lime and sand streaks
450	471	Black shale, clay and bentonite
471	482	Hard sharp sand and sandy shale
482	490	Black shale, clay- streaks hard tan sandy lime
490	500	Hard fine sand and shale
500	590	Hard sharp grey sand
590	630	Med. hard grey sand, bentonite, Red shale
630	640	Grey sticky clay, red, green and black shale
640	700	Red shale, streaks of hard sand
700	720	Clay, shale, hard limy sand
720	740	Medium soft coarse sand and hard limy sand
740	750	White mucky sand and mucky clay
750	763	Soft fine sand and white mucky silty clay
763	770	Medium coarse soft black and white sand, red and brown shale with hard limy sand
770	807	Hard sand, sandy lime and grey and red shale
807	890	White clay and shale
890	905	White clayish sand and some fine medium hard sand
905	916	Soft finer sand- some red shale, bentonite and grey clay
916	940	Soft salt and pepper sand
940	950	Shale and lime

18768

#73
U.R. 100.

STATE OF MONTANA,
County of Petroleum.

Filed September 1 1960

at 1:30 o'clock P.M.

John R. Weston
County Recorder.

Deputy.