G

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

File No. .....

T 17 N R 12 E

DUPLICATE

County .....

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

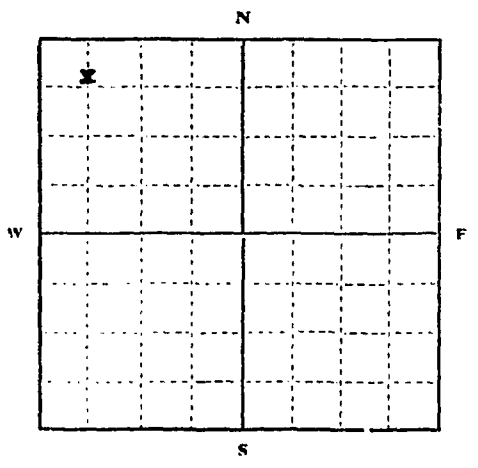
RECEIVED
JAN 15 1964
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Myron C. Haber, of Stanford, Montana
(Name of Appropriator) (Address) (Town)

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



NW ¼ Sec. 22 T. 17 R. 12
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 Used for stock water.

3. Date or approximate date of earliest beneficial use; and how continuous the use has been May 20,1963 began using. Used every day.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 14 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 The means of withdrawing such water from the ground and the location of each well or other means of withdrawal withdrawn with ½ horse jest pump

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater commenced May 18,1963 completed May 20,1963

8. The depth of water table 17 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 drilled 6¼ inches, cased with 4½ inch plastic approx. fifty feet deep.

10. The estimated amount of groundwater withdrawn each year 40000 gal.

11. The log of formations encountered in the drilling of each well if available 0 to 15 ft. gravel, 15 to 50 ft. blue shale layers of bentonite.

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 Myron C. Haber
Date Dec. 31, 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.

32822

File No. 946

Byron C. Baker

Sec. 22-17-12

State of Montana
County of Judith Basin

Filed this 31st day of

December A. D. 1963 at

2:48 o'clock P.M.

County Clerk.

Fee $2.00 paid.

GW 3 Approved Stock Form—State Publishing Co., Helena, Montana—39318 3

File No.....

T 17 R 12

DUPLICATE

County Judith Basin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater Appropriation Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater 1920

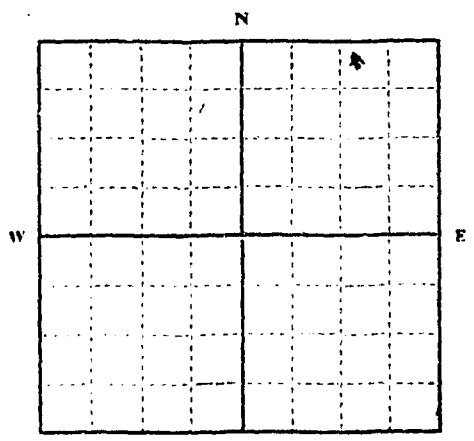
Owner Aaro Samson Address Stanford, Montana

Contractor (if any) Potter cloned out himself in 1959

Address of Contractor Lewistown, Montana

Date Started 1920 Date Completed 1959

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable. Backhoe machine dug to a depth of about 8 feet.



NW¼/NE¼ ¼ Sec 22 T 17 R 12

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. Not known, used for cattle drinking.

Signature of Owner Aaro Samson

Date December 26, 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.

32657

File No. 302 580

Aero Samson

NW¼/NE¼ Sec. 22-17-12

State of Montana

County of Judith Basin

Filed this 26th day of

December A. D. 1963, at

2:35 P. M.

Deb. A. Leslie

County Clerk

Fee $2.00 Paid.

T. 17 R. 12

County Judith Basin

RECEIVED
MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

STATE ENGINEER

WATER WELL LOG

Owner Clayton Potter Address Stanford, Montana

Driller O. C. Thatcher Address Stanford, Montana

Date Started July 5, 1958 Date Completed July 12, 1958

Location: Sec. 28 T. 17 R. 12 ¼ sec. NE¼ SE¼

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 63 ft. Type Galvanized Size 4"

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: Pump 4 gallons per minute at 55 feet feet.

Shut-in pressure, for flowing well: Artesian flow about one quart over the top per minute lb./sq. in. on: (date)

Pumping water level 55 feet at 4 gal. per min.

How tested: By Bailing

Length of test 4 or 5 hours

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

(over)

Log of Well

Depth, feet From	Depth, feet To	Description of Material Drilled
0	21	Overburden
21	55	Blue Shale
55	57	Bentonite
57	115	Layers of black slatey sandstone and thin streaks of bentonite
115	119	Bentonite
119	145	Layers of black shale and streaks of black slatey sandstone and a few thin streaks of bentonite.
145	160	Mostly black slatey sandstone, (Water)
160	180	Blue Shale

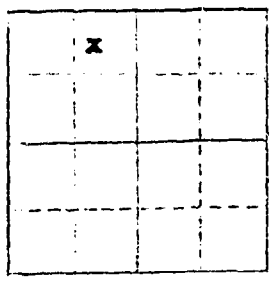
Form No. 18
8-60

T. 17 R. 12

County Judith Basin

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG



Owner Walter Myllimaki Address Stanford, Montana

Driller Thatcher Drilling Co. Address Stanford, Montana

Date Started Sept. 12, 1961 Date Completed Sept. 20, 1961

Location: Sec. 28 T. 17 R. 12 ¼ sec. NE¼NW¼

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 558 ft. Type Galv. Size 2"

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft 567 to ft. 587. Ft. to ft.

Type of screen or perforations Last 20 feet is perforated pipe

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

Shut-in pressure, for flowing well: 10 lb./sq. in. on: Sept. 20, 1961 (date)

Pumping water level feet at gal. per min.

How tested: Natural Flow

Length of test

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

(over)

Log of Well

Depth, Feet		Description of Material Drilled
From	To	
0	24	Gravel
24	124	Grey shale
124	142	Alt. hard sandstone & grey shale
142	178	Grey shale-sandy layers bentonite
178	270	Hard sandy shael-layers bentonite
270	330	hard sandstone-grey shale
330	495	Grey shale-hard sandy layers
495	555	Alt. blue shale-hard sandstone
555	570	Blue shale
570	586	Med. to soft sandston. Water produced 3 gal. per min.
586	587	Hard sandstone
		Filed for record this 20th day of Nov. 1961 W.W. Log #72

GW STATE WATER CONSERVATION BOARD Approved Stock Form - State Publishing Co., Helena, Montana 44812 30

File No.....

T. 17 R. 12

DUPLICATE

County Judith Basin

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Co...
Da...
Di...

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

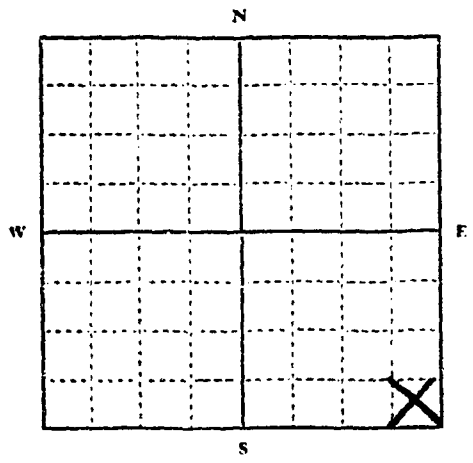
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

We Calvin and/or Gladys Richwine (Name of Appropriator) of Stanford (Address) (Town)

County of Judith Basin State of Montana

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



SE ¼ SE ¼ Sec. 30 T. 17 R. 12

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 is domestic, livestock and irrigation

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1918--continuous

4. The amount of groundwater claimed (in miner's inches or gallons per minute) ten 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
Four or five acres around buildings
SE ¼ of SE ¼ Section 30 T 17 R12
Calvin and / or Gladys Richwine are the owners.

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Prior to 1918

8. The depth of water table Nineteen 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
type--dug well with concrete casing
Depth--28 feet
Size-- 48 by 32

10. The estimated amount of groundwater withdrawn each year Five Hundred Thousand Gallons

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
Land described above was purchased from Charles and William Handford in July of 1958.

Signature of Owner Gladys Richwine
Calvin Richwine

Date November 17, 1965

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.

39887

649

Calvin and/or Gladys Richwine

of Stanford, Montana

State of Montana

County of Judith Basin

Filed this 19th day of

November A.D. 1965 at 8:10

A.M.

Delight Arlee

County Clerk.

Fee $2.00 Paid.

GROUNDWATER INDEX

Page ____ of ____

County Judith Basin Twp. 17N Rge. 13E

Sec.	Name of Appropriator	Type of Form	County File No.	Remarks
2	Barber, John E.	GW-4	266	
6	Plaggemeyer, Margaret	"	[illegible]	
6	" "	"	[illegible]	
10	Barber, John E.	GW-3	[illegible]	
12	Morse, Harry B.	GW-4	[illegible]	
14	Hess, [illegible]	[illegible]	[illegible]	
14	Hall, [illegible]	GW-4	[illegible]	
15	Hess, [illegible]	"	[illegible]	
17	Kesselheim, [illegible] E.	"	[illegible]	
20	[illegible]	"	[illegible]	
24	[illegible], John	[illegible]	—	
26	Smith, George [illegible]	" " [illegible]	—	
26	" " "	" "	—	
27	Hall, [illegible]	GW-4	[illegible]	
30	[illegible], Walter	[illegible]	[illegible]	
31	[illegible], J.R.	GW-4	[illegible]	
33	Hall, Willard E.	"	[illegible]	
34	" " "	GW-3	[illegible]	
36	Smith, George [illegible]	[illegible]	—	
36	[illegible], J.R.	GW-4	[illegible]	

GW

File No.....

DUPLICATE

T. 17 N R. 13 E

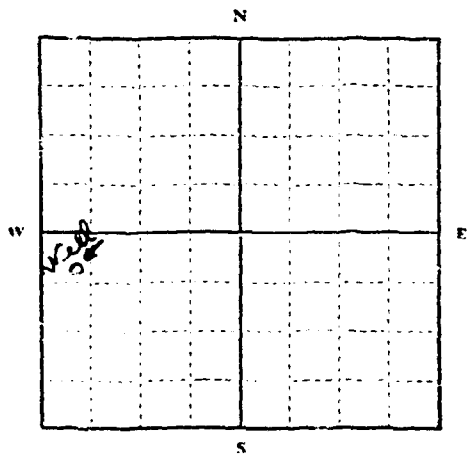
County Judith Basin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

I John F. Barber of P.O. Box Denton
(Name of Appropriator) (Address) (Town)
County of Judith Basin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW¼SW Sec. 2 T. 17 N R. 13 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 Used for the home irrigating garden & lawn & for livestock use

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1914 used for house & stock water ever since

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 6 gal per minute — for 24 hr 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 This water is used to irrigate a lawn & garden for the Mr. & Mrs. John F. Baber residence

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal This water is withdrawn by a jet pump & piped to the house & other buildings on the farm & is located in the NW¼ of SW¼ Sec. 2 T. 17 N. R. 13

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater This well was dug in 1914 & pumped with a windmill until about 1948, when a new house was built & the water was piped into the new house.

8. The depth of water table 30 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 is a dug well about 4 ft. in diameter & 35 ft deep

10. The estimated amount of groundwater withdrawn each year 125,000 gal

11. The log of formations encountered in the drilling of each well if available None available

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

Signature of Owner John F. Barber

Date Nov. 26, 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.

#266

John P. Barber

NW SW Sec. 2- 17-13

State of Montana
County of Judith Basin
Filed for this 26th day
of November, A. D. 1963 at
11:15 o'clock A.M.

County Clerk.

GW Springs

Approved Stock Form—State Publishing Co., Helena, Montana—42234 3

File No.....

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

DUPLICATE

County.....

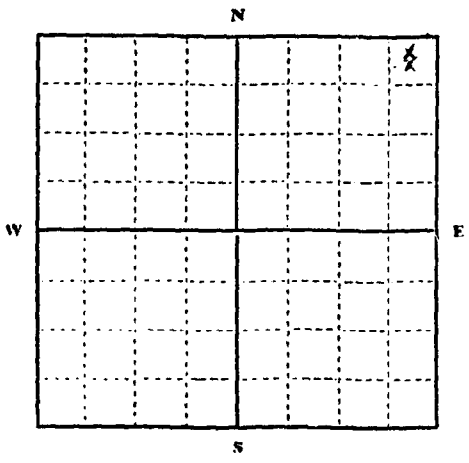
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 15 1964
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Margaret Plaughan (Name of Appropriator), of Denton (Address) (Town)
County of Judith State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE ¼ Sec. 6 T. 17 R. 13

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, irrigation

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

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 50 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 NE¼ S6 T17 R13

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

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

8. The depth of water table unknown

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

10. The estimated amount of groundwater withdrawn each year 50 gal per min.

11. The log of formations encountered in the drilling of each well if available none

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record none

Signature of Owner Margaret Plaughan

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.

32718

VESTED GROUNDWATER (CERT.)
HARGA ST FLOTHAR

NE Sec. 6-17-13

122191

State of Montana
County of Judith Basin
Filed for record this 30th
day of Dec. A.D. 1963 at 10:45
o'clock A.M.
Delight Leslie, Clerk and Rec.

by_____ Dep.

Fee $2.00 pd.

GW

Approved Stock Form—State Publishing Co., Helena, Montana—42274

File No. ....

T. 17 R. 13

DUPLICATE

County J. Basin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 15 1964
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Margaret Ployhar (Name of Appropriator), of Denton (Address) (Town)

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

N

W E

S

NE¼ Sec. 6 T. 17 R. 13

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 irrigation household, stock, weed spraying

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1913, Continuous

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

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 NE¼ S 6 T 17 R 13

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1913

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 20 ft. deep 5 ft. Dia.

10. The estimated amount of groundwater withdrawn each year unknown

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

12. Such other information of a similar nature as may be useful in carrying out the policy of this act, including reference to book and page of any county record none

Signature of Owner Margaret Ployhar

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.

32719

#443

[illegible]
[illegible]

NE Sec. 6-17-13

122192

State of Montana
County of Judith Basin
Filed for record this 30th
day of Dec. A.D. 1963 at 11:00
o'clock A.M.

Delight Leslie, Clerk and Rec.

by _____ Dep.

Fee $2.00 pd.

10

GW 3 Approved Stock Form—State Publishing Co., Helena, Montana—42262

File No.............................. T. 17 N R. 12 E

TRIPLICATE County Fergus [illegible]

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Notice of Completion of Groundwater Appropriation Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater June 21, 1973

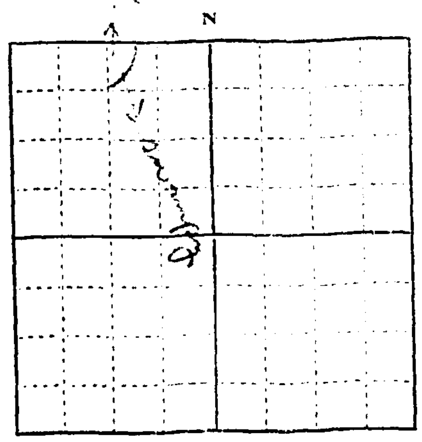
Owner John F. Barber Address Denton Mont

Contractor (if any) none

Address of Contractor ....

Date Started June 20 Date Completed June 26

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable This spring is about 6' deep & runs through a pipe to a tank by gravity. This [illegible] part of the [illegible] [illegible]



NW 1/4 NE Sec 10 T. 17 N R. 12 E

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 [illegible]

[illegible] pipe [illegible]

929

[illegible] day of June A.D. 19 73 at [illegible] O'clock P.M.

Signature of Owner John F. Barber

Date June 21, 1973

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.

53710

#769

WATER APPROPRIATION

DEVELOPED SPRING

BARBER, JOHN F.
Dentom, Mt.

NW¼NE¼ OF Sec. 10,
Twp. 17N, R 13 E

STATE OF MONTANA
County of Judith Basin

Filed for record this 21st day of June A.D. 1973 at 3:30 p.m.

Delight Leslie Co.Clerk

________ Deputy

G

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

File No. .... T. ...... R. ......

DUPLICATE County ....

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

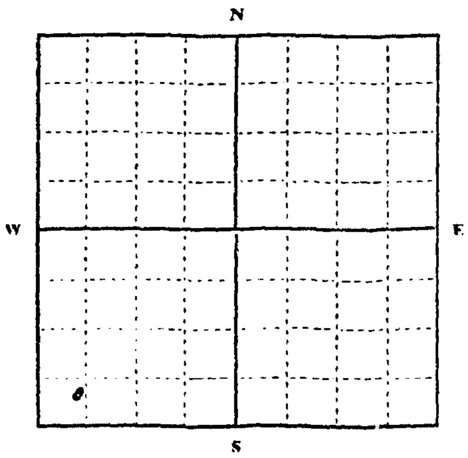
RECEIVED
JAN 15 1964
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Harry P Morse Jr , of Rt 2 Elkhorn
(Name of Appropriator) (Address) (Town)

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



SW 1/4 SW 1/4 Sec. 12 T. 17 N R. 13 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 house use and stock water

3. Date or approximate date of earliest beneficial use; and how continuous the use has been approx. 1915 used approx. thirty years since

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 25 gal per min

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

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater approx 1915

8. The depth of water table approx 25 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 the well is approx 25 ft deep and 3 ft in diameter with a concrete curbing

10. The estimated amount of groundwater withdrawn each year for stock & house use

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

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

Signature of Owner Harry P. Morse Jr.

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.

32900

File No. 624

Henry P. Morse

Sec. 12-17-13

State of Montana

County of Judith Basin

Filed for record this

31st day of Dec. A. D. 1963

at 4:07 P. M.

Debbie Beebe

County Clerk

Fee $2.00 Paid.

GW 2

File No.

T. 17 R. 13

DUPLICATE

County Judith Basin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 15 1964
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)

Owner Francis D. Hess Address Denton, Montana

Driller George F. Askin Address Miles City, Montana

Date of Notice of Appropriation of Groundwater

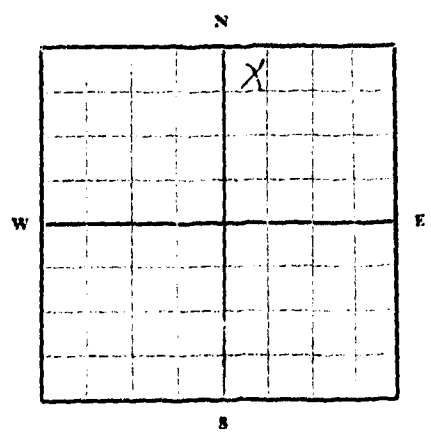
Date well started May 19, 1962 Date Completed Feb. 1, 1963

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

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

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

Size of Drilled Hole	Size and Weight of Casing	From (Feet)	To (Feet)	PERFORATIONS Kind Size	From (Feet)	To (Feet)
12"	8" I.D.	0	32			
7"	5" I.D.	0	1786			
4"	3" I.D.	1786	2160	5/16" round holes, 4 to the foot with 3 rows		
5/16" used	thick oil well casing was through out this well			perforated 400 feet.		



NW ¼ NE ¼ Sec. 14 T. 17 R. 13
Indicate location of well and place of use, if possible. Each small square represents 10 acres.

Static Water Level for non-flowing Well feet.

Shut-in Pressure for Flowing Well 35 lbs.

Pumping Water Level 200 feet at 15 gal. per minute.

Discharge in gal. per min. of flowing well 15 gal.

How Tested watch & gal measure Length of Test 24 hrs.
60 days for pumping rate

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) 8" casing cemented through ground water level. 5" casing cemented with 100 sacks cement. 400 feet 3" casing sealed with tarred lead seal.

Show exact depth of bottom.

50
Driller's License Number

George F. Askin
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.

32708

#432

WATER COMPLETION
FRANCIS D. HESS

NWNE Sec. 14-17-13

122181

State of Montana
county of Judith Basin
Filed for record this
30th day of Dec. A.D. 1963
at 9:45 o'clock A.M.
Delight Leslie, Clk. & Rec.

by Betty [illegible] Dep.

Fee $2.00 pd.

FRANCIS HESS WATER WELL

NE, sec. 14-17N-13E
Judith Basin County, Montana

SAMPLE DESCRIPTION

1090 - 1120	Shale, gray, lumpy, silty, bentonitic, streaks silty bentonite.
1120 - 1150	Shale, dark gray, gray, lumpy, bentonitic, silty and sandy, streaks bentonite.
1150 - 1180	Shale, gray, lumpy, bentonitic, slightly silty and sandy, streaks bentonite.
1180 - 1190	Shale, gray, lumpy, bentonitic, silty, streaks bentonite.
1180 - 1210	Shale as above.
1210 - 1270	No samples.
1270 - 1300	Shale, gray, lumpy, bentonitic, silty, slightly sandy, streaks micaceous bentonite.
1300 - 1330	No samples.
1330 - 1370	Shale, gray, lumpy, bentonitic, silty, carbonaceous?, streaks bentonite.
1360 - 1390	Shale, gray, lumpy, bentonitic, slightly silty, slightly glauconitic, few Inoceramus fragments, pyrite, streaks bentonite.
1390 - 1420	Shale, glauconitic as above.
1420 - 1450	Shale, dark gray, lumpy, bentonitic, slightly carbonaceous, silty locally, few streaks bentonite.
1450 - 1500	Shale, black, gray, splintery, bentonitic, micaceous, streaks silty bentonite.
1500 - 1520	No samples.
1520 - 1550	Claystone, red, gray-brown, green, lumpy, slightly silty. Driller redbeds at 1525.
1550 - 1580	Claystone, gray, red, tan, lumpy, silty, abundant bentonite.
1580 - 1610	Claystone, red, gray-brown, lumpy, bentonitic.
1610 - 1657	Claystone as above.
1657 - 1660	No samples.
1660 - 1680	Claystone, red, brown, purple, lumpy, bentonitic.
1680 - 1770	No samples.

1610 - 1657	Claystone as above.
1657 - 1660	No samples.
1660 - 1680	Claystone, red, brown, purple, lumpy, bentonitic.
1680 - 1770	No samples.
1770 - 1850	Sandstone, white, cream, -0.1 to 0.2mm, average 0.1mm, subrounded, dolomitic, grading to siltstone, much cream, subchalky, much red, gray-green claystone, few loose 0.5mm rounded sand grains.
1850 - 1890	No samples.
1890 - 1920	Claystone, red, brown, gray, lumpy, bentonitic, silty.
1920 - 1950	Claystone, red, maroon, gray, flaky, bentonitic, carbonaceous, some cream, brown, salt and pepper, -0.1mm sandstone, grading to siltstone, few loose 0.3mm sand grains, much pyrite.
1950 - 2000	Sandstone, loose, salt and pepper, -0.1 to 0.4mm, average 0.2mm, subrounded, argillaceous, few black chert grains, possible slight porosity, much varicolored claystone.
2000 - 2100	No samples.
2100 - 2150	Claystone, red, dark gray, bentonitic, carbonaceous, few loose -0.1mm sand grains.
2130 - 2160	Claystone as above.

GV

File No.....

T. 17 R. 13

DUPLICATE

County Judith Basin

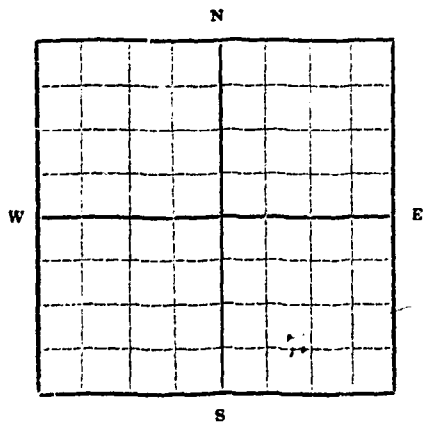
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

STATE ENGINEER

1. May B. Hall, of Stanford
(Name of Appropriator) (Address) (Town)
County of Judith Basin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SW SE
SW SW
¼ Sec. 14 T.17 R.13

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, domestic water, and irrigation

3. Date or approximate date of earliest beneficial use; and how continuous the use has been about 1920

4. The amount of groundwater claimed (in miner's inches or gallons per minute) Whatever the will may be.

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

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal gasoline motors on pumps for both wells, spring flows

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 about 32 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 One dug well 32' deep, one well 12' deep, one spring flowing

10. The estimated amount of groundwater withdrawn each year unknown

11. The log of formations encountered in the drilling of each well if available No log

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 As these two wells and spring are so close together and in the same 10 acres I am filing them all on one form.

Signature of Owner May B. Hall

Date January 5, 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.

1102-

118693 116

May H. Hall

Vested Groundwater Right

SW SE Sec. 14-17-13

Filed for record htis 5t day of Jan. 1962 A. D. at 11:35 o'clock P.M.

Delight Leslie, Clk. & Rec.

by Betty Christensen Dep

Fee $2.00 pd

In checking [illegible] I find that on Jan. 5th,1962 at 11:35 o'clock in a Vested Groundwater Right for May H. Hall the description should read SWSE Sec. 14-17-13. It is marked correctly on the [illegible] map but on our copy it still reads SWSW. Would you please check the copies we sent you and either send them back to us for correction or make the correction there and let us know.

Clerk and recorder, Judith Basin County

[illegible]

STATE ENGINEER

G —H. lena Independent Record

File No.....

T. 17 R. 13

DUPLICATE

County. Judith Basin

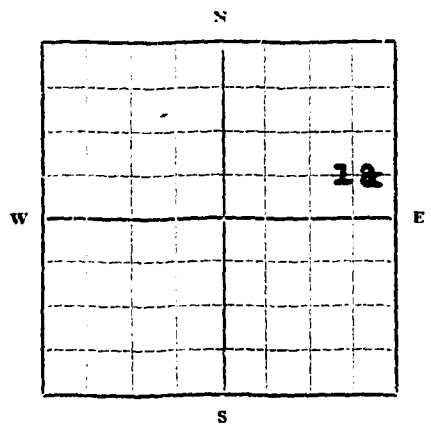
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

RECEIVED
JAN 17 1964
STATE ENGINEER

1. Ivan H. Hess of Rural Route Denton
(Name of Appropriator) (Address) (Town)
County of Judith Basin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



XX SENE
¼ Sec. 15 T17 R13
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
Well 1 household
Well 2 stockwater and irrigation

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
Well 1,1936 continuously
Well 2, 1949 continuously

4. The amount of groundwater claimed (in miner's inches or gallons per minute)
Well 1, 8 gallon per minute
Well 2, 20 gallon per min (never pumped dry)

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
Well 2, irrigated 2 acres garden
& pasture from H. Hess

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal
pump
NE¼NE¼ Sec. 15, T. 17 R. 13

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Well 1, July 1936
Well 2, July 1949

8. The depth of water table 33 ft both wells

9. So far as it may be available, the type, size and depth of each well or the general specifications of any other works for the withdrawal of groundwater
both dug well, 4 ft. in diam, 33 ft. deep

10. The estimated amount of groundwater withdrawn each year 420,180 gallon Well No. 1
3,306,00 gallon Well No. 2

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

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

Signature of Owner Ivan H. Hess

Date Dec. 13, 1963

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

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

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

32579

No. 302

VESTED GROUNDWATER RIGHTS
IVAN H. HESS

SWNE Sec. 15-17-13

121993

State of Montana
County of Judith Basin
Filed for record this 15th
day of Dec. A.D. 1963 at 2:00
o'clock P.M.
Dalight Leslie, Clk. & R.C.

by _____ Dep.

Fee $2.00 pd.

File No. .....

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

T 17N R 13E.
County Judith Basin

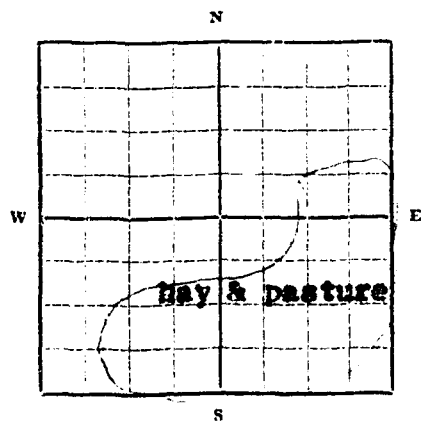
Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

Kesselheim

1. B. Kesselheim and Lucile E./ , of 341 Park Hill Drive, Billings
(Name of Appropriator) (Address) (Town)

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



N½ and
S½ NW¼ Sec. 17 T 17N R 13E

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 - sub-irrigation and irrigation of hay and pasture

3. Date or approximate date of earliest beneficial use; and how continuous the use has been to my knowledge these large springs have been used since early 1920's, including domestic use

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 150 inches

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 - irrigated pasture and 100 acres and hay acreage 100 acres-see plat

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater not applicable

8. The depth of water table 1 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 spring fed reservoir and dam - covering 2 - 3 acres

10. The estimated amount of groundwater withdrawn each year 150 inches

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

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 Right notice book 5 Water Rights, page 49
" " " book 12 " " page 195
" " " book 12 " " page 195

Signature of Owner B. Kesselheim

Date May 21, 1962

STATE OF MONTANA, County of Yellowstone, ss:
B. Kesselheim and Lucile E. Kesselheim having first been duly sworn, depose and say that they are of lawful age and the appropriators and claimants of the order and water right mentioned in the foregoing declaration of vested groundwater rights and the persons whose names are subscribed thereto, as the appropriators and claimants, that they know the contents of said foregoing notice and that the matters and things therein stated are true.

Subscribed and sworn to before me, this 21 day of May, 19 62

[illegible], Notary Public for the State of Montana, residing at Billings, Montana My Commission expires April 21, 19 64

[illegible]

DECLARATION OF STATED GROUNDWATER RIGHTS

NE¼ and S½ of Sec. 17- 17-13

B. Kesselheim and Lucile L. Kesselheim

State of Montana

County of Judith Basin

Filed this 28th day of May A.D. 1962 at 8:35 o'clock A.M.

[signature]

County Clerk.

Fee $2.00 Paid.

G

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

File No.....

T 17 R 13

DUPLICATE

County Judith Basin

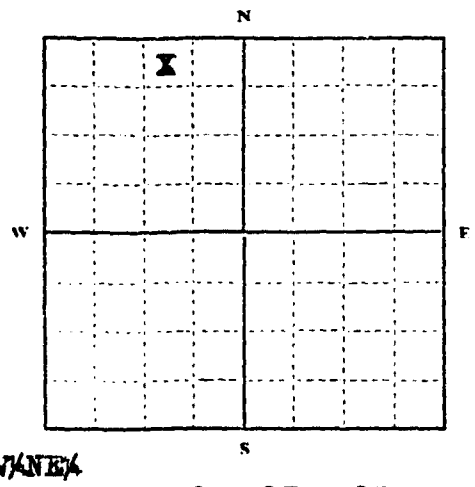
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

RECEIVED
JAN 15 1964
STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. Harry J. Dester, of Box 485 Stanford
(Name of Appropriator) (Address) (Town)
County of Judith Basin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NW¼NE¼
XX Sec. 20 T. 17 R. 13

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 well for livestock use;

3. Date or approximate date of earliest beneficial use; and how continuous the use has been 1961, dug well and continuous use since this date;

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 6 gal. a 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
does not apply

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal electric pump, and piped to tank;

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater 1961, well completed same year, continuous use since;

8. The depth of water table well 11 ft. deep, standing well 9 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 11 ft. deep; 36-in. tube;

10. The estimated amount of groundwater withdrawn each year approximately 90,000 gal. year

11. The log of formations encountered in the drilling of each well if available none

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

Signature of Owner Harry J Dester

Date December 31, 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.

32868

Harry Dester
Sec 20-17-13

State of Montana
County of Judith Basin
Filed for record this
31st day of Dec. A.D. 1965 at
3:35 o'clock P.M.
Delight Leslie, Clerk and Rec.

by _____ Dep.

Fee $2.00 pd.

T. 17 R. 13

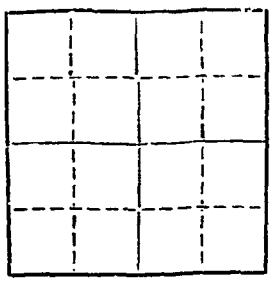
County Judith Basin

RECEIVED

STATE ENGINEER

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG



Owner John Metcalf Address Stanford

Driller O.=C. Thatcher Address Stanford, Montana

Date Started Aug. 18, 1960 Date Completed Sept. 6, 1960

Location: Sec. 25 T. 17 R. 13 ¼ sec. NW

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

Water use: Domestic ☐ Municipal ☐ Stock ☒ Irrigation ☐

Industrial ☐ Drainage ☐ Other:

Casing: 1 ft. to 1821 ft. Type Galvanised Size 2"

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated ~~or Screened~~: Ft. 1721 to ft. 1821 Ft. to ft.

Type of screen or perforations

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

Shut-in pressure, for flowing well: 5 Gal. per min. ~~Measured~~ (date)

Pumping water level feet at gal. per min.

How tested:

Length of test Indefinite

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

(over)

Log of Well

Depth, feet From	Depth, feet To	Description of Material Drilled
0	55	Yellow Clay
55	160	Blue Shale with thin hard sandstone streaks
160	486	Blue Shale
486	573	Sandstone and blue shale
573	576	Bentonite
576	768	Sandy shale and hard sandstone
768	928	Hard sandy shale and sandstone
928	1071	Sandy gray shale
1071	1340	Sandy gray shale and sandstone
1340	1364	Hard sandstone
1364	1520	Alt. red shale and sandstone
1520	1557	Red shale and sandstone
1557	1610	Alt. hard sandstone and red shale
1610	1647	Hard sandstone
1647	1738	Sandy shale and hard sandstone
1738	1789	Hard sandstone
1789	1813	Soft sandstone
1813	1821	Med. hard sandstone

26

Form No. 18
8-60

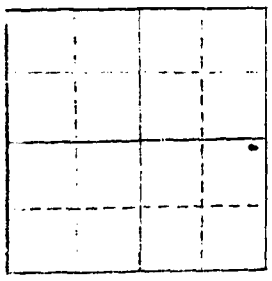
T. 17 R. 13

County Judith Basin

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED
STATE ENGINEER

WATER WELL LOG



Owner George L. Smith Address Stanford

Driller O. C. Thatcher Address Stanford, Montana

Date Started June 3rd, 1954 Date Completed July 7, 1954

Location: Sec. 26 T. 17 R. 13 1/4 sec. SE¼NE¼

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

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

Industrial [ ] Drainage [ ] Other

Casing: 0 ft. to ~~16x~~ 1567 ft. Type Galvanized Iron Size 2"

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 6 to ft. . Ft. to ft.

Type of screen or perforations

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

Shut-in pressure, for flowing well: 124 lb./sq. in. on: (date)

Pumping water level feet at gal. per min.

How tested: Steam Gauge

Length of test

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

Hydrant for shut-off.

Cemented

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	18	Overburden
18	190	Blue Shale
190	208	Blue shale with layers of sandstone
208	225	Hard Sandstone about 1 gal of water per min. 210-220
225	245	Blue shale with layers of sandstone and bentonite
245	300	Sandy Blue shale
300	323	Hard sandstone with layers of bentonite
323	327	Hard sandstone
327	329	Bentonite
329	351	Hard sandstone, about 1 gal of water per min 340-345
351	375	Sandy shale with layers of sandstone
375	505	Very hard sandy shale
505	520	Sandy shale
520	635	Sandy shale and sandstone alternately
635	790	Hard sandy shale
790	825	Soft grey shale
825	835	Sandy shale
835	890	Hard sandy shale
890	995	Soft grey sandy shale, 1 to 1 gal water per min 890
995	1005	Soft grey shale
1005	1090	Black shale
1090	1125	Hard grey sandy shale
1125	1270	Red shale
1270	1308	Grey sandy shale this coloring doesn't definitely show whether it is the top part of the second "CAt Creek Sand."
1308	1320	Sandstone
1320	1395	Sandstone, with occasional layers of red shale
1395	1403	Red shale
1403	1540	Sandstone
1540	1546	Sandstone
1546	1556	Sandstone, appeared to be softening
1556	1561	Soft sandstone about 4 gal water per min.
1561	1567	Fairly hard sandstone
1567	1573	Soft Sandstone
1573	1577	Fairly hard sandstone
1577	1590	Hard sandstone
1590	1610	Softer apparently sandy shale, water is a light grey to light pink in color
1610	1620	Drilling soft ~~xxx~~ apparently some sand with shale, water from grey to light brown to chocolate brown, water has oily scum probable coal zone
1620	1629	Fairly soft apparently sandy shale, water turned to greyish brown
1629	1633	Hard rock, water still greyish brown
1633	1655	Medium Hard rock, water is light grey in color Medium hard rock appears to be a soft limestone or denee shale with little or no sand ~~water light grey~~
1655	1685	Medium hard water slimy grey to dark grey, mostly shale
		Filed this 29th day of December A. D. 1961 in Judith Basin County State of Montana.

County Clerk.

26

Form No. 18
8-60

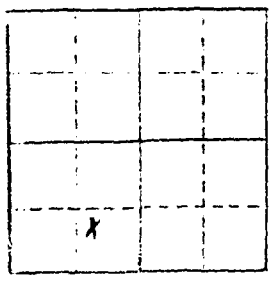
T. 17 R. 13

County Judith Basin

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED
STATE ENGINEER

WATER WELL LOG



Owner George L. Smith Address Stanford, Montana

Driller Thatcher Drilling Company Address Stanford

Date Started Oct. 15, 1961 Date Completed Oct. 19, 1961

Location: Sec. 26 T. 17 R. 13 1/4 sec. SE SW

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

Water use: Domestic ☐ Municipal ☐ Stock ☒ Irrigation ☐

Industrial ☐ Drainage ☐ Other

Casing: 0 ft. to 131 ft. Type Plastic Size 2"

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 61 to ft. . Ft. to ft.

Type of screen or perforations Cut with a torch

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

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

Pumping water level None feet at gal. per min.

How tested:

Length of test

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

Cemented

Not completely shut-off but it runs about 2 gal a minute

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	12	Overburned
12	63	Blue Shale
63	82	Thin Layers of Sandstone and Shale
82	116	Blue Shale with thing layers of Bentonite & Sandstone
116	131	Layers of hard sandstone and bentonite, Producing about 75
		G.P.M. in this zone.

WATER WELL LOG
of
GEORGE L. SMITH

SE¼SW¼ of Sec. 26-17-23

STATE OF MONTANA
COUNTY OF JUDITH BASIN

Filed this 29th day of
December, A. D., 1961 at
A. M.

County Clerk.

GV

File No. .....

T 17 R 13

DUPLICATE

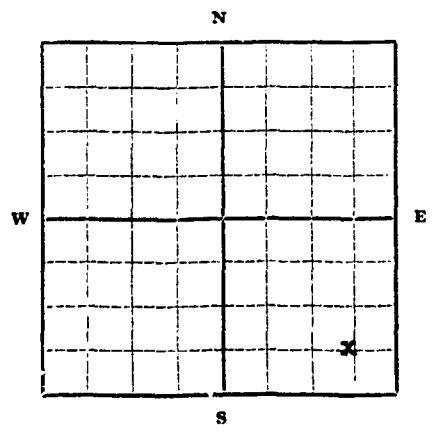
County Judith Basin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

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



SE SE¼ Sec. 27 T 17 R 13

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

3. Date or approximate date of earliest beneficial use; and how continuous the use has been December 2, 1955

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 35 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 flowing

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater December 7, 1955 completed December 9, 1955

8. The depth of water table at abt 30 '

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 ~~1998~~ 113' deep 2" gal. pipe, put packer at 26' and cemented with 5 sacks cement.

10. The estimated amount of groundwater withdrawn each year

11. The log of formations encountered in the drilling of each well if available (none)

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

Signature of Owner L. L. Hall

Date Jan. 4, 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.

1101

0	17	Overbur[illegible]en
17	84	Blue shale, [illegible]onite
84	87	Very soft [illegible]ntonite
87	89	Sandstone [illegible] about 4 gal. of [illegible]
89	99	Blue shale and bentonite
99	106	Broken sandstone area [illegible], [illegible] 35 gal. [illegible]ater per minute in this
106	111	Sandstone (no water)
11	113	set 2" galvanized pipe, put packer at 26' and cemented with 5 [illegible] cement.

115

Appro. Vested Groundwater Right

[illegible]ay [illegible]. Hall

S[illegible] Sec. 27-17-13

118689

Filed for record this 4th day of Jan. A. D. 1962 A.M., at 3:00 P.M.

Delight Leslie, Clk. & Rec.,

by [illegible] Dep.

Fee 2.00 pd

Form No. 18
8-60

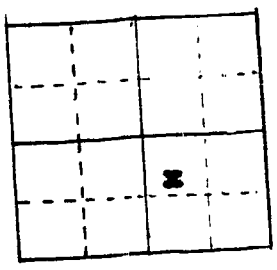
T. 17N R. 13E

County Judith Basin

RECEIVED
STATE ENGINEER

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

WATER WELL LOG



Owner Walter Myllimaki Address Stanford, Montana

Driller O. C. Thatcher Address Box 498, Stanford, Mont.

Date Started Feb. 25, 1957 Date Completed April 13, 1957

Location: Sec. 30 T. 17N R. 13E ¼ sec. NE¼SE¼

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

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

Casing: 0 ft. to 1563 ft. Type Galvanized Size 2"

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 1528 to ft. 1563. Ft. to ft.

Type of screen or perforations perforated the last 40 ft.

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

Shut-in pressure, for flowing well: 25 lb./sq. in. on: April 13, 1957 (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)

well produced approximately 4 gallons of water per minute.
Cased with 2" galvanized pipe, cemented with 8 sacks of cement

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	3	Overburden
3	160	Blue Shale with layers of bentonite and sandstone
160	168	Sandstone
168	253	Shale with layers of sandstone and bentonite.
253	261	Hard sandstone
261	319	Black shale with layers of sandstone and bentonite
319	332	Sandstone
332	355	Blue-black shale
355	615	Blue Shale
615	735	Blue Shale with a few thin layers of sandstone
735	890	Blue shale
890	980	Grey shale with layers of green sandstone
980	1053	Grey shale
1053	1239	Red shale
1239	1246	Sandstone
1246	1254	Red shale
1254	1272	Sandstone
1272	1282	Red shale
1282	1330	Sandstone
1330	1360	Sandstone
1360	1470	Hard sandstone
1470	1474	Fairly soft sandstone
1474	1476	Red shale
1476	1482	Hard sandstone
1482	1494	Soft sandstone
1494	1506	Hard stone
1506	1508	Soft sand
1508	1517	Hard sand
1517	1521	Fairly soft sand
1521	1528	Soft sand
1528	1563	Fairly soft sandstone

STATE OF MONTANA
JUDITH BASIN } ss
Sept 26 ... 61
10:00 ... A. M.
Delight Leslie
Deputy

W.W. Loe #63

GW 4 Approved Stock Form—State Publishing Co., Helena, Montana—42254 31

File No. T 17 N R 13 E

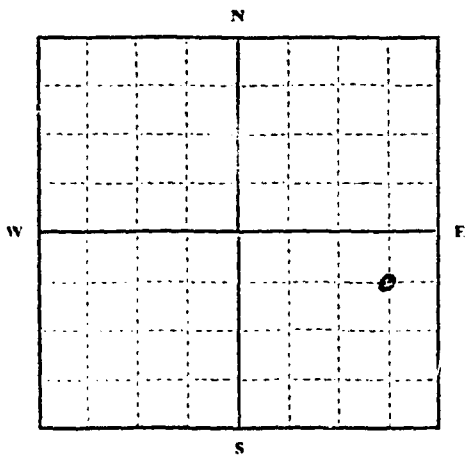
DUPLICATE County

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. G. R. Hedrick, of Stanford Mont
(Name of Appropriator) (Address) (Town)
County of Judith Basin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE¼SE¼ Sec. 31 T. 17 R. 13

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 Watering

3. Date or approximate date of earliest beneficial use; and how continuous the use has been Oct 1957 Since that yr.

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 11 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

6. The means of withdrawing such water from the ground and the location of each well or other means of withdrawal By a Windmill & Pump.

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater Sept. 1957 Completed Oct. 1957

8. The depth of water table 182 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" Pump well with a Windmill & Pump

10. The estimated amount of groundwater withdrawn each year 540,000

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 G. R. Hedrick

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.

10698

#695

J. R. HEDRICK
NESE Sec. 31-17-13

State of Montana
County of Judith Basin
Filed for record this
30th day of Dec. A.D. 1965
at 10:20 o'clock A.M.

Delight Leslie, Clk. & Rec.
by Betty C. Lamore Dep

G

File No. .....

T 17 R 13

DUPLICATE

County Judith Basin

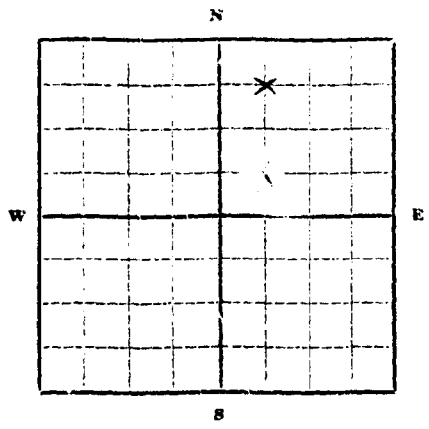
STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

RECEIVED
STATE ENGINEER

I, Willard L. Hall, of Stanford
(Name of Appropriator) (Address) (Town)
County of Judith Basin State of Montana
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



NE NW¼ Sec. 35 T 17 R 13

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

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

3. Date or approximate date of earliest beneficial use; and how continuous the use has been
Dec. 3, 1955 completed Dec. 6, 1955
continuous use

4. The amount of groundwater claimed (in miner's inches or gallons per minute)
20 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
½ acre of garden b well

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater
Dec. 3, 1955 completed Dec. 6, 1955

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
104 ft. approximately

10. The estimated amount of groundwater withdrawn each year Unknown

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

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
Cased with Galv. pipe 2" cemented with 3 sacks of cement.

Signature of Owner Willard L Hall

Date Jan. 4, 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.

1067

0	8	Overburden
8	65	Blue shale
65	104	Blue shale with layers of sandstone and bentonite.
104	135	Blue shale layers in black sandstone with some layers of bentonite. Hit about 20 gal of water per minute. 123-128 ft.

Set 135 ft 2" galvonized pipe. Set packer at 27 ft.
Cemented in with two sacks cement.

118688 114

Vested Groundwater Rights
Willard F. Hall
No NW Sec. 35-17-13

Filed for record this 4th day
of Jan. A. D. 1962 at 1:40 P.M.

Delight Leslie, Clk. & Rec.

by [signature] Dep.

Fee 2= pd

GW 3 Approved Stock Form—State Publishing Co., Helena, Montana—39318

File No.....

T 17 R 13

DUPLICATE

County Judith Basin

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

STATE ENGINEER

Notice of Completion of Groundwater Appropriation Without Well

(Under Chapter 237 Montana Session Laws, 1961)

Date of Appropriation of Groundwater.....

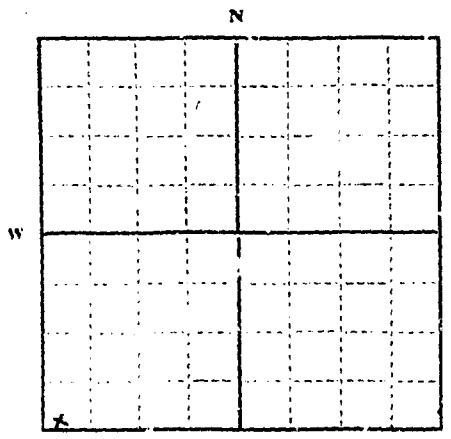
Owner Willard F. Hall Address Stanford, Montana

Contractor (if any) Hall Brothers

Address of Contractor Stanford, Montana

Date Started 1948 Date Completed 1948

Describe means of obtaining groundwater without a well "as by sub-irrigation and other natural processes". Include depth to water when applicable dug into spring about 10 feat. & piped it 150 feet underground into a tank.



SW¼/SW¼

¼ Sec. 22 T. 17 R. 13

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 10 gallons per minute.

Signature of Owner Willard F. Hall

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

32661

File No. 385

Willard F. Hall

SW¼ SW¼ Sec. 35-17-13

State of Montana

County of Judith Basin

Filed this 27th day of

December A.D. 1963 at

9:20 A. M.

[signature]
County Clerk

Fee $2.00 Paid.

36

Form No. 18
8-60

T. 17 R. 13

County Judith Basin

MONTANA BUREAU OF MINES AND GEOLOGY
Butte, Montana

RECEIVED

STATE ENGINEER

WATER WELL LOG

Owner George L. Smith Address Stanford, Montana

Driller O. C. Thatcher Address Stanford, Montana

Date Started July 26, 1960 Date Completed Aug. 16, 1960

Location: Sec. 36 T. 17 R. 13 ¼ sec. [illegible] SW¼NE¼

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

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

Casing: 0 ft. to 1278 ft. Type Galvanized Size 2"

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 6' to ft. . Ft. to ft.

Type of screen or perforations

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

Shut-in pressure, for flowing well: 76 lb./sq. in. on: (date)

Pumping water level feet at gal. per min.

How tested: Steam Gauge

Length of test

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

Cemented

Hydrant for Shut-off

(over)

Log of Well

Depth, feet		Description of Material Drilled
From	To	
0	190	Blue Shale with hard ribs
190	245	Black shale medium soft
245	415	Med. hard black shale
415	420	Bentonite with green shale layers
420	488	Gray shale med. soft
488	550	Shale with Med. soft sand ribs
550	740	Med. soft gray shale
740	760	Blue shale with bentonite layers
760	818	Hard and med. hard sandstone
818	844	Blue shale with thin sandy streaks
844	920	Gray shale and sandy shale
920	1075	Alt. gray shale and sandstone
1075	1093	Red Shale
1093	1178	Red Shale some muddy
1178	1180	Sandstone
1180	1224	Red shale
1224	1260	Alt. hard sandstone and sandy shale
1260	1276	Soft water sand
1276	1 278	Hard Sandstone about 7 gal. water per min.

WATER WELL LOG
GEORGE L. SMITH
SW¼ Sec. 36
Twp. 17, Rge. 13

STATE OF MONTANA
COUNTY OF JUDITH BASIN
Filed this 29th day of
December 1961 at ____
o'clock A.M.

____
County Clerk.

GV

Approved Stock Form—State Publishing Co., Helena, Montana—42234 36

File No.

T 17 N R 13 E

DUPLICATE

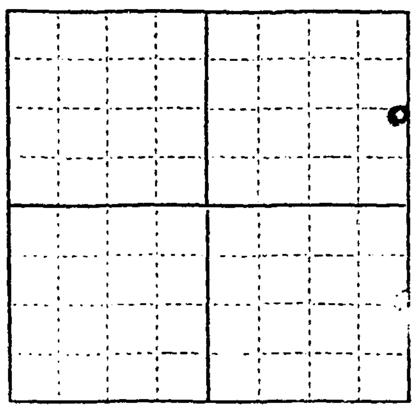
County

STATE OF MONTANA
ADMINISTRATOR OF GROUNDWATER CODE
OFFICE OF STATE ENGINEER

Declaration of Vested Groundwater Rights

(Under Chapter 237, Montana Session Laws, 1961)

1. J. R. Hedrick, of Stanford Mont
(Name of Appropriator) (Address) (Town)
County of Judith Basin State of Mont
have appropriated groundwater according to the Montana laws in effect prior to January 1, 1962, as follows:



SE ¼ NE ¼ Sec. 36 T 17 R 13

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 watering livestock

3. Date or approximate date of earliest beneficial use; and how continuous the use has been April 1962 dur summer & winter

4. The amount of groundwater claimed (in miner's inches or gallons per minute) 11 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

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

7. The date of commencement and completion of the construction of the well, wells, or other works for withdrawal of groundwater June 30 1962

8. The depth of water table 1418 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 1418 ft deep with a 2 in casing

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

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 J. R. Hedrick
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.

40961

#692

J. R. HEDRICK
SENE Sec. 36-17-13

State of Montana
County of Judith Basin
Filed for record this
30th day of Dec. A.D. 1965
at 10:05 o'clock A.M.

Delight Leslie, Clk. & Rec.
by Betty Cruikshank Dep

GROUNDWATER INDEX

Page ___ of ___

County Judith Basin Twp. 17N Rge. 14E.

Sec.	Name of Appropriator	Type of Form	County File No.	Remarks
20	Todd, Lee	Well Loc.	[illegible]	
31	Todd, Lee & Agnes	GW-4	361	
25	Hitchcock, Lester C.	"	[illegible]	

20

T. 17 R. 14

County Gallatin Basin

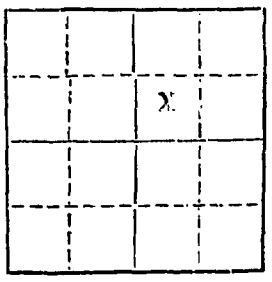
RECEIVED

STATE ENGINEER

MONTANA BUREAU OF MINES AND GEOLOGY

Butte, Montana

WATER WELL LOG



Owner Lee Todd Address Benton, Montana

Driller O. C. Thatcher Address Stanford, Montana

Date Started November 6, 1958 Date Completed Dec. 12, 1958

Location: Sec. 20 T. 17 R. 14 ¼ sec. NE

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

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

Industrial [ ] Drainage [ ] Other:

Casing: 0 ft. to 2101 ft. Type Galvanized Size 8 in.

Casing: ft. to ft. Type Size

Casing: ft. to ft. Type Size

Perforated or Screened: Ft. 1850 to ft. 2101 Ft. to ft.

Type of screen or perforations Slotted Pipe

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

Shut-in pressure, for flowing well: 75 lb./sq. in. on: December 28, 1958 (date)

Pumping water level feet at Artesian gal. per min. 50

How tested:

Length of test

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

Cemented in.

(over)

C

Log of We

Depth, feet		Description of Material Drilled
From	To	
0	0	Overburden
[illegible]	16	Gravel
16	75	Shale
75	77	Sandstone
77	[illegible]	Shale
[illegible]	100	Sandstone
100	175	Shale
175	178	Sandstone
178	215	Shale
215	218	Blue Shale
218	221	Streak of Sandstone
221	265	Blue Shale
265	304	Sandy Shale
304	328	Blue Shale
328	355	Sandy Shale
355	506	Blue Shale
506	509	Sandstone
509	530	Shale
530	630	Blue Shale
630	642	Sandy Shale
642	645	Hard Sandstone
645	650	Soft Sandstone
650	679	Hard Sandstone
679	699	Blue Shale
[illegible]	728	Shale
728	[illegible]	Sandstone

From	To	Description
725	782	Sandy Shale
782	809	Sandy Shale alternating with small streams of sandstone.
809	910	Sandy Shale
910	930	Blue Shale
930	950	Sandstone
950	965	Blue Shale
965	971	Sandstone
971	1065	Shale
1065	1154	Grey Shale
1154	1160	Blue Shale
1160	1187	Sandy Shale
1187	1360	Shale
1360	1365	Sandstone
1365	1390	Shale
1390	1399	Sandstone
1399	1440	Grey Shale with tapers of Sandstone.
1440	1501	Red Shale
1501	1503	Hard Sandstone
1503	1560	Red Shale
1560	1575	Sandstone
1575	1580	Hard Sandstone
1580	1625	Red Shale
1625	1632	Hard Sandstone
1632	1635	Soft Sandstone
1635	1650	Hard Sandstone
1650	1699	Medium Hard Sandstone
1699	1717	Dark Shale (almost black)
1717	1735	Hard Sandstone
1735	1755	Soft Sandstone
1755	1772	Hard Sandstone
1772	1785	Red Shale
1785	1825	Sandstone
1825	1870	Shale
1870	1917	Sandy Shale
1917	1942	Shale
1942	1960	Sandy Shale
1960	1968	Sandstone
1968	1978	Sandy Shale
1978	2015	Soft Shale
2015	2020	Shale
2020	2025	Shale
2025	2075	Soft Sandstone with some shale layers.
2075	2085	Sandy Shale
2085	2101	Shale

Nov. 14th, 1963.

RECEIVED
NOV 15 1963
STATE ENGINEER

State Engineer.

Helena, Montana

Dear Sir:

Mr. Todd said that your department couldn't find any record of the filing of this well, so we are enclosing a certified copy for your records.

Sincerely,

County Clerk.

State of Montana [illegible]
County of [illegible]

I hereby certify [illegible] to which this certificate is [illegible] true [illegible] and correct copy of the [illegible] on F.12 [illegible]

Witness my hand and seal [illegible] this 14th day of November [illegible] 63

County Clerk and Recorder

[illegible] Deputy