PERMIT #: 2002-338

MISSOULA CITY-COUNTY HEALTH DEPARTMENT

301 W. ALDER (406)523-4755

SEWER PERMIT AND APPLICATION

OWNER NAME: Mike Lenz PHONE: (406) 677-0199

OWNER ADDRESS: 640 Evergreen Drive

CERTIFIED INSTALLER: Self install

LOCATION OF INSTALLATION: ____ 1/4 ____ 1/4 T 16 R 15 S 1

ADDRESS OF SITE: 640 Evergreen Drive

CERTIFICATE OF SURVEY: # ____ SUBDIVISION: Double Arrow Phase IV

LOT: 15 BLOCK: ____ TRACT: ____ SIZE OF PARCEL: 2.942 acres

GENERAL AREA NAME: Seeley Lake

SEPARATION ADEQUATE FOR:
(INFO SUPPLIED BY APPLICANT)(CHECK ALL)

	YES	NO
WELLS >100'	✓	
WATER LINES >10'	✓	
FLOODPLAIN >100'	✓	
SURFACE WATER >100'	✓	
HGW >4',>5', >6'	✓	
BEDROCK >6'	✓	
SLOPE <25%	✓	
PROPERTY LINES, BLDGS >10'	✓	

Special Conditions and Other Information

*SANITARY RESTRICTIONS ?	YES ___ NO ✓
*ANY EXISTING SEPTIC SYSTEMS?	YES ___ NO ✓
UPGRADE REQUIRED?	YES ___ NO ✓
*INSIDE OR NEAR FLOODPLAIN:	YES ___ NO ✓
*PUBLIC SEWER LESS THAN 200 FEET:	YES ___ NO ✓
*PROPERTY LOCATED IN MWTPSA?	YES ___ NO ✓
FOR NEW OR INCREASED USE	
___SUBDIVISION PLAT LANGUAGE EXISTS	
___DEED RESTRICTION FILED	
*PROPERTY LOCATED IN S.T.E.P. AREA?	YES ___ NO ✓
___CITY S.T.E.P. TANK & PERMIT REQUIRED	

SOIL TYPE: Sandy loam

WATER SUPPLY: well

TYPE OF SYSTEM TO BE INSTALLED: X NEW: ____ REPLACEMENT

SYSTEM SIZING: X RESIDENTIAL #OF BEDROOMS: 2 GAL/DAY: 300

____ COMMERCIAL USE ____ GAL/DAY: ____

APPLICATION RATE (Gal/day or sq. ft./bedroom): 250

FROM: PLAT APPROVAL X ; SITE EVALUATION ____ ; ENGINEER ____

SYSTEM SIZE & DESCRIPTION: 1000 Gallons (X concrete, ____ S.T.E.P., ____ other) septic tank with 250 lineal feet of 24 inch trench drainfield as per site plan attached. Install an 8 inch capped riser from tank to surface. S T.E.P. tanks requires manway and lid to be inspected by the City.

SPECIAL CONDITIONS: ____

As purchaser of this permit, I agree to comply with all requirements for installation as described in Missoula City-County Health Code Regulation #1, State Water Quality Bureau Regulations and special conditions described above. This document does not release me from complying with any other State, Federal or Local regulations including but not limited to zoning, building and floodplain regulations.

This permit is valid for twelve (12) months from date of purchase. Sewage disposal systems must be completed within this time and inspected by the Department prior to covering the system. A copy of this permit is to be on site at all times during construction and inspection of the system. Please use the permit number in the upper right hand corner for reference when you call for a final inspection.

Permit purchaser: Michael Lenz Date: 10/11/02

Health Authority: Duane Sylvester Date: 10/11/02

MONTANA WELL LOG REPORT

Form No. 603 R2-99 Well ID# 8640

This log reports the activities of a licensed Montana well driller and serves as the official record of work done within the borehole and casing and describes the amount of water encountered. **This form is to be completed by the driller and filed with DNRC within 60 days of completion of the work. Acquiring Water Rights is the well owner's responsibility and is not accomplished by the filing of this report.**

Well log information is stored in the Groundwater Information Center at the Montana Bureau of Mines and Geology (Butte) and water right information is stored in the Water Rights Bureau records (Helena).

For fields that are not applicable, enter NA. Optional fields have a grayed background. Record additional information in the REMARKS section.

1. WELL OWNER:
Name Michoal Lenz
Mailing address P.O. box 976
Seeley lake Montana 59868

2. WELL LOCATION: List ¼ from smallest to largest
SW ¼ NW ¼ ____ ¼ ____ ¼, Section 6
Township 16N N/S Range 14W E/W County Missoula
Lot 15 Tract/Blk ____ Subdivision Name ____
Well Address ____
GPS ☐ Yes ☒ No
Latitude ____ Longitude ____
Error as reported by GPS locator (± feet) ____
Horizontal datum ☐ NAD27 ☐ WGS84

3. PROPOSED USE: ☒ Domestic ☐ Stock ☐ Irrigation
☐ Public water supply ☐ Monitoring Well ☐ Other: ____

4. TYPE OF WORK:
☒ New well ☐ Deepen existing well ☐ Abandon existing well
Method: ☐ Cable ☒ Rotary ☐ Other: ____

5. WELL CONSTRUCTION DETAILS:
Borehole:
Dia. 6" in. from G-Level ft. to 120' ft.
Dia. ____ in. from ____ ft. to ____ ft.
Dia. ____ in. from ____ ft. to ____ ft.

Casing:
Steel: Wall thickness .250 ☐ Threaded ☒ Welded
Dia. 6" in. from +2 ft. to 120' ft.
Dia. ____ in. from ____ ft. to ____ ft.

Plastic: Pressure Rating ____ lbs. ☐ Threaded ☐ Welded
Dia. ____ in. from ____ ft. to ____ ft.

Perforations/Slotted Pipe:
Type of perforator used Holte
Size of perforations/slots 3/16 in. by 1" in.
10' no. of perforations/slots from 100' ft. to 110' ft.
____ no. of perforations/slots from ____ ft. to ____ ft.

Screens: ☐ Yes ☒ No
Material ____
Dia. ____ Slot size ____ from ____ ft. to ____ ft.
Dia. ____ Slot size ____ from ____ ft. to ____ ft.

Gravel Packed: ☐ Yes ☒ No
Size of gravel ____
Gravel placed from ____ ft. to ____ ft.

Packer: ☐ Yes ☒ No
Type ____ Depth(s) ____

Grout: Material used Bentonite
Depth from ____ ft. to ____ ft. OR ☒ Continuous feed

6. WELL TEST DATA:
A well test is required for all wells. *(See details on well log report cover.)*
☒ Static water level 25' ft. below top of casing or
☐ Closed-in artesian pressure ____ psi.
How was test flow measured:
~~bucket/stopwatch~~, weir, flume, flowmeter, etc ____
Yellowstone Controlled Groundwater Area - Water Temperature ____ °F
☐ AQUIFER TEST DATA FORM ATTACHED

Test - 1 hour minimum
Drawdown is the amount water level is lowered below static level.
All depth measurements shall be from the top of the well casing.
Time of recovery is hours/minutes since pumping stopped.

Air test*:
13 gpm with drill stem set at 110' ft. for 2hrs hours
Time of recovery 15min hrs/min. Recovery water level 25' ft.

OR Bailer test*:
____ gpm with ____ ft. of drawdown after ____ hours
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Pump test*:
Depth pump set for test ____ ft.
____ gpm pump rate with ____ ft. of drawdown after ____ hrs pumping
Time of recovery ____ hrs/min. Recovery water level ____ ft.

OR Flowing Artesian*:
____ gpm for ____ hours
Flow controlled by ____

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

7. WELL LOG:

Depth, Feet From	Depth, Feet To	Material: color/rock and type/descriptor (example: blue/shale/hard, or brown/gravel/water, or brown/sand/heaving)
0	1'	Top soil
1'	16'	Multi collored cobbles & boulders
16'	70'	moist tan clay gravel & cobbles
70'	80'	Tan clay & Gravel
80'	89'	tan clay
89'	95'	tan clay, cobbles & gravel
95'	103'	dark tan & red clay & gravel
103'	110'	red clay multicollored gravel & cobbles
110'	120'	red clay

☐ ADDITIONAL SHEETS ATTACHED

8. DATE WELL COMPLETED: 6-18-02

9. REMARKS: ____

10. DRILLER/CONTRACTOR'S CERTIFICATION:
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.
Name, firm, or corporation (print) Jerome's Drilling co., Inc.
Address P.O. box 17020 Missoula Montana 59808
Signature Randy Roberts
Date 7-31-02 License no. 690

[redacted] Montana DNRC PO BOX 201601 HELENA, MT 59620-1601 444-6610 MBMG ID#

DEPARTMENT COPY

DRILLER: Please give this copy to the well owner to complete reverse side.

OWNER: Complete reverse side and send to DNRC when the well is completed and the water has been used beneficially for the intended