Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

A

Permit Number
#8001738

Onsite Wastewater Treatment System Permit Application

Include Form B and C. Submit correct fee with this Application

☑ Septic System ☑ Lagoon ☐ Other (Refer to Form C)

PLEASE PRINT OR TYPE

A. Onsite System Location

Address* 16598 old cheney Rd City Walton, NE Zip 68461
(no rural route)

Legal Description 5 11 T9 R8 11 Lot
1/4 1/4 Section Township Range Subdivison Addition Block Lot

PID 22-11-300-003-000 *Approx. Address (If to be determined)

B. Owner

Name Reagan Dalton Signature Reagan Dalton
Address 16598 old cheney Rd City/State/Zip Walton NE 68461
Home Phone 402-817-9348 Work Phone

C. Certified Installer

Name: HARPER WELL Signature Leonard Harper
Address P.O Box 15 City/State/Zip ADAMS NE 68301
Work Phone 402 432-2204

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number:

Designer Name Firm Work Phone

E. This system will serve a

☐ Residential Dwelling Number of Bedrooms 3 Whirlpool Bathtub? ☐ Yes ☑ No Total Acres 20
Garbage Grinder? ☐ Yes ☑ No

☐ Commercial Establishment/Other Facility Specify Design flow in gallons per day

Type of Wastewater ☐ Domestic ☐ Non-Domestic

DO NOT WRITE BELOW THIS LINE

Approval Process

1. Health Department
Site visits
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

2. Supt. Bldg. Insp. or Village Clerk
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

3. City or County Engineer
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

Installation Final Written Approval
By
Date

Business Office Use Only
Date Received 9-21-18 Amount Paid $405.00
Received By JAD Cash/Check No. 7657

White - Health Department Yellow - Engineer Pink - Building & Safety

Lincoln-Lancaster County Health Department
Environmental Public Health Division (402) 441-8027
3131 O Street Lincoln, Nebraska 68510-1514

ON-SITE WASTE WATER SYSTEM
CONSTRUCTION - INSTALLATION PERMIT
No. HS001738

System Type: Lagoon

Situs: 16598 OLD CHENEY RD, BENNET, NE 68461

Issued: 9/24/2018

Expires: 9/24/2019

Description: S11, T9, R8, 6th Principal Meridian, LOT 11 SW

Owner: FIVE J PROPERTY LLC
7850 AMELIA DR
LINCOLN, NE 68516

Shavonna M. Lausterer, MPH, CPH, Health Director

Dear Applicant:

The above document is your permit to construct a new On-site Waste Water System at the location listed. Please contact this office once the sytem is complete in order to schedule a final inspection before use.

Shavonna M. Lausterer, MPH, CPH
Health Director

LEONARD HARPER
PO BOX 15
ADAMS, NE 68301

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

A

Permit Number HS001738

SCANNED

Contacted on Lemm 9/3/19 pdf

Onsite Wastewater Treatment System Permit Application

Include Form B and C. Submit correct fee with this Application

☑ Septic System ☑ Lagoon ☐ Other (Refer to Form C)

PLEASE PRINT OR TYPE

A. Onsite System Location

Address* 16598 old cheney Rd City Walton, NE Zip 68461
(no rural route)

Legal Description 11 Lot

1/4	1/4	Section	Township	Range	Subdivison	Addition	Block	Lot
		11	T9	R8				

PID 22-11-300-003-000 *Approx. Address (If to be determined)

B. Owner

Name Reagan Dalton Signature Reagan Dalton
Address 16598 old cheney Rd City/State/Zip Walton NE 68461
Home Phone 402-817-9348 Work Phone

C. Certified Installer

Name: HARPER WELL Signature Leonard Harper
Address P.O Box 15 City/State/Zip ADAMS NE 68301
Work Phone 402 432-2204

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number:

Designer Name Firm Work Phone

E. This system will serve a

☐ Residential Dwelling Number of Bedrooms 3 Whirlpool Bathtub? ☐ Yes ☑ No Total Acres 20.77
Garbage Grinder? ☐ Yes ☑ No

☐ Commercial Establishment/Other Facility Specify Design flow in gallons per day

Type of Wastewater ☐ Domestic ☐ Non-Domestic

DO NOT WRITE BELOW THIS LINE

Approval Process

1. Health Department
Site visits 12/10/19
Comments
Date rec'd 9/24/18
Date frwd 9/24/18
ACTION ☑ Approved ☐ Disapproved
Signature

2. Supt. Bldg. Insp. or Village Clerk
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

3. City or County Engineer
Comments
Date rec'd
Date frwd
ACTION ☐ Approved ☐ Disapproved
Signature

Installation Final Written Approval
By
Date 12/10/19

Business Office Use Only
Date Received 9-21-18 Amount Paid $405.00
Received By Cash/Check No. 7657

White - Health Department Yellow - Engineer Pink - Building & Safety

Form A Updated: 4/15

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

Exhibit 5

Permit Number: HS001738

Onsite Wastewater Treatment System

Inspection Sheet

Date 12/10/19 Legal Description ___ ¼ ___ ¼ 11 / 9 / 8 Lot 11 Section/Township/Range

Onsite System Location

Address (no rural route) 16598 Old Cheney City ___

Owner ___ Address ___

Mark One: ☒ Dwelling ☐ Non-dwelling

☒ New System ☐ Alteration [☐ Tank Only ☐ Trench Only] ☐ Lateral Only

☐ Temporary modification (Describe problem causing discharge and reason for temporary modification): ___

Drainfield Absorption System:

☒ Lateral ☐ Bed ☐ Non-standard (engineer-designed and NDEQ approved) ☐ Holding Tank ☐ Trench

Total square feet of drainfield 1,350 Sq. Ft. Tank Size 2 – 1,000 2,000 gals

Total length of laterals 300' Type of Distribution: ☐ Chamber ☐ Perforated Pipe ☒ Other (describe) EZ flow

No. of Absorption Laterals 3 Width 4.5 Fecta No. of Drop Boxes ___ Distribution Box 1

Leveling Method Used Laser

Setbacks (Check the Boxes Below if the Required Setback has been Satisfied):

Distance From	Private Well	Public Well	Surface Water	Ground water	Pressure Water Lines	Property Lines
Tank (ft)	50 ☐	500 ☐	50 ☐	NA ☐	10 ☐	5 ☐
Field (ft)	100 ☐	500 ☐	50 ☐	4 ☐	25 ☐	5 ☐

Geographical Coordinates to 6 Decimals:

Tank ___ NA

Lateral #1 ___ Lateral #3 ___

Lateral #2 ___ Lateral #4 ___

Comments:

Inspections prior to Final Approval
Initial DC Date 12/10/19

Follow-Up ___ Date ___

Follow-Up ___ Date ___

Installation Final Written Approval
By Corey Thiel

Date 12/10/19

Field Note Drawing (See Reverse Side):

Lincoln-Lancaster County Health Department
Environmental Health Division
3140 "N" Street • Lincoln, NE 68510-1514
Phone: 402-441-8022

D

Permit Number: H500 1738

Sewage Disposal System

As Built Plans & Specifications

Date 12/7/19

System Location (Indicate correct number and street)

Address 16598 old Cheney RD (no rural route) City Walton NE, Zip 68461

A. Building Sewer

1. Material: PVC
   Diameter: 4" in.
2. Distance above basement floor: 4' in.
   or distance below basement floor: _____ in.
3. Distance between dwelling and septic tank: 70 ft.
4. Number of clean-outs: 1
5. Distances to: well or suction line _____ ft.
   stream _____ ft.
   pressure line 80' ft.
   property line _____ ft.

B. Septic Tank

1. Material: PVC
   Number of compartments: 1
2. Capacity: _____ gal.
3. Factory built: ☑ Yes ☐ No
4. Manholes: Over inlet, diameter _____ in.
   Over outlet, diameter _____ in.
   Riser: ☑ above ☐ below grade 2" in.
5. Inlet: ☐ baffle ☑ tee
6. Outlet: ☐ baffle ☑ tee
7. Depth to top of tank, below unfinished grade: 16" in.
8. Distances to: Well or suction line _____ ft.
   Stream _____ ft.
   Pressure line _____ ft.
   Property line _____ ft.

C. Distribution Box

1. Material: PVC
   Number available outlets: 6
2. Factory built: ☑ Yes ☐ No
3. Distance from septic tank: 10 ft.

D. Absorption Field

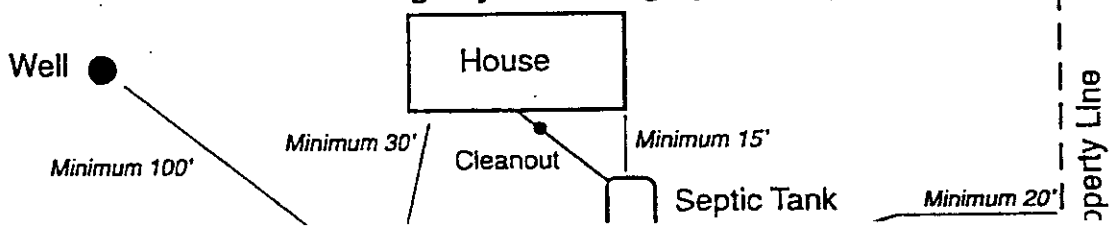
(Provide as-built drawings on back of this form)

1. Type: ☐ Half rounds ☐ Perforated pipe
   Diameter of half round: EASY Flow
   or perforated pipe: _____
   Material: ☐ fiberglass ☑ plastic ☐ concrete
   ☐ other _____
2. Lateral lines: Number 3
   Length of each line: 0 ft. 100 ft.
   _____ ft. _____ ft., _____ ft.
3. Trench dimensions: Width 36" ft.
   Slope _____ in/100 ft.
   Average depth 30" in
4. Filter material: BACKFILL
   Depth of material _____ in.
5. Distances to: Well or suction line _____ ft.
   Stream _____ ft.
   Pressure line _____ ft.
   Property line _____ ft.

Complete "As Built" drawing on back of this form.

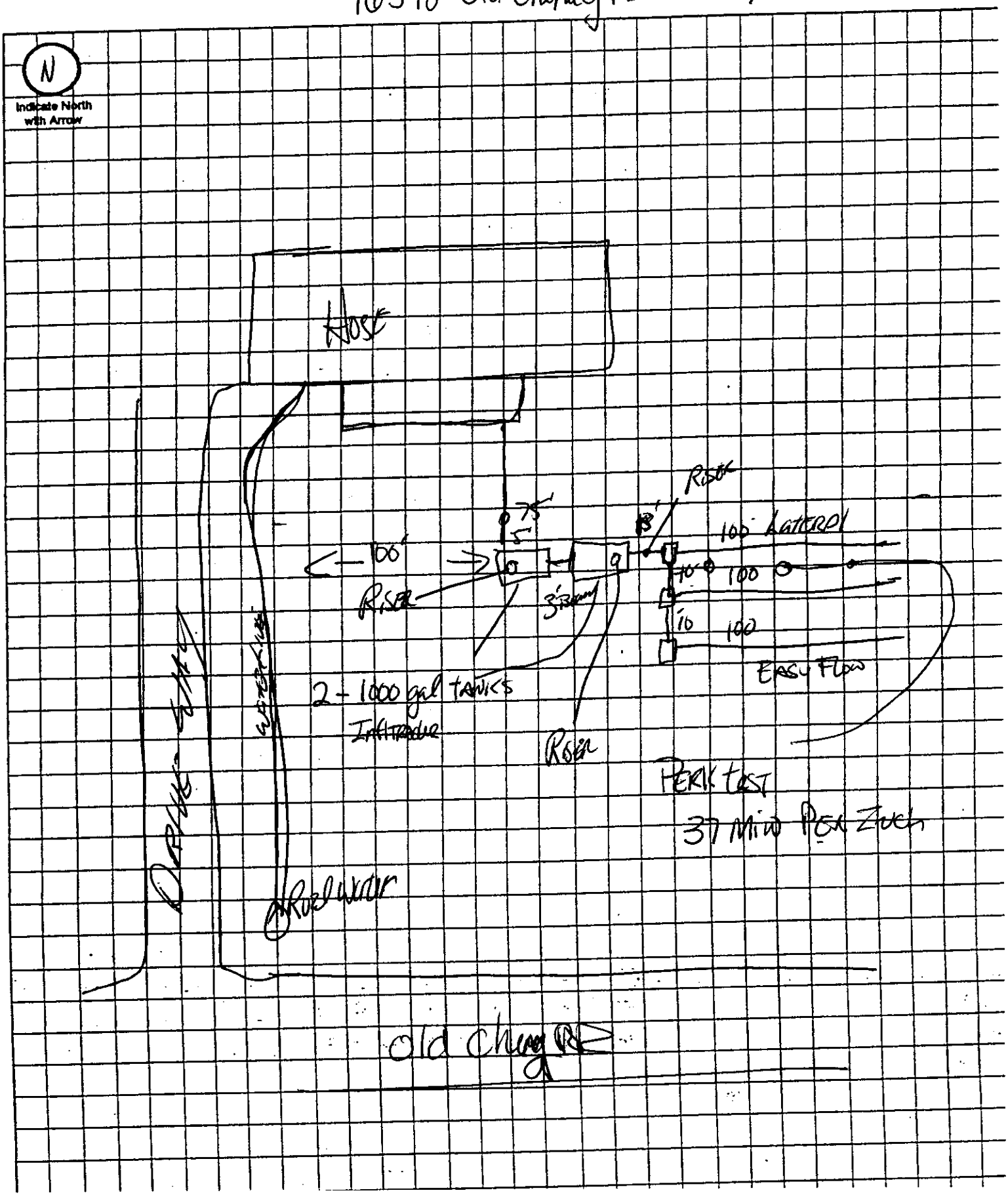
Indicate North with Arrow

Individual Sewage System Design (Example)



As Built Drawing

16598 Old Cheney RD Walton, NE 68461



Lincoln-Lancaster County Health Department (LLCHD)
Environmental Public Health Division
3131 "O" Street • Lincoln, NE 68510-1514
Phone: 402-441-8643

B

Permit Number:

Onsite Wastewater Treatment System
Soil Evaluation Report

PLEASE PRINT OR TYPE

Onsite System Location

Address 16598 Old Cheney RD (no rural route) City Waton NE, Zip 68461

Owner Regen Dalton Haley Bowers Address

Date of Tests June 26/19 to Weather: Precipitation Temperature 80°

Percolation Test Data Table

A.	B.	C. D. E. F. Saturation/Swelling Time				G. H. I. J. K. Water Level Drop Last 30 mins of 4 hr or last 10 mins of 1 hr					L. M. N. Results		
		Start		End		Start			End				
Hole No.	Hole Depth(in)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Date (Mo/Da)	Time (Hr/Min)	Initial Water Lev (in.)	Date (Mo/Da)	Time (Hr/Min)	Elapsed Time Interval	Water Level Drop(in)	Percolation Rates (Min/in = mpi)
1								6	10/?		30	3/4	34
2								6	10/?		30	13/16	37
3								6			30	13/16	37
4								6			30	13/16	37
								6					
								6					
								6					
								6					

Person Conducting Percolation Test

Name: Jerad Hom

Phone 402 932-2204

Address P.O Box 15

ADAMS NE 68301

Sum of Percolation Rates: 37 Min - 185

Average of Rates: 36.25

Rate Used for Calculation: 37

Soil type (NRCS Maps/Other)

Groundwater Depth

DO NOT WRITE BELOW THIS LINE

Reviewing Action

Comments (Soil type, groundwater, floodplain, etc.)

Signature of Reviewing Official Date

CONDUCTING A PERCOLATION TEST

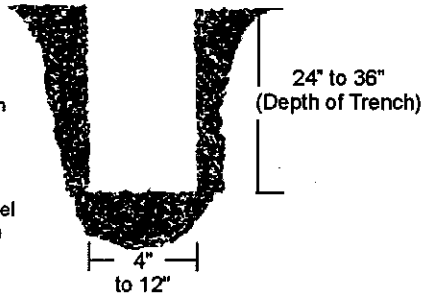
READ THOROUGHLY

DIAGRAM OF PERCOLATION TEST PROCEDURE

Natural Ground Level

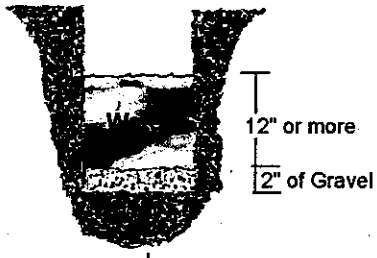
I. Number, Size and Location of Test Holes

- A. Dig six or more holes spaced evenly over proposed drainfield.
- B. Scratch smeared areas on the bottom 12" of hole.
- C. Remove loose material from hole.
- D. Add 2" layer of clean gravel in hole. Gravel (1/4"-3/4") may be placed in a nylon mesh bag so it can be used again.



II. Saturation/Swelling of Soil

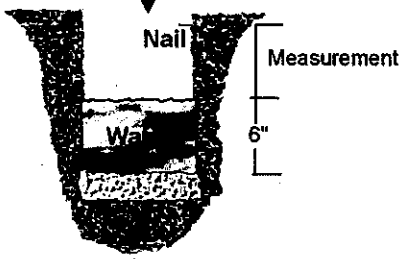
- A. Fill hole with at least 12" of clear water.
- B. **MAINTAIN THIS WATER LEVEL FOR 4 HOURS.**
- C. Record on Form B, Columns A to F
- D. **Must wait 24 hours before beginning Step III.**



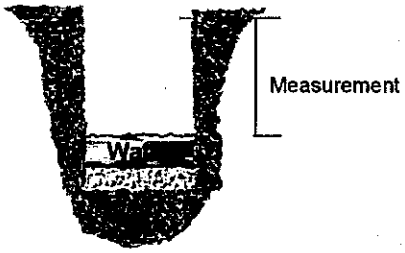
24 Hours Later

III. Water Level Drop Measurement (Refer to instructions 4a, b or c)

- A. Adjust water level to 6".
- B. Measure from fixed reference point (nail) to water, or use a percometer.
- C. Record measurement and time on scratch paper.
- D. 30 min. later re-measure and record time.
- E. After each measurement, refill to 6" above gravel.
- F. Continue for 4 hours taking readings evey 30 min. (Refer to 4b for exception)
- G. Last 30 min. reading is used in filing out Form B. Record in Column G through M.



½ hour later
(30 minutes)



IV. The Department will calculate Percolation Rates.

Instructions

1. Percolation test holes. Percolation tests should be made in 6 or more separate holes spaced uniformly over proposed drainfield. Dig or bore holes 4 to 12" in diameter to the depth of the bottom of drainfield trench. (If sides of hole collapse, a slotted PVC plastic pipe and gravel pack may be needed to support the sides of the hole.) Do not dig holes in soil that is above the plastic limit or where frost is within 12" from the bottom of hole.
2. Preparation of test hole. Scratch any smeared areas on the bottom 12" of hole with nails driven into a 1x2" board to provide a natural soil interface for water to percolate. Remove all loose soil from bottom of hole. Add 2" of clean gravel to protect the bottom from scouring when water is put into hole.
3. Saturation and swelling of the soil. Fill holes with clear water to a depth fo 12" or more above gravel and maintain this water level at least 4 hours (add water as necessary). Do not remove water from holes. Holes should be covered with boards during the 20 hrs. wait before the test begins. Soils with slow permeability or containing greater than 30% clay will require several days saturation for thorough swelling in a dry season. The accuracy of the percolation test depends on thorough saturation and swelling of soil. Sandy soil containing no clay does not swell. The percolation test may proceed immediately if the 12" of water seeps away in 10 min. or less after filling holes twice. Proceed to Step 4c.
4. Measure percolation rate. Measurements must be made 24 hrs after starting saturation/swelling procedure described above. Record results on the front of this form and the Department will complete the calculations.

   a. If water remains in hole after the saturation/ swelling period, adjust depth to 6" above gravel. From a fixed point, measure the drop in water level over a 30 min. period to nearest 1/8". This drop is used to calculate percolation rate.

   b. If no water remains in hole after the saturation/ swelling period, add 6" of clear water above gravel. From a fixed point, measure the drop in water level to nearest 1/8" at 30 min. intervals for 4 hrs. Refill to the 6" level above gravel after each measurement. The drop that occurs during the last 30 min. of the 4 hrs. is used to calculate the percolation rate (when 3 consecutive percolation rates vary by no more than 10%, the test can stop before the end of 4 hr. period).

   c. In sandy soils, or other soils in which t he first 6" of water seeps away in less than 30 min., allow 10 min. between measurements and run the test for 1 hr. The drop that occurs during the last 10 min. of 1 hour is used to calculate the percolation rate. If 6" of water seeps away in less than 10 min., use a stopwatch.
5. Record test results on the front of this form. The average of the percolation rates calculated for all holes in 30 (10) min. will usually be the rate used to size the drainfield. Exceptions are the use of the slowest percolation rate when rates vary more than 20 mpi between holes or when other soil evaluation indicates a problem.

LLCHD reserves the right to witness or perform percolation tests and to required additional soil or groundwater information.