HS001235

# Application to Alter or Repair an Onsite Wastewater Treatment System

The applicant is applying for a permit to: ☐**ALTER** ☐**REPAIR** an existing Onsite Wastewater Treatment System, and agrees to comply with LMC 24.38 or County Resolution 02-0030.

1. **Street Address (No Rural Route):** 3430 W. Buckthorn Rd.

   **Legal Description of Property:** Township:_____ Range:_____ Section:_____

   Block 2 Lot 3 SubDivsion Rhoads Ironwood Est. Add:_____

   ***Parcel ID** 09 - 17 - 102 - 003 - 000 (i.e. 99-99-999-999-999)

2. **Property use:** ☒ Residential ☐ Commercial ☐ Other use (Describe: _____)

   Number of bedrooms 3 Does the system have a: ☒ Garbage Grinder ☒ Large Capacity Tub
   X Water Softner X Iron System X R.O. System

3. **Type of Present Individual Disposal System** ☒ septic system ☐ lagoon ☐ other

4. **Description of proposed alteration or repair:** Install new lateral Field, Add approx. 2 - 120 Foot Lateral Field to accomadate the amount of Waste Water. We are also going to Replace D-Box. Chamber With Gravel

5. **Current Type of Lateral-** Infiltrators **Current Linear Ft. Of Lateral -** 240'

   **Current Tank Gallonage-** 1,500

6. Print Name Josh Vesterna Address 3717 W. Harvest LN Phone: 402 720 3950

   Applicant Signature: _____

**Please contact LLCHD for the current permit fee for this application**

Fee must be included before the application will be processed. Incomplete information will delay processing.

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**HEALTH DEPARTMENT USE ONLY**

☐Municipal Code 24.38 ☐County Resolution Number 02-30

Date received ____/____/____ REVIEW: ☐ Approved ☐ Disapproved By:_____

Comments (if any):_____

**Site visits**
Date ____/____/____ By_____
Date ____/____/____ By_____

**Installation final written approval**
Date ____/____/____ By_____

**Return application to:**

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 "N" Street, Lincoln, NE 68510
Phone: (402) 441-8643

***Business Office Use Only***

Received: Date: 4/26/16 Amount $210.00 Check No. 229837 Initials SB

Revised 4/8/13

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

**B**

Permit Number: HS001235

# Onsite Wastewater Treatment System

## Soil Evaluation Report

**PLEASE PRINT OR TYPE**

### Onsite System Location

Address 3430 W. Buckthorn Rd. (no rural route) City Lincoln NE, Zip 68523

Owner Chuck & Linette Cheever Address _____

Date of Tests 4-11 to 4-12 Weather: Precipitation 0 Temperature 57°

### Percolation Test Data Table

| A. | B. | C. | D. | E. | F. | G. | H. | I. | J. | K. | L. | M. | N. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Saturation/Swelling Time | | | | Water Level Drop: Last 30 mins of 4 hr or last 10 mins of 1 hr | | | | | 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 | 48 | 4/11 | 12:00 | 4/12 | 11:30 | 4/12 | 11:30 | 6 | 4/12 | 3:30 | 30 | 1" | 30 |
| 2 | 48 | 4/11 | 12:00 | 4/12 | 11:30 | 4/12 | 11:30 | 6 | 4/12 | 3:30 | 30 | 1" | 30 |
| 3 | 48 | 4/11 | 12:00 | 4/12 | 11:30 | 4/12 | 11:30 | 6 | 4/12 | 3:30 | 30 | 1" | 30 |
| 4 | 48 | 4/11 | 12:00 | 4/12 | 11:30 | 4/12 | 11:30 | 6 | 4/12 | 3:30 | 30 | 1¼ | 37.5 |
| 5 | 48 | 4/11 | 12:00 | 4/12 | 11:30 | 4/12 | 11:30 | 6 | 4/12 | 3:30 | 30 | ¾ | 22.5 |
| 6 | 48 | 4/11 | 12:00 | 4/12 | 11:30 | 4/12 | 11:30 | 6 | 4/12 | 3:30 | 30 | 1¼ | 37.5 |
| | | | | | | | | 6 | | | | | |
| | | | | | | | | 6 | | | | | |

### Person Conducting Percolation Test

Name: Josh Vesterna

Phone: (402) 610-6141

Address 3717 W. Harwart LN.

Sum of Percolation Rates: Ave Perc Rate of 31.25 MPI 187.5 Total

Average of Rates: 31.25 MPI

Rate Used for Calculation: _____

Soil type (NRCS Maps/Other) _____

Groundwater Depth _____

***DO NOT WRITE BELOW THIS LINE***

### Reviewing Action

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

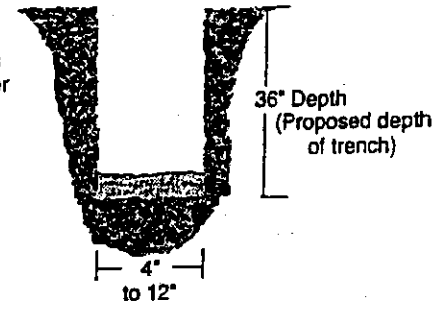
Signature of Reviewing Official _____ Date _____

## READ THOROUGHLY

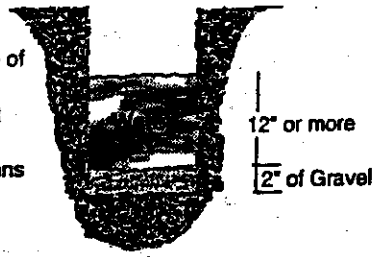
### DIAGRAM OF PERCOLATION TEST PROCEDURE

Finished Grade or Natural Ground Level

I. Size, Number, and Location or Test Holes
   - A. Dig six or more holes spaced uniformly over proposed lateral field site.
   - B. Scratch smeared spots on sides of hole.
   - C. Remove loose material from hole.
   - D. Add 2" of gravel to hole.

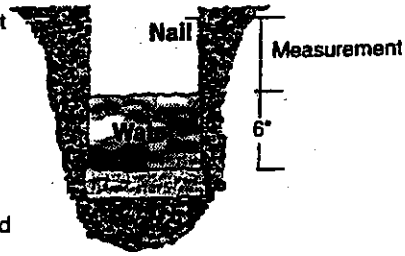



II. Saturation of Soil (Pre-soak)
   - A. Fill hole with 12" or more of water.
   - B. MAINTAIN THIS WATER LEVEL FOR 4 HOURS.
   - C. Record on Form B columns a thru f.



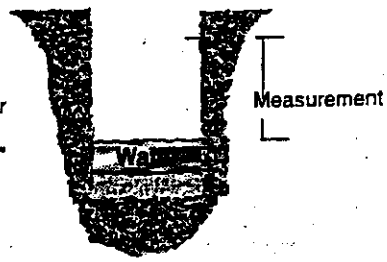

24 Hours Later

III. Percolation-rate Measurement **(refer to instructions 5a, 5b, or 5c.)**
   - A. Add 6" of water.
   - B. Measure from fixed reference point (nail) to water.
   - C. Record measurement and time on front of Form B.




½ hour later
(30 minutes)

   - D. 30 minutes later remeasure and record time.
   - E. If water will be too low for another reading 30 minutes later, adjust to 6" of water and remeasure and record time.




   - F. Continue for 3½ hours taking readings every 30 minutes.
   - G. Last 30 minute reading is used in filling out Form B. Record date, time, intervals and water level drops in column g thru m.

# Instructions

1. **Number and location of tests.** Percolation tests shall be made in 6 or more separate test holes which shall be spaced uniformly over the proposed lateral field site.
2. **Type of test hole.** Dig or bore a hole 3 feet deep with a diameter of 4 to 12 inches. (To save time, labor and the volume of water required per test, a 4-inch auger hole is recommended).
3. **Preparation of the test hole.** Scratch or roughen any smeared spots on the sides of the hole with a knife blade or sharp pointed instrument to provide a natural soil interface into which water may percolate. Remove all loose material from the hole. Add 2 inches of gravel to protect the bottom from scouring when water is poured into the hole.
4. **Saturation and swelling of the soil.** Fill the hole with clear water to a depth of 12 inches or more above the gravel and maintain this water level at least 4 hours and preferably overnight. The accuracy and true value of the percolation data depends on thorough saturation and swelling of the soil.
5. **Percolation-rate measurement.** Percolation-rate measurements shall be made 24 hours after starting the saturation and swelling procedure described above. Record results on the front of this form and complete all calculations.
   a. If water remains in the test hole after the overnight swelling period, adjust the depth to approximately 6 inches over the gravel. From a fixed reference point, measure the drop in water level over a 30 minute period to the nearest 1/8 of an inch. This drop is used to calculate the percolation rate.
   b. If no water remains in the test hole after the overnight swelling period, add clear water to bring the depth to approximately 6 inches over the gravel. From a fixed point, measure the drop in water level to the nearest 1/8 of an inch at 30-minute intervals for 4 hours. Refill to the 6 inch level over the gravel as often as necessary. The drop that occurs during the final 30 minutes is used to calculate the percolation rate.
   c. In sandy soils (or other soils in which the first 6 inches of water seeps away in less than 30 minutes after the overnight swelling period) the time interval between measurements shall be 10 minutes instead of 30 minutes and the test run for 1 hour instead of 4 hours. The drop that occurs during the final 10 minutes is used to calculate the percolation rate.
6. **Record the test results and complete all calculations on the front of this form.** The average of the percolation rates calculated for all holes in the last 30 (10) minutes will normally be the rate used for calculations to size the system. ***Exceptions are the use of the greatest percolation rate when rates vary more than 20 min/in between holes or when other soil analysis indicates potential percolation problems.***

LLCHD reserves the right to require additional testing based on knowledge of soil types, percolation tests results on nearby properties, or due to concerns with procedures followed. In some situations, LLCHD staff will require and perform on-site observation of percolation tests.

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

5/10/16 ok gw

Exhibit 5

Permit Number: H500123

# Onsite Wastewater Treatment System

## Inspection Sheet

Date 5/11/16 Legal Description _____

¼ ¼ Section/Township/Range

**Onsite System Location**

Address (no rural route) 3430 W. Bethphage 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 N/O Sq. Ft. Tank Size N/O gals

Total length of laterals N/O Type of Distribution: ☐ Chamber ☐ Perforated Pipe ☐ Other (describe)_____

No. of Absorption Laterals 3 Width 5' No. of Drop Boxes 0 Distribution Box 1

Leveling Method Used Laser (+ level?)

**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_____

Lateral #1_____ Lateral #3_____

Lateral #2_____ Lateral #4_____

**Comments:**

* 3 trenches adding to over 16 ft - 5 ft wide w/ fill.

Inspections prior to Final Approval
Initial _____ Date 5/16/16 DH

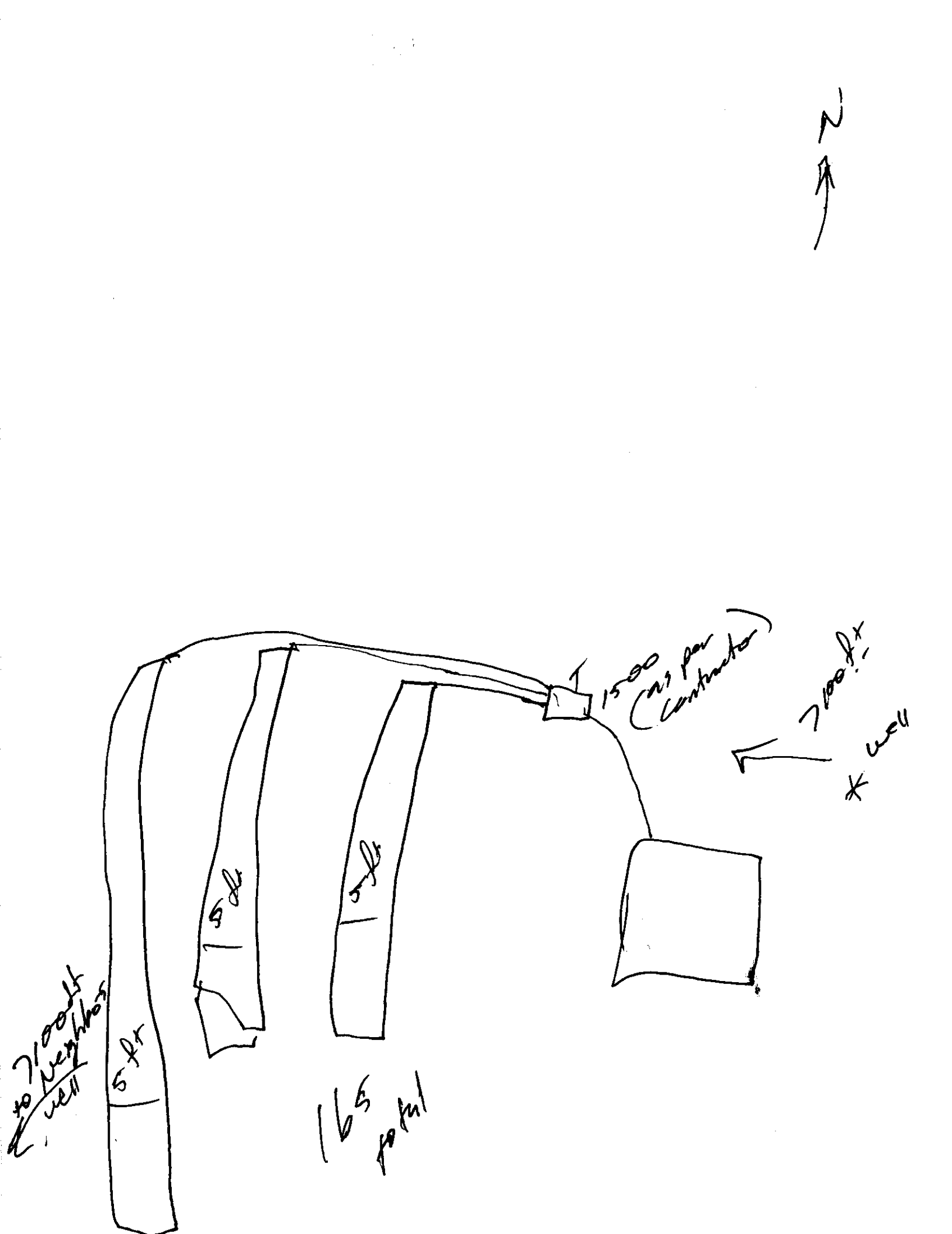
Follow-Up_____ Date _____

Follow-Up_____ Date _____

Installation ~~Had Written~~ Approval
By _____

Date 5/11/16

**Field Note Drawing (See Reverse Side):**


N
1500 cars per contractor
7100 ft.
well
5 ft
5 ft
5 ft
7100 ft to Neighbors well
165 gpm

SCANNED

HS001235

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**HEALTH DEPARTMENT USE ONLY**

☒Municipal Code 24.38 ☐County Resolution Number 02-30

Date received 4 / 27 / 16 REVIEW: ☒ Approved ☐ Disapproved By:

Comments (if any):

**Site visits**

Date ___/___/___ By

Date ___/___/___ By

**Installation final written approval**

Date 5 / 11 / 16 By

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