

# TRI-COUNTY DISTRICT HEALTH DEPARTMENT ENVIRONMENTAL HEALTH DIVISION

FIS

4347

**ADAMS CITY**  
4301 EAST 72ND AVE.  
288-6816

**WEST ADAMS**  
7475 DAKIN ST.  
SUITE 401  
428-8543

**BRIGHTON**  
1895 EGBERT ST.  
659-4000

**ENGLEWOOD**  
4857 SO. BROADWAY  
761-1340

**AURORA**  
15400 EAST 14th PLACE  
SUITE 309  
341-9370

**DOUGLAS COUNTY**  
502 THIRD ST.  
688-5145

## PERMIT

TRI-COUNTY DISTRICT HEALTH DEPARTMENT (FILE) NO. 2989  
PERMIT TO (  ) CONSTRUCT (  ) REMODEL A NON-MUNICIPAL WASTE DISPOSAL SYSTEM FOR Ronald M. & Barbara J. Smith  
AT Tract 25, McArthur Ranch, Filing #2, Sections 20 & 21, T6S 267N, Range 10E, Sec 10, Douglas County, MO. (Name)  
(Address or Legal Description)  
COMPOSED OF 1000 GALLON SEPTIC TANK AND A SOIL ABSORPTION AREA 1,050 SQ. FT.  
OR \_\_\_\_\_

THIS PERMIT SHALL EXPIRE ONE YEAR FROM DATE OF ISSUANCE UNLESS EXTENDED TO A FIXED DATE UPON REQUEST BY THE APPLICANT AND APPROVED BY THE HEALTH OFFICER.

ISSUED BY Samuel Johnson, M.D. PUBLIC HEALTH OFFICER, TRI-COUNTY DISTRICT HEALTH DEPARTMENT BY  
[Signature] , DATE 3-29-1978  
(Sanitarian)

Leaching field must be located in the area of the test holes F-1-P-1.

OWNER MUST ASCERTAIN THAT THIS ENTIRE WASTE DISPOSAL SYSTEM REMAINS OPEN FOR INSPECTION UNTIL IT HAS RECEIVED APPROVAL BY THE TRI-COUNTY DISTRICT HEALTH DEPARTMENT. THE HEALTH OFFICER CANNOT ASSUME RESPONSIBILITY IN CASE OF FAILURE OR INADEQUACY OF A WASTE DISPOSAL SYSTEM BEYOND CONSULTING IN GOOD FAITH WITH PROPERTY OWNER. MALFUNCTIONS MAY BE DUE TO IMPROPER MAINTENANCE AND/OR USAGE, VARIABLE GROUND WATER TABLE, SOIL COMPACTION OR OTHER FACTORS. IN THE EVENT THIS SYSTEM MUST BE SAMPLED TO DETERMINE COMPLIANCE WITH STATE STANDARDS, A FEE OF \$ \_\_\_\_\_ PLUS \_\_\_\_\_ MILES AT 10¢ PER MILE WILL BE ASSESSED FOR EACH SAMPLE TAKEN.

PERMIT FEE OF \$ 75.00 FOR NEW SYSTEM. CHECK NO. \_\_\_\_\_ M.O. NO. \_\_\_\_\_ CASH \_\_\_\_\_  
RECEIVED BY K.B.H. DATE 3-29-1978

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ENVIRONMENTAL HEALTH DIVISION

Adams City  
4301 E. 72nd Ave.  
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Brighton  
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2989  
BOB EOLEN Tr 25  
2107 MILLER  
Englewood  
4857 So. Broadway  
761-1340

Aurora Office  
15400 E. 14th Place  
341-9370

MAA) BEALUND  
Castle Rock  
502 3rd St.  
688-5145

West Adams City  
7475 Dakin  
428-8543

962 Mc Arthur

APPLICATION FOR PERMIT TO CONSTRUCT, REMODEL, OR INSTALL A WASTE DISPOSAL SYSTEM

SECTIONS 20 + 21

✓ Address (Legal Description) TRACT 25 McARTHUR RANCH FILING #2 T65 R67W  
 ✓ Owner RONALD M + BARBARA J. SMITH Address 4302 S. EVERETT Telephone No. 973-2892  
 ✓ Installed by JIM PATTERSON Address \_\_\_\_\_ Telephone No. 753-9378

GENERAL INFORMATION

✓ Type of Waste System: Residence YES Commercial \_\_\_\_\_ Other \_\_\_\_\_  
 ✓ Size of Lot 5 ACRES  
 Percolation Rate #1 \_\_\_\_\_ #2 \_\_\_\_\_ #3 \_\_\_\_\_ #4 \_\_\_\_\_ #5 \_\_\_\_\_ #6 \_\_\_\_\_  
 average \_\_\_\_\_ minutes per inch. Depth of 1st Ground Water \_\_\_\_\_  
 oil Profile 1' to 10' \_\_\_\_\_  
 Source of Domestic Water: Public (name) \_\_\_\_\_  
 ✓ Private well YES Depth PROPOSED 300' Distance from Sewage System \_\_\_\_\_  
 Estimated Daily Sewage Flow \_\_\_\_\_ G.P.D.

RESIDENCE

✓ Number of Bedrooms 2 Tubs or Showers 2 Toilets 2 Lavatory 2 Sinks 2

COMMERCIAL or Other: Attach estimated daily sewage flow data.

Depth of Building Drain \_\_\_\_\_

Leaching Field must be located  
In the Area of Test holes P-9-85-P6

CONSTRUCTION INFORMATION

Septic Tank Capacity 1000 gallons. Material concrete  
 Inlet T Outlet T  
 Soil Absorption System Trench \_\_\_\_\_ Bed X Pit \_\_\_\_\_  
 Required Absorption Area in square feet 1650 Filler Material Size 1/2" Depth 36"  
 Distribution Line Material Pvc Diameter 2"

For other type disposal system attach complete design and specification data.

✓ Owner or Agent Ronald M. Smith Date March 27, 1978

Roy Upshaw Tri-County District H.D. 3-29-78 Date

Water Pollution Control Comm. \_\_\_\_\_ Date

Local Building & Zoning \_\_\_\_\_ Date

Public Water & Sewer District \_\_\_\_\_ Date

Permit Issued \_\_\_\_\_ (health officer) \_\_\_\_\_ Date

Supporting data (attached) \_\_\_\_\_ Soil Profile \_\_\_\_\_

Plot Plans \_\_\_\_\_ Special Design Data \_\_\_\_\_

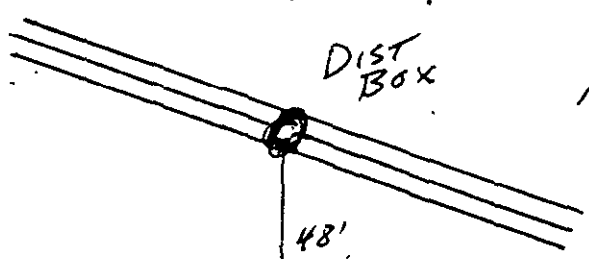
Percolation Data \_\_\_\_\_

✓ The construction of this nonmunicipal waste disposal system will comply with TCDHD Reg. #2/69 and all other applicable laws, ordinances, standards or resolutions. X Owner.

System Inspected and approved (date) 10-3-78 Sanitarian Scott R. Miller

Permit File No. 2989 Fiscal Control No. 4347

3 LINES 1 1/2" RIVER ROCK  
1746 SQ FT  
18' x 97'



48'  
48' bend  
15'

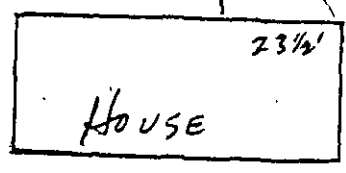
60.0 CLEAN OUT

97'



600 GAL SEPTIC TANKS  
1000 GAL TANKS

48' 53'



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SECTIONS 20 & 21

✓ Address (Legal Description) TRACT 25 McARTHUR RANCH FILING #2 T65 R67W  
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✓ Installed by JIM PATERSON Address \_\_\_\_\_ Telephone No. 753-9378

GENERAL INFORMATION

✓ Type of Waste System: Residence YES Commercial \_\_\_\_\_ Other \_\_\_\_\_  
✓ Size of Lot 5 ACRES  
Percolation Rate #1 \_\_\_\_\_ #2 \_\_\_\_\_ #3 \_\_\_\_\_ #4 \_\_\_\_\_ #5 \_\_\_\_\_ #6 \_\_\_\_\_  
Average \_\_\_\_\_ minutes per inch. Depth of 1st Ground Water \_\_\_\_\_  
Soil Profile 1' to 10' \_\_\_\_\_  
Source of Domestic Water: Public (name) \_\_\_\_\_  
✓ Private well YES Depth PROPOSED 300' Distance from Sewage System \_\_\_\_\_  
Estimated Daily Sewage Flow \_\_\_\_\_ G.P.D.

RESIDENCE

✓ Number of Bedrooms 2 Tubs or Showers 2 Toilets 2 Lavatory 2 Sinks 2

COMMERCIAL or Other: Attach estimated daily sewage flow data.

Depth of Building Drain \_\_\_\_\_  
*Leaching Field must be located  
in the Area of test holes P-4-P5-P6*

CONSTRUCTION INFORMATION

Septic Tank Capacity 1000 gallons Material CONCRETE  
Inlet \_\_\_\_\_ Outlet T  
Soil Absorbtion System Trench \_\_\_\_\_ Bed X Pit \_\_\_\_\_  
Required Absorbtion Area in square feet 1650 Filler Material Size 1/2" Depth 36"  
Distribution Line Material PVC Diameter 3"

For other type disposal system attach complete design and specification data.

✓ Owner or Agent Ronald M. Smith Date March 27, 1978

Roy Updegrave Tri-County District H.D. 3-29-78 Date  
Water Pollution Control Comm. \_\_\_\_\_ Date  
Local Building & Zoning \_\_\_\_\_ Date  
Public Water & Sewer District \_\_\_\_\_ Date  
Permit Issued \_\_\_\_\_ (health officer) \_\_\_\_\_ Date  
Supporting data (attached) \_\_\_\_\_ Soil Profile \_\_\_\_\_  
Plot Plans \_\_\_\_\_ Special Design Data \_\_\_\_\_  
Percolation Data \_\_\_\_\_

✓ The construction of this nonmunicipal waste disposal system will comply with TCDHD Reg. #2/69 and all other applicable laws, ordinances, standards or resolutions \_\_\_\_\_ Owner.

System Inspected and approved (date) \_\_\_\_\_ Sanitarian \_\_\_\_\_  
Permit File No. 2989 Fiscal Control No. 4347

**THE FISHERMAN COMPANY** CONSULTING SOILS ENGINEERS  
C. REES NICKERSON, P.E. President  
10600 W. ALAMEDA SUITE L-7 • LAKEWOOD, CO. 80226 • (303) 989-3110

MATT. 4:19



March 24, 1978

Mr. Ron Smith  
4302 South Everett  
Littleton, Colorado 80123

Subject: Percolation Tests  
Proposed Smith Residence  
Lot 25 McArthur Ranch  
Filing No. 2  
Douglas County, Colorado  
Job No. 245

Dear Mr. Smith:

Additional percolation tests have been run in various areas on the subject lot. These tests were run to determine if faster percolation rates would occur in other areas of the lot. An area was found further downhill of the residence and north of the residence where the clays contained more sand and silt.

A profile boring was drilled to a depth of 8 feet at the location shown on Fig. 1. There was about 6 inches of topsoil underlain by silty, sandy clay to 8 feet. No ground water was encountered in the boring.

Percolation borings 10 inches in diameter, 3 feet deep were drilled. Percolation tests were run to evaluate permeability. The perc test results are presented on Table I. Perc rates ranged from 48 to 60 minutes per inch.

In our opinion this area percs at a faster rate than the one tested in January, 1978, and reported under our Job No. 245 dated January 30, 1978. We recommend locating the leach field in the new area. At this location a standard field can be constructed. We recommend sizing the field for a percolation rate of 60 minutes per inch.

If you have questions about this information, please call.

Very truly yours,

THE FISHERMAN COMPANY

*C. Rees Nickerson*  
C. Rees Nickerson, P.E.



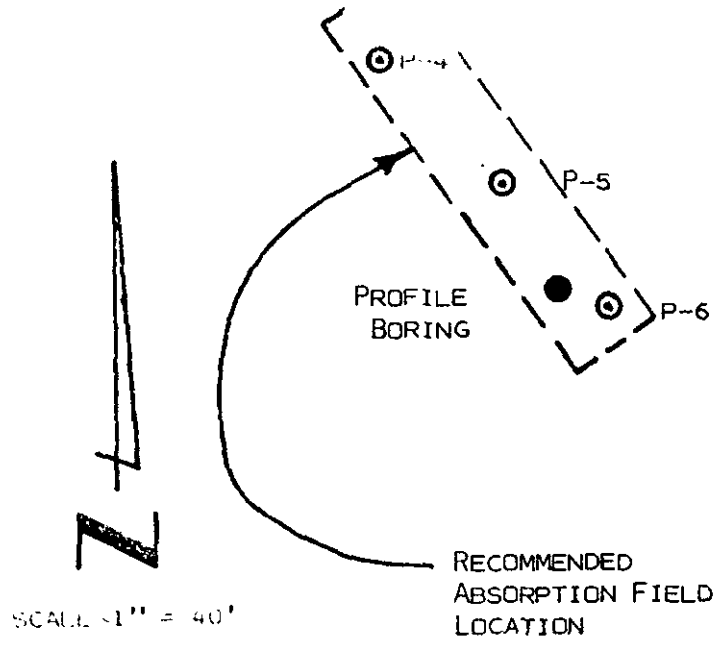


FIG. 25 FIELD NO. 2  
 MC ARTHUR BASIN

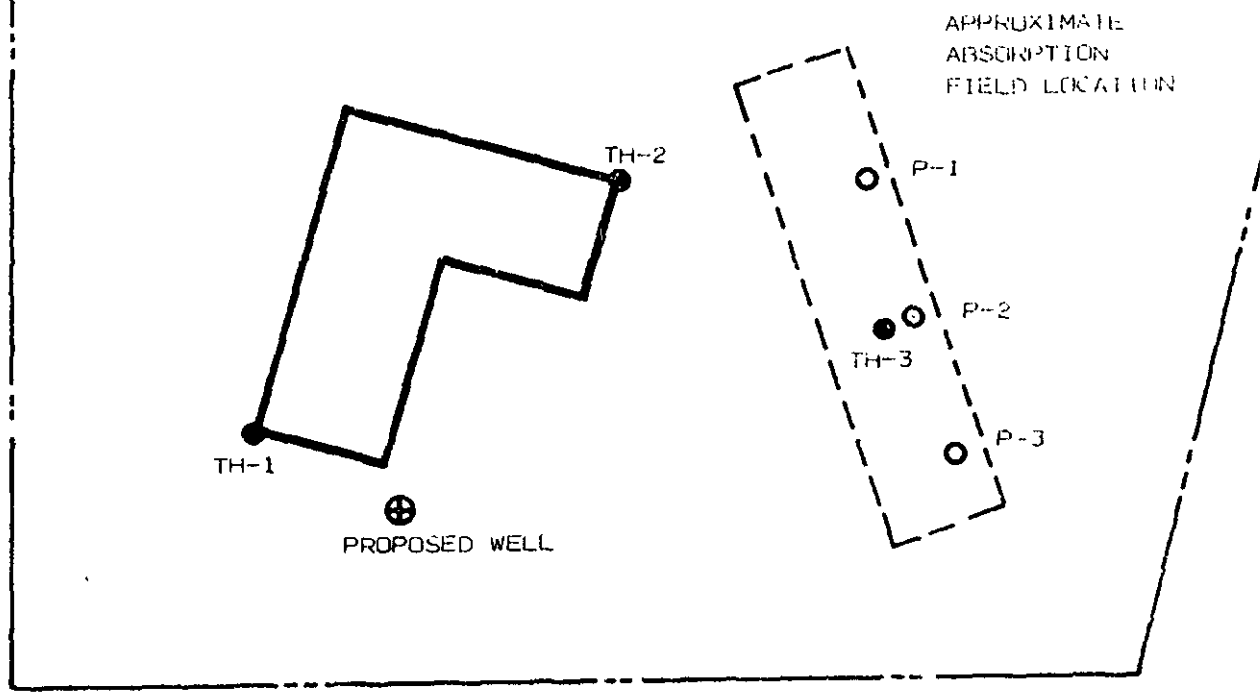


TABLE I  
PERCOLATION TEST RESULTS  
TESTS RUN 3/20/78

| HOLE NUMBER | DEPTH<br>INCHES | TIME INTERVAL<br>MINUTES | DEPTH TO WATER<br>START OF TIME INTERVAL<br>INCHES | DEPTH TO WATER<br>END OF TIME INTERVAL<br>INCHES | CHANGE IN WATER DEPTH<br>INCHES | PERC RATE<br>MIN/INCH |
|-------------|-----------------|--------------------------|--|--|---------------------------------|-----------------------|
| P-4         | 36              | 30                       | 26 1/2   | 27 1/4   |                                 |                       |
|             |                 | 30                       | 27 1/4   | 27 3/4   |                                 |                       |
|             |                 | 30                       | 27 3/4   | 28 3/8   |                                 |                       |
|             |                 | 30                       | 28 3/8   | 28 7/8   |                                 |                       |
|             |                 | 30                       | 28 7/8   | 29 1/2   |                                 |                       |
|             |                 | 30                       | 29 1/2   | 30   |                                 |                       |
|             |                 | 30                       | 30   | 30 5/8   |                                 |                       |
|             |                 | 30                       | 30 5/8   | 31 1/8   | 1/2                             | 60                    |
| P-5         | 36              | 30                       | 26 1/8   | 26 5/8   |                                 |                       |
|             |                 | 30                       | 26 5/8   | 27 1/8   |                                 |                       |
|             |                 | 30                       | 27 1/8   | 27 5/8   |                                 |                       |
|             |                 | 30                       | 27 5/8   | 28   |                                 |                       |
|             |                 | 30                       | 28   | 28 1/2   |                                 |                       |
|             |                 | 30                       | 28 1/2   | 29   |                                 |                       |
|             |                 | 30                       | 29   | 29 1/2   |                                 |                       |
|             |                 | 30                       | 29 1/2   | 30   | 1/2                             | 60                    |
| P-6         | 36              | 30                       | 26   | 26 7/8   |                                 |                       |
|             |                 | 30                       | 26 7/8   | 27 1/2   |                                 |                       |
|             |                 | 30                       | 27 1/2   | 28   |                                 |                       |
|             |                 | 30                       | 28   | 28 1/2   |                                 |                       |
|             |                 | 30                       | 28 1/2   | 29 1/8   |                                 |                       |
|             |                 | 30                       | 29 1/8   | 29 5/8   |                                 |                       |
|             |                 | 30                       | 29 5/8   | 30 1/4   |                                 |                       |
|             |                 | 30                       | 30 1/4   | 30 7/8   | 5/8                             | 48                    |