FREEHOLD AREA HEALTH DEPARTMENT

SERVING
FREEHOLD TOWNSHIP FREEHOLD BOROUGH
UPPER FREEHOLD TOWNSHIP

1 MUNICIPAL PLAZA
FREEHOLD, NEW JERSEY 07728-3099

TELEPHONE: 732-294-2060
FAX: 732-462-2340

TOWNSHIP Upper Freehold BLOCK 54 LOT 8.05 PERMIT FEE $50.00

NEW WELL (NEW CONSTRUCTION) X REPLACEMENT WELL ____

PERMIT FEE SCHEDULE: FREEHOLD TOWNSHIP $30.00
UPPER FREEHOLD TOWNSHIP $50.00

CLIENT (OWNER): Ryan HOmes

COMPLETE OWNER ADDRESS AND TELPHONE NUMBER: 1451 HIghway 34 Suite 201 Farmingdale, NJ 07727 732-938-3535

STATE WELL DRILLING PERMIT NUMBER: 2800054946 DATE ISSUED: 2/22/05

NAME & ADDRESS OF CONTRACTOR: K Anderson's Well DRilling LLC 235 Sycamore Aye Marlton, NJ 08053 856-767-8757

LOCATION OF PROPERTY: Providence Estates- Jake Drive

TYPE OF WELL OR WATER SUPPLY: Domestic New Construction

ESTIMATED DEPTH: 150' METHOD OF SEALING: pressure grout-bentonite

PUMPING EQUIPMENT: Submersible pump

STORAGE FACILITIES: Water tank

PURIFICATION FACILITIES: Unknown at this time

IF THIS WELL IS TO BE INSTALLED ON A PROPERTY WHERE A PUBLIC WATER SUPPLY IS ALSO BEING UTILIZED, ALL WELL PUMPS, PIPES, TANKS AND OTHER EQUIPMENT MUST BE LOCATED OUTSIDE THE DWELLING UNIT.

COPIES OF ALL SUCH PERMITS MUST BE FILED WITH THE WATER DEPARTMENT

№ 150

FREEHOLD AREA HEALTH DEPARTMENT
SERVING FREEHOLD TOWNSHIP, MILLSTONE TOWNSHIP,
AND UPPER FREEHOLD TOWNSHIP
732-294-2060

CERTIFICATE OF COMPLIANCE

THIS IS TO CERTIFY THAT THE SEWAGE DISPOSAL SYSTEM AT

BLOCK: 54 LOT: 8.05 TOWNSHIP: Upper Freehold

STREET MAILING ADDRESS: 1451 Rt 34 Ste. 301 Farmingdale, NJ 07727

AND OWNED BY: CJS Investments PHONE: _____

HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THE CURRENT "STANDARDS FOR INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEMS", AS ADOPTED BY THE FREEHOLD AREA HEALTH DEPARTMENT.

THE ISSUANCE OF THIS CERTIFICATE SHALL NOT BE CONSTRUED AS A GUARANTEE THAT THE SYSTEM WILL FUNCTION SATISFACTORILY NOR SHALL IT IN ANY WAY RESTRICT THE POWERS OR RESPONSIBILITIES OF THE BOARD OF HEALTH IN THE ENFORCEMENT OF ANY LAW OR ORDINANCE RELATING TO PUBLIC HEALTH.

DATED: 12/11/06 _____
FREEHOLD AREA HEALTH DEPARTMENT

№ 150

FREEHOLD AREA HEALTH DEPARTMENT
SERVING FREEHOLD TOWNSHIP, MILLSTONE TOWNSHIP,
AND UPPER FREEHOLD TOWNSHIP
732-294-2060

PERMIT TO LOCATE AND CONSTRUCT OR ALTER AN INDIVIDUAL SEWAGE DISPOSAL SYSTEM

PERMISSION IS HEREBY GRANTED TO:

OWNER/CONTRACTOR: CJS Investments

ADDRESS: 1451 Rt 34 Ste. 301 Farmingdale, NJ

07727 PHONE: _____

TO LOCATE AND CONSTRUCT AN INDIVIDUAL SEWAGE DISPOSAL SYSTEM IN ACCORDANCE WITH THE CURRENT "STANDARDS FOR INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEMS", LOCATED AT:

BLOCK: 54 LOT: 8.05 TOWN: Upper Freehold

DATE OF ISSUE: 8/9/05 EXPIRATION DATE: ~~8/9/07~~ 8/8/08

FEE PAID: $ 200.00 _____
FREEHOLD AREA HEALTH DEPARTMENT

Reissued on 8/8/06 Fee pd. 400.00
For 5 bedroom house

COUNTY/MUNICIPALITY: Monmouth County \ Upper Freehold Township

APPLICATION FOR PERMIT TO CONSTRUCT AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2b- Soil Log and Interpretations

1. Log Number 1 Method: (Check One): XX Profile Pit ____ Boring
2. Block 54 Lot 8.37

Horizon Depth (inches)	Horizon Description
0 - 7	Very Dark Grayish Brown (10YR, 3/2) Topsoil, Organics, loamy sand, medium texture, sub angular blocky, friable
7 - 24	Olive (5Y, 4/4) sandy clay loam, medium texture, sub angular blocky, friable glauconitic
24 - 42	Olive (5Y, 4/3) sandy loam, medium texture, sub angular blocky, friable glauconitic
42 - 58	Olive Gray (5Y, 4/2) sandy loam, medium texture, sub angular blocky, friable mottles @ 43", to be removed
58 - 128	Olive (5Y, 5/4) sandy loam - loamy sand, medium - coarse texture, sub angular blocky

Notes:

1. Soil Pit performed on February 3 - 6, 2003 by Andrew Westhoven.
2. All soil colors are described as moist unless otherwise noted.
3. Soil logs were witnessed by Jen Smith of the Freehold Health Department.

4. Ground Water Observations:
   - X Seepage – Indicate Depth: 73"
   - ____ Pit/Boring Flooded – Depth After ____ Hours
5. Soil Limiting Zones (Check Appropriate Categories)
   - ____ Fractured Rock – Depth to Top:
   - ____ Massive Rock Substratum – Depth to Top:
   - ____ Excessively Coarse Horizon – Depth Top to Bottom:
   - ____ Excessively Coarse Substratum – Depth to Top:
   - ____ Hydraulically Restrictive Horizon – Depth Top to Bottom:
   - ____ Hydraulically Restrictive Substratum – Depth to Top:
   - ____ Perched Zone of Saturation – Depth Top to Bottom:
   - X Regional Zone of Saturation – Depth to Top: 43
6. Soil Suitability Classification: IIWr
7. I hereby certify that the information furnished on Form 2b of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et esq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator _____ Date _____

Signature of Professional Engineer  License #45332

COUNTY/MUNICIPALITY: Monmouth County \ Upper Freehold Township

APPLICATION FOR PERMIT TO CONSTRUCT AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2b- Soil Log and Interpretations

1. Log Number 2 Method: (Check One): __XX__ Profile Pit ____ Boring
2. Block __54__ Lot __8.37__

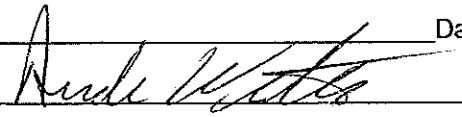
Horizon Depth (inches)	Horizon Description
0 - 8	Very Dark Grayish Brown (10YR, 3/2) Topsoil, Organics, loamy sand, medium texture, sub angular blocky, friable
8 - 30	Olive (5Y, 4/4) sandy clay loam, medium texture, sub angular blocky, friable
30 - 42	Olive (5Y, 4/3) sandy loam, medium texture, sub angular blocky, friable, to be removed
42 - 59	Olive Gray (5Y, 4/2) sandy loam, medium texture, sub angular blocky, friable glauconitic
59 - 96	Olive (5Y, 5/4) sandy loam - loamy sand, coarse texture, mottles @ 52"
96 - 121	Dark Olive Gray (5Y, 3/2) sandy clay loam, medium texture, sub angular blocky, friable glauconitic

Notes:

1. Soil Pit performed on February 3 - 6, 2003 by Andrew Westhoven.
2. All soil colors are described as moist unless otherwise noted.
3. Soil logs were witnessed by Jen Smith of the Freehold Health Department.

4. Ground Water Observations:
   - __X__ Seepage – Indicate Depth: 79"
   - _____ Pit/Boring Flooded – Depth After _____ Hours
5. Soil Limiting Zones (Check Appropriate Categories)
   - _____ Fractured Rock – Depth to Top:
   - _____ Massive Rock Substratum – Depth to Top:
   - _____ Excessively Coarse Horizon – Depth Top to Bottom:
   - _____ Excessively Coarse Substratum – Depth to Top:
   - _____ Hydraulically Restrictive Horizon – Depth Top to Bottom:
   - __X__ Hydraulically Restrictive Substratum – Depth to Top:96
   - _____ Perched Zone of Saturation – Depth Top to Bottom:
   - __X__ Regional Zone of Saturation – Depth to Top: 52
6. Soil Suitability Classification: IIWr, Sr
7. I hereby certify that the information furnished on Form 2b of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et esq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator _____ Date _____

Signature of Professional Engineer  License #45332

Challoner & Magno Engineering Inc.
201 Main Street, 2nd Floor
Toms River, NJ 08753

FORM 3B TUBE PERMEAMETER TEST

Block 54 Soil Log 8.37-1

1 Test No. 1

2 Material Tested ____ Fill Test in Native Soil-Horizon 58-128

3 Type of sample: X Undisturbed ____ Disturbed

4 Sample dimensions: Inside radius of sample tube, R . 0.75 inches
Length of sample, L 3.4 inches

5 Bulk density determination (disturbed samples only):
Sample weight ____ grams
Sample volume (L x 3.14*R^2)(16.39) ____ cc
Bulk density (Sample weight/Sample volume) ____ grams/cc

6 Standpipe Used: X Yes ____ No
Indicate Internal Radius 0.25 inches

7 Height of water above rim of test basin, inches
At the beginning of each test interval,H1
At the end of each test interval H2

Rate of water level drop

	H1 (in)	H2 (in)	Time, Start of Test Interval, T1 (min)	Time, End of Test Interval, T2 (min)	Length of Test Interval, T, minutes
Test 1	30.0	25.0	0.00	1.87	1.87
Test 2	30.0	25.0	0.00	1.82	1.82
Test 3					
Test 4					
Test 5					
Test 6					
Test 7					

8 **Calculation of Permeability:**

K, (in/hr)= 60 min/hr*r^2/R^2*L(in)/T(min)*Ln (H1/H2

K_1 (in/hr)= 2.210 K3 Soil Permeability Class

K_2 (in/hr)= 2.271 K3 Soil Permeability Class

K_3 (in/hr)= ____ Soil Permeability Class

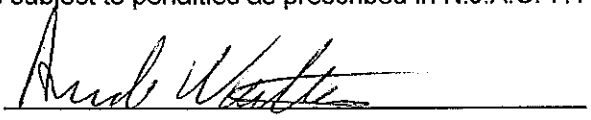
K_4 (in/hr)= ____ Soil Permeability Class

K_5 (in/hr)= ____ Soil Permeability Class

K_6 (in/hr)= ____ Soil Permeability Class

K_7 (in/hr)= ____ Soil Permeability Class

9 I hereby certify that the information furnished on Form 3B of this application is true and accurate. I am aware that falsification of the data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8

Signature of Professional Engineer  Lic. # 45332

Challoner & Magno Engineering Inc.
201 Main Street, 2nd Floor
Toms River, NJ 08753

FORM 3B TUBE PERMEAMETER TEST

Block 54 Soil Log 8.37-2

1 Test No. 1

2 Material Tested _____ Fill Test in Native Soil-Horizon 59-96

3 Type of sample: X Undisturbed _____ Disturbed

4 Sample dimensions: Inside radius of sample tube, R . 0.75 inches
Length of sample, L 3.0 inches

5 Bulk density determination (disturbed samples only):
Sample weight _____ grams
Sample volume (L x 3.14*R^2)(16.39) _____ cc
Bulk density (Sample weight/Sample volume) _____ grams/cc

6 Standpipe Used: X Yes _____ No
Indicate Internal Radius 0.25 inches

7 Height of water above rim of test basin, inches
At the beginning of each test interval,H1
At the end of each test interval H2

Rate of water level drop

	H1 (in)	H2 (in)	Time, Start of Test Interval, T1 (min)	Time, End of Test Interval, T2 (min)	Length of Test Interval, T, minutes
Test 1	30.0	21.0	0.00	3.40	3.40
Test 2	30.0	25.0	0.00	1.70	1.70
Test 3					
Test 4					
Test 5					
Test 6					
Test 7					

8 **Calculation of Permeability:**

K, (in/hr)= 60 min/hr*r^2/R^2*L(in)/T(min)*Ln (H1/H2

K_1 (in/hr)= 2.098 K3 Soil Permeability Class

K_2 (in/hr)= 2.145 K3 Soil Permeability Class

K_3 (in/hr)= _____ Soil Permeability Class

K_4 (in/hr)= _____ Soil Permeability Class

K_5 (in/hr)= _____ Soil Permeability Class

K_6 (in/hr)= _____ Soil Permeability Class

K_7 (in/hr)= _____ Soil Permeability Class

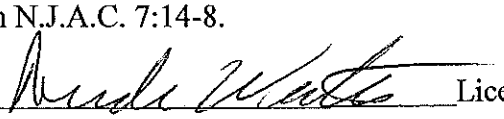
9 I hereby certify that the information furnished on Form 3B of this application is true and accurate. I am aware that falsification of the data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8

Signature of Professional Engineer _____ Lic. #45332

CHALLONER & ASSOCIATES, LLC
215 Main Street, 2nd Floor
Toms River, New Jersey 08753

FORM 4 GENERAL DESIGN DATA Lot 8.05, Block 54

1. Volume of Sanitary Sewage, gal 800
   X Residential: No. of Dwelling Units 1 Total No. of Bedrooms 5
   _____ Commercial/Institutional- indicate type of establishment and show method of calculation. If estimate is based on water meter data, indicate source of data, frequency of readings, average daily flow, and maximum recorded daily reading _____
2. Alterations or Repairs
   a. Reason for alteration or Repair (Check appropriate categories):
      _____Expansion or Change of Use _____Upgrade Existing Facilities
      _____Correct Malfunctioning System _____Other (Specify)_____
3. System Components:
   a. Grease Trap Capacity, gals_____
      Show Calculation Used:_____
   b. Septic Tank Capacities, gals 1,250 First (Single) Compartment
      gals. _____Second Compartment, gals. _____Third Compartment
   c. Effluent Distribution Method: X Gravity Flow _____Gravity Dosing
      _____ Pressure Dosing
   d. Dosing Tank Capacities, gals: Total Capacity _____ Dose Volume_____
      Reserve Capacity _____gals.
   e. Laterals: Number 9 Total Length 43 Pipe Size 4" Spacing 3'
   f. Connecting Pipe: Size 4" Type: PVC Length: 40'
   g. Manifold: Size_____ Length_____
   h. Disposal Field: Type of Installation: Soil Replacement Fill Enclosed
      Design Permeability (Percolation Rate): 6 - 20 in/hr
      Trenches: Width_____ Total Length_____ Bed Area: 1,290 SF
   i. Seepage Pits: Design Percolation Rate_____
4. Attachments (Check items included):
   X General Plan of System Showing Location of All System Components
   X X-Sections of Each System Component Including Grease Trap, Septic Tank, Dosing Tank, Disposal Field, Seepage Pits and Interceptor Drains
   _____ Pump Performance Curve
   X Other-Specify: Details
5. I hereby certify that the information furnished on Form 4 of this application (and attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Professional Engineer  License #45332

APPLICATION FOR A SEPTIC SYSTEM PERMIT

The Freehold Area Health Department

1 Municipal Plaza Freehold, New Jersey 07728 732-294-2060

Construct: _____ Alter: X Repair: _____
Freehold Township ($350) _____ Upper Freehold Township ($200) _____

Property Address: Jake Drive Block: 54 Lot: 8.05

Property Owner: CJS Investments, Inc. Builder: Ryan Homes

Owner Address: 1451 Route #34, Suite 301 Phone: (732) 751-9101

Farmingdale, NJ 07727

Soils Investigator: Andrew Westhoven Phone: (732) 818-9980

Certifying Engineer: Andrew Westhoven Phone: (732) 818-9980

Health Department Witness: Jennifer Smith Date of Tests: 02/06/2003

Number of Bedrooms: 5 Expansion Room/Den: Yes: ___ No: X Garbage Grinder: Yes: ___ No: X

Design Gallons/ Day: 800 Overdesign (if any): No ***Include calculations in application**

Treatment Specifications:

Septic Tank Capacity: 1250 Grease Trap Capacity: 0 Dosing Tank Capacity: 0
Specify material of construction if other than commercial pre-cast

Disposal Specifications:

Disposal Bed: Width: 30 Length: 43 Required Area: 1288 Design Area: 1290

Trenches: Width: _____ Length: _____ Depth: _____ Required Area: _____ Design Area: _____

Pits: Width: _____ Length: _____ Diameter: _____ Required Area: _____ # of Pits: _____

Please include the following with your application:

X Results, Dates, and Locations for all Soil Logs and Permeability Tests. N/A Interceptor Details
X Ground Water Observations and Seasonal High Water Table Levels. N/A Pump Specifications
X Plot Plan with Topography and Bench Mark. *Include form # 5 from Chapter N.J.A.C. 7:9A "Standards for Individual Subsurface Sewage Disposal Systems" for Pressure Dosing Systems*

Please Note: The applicant is responsible for obtaining all other required federal, state or local approvals prior to commencement of work under this approval, including but not limited to NJDEP Permits to conduct activities in freshwater wetlands, wetland transition areas or flood plain jurisdictions. Failure to obtain these permits prior to conducting regulated activities within these areas may result in removal of the system and or the assessment of significant civil penalties.

B1 54.01 lot 8.05 7-18-05

4 BDRMS 650 1000 gal TANK

Bed size 30 x 35 = 1050 SQ FT

permeability SLT 2 96-121 ?

SL → 109.2 109.2

START 43'

Mounded Soil Replacement

Excav → 102.3 OKAY

→ F3 2FT 20D

111.54 111.29 110.27 110.6 109.6 105.6 101.6

Tank → D Box → LG T 20D B 20D

Set Backs OKAY
Stone Size OKAY
Filter - OKAY
Slope 2% OKAY

Compaction OKAY
Fill Cuts OKAY
3:1 Slope OKAY
2Ft buffer OKAY

2Ft 20D because of denoted Hydraulically Restrictive horizon

25 Ft from House OKAY

* As built Deviation
* permeability test ?

Challoner & Magno Engineering Inc.
201 Main Street, 2nd Floor
Toms River, NJ 08753

FORM 3B TUBE PERMEAMETER TEST

Block 54 Soil Log 8.37-1

1 Test No. 1

2 Material Tested _____ Fill Test in Native Soil-Horizon 58-128

3 Type of sample: X Undisturbed _____ Disturbed

4 Sample dimensions: Inside radius of sample tube, R . 0.75 inches
Length of sample, L 3.4 inches

5 Bulk density determination (disturbed samples only):
Sample weight _____ grams
Sample volume (L x 3.14*R^2)(16.39) _____ cc
Bulk density (Sample weight/Sample volume) _____ grams/cc

6 Standpipe Used: X Yes _____ No
Indicate Internal Radius 0.25 inches

7 Height of water above rim of test basin, inches
At the beginning of each test interval,H1
At the end of each test interval H2

Rate of water level drop

	H1 (in)	H2 (in)	Time, Start of Test Interval, T1 (min)	Time, End of Test Interval, T2 (min)	Length of Test Interval, T, minutes
Test 1	30.0	25.0	0.00	1.87	1.87
Test 2	30.0	25.0	0.00	1.82	1.82
Test 3					
Test 4					
Test 5					
Test 6					
Test 7					

8 **Calculation of Permeability:**

K, (in/hr)= 60 min/hr*r^2/R^2*L(in)/T(min)*Ln (H1/H2

K_1 (in/hr)= 2.210 K3 Soil Permeability Class

K_2 (in/hr)= 2.271 K3 Soil Permeability Class

K_3 (in/hr)= _____ Soil Permeability Class

K_4 (in/hr)= _____ Soil Permeability Class

K_5 (in/hr)= _____ Soil Permeability Class

K_6 (in/hr)= _____ Soil Permeability Class

K_7 (in/hr)= _____ Soil Permeability Class

9 I hereby certify that the information furnished on Form 3B of this application is true and accurate. I am aware that falsification of the data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8

Signature of Professional Engineer _____ Lic. # _____

Challoner & Magno Engineering Inc.
201 Main Street, 2nd Floor
Toms River, NJ 08753

FORM 3B TUBE PERMEAMETER TEST

Block 54 Soil Log 8.37-2

1 Test No. 1

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3 Type of sample: X Undisturbed _____ Disturbed

4 Sample dimensions: Inside radius of sample tube, R . 0.75 inches
Length of sample, L 3.0 inches

5 Bulk density determination (disturbed samples only):
Sample weight _____ grams
Sample volume (L x 3.14*R^2)(16.39) _____ cc
Bulk density (Sample weight/Sample volume) _____ grams/cc

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Indicate Internal Radius 0.25 inches

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At the beginning of each test interval,H1
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	H1 (in)	H2 (in)	Time, Start of Test Interval, T1 (min)	Time, End of Test Interval, T2 (min)	Length of Test Interval, T, minutes
Test 1	30.0	21.0	0.00	3.40	3.40
Test 2	30.0	25.0	0.00	1.70	1.70
Test 3					
Test 4					
Test 5					
Test 6					
Test 7					

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K, (in/hr)= 60 min/hr*r^2/R^2*L(in)/T(min)*Ln (H1/H2

K_1 (in/hr)= 2.098 K3 Soil Permeability Class

K_2 (in/hr)= 2.145 K3 Soil Permeability Class

K_3 (in/hr)= _____ Soil Permeability Class

K_4 (in/hr)= _____ Soil Permeability Class

K_5 (in/hr)= _____ Soil Permeability Class

K_6 (in/hr)= _____ Soil Permeability Class

K_7 (in/hr)= _____ Soil Permeability Class

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Signature of Professional Engineer _____ Lic. # _____

Freehold Area Health Department - Municipal Plaza, Freehold, NJ 07728

Town: UT Block: 54 Lot: 237 Location: Millstream

Log # 2 Date: 2/15/13 Engineer: Andy Westhaven Witness: J. S

Depth	Color	Texture	Structure	Consistence	Other	Mottling	H20	LZ	S
8		Top							
30	5Y 4/4	SCL	MS	MF					
42	5Y 4/3	SL	SAB	MF		CMD @ 52			
59	5Y 4/2	Gravelly SL	SAB	MF		"			2 Pa
96	5Y 5/4	Med-Coarse SL	SAB	MF		"			Tube
128 *	5Y 3/2	Gravelly SCL	SAB	MF		"		A	

Comments:

Static Water: 79 SHWT: 52

Freehold Area Health Department - Municipal Plaza, Freehold, NJ 07728

Town: UT Block: 54 Lot: 8.37 Location: Millstream

Log # 1 Date: 2/5/03 Engineer: Andy Westhaven Witness: L.S

Depth	Color	Texture	Structure	Consistence	Other	Mottling	H20	LZ	S
0		Top							
24	5Y 4/3	SCL	MS	FM					
42	5Y 4/3	SL Glau	SAS	MF	removed *	CMD @ 43			
58	5Y 4/2	SL	SAS	MF		"			Tube
128	5Y 4/4	SL-LS	SAS	MF		"			

Comments:

Static Water: 73 SHWT: 43

8.35

COUNTY/MUNICIPALITY: Monmouth County \ Upper Freehold Township

APPLICATION FOR PERMIT TO CONSTRUCT
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL S . .

Form 2b- Soil Log and Interpretations

1. Log Number 1 Method: (Check One): __XX__ Profile Pit ____ Boring
2. Block __54__ Lot __8.37__

Horizon Depth (inches)	Horizon Description
0 - 7	Very Dark Grayish Brown (10YR, 3/2) Topsoil, Organics, loamy sand, medium texture, sub angular blocky, friable
7 - 24	Olive (5Y, 4/4) sandy clay loam, medium texture, sub angular blocky, friable glauconitic
24 - 42	Olive (5Y, 4/3) sandy loam, medium texture, sub angular blocky, friable glauconitic
42 - 58	Olive Gray (5Y, 4/2) sandy loam, medium texture, sub angular blocky, friable mottles @ 43", to be removed
58 - 128	Olive (5Y, 5/4) sandy loam - loamy sand, medium - coarse texture, sub angular blocky

Notes:

1. Soil Pit performed on February 3 - 6, 2003 by Andrew Westhoven.
2. All soil colors are described as moist unless otherwise noted.
3. Soil logs were witnessed by Jen Smith of the Freehold Health Department.

4. Ground Water Observations:
   - __X__ Seepage – Indicate Depth: 73"
   - _____ Pit/Boring Flooded – Depth After _____ Hours
5. Soil Limiting Zones (Check Appropriate Categories)
   - _____ Fractured Rock – Depth to Top:
   - _____ Massive Rock Substratum – Depth to Top:
   - _____ Excessively Coarse Horizon – Depth Top to Bottom:
   - _____ Excessively Coarse Substratum – Depth to Top:
   - _____ Hydraulically Restrictive Horizon – Depth Top to Bottom:
   - _____ Hydraulically Restrictive Substratum – Depth to Top:
   - _____ Perched Zone of Saturation – Depth Top to Bottom:
   - __X__ Regional Zone of Saturation – Depth to Top: 43
6. Soil Suitability Classification:
7. I hereby certify that the information furnished on Form 2b of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et esq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator_____ D[illegible]

Signature of Professional Engineer_____ License #34337

COUNTY/MUNICIPALITY: Monmouth County \ Upper Freehold Township

APPLICATION FOR PERMIT TO CONSTRUCT AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2b- Soil Log and Interpretations

1. Log Number 2 Method: (Check One): __XX__ Profile Pit _____ Boring
2. Block __54__ Lot __8.37__

Horizon Depth (inches)	Horizon Description
0 - 8	Very Dark Grayish Brown (10YR, 3/2) Topsoil, Organics, loamy sand, medium texture, sub angular blocky, friable
8 - 30	Olive (5Y, 4/4) sandy clay loam, medium texture, sub angular blocky, friable
30 - 42	Olive (5Y, 4/3) sandy loam, medium texture, sub angular blocky, friable, to be removed
42 - 59	Olive Gray (5Y, 4/2) sandy loam, medium texture, sub angular blocky, friable glauconitic
59 - 96	Olive (5Y, 5/4) sandy loam - loamy sand, coarse texture, mottles @ 52"
96 - 121	Dark Olive Gray (5Y, 3/2) sandy clay loam, medium texture, sub angular blocky, friable glauconitic

Notes:

1. Soil Pit performed on February 3 - 6, 2003 by Andrew Westhoven.
2. All soil colors are described as moist unless otherwise noted.
3. Soil logs were witnessed by Jen Smith of the Freehold Health Department.

4. Ground Water Observations:
   - __X__ Seepage – Indicate Depth: 79"
   - _____ Pit/Boring Flooded – Depth After _____ Hours
5. Soil Limiting Zones (Check Appropriate Categories)
   - _____ Fractured Rock – Depth to Top:
   - _____ Massive Rock Substratum – Depth to Top:
   - _____ Excessively Coarse Horizon – Depth Top to Bottom:
   - _____ Excessively Coarse Substratum – Depth to Top:
   - _____ Hydraulically Restrictive Horizon – Depth Top to Bottom:
   - __X__ Hydraulically Restrictive Substratum – Depth to Top:96
   - _____ Perched Zone of Saturation – Depth Top to Bottom:
   - __X__ Regional Zone of Saturation – Depth to Top: 52
6. Soil Suitability Classification:
7. I hereby certify that the information furnished on Form 2b of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et esq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator_____ Date_____

Signature of Professional Engineer_____ License #34337

Jake Drive B1 54 / 8.05

Upgrade to 5 BedRooms 800 gal 1250 TANK OKAY

30 x 43 = 1290 Sq FT OKAY HR

Kz permeability Excavate below 104.3

102.3 OKAY

MSR Buffer OKAY

TANK		D BOX		
In 111.54	out 111.29	110.77	= out	110.6

SHWT 105.6 LOI OKAY 109.5

Soil Cats OKAY

Distances OKAY

OKAY to Approve.

Design basically the same Eng Just extended bed to gain Sq FT.

JM

South Jersey Engineers LLC

PO Box 1406, Voorhees, NJ 08043
(856) 651-9050 (Voice) (856) 782-9620 (Fax)
sje@septics.com (E-Mail)

Upper Freehold Health Department
One Municipal Plaza
Freehold, NJ 07728-3099
Environmental Quality Dept.

Re: Block 54, Lot 8.05, Upper Freehold Township
Ryan Homes

Dear Sir or Madam:

Enclosed please find permeability test results for select fill utilized on the subject ISDS (samples taken at the LOI). Also, please note that the fill was properly installed and compacted per N.J.A.C. 7:9A to an elevation of 109.6 as of the date of our inspection.

Please do not hesitate to call or write if any additional information is required.

Respectfully,

Sandford S. Mersky, P.E.
NJ License # 28106

MONMOUTH COUNTY DEPARTMENT OF HEALTH
APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

MUNICIPALITY: Upper Freehold

Form 3b. Tube Permeameter Test Data

1. Test Number: 1 Replicate Letter: A Date Collected: 9/27/2006

2. Material Tested: X Fill ____ Test in Native Soil - Indicate Depth ____

3. Type of Sample: X Undisturbed ____ Disturbed

4. Sample Dimensions
Inside Radius of Sample Tube, R, in cm: 1.905
Length of Sample, in inches: 3

5. Bulk Density Determination (Disturbed Samples Only):
Sample Weight (Wt. Tube Containing Sample - Wt. Empty Tube: ____
Sample Volume (L x 2.54 cm/inch x 3.14R²), cc: ____
Bulk Density (Sample Wt./Sample Volume), grams/cc: ____

6. Standpipe Used: ___x___ No _____ Yes
Indicate internal Radius, cm _____

7. Height of water Level above Rim of Test Basin in inches:
At the Beginning of Each Test Interval, H1: 3.0
At the End of Each Test Interval, H2: 2.0

8. Rate of Water Level Drop (Add additional lines if needed):

Time, Start of Test Interval, T1 (min.sec)	Time, Start of Test Interval, T1 (min.sec)	Length of Test Interval, T, (min)
0.00	5.29	5.48
0.00	5.44	5.74
0.00	6.03	6.05

9. Calculation of Permeability:

K, (in/hr) = 60 min/hr x r^2/R^2 x L(in)/T(min) x ln (H1/H2)

k= 60 min/hr x --------/-------- x 3/ 6.03 x ln(3/2)

k= 12.11

10. Defects in the Sample (Check appropriate items):
___x___ None _____Cracks _____Worm Channels _____Root Channels
_____ Soil/Tube Contact _____Large Gravel _____Large Roots
_____ Dry Soil _____Smeering _____Compactation
_____ Other---Specify_____

11. I hereby certify that the information furnished on form 3b of this application is true and accurate. I am aware that falsification of data is a violation of the Water and Pollution Control Act (N.J.S.A. 58:10A-1 et seq) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator _____ Date 10/3/2006

Signature of Professional Engineer _____ License # 28106

MONMOUTH COUNTY DEPARTMENT OF HEALTH
APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

MUNICIPALITY: Upper Freehold

Form 3b. Tube Permeameter Test Data

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4. Sample Dimensions
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Length of Sample, in inches: 3

5. Bulk Density Determination (Disturbed Samples Only):
Sample Weight (Wt. Tube Containing Sample - Wt. Empty Tube: ____
Sample Volume (L x 2.54 cm/inch x 3.14R²), cc: ____
Bulk Density (Sample Wt./Sample Volume), grams/cc: ____

6. Standpipe Used: ____x____ No _____ Yes
Indicate internal Radius, cm _____

7. Height of water Level above Rim of Test Basin in inches:
At the Beginning of Each Test Interval, H1: 3.0
At the End of Each Test Interval, H2: 2.0

8. Rate of Water Level Drop (Add additional lines if needed):

Time, Start of Test Interval, T1 (min.sec)	Time, Start of Test Interval, T1 (min.sec)	Length of Test Interval, T, (min)
0.00	5.53	5.89
0.00	6.22	6.37
0.00	6.27	6.46

9. Calculation of Permeability:

K, (in/hr) = 60 min/hr x r²/R² x L(in)/T(min) x ln (H1/H2)

k= 60 min/hr x ---------/--------- x 3/ 6.27 x ln(3/2)

k= 11.63

10. Defects in the Sample (Check appropriate items):
___x___ None _____Cracks _____Worm Channels _____Root Channels
_____ Soil/Tube Contact _____Large Gravel _____Large Roots
_____ Dry Soil _____Smeering _____Compactation
_____ Other---Specify_____

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Signature of Site Evaluator _____ Date 10/3/2006

Signature of Professional Engineer _____ License # 28106

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Upper Freehold Health Department
One Municipal Plaza
Freehold, NJ 07728-3099
Environmental Quality Dept.

Re: Block 54, Lot 8.18, Upper Freehold Township
Ryan Homes

Dear Sir or Madam:

Enclosed please find permeability test results for select fill utilized on the subject ISDS (samples taken at the LOI). Also, please note that the fill was properly installed and compacted per N.J.A.C. 7:9A to an elevation of 113.80 as of the date of our inspection.

Please do not hesitate to call or write if any additional information is required.

Respectfully,

Sandford S. Mersky, P.E.
NJ License # 28106

MONMOUTH COUNTY DEPARTMENT OF HEALTH
APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

MUNICIPALITY: Upper Freehold

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Length of Sample, in inches: 3

5. Bulk Density Determination (Disturbed Samples Only):
Sample Weight (Wt. Tube Containing Sample - Wt. Empty Tube: ____
Sample Volume (L x 2.54 cm/inch x 3.14R²), cc: ____
Bulk Density (Sample Wt./Sample Volume), grams/cc: ____

6. Standpipe Used: ___x___ No _____ Yes
Indicate internal Radius, cm _____

7. Height of water Level above Rim of Test Basin in inches:
At the Beginning of Each Test Interval, H1: 3.0
At the End of Each Test Interval, H2: 2.0

8. Rate of Water Level Drop (Add additional lines if needed):

Time, Start of Test Interval, T1 (min.sec)	Time, Start of Test Interval, T1 (min.sec)	Length of Test Interval, T, (min)
0.00	5.54	5.90
0.00	6.01	6.02
0.00	6.03	6.05

9. Calculation of Permeability:

K, (in/hr) = 60 min/hr x r²/R² x L(in)/T(min) x ln (H1/H2)

k= 60 min/hr	x ---------/--------- x 3/	6.03	x ln(3/2)
k= 12.10			

10. Defects in the Sample (Check appropriate items):
___x___ None _____Cracks _____Worm Channels _____Root Channels
_____ Soil/Tube Contact _____Large Gravel _____Large Roots
_____ Dry Soil _____Smeering _____Compactation
_____ Other---Specify_____

11. I hereby certify that the information furnished on form 3b of this application is true and accurate. I am aware that falsification of data is a violation of the Water and Pollution Control Act (N.J.S.A. 58:10A-1 et seq) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator _____ Date 10/3/2006

Signature of Professional Engineer _____ License # 28106

MONMOUTH COUNTY DEPARTMENT OF HEALTH
APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

MUNICIPALITY: Upper Freehold

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Length of Sample, in inches: 3

5. Bulk Density Determination (Disturbed Samples Only):
Sample Weight (Wt. Tube Containing Sample - Wt. Empty Tube
Sample Volume (L x 2.54 cm/inch x 3.14R²), cc
Bulk Density (Sample Wt./Sample Volume), grams/cc

6. Standpipe Used: ____x____ No _____ Yes
Indicate internal Radius, cm _____

7. Height of water Level above Rim of Test Basin in inches:
At the Beginning of Each Test Interval, H1: 3.0
At the End of Each Test Interval, H2: 2.0

8. Rate of Water Level Drop (Add additional lines if needed):

Time, Start of Test Interval, T1 (min.sec)	Time, Start of Test Interval, T1 (min.sec)	Length of Test Interval, T, (min)
0.00	5.58	5.97
0.00	6.13	6.22
0.00	6.32	6.54

9. Calculation of Permeability:

K, (in/hr) = 60 min/hr x r²/R² x L(in)/T(min) x ln (H1/H2)

k= 60 min/hr x ---------/--------- x 3/ 6.32 x ln(3/2)

k= 11.54

10. Defects in the Sample (Check appropriate items):
____x____ None _____Cracks _____Worm Channels _____Root Channels
_____ Soil/Tube Contact _____Large Gravel _____Large Roots
_____ Dry Soil _____Smeering _____Compactation
_____ Other---Specify_____

11. I hereby certify that the information furnished on form 3b of this application is true and accurate. I am aware that falsification of data is a violation of the Water and Pollution Control Act (N.J.S.A. 58:10A-1 et seq) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator _____ Date 10/3/2006

Signature of Professional Engineer _____ License # 28106

South Jersey Water Test, LLC
4077 South Black Horse Pike
Williamstown, NJ 08094
856-875-3506 Phone
856-875-3507 Fax

www.sjwatertest.com
NJ DEP Certified Lab # 08006
Professional Septic Inspections

ok 11/14/06 SP

New Jersey Private Well Water Test Reporting Form

The New Jersey Private Well Test Reporting Form is a standardized form to be used exclusively by laboratories reporting well test results to their client in accordance with the Private Well Testing Act Regulations N.J.A.C. 7:9E.

These laboratory analyses were completed for the purposes of complying with the Private Well Testing Act. In accordance with the Private Well Testing Act Regulations all analytical results except for coliform (total, fecal or e. coli) shall remain valid for a period of one year from the date of sample collection. All coliform (total, fecal or e. coli) analytical results shall remain valid for period of six months from the date of sample collection.

- ☐ **Analytical results meet primary and secondary contaminant standards for drinking water**
- ☐ **One or more of the analytical results do not meet primary + contaminant standards for drinking water**
- ☑ **One or more of the analytical results do not meet secondary ++ contaminant standards for drinking water**

CLIENT INFORMATION
Name: **Pure Water Solutions, Inc.** Date Test Requested: **11/7/2006**

Mailing Address & Phone #: **12 Oak Avenue Berlin, NJ 08009**

PROPERTY INFORMATION
Property Address: **7 Jake Drive** Municipality: **Upper Freehold Township** Muni Code (4 digit): **1351**

County: **Monmouth** Property Lot: **8.05** Block: **54**

GPS Location- State Plane Coordinates (feet): (X) **483747** (Y) **460377**

GPS Coordinate Origin (Circle One): Well Head/Front Door/Sample Collection Point/Other (Explain):

NJ Well Permit or Well Record Number: (if known)

LABORATORY INFORMATION
Reporting Laboratory Name & ID #: **South Jersey Water Test, LLC Lab ID# 08006**

Reporting Laboratory Address & Phone #: **4077 South Black Horse Pike, Williamstown, NJ 08094 (856) 875-3506**

SAMPLE INFORMATION
Sample Collector Name: **Mark Riether**

Authorized Representative/Certified Laboratory Employee Lab Certification ID #: **South Jersey Water Test, LLC Lab ID # 08006**

Sample Type: ***NOTE:*** **Only raw or untreated water samples meet the requirements of the PWTA regulations N.J.A.C. 7:9E.**

a.) Indicate Specific Location of Sample Collected: **Pressure Tank Spigot - Raw Water**

b.) Type of Treatment Device(s) Installed (if known): **Present, devices and media unknown.**

+ Primary Drinking Water contaminants are those contaminants that have Maximum Contaminant Levels or Action Levels established to protect health. The Primary Drinking Water contaminants are coliform bacteria, nitrate (total), lead, the volatile organic compounds, arsenic, mercury and gross alpha. The standards for primary contaminants are the maximum permissible levels allowed in drinking water based on ingesting the drinking water over the course of a lifetime.

++ Secondary Drinking Water contaminants are those contaminants that have Recommended Upper Limits or Optimum Ranges established to protect against those properties that adversely effect the taste, odor, or appearance of drinking water. The Secondary Drinking Water contaminants are iron, manganese and pH.

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These laboratory analyses were completed for the purposes of complying with the Private Well Testing Act

SUMMARY OF WELL WATER TEST RESULTS

Required Test Parameters	Result	Units	Applicable Standard (Maximum Contaminant Level, Action Level or Recommended Limit)	Standard Exceeded (Y/N)	Laboratory Certification ID #	Analytical Method
Microbial Parameters						
Total Coliform	Absence	Pres/Abs	Absent	N	08006	SM 9223 B+UV
Fecal Coliform*		Pres/Abs	Absent			
*E. coli**	Absence	Pres/Abs	Absent	N	08006	SM 9223 B+UV
Metals						
Arsenic #		ug/l	5 ug/L			
Mercury ^	<0.5	ug/l	2 ug/L	N	08006	EPA245.1
Lead **	<3.0	ug/l	5 ug/L*	N	04653	EPA 200.9
Iron	0.40	mg/l	0.3 mg/L	YES	08006	SM3111B
Manganese	<0.03	mg/l	0.05 mg/L	N	08006	SM3111B
General Chemistry						
pH	6.90	su	6.5-8.5 (optimum range)	N	08006	SM 4500 H+-B
Nitrate (total)	<1,000	ug/l	10,000 ug/L	N	08006	SM 4500 NO3 D
Volatile Organic Compounds						
Benzene	<0.5	ug/l	1 ug/L	N	08006	EPA 524.2
Carbon Tetrachloride	<0.5	ug/l	2 ug/L	N	08006	EPA 524.2
meta-Dichlorobenzene	<0.5	ug/l	600 ug/L	N	08006	EPA 524.2
ortho-Dichlorobenzene	<0.5	ug/l	600 ug/L	N	08006	EPA 524.2
para-Dichlorobenzene	<0.5	ug/l	75 ug/L	N	08006	EPA 524.2
1,1-Dichloroethane	<0.5	ug/l	50 ug/L	N	08006	EPA 524.2
1,2-Dichloroethane	<0.5	ug/l	2 ug/L	N	08006	EPA 524.2
1,1-Dichloroethylene	<0.5	ug/l	2 ug/L	N	08006	EPA 524.2
cis-1,2-Dichloroethylene	<0.5	ug/l	70 ug/L	N	08006	EPA 524.2
trans-1,2-Dichloroethylene	<0.5	ug/l	100 ug/L	N	08006	EPA 524.2
1,2-Dichloropropane	<0.5	ug/l	5 ug/L	N	08006	EPA 524.2
Ethylbenzene	<0.5	ug/l	700 ug/L	N	08006	EPA 524.2
Methyl tertiary-butyl ether	<0.5	ug/l	70 ug/L	N	08006	EPA 524.2
Methylene Chloride	<0.5	ug/l	3 ug/L	N	08006	EPA 524.2
Monochlorobenzene	<0.5	ug/l	50 ug/L	N	08006	EPA 524.2
Naphthalene	<0.5	ug/l	300 ug/L	N	08006	EPA 524.2
Styrene	<0.5	ug/l	100 ug/L	N	08006	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.5	ug/l	1 ug/L	N	08006	EPA 524.2
Tetrachloroethylene	<0.5	ug/l	1 ug/L	N	08006	EPA 524.2
Toluene	<0.5	ug/l	1,000 ug/L	N	08006	EPA 524.2
1,2,4-Trichlorobenzene	<0.5	ug/l	9 ug/L	N	08006	EPA 524.2
1,1,1-Trichloroethane	<0.5	ug/l	30 ug/L	N	08006	EPA 524.2
1,1,2-Trichloroethane	<0.5	ug/l	3 ug/L	N	08006	EPA 524.2
Trichloroethylene	<0.5	ug/l	1 ug/L	N	08006	EPA 524.2
Vinyl Chloride	<0.5	ug/l	2 ug/L	N	08006	EPA 524.2
Xylenes (total)	<0.5	ug/l	1,000 ug/L	N	08006	EPA 524.2
Radiological Parameters						
Gross Alpha (initial)~	2.0±0.6	pCi/l	5 pCi/L~	NA	FL008	NJAC 7:18
Gross Alpha (final)~	±	pCi/l	15 pCi/L	N	FL008	NJAC 7:18

UNITS: *Pres/Abs=presence or absence; ug/l= micrograms per liter (also known as parts per billion); mg/l=milligrams per liter (also known as parts per million); pCi/L=picocuries per liter; su=standard units.*

** If total coliform bacteria are detected then additional analyses are required to determine the specific type (fecal or E. coli) present. Fecal coliform or E. coli analysis are not required if total coliform sample results indicate the absence of total coliform bacteria.*

*** The results of a "flushed" raw (untreated) water sample, which is required by the Private Well Testing Act regulations, should be compared to the Ground Water Quality Standard of 5 ug/l found at N.J.A.C.7: 9-6 et seq. The Lead Action Level of 15 ug/l applies to a one liter first-draw tap sample collected from a cold water kitchen or bathroom tap/sink in which the water has remained motionless in the plumbing system for at least six hours [40 CFR 141.86(b)(2)]. This type of standing-water sample is NOT required by the Private Well Testing Act regulations.*

 # Arsenic analysis is required only in Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Morris, Passaic, Somerset and Union Counties. The new MCL for arsenic is 5 ug/l (ppb) took effect on January 23, 2006.

^ Mercury analysis is required only in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Monmouth, Ocean, and Salem Counties.

~ Gross alpha particle activity testing will be required in Cumberland and Gloucester Counties starting March 15, 2003; Atlantic, Burlington, Camden and Salem Counties starting September 16, 2003; Cape May, Hunterdon, Mercer, Middlesex, Monmouth and Ocean Counties starting March 16, 2004. If the initial Gross alpha particle count exceeds 5 pCi/l a second count is required according to the Method. The MCL for Gross alpha particle activity is 15 pCi/l.

Muni Code: **1351** Property Lot: **8.05** Block: **54**

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New Jersey Private Well Water Test Reporting Form

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These laboratory analyses were completed for the purposes of complying with the Private Well Testing Act

ADDITIONAL SAMPLE INFORMATION

Coliform Analyses:
Date/Time Sample Collected: **11/07/2006 12:10** Date/Time Sample Analyzed: **11/07/2006 19:00** Sample ID Number: **E10609**

Volatile Organics:
Date/Time Sample Collected: **11/07/2006 12:10** Date/Time Sample Analyzed: **11/09/2006 03:33** Sample ID Number: **E10609**

Inorganics:
Date/Time Sample Collected: **11/07/2006 12:10** Date/Time Sample Analyzed: **11/10/2006 13:20** Sample ID Number: **E10609**

Date/Time Sample Collected: **11/07/2006 12:10** Date/Time Sample Analyzed: **11/07/2006 23:52** Sample ID Number: **E10609**

pH Analysis:
Date/Time Sample Collected: **11/07/2006 12:10** Date/Time Sample Analyzed: **11/07/2006 12:10** Sample ID Number: **E10609**

Gross Alpha Analyses:
Date/Time Sample Collected: **11/07/2006 12:10** Date/Time Sample Analyzed: **11/08/2006 15:00** Sample ID Number: **E10609**

Date(s) All Analyses Received by Reporting Lab from Subcontracted Lab (if applicable): **11/10/2006**

CERTIFICATION OF RESULT

I certify in writing that all sampling, analyses, and reporting performed herein, comply with all requirements set forth in N.J.A.C. 7:9E and N.J.A.C. 7:18, and hereby certify that this laboratory is in compliance with all laboratory certification and quality control procedures and requirements as set forth in N.J.A.C. 7:18.

Mark A. Bonfiglio for MJR 11/10/06

Mark J. Riether, Laboratory Director or Designee — Date

ADDITIONAL INFORMATION

I. Treatment Options

Listed below are the common treatments available to homeowners having well contamination above a Maximum Contaminant Level, Action Level or Recommended Limit. The goal of water treatment is the removal of contaminants to levels below the Maximum Contaminant Level, Action Level or Recommended Limit. For additional information on home treatment devices contact your local/county health department or the NJDEP Private Well Testing Act Hotline at **1-866-4PW-TEST** or visit the Private Well Testing Act webpage at: *www.state.nj.us/dep/pwta* for links to other appropriate websites, such as the National Sanitation Foundation website at *www.nsf.org*, or the USEPA website *at www.epa.gov/safewater.* You may also call the USEPA Drinking Water Hotline at (800) 426-4791 to obtain a copy of USEPA's pamphlet entitled "Home Water Treatment Units" (WH-550A). All treatment devices must be properly maintained in accordance with manufacturer recommendations to ensure operating efficiency in removing contaminants. As noted below, not all treatment devices remove every contaminant; there may be more than one device installed if multiple contaminants exist in the drinking water. Water treatment companies may be found by consulting the yellow pages of your local area phone book.

Muni Code: **1351** Property Lot: **8.05** Block: **54**

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SUMMARY OF TREATMENT OPTIONS FOR HOMEOWNERS

Treatment Type	Contaminants Treated
Activated Carbon Filtration	Some Organic Chemicals
	Taste
	Trihalomethanes
	Some Pesticides
	Odor
Air Stripping	Volatile Organic Compounds (higher concentrations)
	Iron (with filtration)
	Hydrogen Sulfide
	Radon Gas
Chlorinators	Bacteria (Coliform)
	Microbiological Contamination
Distillation	All Inorganic Chemicals (i.e., Nitrate, Sodium Chloride)
	Some Organic Chemicals
Ion Exchange	Hard Water (Water Softening)
	Manganese
	Some Heavy Metals
	Calcium
	Iron
Reverse Osmosis	Certain Organic Chemicals
	Nitrates
	Dissolved Solids/Metals
Mechanical Filtration	Turbidity
	Dirt
	Sediment
	Particulates (Loose Scale)
Bottled Water	Temporary Solution to Aesthetic Problems & Emergency Situations
KDF-55 with pH adjustment	Mercury
Ultraviolet Radiation	Bacteria (Coliform)
	Microbiological Contamination

II. Health Effects

Drinking water standards are established to protect consumers of drinking water from both adverse health effects (primary drinking water standards) and from qualities that make the water unpalatable (secondary drinking water standards). Both NJDEP and USEPA set drinking water standards; those in effect in New Jersey can be found at www.state.nj.us/dep/watersupply. Both NJDEP and USEPA periodically review this list and add or subtract contaminants based on new scientific information. Standard setting is summarized in a brochure entitled "Standards for Safe Drinking Water In New Jersey" available by calling **1-866-4PW-TEST.**

There are several resources available to assist in interpreting your test results. An informative booklet explaining drinking water results written by Rutgers Cooperative Extension Service entitled "Interpreting Drinking Water Quality Analysis - What do the Numbers Mean? - 5th edition" is available at www.rce.rutgers.edu/pubs/pdfs/e214.pdf. Health effects information developed by the USEPA is summarized at www.epa.gov/safewater/mcl.html. The New Jersey Department of Health and Senior Services, in conjunction with NJDEP's Bureau of Safe Drinking Water and Division of Science Research and Technology, has developed a series of brochures for drinking water and health that can be found at www.state.nj.us/health/eoh/hhazweb/edmat.html.

South Jersey Water Test, LLC
4077 South Black Horse Pike
Williamstown, NJ 08094
856-875-3506 Phone
856-875-3507 Fax

www.sjwatertest.com
NJ DEP Certified Lab # 08006
Professional Septic Inspections

New Jersey Private Well Water Test Reporting Form

The Private Well Test Reporting Form is a standardized form to be used exclusively by laboratories reporting well test results to their client in accordance with the Private Well Testing Act Regulations N.J.A.C. 7:9E.

These laboratory analyses were completed for the purposes of complying with the Private Well Testing Act.

III. Recommendations for Additional Testing

The Private Well Testing Act regulations require well water samples to be collected from untreated or "raw" water. Raw water quality represents the well water quality. Additional water testing may be conducted to determine the effectiveness of a water treatment system or to determine if the distribution system (pipes) may be contributing additional contamination. In those cases sampling of treated or finished water at the tap is recommended. This additional testing of treated water is not required under the Private Well Testing Act regulations. For example, testing of finished water to determine the effectiveness of a treatment system to remove contaminants for a known, pre-existing water quality problem would be desirable. Below are recommendations for additional testing.

Scenario One: There is an existing treatment system or device installed at the house or building due to a known pre-existing water quality problem and raw water testing indicates that one or more parameters are above a Maximum Contaminant Level, Action Level, or Recommended Limit. NJDEP recommends that a second water sample be collected for the parameter(s) of concern at a location after the treatment system or device at a primary tap to insure that the system or device is working properly in removing or reducing the contaminants to below the applicable Maximum Contaminant Level, Action Level, or Recommended Limit.

Scenario Two: After testing, total and fecal coliform bacteria are found to be above the Maximum Contaminant Level. The well is subsequently treated via chlorine disinfection. Re-testing is recommended after a chlorine residual can no longer be detected to insure the effectiveness of the treatment.

Scenario Three: **/FOR LEAD ANALYSIS ONLY/** **(Note:** The Private Well Testing Act regulations require that a "flushed" sample be collected for lead analysis meaning the well water was run to remove any water that may have been in contact with the plumbing for an extended period of time). ***In scenario three,*** the flushed, untreated sample, collected at the tap, indicates there is lead contamination greater than 5 ug/l. The state's ground water quality standard of 5 ug/l is the more appropriate standard to apply to a "flushed" water sample rather than the drinking water Action Level of 15 ug/l, which is based on sampling drinking water that has been allowed to remain in the plumbing for at least six hours.

If the interested party wants to better evaluate the level of potential lead contamination from the plumbing system, a "first draw" (non-flushed) sample should also be analyzed for lead. This "first draw" water sample may likely contain the highest level of lead to which one is likely to be exposed. The results of this sample should be compared to the lead Action Level of 15 ug/l. Results above 15 ug/l mean that there is a source of lead in the home plumbing system. The interested party may install treatment to make the water less corrosive and less likely to dissolve lead from the plumbing; may attempt to locate the source of the lead and remove it from the home plumbing system or may choose to run the water through the plumbing (or selected faucets) each morning to insure that the standing water is flushed through the pipes and is not consumed.

IV. Remediation/Treatment Funding Sources

A.) The **Spill Fund Program** administered by the Bureau of Contact and Fund Management within the New Jersey Department of Environmental Protection offers help to innocent parties suffering from direct or indirect damages resulting from the discharge of a *hazardous substance*. A property owner may file a claim for reimbursement for most of the expenses incurred to install a treatment device for a potable well or to connect to a public water supply because of a hazardous substance in the well water. A claimant has **1 year** from the date he/she learns that the well is contaminated above standards to file a claim. There are specific requirements and guidelines for filing claims with the Spill Fund. For more information, please contact the NJDEP-Bureau of Contact and Fund Management at: 609-777-0101 or visit their website at: *www.state.nj.us/dep/srp* or you may write to the BCFM: NJDEP-BCFM/Spill Fund, P.O. Box 413, 401 E. State Street, Trenton, N.J. 08625-0413.

B.) The **New Jersey Housing and Mortgage Finance Agency** (NJHMFA) has a Potable Water Loan Program that is available to owners of single family residences whose source of potable water exceeds the State of New Jersey's Primary Drinking Water Standards, including lead and mercury. In addition, the loan program covers iron and manganese although these contaminants do not have Primary Drinking Water Standards. For further information, please contact the NJHMFA Hotline at 1-800-NJHOUSE (1-800-654-6873) or they may be reached at: P.O. Box 18550, 637 South Clinton Avenue, Trenton, N.J. 08650-2085 or on the web at: *www.state.nj.us/dca/hmfa*

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Thursday, November 09, 2006

Pure Water Solutions, Inc.
12 Oak Avenue
Berlin, NJ 08009

Certificate of Analysis

Property Address: 7 Jake Drive
Sample Location: Pressure Tank – Treated Water
Date/Time Sampled: 11/07/2006 12:20
County: Monmouth
Municipality: Upper Freehold Township
Lot: 8.05 **Block:** 54

Test/ Parameter	Date/Time Analyzed	Result	Allowable Limit	Units	Reporting Limit	Method
Sample ID	E10610					
pH	11/07/2006 12:20	7.10	6.5 to 8.5	su	N.A.	SM4500HB
Iron	11/08/2006 16:00	<0.10	0.3	mg/L	0.10	SM3111B
Manganese	11/08/2006 17:22	<0.03	0.05	mg/L	0.03	SM3111B

This report relates only to the samples as received by the laboratory.

Mark J. Riether, Lab Director

11/10/06
Date

CHAIN OF CUSTODY RECORD

South Jersey Water Test, LLC
4077 South Black Horse Pike
Williamstown, NJ 08094
Phone: 856-875-3506 Fax: 856-875-3507
www.sjwatertest.com
NJ DEP Certification #08006

Customer:	**Pure Water Solutions**		
Contact	**Gary Carlson**		
Address:	12 Oak Avenue		
	Berlin, NJ 08009		
Phone:	856-767-7300	**Fax:**	856-768-7887
E-mail:			

Lab ID#	Sample Location	Collection Date	Collection Time	Grab	Comp	Matrix	Field Measurements	No. of Bottles	Pres.	Analysis Required
E10609	7 Jake Drive - Raw,	11/7/06	12:00	X		D	Res. Cl = 2.10	-----	-----	Time Analyzed: 1200 Meter # 3
	Pressure Tank		12:10	X		D		1 X 120	NaThio	Total Coliform/E.coli
				X		D		1 X 125	NA	Nitrates
				X		D		1 X 250	HNO3	Fe, Mn, Pb, Hg
				X		D		2 X 40	HCL	VOC's
				X		D		1 X 500	HNO3	Gross Alpha
				X		D	pH = 6.90	-----	-----	Time Analyzed: 1210 Meter # 2
E10610	7 Jake Drive - Treated,	11/7/06	1220	X		D		1 X 250	HNO3	Fe, Mn
	Pressure Tank			X		D	pH = 7.10	-----	-----	Time Analyzed: Meter #

MATRIX ABBREVIATIONS: **D**\DRINKING WATER **A**\AQUEOUS **S**\SOIL **SL**\SLUDGE **GW**\GROUND WATER **SW**\SURFACE WATER **WW**\WASTE WATER

Turnaround Time	Report Format	Comments/Special Instructions	Cooler Temp
✓ SJWT Standard is 10 work days	___ Standard		Iced 3.0 °C
___ Rush turnaround available upon request and lab approval _____	___ NJ DEP Reduced Deliverables		Properly Preserved
	___ NJ DEP Full Deliverables		(Yes) No
	___ Electronic Data Deliverables		
	✓ PWTA Format		

Sampled by: *(Print)* Eliezer Cohen					
Sampled by/Relinquished by: *(Signature)*	**Date** 11/7/06	**Time** 1650	**Received by:** *(Signature)*	**Date** 11/7/06	**Time** 1650
Relinquished by: *(Signature)*	**Date**	**Time**	**Received by:** *(Signature)*	**Date**	**Time**
Relinquished by: *(Signature)*	**Date**	**Time**	**Received by:** *(Signature)*	**Date**	**Time**

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NAWT, NJSMA, NOF

Attached you will find the portion of the project that was subcontracted and is being reported as per N.J.A.C. 7:18 - Requirements for Records and Data Reporting. The subcontract Laboratory maintains the required NJDEP certifications for the tests conducted.

If you have any questions about your test report, please contact us.

FL DOH Certification #E84025
New Jersey Laboratory ID# FL008

KNL LABORATORY SERVICES
2742 N. Florida Ave.
P.O. Box 1833
Tampa, Florida 33601
(813) 229-2879
Fax (813) 229-0002

November 9, 2006

South Jersey Water Test
4077 South Black Horse Pike
Williamstown, NJ 08094

Attn: Mark Riether

Field Custody: Client
Client/Field ID: E10609-7

Sample Collection: 11-07-06/1216

Lab ID No: 11233
Lab Custody Date: 11-08-06/1015
Sample description: DW

CERTIFICATE OF ANALYSIS

Parameter	Units	Results			Analysis Date	Method	Detection Limit
Gross Alpha	pCi/l	2.0	±	0.6	11-08-06/1500	N.J.A.C. 7:18-6	0.5

Alpha Standard: Th-230

James W. Hayes
Laboratory Manager

Test results meet all requirements of the NELAC standards.
Contact person: Jim Hayes (813)229-2879

Faxed 11/15

FREEHOLD AREA HEALTH DEPARTMENT

Serving Freehold Twp., Freehold Boro, Upper Freehold Twp. and Millstone Twp.

(732) 294-2060

No. 4372

CERTIFICATE OF COMPLIANCE

Issued to Ryan Homes
(Owner or Contractor)

THIS IS TO CERTIFY That the individual water supply system at Block No. 54

Lot. No. 8.05 is in compliance with the Application for Permit to Locate and Construct or Alter an Individual Water Supply System, dated 3/8/05

the issuance of this certificate shall not be construed as a guarantee that the system will function satisfactorily nor shall it in any way restrict the powers or responsibilities of the Board of Health in the enforcement of any law or ordinance relating to public health.

11/11/06 Jeffrey Pakutka

FREEHOLD AREA HEALTH DEPARTMENT

Serving Freehold Twp., Freehold Boro, Upper Freehold Twp. and Millstone Twp.

(732) 294-2060

No. 4372

PERMIT TO LOCATE AND CONSTRUCT OR ALTER A WATER SUPPLY

Date of issue 3/8/05

Permission is hereby granted K Anderson Well Drilling Lic. # 28 00058946

Complete mailing address 235 Sycamore Ave Marlton, NJ 08053

Phone number

To Locate and Construct ☐ or Alter ☐ a Water Supply at Blk. 54 Lot 8.05

Street Location Jake Drive

Post Office Address Upper Freehold

and owned by Ryan Homes 1451 Route 34 Ste. 201 Farmingdale, NJ 07727

To Supply Domestic
in accordance with the Provisions of an ordinance titled Standards for the Construction of Public Non-Community and Non-Public Water Systems.

Date application was approved 3/8/05

Inspection is required prior to covering, or at any other time required by this Department.

Permit Fee 30.00

Check ____ Cash ____