



July 28, 2022

**Via Electronic Filing**

Ms. A. Shonta Dunston, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4325

Re: Aqua North Carolina, Inc.  
Docket No. W-218, Sub 553

Dear Ms. Dunston:

Attached is Aqua North Carolina's Application for Certificate of Public Convenience and Necessity and for Approval of Rates for Gardner Farms water system located in Wake County. The following exhibits are also included:

- PWSS Letter
- Chemical Analysis
- Vicinity Map
- Water and Sewer System Plan
- Estimated Cost

If there are questions regarding the attached information, please do not hesitate to contact me at 919-653-6963.

Sincerely,

Barbara Brantley  
New Business Coordinator

Attachments

## BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

APPLICATION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY  
AND FOR APPROVAL OF RATES

## INSTRUCTIONS

Notes or explanations placed in the margins of the application are acceptable. If additional space is needed, supplementary sheets may be attached. If any section does not apply, write "not applicable" or cross out the section.

## APPLICANT

1. Trade name used for utility business Aqua North Carolina, Inc.
2. Name of owner (if different from trade name) N/A
3. Business mailing address 202 MacKenan Court  
City and State Cary, North Carolina 27511
4. Business street address (if different from mailing address)  
202 MacKenan Court, Cary, North Carolina 27511
5. Business telephone number (919) 467 - 8712
6. If corporation, list the following:  
President - Shannon V. Becker Vice President -  
Secretary - Robyn Lambeth Treasurer -  
Three (3) largest stockholders and percent of voting shares held by each  
Aqua America, Inc. 100%
7. If partnership, list the owners and percent of ownership held by each  
N/A

## PROPOSED UTILITY SERVICE AREAS

8. Name of Subdivision or Service Area Gardner Farms
9. County (or Counties) Wake
10. Type of Service (Water and/or Sewer) Water

## PROPOSED RATES

Amount You Proposed to Charge

11. Metered Residential Service :  
Water: BFC: \$20.70 + \$6.38 per 1000 gallons  
Same as rates approved in Docket No. W-218, Sub 526  
Sewer: N/A
12. Flat Rate Residential Service:  
Water: N/A  
Sewer: N/A
13. Nonresidential Service (explain):  
Water: Same as rates approved in Docket No. W-218, Sub 526  
Sewer: N/A
14. Tap-on fees:  
Water: Based on contract to be filed with NCUC  
Sewer: 1%
15. Finance charge for late payment:  
(NCUC Rule R12-9 specifies not more than one percent (1.0%) per month will be applied to the unpaid balance of all bills still past due 25 days after billing date.)
16. Reconnection charge if water service cut off by utility as specified in NCUC Rule R7-20: \$35.00
17. Reconnection charge if water service discontinued at customer's request: \$15.00
18. Reconnection charge if sewer service cut off by utility as specified in NCUC Rule R10-16: Actual Cost
19. Other charges: New Account Fee: \$20.00

**PROPOSED BILLING**

1. Frequency of billing shall be (monthly, quarterly, etc.) Monthly
2. Billing shall be for service (in advance or arrears) Arrears
3. Bills past due 15 days after the billing dates :  
(NCUC Rule R12-9 specifies that bills shall not be past due less than fifteen (15) days after billing date).
4. Will regular billing be by written statement ? (yes or no) Yes
5. Will the billing statement contain the following ? (yes or no)
  - (a) Meter reading at beginning and end of billing period Yes
  - (b) Date of meter readings Yes
  - (c) Gallons used, based on meter readings Yes
  - (d) Amount due for current billing period listed as a separate amount Yes
  - (e) Amount due from previous billing period listed as a separate amount Yes
  - (f) Amount due for each special charge ( i.e., deposits, tap fees, etc.) listed as a separate amount (yes or no) Yes
6. Show how the following will appear on the billing statement:
  - (a) Mailing address of company: 202 MacKenan Court  
Cary, N. C. 27511
  - (b) Address where bill can be paid in person: N/A
  - (c) Name and phone of alternative persons to contact for emergency service after business hours: (877) 987-2782
7. Is service already metered? (yes or no) Yes
8. Does the Applicant understand the provisions for establishing credit and collecting customer deposits set forth in NCUC Rules and Regulations, Chapter 12? Yes  
(Customer deposits must be refunded to customer having not more than two (2) bills overdue during a 12-month period and who are not then delinquent on the payment of their bills per NCUC Rule R12-5.

**PRESENT RATES**

9. Are you presently charging for service? If so, describe the rates being charged  
No
10. How long have these rates been in effect? N/A

**PERSONS TO CONTACT**

- |                            | NAME             | ADDRESS            | TELEPHONE    |
|----------------------------|------------------|--------------------|--------------|
| 11. General Manager        | Joe Pearce       | 202 MacKenan Court | 919-467-8712 |
| 12. Complaints or Billing  | Customer Service | 202 MacKenan Court | 919-467-8712 |
| 13. Engineering Operations | Michael Melton   | 202 MacKenan Court | 704-507-3315 |
| 14. Emergency Service      | Area Manager     | 202 MacKenan Court | 919-467-8712 |
| 15. Accounting             | Dean Gearhart    | 202 MacKenan Court | 919-467-8712 |
16. Are the names and phone numbers shown above listed in the phone book by each of the proposed service areas? (yes or no) Yes
  17. Can customers make phone calls for service without being charged for long distance phone call? (yes or no) Yes
  18. Do persons designated to receive phone calls for emergency service after regular business hours have authority to provide the needed repairs without first contacting owner? (yes or no) Yes
  19. List the qualifications of the person in charge of the utility system:  
On file with commission
  20. List the date(s) and describe any DEHNR violation(s) since the last application for franchise, transfer, or rate increase: None

**SERVICE AREA**

Fill in one column for each subdivision or service area. If more columns are needed for additional subdivisions or service areas, attach supplementary sheets.

		New System	Existing System
1. Name of subdivision or service area		Gardner Farms	
2. County (or Counties)		Wake	
3. Type of Service (water, sewer, etc.)		Water	
4. If water is purchased, list from whom		N/A	
5. Source of water supply (wells, etc.)		Well	
6. Number of wells in service		1	
7. Pumping capacity of each pump in service		69 gpm	
8. Elevated storage tank capacity (gals.)		N/A	
9. Pressure tank capacity (gals.)		12,000 gallons	
10. Types of water treatment (chlorine, etc.)		Fe/Mn Filtration	
11. Number of hydrants installed		N/A	
12. Is sewage disposal by septic tanks or by sewer system?		Septic	
13. If disposal is by sewer system, is sewage treated by utility company or by others?		N/A	
14. Capacity of company's sewage treatment plant (gallons per day)		N/A	
15. Is service metered? (yes or no)		Yes	
16. Number of water meters in use		0	
17. Number of service taps in use (List number of each size)	Water	43 - 3/4"	
	Sewer	N/A	
18. Number of customers at the end of test year	Water	7	
	Sewer	N/A	
19. Number of customers that can be served by mains already installed (including present customers, vacant lots, etc.)	Water	7	
	Sewer	N/A	
20. Number of customers that can be served by pumping capacity	Water	124 @ 0.555pgm/lot	
21. Number of customers that can be served by storage tank capacity	Water	63	
22. Number of customers that can be served by treatment plant capacity	Sewer	N/A	
23. Name nearest water/sewer utility system		Kennebec Farms	N/A
24. Distance to nearest water/sewer utility system		<0.5 miles	N/A
25. Does any other person or utility seek to furnish the service(s) proposed herein? (yes or no)		No	No
26. a. DEHNR System I.D. No.	Water	NC4092197	
b. NPDES or Nondischarge Permit No.	Sewer	N/A	N/A

**FINANCIAL STATEMENT**

- 1 Will a separate set of books be maintained for the utility business?  
Yes
- 2 Will a separate bank account be maintained for the utility business?  
Yes
- 3 Are the revenues and expenses listed below based on past operations or are they estimated for future operations? (actual or estimated) Estimated

Note: If the Applicant already holds a public utility franchise, the proposed service area is new (i.e., there are no customers being served), and the proposed rates herein are the same as those previously approved, the financial statements below (lines 4 through 35) may be omitted.

**REVENUES AND EXPENSES**

For 12 Months Ended \_\_\_\_\_ (Date)

	Revenues	Water	Sewer
4	Residential service (flat rate)	\$	\$ N/A
5	Residential service (metered rate)	"	"
6	Nonresidential service (flat rate)	"	"
7	Nonresidential service (metered rate)	"	"
8	Other revenues (describe in remarks below)	"	"
9	Total Revenues (lines 4 thru 8)	"	"
10	Total salaries (except owner)	"	"
11	Salaries paid to owner	"	"
12	Administrative and office expenses (except salaries)	"	"
13	Maintenance and repair expenses (except salaries)	"	"
14	Transportation expenses	"	"
15	Electric power for pumping	"	"
16	Chemicals for treatment	"	"
17	Testing Fees	"	"
18	Permit Fees	"	"
19	Purchased water/sewer treatment	"	"
20	Annual depreciation	"	"
21	Taxes: State income taxes	"	"
22	Federal income taxes	"	"
23	Gross receipts (or franchise tax)	"	"
24	Property taxes	"	"
25	Payroll taxes	"	"
26	Other taxes	"	"
27	Interest on debt during year	"	"
28	Other expenses (describe in remarks below)	"	"
29	Total Expenses (lines 10 thru 28)	"	"
30	Net Income (line 9 minus line 29)	\$ "	\$ "

**Remarks**

31 \_\_\_\_\_

32 \_\_\_\_\_

33 \_\_\_\_\_

34 \_\_\_\_\_

35 \_\_\_\_\_

**NUMBER OF CUSTOMERS SERVED**

	Water		Sewer	
	Flat	Metered	Flat	Metered
36	N/A	7	N/A	N/A
37	N/A	7	N/A	N/A
38	Average gallons used per customer 5,000 per month			

\*to be determined



**COST OF UTILITY SYSTEM**

1. Is the cost of utility system listed below based on past operation, or is it estimated for future operation? (actual, estimated)

Estimated

2. Does the cost of utility system listed below represent the cost to the Applicant herein? (yes or no) No

**ORIGINAL COST OF UTILITY SYSTEM**

As of Year Ended \_\_\_\_\_ (Date)

Note: List the total original cost to construct and establish the system, whether or not paid for by the present owner.

	Utility Property in Service	Balance at End of Year	
		Water	Sewer
3.	Land and rights of way	\$ See # 23	\$ N/A
4.	Structures and site improvement	"	"
5.	Wells	"	"
6.	Pumping equipment	"	"
7.	Treatment equipment	"	"
8.	Storage tanks	"	"
9.	Mains (excluding service connections)	"	"
10.	Service connections	"	"
11.	Meters ( including spare meters)	"	"
12.	Office furniture and equipment	"	"
13.	Transportation equipment	"	"
14.	Other utility property in service (Describe in remarks below)	"	"
15.	Total utility property in service (lines 3 thru 14)	"	"
16.	Less accumulated depreciation	"	"
17.	Less accumulated tap fee and other contributions in aid of construction	"	"
18.	Less customer advances	"	"
19.	Net investment in utility property (line 15 minus 16, 17, & 18)	\$ "	\$ "

	Utility Property Not in Service	Balance at End of Year	
		Water	Sewer
20.	Construction work in progress	\$ N/A	\$ N/A
21.	Property held for future use	"	"
22.	Other (describe in remarks below)	"	"

**Remarks**

23. #3 - #19 See Contract filed with Application
24. \_\_\_\_\_
25. \_\_\_\_\_
26. \_\_\_\_\_

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## OTHER FINANCIAL INFORMATION

1. Please provide the following capital structure information for the Company prior to the purchase of the new water and / or sewer system(s) :

- a. Capital Structure as of September 30, 2020

- b. Capital Structure balances :

	Amount	Percent Of Total Capital
Long - term debt / loans	\$131,676,937 [1]	49%
Preferred stock (if any)	\$0	0%
Common Equity :		
Common Stock	\$6,116	0%
Other paid in capital	\$69,079,826	24%
Retained Earnings	\$69,067,602	26%
Total common equity	\$138,153,544	50%
Total Capital	\$269,830,481	99%

[1] Including short-term line of credit in the amount of \$6.8 million current portion on long-term debt.

2. The purchase price of the system will be financed as follows :

- |                         |          |
|-------------------------|----------|
| a. Long - term debt     |          |
| b. Short - term debt    |          |
| c. Common Stock         |          |
| d. Retained Earnings    | \$75,250 |
| e. Other                |          |
| f. Total purchase price | \$75,250 |

- g. Description of other : \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

3. Please provide the following for improvements / additions to be made in the first year :

- a. Brief description : \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

- b. Financing :

- |                                    |        |
|------------------------------------|--------|
| (1) Long - term debt               | 50.00% |
| (2) Short - term debt              |        |
| (3) Common Stock                   |        |
| (4) Retained Earnings              | 50.00% |
| (5) Other                          |        |
| (6) Total improvements / additions |        |

- (7) Description of other : \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**RECOVERY OF PLANT COST**

The utility proposes to recover the cost of the plant listed on Page 5, Line 15 as follows

	Water	Sewer
1. Amount to be contributed by developer	\$ See #5	\$ N/A
2. Amount to be recovered through tap fees	"	"
3. Amount to be recovered through rates	"	"
4. Other (Please describe below on Line 6)	"	"
5. Total Cost of Plant		
6. Description of other:		

a. Per contract, Developer installs entire facilities at his expense.

b. Per tariff, Aqua collects \$70 new meter fee and \$20 new customer fee per each new connection made to the water system

b. Per contract, Utility's purchase price per lot is \$1,750 quaterly for water

**ANNUAL DEPRECIATION**

- 7 If annual depreciation is claimed using a composite rate for the entire system, show rate of depreciation used:

Water: When the system is actually recorded in the asset accounts, Utility will use account specific depreciation rates.

Sewer: N/A

8. If annual depreciation is claimed using individual rates for each type of equipment, show rates of depreciation used:

As on file with Commission



**OTHER FINANCIAL INFORMATION**

1. Are there any major improvements/additions required in the next five years and the next ten years? Indicate the estimated cost of each improvement/addition, the year it will be made, and how it will be financed. (long-term debt, short-term debt, common stock, earnings, and othe (please explain).

0 - 5 years - no replacement expected

5 - 10 years - routine replacement of pumps/motors

10 - 20 years - routine replacement of pumps/motors

20 - 40 years - routine replacement of pumps/motors

2. Are there any major replacements required in the next five years and the next ten years? Indicate the estimated cost of each replacement, the year it will be made, and how it will be financed retained (long-term debt, short-term debt, common stock, earnings, and othe (please explain).

0 - 5 years - no replacement expected

5 - 10 years - routine replacement of pumps/piping/motors

10 - 20 years - routine replacement of pumps/piping/motors

20 - 40 years - routine replacement of pumps/piping/motors

3. Please fill out the attached addendum showing the projected cash flows and income statement for the first five years of operation of this system. This addendum should be for the utility system for which the subject application is being submitted, exclusively. Instructions are included on page 3 of the addendum. The following information may be provided instead of filling out the addendum:

- (1) Audited financial statements for the utility and/or parent company.
- (2) Budgets, capital and operating, for the company's North Carolina utility operations for the next five years.
- (3) The most recent fiscal year budgets, capital and operating, and the actual amounts for that year for the utility and/or parent company's North Carolina utility operations.

## EXHIBITS

THE FOLLOWING EXHIBITS SHALL BE ATTACHED TO THE APPLICATION:

1. If the Applicant is a corporation, enclose a copy of the Articles of Incorporation on file with the North Carolina Secretary of State. (Not required is previously filed with the Commission.)
2. If the Applicants are doing business as a partnership, enclose a copy of the partnership agreement. (Not required is previously filed with the Commission.)
3. If the Applicant is conducting business under a trade name or d/b/a, enclose a copy of the certificate filed with the register of deeds in each county where the Applicant will be conducting business as required by G.S. 66-68.
4. Enclose a copy of a letter from the Department of Environment Quality approval of the plan for each water system.
5. Enclose a copy of a letter from the Department of Environment Quality granting approval of the plan for each sewer system.
6. Enclose a copy of a Division of Environmental Health (DEH) report on a chemical analysis of untreated water from each well. (This should not be confused with the monthly samples submitted to the DEH for bacteriological analysis. Contact DEH for instructions to obtain a sample for chemical analysis.)
7. Enclose a copy of purchase agreements or contract showing provision for ownership or control of the water or sewer systems, including sites for wells or treatment plants.
8. Enclose a copy of contracts or agreements, including all attachments, exhibits, and appendices, between the utility and any other party (land developers, customers, etc.) regarding the proposed utility services, including contracts regarding tap fees, construction costs, easements and rights-of-way, etc. (If none, write "none")
9. Enclose a vicinity map showing the location of the proposed subdivisions or service areas in sufficient detail for someone not familiar with the county to locate the subdivisions. (A county roadmap with the subdivisions outlined is suggested.)
10. Enclose maps of the subdivisions in sufficient detail to show layout of streets, lots, the water or sewer mains, hydrants, wells, pumping equipment, treatment facilities, storage facilities, etc.
11. Enclose a copy of the workpapers supporting the estimate of the plant costs, including a breakdown by type of plant item, showing the detail of how the estimated cost was determined, and indicating which plant items, if any, will be contributed to the utility.
12. Enclose a copy of the most recent fiscal year financial statements, audited if available, for the Applicant.
13. Enclose a copy of the most recent fiscal year financial statements, audited if available, for the parent company of the Applicant.
14. If the information requested in Exhibits 12 and 13 is not available, enclose a copy of the most recent fiscal year financial statements or statement of net worth for the principals of the utility and/or parent company.

## FILING INSTRUCTIONS

15. Eight (8) copies of the application and exhibits shall be filed with the North Carolina Utilities Commission, 4325 Mail Service Center, Raleigh, North Carolina 27699-4325. One of these copies must have an original signature. (Applicants must make their own copies.)
16. Enclose filing fee as required by G.S. s62--300. A Class A company (annual revenues of \$1,000,000 or more) requires a \$250.00 filing fee. A Class B company (annual revenues between \$200,000 and \$1,000,000) requires a \$100.00 filing fee. A Class C company (annual revenues less than \$200,000) requires a \$25.00 filing fee. MAKE CHECK PAYABLE TO THE N.C. Department of Commerce/ Utilities Commission.

## SIGNATURE

17. Application shall be signed and verified by the Applicant.

Signature

Shannon V. Becker, President  
Shannon V. Becker, President

Date

7/27/2022

18. (Typed or Printed Name) Shannon V. Becker  
personally appearing before me and, being first duly sworn, says that the information contained in this application and in the exhibits attached hereto are true to the best of his/her knowledge and belief.

This 27 day of July, 2022

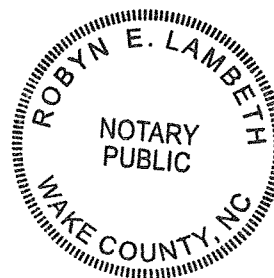
[Signature]  
Notary Public

202 MacKenan Court, Cary, NC 27511

Address

My Commission Expires

May 13, 2026  
Date



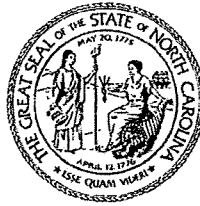
Proposed Service Area: Gardner Farms**Attached, On File, or N/A**

1 Articles of Incorporation	<u>On file with Commission</u>
2 Partnership Agreement	<u>N/A</u>
3 PWSS Letter	<u>Attached</u>
4 DEQ Letter	<u>N/A</u>
5 Chemical Analyses Report	<u>Attached</u>
6 Deeds	<u>Late Exhibit- to be filed</u>
7 Contract	<u>On file with Commission</u>
8 Vicinity Map	<u>Attached</u>
9 Water/Sewer System Plan	<u>Attached</u>
10 Estimated Cost	<u>Attached</u>
11 Audited Financial Report of Utility	<u>On file/Comm.</u>
12 Audited Financial Report of Aqua America	<u>On file/Comm.</u>

ROY COOPER  
Governor

JOHN NICHOLSON  
Interim Secretary

S. DANIEL SMITH  
Director



NORTH CAROLINA  
Environmental Quality

W-218 Sub 553

August 19, 2021

Aqua North Carolina, Inc.  
Attention: Michael A. Melton, Engineering Manager  
202 MacKenan Court  
Cary, North Carolina 27511

Re: Engineering Plans Approval  
Distribution Extension  
Gardner Farms  
Water System: Gardner Property  
Water System No.: NC4092197; Wake County  
Serial No.: 21-00539

Dear Applicant:

Enclosed please find one copy of the "Application for Approval..." together with one copy of the referenced engineering plans bearing the Division of Water Resources stamp of approval for the referenced project. These engineering plans are approved under Division of Water Resources Serial Number 21-00539, dated August 19, 2021.

Engineering plans prepared by Michael V. Zaccardo, P.E., call for the installation of approximately 2,780 feet of 6-inch water main, 470 feet of 4-inch water main, valves, and associated appurtenances along Maxine Street, Bonnie Street, Melvin Street, and within the proposed utility access easement to serve 43 new single-family homes within Gardner Farms subdivision located at 7508 James Austin Road, Willow Springs, NC. The proposed 6-inch water main will connect to Gardner Property Community Well System (approved under Serial Number: 21-00543) at the stub end of well site. Construction of this project must be in accordance with the Aqua North Carolina, Inc.'s standard specifications.

Please note that in accordance with 15A NCAC 18C .0309(a), no construction, alteration, or expansion of a water system shall be placed into service or made available for human consumption until the Public Water Supply Section has issued Final Approval. Final Approval will be issued and mailed to the applicant upon receipt of both an Engineer's Certification and an Applicant's Certification submitted in accordance with 15A NCAC 18C .0303 (a) and (c).

These plans in the foregoing application are approved insofar as the protection of public health is concerned as provided in the rules, standards and criteria adopted under the authority of Chapter 130A-317 of the General Statutes. This approval does not constitute a warranty of the design, construction, or future operation of the water system.



North Carolina Department of Environmental Quality | Division of Water Resources  
512 North Salisbury Street | 1634 Mail Service Center | Raleigh, North Carolina 27699-1634  
919.707.9100

OFFICIAL COPY

JUL 28 2022

Aqua North Carolina, Inc.  
Attention: Michael A. Melton, Engineering Manager  
Page 2 of 2  
August 19, 2021

W-218 Sub 553

One copy of the "Application for Approval..." and a copy of the plans with a seal of approval from the Department are enclosed. One copy of the approved documents in a digital format (CD) is being forwarded to our Raleigh Regional Office. The second copy of the CD is being retained in our office.

If the Public Water Supply Section can be of further service, please call (919) 707-9100.

Sincerely,

*Monti Hassan* /for

Robert W. Midgette, P.E.  
Chief, Public Water Supply Section  
Division of Water Resources

RWM/MH

Enclosures: Approval Documents

cc: Shawn Guyer, P.E., Raleigh Regional Office  
Wake County Health Department  
Timmons Group  
North Carolina Utilities Commission, Water Division

OFFICIAL COPY

JUL 28 2022

ROY COOPER  
Governor

JOHN NICHOLSON  
Interim Secretary

S. DANIEL SMITH  
Director



NORTH CAROLINA  
Environmental Quality

August 16, 2021

Aqua North Carolina, Inc.  
Attention: Michael A. Melton, Engineering Manager  
202 MacKenan Court  
Cary, North Carolina 27511

Re: Engineering Plans and Specifications Approval  
Groundwater System  
Gardner Property Community Well System  
Gardner Property  
Water System No.: NC4092197; Wake County  
Serial No.: 21-00543

Dear Applicant:

Enclosed please find one copy of the "Application for Approval..." together with one copy of the referenced engineering plans and specifications bearing the Division of Water Resources stamp of approval for the referenced project. These engineering plans and specifications are approved under the Division of Water Resources Serial Number 21-00543, dated August 16, 2021. **This approval has the following condition: Prior to issuance of final approval for the project, a recorded deed/easement for the well site that documents that the area within 100-foot radius around the well is owned or controlled by the supplier of water must be submitted to our office.**

Engineering plans prepared by Bruce W. Strickland Jr., P.E. and specifications prepared by Christopher R. Petree, P.E., call for the construction of a new well, Well No. 2 (WSF ID: W02) with a 44 gallon per minute (gpm) pump capacity (68 gpm yield), 499 feet total dynamic head (TDH), 10 horsepower (HP) submersible pump; well head piping, well house, sodium hypochlorite feeding system, one (1) 12,000-gallon ASME coded hydropneumatic storage tank with automatic pressure controls; installation of an iron and manganese filtration system (AdEdge Model: APU26-3072CO-2-315-PLC) with two (2) 30-inch diameter by 72-inch height pressure vessels containing manganese dioxide media (AdEdge AD26L) and garnet underbedding set up in parallel operation with a filtration rate of 4.4 gpm/sqft; H2Zero backwash recycle system with one (1) 3,000-gallon backwash recycle tank and one (1) 5,500-gallon sludge holding tank; distribution system, and associated appurtenances to serve 43 single-family lots within Gardner Farms subdivision (distribution mains will be approved under Serial Number: 21-00539) located at 7508 James Austin Road, Willow Springs, NC. Backwash sludge will either be hauled-off to nearby wastewater treatment facility owned and operated by Aqua NC, Inc. or to the land application sites.



North Carolina Department of Environmental Quality | Division of Water Resources  
512 North Salisbury Street | 1634 Mail Service Center | Raleigh, North Carolina 27699-1634  
919.707.9100

OFFICIAL COPY  
Jul 28 2022



Hydropneumatic tanks with a capacity greater than 120 gallons must be constructed and stamped in accordance with the American Society of Mechanical Engineers (ASME) Pressure Vessel Code stamped with the ASME "U" symbol stamp and registered with the National Board of Boiler and Pressure Vessel Inspectors. These tanks must be inspected by the Department of Labor, Boiler Safety Bureau after installation but prior to operation. Please call (919) 707-7918 to schedule an inspection.

Please note that in accordance with 15A NCAC 18C .0309(a), no construction, alteration, or expansion of a water system shall be placed into service or made available for human consumption until the Public Water Supply Section has issued Final Approval. Final Approval will be issued and mailed to the applicant upon receipt of both an Engineer's Certification and an Applicant's Certification submitted in accordance with 15A NCAC 18C .0303 (a) and (c).

These plans and specifications in the foregoing application are approved insofar as the protection of public health is concerned as provided in the rules, standards and criteria adopted under the authority of Chapter 130A-317 of the General Statutes. This approval does not constitute a warranty of the design, construction, or future operation of the water system.

One copy of the "Application for Approval..." and a copy of the plans and specifications with a seal of approval from the Department are enclosed. One copy of the approved documents in a digital format (CD) is being forwarded to our Raleigh Regional Office. The second copy of the CD is being retained in our office.

If the Public Water Supply Section can be of further service, please call (919) 707-9100.

Sincerely,

*Monti Hassan* for

Robert W. Midgette, P.E.  
Chief, Public Water Supply Section  
Division of Water Resources

RWM/MH

Enclosures: Approval Documents

cc: Shawn Guyer, P.E., Raleigh Regional Office  
Wake County Health Department  
Timmons Group  
North Carolina Utilities Commission, Water Division  
Linda Raynor, Compliance Services Branch, Public Water Supply Section  
Boiler Safety Bureau, Department of Labor



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 255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

ANALYTICAL & CONSULTING CHEMISTS

info@environmentalchemists.com

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Jul 28 2022

## NEW WELL INORGANIC CHEMICAL ANALYSIS

Name of System: Powell Family LP

County:

Sample Type:

Location:

Facility ID:

Sample Point:

Collection Date:

Collection Time:

6/12/2020

10:15:00 AM

Collected by: Kevin Letchworth

Mail Results to (water system representative)

Phone Number: 919-266-9223

NW Poole Well and Pump

Fax Number:

Post Office box 1958

Responsible Person's email:

Wendell

NC

27591

LABORATORY ID #: 37729

☒ SAMPLE UNSATISFACTORY

☒ RESAMPLE REQUIRED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT	QUANTIFIED RESULTS	ANALYSES BEGUN	ANALYSES COMPLETED	ALLOWABLE LIMITS
0100	Turbidity	SM 2130 B	0.1	1.7 NTU	06/12/2020 16:55	6/15/2020	8:29
1005	Arsenic	EPA 200.8	0.005	<0.005 mg/L	06/16/2020 14:53	6/18/2020	8:14 0.01
1010	Barium	EPA 200.8	0.4	<0.400 mg/L	06/16/2020 14:53	6/18/2020	8:14 2
1015	Cadmium	EPA 200.8	0.001	<0.001 mg/L	06/16/2020 14:53	6/18/2020	8:14 0.005
1016	Calcium	EPA 200.7	1	13.9 mg/L	06/16/2020 11:03	6/17/2020	11:22
1017	Chloride	SM 4500 Cl B	5	<5 mg/L	06/18/2020 11:20	6/18/2020	15:27 250
1020	Chromium	EPA 200.8	0.02	<0.020 mg/L	06/16/2020 14:53	6/18/2020	8:14 0.1
1022	Copper	EPA 200.8	0.05	<0.050 mg/L	06/16/2020 14:53	6/18/2020	8:14 1.3
1024	Cyanide	EPA 335.4	0.05	<0.050 mg/L	06/29/2020 13:44	6/30/2020	9:38 0.2
Analyzed outside of hold time.							
1025	Fluoride	SM 4500 F C	0.1	0.1 mg/L	06/15/2020 09:50	6/16/2020	9:26 4
1028	Iron	EPA 200.7	0.06	0.889 mg/L	06/16/2020 11:03	6/17/2020	11:22 0.3
1030	Lead	EPA 200.8	0.003	<0.003 mg/L	06/16/2020 14:53	6/18/2020	8:14 0.015
1031	Magnesium	EPA 200.7	1	2.43 mg/L	06/16/2020 11:03	6/17/2020	11:22
1035	Mercury	EPA 245.1	0.0004	<0.0004 mg/L	06/15/2020 14:17	6/16/2020	9:46 0.002
1036	Nickel	EPA 200.8	0.1	<0.100 mg/L	06/16/2020 14:53	6/18/2020	8:14
1040	Nitrate Nitrogen	EPA 353.2	1	<1.0 mg/L	06/13/2020 10:07	7/6/2020	10:52 10
1041	Nitrite Nitrogen	EPA 353.2	0.1	<0.10 mg/L	06/13/2020 10:07	6/15/2020	10:16 1
1045	Selenium	EPA 200.8	0.01	<0.010 mg/L	06/16/2020 14:53	6/18/2020	8:14 0.05
1050	Silver	EPA 200.8	0.05	<0.05 mg/L	06/18/2020 14:16	6/19/2020	8:41 0.1

LABORATORY LOG 20-24439

REPORT #: 2020-09776



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Jul 28 2022

## NEW WELL INORGANIC CHEMICAL ANALYSIS

Name of System: Powell Family LP

County:

Sample Type:

Location:

Facility ID:

Sample Point:

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Collected by: Kevin Letchworth

Mail Results to (water system representative)

Phone Number: 919-266-9223

NW Poole Well and Pump

Post Office box 1958

Wendell

NC

27591

Fax Number:

Responsible Person's email:

LABORATORY ID #: 37729		<input checked="" type="checkbox"/> SAMPLE UNSATISFACTORY			<input checked="" type="checkbox"/> RESAMPLE REQUIRED				
CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT	QUANTIFIED RESULTS	ANALYSES BEGUN	ANALYSES COMPLETED	ALLOWABLE LIMITS		
1052	Sodium	EPA 200.7	1	11.7 mg/L	06/19/2020 10:15	6/23/2020 13:10			
1055	Sulfate (NW)	EPA 300.0	5	9 mg/L	06/16/2020 16:46	6/18/2020 9:09	250		
1068	Acidity	SM 2310 B	1	4 mg/L	06/24/2020 11:30	6/25/2020 7:53			
1074	Antimony	EPA 200.8	0.003	<0.003 mg/L	06/16/2020 14:53	6/18/2020 8:14	0.006		
1075	Beryllium	EPA 200.8	0.002	<0.002 mg/L	06/16/2020 14:53	6/18/2020 8:14	0.004		
1085	Thallium	EPA 200.8	0.001	<0.001 mg/L	06/16/2020 14:53	6/18/2020 8:14	0.002		
1905	Color PtCo	SM 2120B (PtCo)	5	<5 units	06/13/2020 08:10	6/18/2020 8:21	15		
1915	Total Hardness	SM 2340 C	1	48 mg/L	06/15/2020 10:30	6/15/2020 15:59			
1925	pH	SM 4500 H B		7.4 units	06/15/2020 14:00	6/15/2020 16:01			
1927	Alkalinity	SM 2320B	1	65 mg/L	06/16/2020 10:00	6/16/2020 15:38			
1930	Total Dissolved Solids (TDS)	SM 2540 C		114 mg/L	06/12/2020 16:00	6/16/2020 10:49	500		

Note: Except for Iron, Manganese and Sulfate, if result exceeds allowable limit, the laboratory must fax analytical results to the within 48 hours.

Comment:

Reviewed by: Jimmy Dwan



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JUL 28 2022

## NEW WELL - VOLATILE ORGANIC CHEMICALS (VOCs) ANALYSIS

Name of System: Powell Family LP

County:

Sample Type:

Location Where Collected:

Facility ID:

Sample Point:

Collection Date:

Collection Time:

6/12/2020

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Collected by: Kevin Letchworth

Mail Results to (water system representative)

Phone Number: 919-266-9223

NW Poole Well and Pump

Fax Number:

Post Office box 1958

Responsible Person's email:

Wendell

NC

27591

LABORATORY ID #: 37729

☒ SAMPLE UNSATISFACTORY

☒ RESAMPLE REQUIRED

CONTAM. CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT	QUANTIFIED RESULTS	ANALYSES BEGUN	ANALYSES COMPLETED	ALLOWABLE LIMITS
2030	p-Isopropyltoluene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2210	Chloromethane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2212	Dichlorodifluoromethane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2214	Bromomethane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2216	Chloroethane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2218	Fluorotrichloromethane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2246	Hexachlorobutadiene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2248	Naphthalene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2378	1,2,4-Trichlorobenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	0.07
2380	Cis-1,2-Dichloroethylene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	0.07
2408	Dibromomethane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2410	1,1-Dichloropropene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2412	1,3-Dichloropropane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2413	1,3-Dichloropropene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2414	1,2,3-Trichloropropane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2416	2,2-Dichloropropane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2418	1,2,4-Trimethylbenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2420	1,2,3-Trichlorobenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2422	n-Butylbenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2424	1,3,5-Trimethylbenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	
2426	tert-Butylbenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020 00:25	6/23/2020 15:25	



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## NEW WELL - VOLATILE ORGANIC CHEMICALS (VOCs) ANALYSIS

Name of System: Powell Family LP

County:

Sample Type:

Location Where Collected:

Facility ID:

Sample Point:

Collected by: Kevin Letchworth

Collection Date:

Collection Time:

6/12/2020

10:15:00 AM

Mail Results to (water system representative)

Phone Number: 919-266-9223

NW Poole Well and Pump

Fax Number:

Post Office box 1958

Responsible Person's email:

Wendell NC 27591

LABORATORY ID #: 37729			<input checked="" type="checkbox"/> SAMPLE UNSATISFACTORY			<input checked="" type="checkbox"/> RESAMPLE REQUIRED			
2428	sec-Butylbenzene	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2430	Bromochloromethane	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2941	Chloroform	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2942	Bromoform	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2943	Bromodichloromethane	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2944	Chlorodibromomethane	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2955	Xylenes(total)	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 10
2964	Dichloromethane	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.005
2965	o-Chlorotoluene	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2966	p-Chlorotoluene	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2967	m-Dichlorobenzene	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2968	o-Dichlorobenzene	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.6
2969	p-Dichlorobenzene	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.075
2976	Vinyl chloride	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.002
2977	1,1-Dichloroethylene	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.007
2978	1,1-Dichloroethane	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25
2979	Trans-1,2-dichloroethylene	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.1
2980	1,2-Dichloroethane	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.005
2981	1,1,1-Trichloroethane	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.2
2982	Carbon tetrachloride	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.005
2983	1,2-Dichloropropane	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.005
2984	Trichloroethylene	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.005
2985	1,1,2-Trichloroethane	EPA 502.2	0.0005	<0.0005	mg/L	06/18/2020	00:25	6/23/2020	15:25 0.005

LABORATORY LOG 20-24439

REPORT #: 2020-09776

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JUL 28 2022

## NEW WELL - VOLATILE ORGANIC CHEMICALS (VOCs) ANALYSIS

Name of System: Powell Family LP

County:

Sample Type:

Location Where Collected:

Facility ID:

Sample Point:

Collection Date:

Collection Time:

6/12/2020

10:15:00 AM

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Phone Number: 919-266-9223

NW Poole Well and Pump

Fax Number:

Post Office box 1958

Responsible Person's email:

Wendell NC 27591

LABORATORY ID #: 37729			<input checked="" type="checkbox"/> SAMPLE UNSATISFACTORY		<input checked="" type="checkbox"/> RESAMPLE REQUIRED				
2986	1,1,1,2-Tetrachloroethane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	
2987	Tetrachloroethylene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	0.005
2988	1,1,2,2-Tetrachloroethane	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	
2989	Chlorobenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	0.1
2990	Benzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	0.005
2991	Toluene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	1
2992	Ethylbenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	0.7
2993	Bromobenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	
2994	Isopropylbenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	
2996	Styrene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	0.1
2998	n-Propylbenzene	EPA 502.2	0.0005	<0.0005 mg/L	06/18/2020	00:25	6/23/2020	15:25	

Note: If result exceeds allowable limit, the laboratory must fax analytical results to the within 48 hours.

Comment:

Reviewed by:

Sammy Duan





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Jul 28 2022

## NEW WELL - PESTICIDES AND SYNTHETIC ORGANIC CHEMICALS (SOC) ANALYSIS

Name of System: Powell Family LP

County:

Sample Type:

Location Where Collected:

Facility ID:

Sample Point:

Collected by: Kevin Letchworth

Collection Date:

Collection Time:

6/12/2020

10:15:00 AM

Mail Results to (water system representative)

Phone Number: 919-266-9223

NW Poole Well and Pump

Post Office box 1958

Wendell

NC

27591

Attn:

Fax Number:

Responsible Person's email:

LABORATORY ID #: 37729		<input checked="" type="checkbox"/> SAMPLE UNSATISFACTORY			<input checked="" type="checkbox"/> RESAMPLE REQUIRED					
CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT	QUANTIFIED RESULTS	ANALYSES BEGUN	ANALYSES COMPLETED	ALLOWABLE LIMITS			
2005	Endrin	EPA 508.1	0.00001	< 0.00001 mg/L	06/18/2020 08:00	6/30/2020	7:56	0.002		
2010	Lindane	EPA 508.1	0.00002	< 0.00002 mg/L	06/18/2020 08:00	6/30/2020	7:56	0.0002		
2015	Methoxychlor	EPA 508.1	0.0001	< 0.0001 mg/L	06/18/2020 08:00	6/30/2020	7:56	0.04		
2020	Toxaphene	EPA 508.1	0.001	< 0.001 mg/L	06/18/2020 08:00	6/30/2020	7:56	0.003		
2031	Dalapon	EPA 515.4	0.001	< 0.001 mg/L	06/18/2020 14:00	7/2/2020	16:35	0.2		
2035	Di(2-ethylhexyl)adipate	EPA 525.2	0.0006	< 0.0006 mg/L	06/16/2020 08:00	6/19/2020	9:53	0.4		
2036	Oxamyl(vydate)	EPA 531.1	0.002	< 0.002 mg/L	06/25/2020 11:07	7/2/2020	16:33	0.2		
2037	Simazine	EPA 525.2	0.00007	< 0.00007 mg/L	06/16/2020 08:00	6/19/2020	9:53	0.004		
2039	Di(2-ethylhexyl)phthalate	EPA 525.2	0.00132	< 0.00132 mg/L	06/16/2020 08:00	6/19/2020	9:53	0.006		
2040	Picloram	EPA 515.4	0.0001	< 0.0001 mg/L	06/18/2020 14:00	7/2/2020	16:35	0.5		
2041	Dinoseb	EPA 515.4	0.0002	< 0.0002 mg/L	06/18/2020 14:00	7/2/2020	16:35	0.007		
2042	Hexachlorocyclopentadiene	EPA 525.2	0.0001	< 0.0001 mg/L	06/16/2020 08:00	6/19/2020	9:53	0.05		
2046	Carbofuran	EPA 531.1	0.0009	< 0.0009 mg/L	06/25/2020 11:07	7/2/2020	16:33	0.04		
2050	Atrazine	EPA 508.1	0.0001	< 0.0001 mg/L	06/18/2020 08:00	6/30/2020	7:56	0.003		
2051	Alachlor	EPA 508.1	0.0002	< 0.0002 mg/L	06/18/2020 08:00	6/30/2020	7:56	0.002		
2065	Heptachlor	EPA 525.2	0.00004	< 0.00004 mg/L	06/16/2020 08:00	6/19/2020	9:53	0.0004		
2067	Heptachlor epoxide	EPA 508.1	0.00002	< 0.00002 mg/L	06/18/2020 08:00	6/30/2020	7:56	0.0002		

LABORATORY LOG 20-24439

REPORT #: 2020-09776



# Environmental Chemists, Inc.

W-218 Sub 553

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## NEW WELL - PESTICIDES AND SYNTHETIC ORGANIC CHEMICALS (SOC) ANALYSIS

Name of System: Powell Family LP

County:

Sample Type:

Location Where Collected:

Facility ID:

Sample Point:

Collected by: Kevin Letchworth

Collection Date:

Collection Time:

6/12/2020

10:15:00 AM

Mail Results to (water system representative)

Phone Number: 919-266-9223

NW Poole Well and Pump

Post Office box 1958

Wendell

NC

27591

Attn:

Fax Number:

Responsible Person's email:

LABORATORY ID # 37729		<input checked="" type="checkbox"/> SAMPLE UNSATISFACTORY				<input checked="" type="checkbox"/> RESAMPLE REQUIRED				
2105	2,4-D	EPA 515.4	0.0001	< 0.0001	mg/L	06/18/2020	14:00	7/2/2020	16:35	0.07
2110	2,4,5-TP (Silvex)	EPA 515.4	0.0002	< 0.0002	mg/L	06/18/2020	14:00	7/2/2020	16:35	0.05
2274	Hexachlorobenzene	EPA 525.2	0.0001	< 0.0001	mg/L	06/16/2020	08:00	6/19/2020	9:53	0.001
2306	Benzo(a)pyrene	EPA 525.2	0.00002	< 0.00002	mg/L	06/16/2020	08:00	6/19/2020	9:53	0.0002
2326	Pentachlorophenol	EPA 515.4	0.00004	< 0.00004	mg/L	06/18/2020	14:00	7/2/2020	16:35	0.001
2383	(PCB) Total Polychlorinated Biphen	EPA 508.1	0.0001	< 0.0001	mg/L	06/18/2020	08:00	6/30/2020	7:56	0.0005
2931	1,2-Dibromo-3-chloropropane (DB	EPA 504.1	0.00002	< 0.00002	mg/L	06/15/2020	08:30	6/19/2020	9:55	0.0002
2948	Ethylene Dibromide (EDB)	EPA 504.1	0.00001	< 0.00001	mg/L	06/15/2020	08:30	6/19/2020	9:55	0.00005
2959	Chlordane	EPA 508.1	0.0002	< 0.0002	mg/L	06/18/2020	08:00	6/30/2020	7:56	0.002

Note: If result exceeds allowable limit, the laboratory must fax analytical results to the within 48 hours.

Comment:

Reviewed by:

Sammy Duan



# Environmental Chemists, Inc.

6602 Windmill Way, Wilmington, NC 28405 • 910.392.0223 Lab • 910.392.4424 Fax  
710 Bowsertown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax  
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

ANALYTICAL & CONSULTING CHEMISTS

info@environmentalchemists.com

NW Poole Well and Pump  
Post Office box 1958  
Wendell NC 27591  
Attention:

Date of Report: Jul 06, 2020  
Customer PO #:  
Report #: 2020-09776  
Report to:  
Project ID: Powell Family LP

## TTHM - HAA5 FORMATION POTENTIAL

Lab ID	Sample ID:	Collect Date/Time	Matrix	Sampled by
20-24439	Site: New Well	6/12/2020 10:15 AM	DW	Kevin Letchworth
Test	Method	Results	Date Analyzed	
Bromodichloromethane	EPA 524.2	<0.001 mg/L	06/23/2020	
Bromoform	EPA 524.2	<0.001 mg/L	06/23/2020	
Chloroform	EPA 524.2	0.002 mg/L	06/23/2020	
Dibromochloromethane	EPA 524.2	<0.001 mg/L	06/23/2020	
TTHMFP	EPA 524.2	0.002 mg/L	06/23/2020	
Dibromoacetic Acid	EPA 552.2	<0.001 mg/L	06/24/2020	
Dichloroacetic Acid	EPA 552.2	<0.001 mg/L	06/24/2020	
Monobromoacetic Acid (MBAA)	EPA 552.2	<0.001 mg/L	06/24/2020	
Monochloroacetic Acid	EPA 552.2	<0.002 mg/L	06/24/2020	
THAFP	EPA 552.2	<0.002 mg/L	06/24/2020	
Trichloroacetic Acid	EPA 552.2	<0.001 mg/L	06/24/2020	
4 Hour Demand <0.1 mg/L	SM 5710 B	*	06/15/2020	
7 Day Chlorine Residual 1.97 mg/L from 5 mg/L dose.	SM 5710 B	*	06/15/2020	

Comment:

Reviewed by: Jimmy Duan



# Environmental Chemists, Inc.

W 218 Stb 553

6602 Windmill Way, Wilmington, NC 28405 • 910.392.0223 Lab • 910.392.4424 Fax  
710 Bowsertown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax  
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

ANALYTICAL &amp; CONSULTING CHEMISTS

info@environmentalchemists.com

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Jul 28 2022

## BACTERIOLOGICAL ANALYSIS

Note: ALL applicable information must be supplied for compliance credit

Water System ID #:

Powell Family LP

County:

System Type:

Water Source:

### Distribution - Total Coliform Rule (TCR)

SampleType:

Facility ID:

Location Code: New Well

Sample Point:

Location:

Collected by: Kevin LetchworthDATE: 6/12/2020TIME: 10:15:00 AM

#### Mail Results to (water system representative):

NW Poole Well and Pump

Post Office box 1958

Wendell NC 27591

Phone Number: 919-266-9223

Fax Number:

Complete for Repeat, Triggered, or Additional / Confirmation Samples:

Previous Positive Laboratory ID Number: \_\_\_\_\_

" Positive Laboratory Log Number: \_\_\_\_\_

" Positive Location Code: \_\_\_\_\_

" Positive Collection Date: \_\_\_\_\_

#### Disinfectant Used:

Responsible Person's Name

Customer Number

Total Chlorine Residual

mg/L

14070007

Free Chlorine Residual:

mg/L

LABORATORY ID #: 37729

☒ Repeat Samples Required from Client☒ Resample Required from Client

CONTAM CODE	CONTAMINANT	METHOD CODE	QUANTIFIED RESULTS	ANALYSES BEGUN	ANALYSES COMPLETED
3100	Total Coliform	SM 9223B	Absent	06/12/2020 16:00	6/13/2020 10:45
3014	E. Coli	SM 9223B	Absent	06/12/2020 16:00	6/13/2020 10:45

Comment:

Reviewed by:

Sammy Duran

Laboratory Log Number: 20-24439

REPORT #: 2020-09776



# Environmental Chemists, Inc.

6602 Windmill Way, Wilmington, NC 28405 • 910.392.0223 Lab • 910.392.4424 Fax  
710 Bowserstown Road, Manteo, NC 27954 • 252.473.5702 Lab/Fax  
255-A Wilmington Highway, Jacksonville, NC 28540 • 910.347.5843 Lab/Fax

ANALYTICAL & CONSULTING CHEMISTS

info@environmentalchemists.com

NW Poole Well and Pump  
Post Office box 1958  
Wendell NC 27591  
Attention:

Date of Report: Jul 06, 2020  
Customer PO #:  
Customer ID: 14070007  
Report #: 2020-09776  
Project ID: Powell Family LP

Lab ID	Sample ID:	Collect Date/Time	Matrix	Sampled by
20-24439	Site: New Well	6/12/2020 10:15 AM	DW	Kevin Letchworth
Test	Method	Results	Date Analyzed	
Uranium	EPA 200.8	<0.67 pCi/L	06/16/2020	

Comment:

Reviewed by: Sammy Duran

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JUL 28 2022





# Florida Radiochemistry Services, Inc.

5456 Hoffner Ave., Suite 201 Orlando, FL 32812

Phone: (407) 382-7733 Fax: (407) 382-7744

## RADIOLOGICAL ANALYSIS

Note: All information must be supplied for compliance credit.

WATER SYSTEM ID #: N/A

County: \_\_\_\_\_

Name of Water System: NW POOLE - POWELLSample Type: ☐ Distribution ☒ Entry Point ☐ Composite ☒ Special/Non-compliance

Mail Results to (system representative):

ENVIROCHEM6602 WINDMILL WAYWILMINGTON NC 28405Phone 910-392-0223

Fax \_\_\_\_\_

Collection Data					
Period	Date (MM/DD/YY)	Time (Specify AM or PM)	FACILITY /SAMPLE Code	Sample Location	Collected By
Single or 1st Qtr	6/12/20	10:15	N/A	N/A	LEITCHWORTH
2nd Qtr					
3rd Qtr					
4th Qtr					

LABORATORY ID #: 12709☐ SAMPLE UNSATISFACTORY ☐ RESAMPLE REQUIRED

CONTAM CODE	CONTAMINANT	METHOD CODE	REQUIRED REPORTING LIMIT (RRL)	NOT DETECTED (i.e. < RRL)	QUANTIFIED RESULTS* (pCi/L)	UNIT (pCi/L)	ALLOWABLE LIMIT
4000	* Gross Alpha	435	3 pCi/L	X		1.8	15 pCi/L
4004	Radon	—	100 pCi/L				N/A
4006	Uranium	456	2 pCi/L				20.1 pCi/L
4010	* Combined Radium	N/A	N/A	4.0 N/A		0.5	5 pCi/L
4020	* Radium 226	446	1 pCi/L	X		0.2	3 pCi/L
4030	* Radium 228	452	1 pCi/L	X		0.5	2 pCi/L
4100	* Gross Beta	435	4 pCi/L				50 pCi/L

Note: If result exceeds allowable limit, the laboratory must fax analytical results to the State within 48 hours.

DATE:		TIME:	
ANALYSES BEGUN:		06-23-20	08:25 AM
ANALYSES COMPLETED:		07-02-20	03:06 PM

Laboratory Log #: 20061160.02Certified By: McKumCOMMENTS: 20-09776 / 24439





## EMSL Analytical, Inc.

2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560  
 Phone/Fax: (919) 465-3900 / (919) 465-3950  
<http://www.EMSL.com> / [raleighlab@emsl.com](mailto:raleighlab@emsl.com)

EMSL Order ID: 292006974  
 Customer ID: ENCH66  
 Customer PO:  
 Project ID:

Attn: Jay Baker  
 Environmental Chemists  
 6802 Windmill Way  
 Wilmington, NC 28405

Phone: (910) 392-0223  
 Fax: (910) 392-4424  
 Received: 07/07/2020  
 Analyzed: 07/20/2020

Proj: 20-09776/24439, N.W. Poole - Powell

**Test Report: Determination of Asbestos Structures >10µm in Drinking Water**  
**Performed by the 100.2 Method (EPA 600/R-94/134)**

Sample ID Client / EMSL	Sample Filtration Date/Time	Original Sample Vol. Filtered (ml)	Effective Filter Area (mm²)	Area Analyzed (mm²)	ASBESTOS				
					Asbestos Types	Fibers Detected	Analytical Sensitivity	Concentration	Confidence Limits
N.W. Poole - Powell 292006974-0001	7/7/2020 02:15 PM	50	1283	0.1300	None Detected	ND	0.19	<0.19	0.00 - 0.72
Collection Date/Time:		06/12/2020 10:15 AM							

Collection Date/Time: 06/12/2020 10:15 AM

Analyst(s)

Billy Barnes

(1)

*Billy Barnes*

Billy Barnes, Asbestos Lab Manager  
 or Other Approved Signatory

Any questions please contact Billy Barnes.

Initial report from: 07/20/2020 16:27:32

Sample collection and containers provided by the client. acceptable bottle blank level is defined as ≤0.01MFL>10µm. ND=None Detected. This report may not be reproduced, except in full without written permission by EMSL Analytical, Inc. The test results contained within this report meet the requirements of NELAP unless otherwise noted. This report relates only to the samples reported above. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Morrisville, NC



Analytical & Consulting Chemists

# ENVIRONMENTAL CHEMISTS, INC

NCDENR: DWQ CERTIFICATION # 94 NCDHHS: DLS CERTIFICATION # 37729

6602 Windmill Way Wilmington, NC 28405  
OFFICE: 910-392-0223 FAX 910-392-4424  
info@environmentalchemists.com

## COLLECTION AND CHAIN OF CUSTODY

Client: NW Poole	PROJECT NAME: <u>POWELL FAMILY LP</u>	REPORT NO: <u>20-09776</u>
ADDRESS:	CONTACT NAME: Kevin Letchworth	PO NO:
	REPORT TO:	PHONE/FAX:
	COPY TO:	email:

Sampled By: \_\_\_\_\_

SAMPLE TYPE: I = Influent, E = Effluent, W = Well, ST = Stream, SO = Soil, SL = Sludge, Other: \_\_\_\_\_

Sample Identification	Collection			Sample Type	Composite or Grab	Container (P or G)	Chlorine mg/L	LAB ID NUMBER	PRESERVATION								ANALYSIS REQUESTED
	Date	Time	Temp						NONE	HCL	H2SO4	HNO3	NAOH	THO	OTHER		
New Well	6-12-2020	10:15			C	P		24439	X	X	X	X	X	X	X	VOC,SOC,New Well IOC	
					G	G											
					C	P											
					G	G						X			X	Asbestos, Rads (5 compounds)	
					C	P											
					G	G			X					X		Total Coliform, THM/HAAFP	
					C	P											
					G	G											
					C	P											
					G	G											
					C	P											
					G	G											
					C	P											
					G	G											
					C	P											
					G	G											
					C	P											
					G	G											

Transfer	Relinquished By:	Date/Time	Received By:	Date/Time
1.			<u>[Signature]</u>	6-12-20/1230
2.				

Temperature when Received: 4.0°C Accepted: [Signature] Rejected: \_\_\_\_\_ Resample Requested: \_\_\_\_\_  
 Delivered By: [Signature] Received By: [Signature] Date: 6-12-20 Time: 1430  
 Comments: \_\_\_\_\_ TURNAROUND: \_\_\_\_\_

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Jul 28 2022

# GARDNER PROPERTY

## CONSTRUCTION DRAWINGS

PIN: 0685-30-2137

7508 JAMES AUSTIN RD, WILLOW SPRINGS, WAKE COUNTY, NORTH CAROLINA

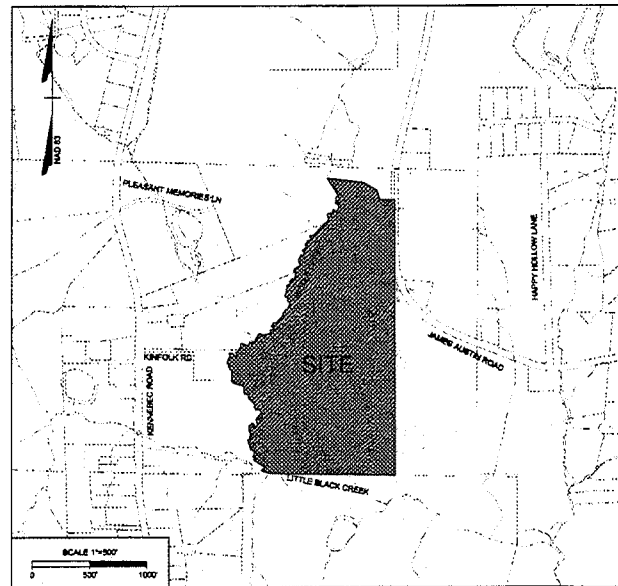
### SITE DATA

PROJECT: GARDNER PROPERTY  
 ENGINEER: MIKE ZACCARDO, P.E.  
 TIMMONS GROUP  
 5410 TRINITY ROAD, SUITE 102  
 RALEIGH, NC 27607  
 PHONE: 919-532-3281  
 FAX: 919-859-5883  
 EMAIL: MIKE.ZACCARDO@TIMMONS.COM

DEVELOPER: POWELL GENERAL FAMILY PARTNERSHIP  
 1100 WILSON ROAD  
 FLOUQUA VARIANA, NC 27526

LAND OWNER: MAYNE A GARDNER TRUSTEE /  
 JAMES I GARDNER REVOCABLE TRUST  
 8103 KENNEBEC ROAD  
 WILLOW SPRINGS, NC 27582

TOTAL SITE AREA: 80.44 ACRES  
 PIN: 0685-30-2137  
 ZONING: R-50  
 PROPOSED USE: RESIDENTIAL



VICINITY MAP

### Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER SHEET
C1.0	EXISTING CONDITIONS & DEMOLITION PLAN
C2.0	SUBDIVISION LAYOUT PLAN
C3.0	UTILITY PLAN
C4.0	GRADING & DRAINAGE PLAN
C5.1	EROSION & SEDIMENTATION CONTROL PLAN PHASE 1
C5.2	EROSION & SEDIMENTATION CONTROL PLAN PHASE 2
C6.1	ROAD A PLAN & PROFILE 1 OF 3
C6.2	ROAD A PLAN & PROFILE 2 OF 3
C6.3	ROAD A PLAN & PROFILE 3 OF 3
C7.1	ROAD B PLAN & PROFILE
C7.2	ROAD C PLAN & PROFILE
C7.3	ROAD D PLAN & PROFILE
C8.1	NOTES AND DETAILS 1 OF 3
C8.2	NOTES AND DETAILS 2 OF 3
C8.3	NOTES AND DETAILS 3 OF 3

### EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT

#### APPROVED

EROSION CONTROL ☒ SEC-040184-2020STORMWATER MGMT. ☒ SWF-040186-2020FLOOD STUDY ☐ S- \_\_\_\_\_

DATE 4/6/2024

  
 ENVIRONMENTAL CONSULTANT SIGNATURE

SEC-040184-2020

SWF-040186-2020



THIS DRAWING PREPARED AT THE  
 OFFICE OF THE ENGINEER  
 5410 TRINITY ROAD, SUITE 102  
 RALEIGH, NC 27607  
 TEL: 919.859.5883 FAX: 919.859.5883

YOUR DESIGN APPROVED THROUGH OURS

DATE

02-05-2021

DRAWN BY

T. CROSS

CHECKED BY

M. ZACCARDO

SCALE

1" = 500'

**TIMMONS GROUP**  
 NORTH CAROLINA LICENSE NO. C-1652  
**GARDNER PROPERTY**  
 7508 JAMES AUSTIN RD, WILLOW SPRINGS, WAKE COUNTY, NORTH CAROLINA  
**COVER SHEET**

JOB NO.  
43269SHEET NO.  
C0.0

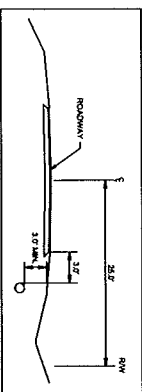
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Jul 28 2022

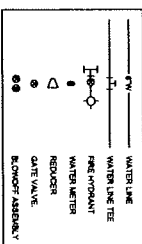
W-218 Sub 553

### UTILITY NOTES

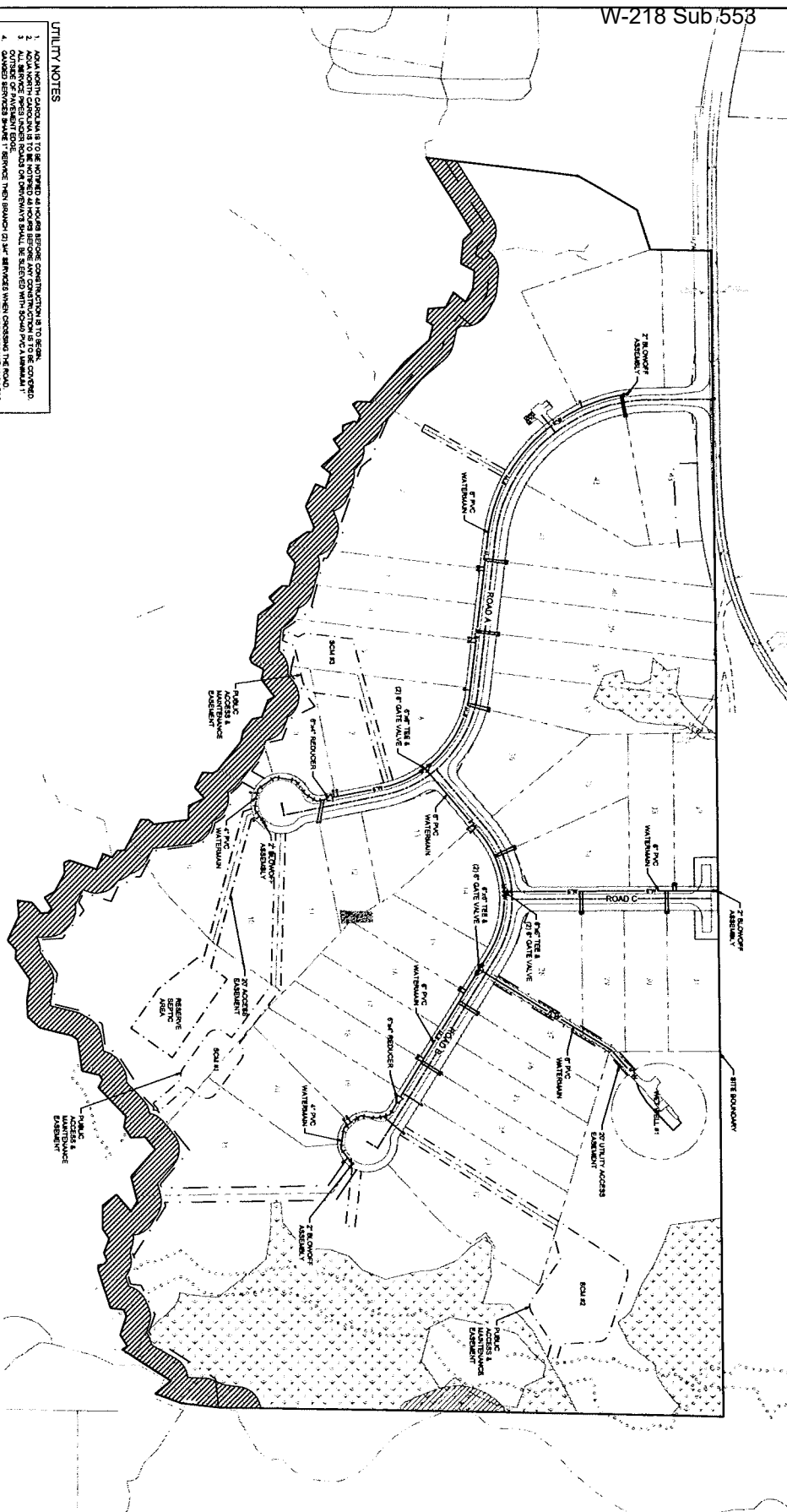
- [illegible]



### TYPICAL WATERLINE SECTION



### UTILITY LEGEND



SCALE 1"=100'

0 100' 200'

**North 8th**  
WATER RELATIONS

**TIMMONS GROUP**   
NORTH CAROLINA LICENSE NO. C-1652

GARDNER PROPERTY

7508 JAMES AUSTIN RD, WILLOW SPRINGS, WAKE COUNTY, NORTH CAROLINA

## UTILITY PLAN

YOUR VISTOR ACHIEVED THROUGH OURS

THIS DRAWING PREPARED AT THE  
RALEIGH OFFICE  
5410 Trinity Road, Suite 102 | Raleigh, NC 27607  
TEL 919.866.4951 FAX 919.833.8124 [www.lcs2moon.com](http://www.lcs2moon.com)

DATE		REVISION DESCRIPTION
DATE	02/05/2027	



These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, indicative, but not

# Water System Information Required for Application

W-218 Sub 553

1. Company Name: ANC  
2. Type of Application: NF  
3. Name of Service Area: Gardner Farms

4. Number of Lots: 43

5. Number of Customers/year:  
Yr 1 @ 30% 13  
Yr 2 @ 20% 9  
Yr 3 @ 20% 9  
Yr 4 @ 15 % 6  
Yr 5 @ 15% 6

6. Number of Wells: 1

7. Size of Storage Tank: 12,000 gallons

Cost of Mains \$ 92,450.00 Estimated: \$2150/lot  
Cost of Services \$ 64,500.00 Estimated: \$1500/lot  
Cost of Sewer Mains \$ 0.00 Estimated: 2,500/lot  
Cost of Pump Station \$ 0.00 Estimated: 100,000 per PS  
Cost of Pump Station Lot \$ 0.00 Estimated: 500 per PS Lot  
Cost of WWTP Facility \$ 0.00  
Cost of WWTP Lot \$ 0.00  
Cost of Well Drilling \$ 25,000.00 Estimated: 45,000/well  
Cost of Well House \$ 45,000.00 Estimated: 40,000/well  
Cost of Treatment \$ 75,000.00 Estimated: 70,000/well  
Cost of Well Lot \$ 500.00 Estimated: 500/well site  
Cost of Testing \$ 9,000.00 Estimated: 9,000/well  
Cost of Storage \$ 48,000.00 Estimated: \$35,000 (5,400 gals) \$45,000 (10,000 gals)

Engineering Cost - Water \$ 20,000.00  
Engineering Cost - Sewer \$

Total Cost of System \$ 379,450.00

8. Purchase Price/Lot - Water \$ 1,750.00  
Purchase Price/Lot - Sewer \$ N/A

Purchase Price/Lot - Water \$ 75,250.00  
Purchase Price/Lot - Sewer \$ 0.00

9. Bond Amount: \$ 10,000.00

CIAC \$ 304,200.00

10. Other Needed Information:

Mains @ \$2,150/lot  
Services @ \$1500/lot  
Well Drilling @ \$40,000/well  
Well House @ \$45,000/well  
Well Lot Valve @ \$500/lot

Well Testing @ \$9,000/well  
Storage @ \$35,000 @ 5k  
\$45,000 @ 10k  
Engineering @ \$20,000/system

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## Exhibit 11 (New Franchise)

Estimated Plant Cost for Gardner Farms

<u>Plant Item</u>	<u>Water</u>	<u>Wastewater</u>
1. Mains	92,450.00	0.00
2. Services	64,500.00	N/A
3. Well Drilling	25,000.00	N/A
4. Well House	50,000.00	N/A
5. Well Lot	500.00	N/A
6. Testing	9,000.00	N/A
7. Storage	40,000.00	N/A
8. Treatment	75,000.00	
9. Pump Station	N/A	0.00
10. Pump Station Lot	N/A	0.00
11. Engineering	20,000.00	0.00
12. WWTP Facility	N/A	0.00
13. WWTP Lot	N/A	0.00
14. TOTAL	376,450.00	0.00
15. Less Purchase Price	75,250.00	0.00
Total Contribution	301,200.00	0.00
(\$70 x 13 lots in year one)	910.00	0.00
	302,110.00	0.00

Developer's contribution is line 11 above less purchase price

<b>NOTE:</b>	<u>Water</u>	<u>Sewer</u>
Total Contribution	301,200.00	0.00
Lots In Yr. 1	910.00	0.00
Purchase Price Yr. 1	22,750.00	
<b>Line 16 CFS</b>	<b>324,860.00</b>	<b>0.00</b>



## Exhibit 11 Detail of Estimated Costs

### Water

Distribution mains are estimated at \$2150/lot; however, the subdivision layout, lot sizes, and main material will vary this estimate.

Services to each lot from the main, including the meter boxes, are estimated to be \$1500/lot.

Well drilling, including grouting, is estimated to be \$40,000/well; however, the depth of the well, videoing, and any well renovations will vary this amount.

Well houses, including pump, drop pipe, wiring, plumbing, and chemical equipment is estimated at \$45,000 each; however, depth of well, pump size, drop pipe shoe, and type of treatment may vary this amount.

Well lots are estimated to be valued at \$500.

Testing, including the 24-hour drawdown and required water quality testing, is estimated to be \$9,000/well.

A 5,400 gallon hydro tank is estimated at \$35,000; a 10,000 gallon hydro tank at \$45,000; this includes delivery, crane rental, pedestals, and set up.

Engineering for the water system is estimated at \$20,000; however, based on size of subdivision; this will vary.

Total water lots \_\_\_\_\_ 7 Total wells - \_\_\_\_\_ 1

### Wastewater

Collection mains are estimated at \$2,500/lot; however, the subdivision layout, lot sizes, and main materials will vary this amount.

Pump stations are estimated at \$100,000 each; however, depth, size of pump, and other items will vary this amount.

Pump station lot is estimated at \$500.

Engineering is estimated at \$20,000; however, based on subdivision size, this will vary.

Total pump station lots - \_\_\_\_\_ N/A \_\_\_\_\_

Gardner Farms - Aqua North Carolina, Inc. (ANC Water - Cary Region)  
ADDENDUM TO APPLICATION FOR CERTIFICATE OF PUBLIC CONVENIENCE & NECESSITY AND FOR APPROVAL OF RATES

**Projected Income Statement**

Line No.	Item	Year 1	Year 2	Year 3	Year 4	Year 5
<u>Operating Revenue</u>						
1	Metered service revenue	\$7,839	\$13,266	\$18,090	\$22,311	\$25,929
2	Flat rate service revenue	\$0	\$0	\$0	\$0	\$0
3	EPA testing surcharge	\$0	\$0	\$0	\$0	\$0
4	Re-connect fees	\$0	\$0	\$0	\$0	\$0
5	Return check charge	\$0	\$0	\$0	\$0	\$0
6	Late payment charges	\$13	\$23	\$31	\$38	\$45
7	Other operating revenue	\$118	\$199	\$271	\$335	\$389
8	Total operating revenue (Sum of Line 1 thru Line 7)	\$7,970	\$13,488	\$18,392	\$22,684	\$26,362
<u>Operating Expenses</u>						
9	Total salaries and wages (employees only)	\$1,430	\$2,419	\$3,299	\$4,069	\$4,728
10	Outside labor expense (non-employees)	\$521	\$882	\$1,203	\$1,484	\$1,724
11	Administrative and office expense	\$43	\$72	\$98	\$121	\$141
12	Maintenance and repair expense	\$77	\$130	\$178	\$219	\$255
13	Purchased Water	\$0	\$0	\$0	\$0	\$0
14	Purchased sewage treatment	\$0	\$0	\$0	\$0	\$0
15	Electric power expense (exclude office)	\$482	\$815	\$1,112	\$1,371	\$1,594
16	Chemicals expense	\$94	\$159	\$216	\$267	\$310
17	Testing fees	\$139	\$235	\$320	\$394	\$458
18	Transportation expense	\$180	\$305	\$415	\$512	\$595
19	Other operating expenses	\$761	\$1,288	\$1,756	\$2,166	\$2,517
20	Total operation and maintenance expenses (Sum of Lines 9 thru 19)	\$3,725	\$6,304	\$8,597	\$10,603	\$12,322
21	Annual depreciation expense	\$1,118	\$983	\$1,041	\$1,083	\$1,109
22	Property taxes paid on utility property	\$109	\$184	\$251	\$309	\$359
23	Payroll taxes	\$100	\$170	\$232	\$286	\$332
24	Franchise (gross receipts) tax	\$0	\$0	\$0	\$0	\$0
25	Annual NCUC regulatory fee	\$11	\$19	\$26	\$32	\$37
26	Total operating expenses (Sum of Line 20 thru Line 25)	\$5,064	\$7,660	\$10,146	\$12,313	\$14,160
<u>Income taxes</u>						
27	State income taxes	\$73	\$146	\$206	\$259	\$305
28	Federal income taxes	\$595	\$1,193	\$1,688	\$2,124	\$2,498
29	Total income taxes (Line 27 + Line 28)	\$668	\$1,339	\$1,894	\$2,383	\$2,803
30	Net operating income (loss) (Line 8 - Line 26 - Line 29)	\$2,238	\$4,489	\$6,352	\$7,988	\$9,399
31	Interest expense	\$0	\$0	\$0	\$0	\$0
32	Net income (loss) (Line 30 - Line 31)	\$2,238	\$4,489	\$6,352	\$7,988	\$9,399

All amounts are estimated. Certain average cost per customer information was derived from Aqua North Carolina Inc.'s last rate case (Docket No. W-218, Sub 526, final order dated 10/26/20.

For purposes of this projection no allowances have been made for inflation.

Number of customers (row 52)	13	22	30	37	43
	30%	20%	20%	15%	15%

Gardner Farms - Aqua North Carolina, Inc. (ANC Water - Cary Region)  
ADDENDUM TO APPLICATION FOR CERTIFICATE OF PUBLIC CONVENIENCE & NECESSITY AND FOR APPROVAL OF RATES

**Statement of Cash Flows**

Line No.	Item	Year 1	Year 2	Year 3	Year 4	Year 5
<u>Cash Flows From Operating Activities</u>						
1	Pre-tax operating income (loss) :					
2	Total operating revenue	\$7,970	\$13,488	\$18,392	\$22,684	\$26,362
3	Less : Operation and maintenance expenses	\$3,725	\$6,304	\$8,597	\$10,603	\$12,322
4	Less : Taxes other than income	\$220	\$373	\$508	\$627	\$728
5	Pre-tax operating income (loss)	\$4,024	\$6,811	\$9,287	\$11,454	\$13,311
6	Income tax calculation :					
7	Pre-tax operating income (loss)	\$4,024	\$6,811	\$9,287	\$11,454	\$13,311
8	Plus : Contribution in aid of construction (Meter fees, Tap fees)	\$910	\$630	\$560	\$490	\$420
9	Less : Tax depreciation	\$946	\$1,602	\$2,184	\$2,694	\$3,130
10	Less : Interest expense	\$0	\$0	\$0	\$0	\$0
11	Taxable income (loss)	\$3,988	\$5,839	\$7,663	\$9,251	\$10,601
12	State income tax	\$100	\$146	\$192	\$231	\$265
13	Federal income tax	\$816	\$1,196	\$1,569	\$1,894	\$2,171
14	Total income taxes to be paid	\$916	\$1,342	\$1,761	\$2,125	\$2,436
15	Net cash provided by (used in) operating activities	\$3,108	\$5,469	\$7,526	\$9,329	\$10,875
<u>Cash Flows From Investing Activities</u>						
16	Purchases of utility plant	\$324,860	\$16,380	\$14,560	\$12,740	\$10,920
17	Plus : Cash bonds posted	\$0	\$0	\$0	\$0	\$0
18	Less : Contributions in aid of construction	\$302,110	\$630	\$560	\$490	\$420
19	Less : Proceeds from disposal of utility plant	\$0	\$0	\$0	\$0	\$0
20	Net cash used (provided) by investing activities	\$22,750	\$15,750	\$14,000	\$12,250	\$10,500
<u>Cash Flows From Financing Activities</u>						
21	Proceeds from issuing short term debt	\$0	\$0	\$0	\$0	\$0
22	Less : Principal repayment of short term debt	\$0	\$0	\$0	\$0	\$0
23	Plus : Proceeds from issuing long term debt	\$0	\$0	\$0	\$0	\$0
24	Less : Principal repayment of long term debt	\$0	\$0	\$0	\$0	\$0
25	Less : Interest payment for short and long term debt	\$0	\$0	\$0	\$0	\$0
26	Plus : Proceeds from issuing stock	\$0	\$0	\$0	\$0	\$0
27	Less : Dividends paid	\$0	\$0	\$0	\$0	\$0
28	Plus : Funds provided by company	\$22,750	\$0	\$0	\$0	\$0
29	Net cash provided (used) by financing activities	\$22,750	\$0	\$0	\$0	\$0
30	Net increase (decrease) in cash	\$3,108	(\$10,281)	(\$6,474)	(\$2,921)	\$375
31	Cash balance at beginning of year	\$0	\$3,108	(\$7,173)	(\$13,647)	(\$16,568)
32	Cash balance at end of year	\$3,108	(\$7,173)	(\$13,647)	(\$16,568)	(\$16,193)

Gardner Farms - Aqua North Carolina, Inc. (ANC Water - Cary Region)

ADDENDUM TO NOTIFICATION OF INTENTION TO BEGIN OPERATIONS IN AREA CONTIGUOUS TO PRESENT SERVICE AREA

Summary of Assumptions

- 1) Most calculations are based on an average cost per customer for Aqua North Carolina, Inc. North Carolina Water per the audited expenses and REU's in the NCUC Final Order dated 10/26/20 for the 3/31/20 test year. These are the amounts being used when referring to the average cost per customer in the following assumptions.
- 2) All line items with \$0 amounts were not applicable for this franchise.
- 3) We expect this system to build out at 43 customers. The average number of customers used for years 1-5 are expected to be 13, 22, 30, 37 and 43 respectively.
- 4) For the Projected Income Statement the following line items are based upon the average cost per customer multiplied by the number of customers projected for this extension each year :  
Lines 1, 4-7, 9-12, 15-16, 18-19 and 22-23.
- 5) I/S Line 17 - Testing fees are made up of two components. Using tests that are related to a system we calculated an average annual cost per system. Using tests that are related to the number of entry points we calculated an average annual cost per entry point for a one well system. We added these two amounts together to come up with an annual cost per system for a one well system.
- 6) I/S Line 21- In order to calculate annual depreciation expense we used our initial cost investment and any other plant items paid for by Aqua North Carolina. For purposes of this projection we used a composite depreciation rate. However, when the extension is recorded in the asset accounts Heater will use account specific depreciation rates. For the allocated amount of depreciation expense we calculated the average cost per customer using the general plant allocations and the REU's per 10/26/20 rate case.
- 7) I/S Line 24 - The franchise tax calculation is based on the same formula used in rate proceedings at the 0%.
- 8) I/S Line 25 - The annual NCUC regulatory fee is a calculation based on the same formula used in rate proceedings at the .135%. The rate has since changed to .13% effective 7/1/19 and .14% effective 7/1/22.

9) I/S Line 27, C/F Line 12 - The state income taxes are a formula based on the income tax rates for 2014 which is 5.0%. The state tax rate has since changed to 4.0%. The state tax rate has changed to 3% effective 1/1/17. Effective 1/1/19, state tax is 2.5%.

10) I/S Line 28, C/F Line 13 - The federal income taxes are a formula based on the 35% federal income tax rate. Federal income tax rate changed to 21% effective 1/1/18.

11) C/F Lines 8, Line 19 - CIAC is per the agreement between Aqua North Carolina, Inc and the developer. Meter fees / tap fees are based upon the estimated number of customers connected to the extension each year.

12) C/F Line 9 - The tax depreciation is based on the IRS straight - line depreciation rates for 25 year utility property applied to Aqua's estimated total cost plant per the contract with the developer and applied to the estimated meter fees / tap fees.

13) C/F Line 17 - For the purchases of utility plant we used the estimated amount of total plant per the contract with the developer and year 1 initial cost investment. Meter fees / tap fees are based upon the estimated number of customers connected to the extension the first year.

14) C/F Line 18 - Cash bonds posted are not required as Aqua has an approved corporate surety bond to satisfy NCUC bonding requirements.

15) C/F Line 29 - Funds provided by company is the estimated amount needed to purchase this extension.

16) The initial cost investment does not include internal costs including due diligence related to

## **AQUA NORTH CAROLINA, INC.**

### **VIABILITY STATEMENT**

Aqua North Carolina, Inc. provides sewer service to approximately 17,360 customers and water service to approximately 63,727 customers in North Carolina. In Aqua's last general rate case, Docket Number W-218, Sub5267, the North Carolina Utilities Commission (NCUC) determined that 9.40% was a reasonable return on equity for Aqua's North Carolina operations for the test year ended March 31, 2020. The 9.40% return on equity produced total annual operation revenues of \$39,190,819 for water and \$16,457,554 for sewer. The total rate based allowed was \$135,909,810 for water and \$60,371,609 for sewer of which 50% or 98,140,710 was equity funded.

Aqua North Carolina, Inc. has a corporate surety bond in the amount of \$13.0 million which was approved by the Commission which was approved by the Commission in August 2017 to satisfy NCUC bonding requirements.