Franklin County Sanitary Landfill
VA DEQ Permits No. 72 and 577

Franklin County
A Natural Setting for Opportunity

RECEIVED
JUN 2 - 2016
DEQ - BRRO

#VA OO92142 VPDES PERMIT RENEWAL

1255 Franklin Street, Suite 103 ▪ Rocky Mount, Virginia 24151 ▪ (540) 483-3027 ▪ (540) 483-3041 (Fax)

PUBLIC NOTICE BILLING INFORMATION FORM

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2:

Newspaper Name: FRANKLIN NEWS POST

Agent/Department to be billed: FRANKLIN COUNTY PUBLIC WORKS c/o DON SMITH

Owner: FRANKLIN COUNTY

Applicant's Address: 1255 FRANKLIN ST SUITE 103
ROCKY MOUNT, VA 24151

Agent's Telephone No: 540-352-5738 (o)
540-263-0322 (c)

Authorizing Agent: _____
Signature

DONALD K. SMITH
Printed Name

PUBLIC WORKS DIRECTOR
Title

Facility Name: FRANKLIN COUNTY LANDFILL
Permit No. #72 AND #577

Please return to:

Becky L. France
Department of Environmental Quality
3019 Peters Creek Road
Roanoke, VA 24019
Fax No. (540) 562-6725

VPDES General Permit for Industrial Activity Stormwater Discharges (VAR05)
Registration Statement

(Please Type or Print All Information)

1a. Facility Owner

Name: County of Franklin

Mailing Address: 1255 Franklin Street, Suite 112

City: Rocky Mount State: VA Zip: 24151 Phone: 540-483-3030

E-Mail Address (where available): don.smith@franklincountyva.gov

1b. Operator Applying For Permit Coverage (if different than "1a")

Name:

Mailing Address:

City: State: Zip: Phone:

E-Mail Address (where available):

2. Facility Information

Facility Name: Franklin County Sanitary Landfill

Street Address: 9340 Virgil H. Goode Highway

City: Rocky Mount State: VA Zip: 24151 FAX Number:

County Name: Franklin

Contact Name: Donald W. Smith Phone: 540-352-5738

E-Mail Address (where available): don.smith@franklincountyva.gov

3. Nature of business (provide a brief description): Municipal solid waste landfill

4. Names of the receiving waters for all industrial activity discharges: North Fork Little Chestnut Creek

5. Are any of the discharges through a municipal separate storm sewer system (MS4)? Yes ☐ No ☑

If "yes", provide the name of the MS4 owner:

Note: Permit Special Condition 13 requires the permittee to notify the MS4 owner in writing of the existence of the discharge within 30 days of coverage under this permit. The notification must include the following information: the name of the facility, a contact person and phone number, the location of the discharge, the nature of the discharge, and the facility's VPDES general permit registration number. DEQ must be copied with the notification.

6. Permit Numbers for any existing VPDES permits assigned to the facility: VA 0092142

7. For a new facility, a facility previously covered by an expiring individual permit, or an existing facility not currently covered by a VPDES permit, has a SWPPP been prepared? Yes ☑ No ☐

8. Identify up to four 4-digit Standard Industrial Classification (SIC) Codes or 2-letter Industrial Activity Codes that best represent the principal products or services rendered by the facility and major co-located activities.

*The 2-letter Industrial Activity Codes are: **HZ** - hazardous waste treatment, storage, or disposal facilities; **LF** - landfills/disposal facilities that receive or have received any industrial wastes; **SE** - steam electric power generating facilities; or, **TW** - treatment works treating domestic sewage.*

4-Digit SIC Codes or 2-letter Industrial Activity Codes: LF

9. **Attach a list identifying all the applicable industrial sectors that cover the stormwater discharges from the industrial activities at the facility, and from major co-located industrial activities that will be covered under this permit (see instructions). Also identify the stormwater outfalls associated with each identified sector.**

In addition to attaching the list, answer the questions below as they apply to the facility's discharges:

a. For landfills (Sector L), indicate the type of landfill: Municipal Sanitary

b. For timber products operations (Sector A), indicate which outfalls (if any) receive discharges from wet decking areas: NA

c. For all facilities, indicate which outfalls (if any) receive discharges from coal storage piles: NA

d. For asphalt paving and roofing materials manufacturers (Sector D), indicate which outfalls (if any) receive discharges from asphalt paving and roofing emulsions production areas: NA

e. For cement manufacturing facilities (Sector E), indicate which outfalls (if any) receive discharges from material storage piles: NA

f. For (Sector N) scrap recycling/waste recycling facilities that receive only source-separated recyclable materials, indicate which outfalls (if any) receive discharges from this activity. Also list the metals that are received (if any). NA

g. For primary airports (Sector S), list the average deicing season, and indicate which outfalls (if any) receive discharges from deicing of non-propeller aircraft, and the annual average departures of non-propeller aircraft. NA

10. **Facility area information. List the total area of the facility (in acres), the area of industrial activity at the facility (in acres), the total impervious area of the industrial activity at the facility (in acres), and the area (in acres) draining to each industrial activity outfall at the facility.** See Attachment #1

11. **Attach the following maps to the registration statement:**

a. General location map. A USGS 7.5 minute topographic map, or other equivalent computer generated map, with sufficient resolution to clearly show the location of the facility and the surrounding locale; and

b. Site map. A map showing the property boundaries, the location of all industrial activity areas, all stormwater outfalls, and all water bodies receiving stormwater discharges from the site.

12. **Is this a new facility that commenced construction after June 30, 2014, located in the Chesapeake Bay watershed, and applying for first time general permit coverage? (see instructions) Yes ☐ No ☑**

If "yes", attach the required documentation (see instructions).

13. **Certification:** "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Print Name W. Brent Robertson Title: County Administrator

Signature: W. Brent Robertson Date: 6/1/16

14. **Would you like your permit sent to you electronically? Yes ☑ No ☐**

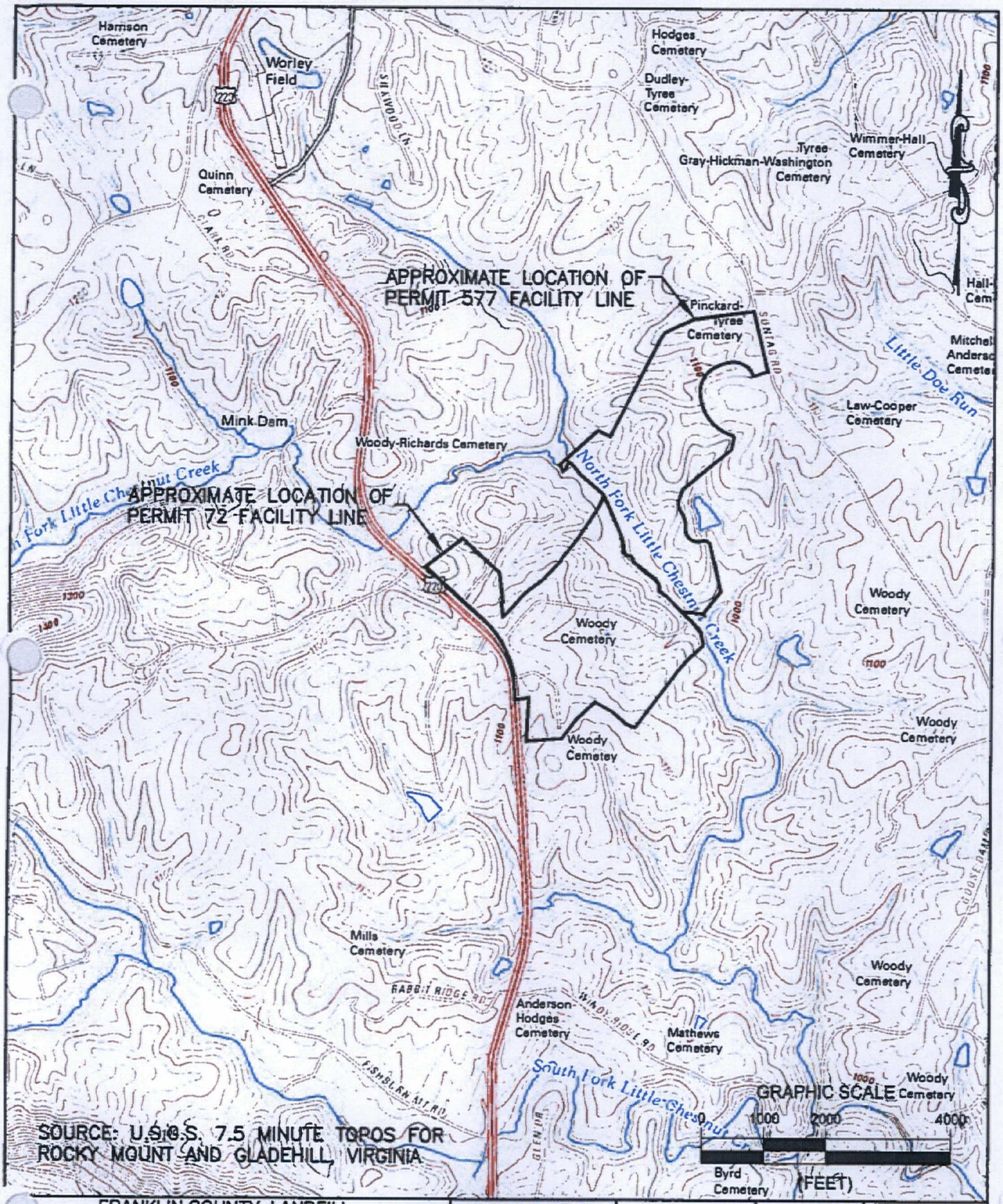
If "Yes", please list the email address to send it to: don.smith@franklincountyva.gov

For Department of Environmental Quality Use Only

Accepted/Not Accepted by: _____ Date: _____

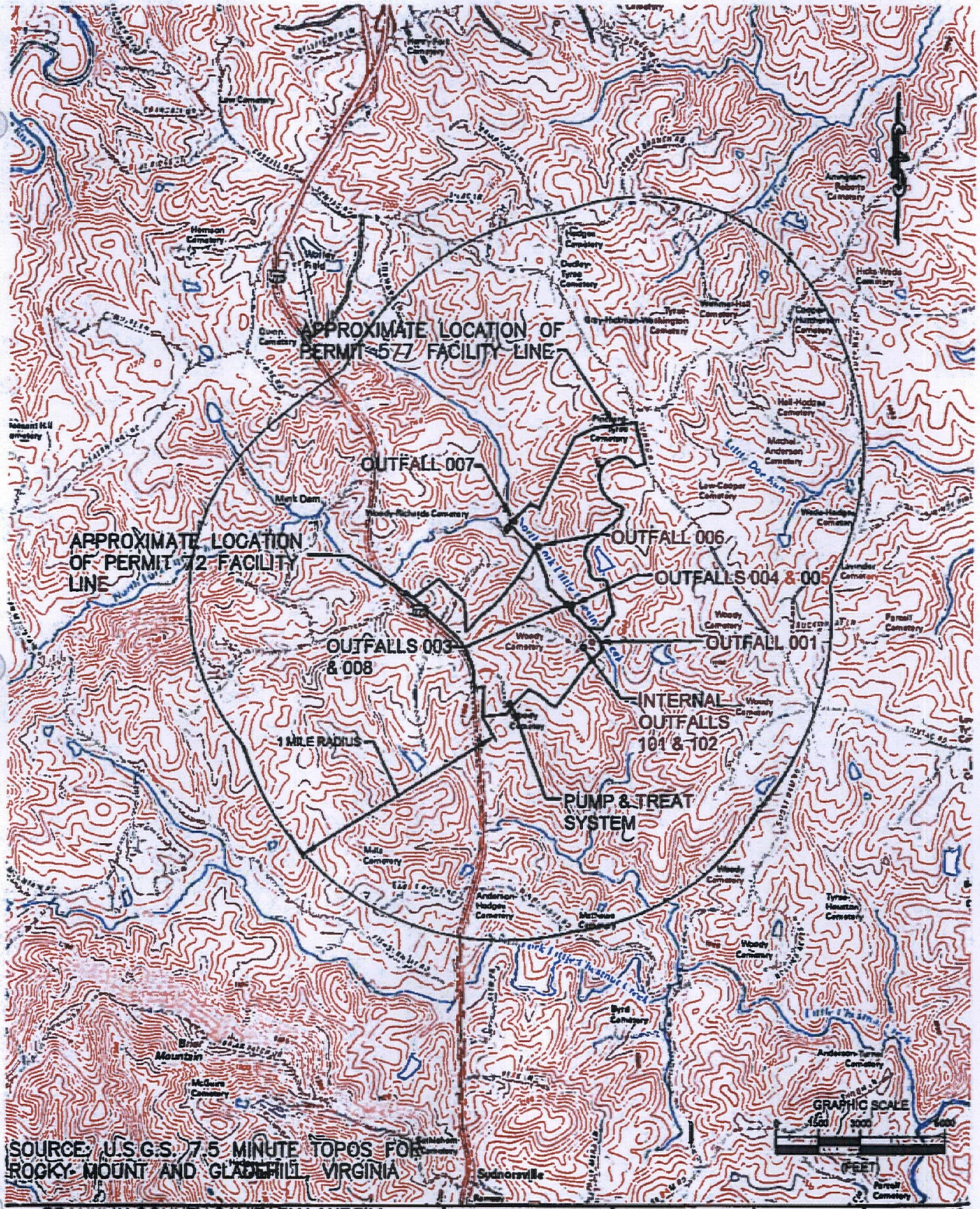
Basin _____ Stream Class _____ Section _____ Special Standards _____

Antidegradation Checked? Y☐ N☐ Impaired Waters Discharge? Y☐ N☐ TMDL approved? Y☐ N☐



FRANKLIN COUNTY LANDFILL ROCKY MOUNT, VIRGINIA	JOYCE ENGINEERING 2211 W. MEADOWVIEW ROAD GREENSBORO, NC 27407 PHONE. (336) 323-0092	DESIGNED CTM DRAWN HRW CHECKED CTM APPROVED DATE 4/4/2012 © 2012 Joyce Engineering, Inc. All rights reserved.	SCALE 1" = 2000'	PROJECT NO. 459.1201.11
SITE LOCATION MAP				DRAWING NO. 1

L:\Franklin (VA)\dwg\2012 PHASE 1 CONSTRUCTION\BASE\, SITE LOCATION MAP 2012.dwg



FRANKLIN COUNTY SANITARY LANDFILL
ROCKY MOUNT, VIRGINIA

SITE LOCATION MAP

JOYCE ENGINEERING
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092

DESIGNED RWH
DRAWN RWH
CHECKED RWH
APPROVED
DATE 08/18/13

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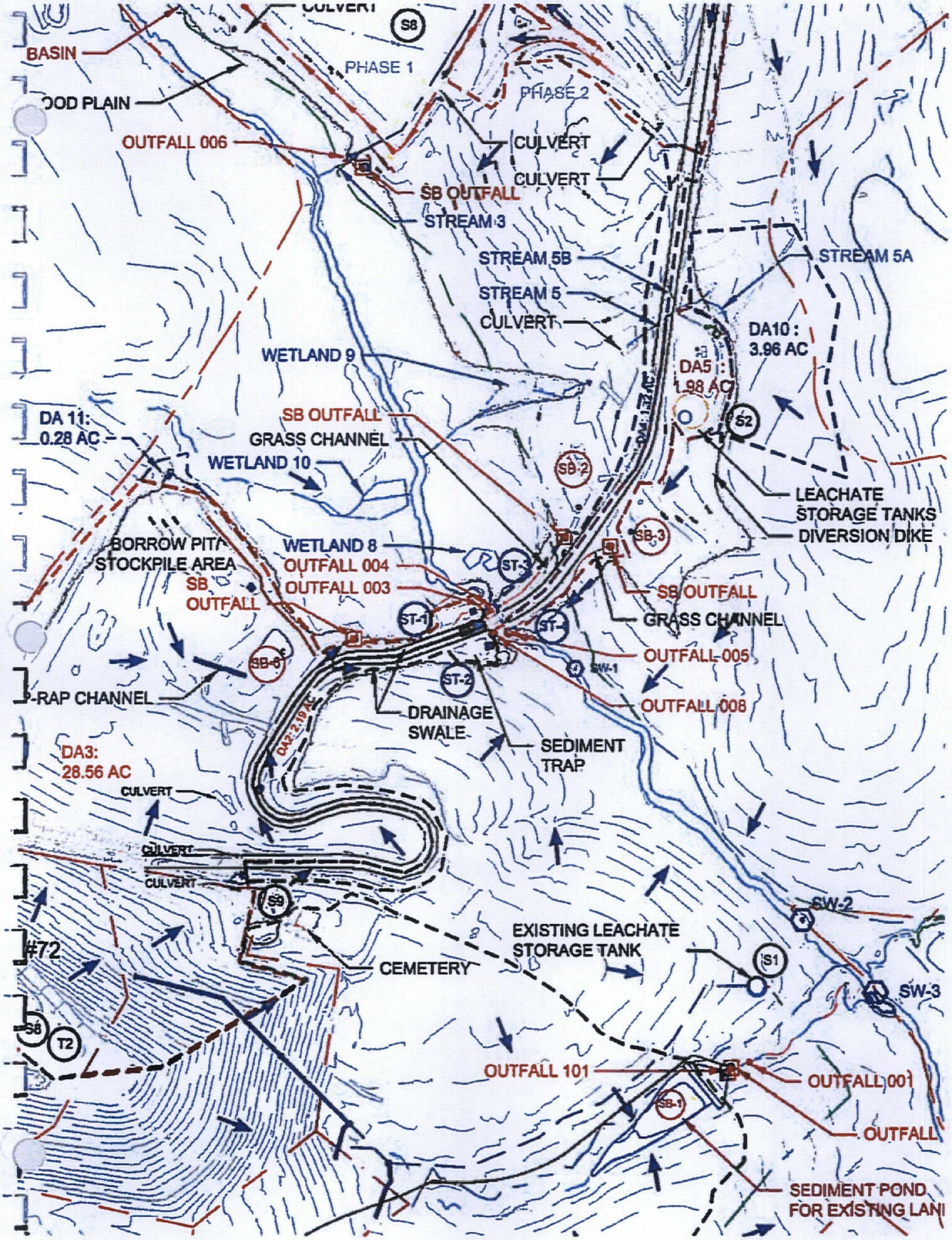
SCALE
AS SHOWN

PROJECT NO.
459.1301.1

DRAWING NO.
1


CULVERT
S8
BASIN
PHASE 1
PHASE 2
OOD PLAIN
OUTFALL 006
CULVERT
CULVERT
SB OUTFALL
STREAM 3
STREAM 5B
STREAM 5A
STREAM 5
CULVERT
DA10 :
3.96 AC
WETLAND 9
DA5 :
1.98 AC
S2
DA 11:
0.28 AC
SB OUTFALL
GRASS CHANNEL
WETLAND 10
SB-2
LEACHATE
STORAGE TANKS
DIVERSION DIKE
SB-3
BORROW PIT/
STOCKPILE AREA
WETLAND 8
OUTFALL 004
OUTFALL 003
ST-3
SB
OUTFALL
SB OUTFALL
GRASS CHANNEL
ST-1
ST-
SB-6
OUTFALL 005
SW-1
ST-2
-RAP CHANNEL
OUTFALL 008
DRAINAGE
SWALE
SEDIMENT
TRAP
DA2: 2.19 AC
DA3:
28.56 AC
CULVERT
CULVERT
CULVERT
S9
SW-2
EXISTING LEACHATE
STORAGE TANK
#72
CEMETERY
S1
SW-3
S8
T2
OUTFALL 101
OUTFALL 001
SB-1
OUTFALL
SEDIMENT POND
FOR EXISTING LAN

DRAINAGE SUMMARY

TOTAL FACILITY AREA	**334 acres**
TOTAL INDUSTRIAL ACTIVITY	**70 acres**
TOTAL FACILITY IMPERVIOUS AREA	**11.4 acres**

OUTFALL	DRAINAGE AREA	IMPERVIOUS AREA
001	60 acres	2.45 acres
003	31.6 acres	0.25 acres
004	5.0 acres	0.25 acres
005	2.0 acres	1.2 acres
006	16 acres	0.25 acres
007	12.5 acres	0.0 acres
008	2.2 acres	0.4 acres
101, 102	Pump and treat N/A	N/A

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

For Approved. OMB No. 2040-0086. Approval expires 5-31-92

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

S		T/A	C
F	NA		D
1	2 13	14	15

LABEL ITEMS

- I. EPA I.D. NUMBER
- III. FACILITY NAME
- V. FACILITY MAILING LIST
- VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area*(s)* below. If the label is complete and correct, you need not complete Items I, III, V, and VI*(except VI-B which must be completed regardless)*. Complete all items if no label has been proved. Refer to the instructions for detailed item descriptions and for the legal authorization under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental from listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	MARK "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge to waters of the U.S.**? (FORM 2A)	☐ 16	☒ 17	☐ 18	B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge to waters of the U.S.**? (FORM 2B)	☐ 19	☒ 20	☐ 21
C. Is this facility which currently results in **discharges to waters of the U.S.** other than those described in A or B above? (FORM 2C)	☒ 22	☐ 23	☒ 24	D. Is this proposal facility *(other than those described in A or B above)* which will result in a **discharge to waters of the U.S.**? (FORM 2D)	☐ 25	☒ 26	☐ 27
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)	☐ 28	☒ 29	☐ 30	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)	☐ 31	☒ 32	☐ 33
G. Do you or will you inject at this facility any produced water other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	☐ 34	☒ 35	☐ 36	H. Do you or will you inject at this facility fluids for special processes such as mining of sulfer by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	☐ 37	☒ 38	☐ 39
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)	☐ 40	☒ 41	☐ 42	J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment are**? (FORM 5)	☐ 43	☒ 44	☐ 45

III. NAME OF FACILITY

C 1 | SKIP | ***FRANKLIN COUNTY MUNICIPAL SANITARY LANDFILL***
15 | 16-29 | 30 ... 69

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*		
C 2 ***W. BRENT ROBERTSON, COUNTY ADMINISTRATOR***	***540***	***483***	***3030***
15 16 ... 45	46 48	49 51	52 55

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

C 3 ***1255 FRANKLIN STREET, SUITE 112***
15 16 ... 45

B. CITY OR TOWN	C. STATE	D. ZIP CODE
C 4 ***ROCKY MOUNT***	***VA***	***24151***
15 16 ... 40	41 42	47 51

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

C 5 ***9340 VIRGIL H. GOODE HIGHWAY***
15 16 ... 45

B. COUNTY NAME

FRANKLIN
46 ... 70

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE
C 6 ***ROCKY MOUNT***	***VA***	***24151***	
15 16 ... 40	41 42	47 51	52 54

CONTINUED ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST			B. SECOND		
C 7	4953	(specify) OPERATION OF A SANITARY LANDFILL	7 7		(specify)
15	16 17		15	16 19	

C. THIRD			D. FOURTH		
C 7		(specify)	7 7		(specify)
15	16 17		15	16 19	

VIII. OPERATOR INFORMATION

A. NAME: C 8 — FRANKLIN COUNTY (18–55)

B. Is the name listed in Item VIII-A also the owner? ☒ YES ☐ NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other," specify.)
F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC (other than federal or state)
O = OTHER (specify)

M (56) (specify)

D. PHONE (area code & no.): C A (15) 540 (16–18) 489 (19–21) 1600 (22–25)

E. STREET OR PO BOX: 1255 FRANKLIN STREET, SUITE 112 (26–55)

F. CITY OR TOWN: C B — ROCKY MOUNT (15–40)

G. STATE: VA (42–42)

H. ZIP CODE: 24151 (47–51)

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☒ NO

X. EXISTING ENVIRONMENTAL PERMITS

	C	T	I		C	T	I		
A. NPDES (Discharges to Surface Water)	9	N		VA0092142	9	P		TITLE V #21534	D. PSD (Air Emissions from Proposed Sources)
	15	16	17	18–30	15	16	17	18–30	
B. UIC (Underground Injection of Fluids	9	U			9				E. OTHER (specify) (Specify)
	15	16	17	18–30	15	16	17	18–30	
C. RCRA (Hazardous Wastes)	9	R			9				E. OTHER (specify) (Specify)
	15	16	17	18–30	15	16	17	18–30	

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

This permit request is to continue discharge (IP VA 0092142) of the treated groundwater from the franklin County pump and treat air stripper facility at the Franklin County Sanitary landfill. Stormwater from landfill Permits # 72 and #577 will be handled through a separate general stormwater permit moving forward.

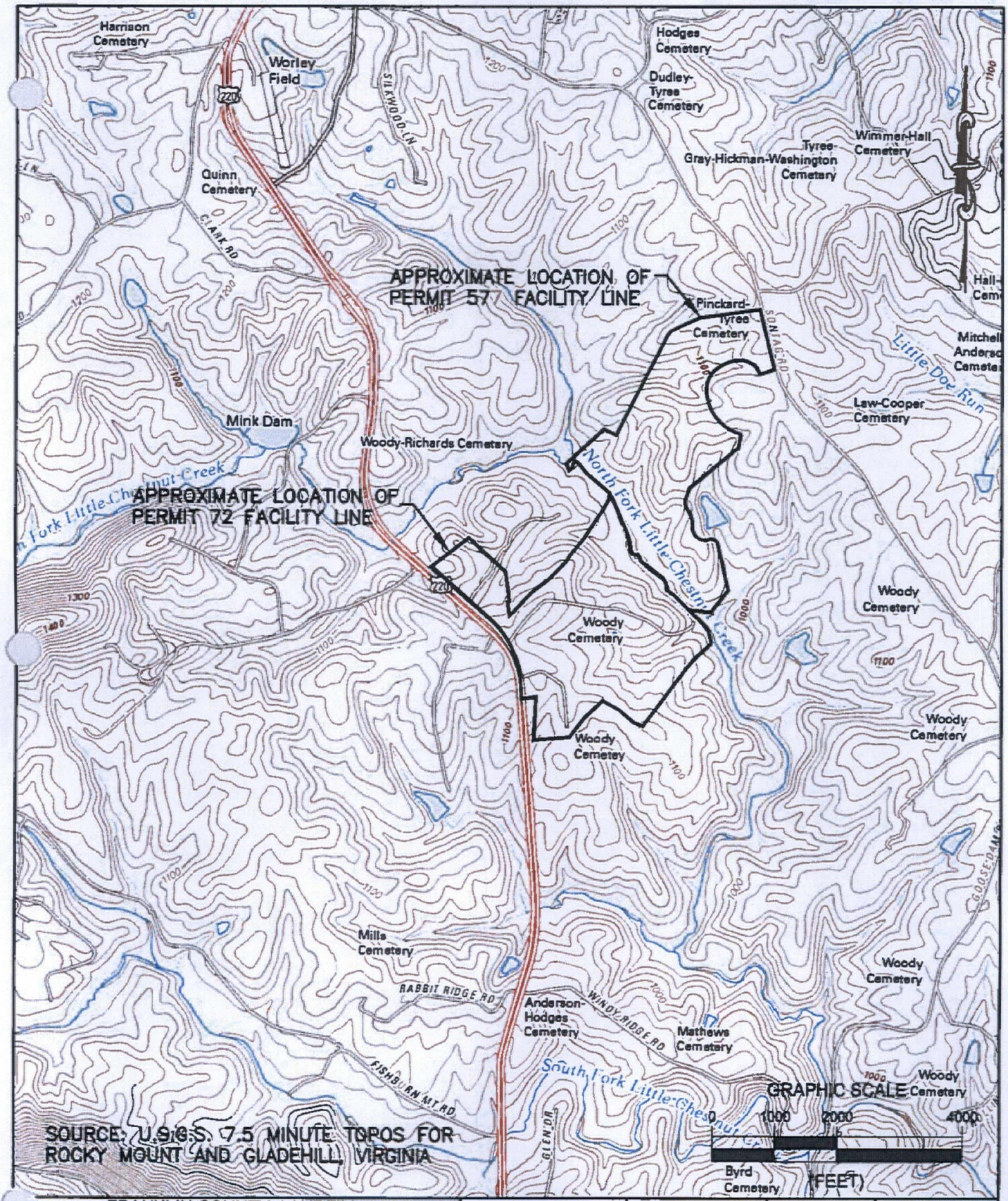
XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
County Administrator	W. Brent Robertson	6/1/16

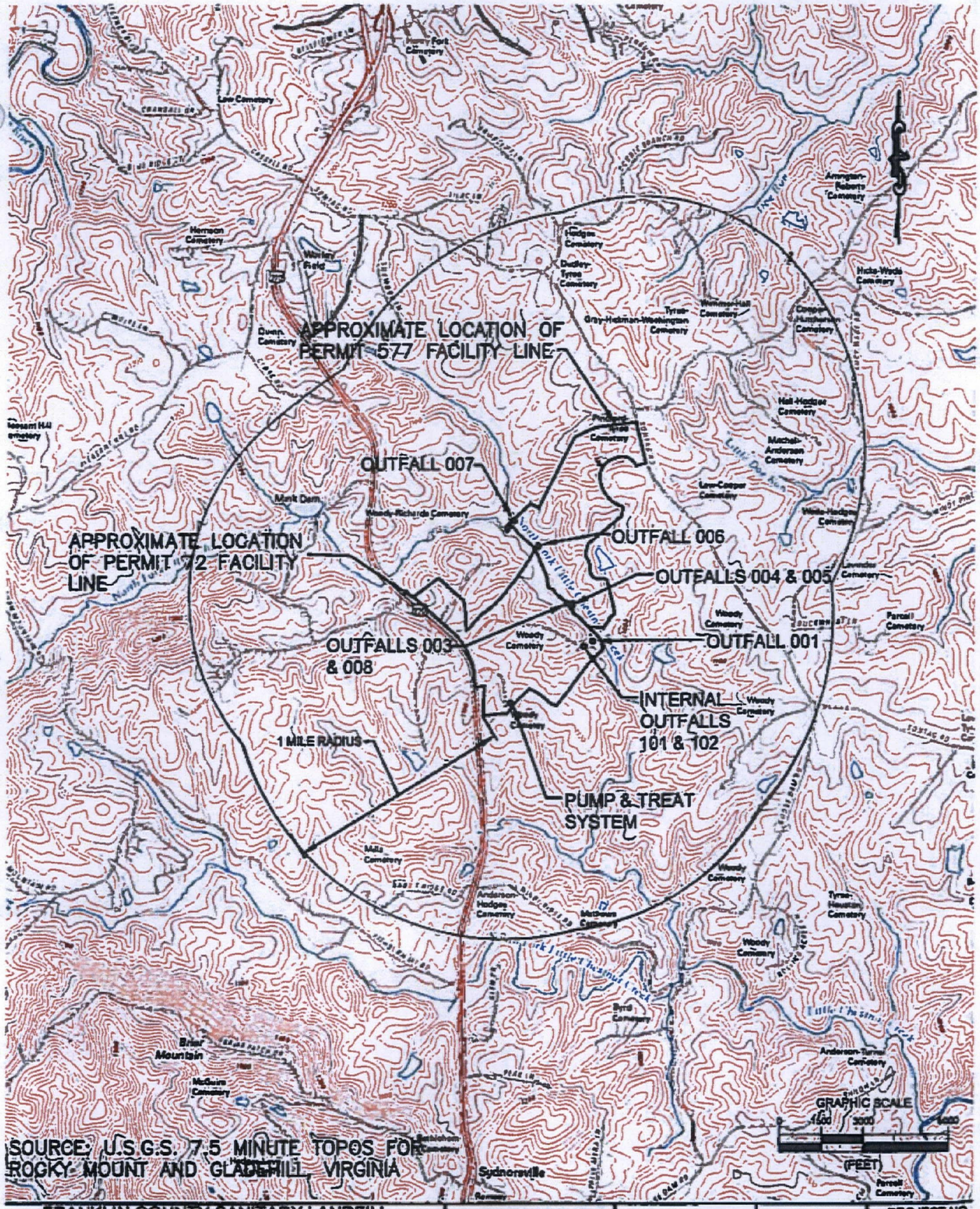
COMMENTS FOR OFFICIAL USE ONLY

C C (15–55)



FRANKLIN COUNTY LANDFILL ROCKY MOUNT, VIRGINIA	JOYCE ENGINEERING 2211 W. MEADOWVIEW ROAD GREENSBORO, NC 27407 PHONE: (336) 323-0092	DESIGNED CTM DRAWN HRW CHECKED CTM APPROVED DATE 4/4/2012	SCALE 1" = 2000'	PROJECT NO. 459.1201.11
SITE LOCATION MAP		© 2012 Joyce Engineering, Inc. All rights reserved.		DRAWING NO. 1

L:\Franklin (VA)\dwg\2012 PHASE 1 CONSTRUCTION\BASE\, SITE LOCATION MAP 2012.dwg



FRANKLIN COUNTY SANITARY LANDFILL
ROCKY MOUNT, VIRGINIA

SITE LOCATION MAP

JOYCE ENGINEERING
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092

DESIGNED RWH
DRAWN RWH
CHECKED RWH
APPROVED
DATE 06/18/13

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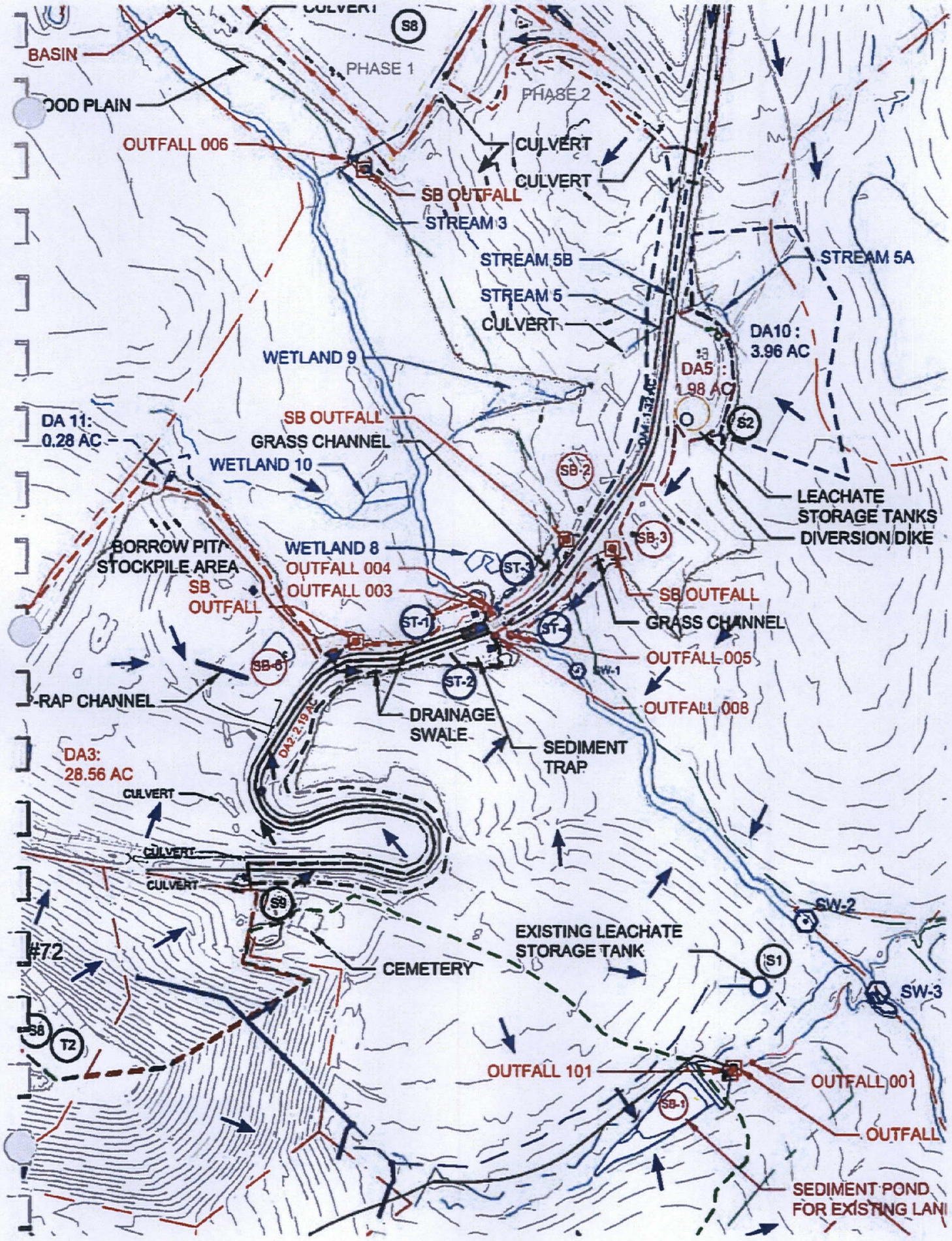
SCALE
AS SHOWN

PROJECT NO.
459.1301.11

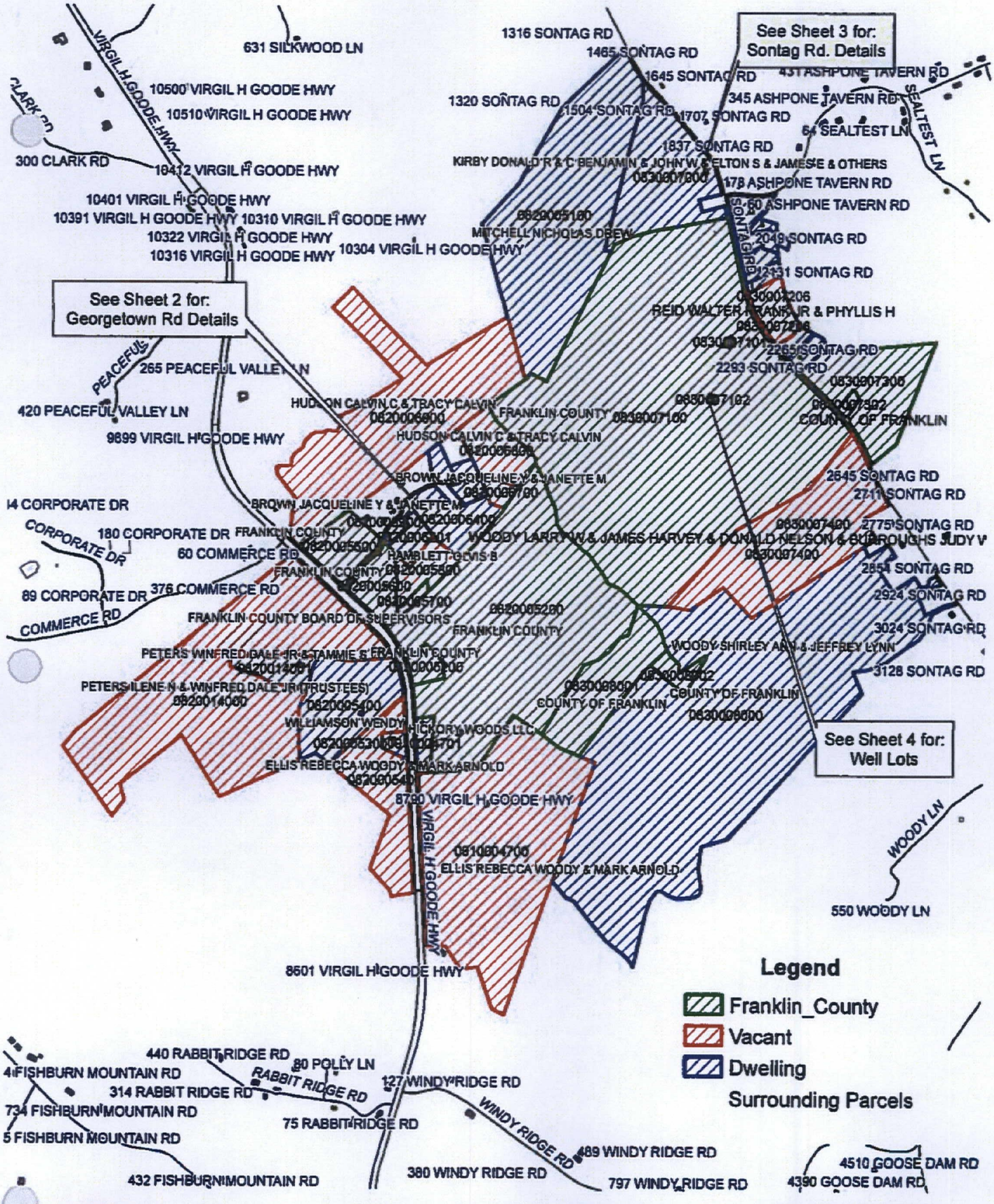
DRAWING NO.
1


CULVERT
S8
BASIN
PHASE 1
PHASE 2
OOD PLAIN
OUTFALL 006
CULVERT
CULVERT
SB OUTFALL
STREAM 3
STREAM 5B
STREAM 5A
STREAM 5
CULVERT
DA10 :
3.96 AC
WETLAND 9
DA5 :
1.98 AC
S2
DA 11:
0.28 AC
SB OUTFALL
GRASS CHANNEL
WETLAND 10
SB-2
LEACHATE
STORAGE TANKS
DIVERSION DIKE
SB-3
BORROW PIT/
STOCKPILE AREA
WETLAND 8
OUTFALL 004
OUTFALL 003
ST-3
SB
OUTFALL
SB OUTFALL
ST-1
ST-4
GRASS CHANNEL
OUTFALL 005
SB-6
SW-1
ST-2
-RAP CHANNEL
OUTFALL 008
DRAINAGE
SWALE
SEDIMENT
TRAP
DA2: 2.19 AC
DA3:
28.56 AC
CULVERT
CULVERT
CULVERT
S9
SW-2
EXISTING LEACHATE
STORAGE TANK
#72
CEMETERY
S1
SW-3
S8
T2
OUTFALL 101
OUTFALL 001
SB-1
OUTFALL
SEDIMENT POND
FOR EXISTING LAN

2015 Groundwater Use Survey at SWLFs with GPS exceedances Section B. Offsite Groundwater Use

All addresses are Rocky Mount, Virginia 24151,are dwellings, assume one potable well

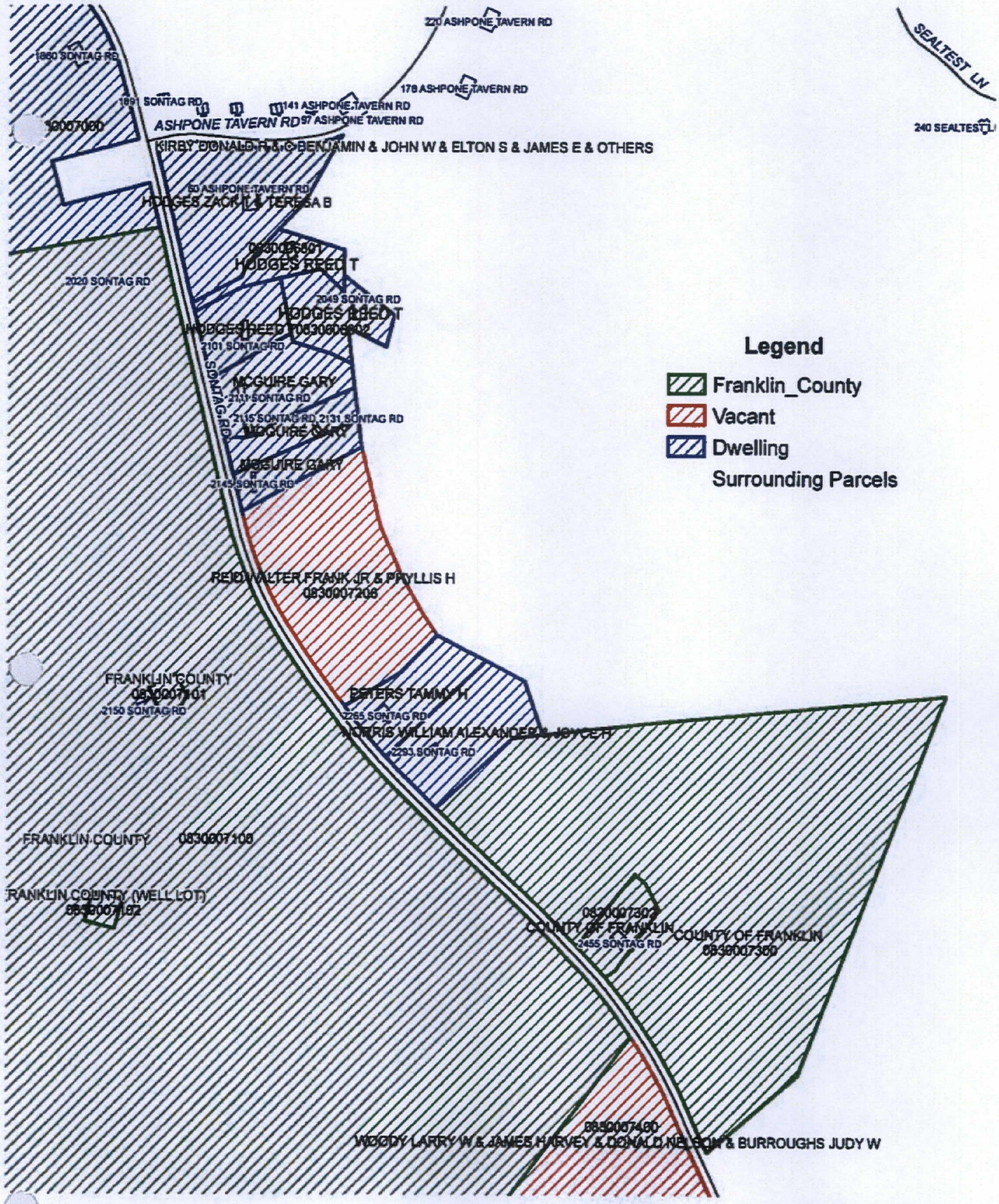
Property Address	Tested for VDH parameters	Tested for VSWMR constituents
60 Ashpone Tavern Rd	Unknown	No
1504 Sontag Rd	Unknown	No
1860 Sontag Rd	Unknown	No
2045 Sontag Rd	Unknown	No
2049 Sontag Rd	Unknown	No
2101 Sontag Rd	Unknown	No
2111 Sontag Rd	Unknown	No
2115 Sontag Rd	Unknown	No
2131 Sontag Rd	Unknown	No
2145 Sontag Rd	Unknown	No
2265 Sontag Rd	Unknown	No
2293 Sontag Rd	Unknown	No
2455 Sontag Rd	Unknown	No
2920 Sontag Rd	Unknown	No
164 Georgetown Rd	Unknown	Yes – Results Attached
230 Georgetown Rd	Unknown	Yes – Results Attached
300 Georgetown Rd	Unknown	Yes – Results Attached
375 Georgetown Rd	Unknown	Yes – Results Attached
418 Georgetown Rd	Unknown	Yes – Results Attached
9075 Virgil Goode Hwy	Unknown	Yes – Results Attached
9245 Virgil Goode Hwy	Unknown	No
9457 Virgil Goode Hwy	Unknown	No



County Owned Properties (Landfill and Recreation Park) & Adjacent Land Parcels

November 13, 2015

Sheet 1

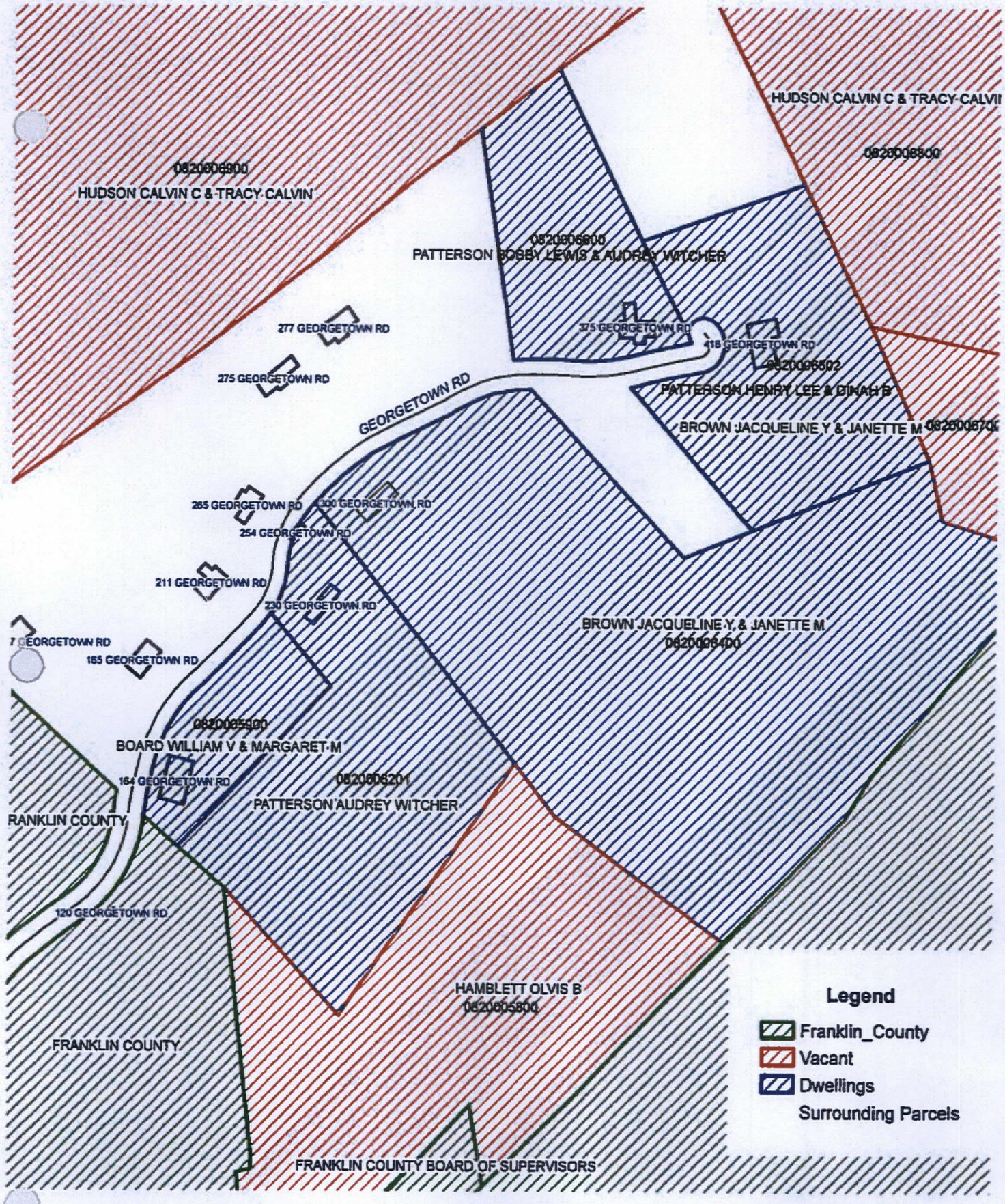


Franklin County

County Owned Properties (Landfill and Recreation Park) & Adjacent Land Parcels on Sontag Rd.

November 10, 2015

Sheet 3



County Owned Properties (Landfill and Recreation Park) & Adjacent Land Parcels on Georgetown Rd.

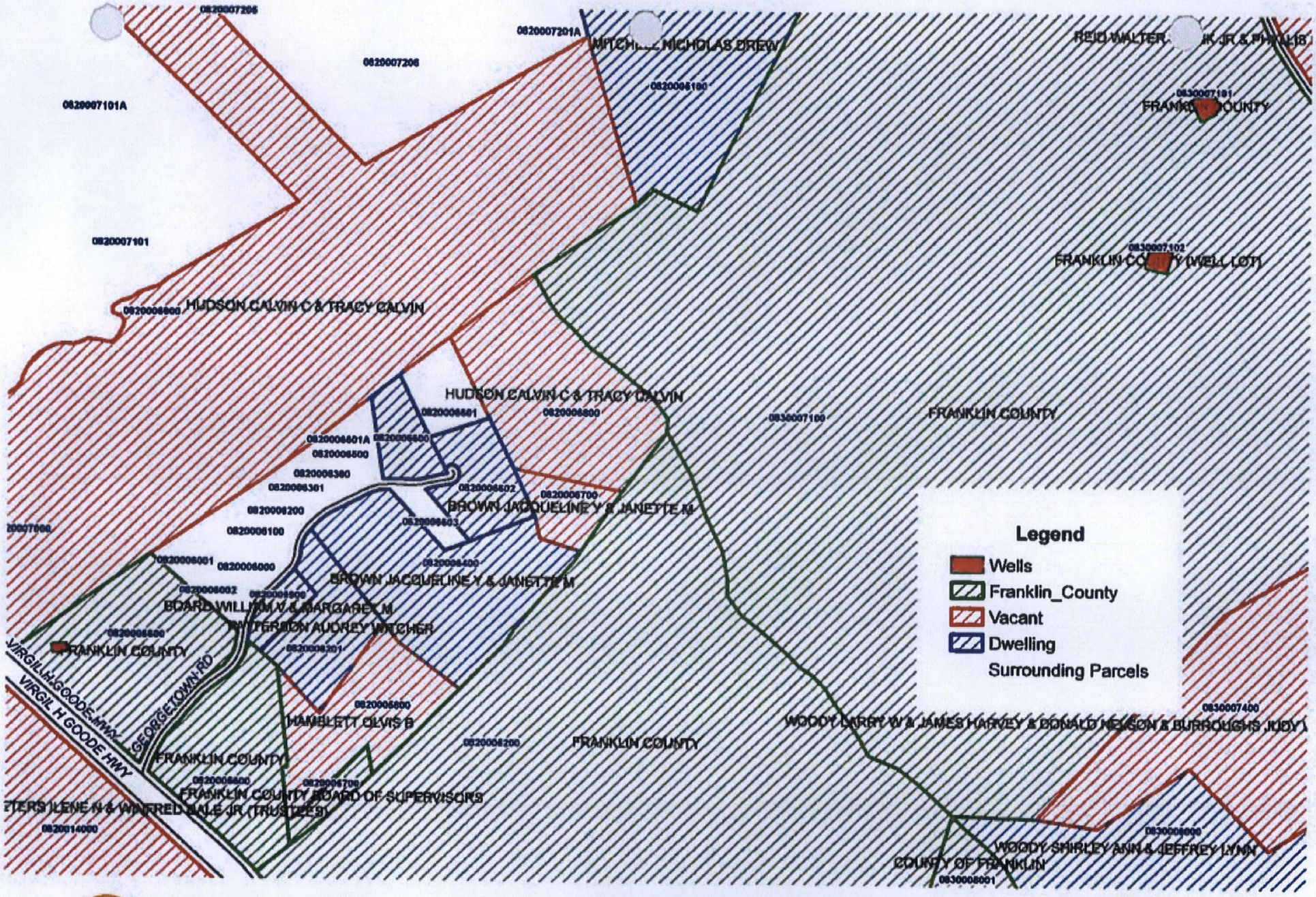
Franklin County

0 65 130 260 Feet

1 inch = 200 feet

November 13, 2015

Sheet 2



Franklin County
A Natural Setting for Opportunity

County Owned Properties (Landfill and Recreation Park) & Adjacent Land Parcels

0 180 360 720 Feet

1 inch = 550 feet

November 13, 2015

Sheet 4

Please print or type in the unshaded areas only.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)

Form Approved.
OMB No. 2040-0086.
Approval expires 3-31-98.

FORM **2C** NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER

EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURE OPERATIONS

Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER (*list*)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (*name*)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
102	36	55	34	79	51	25	Unnamed tributary NF Little Chestnut Ck
001	36	55	34	79	51	25	Unnamed tributary NF Little Chestnut Ck

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (*e.g., for certain mining activities*), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUT-FALL NO. (*list*)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
102	Effluent from landfill groundwater	for year 2015 Ave. 12,236 GPD	The intake water is pumped from 18 extraction wells into the treatment system. The water is	1-K	2-K
	treatment facility,		treated by an air stripper and a carbon filter and is then discharged to surface water.	4-A	

OFFICIAL USE ONLY (*effluent guidelines sub-categories*)

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☐ YES (*complete the following table*) ☑ NO (*go to Section III*)

1. OUTFALL NUMBER (*list*)	2. OPERATION(s) CONTRIBUTING FLOW (*list*)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (*specify average*)	b. MONTHS PER YEAR (*specify average*)	a. FLOW RATE (*in mgd*)		B. TOTAL VOLUME (*specify with units*)		C. DURATION (*in days*)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ YES (*complete Item III-B*) ☑ NO (*go to Section IV*)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (*or other measure of operation*)?

☐ YES (*complete Item III-C*) ☐ NO (*go to Section IV*)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (*list outfall numbers*)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (*specify*)	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operations of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☑ YES (*complete the following table*) ☐ NO (*go to Item IV-B*)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED
Corrective Action Monitoring Plan	102	Pump and Treat facility	Discharge of treated groundwater		

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (*or other environmental projects which may affect your discharges*) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

 CONTINUE ON PAGE 3

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)

CONTINUED FROM PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding – Complete one set of tables for each outfall – Annotate the outfall number in the space provided.
NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
None			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (*list all such pollutants below*) ☑ NO (*go to Item VI-B*)

 CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES (*identify the test(s) and describe their purposes below*) ☑ NO (*go to Section VIII*)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

☑ YES (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☐ NO (*go to Section IX*)

A. NAME	B. ADDRESS	C. TELEPHONE (*area code & no.*)	D. POLLUTANTS ANALYZED (*list*)
Pace Analytical Services	9800 Kincey ave. Ste 100 Huntersvuille, NC 28078	704-875-9092	See attached report

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (*type or print*)	B. PHONE NO. (*area code & no.*)
W. Brent Robertson, Coubty Administrator	(540) 483-3030
C. SIGNATURE W. Brent Robert	D. DATE SIGNED 6/1/16

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (*use the same format*) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)

V. INTAKE AND EFFLUENT CHARACTERISTICS (*continued from page 3 of Form 2-C*) [redacted] OUTFALL NO. 102

PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (*if available*) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (*if available*) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	3. UNITS (*specify if blank*) a. CONCENTRATION	b. MASS	4. INTAKE (*optional*) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Biochemical Oxygen Demand (*BOD*)	<QL	<QL					1	mg/l				
b. Chemical Oxygen Demand (*COD*)	<QL	<QL					1	mg/l				
c. Total Organic Carbon (*TOC*)	0.84J						1	mg/l				
d. Total Suspended Solids (*TSS*)	<QL	<QL					2	mg/l				
e. Ammonia (*as N*)	<QL	<QL					1	mg/l				
f. Flow	VALUE 14510		VALUE		VALUE year 2015-12236			GPD		VALUE		
g. Temperature (*winter*)	VALUE 20.7		VALUE		VALUE 17.3			°C		VALUE		
h. Temperature (*summer*)	VALUE 12.1		VALUE		VALUE 15.3			°C		VALUE		
i. pH	MINIMUM 7.63	MAXIMUM 8.11	MINIMUM	MAXIMUM				STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (*if available*)	2. MARK "X" a. BELIEVED PRESENT	b. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (*if available*) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (*if available*) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (*optional*) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)		X												
b. Chlorine, Total Residual		X												
c. Color		X												
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)		X												
f. Nitrate-Nitrite (as N)		X												

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)		X												
h. Oil and Grease		X												
i. Phosphorus (as P), Total (7723-14-0)		X												
j. Radioactivity														
(1) Alpha, Total	X		1.78	359					1	pCi/l	pCi			
(2) Beta, Total	X		1.25	252					1	pCi/l	pCi			
(3) Radium, Total		X												
(4) Radium 226, Total		X												
k. Sulfate (as SO_4) (14808-79-8)		X												
l. Sulfide (as S)		X												
m. Sulfite (as SO_3) (14265-45-3)		X												
n. Surfactants		X												
o. Aluminum, Total (7429-90-5)		X												
p. Barium, Total (7440-39-3)		X												
q. Boron, Total (7440-42-8)		X												
r. Cobalt, Total (7440-48-4)	X		4.6	247			2.25	121	4	ug/l	g			
s. Iron, Total (7439-89-6)		X												
t. Magnesium, Total (7439-95-4)		X												
u. Molybdenum, Total (7439-98-7)		X												
v. Manganese, Total (7439-96-5)		X												
w. Tin, Total (7440-31-5)		X												
x. Titanium, Total (7440-32-6)		X												

CONTINUE ON PAGE V-3

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
	102

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M Antimony, Total (7440-36-0)	X			<QL	<QL			<QL	<QL	2	ug/l	g			
2M Arsenic, Total (7440-38-2)	X			<QL	<QL			<QL	<QL	2	ug/l	g			
3M Beryllium, Total (7440-41-7)			X												
4M Cadmium, Total (7440-43-9)	X			<QL	<QL			<QL	<QL	14	ug/l	g			
5M Chromium, Total (7440-47-3)	X			<QL	<QL			<QL	<QL	2	ug/l	g			
6M Copper, Total (7440-50-8)	X			<QL	<QL			<QL	<QL	2	ug/l	g			
7M Lead, Total (7439-92-1)	X			<QL	<QL			<QL	<QL	14	ug/l	g			
8M Mercury, Total (7439-97-6)	X			<QL	<QL			<QL	<QL	2	ug/l	g			
9M Nickel, Total (7440-02-0)	X			<QL	<QL			<QL	<QL	14	ug/l	g			
10M Selenium, Total (7782-49-2)	X			<QL	<QL			<QL	<QL	14	ug/l	g			
11M Silver, Total (7440-22-4)	X			<QL	<QL			<QL	<QL	2	ug/l	g			
12M Thallium, Total (7440-28-0)	X			<QL	<QL			<QL	<QL	2	ug/l	g			
13M Zinc, Total (7440-66-6)	X			<QL	<QL			<QL	<QL	14	ug/l	g			
14M Cyanide, Total (57-12-5)	X			<QL	<QL			<QL	<QL	1	ug/l	g			
15M Phenols, Total	X			<QL	<QL			<QL	<QL	1	ug/l	g			
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	X			<QL	<QL					1	ug/l	g			
2V. Acrylonitrile (107-13-1)	X			<QL	<QL					1	ug/l	g			
3V. Benzene (71-43-2)	X		X	<QL	<QL			<QL	<QL	62	ug/l	g			
4V. Bis (Chloro-methyl) Ether (542-88-1)	X			<QL	<QL					1	ug/l	g			
5V. Bromoform (75-25-2)	X			<QL	<QL					1	ug/l	g			
6V. Carbon Tetrachloride (56-23-5)	X			<QL	<QL					1	ug/l	g			
7V. Chlorobenzene (108-90-7)	X			<QL	<QL					1	ug/l	g			
8V. Chlorodi-bromomethane (124-48-1)	X			<QL	<QL					1	ug/l	g			
9V. Chloroethane (75-00-3)	X			<QL	<QL			<QL	<QL	62	ug/l	g			
10V. 2-Chloro-ethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)	X			<QL	<QL					1	ug/l	g			
12V. Dichloro-bromomethane (75-27-4)	X			<QL	<QL					1	ug/l	g			
13V. Dichloro-difluoromethane (75-71-8)			X												
14V. 1,1-Dichloro-ethane (75-34-3)	X		X	<QL	<QL			<QL	<QL	62	ug/l	g			
15V. 1,2-Dichloro-ethane (107-06-2)	X		X	<QL	<QL			<QL	<QL	62	ug/l	g			
16V. 1,1-Dichloro-ethylene (75-35-4)	X			<QL	<QL			<QL	<QL	62	ug/l	g			
17V. 1,2-Dichloro-propane (78-87-5)	X			<QL	<QL			<QL	<QL	62	ug/l	g			
18V. 1,3-Dichloro-propylene (542-75-6)	X			<QL	<QL					1	ug/l	g			
19V. Ethylbenzene (100-41-4)	X			<QL	<QL					1	ug/l	g			
20V. Methyl Bromide (74-83-9)	X			<QL	<QL					1	ug/l	g			
21V. Methyl Chloride (74-87-3)			X												

CONTINUE ON PAGE V-5

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)	X		X	<QL	<QL			<QL	<QL	58	ug/l	g			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)	X			<QL	<QL					1	ug/l	g			
24V. Tetrachloro-ethylene (127-18-4)	X			<QL	<QL					1	ug/l	g			
25V. Toluene (108-88-3)	X			<QL	<QL					1	ug/l	g			
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X												
27V. 1,1,1-Trichloro-ethane (71-55-6)	X		X	<QL	<QL			<QL	<QL	62	ug/l	g			
28V. 1,1,2-Trichloro-ethane (79-00-5)	X		X	<QL	<QL			<QL	<QL	62	ug/l	g			
29V. Trichloro-ethylene (79-01-6)	X			<QL	<QL					1	ug/l	g			
30V. Trichloro-fluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)	X		X	<QL	<QL			<QL	<QL	62	ug/l	g			
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	X			<QL	<QL					1	ug/l	g			
2A. 2,4-Dichloro-phenol (120-83-2)	X			<QL	<QL					1	ug/l	g			
3A. 2,4-Dimethyl-phenol (105-67-9)	X			<QL	<QL					1	ug/l	g			
4A. 4,6-Dinitro-O-Cresol (534-52-1)	X			<QL	<QL					1	ug/l	g			
5A. 2,4-Dinitro-phenol (51-28-5)	X			<QL	<QL					1	ug/l	g			
6A. 2-Nitrophenol (88-75-5)			X												
7A. 4-Nitrophenol (100-02-7)			X												
8A. P-Chloro-M-Cresol (59-50-7)			X												
9A. Pentachloro-phenol (87-86-5)	X			<QL	<QL					1	ug/l	g			
10A. Phenol (108-95-2)	X			<QL	<QL					1	ug/l	g			
11A. 2,4,6-Trichloro-phenol (88-05-2)	X			<QL	<QL					1	ug/l	g			

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)	X			<QL	<QL					1	ug/1	g			
2B. Acenaphtylene (208-96-8)	X		X	<QL	<QL			<QL	<QL	2	ug?1	g			
3B. Anthracene (120-12-7)	X			<QL	<QL					1	ug/1	g			
4B. Benzidine (92-87-5)	X			<QL	<QL					1	ug/1	g			
5B. Benzo (a) Anthracene (56-55-3)	X			<QL	<QL					1	ug/1	g			
6B. Benzo (a) Pyrene (50-32-8)	X			<QL	<QL					1	ug/1	g			
7B. 3,4-Benzo-fluoranthene (205-99-2)	X			<QL	<QL					1	ug/1	g			
8B. Benzo (ghi) Perylene (191-24-2)			X												
9B. Benzo (k) Fluoranthene (207-08-9)	X			<QL	<QL					1	ug/1	g			
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)			X												
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)	X			<QL	<QL					1	ug/1	g			
12B. Bis (2-Chloroisopropyl) Ether (102-80-1)	X			<QL	<QL					1	ug/1	g			
13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7)	X			<QL	<QL					1	ug/1	g			
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X												
15B. Butyl Benzyl Phthalate (85-68-7)	X			<QL	<QL					1	ug/1	g			
16B. 2-Chloro-naphthalene (91-58-7)	X			<QL	<QL					1	ug/1	g			
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)			X												
18B. Chrysene (218-01-9)	X			<QL	<QL					1	ug/1	g			
19B. Dibenzo (a,h) Anthracene (53-70-3)	X			<QL	<QL					1	ug/1	g			
20B. 1,2-Dichloro-benzene (95-50-1)	X			<QL	<QL					1	ug/1	g			
21B. 1,3-Di-chloro-benzene (541-73-1)	X			<QL	<QL					1	ug/1	g			

CONTINUE ON PAGE V-7

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)	X			<QL	<QL					1	ug/l	g			
23B. 3,3-Dichlorobenzidine (91-94-1)	X			<QL	<QL					1	ug/l	g			
24B. Diethyl Phthalate (84-66-2)	X			<QL	<QL					1	ug/l	g			
25B. Dimethyl Phthalate (131-11-3)	X			<QL	<QL					1	ug/l	g			
26B. Di-N-Butyl Phthalate (84-74-2)			X												
27B. 2,4-Dinitrotoluene (121-14-2)	X			<QL	<QL					1	ug/l	g			
28B. 2,6-Dinitrotoluene (606-20-2)			X												
29B. Di-N-Octyl Phthalate (117-84-0)			X												
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	X			<QL	<QL					1	ug/l	g			
31B. Fluoranthene (206-44-0)	X			<QL	<QL					1	ug/l	g			
32B. Fluorene (86-73-7)	X			<QL	<QL					1	ug/l	g			
33B. Hexachlorobenzene (118-74-1)	X			<QL	<QL					1	ug/l	g			
34B. Hexachlorobutadiene (87-68-3)	X			<QL	<QL					1	ug/l	g			
35B. Hexachlorocyclopentadiene (77-47-4)	X			<QL	<QL					1	ug/l	g			
36B Hexachloroethane (67-72-1)	X			<QL	<QL					1	ug/l	g			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	X			<QL	<QL					1	ug/l	g			
38B. Isophorone (78-59-1)	X			<QL	<QL					1	ug/l	g			
39B. Naphthalene (91-20-3)	X		X	<QL	<QL			<QL	<QL	61	ug/l	g			
40B. Nitrobenzene (98-95-3)	X			<QL	<QL					1	ug/l	g			
41B. N-Nitrosodimethylamine (62-75-9)	X			<QL	<QL					1	ug/l	g			
42B. N-Nitrosodi-N-Propylamine (621-64-7)	X			<QL	<QL					1	ug/l	g			

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitro-sodiphenylamine (86-30-6)	X			<QL	<QL					1	ug/l	g			
44B. Phenanthrene (85-01-8)			X												
45B. Pyrene (129-00-0)	X			<QL	<QL					1	ug/l	g			
46B. 1,2,4-Tri-chlorobenzene (120-82-1)	X			<QL	<QL					1	ug/l	g			
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)	X			<QL	<QL					1	ug/l	g			
2P. α-BHC (319-84-6)	X			<QL	<QL					1	ug/l	g			
3P. β-BHC (319-85-7)	X		X	<QL	<QL			<QL	<QL	61	ug/l	g			
4P. γ-BHC (58-89-9)	X			<QL	<QL					1	ug/l	g			
5P. δ-BHC (319-86-8)	X			<QL	<QL					1	ug/l	g			
6P. Chlordane (57-74-9)	X			<QL	<QL					1	ug/l	g			
7P. 4,4'-DDT (50-29-3)	X			<QL	<QL					1	ug/l	g			
8P. 4,4'-DDE (72-55-9)	X			<QL	<QL					1	ug/l	g			
9P. 4,4'-DDD (72-54-8)	X			<QL	<QL					1	ug/l	g			
10P. Dieldrin (60-57-1)	X			<QL	<QL					1	ug/l	g			
11P. α-Enosulfan (115-29-7)	X			<QL	<QL					1	ug/l	g			
12P. β-Endosulfan (115-29-7)	X			<QL	<QL					1	ug/l	g			
13P. Endosulfan Sulfate (1031-07-8)	X			<QL	<QL					1	ug/l	g			
14P. Endrin (72-20-8)	X			<QL	<QL					1	ug/l	g			
15P. Endrin Aldehyde (7421-93-4)	X			<QL	<QL					1	ug/l	g			
16P. Heptachlor (76-44-8)	X			<QL	<QL					1	ug/l	g			

CONTINUE ON PAGE V-9

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
	102

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)	X			<QL	<QL					1	ug/l	g			
18P. PCB-1242 (53469-21-9)	X			<QL	<QL					1	ug/l	g			
19P. PCB-1254 (11097-69-1)	X			<QL	<QL					1	ug/l	g			
20P. PCB-1221 (11104-28-2)	X			<QL	<QL					1	ug/l	g			
21P. PCB-1232 (11141-16-5)	X			<QL	<QL					1	ug/l	g			
22P. PCB-1248 (12672-29-6)	X			<QL	<QL					1	ug/l	g			
23P. PCB-1260 (11096-82-5)	X			<QL	<QL					1	ug/l	g			
24P. PCB-1016 (12674-11-2)	X			<QL	<QL					1	ug/l	g			
25P. Toxaphene (8001-35-2)	X			<QL	<QL					1	ug/l	g			

FRANKLIN COUNTY PUMP & TREAT
OUTFALL 102 FLOW DIAGRAM

Rain

↓

Landfill Waste

↓

GROUNDWATER

↓

18 EXTRACTION WELLS

↓

PUMP & TREAT
AIR STRIPPER AND CARBON FILTER

↓

OUT FALL 102

↓

UNNAMED TRIBUTARY
NORTH FORK CHESTNUT CREEK

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(704)875-9092

May 09, 2016

Mr. Van Burbach
Joyce Engineering-VA
2211 West Meadowview Rd
Suite 101
Greensboro, NC 27407

RE: Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

Dear Mr. Burbach:
Enclosed are the analytical results for sample(s) received by the laboratory on April 28, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Analyses were performed at the Pace Analytical Services location indicated on the sample analyte page for analysis unless otherwise footnoted.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Godwin
kevin.godwin@pacelabs.com
Project Manager

Enclosures

cc: Alex Everhart, Joyce Engineering
Mr. Don Smith, County of Franklin

Pace Analytical Services, Inc.
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Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

Ormond Beach Certification IDs
8 East Tower Circle, Ormond Beach, FL 32174
Alabama Certification #: 41320
Connecticut Certification #: PH-0216
Delaware Certification: FL NELAC Reciprocity
Florida Certification #: E83079
Georgia Certification #: 955
Guam Certification: FL NELAC Reciprocity
Hawaii Certification: FL NELAC Reciprocity
Illinois Certification #: 200068
Indiana Certification: FL NELAC Reciprocity
Kansas Certification #: E-10383
Louisiana Certification #: FL NELAC Reciprocity
Louisiana Environmental Certificate #: 05007
Maryland Certification: #346
Michigan Certification #: 9911
Mississippi Certification: FL NELAC Reciprocity
Missouri Certification #: 236
Montana Certification #: Cert 0074
Nebraska Certification: NE-OS-28-14
Nevada Certification: FL NELAC Reciprocity
New York Certification #: 11608
North Carolina Environmental Certificate #: 667
North Carolina Certification #: 12710
North Dakota Certification #: R-216
Oklahoma Certification #: D9947
Pennsylvania Certification #: 68-00547
Puerto Rico Certification #: FL01264
South Carolina Certification: #96042001
Tennessee Certification #: TN02974
Texas Certification: FL NELAC Reciprocity
US Virgin Islands Certification: FL NELAC Reciprocity
Virginia Environmental Certification #: 460165
Wyoming Certification: FL NELAC Reciprocity
West Virginia Certification #: 9962C
Wisconsin Certification #: 399079670
Wyoming (EPA Region 8): FL NELAC Reciprocity

Charlotte Certification IDs
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Asheville Certification IDs
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Eden Certification IDs
205 East Meadow Road Suite A, Eden, NC 27288
North Carolina Drinking Water Certification #: 37738
North Carolina Wastewater Certification #: 633
Virginia/VELAP Certification #: 460025

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SAMPLE SUMMARY

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92295589001	**P&T OUTFALL 102**	Water	04/28/16 08:15	04/28/16 12:35

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SAMPLE ANALYTE COUNT

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92295589001	**P&T OUTFALL 102**	SM 2540D	DWJ	1	PASI-E
		EPA 6010	CDF	10	PASI-A
		EPA 6020	DRS	1	PASI-O
		EPA 7470	ANB	1	PASI-A
		EPA 8270	BPJ	7	PASI-C
		SM 5310B	MDW	1	PASI-A

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SUMMARY OF DETECTION

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92295589001	**P&T OUTFALL 102**					
SM 5310B	Nonpurgeable Organic Carbon	0.84J	mg/L	1.0	05/02/16 21:47	

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ANALYTICAL RESULTS

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

Sample: P&T OUTFALL 102 **Lab ID: 92295589001** Collected: 04/28/16 08:15 Received: 04/28/16 12:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540D TSS, Low-Level, Eden	Analytical Method: SM 2540D								
Total Suspended Solids	ND	mg/L	1.0	1.0	1		04/29/16 11:36		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010A								
Antimony	ND	ug/L	5.0	3.9	1	05/03/16 15:30	05/04/16 15:50	7440-36-0	
Arsenic	ND	ug/L	10.0	5.0	1	05/03/16 15:30	05/04/16 15:50	7440-38-2	
Cadmium	ND	ug/L	1.0	0.50	1	05/03/16 15:30	05/04/16 15:50	7440-43-9	
Chromium	ND	ug/L	5.0	2.5	1	05/03/16 15:30	05/04/16 15:50	7440-47-3	
Copper	ND	ug/L	5.0	2.5	1	05/03/16 15:30	05/04/16 15:50	7440-50-8	
Lead	ND	ug/L	5.0	2.5	1	05/03/16 15:30	05/04/16 15:50	7439-92-1	
Nickel	ND	ug/L	5.0	2.5	1	05/03/16 15:30	05/04/16 15:50	7440-02-0	
Selenium	ND	ug/L	10.0	5.0	1	05/03/16 15:30	05/04/16 15:50	7782-49-2	
Silver	ND	ug/L	5.0	2.5	1	05/03/16 15:30	05/04/16 15:50	7440-22-4	
Zinc	ND	ug/L	10.0	5.0	1	05/03/16 15:30	05/04/16 15:50	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Thallium	ND	ug/L	2.0	0.50	1	05/09/16 08:46	05/09/16 15:30	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.10	1	05/02/16 16:30	05/05/16 12:12	7439-97-6	
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270 Preparation Method: EPA 3510								
Acenaphthylene	ND	ug/L	10.0	0.21	1	05/02/16 09:14	05/03/16 19:26	208-96-8	
Surrogates									
Nitrobenzene-d5 (S)	84	%	21-110		1	05/02/16 09:14	05/03/16 19:26	4165-60-0	
2-Fluorobiphenyl (S)	70	%	27-110		1	05/02/16 09:14	05/03/16 19:26	321-60-8	
Terphenyl-d14 (S)	69	%	31-107		1	05/02/16 09:14	05/03/16 19:26	1718-51-0	
Phenol-d6 (S)	19	%	10-110		1	05/02/16 09:14	05/03/16 19:26	13127-88-3	
2-Fluorophenol (S)	34	%	12-110		1	05/02/16 09:14	05/03/16 19:26	367-12-4	
2,4,6-Tribromophenol (S)	73	%	27-110		1	05/02/16 09:14	05/03/16 19:26	118-79-6	
5310B WVA Nonpurgeable Organic	Analytical Method: SM 5310B								
Nonpurgeable Organic Carbon	**0.84J**	mg/L	1.0	0.50	1		05/02/16 21:47	7440-44-0	

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QUALITY CONTROL DATA

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

QC Batch: EDEN/22659 | Analysis Method: SM 2540D
QC Batch Method: SM 2540D | Analysis Description: 2540D TSS, Low Level, Eden
Associated Lab Samples: 92295589001

METHOD BLANK: 1722649 | Matrix: Water
Associated Lab Samples: 92295589001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	1.0	1.0	04/29/16 11:31	

LABORATORY CONTROL SAMPLE: 1722650

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Suspended Solids	mg/L	250	268	107	90-110	

SAMPLE DUPLICATE: 1722651

Parameter	Units	92295576001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	3840	4190	9	5	D6

SAMPLE DUPLICATE: 1722652

Parameter	Units	92295576005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	1250	1350	8	5	D6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

QC Batch: MERP/9346 | Analysis Method: EPA 7470
QC Batch Method: EPA 7470 | Analysis Description: 7470 Mercury
Associated Lab Samples: 92295589001

METHOD BLANK: 1723763 | Matrix: Water
Associated Lab Samples: 92295589001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.10	05/05/16 11:50	

LABORATORY CONTROL SAMPLE: 1723764

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.7	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1723765 1723766

Parameter	Units	92295667009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	2.5	2.5	2.1	2.0	83	80	75-125	4	25	

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QUALITY CONTROL DATA

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

QC Batch: MPRP/21564 | Analysis Method: EPA 6010
QC Batch Method: EPA 3010A | Analysis Description: 6010 MET
Associated Lab Samples: 92295589001

METHOD BLANK: 1723631 | Matrix: Water
Associated Lab Samples: 92295589001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.9	05/04/16 14:58	
Arsenic	ug/L	ND	10.0	5.0	05/04/16 14:58	
Cadmium	ug/L	ND	1.0	0.50	05/04/16 14:58	
Chromium	ug/L	ND	5.0	2.5	05/04/16 14:58	
Copper	ug/L	ND	5.0	2.5	05/04/16 14:58	
Lead	ug/L	ND	5.0	2.5	05/04/16 14:58	
Nickel	ug/L	ND	5.0	2.5	05/04/16 14:58	
Selenium	ug/L	5.6J	10.0	5.0	05/04/16 14:58	
Silver	ug/L	ND	5.0	2.5	05/04/16 14:58	
Zinc	ug/L	ND	10.0	5.0	05/04/16 14:58	

LABORATORY CONTROL SAMPLE: 1723632

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	509	102	80-120	
Arsenic	ug/L	500	513	103	80-120	
Cadmium	ug/L	500	518	104	80-120	
Chromium	ug/L	500	521	104	80-120	
Copper	ug/L	500	519	104	80-120	
Lead	ug/L	500	501	100	80-120	
Nickel	ug/L	500	512	102	80-120	
Selenium	ug/L	500	514	103	80-120	
Silver	ug/L	250	269	108	80-120	
Zinc	ug/L	500	494	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1723633 1723634

Parameter	Units	92295667009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	ug/L	ND	500	500	464	496	92	98	75-125	7	20	
Arsenic	ug/L	ND	500	500	473	508	94	101	75-125	7	20	
Cadmium	ug/L	ND	500	500	465	495	93	99	75-125	6	20	
Chromium	ug/L	0.0086 mg/L	500	500	516	495	101	97	75-125	4	20	
Copper	ug/L	0.017 mg/L	500	500	550	531	107	103	75-125	3	20	
Lead	ug/L	0.0070 mg/L	500	500	435	463	86	91	75-125	6	20	
Nickel	ug/L	ND	500	500	441	467	88	93	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1723633 1723634

Parameter	Units	92295667009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Selenium	ug/L	ND	500	500	226	229	45	46	75-125	1	20	M1
Silver	ug/L	ND	250	250	268	259	107	104	75-125	3	20	
Zinc	ug/L	0.016 mg/L	500	500	436	461	84	89	75-125	6	20	

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

QC Batch: MPRP/30275 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 92295589001

METHOD BLANK: 1566561 Matrix: Water
Associated Lab Samples: 92295589001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Thallium	ug/L	ND	2.0	0.50	05/09/16 15:20	

LABORATORY CONTROL SAMPLE & LCSD: 1566562 1566608

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Thallium	ug/L	50	49.1	50.0	98	100	80-120	2	20	

MATRIX SPIKE SAMPLE: 1566563

Parameter	Units	92295589001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Thallium	ug/L	ND	50	52.0	104	75-125	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

QC Batch: OEXT/42316
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 Water MSSV
Associated Lab Samples: 92295589001

METHOD BLANK: 1723583
Matrix: Water
Associated Lab Samples: 92295589001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acenaphthylene	ug/L	ND	10.0	0.21	05/02/16 14:14	
2,4,6-Tribromophenol (S)	%	81	27-110		05/02/16 14:14	
2-Fluorobiphenyl (S)	%	76	27-110		05/02/16 14:14	
2-Fluorophenol (S)	%	40	12-110		05/02/16 14:14	
Nitrobenzene-d5 (S)	%	77	21-110		05/02/16 14:14	
Phenol-d6 (S)	%	26	10-110		05/02/16 14:14	
Terphenyl-d14 (S)	%	89	31-107		05/02/16 14:14	

LABORATORY CONTROL SAMPLE: 1723584

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthylene	ug/L	50	41.7	83	48-112	
2,4,6-Tribromophenol (S)	%			94	27-110	
2-Fluorobiphenyl (S)	%			80	27-110	
2-Fluorophenol (S)	%			45	12-110	
Nitrobenzene-d5 (S)	%			75	21-110	
Phenol-d6 (S)	%			31	10-110	
Terphenyl-d14 (S)	%			94	31-107	

MATRIX SPIKE SAMPLE: 1723585

Parameter	Units	92295589001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Acenaphthylene	ug/L	ND	50	42.5	85	21-100	
2,4,6-Tribromophenol (S)	%				88	27-110	
2-Fluorobiphenyl (S)	%				83	27-110	
2-Fluorophenol (S)	%				44	12-110	
Nitrobenzene-d5 (S)	%				82	21-110	
Phenol-d6 (S)	%				30	10-110	
Terphenyl-d14 (S)	%				86	31-107	

SAMPLE DUPLICATE: 1723586

Parameter	Units	92295679002 Result	Dup Result	RPD	Max RPD	Qualifiers
Acenaphthylene	ug/L	ND	ND		30	
2,4,6-Tribromophenol (S)	%	71	71	1		
2-Fluorobiphenyl (S)	%	46	69	40		
2-Fluorophenol (S)	%	23	34	36		

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QUALITY CONTROL DATA

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

SAMPLE DUPLICATE: 1723586

Parameter	Units	92295679002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrobenzene-d5 (S)	%	34	68	66		
Phenol-d6 (S)	%	14	19	30		
Terphenyl-d14 (S)	%	69	96	34		

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QUALITY CONTROL DATA

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

QC Batch: WETA/27431
QC Batch Method: SM 5310B
Associated Lab Samples: 92295589001

Analysis Method: SM 5310B
Analysis Description: 5310B WVA Nonpurgeable Organic Carbon

METHOD BLANK: 1723520
Associated Lab Samples: 92295589001

Matrix: Water

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nonpurgeable Organic Carbon	mg/L	ND	1.0	0.50	05/02/16 19:32	

LABORATORY CONTROL SAMPLE: 1723521

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nonpurgeable Organic Carbon	mg/L	25	23.8	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1723522 1723523

Parameter	Units	92295697001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nonpurgeable Organic Carbon	mg/L	6.3	25	25	30.2	30.3	95	96	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1723524 1723525

Parameter	Units	92295449018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nonpurgeable Organic Carbon	mg/L	1.8	25	25	25.8	26.0	96	97	90-110	1	10	

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QUALIFIERS

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether, Styrene, and Vinyl chloride.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte
PASI-E	Pace Analytical Services - Eden
PASI-O	Pace Analytical Services - Ormond Beach

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FRANKLIN CO LF P&T OUTFALL 102
Pace Project No.: 92295589

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92295589001	**P&T OUTFALL 102**	SM 2540D	EDEN/22659		
92295589001	**P&T OUTFALL 102**	EPA 3010A	MPRP/21564	EPA 6010	ICP/19375
92295589001	**P&T OUTFALL 102**	EPA 3010	MPRP/30275	EPA 6020	ICPM/12247
92295589001	**P&T OUTFALL 102**	EPA 7470	MERP/9346	EPA 7470	MERC/8978
92295589001	**P&T OUTFALL 102**	EPA 3510	OEXT/42316	EPA 8270	MSSV/12183
92295589001	**P&T OUTFALL 102**	SM 5310B	WETA/27431		

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Pace Analytical®	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: 26FEB2016 Page 1 of 2
	Document No.: F-EDN-CS-003-rev.13	Issuing Authority: Pace Eden Quality Office

Sample Condition Upon Receipt

Client Name: Joyce Engineering

Project #:

WO# : 92295589

92295589

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☑ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 4/28/16 d

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other:

Thermometer: ☐ IR Gun ED007 Type of Ice: ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Correction Factor: 0.0°C Cooler Temp Corrected (°C): 3.2 Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Temp should be above freezing to 6°C

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				COMMENTS:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT/G	☑ Yes	☐ No	☐ N/A	12.
All containers needing acid/base preservation have been checked?	☑ Yes	☐ No	☐ N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH >9 Sulfide, NaOH>12 Cyanide)	☑ Yes	☐ No	☐ N/A	
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg	☐ Yes	☐ No	☑ N/A	
Samples checked for dechlorination	☑ Yes	☐ No	☐ N/A	14.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☑ No	☐ N/A	15.
Trip Blank Present?	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Custody Seals Present?	☐ Yes	☑ No	☐ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager SCURF Review: JY Date: 4/28/16

Project Manager SRF Review: JY Date: 4/29/16

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers).

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 1 Of 1

Section A — Required Client Information:

Company:	Joyce Engineering-Greensboro
Address:	2211 West Meadowview Rd
	Greensboro, NC 27407
Email To:	aeverhart@joyceengineering.com
Phone:	(336) 323-0092 Fax:
Requested Due Date/TAT:	10 Day (Default)

Section B — Required Project Information:

Report To:	Alex Everhart
Copy To:	
Purchase Order No.	
Client Project ID:	Franklin Co Landfill P&T OUTFALL
Container Order Number:	102

Section C — Invoice Information:

Attention:	Don Smith
Company Name:	County of Franklin
Address:	1255 Franklin Street, Suite 103, Rocky Mount, VA 24151
Pace Quote Reference:	
Pace Project Manager:	Godwin, Kevin
Pace Profile #:	

Regulatory Agency

State / Location: Virginia

Requested Analysis Filtered (Y/N)

ITEM#	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Sample ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: T.S.S.	T.O.C.	TOTAL METALS (SEE LIST)	ACENAPHTHYLENE	Residual Chlorine (Y/N)	92295589
1	P&T OUTFALL 102	WT	G	4-28	3:15			17.9										X	X	X			001
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

METALS ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
ANTIMONY, ARSENIC, CADMIUM	[signature]	4-28-16	1235	[signature]	4-28-16	1235
CHROMIUM, COPPER, LEAD, MERCURY,				[signature]	4/29/16	1330
NICKEL, SELENIUM, SILVER,						
THALLIUM, ZINC						

TOTAL METALS

SAMPLE CONDITIONS			
TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
32	Y	N	Y

SAMPLER NAME AND SIGNATURE: DONALD W SMITH

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: [signature] DATE Signed: 4-28-16