Dare County C&D Landfill Facility Permit No. 28-03 Semi-Annual Sampling Report

(February 2012 Sampling Event

Dare County

Report

March 2012

CDM Smith

DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #:

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Consultant - Camp Dresser & McKee

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Mathew F. Colone Phone: 919-787-5620

E-mail: colonemf@cdmsmith.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Dare County C&D Landfill	1603 Cub Road Manns Harbor, NC 27953	28-03	.0500	February 16, 2012

Environmental Status: (Check all that apply)

☐ Initial/Background Monitoring ☒ Detection Monitoring ☐ Assessment Monitoring ☐ Corrective Action

Type of data submitted: (Check all that apply)

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify) _____
☐ Other(specify) _____

Notification attached?

☐ No. No groundwater or surface water standards were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

Mathew F. Colone — Consultant — (919) 787-5620

Facility Representative Name (Print) — Title — (Area Code) Telephone Number

Mathew F Colone — Digitally signed by Mathew F Colone DN: cn=Mathew F Colone, o=CDM, ou, email=colonemf@cdm.com, c=US Date: 2012.03.19 15:01:47 -04'00' — 3/20/2012

Signature — Date

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 1851 GEOLOGIST MATHEW F. COLONE

3/20/2012

5400 Glenwood Ave, Suite 300, Raleigh, NC 27612

Facility Representative Address

F-0412

NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009

CDM Smith

5400 Glenwood Avenue, Suite 300
Raleigh, North Carolina 27612
tel: 919 787-5620
fax: 919 781-5730

March 20, 2012

Ms. Jaclynne Drummond
North Carolina Department of Environment and
Natural Resources
Division of Waste Management
Solid Waste Section
1646 Mail Service Center
Raleigh, North Carolina 27699-1646

Subject: February 2012 Semi-Annual Monitoring Sampling Report
Dare County C&D Landfill
Facility Permit No. 28-03

Dear Ms. Drummond:

Camp Dresser & McKee (CDM Smith), on behalf of Dare County, is submitting a copy of the February 2012 semi-annual sampling event report. This letter report presents the results of the most recent semi-annual sampling event that was completed at the Dare County C&D Landfill and constitutes the first semi-annual sampling event for 2012. The approved groundwater monitoring network consists of 13 wells (MW-1, -2, -3, -8, -9, -10, -11, -12, -13, -14, -15, -16, and -17) and 3 surface water sampling locations (SW-1, -2, and –3). Field activities and sampling results for all wells and surface water sampling locations are discussed below.

Field Activities

Groundwater and surface water samples from the Dare County C&D Landfill were collected on February 16, 2012 by Environment One, Inc. Groundwater elevations were measured at each well prior to sampling and are presented in **Table 1**. These groundwater elevations were used to construct a potentiometric surface map for this sampling event. The potentiometric contours and sampling locations are presented on **Figure 1**. Prior to sampling each well was measured in the field for pH, conductivity, temperature, and total dissolved solids. The water quality parameters at the time of sampling are also presented in Table 1.

Sampling Results

Environment One, Inc. in Greenville, North Carolina analyzed the groundwater and surface water samples for the North Carolina Appendix I volatile organic compounds (VOC's) by U.S. Environmental

Protection Agency (EPA) Method 8260B, metals by EPA Method 200.8 and Standard Method (SM) 3113B, alkalinity by SM 2320B, chloride by SM 4500-CL B, and sulfate by SM 426C. In accordance with Solid Waste Section guidelines the analytical results were reported to the laboratory specific method detection limit (MDL) and are quantifiable at or below Solid Waste Section Limits (SWSLs). All monitoring wells and surface water sample locations for the C&D Landfill had detections of analytes above the MDL with a majority of the detections below SWSLs. These detections were qualified as estimated or "J" flags.

The following list presents the analytes detected above the MDL at each sample location. No "J" flag detections are provided. Underlined analytes exceeded the North Carolina 2L Standard (NC 2L), Groundwater Protection Standard, or the North Carolina Surface Water Standards for Class C Waters (NC 2B). A complete summary of all detected and estimated concentrations for the August 2011 and February 2012 sampling events are presented in **Table 2**. A copy of the laboratory report is provided in **Appendix A**.

MW-1

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

MW-2

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

MW-3

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

MW-8

Inorganics:	Alkalinity, Chloride
Metals:	Barium, Iron, Manganese, Selenium
Volatile Organic Compounds:	None Detected

MW-9

Inorganics:	Alkalinity, Chloride
Metals:	Arsenic, Chromium, Iron, Manganese, Vanadium, Zinc
Volatile Organic Compounds:	None Detected

MW-10

Inorganics:	Alkalinity, Chloride, Sulfate
Metals:	Arsenic, Iron, Manganese, Zinc
Volatile Organic Compounds:	None Detected

MW-11

Inorganics:	Alkalinity, Chloride, Sulfate
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

MW-12

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

MW-13

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

MW-14

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

MW-15

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese, Zinc
Volatile Organic Compounds:	None Detected

MW-16

Inorganics:	Alkalinity, Chloride, Sulfate
Metals:	Barium, Iron, Manganese, Selenium
Volatile Organic Compounds:	None Detected

MW-17

Inorganics:	Chloride, Sulfate
Metals:	Iron, Manganese, Zinc
Volatile Organic Compounds:	None Detected

SW-1

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

SW-2

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

SW-3

Inorganics:	Alkalinity, Chloride
Metals:	Iron, Manganese
Volatile Organic Compounds:	None Detected

"J" flags were not included in the previous list, but several locations had "J" flag detections that exceeded the standards. The "J" flag constituents above the standards along with their locations are listed below.

Cobalt:	MW-9, MW-17
Selenium:	SW-2, SW-3
Vanadium:	MW-1, MW-2, MW-3, MW-8, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17

CDM Smith will monitor future analytical results to determine if any trend appears. The semi-annual groundwater monitoring program will be continued by Dare County. The second semi-annual sampling event for 2012 will be completed in August.

CDM Smith

If you have any questions or require further explanation, do not hesitate to call me at (919) 787-5620.

Very truly yours,

Mathew F. Colone, P.G.
Camp Dresser & McKee

cc: Edward Mann, Dare County

Table 1
Water Quality Field Parameters
February 2012 Semi-Annual Sampling Event
Dare County C&D Landfill

		Water Quality Parameters				Groundwater Elevations		
Facility Permit Number	Monitoring Well I.D.	pH	Conductivity (uS/cm)	Temperature (deg.C)	TDS (mg/L)	TOC Elevation (feet AMSL)	Depth to Groundwater (feet)	Groundwater Elevation (feet AMSL)
28-03	MW-1	6.6	3,460	17	1,950	1.61	2.00	-0.39
28-03	MW-2	6.9	769	17	561	1.55	2.61	-1.06
28-03	MW-3	6.8	775	16	517	1.74	3.84	-2.10
28-03	MW-8	6.2	6,830	18	4,340	2.90	3.03	-0.13
28-03	MW-9	5.2	259	17	211	4.99	5.79	-0.80
28-03	MW-10	5.3	1,828	18	1,800	2.87	5.33	-2.46
28-03	MW-11	5.7	1,134	17	1,000	3.56	4.75	-1.19
28-03	MW-12	6.2	262	17	203	2.80	4.33	-1.53
28-03	MW-13	6.8	773	17	584	2.96	4.11	-1.15
28-03	MW-14	6.7	558	17	411	2.96	4.29	-1.33
28-03	MW-15	6.6	403	17	296	3.17	4.55	-1.38
28-03	MW-16	6.2	8,270	18	4,780	5.56	5.74	-0.18
28-03	MW-17	4.5	618	15	456	2.85	4.27	-1.42
Surface Water Sampling Locations								
28-03	SW-1	7.3	3,250	11	1,980			
28-03	SW-2	6.6	3,150	11	1,960			
28-03	SW-3	6.6	3,230	11	2,170			

Notes:
1. mg/L - milligrams per liter
2. *uS* - Microsiemens
3. TDS - Total Dissolved Solids
4. AMSL - Above Mean Sea Level
5. TOC - Top of Casing

Table 2a
Detected Groundwater Constituents - Metals, Volatile Organic Compounds, and Inorganics
February 2012 Semi-Annual Sampling Event
Dare County C&D Landfill

			Metals																		Volatile Organic Compounds						Inorganics		
Facility Permit Number	Monitoring Well ID	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Acetone	Benzene	Carbon Disulfide	Chlorobenzene	Chloromethane	Toluene	Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)
North Carolina 2L Standard			1*	10	700	4*	2	10	1*	1,000	NS	15	NS	1	100	20	20	0.2*	0.3*	1,000	6,000	1	700	50	3	600	NS	NS	250
Solid Waste Section Limit			6	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10	100	1	100	3	1	1	1	5	250
28-03	MW-1	22-Aug-11		2.7J	48.1J	0.10J		1.6J	0.57J	2.5J	46,050	0.60J	552		2.5J	7.3J			3.0J	3.9J							239	1,070	58.8J
28-03	MW-1	16-Feb-12		2.2J	42.2J	0.09J		1.6J	0.39J	1.9J	49,400	0.47J	578		2J	6.7J			2.3J	1.8J							296	1,000	45.2J
28-03	MW-2	22-Aug-11		0.21J	7.8J				0.14J	0.72J	16,160	0.06J	282		1.2J	0.26J			1.4J	2.0J							388	39	
28-03	MW-2	16-Feb-12		0.32J	12.9J	0.06J		0.94J	0.18J	1.5J	45,400	0.43J	344		0.88J	0.26J			1.9J	2.8J							393	37	
28-03	MW-3	22-Aug-11		0.18J	13.0J	0.11J	0.04J		0.18J	0.72J	25,400	0.08J	355		1.2J				1.1J	3.6J							391	35	12.1J
28-03	MW-3	16-Feb-12			10.7J	0.11J	0.04J	0.22J	0.15J	0.28J	25,275	0.07J	398		0.77J				0.71J								408	34	
28-03	MW-8	22-Aug-11		4.2J	253	0.74J		4.5J	0.12J	7.7J	31,125	0.11J	101		1.3J			0.05J	8.4J	3.1J							128	2,724	213J
28-03	MW-8	16-Feb-12		3.3J	237	0.5J		3.6J	0.24J	6J	24,150	0.16J	166		1.8J	14			5.4J	2.7J							179	2,699	166J
28-03	MW-9	22-Aug-11		21	35.8J	0.18J	0.16J	6.1J	5.6J	2.8J	194,750	2.6J	162		7.1J	1.0J		0.12J	9.4J	47							38	12	194J
28-03	MW-9	16-Feb-12	0.21J	249	47.4J	0.45J	0.18J	14	3.2J	5.1J	68,075	8.1J	69		3.6J	1.5J	0.07J	0.08J	31	21							11	16	120J
28-03	MW-10	22-Aug-11	0.26J	5.8J	63.1J	0.22J	0.11J	3.9J	0.51J	1.3J	116,250	1.0J	567		2.3J	1.1J		0.05J	7.5J	5.3J							209	34	626
28-03	MW-10	16-Feb-12		10	42.5J	0.25J	0.12J	3.2J	2J	1.4J	68,475	1.3J	617		6.7J	1.1J		0.07J	8.5J	14							45	39	3,365
28-03	MW-11	22-Aug-11		1.7J	50.1J	0.07J	0.10J	2.1J	0.74J	1.3J	18,880	1.4J	257		1.5J	0.41J		0.08J	3.6J	5.6J							93	47	257
28-03	MW-11	16-Feb-12		5.1J	72.4J	0.13J	0.16J	2.2J	2.7J	1.5J	54,125	1.6J	295		3.6J	0.35J		0.04J	4.7J	9J							48	60	376
28-03	MW-12	22-Aug-11		5.5J	59.8J	0.10J	0.07J	1.2J	0.54J	0.85J	26,700	0.74J	579		2.3J	0.34J		0.03J	3.7J	6.5J							209	51	
28-03	MW-12	16-Feb-12		3.3J	43.6J	0.1J	0.04J	1.4J	0.93J	0.94J	11,685	1.3J	253		2.2J	0.24J		0.08J	3.6J	4.1J							49	38	14.6J
28-03	MW-13	18-Oct-11		2.7J	30.0J	0.10J	0.11J	2.5J	0.59J	0.78J	21,100	0.51J	2,672		1.3J	0.59J		0.03J	2.8J	4.9J							296	43	7.9J
28-03	MW-13	16-Feb-12	0.25J	3.8J	31.4J	0.08J	0.08J	1.4J	0.26J	0.27J	40,875	0.31J	351	0.11J	0.93J	0.34J		0.03J	2.5J	1.6J							343	46	12.9J
28-03	MW-14	18-Oct-11		33	76.8J	0.54J	0.26J	6.2J	0.40J	0.57J	74,700	0.63J	188		1.0J	0.50J			12.0J	3.5J							243	38	
28-03	MW-14	16-Feb-12		3.3J	29.3J		0.04J	1.9J	0.2J	0.7J	32,250	0.18J	206		0.88J				1.8J	1.9J							273	36	
28-03	MW-15	18-Oct-11		13	43.0J	0.26J	0.23J	3.5J	1.3J	1.6J	43,025	2.1J	292		2.7J	0.28J		0.05J	4.7J	354							191	29	30.2J
28-03	MW-15	16-Feb-12		5.3J	24.9J	0.07J	0.09J	0.9J	0.33J	0.3J	29,125	0.38J	226		0.62J				1.2J	78							143	30	23.4J
28-03	MW-16	18-Oct-11	0.15J	3.7J	278	0.48J		3.9J	0.38J	7.6J	29,425	0.22J	89		2.1J				5.5J	3.7J							154	3,099	207J
28-03	MW-16	16-Feb-12		6.6J	283	0.36J		3.2J	0.17J	6.1J	24,175	0.06J	108		1.8J	21			4.7J	1J							163	2,824	255
28-03	MW-17	18-Oct-11		30	63.5J	1	0.33J	2.9J	3.7J	1.4J	47,875	1.8J	194		7.9J	0.91J		0.03J	8.3J	957								19	287
28-03	MW-17	16-Feb-12		4.1J	36.8J	0.9J	0.21J	1.8J	3.1J	1.1J	7,748	1.4J	98		6.3J	0.51J			2.1J	382								22	372

Notes:

Metal and Volatile Organic Compound units are in micrograms per liter (parts per billion).

Inorganic units are in milligrams per liter (parts per million).

*-Groundwater Protection Standard

NS = No Standard

- Concentration exceeds N.C. 2L Groundwater Standards

- Blank cells indicate analyte was not detected

J - Indicates the analytical result is an estimated concentration between the method detection limit and the Solid Waste Section Reporting Limit (SWSL)

CDM Smith

Table 2b
Detected Surface Water Constituents - Metals, Volatile Organic Compounds, and Inorganics
February 2012 Semi-Annual Sampling Event
Dare County C&D Landfill

			Metals																		Volatile Organic Compounds						Inorganics		
Facility Permit Number	Location	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Acetone	Benzene	Chlorobenzene	Chloromethane	1,4-Dichlorobenzene	Toluene	Alkalinity (mg/L)	Chloride (mg/L)	Sulfate (mg/L)
North Carolina 2B Standard			10*	10*	1,000	6.5	2	50	NS	7**	1,000**	25	200	0.012	88	5	0.06**	NS	NS	50**	NS	51	488	NS	488	11	NS	230**	250
Solid Waste Section Limit			10	10	100	1	1	10	10	10	300	10	50	0.2	50	10	10	5.5	25	10	100	1	3	1	1	1	1	5	250
28-03	SW-1	22-Aug-11		2.8J	23.7J			0.17J	0.54J	1.4J	274J	0.19J	635		2.5J	2.0J			2.9J	2.4J							214	392	76.3J
28-03	SW-1	16-Feb-12		2.1J	93J			0.19J	1J	2.1J	403	0.17J	201		3.9J	7.2J			0.72J	0.92J							158	935	170J
28-03	SW-2	18-Oct-11	0.21J	3.5J	53.3J			0.70J	0.74J	3.3J	2,396	13	153		2.7J	7.4J			0.94J	9.4J							91	1,170	127J
28-03	SW-2	16-Feb-12		2.9J	97.3J			0.95J	1.4J	2.9J	2,968	4.9J	274		4.4J	6.5J			1.2J	7.6J							143	935	165J
28-03	SW-3	22-Aug-11		4.5J	44.1J			0.53J	0.93J	3.3J	1,142	2.8J	106		3.2J	6.3J			3.2J	5.2J							178	965	117J
28-03	SW-3	16-Feb-12		2.7J	94.4J			0.64J	0.9J	2.2J	924	2.1J	249		3.8J	8.1J			0.72J	2.9J							159	910	153J

Notes:

Metal and Volatile Organic Compound units are in micrograms per liter (parts per billion).

Inorganic units are in milligrams per liter (parts per million).

Standards obtained from section 15A NCAC 02B .0211 Fresh Surface Water Quality Standards for Class C Waters

NS = No Standard

- Concentrations exceeds N.C. 2B Standards for Class C Waters

- Blank cells indicate analyte was not detected

* - Human Health Standard

** - Action Level Standard

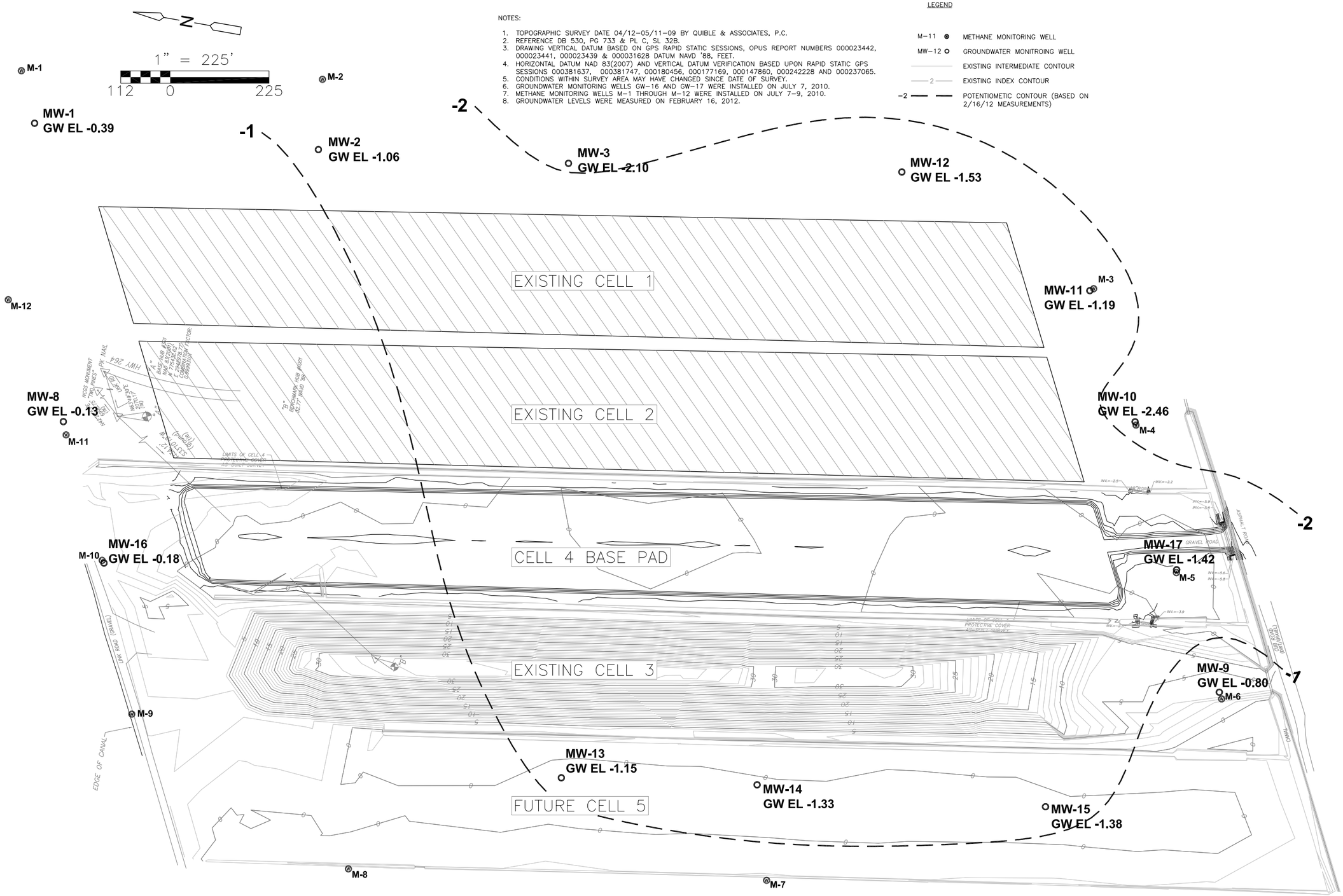
J - Indicates the analytical result is an estimated concentration between the Method Detection Limit and the Solid Waste Section Reporting Limit.

NOTES:

1. TOPOGRAPHIC SURVEY DATE 04/12-05/11-09 BY QUIBLE & ASSOCIATES, P.C.
2. REFERENCE DB 530, PG 733 & PL C, SL 32B.
3. DRAWING VERTICAL DATUM BASED ON GPS RAPID STATIC SESSIONS, OPUS REPORT NUMBERS 000023442, 000023441, 000023439 & 000031628 DATUM NAVD '88, FEET.
4. HORIZONTAL DATUM NAD 83(2007) AND VERTICAL DATUM VERIFICATION BASED UPON RAPID STATIC GPS SESSIONS 000381637, 000381747, 000180456, 000177169, 000147860, 000242228 AND 000237065.
5. CONDITIONS WITHIN SURVEY AREA MAY HAVE CHANGED SINCE DATE OF SURVEY.
6. GROUNDWATER MONITORING WELLS GW-16 AND GW-17 WERE INSTALLED ON JULY 7, 2010.
7. METHANE MONITORING WELLS M-1 THROUGH M-12 WERE INSTALLED ON JULY 7-9, 2010.
8. GROUNDWATER LEVELS WERE MEASURED ON FEBRUARY 16, 2012.

LEGEND

M-11	METHANE MONITORING WELL
MW-12	GROUNDWATER MONITROING WELL
	EXISTING INTERMEDIATE CONTOUR
2	EXISTING INDEX CONTOUR
-2	POTENTIOMETIC CONTOUR (BASED ON 2/16/12 MEASUREMENTS)



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: P. STOUT
DRAWN BY: A. WEISPFENNING
SHEET CHK'D BY: D. FORBES
CROSS CHK'D BY:
APPROVED BY:
DATE: MARCH 2012

CDM Smith
5400 Glenwood Ave, Suite 300
Raleigh, NC 27612
Tel: (919) 325-3500

DARE COUNTY
NORTH CAROLINA

CONSTRUCTION & DEMOLITION DEBRIS LANDFILL

POTENTIOMETRIC SURFACE MAP

PROJECT NO. 17952-56960
FILE NAME: DARE C&D S12.DWG

SHEET NO.
1

Appendix A

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6051

DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO ,NC 27954

DATE COLLECTED: 02/16/12
DATE REPORTED : 03/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-1	MW-2	MW-3	MW-8	MW-9	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.6	6.9	6.8	6.2	5.2	02/16/12	RJH	SM4500HB
Total Alkalinity, mg/l	1.0	1.0	296	393	408	179	11	02/16/12	TRB	SM2320B
Chloride, mg/l	5.0	5.0	1000	37	34	2699	16	02/20/12	HLB	SM4500-CLB
Total Dissolved Residue, mg/l	1.0	1.0	1950	561	517	4340	211	02/17/12	MEL	SM2540C
Sulfate, mg/l	5.0	250.0	45.2 J	--- U	--- U	166 J	120 J	02/21/12	TRB	SM426C
Antimony, ug/l	0.14	6.0	--- U	--- U	--- U	--- U	0.21 J	02/23/12	LFJ	EPA200.8
Arsenic, ug/l	0.43	10.0	2.2 J	0.32 J	--- U	3.3 J		02/23/12	LFJ	EPA200.8
Arsenic, ug/l	0.43	10.0					249	02/29/12	CMF	SM3113B
Barium, ug/l	0.02	100.0	42.2 J	12.9 J	10.7 J	237	47.4 J	02/23/12	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.09 J	0.06 J	0.11 J	0.50 J	0.45 J	02/23/12	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	--- U	--- U	0.04 J	--- U	0.18 J	02/23/12	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	0.39 J	0.18 J	0.15 J	0.24 J	3.2 J	02/23/12	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	1.9 J	1.5 J	0.28 J	6.0 J	5.1 J	02/23/12	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	1.6 J	0.94 J	0.22 J	3.6 J	14	02/23/12	LFJ	EPA200.8
Iron, ug/l	15.9	300.0	49400	45400	25275	24150	68075	03/07/12	ADD	SM3111B
Manganese, ug/l	0.61	50.0	578	344	398	166	69	02/27/12	LFJ	EPA200.7
Lead, ug/l	0.02	10.0	0.47 J	0.43 J	0.07 J	0.16 J	8.1 J	02/23/12	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20	--- U	--- U	--- U	--- U	--- U	02/23/12	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	2.0 J	0.88 J	0.77 J	1.8 J	3.6 J	02/23/12	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	6.7 J	0.26 J	--- U	14	1.5 J	02/23/12	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U	--- U	--- U	--- U	0.07 J	02/23/12	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	--- U	--- U	--- U	--- U	0.08 J	02/23/12	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	2.3 J	1.9 J	0.71 J	5.4 J	31	02/23/12	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	1.8 J	2.8 J	--- U	2.7 J	21	02/23/12	LFJ	EPA200.8
Conductivity (at 25c), uMhos/cm	1.0	1.0	3460	769	775	6830	259	02/16/12	RJH	SM2510B
Temperature, °C			17	17	16	18	17	02/16/12	RJH	SM2550B
Static Water Level, feet			2.00	2.61	3.84	3.03	5.79	02/16/12	RJH	
Well Depth, feet			20.35	20.97	19.95	19.17	22.75	02/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6051

DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO ,NC 27954

DATE COLLECTED: 02/16/12
DATE REPORTED : 03/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-10	MW-11	MW-12	SW-1	SW-2	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.3	5.7	6.2	7.3	6.6	02/16/12	RJH	SM4500HB
Total Alkalinity, mg/l	1.0	1.0	45	48	49	158	143	02/16/12	TRB	SM2320B
Chloride, mg/l	5.0	5.0	39	60	38	935	935	02/20/12	HLB	SM4500-CLB
Total Dissolved Residue, mg/l	1.0	1.0	1800			1980		02/22/12	HLB	SM2540C
Total Dissolved Residue, mg/l	1.0	1.0		1000	203		1960	02/17/12	MEL	SM2540C
Sulfate, mg/l	5.0	250.0	3365	376	14.6 J	170 J	165 J	02/21/12	TRB	SM426C
Antimony, ug/l	0.14	6.0	--- U	--- U	--- U	--- U	--- U	02/23/12	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	10	5.1 J	3.3 J	2..1J	2.9 J	02/23/12	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	42.5 J	72.4 J	43.6 J	93.0 J	97.3 J	02/23/12	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.25 J	0.13 J	0.10 J	--- U	--- U	02/23/12	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.12 J	0.16 J	0.04 J	--- U	--- U	02/23/12	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	2.0 J	2.7 J	0.93 J	1.0 J	1.4 J	02/23/12	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	1.4 J	1.5 J	0.94 J	2.1 J	2.9 J	02/23/12	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	3.2 J	2.2 J	1.4 J	0.19 J	0.95 J	02/23/12	LFJ	EPA200.8
Iron, ug/l	15.9	300.0	68475	54125	11685	403	2968	03/07/12	ADD	SM3111B
Manganese, ug/l	0.61	50.0	617	295	253	201	274	02/27/12	LFJ	EPA200.7
Lead, ug/l	0.02	10.0	1.3 J	1.6 J	1.3 J	0.17 J	4.9 J	02/23/12	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20	--- U	--- U	--- U	--- U	--- U	02/23/12	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	6.7 J	3.6 J	2.2 J	3.9 J	4.4 J	02/23/12	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	1.1 J	0.35 J	0.24 J	7.2 J	6.5 J	02/23/12	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U	--- U	--- U	--- U	--- U	02/23/12	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	0.07 J	0.04 J	0.08 J	--- U	--- U	02/23/12	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	8.5 J	4.7 J	3.6 J	0.72 J	1.2 J	02/23/12	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	14	9.0 J	4.1 J	0.92 J	7.6 J	02/23/12	LFJ	EPA200.8
Conductivity (at 25c), uMhos/cm	1.0	1.0	1828	1134	262	3250	3150	02/16/12	RJH	SM2510B
Temperature, °C			18	17	17	11	11	02/16/12	RJH	SM2550B
Static Water Level, feet			5.33	4.75	4.33			02/16/12	RJH	
Well Depth, feet			21.97	20.42	22.65			02/16/12	RJH	

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Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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ID#: 6051

DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO ,NC 27954

DATE COLLECTED: 02/16/12
DATE REPORTED : 03/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	SW-3	Trip Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.6		02/16/12	RJH	SM4500HB
Total Alkalinity, mg/l	1.0	1.0	159		02/16/12	TRB	SM2320B
Chloride, mg/l	5.0	5.0	910		02/20/12	HLB	SM4500-CLB
Total Dissolved Residue, mg/l	1.0	1.0	2170		02/22/12	HLB	SM2540C
Sulfate, mg/l	5.0	250.0	153 J		02/21/12	TRB	SM426C
Antimony, ug/l	0.14	6.0	--- U		02/23/12	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	2.7 J		02/23/12	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	94.4 J		02/23/12	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	--- U		02/23/12	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	--- U		02/23/12	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	0.90 J		02/23/12	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	2.2 J		02/23/12	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	0.64 J		02/23/12	LFJ	EPA200.8
Iron, ug/l	15.9	300.0	924		03/07/12	ADD	SM3111B
Manganese, ug/l	0.61	50.0	249		02/27/12	LFJ	EPA200.7
Lead, ug/l	0.02	10.0	2.1 J		02/23/12	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20	--- U		02/23/12	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	3.8 J		02/23/12	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	8.1 J		02/23/12	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U		02/23/12	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	--- U		02/23/12	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	0.72 J		02/23/12	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	2.9 J		02/23/12	LFJ	EPA200.8
Conductivity (at 25c), uMhos/cm	1.0	1.0	3230		02/16/12	RJH	SM2510B
Temperature, °C			11		02/16/12	RJH	SM2550B

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Drinking Water ID: 37715
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CLIENT: DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO, NC 27954

CLIENT ID: 6051

ANALYST: MAO
DATE COLLECTED: 02/16/12
DATE REPORTED: 03/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	02/28/12 MW-1	02/28/12 MW-2	02/29/12 MW-3	02/29/12 MW-8	02/29/12 MW-9
	Date Analyzed:						
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

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Drinking Water ID: 37715
Wastewater ID: 10

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MR. EDWARD L. MANN
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P.O. BOX 1000
MANTEO, NC 27954

CLIENT ID: 6051

ANALYST: MAO
DATE COLLECTED: 02/16/12
DATE REPORTED: 03/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 02/28/12 MW-1	02/28/12 MW-2	02/29/12 MW-3	02/29/12 MW-8	02/29/12 MW-9
48. Tetrahydrofuran	0.39	1.0	--- U	--- U	--- U	--- U	--- U

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VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	02/29/12 MW-10	02/29/12 MW-11	02/29/12 MW-12	02/29/12 SW-1	02/29/12 SW-2
	Date Analyzed:						
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO, NC 27954

CLIENT ID: 6051

ANALYST: MAO
DATE COLLECTED: 02/16/12
DATE REPORTED: 03/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 02/29/12 MW-10	02/29/12 MW-11	02/29/12 MW-12	02/29/12 SW-1	02/29/12 SW-2
48. Tetrahydrofuran	0.39	1.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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CLIENT: DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO, NC 27954

CLIENT ID: 6051

ANALYST: MAO
DATE COLLECTED: 02/16/12
DATE REPORTED: 03/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	02/29/12 SW-3	02/29/12 Trip Blank
	Date Analyzed:			
1. Chloromethane	0.77	1.0	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO, NC 27954

CLIENT ID: 6051

ANALYST: MAO
DATE COLLECTED: 02/16/12
DATE REPORTED: 03/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 02/29/12 SW-3	02/29/12 Trip Blank
48. Tetrahydrofuran	0.39	1.0	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6051 **Week: 9**

DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO NC 27954

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

CHLORINE NEUTRALIZED AT COLLECTION																		
pH CHECK (LAB)							12				12	12	12					
CONTAINER TYPE, P/G	P	P	P	P	P	P	P	P		G	G	G						
CHEMICAL PRESERVATION	A	A	A	A	A	A	A	A		E	E	E						
PARAMETERS	Field pH	Alkalinity	Chloride	TDS	Sulfate	Metals	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2						

A - NONE, B - HNO_3, C - H_2SO_4, D - NAOH, E - HCL, F - ZINC ACETATE, G - NA THIOSULFATE

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Alkalinity	Chloride	TDS	Sulfate	Metals	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
MW-1	02/16/12	0905		17	8	G	G	G	G	G	G	G	G	G	G	G	G
MW-2	02/16/12	0925		17	7	G	G	G	G	G	G	G	G	G	G	G	
MW-3	02/16/12	0940		16	7	G	G	G	G	G	G	G	G	G	G	G	
MW-8	02/16/12	1245		18	7	G	G	G	G	G	G	G	G	G	G	G	
MW-9	02/16/12	1100		17	7	G	G	G	G	G	G	G	G	G	G	G	
MW-10	02/16/12	1035		18	7	G	G	G	G	G	G	G	G	G	G	G	
MW-11	02/16/12	1020		17	7	G	G	G	G	G	G	G	G	G	G	G	
MW-12	02/16/12	0955		17	7	G	G	G	G	G	G	G	G	G	G	G	
SW-1	02/16/12	1005		11	7	G	G	G	G	G	G	G	G		G	G	
SW-2	02/16/12	1110		11	7	G	G	G	G	G	G	G	G		G	G	
SW-3	02/16/12	1050		11	7	G	G	G	G	G	G	G	G		G	G	

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) H Lane / Fox

SAMPLES RECEIVED IN LAB AT 0.2 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Lane	02/16/12	[signature]	2/16 1334
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
		[signature]	
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

№ 234481

FORM #5

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6051 **Week:** 9

DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO NC 27954

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Alkalinity	Chloride	TDS	Sulfate	Metals	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION																	
pH CHECK (LAB)															12	22	
CONTAINER TYPE, P/G						P	P	P	P	P	P	P	P		G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A	A	A	A		E	E	E
Trip Blank					2												

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) H Lane / Fox

SAMPLES RECEIVED IN LAB AT 0.2 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Lane	02/16/21	B Mann	2/16/3241
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

№ 234480

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6051 A

DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO ,NC 27954

DATE COLLECTED: 02/16/12
DATE REPORTED : 03/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-13	MW-14	MW-15	MW-16	MW-17	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.8	6.7	6.6	6.2	4.5	02/16/12	RJH	SM4500HB
Total Alkalinity, mg/l	1.0	1.0	343	273	143	163	--- U	02/16/12	TRB	SM2320B
Chloride, mg/l	5.0	5.0	46	36	30	2824	22	02/20/12	HLB	SM4500-CLB
Total Dissolved Residue, mg/l	1.0	1.0	584	411	296		456	02/17/12	MEL	SM2540C
Total Dissolved Residue, mg/l	1.0	1.0				4780		02/22/12	HLB	SM2540C
Sulfate, mg/l	5.0	250.0	12.9 J	--- U	23.4 J	255	372	02/21/12	TRB	SM426C
Antimony, ug/l	0.14	6.0	0.25 J	--- U	--- U	--- U	--- U	02/23/12	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	3.8 J	3.3 J	5.3 J	6.6 J	4.1 J	02/23/12	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	31.4 J	29.3 J	24.9 J	283	36.8 J	02/23/12	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.08 J	--- U	0.07 J	0.36 J	0.90 J	02/23/12	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.08 J	0.04 J	0.09 J	--- U	0.21 J	02/23/12	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	0.26 J	0.20 J	0.33 J	0.17 J	3.1 J	02/23/12	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	0.27 J	0.70 J	0.30 J	6.1 J	1.1 J	02/23/12	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	1.4 J	1.9 J	0.90 J	3.2 J	1.8 J	02/23/12	LFJ	EPA200.8
Iron, ug/l	15.9	300.0	40875	32250	29125	24175	7748	03/07/12	ADD	SM3111B
Manganese, ug/l	0.61	50.0	351	206	226	108	98	02/27/12	LFJ	EPA200.7
Lead, ug/l	0.02	10.0	0.31 J	0.18 J	0.38 J	0.06 J	1.4 J	02/23/12	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20	0.11 J	--- U	--- U	--- U	--- U	02/23/12	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	0.93 J	0.88 J	0.62 J	1.8 J	6.3 J	02/23/12	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	0.34 J	--- U	--- U	21	0.51 J	02/23/12	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U	--- U	--- U	--- U	--- U	02/23/12	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	0.03 J	--- U	--- U	--- U	--- U	02/23/12	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	2.5 J	1.8 J	1.2 J	4.7 J	2.1 J	02/23/12	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	1.6 J	1.9 J	78	1.00 J	382	02/23/12	LFJ	EPA200.8
Conductivity (at 25c), uMhos/cm	1.0	1.0	773	558	403	8270	618	02/16/12	RJH	SM2510B
Temperature, °C			17	17	17	18	15	02/16/12	RJH	SM2550B
Static Water Level, feet			4.11	4.29	4.55	5.74	4.27	02/16/12	RJH	
Well Depth, feet			22.41	22.02	22.62	20.11	14.78	02/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO, NC 27954

CLIENT ID: 6051 A

ANALYST: MAO
DATE COLLECTED: 02/16/12
DATE REPORTED: 03/12/12

Page: 1

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	02/29/12 MW-13	03/01/12 MW-14	03/01/12 MW-15	03/01/12 MW-16	03/01/12 MW-17
	Date Analyzed:						
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO, NC 27954

CLIENT ID: 6051 A

ANALYST: MAO
DATE COLLECTED: 02/16/12
DATE REPORTED: 03/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 02/29/12 MW-13	03/01/12 MW-14	03/01/12 MW-15	03/01/12 MW-16	03/01/12 MW-17
48. Tetrahydrofuran	0.39	1.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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CLIENT: DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO, NC 27954

CLIENT ID: 6051 A

ANALYST: MAO
DATE COLLECTED: 02/16/12
DATE REPORTED: 03/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed: MDL	SWSL	03/01/12 Trip Blank
1. Chloromethane	0.77	1.0	--- U
2. Vinyl Chloride	0.63	1.0	--- U
3. Bromomethane	0.67	10.0	--- U
4. Chloroethane	0.48	10.0	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U
7. Acetone	9.06	100.0	--- U
8. Iodomethane	0.26	10.0	--- U
9. Carbon Disulfide	0.23	100.0	--- U
10. Methylene Chloride	0.64	1.0	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U
15. 2-Butanone	2.21	100.0	--- U
16. Bromochloromethane	0.27	3.0	--- U
17. Chloroform	0.25	5.0	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U
20. Benzene	0.24	1.0	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U
22. Trichloroethene	0.23	1.0	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U
24. Bromodichloromethane	0.21	1.0	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U
27. Toluene	0.23	1.0	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U
30. Tetrachloroethene	0.17	1.0	--- U
31. 2-Hexanone	1.57	50.0	--- U
32. Dibromochloromethane	0.24	3.0	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U
34. Chlorobenzene	0.30	3.0	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U
36. Ethylbenzene	0.21	1.0	--- U
37. Xylenes	0.68	5.0	--- U
38. Dibromomethane	0.28	10.0	--- U
39. Styrene	0.19	1.0	--- U
40. Bromoform	0.20	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U
46. Acrylonitrile	2.72	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO, NC 27954

CLIENT ID: 6051 A

ANALYST: MAO
DATE COLLECTED: 02/16/12
DATE REPORTED: 03/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 03/01/12 Trip Blank
48. Tetrahydrofuran	0.39	1.0	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6051 A **Week:** 9

DARE COUNTY (C&D SITE)
MR. EDWARD L. MANN
DARE CO. PUBLIC WORKS
P.O. BOX 1000
MANTEO NC 27954

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Alkalinity	Chloride	TDS	Sulfate	Metals	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION																	
pH CHECK (LAB)											12				12	12	12
CONTAINER TYPE, P/G						P	P	P	P	P	P	P	P		G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A	A	A	A		E	E	E
MW-13	02/16/12	1145		17	8	G	G	G	G	G	G	G	G	G	G	G	G
MW-14	02/16/12	1200		17	7	G	G	G	G	G	G	G	G	G	G	G	
MW-15	02/16/12	1225		17	7	G	G	G	G	G	G	G	G	G	G	G	
MW-16	02/16/12	1130		18	7	G	G	G	G	G	G	G	G	G	G	G	
MW-17	02/16/12	1115		15	7	G	G	G	G	G	G	G	G	G	G	G	
Trip Blank					2												

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) H Lane / Fox

SAMPLES RECEIVED IN LAB AT 02 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Lane	02/16/12	[illegible]	2/16 1334
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

№ 234479

FORM #5

CDM Smith

cdmsmith.com