

JANUARY 2003 BASELINE C-8 SAMPLING DUPONT FAYETTEVILLE WORKS FAYETTEVILLE, NORTH CAROLINA

Date: March 2003

Project No.: 18983753.00037



CORPORATE REMEDIATION GROUP

*An Alliance between
DuPont and URS Diamond*

Barley Mill Plaza, Building 27
Wilmington, Delaware 19805

Introduction

During the week of January 27th 2003, groundwater was sampled from four monitoring wells at the DuPont Fayetteville Works. In addition, a combined surface and wastewater sample was collected above Outfall-002. These samples were collected in order to establish baseline conditions at the facility during the initial activation of APFO (C-8) production.

C-8 Sampling

Prior to initiating sampling activities, well locations were field identified and sampling locations were selected based on site coverage and accessibility. Figure 1 (attached) shows the locations of the four wells selected for sampling. Before sampling activities began, depth to water and depth to bottom were measured for each well to the nearest one hundredth of a foot.

Prior to sampling, monitoring wells were purged using low-flow sampling methods where possible. The low-flow bladder pump was gently lowered to approximately the middle of the screened interval in the well and the well was purged. During low-flow purging, pH, specific conductance, dissolved oxygen, oxidation-reduction potential and temperature were monitored approximately every three minutes using a flow-through monitoring cell. Purging was considered complete when all field parameters stabilized (variations in values were within 10 percent of each other for three consecutive readings three minutes apart). Once field parameters stabilized, groundwater was sampled directly from the end of the discharge tubing. Wells SMW-01, NAF-01 and MW-1S were sampled using this low-flow sampling method.

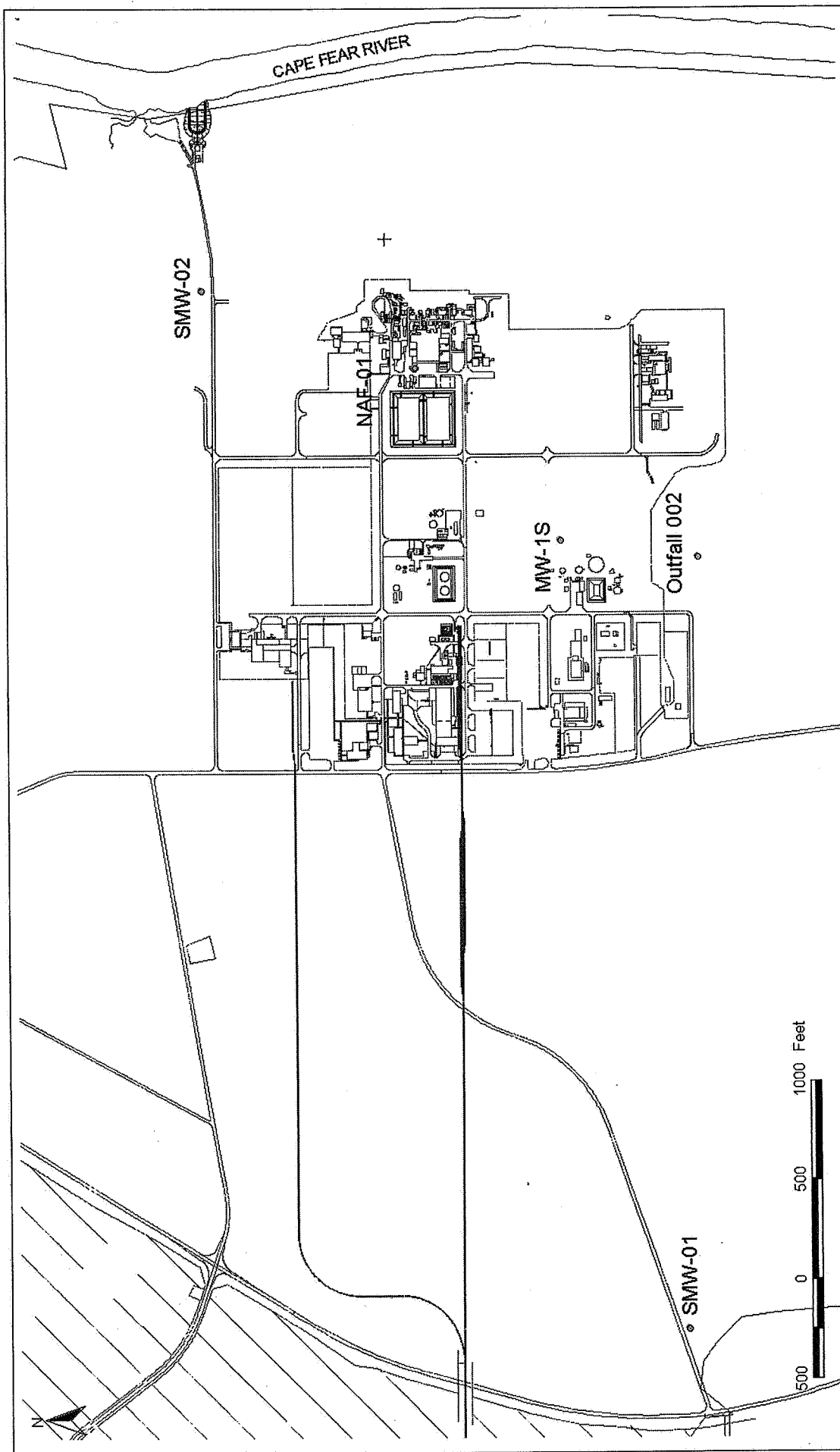
Alternatively, if low-flow purging was not practical due to field conditions (i. e. too little water in the well), monitoring wells were evacuated using a disposable bailer. Well evacuation stopped when at least three volumes were evacuated and three consecutive readings of pH and specific conductance were stabilized to within ten percent. After evacuation and parameter stabilization, the groundwater was sampled directly from a disposable bailer. Well SMW-02 was sampled using this method.

The combined surface and wastewater sample was collected approximately ten feet upstream from Outfall-002, after the confluence of all plant discharges. The location of Outfall-002 is shown on Figure 1 (attached). The water sample was collected by submerging the sample bottle into the water and then filling the bottle.

All equipment used for sampling activities was pre-cleaned or was dedicated as per the Groundwater Investigation Quality Assurance Project Plan For Washington Works Plant (QAPP), dated January 2002. All samples were collected and handled in a manner described in the QAPP, including the sample collected above Outfall-002.

C-8 Results

The C-8 results for the four wells and Outfall-002 are presented in Table 1 (attached). This table provides the sample name and date of the sample, the depth to water and depth to bottom for each well, the measured C-8 result in ug/l, and comments, if applicable. The groundwater from well NAF-01 is the only sample that had a detectable concentration of C-8. The concentration measured in this well was 0.0649 ug/l. Samples from the other wells and the outfall had C-8 concentrations that were either below the practical quantification limit of 0.05 ug/l (NQ) or non-detectable (less than 0.01 ug/l; ND).



 CORPORATE REMEDIATION GROUP <i>An Alliance between</i> DuPont and URS Diamond 6324 Fairview Road Charlotte, NC 28210	TITLE: January 2003 - Baseline C-8 Sampling Locations DuPont Fayetteville Works Fayetteville, North Carolina	DRAWN: EMA	APPROVED:	PROJECT NO.:
		CHECKED:	DATE: 3/6/03	
		FILE NAME: plantcoord3.apr		
		REVISION: 1		

Table 1
January 2003 - Baseline C-8 Sampling
DuPont Fayetteville Works
Fayetteville, North Carolina

Sample Name	Date	Depth to Water (ft.)	Depth to Bottom (ft.)	C-8(ug/L)	Comments
SMW-01	1/27/2003	13.55	22.84	ND(<0.01)	shallow well installed 1/21/03 for C-8 sampling
SMW-02	1/27/2003	14.79	17.12	ND(<0.01)	shallow well installed 1/21/03 for C-8 sampling, well bailed due to low water level
NAF-01	1/27/2003	7.14	18.31	0.0649	
MW-1S	1/28/2003	18.81	32.25	NQ(<0.05)	
MW-1S-2	1/28/2003	18.81	32.25	NQ(<0.05)	duplicate sample water is very foamy, sample collected upstream of outfall sampling point but after confluence of all plant discharges
Outfall-002	1/28/2003	--	--	NQ(<0.05)	