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February 21, 2003

Project Number 2128

Ms. Michele DiGeambeardino EV21/MD
Remedial Project Manager
Engineering Field Activity Northeast
Naval Facilities Engineering Command
10 Industrial Highway Mail Stop 82
Lester, Pennsylvania 19113-2090

Reference: Contract No. N62467-94-D-0888 (CLEAN)
Contract Task Order No. 0843
Naval Weapons Station Earle
Colts Neck, New Jersey

Subject: Technical Memorandum: Extent of Groundwater Contamination at Site 26 –Operable Unit-3 (OU-3). Recommendation against the Proposed Designation of OU-7 – Secondary Tetrachloroethylene (PCE) Plume

Dear Ms. DiGeambeardino:

This technical memorandum summarizes the results of the secondary groundwater contamination investigation at Site 26. As part of pre-construction evaluation and design for remedial action at the Site 26 groundwater contamination plume the Navy's remedial action contractor (RAC) performed surface water, sediment, subsurface soil, and groundwater investigations. The investigations were performed in part to verify the extent and identify the potential source of a separate "secondary PCE plume" thought to be in groundwater in the general vicinity of the trichloroethene (TCE) and 1,2-dichloroethene (1,2-DCE) plume at Site 26. It was theorized that this "secondary PCE plume" originated from a separate source, possibly a leach tank attached to the former Building GB-2. Figure 1 shows site features and current monitoring well locations.

The results of The Navy's investigation indicate that there is no separate "secondary PCE plume."

Overview

During the remedial investigation (RI) that ended in 1997 (RI Addendum Report – January 1998), groundwater samples collected from monitoring wells and by direct-push groundwater sampling methods detected TCE, 1,2-DCE, and related chlorinated hydrocarbon compounds at significant concentrations in a wide plume (approximately 350 feet by 130 feet) southwest of Building GB-1. The type of contaminants detected and the configuration of the plume implicated the former process leach tank, located at the south west end of Building GB-1 as the source of groundwater contamination. Results of the RI indicated that soil samples obtained near the process leach tank detected TCE (up to 74.0 ug/kg) and 1,2-DCE (total) (up to 140 ug/kg). A semi-confining clay layer at approximately 25 feet below ground surface that underlies the entire site, appears to have limited the vertical migration of TCE and related compounds in groundwater, causing a widespread (horizontally) but relatively thin (vertically) chlorinated hydrocarbon plume that is fairly concentrated (approximately 9,000 ug/L of TCE in 1997) in monitoring well 26MW01 near the former process leach tank but that rapidly becomes less concentrated with horizontal distance from the apparent historical source.

RI groundwater samples obtained from direct push (hydropunch or geoprobe) sampling and from monitoring wells exhibited a wide range of chlorinated compounds at concentrations above regulatory guidelines. The major organic constituents contaminating groundwater were TCE and 1,2-DCE. Other organic compounds found at levels above regulatory guidelines in groundwater included 1,1-dichlorethene, methylene chloride and tetrachlorethene (PCE). Figure 2 (Figure 10-5 from the RI Addendum Report) shows the location and concentration of compounds in groundwater exceeding regulatory screening levels in 1997.

The ROD for OU-3, which documented air sparging with soil vapor extraction (AS/SVE), source removal, institutional controls, and long-term monitoring as the selected remedial action alternative, was signed in September 1998. Foster Wheeler Environmental Corporation (FWENC) the Navy RAC was selected to perform pre-design studies and design and construction of the selected remedy.

Secondary PCE Plume Investigation

To the southwest of Building GB-1 there was a former Building GB-2 that was demolished in 1998. Building GB-2 had a septic tank and leaching system similar to the process leaching system at Building GB-1. Because of an unverified suspicion that the septic system located near the former Building GB-2 may have been used for disposal in a manner like the process leach tank at Building GB-1, the Navy assigned FWENC to obtain samples from subsurface soil near the septic system, septic tank contents, surface water and sediment from the nearest downgradient stream, and groundwater.

Subsurface Soil Samples

In August 1999 FWENC obtained five soil samples from six borings (SB01 – SB06) in close proximity to the septic tank at the former Building GB-2 area and one soil sample from a boring (SB07) beneath abandoned painting equipment nearby. Figure 3 shows soil boring locations. Samples were submitted for Target Compound List (TCL) Volatile Organic Compounds (VOC) analysis. Analytical results for all samples were non-detect for all TCL VOC's except 2-butanone, a common laboratory solvent that is not a compound of concern at this site (2-butanone was also found in the trip blank).

Septic Tank Contents Sample

In August 1999 FWENC obtained one aqueous liquid sample from the septic tank at the former Building GB-2 area. There was no appreciable amount of sludge found in the tank. The aqueous sample was submitted for TCL VOC analysis. No VOC's were detected.

Surface Water and Sediment Samples

In March 2000 FWENC obtained one surface water sample (26SW01) upstream and one surface water sample (26SW02) and sediment sample (26SD02) downstream from Site 26 in the Mingamahone Brook. Two surface water (26SW03 and 26SW04) and one sediment sample (26SD01) were collected in the Mingamahone Brook southwest of Site 26 in the projected path of groundwater leaving the Site 26 area. Figure 4 shows the locations of surface water and sediment samples. Samples were submitted to the laboratory for TCL VOC analysis. No VOC's were found in surface water or sediment.

Groundwater Sampling March 2000

In March 2000 FWENC obtained groundwater samples from four monitoring wells and 72 direct-push locations. All samples were analyzed for VOC's and four of the five monitoring well samples were analyzed for metals concentration for AS/SVE system design purposes.

The monitoring wells analytical results were similar to previous results, with monitoring well 26MW01 (located near the former process leach tank) showing the highest level of TCE (9,300 ug/L), substantially similar to the RI findings.

The direct push screening samples encountered TCE ranging from non-detect to 2,000 ug/L, DCE ranging from non-detect to 1,700 ug/L and PCE ranging from non-detect to 77 ug/L. The results of the direct push screening implied that the existing TCE/DCE plume appeared larger than previously depicted. The direct-push results also raised the possibility and that a large PCE plume, not previously identified, extended farther eastward, southward and westward than the original TCE and DCE plume identified at Site 26. Figure 5 shows the projected PCE plume based on the direct-push screening results.

Monitoring Well Installation

During construction of the AS/SVE system in 2000 the Navy added seven monitoring wells (26MW07 – 26MW13 as depicted on Figure 1) to help evaluate progress of groundwater remediation. After consideration of the March 2000 direct-push screening program results, the Navy installed an additional five permanent monitoring wells (26MW14 – 26MW18 as depicted on Figure 1) in the area of the suspected PCE plume to verify the direct-push results.

Quarterly AS/SVE Remedy Groundwater Sampling

The AS/SVE system began operations on January 4, 2001. Five rounds of quarterly monitoring of groundwater monitoring wells have been completed since operations began. Monitoring wells sampled each quarter include all of the monitoring wells installed to investigate the "secondary PCE plume" in addition to the monitoring wells required to evaluate AS/SVE performance and compliance with the New Jersey Department of Environmental Protection (NJDEP) Classification Exception Area (CEA) for Site 26.

The results from the five quarterly groundwater sampling events at Site 26 since April 2001, summarized in Table 1, do not suggest the presence of a larger TCE/DCE plume or the existence of a previously unidentified large PCE plume as suggested by the March 2000 direct-push screening.

Figure 6 shows the estimated TCE plume from the April 2002 quarterly monitoring event data compared to the plume depicted previously from the RI. The two plume depictions are roughly equivalent. Figure 6a shows the TCE data from the most recent (July 2002) quarterly monitoring event compared to the plume depicted previously from the RI. There are too few TCE concentrations found at a level above the evaluation criteria (regulatory limits defined in the CEA) to estimate a TCE plume from the July 2002 quarterly sampling results.

PCE concentrations found in direct-push groundwater samples have not been matched in groundwater samples collected from monitoring wells at the corresponding location. PCE does not appear to be more widespread in groundwater than was concluded in the RI. Figure 7 shows the PCE distribution from the April 2002 quarterly monitoring event data. PCE was found in one monitoring well (26MW18), approximately 200 feet west of the original TCE plume, at a concentration (3.8 ug/L) greater than the New Jersey Department of Environmental Protection NJDEP Groundwater Quality Standard (GWQS) of 1 ug/L. Figure 7a shows similar PCE results in the July 2002 quarterly sampling.

Conclusions

PCE found in groundwater near Site 26 appears to be the result of historical disposal practices in the process leach tank at Building GB-1. Actual disposal practices are not documented, but it appears that a variety of chlorinated organic compounds such as TCE, PCE and methylene chloride were disposed into

the ground through the process leach tank over an unknown period of time. The sequence and rate of disposal or co-disposal of these compounds (and possibly others) is unknown.

There is very little evidence that solvent disposal practices similar to those at GB-1 could have occurred at the septic tank located at Building GB-2. This possibility does not merit further investigaton.

There is no definable "secondary PCE plume" at Site 26, although there is PCE in the previously identified plume currently under remediation via AS/SVE.

Recommendations

Based on the analytical results from the RI, the "secondary PCE plume" investigation and five rounds of quarterly monitoring samples, the following actions are recommended:

- It is not necessary or advisable to proceed with designation of a separate operable unit (OU-7) for the "secondary PCE plume" at Site 26.
- There is no need for a Feasibility Study or Decision Documents for (OU-7). If EPA and NJDEP agree, PCE encountered in groundwater in the vicinity of Site 26 can be monitored within the active CEA implemented for OU-3 groundwater contamination.
- Low concentrations of TCE and DCE in AS/SVE evaluation monitoring wells and CEA compliance monitoring wells indicate that AS/SVE treatment may have reached its practical physical endpoint for the subsurface conditions at Site 26.
- Considering that PCE has been encountered in 26MW18 at concentrations above the NJDEP GWQS, additional CEA compliance wells (i.e., 26MW14, 26MW17 and 26MW18) should be added for routine quarterly sampling.

If you have any questions or comments, please contact me.

Respectfully,

Russell E. Turner

Russell E. Turner
Project Manager

RET/nfs

c: Garth Glenn (Tetra Tech NUS)(without attachments)
John Trepanowski (Tetra Tech NUS) (without attachments)
File 2128.1121

FIGURES

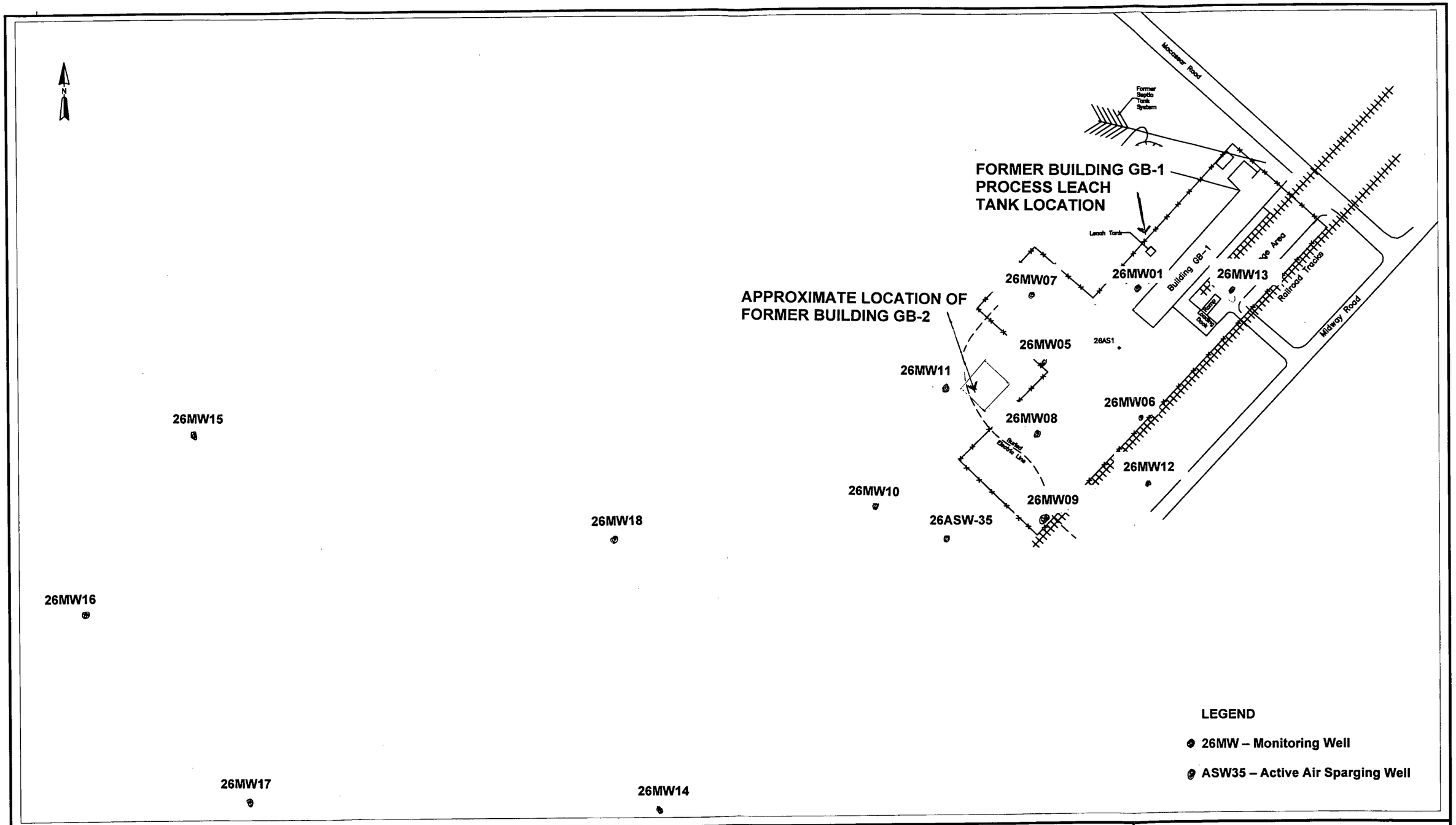

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FIGURE 1
Well Locati n Map

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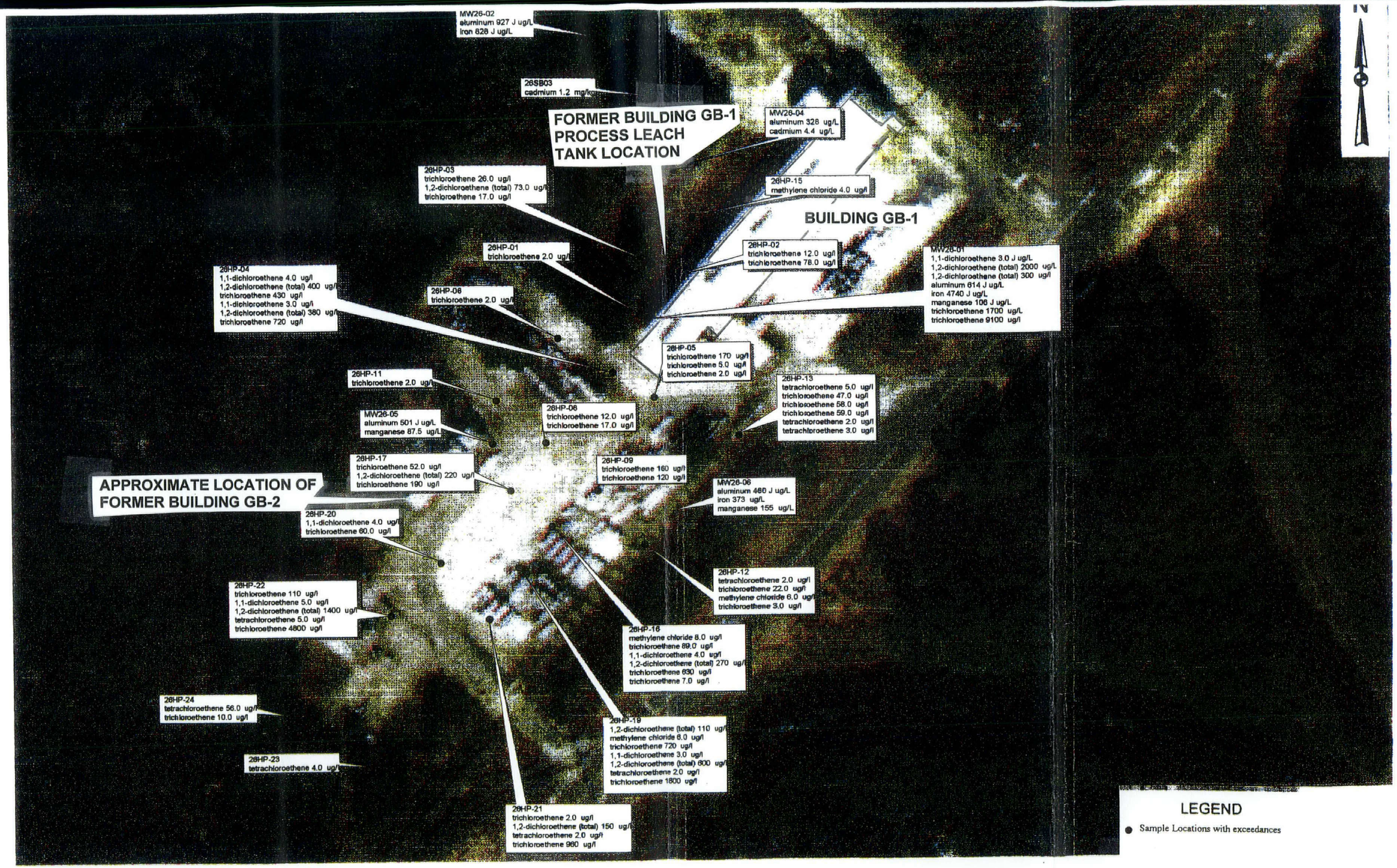

CONCENTRATIONS ABOVE SCREENING LEVELS
SITE 26 - EXPLOSIVE "D" WASHOUT AREA

60 0 60 120 Feet

FIGURE 2

Brown & Root Environmental

APR 07-FEB-96 MJJ Site 26 Tag 2

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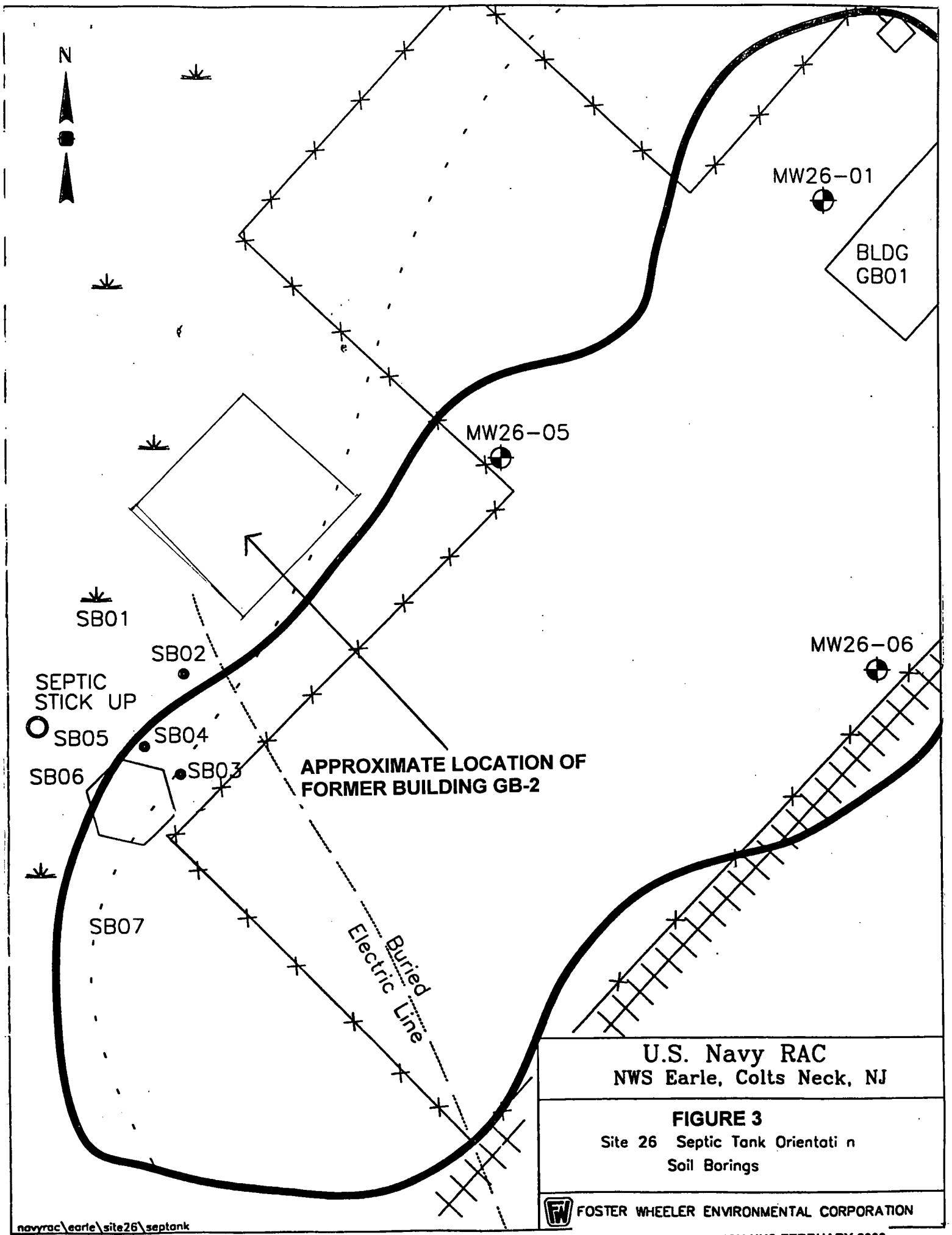

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FIGURE 3
Site 26 Septic Tank Orientati n
Soil Borings

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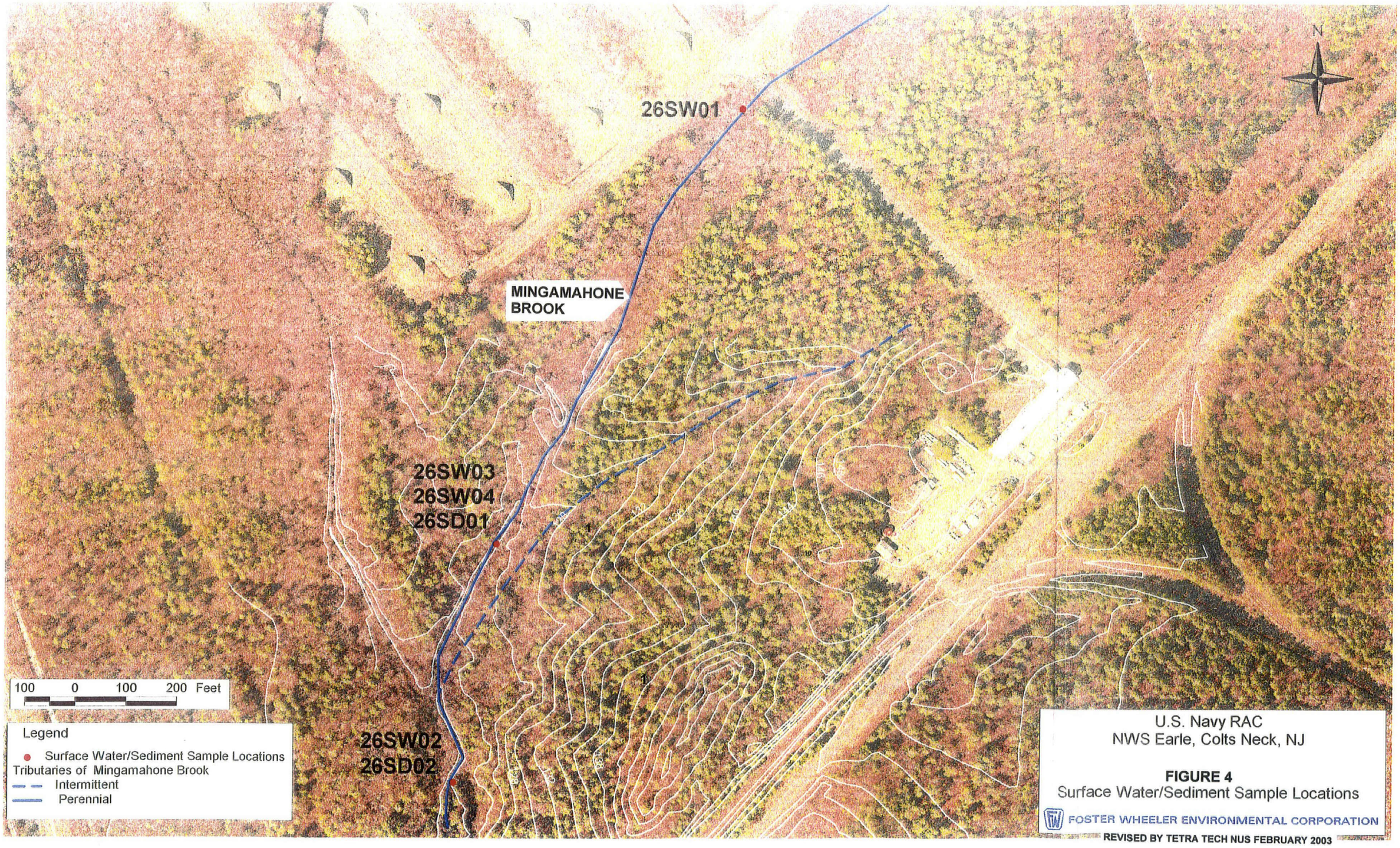
N
26SW01
MINGAMAHONE BROOK
26SW03
26SW04
26SD01
26SW02
26SD02
100 0 100 200 Feet
Legend
Surface Water/Sediment Sample Locations
Tributaries of Mingamahone Brook
Intermittent
Perennial
U.S. Navy RAC
NWS Earle, Colts Neck, NJ
FIGURE 4
Surface Water/Sediment Sample Locations
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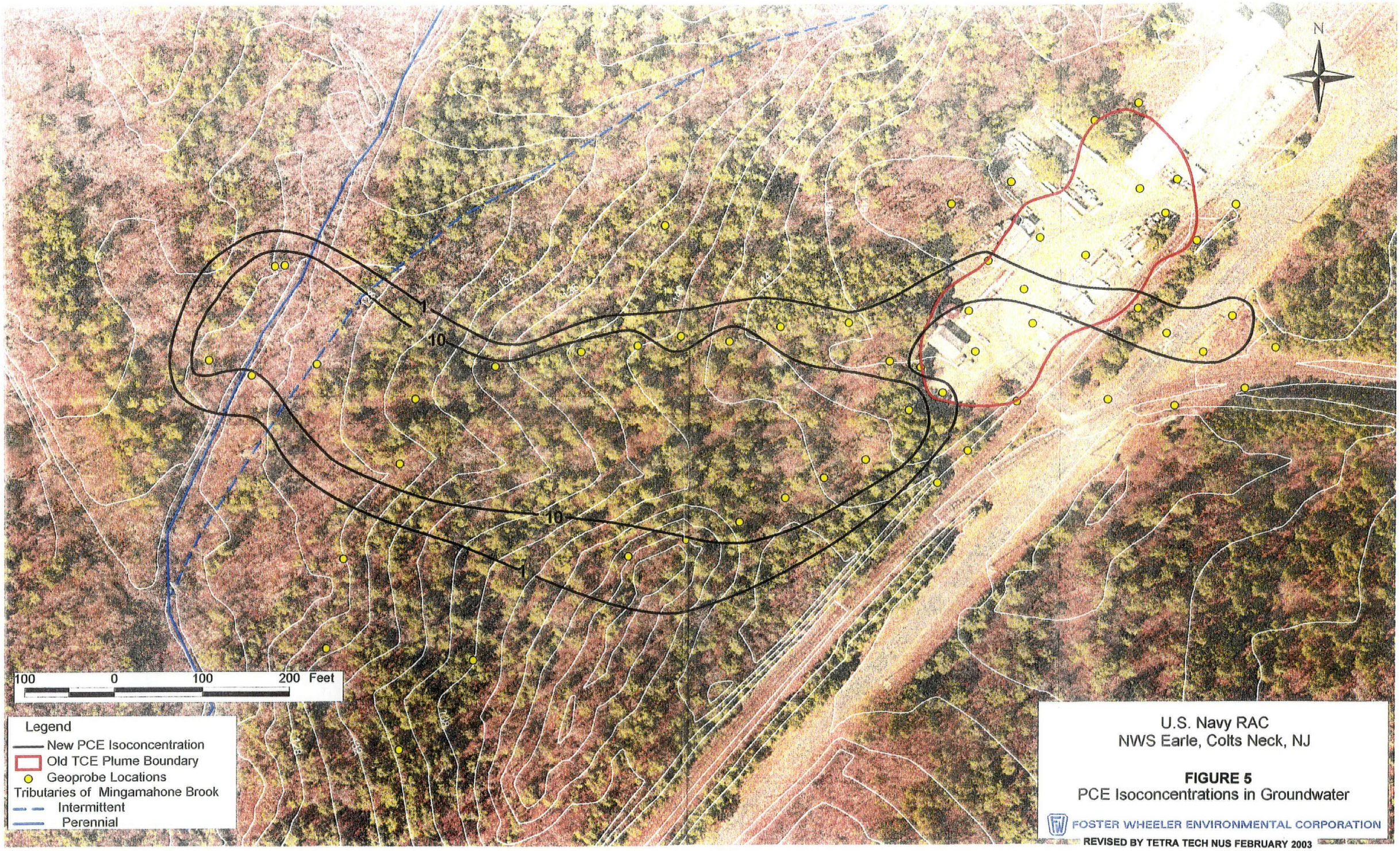
N
1
10
10
1
100 0 100 200 Feet
Legend
New PCE Isoconcentration
Old TCE Plume Boundary
Geoprobe Locations
Tributaries of Mingamahone Brook
Intermittent
Perennial
U.S. Navy RAC
NWS Earle, Colts Neck, NJ
FIGURE 5
PCE Isoconcentrations in Groundwater
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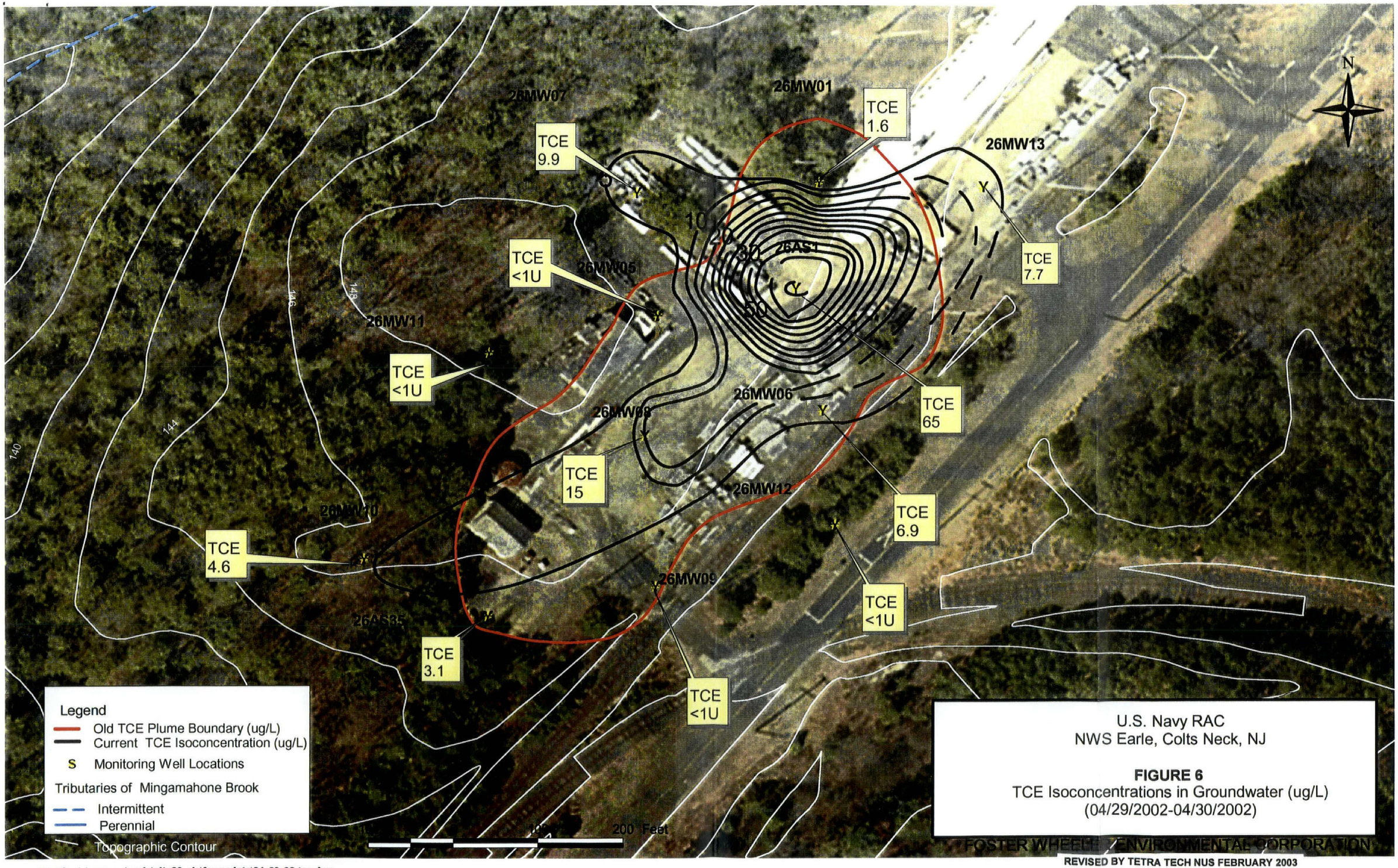

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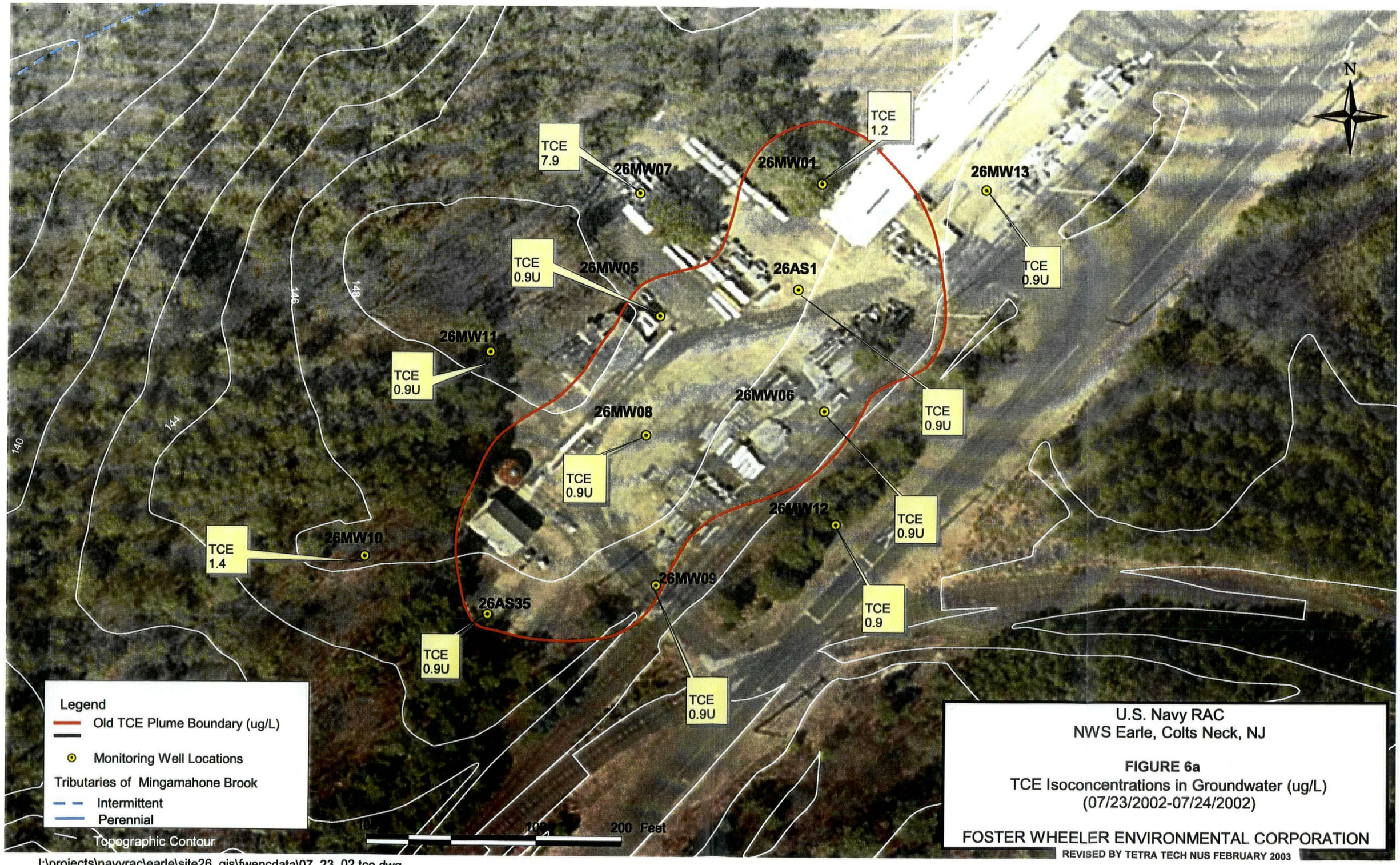

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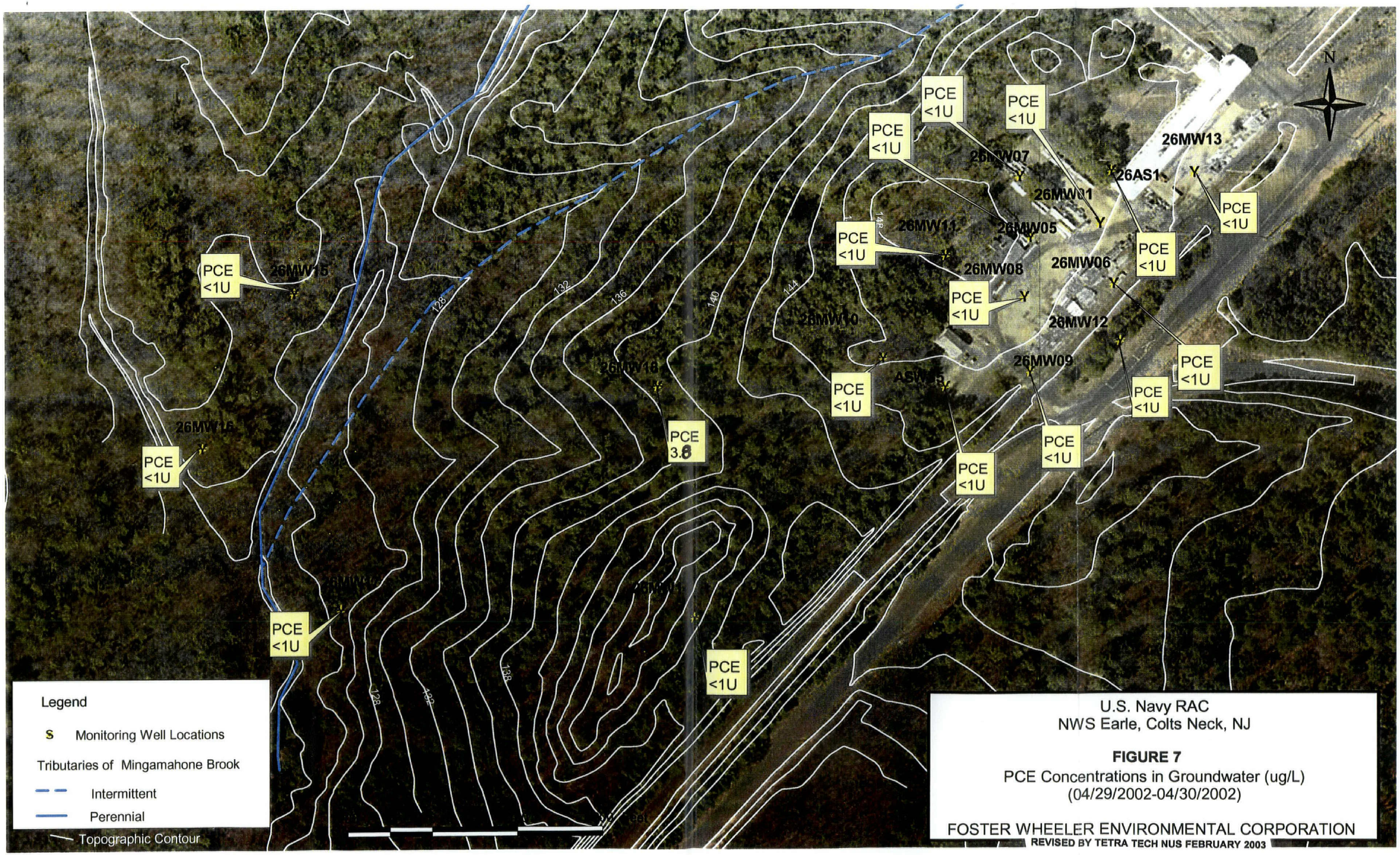

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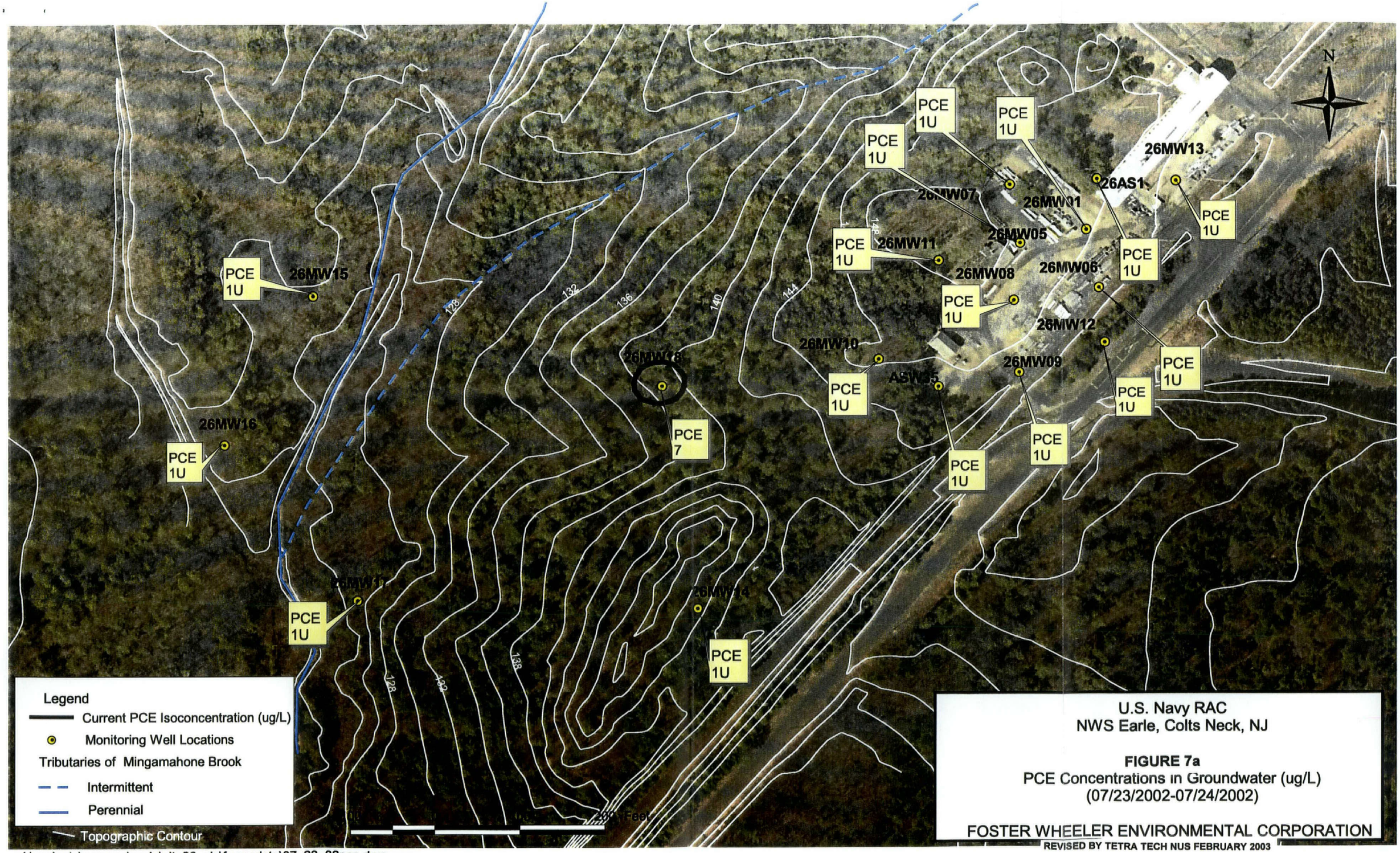

U.S. Navy RAC
NWS Earle, Colts Neck, NJ

FIGURE 7a
PCE Concentrations in Groundwater (ug/L)
(07/23/2002-07/24/2002)

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TABLE 1

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-01		26MW-01-02		26MW-01-03		26MW-01-04		26MW-01-05		26MW-01-06	
LABORATORY ID		O32547		O06		O01		O05		P2414-05		P3468-15	
DATE COLLECTED	Groundwater	08/14/00		04/02/01		10/30/01		01/29/02		04/29/02		07/24/02	
LOCATION	Quality	SITE 26, MW-01		SITE 26, MW-01		SITE 26, MW-01		SITE 26, MW-01		SITE 26, MW-01		SITE 26, MW-01	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	1	U	1.4	
Acetone	700	5	R	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	**1800**	D	**830**	D	**16**		2.4		1	U	1	U
trans - 1,2-Dichlorethene	100	5	U	6.8	U	0.4	U	0.4	U	1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	1	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	**3700**	D	**370**	D	**10**		**6**		**1.6**		**1.2**	
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded : Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-05		26MW-05-02		26MW-05-03		26MW-05-04		26MW-05-05		26MW-05-06	
LABORATORY ID		O32545		O04		O01				P2414-18		P3468-14	
DATE COLLECTED	Groundwater	08/14/00		04/02/01		10/26/01				04/29/02		07/24/02	
LOCATION	Quality	SITE 26, MW-05		SITE 26, MW-05		SITE 26, MW-05		SITE 26, MW-05		SITE 26, MW-05		SITE 26, MW-05	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	NR		1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	NR		1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	NR		1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	NR		1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	NR		1	U	**2.8**	
Acetone	700	5	R	5	U	2.4	U	NR		NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	NR		NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	NR		1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	NR		1	U	0.6	U
cis - 1,2 -Dichloroethene	10	5	U	1	U	1.9		NR		1	U	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	NR		1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	NR		1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	NR		1	U	0.6	U
2-Butanone	300	5	U	5	U	2.8	U	NR		NR	U	NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	NR		1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	NR		1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	NR		1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	NR		1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	NR		1	U	1.5	U
Trichloroethene	1	5	U	**1.3**		**1.2**		NR		1	U	0.9	U
Dibromochloromethane	10	5	U	1	U	0.3	U	NR		1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	NR		1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	NR		1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	NR		1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	NR		1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	NR		NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	NR		NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	NR		1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	NR		1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	NR		1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	NR		1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	NR		1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	NR		1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	NR		1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-06		26MW-06-02		26MW-06-03		26MW-06-04		26MW-06-05		26MW-06-06	
LABORATORY ID		O32550		O01		O02		O02		P2414-02		P3468-08	
DATE COLLECTED	Groundwater	08/15/00		04/02/01		10/30/01		01/29/02		04/29/02		07/24/02	
LOCATION	Quality	SITE 26, MW-06		SITE 26, MW-06		SITE 26, MW-06		SITE 26, MW-06		SITE 26, MW-06		SITE 26, MW-06	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Acetone	700	5	R	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	5	U	0.8	J	1.6		7.2		1.2	T	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	0.4	U	1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	5	U	**3**		**4.7**		**12**		**6.9**	U	0.9	U
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP Groundwater Quality Criteria ug/L	26MW-07		26MW-07-02		26MW-07-03		26MW-07-04		26MW-07-05		26MW-07-06	
LABORATORY ID		O32546		O05		O11		O04		P2414-04		P3468-05	
DATE COLLECTED		08/14/00		04/02/01		10/26/01		01/29/02		04/29/02		07/23/02	
LOCATION		SITE 26, MW-07		SITE 26, MW-07		SITE 26, MW-07		SITE 26, MW-07		SITE 26, MW-07		SITE 26, MW-07	
MATRIX		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Acetone	700	5	R	5	U	2.4	U	2.4	U	NR	R	NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	5	U	1	U	0.3	U	1.4		1	U	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	0.4	U	1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	5	U	**3**		**3.5**		**7.4**		**9.9**		**7.9**	
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-08		26MW-08-02		26MW-08-03		26MW-08-04		26MW-08-05		26MW-08-06	
LABORATORY ID		O32549		O03		O09		O03		P2414-03		P3468-09	
DATE COLLECTED	Groundwater	08/15/00		04/02/01		10/26/01		01/29/02		04/29/02		07/24/02	
LOCATION	Quality	SITE 26, MW-08		SITE 26, MW-08		SITE 26, MW-08		SITE 26, MW-08		SITE 26, MW-08		SITE 26, MW-08	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	1	U	**2.5**	
Acetone	700	5	R	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	**28**		**540**	D	**310**	E	**80**		**15**	T	1	U
trans - 1,2-Dichlorethene	100	5	U	3		2.9		0.8		1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	**42**		**440**	D	**97**		**57**		**15**		0.9	U
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-09		26MW-09-02		26MW-09-03		26MW-09-04		26MW-09-05		26MW-09-06	
LABORATORY ID		O32548		O02		O08		O18		P2414-06		P3468-10	
DATE COLLECTED	Groundwater	08/15/00		04/02/01		10/26/01		1/30/02		04/29/02		07/24/02	
LOCATION	Quality	SITE 26, MW-09		SITE 26, MW-09		SITE 26, MW-09		SITE 26, MW-09		SITE 26, MW-09		SITE 26, MW-09	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Acetone	700	5	R	3.2	J	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	5	U	1	U	0.3	U	0.3	U	1	U	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	0.4	U	1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	5	U	**1.1**		0.4	U	0.4	U	1	U	0.9	U
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-10		26MW-10-02		26MW-10-03		26MW-10-04		26MW-10-05		26MW-10-06	
LABORATORY ID		O32553		O08		O07		O14		P2414-07		P3468-12	
DATE COLLECTED	Groundwater	08/15/00		04/02/01		10/26/01		1/30/02		04/29/02		07/24/02	
LOCATION	Quality	SITE 26, MW-10		SITE 26, MW-10		SITE 26, MW-10		SITE 26, MW-10		SITE 26, MW-10		SITE 26, MW-10	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Acetone	700	5	R	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	**10**		1	U	3.8		4.5		1	U	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	0.4	U	1	U	1	U
Chloroform	6	5	U	2.5		0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	**10**		**1.7**		**2.9**		**6.3**		**4.6**	U	**1.4**	
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	**6.2**	J	1	U	**1.1**		0.8		1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP Groundwater Quality Criteria ug/L	26MW-11		26MW-11-02		26MW-11-03		26MW-11-04		26MW-11-05		26MW-11-06	
LABORATORY ID		O32601		O09		O12		O15		P2414-09		P3468-11	
DATE COLLECTED		08/15/00		04/02/01		10/26/01		1/30/02		04/29/02		07/24/02	
LOCATION		SITE 26, MW-11		SITE 26, MW-11		SITE 26, MW-11		SITE 26, MW-11		SITE 26, MW-11		SITE 26, MW-11	
MATRIX		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	1	U	**2.9**	
Acetone	700	5	R	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	5	U	1	U	0.3	U	0.3	U	1	U	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	0.4	U	1	U	1	U
Chloroform	6	5	U	**12**		2		0.6		1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	R	5	U	2.8	U	2.8	U	1	U	NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	5	U	**14**		0.4	U	0.4	U	1	U	0.9	U
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-12		26MW-12-02		26MW-12-03		26MW-12-04		26MWD-04		26MW12-05		26MW12D-05		26MW12-06	
LABORATORY ID		O32600		O07		O05		O10		O11		P2414-10		P2414-14		P3468-16	
DATE COLLECTED	Groundwater	08/15/00		04/02/01		10/30/01		01/29/02		01/29/02		04/29/02		04/29/02		07/24/02	
LOCATION	Quality	SITE 26, MW-12		SITE 26, MW-12		SITE 26, MW-12		SITE 26, MW-12		SITE 26, MW-12		SITE 26, MW-12		SITE 26, MW-12		SITE 26, MW-12	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 4th Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	1.1	U	1.1	U	1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	0.6	U	1	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	0.7	U	1	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	0.4	U	1	U	1	U	1.2	
Acetone	700	5	R	5	U	2.4	U	2.4	U	2.4	U	NR		NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	0.3	U	NR		NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	0.4	U	1	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	0.2	U	1	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	0.4	U	0.4	U	1	U	1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	0.6	U
2-Butanone	300	5	R	5	U	2.8	U	2.8	U	2.8	U	NR		NR		NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	0.4	U	1	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	1.5	U
Trichloroethene	1	5	U	1	U	0.4	U	0.4	U	0.4	U	1	U	1	U	0.9	
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	0.2	U	1	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	1.4	U	NR		NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	1	U	NR		NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	0.2	U	1	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	0.4	U	1	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	0.2	U	1	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	0.9	U	1	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID LABORATORY ID DATE COLLECTED LOCATION MATRIX UNITS COMMENTS	NJDEP Groundwater Quality Criteria ug/L	26MW12-06D P3468-17 07/24/02 SITE 26, MW-12 AQUEOUS ug/L After 5th Qtr of AS/SVE	
Chloromethane	30	1.4	U
Bromomethane	10	1.7	U
Vinyl Chloride	5	1.2	U
Chloroethane	NA	1.8	U
Methylene Chloride	2	1.2	U
Acetone	700	NR	
Carbon Disulfide	NA	NR	
1,1-Dichlorethene	1	1	U
1,1-Dichlorethane	70	0.6	U
cis - 1,2 -Dichloroethene	10	1	U
trans - 1,2-Dichlorethene	100	1	U
Chloroform	6	0.8	U
1,2-Dichlorethane	2	0.6	U
2-Butanone	300	NR	
1,1,1-Trichlorethane	30	0.8	U
Carbon Tetrachloride	2	0.5	U
Bromodichloromethane	1	0.9	U
1,2-Dichloropropane	1	0.8	U
cis-1,3-Dichloropropene	NA	1.5	U
Trichloroethene	1	0.9	
Dibromochloromethane	10	1.4	U
1,1,2-Trichloroethane	3	1.5	U
Benzene	1	0.6	U
trans-1,3-Dichloropropene	NA	NR	
Bromoform	4	1.5	U
4-Methyl-2-pentanone	400	NR	
2-Hexanone	NA	NR	
Tetrachloroethene	1	1	U
Toluene	1000	1	U
1,1,2,2-Tetrachloroethane	2	0.8	U
Chlorobenzene	4	1	U
Ethylbenzene	700	1.2	U
Styrene	100	NR	
Xylenes (total)	40	3.4	U

Notes:
U - Not detected above quantitation limit
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NR - No result
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ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-13		26MW-13-02		26MW-13-03		26MW-13-04		26MW-13-05		26MW-13-06	
LABORATORY ID		O32599		O07		O04		O01		P2414-01		P3468-07	
DATE COLLECTED	Groundwater	08/15/00		04/03/01		10/30/01		01/29/02		04/29/02		07/24/02	
LOCATION	Quality	SITE 26, MW-13		SITE 26, MW-13		SITE 26, MW-13		SITE 26, MW-13		SITE 26, MW-13		SITE 26, MW-13	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	1	U	**2.7**	
Acetone	700	5	R	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	NR	U	NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	5	U	1	U	4		3.1		1.2	T	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	0.4	U	1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	R	5	U	2.8	U	2.8	U	1	U	NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	5	U	**2.3**		**8.7**		**8.4**		**7.7**	U	0.9	U
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
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TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26AS-1		26AS-1-02		26AS-1-03		26AS-1-04		26AS-1-05		26AS-1-06	
LABORATORY ID		O32602		O12		O03		O07		P2414-11		P3468-18	
DATE COLLECTED	Groundwater	08/16/00		03/29/01		10/30/01		01/29/02		04/29/02		04/29/02	
LOCATION	Quality	SITE 26, AS-1		SITE 26, AS-1		SITE 26, AS-1		SITE 26, AS-1		SITE 26, AS-1		SITE 26, AS-1	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	U	1	U	1.1	U	NR		1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	NR		1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	NR		1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	NR		1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	NR		1	U	1.2	U
Acetone	700	5	R	5	U	2.4	U	NR		NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	NR		NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	NR		1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	NR		1	U	0.6	U
cis - 1,2 -Dichloroethene	10	**63**		**38**		**45**		NR		**53**	TD	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	NR		1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	NR		1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	NR		1	U	0.6	U
2-Butanone	300	5	R	5	U	2.8	U	NR		NR		NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	NR		1	U	0.8	U
Carbon Tetrachloride	2	5	U	1	U	0.3	U	NR		1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	NR		1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	NR		1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	NR		1	U	1.5	U
Trichloroethene	1	**7.9**		**120**		**43**		NR		**65**	D	0.9	U
Dibromochloromethane	10	5	U	1	U	0.3	U	NR		1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	NR		1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	NR		1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	NR		1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	NR		1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	NR		NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	NR		NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	NR		1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	NR		1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	NR		1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	NR		1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	NR		1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	NR		1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	NR		1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26AS-35		26AS-35-02		26AS-35-03		26AS-35-04		26AS-35-05		26AS-35-06	
LABORATORY ID		O32603		O12		O06		O09		P2414-08		P3468-13	
DATE COLLECTED	Groundwater	08/16/00		04/03/01		10/30/01		1/29/02		04/29/02		07/24/02	
LOCATION	Quality	SITE 26, AS-35		SITE 26, AS-35		SITE 26, AS-35		SITE 26, AS-35		SITE 26, AS-35		SITE 26, AS-35	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		Baseline GW		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	5	UJ	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	5	UJ	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	5	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	5	U	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	5	U	1	U	0.4	U	0.4	U	1	U	1.7	
Acetone	700	5	R	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	5	U	1	U	0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	5	U	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	5	U	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	5	U	5.5		1.2		1.8		2.9	T	1	U
trans - 1,2-Dichlorethene	100	5	U	1	U	0.4	U	0.4	U	1	U	1	U
Chloroform	6	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	5	UJ	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	5	U	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	5	U	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	**5.6**		**6.1**		0.4	U	0.8		**3.1**		0.9	U
Dibromochloromethane	10	5	U	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	5	U	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	5	U	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	5	U	5	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	5	UJ	5	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	5	UJ	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	5	U	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	5	U	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	5	U	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	5	U	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	5	U	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	5	U	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP Groundwater Quality Criteria ug/L	26MW-14-02		26MW-14-03		26MW-14-04		26MWDP-04		26MW14-05		26MW14-06	
LABORATORY ID		O01		O03		O16		O17		P2414-12		P3468-03	
DATE COLLECTED		5/16/01		10/26/01		1/30/02		1/30/02		04/30/02		07/23/02	
LOCATION		SITE 26, MW-14		SITE 26, MW-14		SITE 26, MW-14		SITE 26, MW-14		SITE 26, MW-14		SITE 26, MW-14	
MATRIX		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS		ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	1	U	1.1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	1	U	0.6	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	1	U	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	1	U	0.7	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	1	U	0.4	U	0.4	U	0.4	U	1	U	1.2	
Acetone	700	5	U	2.4	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	NR		0.3	U	0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	1	U	0.4	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	1	U	0.2	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U
trans - 1,2-Dichlorethene	100	NR		0.4	U	0.4	U	0.4	U	1	U	1	U
Chloroform	6	1	U	0.3	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	1	U	0.3	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	2.8	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	1	U	0.3	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	1	U	0.3	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	1	U	0.3	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	1	U	0.4	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	NR		0.3	U	0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	1	U	0.4	U	0.4	U	0.4	U	1	U	0.9	U
Dibromochloromethane	10	1	U	0.3	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	1	U	0.3	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	1	U	0.3	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA		U	0.2	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	1	U	0.3	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	NR		1.4	U	1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	NR		1	U	1	U	1	U	NR		NR	
Tetrachloroethene	1	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	1	U	0.3	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	1	U	0.3	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	1	U	0.2	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	1	U	0.4	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	1	U	0.2	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	1	U	0.9	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-15-02		26MW-15-03		26MW-15-04		26MW-15-05		26MW-15-06	
LABORATORY ID		O02		O01		O06		P2414-16		P3468-02	
DATE COLLECTED	Groundwater	5/16/01		10/26/01		1/29/02		04/30/02		07/23/02	
LOCATION	Quality	SITE 26, MW-15		SITE 26, MW-15		SITE 26, MW-15		SITE 26, MW-15		SITE 26, MW-15	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	1	U	0.4	U	0.4	U	1	U	1.2	U
Acetone	700	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	NR		0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	1	U	0.2	U	0.2	U	1	U	1	U
cis - 1,2 -Dichloroethene	10	1	U	0.3	U	0.3	U	1	U	1	U
trans - 1,2-Dichlorethene	100	NR		0.4	U	0.4	U	1	U	1	U
Chloroform	6	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	1	U	0.3	U	0.3	U	1	U	1	U
Carbon Tetrachloride	2	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	NR		0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	1	U	0.4	U	0.4	U	1	U	0.9	U
Dibromochloromethane	10	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA		U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	NR		1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	NR		1	U	1	U	NR		NR	
Tetrachloroethene	1	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-16-02		26MW-16-03		26MW-16-04		26MW-16-05		26MW-16-06	
LABORATORY ID		O03		O02		O08		P2414-17		P3468-01	
DATE COLLECTED	Groundwater	5/16/01		10/26/01		1/29/02		04/30/02		07/23/02	
LOCATION	Quality	SITE 26, MW-16		SITE 26, MW-16		SITE 26, MW-16		SITE 26, MW-16		SITE 26, MW-16	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	1	U	0.4	U	1.2	B	1	U	1.2	U
Acetone	700	5	U	16		2.4	U	NR		NR	
Carbon Disulfide	NA	NR		0.3	U	1.5		NR		NR	
1,1-Dichlorethene	1	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	1	U	0.3	U	0.3	U	1	U	1	U
trans - 1,2-Dichlorethene	100	NR		0.4	U	0.4	U	1	U	1	U
Chloroform	6	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	NR		0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	1	U	0.4	U	0.4	U	1	U	0.9	U
Dibromochloromethane	10	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA		U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	NR		1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	NR		1	U	1	U	NR		NR	
Tetrachloroethene	1	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP Groundwater Quality Criteria ug/L	26MW-17-02		26MW-17-03		26MW-17-04		26MW-17-05		26MW-17-06	
LABORATORY ID		O04		O05		O13		P2414-15		P3468-06	
DATE COLLECTED		5/16/01		10/26/01		1/30/02		04/30/02		07/23/02	
LOCATION		SITE 26, MW-17		SITE 26, MW-17		SITE 26, MW-17		SITE 26, MW-17		SITE 26, MW-17	
MATRIX		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS		ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	1	U	0.4	U	0.4	U	1	U	1.2	U
Acetone	700	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	NR		0.3	U	0.3	U	NR		NR	
1,1-Dichlorethene	1	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	1	U	0.3	U	0.3	U	1	U	1	U
trans - 1,2-Dichlorethene	100	NR		0.4	U	0.4	U	1	U	1	U
Chloroform	6	1	U	0.3	U	0.3	U	1	U	0.8	U
1,2-Dichlorethane	2	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	NR		0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	1	U	0.4	U	0.4	U	1	U	0.9	U
Dibromochloromethane	10	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA	1	U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	NR		1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	NR		1	U	1	U	NR		NR	
Tetrachloroethene	1	1	U	0.3	U	0.3	U	1	U	1	U
Toluene	1000	1	U	0.3	U	0.3	U	1	U	1	U
1,1,2,2-Tetrachloroethane	2	1	U	0.3	U	0.3	U	1	U	0.8	U
Chlorobenzene	4	1	U	0.2	U	0.2	U	1	U	1	U
Ethylbenzene	700	1	U	0.4	U	0.4	U	1	U	1.2	U
Styrene	100	1	U	0.2	U	0.2	U	1	U	NR	
Xylenes (total)	40	1	U	0.9	U	0.9	U	1	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
NR - No result
D - Diluted
J - Estimated
UJ - Not detected, quantitation limit is approximate
R - Result rejected (see data validation report)
T - Tentitive Identified Compound
Shaded/Bolded - Exceeds NJDEP GQS
ug/L - microgram per liter

TABLE 1
NWS-Earle, Site 26
5th Quarter - AS/SVE Operation Report
Groundwater Analytical Data
Volatile Organic Compounds

SAMPLE ID	NJDEP	26MW-18-02		26MW-18-03		26MW-18-04		26MW-18-05		26MW-18-06	
LABORATORY ID		O05		O04		O12		p2414-13		p2414-13	
DATE COLLECTED	Groundwater	5/16/01		10/26/01		1/30/02		04/30/02		07/23/02	
LOCATION	Quality	SITE 26, MW-18		SITE 26, MW-18		SITE 26, MW-18		SITE 26, MW-18		SITE 26, MW-18	
MATRIX	Criteria	AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS		AQUEOUS	
UNITS	ug/L	ug/L		ug/L		ug/L		ug/L		ug/L	
COMMENTS		After 1st Qtr of AS/SVE		After 2nd Qtr of AS/SVE		After 3rd Qtr of AS/SVE		After 4TH Qtr of AS/SVE		After 5th Qtr of AS/SVE	
Chloromethane	30	1	U	1.1	U	1.1	U	1	U	1.4	U
Bromomethane	10	1	U	0.6	U	0.6	U	1	U	1.7	U
Vinyl Chloride	5	1	U	1	U	1	U	1	U	1.2	U
Chloroethane	NA	1	U	0.7	U	0.7	U	1	U	1.8	U
Methylene Chloride	2	1	U	0.4	U	0.4	U	1	U	1.2	U
Acetone	700	5	U	2.4	U	2.4	U	NR		NR	
Carbon Disulfide	NA	NR		0.3	U	0.3	U	NR	U	NR	
1,1-Dichlorethene	1	1	U	0.4	U	0.4	U	1	U	1	U
1,1-Dichlorethane	70	1	U	0.2	U	0.2	U	1	U	0.6	U
cis - 1,2 -Dichloroethene	10	1	U	0.3	U	0.3	U	1	U	1	U
trans - 1,2-Dichlorethene	100	NR		0.4	U	0.4	U	1	U	1	U
Chloroform	6	1	U	**11**		**10**		**12**		**6.8**	
1,2-Dichlorethane	2	1	U	0.3	U	0.3	U	1	U	0.6	U
2-Butanone	300	5	U	2.8	U	2.8	U	NR		NR	
1,1,1-Trichlorethane	30	1	U	0.3	U	0.3	U	1	U	0.8	U
Carbon Tetrachloride	2	1	U	0.3	U	0.3	U	1	U	0.5	U
Bromodichloromethane	1	1	U	0.3	U	0.3	U	1	U	0.9	U
1,2-Dichloropropane	1	1	U	0.4	U	0.4	U	1	U	0.8	U
cis-1,3-Dichloropropene	NA	NR		0.3	U	0.3	U	1	U	1.5	U
Trichloroethene	1	1	U	0.4	U	0.4	U	1	U	0.9	U
Dibromochloromethane	10	1	U	0.3	U	0.3	U	1	U	1.4	U
1,1,2-Trichloroethane	3	1	U	0.3	U	0.3	U	1	U	1.5	U
Benzene	1	1	U	0.3	U	0.3	U	1	U	0.6	U
trans-1,3-Dichloropropene	NA		U	0.2	U	0.2	U	1	U	NR	
Bromoform	4	1	U	0.3	U	0.3	U	1	U	1.5	U
4-Methyl-2-pentanone	400	NR		1.4	U	1.4	U	NR		NR	
2-Hexanone	NA	NR		1	U	1	U	NR		NR	
Tetrachloroethene	1	1	U	**4.6**		**2.9**		**3.8**		**7**	
Toluene	1000	1	U	0.3	U	0.3	U	5	U	1	U
1,1,2,2-Tetrachloroethane	2	1	U	0.3	U	0.3	U	5	U	0.8	U
Chlorobenzene	4	1	U	0.2	U	0.2	U	5	U	1	U
Ethylbenzene	700	1	U	0.4	U	0.4	U	5	U	1.2	U
Styrene	100	1	U	0.2	U	0.2	U	5	U	NR	
Xylenes (total)	40	1	U	0.9	U	0.9	U	5	U	3.4	U

Notes:
U - Not detected above quantitation limit
NA - No applicable standard
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