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Site 20903-5640 (White Oak)
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Addendum
Rounds 1, 2, 3, & 4
Groundwater Data
RCRA Facility Investigation
for
Site 11

Naval Surface Warfare Center
White Oak
Silver Spring, Maryland

Engineering Field Activity Chesapeake
Naval Facilities Engineering Command
Contract Number N62472-90-D-1298
Contract Task Order 0298

April 2000

TETRA TECH NUS, INC.

Section: 12.05
Site 20903-5640 (White Oak)
Doc. #: 0006

ADDENDUM
ROUNDS 1,2, 3 & 4 GROUNDWATER DATA
RCRA FACILITY INVESTIGATION
FOR
SITE 11

NAVAL SURFACE WARFARE CENTER
WHITE OAK
SILVER SPRING, MARYLAND

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

Submitted to:
Engineering Field Activity Chesapeake
Environmental Branch Code 18
Naval Facilities Engineering Command
Washington Navy Yard, Building 212
Washington, D.C. 20374-2121

Submitted by:
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APRIL 2000

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SECTION A

COMPARISON OF GROUNDWATER RESULTS FROM ROUNDS 1, 2, 3 AND 4

COMPARISON OF ROUNDS 1,2,3 AND 4 FOR SITE 11 GROUNDWATER RESULTS NSWC WHITE OAK SILVER SPRING, MARYLAND

SITE 11 – INDUSTRIAL DISPOSAL WASTEWATER AREA 100

This addendum presents the comparison of the analytical results of four rounds of groundwater samples collected in January/February, April, July/August, and October, 1999. Section D presents a within-well comparison of analytical results for the four sampling rounds. The constituent concentrations are also compared to risk-based screening levels based on USEPA Region III RBCs for tap water and USEPA primary and secondary MCLs. Figure 1 presents the groundwater sample locations and concentrations of constituents of concern for the four rounds at Site 11.

Volatile Organic Chemicals (VOCs)

Sixteen VOCs were initially detected in Round 1 samples and seven additional VOCs (1,1-dichlorobenzene, 1,1,1-trichloroethane, 1,2,4-trichlorobenzene, bromomethane, chloromethane, toluene, and xylenes) were detected in Rounds 2, 3, and 4 at concentrations below their respective screening levels. 1,1,2-Trichloroethane and bromodichloromethane were detected in Round 1 at concentrations that exceeded screening levels but were not detected in any subsequent rounds.

The comparisons provided in Section D indicate that very little change has occurred in VOC concentrations within individual wells for samples collected in the four sampling rounds. The highest concentrations of most VOCs exceeding screening levels were reported in Monitoring Well 11GW110 in all four rounds. The highest concentration of tetrachloroethene (PCE) was detected in Well 11GW28 in all four rounds.

In summary, little change was noted regarding VOC detections or concentrations throughout the four sampling rounds. No new potential constituents of concern (PCOCs) were added in Rounds 2, 3 and 4 and several VOCs initially selected as PCOCs in Round 1 were not detected in later rounds.

Semivolatile Organic Chemicals (SVOCs)

No SVOCs were reported in groundwater in Round 1 but five SVOCs (benzo(a) anthracene, di-n-octyl phthalate, fluoranthene, pyrene, and 4-methylphenol) were detected in Rounds 2 and 3. The maximum concentration of benzo(a)anthracene detected in Round 2 exceeded its screening level. However, no

SVOCs were detected in samples collected in Round 4. Overall, the analytical results for SVOCS in groundwater at Site 11 remained constant over the four sampling rounds.

Pesticides/PCBs

Two pesticides, alpha-chlordane and gamma-chlordane, were detected in 1 of 36 samples in Round 1 with the concentration of alpha-chordane exceeding its screening level. Heptachlor epoxide was detected in Round 2 in one sample at a concentration exceeding its screening level. No new pesticides were detected in Rounds 3 and 4. All pesticide detections occurred in Monitoring Well 11GW27. Alpha-chlordane and gamma-chlordane were detected in all four rounds at similar concentrations but heptachlor epoxide was only detected in Round 2. Therefore, the analytical results indicate that very little change has occurred in pesticide concentrations within individual wells over the four sampling rounds.

Explosives

One explosive, 2,4-dinitrotoluene, was detected in Round 1 in Wells 11GW109 and 11GW29 and one explosive, tetryl, was detected in Round 2 in Well 11GW109. The concentrations of both compounds were below screening levels. No explosives were detected in any samples in Rounds 3 and 4. Therefore, no explosives are considered as potential constituents of concern in groundwater at Site 11.

Perchlorate

Perchlorate was detected in 8 of 36 samples in Round 1 at concentrations exceeding the health-based action level. Analysis for perchlorate was not performed in Round 2. In general, perchlorate concentrations did not change significantly in later rounds. However, within several individual wells, the concentrations of perchlorate showed considerable variability over Rounds 1, 3 and 4, as shown in Section D. For example, perchlorate was detected at a concentration of 58.5 µg/L in Sample 11GW111 in Round 1, but was not detected in Rounds 3 and 4. In contrast, perchlorate was not detected in Round 1 in Well 11GW24 but was detected in Rounds 3 and 4 at concentrations of 110 and 96 µg/L, respectively. Despite this variability in individual wells, perchlorate remained a risk driver in all rounds and the maximum concentrations did not vary greatly among Rounds 1, 3 and 4.

Inorganics

Twenty-three metals were detected in groundwater at Site 11 in all four rounds. The concentrations of eleven of these metals were statistically determined be within naturally occurring levels by the Wilcoxon Rank Sum Test. The metals found to be within naturally occurring levels at Site 11 are: aluminum, arsenic, barium, beryllium, chromium, copper, iron, lead, nickel, vanadium, and zinc. Cadmium and antimony were not detected in Round 1 but were detected in later rounds. The maximum concentrations

of cadmium exceeded the risk-based screening levels in Rounds 2, 3 and 4. Antimony was detected in Round 4 with the maximum concentration exceeding the screening level but it was not detected in any samples in Rounds 2 and 3.

The concentrations of most metals showed little variation within wells over the four sampling rounds with the exception of aluminum and iron. However, these metals had been shown to be within background levels. Cobalt and selenium concentrations in Well 11PZ63 slightly exceeded screening levels in Round 3 but the concentrations of these constituents were well below the screening levels in Rounds 1, 2 and 4.

In summary, the occurrence and concentrations of inorganics show little change over time. Cadmium and antimony, which were not detected in Round 1 samples, were detected in Rounds 2, 3 and 4 but at concentrations less than the Region III RBCs for tap water. Therefore, their omission from the list of potential constituents of concern does not alter the conclusions regarding potential risk.

Deep Monitoring Wells

Five deep monitoring wells were installed at Site 11 for the 1999 field investigation (Wells 11GW106, 11GW107, 11GW108, 11GW109, and 11GW110). The analytical results for these wells (Section D) indicate that a number VOCs (chloroform, 1,2-dichloroethane, cis-1,2-dichloroethene and TCE) were detected in all four rounds at concentrations similar to those found in the shallow wells at Site 11. However, the concentrations of chloroform, 1,2-dichloroethane, cis-1,2-dichloroethene and TCE in Well 11GW110 were among the highest reported at Site 11. Concentrations of VOCs in the other deep wells were less than screening levels and generally similar to those reported in the shallow wells. No SVOCs or pesticides were detected in deep wells at Site 11. Two explosives, 2,4-dinitrotoluene (Round 1) and tetryl (Round 2) were detected in deep well 11GW109 at concentrations below their screening levels. The analytical results for explosives in the deep wells at Site 11 are similar to those in the shallow wells. Perchlorate was detected in two deep wells at Site 11 (Well 11GW108 and 11GW110) in Rounds 1, 3 and 4 at concentrations exceeding the health-based action level for perchlorates. The perchlorate concentrations in the deep wells were within the range of concentrations found in the shallow wells.

SECTION B

TABLES

COMPARISON OF MAXIMUM GROUNDWATER RESULTS FROM ROUNDS 1, 2, 3 AND 4

TABLE 1

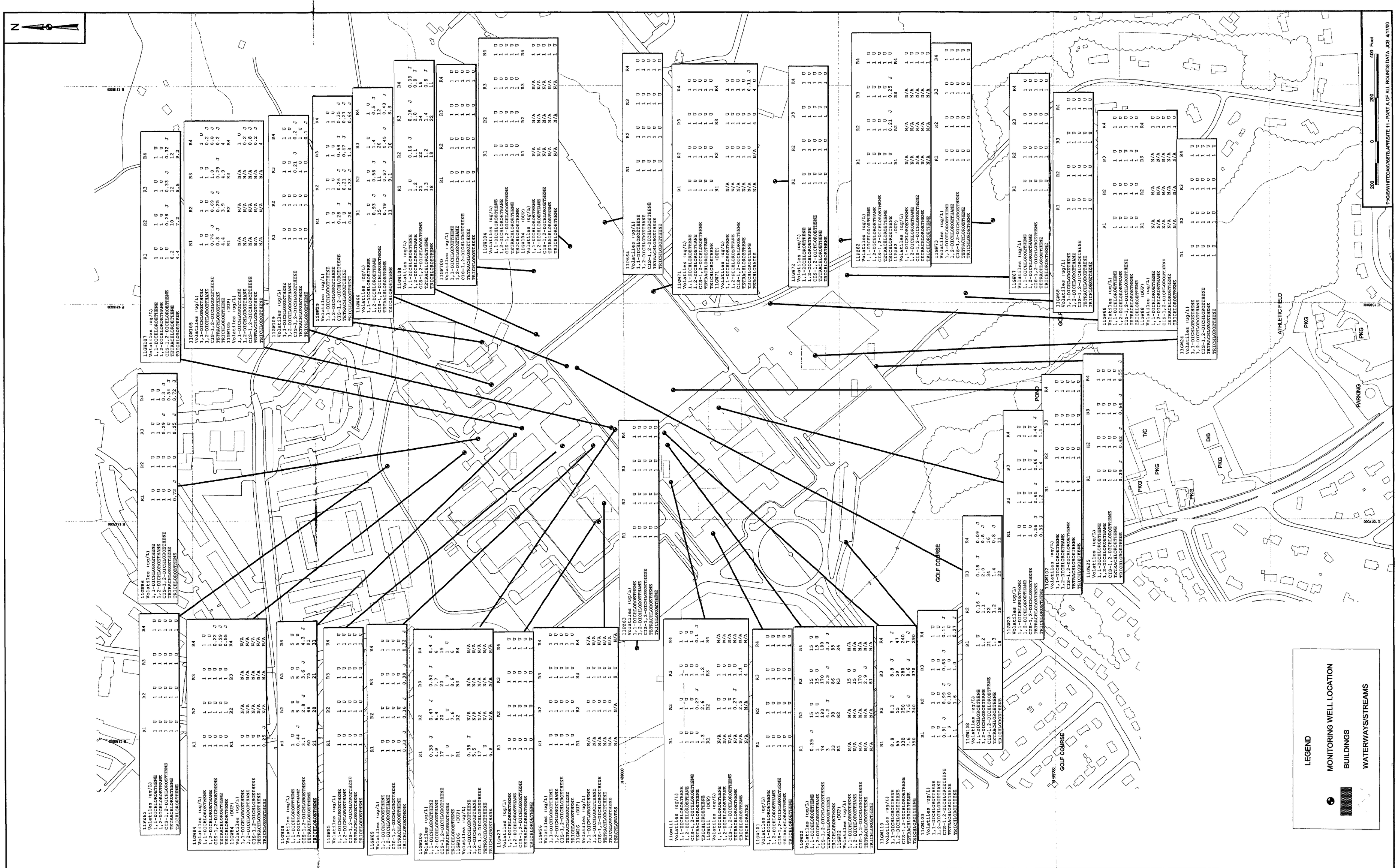
COMPARISON OF ROUNDS 1,2,3 and 4
SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND

Parameter	First Round Maximum (µg/L)	Second Round Maximum (µg/L)	Third Round Maximum (µg/L)	Fourth Round Maximum (µg/L)	Risk-Based Screening Level (µg/L)
VOLATILES					
1,1,1-TRICHLOROETHANE	NA	0.25	0.33	0.13	54
1,1,2-TRICHLOROETHANE	1	NA	NA	NA	0.19
1,1-DICHLOROETHANE	21	17	19	15	80
1,1-DICHLOROETHENE	8.8	8.1	8.8	7	0.044
1,2-DICHLOROBENZENE	NA	NA	NA	0.11	55
1,3-DICHLOROBENZENE	0.55	0.55	0.57	0.47	0.55
1,4-DICHLOROBENZENE	0.79	0.85	1.1	0.82	0.47
1,2,4-TRICHLOROBENZENE	NA	NA	0.37	0.14	19
1,2-DICHLOROETHANE	65	55	59	47	0.12
ACETONE	3.1	1.8	5.3	NA	61
BROMODICHLOROMETHANE	0.38	NA	NA	NA	0.17
BROMOMETHANE	NA	NA	0.37	NA	0.85
CARBON TETRACHLORIDE	5.2	0.51	4.6	4	0.16
CHLOROBENZENE	1.8	2.5	3.8	1.8	11
CHLOROFORM	18	16	18	14	0.15
CHLOROMETHANE	NA	NA	0.26	NA	2.1
CIS-1,2-DICHLOROETHENE	330	250	280	240	6.1
METHYLENE CHLORIDE	0.5	NA	6.8	NA	4.1
TETRACHLOROETHENE	60	66	75	81	1.1
TOLUENE	NA	0.17	NA	1.6	75
TRANS-1,2-DICHLOROETHENE	2.5	0.25	0.34	NA	12
TRICHLOROETHENE	390	340	370	290	1.6
XYLENES, TOTAL	NA	11	NA	NA	1200
SEMIVOLATILES					
4-METHYLPHENOL	NA	NA	5.7	NA	18
BENZO(A)ANTHRACENE	NA	1.1	NA	NA	0.092
DI-N-OCTYL PHTHALATE	NA	4.6	NA	NA	73
FLUORANTHENE	NA	1.9	NA	NA	150
PYRENE	NA	1.5	NA	NA	18
PESTICIDES/PCBS					
ALPHA-CHLORDANE	0.12	0.2	0.15	0.17	0.19
GAMMA-CHLORDANE	0.1	0.16	0.13	0.14	0.19
HEPTACHLOR EPOXIDE	NA	0.068	NA	NA	0.0074
EXPLOSIVES					
2,4-DINITROTOLUENE	0.29	NA	NA	NA	7.3
TETRYL	NA	0.25	NA	NA	37
INORGANICS					
ALUMINUM	60700	71900	135000	60900	3700
ANTIMONY	NA	NA	NA	7.1	1.5
ARSENIC	17.2	15.1	50.2	14.4	0.045
BARIUM	794	467	1130	430	260
BERYLLIUM	13	11	91.1	40.1	7.3
CADMIUM	NA	5.8	9.2	7.9	3.7
CALCIUM	50800	49100	35000	63400	NA
CHROMIUM	617	608	556	545	11
COBALT	198	157	289	74.5	220
COPPER	4260	3530	3540	3470	150
CYANIDE	4.5	2.7	NA	3.4	73
IRON	160000	116000	1550000	850000	1100
LEAD	53.1	54.8	183	64.3	15
MAGNESIUM	26400	21700	60800	20800	NA
MERCURY	1.9	1.1	2	1	1.1
NICKEL	174	171	436	171	73
POTASSIUM	10700	22400	40800	17200	NA
SELENIUM	10.1	2.7	28	6.1	18
SILVER	3.8	NA	28.9	NA	18
SODIUM	53300	448000	425000	47400	NA
THALLIUM	5.5	NA	7.6	NA	0.26
VANADIUM	140	146	255	115	26
ZINC	463	415	2110	901	1100
PERCHLORATES	84.7	NA	190	130	NA

SECTION C

FIGURES

SUMMARY OF EXCEEDENCES OF REGION 3 RBCS FOR ROUNDS 1, 2, 3 AND 4



NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES	NO.	RELEASED FOR	BY	DATE

DRAWN BY J. BELLONE DATE 4/11/00
CHECKED BY
COST/SCHEDULE-AREA
SCALE AS NOTED

Tetra Tech NUS, Inc.

CONSTITUENTS I N GROUNDWATER
THAT EXCEED SCREENING CRITERIA
ROUNDS 1 THROUGH 4
SITE 11 - INDUSTRIAL DISPOSAL WASTEWATER AREA 100
NSWC WHITE OAK
SILVER SPRING, MARYLAND

CONTRACT NO. 7687
OWNER NO.
APPROVED BY
DATE 4/18/00
APPROVED BY
DATE
DRAWING NO. FIGURE 1-1
REV. 0

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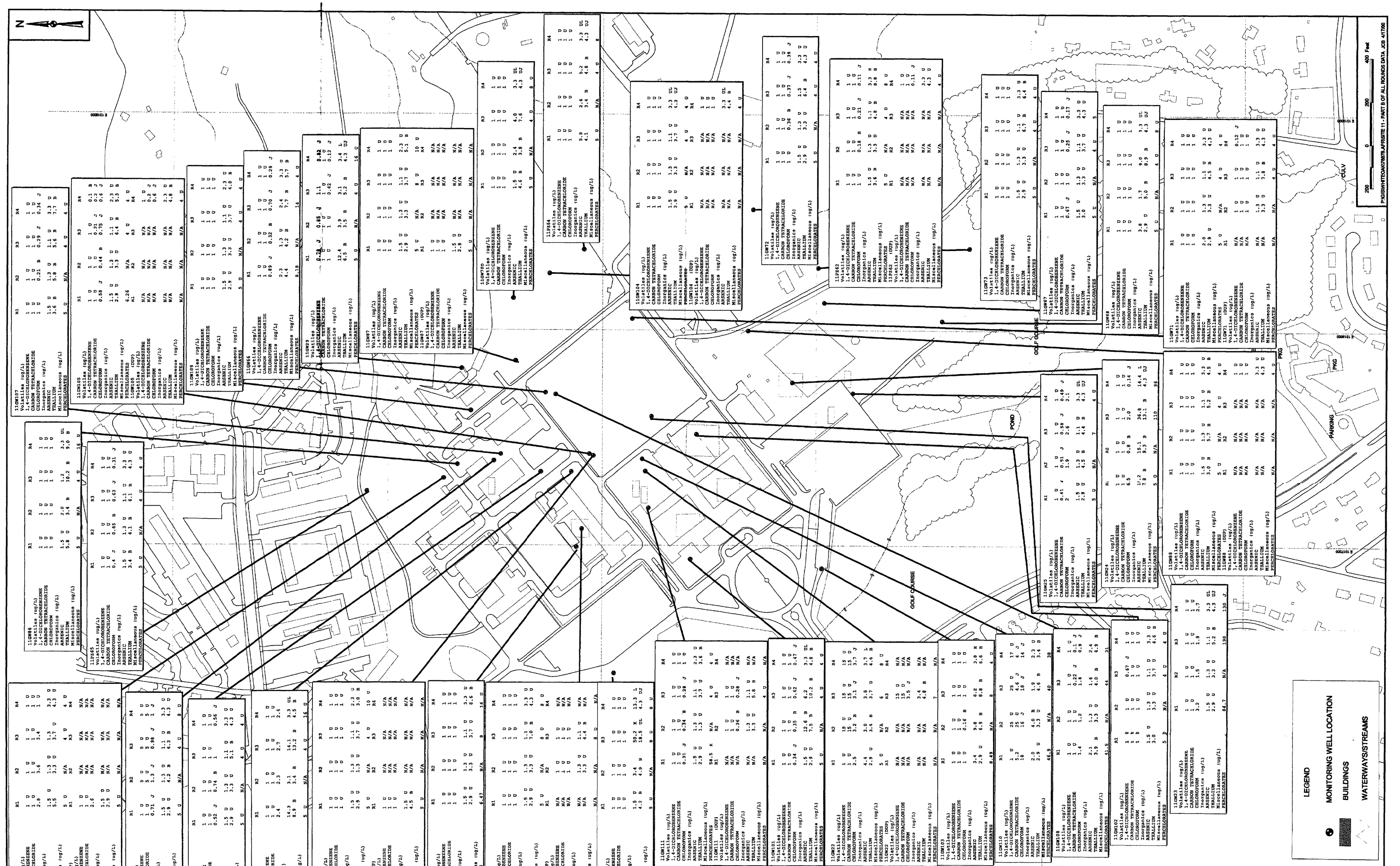

DRAWN BY J. BELLONE DATE 4/11/00
CHECKED BY DATE
COST/SCHEDULE-AREA
SCALE AS NOTED

Tetra Tech NUS, Inc.

CONSTITUENTS I N GROUNDWATER
THAT EXCEED SCREENING CRITERIA
ROUNDS 1 THROUGH 4
SITE 11 - INDUSTRIAL DISPOSAL WASTEWATER AREA 100
NSWC WHITE OAK
SILVER SPRING, MARYLAND

CONTRACT NO. 7687
OWNER NO.
APPROVED BY
DATE 4/18/00
APPROVED BY
DATE
DRAWING NO. FIGURE 1-2
REV. 0

SECTION D

WITHIN-WELL COMPARISON OF ANALYTICAL DATA FOR ROUNDS 1, 2, 3 AND 4

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW101
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW101 1 11GW1010001 2/3/99	11GW101 2 11GW1010002 4/12/99	11GW101 3 11GW1010003 7/13/99	11GW101 4 11GW1010004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.5 B	0.88 B	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	0.34 J	0.35 B	0.42 J	0.47 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5.2 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5.2 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5.2 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5.2 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5.2 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 UL	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 UL	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 UL	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 U	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	633	47600	28200 J	9180 K	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW101
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW101 1 11GW1010001 2/3/99	11GW101 2 11GW1010002 4/12/99	11GW101 3 11GW1010003 7/13/99	11GW101 4 11GW1010004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	12.6 B	6.2	3.3 UL	50	0.045	C
BARIUM	78.8	258	128	64.8	2000	260	N
BERYLLIUM	0.92 B	11.0	4.7	2.6	4	7.3	N
CADMIUM	5.7 B	3.0 UL	3.6 J	1.8 K	5	3.7	N
CALCIUM	7760	9100	6590	4470	N/A	N/A	
CHROMIUM	2.3 UL	74.1	33.0 J	9.5 L	100	11	N
COBALT	30.9	75.5	32.9	15.6	N/A	220	N
COPPER	29.7	159	66.5	22.6	1300	150	N
CYANIDE	10.0 U	2.5 U	2.9 B	3.0 U	200	73	N
IRON	1850	106000	43700 J	14400	300	1100	N
LEAD	5.3 B	29.3	9.6	3.4 L	15	15	
MAGNESIUM	4090	19300	9010	4080	N/A	N/A	
MANGANESE	715	1440	616	338	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.05 U	2	1.1(a)	N
NICKEL	19.4	81.2	53.6	21.5	100	73	N
POTASSIUM	3560	21900	10100	4370	N/A	N/A	
SELENIUM	2.5 U	4.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	1.9 UJ	100	18	N
SODIUM	11800	11400	405000	7950	N/A	N/A	
THALLIUM	2.9 U	7.5 B	10.2 B	4.8 B	2	0.26	N
VANADIUM	4.2 B	77.2	30.2	11.3	N/A	26	N
ZINC	53.7 B	415	255	87	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	860				N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	N/A	N/A	
PH	4.81				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.162				N/A	N/A	
TEMPERATURE	15				N/A	N/A	
TURBIDITY	999				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Nc ıable
**All RB es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW102
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW102 1 11GW1020001 2/3/99	11GW102 2 11GW1020002 4/13/99	11GW102 3 11GW1020003 7/14/99	11GW102 4 11GW1020004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	0.67 J	1 U	75	0.47	C
ACETONE	2 B	5 UR	2.9 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.18 J	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	0.17 J	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	6 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	6 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	6 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	6 U	N/A	150	N
PYRENE	5 U	5 U	5 U	6 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.051 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.051 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.051 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				200 J	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	5240	291	1280 J	1040	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW102
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW102 1 11GW1020001 2/3/99	11GW102 2 11GW1020002 4/13/99	11GW102 3 11GW1020003 7/14/99	11GW102 4 11GW1020004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 U	50	0.045	C
BARIUM	42.8	11.9	17.4	18.0	2000	260	N
BERYLLIUM	0.70 B	0.20 B	0.24 B	0.30 U	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 U	0.53 K	5	3.7	N
CALCIUM	1950	1900	1630	1320	N/A	N/A	
CHROMIUM	6.8 L	3.0 UL	2.4 U	1.2 U	100	11	N
COBALT	14.4 B	5.4	7.8	7.4	N/A	220	N
COPPER	21.5	6.9 B	10.1	5	1300	150	N
CYANIDE	10.0 U	2.5 U	1.4 U	10.0 U	200	73	N
IRON	7680	592	2200 J	1380	300	1100	N
LEAD	14.3	0.92 U	1.0 UL	1.7 UL	15	15	
MAGNESIUM	2340	1080	1390	1140	N/A	N/A	
MANGANESE	291	134	185	189	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.20 U	2	1.1(a)	N
NICKEL	7.5 U	5.9 U	8.8 U	2.4	100	73	N
POTASSIUM	2180 B	1170	1870	1110	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	1.9 U	100	18	N
SODIUM	2910	2900	2660	2710	N/A	N/A	
THALLIUM	3.0	3.3 U	3.7 U	4.6 B	2	0.26	N
VANADIUM	6.3 B	5.1 U	2.4 U	1.4 U	N/A	26	N
ZINC	41.4 B	29.8	28.3	11.4 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	4380				N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	N/A	N/A	
PH	4.95				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.042				N/A	N/A	
TEMPERATURE	14.7				N/A	N/A	
TURBIDITY	22				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - No[illegible]able
**All RB[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW103
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW103 1 11GW1030001 2/3/99	11GW103 2 11GW1030002 4/12/99	11GW103 3 11GW1030003 7/14/99	11GW103 4 11GW1030004 10/13/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	5 UR	5 UR	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	1 U	0.16 B	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	0.91 J	0.99 J	0.63 J	0.11 J	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	0.18 J	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1.1	1.6	1.0	0.27 J	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5.2 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5.2 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5.2 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5.2 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5.2 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 UJ	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	15700	71900	39500 J	15800	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW103
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW103 1 11GW1030001 2/3/99	11GW103 2 11GW1030002 4/12/99	11GW103 3 11GW1030003 7/14/99	11GW103 4 11GW1030004 10/13/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	3.4	9.8	6.2	3.8 K	50	0.045	C
BARIUM	181	467	377	122	2000	260	N
BERYLLIUM	1.3 B	6.6	4.2	1.3 B	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 U	0.50 U	5	3.7	N
CALCIUM	6220	6610	6100	4040	N/A	N/A	
CHROMIUM	25.7	114	73.4 J	21.9	100	11	N
COBALT	78.8	157	127	45.4	N/A	220	N
COPPER	27.5	75.0	60.0	13.6	1300	150	N
CYANIDE	10.0 U	2.5 U	1.4 U	10.0 U	200	73	N
IRON	22700	88900	52900 J	16200	300	1100	N
LEAD	12.7	37.4	22.6	5.6 L	15	15	
MAGNESIUM	5570	16800	10800	4740	N/A	N/A	
MANGANESE	5240	5350	4880	3600	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.20 U	2	1.1(a)	N
NICKEL	71.9	171	132	63.6	100	73	N
POTASSIUM	10100	22400	15100	8260	N/A	N/A	
SELENIUM	2.6 K	2.6 K	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	1.9 U	100	18	N
SODIUM	6170	7800	6050	5280	N/A	N/A	
THALLIUM	2.9 U	6.9 B	8.8 B	6.6 B	2	0.26	N
VANADIUM	15.1 B	79.5	43.6	16.2	N/A	26	N
ZINC	77.4	269	164	51.1	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	3080				N/A	N/A	
PERCHLORATES	8.49		8	4 U	N/A	N/A	
PH	5.68				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.131				N/A	N/A	
TEMPERATURE	15.8				N/A	N/A	
TURBIDITY	999				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Nc [illegible] able
**All RB[illegible] es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW104
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION:	11GW104	11GW104	11GW104	11GW104	11GW104	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ROUND:	1	2	3	4	4			
SAMPLE I.D.:	11GW1040001	11GW1040002	11GW1040003	11GW1040004	11GW1040004-D			
SAMPLE DATE:	2/4/99	4/13/99	7/14/99	10/11/99	10/11/99			
ASSOCIATED DUPLICATE:				11GW1040004-D	11GW1040004			
VOLATILES (µg/L)								
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.7 B	5 UR	5 UR	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)								
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)								
ALPHA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.052 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)								
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)								
TPH-DIESEL				240	140	N/A	N/A	
INORGANICS (µg/L)								
ALUMINUM	174 B	139	794 J	8970 K	8430 K	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.7 UJ	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW104
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW104 1 11GW1040001 2/4/99	11GW104 2 11GW1040002 4/13/99	11GW104 3 11GW1040003 7/14/99	11GW104 4 11GW1040004 10/11/99 11GW1040004-D	11GW104 4 11GW1040004-D 10/11/99 11GW1040004	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 UL	3.3 UL	50	0.045	C
BARIUM	29.1	40.3	41.8	106	105	2000	260	N
BERYLLIUM	0.53 B	0.70 B	0.94 B	2.9	3.0	4	7.3	N
CADMIUM	3.5 B	3.0 UL	3.0 U	0.49 U	0.49 U	5	3.7	N
CALCIUM	6200	6640	6950	6750	6910	N/A	N/A	
CHROMIUM	2.3 UL	3.0 UL	2.8 J	13.3 L	11.7 L	100	11	N
COBALT	11.7 B	16.0	17.5	26.2	26.4	N/A	220	N
COPPER	3.8	5.6 B	8.3	29.4	27.9	1300	150	N
CYANIDE	10.0 U	2.5 U	1.4 U	3.0 U	3.0 U	200	73	N
IRON	1180	860	2520 J	17700	16500	300	1100	N
LEAD	1.4 B	0.92 U	1.0 UL	6.4	5.1 L	15	15	
MAGNESIUM	4140	4140	4300	6090	5860	N/A	N/A	
MANGANESE	754	713	740	819	830	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.05 U	0.05 U	2	1.1(a)	N
NICKEL	21.1	28.6	36.0	56.5	54.3	100	73	N
POTASSIUM	3910	4360	4290	6650	6410	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	1.9 UJ	1.9 UJ	100	18	N
SODIUM	14500	14100	12800	11300	11500	N/A	N/A	
THALLIUM	2.9 U	3.3 U	3.7 U	4.3 UJ	4.4 B	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.4 U	10.8	9.9	N/A	26	N
ZINC	50.6 B	77.8	77.3	133	132	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)								
AMMONIA				300	300	N/A	21	N
DISSOLVED OXYGEN	4200					N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	4 U	N/A	N/A	
PH	5.4					N/A	N/A	
SALINITY	0					N/A	N/A	
SPECIFIC CONDUCTIVITY	0.126					N/A	N/A	
TEMPERATURE	13.7					N/A	N/A	
TURBIDITY	14					N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Nc [illegible] lable
**All RB[illegible] [illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW105
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW105 1 11GW1050001 2/8/99	11GW105 2 11GW1050002 4/8/99	11GW105 3 11GW1050003 7/14/99	11GW105 4 11GW1050004 10/18/99 11GW1050004-D	11GW105 4 11GW1050004-D 10/18/99 11GW1050004	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)								
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	0.2 J	0.2 J	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	0.1 B	1 U	75	0.47	C
ACETONE	5 UR	5 UR	5 UR	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	0.21 J	0.2 J	0.2 J	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	0.58 J	0.44 B	0.75 J	0.6 J	0.6 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	0.76 J	0.69 J	1.0	0.8 J	0.8 J	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	0.3 B	0.3 B	5	4.1	C
TETRACHLOROETHENE	0.3 J	0.25 J	0.29 J	0.2 J	0.2 J	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	4.4	3.9	4.9	4	4	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)								
4-METHYLPHENOL	5 U	5.3 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5.3 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5.3 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5.3 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5.3 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)								
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)								
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)								
TPH-DIESEL				100 U	100 U	N/A	N/A	
INORGANICS (µg/L)								
ALUMINUM	58.0 B	460	145 J	48.3 B	77.0 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	2.2 U	2.2 U	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW105
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW105 1 11GW1050001 2/8/99	11GW105 2 11GW1050002 4/8/99	11GW105 3 11GW1050003 7/14/99	11GW105 4 11GW1050004 10/18/99 11GW1050004-D	11GW105 4 11GW1050004-D 10/18/99 11GW1050004	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	2.3 U	2.3 U	50	0.045	C
BARIUM	38.7	43.9	52.5	53.0	51.4	2000	260	N
BERYLLIUM	0.20 B	0.14 B	0.17 B	0.19 B	0.17 B	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 U	1.3 B	1.4 B	5	3.7	N
CALCIUM	6730	7180	7510	6700	6490	N/A	N/A	
CHROMIUM	4.1 B	10.3 L	3.1 J	5.7 B	6.7 B	100	11	N
COBALT	8.7	7.2	24.1	2.2 B	2.0 B	N/A	220	N
COPPER	2.4 UL	15.4 B	2.4 B	1.6	4.1	1300	150	N
CYANIDE	2.7 U	2.5 U	1.4 U	1.3 U	1.5	200	73	N
IRON	48.2 L	1110	258 J	41.1 B	89.8 B	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.1 U	1.1 U	15	15	
MAGNESIUM	3400	3880	4420	3960	3820	N/A	N/A	
MANGANESE	287	278	225	190	186	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.20 UL	0.20 UL	2	1.1(a)	N
NICKEL	17.4	15.4	13.0	15.3	14.7	100	73	N
POTASSIUM	3100	2670	2310	2310	2220	N/A	N/A	
SELENIUM	2.9 B	2.0 U	2.7 U	3.5 U	3.5 U	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	0.60 U	0.60 U	100	18	N
SODIUM	13500	14100	15100	15100	14500	N/A	N/A	
THALLIUM	2.9 U	3.3 U	6.4 B	5.3 B	4.8 B	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.4 U	0.60 U	0.60 U	N/A	26	N
ZINC	21.2	51.8	40.7	20.4 K	21.6 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)								
AMMONIA				200 U	200 U	N/A	21	N
DISSOLVED OXYGEN	2600					N/A	N/A	
PERCHLORATES	6.26		4 U	4 U	4 U	N/A	N/A	
PH	6.22					N/A	N/A	
SALINITY	0					N/A	N/A	
SPECIFIC CONDUCTIVITY	0.215					N/A	N/A	
TEMPERATURE	19.6					N/A	N/A	
TURBIDITY	4.7					N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]able
**All RB[illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW106
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION:	11GW106	11GW106	11GW106	11GW106	11GW106	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ROUND:	1	1	2	3	4			
SAMPLE I.D.:	11GW1060001	11GW1060001-D	11GW1060002	11GW1060003	11GW1060004			
SAMPLE DATE:	2/8/99	2/8/99	4/8/99	7/14/99	10/18/99			
ASSOCIATED DUPLICATE:	11GW1060001-D	11GW1060001						
VOLATILES (µg/L)								
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1.4	1.5	1.6	1.8	1	N/A	80	N
1,1-DICHLOROETHENE	0.38 J	0.38 J	0.47 J	0.52 J	0.4 J	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	4.9	5.5	6.4	7.7	6	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2 J	1.9 J	5 UR	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	17	17	20	20	19	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	0.2 B	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	7	6.9	7.6	8.6	6	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)								
4-METHYLPHENOL	5 U	5 U	5.4 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5.4 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5.4 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5.4 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5.4 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)								
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)								
2,4-DINITROTOLUENE	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)								
TPH-DIESEL					100 U	N/A	N/A	
INORGANICS (µg/L)								
ALUMINUM	134 B	139 B	239	254 J	215 B	50-200	3700	N
ANTIMONY	1.9 U	1.9 U	34.2 UL	1.7 UL	2.2 U	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW106
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW106 1 11GW1060001 2/8/99 11GW1060001-D	11GW106 1 11GW1060001-D 2/8/99 11GW1060001	11GW106 2 11GW1060002 4/8/99	11GW106 3 11GW1060003 7/14/99	11GW106 4 11GW1060004 10/18/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.5 U	1.3 U	1.1 U	2.3 U	50	0.045	C
BARIUM	84.2	82.8	95.3	74.9	68.1	2000	260	N
BERYLLIUM	0.15 B	0.27 B	0.20 B	0.14 B	0.17 B	4	7.3	N
CADMIUM	2.7 U	2.7 UL	3.0 UL	3.0 U	0.20 U	5	3.7	N
CALCIUM	50300	50800	45500	33800	24100	N/A	N/A	
CHROMIUM	2.3 U	2.3 U	3.0 UL	2.4 U	0.80 U	100	11	N
COBALT	3.3 U	3.3 U	2.5 U	3.8 U	0.60 U	N/A	220	N
COPPER	2.4 UL	2.4 UL	2.4 U	1.4 U	0.70 U	1300	150	N
CYANIDE	4.5	2.7 U	2.5 U	1.4 U	1.3 U	200	73	N
IRON	3050	2860	3260	3200 J	3060	300	1100	N
LEAD	1.0 U	1.0 U	0.92 U	1.0 UL	1.1 U	15	15	
MAGNESIUM	4670	4560	5200	5080	4870	N/A	N/A	
MANGANESE	242	240	265	284	311	50	73	N
MERCURY	0.20 U	0.20 U	0.10 U	0.10 UJ	0.20 UL	2	1.1(a)	N
NICKEL	7.5 U	7.5 U	5.9 U	8.8 U	2.4	100	73	N
POTASSIUM	4610	4880	5290	4110	4110	N/A	N/A	
SELENIUM	3.5 B	3.7 B	2.0 U	2.7 U	3.5 U	50	18	N
SILVER	2.8 U	2.8 U	3.3 U	2.2 U	0.60 U	100	18	N
SODIUM	8680	8420	8660	7920	8050	N/A	N/A	
THALLIUM	2.9 U	4.5 B	3.3 U	3.7 U	3.0 B	2	0.26	N
VANADIUM	10.6 B	9.7 B	12.6	6.9	11.6	N/A	26	N
ZINC	6.9 B	8.1 B	3.4	5.4 B	1.6 B	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)								
AMMONIA					200 U	N/A	21	N
DISSOLVED OXYGEN	2160					N/A	N/A	
PERCHLORATES	5 U	5 U		4 U	10 U	N/A	N/A	
PH	9.86					N/A	N/A	
SALINITY	0.01					N/A	N/A	
SPECIFIC CONDUCTIVITY	0.338					N/A	N/A	
TEMPERATURE	16.3					N/A	N/A	
TURBIDITY	38.4					N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]able
**All RB[illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW107
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW107 1 11GW1070001 2/8/99	11GW107 2 11GW1070002 4/13/99	11GW107 3 11GW1070003 7/16/99	11GW107 4 11GW1070004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	0.25 J	0.23 J	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.4 J	1.8 L	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	1 U	0.21 B	0.29 J	0.34 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	0.26 J	0.33 J	0.32 J	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	6.2	10	12	12	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	4.4	7.2	8.5	9.2	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 UJ	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	132 B	54.2	66.8 J	83.6 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW107
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW107 1 11GW1070001 2/8/99	11GW107 2 11GW1070002 4/13/99	11GW107 3 11GW1070003 7/16/99	11GW107 4 11GW1070004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 U	50	0.045	C
BARIUM	35.6	33.6	37.6	38.4	2000	260	N
BERYLLIUM	0.23 B	0.14 B	0.24 B	0.30 U	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 UL	0.50 U	5	3.7	N
CALCIUM	6210	6680	6380	6120	N/A	N/A	
CHROMIUM	2.9 B	3.0 UL	2.4 U	1.2 U	100	11	N
COBALT	3.3 U	2.5 U	7.3	1.5	N/A	220	N
COPPER	2.4 UL	5.6	3.4	1.3 U	1300	150	N
CYANIDE	2.7 U	1.1 U	1.4 U	10.0 U	200	73	N
IRON	253	74.7 K	22.3 J	34.6 K	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.7 UL	15	15	
MAGNESIUM	4100	3990	4280	3870	N/A	N/A	
MANGANESE	43.1	33.6	20.7	21.1	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.05	2	1.1(a)	N
NICKEL	14.0	8.1	12.7 K	11.2	100	73	N
POTASSIUM	2550 B	2040	2380	2140	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 U	100	18	N
SODIUM	12200	12300	12400 J	11900	N/A	N/A	
THALLIUM	3.6 B	5.8 B	5.6 B	7.7 B	2	0.26	N
VANADIUM	2.4 B	5.1 U	2.4 U	1.4 U	N/A	26	N
ZINC	20.4	34.0	17.0 B	9.3 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	4780				N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	N/A	N/A	
PH	5.23				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.146				N/A	N/A	
TEMPERATURE	17.7				N/A	N/A	
TURBIDITY	2				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - No[illegible]able
**All RB[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW108
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW108 1 11GW1080001 2/8/99	11GW108 2 11GW1080002 4/8/99	11GW108 3 11GW1080003 7/14/99	11GW108 4 11GW1080004 10/18/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	0.64 J	0.6 J	0.80 J	0.4 J	N/A	80	N
1,1-DICHLOROETHENE	1 U	0.16 J	0.18 J	0.09 J	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1.2	1.1	2.0	0.8 J	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.9 J	5 UR	2.8 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	0.22 J	0.1 J	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.28 J	1 U	100	11	N
CHLOROFORM	1.4	1.2	1.8	0.9 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	21	22	34	16	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	0.2 B	5	4.1	C
TETRACHLOROETHENE	1.3	1.2	1.4	0.8 J	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	0.25 J	0.34 J	1 U	100	12	N
TRICHLOROETHENE	18	18	22	11	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5.3 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5.3 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5.3 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5.3 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5.3 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 U	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	47.2 B	53.9 B	49.5 J	27.2 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	2.7	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW108
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW108 1 11GW1080001 2/8/99	11GW108 2 11GW1080002 4/8/99	11GW108 3 11GW1080003 7/14/99	11GW108 4 11GW1080004 10/18/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	2.1	1.3 U	1.6	2.4	50	0.045	C
BARIUM	14.7	11.6	10.6	10.2	2000	260	N
BERYLLIUM	0.13 B	0.19 B	0.22 B	0.48 B	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 U	0.29 B	5	3.7	N
CALCIUM	7360	5810	4220	2920	N/A	N/A	
CHROMIUM	5.6 B	3.0 UL	2.4 U	3.0 B	100	11	N
COBALT	3.3 U	4.4	11.0	0.60 U	N/A	220	N
COPPER	2.4 UL	4.0 B	3.7 B	0.70 U	1300	150	N
CYANIDE	2.7 U	2.5 U	2.2 B	2.4	200	73	N
IRON	2.0 UL	113	54.6 J	48.8 B	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.1 U	15	15	
MAGNESIUM	1250	1160	1190	1070	N/A	N/A	
MANGANESE	2.4 B	2.7	2.6 B	4.1 B	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.20 UL	2	1.1(a)	N
NICKEL	7.5 U	5.9 U	8.8 U	3.4	100	73	N
POTASSIUM	1710 B	1480	1090	1060	N/A	N/A	
SELENIUM	3.3 B	2.0 U	2.7 U	3.5 U	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	0.60 U	100	18	N
SODIUM	6100	6060	5510	5270	N/A	N/A	
THALLIUM	3.9 B	3.3 U	4.0 B	4.9 B	2	0.26	N
VANADIUM	8.4 B	5.1 U	2.4 U	1.2 B	N/A	26	N
ZINC	9.0 B	36.7	4.6 B	10.3 B	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	5890				N/A	N/A	
PERCHLORATES	41.5		44	31	N/A	N/A	
PH	6.45				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.078				N/A	N/A	
TEMPERATURE	14.8				N/A	N/A	
TURBIDITY	1.3				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]lable
**All RB[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW109
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW109 1 11GW1090001 2/8/99	11GW109 2 11GW1090002 4/16/99	11GW109 3 11GW1090003 7/13/99	11GW109 4 11GW1090004 10/18/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.5 J	5 UR	2.6 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.18 J	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	0.21 J	0.2 J	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	0.2 B	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	0.1 J	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.21	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.25	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 U	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	86.4 B	16.6 U	29.4 U	23.5 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	2.2 U	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW109
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW109 1 11GW1090001 2/8/99	11GW109 2 11GW1090002 4/16/99	11GW109 3 11GW1090003 7/13/99	11GW109 4 11GW1090004 10/18/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	2.3 U	50	0.045	C
BARIUM	33.7	30.8	33.1	34.3	2000	260	N
BERYLLIUM	0.27 B	0.28 B	0.36 B	0.51 B	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 U	0.20 U	5	3.7	N
CALCIUM	8460	8250	8850	8230	N/A	N/A	
CHROMIUM	9.4 B	3.0 UL	2.4 U	0.84 B	100	11	N
COBALT	5.5	3.7	3.8 U	1.9 B	N/A	220	N
COPPER	2.4 UL	3.8	1.4 U	0.70 U	1300	150	N
CYANIDE	2.7 U	1.1 U	1.7 B	1.3 U	200	73	N
IRON	9080	8580 K	9240 J	9060	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.1 U	15	15	
MAGNESIUM	5010	4830	5190	4760	N/A	N/A	
MANGANESE	887	786	903	950	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.20 UL	2	1.1(a)	N
NICKEL	18.7	17.2	11.5	16.4	100	73	N
POTASSIUM	3640	3130	3020	3060	N/A	N/A	
SELENIUM	2.9 B	2.0 U	2.7 U	3.5 U	50	18	N
SILVER	3.8	3.3 UL	2.2 U	0.60 U	100	18	N
SODIUM	7210	6860	6430	6720	N/A	N/A	
THALLIUM	2.9 U	3.3 U	3.7 U	4.0 B	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.4 U	0.60 U	N/A	26	N
ZINC	13.0	15.6	6.2 B	13.4 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	2190				N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	N/A	N/A	
PH	6.31				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.143				N/A	N/A	
TEMPERATURE	17.5				N/A	N/A	
TURBIDITY	5.4				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]lable
**All RB[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW110
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW110 1 11GW1100001 2/9/99	11GW110 2 11GW1100002 4/9/99	11GW110 3 11GW1100003 7/15/99	11GW110 4 11GW1100004 10/19/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	25 U	25 U	17 U	200	54	N
1,1,2-TRICHLOROETHANE	1	25 U	25 U	17 U	5	0.19	C
1,1-DICHLOROETHANE	21	17 J	19 J	15 J	N/A	80	N
1,1-DICHLOROETHENE	8.8	8.1 J	8.8 J	7 J	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	25 U	25 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	25 U	25 U	17 U	600	55	N
1,2-DICHLOROETHANE	65	55	59	47	5	0.12	C
1,3-DICHLOROBENZENE	1 U	25 U	25 U	17 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	25 U	25 U	17 U	75	0.47	C
ACETONE	5 UR	120 UR	120 UR	83 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	25 U	25 U	17 U	80	0.17	C
BROMOMETHANE	1 U	25 UR	25 U	17 U	N/A	0.85	N
CARBON TETRACHLORIDE	5.2	25 U	4.6 J	4 J	5	0.16	C
CHLOROBENZENE	1 U	25 U	25 U	17 U	100	11	N
CHLOROFORM	18	16 J	18 J	14 J	80	0.15	C
CHLOROMETHANE	1 U	25 U	25 U	17 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	330	250	280	240	70	6.1	N
METHYLENE CHLORIDE	0.5 J	50 U	6.8 J	33 U	5	4.1	C
TETRACHLOROETHENE	7.6	7.6 J	8.6 J	7 J	5	1.1	C
TOLUENE	1 U	25 U	25 U	17 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	2.5	25 U	25 U	17 U	100	12	N
TRICHLOROETHENE	390	340	370	290	5	1.6	C
XYLENES, TOTAL	1 U	11 J	25 U	17 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.20 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.20 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 U	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	58.5 B	47.1 B	52.8 J	32.7 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	2.2 U	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW110
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW110 1 11GW1100001 2/9/99	11GW110 2 11GW1100002 4/9/99	11GW110 3 11GW1100003 7/15/99	11GW110 4 11GW1100004 10/19/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	2.0	4.0 B	1.9	2.3 U	50	0.045	C
BARIUM	10.6	7.8	6.8	6.5	2000	260	N
BERYLLIUM	0.11 B	0.25 B	0.11 U	0.11 B	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 U	0.20 U	5	3.7	N
CALCIUM	9080	7620	6300	5190	N/A	N/A	
CHROMIUM	3.9 B	4.4 J	2.4 U	2.0 B	100	11	N
COBALT	14.9	6.4	3.8 U	1.0 B	N/A	220	N
COPPER	2.4 UL	9.8 J	3.7 B	0.70 U	1300	150	N
CYANIDE	2.7 U	2.5 U	1.4 U	3.4	200	73	N
IRON	217	256 J	146 J	74.4 B	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.1 U	15	15	
MAGNESIUM	3180	3120 J	3140	2710	N/A	N/A	
MANGANESE	87.5	79.2 J	77.5	72.0	50	73	N
MERCURY	0.20 U	0.10 UL	0.10 UJ	0.20 UL	2	1.1(a)	N
NICKEL	10.0	10.3	8.8 U	4.9	100	73	N
POTASSIUM	3920	4090 J	3150	3330	N/A	N/A	
SELENIUM	3.5 B	2.0 U	2.7 U	3.5 U	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	0.60 U	100	18	N
SODIUM	10100	9270	8080	8330	N/A	N/A	
THALLIUM	2.9 U	3.3 U	4.6 B	3.4 B	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.4 U	0.60 U	N/A	26	N
ZINC	12.7	16.5 J	5.9 B	7.5 B	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				300	N/A	21	N
DISSOLVED OXYGEN	4500				N/A	N/A	
PERCHLORATES	46.9		40	38	N/A	N/A	
PH	6.21				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.115				N/A	N/A	
TEMPERATURE	18.3				N/A	N/A	
TURBIDITY	1.99				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]able
**All RB[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW111
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION:	11GW111	11GW111	11GW111	11GW111	11GW111	11GW111	FEDERAL	REGION III RBC	TAP WATER
ROUND:	1	2	2	3	3	4	MCLs	FOR TAP WATER	BASIS
SAMPLE I.D.:	11GW1110001	11GW1110002	11GW1110002-D	11GW1110003	11GW1110003-D	11GW1110004			
SAMPLE DATE:	2/15/99	4/13/99	4/13/99	7/15/99	7/15/99	10/19/99			
ASSOCIATED DUPLICATE:		11GW1110002-D	11GW1110002	11GW1110003-D	11GW1110003				
VOLATILES (µg/L)									
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.3 B	2.4 B	1.9 B	1.9 J	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 UR	1 U	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	0.20 J	1 U	1 U	100	11	N
CHLOROFORM	0.31 J	0.34 B	0.36 B	0.28 J	0.28 J	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	0.27 J	0.27 J	1 U	1 U	0.1 J	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1.3	2.6	2.5	1.2	1.1	1	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)									
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)									
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)									
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)									
TPH-DIESEL						100 U	N/A	N/A	
INORGANICS (µg/L)									
ALUMINUM	631	215	219	841 J	547 J	1100	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	34.2 UL	1.7 UL	1.7 UL	2.2 U	6	1.5	N
ARSENIC	1.5 U	1.3 U	1.3 U	1.1 U	1.1 U	2.3 U	50	0.045	C
BARIUM	23.8	25.8	26.0	27.9	26.1	34.9	2000	260	N
BERYLLIUM	0.13 B	0.20 B	0.17 B	0.24 B	0.17 B	0.28 B	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 UL	3.0 U	3.0 U	0.84 B	5	3.7	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW111
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW111 1 11GW1110001 2/15/99	11GW111 2 11GW1110002 4/13/99 11GW1110002-D	11GW111 2 11GW1110002-D 4/13/99 11GW1110002	11GW111 3 11GW1110003 7/15/99 11GW1110003-D	11GW111 3 11GW1110003-D 7/15/99 11GW1110003	11GW111 4 11GW1110004 10/19/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
CALCIUM	2420	3450	3430	2830	2900	3240	N/A	N/A	
CHROMIUM	20.2	3.1 L	3.2 L	3.7 J	2.4 U	11.1	100	11	N
COBALT	29.8	20.2	19.6	17.5	15.1	12.9	N/A	220	N
COPPER	7.7	3.8 B	4.4 B	10.1	9.1	3.5	1300	150	N
CYANIDE	10.0 U	2.5 U	2.5 U	1.4 U	1.4 U	1.3 U	200	73	N
IRON	1490	524	551	1950 J	1230 J	2150	300	1100	N
LEAD	1.0 U	0.92 U	0.92 U	1.0 UL	1.0 UL	1.1 U	15	15	
MAGNESIUM	1340	1540	1550	1590	1510	1800	N/A	N/A	
MANGANESE	743	770	777	685	668	586	50	73	N
MERCURY	0.20 UL	0.10 U	0.10 U	0.10 UJ	0.10 UJ	0.20 UL	2	1.1(a)	N
NICKEL	29.5	5.9 U	5.9 U	8.8 U	8.8 U	16.7	100	73	N
POTASSIUM	3830	3140	2940	2470	2220	2180	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.0 U	2.7 U	2.7 U	3.5 U	50	18	N
SILVER	3.0 B	3.3 U	3.3 U	2.2 U	2.2 U	0.60 U	100	18	N
SODIUM	8730	8790	8990	7900	7990	8280	N/A	N/A	
THALLIUM	2.9 U	3.3 U	3.3 U	3.7 U	5.8 B	3.6 B	2	0.26	N
VANADIUM	2.1 U	5.1 U	5.1 U	2.4 U	2.4 U	0.79 B	N/A	26	N
ZINC	35.0	44.3	47.6	29.5	34.8	20.4 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)									
AMMONIA						200 U	N/A	21	N
DISSOLVED OXYGEN	8290						N/A	N/A	
PERCHLORATES	58.5 K			4 U	4 U	4 U	N/A	N/A	
PH	5.36						N/A	N/A	
SALINITY							N/A	N/A	
SPECIFIC CONDUCTIVITY	0.08						N/A	N/A	
TEMPERATURE	19.9						N/A	N/A	
TURBIDITY	29.4						N/A	N/A	

(a) - RBC[illegible]e shown is based on Mercuric chloride.
N/A - Nc[illegible]ble
**All RBC[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW22
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW22 1 11GW220001 2/5/99	11GW22 2 11GW220002 4/13/99	11GW22 3 11GW220003 7/20/99 11GW220003-D	11GW22 3 11GW220003-D 7/20/99 11GW220003	11GW22 4 11GW220004 10/8/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)								
1,1,1-TRICHLOROETHANE	1 U	15 U	15 U	15 U	15 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	15 U	15 U	15 U	15 U	5	0.19	C
1,1-DICHLOROETHANE	0.8 J	15 U	15 U	15 U	15 U	N/A	80	N
1,1-DICHLOROETHENE	0.39 J	15 U	15 U	15 U	15 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	15 U	15 U	15 U	15 U	70	19	N
1,2-DICHLOROBENZENE	1 U	15 U	15 U	15 U	15 U	600	55	N
1,2-DICHLOROETHANE	1	15 U	15 U	15 U	15 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	15 U	15 U	15 U	15 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	15 U	15 U	15 U	15 U	75	0.47	C
ACETONE	5 UR	75 UR	75 UR	75 UR	75 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	15 U	15 U	15 U	15 U	80	0.17	C
BROMOMETHANE	1 U	15 U	15 U	15 U	15 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	15 U	15 U	15 U	15 U	5	0.16	C
CHLOROBENZENE	1 U	15 U	15 U	15 U	15 U	100	11	N
CHLOROFORM	2.5	3.2 B	3.1 J	3.5 J	3.7 J	80	0.15	C
CHLOROMETHANE	1 U	15 U	15 U	15 U	15 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	74	190	170	170	180	70	6.1	N
METHYLENE CHLORIDE	2 U	30 U	30 U	30 U	30 U	5	4.1	C
TETRACHLOROETHENE	3	4.2 J	3.3 J	2.9 J	3.3 J	5	1.1	C
TOLUENE	1 U	15 U	15 U	15 U	1.6 J	1000	75	N
TRANS-1,2-DICHLOROETHENE	0.39 J	15 U	15 U	15 U	15 U	100	12	N
TRICHLOROETHENE	33	98	86	81	85	5	1.6	C
XYLENES, TOTAL	1 U	15 U	15 U	15 U	15 U	10000	1200	N
SEMIVOLATILES (µg/L)								
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)								
ALPHA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.052 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)								
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)								
TPH-DIESEL					100 U	N/A	N/A	
INORGANICS (µg/L)								
ALUMINUM	125 B	168	331 J	243 J	3430 K	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	1.7 U	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW22
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW22 1 11GW220001 2/5/99	11GW22 2 11GW220002 4/13/99	11GW22 3 11GW220003 7/20/99 11GW220003-D	11GW22 3 11GW220003-D 7/20/99 11GW220003	11GW22 4 11GW220004 10/8/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	4.4	3.0	3.8	3.4	3.7 L	50	0.045	C
BARIUM	39.9	39.3	44.3	42.4	53.4	2000	260	N
BERYLLIUM	0.10 U	0.18 B	0.30 B	0.30 B	0.6 B	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 UL	3.0 UL	0.69 K	5	3.7	N
CALCIUM	2840	3450	3180	3040	2470	N/A	N/A	
CHROMIUM	7.0 L	3.0 UL	6.2	4.1	17.4 L	100	11	N
COBALT	29.5 B	23.8	28.4	27.5	26.5	N/A	220	N
COPPER	7.3	4.8 B	3.7	3.7	4.3	1300	150	N
CYANIDE	10.0 U	2.5 U	1.4 U	1.4 U	3.0 U	200	73	N
IRON	355	471	807 J	513 J	6310	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.0 UL	1.7 UL	15	15	
MAGNESIUM	1470	1470	1600	1540	1860	N/A	N/A	
MANGANESE	1040	906	1040	1030	955	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.11 B	0.12	2	1.1(a)	N
NICKEL	7.5 U	5.9 U	14.2 K	8.8 U	18.4	100	73	N
POTASSIUM	2430 B	2280	2420	2390	2870	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	2.2 U	1.9 UJ	100	18	N
SODIUM	23600	23800	24300 J	24000 J	20200	N/A	N/A	
THALLIUM	2.9 U	3.4 B	3.7 U	4.8 B	4.6 B	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.4 U	2.4 U	4.9	N/A	26	N
ZINC	21.2 B	48.2	22.1	35.0	27.2 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)								
AMMONIA					200 U	N/A	21	N
DISSOLVED OXYGEN	5110					N/A	N/A	
PERCHLORATES	5 U		6	7	8 U	N/A	N/A	
PH	5.15					N/A	N/A	
SALINITY	0					N/A	N/A	
SPECIFIC CONDUCTIVITY	0.166					N/A	N/A	
TEMPERATURE	17.4					N/A	N/A	
TURBIDITY	10					N/A	N/A	

(a) - RBC [illegible]e shown is based on Mercuric chloride.
N/A - N[illegible]able
**All RBC [illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW23
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW23 1 11GW230001 2/3/99	11GW23 2 11GW230002 4/9/99	11GW23 3 11GW230003 7/19/99	11GW23 4 11GW230004 10/8/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.8 B	5 UR	2.7 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.24 J	1 U	100	11	N
CHLOROFORM	3.2	1.5	1.9	2.7	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	0.26 J	0.65 J	0.66 J	0.46 J	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	0.36 J	1.2	1.4	1.1	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5.8 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5.8 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5.8 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5.8 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5.8 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 U	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	55.7 B	202	1220 J	551 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW23
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW23 1 11GW230001 2/3/99	11GW23 2 11GW230002 4/9/99	11GW23 3 11GW230003 7/19/99	11GW23 4 11GW230004 10/8/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 UL	50	0.045	C
BARIUM	50.7	31.0	39.1	43.7	2000	260	N
BERYLLIUM	0.33 B	0.29 B	0.78 B	0.26 U	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 UL	0.49 U	5	3.7	N
CALCIUM	4720	3480	2920	3320	N/A	N/A	
CHROMIUM	4.2 L	3.0 L	5.1	8.6 L	100	11	N
COBALT	3.3 U	8.3	3.8 U	1.5	N/A	220	N
COPPER	5.9	4.4 B	6.6	1.3 U	1300	150	N
CYANIDE	10.0 U	2.5 U	1.4 U	3.0 U	200	73	N
IRON	121 B	548	2480 J	848	300	1100	N
LEAD	1.0 U	0.92 U	1.6 L	1.7 UL	15	15	
MAGNESIUM	2110	1310	1470	1570	N/A	N/A	
MANGANESE	29.1	22.9	62.4	34.1	50	73	N
MERCURY	0.46	0.10 U	0.26 B	0.17	2	1.1(a)	N
NICKEL	7.5 U	5.9 U	8.8 U	8.4	100	73	N
POTASSIUM	957 B	1060	1140	1110	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	1.9 UJ	100	18	N
SODIUM	10100	6170	5570 J	6600	N/A	N/A	
THALLIUM	2.9 U	3.3 U	5.2 B	4.3 UJ	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.5	1.4 U	N/A	26	N
ZINC	43.7 B	48.4	18.4 B	6.4 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	6630				N/A	N/A	
PERCHLORATES	84.7		190	130 J	N/A	N/A	
PH	5.02				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.097				N/A	N/A	
TEMPERATURE	17.9				N/A	N/A	
TURBIDITY	4.35				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - No[illegible]able
**All RB[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW24
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW24 1 11GW240001 2/6/99	11GW24 2 11GW240002 4/9/99	11GW24 3 11GW240003 7/14/99	11GW24 4 11GW240004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	3.1 J	5 UR	2.7 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	0.38 J	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	6.5	0.8 B	2.0	0.14 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5.2 U	5.7	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5.2 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5.2 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5.2 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5.2 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.052000 UL	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.052000 UL	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.052000 UL	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 U	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	45300	61600	108000 J	46700 K	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	3.4 UL	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW24
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW24 1 11GW240001 2/6/99	11GW24 2 11GW240002 4/9/99	11GW24 3 11GW240003 7/14/99	11GW24 4 11GW240004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	17.2	15.1	36.8	14.4 L	50	0.045	C
BARIUM	220	227	329	159	2000	260	N
BERYLLIUM	4.9	7.0	10.3	4.4	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 UL	0.49 U	5	3.7	N
CALCIUM	28000	27400	23000	20800	N/A	N/A	
CHROMIUM	65.1	99.3	165 J	59.1	100	11	N
COBALT	59.8	78.2	99.7 K	37.6	N/A	220	N
COPPER	94.1	159	232	90.6	1300	150	N
CYANIDE	4.2	2.5 U	1.4 U	3.0 U	200	73	N
IRON	76500	116000	190000 J	64000	300	1100	N
LEAD	38.2	54.8	71.0	29	15	15	
MAGNESIUM	10800	16100	17700	8450	N/A	N/A	
MANGANESE	1860	2220	2720	1140	50	73	N
MERCURY	1.9	1.1	2.0	1	2	1.1(a)	N
NICKEL	55.5	80.6	135 L	52	100	73	N
POTASSIUM	5690	9530	12100	5620	N/A	N/A	
SELENIUM	5.2 B	2.0 U	5.4 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	3.5	1.9 UJ	100	18	N
SODIUM	7570	448000	5930	3660	N/A	N/A	
THALLIUM	7.8 B	9.3 B	13.1 B	4.3 UJ	2	0.26	N
VANADIUM	105	146	246	89.1	N/A	26	N
ZINC	216	411	531	190	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				490	N/A	21	N
DISSOLVED OXYGEN	470				N/A	N/A	
PERCHLORATES	5 U		110	96	N/A	N/A	
PH	5.73				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.269				N/A	N/A	
TEMPERATURE	14.7				N/A	N/A	
TURBIDITY	999				N/A	N/A	

(a) - RBC [illegible] lue shown is based on Mercuric chloride.
N/A - N[illegible] lable
**All RB[illegible] ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW25
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW25 1 11GW250001 2/5/99	11GW25 2 11GW250002 4/14/99	11GW25 3 11GW250003 7/19/99	11GW25 4 11GW250004 10/8/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.6 B	5 UR	3 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	0.37 J	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	0.41 J	0.51 J	0.58 J	0.49 J	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.28 J	1 U	100	11	N
CHLOROFORM	2	1.9	2.6	2.1	80	0.15	C
CHLOROMETHANE	1 U	1 U	0.29 B	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	0.39 J	0.62 J	0.64 J	0.55 J	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.052 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 U	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	139 B	406	248 J	399 B	50-200	3700	N
ANTIMONY	2.0 B	34.2 UL	1.7 U	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW25
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW25 1 11GW250001 2/5/99	11GW25 2 11GW250002 4/14/99	11GW25 3 11GW250003 7/19/99	11GW25 4 11GW250004 10/8/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 UL	50	0.045	C
BARIUM	29.0	35.6	36.6	33.7	2000	260	N
BERYLLIUM	0.10 U	0.20 B	0.29 B	0.26 U	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 UL	0.49 U	5	3.7	N
CALCIUM	3430	4260	4030	3280	N/A	N/A	
CHROMIUM	2.3 UL	3.1 L	2.4 U	8.8 L	100	11	N
COBALT	5.3 B	13.9	3.8 U	6.2	N/A	220	N
COPPER	9.5	5.7	5.2	1.3 U	1300	150	N
CYANIDE	10.0 U	1.5 B	1.4 U	3.0 U	200	73	N
IRON	266	995 K	406 J	534	300	1100	N
LEAD	2.7 B	0.92 U	1.0 L	1.7 UL	15	15	
MAGNESIUM	2290	2810	2650	2220	N/A	N/A	
MANGANESE	169	413	218	297	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.07	2	1.1(a)	N
NICKEL	7.5 U	9.1	8.8 U	8.4	100	73	N
POTASSIUM	1040 B	1570	1310	1100	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 UJ	100	18	N
SODIUM	9950	12100	10700 J	9480	N/A	N/A	
THALLIUM	2.9 U	4.5 B	4.4 B	4.3 UJ	2	0.26	N
VANADIUM	2.5 B	5.1 U	2.5	1.4 U	N/A	26	N
ZINC	16.0 B	50.1	19.6 B	4.2 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	6190				N/A	N/A	
PERCHLORATES	5 U		7	4 U	N/A	N/A	
PH	5				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.097				N/A	N/A	
TEMPERATURE	17.4				N/A	N/A	
TURBIDITY	16.9				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]lable
**All RB[illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW26
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW26 1 11GW260001 2/6/99	11GW26 2 11GW260002 4/14/99 11GW260002-D	11GW26 2 11GW260002-D 4/14/99 11GW260002	11GW26 3 11GW260003 7/16/99 11GW260003-D	11GW26 3 11GW260003-D 7/16/99 11GW260003	11GW26 4 11GW260004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)									
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.1 B	5 UR	5 UR	2.8 J	2.9 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 UR	1 U	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	0.36 J	0.26 J	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)									
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	4.6 J	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)									
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)									
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)									
TPH-DIESEL						100 UJ	N/A	N/A	
INORGANICS (µg/L)									
ALUMINUM	27.0 B	162	181	823 J	772 J	137 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	34.2 UL	1.7 U	1.7 U	5.8 UJ	6	1.5	N
ARSENIC	1.5 U	1.3 U	1.3 U	1.1 U	1.1 U	3.3 U	50	0.045	C
BARIUM	39.7	49.1	46.0	82.8	83.1	37.7	2000	260	N
BERYLLIUM	0.10 U	0.11 B	0.11 B	0.21 B	0.20 B	0.30 U	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 UL	3.0 UL	3.0 UL	0.50 U	5	3.7	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW26
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW26 1 11GW260001 2/6/99	11GW26 2 11GW260002 4/14/99 11GW260002-D	11GW26 2 11GW260002-D 4/14/99 11GW260002	11GW26 3 11GW260003 7/16/99 11GW260003-D	11GW26 3 11GW260003-D 7/16/99 11GW260003	11GW26 4 11GW260004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
CALCIUM	25300	28400	26500	29200	29400	26400	N/A	N/A	
CHROMIUM	2.3 UL	3.0 UL	3.0 UL	2.4 U	2.4 U	6	100	11	N
COBALT	3.3 U	4.0	3.7	9.1	9.4	1.9	N/A	220	N
COPPER	4.4	7.1	5.6	4.2	5.2	1.3 U	1300	150	N
CYANIDE	10.0 U	3.2 B	3.8 B	1.4 U	1.4 U	10.0 U	200	73	N
IRON	59.1 B	273 K	312 K	1460 J	1410 J	161 K	300	1100	N
LEAD	1.0 U	0.92 U	0.92 U	1.2 L	1.0 UL	1.7 UL	15	15	
MAGNESIUM	9070	10400	9770	14500	14600	7520	N/A	N/A	
MANGANESE	2.2 B	9.7	10.9	28.5	27.1	4.1	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.10 U	0.16 B	0.20 U	2	1.1(a)	N
NICKEL	7.5 U	5.9 U	5.9 U	9.1 K	12.4 K	7.5	100	73	N
POTASSIUM	2270 B	3160	2760	3910	4240	2650	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.0 U	2.7 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	3.3 UL	2.2 U	2.2 U	1.9 U	100	18	N
SODIUM	14400	18500	17200	31100 J	31500 J	11700	N/A	N/A	
THALLIUM	2.9 U	3.3 U	3.3 U	7.0 B	4.4 B	4.3 U	2	0.26	N
VANADIUM	2.1 U	5.1 U	5.1 U	2.4 U	2.4	1.4 U	N/A	26	N
ZINC	19.3 B	45.6	24.2	18.4 B	24.7	4.7 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)									
AMMONIA						200 U	N/A	21	N
DISSOLVED OXYGEN	6890						N/A	N/A	
PERCHLORATES	5 U			8 U	8 U	8 U	N/A	N/A	
PH	6.08						N/A	N/A	
SALINITY	0						N/A	N/A	
SPECIFIC CONDUCTIVITY	0.306						N/A	N/A	
TEMPERATURE	17.1						N/A	N/A	
TURBIDITY	2.34						N/A	N/A	

(a) - RBC[illegible]e shown is based on Mercuric chloride.
N/A - N[illegible]able
**All RB[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW27
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW27 1 11GW270001 2/6/99	11GW27 2 11GW270002 4/14/99	11GW27 3 11GW270003 7/16/99	11GW27 4 11GW270004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.8 B	5 UR	2.9 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.3 J	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.12	0.20	0.15	0.17	2	0.19	C
GAMMA-CHLORDANE	0.10	0.16	0.13	0.14	2	0.19	C
HEPTACHLOR EPOXIDE	0.052 U	0.068	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 UJ	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	1610	1680	1640 J	1600	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW27
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW27 1 11GW270001 2/6/99	11GW27 2 11GW270002 4/14/99	11GW27 3 11GW270003 7/16/99	11GW27 4 11GW270004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 U	50	0.045	C
BARIUM	182	170	218	198	2000	260	N
BERYLLIUM	2.0 B	1.8	1.8 B	2.0 B	4	7.3	N
CADMIUM	6.2 B	5.8 L	9.2 L	7.9 K	5	3.7	N
CALCIUM	13500	13900	16500	13400	N/A	N/A	
CHROMIUM	617	608	556	545	100	11	N
COBALT	53.1	52.9	53.7	56.7	N/A	220	N
COPPER	4260	3530	3540	3470	1300	150	N
CYANIDE	10.0 U	1.1 U	1.4 U	10.0 U	200	73	N
IRON	242	863 K	520 J	710	300	1100	N
LEAD	6.1 B	0.92 U	1.2 L	1.7 UL	15	15	
MAGNESIUM	15300	15000	17900	14500	N/A	N/A	
MANGANESE	2280	2150	2310	2300	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.08	2	1.1(a)	N
NICKEL	116	91.8	112	110	100	73	N
POTASSIUM	4180	4460	4960	4720	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 U	100	18	N
SODIUM	40200	37300	48600 J	36900	N/A	N/A	
THALLIUM	2.9 U	3.3 U	3.7 U	8.6 B	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.4 U	1.4 U	N/A	26	N
ZINC	225	196	207	203	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				520	N/A	21	N
DISSOLVED OXYGEN	4030				N/A	N/A	
PERCHLORATES	6.47		9	16 U	N/A	N/A	
PH	4.23				N/A	N/A	
SALINITY	0.02				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.533				N/A	N/A	
TEMPERATURE	17.3				N/A	N/A	
TURBIDITY	8.03				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]able
**All RB[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW28
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW28 1 11GW280001 2/7/99	11GW28 2 11GW280002 4/13/99	11GW28 3 11GW280003 7/16/99	11GW28 4 11GW280004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	5 U	5 U	5 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	5 U	5 U	5 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	5 U	5 U	5 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	5 U	5 U	5 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	5 U	5 U	5 U	70	19	N
1,2-DICHLOROBENZENE	1 U	5 U	5 U	5 U	600	55	N
1,2-DICHLOROETHANE	0.44 J	5 U	5 U	5 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	5 U	5 U	5 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	5 U	5 U	5 U	75	0.47	C
ACETONE	2.4 J	25 UR	25 UR	25 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	5 U	5 U	5 U	80	0.17	C
BROMOMETHANE	1 U	5 UR	5 U	5 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	5 U	5 U	5 U	5	0.16	C
CHLOROBENZENE	1 U	5 U	5 U	5 U	100	11	N
CHLOROFORM	0.71 J	1.3 J	0.98 J	1 J	80	0.15	C
CHLOROMETHANE	1 U	5 U	5 U	5 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	3.1	2.8 J	3.6 J	4.3 J	70	6.1	N
METHYLENE CHLORIDE	2 U	10 U	10 U	10 U	5	4.1	C
TETRACHLOROETHENE	60	66	75	81	5	1.1	C
TOLUENE	1 U	5 U	5 U	5 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	5 U	5 U	5 U	100	12	N
TRICHLOROETHENE	21	20	21	31	5	1.6	C
XYLENES, TOTAL	1 U	5 U	5 U	5 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	1.1 J	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	1.9 J	5 U	5 U	N/A	150	N
PYRENE	5 U	1.5 J	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				170 J	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	94.8 B	1540	356 J	213 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW28
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW28 1 11GW280001 2/7/99	11GW28 2 11GW280002 4/13/99	11GW28 3 11GW280003 7/16/99	11GW28 4 11GW280004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 U	50	0.045	C
BARIUM	51.5	59.3	59.0	59.5	2000	260	N
BERYLLIUM	0.42 B	0.70 B	0.60 B	0.34 B	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 UL	0.5 U	5	3.7	N
CALCIUM	7290	8070	8660	7780	N/A	N/A	
CHROMIUM	2.3 U	10.0 L	2.4 U	1.2 U	100	11	N
COBALT	3.3 U	7.3	6.1	4.0	N/A	220	N
COPPER	2.4 UL	10.4	11.9	1.3 U	1300	150	N
CYANIDE	2.7 U	1.1 U	1.4 U	10.0 U	200	73	N
IRON	106 L	3490 K	569 J	215	300	1100	N
LEAD	1.0 U	0.92 U	1.4 L	1.7 UL	15	15	
MAGNESIUM	5420	5930	6250	5490	N/A	N/A	
MANGANESE	112	151	142	135	50	73	N
MERCURY	0.20 U	0.10 U	0.18 B	0.14	2	1.1(a)	N
NICKEL	16.4	20.3	17.0 K	14.2	100	73	N
POTASSIUM	2160 B	3110	2510	2270	N/A	N/A	
SELENIUM	2.8 B	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 U	100	18	N
SODIUM	11200	11200	12300 J	11200	N/A	N/A	
THALLIUM	2.9 U	4.2 B	6.3 B	4.3 U	2	0.26	N
VANADIUM	2.1 U	5.1 U	3.8	1.4 U	N/A	26	N
ZINC	19.9	50.3	73.8	19.2 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	3810				N/A	N/A	
PERCHLORATES	5 U		4 U	8 U	N/A	N/A	
PH	4.92				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.168				N/A	N/A	
TEMPERATURE	17				N/A	N/A	
TURBIDITY	5.9				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not applicable
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW29
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW29 1 11GW290001 2/7/99	11GW29 2 11GW290002 4/12/99	11GW29 3 11GW290003 7/14/99	11GW29 4 11GW290004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	0.37 J	0.14 J	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	0.11 J	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	0.55 J	0.55 J	0.57 J	0.47 J	N/A	0.55	N
1,4-DICHLOROBENZENE	0.79 J	0.85 J	1.1	0.82 J	75	0.47	C
ACETONE	2.3 J	2.5 B	3.4 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1.8	2.5	3.8	1.8	100	11	N
CHLOROFORM	1 U	1 U	0.42 J	0.12 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	0.28 J	0.26 J	0.69 J	0.35 J	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	0.21 J	0.47 J	0.21 J	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	0.26 J	0.33 J	1.3	0.64 J	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.29	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				830	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	60700	14100	15500 J	11900 K	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW29
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW29 1 11GW290001 2/7/99	11GW29 2 11GW290002 4/12/99	11GW29 3 11GW290003 7/14/99	11GW29 4 11GW290004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	12.4	3.9	3.1	3.4 L	50	0.045	C
BARIUM	445	188	157	152	2000	260	N
BERYLLIUM	8.5	2.3 B	2.5	1.4 B	4	7.3	N
CADMIUM	13.1 B	3.0 UL	3.0 U	7.1 K	5	3.7	N
CALCIUM	48800	49100	7330	63400	N/A	N/A	
CHROMIUM	110	32.1	36.0 J	19.5 L	100	11	N
COBALT	198	81.0	91.4	40.2	N/A	220	N
COPPER	83.1	28.0 B	26.9	24.6	1300	150	N
CYANIDE	2.7 U	2.5 U	1.4 U	3.0 U	200	73	N
IRON	93900	36700	30700 J	22600	300	1100	N
LEAD	53.1	21.4	13.4	11.2	15	15	
MAGNESIUM	17600	10700	7570	7530	N/A	N/A	
MANGANESE	4300	3320	2950	1760	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.05 U	2	1.1(a)	N
NICKEL	83.6	13.7	20.3	16.5	100	73	N
POTASSIUM	10700	5460	3780	6860	N/A	N/A	
SELENIUM	6.0 B	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	1.9 UJ	100	18	N
SODIUM	52500	50700	53100	28900	N/A	N/A	
THALLIUM	6.5 B	3.5 B	5.2 B	4.3 UJ	2	0.26	N
VANADIUM	111	35.1	33.5	24.6	N/A	26	N
ZINC	463	112	116	58.2	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				800	N/A	21	N
DISSOLVED OXYGEN	2340				N/A	N/A	
PERCHLORATES	5 U		4 U	16 U	N/A	N/A	
PH	6.23				N/A	N/A	
SALINITY	0.02				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.639				N/A	N/A	
TEMPERATURE	13.6				N/A	N/A	
TURBIDITY	999				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not applicable
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW66
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW66 1 11GW660001 2/2/99	11GW66 2 11GW660002 4/8/99	11GW66 3 11GW660003 7/14/99	11GW66 4 11GW660004 10/13/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	0.59 J	0.4 J	0.62 J	0.33 J	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	0.93 J	0.58 J	1.4	0.5 J	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.2 B	5 UR	3.5 J	1.5 B	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.20 J	1 U	100	11	N
CHLOROFORM	0.89 J	0.32 B	0.70 J	0.29 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	15	11	20	12	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	0.79 J	0.57 J	0.45 J	0.43 J	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	11	9.1	10	8.3	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5.8 U	5 U	6 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5.8 U	5 U	6 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5.8 U	5 U	6 U	N/A	73	N
FLUORANTHENE	5 U	5.8 U	5 U	6 U	N/A	150	N
PYRENE	5 U	5.8 U	5 U	6 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 UJ	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	43.3 B	91.4 B	15700 J	162 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW66
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW66 1 11GW660001 2/2/99	11GW66 2 11GW660002 4/8/99	11GW66 3 11GW660003 7/14/99	11GW66 4 11GW660004 10/13/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	2.3	1.3 U	2.4	3.3 U	50	0.045	C
BARIUM	31.2	40.0	138	45.4	2000	260	N
BERYLLIUM	0.12 B	0.23 B	1.7	0.30 U	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 U	0.50 U	5	3.7	N
CALCIUM	3980	4420	6960	2290	N/A	N/A	
CHROMIUM	2.3 UL	3.8 L	91.4 J	5.3	100	11	N
COBALT	11.8 B	10.1	34.3	17.0	N/A	220	N
COPPER	8.0	6.3 B	47.5	1.3 U	1300	150	N
CYANIDE	10.0 U	2.5 U	1.4 U	10.0 U	200	73	N
IRON	1100	642	49800 J	4780	300	1100	N
LEAD	1.0 U	1.1 B	9.9	1.7 UL	15	15	
MAGNESIUM	2650	1970	9290	1660	N/A	N/A	
MANGANESE	539	493	797	694	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.20 U	2	1.1(a)	N
NICKEL	31.9	28.3	92.9	36.3	100	73	N
POTASSIUM	2780	2290	9290	2150	N/A	N/A	
SELENIUM	2.7 K	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.4	1.9 U	100	18	N
SODIUM	9500	8120	8040	8880	N/A	N/A	
THALLIUM	4.4	4.2 B	7.7 B	5.7 B	2	0.26	N
VANADIUM	2.1 U	5.1 U	21.6	1.4 U	N/A	26	N
ZINC	36.6 B	51.1	103	19.6 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200	N/A	21	N
DISSOLVED OXYGEN	5230				N/A	N/A	
PERCHLORATES	8.18		14	4 U	N/A	N/A	
PH	5.7				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.108				N/A	N/A	
TEMPERATURE	17.5				N/A	N/A	
TURBIDITY	10				N/A	N/A	

(a) - RBC [illegible] lue shown is based on Mercuric chloride.
N/A - N[illegible] [illegible]able
**All RB[illegible] [illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW67
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW67 1 11GW670001 2/5/99	11GW67 2 11GW670002 4/14/99	11GW67 3 11GW670003 7/16/99	11GW67 4 11GW670004 10/13/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.2 B	5 UR	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	0.22 J	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.19 J	1 U	100	11	N
CHLOROFORM	0.67 J	1 U	0.25 J	0.17 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 UJ	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 UJ	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 UJ	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 UJ	N/A	150	N
PYRENE	5 U	5 U	5 U	5 UJ	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.051 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.051 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.051 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 UJ	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	106 B	65.0	57.4 J	88.8 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW67
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW67 1 11GW670001 2/5/99	11GW67 2 11GW670002 4/14/99	11GW67 3 11GW670003 7/16/99	11GW67 4 11GW670004 10/13/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 U	50	0.045	C
BARIUM	19.7	15.9	17.8	18.5	2000	260	N
BERYLLIUM	0.10 U	0.07 U	0.12 B	0.30 U	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 UL	0.50 U	5	3.7	N
CALCIUM	1600	2000	1480	1360	N/A	N/A	
CHROMIUM	2.3 UL	3.0 UL	2.4 U	2.1	100	11	N
COBALT	5.6 B	4.2	3.8 U	1.2 U	N/A	220	N
COPPER	11.7	12.5	5.0	4.0	1300	150	N
CYANIDE	10.0 U	1.1 U	1.4 U	10.0 U	200	73	N
IRON	268	134 K	30.6 J	47.0 K	300	1100	N
LEAD	1.4 B	0.92 U	1.0 UL	1.7 UL	15	15	
MAGNESIUM	1590	1440	1560	1360	N/A	N/A	
MANGANESE	111	41.7	35.3	30.3	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.20 U	2	1.1(a)	N
NICKEL	7.5 U	5.9 U	8.8 U	3.1	100	73	N
POTASSIUM	974 B	793	756	877	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 U	100	18	N
SODIUM	6200	5170	5070 J	4850	N/A	N/A	
THALLIUM	3.0	3.3 U	3.7 U	4.3 U	2	0.26	N
VANADIUM	3.4 B	5.1 U	2.4 U	1.4 U	N/A	26	N
ZINC	90.0	63.3	43.1	34.1 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200	N/A	21	N
DISSOLVED OXYGEN	5250				N/A	N/A	
PERCHLORATES	5 U		4 U	5	N/A	N/A	
PH	5.15				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.056				N/A	N/A	
TEMPERATURE	14.3				N/A	N/A	
TURBIDITY	4				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]lable
**All RB[illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW68
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW68 1 11GW680001 2/4/99	11GW68 2 11GW680002 4/12/99	11GW68 3 11GW680003 7/14/99	11GW68 4 11GW680004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.8 B	5 UR	2.7 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.18 J	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5.2 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5.2 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5.2 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5.2 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5.2 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 UL	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 UL	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 UL	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 U	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	18300	15900	57100 J	14000 K	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW68
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW68 1 11GW680001 2/4/99	11GW68 2 11GW680002 4/12/99	11GW68 3 11GW680003 7/14/99	11GW68 4 11GW680004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	3.8	1.7	9.0	3.3 UL	50	0.045	C
BARIUM	90.0	57.0	204	80.1	2000	260	N
BERYLLIUM	1.5 B	1.1 B	4.1	0.86 B	4	7.3	N
CADMIUM	4.2 B	3.0 UL	3.0 U	0.49 U	5	3.7	N
CALCIUM	2400	1810	2490	1030	N/A	N/A	
CHROMIUM	23.2	21.5	80.8 J	14.7 L	100	11	N
COBALT	21.8 B	10.7	42.0	6.2	N/A	220	N
COPPER	56.3	79.2	185	51.3	1300	150	N
CYANIDE	10.0 U	2.5 U	1.4 U	3.0 U	200	73	N
IRON	29300	31500	99900 J	17600	300	1100	N
LEAD	10.7	6.5	23.7	2.7 L	15	15	
MAGNESIUM	3680	3760	9490	2190	N/A	N/A	
MANGANESE	472	191	980	116	50	73	N
MERCURY	0.20 U	0.10 U	0.18 J	0.05 U	2	1.1(a)	N
NICKEL	17.7	18.4	60.6	12.7	100	73	N
POTASSIUM	2930	3010	6990	1790	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	1.9 UJ	100	18	N
SODIUM	3960	3950	3890	2990	N/A	N/A	
THALLIUM	2.9 U	5.0 B	8.9 B	4.3 UJ	2	0.26	N
VANADIUM	33.8	41.8	115	26.6	N/A	26	N
ZINC	71.7 B	76.4	188	34.4 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	7370				N/A	N/A	
PERCHLORATES	5 U		4 U	8 U	N/A	N/A	
PH	4.82				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.029				N/A	N/A	
TEMPERATURE	14.7				N/A	N/A	
TURBIDITY	999				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not applicable
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW69
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW69 1 11GW690001 2/7/99	11GW69 2 11GW690002 4/12/99	11GW69 3 11GW690003 7/13/99	11GW69 4 11GW690004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	5 UR	5 UR	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	0.33 J	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	2.4	2.3	2.7	2.4	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	0.33 J	0.36 J	0.38 J	0.32 J	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				250	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	47600	9310	44600 J	5480 K	50-200	3700	N
ANTIMONY	3.8 U	34.2 UL	3.4 UL	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW69
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW69 1 11GW690001 2/7/99	11GW69 2 11GW690002 4/12/99	11GW69 3 11GW690003 7/13/99	11GW69 4 11GW690004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	14.3	3.1	14.1	3.3 UL	50	0.045	C
BARIUM	740	405	754	368	2000	260	N
BERYLLIUM	13.0	3.8	13.2	2.2 B	4	7.3	N
CADMIUM	5.5 B	3.0 UL	4.1 J	2.8 K	5	3.7	N
CALCIUM	24300	22700	26300	20600	N/A	N/A	
CHROMIUM	158	32.5	146	12.1 L	100	11	N
COBALT	116	28.2	116	15.1	N/A	220	N
COPPER	143	37.4 B	119	10	1300	150	N
CYANIDE	3.0	10.0 U	1.5 B	3.0 U	200	73	N
IRON	160000	40000	158000 J	13700	300	1100	N
LEAD	49.6	11.5	47.4	3.9 L	15	15	
MAGNESIUM	26400	21700	25800	17700	N/A	N/A	
MANGANESE	3550	1100	3720	675	50	73	N
MERCURY	0.97	0.38	1.7	0.23	2	1.1(a)	N
NICKEL	174	64.0	155 L	60.0	100	73	N
POTASSIUM	8550	4660	6630	3690	N/A	N/A	
SELENIUM	7.8 B	2.0 U	5.4 U	3.8 UL	50	18	N
SILVER	2.8 UL	3.3 U	3.7	1.9 UJ	100	18	N
SODIUM	53300	52100	48200	47400	N/A	N/A	
THALLIUM	8.9 B	3.4 B	13.2 B	4.5 B	2	0.26	N
VANADIUM	140	34.3	136	12.3	N/A	26	N
ZINC	352	136	301	79.0	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200	N/A	21	N
DISSOLVED OXYGEN	0				N/A	N/A	
PERCHLORATES	5 U		4 U	16 U	N/A	N/A	
PH	4.45				N/A	N/A	
SALINITY	0.04				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.929				N/A	N/A	
TEMPERATURE	15.4				N/A	N/A	
TURBIDITY	999				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Nc able
**All RB es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW70D
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW70D 1 11GW70D0001 2/8/99	11GW70D 2 11GW70D0002 4/16/99	11GW70D 3 11GW70D0003 7/20/99	11GW70D 4 11GW70D0004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.7 J	5 UR	3.8 B	1.4 B	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.2 B	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 UL	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 UL	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 UL	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				130	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	967	8550	8900	10100 K	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW70D
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW70D 1 11GW70D0001 2/8/99	11GW70D 2 11GW70D0002 4/16/99	11GW70D 3 11GW70D0003 7/20/99	11GW70D 4 11GW70D0004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	2.4	4.0	3.3 UL	50	0.045	C
BARIUM	67.6	134	141	141	2000	260	N
BERYLLIUM	0.63 B	2.9	3.2 B	2.2 B	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 UL	0.52 K	5	3.7	N
CALCIUM	6910	9710	9800	8070	N/A	N/A	
CHROMIUM	15.7 B	25.4	29.2	9.9 L	100	11	N
COBALT	12.9	35.8	35.1	22.4	N/A	220	N
COPPER	2.4 UL	23.9	25.1	89.7	1300	150	N
CYANIDE	2.7 U	1.5 B	1.4 U	3.0 U	200	73	N
IRON	8840	38700 K	38200	22200	300	1100	N
LEAD	2.1 K	13.0	12.6	9.6	15	15	
MAGNESIUM	5390	9030	9490	6790	N/A	N/A	
MANGANESE	1540	2530	2380	1920	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.05	2	1.1(a)	N
NICKEL	35.1	55.3	61.1	44.5	100	73	N
POTASSIUM	4460	7250	6900	6110	N/A	N/A	
SELENIUM	3.6 B	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 UJ	100	18	N
SODIUM	4660	7330	4660	5270	N/A	N/A	
THALLIUM	4.6 B	3.8 B	7.6	4.3 UJ	2	0.26	N
VANADIUM	2.1 U	7.4	10.7	8.2	N/A	26	N
ZINC	41.4	132	144	86.2	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				490	N/A	21	N
DISSOLVED OXYGEN	5160				N/A	N/A	
PERCHLORATES	5 U		4 U	8 U	N/A	N/A	
PH	5.99				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.113				N/A	N/A	
TEMPERATURE	11.6				N/A	N/A	
TURBIDITY	274				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - No[illegible]able
**All RB[illegible]es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW71
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION:	11GW71	11GW71	11GW71	11GW71	11GW71	11GW71	11GW71	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ROUND:	1	2	2	3	3	4	4			
SAMPLE I.D.:	11GW710001	11GW710002	11GW710002-D	11GW710003	11GW710003-D	11GW710004	11GW710004-D			
SAMPLE DATE:	2/2/99	4/9/99	4/9/99	7/19/99	7/19/99	10/12/99	10/12/99			
ASSOCIATED DUPLICATE:		11GW710002-D	11GW710002	11GW710003-D	11GW710003	11GW710004-D	11GW710004			
VOLATILES (µg/L)										
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	0.12 J	75	0.47	C
ACETONE	1.8 B	5 UR	5 UR	5.3 J	2.7 J	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 UR	0.34 J	1 U	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	0.46 J	1 U	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	0.33 B	0.51 B	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	0.11 J	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)										
4-METHYLPHENOL	5 U	6.6 U	5.5 U	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	6.6 U	5.5 U	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	6.6 U	5.5 U	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	6.6 U	5.5 U	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	6.6 U	5.5 U	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)										
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)										
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)										
TPH-DIESEL						100 UJ	100 UJ	N/A	N/A	
INORGANICS (µg/L)										
ALUMINUM	4380	18.2 B	17.0 B	149 J	1620 J	57.0 B	67.1 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	34.2 UL	1.7 U	1.7 U	5.8 UJ	5.8 UJ	6	1.5	N
ARSENIC	2.0	1.3 U	1.3 U	1.1 U	1.1 U	3.3 U	3.3 U	50	0.045	C
BARIUM	111	45.1	44.5	41.2	55.6	46.2	45.6	2000	260	N
BERYLLIUM	0.59 B	0.07 U	0.08 B	0.11 B	0.32 B	0.30 U	0.30 U	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 UL	3.0 UL	3.0 UL	0.50 U	0.50 U	5	3.7	N
CALCIUM	4110	4930	4830	4260	4240	4410	4350	N/A	N/A	
CHROMIUM	19.8 L	3.0 UL	3.0 UL	7.7	19.4	1.2 U	1.2 U	100	11	N
COBALT	21.8 B	4.7	5.2	29.9	25.2	5.3	4.3	N/A	220	N
COPPER	13.1	2.9 B	3.2 B	3.3	5.8	1.3 U	1.3 U	1300	150	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW71
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW71 1 11GW710001 2/2/99	11GW71 2 11GW710002 4/9/99 11GW710002-D	11GW71 2 11GW710002-D 4/9/99 11GW710002	11GW71 3 11GW710003 7/19/99 11GW710003-D	11GW71 3 11GW710003-D 7/19/99 11GW710003	11GW71 4 11GW710004 10/12/99 11GW710004-D	11GW71 4 11GW710004-D 10/12/99 11GW710004	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
CYANIDE	10.0 U	2.5 U	2.7	1.4 U	1.4 U	10.0 U	10.0 U	200	73	N
IRON	15800	302	307	779 J	5450 J	762	686	300	1100	N
LEAD	4.3 B	0.92 U	0.92 U	1.0 UL	1.0 UL	1.7 UL	1.7 UL	15	15	
MAGNESIUM	2680	2050	2030	1700	1840	1800	1760	N/A	N/A	
MANGANESE	1490	323	319	202	269	513	486	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.20 U	2	1.1(a)	N
NICKEL	35.6	5.9 U	6.3	14.3 K	24.7 K	8.3	9.2	100	73	N
POTASSIUM	3190	2070	1960	2030	2270	1840	1840	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.0 U	2.7 U	2.7 U	3.8 UL	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	3.3 U	2.2 U	2.2 U	1.9 U	1.9 U	100	18	N
SODIUM	6340	7710	7540	7000 J	425000 J	6370	6490	N/A	N/A	
THALLIUM	2.9 U	3.3 U	3.3 U	4.5 B	7.8 B	4.3 U	4.3 U	2	0.26	N
VANADIUM	12.6 B	5.1 U	5.1 U	2.4 U	5.1	1.4 U	1.4 U	N/A	26	N
ZINC	55.3 B	13.6	8.6	26.1	18.7 B	5.7 K	6.7 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)										
AMMONIA						200 U	200	N/A	21	N
DISSOLVED OXYGEN	4840							N/A	N/A	
PERCHLORATES	5 U			4 U	4 U	4 U	4 U	N/A	N/A	
PH	6.03							N/A	N/A	
SALINITY	0							N/A	N/A	
SPECIFIC CONDUCTIVITY	0.071							N/A	N/A	
TEMPERATURE	15.5							N/A	N/A	
TURBIDITY	180							N/A	N/A	

(a) - RBC v[illegible] shown is based on Mercuric chloride.
N/A - Not [illegible]e
**All RBC [illegible] have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW72
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW72 1 11GW720001 2/6/99	11GW72 2 11GW720002 4/15/99	11GW72 3 11GW720003 7/15/99	11GW72 4 11GW720004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	5 UR	5 UR	2.6 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.2 J	1 U	100	11	N
CHLOROFORM	1 U	0.36 B	0.37 J	0.39 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	0.26 J	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				110 J	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	316 B	150	1760 J	175 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW72
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW72 1 11GW720001 2/6/99	11GW72 2 11GW720002 4/15/99	11GW72 3 11GW720003 7/15/99	11GW72 4 11GW720004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.5	3.3 U	50	0.045	C
BARIUM	63.5	72.9	74.7	75.0	2000	260	N
BERYLLIUM	0.17 B	0.31 B	0.57 B	0.30 U	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 U	0.50 U	5	3.7	N
CALCIUM	8960	9470	10400	9640	N/A	N/A	
CHROMIUM	4.4 B	3.0 UL	6.6	2.0	100	11	N
COBALT	6.5	7.9	30.2	5.3	N/A	220	N
COPPER	9.2 L	10.4	33.0	5.9	1300	150	N
CYANIDE	2.7 U	1.1 U	1.4 U	10.0 U	200	73	N
IRON	176 L	66.3 K	1890 J	33.6 U	300	1100	N
LEAD	1.0 U	0.92 U	1.7 L	1.7 UL	15	15	
MAGNESIUM	6940	7780	8810	6740	N/A	N/A	
MANGANESE	59.8	55.3	150	57.1	50	73	N
MERCURY	0.20 U	0.10 U	0.12 J	0.20 U	2	1.1(a)	N
NICKEL	19.2	10.9	16.7	12.9	100	73	N
POTASSIUM	1900 B	2090	2040	2050	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 U	100	18	N
SODIUM	4970	4960	5010	4270	N/A	N/A	
THALLIUM	2.9 U	3.3 U	6.4 B	4.3 U	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.5	1.4 U	N/A	26	N
ZINC	21.2	16.3	40.5	18.4 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200	N/A	21	N
DISSOLVED OXYGEN	7220				N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	N/A	N/A	
PH	5.8				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.141				N/A	N/A	
TEMPERATURE	16.5				N/A	N/A	
TURBIDITY	72				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not applicable
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW73
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW73 1 11GW730001 2/4/99	11GW73 2 11GW730002 4/15/99	11GW73 3 11GW730003 7/16/99	11GW73 4 11GW730004 10/13/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	5 UR	5 UR	3.2 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.052 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 UJ	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	57.4 B	45.2	333 J	192 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.8 U	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW73
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW73 1 11GW730001 2/4/99	11GW73 2 11GW730002 4/15/99	11GW73 3 11GW730003 7/16/99	11GW73 4 11GW730004 10/13/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 U	50	0.045	C
BARIUM	15.1	14.2	16.8	16.2	2000	260	N
BERYLLIUM	0.11 B	0.08 B	0.11 B	0.30 U	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 UL	0.50 U	5	3.7	N
CALCIUM	2000	2130	1940	1390	N/A	N/A	
CHROMIUM	4.8 L	5.1 L	8.1	2.4	100	11	N
COBALT	3.3 U	7.4	16.5	1.2 U	N/A	220	N
COPPER	4.7	7.3	12.4	1.3 U	1300	150	N
CYANIDE	10.0 U	1.5 B	1.4 U	10.0 U	200	73	N
IRON	132 B	169 K	1330 J	370	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.7 UL	15	15	
MAGNESIUM	1360	1380	1460	1240	N/A	N/A	
MANGANESE	18.9	21.4	35.4	23.3	50	73	N
MERCURY	0.20 U	0.10 U	0.10 B	0.20 U	2	1.1(a)	N
NICKEL	8.5	12.2	11.7 K	5.8	100	73	N
POTASSIUM	1390 B	1290	1050	790	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	3.5 B	3.3 UL	2.2 U	1.9 U	100	18	N
SODIUM	2290	2510	2220 J	1820	N/A	N/A	
THALLIUM	2.9 U	3.3 U	6.7 B	6.4 B	2	0.26	N
VANADIUM	3.8 B	5.1 U	3.7	1.4 U	N/A	26	N
ZINC	22.7 B	23.9	23.8	8.4 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	2310				N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	N/A	N/A	
PH	5.32				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.049				N/A	N/A	
TEMPERATURE	16.1				N/A	N/A	
TURBIDITY	14.5				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not applicable
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW84
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW84 1 11GW840001 2/2/99 11GW840001-D	11GW84 1 11GW840001-D 2/2/99 11GW840001	11GW84 2 11GW840002 4/14/99	11GW84 3 11GW840003 7/15/99	11GW84 4 11GW840004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)								
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.2 B	2.2 B	5 UR	2.9 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	0.33 J	1 U	100	11	N
CHLOROFORM	2.8	2.6	3.6	3.4	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	0.22 J	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	0.29 J	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	0.25 J	1 U	1 U	0.55 J	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)								
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)								
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)								
2,4-DINITROTOLUENE	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)								
TPH-DIESEL					100 UJ	N/A	N/A	
INORGANICS (µg/L)								
ALUMINUM	45.0 B	53.5 B	302	13300 J	3010	50-200	3700	N
ANTIMONY	1.9 U	1.9 U	34.2 UL	1.7 U	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW84
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW84 1 11GW840001 2/2/99 11GW840001-D	11GW84 1 11GW840001-D 2/2/99 11GW840001	11GW84 2 11GW840002 4/14/99	11GW84 3 11GW840003 7/15/99	11GW84 4 11GW840004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.5 U	1.3 U	1.3	3.3 U	50	0.045	C
BARIUM	23.8	24.3	24.2	73.5	36.3	2000	260	N
BERYLLIUM	0.10 U	0.11 B	0.25 B	2.7	0.41 B	4	7.3	N
CADMIUM	2.7 UJ	2.7 UJ	3.0 UL	3.0 UL	0.50 U	5	3.7	N
CALCIUM	2390	2490	2890	3870	2680	N/A	N/A	
CHROMIUM	2.3 UL	5.9 L	3.0 UL	24.6	1.2 U	100	11	N
COBALT	3.4 B	5.0 B	4.4	7.2	3.6	N/A	220	N
COPPER	3.9	6.1	8.8	12.3	1.3 U	1300	150	N
CYANIDE	10.0 U	10.0 U	1.7 B	1.4 U	10.0 U	200	73	N
IRON	56.5 B	95.7 B	351 K	7090 J	1110	300	1100	N
LEAD	1.0 U	1.0 U	0.92 U	13.3	1.7 UL	15	15	
MAGNESIUM	1580	1630	1600	2660	1730	N/A	N/A	
MANGANESE	17.9	19.4	21.8	119	35.8	50	73	N
MERCURY	0.20 U	0.20 U	0.10 U	0.10 U	0.05	2	1.1(a)	N
NICKEL	7.5 U	7.7	5.9 U	27.3 K	3.9	100	73	N
POTASSIUM	1280 B	2380 B	1850	2450	1540	N/A	N/A	
SELENIUM	3.6 K	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	2.8 U	3.3 UL	2.2 U	1.9 U	100	18	N
SODIUM	4950	4840	4810	5290 J	4790	N/A	N/A	
THALLIUM	5.5	2.9 U	3.3 U	3.7 U	4.3 U	2	0.26	N
VANADIUM	2.1 U	5.1 B	5.1 U	3.8	1.4 U	N/A	26	N
ZINC	18.7 B	20.1 B	18.8	48.6	12.4 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)								
AMMONIA					200 U	N/A	21	N
DISSOLVED OXYGEN	5190					N/A	N/A	
PERCHLORATES	5 U	5 U		4 U	4 U	N/A	N/A	
PH	5.3					N/A	N/A	
SALINITY	0					N/A	N/A	
SPECIFIC CONDUCTIVITY	0.052					N/A	N/A	
TEMPERATURE	19					N/A	N/A	
TURBIDITY	9					N/A	N/A	

(a) - RBC [illegible]ue shown is based on Mercuric chloride.
N/A - Nc [illegible]able
**All RBC [illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW85
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW85 1 11GW850001 2/7/99	11GW85 2 11GW850002 4/15/99	11GW85 3 11GW850003 7/20/99	11GW85 4 11GW850004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.9 J	5 UR	2.5 J	1.3 B	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	0.52 J	0.74 B	1	0.56 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	0.33 B	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 UJ	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	613	208	4250 J	867	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW85
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW85 1 11GW850001 2/7/99	11GW85 2 11GW850002 4/15/99	11GW85 3 11GW850003 7/20/99	11GW85 4 11GW850004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 U	50	0.045	C
BARIUM	62.1	55.5	80.8	64.2	2000	260	N
BERYLLIUM	0.42 B	0.26 B	1.2 B	0.30 U	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 UL	0.50 U	5	3.7	N
CALCIUM	4720	4960	5170	4540	N/A	N/A	
CHROMIUM	6.9 B	3.0 UL	14.2	10.0	100	11	N
COBALT	3.3 U	2.5 U	14.0	3.1	N/A	220	N
COPPER	2.4 UL	5.6	14.9	1.3 U	1300	150	N
CYANIDE	2.7 U	1.1 U	1.4 U	10.0 U	200	73	N
IRON	839	363 K	6890 J	994	300	1100	N
LEAD	1.0 U	0.92 U	3.4 L	1.7 UL	15	15	
MAGNESIUM	3790	3570	4510	3470	N/A	N/A	
MANGANESE	90.8	47.7	251	84	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.20 U	2	1.1(a)	N
NICKEL	12.6	8.2	21.0 K	16.0	100	73	N
POTASSIUM	2320 B	1960	3260	2220	N/A	N/A	
SELENIUM	2.5 U	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 U	100	18	N
SODIUM	12400	12400	12300 J	11300	N/A	N/A	
THALLIUM	2.9 U	3.3 U	5.1 B	4.3 U	2	0.26	N
VANADIUM	2.1 U	5.1 U	5.0	1.4 U	N/A	26	N
ZINC	19.0	75.5	36.4	15.7 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	5250				N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	N/A	N/A	
PH	4.84				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.137				N/A	N/A	
TEMPERATURE	18.4				N/A	N/A	
TURBIDITY	9.6				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not applicable
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW86
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW86 1 11GW860001 2/2/99	11GW86 2 11GW860002 4/12/99	11GW86 3 11GW860003 7/14/99	11GW86 4 11GW860004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.4 B	5 UR	5 UR	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	0.29 J	0.3 J	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	0.34 J	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	0.72 J	1 U	0.25 J	0.72 J	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.22	0.34 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.76 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				110	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	5340	8780	9370 J	436 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW86
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW86 1 11GW860001 2/2/99	11GW86 2 11GW860002 4/12/99	11GW86 3 11GW860003 7/14/99	11GW86 4 11GW860004 10/12/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	2.0	1.2	3.3 UL	50	0.045	C
BARIUM	794	262	258	181	2000	260	N
BERYLLIUM	4.7 B	1.0 B	0.95	0.26 U	4	7.3	N
CADMIUM	5.4 B	3.0 UL	3.0 U	0.49 U	5	3.7	N
CALCIUM	25300	11400	11000	10200	N/A	N/A	
CHROMIUM	7.8 L	14.5 L	15.2	1.2 UL	100	11	N
COBALT	130	61.0	62.3	48.9	N/A	220	N
COPPER	184	37.5 B	36.2	1.3 U	1300	150	N
CYANIDE	10.0 U	2.5 U	1.4 U	3.0 U	200	73	N
IRON	68300	39500	42600 J	14100	300	1100	N
LEAD	6.9	4.3 B	2.0 L	1.7 UL	15	15	
MAGNESIUM	13400	11400	11600	6720	N/A	N/A	
MANGANESE	17000	10100	10900	9560	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.05 U	2	1.1(a)	N
NICKEL	113	40.2	44.9	32.0	100	73	N
POTASSIUM	5480	8320	7540	3060	N/A	N/A	
SELENIUM	10.1 K	2.7 K	5.4 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	1.9 UJ	100	18	N
SODIUM	23700	21500	20400	20100	N/A	N/A	
THALLIUM	5.8 U	3.4 B	10.2 B	9.0 B	2	0.26	N
VANADIUM	22.5	18.2	16.8	1.4 U	N/A	26	N
ZINC	151	96.4	77.2	20.9 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				500	N/A	21	N
DISSOLVED OXYGEN	8160				N/A	N/A	
PERCHLORATES	5 U		4 U	16 U	N/A	N/A	
PH	5.96				N/A	N/A	
SALINITY	0.01				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.345				N/A	N/A	
TEMPERATURE	16.8				N/A	N/A	
TURBIDITY	188				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not applicable
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW87
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW87 1 11GW870001 2/5/99 11GW870001-D	11GW87 1 11GW870001-D 2/5/99 11GW870001	11GW87 2 11GW870002 4/13/99	11GW87 3 11GW870003 7/21/99	11GW87 4 11GW870004 10/18/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)								
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	0.37 J	0.35 J	0.3 J	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	0.62 J	0.58 J	0.85 J	1.2 J	0.8 J	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2 B	1.7 B	5 UR	2.8 B	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	0.2 B	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	2.2	2.1	3.5	3.4	3	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	0.2 B	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	0.1 J	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1.4	1.4	3.4	3.2	2	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)								
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)								
ALPHA-CHLORDANE	0.051 U	0.052 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.051 U	0.052 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.051 U	0.052 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)								
2,4-DINITROTOLUENE	0.21	0.22	0.21 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)								
TPH-DIESEL					130	N/A	N/A	
INORGANICS (µg/L)								
ALUMINUM	42.9 B	12.9 B	185	248 B	118 B	50-200	3700	N
ANTIMONY	1.9 U	1.9 B	34.2 UL	1.7 U	2.5	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW87
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW87 1 11GW870001 2/5/99 11GW870001-D	11GW87 1 11GW870001-D 2/5/99 11GW870001	11GW87 2 11GW870002 4/13/99	11GW87 3 11GW870003 7/21/99	11GW87 4 11GW870004 10/18/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.5 U	1.3 U	1.1 U	2.3 U	50	0.045	C
BARIUM	252	257	273	287	325	2000	260	N
BERYLLIUM	1.0 B	0.97 B	1.3	1.1 B	1.4 B	4	7.3	N
CADMIUM	2.7 UJ	2.7 UJ	3.0 UL	3.0 UL	0.20 U	5	3.7	N
CALCIUM	18300	18200	18400	18800	19400	N/A	N/A	
CHROMIUM	2.3 UL	2.3 UL	3.0 UL	3.9	1.5 B	100	11	N
COBALT	13.3 B	10.9 B	12.7	14.7	12.9	N/A	220	N
COPPER	3.5	2.7	3.3	4.2 B	0.70 U	1300	150	N
CYANIDE	10.0 U	10.0 U	1.1 U	1.4 U	1.5	200	73	N
IRON	25300	25800	30100 K	33700	35800	300	1100	N
LEAD	1.0 U	1.0 U	0.92 U	1.0 U	1.1 U	15	15	
MAGNESIUM	11300	11600	12200	12600	12800	N/A	N/A	
MANGANESE	1960	2010	2290	2480	2760	50	73	N
MERCURY	0.20 U	0.20 U	0.10 U	0.10 U	0.20 UL	2	1.1(a)	N
NICKEL	49.7	52.9	63.6	65.6	76.4	100	73	N
POTASSIUM	5090	5060	5130	4770	6020	N/A	N/A	
SELENIUM	2.5 U	2.5 U	2.0 U	2.7 U	3.5 U	50	18	N
SILVER	2.8 U	2.8 U	3.3 UL	2.2 U	0.60 U	100	18	N
SODIUM	17900	18300	20800	20200	21800	N/A	N/A	
THALLIUM	2.9 U	2.9 U	3.3 U	3.7 U	5.1 B	2	0.26	N
VANADIUM	2.1 U	3.7 B	5.1 U	2.4 U	0.60 U	N/A	26	N
ZINC	73.4 B	65.7 B	78.5	64.0	61.3	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)								
AMMONIA					200 U	N/A	21	N
DISSOLVED OXYGEN	3400					N/A	N/A	
PERCHLORATES	5 U	5 U		8 U	10 U	N/A	N/A	
PH	5.94					N/A	N/A	
SALINITY	0.01					N/A	N/A	
SPECIFIC CONDUCTIVITY	0.407					N/A	N/A	
TEMPERATURE	13.8					N/A	N/A	
TURBIDITY	35					N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]lable
**All RB[illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW88
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW88 1 11GW880001 2/6/99	11GW88 2 11GW880002 4/14/99	11GW88 3 11GW880003 7/19/99	11GW88 4 11GW880004 10/13/99 11GW880004-D	11GW88 4 11GW880004-D 10/13/99 11GW880004	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)								
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.3 J	5 UR	5 UR	5 UR	1.4 B	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.28 J	1 U	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	0.35 B	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)								
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)								
ALPHA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.052 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.052 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)								
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)								
TPH-DIESEL				100 UJ	100 UJ	N/A	N/A	
INORGANICS (µg/L)								
ALUMINUM	140 B	103	199 J	72.6 B	70.7 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.8 UJ	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11GW88
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11GW88 1 11GW880001 2/6/99	11GW88 2 11GW880002 4/14/99	11GW88 3 11GW880003 7/19/99	11GW88 4 11GW880004 10/13/99 11GW880004-D	11GW88 4 11GW880004-D 10/13/99 11GW880004	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 U	3.3 U	50	0.045	C
BARIUM	24.3	24.8	26.7	25.9	25.6	2000	260	N
BERYLLIUM	0.10 U	0.14 B	0.18 B	0.30 U	0.30 U	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 UL	2.3 K	2.5 K	5	3.7	N
CALCIUM	3190	3520	3300	3120	3090	N/A	N/A	
CHROMIUM	5.1 B	3.0 UL	2.4 U	1.2 U	1.2 U	100	11	N
COBALT	3.3 U	2.5 U	3.8 U	1.2 U	1.2 U	N/A	220	N
COPPER	2.4 UL	4.1	3.8	1.3 U	1.3 U	1300	150	N
CYANIDE	2.7 U	1.1 U	1.4 U	10.0 U	10.0 U	200	73	N
IRON	328	209 K	468 J	33.6 U	42.3 K	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.7 UL	1.7 UL	15	15	
MAGNESIUM	1840	2010	2160	1820	1810	N/A	N/A	
MANGANESE	51.7	43.9	66.3	31.6	34.1	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.20 U	0.20 U	2	1.1(a)	N
NICKEL	7.8	5.9 U	8.8 U	1.8 U	3.3	100	73	N
POTASSIUM	1240 B	1000	1190	1050	1050	N/A	N/A	
SELENIUM	3.8 B	2.0 U	2.7 U	3.8 UL	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 U	1.9 U	100	18	N
SODIUM	8200	9520	9930 J	8880	8900	N/A	N/A	
THALLIUM	3.0 B	5.7 B	5.2 B	4.5 B	4.3 U	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.4 U	1.4 U	1.4 U	N/A	26	N
ZINC	13.0	23.4	29.4	7.4 K	7.1 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)								
AMMONIA				200 U	200 U	N/A	21	N
DISSOLVED OXYGEN	4450					N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	4 U	N/A	N/A	
PH	5.32					N/A	N/A	
SALINITY	0					N/A	N/A	
SPECIFIC CONDUCTIVITY	0.083					N/A	N/A	
TEMPERATURE	16.7					N/A	N/A	
TURBIDITY	9.4					N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not applicable
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11PZ62
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11PZ62 1 11GW620001 2/6/99	11PZ62 2 11GW620002 4/15/99	11PZ62 3 11GW620003 7/15/99	11PZ62 4 11GW620004 10/14/99 11GW620004-D	11PZ62 4 11GW620004-D 10/14/99 11GW620004	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)								
1,1,1-TRICHLOROETHANE	1 U	1 U	0.33 J	0.13 J	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.5 J	5 UR	2.5 J	1.3 B	1.4 B	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.24 J	1 U	1 U	100	11	N
CHLOROFORM	1 U	0.18 B	0.21 J	0.11 J	0.11 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	0.21 J	0.25 J	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)								
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)								
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)								
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)								
TPH-DIESEL				100 UJ	110 J	N/A	N/A	
INORGANICS (µg/L)								
ALUMINUM	29.6 B	30.2	265 J	77.1 B	159 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.8 UJ	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11PZ62
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11PZ62 1 11GW620001 2/6/99	11PZ62 2 11GW620002 4/15/99	11PZ62 3 11GW620003 7/15/99	11PZ62 4 11GW620004 10/14/99 11GW620004-D	11PZ62 4 11GW620004-D 10/14/99 11GW620004	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 K	3.3 U	50	0.045	C
BARIUM	14.3	8.6	11.0	10.1	10.3	2000	260	N
BERYLLIUM	0.10 U	0.08 B	0.11 B	0.30 U	0.30 U	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 U	0.50 U	0.50 U	5	3.7	N
CALCIUM	10400	7180	5000	4560	4660	N/A	N/A	
CHROMIUM	2.3 U	3.0 UL	7.2 J	1.2 U	1.2 U	100	11	N
COBALT	3.3 U	3.2	26.6	1.8	1.2 U	N/A	220	N
COPPER	2.4 UL	7.3	8.1	2.4	2.0	1300	150	N
CYANIDE	2.7 U	1.1 U	1.4 U	10.0 U	10.0 U	200	73	N
IRON	200 L	79.6 K	458 J	80.8 K	340	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.7 UL	1.7 UL	15	15	
MAGNESIUM	3020	2040	1720	1460	1490	N/A	N/A	
MANGANESE	84.6	54.3	40.2	37.0	37.7	50	73	N
MERCURY	0.20 U	0.10 U	0.10 UJ	0.20 U	0.20 U	2	1.1(a)	N
NICKEL	7.5 U	5.9 U	8.8 U	1.8 U	1.8 U	100	73	N
POTASSIUM	743 B	1270	648	690	710	N/A	N/A	
SELENIUM	3.8 B	2.0 U	2.7 U	3.8 UL	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 U	1.9 U	100	18	N
SODIUM	22600	18700	15500	16100	16100	N/A	N/A	
THALLIUM	3.6 B	3.3 U	4.8 B	8.8 B	4.3 U	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.4 U	1.4 U	1.4 U	N/A	26	N
ZINC	26.3	22.8	26.0 B	28.5 K	33.7 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)								
AMMONIA				200 U	200 U	N/A	21	N
DISSOLVED OXYGEN	5430					N/A	N/A	
PERCHLORATES	5 U		4 U	8 U	4 U	N/A	N/A	
PH	5.42					N/A	N/A	
SALINITY	0					N/A	N/A	
SPECIFIC CONDUCTIVITY	0.224					N/A	N/A	
TEMPERATURE	14.8					N/A	N/A	
TURBIDITY	6.09					N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Nc [illegible] able
**All RB[illegible] es have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11PZ63
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11PZ63 1 11GW630001 2/8/99	11PZ63 2 11GW630002 4/15/99	11PZ63 3 11GW630003 7/19/99	11PZ63 4 11GW630004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	2.3 J	5 UR	5 UR	1.2 B	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	0.29 J	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	1 U	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 UL	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 UL	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 UL	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.56 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.56 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	3340	4840	135000 J	60900 K	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	8.5 U	7.1 J	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11PZ63
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11PZ63 1 11GW630001 2/8/99	11PZ63 2 11GW630002 4/15/99	11PZ63 3 11GW630003 7/19/99	11PZ63 4 11GW630004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	3.4	50.2 K	13.3 L	50	0.045	C
BARIUM	76.2	125	1130	430	2000	260	N
BERYLLIUM	1.7 B	4.1	91.1	40.1 L	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	15.0 UL	0.49 UL	5	3.7	N
CALCIUM	4790	8210	35000	10600	N/A	N/A	
CHROMIUM	61.3	13.1 L	339	118	100	11	N
COBALT	18.9	29.9	289 K	74.5	N/A	220	N
COPPER	10.9 L	26.1	445	190	1300	150	N
CYANIDE	2.7 U	1.1 U	1.4 U	3.0 U	200	73	N
IRON	41600	72500 K	1550000 J	850000	300	1100	N
LEAD	5.5 K	9.1	183 K	64.3 K	15	15	
MAGNESIUM	6560	9020	60800	20800	N/A	N/A	
MANGANESE	1800	1630	8130	3720	50	73	N
MERCURY	0.20 U	0.10 U	0.73 B	0.29	2	1.1(a)	N
NICKEL	80.2	52.8	436 L	171 K	100	73	N
POTASSIUM	5320	6240	40800	17200 L	N/A	N/A	
SELENIUM	2.5 U	2.0 U	28.0 K	6.1 J	50	18	N
SILVER	2.8 U	3.3 UL	28.9	1.9 UJ	100	18	N
SODIUM	27100	41900	57100 J	27100	N/A	N/A	
THALLIUM	4.2 B	4.9 B	18.5 UL	4.3 UJ	2	0.26	N
VANADIUM	7.1 B	10.4	255 K	115 K	N/A	26	N
ZINC	140	231	2110	901	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				470	N/A	21	N
DISSOLVED OXYGEN	5260				N/A	N/A	
PERCHLORATES	5 U		8 U	8 U	N/A	N/A	
PH	5.2				N/A	N/A	
SALINITY	0.01				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.298				N/A	N/A	
TEMPERATURE	13.5				N/A	N/A	
TURBIDITY	330				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not applicable
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11PZ64
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11PZ64 1 11GW640001 2/4/99	11PZ64 2 11GW640002 4/12/99	11PZ64 3 11GW640003 7/14/99	11PZ64 4 11GW640004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.6 B	1.6 B	1.7 J	5 UR	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.20 J	1 U	100	11	N
CHLOROFORM	1 U	1 U	1 U	1 U	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				150	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	4900	2450	4550 J	885 K	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 UL	5.7 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11PZ64
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11PZ64 1 11GW640001 2/4/99	11PZ64 2 11GW640002 4/12/99	11PZ64 3 11GW640003 7/14/99	11PZ64 4 11GW640004 10/11/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	5.9	2.6	5.2	3.3 UL	50	0.045	C
BARIUM	120	62.6	106	47.2	2000	260	N
BERYLLIUM	0.57 B	0.35 B	0.95 B	0.26 U	4	7.3	N
CADMIUM	2.7 UJ	3.0 UL	3.0 U	0.49 U	5	3.7	N
CALCIUM	4420	3360	5330	2150	N/A	N/A	
CHROMIUM	15.7 L	4.0 L	17.6 J	1.2 UL	100	11	N
COBALT	46.4	26.2	47.5	17.2	N/A	220	N
COPPER	36.1	21.2 B	40.5	2.7	1300	150	N
CYANIDE	10.0 U	2.5 U	1.4 U	3.0 U	200	73	N
IRON	20300	11500	20800 J	4580	300	1100	N
LEAD	11.5	6.0 K	11.2	1.7 UL	15	15	
MAGNESIUM	4040	2910	4810	1850	N/A	N/A	
MANGANESE	993	754	1110	617	50	73	N
MERCURY	0.20 U	0.11	0.10 UJ	0.06	2	1.1(a)	N
NICKEL	25.3	5.9 U	22.9	3.2	100	73	N
POTASSIUM	2270 B	1720	2540	1060	N/A	N/A	
SELENIUM	4.6 K	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 U	2.2 U	1.9 UJ	100	18	N
SODIUM	3430	3170	3480	2830	N/A	N/A	
THALLIUM	4.1	3.4 B	4.8 B	4.3 UJ	2	0.26	N
VANADIUM	19.8	11.8	19.1	2.4	N/A	26	N
ZINC	52.7 B	43.2	83.0	7.1 K	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				300	N/A	21	N
DISSOLVED OXYGEN	2880				N/A	N/A	
PERCHLORATES	5 U		4 U	8	N/A	N/A	
PH	5.6				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.073				N/A	N/A	
TEMPERATURE	14.1				N/A	N/A	
TURBIDITY	999				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]lable
**All RB[illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11PZ65
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11PZ65 1 11GW650001 2/7/99	11PZ65 2 11GW650002 4/14/99	11PZ65 3 11GW650003 7/15/99	11PZ65 4 11GW650004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	200	54	N
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.19	C
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	N/A	80	N
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	7	0.044	C
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	70	19	N
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	600	55	N
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	5	0.12	C
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	N/A	0.55	N
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	75	0.47	C
ACETONE	1.8 J	5 UR	3.8 J	1.4 B	N/A	61	N
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	80	0.17	C
BROMOMETHANE	1 U	1 UR	1 U	1 U	N/A	0.85	N
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	5	0.16	C
CHLOROBENZENE	1 U	1 U	0.46 J	1 U	100	11	N
CHLOROFORM	0.4 J	0.85 B	0.63 J	0.31 J	80	0.15	C
CHLOROMETHANE	1 U	1 U	1 U	1 U	N/A	2.1	C
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	70	6.1	N
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	5	4.1	C
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	5	1.1	C
TOLUENE	1 U	1 U	1 U	1 U	1000	75	N
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	100	12	N
TRICHLOROETHENE	1 U	1 U	1 U	1 U	5	1.6	C
XYLENES, TOTAL	1 U	1 U	1 U	1 U	10000	1200	N
SEMIVOLATILES (µg/L)							
4-METHYLPHENOL	5 U	5 U	5 U	5 U	N/A	18	N
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	N/A	0.092	C
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	N/A	73	N
FLUORANTHENE	5 U	5 U	5 U	5 U	N/A	150	N
PYRENE	5 U	5 U	5 U	5 U	N/A	18	N
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	2	0.19	C
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.2	0.0074	C
EXPLOSIVES (µg/L)							
2,4-DINITROTOLUENE	0.20 U	0.2 U	0.2 U	0.2 U	N/A	7.3	N
TETRYL	0.20 U	0.2 U	0.2 U	0.2 U	N/A	37	N
PETROLEUM HYDROCARBONS (µg/L)							
TPH-DIESEL				100 UJ	N/A	N/A	
INORGANICS (µg/L)							
ALUMINUM	40.2 B	42.9	85.7 J	268 B	50-200	3700	N
ANTIMONY	1.9 U	34.2 UL	1.7 U	5.8 UJ	6	1.5	N

(a) - RBC value shown is based on Mercuric chloride.
N/A - Not available
**All RBC values have been divided by a factor of 10 for non-carcinogens (N).

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
WELL #11PZ65
SUMMARY OF ANALYTICAL RESULTS FOR ALL ROUNDS OF GROUNDWATER DATA - 1999

LOCATION: ROUND: SAMPLE I.D.: SAMPLE DATE: ASSOCIATED DUPLICATE:	11PZ65 1 11GW650001 2/7/99	11PZ65 2 11GW650002 4/14/99	11PZ65 3 11GW650003 7/15/99	11PZ65 4 11GW650004 10/14/99	FEDERAL MCLs	REGION III RBC FOR TAP WATER	TAP WATER BASIS
ARSENIC	1.5 U	1.3 U	1.1 U	3.3 U	50	0.045	C
BARIUM	30.9	28.4	31.0	34.4	2000	260	N
BERYLLIUM	0.66 B	0.62 B	0.72 B	1.0 B	4	7.3	N
CADMIUM	2.7 UL	3.0 UL	3.0 UL	0.50 U	5	3.7	N
CALCIUM	3530	4010	3660	3490	N/A	N/A	
CHROMIUM	2.3 U	3.0 UL	3.7	1.2 U	100	11	N
COBALT	4.2	8.7	22.9	5.0	N/A	220	N
COPPER	2.4 UL	7.2	5.2	1.3 U	1300	150	N
CYANIDE	2.7 U	2.1 B	1.4 U	10.0 U	200	73	N
IRON	4190	3330 K	3340 J	4460	300	1100	N
LEAD	1.0 U	0.92 U	1.0 UL	1.7 UL	15	15	
MAGNESIUM	4130	4120	4170	3960	N/A	N/A	
MANGANESE	501	494	511	537	50	73	N
MERCURY	0.20 U	0.10 U	0.10 U	0.20 U	2	1.1(a)	N
NICKEL	17.7	13.3	22.7 K	15.2	100	73	N
POTASSIUM	3700	3940	3880	3660	N/A	N/A	
SELENIUM	2.6 B	2.0 U	2.7 U	3.8 UL	50	18	N
SILVER	2.8 U	3.3 UL	2.2 U	1.9 U	100	18	N
SODIUM	4170	4130	3920 J	4040	N/A	N/A	
THALLIUM	3.4 B	4.1 B	6.1 B	4.3 U	2	0.26	N
VANADIUM	2.1 U	5.1 U	2.4 U	1.4 U	N/A	26	N
ZINC	43.0	45.8	52.0	43.4	5000	1100	N
MISCELLANEOUS PARAMETERS (µg/L)							
AMMONIA				200 U	N/A	21	N
DISSOLVED OXYGEN	3790				N/A	N/A	
PERCHLORATES	5 U		4 U	4 U	N/A	N/A	
PH	6.4				N/A	N/A	
SALINITY	0				N/A	N/A	
SPECIFIC CONDUCTIVITY	0.091				N/A	N/A	
TEMPERATURE	14.1				N/A	N/A	
TURBIDITY	8.3				N/A	N/A	

(a) - RBC value shown is based on Mercuric chloride.
N/A - N[illegible]able
**All RB[illegible]ues have been divided by a factor of 10 for non-carcinogens (N).

SECTION E

SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER – ROUND 4 DATA, OCTOBER 1999

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW220004	11GW230004	11GW240004	11GW250004	11GW260004	11GW270004	11GW280004	11GW290004
LOCATION:	11GW22	11GW23	11GW24	11GW25	11GW26	11GW27	11GW28	11GW29
SAMPLE DATE:	10/8/99	10/8/99	10/11/99	10/8/99	10/12/99	10/12/99	10/14/99	10/11/99
ASSOCIATED DUPLICATE:								
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)								
1,1,1-TRICHLOROETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U
1,1-DICHLOROETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U
1,1-DICHLOROETHENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U
1,2,4-TRICHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U	0.14 J
1,2-DICHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U	0.11 J
1,2-DICHLOROETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U
1,3-DICHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U	0.47 J
1,4-DICHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U	0.82 J
CARBON TETRACHLORIDE	15 U	1 U	1 U	0.49 J	1 U	1 U	5 U	1 U
CHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U	1.8
CHLOROFORM	3.7 J	2.7	0.14 J	2.1	1 U	1 U	1 J	0.12 J
CIS-1,2-DICHLOROETHENE	180	1 U	1 U	1 U	1 U	1 U	4.3 J	0.35 J
TETRACHLOROETHENE	3.3 J	0.46 J	1 U	1 U	1 U	1 U	81	0.21 J
TOLUENE	1.6 J	1 U	1 U	1 U	1 U	1 U	5 U	1 U
TRICHLOROETHENE	85	1.1	1 U	0.55 J	1 U	1 U	31	0.64 J
PESTICIDES/PCBs (µg/L)								
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.17	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.14	0.050 U	0.050 U
INORGANICS (µg/L)								
ALUMINUM	3430 K	551 B	46700 K	399 B	137 B	1600	213 B	11900 K
ANTIMONY	5.7 UJ	5.7 UJ	5.7 UJ	5.7 UJ	5.8 UJ	5.8 UJ	5.8 UJ	5.7 UJ
ARSENIC	3.7 L	3.3 UL	14.4 L	3.3 UL	3.3 U	3.3 U	3.3 U	3.4 L
BARIUM	53.4	43.7	159	33.7	37.7	198	59.5	152
BERYLLIUM	0.6 B	0.26 U	4.4	0.26 U	0.30 U	2.0 B	0.34 B	1.4 B
CADMIUM	0.69 K	0.49 U	0.49 U	0.49 U	0.50 U	7.9 K	0.5 U	7.1 K
CALCIUM	2470	3320	20800	3280	26400	13400	7780	63400
CHROMIUM	17.4 L	8.6 L	59.1	8.8 L	6	545	1.2 U	19.5 L
COBALT	26.5	1.5	37.6	6.2	1.9	56.7	4.0	40.2
COPPER	4.3	1.3 U	90.6	1.3 U	1.3 U	3470	1.3 U	24.6
CYANIDE	3.0 U	3.0 U	3.0 U	3.0 U	10.0 U	10.0 U	10.0 U	3.0 U
IRON	6310	848	64000	534	161 K	710	215	22600
LEAD	1.7 UL	1.7 UL	29	1.7 UL	1.7 UL	1.7 UL	1.7 UL	11.2
MAGNESIUM	1860	1570	8450	2220	7520	14500	5490	7530
MANGANESE	955	34.1	1140	297	4.1	2300	135	1760
MERCURY	0.12	0.17	1	0.07	0.20 U	0.08	0.14	0.05 U
NICKEL	18.4	8.4	52	8.4	7.5	110	14.2	16.5
POTASSIUM	2870	1110	5620	1100	2650	4720	2270	6860
SELENIUM	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL
SODIUM	20200	6600	3660	9480	11700	36900	11200	28900
VANADIUM	4.9	1.4 U	89.1	1.4 U	1.4 U	1.4 U	1.4 U	24.6
ZINC	27.2 K	6.4 K	190	4.2 K	4.7 K	203	19.2 K	58.2

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW220004	11GW230004	11GW240004	11GW250004	11GW260004	11GW270004	11GW280004	11GW290004
LOCATION:	11GW22	11GW23	11GW24	11GW25	11GW26	11GW27	11GW28	11GW29
SAMPLE DATE:	10/8/99	10/8/99	10/11/99	10/8/99	10/12/99	10/12/99	10/14/99	10/11/99
ASSOCIATED DUPLICATE:								
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
PETROLEUM HYDROCARBONS								
TPH-DIESEL UG/L	100 U	100 U	100 U	100 U	100 UJ	100 UJ	170 J	830
MISCELLANEOUS PARAMETERS								
PERCHLORATE UG/L	8 U	130 J	96	4 U	8 U	16 U	8 U	16 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW620004	11GW620004-D	11GW630004	11GW640004	11GW650004	11GW660004	11GW670004
LOCATION:	11PZ62	11PZ62	11PZ63	11PZ64	11PZ65	11GW66	11GW67
SAMPLE DATE:	10/14/99	10/14/99	10/11/99	10/11/99	10/14/99	10/13/99	10/13/99
ASSOCIATED DUPLICATE:	11GW620004-D	11GW620004					
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	0.13 J	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	0.33 J	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	0.5 J	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.11 J	0.11 J	1 U	1 U	0.31 J	0.29 J	0.17 J
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	12	1 U
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	0.43 J	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	8.3	1 U
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
INORGANICS (µg/L)							
ALUMINUM	77.1 B	159 B	60900 K	885 K	268 B	162 B	88.8 B
ANTIMONY	5.8 UJ	5.8 UJ	7.1 J	5.7 UJ	5.8 UJ	5.8 UJ	5.8 UJ
ARSENIC	3.3 K	3.3 U	13.3 L	3.3 UL	3.3 U	3.3 U	3.3 U
BARIUM	10.1	10.3	430	47.2	34.4	45.4	18.5
BERYLLIUM	0.30 U	0.30 U	40.1 L	0.26 U	1.0 B	0.30 U	0.30 U
CADMIUM	0.50 U	0.50 U	0.49 UL	0.49 U	0.50 U	0.50 U	0.50 U
CALCIUM	4560	4660	10600	2150	3490	2290	1360
CHROMIUM	1.2 U	1.2 U	118	1.2 UL	1.2 U	5.3	2.1
COBALT	1.8	1.2 U	74.5	17.2	5.0	17.0	1.2 U
COPPER	2.4	2.0	190	2.7	1.3 U	1.3 U	4.0
CYANIDE	10.0 U	10.0 U	3.0 U	3.0 U	10.0 U	10.0 U	10.0 U
IRON	80.8 K	340	850000	4580	4460	4780	47.0 K
LEAD	1.7 UL	1.7 UL	64.3 K	1.7 UL	1.7 UL	1.7 UL	1.7 UL
MAGNESIUM	1460	1490	20800	1850	3960	1660	1360
MANGANESE	37.0	37.7	3720	617	537	694	30.3
MERCURY	0.20 U	0.20 U	0.29	0.06	0.20 U	0.20 U	0.20 U
NICKEL	1.8 U	1.8 U	171 K	3.2	15.2	36.3	3.1
POTASSIUM	690	710	17200 L	1060	3660	2150	877
SELENIUM	3.8 UL	3.8 UL	6.1 J	3.8 UL	3.8 UL	3.8 UL	3.8 UL
SODIUM	16100	16100	27100	2830	4040	8880	4850
VANADIUM	1.4 U	1.4 U	115 K	2.4	1.4 U	1.4 U	1.4 U
ZINC	28.5 K	33.7 K	901	7.1 K	43.4	19.6 K	34.1 K

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW620004	11GW620004-D	11GW630004	11GW640004	11GW650004	11GW660004	11GW670004
LOCATION:	11PZ62	11PZ62	11PZ63	11PZ64	11PZ65	11GW66	11GW67
SAMPLE DATE:	10/14/99	10/14/99	10/11/99	10/11/99	10/14/99	10/13/99	10/13/99
ASSOCIATED DUPLICATE:	11GW620004-D	11GW620004					
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
PETROLEUM HYDROCARBONS							
TPH-DIESEL UG/L	100 UJ	110 J	100	150	100 UJ	100 UJ	100 UJ
MISCELLANEOUS PARAMETERS							
PERCHLORATE UG/L	8 U	4 U	8 U	8	4 U	4 U	5

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW680004	11GW690004	11GW70D0004	11GW710004	11GW710004-D	11GW720004	11GW730004
LOCATION:	11GW68	11GW69	11GW70D	11GW71	11GW71	11GW72	11GW73
SAMPLE DATE:	10/11/99	10/12/99	10/11/99	10/12/99	10/12/99	10/14/99	10/13/99
ASSOCIATED DUPLICATE:				11GW710004-D	11GW710004		
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	0.12 J	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	2.4	1 U	1 U	1 U	0.39 J	1 U
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	1 U	0.32 J	1 U	1 U	0.11 J	1 U	1 U
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
INORGANICS (µg/L)							
ALUMINUM	14000 K	5480 K	10100 K	57.0 B	67.1 B	175 B	192 B
ANTIMONY	5.7 UJ	5.7 UJ	5.7 UJ	5.8 UJ	5.8 UJ	5.8 UJ	5.8 U
ARSENIC	3.3 UL	3.3 UL	3.3 UL	3.3 U	3.3 U	3.3 U	3.3 U
BARIUM	80.1	368	141	46.2	45.6	75.0	16.2
BERYLLIUM	0.86 B	2.2 B	2.2 B	0.30 U	0.30 U	0.30 U	0.30 U
CADMIUM	0.49 U	2.8 K	0.52 K	0.50 U	0.50 U	0.50 U	0.50 U
CALCIUM	1030	20600	8070	4410	4350	9640	1390
CHROMIUM	14.7 L	12.1 L	9.9 L	1.2 U	1.2 U	2.0	2.4
COBALT	6.2	15.1	22.4	5.3	4.3	5.3	1.2 U
COPPER	51.3	10	89.7	1.3 U	1.3 U	5.9	1.3 U
CYANIDE	3.0 U	3.0 U	3.0 U	10.0 U	10.0 U	10.0 U	10.0 U
IRON	17600	13700	22200	762	686	33.6 U	370
LEAD	2.7 L	3.9 L	9.6	1.7 UL	1.7 UL	1.7 UL	1.7 UL
MAGNESIUM	2190	17700	6790	1800	1760	6740	1240
MANGANESE	116	675	1920	513	486	57.1	23.3
MERCURY	0.05 U	0.23	0.05	0.20 U	0.20 U	0.20 U	0.20 U
NICKEL	12.7	60.0	44.5	8.3	9.2	12.9	5.8
POTASSIUM	1790	3690	6110	1840	1840	2050	790
SELENIUM	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL
SODIUM	2990	47400	5270	6370	6490	4270	1820
VANADIUM	26.6	12.3	8.2	1.4 U	1.4 U	1.4 U	1.4 U
ZINC	34.4 K	79.0	86.2	5.7 K	6.7 K	18.4 K	8.4 K

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW680004	11GW690004	11GW70D0004	11GW710004	11GW710004-D	11GW720004	11GW730004
LOCATION:	11GW68	11GW69	11GW70D	11GW71	11GW71	11GW72	11GW73
SAMPLE DATE:	10/11/99	10/12/99	10/11/99	10/12/99	10/12/99	10/14/99	10/13/99
ASSOCIATED DUPLICATE:				11GW710004-D	11GW710004		
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
PETROLEUM HYDROCARBONS							
TPH-DIESEL UG/L	100 U	250	130	100 UJ	100 UJ	110 J	100 UJ
MISCELLANEOUS PARAMETERS							
PERCHLORATE UG/L	8 U	16 U	8 U	4 U	4 U	4 U	4 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW840004	11GW850004	11GW860004	11GW870004	11GW880004	11GW880004-D	11GW1010004
LOCATION:	11GW84	11GW85	11GW86	11GW87	11GW88	11GW88	11GW101
SAMPLE DATE:	10/12/99	10/14/99	10/12/99	10/18/99	10/13/99	10/13/99	10/12/99
ASSOCIATED DUPLICATE:					11GW880004-D	11GW880004	
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	0.3 J	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	0.8 J	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	0.56 J	1 U	1 U	1 U	1 U	0.47 J
CIS-1,2-DICHLOROETHENE	0.22 J	1 U	0.3 J	3	1 U	1 U	1 U
TETRACHLOROETHENE	0.29 J	1 U	0.34 J	0.1 J	1 U	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	0.55 J	1 U	0.72 J	2	1 U	1 U	1 U
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
INORGANICS (µg/L)							
ALUMINUM	3010	867	436 B	118 B	72.6 B	70.7 B	9180 K
ANTIMONY	5.8 UJ	5.8 UJ	5.7 UJ	2.5	5.8 UJ	5.8 UJ	5.7 UJ
ARSENIC	3.3 U	3.3 U	3.3 UL	2.3 U	3.3 U	3.3 U	3.3 UL
BARIUM	36.3	64.2	181	325	25.9	25.6	64.8
BERYLLIUM	0.41 B	0.30 U	0.26 U	1.4 B	0.30 U	0.30 U	2.6
CADMIUM	0.50 U	0.50 U	0.49 U	0.20 U	2.3 K	2.5 K	1.8 K
CALCIUM	2680	4540	10200	19400	3120	3090	4470
CHROMIUM	1.2 U	10.0	1.2 UL	1.5 B	1.2 U	1.2 U	9.5 L
COBALT	3.6	3.1	48.9	12.9	1.2 U	1.2 U	15.6
COPPER	1.3 U	1.3 U	1.3 U	0.70 U	1.3 U	1.3 U	22.6
CYANIDE	10.0 U	10.0 U	3.0 U	1.5	10.0 U	10.0 U	3.0 U
IRON	1110	994	14100	35800	33.6 U	42.3 K	14400
LEAD	1.7 UL	1.7 UL	1.7 UL	1.1 U	1.7 UL	1.7 UL	3.4 L
MAGNESIUM	1730	3470	6720	12800	1820	1810	4080
MANGANESE	35.8	84	9560	2760	31.6	34.1	338
MERCURY	0.05	0.20 U	0.05 U	0.20 UL	0.20 U	0.20 U	0.05 U
NICKEL	3.9	16.0	32.0	76.4	1.8 U	3.3	21.5
POTASSIUM	1540	2220	3060	6020	1050	1050	4370
SELENIUM	3.8 UL	3.8 UL	3.8 UL	3.5 U	3.8 UL	3.8 UL	3.8 UL
SODIUM	4790	11300	20100	21800	8880	8900	7950
VANADIUM	1.4 U	1.4 U	1.4 U	0.60 U	1.4 U	1.4 U	11.3
ZINC	12.4 K	15.7 K	20.9 K	61.3	7.4 K	7.1 K	87

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW840004	11GW850004	11GW860004	11GW870004	11GW880004	11GW880004-D	11GW1010004
LOCATION:	11GW84	11GW85	11GW86	11GW87	11GW88	11GW88	11GW101
SAMPLE DATE:	10/12/99	10/14/99	10/12/99	10/18/99	10/13/99	10/13/99	10/12/99
ASSOCIATED DUPLICATE:					11GW880004-D	11GW880004	
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
PETROLEUM HYDROCARBONS							
TPH-DIESEL UG/L	100 UJ	100 UJ	110	130	100 UJ	100 UJ	100 U
MISCELLANEOUS PARAMETERS							
PERCHLORATE UG/L	4 U	4 U	16 U	10 U	4 U	4 U	4 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW1020004	11GW1030004	11GW1040004	11GW1040004-D	11GW1050004	11GW1050004-D	11GW1060004
LOCATION:	11GW102	11GW103	11GW104	11GW104	11GW105	11GW105	11GW106
SAMPLE DATE:	10/14/99	10/13/99	10/11/99	10/11/99	10/18/99	10/18/99	10/18/99
ASSOCIATED DUPLICATE:			11GW1040004-D	11GW1040004	11GW1050004-D	11GW1050004	
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	0.4 J
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	0.2 J	0.2 J	6
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	0.1 B	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	0.2 J	0.2 J	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	1 U	1 U	0.6 J	0.6 J	1 U
CIS-1,2-DICHLOROETHENE	1 U	0.11 J	1 U	1 U	0.8 J	0.8 J	19
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	0.2 J	0.2 J	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	1 U	0.27 J	1 U	1 U	4	4	6
PESTICIDES/PCBs (µg/L)							
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
INORGANICS (µg/L)							
ALUMINUM	1040	15800	8970 K	8430 K	48.3 B	77.0 B	215 B
ANTIMONY	5.8 UJ	5.8 UJ	5.7 UJ	5.7 UJ	2.2 U	2.2 U	2.2 U
ARSENIC	3.3 U	3.8 K	3.3 UL	3.3 UL	2.3 U	2.3 U	2.3 U
BARIUM	18.0	122	106	105	53.0	51.4	68.1
BERYLLIUM	0.30 U	1.3 B	2.9	3.0	0.19 B	0.17 B	0.17 B
CADMIUM	0.53 K	0.50 U	0.49 U	0.49 U	1.3 B	1.4 B	0.20 U
CALCIUM	1320	4040	6750	6910	6700	6490	24100
CHROMIUM	1.2 U	21.9	13.3 L	11.7 L	5.7 B	6.7 B	0.80 U
COBALT	7.4	45.4	26.2	26.4	2.2 B	2.0 B	0.60 U
COPPER	5	13.6	29.4	27.9	1.6	4.1	0.70 U
CYANIDE	10.0 U	10.0 U	3.0 U	3.0 U	1.3 U	1.5	1.3 U
IRON	1380	16200	17700	16500	41.1 B	89.8 B	3060
LEAD	1.7 UL	5.6 L	6.4	5.1 L	1.1 U	1.1 U	1.1 U
MAGNESIUM	1140	4740	6090	5860	3960	3820	4870
MANGANESE	189	3600	819	830	190	186	311
MERCURY	0.20 U	0.20 U	0.05 U	0.05 U	0.20 UL	0.20 UL	0.20 UL
NICKEL	2.4	63.6	56.5	54.3	15.3	14.7	2.4
POTASSIUM	1110	8260	6650	6410	2310	2220	4110
SELENIUM	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.5 U	3.5 U	3.5 U
SODIUM	2710	5280	11300	11500	15100	14500	8050
VANADIUM	1.4 U	16.2	10.8	9.9	0.60 U	0.60 U	11.6
ZINC	11.4 K	51.1	133	132	20.4 K	21.6 K	1.6 B

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW1020004	11GW1030004	11GW1040004	11GW1040004-D	11GW1050004	11GW1050004-D	11GW1060004
LOCATION:	11GW102	11GW103	11GW104	11GW104	11GW105	11GW105	11GW106
SAMPLE DATE:	10/14/99	10/13/99	10/11/99	10/11/99	10/18/99	10/18/99	10/18/99
ASSOCIATED DUPLICATE:			11GW1040004-D	11GW1040004	11GW1050004-D	11GW1050004	
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
PETROLEUM HYDROCARBONS							
TPH-DIESEL UG/L	200 J	100 UJ	240	140	100 U	100 U	100 U
MISCELLANEOUS PARAMETERS							
PERCHLORATE UG/L	4 U	4 U	4 U	4 U	4 U	4 U	10 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW1070004	11GW1080004	11GW1090004	11GW1100004	11GW1110004
LOCATION:	11GW107	11GW108	11GW109	11GW110	11GW111
SAMPLE DATE:	10/14/99	10/18/99	10/18/99	10/19/99	10/19/99
ASSOCIATED DUPLICATE:					
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)					
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	17 U	1 U
1,1-DICHLOROETHANE	1 U	0.4 J	1 U	15 J	1 U
1,1-DICHLOROETHENE	1 U	0.09 J	1 U	7 J	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	17 U	1 U
1,2-DICHLOROETHANE	1 U	0.8 J	1 U	47	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	17 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	17 U	1 U
CARBON TETRACHLORIDE	1 U	0.1 J	1 U	4 J	1 U
CHLOROBENZENE	1 U	1 U	1 U	17 U	1 U
CHLOROFORM	0.34 J	0.9 J	1 U	14 J	1 U
CIS-1,2-DICHLOROETHENE	0.32 J	16	0.2 J	240	1 U
TETRACHLOROETHENE	12	0.8 J	1 U	7 J	0.1 J
TOLUENE	1 U	1 U	1 U	17 U	1 U
TRICHLOROETHENE	9.2	11	0.1 J	290	1
PESTICIDES/PCBs (µg/L)					
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
INORGANICS (µg/L)					
ALUMINUM	83.6 B	27.2 B	23.5 B	32.7 B	1100
ANTIMONY	5.8 UJ	2.7	2.2 U	2.2 U	2.2 U
ARSENIC	3.3 U	2.4	2.3 U	2.3 U	2.3 U
BARIUM	38.4	10.2	34.3	6.5	34.9
BERYLLIUM	0.30 U	0.48 B	0.51 B	0.11 B	0.28 B
CADMIUM	0.50 U	0.29 B	0.20 U	0.20 U	0.84 B
CALCIUM	6120	2920	8230	5190	3240
CHROMIUM	1.2 U	3.0 B	0.84 B	2.0 B	11.1
COBALT	1.5	0.60 U	1.9 B	1.0 B	12.9
COPPER	1.3 U	0.70 U	0.70 U	0.70 U	3.5
CYANIDE	10.0 U	2.4	1.3 U	3.4	1.3 U
IRON	34.6 K	48.8 B	9060	74.4 B	2150
LEAD	1.7 UL	1.1 U	1.1 U	1.1 U	1.1 U
MAGNESIUM	3870	1070	4760	2710	1800
MANGANESE	21.1	4.1 B	950	72.0	586
MERCURY	0.05	0.20 UL	0.20 UL	0.20 UL	0.20 UL
NICKEL	11.2	3.4	16.4	4.9	16.7
POTASSIUM	2140	1060	3060	3330	2180
SELENIUM	3.8 UL	3.5 U	3.5 U	3.5 U	3.5 U
SODIUM	11900	5270	6720	8330	8280
VANADIUM	1.4 U	1.2 B	0.60 U	0.60 U	0.79 B
ZINC	9.3 K	10.3 B	13.4 K	7.5 B	20.4 K

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF POSITIVE ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:		11GW1070004	11GW1080004	11GW1090004	11GW1100004	11GW1110004
LOCATION:		11GW107	11GW108	11GW109	11GW110	11GW111
SAMPLE DATE:		10/14/99	10/18/99	10/18/99	10/19/99	10/19/99
ASSOCIATED DUPLICATE:						
VALIDATION STATUS:		VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
PETROLEUM HYDROCARBONS						
TPH-DIESEL	UG/L	100 UJ	100 U	100 U	100 U	100 U
MISCELLANEOUS PARAMETERS						
PERCHLORATE	UG/L	4 U	31	4 U	38	4 U

SECTION F

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER ROUND 4 DATA, OCTOBER 1999

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW220004	11GW230004	11GW240004	11GW250004	11GW260004	11GW270004	11GW280004
LOCATION:	11GW22	11GW23	11GW24	11GW25	11GW26	11GW27	11GW28
SAMPLE DATE:	10/8/99	10/8/99	10/11/99	10/8/99	10/12/99	10/12/99	10/14/99
ASSOCIATED DUPLICATE:							
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,1,2,2-TETRACHLOROETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,1,2-TRICHLOROETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,1-DICHLOROETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,1-DICHLOROETHENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,2,4-TRICHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,2-DIBROMO-3-CHLOROPROPANE	15 UR	1 UR	1 UR	1 UR	1 UR	1 UR	5 UR
1,2-DIBROMOETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,2-DICHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,2-DICHLOROETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,2-DICHLOROPROPANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,3-DICHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
1,4-DICHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
2-BUTANONE	75 UR	5 UR	5 UR	5 UR	5 UR	5 UR	25 UR
2-HEXANONE	75 U	5 U	5 U	5 U	5 U	5 U	25 U
4-METHYL-2-PENTANONE	75 U	5 U	5 U	5 U	5 U	5 U	25 U
ACETONE	75 UR	5 UR	5 UR	5 UR	5 UR	5 UR	25 UR
BENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
BROMOCHLOROMETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
BROMODICHLOROMETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
BROMOFORM	15 U	1 U	1 U	1 U	1 U	1 U	5 U
BROMOMETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
CARBON DISULFIDE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
CARBON TETRACHLORIDE	15 U	1 U	1 U	0.49 J	1 U	1 U	5 U
CHLOROBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
CHLOROETHANE	15 UJ	1 UJ	1 U	1 UJ	1 U	1 U	5 U
CHLOROFORM	3.7 J	2.7	0.14 J	2.1	1 U	1 U	1 J
CHLOROMETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
CIS-1,2-DICHLOROETHENE	180	1 U	1 U	1 U	1 U	1 U	4.3 J
CIS-1,3-DICHLOROPROPENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
DIBROMOCHLOROMETHANE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
ETHYLBENZENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
METHYLENE CHLORIDE	30 U	2 U	2 U	2 U	2 U	2 U	10 U
STYRENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
TETRACHLOROETHENE	3.3 J	0.46 J	1 U	1 U	1 U	1 U	81
TOLUENE	1.6 J	1 U	1 U	1 U	1 U	1 U	5 U
TRANS-1,2-DICHLOROETHENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
TRANS-1,3-DICHLOROPROPENE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
TRICHLOROETHENE	85	1.1	1 U	0.55 J	1 U	1 U	31
VINYL CHLORIDE	15 U	1 U	1 U	1 U	1 U	1 U	5 U
XYLENES, TOTAL	15 U	1 U	1 U	1 U	1 U	1 U	5 U
SEMIVOLATILES (µg/L)							
2,2'-OXYBIS(1-CHLOROPROPANE)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4,5-TRICHLOROPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW220004	11GW230004	11GW240004	11GW250004	11GW260004	11GW270004	11GW280004
LOCATION:	11GW22	11GW23	11GW24	11GW25	11GW26	11GW27	11GW28
SAMPLE DATE:	10/8/99	10/8/99	10/11/99	10/8/99	10/12/99	10/12/99	10/14/99
ASSOCIATED DUPLICATE:							
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4,6-TRICHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DICHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DIMETHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DINITROPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-DINITROTOLUENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,6-DINITROTOLUENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLORONAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-METHYLNAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-NITROANILINE	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2-NITROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3,3'-DICHLOROBENZIDINE	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U
3-NITROANILINE	20 U	20 U	20 U	20 U	20 U	20 U	20 U
4,6-DINITRO-2-METHYLPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U
4-BROMOPHENYL PHENYL ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLORO-3-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLOROANILINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLOROPHENYL PHENYL ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-NITROANILINE	20 U	20 U	20 U	20 U	20 U	20 U	20 U
4-NITROPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ACENAPHTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACENAPHTHYLENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(A)PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(B)FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(G,H,I)PERYLENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(K)FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHOXY)METHANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHYL)ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-ETHYLHEXYL)PHTHALATE	5 U	1 B	5 U	5 U	5 U	1 B	5 U
BUTYLBENZYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CHRYSENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DI-N-BUTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIBENZO(A,H)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIBENZOFURAN	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIETHYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIMETHYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
FLUORENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROBUTADIENE	5 U	5 U	5 U	5 U	5 U	5 U	[illegible]

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW220004	11GW230004	11GW240004	11GW250004	11GW260004	11GW270004	11GW280004
LOCATION:	11GW22	11GW23	11GW24	11GW25	11GW26	11GW27	11GW28
SAMPLE DATE:	10/8/99	10/8/99	10/11/99	10/8/99	10/12/99	10/12/99	10/14/99
ASSOCIATED DUPLICATE:							
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
HEXACHLOROCYCLOPENTADIENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROETHANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
INDENO(1,2,3-CD)PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ISOPHORONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-NITROSO-DI-N-PROPYLAMINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-NITROSODIPHENYLAMINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
NAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
NITROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PENTACHLOROPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PHENANTHRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PESTICIDES/PCBs (µg/L)							
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ALDRIN	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.17	0.050 U
AROCLOR-1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1221	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
AROCLOR-1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BETA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DELTA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DIELDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN I	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ENDOSULFAN II	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN SULFATE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN ALDEHYDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN KETONE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
GAMMA-BHC (LINDANE)	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.14	0.050 U
HEPTACHLOR	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
METHOXYCHLOR	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TOXAPHENE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
EXPLOSIVES (µg/L)							
1,3,5-TRINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-DINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,4,6-TRINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW220004	11GW230004	11GW240004	11GW250004	11GW260004	11GW270004	11GW280004
LOCATION:	11GW22	11GW23	11GW24	11GW25	11GW26	11GW27	11GW28
SAMPLE DATE:	10/8/99	10/8/99	10/11/99	10/8/99	10/12/99	10/12/99	10/14/99
ASSOCIATED DUPLICATE:							
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-AMINO-4,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
3-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-AMINO-2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
HMX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
NITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRYL	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANICS (µg/L)							
ALUMINUM	3430 K	551 B	46700 K	399 B	137 B	1600	213 B
ANTIMONY	5.7 UJ	5.7 UJ	5.7 UJ	5.7 UJ	5.8 UJ	5.8 UJ	5.8 UJ
ARSENIC	3.7 L	3.3 UL	14.4 L	3.3 UL	3.3 U	3.3 U	3.3 U
BARIUM	53.4	43.7	159	33.7	37.7	198	59.5
BERYLLIUM	0.6 B	0.26 U	4.4	0.26 U	0.30 U	2.0 B	0.34 B
CADMIUM	0.69 K	0.49 U	0.49 U	0.49 U	0.50 U	7.9 K	0.5 U
CALCIUM	2470	3320	20800	3280	26400	13400	7780
CHROMIUM	17.4 L	8.6 L	59.1	8.8 L	6	545	1.2 U
COBALT	26.5	1.5	37.6	6.2	1.9	56.7	4.0
COPPER	4.3	1.3 U	90.6	1.3 U	1.3 U	3470	1.3 U
CYANIDE	3.0 U	3.0 U	3.0 U	3.0 U	10.0 U	10.0 U	10.0 U
IRON	6310	848	64000	534	161 K	710	215
LEAD	1.7 UL	1.7 UL	29	1.7 UL	1.7 UL	1.7 UL	1.7 UL
MAGNESIUM	1860	1570	8450	2220	7520	14500	5490
MANGANESE	955	34.1	1140	297	4.1	2300	135
MERCURY	0.12	0.17	1	0.07	0.20 U	0.08	0.14
NICKEL	18.4	8.4	52	8.4	7.5	110	14.2
POTASSIUM	2870	1110	5620	1100	2650	4720	2270
SELENIUM	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL
SILVER	1.9 UJ	1.9 UJ	1.9 UJ	1.9 UJ	1.9 U	1.9 U	1.9 U
SODIUM	20200	6600	3660	9480	11700	36900	11200
THALLIUM	4.6 B	4.3 UJ	4.3 UJ	4.3 UJ	4.3 U	8.6 B	4.3 U
VANADIUM	4.9	1.4 U	89.1	1.4 U	1.4 U	1.4 U	1.4 U
ZINC	27.2 K	6.4 K	190	4.2 K	4.7 K	203	19.2 K
PETROLEUM HYDROCARBONS							
TOTAL PETROLEUM HYDROCARBONS MG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TPH-DIESEL UG/L	100 U	100 U	100 U	100 U	100 UJ	100 UJ	170 J
MISCELLANEOUS PARAMETERS							
AMMONIA MG/L	0.2 U	0.2 U	0.49	0.2 U	0.2 U	0.52	0.2 U
PERCHLORATE UG/L	8 U	130 J	96	4 U	8 U	16 U	8 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW290004	11GW620004	11GW620004-D	11GW630004	11GW640004	11GW650004	11GW660004
LOCATION:	11GW29	11PZ62	11PZ62	11PZ63	11PZ64	11PZ65	11GW66
SAMPLE DATE:	10/11/99	10/14/99	10/14/99	10/11/99	10/11/99	10/14/99	10/13/99
ASSOCIATED DUPLICATE:		11GW620004-D	11GW620004				
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	0.13 J	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	0.33 J
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	0.14 J	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	1 UR	1 U	1 UR	1 UR	1 UR	1 UR	1 UR
1,2-DIBROMOETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	0.11 J	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	0.47 J	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	0.82 J	1 U	1 U	1 U	1 U	1 U	1 U
2-BUTANONE	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
2-HEXANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	5 UR	1.3 B	1.4 B	1.2 B	5 UR	1.4 B	1.5 B
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1.8	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.12 J	0.11 J	0.11 J	1 U	1 U	0.31 J	0.29 J
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	0.35 J	1 U	1 U	1 U	1 U	1 U	12
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	2 U	2 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	0.21 J	1 U	1 U	1 U	1 U	1 U	0.43 J
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	0.64 J	1 U	1 U	1 U	1 U	1 U	8.3
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SEMIVOLATILES (µg/L)							
2,2'-OXYBIS(1-CHLOROPROPANE)	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2,4,5-TRICHLOROPHENOL	20 U	20 U	21 U	20 U	20 U	20 U	22 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW290004	11GW620004	11GW620004-D	11GW630004	11GW640004	11GW650004	11GW660004
LOCATION:	11GW29	11PZ62	11PZ62	11PZ63	11PZ64	11PZ65	11GW66
SAMPLE DATE:	10/11/99	10/14/99	10/14/99	10/11/99	10/11/99	10/14/99	10/13/99
ASSOCIATED DUPLICATE:		11GW620004-D	11GW620004				
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4,6-TRICHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2,4-DICHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2,4-DIMETHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2,4-DINITROPHENOL	20 U	20 U	21 U	20 U	20 U	20 U	22 U
2,4-DINITROTOLUENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2,6-DINITROTOLUENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2-CHLORONAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2-CHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2-METHYLNAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	6 U
2-NITROANILINE	20 U	20 U	21 U	20 U	20 U	20 U	22 U
2-NITROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	6 U
3,3'-DICHLOROBENZIDINE	5 U	5 U	5 U	5 U	5 U	5 U	6 UJ
3-NITROANILINE	20 U	20 U	21 U	20 U	20 U	20 U	22 U
4,6-DINITRO-2-METHYLPHENOL	20 U	20 U	21 U	20 U	20 U	20 U	22 U
4-BROMOPHENYL PHENYL ETHER	5 U	5 U	5 U	5 U	5 U	5 U	6 U
4-CHLORO-3-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	6 U
4-CHLOROANILINE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
4-CHLOROPHENYL PHENYL ETHER	5 U	5 U	5 U	5 U	5 U	5 U	6 U
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	6 U
4-NITROANILINE	20 U	20 U	21 U	20 U	20 U	20 U	22 U
4-NITROPHENOL	20 U	20 U	21 U	20 U	20 U	20 U	22 U
ACENAPHTHENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
ACENAPHTHYLENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
BENZO(A)PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
BENZO(B)FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
BENZO(G,H,I)PERYLENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
BENZO(K)FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
BIS(2-CHLOROETHOXY)METHANE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
BIS(2-CHLOROETHYL)ETHER	5 U	5 U	5 U	5 U	5 U	5 U	6 U
BIS(2-ETHYLHEXYL)PHTHALATE	5 U	9 B	2 B	12 B	1 B	5 U	6 U
BUTYLBENZYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
CHRYSENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
DI-N-BUTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
DIBENZO(A,H)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
DIBENZOFURAN	5 U	5 U	5 U	5 U	5 U	5 U	6 U
DIETHYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
DIMETHYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
FLUORENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
HEXA[illegible]OROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	[illegible] U
HEX[illegible]ROBUTADIENE	5 U	5 U	5 U	5 U	5 U	5 U	[illegible]

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW290004	11GW620004	11GW620004-D	11GW630004	11GW640004	11GW650004	11GW660004
LOCATION:	11GW29	11PZ62	11PZ62	11PZ63	11PZ64	11PZ65	11GW66
SAMPLE DATE:	10/11/99	10/14/99	10/14/99	10/11/99	10/11/99	10/14/99	10/13/99
ASSOCIATED DUPLICATE:		11GW620004-D	11GW620004				
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
HEXACHLOROCYCLOPENTADIENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
HEXACHLOROETHANE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
INDENO(1,2,3-CD)PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
ISOPHORONE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
N-NITROSO-DI-N-PROPYLAMINE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
N-NITROSODIPHENYLAMINE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
NAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
NITROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
PENTACHLOROPHENOL	20 U	20 U	21 U	20 U	20 U	20 U	22 U
PHENANTHRENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
PHENOL	5 U	5 U	5 U	5 U	5 U	5 U	6 U
PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	6 U
PESTICIDES/PCBs (µg/L)							
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ALDRIN	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
AROCLOR-1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1221	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
AROCLOR-1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BETA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DELTA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DIELDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN I	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ENDOSULFAN II	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN SULFATE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN ALDEHYDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN KETONE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
GAMMA-BHC (LINDANE)	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
METHOXYCHLOR	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TOXAPHENE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
EXPLOSIVES (µg/L)							
1,3,5-TRINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-DINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,4,6-TRINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW290004	11GW620004	11GW620004-D	11GW630004	11GW640004	11GW650004	11GW660004
LOCATION:	11GW29	11PZ62	11PZ62	11PZ63	11PZ64	11PZ65	11GW66
SAMPLE DATE:	10/11/99	10/14/99	10/14/99	10/11/99	10/11/99	10/14/99	10/13/99
ASSOCIATED DUPLICATE:		11GW620004-D	11GW620004				
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-AMINO-4,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
3-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-AMINO-2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
HMX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
NITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRYL	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANICS. (µg/L)							
ALUMINUM	11900 K	77.1 B	159 B	60900 K	885 K	268 B	162 B
ANTIMONY	5.7 UJ	5.8 UJ	5.8 UJ	7.1 J	5.7 UJ	5.8 UJ	5.8 UJ
ARSENIC	3.4 L	3.3 K	3.3 U	13.3 L	3.3 UL	3.3 U	3.3 U
BARIUM	152	10.1	10.3	430	47.2	34.4	45.4
BERYLLIUM	1.4 B	0.30 U	0.30 U	40.1 L	0.26 U	1.0 B	0.30 U
CADMIUM	7.1 K	0.50 U	0.50 U	0.49 UL	0.49 U	0.50 U	0.50 U
CALCIUM	63400	4560	4660	10600	2150	3490	2290
CHROMIUM	19.5 L	1.2 U	1.2 U	118	1.2 UL	1.2 U	5.3
COBALT	40.2	1.8	1.2 U	74.5	17.2	5.0	17.0
COPPER	24.6	2.4	2.0	190	2.7	1.3 U	1.3 U
CYANIDE	3.0 U	10.0 U	10.0 U	3.0 U	3.0 U	10.0 U	10.0 U
IRON	22600	80.8 K	340	850000	4580	4460	4780
LEAD	11.2	1.7 UL	1.7 UL	64.3 K	1.7 UL	1.7 UL	1.7 UL
MAGNESIUM	7530	1460	1490	20800	1850	3960	1660
MANGANESE	1760	37.0	37.7	3720	617	537	694
MERCURY	0.05 U	0.20 U	0.20 U	0.29	0.06	0.20 U	0.20 U
NICKEL	16.5	1.8 U	1.8 U	171 K	3.2	15.2	36.3
POTASSIUM	6860	690	710	17200 L	1060	3660	2150
SELENIUM	3.8 UL	3.8 UL	3.8 UL	6.1 J	3.8 UL	3.8 UL	3.8 UL
SILVER	1.9 UJ	1.9 U	1.9 U	1.9 UJ	1.9 UJ	1.9 U	1.9 U
SODIUM	28900	16100	16100	27100	2830	4040	8880
THALLIUM	4.3 UJ	8.8 B	4.3 U	4.3 UJ	4.3 UJ	4.3 U	5.7 B
VANADIUM	24.6	1.4 U	1.4 U	115 K	2.4	1.4 U	1.4 U
ZINC	58.2	28.5 K	33.7 K	901	7.1 K	43.4	19.6 K
PETROLEUM HYDROCARBONS							
TOTAL PETROLEUM HYDROCARBONS MG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TPH-DIESEL UG/L	830	100 UJ	110 J	100	150	100 UJ	100 UJ
MISCELLANEOUS PARAMETERS							
AMMONIA MG/L	0.8	0.2 U	0.2 U	0.47	0.3	0.2 U	0.2
PERCHLORATE UG/L	16 U	8 U	4 U	8 U	8	4 U	4 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW670004	11GW680004	11GW690004	11GW70D0004	11GW710004	11GW710004-D	11GW720004
LOCATION:	11GW67	11GW68	11GW69	11GW70D	11GW71	11GW71	11GW72
SAMPLE DATE:	10/13/99	10/11/99	10/12/99	10/11/99	10/12/99	10/12/99	10/14/99
ASSOCIATED DUPLICATE:					11GW710004-D	11GW710004	
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR
1,2-DIBROMOETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	0.12 J	1 U
2-BUTANONE	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
2-HEXANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	5 UR	5 UR	5 UR	1.4 B	5 UR	5 UR	5 UR
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.17 J	1 U	2.4	1 U	1 U	1 U	0.39 J
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	2 U	2 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	1 U	1 U	0.32 J	1 U	1 U	0.11 J	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SEMIVOLATILES (µg/L)							
2,2'-OXYBIS(1-CHLOROPROPANE)	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2,4,5-TRICHLOROPHENOL	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW670004	11GW680004	11GW690004	11GW70D0004	11GW710004	11GW710004-D	11GW720004
LOCATION:	11GW67	11GW68	11GW69	11GW70D	11GW71	11GW71	11GW72
SAMPLE DATE:	10/13/99	10/11/99	10/12/99	10/11/99	10/12/99	10/12/99	10/14/99
ASSOCIATED DUPLICATE:					11GW710004-D	11GW710004	
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4,6-TRICHLOROPHENOL	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DICHLOROPHENOL	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DIMETHYLPHENOL	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DINITROPHENOL	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U
2,4-DINITROTOLUENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2,6-DINITROTOLUENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLORONAPHTHALENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLOROPHENOL	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2-METHYLNAPHTHALENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2-METHYLPHENOL	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
2-NITROANILINE	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U
2-NITROPHENOL	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
3,3'-DICHLOROBENZIDINE	5 UJ	5 U	5 U	5 U	5 UJ	5 UJ	5 UJ
3-NITROANILINE	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U
4,6-DINITRO-2-METHYLPHENOL	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U
4-BROMOPHENYL PHENYL ETHER	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLORO-3-METHYLPHENOL	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLOROANILINE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLOROPHENYL PHENYL ETHER	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYLPHENOL	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
4-NITROANILINE	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U
4-NITROPHENOL	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U
ACENAPHTHENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
ACENAPHTHYLENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
ANTHRACENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(A)ANTHRACENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(A)PYRENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(B)FLUORANTHENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(G,H,I)PERYLENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(K)FLUORANTHENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHOXY)METHANE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHYL)ETHER	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-ETHYLHEXYL)PHTHALATE	1 B	2 B	5 U	2 B	5 U	1 B	5 U
BUTYLBENZYL PHTHALATE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
CHRYSENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
DI-N-BUTYL PHTHALATE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
DI-N-OCTYL PHTHALATE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
DIBENZO(A,H)ANTHRACENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
DIBENZOFURAN	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
DIETHYL PHTHALATE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
DIMETHYL PHTHALATE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
FLUORANTHENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
FLUORENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
HEXAC[illegible]OROBENZENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
HEXA[illegible]ROBUTADIENE	5 UJ	5 U	5 U	5 U	5 U	5 U	[illegible]U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW670004	11GW680004	11GW690004	11GW70D0004	11GW710004	11GW710004-D	11GW720004
LOCATION:	11GW67	11GW68	11GW69	11GW70D	11GW71	11GW71	11GW72
SAMPLE DATE:	10/13/99	10/11/99	10/12/99	10/11/99	10/12/99	10/12/99	10/14/99
ASSOCIATED DUPLICATE:					11GW710004-D	11GW710004	
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
HEXACHLOROCYCLOPENTADIENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROETHANE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
INDENO(1,2,3-CD)PYRENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
ISOPHORONE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
N-NITROSO-DI-N-PROPYLAMINE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
N-NITROSODIPHENYLAMINE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
NAPHTHALENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
NITROBENZENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
PENTACHLOROPHENOL	20 UJ	20 U	20 U	20 U	20 U	20 U	20 U
PHENANTHRENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
PHENOL	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
PYRENE	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
PESTICIDES/PCBs (µg/L)							
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ALDRIN	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
AROCLOR-1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1221	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
AROCLOR-1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BETA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DELTA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DIELDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN I	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ENDOSULFAN II	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN SULFATE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN ALDEHYDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN KETONE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
GAMMA-BHC (LINDANE)	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
METHOXYCHLOR	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TOXAPHENE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
EXPLOSIVES (µg/L)							
1,3,5-TRINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-DINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,4,6-TRINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW670004	11GW680004	11GW690004	11GW70D0004	11GW710004	11GW710004-D	11GW720004
LOCATION:	11GW67	11GW68	11GW69	11GW70D	11GW71	11GW71	11GW72
SAMPLE DATE:	10/13/99	10/11/99	10/12/99	10/11/99	10/12/99	10/12/99	10/14/99
ASSOCIATED DUPLICATE:					11GW710004-D	11GW710004	
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-AMINO-4,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
3-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-AMINO-2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
HMX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
NITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRYL	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANICS (µg/L)							
ALUMINUM	88.8 B	14000 K	5480 K	10100 K	57.0 B	67.1 B	175 B
ANTIMONY	5.8 UJ	5.7 UJ	5.7 UJ	5.7 UJ	5.8 UJ	5.8 UJ	5.8 UJ
ARSENIC	3.3 U	3.3 UL	3.3 UL	3.3 UL	3.3 U	3.3 U	3.3 U
BARIUM	18.5	80.1	368	141	46.2	45.6	75.0
BERYLLIUM	0.30 U	0.86 B	2.2 B	2.2 B	0.30 U	0.30 U	0.30 U
CADMIUM	0.50 U	0.49 U	2.8 K	0.52 K	0.50 U	0.50 U	0.50 U
CALCIUM	1360	1030	20600	8070	4410	4350	9640
CHROMIUM	2.1	14.7 L	12.1 L	9.9 L	1.2 U	1.2 U	2.0
COBALT	1.2 U	6.2	15.1	22.4	5.3	4.3	5.3
COPPER	4.0	51.3	10	89.7	1.3 U	1.3 U	5.9
CYANIDE	10.0 U	3.0 U	3.0 U	3.0 U	10.0 U	10.0 U	10.0 U
IRON	47.0 K	17600	13700	22200	762	686	33.6 U
LEAD	1.7 UL	2.7 L	3.9 L	9.6	1.7 UL	1.7 UL	1.7 UL
MAGNESIUM	1360	2190	17700	6790	1800	1760	6740
MANGANESE	30.3	116	675	1920	513	486	57.1
MERCURY	0.20 U	0.05 U	0.23	0.05	0.20 U	0.20 U	0.20 U
NICKEL	3.1	12.7	60.0	44.5	8.3	9.2	12.9
POTASSIUM	877	1790	3690	6110	1840	1840	2050
SELENIUM	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL
SILVER	1.9 U	1.9 UJ	1.9 UJ	1.9 UJ	1.9 U	1.9 U	1.9 U
SODIUM	4850	2990	47400	5270	6370	6490	4270
THALLIUM	4.3 U	4.3 UJ	4.5 B	4.3 UJ	4.3 U	4.3 U	4.3 U
VANADIUM	1.4 U	26.6	12.3	8.2	1.4 U	1.4 U	1.4 U
ZINC	34.1 K	34.4 K	79.0	86.2	5.7 K	6.7 K	18.4 K
PETROLEUM HYDROCARBONS							
TOTAL PETROLEUM HYDROCARBONS **MG/L**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TPH-DIESEL **UG/L**	100 UJ	100 U	250	130	100 UJ	100 UJ	110 J
MISCELLANEOUS PARAMETERS							
AMMONIA **MG/L**	0.2	0.2 U	0.2	0.49	0.2 U	0.2	0.2
PERCHLORATE **UG/L**	5	8 U	16 U	8 U	4 U	4 U	4 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW730004	11GW840004	11GW850004	11GW860004	11GW870004	11GW880004	11GW880004-D
LOCATION:	11GW73	11GW84	11GW85	11GW86	11GW87	11GW88	11GW88
SAMPLE DATE:	10/13/99	10/12/99	10/14/99	10/12/99	10/18/99	10/13/99	10/13/99
ASSOCIATED DUPLICATE:						11GW880004-D	11GW880004
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	0.3 J	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	1 UR	1 UR	1 UR	1 UR	1 U	1 UR	1 UR
1,2-DIBROMOETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	0.8 J	1 U	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-BUTANONE	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
2-HEXANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	5 UR	5 UR	1.3 B	5 UR	5 UR	5 UR	1.4 B
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	1 U	1 U	0.56 J	1 U	1 U	1 U	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	1 U	0.22 J	1 U	0.3 J	3	1 U	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	0.2 B	2 U	2 U
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	1 U	0.29 J	1 U	0.34 J	0.1 J	1 U	1 U
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	1 U	0.55 J	1 U	0.72 J	2	1 U	1 U
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SEMIVOLATILES (µg/L)							
2,2'-OXYBIS(1-CHLOROPROPANE)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4,5-TRICHLOROPHENOL	21 U	20 U	21 U	20 U	20 U	21 U	22 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW730004	11GW840004	11GW850004	11GW860004	11GW870004	11GW880004	11GW880004-D
LOCATION:	11GW73	11GW84	11GW85	11GW86	11GW87	11GW88	11GW88
SAMPLE DATE:	10/13/99	10/12/99	10/14/99	10/12/99	10/18/99	10/13/99	10/13/99
ASSOCIATED DUPLICATE:						11GW880004-D	11GW880004
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4,6-TRICHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DICHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DIMETHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DINITROPHENOL	21 U	20 U	21 U	20 U	20 U	21 U	22 U
2,4-DINITROTOLUENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,6-DINITROTOLUENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLORONAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-METHYLNAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-NITROANILINE	21 U	20 U	21 U	20 U	20 U	21 U	22 U
2-NITROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3,3'-DICHLOROBENZIDINE	5 UJ	5 UJ	5 U	5 U	5 U	5 UJ	5 UJ
3-NITROANILINE	21 U	20 U	21 U	20 U	20 U	21 U	22 U
4,6-DINITRO-2-METHYLPHENOL	21 U	20 U	21 U	20 U	20 U	21 U	22 U
4-BROMOPHENYL PHENYL ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLORO-3-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLOROANILINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLOROPHENYL PHENYL ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-NITROANILINE	21 U	20 U	21 U	20 U	20 U	21 U	22 U
4-NITROPHENOL	21 U	20 U	21 U	20 U	20 U	21 U	22 U
ACENAPHTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACENAPHTHYLENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(A)PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(B)FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(G,H,I)PERYLENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(K)FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHOXY)METHANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHYL)ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-ETHYLHEXYL)PHTHALATE	5 U	1 B	5 U	5 U	2 B	5 U	5 U
BUTYLBENZYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CHRYSENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DI-N-BUTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIBENZO(A,H)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIBENZOFURAN	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIETHYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIMETHYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
FLUORENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROBUTADIENE	5 U	5 U	5 U	5 U	5 U	5 U	[illegible]

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW730004	11GW840004	11GW850004	11GW860004	11GW870004	11GW880004	11GW880004-D
LOCATION:	11GW73	11GW84	11GW85	11GW86	11GW87	11GW88	11GW88
SAMPLE DATE:	10/13/99	10/12/99	10/14/99	10/12/99	10/18/99	10/13/99	10/13/99
ASSOCIATED DUPLICATE:						11GW880004-D	11GW880004
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
HEXACHLOROCYCLOPENTADIENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROETHANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
INDENO(1,2,3-CD)PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ISOPHORONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-NITROSO-DI-N-PROPYLAMINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-NITROSODIPHENYLAMINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
NAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
NITROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PENTACHLOROPHENOL	21 U	20 U	21 U	20 U	20 U	21 U	22 U
PHENANTHRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PESTICIDES/PCBs (µg/L)							
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ALDRIN	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
AROCLOR-1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1221	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
AROCLOR-1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BETA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DELTA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DIELDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN I	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ENDOSULFAN II	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN SULFATE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN ALDEHYDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN KETONE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
GAMMA-BHC (LINDANE)	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
METHOXYCHLOR	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TOXAPHENE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
EXPLOSIVES (µg/L)							
1,3,5-TRINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-DINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,4,6-TRINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW730004	11GW840004	11GW850004	11GW860004	11GW870004	11GW880004	11GW880004-D
LOCATION:	11GW73	11GW84	11GW85	11GW86	11GW87	11GW88	11GW88
SAMPLE DATE:	10/13/99	10/12/99	10/14/99	10/12/99	10/18/99	10/13/99	10/13/99
ASSOCIATED DUPLICATE:						11GW880004-D	11GW880004
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-AMINO-4,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
3-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-AMINO-2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
HMX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
NITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRYL	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANICS (µg/L)							
ALUMINUM	192 B	3010	867	436 B	118 B	72.6 B	70.7 B
ANTIMONY	5.8 U	5.8 UJ	5.8 UJ	5.7 UJ	2.5	5.8 UJ	5.8 UJ
ARSENIC	3.3 U	3.3 U	3.3 U	3.3 UL	2.3 U	3.3 U	3.3 U
BARIUM	16.2	36.3	64.2	181	325	25.9	25.6
BERYLLIUM	0.30 U	0.41 B	0.30 U	0.26 U	1.4 B	0.30 U	0.30 U
CADMIUM	0.50 U	0.50 U	0.50 U	0.49 U	0.20 U	2.3 K	2.5 K
CALCIUM	1390	2680	4540	10200	19400	3120	3090
CHROMIUM	2.4	1.2 U	10.0	1.2 UL	1.5 B	1.2 U	1.2 U
COBALT	1.2 U	3.6	3.1	48.9	12.9	1.2 U	1.2 U
COPPER	1.3 U	1.3 U	1.3 U	1.3 U	0.70 U	1.3 U	1.3 U
CYANIDE	10.0 U	10.0 U	10.0 U	3.0 U	1.5	10.0 U	10.0 U
IRON	370	1110	994	14100	35800	33.6 U	42.3 K
LEAD	1.7 UL	1.7 UL	1.7 UL	1.7 UL	1.1 U	1.7 UL	1.7 UL
MAGNESIUM	1240	1730	3470	6720	12800	1820	1810
MANGANESE	23.3	35.8	84	9560	2760	31.6	34.1
MERCURY	0.20 U	0.05	0.20 U	0.05 U	0.20 UL	0.20 U	0.20 U
NICKEL	5.8	3.9	16.0	32.0	76.4	1.8 U	3.3
POTASSIUM	790	1540	2220	3060	6020	1050	1050
SELENIUM	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.5 U	3.8 UL	3.8 UL
SILVER	1.9 U	1.9 U	1.9 U	1.9 UJ	0.60 U	1.9 U	1.9 U
SODIUM	1820	4790	11300	20100	21800	8880	8900
THALLIUM	6.4 B	4.3 U	4.3 U	9.0 B	5.1 B	4.5 B	4.3 U
VANADIUM	1.4 U	1.4 U	1.4 U	1.4 U	0.60 U	1.4 U	1.4 U
ZINC	8.4 K	12.4 K	15.7 K	20.9 K	61.3	7.4 K	7.1 K
PETROLEUM HYDROCARBONS							
TOTAL PETROLEUM HYDROCARBONS MG/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TPH-DIESEL UG/L	100 UJ	100 UJ	100 UJ	110	130	100 UJ	100 UJ
MISCELLANEOUS PARAMETERS							
AMMONIA MG/L	0.2 U	0.2 U	0.2 U	0.5	0.2 U	0.2 U	0.2 U
PERCHLORATE UG/L	4 U	4 U	4 U	16 U	10 U	4 U	4 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW1010004	11GW1020004	11GW1030004	11GW1040004	11GW1040004-D	11GW1050004
LOCATION:	11GW101	11GW102	11GW103	11GW104	11GW104	11GW105
SAMPLE DATE:	10/12/99	10/14/99	10/13/99	10/11/99	10/11/99	10/18/99
ASSOCIATED DUPLICATE:						11GW1050004-D
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)						
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U
1,1-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	1 UR	1 UR	1 UR	1 UR	1 UR	1 U
1,2-DIBROMOETHANE	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	0.2 J
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	0.1 B
2-BUTANONE	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
2-HEXANONE	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR
BENZENE	1 U	1 U	1 U	1 U	1 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	1 U
CARBON TETRACHLORIDE	1 U	1 U	1 U	1 U	1 U	0.2 J
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROFORM	0.47 J	1 U	1 U	1 U	1 U	0.6 J
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	1 U	1 U	0.11 J	1 U	1 U	0.8 J
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	1 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	1 U
METHYLENE CHLORIDE	2 U	2 U	2 U	2 U	2 U	0.3 B
STYRENE	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	1 U	1 U	1 U	1 U	1 U	0.2 J
TOLUENE	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	1 U	1 U	0.27 J	1 U	1 U	4
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	1 U
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	1 U
SEMIVOLATILES (µg/L)						
2,2'-OXYBIS(1-CHLOROPROPANE)	5 U	6 U	5 U	5 U	5 U	5 U
2,4,5-TRICHLOROPHENOL	20 U	25 U	20 U	20 U	20 U	20 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW1010004	11GW1020004	11GW1030004	11GW1040004	11GW1040004-D	11GW1050004
LOCATION:	11GW101	11GW102	11GW103	11GW104	11GW104	11GW105
SAMPLE DATE:	10/12/99	10/14/99	10/13/99	10/11/99	10/11/99	10/18/99
ASSOCIATED DUPLICATE:						11GW1050004-D
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4,6-TRICHLOROPHENOL	5 U	6 U	5 U	5 U	5 U	5 U
2,4-DICHLOROPHENOL	5 U	6 U	5 U	5 U	5 U	5 U
2,4-DIMETHYLPHENOL	5 U	6 U	5 U	5 U	5 U	5 U
2,4-DINITROPHENOL	20 U	25 U	20 U	20 U	20 U	20 U
2,4-DINITROTOLUENE	5 U	6 U	5 U	5 U	5 U	5 U
2,6-DINITROTOLUENE	5 U	6 U	5 U	5 U	5 U	5 U
2-CHLORONAPHTHALENE	5 U	6 U	5 U	5 U	5 U	5 U
2-CHLOROPHENOL	5 U	6 U	5 U	5 U	5 U	5 U
2-METHYLNAPHTHALENE	5 U	6 U	5 U	5 U	5 U	5 U
2-METHYLPHENOL	5 U	6 U	5 U	5 U	5 U	5 U
2-NITROANILINE	20 U	25 U	20 U	20 U	20 U	20 U
2-NITROPHENOL	5 U	6 U	5 U	5 U	5 U	5 U
3,3'-DICHLOROBENZIDINE	5 U	6 UJ	5 UJ	5 U	5 U	5 U
3-NITROANILINE	20 U	25 U	20 U	20 U	20 U	20 U
4,6-DINITRO-2-METHYLPHENOL	20 U	25 U	20 U	20 U	20 U	20 U
4-BROMOPHENYL PHENYL ETHER	5 U	6 U	5 U	5 U	5 U	5 U
4-CHLORO-3-METHYLPHENOL	5 U	6 U	5 U	5 U	5 U	5 U
4-CHLOROANILINE	5 U	6 U	5 U	5 U	5 U	5 U
4-CHLOROPHENYL PHENYL ETHER	5 U	6 U	5 U	5 U	5 U	5 U
4-METHYLPHENOL	5 U	6 U	5 U	5 U	5 U	5 U
4-NITROANILINE	20 U	25 U	20 U	20 U	20 U	20 U
4-NITROPHENOL	20 U	25 U	20 U	20 U	20 U	20 U
ACENAPHTHENE	5 U	6 U	5 U	5 U	5 U	5 U
ACENAPHTHYLENE	5 U	6 U	5 U	5 U	5 U	5 U
ANTHRACENE	5 U	6 U	5 U	5 U	5 U	5 U
BENZO(A)ANTHRACENE	5 U	6 U	5 U	5 U	5 U	5 U
BENZO(A)PYRENE	5 U	6 U	5 U	5 U	5 U	5 U
BENZO(B)FLUORANTHENE	5 U	6 U	5 U	5 U	5 U	5 U
BENZO(G,H,I)PERYLENE	5 U	6 U	5 U	5 U	5 U	5 U
BENZO(K)FLUORANTHENE	5 U	6 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHOXY)METHANE	5 U	6 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHYL)ETHER	5 U	6 U	5 U	5 U	5 U	5 U
BIS(2-ETHYLHEXYL)PHTHALATE	5 U	6 U	5 U	2 B	5 U	5 U
BUTYLBENZYL PHTHALATE	5 U	6 U	5 U	5 U	5 U	5 U
CHRYSENE	5 U	6 U	5 U	5 U	5 U	5 U
DI-N-BUTYL PHTHALATE	5 U	6 U	5 U	5 U	5 U	5 U
DI-N-OCTYL PHTHALATE	5 U	6 U	5 U	5 U	5 U	5 U
DIBENZO(A,H)ANTHRACENE	5 U	6 U	5 U	5 U	5 U	5 U
DIBENZOFURAN	5 U	6 U	5 U	5 U	5 U	5 U
DIETHYL PHTHALATE	5 U	6 U	5 U	5 U	5 U	5 U
DIMETHYL PHTHALATE	5 U	6 U	5 U	5 U	5 U	5 U
FLUORANTHENE	5 U	6 U	5 U	5 U	5 U	5 U
FLUORENE	5 U	6 U	5 U	5 U	5 U	5 U
HEXACHLOROBENZENE	5 U	6 U	5 U	5 U	5 U	5 U
HEXACHLOROBUTADIENE	5 U	[illegible]	5 U	5 U	5 U	5 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW1010004	11GW1020004	11GW1030004	11GW1040004	11GW1040004-D	11GW1050004
LOCATION:	11GW101	11GW102	11GW103	11GW104	11GW104	11GW105
SAMPLE DATE:	10/12/99	10/14/99	10/13/99	10/11/99	10/11/99	10/18/99
ASSOCIATED DUPLICATE:						11GW1050004-D
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
HEXACHLOROCYCLOPENTADIENE	5 U	6 U	5 U	5 U	5 U	5 U
HEXACHLOROETHANE	5 U	6 U	5 U	5 U	5 U	5 U
INDENO(1,2,3-CD)PYRENE	5 U	6 U	5 U	5 U	5 U	5 U
ISOPHORONE	5 U	6 U	5 U	5 U	5 U	5 U
N-NITROSO-DI-N-PROPYLAMINE	5 U	6 U	5 U	5 U	5 U	5 U
N-NITROSODIPHENYLAMINE	5 U	6 U	5 U	5 UR	5 U	5 U
NAPHTHALENE	5 U	6 U	5 U	5 U	5 U	5 U
NITROBENZENE	5 U	6 U	5 U	5 U	5 U	5 U
PENTACHLOROPHENOL	20 U	25 U	20 U	20 U	20 U	20 U
PHENANTHRENE	5 U	6 U	5 U	5 U	5 U	5 U
PHENOL	5 U	6 U	5 U	5 U	5 U	5 U
PYRENE	5 U	6 U	5 U	5 U	5 U	5 U
PESTICIDES/PCBs (µg/L)						
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ALDRIN	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
AROCLOR-1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1221	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
AROCLOR-1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BETA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DELTA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DIELDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN I	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ENDOSULFAN II	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN SULFATE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN ALDEHYDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN KETONE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
GAMMA-BHC (LINDANE)	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
METHOXYCHLOR	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TOXAPHENE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
EXPLOSIVES (µg/L)						
1,3,5-TRINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-DINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,4,6-TRINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW1010004	11GW1020004	11GW1030004	11GW1040004	11GW1040004-D	11GW1050004
LOCATION:	11GW101	11GW102	11GW103	11GW104	11GW104	11GW105
SAMPLE DATE:	10/12/99	10/14/99	10/13/99	10/11/99	10/11/99	10/18/99
ASSOCIATED DUPLICATE:						11GW1050004-D
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-AMINO-4,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
3-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-AMINO-2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
HMX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
NITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRYL	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANICS (µg/L)						
ALUMINUM	9180 K	1040	15800	8970 K	8430 K	48.3 B
ANTIMONY	5.7 UJ	5.8 UJ	5.8 UJ	5.7 UJ	5.7 UJ	2.2 U
ARSENIC	3.3 UL	3.3 U	3.8 K	3.3 UL	3.3 UL	2.3 U
BARIUM	64.8	18.0	122	106	105	53.0
BERYLLIUM	2.6	0.30 U	1.3 B	2.9	3.0	0.19 B
CADMIUM	1.8 K	0.53 K	0.50 U	0.49 U	0.49 U	1.3 B
CALCIUM	4470	1320	4040	6750	6910	6700
CHROMIUM	9.5 L	1.2 U	21.9	13.3 L	11.7 L	5.7 B
COBALT	15.6	7.4	45.4	26.2	26.4	2.2 B
COPPER	22.6	5	13.6	29.4	27.9	1.6
CYANIDE	3.0 U	10.0 U	10.0 U	3.0 U	3.0 U	1.3 U
IRON	14400	1380	16200	17700	16500	41.1 B
LEAD	3.4 L	1.7 UL	5.6 L	6.4	5.1 L	1.1 U
MAGNESIUM	4080	1140	4740	6090	5860	3960
MANGANESE	338	189	3600	819	830	190
MERCURY	0.05 U	0.20 U	0.20 U	0.05 U	0.05 U	0.20 UL
NICKEL	21.5	2.4	63.6	56.5	54.3	15.3
POTASSIUM	4370	1110	8260	6650	6410	2310
SELENIUM	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.8 UL	3.5 U
SILVER	1.9 UJ	1.9 U	1.9 U	1.9 UJ	1.9 UJ	0.60 U
SODIUM	7950	2710	5280	11300	11500	15100
THALLIUM	4.8 B	4.6 B	6.6 B	4.3 UJ	4.4 B	5.3 B
VANADIUM	11.3	1.4 U	16.2	10.8	9.9	0.60 U
ZINC	87	11.4 K	51.1	133	132	20.4 K
PETROLEUM HYDROCARBONS						
TOTAL PETROLEUM HYDROCARBONS **MG/L**	1 U	1 U	1 U	1 U	1 U	1 U
TPH-DIESEL **UG/L**	100 U	200 J	100 UJ	240	140	100 U
MISCELLANEOUS PARAMETERS						
AMMONIA **MG/L**	0.2 U	0.2 U	0.2 U	0.3	0.3	0.2 U
PERCHLORATE **UG/L**	4 U	4 U	4 U	4 U	4 U	4 U

SITE 11
NSWC WHITE OAK
SILVER SPRING, MARYLAND
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
ROUND 4 DATA - OCTOBER 1999

SAMPLE I.D.:	11GW1050004-D	11GW1060004	11GW1070004	11GW1080004	11GW1090004	11GW1100004	11GW1110004
LOCATION:	11GW105	11GW106	11GW107	11GW108	11GW109	11GW110	11GW111
SAMPLE DATE:	10/18/99	10/18/99	10/14/99	10/18/99	10/18/99	10/19/99	10/19/99
ASSOCIATED DUPLICATE:	11GW1050004						
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
VOLATILES (µg/L)							
1,1,1-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
1,1,2,2-TETRACHLOROETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
1,1,2-TRICHLOROETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
1,1-DICHLOROETHANE	1 U	1	1 U	0.4 J	1 U	15 J	1 U
1,1-DICHLOROETHENE	1 U	0.4 J	1 U	0.09 J	1 U	7 J	1 U
1,2,4-TRICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-DIBROMO-3-CHLOROPROPANE	1 U	1 U	1 UR	1 U	1 U	17 U	1 U
1,2-DIBROMOETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
1,2-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
1,2-DICHLOROETHANE	0.2 J	6	1 U	0.8 J	1 U	47	1 U
1,2-DICHLOROPROPANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
1,3-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
1,4-DICHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
2-BUTANONE	5 UR	5 UR	5 UR	5 UR	5 UR	83 UR	5 UR
2-HEXANONE	5 U	5 U	5 U	5 U	5 U	83 U	5 U
4-METHYL-2-PENTANONE	5 U	5 U	5 U	5 U	5 U	83 U	5 U
ACETONE	5 UR	5 UR	5 UR	5 UR	5 UR	83 UR	5 UR
BENZENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
BROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
BROMODICHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
BROMOFORM	1 U	1 U	1 U	1 U	1 U	17 U	1 U
BROMOMETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
CARBON DISULFIDE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
CARBON TETRACHLORIDE	0.2 J	1 U	1 U	0.1 J	1 U	4 J	1 U
CHLOROBENZENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
CHLOROETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
CHLOROFORM	0.6 J	1 U	0.34 J	0.9 J	1 U	14 J	1 U
CHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
CIS-1,2-DICHLOROETHENE	0.8 J	19	0.32 J	16	0.2 J	240	1 U
CIS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
DIBROMOCHLOROMETHANE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
ETHYLBENZENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
METHYLENE CHLORIDE	0.3 B	0.2 B	2 U	0.2 B	0.2 B	33 U	2 U
STYRENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
TETRACHLOROETHENE	0.2 J	1 U	12	0.8 J	1 U	7 J	0.1 J
TOLUENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
TRANS-1,2-DICHLOROETHENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
TRANS-1,3-DICHLOROPROPENE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
TRICHLOROETHENE	4	6	9.2	11	0.1 J	290	1
VINYL CHLORIDE	1 U	1 U	1 U	1 U	1 U	17 U	1 U
XYLENES, TOTAL	1 U	1 U	1 U	1 U	1 U	17 U	1 U
SEMIVOLATILES (µg/L)							
2,2'-OXYBIS(1-CHLOROPROPANE)	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4,5-TRICHLOROPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U

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SAMPLE DATE:	10/18/99	10/18/99	10/14/99	10/18/99	10/18/99	10/19/99	10/19/99
ASSOCIATED DUPLICATE:	11GW1050004						
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4,6-TRICHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DICHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DIMETHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,4-DINITROPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2,4-DINITROTOLUENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,6-DINITROTOLUENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLORONAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-CHLOROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-METHYLNAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-NITROANILINE	20 U	20 U	20 U	20 U	20 U	20 U	20 U
2-NITROPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3,3'-DICHLOROBENZIDINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3-NITROANILINE	20 U	20 U	20 U	20 U	20 U	20 U	20 U
4,6-DINITRO-2-METHYLPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U
4-BROMOPHENYL PHENYL ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLORO-3-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLOROANILINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-CHLOROPHENYL PHENYL ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-METHYLPHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-NITROANILINE	20 U	20 U	20 U	20 U	20 U	20 U	20 U
4-NITROPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U
ACENAPHTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACENAPHTHYLENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(A)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(A)PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(B)FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(G,H,I)PERYLENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BENZO(K)FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHOXY)METHANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-CHLOROETHYL)ETHER	5 U	5 U	5 U	5 U	5 U	5 U	5 U
BIS(2-ETHYLHEXYL)PHTHALATE	5 U	2 B	5 U	5 U	1 B	1 B	5 U
BUTYLBENZYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CHRYSENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DI-N-BUTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DI-N-OCTYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIBENZO(A,H)ANTHRACENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIBENZOFURAN	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIETHYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
DIMETHYL PHTHALATE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
FLUORANTHENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
FLUORENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROBUTADIENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U

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SAMPLE DATE:	10/18/99	10/18/99	10/14/99	10/18/99	10/18/99	10/19/99	10/19/99
ASSOCIATED DUPLICATE:	11GW1050004						
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
HEXACHLOROCYCLOPENTADIENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
HEXACHLOROETHANE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
INDENO(1,2,3-CD)PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ISOPHORONE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-NITROSO-DI-N-PROPYLAMINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
N-NITROSODIPHENYLAMINE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
NAPHTHALENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
NITROBENZENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PENTACHLOROPHENOL	20 U	20 U	20 U	20 U	20 U	20 U	20 U
PHENANTHRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PHENOL	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PYRENE	5 U	5 U	5 U	5 U	5 U	5 U	5 U
PESTICIDES/PCBs (µg/L)							
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ALDRIN	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ALPHA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
AROCLOR-1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1221	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
AROCLOR-1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1248	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
AROCLOR-1260	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
BETA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DELTA-BHC	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
DIELDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN I	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
ENDOSULFAN II	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDOSULFAN SULFATE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN ALDEHYDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
ENDRIN KETONE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
GAMMA-BHC (LINDANE)	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
GAMMA-CHLORDANE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
HEPTACHLOR EPOXIDE	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U
METHOXYCHLOR	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
TOXAPHENE	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
EXPLOSIVES (µg/L)							
1,3,5-TRINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-DINITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,4,6-TRINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

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LOCATION:	11GW105	11GW106	11GW107	11GW108	11GW109	11GW110	11GW111
SAMPLE DATE:	10/18/99	10/18/99	10/14/99	10/18/99	10/18/99	10/19/99	10/19/99
ASSOCIATED DUPLICATE:	11GW1050004						
VALIDATION STATUS:	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED	VALIDATED
2,4-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-AMINO-4,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
3-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-AMINO-2,6-DINITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-NITROTOLUENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
HMX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
NITROBENZENE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
RDX	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
TETRYL	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
INORGANICS (µg/L)							
ALUMINUM	77.0 B	215 B	83.6 B	27.2 B	23.5 B	32.7 B	1100
ANTIMONY	2.2 U	2.2 U	5.8 UJ	2.7	2.2 U	2.2 U	2.2 U
ARSENIC	2.3 U	2.3 U	3.3 U	2.4	2.3 U	2.3 U	2.3 U
BARIUM	51.4	68.1	38.4	10.2	34.3	6.5	34.9
BERYLLIUM	0.17 B	0.17 B	0.30 U	0.48 B	0.51 B	0.11 B	0.28 B
CADMIUM	1.4 B	0.20 U	0.50 U	0.29 B	0.20 U	0.20 U	0.84 B
CALCIUM	6490	24100	6120	2920	8230	5190	3240
CHROMIUM	6.7 B	0.80 U	1.2 U	3.0 B	0.84 B	2.0 B	11.1
COBALT	2.0 B	0.60 U	1.5	0.60 U	1.9 B	1.0 B	12.9
COPPER	4.1	0.70 U	1.3 U	0.70 U	0.70 U	0.70 U	3.5
CYANIDE	1.5	1.3 U	10.0 U	2.4	1.3 U	3.4	1.3 U
IRON	89.8 B	3060	34.6 K	48.8 B	9060	74.4 B	2150
LEAD	1.1 U	1.1 U	1.7 UL	1.1 U	1.1 U	1.1 U	1.1 U
MAGNESIUM	3820	4870	3870	1070	4760	2710	1800
MANGANESE	186	311	21.1	4.1 B	950	72.0	586
MERCURY	0.20 UL	0.20 UL	0.05	0.20 UL	0.20 UL	0.20 UL	0.20 UL
NICKEL	14.7	2.4	11.2	3.4	16.4	4.9	16.7
POTASSIUM	2220	4110	2140	1060	3060	3330	2180
SELENIUM	3.5 U	3.5 U	3.8 UL	3.5 U	3.5 U	3.5 U	3.5 U
SILVER	0.60 U	0.60 U	1.9 U	0.60 U	0.60 U	0.60 U	0.60 U
SODIUM	14500	8050	11900	5270	6720	8330	8280
THALLIUM	4.8 B	3.0 B	7.7 B	4.9 B	4.0 B	3.4 B	3.6 B
VANADIUM	0.60 U	11.6	1.4 U	1.2 B	0.60 U	0.60 U	0.79 B
ZINC	21.6 K	1.6 B	9.3 K	10.3 B	13.4 K	7.5 B	20.4 K
PETROLEUM HYDROCARBONS							
TOTAL PETROLEUM HYDROCARBONS MG/L	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U
TPH-DIESEL UG/L	100 U	100 U	100 UJ	100 U	100 U	100 U	100 U
MISCELLANEOUS PARAMETERS							
AMMONIA MG/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3	0.2 U
PERCHLORATE UG/L	4 U	10 U	4 U	31	4 U	38	4 U

SECTION G

DATA VALIDATION MEMORANDA

Tetra Tech NUS

INTERNAL CORRESPONDENCE

PITT-12-9-200

TO :	R. KOTUN	DATE:	MARCH 3, 2000
FROM:	GRETCHEN A. PHIPPS	COPIES:	DV FILE

SUBJECT: INORGANIC DATA VALIDATION –TAL METALS, DISSOLVED TAL METALS AND CYANIDE
CTO 298 – NSWC WHITE OAK, MD
SAMPLE DELIVERY GROUP SDG – WO076

SAMPLES: 25/Aqueous/

11GW1050004	11GW1059904	11GW1060004
11GW1080004	11GW1090004	11GW1100004
11GW1110004	11GW1110004-F	11GW870004
11GW870004-F	2GW1020004	2GW1030004
2GW1030004-F	2GW1040004	2GW1040004-F
2GW1050004	2GW1050004-F	2GW310004
2GW320004	2GW450004	2GW450004-F
3GW770004	3GW770004-F	BGW1010004
BGW1010004-F		

Overview

The sample set for SDG WO076, NSWC White Oak, consists of twenty-five (25) aqueous environmental samples. One (1) field duplicate pair (11GW1050004 / 11GW1059904) was included within this SDG.

All samples, with exception to those designated –F, were analyzed for target analyte list (TAL) metals and cyanide. The samples designated with –F were analyzed for dissolved target analyte list (TAL) metals. The samples were collected by Tetra Tech NUS on October 15 and 18-20, 1999 and analyzed by Quanterra Laboratories under Naval Facilities Engineering Service Center (NFESC) Quality Assurance / Quality Control (QA/QC) criteria. Metals and cyanide analyses were conducted using CLP ILM03.0/4.0 methodology.

Summary

All analytes were successfully analyzed. The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, calibration data, laboratory method/preparation blanks, interference check sample (ICS) results, matrix spike results, laboratory duplicate results, field duplicate results, laboratory control sample (LCS) results, ICP serial dilution results, detection limits and analyte quantitation.

All TAL metals analyses, with the exception of mercury, were conducted using Inductively Coupled Plasma (ICP) methodologies. Mercury analyses were conducted using cold vapor AA.

Areas of concern with respect to data quality are listed below.

Minor Problems

- The Contract Required Detection Limit (CRDL) Percent Recoveries (%Rs) for lead and zinc were >110% quality control limit. The positive results <2X CRDL reported for lead and zinc were qualified as biased high, "K".

- The CRDL %R for mercury was <90% quality control limit. The nondetected results reported for mercury were qualified as biased low, "UL".

- The following contaminants were detected in the laboratory method / preparation blanks at the following maximum concentrations :

Samples Affected: All

Analyte	Maximum Concentration	Action Level(aqueous)
Aluminum[1]	88.937µg/L	444.685µg/L
Barium	1.2µg/L	6.0µg/L
Beryllium	1.3µg/L	6.5µg/L
Cadmium	0.4µg/L	2.0µg/L
Calcium	95.9µg/L	479.5µg/L
Chromium	2.1µg/L	10.5µg/L
Cobalt	1.1µg/L	5.5µg/L
Iron	40.0µg/L	200µg/L
Magnesium	102.2µg/L	511µg/L
Manganese[1]	4.038µg/L	20.19µg/L
Sodium[1]	515.7µg/L	2578.5µg/L
Thallium	6.0µg/L	30.0µg/L
Vanadium	1.2µg/L	6.0µg/L
Zinc[1]	2.302µg/L	11.51µg/L

[1] Maximum concentration present in an aqueous preparation blank.

An action level of 5x the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors were taken into consideration when evaluating for blank contamination. The positive results < the action level for aluminum, beryllium, cadmium, chromium, cobalt, iron, manganese, thallium, vanadium and zinc were qualified, "B", as a result of blank contamination. No validation action was required for the remaining analytes since either the results were greater than the action level or were nondetects.

Notes

A comparison of field duplicate pair (11GW1050004 / 11GW1059904) is included in Appendix C.

The CRDL %Rs for beryllium, manganese and thallium were >110% quality control limit. However, all results reported for beryllium, manganese and thallium were either nondetected, qualified as a result of blank contamination or greater than 2X CRDL. Therefore, no validation action was required.

Executive Summary

Laboratory Performance: The CRDL %Rs for several analytes were outside the 90-110% quality control limit. Several analytes were present in the laboratory method/preparation blanks.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Validation", April 1993 Revision as amended for use within USEPA Region III, and the NFESC document entitled "Navy Installation Restoration Chemical Data Quality Manual" (NFESC 6/98).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Gretchen A Phipps

Tetra Tech NUS
Gretchen A. Phipps
Chemist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

PITT-12-9-163

TO :	**R. KOTUN**	**DATE:**	**MARCH 3, 2000**
FROM:	**GRETCHEN A. PHIPPS**	**COPIES:**	**DV FILE**

SUBJECT: **MISCELLANEOUS DATA VALIDATION –AMMONIA AND PERCHLORATE**
CTO 298 – NSWC WHITE OAK, MD
SAMPLE DELIVERY GROUP SDGs – 996545 AND 996229

SAMPLES: **SDG 996545**

27/Aqueous/

13GW010004	13GW019904	13GW020004
13GW030004	3GW1020004	3GW1040004
3GW180004	3GW78D0004	3GW78S0004
5GW020004	9GW010004	9GW020004
9GW030004	9GW040004	9GW050004
9GW060004	9GW069904	9GW070004
9GW1000004	9GW550004	9GW560004
9GW57D0004	9GW57S0004	9GW580004
9GW590004	9GW750004	9GW830004

SDG 996229

19/Aqueous/

11GW220004	11GW230004	11GW250004
7GW080004	7GW1010004	7GW1020004
7GW1030004	7GW1039904	7GW1040004
7GW1050004	7GW410004	7GW420004
7GW430004	8GW330004	8GW340004
8GW350004	8GW360004	8GW530004
8GWB10004		

Overview

The sample set for SDGs 996545 and 996229, NSWC White Oak, consists of forty-six (46) aqueous environmental samples. Three (3) field duplicate pairs (13GW010004 / 13GW019904, 9GW060004 / 9GW069904 and 7GW1030004 / 7GW1039904) were included within this sample set.

The samples were analyzed for ammonia and perchlorate. The samples were collected by Tetra Tech NUS on October 5-8 and 23-28, 1999 and analyzed by Applied Physics and Chemistry Laboratories under Naval Facilities Engineering Service Center (NFESC) Quality Assurance / Quality Control (QA/QC) criteria. Ammonia analyses were conducted using EPA method 350.2. Perchlorate analyses were conducted using EPA method 300.0.

Summary

All analytes were successfully analyzed. The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, calibration data, laboratory method/preparation blanks, matrix spike results, laboratory duplicate results, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems

- None

Minor Problems

- The Matrix Spike (MS) Percent Recovery (%R) for ammonia affecting SDG 996229 was >125% quality control limit. The positive results reported for ammonia in the affected samples were qualified as biased high, "K".

- Field Duplicate imprecision (>30%) was noted for perchlorate affecting SDG 996229. The positive results reported for perchlorate in the affected samples were qualified as estimated, "J". The direction of bias could not be determined.

Executive Summary

Laboratory Performance: None.

Other Factors Affecting Data Quality: The MS %R for ammonia was >125% quality control limit affecting SDG 996229. Field Duplicate imprecision was noted for perchlorate affecting SDG 996229.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Validation", April 1993 Revision as amended for use within USEPA Region III, and the NFESC document entitled "Navy Installation Restoration Chemical Data Quality Manual" (NFESC 6/98).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Gretchen A. Phipps

Tetra Tech NUS
Gretchen A. Phipps
Chemist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

Tetra Tech NUS

INTERNAL CORRESPONDENCE

PITT-12-9-164

TO :	R. KOTUN	DATE:	MARCH 3, 2000
FROM:	GRETCHEN A. PHIPPS	COPIES:	DV FILE

SUBJECT: MISCELLANEOUS DATA VALIDATION –AMMONIA AND PERCHLORATE
CTO 298 – NSWC WHITE OAK, MD
SAMPLE DELIVERY GROUP SDGs – 996310 AND 996439

SAMPLES: **SDG 996310**

32/Aqueous/

11GW1010004	11GW1020004	11GW1030004
11GW1040004	11GW1049904	11GW1070004
11GW240004	11GW260004	11GW270004
11GW280004	11GW290004	11GW620004
11GW629904	11GW630004	11GW640004
11GW650004	11GW660004	11GW670004
11GW680004	11GW690004	11GW70D0004
11GW710004	11GW719904	11GW720004
11GW730004	11GW840004	11GW850004
11GW860004	11GW880004	11GW889904
BGW1000004	BGW400004	

SDG 996439

27/Aqueous/

11GW1050004	11GW1059904	11GW1060004
11GW1080004	11GW1090004	11GW1100004
11GW1110004	11GW870004	2GW1000004
2GW1010004	2GW1020004	2GW1030004
2GW1040004	2GW1050004	2GW300004
2GW309904	2GW310004	2GW320004
2GW450004	2GW760004	3GW1070004
3GW170004	3GW190004	3GW470004
3GW770004	BGW1010004	BGW1020004

Overview

The sample set for SDGs 996310 and 996439, NSWC White Oak, consists of fifty-nine (59) aqueous environmental samples. Six (6) field duplicate pairs (11GW1040004 / 11GW1049904, 11GW620004 / 11GW629904, 11GW710004 / 11GW719904, 11GW710004 / 11GW719904, 11GW1050004 / 11GW1059904 and 2GW300004 / 2GW309904) were included within this sample set.

The samples were analyzed for ammonia and perchlorate. The samples were collected by Tetra Tech NUS on October 11-15, and 18-22 1999 and analyzed by Applied Physics and Chemistry Laboratories under Naval Facilities Engineering Service Center (NFESC) Quality Assurance / Quality Control (QA/QC) criteria. Ammonia analyses were conducted using EPA method 350.2. Perchlorate analyses were conducted using EPA method 300.0.

Summary

All analytes were successfully analyzed. The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, calibration data, laboratory method/preparation blanks, matrix spike results, laboratory duplicate results, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems

- None

Minor Problems

- None

Executive Summary

Laboratory Performance: None.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Validation", April 1993 Revision as amended for use within USEPA Region III, and the NFESC document entitled "Navy Installation Restoration Chemical Data Quality Manual" (NFESC 6/98).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Gretchen A. Phipps

Tetra Tech NUS
Gretchen A. Phipps
Chemist

Tetra Tech NUS
Joseph A. Sarnchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**MR. RON KOTUN**	**DATE:**	**MARCH 10, 2000**
FROM:	**LINDA KARSONOVICH**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOA/SVOA/PEST/PCB/EXP/TPH**
CTO 298, NSWC WHITE OAK, MD
SDG WO074

SAMPLES: 19/Aqueous/

11GW1010004	11GW1040004	11GW1049904
11GW220004	11GW230004	11GW240004
11GW250004	11GW290004	11GW630004
11GW640004	11GW680004	11GW690004
11GW70D0004	11GW860004	7GW420004
7GW430004	TB1008990004	TB1011990004
TB1012990004		

OVERVIEW

The sample set for CTO 298, SDG WO074, NSWC White Oak, MD consists of three (3) trip blanks and sixteen (16) aqueous environmental samples. All samples were analyzed for Target Compound List (TCL) volatile organic compounds. The environmental samples were also analyzed for TCL semivolatile organic compounds, pesticides/PCBs, explosive compounds, Total Petroleum Hydrocarbons (TPH) and TPH-Diesel. No field duplicate pairs were included in the SDG.

The samples were collected by TetraTech NUS on October 7-12, 1999 and were analyzed by Quanterra Laboratories. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using Contract Laboratory Program (CLP) Statement of Work (SOW) OLC02.1 and SW-846 Methods 8330 and 8015B and EPA Method 418.1 analytical and reporting protocols.

All samples were successfully analyzed with the exception of those results that were rejected. The findings offered in this report are based upon a general review of all available data including: data completeness, system performance and tuning, holding times, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, internal standard recoveries, blank spike results, matrix spike/matrix spike duplicate results, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- Initial and continuing calibration relative response factors (RRFs) fell below the 0.05 quality control limit for acetone, 2-butanone, and 1,2-dibromo-3-chloropropane. Nondetected results for all three compounds were rejected, UR. Positive results for acetone, not qualified for blank contamination, were qualified as biased low, L.

- Nitrosodiphenylamine matrix spike recoveries were less than 10%. The nondetected result in the unspiked sample, 11GW1040004, was rejected, R.

Minor Problems

- A continuing calibration percent difference (%D) exceeded the 25% quality control limit for chloroethane. Nondetected results were qualified as estimated, UJ, in samples 11GW220001, TB1008990004, 11GW250004, and 11GW230004.

- The following compounds were detected in the laboratory method blanks or field quality control blanks (*):

Compound	Maximum Concentration	Blank Action Level
Acetone*	2 µg/L	20 µg/L
Methylene chloride*	1 µg/L	10 µg/L
Bis(2-ethylhexyl)phthalate	2 µg/L	20 µg/L

  Sample aliquot and dilution factors were taken into consideration when applying the blank action limit. Positive results for acetone and bis(2-ethylhexyl)phthalate below the blank action level were qualified as false positives, B. Field quality control blanks were not qualified based on contamination in other field quality control blanks or laboratory method blanks.

- Positive results below the CRQL were qualified as estimated, J, due to uncertainty near the detection limit. The direction of bias cannot be determined.

Notes

Sample 11GW220004 in the volatile fraction required dilution due to the presence of target compounds above the instrument's linear calibration range. This accounts for the elevated reporting limit for this sample.

Unknown compounds and dimethyl disulfide were tentatively identified in the volatile laboratory method blanks. These compounds should be considered as false positives where detected in the samples.

An initial calibration relative percent standard deviation (%RSD) exceeded the 30% quality control limit for chloroethane. No qualifiers were assigned on this basis since the exceedance was less than 50% and the compound was not detected in the samples.

Continuing calibration %Ds exceeded the 25% quality control limit for chloroethane and 4-methyl-2-pentanone. No qualifiers were assigned on this basis since the exceedance was less than 50% and the compounds were not detected in the samples.

The matrix spike duplicate form was not included in the data package. The reviewer calculated MSD recoveries. Hexachlorobenzene and benzo(a)pyrene recoveries were low. However, these compounds were not detected in the unspiked sample and no qualifiers were assigned on this basis.

TPH (Diesel) MS/MSD recoveries exceeded the upper quality control limit. No validation action was taken on this basis.

EXECUTIVE SUMMARY

Laboratory Performance Issues:. Several volatile compounds failed to meet the RRF quality control criteria. Several compounds failed to meet the continuing calibration %D criteria in the volatile fraction. Several compounds were detected in the laboratory method and field quality control blanks.

Other Factors Affecting Data Quality: Nitrosodiphenylamine recoveries were less than 10% in the semivolatile MS/MSD.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (9/94) as modified by Region III and the NFESC guidelines "Navy Installation Restoration Program Laboratory Quality Assurance Guide" (February, 1996). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC guidelines and the Quality Assurance Project Plan (QAPP)."

TetraTech NUS

Linda Karsonovich
Chemist/Data Validator

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Support Documentation

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO :	R. KOTUN	**DATE:**	**MARCH 9, 2000**
FROM:	**GRETCHEN A. PHIPPS**	**COPIES:**	**DV FILE**

SUBJECT: **MISCELLANEOUS DATA VALIDATION –TPH**
CTO 298 – NSWC WHITE OAK, MD
SAMPLE DELIVERY GROUP SDG – WO076

SAMPLES: 18/Aqueous/

11GW1050004	11GW1059904	11GW1060004
11GW1080004	11GW1090004	11GW1100004
11GW1110004	11GW870004	2GW1020004
2GW1030004	2GW1040004	2GW1050004
2GW310004	2GW320004	2GW450004
3GW770004	BGW1010004	3GW1070004

Overview

The sample set for SDG WO076, NSWC White Oak, consists of eighteen (18) aqueous environmental samples. One (1) field duplicate pair (11GW1050004 / 11GW1059904) was included within this SDG.

All samples were analyzed for total petroleum hydrocarbons (TPH). The samples were collected by Tetra Tech NUS on October 15 and 18-20, 1999 and analyzed by Quanterra Laboratories under Naval Facilities Engineering Service Center (NFESC) Quality Assurance / Quality Control (QA/QC) criteria. TPH analyses were conducted using EPA MCAWW method 418.1.

Summary

All analytes were successfully analyzed. The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, calibration data, laboratory method blanks, results, matrix spike results, laboratory duplicate results, field duplicate results, laboratory control sample (LCS) results, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Minor Problems

- The following contaminants were detected in the laboratory method blanks at the following maximum concentrations :

Samples Affected: All

Analyte	Maximum Concentration	Action Level(aqueous)
TPH	3.2 mg/L	16.0 mg/L

An action level of 5x the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors were taken into consideration when evaluating for blank contamination. No validation action was required as the results were nondetects.

Executive Summary

Laboratory Performance: TPH was present in a method blank.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Validation", April 1993 Revision as amended for use within USEPA Region III, and the NFESC document entitled "Navy Installation Restoration Chemical Data Quality Manual" (NFESC 6/98).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Gretchen A. Phipps

Tetra Tech NUS
Gretchen A. Phipps
Chemist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**RON KOTUN**	**DATE:**	**MARCH 16, 2000**
FROM:	**SEAN NIXON**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION – VOAS, SVOAS, PESTICIDES/PCBS, TPH AND EXPLOSIVES**
CTO 298 NSWC WHITE OAK, MARYLAND
SDG – WO076

SAMPLES: 22/Aqueous

11GW1050004	11GW1059904	11GW1060004	11GW1080004	11GW1090004
11GW1100004	11GW1110004	11GW870004	2GW1020004	2GW1030004
2GW1040004	2GW1050004	2GW310004	2GW320004	2GW450004
3GW1070004	3GW770004	BGW1010004	TB1015990004	TB1018990004
TB1019990004	TB1020990004			

Overview

The sample set for CTO 298 NSWC White Oak, Maryland SDG WO076, consists of twenty-two (22) aqueous environmental samples including four (4) trip blanks.

All of the samples were analyzed for selected Target Compound List (TCL) Low Concentration volatiles. All of the samples except the trip blanks were analyzed for TCL Low Concentration semivolatiles, TCL pesticides/PCBs, and extracatable Petroleum Hydrocarbons (TPH). All of the samples except the 9GW440004 and the trip blanks were analyzed for TCL explosives. The samples were collected by Tetra Tech NUS on November 4-5, 8, 1999 and analyzed by Quanterra – North Canton (VOA, SVOA, PEST/PCB, TPH), and Knoxville (Explosives), Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. The VOAs and SVOAs analyses were conducted according to Contract Laboratory Procedure (CLP) OLC02.1, the pesticides/PCBs according to CLP OLM03.1, and the explosives and TPH analyses were analyzed according to SW-846 Methods 8330 and 8015B.

Summary

All analytes were successfully analyzed with the exception of those compounds that were rejected. The findings offered in this report were based upon a general review of all available data including data completeness, holding times, calibration data, laboratory and field quality control blank results, GC/MS tuning and performance, Matrix Spike (MS)/ Matrix Spike Duplicate (MSD) analyses, surrogate spike recoveries, Laboratory Control Sample (LCS) analyses, field duplicate results, compound identification and quantification, and detection limits.

Areas of concern with respect to data quality are listed below.

MAJOR PROBLEMS

Volatiles

- The initial calibration contained Relative Response Factors (RRFs) below the 0.05 quality control limit for 2-butanone and acetone. The nondetected results for the aforementioned compounds were rejected, UR, in the affected samples (all samples).

MINOR PROBLEMS

Volatiles

- The following contaminants were detected in the preparation blank/trip blanks:

Analyte	Maximum Concentration	Aqueous Action level
Methylene chloride	0.6 ug/L	6.0 ug/L
Styrene	0.3 ug/L	1.5 ug/L
Toluene	0.1 ug/L	0.5 ug/L
1,2-dichlorobenzene	0.1 ug/L	0.5 ug/L
1,3-dichlorobenzene	0.08 ug/L	0.4 ug/L
1,4-dichlorobenzene	0.2 ug/L	1.0 ug/L

Samples Affected: All.

Sample aliquot and dilution factors were taken into consideration when applying the action level. Positive results for methylene chloride, 1,4,-dichlorobenzene, and toluene reported below the action levels were considered false positives and were qualified, (B). It should be noted that field quality control blanks were not qualified for blank contamination.

Semivolatiles

- The following contaminant was detected in the preparation blank.

Analyte	Maximum Concentration	Aqueous Action level
Bis(2-ethylhexyl)phthalate	4 ug/L	40 ug/L

Samples Affected: All.

Sample aliquot and dilution factors were taken into consideration when applying the action level. Positive results for Bis(2-ethylhexyl)phthalate reported below the action level were considered false positives and were qualified, (B).

Pesticides/PCBs

- Samples 2GW1020004, 3GW1070004, and 3GW770004 yielded surrogate recoveries below the 60% quality control limit for decachlorobiphenyl on both analytical columns. The nondetected results were qualified as estimated, UJ, in the aforementioned samples.

TPH

- As a result of blank contamination, the samples for TPH analysis were re-extracted (in exceedance of the holding time) and reanalyzed. The re-extracted analyses were used for data validation. The positive and nondetected results for TPH were qualified as estimated, J and UJ.

Notes

Positive results reported below the Contract Required Quantitation Limits (CRQL) were qualified as estimated, (J).

The volatile continuing calibration verifications of 10/26/99 contained Percent Differences (%Ds) above the 25% quality control limit for bromomethane and 2-hexanone. Because only nondetected results were reported for the aforementioned compounds in the affected samples, no action was taken.

The volatile continuing calibration verification of 10/27/99 contained a %D above the 25% quality control limit for carbon tetrachloride. Because only nondetected results were reported for the aforementioned compound in the affected samples, no action was taken.

The semivolatile continuing calibration of 10/28/99 contained %Ds above the 25% quality control limit for 4-nitroaniline and 3,3'-dichlorobenzidine. Because only nondetected results were reported for the aforementioned compounds in the affected samples, no action was taken.

The semivolatiles continuing calibration of 10/29/99 contained a %D above the 25% quality control limit for 3,3'-dichlorobenzidine. Because only nondetected results were reported for the aforementioned compound in the affected samples, no action was taken.

The semivolatile surrogates nitrobenzene-d5 and 2-fluorophenol in sample 2GW320004 were less than the quality control limits. Because only one surrogate of both fractions was noncompliant, no action was taken.

A pesticide/PCB continuing calibration contained a %D above the 15% quality control limit for methoxychlor on one column, but no action was taken because the %D for methoxychlor on the other column was within quality control criteria.

The TPH LCSs yielded recoveries above the quality control limit. No action was taken for LCS noncompliances.

Executive Summary

Laboratory Performance: Nondetected results for acetone and 2-butanone were rejected for a gross calibration noncompliance. Blank contamination was noted for methylene chloride, 1,4,-dichlorobenzene, toluene, TPH and bis(2-ethylhexyl)phthalate.

Other Factors Affecting Data Quality: Low pesticide surrogate recoveries resulted in the estimation of nondetected results in samples 2GW102, 3GW107, and 3GW77.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Data Validation", September 1994 Revision as amended for use within USEPA Region III, and the NFESC document entitled "Navy Installation Restoration Laboratory Quality Assurance Guide " (NFESC 2/96).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Sean T. Nixon
Environmental Scientist
Tetra Tech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer
Tetra Tech NUS

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation.

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

PITT-12-9-205

TO :	**R. KOTUN**	**DATE:**	**FEBRUARY 29, 2000**
FROM:	**JENNIFER M. MALLE**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION –TAL METALS, DISSOLVED TAL METALS AND CYANIDE**
CTO 298 – NSWC WHITE OAK, MD
SAMPLE DELIVERY GROUP SDG – WO074

SAMPLES: 33/Aqueous/

11GW1010004	11GW1010004-F	11GW1040004
11GW1040004-F	11GW1049904	11GW1049904-F
11GW220004	11GW220004-F	11GW230004
11GW240004	11GW240004-F	11GW250004
11GW290004	11GW290004-F	11GW630004
11GW630004-F	11GW640004	11GW640004-F
11GW680004	11GW680004-F	11GW690004
11GW690004-F	11GW70D0004	11GW70D0004-F
11GW860004	11GW860004-F	7GW1040004-F
7GW420004	7GW420004-F	7GW430004
7GW430004-F	BGW1000004	BGW10000004-F

Overview

The sample set for SDG WO074, NSWC White Oak, consists of thirty-three (33) aqueous environmental samples. Two field duplicate pairs (11GW1040004/11GW1049904 and 11GW1040004-F/11GW1049904-F) were included within this SDG.

All samples, with exception to those designated -F, were analyzed for target analyte list (TAL) metals and cyanide. The samples designated with -F were analyzed for dissolved TAL metals. The samples were collected by Tetra Tech NUS on October 7, 8, 11 and 12, 1999 and analyzed by Quanterra Laboratories under Naval Facilities Engineering Service Center (NFESC) Navy Installation Restoration Laboratory Quality Assurance Guide (February 1996). Metals and cyanide analyses were conducted using CLP ILM04.0 methodology.

All TAL metals analyses, with the exception of mercury, were conducted using Inductively Coupled Plasma (ICP) methodologies. Mercury analyses were conducted using Cold Vapor AA.

Summary

All analytes were successfully analyzed. The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, calibration data, laboratory method/preparation blanks, interference check sample (ICS) results, matrix spike results, laboratory duplicate results, field duplicate results, laboratory control sample (LCS) results, ICP serial dilution results, detection limits and analyte quantitation.

Areas of concern with respect to data quality are listed below.

Major Problems

- None.

Minor Problems

- The Contract Required Detection Limit (CRDL) Percent Recoveries (%Rs) for arsenic, chromium, lead and selenium were less than the 90% quality control limits. The nondetected results reported for arsenic, chromium, lead and selenium were qualified as biased low, "UL". The positive results less than 2 times the CRDL values reported for arsenic, chromium and lead were qualified as biased low, "L". Due to conflicting noncompliances, the positive result less than 2 times the CRDL value reported for selenium was qualified as estimated, "J".

- The Contract Required Detection Limit (CRDL) Percent Recoveries (%Rs) for cadmium, iron and zinc were greater than the 110% quality control limits. The positive results less than 2 times the CRDL values reported for cadmium, iron and zinc were qualified as biased high, "K".

- The Contract Required Detection Limit (CRDL) Percent Recoveries (%Rs) for antimony, silver and thallium were above and below the 90% - 110% quality control limits. The nondetected results reported for antimony, silver and thallium were qualified as estimated, "UJ". The positive results less than 2 times the CRDL values reported for antimony and thallium were qualified as estimated, "J".

- The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations :

Samples Affected: All

Analyte	Maximum Concentration	Action Level (aqueous)
Aluminum	159 ug/L	797 ug/L
Beryllium	0.5 ug/L	2.5 ug/L
Magnesium	54.5 ug/L	273 ug/L
Manganese	1.4 ug/L	7.0 ug/L
Thallium [1]	8.5 ug/L	42.5 ug/L

[1] - Maximum concentration present in a preparation blank affecting total metals

An action level of 5x the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors were taken into consideration when evaluating for blank contamination. The positive results less than the action level for aluminum, beryllium and thallium were qualified, "B", as a result of blank contamination. No validation action was required for the remaining analytes since either the results were greater than the action level or were qualified nondetected by the laboratory.

- The interfering analyte iron was present in sample 11PZ630004 at a concentration which was comparable to the level of iron in the Interference Check Sample (ICS) solution. Several analytes namely barium, beryllium, cadmium, chromium, copper, lead, manganese, nickel, potassium, selenium, vanadium and zinc were present in the ICS solution at concentrations which exceeded the Instrument Detection Limit (IDL). Interference affects exist for beryllium, cadmium, lead, nickel, potassium, selenium and vanadium in the affected sample. The nondetected result reported for cadmium was qualified as biased low "UL". The positive results reported for beryllium and potassium were qualified as biased low, "L". The positive results reported for lead, nickel and vanadium were qualified as biased high, "K". Due to conflicting noncompliances, the positive result reported for selenium was qualified as estimated, "J".

- The Matrix Spike (MS) relative percent differences (%RPDs), affecting the total metals samples, were greater than the 125% quality control limits for aluminum and selenium. The positive results reported for aluminum in the affected samples were qualified as biased high, "K". The positive result reported for selenium in the affected sample was qualified as estimated, "J", due to conflicting noncompliances.

- The ICP serial dilution percent difference (%D) reported for barium, affecting the dissolved metals samples, was greater than the 10% quality control limits. The positive results reported for barium in the affected samples were qualified as estimated, "J".

Notes

The Contract Required Detection Limit (CRDL) Percent Recovery (%R) for aluminum was greater than the 110% quality control limits. However, no validation action was taken since the results reported were greater than 2x the CRDL value reported for aluminum.

The laboratory incorrectly reported nondetected results on the Electronic Deliverable Data (EDD) to the reporting limits instead of the instrument detection limits (IDL). The EDD was corrected by the data reviewer to report the nondetected results to the appropriate IDL.

The Chain of Custody (COC) incorrectly lists the total and dissolved metal samples 11GW630004, 11GW640004 and 11GW680004 as 11PZ630004, 11PZ640004 and 11PZ680004. The Form 1s were originally changed to reflect the COC. Upon further review , it was discovered that the COC was incorrect and that the samples should be identified with the "GW". The Form 1s were then changed back to the correct sample IDs. The Electronic Deliverable Data (EDD) remained unaffected.

Executive Summary

Laboratory Performance: The CRDL %Rs for antimony, arsenic, cadmium, chromium, iron, lead, selenium, silver, thallium and zinc were outside the 90-110% quality control limits. Several analytes were also present in the laboratory method/preparation blanks.

Other Factors Affecting Data Quality: MS noncompliance was noted for aluminum and selenium. Barium was qualified for ICP serial dilution noncompliance. The interfering analyte iron was present in sample 11PZ630004.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Validation", April 1993 Revision as amended for use within USEPA Region III, and the NFESC document entitled "Navy Installation Restoration Laboratory Quality Assurance Guide" (NFESC 2/96).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Tetra Tech NUS
Jennifer M. Malle
Environmental Scientist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO:	**MR. RON KOTUN**	**DATE:**	**MARCH 15, 2000**
FROM:	**LINDA KARSONOVICH**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC DATA VALIDATION- VOA/SVOA/PEST/PCB/EXP/TPH**
CTO 298, NSWC WHITE OAK, MD
SDG WO075

SAMPLES: 22/Aqueous/

11GW1020004	11GW1030004	11GW1070004	11GW260004
11GW270004	11GW280004	11GW620004	11GW629904
11GW650004	11GW660004	11GW670004	11GW710004
11GW719904	11GW720004	11GW730004	11GW840004
11GW850004	11GW880004	11GW889904	BGW400004
TB101399-00-04	TB101499-00-04		

OVERVIEW

The sample set for CTO 298, SDG WO075, NSWC White Oak, MD consists of two (2) trip blanks (TB) and twenty (20) aqueous environmental samples. All samples were analyzed for Target Compound List (TCL) volatile organic compounds. The environmental samples were also analyzed for TCL semivolatile organic compounds, pesticides/PCBs, explosive compounds, and TPH-Diesel. Three field duplicate pairs were included in the SDG: 11GW620004 and 11GW629904; 11GW710004 and 11GW719904; and 11GW880004 and 11GW889904.

The samples were collected by TetraTech NUS on October 12-14, 1999 and were analyzed by Quanterra Laboratories. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using Contract Laboratory Program (CLP) Statement of Work (SOW) OLC02.1 and SW-846 Methods 8330 and 8015B analytical and reporting protocols.

All samples were successfully analyzed with the exception of those results that were rejected. The findings offered in this report are based upon a general review of all available data including: data completeness, system performance and tuning, holding times, initial/continuing calibrations, laboratory method blank results, surrogate spike recoveries, internal standard recoveries, matrix spike/matrix spike duplicate results, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major Problems

- Initial and continuing calibration relative response factors (RRFs) fell below the 0.05 quality control limit for acetone, 2-butanone, and 1,2-dibromo-3-chloropropane. Nondetected results for all three compounds were rejected, UR. Positive results for acetone, not qualified for blank contamination, were qualified as biased low, L.

Minor Problems

- Due to surrogate recoveries less than 10%, the semivolatile fraction of sample 11GW670004 was re-extracted and re-analyzed. The re-extracted sample was used as the basis for data validation. The re-extraction occurred 13 days after sample collection. Nondetected results were qualified as estimated, UJ.

- All TPH samples were extracted beyond the seven day holding time. Positive and nondetected results were qualified as estimated, J and UJ, for all samples.

- A continuing calibration percent difference (%D) exceeded the 25% quality control limit for chloroethane. Nondetected results were qualified as estimated, UJ, in samples analyzed on 1015-16/99 since the exceedance was greater than 50%.

- Continuing calibration %Ds exceeded the 15% quality control limit for several TPH continuing calibration standards. Positive and nondetected results were qualified as estimated, J and UJ, in samples BGW400004, 11GW1030004, 11GW730004, 11GW670004, 11GW880004, 11GW889904, 11GW660004, 11GW720004, 11GW620004, 11GW629904, 11GW850004, 11GW650004, 11GW1070004, 11GW1020004, and 11GW280004.

- The following compounds were detected in the laboratory method blanks or field quality control blanks (*):

Compound	Maximum Concentration	Blank Action Level
Acetone*	1.8 µg/L	18 µg/L
Methylene chloride*	0.32 µg/L	3.2 µg/L
Styrene*	0.4 µg/L	2.0 µg/L
Toluene*	0.14 µg/L	0.7 µg/L
Bis(2-ethylhexyl)phthalate	5 µg/L	50 µg/L

  Sample aliquot and dilution factors were taken into consideration when applying the blank action limit. Positive results for acetone and bis(2-ethylhexyl)phthalate below the blank action level were qualified as false positives, B. Field quality control blanks were not qualified based on contamination in other field quality control blanks or laboratory method blanks.

- Positive results below the CRQL were qualified as estimated, J, due to uncertainty near the detection limit. The direction of bias cannot be determined.

Notes

An initial calibration relative percent standard deviation (%RSD) exceeded the 30% quality control limit for chloroethane. No qualifiers were assigned on this basis since the exceedance was less than 50% and the compound was not detected in the samples.

Continuing calibration %Ds exceeded the 25% quality control limit for chloroethane. No qualifiers were assigned on this basis since the exceedance was less than 50% and the compounds were not detected in the samples.

Continuing calibration %Ds exceeded the 25% quality control limit for3,3'-dichlorobenzidine and 4-nitroaniline. No qualifiers were assigned on this basis since the exceedance was less than 50% and the compounds were not detected in the samples.

Matrix spike and matrix spike duplicate recoveries of TPH exceeded the upper quality control limit. No qualifiers were assigned on this basis since the compound was not detected in the unspiked sample.

EXECUTIVE SUMMARY

Laboratory Performance Issues:. Several volatile compounds failed to meet the RRF quality control criteria. Several compounds failed to meet the continuing calibration %D criteria in the volatile and TPH fractions. Several compounds were detected in the laboratory method and field quality control blanks.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (9/94) as modified by Region III and the NFESC guidelines "Navy Installation Restoration Program Laboratory Quality Assurance Guide" (February, 1996). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC guidelines and the Quality Assurance Project Plan (QAPP)."

TetraTech NUS

Linda Karsonovich
Chemist/Data Validator

TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Support Documentation

Tetra Tech NUS **INTERNAL CORRESPONDENCE**

TO :	**R. KOTUN**	**DATE:**	**MARCH 3, 2000**
FROM:	**GRETCHEN A. PHIPPS**	**COPIES:**	**DV FILE**

SUBJECT: **INORGANIC DATA VALIDATION –TAL METALS, DISSOLVED TAL METALS, CYANIDE AND TPH**
CTO 298 – NSWC WHITE OAK, MD
SAMPLE DELIVERY GROUP SDG – WO075

SAMPLES: 28/Aqueous/

11GW1020004	11GW1020004-F	11GW1030004
11GW1030004-F	11GW1070004	11GW260004
11GW270004	11GW280004	11GW620004
11GW629904	11GW650004	11GW650004-F
11GW660004	11GW660004-F	11GW670004
11GW710004	11GW719904	11GW720004
11GW730004	11GW730004-F	11GW840004
11GW840004-F	11GW850004	11GW850004-F
11GW880004	11GW889904	BGW400004
BGW400004-F		

Overview

The sample set for SDG WO075, NSWC White Oak, consists of twenty-eight (28) aqueous environmental samples. Three (3) field duplicate pairs (11GW620004 / 11GW629904, 11GW710004 / 11GW719904 and 11GW880004 / 11GW889904) were included within this SDG.

All samples, with exception to those designated –F, were analyzed for target analyte list (TAL) metals, cyanide and total petroleum hydrocarbons (TPH). The samples designated with –F were analyzed for dissolved target analyte list (TAL) metals. The samples were collected by Tetra Tech NUS on October 12-14, 1999 and analyzed by Quanterra Laboratories under Naval Facilities Engineering Service Center (NFESC) Quality Assurance / Quality Control (QA/QC) criteria. Metals and cyanide analyses were conducted using CLP ILM03.0/4.0 methodology. TPH analyses were conducted using MCAWW method 418.1.

Summary

All analytes were successfully analyzed. The findings offered in this report are based upon a general review of all available data. The data review was based on data completeness, holding times, calibration data, laboratory method/preparation blanks, interference check sample (ICS) results, matrix spike results, laboratory duplicate results, field duplicate results, laboratory control sample (LCS) results, ICP serial dilution results, detection limits and analyte quantitation.

All TAL metals analyses, with the exception of mercury, were conducted using Inductively Coupled Plasma (ICP) methodologies. Mercury analyses were conducted using cold vapor AA.

Areas of concern with respect to data quality are listed below.

Minor Problems

- The Contract Required Detection Limit (CRDL) Percent Recoveries (%Rs) for arsenic, cadmium, iron and zinc were >110% quality control limit. The positive results <2X CRDL reported for arsenic, cadmium, iron and zinc were qualified as biased high, "K".

- The CRDL %R for antimony was both above and below the 90-110% quality control limits. The nondetected results reported for antimony were qualified as estimated, "UJ", as a result of conflicting noncompliances.

- The CRDL %Rs for lead and selenium were <90% quality control limit. The positive results <2X CRDL reported for lead were qualified as biased low, "L". The nondetected results reported for lead and selenium were qualified as biased low, "UL".

- The following contaminants were detected in the laboratory method / preparation blanks at the following maximum concentrations :

Samples Affected: All

Analyte	Maximum Concentration	Action Level(aqueous)
Aluminum	122.5µg/L	612.5µg/L
Beryllium	0.4µg/L	2.0µg/L
Manganese	0.6µg/L	3.0µg/L
Thallium	5.1µg/L	25.5µg/L
Thallium[1]	8.8µg/L	44.0µg/L

[1] Maximum concentration present in an aqueous preparation blank affecting dissolved metals.

An action level of 5x the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors were taken into consideration when evaluating for blank contamination. The positive results < the action level for aluminum, beryllium and thallium were qualified, "B", as a result of blank contamination. No validation action was required for the remaining analytes since either the results were greater than the action level or were nondetects.

Notes

A comparison of field duplicate pairs (11GW620004 / 11GW629904, 11GW710004 / 11GW719904 and 11GW880004 / 11GW889904) is included in Appendix C.

The CRDL %Rs for aluminum and thallium were >110% quality control limit. However, all results reported for aluminum and thallium were either nondetected, qualified as a result of blank contamination or greater than 2X CRDL. Therefore, no validation action was required.

The electronic spreadsheets were not reported to the IDL. However, this is a reoccurring problem with Quanterra Laboratory in Knoxville. The electronic data was corrected. A "ND" on the Form 1s indicate a nondetected result reported to the laboratory IDL.

Executive Summary

Laboratory Performance: The CRDL %Rs for several analytes were outside the 90-110% quality control limit. Several analytes were present in the laboratory method/preparation blanks.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Data Validation", April 1993 Revision as amended for use within USEPA Region III, and the NFESC document entitled "Navy Installation Restoration Chemical Data Quality Manual" (NFESC 6/98).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the NFESC Guidelines and the Quality Assurance Project Plan (QAPP)."

Gretchen A Phipps

Tetra Tech NUS
Gretchen A. Phipps
Chemist

Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
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