Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-1 10/23/1989	MW-1 10/24/1995	MW-1 9/21/1999	MW-1 3/28/2000	MW-1 4/25/2008	MW-1 4/25/2008	MW-2 10/27/1995	MW-2 9/21/1999	MW-2 3/30/2000	MW-2 5/8/2008	MW-2 5/8/2008	MW-2 9/17/2008	MW-2 9/17/2008
METAL																	
Antimony	6	6	6	15			5 U		10 U			5 U		10 U		2 U	
Arsenic	10	10	10	0.045			5 U		10 U			5 U		10 U		1 U	
Barium	2000	2000	2000	7300					26.2 B					23.1 B		22.3	
Beryllium	4	4	4	73			1 U		4 U			1 U		4 U		1 U	
Cadmium	5	5	5	18			1 U		5 U			1 U		5 U		1 U	
Cadmium	5	5	5				1 U		5 U			1 U		5 U		1 U	
Calcium					57000	64000	62800	74000				10800	8600				
Chromium	100	100	100				5 U		1.9 B			5 U		3.5 B		20.1 J	
Copper	1000	1000	1300	1500			6		25 U		10 U	6		2.4 B		12	
Hexavalent Chromium	100	100		0.043			10 U		50 U			10 U		50 U			
Iron			300	26000	110	70 U	1100	620			1800	920	1000				
Lead	5	5	15				5 U		3 U			5 U		3 U		0.27 B	
Magnesium						5900	5900	6700			5500	4400	3800				
Manganese	300	300	50	880	22	20	120	20 U			24	20 U	20 U				
Manganese	300	300	50		22	20	120	20 U			24	20 U	20 U				
Mercury	2	2	2	0.57			0 U		0.2 U			0 U		0.071 B		0.2 U	
Nickel	100	100		730			5 U		1.9 B			5 U		3.7 B		9.6	
Potassium						1400	1900	1600			6200	5700	5400				
Selenium	50	50	50	180			5 U		5 U			5 U		5 U		0.28 B	
Silver	100	100		180			5 U		5 U			5 U		5 U		1 U	
Sodium					3400	2000	2600	1900			25000	28600	26000				
Thallium	2	2	2				2 U		10 U			2 U		10 U		0.037 B	
Vanadium	260	720		2.6					50 U					50 U		2.1 J	
Zinc	2000	2000		11000			20 U		2.9 B			36		6.6 B J		19.1	
METAL (Dissolved)																	
Antimony	6	6	6	15						10 U					10 U		2 U
Arsenic	10	10	10	0.045						10 U					10 U		0.47 B
Barium	2000	2000	2000	7300						27 B					23 B		21.6
Beryllium	4	4	4	73						4 U					4 U		1 U
Cadmium	5	5	5							5 U					5 U		1 U
Cadmium	5	5	5	18						5 U					5 U		1 U
Calcium																	
Chromium	100	100	100							5 U					1.7 B		12.1 J
Copper	1000	1000	1300	1500						25 U					25 U		0.95 B
Hexavalent Chromium	100	100		0.043						50 U					50 U		
Iron			300	26000													
Lead	5	5	15							3 U					3 U		0.11 B
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57						0.2 U					0.2 U		0.2 U
Nickel	100	100		730						40 U					2.5 B		7.1
Potassium																	
Selenium	50	50	50	180						5 U					5 U		5 U
Silver	100	100		180						5 U					5 U		1 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-1 10/23/1989	MW-1 10/24/1995	MW-1 9/21/1999	MW-1 3/28/2000	MW-1 4/25/2008	MW-1 4/25/2008	MW-2 10/27/1995	MW-2 9/21/1999	MW-2 3/30/2000	MW-2 5/8/2008	MW-2 5/8/2008	MW-2 9/17/2008	MW-2 9/17/2008
Sodium																	
Thallium	2	2	2							10 U					10 U		0.036 B
Vanadium	260	720		2.6						50 U					50 U		0.31 B J
Zinc	2000	2000		11000						4.3 B J					9.7 B J		18.9

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-2 6/25/2010	MW-3 4/15/1987	MW-3 9/22/1999	MW-3 4/3/2000	MW-3 5/7/2008	MW-3 5/7/2008	MW-4 9/28/1999	MW-4 3/29/2000	MW-4 (Cole) 7/8/2010	MW-5 9/14/1999	MW-5 3/24/2000	MW-5 Dup 3/24/2000	MW-5 4/24/2008
METAL																	
Antimony	6	6	6	15			5 U		10 U		5 U			5 U			10 U
Arsenic	10	10	10	0.045			5 U		10 U		5 U			5 U			10 U
Barium	2000	2000	2000	7300					121 B J								79 B
Beryllium	4	4	4	73			1 U		4 U		1 U			1 U			4 U
Cadmium	5	5	5	18			1 U		5 U		1 U			1 U			5 U
Cadmium	5	5	5				1 U		5 U		1 U			1 U			5 U
Calcium							7100	6200			7800	11000		151000	110000	120000	
Chromium	100	100	100				5 U		5 U		5 U			5 U			5 U
Copper	1000	1000	1300	1500			5 U		25 U		5 U			9			31.7
Hexavalent Chromium	100	100		0.043			10 U		50 U		10 U			10 U			50 U
Iron			300	26000			230	68			470	5300		340	50 U		
Lead	5	5	15				5 U		3 U		5 U			5 U			3 U
Magnesium							4100	3700			4300	5500		14400	14000	15000	
Manganese	300	300	50	880			20 U	20 U			170	290		65	87	96	
Manganese	300	300	50				20 U	20 U			170	290		65	87	96	
Mercury	2	2	2	0.57			0 U		0.2 U		0 U			0 U			0.2 U
Nickel	100	100		730			5		6.2 B		5 U			5 U			3.9 B
Potassium							3800	3600			2300	3000		1700	1600	1700	
Selenium	50	50	50	180			5 U		5 U		5 U			5 U			5 U
Silver	100	100		180			5 U		5 U		5 U			5 U			5 U
Sodium							10500	9400			15700	25000		6000	5800	5900	
Thallium	2	2	2				2 U		10 U		2 U			2 U			10 U
Vanadium	260	720		2.6					50 U								1.5 B
Zinc	2000	2000		11000		40	20 U		20 U		25			39			6 B
METAL (Dissolved)																	
Antimony	6	6	6	15						10 U							
Arsenic	10	10	10	0.045						10 U							
Barium	2000	2000	2000	7300						118 B J							
Beryllium	4	4	4	73						4 U							
Cadmium	5	5	5							5 U							
Cadmium	5	5	5	18						5 U							
Calcium					7680								35400				
Chromium	100	100	100							5 U							
Copper	1000	1000	1300	1500						25 U							
Hexavalent Chromium	100	100		0.043						50 U							
Iron			300	26000	205								100 U				
Lead	5	5	15							3 U							
Magnesium					3330 B								15700				
Manganese	300	300	50		9.5 B								18.7				
Manganese	300	300	50	880	9.5 B								18.7				
Mercury	2	2	2	0.57						0.2 U							
Nickel	100	100		730						6.1 B							
Potassium					4660 B								2120 B				
Selenium	50	50	50	180						5 U							
Silver	100	100		180						5 U							

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-2 6/25/2010	MW-3 4/15/1987	MW-3 9/22/1999	MW-3 4/3/2000	MW-3 5/7/2008	MW-3 5/7/2008	MW-4 9/28/1999	MW-4 3/29/2000	MW-4 (Cole) 7/8/2010	MW-5 9/14/1999	MW-5 3/24/2000	MW-5 Dup 3/24/2000	MW-5 4/24/2008
Sodium					16100								59500				
Thallium	2	2	2							10 U							
Vanadium	260	720		2.6						50 U							
Zinc	2000	2000		11000						14.4 B J							

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-5 4/24/2008	MW-5 9/5/2008	MW-5 9/5/2008	MW-6 4/3/1990	MW-6 4/28/1994	MW-6 7/11/1994	MW-6 9/21/1999	MW-6 3/23/2000	MW-6 6/2/2003	MW-6 6/8/2004	MW-6 6/13/2005	MW-6 6/20/2006	MW-6 6/25/2007	MW-6 6/25/2007
METAL																		
Antimony	6	6	6	15		0.071 B		100 U	170 U	150 U	5 U							
Arsenic	10	10	10	0.045		1 U		10 U	6 U	6 U	5 U							
Barium	2000	2000	2000	7300		72.5												
Beryllium	4	4	4	73		0.072 B		5 U	6 U	5 U	1 U							
Cadmium	5	5	5	18		1 U		100 U	10 U	10 U	1 U							
Cadmium	5	5	5			1 U		100 U	10 U	10 U	1 U							
Calcium											114000	19000						
Chromium	100	100	100			5 J		200 U	20 U	20 U	5 U		0 U	2.8 U	3 U	5 U		
Copper	1000	1000	1300	1500		17.2		100 U	20 U	20 U	5 U							
Hexavalent Chromium	100	100		0.043							10 U		0 U	10 U	10 U	10 U	10 U	
Iron			300	26000					150	4700	94	50 U						
Lead	5	5	15			4.8		150 U	110 U	100 U	5 U		0 U	2.2 U	2.7 U	4.1 J		
Magnesium											6800	6500						
Manganese	300	300	50	880					100	120	62	20 U						
Manganese	300	300	50						100	120	62	20 U						
Mercury	2	2	2	0.57		0.2 U		0.5 U	0.5 U	0.5 U	0 U							
Nickel	100	100		730		4.3		40 U	40 U	40 U	5 U		0 U	3.9 U	2.4 U	5.7 B		
Potassium											1300	2100						
Selenium	50	50	50	180		5 U		10 U	5 U	10 U	5 U							
Silver	100	100		180		1 U		20 U	40 U	40 U	5 U							
Sodium											22900	4800						
Thallium	2	2	2			0.033 B		200 U	330 U	200 U	2 U							
Vanadium	260	720		2.6		2.3 J												
Zinc	2000	2000		11000		6.1		90	60 U	50 U	28		0 U	13.6 B	15.1 B	17.7 JB		
METAL (Dissolved)																		
Antimony	6	6	6	15	10 U		0.078 B J											
Arsenic	10	10	10	0.045	10 U		0.25 B											
Barium	2000	2000	2000	7300	74.4 B		69.4											
Beryllium	4	4	4	73	4 U		1 U											
Cadmium	5	5	5		5 U		1 U											
Cadmium	5	5	5	18	5 U		1 U											
Calcium																		
Chromium	100	100	100		5 U		4.4 J											5 U
Copper	1000	1000	1300	1500	18.8 B		6.6											
Hexavalent Chromium	100	100		0.043	50 U													
Iron			300	26000														
Lead	5	5	15		3 U		0.058 B J											3 U
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57	0.2 U		0.2 U											
Nickel	100	100		730	2.5 B		2.9											2.9 B
Potassium																		
Selenium	50	50	50	180	5 U		0.33 B											
Silver	100	100		180	5 U		1 U											

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-5 4/24/2008	MW-5 9/5/2008	MW-5 9/5/2008	MW-6 4/3/1990	MW-6 4/28/1994	MW-6 7/11/1994	MW-6 9/21/1999	MW-6 3/23/2000	MW-6 6/2/2003	MW-6 6/8/2004	MW-6 6/13/2005	MW-6 6/20/2006	MW-6 6/25/2007	MW-6 6/25/2007
Sodium																		
Thallium	2	2	2		10 U		0.032 B J											
Vanadium	260	720		2.6	1.1 B		1.1											
Zinc	2000	2000		11000	4.5 B J		4.9 B											7.8 B J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-6 4/25/2008	MW-6 4/25/2008	MW-6 9/8/2008	MW-6 9/8/2008	MW-7 10/23/1989	MW-7 4/2/1990	MW-7 4/28/1994	MW-7 7/11/1994	MW-7 9/28/1999	MW-7 4/5/2000	MW-7 6/4/2003	MW-7 Dup 6/9/2004	MW-7 6/9/2004	MW-7 6/17/2005
METAL																		
Antimony	6	6	6	15	10 U		0.075 B			100 U	170 U	150 U	5 U					
Arsenic	10	10	10	0.045	10 U		1 U			10 U	6 U	6 U	5 U					
Barium	2000	2000	2000	7300	201		157											
Beryllium	4	4	4	73	4 U		1 U			5 U	6 U	5 U	1 U					
Cadmium	5	5	5	18	5 U		1 U			100 U	10 U	10 U	1 U					
Cadmium	5	5	5		5 U		1 U			100 U	10 U	10 U	1 U					
Calcium									121000				112000	130000				
Chromium	100	100	100		5 U		3.9 J			20 U	20 U	30	67		77	64.1	63.5	
Copper	1000	1000	1300	1500	25 U		1.3 B			10	20 U	20 U	5 U					
Hexavalent Chromium	100	100		0.043	50 U		0 U						100		70	54.8	54.8	37.5
Iron			300	26000					30		210	220	50 U	50 U				
Lead	5	5	15		3 U		0.14 B			150 U	110 U	100 U	5 U			2.2 U	2.2 U	
Magnesium													13400	15000				
Manganese	300	300	50	880					13		21	31	20 U	20 U				
Manganese	300	300	50						13		21	31	20 U	20 U				
Mercury	2	2	2	0.57	0.2 U		0.2 U			0.5 U	0.5 U	0.5 U	0 U					
Nickel	100	100		730	4 B		2.5			40 U	40 U	40 U	5 U		0 U	4.1 B	5 B	
Potassium													10500	7500				
Selenium	50	50	50	180	5 U		0.42 B			10 U	5 U	5 U	5 U					
Silver	100	100		180	5 U		1 U			20 U	40 U	40 U	5 U					
Sodium									8300				17700	17000				
Thallium	2	2	2		10 U		0.089 B			200 U	330 U	200 U	2 U					
Vanadium	260	720		2.6	2 B		1.1 J											
Zinc	2000	2000		11000	6.2 B		4.9 B			40	60 U	50 U			0 U	14 B	11.8 B	
METAL (Dissolved)																		
Antimony	6	6	6	15		10 U		0.049 B J										
Arsenic	10	10	10	0.045		10 U		0.38 B										
Barium	2000	2000	2000	7300		200		172										
Beryllium	4	4	4	73		4 U		1 U										
Cadmium	5	5	5			5 U		1 U										
Cadmium	5	5	5	18		5 U		1 U										
Calcium																		
Chromium	100	100	100			5 U		4.4 J										
Copper	1000	1000	1300	1500		25 U		1.1 B										
Hexavalent Chromium	100	100		0.043		50 U		0 U										
Iron			300	26000														
Lead	5	5	15			3 U		0.072 B J										
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57		0.2 U		0.2 U										
Nickel	100	100		730		3.4 B		2.9										
Potassium																		
Selenium	50	50	50	180		5 U		0.24 B										
Silver	100	100		180		5 U		1 U										

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-6 4/25/2008	MW-6 4/25/2008	MW-6 9/8/2008	MW-6 9/8/2008	MW-7 10/23/1989	MW-7 4/2/1990	MW-7 4/28/1994	MW-7 7/11/1994	MW-7 9/28/1999	MW-7 4/5/2000	MW-7 6/4/2003	MW-7 Dup 6/9/2004	MW-7 6/9/2004	MW-7 6/17/2005
Sodium																		
Thallium	2	2	2			10 U		0.083 B J										
Vanadium	260	720		2.6		50 U		1.1										
Zinc	2000	2000		11000		8.9 B J		6.1										

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-7 6/17/2005	MW-7 6/23/2006	MW-7 6/28/2007	MW-7 6/28/2007	MW-7 5/19/2008	MW-7 5/19/2008	MW-7 10/1/2008	MW-7 10/1/2008	MW-7 7/7/2009	MW-7 7/7/2009	MW-7 6/29/2010	MW-7 6/29/2010	MW-8 4/2/1990	MW-8 9/29/1999
METAL																		
Antimony	6	6	6	15					10 U		0.094 B						100 U	5 U
Arsenic	10	10	10	0.045					10 U		1 U						10 U	5 U
Barium	2000	2000	2000	7300					139 B		86.2							
Beryllium	4	4	4	73					4 U		1 U						5 U	1 U
Cadmium	5	5	5	18					5 U		1 U						100 U	1 U
Cadmium	5	5	5						5 U		1 U						100 U	1 U
Calcium																		74200
Chromium	100	100	100			76.2			51.4		84 J		114		54.8		20 U	6
Copper	1000	1000	1300	1500					2.1 B		13.3						10 U	5 U
Hexavalent Chromium	100	100		0.043		76	45		50 U		110		170 J		61			10 U
Iron			300	26000														50 U
Lead	5	5	15			3 U			3 U		3.3						150 U	5 U
Magnesium																		21700
Manganese	300	300	50	880														20 U
Manganese	300	300	50															20 U
Mercury	2	2	2	0.57					0.2 U		0.2 U						0.5 U	0 U
Nickel	100	100		730		1.6 B			1.5 B		3.8						40 U	5 U
Potassium																		4600
Selenium	50	50	50	180					5 U		1.2 B						10 U	5 U
Silver	100	100		180					5 U		1 U						20 U	5 U
Sodium																		16400
Thallium	2	2	2						10 U		0.1 B J						200 U	2 U
Vanadium	260	720		2.6					2.2 B		3.2 J							
Zinc	2000	2000		11000		6.8 JB			5.2 B J		13.6						40	25
METAL (Dissolved)																		
Antimony	6	6	6	15						10 U		0.087 B						
Arsenic	10	10	10	0.045						10 U		1 U						
Barium	2000	2000	2000	7300						135 B		84.1						
Beryllium	4	4	4	73						4 U		1 U						
Cadmium	5	5	5							5 U		0.12 B J						
Cadmium	5	5	5	18						5 U		0.12 B J						
Calcium																169000		
Chromium	100	100	100		48.9			48		51.3		92.7 J		113		56.2		
Copper	1000	1000	1300	1500						1.9 B		2.9 J						
Hexavalent Chromium	100	100		0.043						62		96		140		64		
Iron			300	26000												100 U		
Lead	5	5	15		2.7 U			3 U		3 U		0.44 B J						
Magnesium																25000		
Manganese	300	300	50													15.8		
Manganese	300	300	50	880												15.8		
Mercury	2	2	2	0.57						0.17 B		0.2 U						
Nickel	100	100		730	2.4 U			40 U		40 U		4.2						
Potassium																83200		
Selenium	50	50	50	180						5 U		0.87 B						
Silver	100	100		180						5 U		1 U						

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-7 6/17/2005	MW-7 6/23/2006	MW-7 6/28/2007	MW-7 6/28/2007	MW-7 5/19/2008	MW-7 5/19/2008	MW-7 10/1/2008	MW-7 10/1/2008	MW-7 7/7/2009	MW-7 7/7/2009	MW-7 6/29/2010	MW-7 6/29/2010	MW-8 4/2/1990	MW-8 9/29/1999
Sodium																90400		
Thallium	2	2	2							10 U		0.12 B						
Vanadium	260	720		2.6						2.1 B		1 U						
Zinc	2000	2000		11000	39.6			6.8 B J		4.8 B		7						

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-8 4/4/2000	MW-8 5/19/2008	MW-8 5/19/2008	MW-8 6/18/2010	MW-9 6/16/2005	MW-9 Dup 6/16/2005	MW-9 5/9/2008	MW-9 5/9/2008	MW-10 3/27/2000	MW-10 6/16/2005	MW-10 Dup 6/16/2005	MW-10 5/9/2008	MW-10 5/9/2008
METAL																	
Antimony	6	6	6	15		10 U					10 U					10 U	
Arsenic	10	10	10	0.045		10 U					10 U					10 U	
Barium	2000	2000	2000	7300		155 B					10.7 B J					10.2 B J	
Beryllium	4	4	4	73		4 U					4 U					4 U	
Cadmium	5	5	5	18		5 U					0.51 B					0.46 B	
Cadmium	5	5	5			5 U					0.51 B					0.46 B	
Calcium					120000								20000				
Chromium	100	100	100			2.5 B			1.8 B	1.6 U	3 B					5 U	
Copper	1000	1000	1300	1500		3.4 B					25 U					25 U	
Hexavalent Chromium	100	100		0.043		50 U			10 U		10 U			10 U		50 U	
Iron			300	26000	50 U								19000				
Lead	5	5	15			3 U			2.7 U		3 U			5.2	2.7 U	3 U	
Magnesium					34000								9100				
Manganese	300	300	50	880	24								450				
Manganese	300	300	50		24								450				
Mercury	2	2	2	0.57		0.2 U					0.2 U					0.2 U	
Nickel	100	100		730		40 U			5.1 B	3.5 B	3.3 B				2.4 U	1.4 B	
Potassium					22000								1500				
Selenium	50	50	50	180		5 U					5 U					5 U	
Silver	100	100		180		5 U					5 U					5 U	
Sodium					58000								9000				
Thallium	2	2	2			10 U					5.4 B J					10 U	
Vanadium	260	720		2.6		1.6 B					50 U					50 U	
Zinc	2000	2000		11000		11.6 B J					6.8 B J			21.2 B		1.7 B J	
METAL (Dissolved)																	
Antimony	6	6	6	15			10 U					10 U					10 U
Arsenic	10	10	10	0.045			10 U					10 U					10 U
Barium	2000	2000	2000	7300			155 B					9.6 B					10.4 B
Beryllium	4	4	4	73			4 U					4 U					4 U
Cadmium	5	5	5				5 U					0.5 B					0.53 B
Cadmium	5	5	5	18			5 U					0.5 B					0.53 B
Calcium								129000									
Chromium	100	100	100				2.2 B					5 U					5 U
Copper	1000	1000	1300	1500			1.2 B					25 U					25 U
Hexavalent Chromium	100	100		0.043			50 U					50 U					50 U
Iron			300	26000				100 U									
Lead	5	5	15				3 U					3 U					3 U
Magnesium								33900									
Manganese	300	300	50					5.2 B									
Manganese	300	300	50	880				5.2 B									
Mercury	2	2	2	0.57			0.2 U					0.087 B J					0.095 B J
Nickel	100	100		730			40 U					2.8 B					1.5 B
Potassium								23400									
Selenium	50	50	50	180			5 U					5 U					5 U
Silver	100	100		180			5 U					5 U					5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-8 4/4/2000	MW-8 5/19/2008	MW-8 5/19/2008	MW-8 6/18/2010	MW-9 6/16/2005	MW-9 Dup 6/16/2005	MW-9 5/9/2008	MW-9 5/9/2008	MW-10 3/27/2000	MW-10 6/16/2005	MW-10 Dup 6/16/2005	MW-10 5/9/2008	MW-10 5/9/2008
Sodium								65900									
Thallium	2	2	2				10 U					10 U					6.1 B
Vanadium	260	720		2.6			2.6 B					50 U					50 U
Zinc	2000	2000		11000			9.9 B					2.5 B J					1.7 B J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-10 9/22/2008	MW-10 9/22/2008	MW-10 6/24/2010	MW-11 6/16/2005	MW-11 Dup 6/16/2005	MW-11 4/24/2008	MW-11 4/24/2008	MW-12 9/20/1999	MW-12 4/3/2000	MW-12 6/4/2003	MW-12 6/8/2004	MW-12 6/8/2004	MW-12 6/16/2005	MW-12 6/23/2006
METAL																		
Antimony	6	6	6	15	2 U			5.8 U	5.8 U	10 U		5 U						
Arsenic	10	10	10	0.045	1 U					10 U		5 U						
Barium	2000	2000	2000	7300	9.6 B J					133 B								
Beryllium	4	4	4	73	1 U					4 U		1 U						
Cadmium	5	5	5	18	1 U				0.4 U	5 U		1 U						
Cadmium	5	5	5		1 U				0.4 U	5 U		1 U						
Calcium												3800	4500					
Chromium	100	100	100		13.9 J			28.4	1.6 U	4.2 B		5 U		0 U			1.6 U	5 U
Copper	1000	1000	1300	1500	0.44 B					4.5 B		5 U						
Hexavalent Chromium	100	100		0.043				10 U		50 U		10 U		0 U	10 U		10 U	10 U
Iron			300	26000								920	2400					
Lead	5	5	15		0.15 B			32.7		3 U		5 U		0 U			2.7 U	2.6 B
Magnesium												1600	1800					
Manganese	300	300	50	880								70	340					
Manganese	300	300	50									70	340					
Mercury	2	2	2	0.57	0.2 U					0.2 U		0 U						
Nickel	100	100		730	0.81 B			26.3 B		22.6 B		5		0 U			3.4 B	4.3 B
Potassium													1400					
Selenium	50	50	50	180	0.62 B					5 U		5 U						
Silver	100	100		180	1 U					5 U		5 U						
Sodium												6100	8400					
Thallium	2	2	2		1 U					10 U		2 U						
Vanadium	260	720		2.6	3.2 J					1.7 B								
Zinc	2000	2000		11000	3.8 B			71	35.3	22.8		69		0 U			43.6	9.3 JB
METAL (Dissolved)																		
Antimony	6	6	6	15		0.31 B J					10 U							
Arsenic	10	10	10	0.045		0.63 B					10 U							
Barium	2000	2000	2000	7300		9.7 B					134 B							
Beryllium	4	4	4	73		1 U					4 U							
Cadmium	5	5	5			1 U					5 U							
Cadmium	5	5	5	18		1 U					5 U							
Calcium							19200											
Chromium	100	100	100			12.1 J					5 U					2.8 U		
Copper	1000	1000	1300	1500		0.3 B					2.8 B							
Hexavalent Chromium	100	100		0.043							50 U							
Iron			300	26000			15500											
Lead	5	5	15			0.048 B					3 U					2.2 U		
Magnesium							8640											
Manganese	300	300	50				400											
Manganese	300	300	50	880			400											
Mercury	2	2	2	0.57		0.2 U					0.2 U							
Nickel	100	100		730		0.54 B					19.6 B					4.4 B		
Potassium							1260 B											
Selenium	50	50	50	180		0.5 B J					5 U							
Silver	100	100		180		1 U					5 U							

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-10 9/22/2008	MW-10 9/22/2008	MW-10 6/24/2010	MW-11 6/16/2005	MW-11 Dup 6/16/2005	MW-11 4/24/2008	MW-11 4/24/2008	MW-12 9/20/1999	MW-12 4/3/2000	MW-12 6/4/2003	MW-12 6/8/2004	MW-12 6/8/2004	MW-12 6/16/2005	MW-12 6/23/2006
Sodium							7490											
Thallium	2	2	2			1 U					10 U							
Vanadium	260	720		2.6		2.1 J					50 U							
Zinc	2000	2000		11000		4 B					22.7 J					15.2 B		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-12 6/28/2007	MW-12 6/28/2007	MW-12 5/6/2008	MW-12 5/6/2008	MW-12 9/16/2008	MW-12 9/16/2008	MW-14 4/24/2008	MW-14 4/24/2008	MW-15 5/8/2008	MW-15 5/8/2008	MW-15 9/26/2008	MW-15 9/26/2008	MW-16D 5/13/2008	MW-16D 5/13/2008
METAL																		
Antimony	6	6	6	15			10 U		0.062 B		10 U		10 U		0.14 B		10 U	
Arsenic	10	10	10	0.045			10 U		1 U		10 U		10 U		1 U		10 U	
Barium	2000	2000	2000	7300			11.6 B		10.6		120 B		114 B		102		55 B	
Beryllium	4	4	4	73			4 U		1 U		4 U		0.45 B		1 U		4 U	
Cadmium	5	5	5	18			5 U		1 U		5 U		5 U		1 U		5 U	
Cadmium	5	5	5				5 U		1 U		5 U		5 U		1 U		5 U	
Calcium																		
Chromium	100	100	100				2.4 B		16.6 J		1.6 B		14		13.1 J E		5 U	
Copper	1000	1000	1300	1500			1.9 B		2.4		25 U		9.4 B		3		25 U	
Hexavalent Chromium	100	100		0.043	10 U		50 U		0 U		50 U		50 U				50 U	
Iron			300	26000														
Lead	5	5	15				3 U		0.27 B		3 U		3 U		0.79 B		3 U	
Magnesium																		
Manganese	300	300	50	880														
Manganese	300	300	50															
Mercury	2	2	2	0.57			0.2 U		0.2 U		0.2 U		0.2 U		0.2 U		0.2 U	
Nickel	100	100		730			5.7 B J		9.4		3.2 B		12 B		4.8		40 U	
Potassium																		
Selenium	50	50	50	180			5 U		5 U		5 U		5 U		5 U		5 U	
Silver	100	100		180			5 U		1 U		5 U		0.68 B		1 U		5 U	
Sodium																		
Thallium	2	2	2				10 U		0.1 B		10 U		10 U		0.26 B		10 U	
Vanadium	260	720		2.6			50 U		1.8 J		50 U		50 U		3.8 J		50 U	
Zinc	2000	2000		11000			4.9 B J		4.4 B		7.7 B		23.3 J		12.4		22.1 J	
METAL (Dissolved)																		
Antimony	6	6	6	15				10 U		0.073 B		10 U		10 U		0.21 B		10 U
Arsenic	10	10	10	0.045				10 U		1 U		10 U		10 U		1 U		10 U
Barium	2000	2000	2000	7300				10.6 B		10.4		117 B		111 B		96.5		55.8 B
Beryllium	4	4	4	73				4 U		1 U		4 U		0.37 B J		1 U		4 U
Cadmium	5	5	5					5 U		1 U		5 U		5 U		1 U		5 U
Cadmium	5	5	5	18				5 U		1 U		5 U		5 U		1 U		5 U
Calcium																		
Chromium	100	100	100			5 U		5 U		9.1 J		5 U		1.6 B		11.7 J E		5 U
Copper	1000	1000	1300	1500				25 U		1.6 B		25 U		3.4 B		2.8		25 U
Hexavalent Chromium	100	100		0.043				50 U		0 U		50 U		50 U				50 U
Iron			300	26000														
Lead	5	5	15			3 U		3 U		0.065 B		3 U		3 U		0.37 B		3 U
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57				0.2 U		0.2 U		0.2 U		0.2 U		0.2 U		0.2 U
Nickel	100	100		730		4.3 B		3 B J		8		3.2 B		4.6 B		4.8		40 U
Potassium																		
Selenium	50	50	50	180				5 U		5 U		5 U		5 U		5 U		5 U
Silver	100	100		180				5 U		1 U		5 U		5 U		1 U		5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-12 6/28/2007	MW-12 6/28/2007	MW-12 5/6/2008	MW-12 5/6/2008	MW-12 9/16/2008	MW-12 9/16/2008	MW-14 4/24/2008	MW-14 4/24/2008	MW-15 5/8/2008	MW-15 5/8/2008	MW-15 9/26/2008	MW-15 9/26/2008	MW-16D 5/13/2008	MW-16D 5/13/2008
Sodium																		
Thallium	2	2	2					10 U		0.097 B		10 U		10 U		0.077 B J		10 U
Vanadium	260	720		2.6				50 U		1.7 J		50 U		50 U		3.7 J		50 U
Zinc	2000	2000		11000		6.2 B J		3.4 B J		6.2		8 B J		20.2 J		15		21.4 J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-16D 6/16/2010	MW-16S 5/15/2008	MW-16S 5/15/2008	MW-16S 10/2/2008	MW-16S 10/2/2008	MW-16S 7/9/2009	MW-16S 7/9/2009	MW-16S 6/28/2010	MW-17 9/14/1999	MW-17 3/23/2000	MW-17 4/28/2008	MW-17 4/28/2008	MW-17 9/12/2008
METAL																	
Antimony	6	6	6	15		10 U		1.1 B					5 U		10 U		2 U
Arsenic	10	10	10	0.045		10 U		13.8 J		1 U			5 U		10 U		0.24 B
Barium	2000	2000	2000	7300		60.8 B		194							20.8 B		26
Beryllium	4	4	4	73		4 U		3.7					1		4 U		0.17 B
Cadmium	5	5	5	18		5 U		1.1					1 U		5 U		1 U
Cadmium	5	5	5			5 U		1.1					1 U		5 U		1 U
Calcium													8700	100000			
Chromium	100	100	100			2.8 B		37 J					5 U		5 U		5.3 J
Copper	1000	1000	1300	1500		3.2 B		30					13		25 U		1.1 B
Hexavalent Chromium	100	100		0.043		50 U							10 U		50 U		
Iron			300	26000									54	630			
Lead	5	5	15			9.1		142		5.8			5 U		3 U		1.6
Magnesium													3100	6800			
Manganese	300	300	50	880									20 U	79			
Manganese	300	300	50										20 U	79			
Mercury	2	2	2	0.57		0.092 B J		0.083 B					0 U		0.2 U		0.2 U
Nickel	100	100		730		12.2 B		72.4					5 U		40 U		1.6
Potassium													1100	1300			
Selenium	50	50	50	180		5 U		2.4 B					5 U		5 U		5 U
Silver	100	100		180		0.74 B		0.58 B					5 U		5 U		1 U
Sodium													2600	24000			
Thallium	2	2	2			10 U		0.45 B J					2 U		10 U		0.043 B
Vanadium	260	720		2.6		50 U		9.8 J							50 U		2.4 J
Zinc	2000	2000		11000		22.8 J		182					20 U		7.6 B		5 J
METAL (Dissolved)																	
Antimony	6	6	6	15			10 U		0.73 B							10 U	
Arsenic	10	10	10	0.045			10 U		4.4		1 U					10 U	
Barium	2000	2000	2000	7300			46.5 B		109							20.2 B	
Beryllium	4	4	4	73			4 U		2.5							4 U	
Cadmium	5	5	5				5 U		0.62 B J							5 U	
Cadmium	5	5	5	18			5 U		0.62 B J							5 U	
Calcium					36400 J							22800					
Chromium	100	100	100				5 U		19.8 J							5 U	
Copper	1000	1000	1300	1500			25 U		11.6 J							25 U	
Hexavalent Chromium	100	100		0.043			50 U									50 U	
Iron			300	26000	2750							100 U					
Lead	5	5	15				3 U		67.2 J		0.043 B					3 U	
Magnesium					10200							11600					
Manganese	300	300	50		243							627					
Manganese	300	300	50	880	243							627					
Mercury	2	2	2	0.57			0.087 B J		0.2 U							0.2 U	
Nickel	100	100		730			10.3 B		41.8							40 U	
Potassium					1430 B							3750 B					
Selenium	50	50	50	180			5 U		1.6 B							5 U	
Silver	100	100		180			5 U		0.1 B							5 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-16D 6/16/2010	MW-16S 5/15/2008	MW-16S 5/15/2008	MW-16S 10/2/2008	MW-16S 10/2/2008	MW-16S 7/9/2009	MW-16S 7/9/2009	MW-16S 6/28/2010	MW-17 9/14/1999	MW-17 3/23/2000	MW-17 4/28/2008	MW-17 4/28/2008	MW-17 9/12/2008
Sodium					6730							132000					
Thallium	2	2	2				10 U		0.14 B							10 U	
Vanadium	260	720		2.6			50 U		4.2 J							50 U	
Zinc	2000	2000		11000			14.9 B J		74.9							3.5 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-17 9/12/2008	MW-17 6/18/2010	MW-18D 4/23/2008	MW-18D 4/23/2008	MW-18D 10/7/2008	MW-18D 10/7/2008	MW-18D 7/9/2009	MW-18D 7/9/2009	MW-18D 7/1/2010	MW-18S 5/1/2008	MW-18S 5/1/2008	MW-18S Dup 5/1/2008	MW-18S Dup 5/1/2008
METAL																	
Antimony	6	6	6	15			10 U		0.31 B					10 U		10 U	
Arsenic	10	10	10	0.045			10		4					2.4 B		10 U	
Barium	2000	2000	2000	7300			84.3 B		42.2					269		98.3 B	
Beryllium	4	4	4	73			4 U		1 U					0.65 B		0.53 B	
Cadmium	5	5	5	18			5 U		1 U					0.86 B		5 U	
Cadmium	5	5	5				5 U		1 U					0.86 B		5 U	
Calcium																	
Chromium	100	100	100				5 U		13.6 J					4.6 B		2.1 B	
Copper	1000	1000	1300	1500			4.2 B		0.95 B					4.2 B		1.4 B	
Hexavalent Chromium	100	100		0.043			50 U							50 U		50 U	
Iron			300	26000													
Lead	5	5	15				5.1		1.1		0.93 B			14.2		6.7	
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57			0.2 U		0.2 U					0.2 U		0.2 U	
Nickel	100	100		730			2.2 B		3.4 J					10.5 B		3.8 B	
Potassium																	
Selenium	50	50	50	180			5 U		5.0 U					5 U		5 U	
Silver	100	100		180			5 U		1 U					2.2 B		0.99 B	
Sodium																	
Thallium	2	2	2				5.1 B		0.23 B					4.3 B		3.9 B	
Vanadium	260	720		2.6			50 U		5.1 J					2.3 B		50 U	
Zinc	2000	2000		11000			35.6		8.9					379 J		222 J	
METAL (Dissolved)																	
Antimony	6	6	6	15	2 U			10 U		0.16 B					10 U		10 U
Arsenic	10	10	10	0.045	0.19 B			2.4 B		2.7					10 U		10 U
Barium	2000	2000	2000	7300	20.2			39 B		32.2					28.1 B		31.7 B
Beryllium	4	4	4	73	1 U			4 U		1 U					0.61 B J		0.54 B J
Cadmium	5	5	5		1 U			5 U		1 U					5 U		5 U
Cadmium	5	5	5	18	1 U			5 U		1 U					5 U		5 U
Calcium						16800							35000				
Chromium	100	100	100		4.9 J			5 U		14 J					5 U		5 U
Copper	1000	1000	1300	1500	0.36 B			25 U		0.31 B					25 U		25 U
Hexavalent Chromium	100	100		0.043				50 U							50 U		50 U
Iron			300	26000		100 U							3110				
Lead	5	5	15		1 U			3 U		1 U		0.038 B			3 U		3 U
Magnesium						5830							10600				
Manganese	300	300	50			2.3 B							398				
Manganese	300	300	50	880		2.3 B							398				
Mercury	2	2	2	0.57	0.2 U			0.2 U		0.2 U					0.2 U		0.2 U
Nickel	100	100		730	0.46 B			1.7 B		3.2					40 U		40 U
Potassium						2180 B							1160 B				
Selenium	50	50	50	180	0.21 B J			5 U		0.68 B					5 U		5 U
Silver	100	100		180	1 U			5 U		1 U					5 U		5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-17 9/12/2008	MW-17 6/18/2010	MW-18D 4/23/2008	MW-18D 4/23/2008	MW-18D 10/7/2008	MW-18D 10/7/2008	MW-18D 7/9/2009	MW-18D 7/9/2009	MW-18D 7/1/2010	MW-18S 5/1/2008	MW-18S 5/1/2008	MW-18S Dup 5/1/2008	MW-18S Dup 5/1/2008
Sodium						5300							9300				
Thallium	2	2	2		0.025 B			3.9 B		0.043 B					10 U		10 U
Vanadium	260	720		2.6	2.3 J			1 B		2.7 J					50 U		1.3 B
Zinc	2000	2000		11000	2.9 B J			6.8 B J		5.0 U					34.9		22.6

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-18S 10/3/2008	MW-18S 10/3/2008	MW-18S 7/9/2009	MW-18S 7/9/2009	MW-18S 6/29/2010	MW-19 9/22/1999	MW-19 4/3/2000	MW-19 5/14/2008	MW-19 5/14/2008	MW-20D 5/7/2008	MW-20D 5/7/2008	MW-20D 9/5/2008	MW-20D 9/5/2008	MW-20D 6/16/2009
METAL																		
Antimony	6	6	6	15	0.32 B					5 U		10 U		10 U		0.64 B		3.6
Arsenic	10	10	10	0.045	1.8 J					5 U		10 U		10 U		1.1		1.2
Barium	2000	2000	2000	7300	157							25.5 B		11.9 B J		20.6		
Beryllium	4	4	4	73	0.096 B					1 U		4 U		4 U		0.36 B		0.16 B
Cadmium	5	5	5	18	0.21 B					1 U		5 U		5 U		1 U		
Cadmium	5	5	5		0.21 B					1 U		5 U		5 U		1 U		
Calcium										33000	35000							
Chromium	100	100	100		8.9 J					5 U		5 U		2.2 B		14.2 J		13.6 J
Copper	1000	1000	1300	1500	4.2					5		25 U		2.3 B		2.7		
Hexavalent Chromium	100	100		0.043						10 U		50 U		120		0 U		50 U
Iron			300	26000						190	50 U							
Lead	5	5	15		10		1.8			5 U		3 U		59.8		31.8		45.6
Magnesium										10000	11000							
Manganese	300	300	50	880						20 U	20 U							
Manganese	300	300	50							20 U	20 U							
Mercury	2	2	2	0.57	0.2 U					0 U		0.2 U		0.2 U		0.2 U		
Nickel	100	100		730	5.7					5 U		1.7 B		3.2 B		6.2		5.5
Potassium										1300	1300							
Selenium	50	50	50	180	0.53 B					5 U		5 U		5 U		5 U		
Silver	100	100		180	1 U					5 U		5 U		5 U		1 U		
Sodium										4800	4400							
Thallium	2	2	2		0.043 B J					2 U		10 U		10 U		0.024 B		
Vanadium	260	720		2.6	6.9 J							50 U		50 U		3.3 J		
Zinc	2000	2000		11000	97.9					20 U		20 U		20 U		15.5		
METAL (Dissolved)																		
Antimony	6	6	6	15		2 U							10 U		10 U		0.1 B J	
Arsenic	10	10	10	0.045		1.5							10 U		10 U		0.5 B	
Barium	2000	2000	2000	7300		39.7							23.8 B		5.6 B J		4.1 B	
Beryllium	4	4	4	73		1 U							4 U		4 U		1 U	
Cadmium	5	5	5			1 U							5 U		5 U		1 U	
Cadmium	5	5	5	18		1 U							5 U		5 U		1 U	
Calcium									35900									
Chromium	100	100	100			7.9 J							5 U		5 U		4.9 J	
Copper	1000	1000	1300	1500		0.54 B J							25 U		25 U		0.26 B	
Hexavalent Chromium	100	100		0.043									50 U		50 U		0 U	
Iron			300	26000					2120									
Lead	5	5	15			0.27 B J		0.053 B					3 U		12.2		0.4 B J	
Magnesium									11000									
Manganese	300	300	50						478									
Manganese	300	300	50	880					478									
Mercury	2	2	2	0.57		0.2 U							0.2 U		0.2 U		0.2 U	
Nickel	100	100		730		3.7							40 U		2.2 B		3.3	
Potassium									1200 B									
Selenium	50	50	50	180		1.2 B							5 U		5 U		5 U	
Silver	100	100		180		1 U							5 U		5 U		1 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-18S 10/3/2008	MW-18S 10/3/2008	MW-18S 7/9/2009	MW-18S 7/9/2009	MW-18S 6/29/2010	MW-19 9/22/1999	MW-19 4/3/2000	MW-19 5/14/2008	MW-19 5/14/2008	MW-20D 5/7/2008	MW-20D 5/7/2008	MW-20D 9/5/2008	MW-20D 9/5/2008	MW-20D 6/16/2009
Sodium									7630									
Thallium	2	2	2			1 U							10 U		10 U		1 U	
Vanadium	260	720		2.6		2.6 J							50 U		50 U		1.8	
Zinc	2000	2000		11000		16.8							2.8 B J		20 U		4.4 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-20D 6/16/2009	MW-20D Dup 6/16/2009	MW-20D Dup 6/16/2009	MW-20M 5/19/2008	MW-20M 5/19/2008	MW-20M 9/11/2008	MW-20M 9/11/2008	MW-20M 6/19/2009	MW-20M 6/19/2009	MW-20S 5/20/2008	MW-20S 5/20/2008	MW-20S 10/1/2008	MW-20S 10/1/2008
METAL																	
Antimony	6	6	6	15		2.9		10 U		0.58 B		0.46 B J		10 U		0.099 B	
Arsenic	10	10	10	0.045		0.85 B		2.4 B		14.6		17.3		10 U		0.41 B J	
Barium	2000	2000	2000	7300				360		724				102 B		145	
Beryllium	4	4	4	73		0.13 B		4.8		10.4		9.2		4 U		0.31 B	
Cadmium	5	5	5	18				0.79 B		2.1				5 U		1 U	
Cadmium	5	5	5					0.79 B		2.1				5 U		1 U	
Calcium																	
Chromium	100	100	100			14.4 J		5 U		24.4 J		52		4 B		10.5 J	
Copper	1000	1000	1300	1500				25.8		68.8				0.92 B		8.2	
Hexavalent Chromium	100	100		0.043		50 U		330		0 U		50 U		50 U			
Iron			300	26000													
Lead	5	5	15			42		92.6		261		248		3 U		3.7	
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57				0.13 B		0.12 B				0.2 U		0.2 U	
Nickel	100	100		730		5.9		122		167		181		6.6 B		8.3	
Potassium																	
Selenium	50	50	50	180				5 U		7.5				5 U		0.34 B	
Silver	100	100		180				5 U		0.52 B				5 U		1 U	
Sodium																	
Thallium	2	2	2					10 U		0.69 B				10 U		0.12 B J	
Vanadium	260	720		2.6				3.4 B		26.8 J				50 U		6.7 J	
Zinc	2000	2000		11000				217 J		422 J				12.2 B J		14.4	
METAL (Dissolved)																	
Antimony	6	6	6	15	0.77 B J		0.8 B J		10 U		0.34 B		0.33 B J		10 U		2 U
Arsenic	10	10	10	0.045	0.44 B		0.66 B		10 U		17.1		1 U		10 U		1 U
Barium	2000	2000	2000	7300					39.9 B		750				101 B		95.6
Beryllium	4	4	4	73	1 U		1 U		4 U		11.5		0.16 B		4 U		0.12 B
Cadmium	5	5	5						5 U		2.2				5 U		0.12 B J
Cadmium	5	5	5	18					5 U		2.2				5 U		0.12 B J
Calcium																	
Chromium	100	100	100		6.5 J		7.6 J		5 U		26.1 J		5.9 J		5 U		7.8 J
Copper	1000	1000	1300	1500					3 B		69				0.91 B		7.2 J
Hexavalent Chromium	100	100		0.043	50 U		50 U		50 U		0 U		50 U		50 U		
Iron			300	26000													
Lead	5	5	15		0.071 B		0.14 B		3 U		246 J		0.45 B		3 U		0.32 B J
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57					0.2 U		0.14 B				0.2 U		0.2 U
Nickel	100	100		730	3.8		4.1		17.1 B		181		12.9		5.1 B		7.5
Potassium																	
Selenium	50	50	50	180					5 U		8.4				5 U		0.3 B
Silver	100	100		180					5 U		0.51 B				5 U		1 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-20D 6/16/2009	MW-20D Dup 6/16/2009	MW-20D Dup 6/16/2009	MW-20M 5/19/2008	MW-20M 5/19/2008	MW-20M 9/11/2008	MW-20M 9/11/2008	MW-20M 6/19/2009	MW-20M 6/19/2009	MW-20S 5/20/2008	MW-20S 5/20/2008	MW-20S 10/1/2008	MW-20S 10/1/2008
Sodium																	
Thallium	2	2	2						10 U		0.7 B J				10 U		0.069 B
Vanadium	260	720		2.6					50 U		25.5				50 U		1.2 J
Zinc	2000	2000		11000					21.6		470 J				13.8 B		15.3

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-21 10/26/1995	MW-21 9/22/1999	MW-21 3/31/2000	MW-22 10/23/1989	MW-22 10/25/1995	MW-22 9/22/1999	MW-22 3/29/2000	MW-22 Dup 3/29/2000	MW-22 4/28/2008	MW-22 4/28/2008	MW-23 10/25/1995	MW-23 9/22/1999	MW-23 3/27/2000
METAL																	
Antimony	6	6	6	15		5 U				5 U			10 U			5 U	
Arsenic	10	10	10	0.045		5 U				5 U			10 U			5 U	
Barium	2000	2000	2000	7300									18.6 B				
Beryllium	4	4	4	73		3				1 U			4 U			1 U	
Cadmium	5	5	5	18		1 U				1 U			5 U			1 U	
Cadmium	5	5	5			1 U				1 U			5 U			1 U	
Calcium					24000	24600	3500	11000	11000	9400	9200				33000	36200	26000
Chromium	100	100	100			57				5 U			7.2			5 U	
Copper	1000	1000	1300	1500		16				5 U			25 U			7	
Hexavalent Chromium	100	100		0.043		10 U				10 U			50 U			10 U	
Iron			300	26000	2400	15400	66	220	70 U	50 U	64	50 U			70	4600	880
Lead	5	5	15			43				5 U			3 U			5 U	
Magnesium					7300	6400	2100		3900	2900	2800	2900			10000	11100	8900
Manganese	300	300	50	880	92	500	20 U	8	6 U	20 U	20 U				6 U	100	22
Manganese	300	300	50		92	500	20 U	8	6 U	20 U	20 U				6 U	100	22
Mercury	2	2	2	0.57		0 U				0 U			0.2 U			0 U	
Nickel	100	100		730		67				5 U			4 B			5 U	
Potassium					2800	2900	1200		2000	2100	2200	2100			1000	1000	970
Selenium	50	50	50	180		5 U				5 U			5 U			5 U	
Silver	100	100		180		5 U				5 U			5 U			5 U	
Sodium					2200	2700	2400	3000	3200	2300	1700	2000			3700	3800	3300
Thallium	2	2	2			2 U				2 U			10 U			2 U	
Vanadium	260	720		2.6									2 B				
Zinc	2000	2000		11000		86				40			2.4 B			24	
METAL (Dissolved)																	
Antimony	6	6	6	15										10 U			
Arsenic	10	10	10	0.045										10 U			
Barium	2000	2000	2000	7300										14.3 B			
Beryllium	4	4	4	73										4 U			
Cadmium	5	5	5											5 U			
Cadmium	5	5	5	18										5 U			
Calcium																	
Chromium	100	100	100											5 U			
Copper	1000	1000	1300	1500										25 U			
Hexavalent Chromium	100	100		0.043										50 U			
Iron			300	26000													
Lead	5	5	15											3 U			
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57										0.2 U			
Nickel	100	100		730										1.8 B			
Potassium																	
Selenium	50	50	50	180										5 U			
Silver	100	100		180										5 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-21 10/26/1995	MW-21 9/22/1999	MW-21 3/31/2000	MW-22 10/23/1989	MW-22 10/25/1995	MW-22 9/22/1999	MW-22 3/29/2000	MW-22 Dup 3/29/2000	MW-22 4/28/2008	MW-22 4/28/2008	MW-23 10/25/1995	MW-23 9/22/1999	MW-23 3/27/2000
Sodium																	
Thallium	2	2	2											10 U			
Vanadium	260	720		2.6										50 U			
Zinc	2000	2000		11000										8.6 B			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-24 10/25/1995	MW-24 9/22/1999	MW-24 3/31/2000	MW-25 9/27/1999	MW-25 3/23/2000	MW-26 9/27/1999	MW-26 4/3/2000	MW-26 5/5/2008	MW-26 5/5/2008	MW-26 9/29/2008	MW-26 9/29/2008	MW-27 9/27/1999	MW-27 4/5/2000
METAL																	
Antimony	6	6	6	15		5 U		5 U		5 U		10 U		0.24 B		5 U	
Arsenic	10	10	10	0.045		5 U		5 U		5 U		10 U		0.72 B		5 U	
Barium	2000	2000	2000	7300								102 B		80.4			
Beryllium	4	4	4	73		1 U		1 U		10		0.33 B		0.13 B		1 U	
Cadmium	5	5	5	18		1 U		1 U		2		5 U		1 U		1 U	
Cadmium	5	5	5			1 U		1 U		2		5 U		1 U		1 U	
Calcium					57000	47600	21000	5100	12000	63500	39000					83400	100000
Chromium	100	100	100			31		5 U		5 U		3 B		12.2 J		5 U	
Copper	1000	1000	1300	1500		8		5 U		18		4.3 B		5.5		5 U	
Hexavalent Chromium	100	100		0.043		10 U		10 U		10 U		50 U				10 U	
Iron			300	26000	70 U	2600	360	50 U	50 U	900	170					78	190
Lead	5	5	15			5 U		5 U		5 U		4.1		2.6		5 U	
Magnesium					17000	15800	7300	4100	6300	9300	8800					11600	14000
Manganese	300	300	50	880	6 U	180	38	44	20 U	950	110					20 U	22
Manganese	300	300	50		6 U	180	38	44	20 U	950	110					20 U	22
Mercury	2	2	2	0.57		0 U		0 U		2		0.2		0.1 B		0 U	
Nickel	100	100		730		34		5 U		48		5.2 B J		6.3		5 U	
Potassium					3000	3100	3600	1900	1700	2400	1700					4400	14000
Selenium	50	50	50	180		5 U		5 U		5 U		5 U		5 U		5 U	
Silver	100	100		180		5 U		5 U		5 U		5 U		1 U		5 U	
Sodium					5100	4800	6000	5700	3200	5400	6100					17500	20000
Thallium	2	2	2			2 U		2 U		2 U		4.3 B J		0.058 B		2 U	
Vanadium	260	720		2.6								3.1 B		3.3 J			
Zinc	2000	2000		11000		26		20 U		410		26.7 J		19		21	
METAL (Dissolved)																	
Antimony	6	6	6	15									10 U		0.21 B		
Arsenic	10	10	10	0.045									10 U		1 U		
Barium	2000	2000	2000	7300									92.6 B		70.6		
Beryllium	4	4	4	73									4 U		1 U		
Cadmium	5	5	5										5 U		1 U		
Cadmium	5	5	5	18									5 U		1 U		
Calcium																	
Chromium	100	100	100										5 U		12.1 J		
Copper	1000	1000	1300	1500									25 U		2.9		
Hexavalent Chromium	100	100		0.043									50 U				
Iron			300	26000													
Lead	5	5	15										3 U		0.059 B		
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57									0.062 B		0.061 B		
Nickel	100	100		730									1.8 B J		2.7		
Potassium																	
Selenium	50	50	50	180									5 U		5 U		
Silver	100	100		180									5 U		1 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-24 10/25/1995	MW-24 9/22/1999	MW-24 3/31/2000	MW-25 9/27/1999	MW-25 3/23/2000	MW-26 9/27/1999	MW-26 4/3/2000	MW-26 5/5/2008	MW-26 5/5/2008	MW-26 9/29/2008	MW-26 9/29/2008	MW-27 9/27/1999	MW-27 4/5/2000
Sodium																	
Thallium	2	2	2										10 U		0.04 B J		
Vanadium	260	720		2.6									50 U		3.5 J		
Zinc	2000	2000		11000									4.8 B J		11.2		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-27 5/14/2008	MW-27 5/14/2008	MW-27 9/30/2008	MW-27 9/30/2008	MW-28 10/26/1995	MW-28 9/28/1999	MW-28 3/24/2000	MW-28 5/8/2008	MW-28 5/8/2008	MW-29 10/25/1995	MW-29 9/1/1999	MW-29 3/22/2000
METAL																
Antimony	6	6	6	15	10 U		0.05 B			5 U		10 U			5 U	
Arsenic	10	10	10	0.045	10 U		1 U			5 U		10 U			5 U	
Barium	2000	2000	2000	7300	102 B		85.2					284				
Beryllium	4	4	4	73	0.56 B		1 U			1 U		4 U			1 U	
Cadmium	5	5	5	18	5 U		1 U			1 U		5 U			1 U	
Cadmium	5	5	5		5 U		1 U			1 U		5 U			1 U	
Calcium									72000	75700	120000			150000	174000	290000
Chromium	100	100	100		13.1		20.8 J			5 U		2.1 B			5 U	
Copper	1000	1000	1300	1500	1.9 B		1.1 B			5 U		25 U			5 U	
Hexavalent Chromium	100	100		0.043	50 U		0 U			10 U		50 U			10 U	
Iron			300	26000					70 U	50 U	50 U			70 U	50 U	50 U
Lead	5	5	15		3 U		0.47 B			5 U		3 U			5 U	
Magnesium									22000	24900	39000			41000	45400	60000
Manganese	300	300	50	880					6 U	20 U	20 U			6	20 U	20 U
Manganese	300	300	50						6 U	20 U	20 U			6	20 U	20 U
Mercury	2	2	2	0.57	0.97 J		0.75			0 U		0.2 U			0 U	
Nickel	100	100		730	13.7 B		10.8			5 U		40 U			5 U	
Potassium									5600	21700	42000			88000	140000	520000
Selenium	50	50	50	180	5 U		5 U			5 U		5 U			5 U	
Silver	100	100		180	5 U		1 U			5 U		5 U			5 U	
Sodium									13000	12500	16000			65000	94800	730000
Thallium	2	2	2		10 U		0.035 B			2 U		10 U			2 U	
Vanadium	260	720		2.6	2 B		4.5 J					1.9 B				
Zinc	2000	2000		11000	34.2 J		8			39		10.2 B J			20 U	
METAL (Dissolved)																
Antimony	6	6	6	15		10 U		2 U					10 U			
Arsenic	10	10	10	0.045		10 U		1 U					10 U			
Barium	2000	2000	2000	7300		98 B		85.7					294			
Beryllium	4	4	4	73		4 U		1 U					4 U			
Cadmium	5	5	5			5 U		1 U					5 U			
Cadmium	5	5	5	18		5 U		1 U					5 U			
Calcium																
Chromium	100	100	100			1.3 B		12.4 J					1.9 B			
Copper	1000	1000	1300	1500		25 U		0.53 B					25 U			
Hexavalent Chromium	100	100		0.043		50 U		0 U					50 U			
Iron			300	26000												
Lead	5	5	15			3 U		0.044 B					3 U			
Magnesium																
Manganese	300	300	50													
Manganese	300	300	50	880												
Mercury	2	2	2	0.57		0.38 J		0.57					0.2 U			
Nickel	100	100		730		6 B		8.4					40 U			
Potassium																
Selenium	50	50	50	180		5 U		0.47 B					5 U			
Silver	100	100		180		5 U		1 U					5 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - Metal Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-27 5/14/2008	MW-27 5/14/2008	MW-27 9/30/2008	MW-27 9/30/2008	MW-28 10/26/1995	MW-28 9/28/1999	MW-28 3/24/2000	MW-28 5/8/2008	MW-28 5/8/2008	MW-29 10/25/1995	MW-29 9/1/1999	MW-29 3/22/2000
Sodium																
Thallium	2	2	2			10 U		0.021 B J					10 U			
Vanadium	260	720		2.6		1.4 B		3.2 J					1.8 B			
Zinc	2000	2000		11000		23.5 J		6.6					5 B J			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-29 4/23/2008	MW-29 4/23/2008	MW-30 9/27/1999	MW-30 3/22/2000	MW-30 5/7/2008	MW-30 5/7/2008	MW-30 Dup 5/7/2008	MW-30 Dup 5/7/2008	MW-31D 9/27/1999	MW-31D 4/3/2000	MW-31D Dup 4/3/2000	MW-31D 5/16/2008	MW-31D 5/16/2008
METAL																	
Antimony	6	6	6	15	10 U		5 U		10 U		10 U		5 U			10 U	
Arsenic	10	10	10	0.045	10 U		5 U		2.6 B		2.3 B		5 U			10 U	
Barium	2000	2000	2000	7300	742				39.8 B J		41.7 B J					44 B	
Beryllium	4	4	4	73	4 U		1 U		4 U		4 U		1 U			4 U	
Cadmium	5	5	5		0.6 B		1 U		0.5 B		0.5 B		1 U			5 U	
Cadmium	5	5	5	18	0.6 B		1 U		0.5 B		0.5 B		1 U			5 U	
Calcium							278000 E	320000					80200	71000	44000		
Chromium	100	100	100		4.9 B		5 U		2 B		1.8 B		5 U			1.7 B	
Copper	1000	1000	1300	1500	6.8 B		5 U		25 U		25 U		5 U			0.94 B	
Hexavalent Chromium	100	100		0.043	50 U		10 U		50 U		50 U		10 U			50 U	
Iron			300	26000			25900	36000					250	50 U	66		
Lead	5	5	15		4.5		5 U		3 U		3 U		5 U			3 U	
Magnesium							38400	46000					11500	6200	10000		
Manganese	300	300	50	880			5600	4900					82	20 U			
Manganese	300	300	50				5600	4900					82	20 U			
Mercury	2	2	2	0.57	0.63		0 U		0.2 U		0.2 U		0 U			0.2 U	
Nickel	100	100		730	7.6 B		12		6.7 B		6.6 B		5 U			1.5 B	
Potassium							3600	3900					2300	930	1500		
Selenium	50	50	50	180	5 U		5 U		5 U		5 U		5 U			5 U	
Silver	100	100		180	5 U		5 U		0.81 B		0.72 B		5 U			0.7 B	
Sodium							16400	17000					9200	3600	6200		
Thallium	2	2	2		10 U		2 U		10 U		10 U		2 U			10 U	
Vanadium	260	720		2.6	1.4 B				50 U		50 U					50 U	
Zinc	2000	2000		11000	82.2		54		12.6 B J		13.9 B J		24			12.7 B	
METAL (Dissolved)																	
Antimony	6	6	6	15		10 U				10 U		10 U					10 U
Arsenic	10	10	10	0.045		10 U				10 U		2.6 B					10 U
Barium	2000	2000	2000	7300		728				37.7 B J		37.3 B J					39.4 B
Beryllium	4	4	4	73		4 U				4 U		4 U					4 U
Cadmium	5	5	5	18		0.63 B				0.44 B		0.33 B					5 U
Cadmium	5	5	5			0.63 B				0.44 B		0.33 B					5 U
Calcium																	
Chromium	100	100	100			5 U				5 U		5 U					5 U
Copper	1000	1000	1300	1500		25 U				25 U		25 U					25 U
Hexavalent Chromium	100	100		0.043		50 U				50 U		50 U					50 U
Iron			300	26000													
Lead	5	5	15			3 U				3 U		3 U					3 U
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57		0.2 U				0.2 U		0.2 U					0.2 U
Nickel	100	100		730		5.3 B				6.6 B		6.2 B					40 U
Potassium																	
Selenium	50	50	50	180		5 U				5 U		5 U					5 U
Silver	100	100		180		5 U				0.85 B		0.75 B					5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-29 4/23/2008	MW-29 4/23/2008	MW-30 9/27/1999	MW-30 3/22/2000	MW-30 5/7/2008	MW-30 5/7/2008	MW-30 Dup 5/7/2008	MW-30 Dup 5/7/2008	MW-31D 9/27/1999	MW-31D 4/3/2000	MW-31D Dup 4/3/2000	MW-31D 5/16/2008	MW-31D 5/16/2008
Sodium																	
Thallium	2	2	2			3.2 B				10 U		10 U					10 U
Vanadium	260	720		2.6		1.5 B				50 U		50 U					50 U
Zinc	2000	2000		11000		28.5 J				20 U		20 U					5.6 B J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-31D 9/24/2008	MW-31D 9/24/2008	MW-31S 5/26/1995	MW-31S 9/27/1999	MW-31S 3/24/2000	MW-31S 4/28/2008	MW-31S 4/28/2008	MW-31S 9/11/2008	MW-31S 9/11/2008	MW-32D 9/28/1999	MW-32D Dup 9/28/1999	MW-32D 4/6/2000	MW-32D 6/6/2003
METAL																	
Antimony	6	6	6	15	0.25 B			5 U		10 U		0.056 B		5 U			
Arsenic	10	10	10	0.045	1 U		4	5 U		10 U		0.34 B		5 U	5 U		
Barium	2000	2000	2000	7300	47.6 J					309		142					
Beryllium	4	4	4	73	1 U		4	1 U		4 U		1 U		1 U			
Cadmium	5	5	5		1 U		1	1 U		5 U		1 U		1 U			
Cadmium	5	5	5	18	1 U		1	1 U		5 U		1 U		1 U			
Calcium								76000	160000					56900	60700	70000	
Chromium	100	100	100		14.6 J		6	5 U		1.3 B		4.5 J		31	31		0 U
Copper	1000	1000	1300	1500	0.93 B		10	6		25 U		0.73 B		5 U			
Hexavalent Chromium	100	100		0.043	0 U		20	10 U		50 U		0 U		10			0 U
Iron			300	26000				17500	13000					200	220	230	
Lead	5	5	15		0.34 B		6	5 U		3 U		0.11 B		5 U	5 U		0 U
Magnesium								9900	23000					19900	21300	23000	
Manganese	300	300	50	880				510	610					40	42	72	
Manganese	300	300	50					510	610					40	42	72	
Mercury	2	2	2	0.57	0.2 U		5	0 U		0.2 U		0.2 U		0 U			
Nickel	100	100		730	3.2		40	5 U		1.3 B		1.6		30	28		0 U
Potassium								14200	63000					1500	1500	1600	
Selenium	50	50	50	180	1 B			5 U		5 U		0.95 B		5 U	5 U		
Silver	100	100		180	1 U			5 U		5 U		1 U		5 U			
Sodium								10400	13000					8000	8700	10000	
Thallium	2	2	2		0.019 B			2 U		4.9 B		1 U		2 U	2 U		
Vanadium	260	720		2.6	3.6 J					2 B		1.1 J					
Zinc	2000	2000		11000	6.2		30	54		3.4 B		5.0 U		37			0 U
METAL (Dissolved)																	
Antimony	6	6	6	15		2 U					10 U		2 U				
Arsenic	10	10	10	0.045		1 U					10 U		1 U				
Barium	2000	2000	2000	7300		46.3					303		140				
Beryllium	4	4	4	73		1 U					4 U		1 U				
Cadmium	5	5	5	18		1 U					5 U		1 U				
Cadmium	5	5	5			1 U					5 U		1 U				
Calcium																	
Chromium	100	100	100			14.8 J					5 U		4.5 J				
Copper	1000	1000	1300	1500		0.63 B					25 U		0.54 B				
Hexavalent Chromium	100	100		0.043		0 U					50 U		0 U				
Iron			300	26000													
Lead	5	5	15			0.022 B					3 U		1 U				
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57		0.2 U					0.2 U		0.2 U				
Nickel	100	100		730		2.3					40 U		1.4				
Potassium																	
Selenium	50	50	50	180		5.0 U					5 U		0.73 B				
Silver	100	100		180		1 U					5 U		1 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-31D 9/24/2008	MW-31D 9/24/2008	MW-31S 5/26/1995	MW-31S 9/27/1999	MW-31S 3/24/2000	MW-31S 4/28/2008	MW-31S 4/28/2008	MW-31S 9/11/2008	MW-31S 9/11/2008	MW-32D 9/28/1999	MW-32D Dup 9/28/1999	MW-32D 4/6/2000	MW-32D 6/6/2003
Sodium																	
Thallium	2	2	2			1 U					7.2 B J		1 U				
Vanadium	260	720		2.6		1.0 U					1.1 B		1.6				
Zinc	2000	2000		11000		3.2 B					3.3 B		5.0 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-32D 6/10/2004	MW-32D 6/21/2005	MW-32D 6/23/2006	MW-32D 6/29/2007	MW-32D 6/29/2007	MW-32D 5/8/2008	MW-32D 5/8/2008	MW-32D 10/2/2008	MW-32D 10/2/2008	MW-32S 10/5/1989	MW-32S 9/29/1999	MW-32S 4/6/2000	MW-32S 6/5/2003	MW-32S 6/8/2004
METAL																		
Antimony	6	6	6	15						10 U		0.11 B			5 U			
Arsenic	10	10	10	0.045						10 U		1 U			5 U			
Barium	2000	2000	2000	7300						37.4 B		39.7						
Beryllium	4	4	4	73						4 U		1 U			2			
Cadmium	5	5	5							5 U		1 U			1 C			
Cadmium	5	5	5	18						5 U		1 U			1 C			
Calcium															73500	85000		
Chromium	100	100	100		2.8 U	1.6 U	4.1 B			4.4 B		10.8 J			17		16	7.3 B
Copper	1000	1000	1300	1500						25 U		1.6 B			6			
Hexavalent Chromium	100	100		0.043	10 U	10 U	10 U	10 U		50 U		0 U			20		10	10 U
Iron			300	26000										60000	1300	400		
Lead	5	5	15		2.2 U	2.7 U	2.8 B			3 U		1.6			8 C		0 U	2.2 U
Magnesium															15900	19000		
Manganese	300	300	50	880										1400	170	20		
Manganese	300	300	50											1400	170	20		
Mercury	2	2	2	0.57						0.2 U		0.2 U			0 U			
Nickel	100	100		730	3.9 U	2.4 U	40 U			3.9 B		4.4			7		0 U	3.9 U
Potassium															4200	4800		
Selenium	50	50	50	180						5 U		5 U			5 U			
Silver	100	100		180						5 U		1 U			5 U			
Sodium														154000	17200	19000		
Thallium	2	2	2							10 U		0.024 B J			2 U			
Vanadium	260	720		2.6						2.8 B		5.4 J						
Zinc	2000	2000		11000	9.3 B	5.8 U	8.7 JB			9.9 B J		7.3			20 U		0 U	13.2 B
METAL (Dissolved)																		
Antimony	6	6	6	15							10 U		0.088 B					
Arsenic	10	10	10	0.045							10 U		1 U					
Barium	2000	2000	2000	7300							37.4 B		35.6					
Beryllium	4	4	4	73							4 U		1 U					
Cadmium	5	5	5	18							5 U		1 U					
Cadmium	5	5	5								5 U		1 U					
Calcium																		
Chromium	100	100	100						5 U		5 U		8.4 J					
Copper	1000	1000	1300	1500							25 U		0.32 B J					
Hexavalent Chromium	100	100		0.043							50 U		0 U					
Iron			300	26000														
Lead	5	5	15						3 U		3 U		0.078 B J					
Magnesium																		
Manganese	300	300	50	880														
Manganese	300	300	50															
Mercury	2	2	2	0.57							0.2 U		0.2 U					
Nickel	100	100		730					1.4 B		2.8 B		2.9					
Potassium																		
Selenium	50	50	50	180							5 U		0.65 B					
Silver	100	100		180							5 U		1 U					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-32D 6/10/2004	MW-32D 6/21/2005	MW-32D 6/23/2006	MW-32D 6/29/2007	MW-32D 6/29/2007	MW-32D 5/8/2008	MW-32D 5/8/2008	MW-32D 10/2/2008	MW-32D 10/2/2008	MW-32S 10/5/1989	MW-32S 9/29/1999	MW-32S 4/6/2000	MW-32S 6/5/2003	MW-32S 6/8/2004
Sodium																		
Thallium	2	2	2								10 U		1 U					
Vanadium	260	720		2.6							2.9 B		2.3 J					
Zinc	2000	2000		11000					4.2 B J		2.6 B J		3.5 B					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-32S 6/16/2005	MW-32S 6/22/2006	MW-32S 6/27/2007	MW-32S 6/27/2007	MW-32S 5/13/2008	MW-32S 5/13/2008	MW-32S 9/22/2008	MW-32S 9/22/2008	MW-32S 7/6/2009	MW-32S 7/6/2009	MW-33 10/26/1995	MW-33 9/28/1999	MW-33 3/28/2000
METAL																	
Antimony	6	6	6	15					10 U		0.083 B					5 U	
Arsenic	10	10	10	0.045					10 U		1 U					5 U	
Barium	2000	2000	2000	7300					86.2 B		61.9 J						
Beryllium	4	4	4	73					4 U		1 U					1 U	
Cadmium	5	5	5						5 U		1 U					1 U	
Cadmium	5	5	5	18					5 U		1 U					1 U	
Calcium															54000	52600	76000
Chromium	100	100	100		3.7 B	13.3			8.6		28.9 J		17.3			5 U	
Copper	1000	1000	1300	1500					25 U		0.67 B					5 U	
Hexavalent Chromium	100	100		0.043	10 U	10 U	13		50 U		0 U		50 U			10 U	
Iron			300	26000											300	50 U	50 U
Lead	5	5	15		2.7 U	3 U			3 U		0.26 B					5 U	
Magnesium															18000	14500	20000
Manganese	300	300	50	880											10	20 U	20 U
Manganese	300	300	50												10	20 U	20 U
Mercury	2	2	2	0.57					0.2 U		0.2 U					0 U	
Nickel	100	100		730	2.4 U	40 U			2 B		1.8					5 U	
Potassium															6700	20800	11000
Selenium	50	50	50	180					5 U		0.29 B					5 U	
Silver	100	100		180					5 U		1 U					5 U	
Sodium															12000	10600	20000
Thallium	2	2	2						10 U		0.037 B					2 U	
Vanadium	260	720		2.6					3.3 B		2.8 J						
Zinc	2000	2000		11000	26.4 B	8.8 JB			4.1 B J		4 B					20 U	
METAL (Dissolved)																	
Antimony	6	6	6	15						10 U		0.061 B J					
Arsenic	10	10	10	0.045						10 U		1 U					
Barium	2000	2000	2000	7300						84 B		57.7					
Beryllium	4	4	4	73						4 U		1 U					
Cadmium	5	5	5	18						5 U		1 U					
Cadmium	5	5	5							5 U		1 U					
Calcium																	
Chromium	100	100	100					10.8		6.9		28.2 J		16.2			
Copper	1000	1000	1300	1500						25 U		0.6 B					
Hexavalent Chromium	100	100		0.043						50 U		0 U		50 U			
Iron			300	26000													
Lead	5	5	15					3 U		3 U		0.063 B					
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57						0.2 U		0.2 U					
Nickel	100	100		730				1.7 B		40 U		1.6					
Potassium																	
Selenium	50	50	50	180						5 U		0.23 B J					
Silver	100	100		180						5 U		1 U					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-32S 6/16/2005	MW-32S 6/22/2006	MW-32S 6/27/2007	MW-32S 6/27/2007	MW-32S 5/13/2008	MW-32S 5/13/2008	MW-32S 9/22/2008	MW-32S 9/22/2008	MW-32S 7/6/2009	MW-32S 7/6/2009	MW-33 10/26/1995	MW-33 9/28/1999	MW-33 3/28/2000
Sodium																	
Thallium	2	2	2							10 U		0.031 B					
Vanadium	260	720		2.6						2.6 B		4.1 J					
Zinc	2000	2000		11000				8.8 B J		27.8 J		3.2 B					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-33 5/12/2008	MW-33 5/12/2008	MW-34D 9/28/1999	MW-34D Dup 9/28/1999	MW-34D 4/5/2000	MW-34D 6/4/2003	MW-34D 6/8/2004	MW-34D 6/15/2005	MW-34D 6/21/2006	MW-34D 6/26/2007	MW-34D 6/26/2007	MW-34D 5/6/2008	MW-34D 5/6/2008
METAL																	
Antimony	6	6	6	15	10 U		5 U									10 U	
Arsenic	10	10	10	0.045	10 U		5 U									10 U	
Barium	2000	2000	2000	7300	71.4 B											96.1 B	
Beryllium	4	4	4	73	4 U		1 U									4 U	
Cadmium	5	5	5		5 U		1 U									5 U	
Cadmium	5	5	5	18	5 U		1 U									5 U	
Calcium							65100	67500	86000								
Chromium	100	100	100		9.9		9	9		0 U	2.8 U	3 U	1.2 B			3.6 B	
Copper	1000	1000	1300	1500	1 B		5 U	5 U								25 U	
Hexavalent Chromium	100	100		0.043	50 U		10 U	10		0 U	10 U	10 U	10 U	10 U		50 U	
Iron			300	26000			260	270	50 U								
Lead	5	5	15		3 U		5 U			0 U	2.2 U	2.7 U	3.3 J			3 U	
Magnesium							15000	15500	21000								
Manganese	300	300	50	880			49	53	22								
Manganese	300	300	50				49	53	22								
Mercury	2	2	2	0.57	0.2 U		0 U									0.2 U	
Nickel	100	100		730	3.1 B		5 U	5 U		0 U	3.9 U	2.4 U	40 U			40 U	
Potassium							10300	10500	19000								
Selenium	50	50	50	180	5 U		5 U									5 U	
Silver	100	100		180	5 U		5 U									5 U	
Sodium							12500	12800	16000								
Thallium	2	2	2		10 U		2 U									10 U	
Vanadium	260	720		2.6	50 U											2.7 B	
Zinc	2000	2000		11000	8.9 B		20 U			0 U	19 B	30.8	18.4 JB			3.5 B J	
METAL (Dissolved)																	
Antimony	6	6	6	15		10 U											10 U
Arsenic	10	10	10	0.045		10 U											10 U
Barium	2000	2000	2000	7300		64.4 B											98 B
Beryllium	4	4	4	73		4 U											4 U
Cadmium	5	5	5	18		5 U											5 U
Cadmium	5	5	5			5 U											5 U
Calcium																	
Chromium	100	100	100			6.4									2.5 B		3.7 B
Copper	1000	1000	1300	1500		25 U											25 U
Hexavalent Chromium	100	100		0.043		50 U											50 U
Iron			300	26000													
Lead	5	5	15			3 U									3 U		3 U
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57		0.2 U											0.2 U
Nickel	100	100		730		1.1 B									40 U		40 U
Potassium																	
Selenium	50	50	50	180		5 U											5 U
Silver	100	100		180		5 U											5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-33 5/12/2008	MW-33 5/12/2008	MW-34D 9/28/1999	MW-34D Dup 9/28/1999	MW-34D 4/5/2000	MW-34D 6/4/2003	MW-34D 6/8/2004	MW-34D 6/15/2005	MW-34D 6/21/2006	MW-34D 6/26/2007	MW-34D 6/26/2007	MW-34D 5/6/2008	MW-34D 5/6/2008
Sodium																	
Thallium	2	2	2			10 U											10 U
Vanadium	260	720		2.6		50 U											1.4 B
Zinc	2000	2000		11000		6 B J									6.7 B J		2 B J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-34D 9/17/2008	MW-34D 9/17/2008	MW-34D 6/25/2010	MW-34S 9/14/1999	MW-34S 3/24/2000	MW-34S 6/4/2003	MW-34S 6/8/2004	MW-34S 6/15/2005	MW-34S 6/21/2006	MW-34S 6/26/2007	MW-34S 6/26/2007	MW-34S 4/28/2008	MW-34S 4/28/2008	MW-34S 9/10/2008
METAL																		
Antimony	6	6	6	15	0.18 B			5 U								10 U		0.12 B
Arsenic	10	10	10	0.045	1 U			5 U								10 U		0.61 B
Barium	2000	2000	2000	7300	100											132 B		65.6
Beryllium	4	4	4	73	1 U			1 U								4 U		1 U
Cadmium	5	5	5		1 U			1 U								5 U		1 U
Cadmium	5	5	5	18	1 U			1 U								5 U		1 U
Calcium								68700	52000									
Chromium	100	100	100		9.4 J			7		0 U	2.8 U	3 U	1.8 B			1.5 B		5.7 J
Copper	1000	1000	1300	1500	1.3 B			5 U								25 U		0.86 B
Hexavalent Chromium	100	100		0.043	0 U			10 U		0 U	10 U	10 U	10 U	10 U		50 U		0 U
Iron			300	26000				50 U	50 U									
Lead	5	5	15		0.41 B			5 U		0 U	2.2 U	2.7 U	3 U			3 U		0.31 B
Magnesium								17600	14000									
Manganese	300	300	50	880				20 U	20 U									
Manganese	300	300	50					20 U	20 U									
Mercury	2	2	2	0.57	0.2 U			0 U								0.2 U		0.2 U
Nickel	100	100		730	1.3			5 U		0 U	3.9 U	2.4 U	40 U			40 U		0.94 B
Potassium								8000	5600									
Selenium	50	50	50	180	0.63 B			5 U								5 U		0.85 B
Silver	100	100		180	1 U			5 U								5 U		1 U
Sodium								13300	13000									
Thallium	2	2	2		0.051 B			2 U								10 U		0.031 B
Vanadium	260	720		2.6	1.1 J											2.5 B		1.8 J
Zinc	2000	2000		11000	4.4 B			20		0 U	10.6 B	32.3	9.6 JB			1.6 B		5.0 U
METAL (Dissolved)																		
Antimony	6	6	6	15		0.11 B											10 U	
Arsenic	10	10	10	0.045		0.41 B											10 U	
Barium	2000	2000	2000	7300		95.1											131 B	
Beryllium	4	4	4	73		1 U											4 U	
Cadmium	5	5	5	18		1 U											5 U	
Cadmium	5	5	5			1 U											5 U	
Calcium							103000											
Chromium	100	100	100			9.9 J									1.2 B		5 U	
Copper	1000	1000	1300	1500		1.2 B											25 U	
Hexavalent Chromium	100	100		0.043		0 U											50 U	
Iron			300	26000			100 U											
Lead	5	5	15			1 U									3 U		3 U	
Magnesium							24800											
Manganese	300	300	50	880			37.4											
Manganese	300	300	50				37.4											
Mercury	2	2	2	0.57		0.2 U											0.2 U	
Nickel	100	100		730		1.2									1.7 B		40 U	
Potassium							29000											
Selenium	50	50	50	180		5 U											5 U	
Silver	100	100		180		1 U											5 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-34D 9/17/2008	MW-34D 9/17/2008	MW-34D 6/25/2010	MW-34S 9/14/1999	MW-34S 3/24/2000	MW-34S 6/4/2003	MW-34S 6/8/2004	MW-34S 6/15/2005	MW-34S 6/21/2006	MW-34S 6/26/2007	MW-34S 6/26/2007	MW-34S 4/28/2008	MW-34S 4/28/2008	MW-34S 9/10/2008
Sodium							78600											
Thallium	2	2	2			0.031 B											10 U	
Vanadium	260	720		2.6		1.2 J											1.5 B	
Zinc	2000	2000		11000		2.3 B									7.5 B J		5.5 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-34S 9/10/2008	MW-34S Dup 9/10/2008	MW-34S Dup 9/10/2008	MW-34S 6/18/2010	MW-35D 9/29/1999	MW-35D 4/4/2000	MW-35D 5/6/2008	MW-35D 5/6/2008	MW-35D 9/17/2008	MW-35D 9/17/2008	MW-35S 5/13/2008	MW-35S 5/13/2008	MW-35S 6/21/2010
METAL																	
Antimony	6	6	6	15		0.13 B			5 U		10 U		0.16 B		10 U		
Arsenic	10	10	10	0.045		0.64 B			5 U		10 U		0.17 B		10 U		
Barium	2000	2000	2000	7300		66.2					93.6 B		71.7		27.4 B		
Beryllium	4	4	4	73		1 U			1 U		4 U		1 U		4 U		
Cadmium	5	5	5			1 U			1 U		5 U		1 U		5 U		
Cadmium	5	5	5	18		1 U			1 U		5 U		1 U		5 U		
Calcium									56700	83000							
Chromium	100	100	100			5.9 J			15		2.2 B		7.1 J		3.5 B		
Copper	1000	1000	1300	1500		0.96 B			8		25 U		0.87 B		2.1 B		
Hexavalent Chromium	100	100		0.043		0 U			10 U		50 U				50 U		
Iron			300	26000					1700	580							
Lead	5	5	15			0.33 B			5 U		3 U		0.2 B		3 U		
Magnesium									14800	21000							
Manganese	300	300	50	880					35	80							
Manganese	300	300	50						35	80							
Mercury	2	2	2	0.57		0.2 U			0 U		0.2 U		0.2 U		0.2 U		
Nickel	100	100		730		0.89 B			10		1.5 B J		1.4		1.7 B		
Potassium									6400	8800							
Selenium	50	50	50	180		0.54 B			5 U		5 U		0.75 B		5 U		
Silver	100	100		180		1 U			5 U		5 U		1 U		5 U		
Sodium									11900	17000							
Thallium	2	2	2			0.029 B			2 U		3.4 B J		0.13 B		10 U		
Vanadium	260	720		2.6		2.4 J					3.6 B		2.7 J		1.3 B		
Zinc	2000	2000		11000		5.0 U			40		20 U		4.1 B		7.4 B J		
METAL (Dissolved)																	
Antimony	6	6	6	15	0.12 B		0.17 B					10 U		0.17 B		10 U	
Arsenic	10	10	10	0.045	1 U		1 U					10 U		1 U		10 U	
Barium	2000	2000	2000	7300	67.1		64.9					91.5 B		67.5		28 B	
Beryllium	4	4	4	73	1 U		1 U					4 U		1 U		4 U	
Cadmium	5	5	5	18	1 U		1 U					5 U		1 U		5 U	
Cadmium	5	5	5		1 U		1 U					5 U		1 U		5 U	
Calcium								81500									236000
Chromium	100	100	100		6.1 J		5.6 J					1.7 B		8.1 J		1.5 B	
Copper	1000	1000	1300	1500	0.7 B		0.74 B					25 U		0.75 B		25 U	
Hexavalent Chromium	100	100		0.043	0 U		0 U					50 U				50 U	
Iron			300	26000				100 U									100 U
Lead	5	5	15		1.0 U		1.0 U					3 U		0.032 B		3 U	
Magnesium								22000									35200
Manganese	300	300	50	880				6.4 B									10.2 B
Manganese	300	300	50					6.4 B									10.2 B
Mercury	2	2	2	0.57	0.2 U		0.2 U					0.2 U		0.2 U		0.2 U	
Nickel	100	100		730	0.74 B		0.56 B					40 U		1.2		1.3 B	
Potassium								31800									55300
Selenium	50	50	50	180	0.55 B		0.37 B					5 U		0.56 B		5 U	
Silver	100	100		180	1 U		1 U					5 U		1 U		5 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-34S 9/10/2008	MW-34S Dup 9/10/2008	MW-34S Dup 9/10/2008	MW-34S 6/18/2010	MW-35D 9/29/1999	MW-35D 4/4/2000	MW-35D 5/6/2008	MW-35D 5/6/2008	MW-35D 9/17/2008	MW-35D 9/17/2008	MW-35S 5/13/2008	MW-35S 5/13/2008	MW-35S 6/21/2010
Sodium								105000									93100
Thallium	2	2	2		1.0 U		1.0 U					10 U		0.13 B		10 U	
Vanadium	260	720		2.6	1.7		1.5					3.2 B		2 J		1.5 B	
Zinc	2000	2000		11000	5.0 U		5.0 U					5.2 B J		4 B		9.4 B J	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-36D 9/27/1999	MW-36D 4/4/2000	MW-36D 5/19/2008	MW-36D 5/19/2008	MW-36S 5/26/1995	MW-36S 9/27/1999	MW-36S 3/23/2000	MW-36S 5/7/2008	MW-36S 5/7/2008	MW-37D 1/26/1990	MW-37D 4/3/1990	MW-37D 4/28/1994	MW-37D 7/12/1994
METAL																	
Antimony	6	6	6	15	5 U		10 U			5 U		10 U		110 U	100 U	170 U	150 U
Arsenic	10	10	10	0.045	5 U		3.3 B		6	5 U		10 U		11 U	10 U	6 U	6 U
Barium	2000	2000	2000	7300			79.5 B					70.9 B J					
Beryllium	4	4	4	73	1 U		4 U		4	1 U		4 U		5 U	5 U	6 U	5 U
Cadmium	5	5	5		1 U		0.26 B		1	1 U		0.26 B		10 U	10 U	10 U	10 U
Cadmium	5	5	5	18	1 U		0.26 B		1	1 U		0.26 B		10 U	10 U	10 U	10 U
Calcium					168000	140000				69700	580000						
Chromium	100	100	100		8		4.7 B		6	69		6.8		20 U	20 U	20 U	20
Copper	1000	1000	1300	1500	5 U		4.6 B		10	5		25 U		10 U	10 U	20 U	20 U
Hexavalent Chromium	100	100		0.043	10 U		50 U		20	10 U		50 U					
Iron			300	26000	5300	2600				32000	140000					700	90
Lead	5	5	15		5 U		3.8		6	5 U		3 U		160 U	150 U	110 U	100 U
Magnesium					16000	11000				20200	110000						
Manganese	300	300	50	880	2700	1600				700	3200					18	25
Manganese	300	300	50		2700	1600				700	3200					18	25
Mercury	2	2	2	0.57	0 U		0.2 U		5	0 U		0.2 U		0.5 U	0.5 U	0.5 U	0.5 U
Nickel	100	100		730	24		12.2 B		40	130		5.8 B		50 U	40 U	40 U	40 U
Potassium					2000	1800				7200	36000						
Selenium	50	50	50	180	5 U		5 U			5 U		5 U		11 U	10 U	5 U	5 U
Silver	100	100		180	5 U		0.86 B			5 U		5 U		20 U	20 U	40 U	40 U
Sodium					12800	17000				10300	54000						
Thallium	2	2	2		2 U		10 U			2 U		10 U		220 U	200 U	330 U	330 U
Vanadium	260	720		2.6			3.7 B					50 U					
Zinc	2000	2000		11000	53		23.2 J		60	120		20 U		20	40	60 U	60 U
METAL (Dissolved)																	
Antimony	6	6	6	15				10 U					10 U				
Arsenic	10	10	10	0.045				3.3 B					10 U				
Barium	2000	2000	2000	7300				75.7 B					73.5 B J				
Beryllium	4	4	4	73				4 U					4 U				
Cadmium	5	5	5	18				0.28 B					5 U				
Cadmium	5	5	5					0.28 B					5 U				
Calcium																	
Chromium	100	100	100					5 U					5 U				
Copper	1000	1000	1300	1500				1 B					25 U				
Hexavalent Chromium	100	100		0.043				50 U					50 U				
Iron			300	26000													
Lead	5	5	15					3 U					3 U				
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57				0.2 U					0.2 U				
Nickel	100	100		730				7.5 B					2.1 B				
Potassium																	
Selenium	50	50	50	180				5 U					5 U				
Silver	100	100		180				0.91 B					5 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-36D 9/27/1999	MW-36D 4/4/2000	MW-36D 5/19/2008	MW-36D 5/19/2008	MW-36S 5/26/1995	MW-36S 9/27/1999	MW-36S 3/23/2000	MW-36S 5/7/2008	MW-36S 5/7/2008	MW-37D 1/26/1990	MW-37D 4/3/1990	MW-37D 4/28/1994	MW-37D 7/12/1994
Sodium																	
Thallium	2	2	2					10 U					10 U				
Vanadium	260	720		2.6				1.2 B					50 U				
Zinc	2000	2000		11000				8.4 B					20 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-37D 7/12/1994	MW-37D 10/27/1995	MW-37D Dup 10/27/1995	MW-37D 9/22/1999	MW-37D 4/3/2000	MW-37D 4/7/2000	MW-37D 4/15/2004	MW-37D 4/15/2004	MW-37D 5/14/2008	MW-37D 5/14/2008	MW-37D 10/1/2008	MW-37D 10/1/2008	MW-37S 1/26/1990
METAL																	
Antimony	6	6	6	15	150 U			5 U			3.9 U		10 U		0.63 B		110 U
Arsenic	10	10	10	0.045	6 U			5 U			3.4 U		10 U		1 U		810
Barium	2000	2000	2000	7300									38 B		35.2		
Beryllium	4	4	4	73	5 U			1 U			0.1 U		4 U		1 U		60
Cadmium	5	5	5		10 U			1 U			0.65 B		5 U		1 U		44030
Cadmium	5	5	5	18	10 U			1 U			0.65 B		5 U		1 U		44030
Calcium						52000	43000	46000	82000	50000							
Chromium	100	100	100		20 U			5 U			2.8 U		5 U		6.3 J		780
Copper	1000	1000	1300	1500	20 U			5 U			5.1 B		1.1 B		1 B		1490
Hexavalent Chromium	100	100		0.043				10 U			10 U		50 U				
Iron			300	26000	90	90	70 U	3200	50 U	68							
Lead	5	5	15		100 U			5 U			6.7		3 U		0.52 B		990
Magnesium						13000	9500	10200	18000	11000							
Manganese	300	300	50	880	23	50	6 U	810	25	250							
Manganese	300	300	50		23	50	6 U	810	25	250							
Mercury	2	2	2	0.57	0.5 U			0 U			0.1 U		0.2 U		0.2 U		2.4
Nickel	100	100		730	40 U			5 U			3.9 U		1.4 B		1.9		1300
Potassium						3400	2800	6600	2800	7000							
Selenium	50	50	50	180	5 U			5 U			3.9 U		5 U		5 U		11 U
Silver	100	100		180	40 U			5 U			0.7 U		5 U		1 U		20 U
Sodium						13000	14000	12600	20000	14000							
Thallium	2	2	2		330 U			2 U			1.8 U		10 U		0.095 B J		220 U
Vanadium	260	720		2.6									50 U		3.7 J		
Zinc	2000	2000		11000	60 U			21			21.3 B		2.2 B		5.6		4000
METAL (Dissolved)																	
Antimony	6	6	6	15								3.9 U		10 U		0.69 B	
Arsenic	10	10	10	0.045								3.4 U		10 U		0.78 B	
Barium	2000	2000	2000	7300										34.1 B		33.4	
Beryllium	4	4	4	73								0.1 U		4 U		1 U	
Cadmium	5	5	5	18								0.4 U		5 U		0.12 B J	
Cadmium	5	5	5									0.4 U		5 U		0.12 B J	
Calcium																	
Chromium	100	100	100									2.8 U		5 U		9.9 J	
Copper	1000	1000	1300	1500								2.1 U		25 U		0.98 B J	
Hexavalent Chromium	100	100		0.043								10 U		50 U			
Iron			300	26000													
Lead	5	5	15									2.2 U		3 U		0.16 B J	
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57								0.1 U		0.2 U		0.2 U	
Nickel	100	100		730								3.9 U		40 U		1.7	
Potassium																	
Selenium	50	50	50	180								3.9 U		5 U		0.8 B	
Silver	100	100		180								0.7 U		5 U		1 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-37D 7/12/1994	MW-37D 10/27/1995	MW-37D Dup 10/27/1995	MW-37D 9/22/1999	MW-37D 4/3/2000	MW-37D 4/7/2000	MW-37D 4/15/2004	MW-37D 4/15/2004	MW-37D 5/14/2008	MW-37D 5/14/2008	MW-37D 10/1/2008	MW-37D 10/1/2008	MW-37S 1/26/1990
Sodium																	
Thallium	2	2	2									1.8 U		10 U		0.14 B	
Vanadium	260	720		2.6										50 U		1 U	
Zinc	2000	2000		11000								9.4 B		1.8 B J		12.3	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-37S 4/3/1990	MW-37S 4/28/1994	MW-37S 7/12/1994	MW-37S 10/27/1995	MW-37S 9/22/1999	MW-37S 4/3/2000	MW-37S 4/15/2004	MW-37S 4/15/2004	MW-37S 5/14/2008	MW-37S 5/14/2008	MW-37S Dup 5/14/2008	MW-37S Dup 5/14/2008	MW-37S 9/18/2008
METAL																	
Antimony	6	6	6	15	100 U	170 U	150 U		5 U		3.9 U		10 U		10 U		0.36 B J
Arsenic	10	10	10	0.045	10 U	6 U	6 U		5 U		3.4 U		10 U		10 U		0.43 B
Barium	2000	2000	2000	7300									66.4 B		64.5 B		53.7
Beryllium	4	4	4	73	5 U	6 U	5 U		1 U		0.24 B		4 U		4 U		1 U
Cadmium	5	5	5		10 U	10 U	10 U		1 U		0.4 U		5 U		0.25 B		1 U
Cadmium	5	5	5	18	10 U	10 U	10 U		1 U		0.4 U		5 U		0.25 B		1 U
Calcium								54000	64600	80000							
Chromium	100	100	100		20 U	20 U	20		5 U		6.1 B		3.7 B		3.3 B		5.5 J
Copper	1000	1000	1300	1500	10 U	20 U	20 U		5 U		12.6 B		1.1 B		1.1 B		1.2 B
Hexavalent Chromium	100	100		0.043					10 U		20 U		50 U		50 U		
Iron			300	26000		1500	3800	70 U	50 U	50 U							
Lead	5	5	15		150 U	110 U	100 U		5 U		13.4		3 U		3 U		0.26 B
Magnesium								17000	17400	19000							
Manganese	300	300	50	880		350	410	7	20 U	20 U							
Manganese	300	300	50			350	410	7	20 U	20 U							
Mercury	2	2	2	0.57	0.5 U	0.5 U	0.5 U		0 U		0.1 U		0.2 U		0.2 U		0.2 U
Nickel	100	100		730	40 U	40 U	40 U		5 U		6.3 B		2.5 B		2.2 B		1.1
Potassium								5900	17600	56000							
Selenium	50	50	50	180	10 U	5 U	5 U		5 U		3.9 U		5 U		5 U		0.34 B
Silver	100	100		180	20 U	40 U	40 U		5 U		0.7 U		5 U		5 U		1 U
Sodium								12000	14400	76000							
Thallium	2	2	2		200 U	330 U	330 U		2 U		1.8 U		10 U		10 U		0.05 B J
Vanadium	260	720		2.6									50 U		50 U		3.9 J
Zinc	2000	2000		11000	40	60 U	60 U		20 U		34.8		5.2 B		7.2 B		4.6 B
METAL (Dissolved)																	
Antimony	6	6	6	15								3.9 U		10 U		10 U	
Arsenic	10	10	10	0.045								3.4 U		10 U		10 U	
Barium	2000	2000	2000	7300										59.4 B		60.3 B	
Beryllium	4	4	4	73								0.1 U		4 U		4 U	
Cadmium	5	5	5	18								0.4 U		5 U		5 U	
Cadmium	5	5	5									0.4 U		5 U		5 U	
Calcium																	
Chromium	100	100	100									2.8 U		5 U		5 U	
Copper	1000	1000	1300	1500								2.1 U		25 U		25 U	
Hexavalent Chromium	100	100		0.043								10 U		50 U		50 U	
Iron			300	26000													
Lead	5	5	15									2.2 U		3 U		3 U	
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57								0.1 U		0.2 U		0.2 U	
Nickel	100	100		730								3.9 U		40 U		40 U	
Potassium																	
Selenium	50	50	50	180								3.9 U		5 U		5 U	
Silver	100	100		180								0.7 U		5 U		5 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-37S 4/3/1990	MW-37S 4/28/1994	MW-37S 7/12/1994	MW-37S 10/27/1995	MW-37S 9/22/1999	MW-37S 4/3/2000	MW-37S 4/15/2004	MW-37S 4/15/2004	MW-37S 5/14/2008	MW-37S 5/14/2008	MW-37S Dup 5/14/2008	MW-37S Dup 5/14/2008	MW-37S 9/18/2008
Sodium																	
Thallium	2	2	2									1.8 U		10 U		10 U	
Vanadium	260	720		2.6										50 U		1.4 B	
Zinc	2000	2000		11000								6.9 B		6.3 B J		6.3 B J	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-37S 9/18/2008	MW-37S 6/28/2010	MW-38D 1/26/1990	MW-38D 4/3/1990	MW-38D 4/28/1994	MW-38D 4/28/1994	MW-38D 7/11/1994	MW-38D 7/11/1994	MW-38D 9/1/1999	MW-38D 3/29/2000	MW-38D 6/3/2003	MW-38D 4/14/2004	MW-38D 4/14/2004	MW-38D 6/9/2004
METAL																		
Antimony	6	6	6	15			110 U	100 U	170 U	170 U	150 U	150 U	5 U			3.9 U		
Arsenic	10	10	10	0.045			510	10 U	6 U	6 U	6 U	6 U	5 U			3.4 U		
Barium	2000	2000	2000	7300														
Beryllium	4	4	4	73			51	5 U	6 U	6 U	5 U	5 U	1 U			0.1 U		
Cadmium	5	5	5				30	10 U	10 U	10 U	10 U	10 U	1 U			0.4 U		
Cadmium	5	5	5	18			30	10 U	10 U	10 U	10 U	10 U	1 U			0.4 U		
Calcium													55100	70000				
Chromium	100	100	100				950	20 U	20 U	20 U	20 U	20 U	12		0 U	7.4 B		2.8 U
Copper	1000	1000	1300	1500			1100	10 U	20 U	20 U	20 U	20 U	8			5.6 B		
Hexavalent Chromium	100	100		0.043									10 U		0 U	10 U		10 U
Iron			300	26000					6200	60 U	8800	50 U	6600	120				
Lead	5	5	15				770	150 U	110 U	110 U	100 U	100 U	5		0 U	4.9		2.2 U
Magnesium													10700	13000				
Manganese	300	300	50	880					880	690	460	250	600	370				
Manganese	300	300	50						880	690	460	250	600	370				
Mercury	2	2	2	0.57			4.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 U			0.1 U		
Nickel	100	100		730			1400	40 U	40 U	40 U	40 U	40 U	11		0 U	6.8 B		3.9 U
Potassium													2400	3000				
Selenium	50	50	50	180			11 U	10 U	5 U	5 U	5 U	5 U	5 U			3.9 U		
Silver	100	100		180			20 U	20 U	40 U	40 U	40 U	40 U	5 U			0.7 U		
Sodium													12300	14000				
Thallium	2	2	2				220 U	200 U	330 U	330 U	330 U	330 U	2 U			2.4 B		
Vanadium	260	720		2.6														
Zinc	2000	2000		11000			6600	60	60 U	60 U	60 U	60 U	120		0 U	27.5 B		10.1 B
METAL (Dissolved)																		
Antimony	6	6	6	15	0.32 B J												3.9 U	
Arsenic	10	10	10	0.045	1 U												3.4 U	
Barium	2000	2000	2000	7300	49.2													
Beryllium	4	4	4	73	1 U												0.1 U	
Cadmium	5	5	5	18	1 U												0.4 U	
Cadmium	5	5	5		1 U												0.4 U	
Calcium						49600												
Chromium	100	100	100		6.5 J												2.8 U	
Copper	1000	1000	1300	1500	0.97 B												2.1 U	
Hexavalent Chromium	100	100		0.043													10 U	
Iron			300	26000		100 U												
Lead	5	5	15		0.064 B												2.2 U	
Magnesium						12100												
Manganese	300	300	50	880		2.6 B												
Manganese	300	300	50			2.6 B												
Mercury	2	2	2	0.57	0.2 U												0.1 U	
Nickel	100	100		730	1												3.9 U	
Potassium						37700												
Selenium	50	50	50	180	5 U												3.9 U	
Silver	100	100		180	1 U												0.7 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-37S 9/18/2008	MW-37S 6/28/2010	MW-38D 1/26/1990	MW-38D 4/3/1990	MW-38D 4/28/1994	MW-38D 4/28/1994	MW-38D 7/11/1994	MW-38D 7/11/1994	MW-38D 9/1/1999	MW-38D 3/29/2000	MW-38D 6/3/2003	MW-38D 4/14/2004	MW-38D 4/14/2004	MW-38D 6/9/2004
Sodium						26000												
Thallium	2	2	2		0.02 B												1.8 U	
Vanadium	260	720		2.6	1 U													
Zinc	2000	2000		11000	4.5 B												27.5 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-38D 6/14/2005	MW-38D 6/22/2006	MW-38D 6/26/2007	MW-38D 6/26/2007	MW-38D 4/28/2008	MW-38D 4/28/2008	MW-38D 9/16/2008	MW-38D 9/16/2008	MW-38S 2/7/1990	MW-38S 4/3/1990	MW-38S 9/22/1999	MW-38S 3/23/2000	MW-39D 2/22/1990	MW-39D 4/3/1990
METAL																		
Antimony	6	6	6	15					10 U		0.13 B		110 U	100 U	5 U		110 U	100 U
Arsenic	10	10	10	0.045					10 U		0.24 B		11 U	10 U	5 U		78	10 U
Barium	2000	2000	2000	7300					41.4 B		35							
Beryllium	4	4	4	73					4 U		1 U		5 U	5 U	1 U		5 U	5 U
Cadmium	5	5	5						5 U		1 U		10 U	10 U	1 U		10 U	10 U
Cadmium	5	5	5	18					5 U		1 U		10 U	10 U	1 U		10 U	10 U
Calcium															58500	74000		
Chromium	100	100	100		3 U	1.9 B			1.6 B		9.4 J		40	20 U	5 U		80	20 U
Copper	1000	1000	1300	1500					25 U		0.55 B		30	10 U	5 U		140	10 U
Hexavalent Chromium	100	100		0.043	10 U	10 U	10 U		50 U		0 U				10 U			
Iron			300	26000											50 U	50 U		
Lead	5	5	15		2.7 U	3 U			3 U		0.097 B		160 U	150 U	5 U		200	150 U
Magnesium															11600	20000		
Manganese	300	300	50	880											20 U	20 U		
Manganese	300	300	50												20 U	20 U		
Mercury	2	2	2	0.57					0.2 U		0.2 U		0.5 U	0.5 U	0 U		0.6	0.5 U
Nickel	100	100		730	2.4 U	40 U			1.1 B		1.8		50	40 U	5 U		130	40 U
Potassium															4900	8100		
Selenium	50	50	50	180					5 U		0.36 B		11 U	10 U	5 U		11 U	10 U
Silver	100	100		180					5 U		1 U		20 U	20 U	5 U		20 U	20 U
Sodium															10900	12000		
Thallium	2	2	2						10 U		0.12 B		220 U	200 U	2 U		220 U	200 U
Vanadium	260	720		2.6					50 U		1.3 J							
Zinc	2000	2000		11000	14.3 B	7.2 JB			3.1 B		2.4 B		370	30	20 U		690	50
METAL (Dissolved)																		
Antimony	6	6	6	15						10 U		0.1 B						
Arsenic	10	10	10	0.045						10 U		1 U						
Barium	2000	2000	2000	7300						41.8 B		34.8						
Beryllium	4	4	4	73						4 U		1 U						
Cadmium	5	5	5	18						5 U		1 U						
Cadmium	5	5	5							5 U		1 U						
Calcium																		
Chromium	100	100	100					1.6 B		5 U		11.3 J E						
Copper	1000	1000	1300	1500						25 U		0.48 B						
Hexavalent Chromium	100	100		0.043						50 U		0 U						
Iron			300	26000														
Lead	5	5	15					3 U		3 U		1 U						
Magnesium																		
Manganese	300	300	50	880														
Manganese	300	300	50															
Mercury	2	2	2	0.57						0.2 U		0.2 U						
Nickel	100	100		730				1.5 B		40 U		1.6						
Potassium																		
Selenium	50	50	50	180						5 U		5 U						
Silver	100	100		180						5 U		1 U						

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-38D 6/14/2005	MW-38D 6/22/2006	MW-38D 6/26/2007	MW-38D 6/26/2007	MW-38D 4/28/2008	MW-38D 4/28/2008	MW-38D 9/16/2008	MW-38D 9/16/2008	MW-38S 2/7/1990	MW-38S 4/3/1990	MW-38S 9/22/1999	MW-38S 3/23/2000	MW-39D 2/22/1990	MW-39D 4/3/1990
Sodium																		
Thallium	2	2	2							10 U		0.073 B						
Vanadium	260	720		2.6						50 U		2.1 J						
Zinc	2000	2000		11000				7.9 B J		3.7 B		3.5 B						

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-39D 4/29/1994	MW-39D 4/29/1994	MW-39D 7/12/1994	MW-39D 7/12/1994	MW-39D 9/1/1999	MW-39D 3/30/2000	MW-39D 5/9/2008	MW-39D 5/9/2008	MW-39D 9/18/2008	MW-39D 9/18/2008	MW-39D Dup 9/18/2008	MW-39D Dup 9/18/2008	MW-39S 2/5/1990
METAL																	
Antimony	6	6	6	15	170 U	170 U	150 U	150 U	5 U		10 U		0.066 B J		0.07 B J		110 U
Arsenic	10	10	10	0.045	6 U	6 U	6 U	6 U	5 U		10 U		0.53 B		1 U		11 U
Barium	2000	2000	2000	7300							52.2 B		46.4		46.1		
Beryllium	4	4	4	73	6 U	6 U	5 U	5 U	1 U		4 U		1 U		1 U		5 U
Cadmium	5	5	5		10 U	10 U	10 U	10 U	1 U		5 U		1 U		1 U		10 U
Cadmium	5	5	5	18	10 U	10 U	10 U	10 U	1 U		5 U		1 U		1 U		10 U
Calcium									109000	100000							
Chromium	100	100	100		20 U	20 U	20 U	20 U	12		1.7 B		7 J		6.8 J		20 U
Copper	1000	1000	1300	1500	20 U	20 U	20 U	20 U	8		0.81 B		0.86 B		0.82 B		10
Hexavalent Chromium	100	100		0.043					0 U		50 U						
Iron			300	26000	2600	60 U	450	50 U	690	50 U							
Lead	5	5	15		110 U	110 U	100 U	100 U	5 U		3 U		0.43 B		0.4 B		160 U
Magnesium									12300	14000							
Manganese	300	300	50	880	73	6 U	11	5 U	530	20 U							
Manganese	300	300	50		73	6 U	11	5 U	530	20 U							
Mercury	2	2	2	0.57	0.5 U	0.5 U	0.5 U	0.5 U	0 U		0.2 U		0.2 U		0.2 U		0.5 U
Nickel	100	100		730	40 U	40 U	40 U	40 U	20		1.5 B		2.1		2.3		50 U
Potassium									2400	2200							
Selenium	50	50	50	180	5 U	5 U	5 U	5 U	5 U		5 U		0.32 B		5 U		11 U
Silver	100	100		180	40 U	40 U	40 U	40 U	5 U		5 U		1 U		1 U		20 U
Sodium									16400	18000							
Thallium	2	2	2		330 U	330 U	330 U	330 U	2 U		10 U		0.033 B J		0.029 B J		220 U
Vanadium	260	720		2.6							50 U		5 J		4.1 J		
Zinc	2000	2000		11000	60 U	60 U	60 U	60 U	130		59.1		6.1		4.4 B		70
METAL (Dissolved)																	
Antimony	6	6	6	15								10 U		2 U		2 U	
Arsenic	10	10	10	0.045								10 U		1 U		1 U	
Barium	2000	2000	2000	7300								51 B		42.1		42.6	
Beryllium	4	4	4	73								4 U		1 U		1 U	
Cadmium	5	5	5	18								5 U		1 U		1 U	
Cadmium	5	5	5									5 U		1 U		1 U	
Calcium																	
Chromium	100	100	100									5 U		5 J		4.9 J	
Copper	1000	1000	1300	1500								0.76 B		0.36 B		0.31 B	
Hexavalent Chromium	100	100		0.043								50 U					
Iron			300	26000													
Lead	5	5	15									3 U		0.033 B		0.029 B	
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57								0.1 B J		0.2 U		0.2 U	
Nickel	100	100		730								40 U		0.89 B		1.2	
Potassium																	
Selenium	50	50	50	180								5 U		0.5 B		5 U	
Silver	100	100		180								5 U		1 U		1 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-39D 4/29/1994	MW-39D 4/29/1994	MW-39D 7/12/1994	MW-39D 7/12/1994	MW-39D 9/1/1999	MW-39D 3/30/2000	MW-39D 5/9/2008	MW-39D 5/9/2008	MW-39D 9/18/2008	MW-39D 9/18/2008	MW-39D Dup 9/18/2008	MW-39D Dup 9/18/2008	MW-39S 2/5/1990
Sodium																	
Thallium	2	2	2									3.6 B		1 U		1 U	
Vanadium	260	720		2.6								1 B		1 U		0.25 B J	
Zinc	2000	2000		11000								8.2 B J		6.1		3.5 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-39S 4/3/1990	MW-39S 4/28/1994	MW-39S 4/28/1994	MW-39S 7/12/1994	MW-39S 7/12/1994	MW-39S 5/6/2008	MW-39S 5/6/2008	MW-39S 9/15/2008	MW-39S 9/15/2008	MW-40D 10/24/1995	MW-40D 9/15/1999	MW-40D 3/30/2000	MW-40D 4/25/2008
METAL																	
Antimony	6	6	6	15	100 U	170 U	170 U	150 U	150 U	10 U		0.079 B			5 U		10 U
Arsenic	10	10	10	0.045	10 U	6 U	6 U	6 U	6 U	10 U		0.44 B			5 U		10 U
Barium	2000	2000	2000	7300						69.7 B J		84					82.5 B
Beryllium	4	4	4	73	5 U	6 U	6 U	5 U	8	4 U		1 U			1 U		4 U
Cadmium	5	5	5		10 U	10 U	10 U	10 U	10 U	5 U		1 U			1 U		5 U
Cadmium	5	5	5	18	10 U	10 U	10 U	10 U	10 U	5 U		1 U			1 U		5 U
Calcium														52000	66500	58000	
Chromium	100	100	100		20 U	20 U	20 U	170	20 U	1.3 B		5.4 J			5 U		5 U
Copper	1000	1000	1300	1500	20	20 U	20 U	220	20 U	25 U		0.79 B			5 U		25 U
Hexavalent Chromium	100	100		0.043						50 U					10 U		50 U
Iron			300	26000		3400	60 U	320000	80					70 U	450	310	
Lead	5	5	15		150 U	110 U	110 U	240	100 U	3 U		1 U			6		3 U
Magnesium														14000	15900	16000	
Manganese	300	300	50	880		70	14	8100	18					6 U	120	43	
Manganese	300	300	50			70	14	8100	18					6 U	120	43	
Mercury	2	2	2	0.57	0.5 U	0.5 U	0.5 U	0.6	0.5 U	0.2 U		0.2 U			0 U		0.2 U
Nickel	100	100		730	40 U	40 U	40 U	110	40 U	1.7 B		1.8			5 U		40 U
Potassium														1200	1300	1400	
Selenium	50	50	50	180	10 U	5 U	5 U	5 U	5 U	5 U		0.33 B			5 U		5 U
Silver	100	100		180	20 U	40 U	40 U	40 U	40 U	5 U		1 U			5 U		5 U
Sodium														11000	11200	14000	
Thallium	2	2	2		200 U	330 U	330 U	330 U	330 U	10 U		0.023 B			2 U		10 U
Vanadium	260	720		2.6						50 U		1.1 J					50 U
Zinc	2000	2000		11000	60	60 U	60 U	770	60 U	2.6 B J		2.8 B J			25		4.7 B
METAL (Dissolved)																	
Antimony	6	6	6	15							10 U		0.057 B				
Arsenic	10	10	10	0.045							10 U		1 U				
Barium	2000	2000	2000	7300							70.6 B J		83.5				
Beryllium	4	4	4	73							4 U		1 U				
Cadmium	5	5	5	18							5 U		1 U				
Cadmium	5	5	5								5 U		1 U				
Calcium																	
Chromium	100	100	100								5 U		5.4 J				
Copper	1000	1000	1300	1500							0.75 B		1 B				
Hexavalent Chromium	100	100		0.043							50 U						
Iron			300	26000													
Lead	5	5	15								3 U		1 U				
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57							0.2 U		0.2 U				
Nickel	100	100		730							1.5 B		1.1				
Potassium																	
Selenium	50	50	50	180							2.7 B		0.58 B J				
Silver	100	100		180							5 U		1 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-39S 4/3/1990	MW-39S 4/28/1994	MW-39S 4/28/1994	MW-39S 7/12/1994	MW-39S 7/12/1994	MW-39S 5/6/2008	MW-39S 5/6/2008	MW-39S 9/15/2008	MW-39S 9/15/2008	MW-40D 10/24/1995	MW-40D 9/15/1999	MW-40D 3/30/2000	MW-40D 4/25/2008
Sodium																	
Thallium	2	2	2								10 U		0.02 B				
Vanadium	260	720		2.6							50 U		0.94 B J				
Zinc	2000	2000		11000							20 U		4.7 B J				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-40D 4/25/2008	MW-40D 9/8/2008	MW-40D 9/8/2008	MW-40D 6/16/2010	MW-40S 10/30/1995	MW-40S 9/21/1999	MW-40S 3/30/2000	MW-40S 4/25/2008	MW-40S 4/25/2008	MW-40S 9/4/2008	MW-40S 9/4/2008	MW-40S 6/15/2009	MW-40S 6/15/2009	MW-40S 6/15/2010
METAL																		
Antimony	6	6	6	15		0.22 B				5 U		10 U		0.54 B				
Arsenic	10	10	10	0.045		0.3 B				5 U		10 U		5				
Barium	2000	2000	2000	7300		23.9						41.1 B		85.5				
Beryllium	4	4	4	73		1 U				1 U		4 U		1.8				
Cadmium	5	5	5			1 U				1 U		5 U		0.32 B				
Cadmium	5	5	5	18		1 U				1 U		5 U		0.32 B				
Calcium									74000	71100	69000							
Chromium	100	100	100			4.9 J				40		17.2		28.2 J				
Copper	1000	1000	1300	1500		1.1 B				5 U		2.1 B		16.4				
Hexavalent Chromium	100	100		0.043						10 U		50 U						
Iron			300	26000					70 U	500	50 U							
Lead	5	5	15			0.42 B				5 U		3 U		23.6		62		1.7 B
Magnesium									19000	20600	21000							
Manganese	300	300	50	880					6 U	130	20 U							
Manganese	300	300	50						6 U	130	20 U							
Mercury	2	2	2	0.57		0.2 U				0 U		0.2 U		0.2 U				
Nickel	100	100		730		0.82 B				46		11.6 B		19				
Potassium									1400	1300	1300							
Selenium	50	50	50	180		0.3 B				5 U		5 U		0.72 B				
Silver	100	100		180		1 U				5 U		5 U		1 U				
Sodium									18000	12900	10000							
Thallium	2	2	2			0.031 B				2 U		10 U		0.2 B				
Vanadium	260	720		2.6		1.9 J						5.3 B		23.6 J				
Zinc	2000	2000		11000		5.8				38		17.7 B		90.1				
METAL (Dissolved)																		
Antimony	6	6	6	15	10 U		0.13 B J						10 U		0.2 B J			
Arsenic	10	10	10	0.045	10 U		1 U						10 U		0.53 B			
Barium	2000	2000	2000	7300	85.8 B		22.5						31.1 B		28.6			
Beryllium	4	4	4	73	4 U		1 U						4 U		1 U			
Cadmium	5	5	5	18	5 U		1 U						5 U		1 U			
Cadmium	5	5	5		5 U		1 U						5 U		1 U			
Calcium								78300 J										
Chromium	100	100	100		5 U		4.5 J						5 U		5.8 J			
Copper	1000	1000	1300	1500	25 U		0.84 B						25 U		0.86 B			
Hexavalent Chromium	100	100		0.043	50 U								50 U					
Iron			300	26000				100 U										
Lead	5	5	15		3 U		0.25 B J						3 U		0.097 B J		0.02 B	
Magnesium								13700										
Manganese	300	300	50	880				116										
Manganese	300	300	50					116										
Mercury	2	2	2	0.57	0.2 U		0.2 U						0.2 U		0.2 U			
Nickel	100	100		730	40 U		0.62 B						1.4 B		2.3			
Potassium								42900 E										
Selenium	50	50	50	180	5 U		5 U						5 U		0.42 B			
Silver	100	100		180	5 U		1 U						5 U		1 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-40D 4/25/2008	MW-40D 9/8/2008	MW-40D 9/8/2008	MW-40D 6/16/2010	MW-40S 10/30/1995	MW-40S 9/21/1999	MW-40S 3/30/2000	MW-40S 4/25/2008	MW-40S 4/25/2008	MW-40S 9/4/2008	MW-40S 9/4/2008	MW-40S 6/15/2009	MW-40S 6/15/2009	MW-40S 6/15/2010
Sodium								386000										
Thallium	2	2	2		10 U		1 U						10 U		0.13 B J			
Vanadium	260	720		2.6	50 U		1.8						50 U		1.7			
Zinc	2000	2000		11000	9.2 B J		3.3 B						3.7 B J		3 B			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-40S 6/15/2010	MW-41D 10/27/1995	MW-41D 9/20/1999	MW-41D 3/29/2000	MW-41S 10/27/1995	MW-41S 9/20/1999	MW-41S 3/29/2000	MW-42D 10/27/1995	MW-42D 9/21/1999	MW-42D 3/30/2000	MW-42M 10/27/1995	MW-42M 9/26/1999	MW-42M 3/29/2000
METAL																	
Antimony	6	6	6	15			5 U			5 U			5 U			5 U	
Arsenic	10	10	10	0.045			5 U			5 U			5			5 U	
Barium	2000	2000	2000	7300													
Beryllium	4	4	4	73			1 U			1 U			2			1 U	
Cadmium	5	5	5	18			1 U			1 U			1 U			1 U	
Cadmium	5	5	5				1 U			1 U			1 U			1 U	
Calcium						15000	32000	16000		8900	10000	19000	33100	35000	9100	25300	29000
Chromium	100	100	100				15			11			13			5 U	
Copper	1000	1000	1300	1500			6		10 U	7			8			5	
Hexavalent Chromium	100	100		0.043			0 U			0 U			10 U			10 U	
Iron			300	26000		70 U	350	160	320	410	410	800	3500	7500	120	7900	320
Lead	5	5	15				5 U			5 U			12			10	
Magnesium						2200	4200	2600	2400	2200	2300	4200	6600	11000	2000	6300	6000
Manganese	300	300	50			6 U	22	20 U	200	31	20 U	86	140	140	6 U	970	91
Manganese	300	300	50	880		6 U	22	20 U	200	31	20 U	86	140	140	6 U	970	91
Mercury	2	2	2	0.57			0 U			0 U			0 U			0 U	
Nickel	100	100		730			12			18			57			5 U	
Potassium						2200	2900	5300	2500	2900	2900	3000	2900	3000	2300	4600	2900
Selenium	50	50	50	180			5 U			5 U			5 U			5 U	
Silver	100	100		180			5 U			5 U			5 U			5 U	
Sodium						2900	8700	15000	3100	4500	3200	83000	64600	76000	19000	27400	13000
Thallium	2	2	2				2 U			2 U			2 U			2 U	
Vanadium	260	720		2.6													
Zinc	2000	2000		11000			130			110			100			39	
METAL (Dissolved)																	
Antimony	6	6	6	15													
Arsenic	10	10	10	0.045													
Barium	2000	2000	2000	7300													
Beryllium	4	4	4	73													
Cadmium	5	5	5														
Cadmium	5	5	5	18													
Calcium					56800												
Chromium	100	100	100														
Copper	1000	1000	1300	1500													
Hexavalent Chromium	100	100		0.043													
Iron			300	26000	100 U												
Lead	5	5	15		3 U												
Magnesium					14800												
Manganese	300	300	50	880	3.9 B												
Manganese	300	300	50		3.9 B												
Mercury	2	2	2	0.57													
Nickel	100	100		730													
Potassium					6600												
Selenium	50	50	50	180													
Silver	100	100		180													

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-40S 6/15/2010	MW-41D 10/27/1995	MW-41D 9/20/1999	MW-41D 3/29/2000	MW-41S 10/27/1995	MW-41S 9/20/1999	MW-41S 3/29/2000	MW-42D 10/27/1995	MW-42D 9/21/1999	MW-42D 3/30/2000	MW-42M 10/27/1995	MW-42M 9/26/1999	MW-42M 3/29/2000
Sodium					144000												
Thallium	2	2	2														
Vanadium	260	720		2.6													
Zinc	2000	2000		11000													

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-42S 9/28/1999	MW-42S 3/27/2000	MW-43D 10/25/1995	MW-43D 9/17/1999	MW-43D 4/6/2000	MW-43D 6/5/2003	MW-43D 6/8/2004	MW-43D 6/15/2005	MW-43D 6/20/2006	MW-43D 6/25/2007	MW-43D 6/25/2007	MW-43D 5/13/2008	MW-43D 5/13/2008
METAL																	
Antimony	6	6	6	15	5 U			5 U								10 U	
Arsenic	10	10	10	0.045	5 U			5 U								10 U	
Barium	2000	2000	2000	7300												12.4 B	
Beryllium	4	4	4	73	1 U			1 U								4 U	
Cadmium	5	5	5	18	1			1 U								5 U	
Cadmium	5	5	5		1			1 U								5 U	
Calcium					24800	6900	37000	43100	43000								
Chromium	100	100	100		5 U			5 U		0 U	2.8 U	3 U	5 U			5 U	
Copper	1000	1000	1300	1500	7			5 U								25 U	
Hexavalent Chromium	100	100		0.043	10 U			10 U		0 U	10 U	50 U	10 U	10 U		50 U	
Iron			300	26000	2200	300	70 U	160	110								
Lead	5	5	15		87			5 U		0 U	2.2 U	2.7 U	3.3 J			3 U	
Magnesium					7900	5500	8900	9300	9200								
Manganese	300	300	50		1100	20 U	6 U	20 U	34								
Manganese	300	300	50	880	1100	20 U	6 U	20 U	34								
Mercury	2	2	2	0.57	0 U			0 U								0.2 U	
Nickel	100	100		730	8			5 U		0 U	3.9 U	2.4 U	40 U			40 U	
Potassium					4700	4000	1000	1000	980								
Selenium	50	50	50	180	5 U			5 U								5 U	
Silver	100	100		180	5 U			5 U								5 U	
Sodium					3300	7600	4300	4000	4600								
Thallium	2	2	2		2 U			2 U								10 U	
Vanadium	260	720		2.6												50 U	
Zinc	2000	2000		11000	41			29		0 U	9.1 B	38	8.7 JB			8.2 B J	
METAL (Dissolved)																	
Antimony	6	6	6	15													10 U
Arsenic	10	10	10	0.045													10 U
Barium	2000	2000	2000	7300													12.6 B
Beryllium	4	4	4	73													4 U
Cadmium	5	5	5														5 U
Cadmium	5	5	5	18													5 U
Calcium																	
Chromium	100	100	100												5 U		5 U
Copper	1000	1000	1300	1500													25 U
Hexavalent Chromium	100	100		0.043													50 U
Iron			300	26000													
Lead	5	5	15												3 U		3 U
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57													0.2 U
Nickel	100	100		730											40 U		40 U
Potassium																	
Selenium	50	50	50	180													5 U
Silver	100	100		180													5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-42S 9/28/1999	MW-42S 3/27/2000	MW-43D 10/25/1995	MW-43D 9/17/1999	MW-43D 4/6/2000	MW-43D 6/5/2003	MW-43D 6/8/2004	MW-43D 6/15/2005	MW-43D 6/20/2006	MW-43D 6/25/2007	MW-43D 6/25/2007	MW-43D 5/13/2008	MW-43D 5/13/2008
Sodium																	
Thallium	2	2	2														10 U
Vanadium	260	720		2.6													50 U
Zinc	2000	2000		11000											6.1 B J		11.6 B J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-43D 9/25/2008	MW-43D 9/25/2008	MW-43D 6/29/2010	MW-43S 10/25/1995	MW-43S 9/17/1999	MW-43S 3/22/2000	MW-43S 6/2/2003	MW-43S 6/8/2004	MW-43S 6/13/2005	MW-43S 6/20/2006	MW-43S 6/25/2007	MW-43S 6/25/2007	MW-43S 4/24/2008
METAL																	
Antimony	6	6	6	15	0.12 B				5 U								10 U
Arsenic	10	10	10	0.045	0.25 B				5 U								3.5 B
Barium	2000	2000	2000	7300	16.5 J												87.8 B
Beryllium	4	4	4	73	1 U				1 U								0.62 B
Cadmium	5	5	5	18	1 U				1 U								5 U
Cadmium	5	5	5		1 U				1 U								5 U
Calcium								31000	41200	28000							
Chromium	100	100	100		14.2 J				5 U		0 U	2.8 U	3 U	1.3 B			3.1 B
Copper	1000	1000	1300	1500	1.8 B				5 U								6.4 B
Hexavalent Chromium	100	100		0.043	57				10 U		0 U	10 U	10 U	10 U	10 U		50 U
Iron			300	26000				70 U	230	240							
Lead	5	5	15		1.8				5 U		0 U	2.2 U	2.7 U	3.2 J			8
Magnesium								5100	5500	4300							
Manganese	300	300	50					6 U	92	57							
Manganese	300	300	50	880				6 U	92	57							
Mercury	2	2	2	0.57	0.2 U				0 U								0.057 B
Nickel	100	100		730	3.1				5 U		0 U	3.9 U	2.4 U	40 U			11.1 B
Potassium								2500	2200	2300							
Selenium	50	50	50	180	5 U				5 U								5 U
Silver	100	100		180	1 U				5 U								5 U
Sodium								12000	10400	16000							
Thallium	2	2	2		0.06 B				2 U								10 U
Vanadium	260	720		2.6	5.1 J												4.8 B
Zinc	2000	2000		11000	13.7				86		0 U	10.7 B	20.9 B	5.8 JB			29
METAL (Dissolved)																	
Antimony	6	6	6	15		0.075 B J											
Arsenic	10	10	10	0.045		1 U											
Barium	2000	2000	2000	7300		10.7											
Beryllium	4	4	4	73		1 U											
Cadmium	5	5	5			1 U											
Cadmium	5	5	5	18		1 U											
Calcium							41800										
Chromium	100	100	100			12.6 J										5 U	
Copper	1000	1000	1300	1500		0.38 B											
Hexavalent Chromium	100	100		0.043		0 U											
Iron			300	26000			100 U										
Lead	5	5	15			1 U										3 U	
Magnesium							9650										
Manganese	300	300	50	880			15 U										
Manganese	300	300	50				15 U										
Mercury	2	2	2	0.57		0.2 U											
Nickel	100	100		730		1.3										2.5 B	
Potassium							1010 B										
Selenium	50	50	50	180		0.68 B J											
Silver	100	100		180		1 U											

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-43D 9/25/2008	MW-43D 9/25/2008	MW-43D 6/29/2010	MW-43S 10/25/1995	MW-43S 9/17/1999	MW-43S 3/22/2000	MW-43S 6/2/2003	MW-43S 6/8/2004	MW-43S 6/13/2005	MW-43S 6/20/2006	MW-43S 6/25/2007	MW-43S 6/25/2007	MW-43S 4/24/2008
Sodium							3780 B										
Thallium	2	2	2			0.039 B											
Vanadium	260	720		2.6		2.8 J											
Zinc	2000	2000		11000		8.1										14.6 B J	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-43S 4/24/2008	MW-43S 9/4/2008	MW-43S 9/4/2008	MW-43S 6/16/2009	MW-43S 6/16/2009	MW-43S 6/16/2010	MW-43S 6/16/2010	MW-44 10/26/1995	MW-44 9/22/1999	MW-44 3/23/2000	MW-45 5/17/1990	MW-45 9/30/1999	MW-45 3/23/2000
METAL																	
Antimony	6	6	6	15		0.3 B							5 U		110 U	5 U	
Arsenic	10	10	10	0.045		1.5							5 U		11 U	5 U	
Barium	2000	2000	2000	7300		73.3											
Beryllium	4	4	4	73		0.16 B							1 U		5.5 U	1 U	
Cadmium	5	5	5	18		1 U							1 U		11 U	1 U	
Cadmium	5	5	5			1 U							1 U		11 U	1 U	
Calcium												8000	10600	10000		40100	50000
Chromium	100	100	100			7.1 J							5 U		22	5 U	
Copper	1000	1000	1300	1500		4							5		11 U	5 U	
Hexavalent Chromium	100	100		0.043		0 U							10 U			10 U	
Iron			300	26000								140	2000	6800		350	1100
Lead	5	5	15			4.1		1		3 U			5 U		170 U	5 U	
Magnesium												2500	3000	2800		14000	16000
Manganese	300	300	50									33	120	73		27	57
Manganese	300	300	50	880								33	120	73		27	57
Mercury	2	2	2	0.57		0.2 U							0 U		0.5 U	0 U	
Nickel	100	100		730		5.8							5 U		44 U	5 U	
Potassium												2100	2800	2400		630	980
Selenium	50	50	50	180		5 U							5 U		11 U	5 U	
Silver	100	100		180		1 U							5 U		22 U	5 U	
Sodium												2300	2900	2400		7100	9600
Thallium	2	2	2			0.05 B							2 U		220 U	2 U	
Vanadium	260	720		2.6		4.2 J											
Zinc	2000	2000		11000		27.3							20 U		88	20 U	
METAL (Dissolved)																	
Antimony	6	6	6	15	10 U		0.15 B J										
Arsenic	10	10	10	0.045	10 U		1 U										
Barium	2000	2000	2000	7300	51.5 B		62.6										
Beryllium	4	4	4	73	4 U		1 U										
Cadmium	5	5	5		5 U		1 U										
Cadmium	5	5	5	18	5 U		1 U										
Calcium											26400 J						
Chromium	100	100	100		5 U		4.2 J										
Copper	1000	1000	1300	1500	25 U		0.34 B										
Hexavalent Chromium	100	100		0.043	50 U		0 U										
Iron			300	26000							100 U						
Lead	5	5	15		3 U		0.086 B J		1 U		3 U						
Magnesium											5660						
Manganese	300	300	50	880							3.6 B						
Manganese	300	300	50								3.6 B						
Mercury	2	2	2	0.57	0.2 U		0.2 U										
Nickel	100	100		730	40 U		1.6										
Potassium											2660 B						
Selenium	50	50	50	180	5 U		0.31 B										
Silver	100	100		180	5 U		1 U										

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-43S 4/24/2008	MW-43S 9/4/2008	MW-43S 9/4/2008	MW-43S 6/16/2009	MW-43S 6/16/2009	MW-43S 6/16/2010	MW-43S 6/16/2010	MW-44 10/26/1995	MW-44 9/22/1999	MW-44 3/23/2000	MW-45 5/17/1990	MW-45 9/30/1999	MW-45 3/23/2000
Sodium											5550						
Thallium	2	2	2		10 U		0.051 B J										
Vanadium	260	720		2.6	50 U		1										
Zinc	2000	2000		11000	5.6 B J		3.4 B										

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-45 5/20/2008	MW-45 5/20/2008	MW-46 5/17/1990	MW-46 9/29/1999	MW-46 4/4/2000	MW-46 5/19/2008	MW-46 5/19/2008	MW-46 10/3/2008	MW-46 10/3/2008	MW-47 5/17/1990	MW-47 3/14/1995	MW-47 3/14/1995	MW-47 3/24/1995
METAL																	
Antimony	6	6	6	15	10 U		110 U	5 U		10 U		1.7 B		110 U		10 U	0 U
Arsenic	10	10	10	0.045	10 U		11 U	5 U		10 U		1 U		11 U	6 U		0 U
Barium	2000	2000	2000	7300	69.8 B					144 B		98.9					
Beryllium	4	4	4	73	4 U		5.5 U	1 U		4 U		1 U		5.5 U		4 U	0 U
Cadmium	5	5	5	18	5 U		11 U	1 U		5 U		1 U		11 U	1 U		0 U
Cadmium	5	5	5		5 U		11 U	1 U		5 U		1 U		11 U	1 U		0 U
Calcium								52800	69000								
Chromium	100	100	100		2.5 B		22 U	5 U		2.3 B		7 J		2500	4000		4000
Copper	1000	1000	1300	1500	1.1 B		11 U	5 U		2.3 B		0.83 B		11 U		10 U	0 U
Hexavalent Chromium	100	100		0.043	50 U			10 U		50 U					4400		4400
Iron			300	26000				50 U	50 U								
Lead	5	5	15		3 U		170 U	5 U		3 U		0.28 B		170 U	6 U		0 U
Magnesium								17600	23000								
Manganese	300	300	50					20 U	160								
Manganese	300	300	50	880				20 U	160								
Mercury	2	2	2	0.57	0.2 U		0.5 U	0 U		0.2 U		0.2 U		0.5 U		0.5 U	0 U
Nickel	100	100		730	1.1 B		44 U	5 U		40 U		1.7		88		40 U	0 U
Potassium								2900	3200								
Selenium	50	50	50	180	5 U		11 U	5 U		5 U		5 U		11 U	10 U		
Silver	100	100		180	5 U		22 U	5 U		5 U		1 U		22 U		2 U	
Sodium								10100	15000								
Thallium	2	2	2		10 U		220 U	2 U		10 U		1 U		220 U	10 U		
Vanadium	260	720		2.6	3.3 B					1.7 B		4.1 J					
Zinc	2000	2000		11000	6.3 B J		44	20 U		3.9 B J		4.1 B		44	20 U		0 U
METAL (Dissolved)																	
Antimony	6	6	6	15		10 U					10 U		1.6 B				
Arsenic	10	10	10	0.045		10 U					10 U		0.34 B				
Barium	2000	2000	2000	7300		65.6 B					139 B		95.8				
Beryllium	4	4	4	73		4 U					4 U		1 U				
Cadmium	5	5	5			5 U					5 U		1 U				
Cadmium	5	5	5	18		5 U					5 U		1 U				
Calcium																	
Chromium	100	100	100			1.3 B					1.8 B		9.6 J				
Copper	1000	1000	1300	1500		25 U					25 U		0.78 B J				
Hexavalent Chromium	100	100		0.043		50 U					50 U						
Iron			300	26000													
Lead	5	5	15			3 U					3 U		0.068 B J				
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57		0.2 U					0.2 U		0.2 U				
Nickel	100	100		730		40 U					40 U		1.9				
Potassium																	
Selenium	50	50	50	180		5 U					5 U		1 B				
Silver	100	100		180		5 U					5 U		1 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-45 5/20/2008	MW-45 5/20/2008	MW-46 5/17/1990	MW-46 9/29/1999	MW-46 4/4/2000	MW-46 5/19/2008	MW-46 5/19/2008	MW-46 10/3/2008	MW-46 10/3/2008	MW-47 5/17/1990	MW-47 3/14/1995	MW-47 3/14/1995	MW-47 3/24/1995
Sodium																	
Thallium	2	2	2			10 U					10 U		1 U				
Vanadium	260	720		2.6		1.5 B					2.2 B		5.1 J				
Zinc	2000	2000		11000		2.8 B					5.6 B		2.4 B				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-47 9/29/1999	MW-47 Dup 9/29/1999	MW-47 3/31/2000	MW-47 6/5/2003	MW-47 6/9/2004	MW-47 6/16/2005	MW-47 Dup 6/24/2006	MW-47 6/24/2006	MW-47 6/29/2007	MW-47 6/29/2007	MW-47 5/20/2008	MW-47 5/20/2008	MW-47 10/9/2008
METAL																	
Antimony	6	6	6	15	5 U	5 U									10 U		0.22 B
Arsenic	10	10	10	0.045	5 U										10 U		2.5
Barium	2000	2000	2000	7300											177 B J		125
Beryllium	4	4	4	73	1 U	1 U									0.58 B J		0.3 B
Cadmium	5	5	5	18	1 U	1 U									5 U		0.21 B
Cadmium	5	5	5		1 U	1 U									5 U		0.21 B
Calcium					79400	82000	71000										
Chromium	100	100	100		2500	2800		2330	2040	4080	3800	3860			1330		1860 J
Copper	1000	1000	1300	1500	5 U										25 U		4.7
Hexavalent Chromium	100	100		0.043	3000	3000		1790	1960	4430	3500	3600	3000		1400		300
Iron			300	26000	180	210	850										
Lead	5	5	15		5 U			0 U	2.2 U	2.7 U	3 J	2.2 JB			3 U		2.7
Magnesium					8800	9000	8700										
Manganese	300	300	50		39	20 U	210										
Manganese	300	300	50	880	39	20 U	210										
Mercury	2	2	2	0.57	0 U	0 U									0.2 U		0.2 U
Nickel	100	100		730	5 U			0 U	4.7 B	6.1 B	1.9 B	2.6 B			9.1 B		11.4 J
Potassium					1600	1600	1900										
Selenium	50	50	50	180	5 U										5 U		1.5 B J
Silver	100	100		180	5 U	5 U									5 U		1 U
Sodium					9100	9100	8800										
Thallium	2	2	2		2 U										4.7 B		0.031 B
Vanadium	260	720		2.6											50 U		6.2 J
Zinc	2000	2000		11000	20 U	20 U		0 U	35.9	39.2	11.2 JB	4.9 JB			13.6 B J		23.5
METAL (Dissolved)																	
Antimony	6	6	6	15												10 U	
Arsenic	10	10	10	0.045												10 U	
Barium	2000	2000	2000	7300												204	
Beryllium	4	4	4	73												0.53 B J	
Cadmium	5	5	5													0.52 B	
Cadmium	5	5	5	18												0.52 B	
Calcium																	
Chromium	100	100	100											3580		1140	
Copper	1000	1000	1300	1500												25 U	
Hexavalent Chromium	100	100		0.043												450	
Iron			300	26000													
Lead	5	5	15											3 U		3 U	
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57												0.2 U	
Nickel	100	100		730										2.4 B		10.3 B	
Potassium																	
Selenium	50	50	50	180												5 U	
Silver	100	100		180												0.62 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-47 9/29/1999	MW-47 Dup 9/29/1999	MW-47 3/31/2000	MW-47 6/5/2003	MW-47 6/9/2004	MW-47 6/16/2005	MW-47 Dup 6/24/2006	MW-47 6/24/2006	MW-47 6/29/2007	MW-47 6/29/2007	MW-47 5/20/2008	MW-47 5/20/2008	MW-47 10/9/2008
Sodium																	
Thallium	2	2	2													10 U	
Vanadium	260	720		2.6												50 U	
Zinc	2000	2000		11000										4.2 B J		10.6 B J	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-47 10/9/2008	MW-47 7/15/2009	MW-47 7/15/2009	MW-47 6/24/2010	MW-47 6/24/2010	MW-48 5/17/1990	MW-49D 5/21/2008	MW-49D 5/21/2008	MW-49D 10/6/2008	MW-49D 10/6/2008	MW-49S 5/22/2008	MW-49S 5/22/2008	MW-49S 10/9/2008
METAL																	
Antimony	6	6	6	15						110 U	10 U		1.2 B		10 U		1.3 B
Arsenic	10	10	10	0.045						11 U	7.6 B		6.7 J		12.7		7.7
Barium	2000	2000	2000	7300							69.5 B J		84.6		200 U		47.4
Beryllium	4	4	4	73						5.5 U	0.41 B J		1 U		4 U		1 U
Cadmium	5	5	5	18						11 U	5 U		0.15 B		0.39 B		1 U
Cadmium	5	5	5							11 U	5 U		0.15 B		0.39 B		1 U
Calcium																	
Chromium	100	100	100			4470		4830		22 U	5 U		5.8 J		4.9 B		11.9 J
Copper	1000	1000	1300	1500						11 U	0.83 B		2		6.9 B		1.9 B
Hexavalent Chromium	100	100		0.043		5100		5600			50 U		0 U		59 J		0 U
Iron			300	26000													
Lead	5	5	15							170 U	3 U		2		7		0.35 B
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57						0.5 U	0.2 U		0.019 B		0.14 B		0.2 U
Nickel	100	100		730						44 U	3 B		4.5		12.7 B		4.1 J
Potassium																	
Selenium	50	50	50	180						11 U	5 U		5 U		5 U		1.3 B J
Silver	100	100		180						22 U	5 U		1 U		5 U		1 U
Sodium																	
Thallium	2	2	2							220 U	10 U		0.34 B J		10 U		1 U
Vanadium	260	720		2.6							3 B		5.1 J		5.3 B		2.8 J
Zinc	2000	2000		11000						44	7.6 B J		11		50.6 J		8.3
METAL (Dissolved)																	
Antimony	6	6	6	15	0.21 B							10 U		0.64 B		10 U	
Arsenic	10	10	10	0.045	3.4							7.9 B		4.4		11.9	
Barium	2000	2000	2000	7300	129							71 B		77.8		97.1 B	
Beryllium	4	4	4	73	0.35 B							0.37 B J		1 U		4 U	
Cadmium	5	5	5		0.14 B							5 U		1 U		5 U	
Cadmium	5	5	5	18	0.14 B							5 U		1 U		5 U	
Calcium									115000								
Chromium	100	100	100		2310 J		4440		4040			5 U		6.7 J		3.7 B	
Copper	1000	1000	1300	1500	5.9							25 U		0.54 B J		5.3 B	
Hexavalent Chromium	100	100		0.043	0 U		4400		4500			50 U		0 U		62	
Iron			300	26000					100 U								
Lead	5	5	15		3.7							3 U		0.062 B J		4.3	
Magnesium									14000								
Manganese	300	300	50	880					12.8 B								
Manganese	300	300	50						12.8 B								
Mercury	2	2	2	0.57	0.021 B							0.2 U		0.2 U		0.098 B	
Nickel	100	100		730	10.9							3.4 B		3.9		11 B	
Potassium									3710 B								
Selenium	50	50	50	180	1.4 B							5 U		0.55 B		5 U	
Silver	100	100		180	1 U							5 U		1 U		5 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-47 10/9/2008	MW-47 7/15/2009	MW-47 7/15/2009	MW-47 6/24/2010	MW-47 6/24/2010	MW-48 5/17/1990	MW-49D 5/21/2008	MW-49D 5/21/2008	MW-49D 10/6/2008	MW-49D 10/6/2008	MW-49S 5/22/2008	MW-49S 5/22/2008	MW-49S 10/9/2008
Sodium									18300								
Thallium	2	2	2		0.047 B							10 U		0.41 B		10 U	
Vanadium	260	720		2.6	13.8 J							2.7 B		5.4 J		6.7 B	
Zinc	2000	2000		11000	39.4 J							3.1 B J		3.4 B		29.5 J	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-49S 10/9/2008	MW-49S 7/14/2009	MW-49S 7/14/2009	MW-50D 9/28/1999	MW-50D 4/4/2000	MW-50D Dup 4/4/2000	MW-50D 6/9/2004	MW-50D 5/22/2008	MW-50D 5/22/2008	MW-50D 10/7/2008	MW-50D 10/7/2008	MW-50D 7/2/2010	MW-50S 9/28/1999
METAL																	
Antimony	6	6	6	15				5 U				10 U		0.2 B			5 U
Arsenic	10	10	10	0.045		5.8		5				10 U		1.6			5 U
Barium	2000	2000	2000	7300								200 U		36.4			
Beryllium	4	4	4	73				1				4 U		1 U			1 U
Cadmium	5	5	5	18				1 U				5 U		1 U			1 U
Cadmium	5	5	5					1 U				5 U		1 U			1 U
Calcium								104000	140000	110000							83800
Chromium	100	100	100					56			0 U	2.7 B		14 J			17
Copper	1000	1000	1300	1500				29				1 B		3.5			7
Hexavalent Chromium	100	100		0.043				10 U			0 U	50 UJ		0 U			10 U
Iron			300	26000				8100	5300	2200							880
Lead	5	5	15			2.8		28			0 U	3 U		1.5			5 U
Magnesium								24000	32000	32000							29100
Manganese	300	300	50					850	910	640							1100
Manganese	300	300	50	880				850	910	640							1100
Mercury	2	2	2	0.57				0 U				0.2 U		0.2 U			0 U
Nickel	100	100		730				96			0 U	3.7 B		5.5 J			28
Potassium								5000	4400	3900							4300
Selenium	50	50	50	180				5 U				5 U		5.0 U			5 U
Silver	100	100		180				5 U				5 U		1 U			5 U
Sodium								98300	73000	54000							38800
Thallium	2	2	2					2 U				10 U		0.053 B			2 U
Vanadium	260	720		2.6								3.2 B		3.9 J			
Zinc	2000	2000		11000				62			15.9	20 U		13.5			27
METAL (Dissolved)																	
Antimony	6	6	6	15	0.85 B								10 U		0.18 B		
Arsenic	10	10	10	0.045	4.9		4.3						10 U		1.2		
Barium	2000	2000	2000	7300	41.6								32 B		32.9		
Beryllium	4	4	4	73	1 U								4 U		1 U		
Cadmium	5	5	5		1 U								5 U		1 U		
Cadmium	5	5	5	18	1 U								5 U		1 U		
Calcium																113000	
Chromium	100	100	100		11.3 J								5 U		13.5 J		
Copper	1000	1000	1300	1500	0.78 B								25 U		0.88 B		
Hexavalent Chromium	100	100		0.043	0 U								50 U		0 U		
Iron			300	26000												341	
Lead	5	5	15		1 U		0.07 B						3 U		1 U		
Magnesium																36300	
Manganese	300	300	50	880												220	
Manganese	300	300	50													220	
Mercury	2	2	2	0.57	0.2 U								0.2 U		0.2 U		
Nickel	100	100		730	2.6								1.8 B		3.7		
Potassium																27100 J	
Selenium	50	50	50	180	1.1 B								5 U		1.2 B		
Silver	100	100		180	1 U								5 U		1 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-49S 10/9/2008	MW-49S 7/14/2009	MW-49S 7/14/2009	MW-50D 9/28/1999	MW-50D 4/4/2000	MW-50D Dup 4/4/2000	MW-50D 6/9/2004	MW-50D 5/22/2008	MW-50D 5/22/2008	MW-50D 10/7/2008	MW-50D 10/7/2008	MW-50D 7/2/2010	MW-50S 9/28/1999
Sodium																153000	
Thallium	2	2	2		1 U								10 U		0.13 B		
Vanadium	260	720		2.6	1.5 J								1.3 B		6.8 J		
Zinc	2000	2000		11000	6.2 J								20 U		5.0 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-50S 4/6/2000	MW-50S 6/10/2004	MW-50S 5/15/2008	MW-50S 5/15/2008	MW-50S 9/30/2008	MW-50S 9/30/2008	MW-50S 7/1/2009	MW-50S 7/1/2009	MW-50S 6/29/2010	MW-51D 9/21/1999	MW-51D 4/6/2000	MW-51D 6/6/2003	MW-51D 6/9/2004	MW-51D 8/4/2004
METAL																		
Antimony	6	6	6	15			10 U		1.2 B					5 U				
Arsenic	10	10	10	0.045			10 U		0.49 B					5 U				
Barium	2000	2000	2000	7300			293		71.5									
Beryllium	4	4	4	73			4 U		0.16 B					1 U				
Cadmium	5	5	5	18			0.29 B		0.25 B					1 U				
Cadmium	5	5	5				0.29 B		0.25 B					1 U				
Calcium					100000									97600	100000			
Chromium	100	100	100			0 U	5		37.3 J					5 U		0 U	2.8 U	2.8 U
Copper	1000	1000	1300	1500			3.7 B		20.8					5 U				
Hexavalent Chromium	100	100		0.043		0 U	50 U		0 U					10 U		0 U	10 U	10 U
Iron			300	26000	1700									50 U	50 U			
Lead	5	5	15			0 U	3 U		7.9		2 J			5 U		0 U	2.2 U	2.2 U
Magnesium					26000									28000	30000			
Manganese	300	300	50		820									30	84			
Manganese	300	300	50	880	820									30	84			
Mercury	2	2	2	0.57			0.091 B J		0.2 U					0 U				
Nickel	100	100		730		6.8	7.6 B		17.3					5 U		0 U	3.9 U	3.9 U
Potassium					4900									2300	2300			
Selenium	50	50	50	180			5 U		5 U					5 U				
Silver	100	100		180			5 U		1 U					5 U				
Sodium					38000									16900	18000			
Thallium	2	2	2				10 U		0.085 B					2 U				
Vanadium	260	720		2.6			3.3 B		7.2 J									
Zinc	2000	2000		11000		7.4	39.1 J		65.2					20 U		0 U	15.9 B	12 B
METAL (Dissolved)																		
Antimony	6	6	6	15				10 U		0.54 B								
Arsenic	10	10	10	0.045				10 U		0.45 B								
Barium	2000	2000	2000	7300				280		66.3								
Beryllium	4	4	4	73				4 U		1 U								
Cadmium	5	5	5					5 U		1 U								
Cadmium	5	5	5	18				5 U		1 U								
Calcium													108000					
Chromium	100	100	100					5 U		13.7 J								
Copper	1000	1000	1300	1500				25 U		4.1								
Hexavalent Chromium	100	100		0.043				50 U		0 U								
Iron			300	26000									100 U					
Lead	5	5	15					3 U		0.12 B		0.049 B J						
Magnesium													21600					
Manganese	300	300	50	880									445					
Manganese	300	300	50										445					
Mercury	2	2	2	0.57				0.087 B J		0.2 U								
Nickel	100	100		730				4.7 B		5								
Potassium													42100					
Selenium	50	50	50	180				5 U		0.72 B								
Silver	100	100		180				5 U		1 U								

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-50S 4/6/2000	MW-50S 6/10/2004	MW-50S 5/15/2008	MW-50S 5/15/2008	MW-50S 9/30/2008	MW-50S 9/30/2008	MW-50S 7/1/2009	MW-50S 7/1/2009	MW-50S 6/29/2010	MW-51D 9/21/1999	MW-51D 4/6/2000	MW-51D 6/6/2003	MW-51D 6/9/2004	MW-51D 8/4/2004
Sodium													765000					
Thallium	2	2	2					10 U		0.068 B J								
Vanadium	260	720		2.6				3.9 B		4.6 J								
Zinc	2000	2000		11000				21 J		15.9								

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-51D 6/21/2005	MW-51D 6/24/2006	MW-51D 6/29/2007	MW-51D 6/29/2007	MW-51D 5/12/2008	MW-51D 5/12/2008	MW-51D 9/18/2008	MW-51D 9/18/2008	MW-51D 6/30/2010	MW-51D 6/30/2010	MW-51S 9/20/1999	MW-51S 4/5/2000	MW-51S 6/6/2003	MW-51S 6/10/2004
METAL																		
Antimony	6	6	6	15					10 U		5.8 J				5 U			
Arsenic	10	10	10	0.045					10 U		2				5 U			
Barium	2000	2000	2000	7300					64.1 B		40.5							
Beryllium	4	4	4	73					4 U		1 U				1 U			
Cadmium	5	5	5	18					5 U		1 U				1 U			
Cadmium	5	5	5						5 U		1 U				1 U			
Calcium															98500	96000		
Chromium	100	100	100		1.6 U	4.7 B			4.6 B		8.7 J		2.8 B		590		338	2.8 U
Copper	1000	1000	1300	1500					2 B		7.9				5 U			
Hexavalent Chromium	100	100		0.043	10 U	10 U	10 U		50 U		0 U		10 U		0		350	10 U
Iron			300	26000											50 U	50 U		
Lead	5	5	15		2.7 U	5.3 J			3 U		3.1				5 U		0 U	2.2 U
Magnesium															11900	12000		
Manganese	300	300	50												290	140		
Manganese	300	300	50	880											290	140		
Mercury	2	2	2	0.57					0.2 U		0.2 U				0 U			
Nickel	100	100		730	2.4 U	5.3 B			2.3 B		5.8				100		50	6.8 B
Potassium															3900	3400		
Selenium	50	50	50	180					5 U		0.83 B				5 U			
Silver	100	100		180					5 U		1 U				5 U			
Sodium															20700	22000		
Thallium	2	2	2						10 U		0.18 B J				2 U			
Vanadium	260	720		2.6					1.9 B		6.6 J							
Zinc	2000	2000		11000	9.5 B	14.6 JB			3 B		29.7				20 U		0 U	7.4 B
METAL (Dissolved)																		
Antimony	6	6	6	15						10 U		2.2 J						
Arsenic	10	10	10	0.045						10 U		2.9						
Barium	2000	2000	2000	7300						57.2 B		28						
Beryllium	4	4	4	73						4 U		1 U						
Cadmium	5	5	5							5 U		1 U						
Cadmium	5	5	5	18						5 U		1 U						
Calcium														43600				
Chromium	100	100	100					2.8 B		5 U		4.6 J		1.2 B				
Copper	1000	1000	1300	1500						1.8 B		4.4						
Hexavalent Chromium	100	100		0.043						50 U		0 U		10 U				
Iron			300	26000										100 U				
Lead	5	5	15					3 U		3 U		0.24 B						
Magnesium														3920 B				
Manganese	300	300	50	880										4.2 B				
Manganese	300	300	50											4.2 B				
Mercury	2	2	2	0.57						0.2 U		0.2 U						
Nickel	100	100		730				3 B		40 U		2.5						
Potassium														18500				
Selenium	50	50	50	180						5 U		0.96 B						
Silver	100	100		180						5 U		1 U						

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-51D 6/21/2005	MW-51D 6/24/2006	MW-51D 6/29/2007	MW-51D 6/29/2007	MW-51D 5/12/2008	MW-51D 5/12/2008	MW-51D 9/18/2008	MW-51D 9/18/2008	MW-51D 6/30/2010	MW-51D 6/30/2010	MW-51S 9/20/1999	MW-51S 4/5/2000	MW-51S 6/6/2003	MW-51S 6/10/2004
Sodium														87300				
Thallium	2	2	2							10 U		0.092 B						
Vanadium	260	720		2.6						1.2 B		2.3 J						
Zinc	2000	2000		11000				4 B J		2 B J		13.8						

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-51S 8/4/2004	MW-51S 6/17/2005	MW-51S 6/17/2005	MW-51S 6/24/2006	MW-51S 6/29/2007	MW-51S 6/29/2007	MW-51S 5/20/2008	MW-51S 5/20/2008	MW-51S 10/2/2008	MW-51S 10/2/2008	MW-51S 7/1/2009	MW-51S 7/1/2009	MW-51S 7/6/2010	MW-51S 7/6/2010
METAL																		
Antimony	6	6	6	15							10 U		2 U					
Arsenic	10	10	10	0.045							10 U		1 U					
Barium	2000	2000	2000	7300							73.7 B		63					
Beryllium	4	4	4	73							4 U		1 U					
Cadmium	5	5	5	18							0.65 B		0.46 B					
Cadmium	5	5	5								0.65 B		0.46 B					
Calcium																		
Chromium	100	100	100		701			225			258		340 J		304 J		193	
Copper	1000	1000	1300	1500							25 U		0.92 B					
Hexavalent Chromium	100	100		0.043	651	175		220	260		280		330		410		200	
Iron			300	26000														
Lead	5	5	15		2.2 U			2.4 JB			3 U		0.54 B					
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57							0.2 U		0.2 U					
Nickel	100	100		730	47.4			28.6 B			57.6		27					
Potassium																		
Selenium	50	50	50	180							5 U		0.66 B					
Silver	100	100		180							5 U		1 U					
Sodium																		
Thallium	2	2	2								10 U		0.04 B J					
Vanadium	260	720		2.6							50 U		2.7 J					
Zinc	2000	2000		11000	23.6 B			10.4 JB			3.3 B J		7.5					
METAL (Dissolved)																		
Antimony	6	6	6	15								10 U		2 U				
Arsenic	10	10	10	0.045								10 U		1 U				
Barium	2000	2000	2000	7300								74.2 B		61.8				
Beryllium	4	4	4	73								4 U		1 U				
Cadmium	5	5	5									0.69 B		0.48 B J				
Cadmium	5	5	5	18								0.69 B		0.48 B J				
Calcium																		116000
Chromium	100	100	100				317			253		259		356 J		301		199
Copper	1000	1000	1300	1500								0.88 B		1.1 B J				
Hexavalent Chromium	100	100		0.043								280		330		400		200
Iron			300	26000														100 U
Lead	5	5	15				2.7 U			3 U		3 U		0.7 B J				
Magnesium																		14900
Manganese	300	300	50	880														123
Manganese	300	300	50															123
Mercury	2	2	2	0.57								0.2 U		0.2 U				
Nickel	100	100		730			28.3 B			26.4 B		58.3		29.7				
Potassium																		8950
Selenium	50	50	50	180								5 U		0.48 B				
Silver	100	100		180								5 U		1 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-51S 8/4/2004	MW-51S 6/17/2005	MW-51S 6/17/2005	MW-51S 6/24/2006	MW-51S 6/29/2007	MW-51S 6/29/2007	MW-51S 5/20/2008	MW-51S 5/20/2008	MW-51S 10/2/2008	MW-51S 10/2/2008	MW-51S 7/1/2009	MW-51S 7/1/2009	MW-51S 7/6/2010	MW-51S 7/6/2010
Sodium																		43500
Thallium	2	2	2									10 U		0.038 B				
Vanadium	260	720		2.6								50 U		1 U				
Zinc	2000	2000		11000			19.2 B			6.3 B J		6.7 B		3.5 B				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-52 9/28/1999	MW-52 3/22/2000	MW-52 5/6/2008	MW-52 5/6/2008	MW-52 9/4/2008	MW-52 9/4/2008	MW-52 7/13/2009	MW-52 7/13/2009	MW-52 Dup 7/13/2009	MW-52 Dup 7/13/2009	MW-53 9/28/1999	MW-53 3/22/2000	MW-53 4/23/2008
METAL																	
Antimony	6	6	6	15	5 U		10 U		0.48 B						5 U		10 U
Arsenic	10	10	10	0.045	5 U		10 U		3						5 U		5.2 B
Barium	2000	2000	2000	7300			117 B J		144								171 B
Beryllium	4	4	4	73	1 U		4 U		0.94 B						1 U		0.64 B
Cadmium	5	5	5	18	1 U		0.51 B		0.19 B						1 U		5 U
Cadmium	5	5	5		1 U		0.51 B		0.19 B						1 U		5 U
Calcium					77400	73000									29500	52000	
Chromium	100	100	100		5 U		17.6		19.8 J						5 U		21.5
Copper	1000	1000	1300	1500	5 U		14.2 B		13.1						5 U		15.1 B
Hexavalent Chromium	100	100		0.043	10 U		50 U								10 U		50 U
Iron			300	26000	3400	1300									150	190	
Lead	5	5	15		5 U		11.3		13.5		16.1		16.1		5 U		10.9
Magnesium					9500	8100									7500	11000	
Manganese	300	300	50		430	57									120	20 U	
Manganese	300	300	50	880	430	57									120	20 U	
Mercury	2	2	2	0.57	0 U		0.2 U		0.2 U						0 U		0.2 U
Nickel	100	100		730	5 U		34 B		25						5 U		22.9 B
Potassium					7900	12000									10100	28000	
Selenium	50	50	50	180	5 U		5 U		0.58 B						5 U		5 U
Silver	100	100		180	5 U		5 U		1 U						5 U		5 U
Sodium					11900	6000									6000	6300	
Thallium	2	2	2		2 U		10 U		0.14 B						2 U		10 U
Vanadium	260	720		2.6			6.9 B		11.9 J								16 B
Zinc	2000	2000		11000	26		30.8 J		41.3						20		87.9
METAL (Dissolved)																	
Antimony	6	6	6	15				10 U		0.17 B J							
Arsenic	10	10	10	0.045				10 U		1.3							
Barium	2000	2000	2000	7300				86.7 B J		97.5							
Beryllium	4	4	4	73				4 U		1 U							
Cadmium	5	5	5					5 U		1 U							
Cadmium	5	5	5	18				5 U		1 U							
Calcium																	
Chromium	100	100	100					10.2		5.1 J							
Copper	1000	1000	1300	1500				2 B		0.49 B							
Hexavalent Chromium	100	100		0.043				50 U									
Iron			300	26000													
Lead	5	5	15					3 U		0.15 B J		0.12 B		0.079 B			
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57				0.2 U		0.2 U							
Nickel	100	100		730				41		8.3							
Potassium																	
Selenium	50	50	50	180				5 U		0.49 B							
Silver	100	100		180				5 U		1 U							

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-52 9/28/1999	MW-52 3/22/2000	MW-52 5/6/2008	MW-52 5/6/2008	MW-52 9/4/2008	MW-52 9/4/2008	MW-52 7/13/2009	MW-52 7/13/2009	MW-52 Dup 7/13/2009	MW-52 Dup 7/13/2009	MW-53 9/28/1999	MW-53 3/22/2000	MW-53 4/23/2008
Sodium																	
Thallium	2	2	2					10 U		0.037 B J							
Vanadium	260	720		2.6				50 U		1.9							
Zinc	2000	2000		11000				20 U		7.9							

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-53 4/23/2008	MW-53 9/11/2008	MW-53 9/11/2008	MW-54 7/29/1993	MW-54 9/29/1999	MW-54 4/10/2000	MW-54 6/9/2004	MW-54 6/21/2005	MW-54 6/23/2006	MW-54 6/27/2007	MW-54 6/27/2007	MW-54 5/27/2008	MW-54 5/27/2008
METAL																	
Antimony	6	6	6	15		0.4 B		150 U	5 U							10 U	
Arsenic	10	10	10	0.045		0.44 B		60 U	5 U							10 U	
Barium	2000	2000	2000	7300		95.9										41.1 B	
Beryllium	4	4	4	73		1 U		8 U	1 U							0.34 B J	
Cadmium	5	5	5	18		1 U		10 U	1 U							5 U	
Cadmium	5	5	5			1 U		10 U	1 U							5 U	
Calcium									77100	98000							
Chromium	100	100	100			9.9 J		20 U	5 U		2.8 U	1.6 U	5 U			2.8 B	
Copper	1000	1000	1300	1500		1.2 B		20 U	5 U							1.1 B	
Hexavalent Chromium	100	100		0.043		0 U			10 U		10 U	10 U	10 U	10 U		50 U	
Iron			300	26000					350	1400							
Lead	5	5	15			0.38 B		100 U	5 U		2.2 U	2.7 U	1.7 B			3 U	
Magnesium									15900	19000							
Manganese	300	300	50						34	97							
Manganese	300	300	50	880					34	97							
Mercury	2	2	2	0.57		0.2 U		0.5 U	0 U							0.2 U	
Nickel	100	100		730		3.3		40 U	5 U		3.9 U	2.4 U	1.9 B			2.5 B	
Potassium									2300	4300							
Selenium	50	50	50	180		0.46 B		5 U	5 U							5 U	
Silver	100	100		180		1 U		40 U	5 U							0.62 B	
Sodium									11900	12000							
Thallium	2	2	2			0.067 B		200 U	2 U							10 U	
Vanadium	260	720		2.6		1.2 J										2.1 B	
Zinc	2000	2000		11000		5.0 U		50 U	26		15.1 B	13.3 B	11.9 JB			4.3 B J	
METAL (Dissolved)																	
Antimony	6	6	6	15	10 U		0.37 B										10 U
Arsenic	10	10	10	0.045	10 U		0.15 B										10 U
Barium	2000	2000	2000	7300	141 B		97.8										39.9 B
Beryllium	4	4	4	73	4 U		1 U										4 U
Cadmium	5	5	5		5 U		1 U										5 U
Cadmium	5	5	5	18	5 U		1 U										5 U
Calcium																	
Chromium	100	100	100		5 U		7 J								5 U		1.6 B
Copper	1000	1000	1300	1500	25 U		0.98 B										25 U
Hexavalent Chromium	100	100		0.043	50 U		0 U										50 U
Iron			300	26000													
Lead	5	5	15		3 U		1.0 U								3 U		3 U
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57	0.2 U		0.2 U										0.2 U
Nickel	100	100		730	6.1 B		2.6								40 U		1.9 B
Potassium																	
Selenium	50	50	50	180	5 U		0.57 B										5 U
Silver	100	100		180	5 U		1 U										5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-53 4/23/2008	MW-53 9/11/2008	MW-53 9/11/2008	MW-54 7/29/1993	MW-54 9/29/1999	MW-54 4/10/2000	MW-54 6/9/2004	MW-54 6/21/2005	MW-54 6/23/2006	MW-54 6/27/2007	MW-54 6/27/2007	MW-54 5/27/2008	MW-54 5/27/2008
Sodium																	
Thallium	2	2	2		4.4 B		1.0 U										3.2 B
Vanadium	260	720		2.6	50 U		1.7										1.4 B
Zinc	2000	2000		11000	7.8 B		7 J								6.8 B J		5.4 B J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-54 10/8/2008	MW-54 10/8/2008	MW-55 7/29/1993	MW-55 10/27/1995	MW-55 5/23/2008	MW-55 5/23/2008	MW-55 10/8/2008	MW-55 10/8/2008	MW-55 6/30/2009	MW-55 6/30/2009	MW-55 7/9/2010	MW-55 7/9/2010	MW-56 10/27/1995
METAL																	
Antimony	6	6	6	15	0.094 B		150 U		10 U		0.25 B						
Arsenic	10	10	10	0.045	1 U		60 U		10 U		1.5						
Barium	2000	2000	2000	7300	41.2				93.4 B J		74.4						
Beryllium	4	4	4	73	1 U		8 U		0.92 B J		0.24 B						
Cadmium	5	5	5	18	1 U		10 U		0.44 B		1 U						
Cadmium	5	5	5		1 U		10 U		0.44 B		1 U						
Calcium																	110000
Chromium	100	100	100		11.9 J		20 U		13.6		18.8 J						
Copper	1000	1000	1300	1500	2.3		20 U	10 U	13.7 B		7.8						
Hexavalent Chromium	100	100		0.043	0 U				310						10 U		
Iron			300	26000				260									70 U
Lead	5	5	15		1 U		100 U		12.1		6.4		5.8 J		16.4		
Magnesium								19000									5100
Manganese	300	300	50					13									6 U
Manganese	300	300	50	880				13									6 U
Mercury	2	2	2	0.57	0.2 U		0.5 U		0.2 U		0.2 U						
Nickel	100	100		730	2.8 J		40 U		17 B		11.5 J						
Potassium								2000									3400
Selenium	50	50	50	180	5.0 U		5 U		5 U		5.0 U						
Silver	100	100		180	1 U		40 U		1.7 B		1 U						
Sodium								5700									24000
Thallium	2	2	2		1 U		200 U		10 U		0.071 B						
Vanadium	260	720		2.6	6.4 J				10.6 B		10.6 J						
Zinc	2000	2000		11000	5.5		50 U		95.8 J		35.7						
METAL (Dissolved)																	
Antimony	6	6	6	15		0.12 B				10 U		0.13 B					
Arsenic	10	10	10	0.045		1 U				10 U		0.2 B					
Barium	2000	2000	2000	7300		41				56.4 B		46.7					
Beryllium	4	4	4	73		1 U				0.7 B J		1 U					
Cadmium	5	5	5			1 U				5 U		1 U					
Cadmium	5	5	5	18		1 U				5 U		1 U					
Calcium																103000	
Chromium	100	100	100			15.1 J				5 U		12.5 J					
Copper	1000	1000	1300	1500		0.99 B				25 U		1.4 B					
Hexavalent Chromium	100	100		0.043		0 U				50 U						10 U	
Iron			300	26000												769 J	
Lead	5	5	15			1 U				3 U		1 U		0.037 B J		3 U	
Magnesium																18800	
Manganese	300	300	50	880												16.4	
Manganese	300	300	50													16.4	
Mercury	2	2	2	0.57		0.2 U				0.2 U		0.2 U					
Nickel	100	100		730		2.8				40 U		3.4					
Potassium																1220 B	
Selenium	50	50	50	180		2.2 B				5 U		1.2 B					
Silver	100	100		180		1 U				5 U		1 U					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-54 10/8/2008	MW-54 10/8/2008	MW-55 7/29/1993	MW-55 10/27/1995	MW-55 5/23/2008	MW-55 5/23/2008	MW-55 10/8/2008	MW-55 10/8/2008	MW-55 6/30/2009	MW-55 6/30/2009	MW-55 7/9/2010	MW-55 7/9/2010	MW-56 10/27/1995
Sodium																3820 B	
Thallium	2	2	2			0.02 B				10 U		1 U					
Vanadium	260	720		2.6		3.6 J				1.5 B		5 J					
Zinc	2000	2000		11000		5.0 U				6.5 B J		5.0 U					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-56 9/30/1999	MW-56 3/30/2000	MW-56 5/7/2008	MW-56 5/7/2008	MW-57 11/19/1993	MW-57 7/13/1995	MW-57 10/27/1995	MW-57 9/29/1999	MW-57 4/3/2000	MW-57 5/22/2008	MW-57 5/22/2008	MW-57 9/30/2008	MW-57 9/30/2008
METAL																	
Antimony	6	6	6	15	5 U		10 U					5 U		10 U		0.054 B	
Arsenic	10	10	10	0.045	5 U		10 U					5 U		10 U		0.29 B	
Barium	2000	2000	2000	7300			108 B J							200 U		43.4	
Beryllium	4	4	4	73	1 U		4 U					1 U		4 U		1 U	
Cadmium	5	5	5	18	1 U		5 U		40			1 U		5 U		1 U	
Cadmium	5	5	5		1 U		5 U		40			1 U		5 U		1 U	
Calcium					96600	110000					51000	54800	58000				
Chromium	100	100	100		5 U		6.6			76		24		53.2		69.1 J	
Copper	1000	1000	1300	1500	5 U		0.96 B		30	950		5 U		1.1 B		0.61 B	
Hexavalent Chromium	100	100		0.043	1000000 U		50 U			60		30		82 J		94	
Iron			300	26000	62	170					70 U	50 U	50 U				
Lead	5	5	15		5 U		3 U			110		5 U		3 U		0.68 B	
Magnesium					5100	6100					23000	24100	26000				
Manganese	300	300	50		250	280					6 U	20 U	20 U				
Manganese	300	300	50	880	250	280					6 U	20 U	20 U				
Mercury	2	2	2	0.57	0 U		0.2 U					0 U		0.2 U		0.2 U	
Nickel	100	100		730	5 U		9.5 B					5 U		40 U		2.4	
Potassium					2800	8000					1500	1400	2900				
Selenium	50	50	50	180	5 U		5 U					5 U		5 U		5 U	
Silver	100	100		180	5 U		5 U					5 U		5 U		1 U	
Sodium					28100	31000					6900	9600	8900				
Thallium	2	2	2		2 U		10 U					2 U		10 U		1 U	
Vanadium	260	720		2.6			50 U							1.1 B		3.7 J	
Zinc	2000	2000		11000	20 U		15.9 B J			500		20 U		20 U		3.3 B	
METAL (Dissolved)																	
Antimony	6	6	6	15				10 U							10 U		0.054 B
Arsenic	10	10	10	0.045				10 U							10 U		1 U
Barium	2000	2000	2000	7300				107 B J							44.9 B		42.2
Beryllium	4	4	4	73				4 U							4 U		1 U
Cadmium	5	5	5					5 U							5 U		1 U
Cadmium	5	5	5	18				5 U							5 U		1 U
Calcium																	
Chromium	100	100	100					1.4 B							49.4		71.9 J
Copper	1000	1000	1300	1500				25 U							25 U		0.31 B
Hexavalent Chromium	100	100		0.043				50 U							50 U		71
Iron			300	26000													
Lead	5	5	15					3 U							3 U		0.082 B
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57				0.2 U							0.2 U		0.2 U
Nickel	100	100		730				3.2 B							40 U		1.8
Potassium																	
Selenium	50	50	50	180				5 U							5 U		5 U
Silver	100	100		180				5 U							5 U		1 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-56 9/30/1999	MW-56 3/30/2000	MW-56 5/7/2008	MW-56 5/7/2008	MW-57 11/19/1993	MW-57 7/13/1995	MW-57 10/27/1995	MW-57 9/29/1999	MW-57 4/3/2000	MW-57 5/22/2008	MW-57 5/22/2008	MW-57 9/30/2008	MW-57 9/30/2008
Sodium																	
Thallium	2	2	2					10 U							10 U		1 U
Vanadium	260	720		2.6				50 U							50 U		4.1 J
Zinc	2000	2000		11000				20 U							20 U		2.7 B

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-58 11/24/1993	MW-59 5/26/1995
METAL						
Antimony	6	6	6	15		
Arsenic	10	10	10	0.045		6
Barium	2000	2000	2000	7300		
Beryllium	4	4	4	73		4
Cadmium	5	5	5	18	20	1
Cadmium	5	5	5		20	1
Calcium						
Chromium	100	100	100			6
Copper	1000	1000	1300	1500	40	10
Hexavalent Chromium	100	100		0.043		20
Iron			300	26000		
Lead	5	5	15			6
Magnesium						
Manganese	300	300	50			
Manganese	300	300	50	880		
Mercury	2	2	2	0.57		5
Nickel	100	100		730		40
Potassium						
Selenium	50	50	50	180		
Silver	100	100		180		
Sodium						
Thallium	2	2	2			
Vanadium	260	720		2.6		
Zinc	2000	2000		11000		30
METAL (Dissolved)						
Antimony	6	6	6	15		
Arsenic	10	10	10	0.045		
Barium	2000	2000	2000	7300		
Beryllium	4	4	4	73		
Cadmium	5	5	5			
Cadmium	5	5	5	18		
Calcium						
Chromium	100	100	100			
Copper	1000	1000	1300	1500		
Hexavalent Chromium	100	100		0.043		
Iron			300	26000		
Lead	5	5	15			
Magnesium						
Manganese	300	300	50	880		
Manganese	300	300	50			
Mercury	2	2	2	0.57		
Nickel	100	100		730		
Potassium						
Selenium	50	50	50	180		
Silver	100	100		180		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-58 11/24/1993	MW-59 5/26/1995
Sodium						
Thallium	2	2	2			
Vanadium	260	720		2.6		
Zinc	2000	2000		11000		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-59 9/21/1999	MW-59 4/4/2000	MW-60 5/26/1995	MW-60 9/29/1999	MW-60 4/4/2000	MW-61D 10/18/1995	MW-61D 12/29/1995	MW-61D 9/27/1999	MW-61D 3/23/2000	MW-61S 10/20/1995	MW-61S 12/29/1995	MW-61S 9/27/1999	MW-61S 3/22/2000
METAL																	
Antimony	6	6	6	15	5 U			5 U		10 U		5 U		10 U		5 U	
Arsenic	10	10	10	0.045	5 U		6	5 U		6 U		5 U		6 U		5 U	
Barium	2000	2000	2000	7300													
Beryllium	4	4	4	73	1 U		4	1 U		4 U		1 U		4 U		1 U	
Cadmium	5	5	5	18	1 U		1	4 C		1 U		1 U		1 U		1 U	
Cadmium	5	5	5		1 U		1	4 C		1 U		1 U		1 U		1 U	
Calcium					58400	130000		154000	170000	61000	52000	56200	66000	97000	93000	108000	120000
Chromium	100	100	100		15		6	5 U		6 U		5 U		9		5 U	
Copper	1000	1000	1300	1500	10		10	12		10 U		5 U		10 U		5 U	
Hexavalent Chromium	100	100		0.043	10 U		20	10 U				10 U				10 U	
Iron			300	26000	1500	600		4800	160	330	70 U	56	50 U	480	70 U	160	160
Lead	5	5	15		5 U		6	8 C		6 U		5 U		6 U		5 U	
Magnesium					28400	30000		17600	27000	21000	24000	27500	34000	20000	16000	16400	18000
Manganese	300	300	50	880	420	300		1400	2000	53	6 U	20 U	20 U	28	6 U	20 U	20 U
Manganese	300	300	50		420	300		1400	2000	53	6 U	20 U	20 U	28	6 U	20 U	20 U
Mercury	2	2	2	0.57	0 U		5	0 U		0.5 U		0 U		0.5 U		0 U	
Nickel	100	100		730	27		40	24		40 U		5 U		40 U		5 U	
Potassium					5400	4900		10300	9100	1500	1100	1100	1400	14000	3300	3300	5100
Selenium	50	50	50	180	5 U			5 U		10 U		5 U		10 U		5 U	
Silver	100	100		180	5 U			5 U		2 U		5 U		2 U		5 U	
Sodium					41800	35000		54400	66000	59000	16000	14500	12000	22000	7700	5800	21000
Thallium	2	2	2		2 U			2 U		10 U		2 U		10 U		2 U	
Vanadium	260	720		2.6													
Zinc	2000	2000		11000	130		30	130		40		53		30		70	
METAL (Dissolved)																	
Antimony	6	6	6	15													
Arsenic	10	10	10	0.045													
Barium	2000	2000	2000	7300													
Beryllium	4	4	4	73													
Cadmium	5	5	5	18													
Cadmium	5	5	5														
Calcium																	
Chromium	100	100	100														
Copper	1000	1000	1300	1500													
Hexavalent Chromium	100	100		0.043													
Iron			300	26000													
Lead	5	5	15														
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57													
Nickel	100	100		730													
Potassium																	
Selenium	50	50	50	180													
Silver	100	100		180													

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-59 9/21/1999	MW-59 4/4/2000	MW-60 5/26/1995	MW-60 9/29/1999	MW-60 4/4/2000	MW-61D 10/18/1995	MW-61D 12/29/1995	MW-61D 9/27/1999	MW-61D 3/23/2000	MW-61S 10/20/1995	MW-61S 12/29/1995	MW-61S 9/27/1999	MW-61S 3/22/2000
Sodium																	
Thallium	2	2	2														
Vanadium	260	720		2.6													
Zinc	2000	2000		11000													

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-62D 10/18/1995	MW-62D 12/29/1995	MW-62S 10/20/1995	MW-62S 12/29/1995	MW-63D 10/19/1995	MW-63D 12/29/1995	MW-63S 10/19/1995	MW-63S 12/28/1995	MW-64D 10/18/1995	MW-64D 12/28/1995	MW-64D 9/17/1999	MW-64D 4/6/2000
METAL																
Antimony	6	6	6	15	10 U		10 U		10 U		10 U		10 U		5 U	
Arsenic	10	10	10	0.045	6 U		6 U		6 U		6 U		6 U		5 U	
Barium	2000	2000	2000	7300												
Beryllium	4	4	4	73	4 U		4 U		4 U		4 U		4 U		1 U	
Cadmium	5	5	5	18	1 U		2		1 U		1 U		1 U		1 U	
Cadmium	5	5	5		1 U		2		1 U		1 U		1 U		1 U	
Calcium					55000	50000	42000	41000	55000	50000	62000	62000	53000	49000	57400	61000
Chromium	100	100	100		6 U		6 U		6 U		6 U		6 U		9	
Copper	1000	1000	1300	1500	10 U		10 U		10 U		10 U		10 U		5 U	
Hexavalent Chromium	100	100		0.043											10 U	
Iron			300	26000	430	70 U	2400	190	130	70 U	12000	90	3300	70 U	94	130
Lead	5	5	15		6 U		6 U		6 U		6 U		6 U		5 U	
Magnesium					19000	17000	7600	8200	18000	17000	12000	11000	4100	3400	3900	3900
Manganese	300	300	50	880	86	6 U	230	310	31	6 U	440	6 U	120	6	20 U	20 U
Manganese	300	300	50		86	6 U	230	310	31	6 U	440	6 U	120	6	20 U	20 U
Mercury	2	2	2	0.57	0.5 U		0.5 U		0.5 U		0.5 U		0.5 U		0 U	
Nickel	100	100		730	40 U		40 U		40 U		40 U		40 U		8	
Potassium					1400	1600	3000	1900	1700	1600	5000	2000	4000	2600	2800	2800
Selenium	50	50	50	180	10 U		10 U		10 U		10 U		10 U		5 U	
Silver	100	100		180	2 U		2 U		2 U		2 U		2 U		5 U	
Sodium					21000	17000	190000	91000	13000	3700	5300	4000	3900	3800	3300	3200
Thallium	2	2	2		10 U		10 U		10 U		10 U		10 U		2 U	
Vanadium	260	720		2.6												
Zinc	2000	2000		11000	20 U		200		20 U		20 U		30		59	
METAL (Dissolved)																
Antimony	6	6	6	15												
Arsenic	10	10	10	0.045												
Barium	2000	2000	2000	7300												
Beryllium	4	4	4	73												
Cadmium	5	5	5	18												
Cadmium	5	5	5													
Calcium																
Chromium	100	100	100													
Copper	1000	1000	1300	1500												
Hexavalent Chromium	100	100		0.043												
Iron			300	26000												
Lead	5	5	15													
Magnesium																
Manganese	300	300	50	880												
Manganese	300	300	50													
Mercury	2	2	2	0.57												
Nickel	100	100		730												
Potassium																
Selenium	50	50	50	180												
Silver	100	100		180												

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-62D 10/18/1995	MW-62D 12/29/1995	MW-62S 10/20/1995	MW-62S 12/29/1995	MW-63D 10/19/1995	MW-63D 12/29/1995	MW-63S 10/19/1995	MW-63S 12/28/1995	MW-64D 10/18/1995	MW-64D 12/28/1995	MW-64D 9/17/1999	MW-64D 4/6/2000
Sodium																
Thallium	2	2	2													
Vanadium	260	720		2.6												
Zinc	2000	2000		11000												

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-64D 5/19/2008	MW-64D 5/19/2008	MW-64D 9/29/2008	MW-64D 9/29/2008	MW-64D 6/28/2010	MW-64S 12/29/1995	MW-64S 5/14/2008	MW-64S 5/14/2008	MW-64S 9/25/2008	MW-64S 9/25/2008	MW-64S 6/30/2009	MW-64S 6/30/2009	MW-64S 7/1/2010
METAL																	
Antimony	6	6	6	15	10 U		2 U				10 U		0.58 B				
Arsenic	10	10	10	0.045	10 U		0.25 B				12.4		11		0.45 B		
Barium	2000	2000	2000	7300	34 B		29.4				799		914 J				
Beryllium	4	4	4	73	4 U		1 U				3.2 B		3.3				
Cadmium	5	5	5	18	5 U		1 U				1.6 B		1.8				
Cadmium	5	5	5		5 U		1 U				1.6 B		1.8				
Calcium										31000							
Chromium	100	100	100		4.6 B		9.6 J				55.4		77.9 J				
Copper	1000	1000	1300	1500	25 U		0.54 B				32.4		42.6				
Hexavalent Chromium	100	100		0.043	50 U						50 U						
Iron			300	26000						70 U							
Lead	5	5	15		3 U		0.78 B				55.4		73.4		0.92 B J		
Magnesium										2700							
Manganese	300	300	50	880						480							
Manganese	300	300	50							480							
Mercury	2	2	2	0.57	0.2 U		0.2 U				0.12 B		0.15 B				
Nickel	100	100		730	4.4 B		1.4				46.2		50.7				
Potassium										2400							
Selenium	50	50	50	180	5 U		0.71 B				5 U		4.4 B				
Silver	100	100		180	5 U		1 U				5 U		0.24 B				
Sodium										42000							
Thallium	2	2	2		10 U		0.037 B				10 U		0.77 B				
Vanadium	260	720		2.6	50 U		4.2 J				27.7 B		36.7 J				
Zinc	2000	2000		11000	5.6 B J		1.9 B				200		206				
METAL (Dissolved)																	
Antimony	6	6	6	15		10 U		2 U				10 U		0.094 B J			
Arsenic	10	10	10	0.045		10 U		1 U				10 U		1 U		1 U	
Barium	2000	2000	2000	7300		33.8 B		30.3				34.4 B		18.1			
Beryllium	4	4	4	73		4 U		1 U				4 U		0.12 B			
Cadmium	5	5	5	18		5 U		1 U				5 U		1 U			
Cadmium	5	5	5			5 U		1 U				5 U		1 U			
Calcium									66000								2980 B
Chromium	100	100	100			5 U		11.4 J				5 U		14.5 J			
Copper	1000	1000	1300	1500		25 U		0.45 B				25 U		0.96 B			
Hexavalent Chromium	100	100		0.043		50 U						50 U					
Iron			300	26000					100 U								100 U
Lead	5	5	15			3 U		0.12 B				3 U		0.089 B		0.05 B J	
Magnesium									4470 B								1030 B
Manganese	300	300	50	880					0.79 B								19.3
Manganese	300	300	50						0.79 B								19.3
Mercury	2	2	2	0.57		0.2 U		0.2 U				0.2 U		0.2 U			
Nickel	100	100		730		2.2 B		1.9				1.5 B		3			
Potassium									2750 B								1970 B
Selenium	50	50	50	180		5 U		5 U				5 U		5 U			
Silver	100	100		180		5 U		1 U				5 U		1 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-64D 5/19/2008	MW-64D 5/19/2008	MW-64D 9/29/2008	MW-64D 9/29/2008	MW-64D 6/28/2010	MW-64S 12/29/1995	MW-64S 5/14/2008	MW-64S 5/14/2008	MW-64S 9/25/2008	MW-64S 9/25/2008	MW-64S 6/30/2009	MW-64S 6/30/2009	MW-64S 7/1/2010
Sodium									3190 B								6900
Thallium	2	2	2			10 U		0.04 B J				10 U		0.026 B			
Vanadium	260	720		2.6		50 U		2.4 J				50 U		1.3 J			
Zinc	2000	2000		11000		6.9 B		2.8 B				13.9 B J		12.3			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-65D 9/7/1999	MW-65D 3/27/2000	MW-65D 4/25/2008	MW-65D 4/25/2008	MW-65D Dup 4/25/2008	MW-65D Dup 4/25/2008	MW-65D 9/10/2008	MW-65D 9/10/2008	MW-65D 6/22/2009	MW-65D 6/22/2009	MW-65S 9/1/1999	MW-65S 4/4/2000	MW-65S 5/8/2008
METAL																	
Antimony	6	6	6	15	5 U		10 U		10 U		0.17 B				5 U		10 U
Arsenic	10	10	10	0.045	5 U		10 U		10 U		0.6 B				5 U		10 U
Barium	2000	2000	2000	7300			38.8 B		31.5 B		33.5						24.2 B
Beryllium	4	4	4	73	1		4 U		4 U		0.18 B				1		4 U
Cadmium	5	5	5	18	2		5 U		5 U		1 U				1		5 U
Cadmium	5	5	5		2		5 U		5 U		1 U				1		5 U
Calcium					11700	12000									7700	10000	
Chromium	100	100	100		6		37.4		40.9		237 J		17.3		5 U		11.5
Copper	1000	1000	1300	1500	5 U		5.4 B		7.6 B		10.3				5 U		25 U
Hexavalent Chromium	100	100		0.043	10 U		50 U		50 U				50 U				50 U
Iron			300	26000	260	170									1400	1600	
Lead	5	5	15		5 U		2.8 B		3 U		2.2				5 U		3 U
Magnesium					7500	7500									4000	4200	
Manganese	300	300	50	880	100	38									100	280	
Manganese	300	300	50		100	38									100	280	
Mercury	2	2	2	0.57	0 U		0.2 U		0.2 U		0.2 U				0 U		0.2 U
Nickel	100	100		730	8		41.7		69.7		171		10.2		6		10.9 B
Potassium					3100	3300									3100	3100	
Selenium	50	50	50	180	5 U		5 U		5 U		5 U				5 U		5 U
Silver	100	100		180	5 U		5 U		5 U		1 U				5 U		5 U
Sodium					13300	11000									13900	13000	
Thallium	2	2	2		2 U		10 U		10 U		0.094 B				2 U		4 B
Vanadium	260	720		2.6			5.3 B		2.2 B		2.1 J						50 U
Zinc	2000	2000		11000	28		30.1		22.1		21.2 J				20 U		18.4 B J
METAL (Dissolved)																	
Antimony	6	6	6	15				10 U		10 U		0.14 B					
Arsenic	10	10	10	0.045				10 U		10 U		1 U					
Barium	2000	2000	2000	7300				17.1 B		17.2 B		15.9					
Beryllium	4	4	4	73				4 U		4 U		1 U					
Cadmium	5	5	5	18				5 U		5 U		1 U					
Cadmium	5	5	5					5 U		5 U		1 U					
Calcium																	
Chromium	100	100	100					2.2 B		5.2		9.8 J		6.2 J			
Copper	1000	1000	1300	1500				3.6 B		4.2 B		2.4					
Hexavalent Chromium	100	100		0.043				50 U		50 U				50 U			
Iron			300	26000													
Lead	5	5	15					3 U		3 U		1.0 U					
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57				0.2 U		0.2 U		0.2 U					
Nickel	100	100		730				77.4		214		26.3		7.1			
Potassium																	
Selenium	50	50	50	180				5 U		5 U		0.5 B					
Silver	100	100		180				5 U		5 U		1 U					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-65D 9/7/1999	MW-65D 3/27/2000	MW-65D 4/25/2008	MW-65D 4/25/2008	MW-65D Dup 4/25/2008	MW-65D Dup 4/25/2008	MW-65D 9/10/2008	MW-65D 9/10/2008	MW-65D 6/22/2009	MW-65D 6/22/2009	MW-65S 9/1/1999	MW-65S 4/4/2000	MW-65S 5/8/2008
Sodium																	
Thallium	2	2	2					10 U		10 U		1.0 U					
Vanadium	260	720		2.6				50 U		50 U		2.1					
Zinc	2000	2000		11000				29.7 J		54.2 J		16.5 J					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-65S 5/8/2008	MW-66D 9/9/1999	MW-66D 3/28/2000	MW-66D 4/30/2008	MW-66D 4/30/2008	MW-66S 9/1/1999	MW-66S 3/28/2000	MW-66S 4/30/2008	MW-66S 4/30/2008	MW-66S 9/10/2008	MW-66S 9/10/2008	MW-66S 7/7/2009	MW-66S 7/7/2009	MW-67D 9/7/1999
METAL																		
Antimony	6	6	6	15		5 U		10 U		5 U		10 U		0.71 B				5 U
Arsenic	10	10	10	0.045		5 U		10 U		5 U		10 U		30.8		1 U		5 U
Barium	2000	2000	2000	7300				4.2 B J				11 B J		388				
Beryllium	4	4	4	73		1 U		4 U		1		4 U		3.3				1 U
Cadmium	5	5	5	18		1 U		5 U		1		5 U		0.38 B				1 U
Cadmium	5	5	5			1 U		5 U		1		5 U		0.38 B				1 U
Calcium						13000	19000			12200	23000							21000
Chromium	100	100	100			5 U		5 U		5 U		3.3 B		167 J		11.9		5 U
Copper	1000	1000	1300	1500		5 U		0.9 B		5 U		8.3 B		53.1				5 U
Hexavalent Chromium	100	100		0.043		10 U		50 U		10 U		53		0 U		50 UJ		10 U
Iron			300	26000		1100	310			86	5900							54
Lead	5	5	15			5 U		3 U		5 U		3 U		72		0.82 B		5 U
Magnesium						6600	7600			6600	8000							5900
Manganese	300	300	50	880		360	170			29	570							110
Manganese	300	300	50			360	170			29	570							110
Mercury	2	2	2	0.57		0 U		0.2 U		0 U		0.2 U		0.23				0 U
Nickel	100	100		730		5 U		2.3 B		5 U		6 B		79.1				5 U
Potassium						2500	2700			2400	2900							2800
Selenium	50	50	50	180		5 U		5 U		5 U		5 U		2.8 B				5 U
Silver	100	100		180		5 U		5 U		5 U		5 U		0.099 B				5 U
Sodium						6800	7500			7100	8500							8100
Thallium	2	2	2			2 U		10 U		2 U		3.4 B J		0.57 B				2 U
Vanadium	260	720		2.6				50 U				50 U		78.2 J				
Zinc	2000	2000		11000		92		5.5 B J		20 U		8.7 B J		124 J				25
METAL (Dissolved)																		
Antimony	6	6	6	15	10 U				10 U				10 U		0.099 B			
Arsenic	10	10	10	0.045	10 U				10 U				10 U		0.44 B		1 U	
Barium	2000	2000	2000	7300	20.1 B				2.5 B J				6.6 B J		6.9 B			
Beryllium	4	4	4	73	0.46 B J				4 U				4 U		1 U			
Cadmium	5	5	5	18	5 U				5 U				5 U		1 U			
Cadmium	5	5	5		5 U				5 U				5 U		1 U			
Calcium																		
Chromium	100	100	100		4.6 B				5 U				5 U		7.5 J		6.2	
Copper	1000	1000	1300	1500	25 U				25 U				2.2 B		1 B			
Hexavalent Chromium	100	100		0.043	50 U				50 U				50 U		0 U		50 U	
Iron			300	26000														
Lead	5	5	15		3 U				3 U				3 U		0.45 B J		0.17 B J	
Magnesium																		
Manganese	300	300	50	880														
Manganese	300	300	50															
Mercury	2	2	2	0.57	0.2 U				0.2 U				0.2 U		0.075 B			
Nickel	100	100		730	8.5 B				1.2 B				2.9 B		2.8			
Potassium																		
Selenium	50	50	50	180	5 U				5 U				5 U		0.23 B			
Silver	100	100		180	5 U				5 U				5 U		1 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-65S 5/8/2008	MW-66D 9/9/1999	MW-66D 3/28/2000	MW-66D 4/30/2008	MW-66D 4/30/2008	MW-66S 9/1/1999	MW-66S 3/28/2000	MW-66S 4/30/2008	MW-66S 4/30/2008	MW-66S 9/10/2008	MW-66S 9/10/2008	MW-66S 7/7/2009	MW-66S 7/7/2009	MW-67D 9/7/1999
Sodium																		
Thallium	2	2	2		6.8 B				10 U				10 U		1.0 U			
Vanadium	260	720		2.6	50 U				50 U				50 U		2.1			
Zinc	2000	2000		11000	19.5 B J				2.7 B J				4.3 B J		6.2 J			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-67D 3/29/2000	MW-67D 5/6/2008	MW-67D 5/6/2008	MW-67S 9/1/1999	MW-67S 3/31/2000	MW-67S 5/6/2008	MW-67S 5/6/2008	MW-68 9/9/1999	MW-68 3/28/2000	MW-68 5/12/2008	MW-68 5/12/2008	MW-69 9/9/1999	MW-69 4/4/2000	MW-69 5/5/2008
METAL																		
Antimony	6	6	6	15		10 U		5 U		10 U		5 U		10 U		6		10 U
Arsenic	10	10	10	0.045		10 U		5 U		2.4 B		5 U		10 U		5 U		10 U
Barium	2000	2000	2000	7300		23 B				44.3 B				75.1 B				86.4 B
Beryllium	4	4	4	73		4 U		2		4 U		1 U		4 U		1 U		4 U
Cadmium	5	5	5	18		5 U		1 U		5 U		2		5 U		1 U		5 U
Cadmium	5	5	5			5 U		1 U		5 U		2		5 U		1 U		5 U
Calcium					17000			25800	34000			14600	14000			26600	20000	
Chromium	100	100	100			1.3 B		5 U		6.5		5 U		5 U		5 U		1.4 B
Copper	1000	1000	1300	1500		25 U		6		4.2 B		5 U		25 U		5 U		25 U
Hexavalent Chromium	100	100		0.043		50 U		10 U		50 U		10 U		50 U		10 U		50 U
Iron			300	26000	50 U			1100	58			26700	32000			7300	3000	
Lead	5	5	15			3 U		18		3 U		5 U		3 U		5 U		3 U
Magnesium					5000			8700	9800			4600	5000			17700	14000	
Manganese	300	300	50	880	30			760	24			1400	770			110	48	
Manganese	300	300	50		30			760	24			1400	770			110	48	
Mercury	2	2	2	0.57		0.2 U		0 U		0.2 U		0 U		0.2 U		0 U		0.2 U
Nickel	100	100		730		40 U		5 U		3.8 B J		5 U		2.1 B		5 U		1.5 B J
Potassium					2500			3000	2500			3300	3200			4200	3200	
Selenium	50	50	50	180		5 U		5 U		2.5 B		5 U		5 U		5 U		5 U
Silver	100	100		180		5 U		5 U		5 U		5 U		5 U		5 U		5 U
Sodium					6700			6100	3000			6400	6500			4800	2800	
Thallium	2	2	2			10 U		2 U		10.7 J		2 U		10 U		2 U		10 U
Vanadium	260	720		2.6		50 U				2.4 B				50 U				2.3 B
Zinc	2000	2000		11000		1.8 B J		43		9.3 B J		51		1.6 B		84		20 U
METAL (Dissolved)																		
Antimony	6	6	6	15			10 U				10 U				10 U			
Arsenic	10	10	10	0.045			10 U				10 U				10 U			
Barium	2000	2000	2000	7300			23.7 B				35 B				68.8 B			
Beryllium	4	4	4	73			4 U				4 U				4 U			
Cadmium	5	5	5	18			5 U				5 U				5 U			
Cadmium	5	5	5				5 U				5 U				5 U			
Calcium																		
Chromium	100	100	100				5 U				1.4 B				5 U			
Copper	1000	1000	1300	1500			25 U				25 U				25 U			
Hexavalent Chromium	100	100		0.043			50 U				50 U				50 U			
Iron			300	26000														
Lead	5	5	15				3 U				3 U				3 U			
Magnesium																		
Manganese	300	300	50	880														
Manganese	300	300	50															
Mercury	2	2	2	0.57			0.2 U				0.2 U				0.2 U			
Nickel	100	100		730			40 U				2.5 B J				40 U			
Potassium																		
Selenium	50	50	50	180			5 U				5 U				5 U			
Silver	100	100		180			5 U				5 U				5 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-67D 3/29/2000	MW-67D 5/6/2008	MW-67D 5/6/2008	MW-67S 9/1/1999	MW-67S 3/31/2000	MW-67S 5/6/2008	MW-67S 5/6/2008	MW-68 9/9/1999	MW-68 3/28/2000	MW-68 5/12/2008	MW-68 5/12/2008	MW-69 9/9/1999	MW-69 4/4/2000	MW-69 5/5/2008
Sodium																		
Thallium	2	2	2				10 U				10 U				3.1 B			
Vanadium	260	720		2.6			50 U				50 U				50 U			
Zinc	2000	2000		11000			2.5 B J				2.8 B J				2.1 B J			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-69 5/5/2008	MW-69 9/22/2008	MW-69 9/22/2008	MW-70D 9/10/1999	MW-70D 4/3/2000	MW-70D 5/15/2008	MW-70D 5/15/2008	MW-70S 9/10/1999	MW-70S 4/3/2000	MW-70S 5/12/2008	MW-70S 5/12/2008	MW-71D 9/10/1999	MW-71D Dup 9/10/1999
METAL																	
Antimony	6	6	6	15		0.21 B		5 U		10 U		5 U		10 U		5 U	5 U
Arsenic	10	10	10	0.045		1 U		5 U		10 U		5 U		10 U		5 U	5 U
Barium	2000	2000	2000	7300		96.2 J				37.9 B				89.8 B			
Beryllium	4	4	4	73		1 U		1 U		0.33 B		1 U		4 U		1 U	1 U
Cadmium	5	5	5	18		1 U		1 U		5 U		1 U		5 U		1 U	1 U
Cadmium	5	5	5			1 U		1 U		5 U		1 U		5 U		1 U	1 U
Calcium								29200	31000			7200	6400			34600	35800
Chromium	100	100	100			14.9 J		12		8.9		5 U		8.2		5 U	5 U
Copper	1000	1000	1300	1500		1.1 B		5 U		4.8 B		5 U		2 B		5	5
Hexavalent Chromium	100	100		0.043				10 U		50 U		10 U		50 U		10 U	10 U
Iron			300	26000				1600	180			970	78			240	230
Lead	5	5	15			0.13 B		5 U		3.8		5 U		3 U		5 U	5 U
Magnesium								8200	8600			2900	3600			6900	7200
Manganese	300	300	50	880				190	120			190	90			110	120
Manganese	300	300	50					190	120			190	90			110	120
Mercury	2	2	2	0.57		0.2 U		0 U		0.11 B J		0 U		0.2 U		0 U	0 U
Nickel	100	100		730		3		17		25.4 B		5		11.8 B		5 U	5 U
Potassium								1200	1400			2600	2400			2500	2500
Selenium	50	50	50	180		0.22 B		5 U		5 U		5 U		5 U		5 U	5 U
Silver	100	100		180		1 U		5 U		5 U		5 U		5 U		5 U	5 U
Sodium								6100	6000			8700	7600			14800	15100
Thallium	2	2	2			1 U		2 U		10 U		2 U		10 U		2 U	2 U
Vanadium	260	720		2.6		5.5 J				2.1 B				50 U			
Zinc	2000	2000		11000		3 B		31		30.6 J		25		32.9		28	29
METAL (Dissolved)																	
Antimony	6	6	6	15	10 U		0.061 B J				10 U				10 U		
Arsenic	10	10	10	0.045	10 U		1 U				10 U				10 U		
Barium	2000	2000	2000	7300	78.9 B		94.4				25.9 B				77.7 B		
Beryllium	4	4	4	73	4 U		1 U				4 U				4 U		
Cadmium	5	5	5	18	5 U		1 U				5 U				5 U		
Cadmium	5	5	5		5 U		1 U				5 U				5 U		
Calcium																	
Chromium	100	100	100		5 U		16.1 J				5 U				3.2 B		
Copper	1000	1000	1300	1500	25 U		1.2 B				25 U				1.6 B		
Hexavalent Chromium	100	100		0.043	50 U						50 U				50 U		
Iron			300	26000													
Lead	5	5	15		3 U		0.071 B				3 U				3 U		
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57	0.2 U		0.2 U				0.077 B J				0.2 U		
Nickel	100	100		730	40 U		1.3				1.2 B				7.9 B		
Potassium																	
Selenium	50	50	50	180	5 U		5 U				5 U				5 U		
Silver	100	100		180	5 U		1 U				5 U				5 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-69 5/5/2008	MW-69 9/22/2008	MW-69 9/22/2008	MW-70D 9/10/1999	MW-70D 4/3/2000	MW-70D 5/15/2008	MW-70D 5/15/2008	MW-70S 9/10/1999	MW-70S 4/3/2000	MW-70S 5/12/2008	MW-70S 5/12/2008	MW-71D 9/10/1999	MW-71D Dup 9/10/1999
Sodium																	
Thallium	2	2	2		10 U		1 U				10 U				10 U		
Vanadium	260	720		2.6	1.3 B		2.5 J				1 B				2.1 B		
Zinc	2000	2000		11000	20 U		3.3 B				7.3 B J				20.4 J		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-71D 4/5/2000	MW-72 9/13/1999	MW-72 3/28/2000	MW-73 9/13/1999	MW-73 3/24/2000	MW-74D 9/15/1999	MW-74D 4/6/2000	MW-74D 6/5/2003	MW-74D 6/9/2004	MW-74D 6/21/2005	MW-74D 6/23/2006	MW-74D 6/28/2007	MW-74D 6/28/2007	MW-74D 5/9/2008
METAL																		
Antimony	6	6	6	15		5 U		5 U		5 U								10 U
Arsenic	10	10	10	0.045		5 U		5 U		5 U								10 U
Barium	2000	2000	2000	7300														103 B
Beryllium	4	4	4	73		1 U		1 U		1 U								4 U
Cadmium	5	5	5	18		1 U		1 U		1 U								5 U
Cadmium	5	5	5			1 U		1 U		1 U								5 U
Calcium					42000	27100	34000	28900	31000	81300	91000							
Chromium	100	100	100			5 U		5 U		5 U		0 U	2.8 U	1.6 U	1.8 B			2.4 B
Copper	1000	1000	1300	1500		5 U		5 U		5 U								0.84 B
Hexavalent Chromium	100	100		0.043		10 U		10 U		10 U		0 U	10 U	10 U	10 U	10 U		50 U
Iron			300	26000	94	6300	3600	2600	790	550	820							
Lead	5	5	15			5 U		5 U		5 U		0 U	2.2 U	2.7 U	4.8 J			3 U
Magnesium					7600	14600	14000	27000	28000	17500	20000							
Manganese	300	300	50	880	170	190	73	59	26	250	91							
Manganese	300	300	50		170	190	73	59	26	250	91							
Mercury	2	2	2	0.57		0 U		0 U		0 U								0.2 U
Nickel	100	100		730		5 U		5 U		5		0 U	4.7 B	2.4 U	1.4 B			2 B
Potassium					2000	3400	2800	2500	2200	2400	3000							
Selenium	50	50	50	180		5 U		5 U		5 U								5 U
Silver	100	100		180		5 U		5 U		5 U								5 U
Sodium					7600	11600	5800	3300	2500	28500	27000							
Thallium	2	2	2			2 U		2 U		2 U								10 U
Vanadium	260	720		2.6														50 U
Zinc	2000	2000		11000		22		20 U		130		0 U	17.9 B	12.7 B	10.2 JB			4.1 B
METAL (Dissolved)																		
Antimony	6	6	6	15														
Arsenic	10	10	10	0.045														
Barium	2000	2000	2000	7300														
Beryllium	4	4	4	73														
Cadmium	5	5	5	18														
Cadmium	5	5	5															
Calcium																		
Chromium	100	100	100														1.2 B	
Copper	1000	1000	1300	1500														
Hexavalent Chromium	100	100		0.043														
Iron			300	26000														
Lead	5	5	15														3 U	
Magnesium																		
Manganese	300	300	50	880														
Manganese	300	300	50															
Mercury	2	2	2	0.57														
Nickel	100	100		730													40 U	
Potassium																		
Selenium	50	50	50	180														
Silver	100	100		180														

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-71D 4/5/2000	MW-72 9/13/1999	MW-72 3/28/2000	MW-73 9/13/1999	MW-73 3/24/2000	MW-74D 9/15/1999	MW-74D 4/6/2000	MW-74D 6/5/2003	MW-74D 6/9/2004	MW-74D 6/21/2005	MW-74D 6/23/2006	MW-74D 6/28/2007	MW-74D 6/28/2007	MW-74D 5/9/2008
Sodium																		
Thallium	2	2	2															
Vanadium	260	720		2.6														
Zinc	2000	2000		11000													4.3 B J	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-74D 5/9/2008	MW-74D 9/17/2008	MW-74D 9/17/2008	MW-74D 6/22/2010	MW-74D 6/22/2010	MW-74S 9/15/1999	MW-74S 4/3/2000	MW-74S 6/3/2003	MW-74S 6/9/2004	MW-74S 6/14/2005	MW-74S Dup 6/22/2006	MW-74S 6/22/2006	MW-74S 6/28/2007
METAL																	
Antimony	6	6	6	15		0.11 B				5 U							
Arsenic	10	10	10	0.045		1 U				5 U							
Barium	2000	2000	2000	7300		99.2											
Beryllium	4	4	4	73		1 U				3							
Cadmium	5	5	5	18		1 U				1							
Cadmium	5	5	5			1 U				1							
Calcium										125000	84000						
Chromium	100	100	100			9.9 J		2.6 B		5 U		0 U	2.8 U	3 U	2.6 B	3 B	
Copper	1000	1000	1300	1500		1.3 B				13							
Hexavalent Chromium	100	100		0.043		0 U		10 U		10 U		0 U	10 U	10 U	10 U	10 U	10 U
Iron			300	26000						740	440						
Lead	5	5	15			0.65 B				5 U		0 U	2.2 U	2.7 U	3 U	3 U	
Magnesium										15000	9200						
Manganese	300	300	50	880						6600	180						
Manganese	300	300	50							6600	180						
Mercury	2	2	2	0.57		0.2 U				1							
Nickel	100	100		730		2.9				55		0 U	3.9 U	2.4 U	40 U	40 U	
Potassium										3500	2400						
Selenium	50	50	50	180		0.8 B				5 U							
Silver	100	100		180		1 U				5 U							
Sodium										19200	9100						
Thallium	2	2	2			0.062 B				2 U							
Vanadium	260	720		2.6		1.5 J											
Zinc	2000	2000		11000		6.5				89		0 U	9.2 B	14.6 B	14.6 JB	10.3 JB	
METAL (Dissolved)																	
Antimony	6	6	6	15	10 U		0.062 B										
Arsenic	10	10	10	0.045	10 U		1 U										
Barium	2000	2000	2000	7300	100 B		95										
Beryllium	4	4	4	73	4 U		1 U										
Cadmium	5	5	5	18	5 U		1 U										
Cadmium	5	5	5		5 U		1 U										
Calcium									91100								
Chromium	100	100	100		5 U		7.5 J		1.1 B								
Copper	1000	1000	1300	1500	1.1 B		0.44 B										
Hexavalent Chromium	100	100		0.043	50 U		0 U		10 U								
Iron			300	26000					100 U								
Lead	5	5	15		3 U		1 U										
Magnesium									20700								
Manganese	300	300	50	880					7.2 B								
Manganese	300	300	50						7.2 B								
Mercury	2	2	2	0.57	0.093 B J		0.2 U										
Nickel	100	100		730	40 U		1.8										
Potassium									3760 B								
Selenium	50	50	50	180	5 U		5 U										
Silver	100	100		180	5 U		1 U										

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-74D 5/9/2008	MW-74D 9/17/2008	MW-74D 9/17/2008	MW-74D 6/22/2010	MW-74D 6/22/2010	MW-74S 9/15/1999	MW-74S 4/3/2000	MW-74S 6/3/2003	MW-74S 6/9/2004	MW-74S 6/14/2005	MW-74S Dup 6/22/2006	MW-74S 6/22/2006	MW-74S 6/28/2007
Sodium									34700								
Thallium	2	2	2		10 U		0.036 B										
Vanadium	260	720		2.6	50 U		1.3 J										
Zinc	2000	2000		11000	8.9 B J		4.4 B										

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-74S 6/28/2007	MW-74S 4/29/2008	MW-74S 4/29/2008	MW-74S 9/16/2008	MW-74S 9/16/2008	MW-74S 6/22/2010	MW-74S 6/22/2010	MW-75D 9/17/1999	MW-75D 4/7/2000	MW-75D 6/6/2003	MW-75D 4/15/2004	MW-75D 4/15/2004	MW-75D 6/10/2004	MW-75D 6/17/2005
METAL																		
Antimony	6	6	6	15		10 U		0.083 B				5 U			3.9 U			
Arsenic	10	10	10	0.045		10 U		0.29 B				5 U			3.4 U			
Barium	2000	2000	2000	7300		47.9 B		35										
Beryllium	4	4	4	73		4 U		1 U				1 U			0.1 U			
Cadmium	5	5	5	18		5 U		1 U				1 U			0.4 U			
Cadmium	5	5	5			5 U		1 U				1 U			0.4 U			
Calcium												83600	74000					
Chromium	100	100	100			8.6		10.1 J		7.2		15		11	7.1 B		13.2	
Copper	1000	1000	1300	1500		2.8 B		1.3 B				5 U			2.1 U			
Hexavalent Chromium	100	100		0.043		50 U		0 U		10 U		10		0 U	10 U		13.3	10 U
Iron			300	26000								590	50 U					
Lead	5	5	15			3.6		0.99 B				5 U		0 U	2.2 U		2.2 U	
Magnesium												18400	16000					
Manganese	300	300	50	880								110	21					
Manganese	300	300	50									110	21					
Mercury	2	2	2	0.57		0.2 U		0.2 U				0 U			0.1 U			
Nickel	100	100		730		3.6 B		2.9				5 U		0 U	4.1 B		3.9 U	
Potassium												2900	2600					
Selenium	50	50	50	180		5 U		0.53 B				5 U			3.9 U			
Silver	100	100		180		5 U		1 U				5 U			0.7 U			
Sodium												18300	18000					
Thallium	2	2	2			10 U		0.089 B				2 U			1.8 U			
Vanadium	260	720		2.6		6.2 B		1 J										
Zinc	2000	2000		11000		14.4 B		6.8				260		0 U	10.6 B		6.2 B	
METAL (Dissolved)																		
Antimony	6	6	6	15			10 U		0.089 B							3.9 U		
Arsenic	10	10	10	0.045			10 U		0.16 B							3.4 U		
Barium	2000	2000	2000	7300			35.2 B		32.4									
Beryllium	4	4	4	73			4 U		1 U							0.1 U		
Cadmium	5	5	5	18			5 U		1 U							0.4 U		
Cadmium	5	5	5				5 U		1 U							0.4 U		
Calcium											85600							
Chromium	100	100	100		2.1 B		2.2 B		9 J		0.64 B					2.8 U		
Copper	1000	1000	1300	1500			25 U		0.58 B							2.1 U		
Hexavalent Chromium	100	100		0.043			50 U		0 U		10 U					10 U		
Iron			300	26000							100 U							
Lead	5	5	15		3 U		3 U		0.037 B							2.2 U		
Magnesium											10400							
Manganese	300	300	50	880							42.5							
Manganese	300	300	50								42.5							
Mercury	2	2	2	0.57			0.2 U		0.2 U							0.1 U		
Nickel	100	100		730	40 U		40 U		0.81 B							3.9 U		
Potassium											2850 B							
Selenium	50	50	50	180			5 U		0.58 B							3.9 U		
Silver	100	100		180			5 U		1 U							0.7 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-74S 6/28/2007	MW-74S 4/29/2008	MW-74S 4/29/2008	MW-74S 9/16/2008	MW-74S 9/16/2008	MW-74S 6/22/2010	MW-74S 6/22/2010	MW-75D 9/17/1999	MW-75D 4/7/2000	MW-75D 6/6/2003	MW-75D 4/15/2004	MW-75D 4/15/2004	MW-75D 6/10/2004	MW-75D 6/17/2005
Sodium											16800							
Thallium	2	2	2				10 U		0.14 B							1.8 U		
Vanadium	260	720		2.6			50 U		1 J									
Zinc	2000	2000		11000	7.2 B J		1.5 B		4.6 B							8.3 B		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-75D 6/17/2005	MW-75D 6/24/2006	MW-75D 6/29/2007	MW-75D 6/29/2007	MW-75D 5/21/2008	MW-75D 5/21/2008	MW-75D 10/2/2008	MW-75D 10/2/2008	MW-75S 9/17/1999	MW-75S 4/7/2000	MW-75S 6/6/2003	MW-75S 4/15/2004	MW-75S 4/15/2004	MW-75S 6/10/2004
METAL																		
Antimony	6	6	6	15					10 U		0.16 B		5 U			3.9 U		
Arsenic	10	10	10	0.045					10 U		0.24 B J		5 U			3.4 U		
Barium	2000	2000	2000	7300					43.8 B J		46.6							
Beryllium	4	4	4	73					0.4 B J		1 U		1 U			0.11 B		
Cadmium	5	5	5	18					5 U		1 U		1 U			0.57 B		
Cadmium	5	5	5						5 U		1 U		1 U			0.57 B		
Calcium													68800	53000				
Chromium	100	100	100			5 U			10.2		13.7 J		5 U		0 U	7.3 B		2.8 U
Copper	1000	1000	1300	1500					25 U		1.4 B		8			7.5 B		
Hexavalent Chromium	100	100		0.043		10 U	10 U		50 U		0 U		10 U		0 U	10 U		10 U
Iron			300	26000									2800	53				
Lead	5	5	15			2.2 JB			3 U		0.66 B		5 U		0 U	7.1		2.2 U
Magnesium													13500	12000				
Manganese	300	300	50	880									570	20 U				
Manganese	300	300	50										570	20 U				
Mercury	2	2	2	0.57					0.2 U		0.2 U		0 U			0.1 U		
Nickel	100	100		730		40 U			19.8 B		2.1		6		0 U	4.6 B		3.9 U
Potassium													2000	1800				
Selenium	50	50	50	180					5 U		1.2 B		5 U			3.9 U		
Silver	100	100		180					5 U		1 U		5 U			0.7 U		
Sodium													16300	15000				
Thallium	2	2	2						10 U		0.071 B J		2 U			1.8 U		
Vanadium	260	720		2.6					50 U		4.9 J							
Zinc	2000	2000		11000		17.6 JB			19.8 B J		3.9 B		150		0 U	29.2 B		8.7 B
METAL (Dissolved)																		
Antimony	6	6	6	15						10 U		2 U					3.9 U	
Arsenic	10	10	10	0.045						10 U		0.17 B					3.4 U	
Barium	2000	2000	2000	7300						43.7 B		41.4						
Beryllium	4	4	4	73						0.4 B J		1 U					0.1 U	
Cadmium	5	5	5	18						5 U		1 U					0.4 U	
Cadmium	5	5	5							5 U		1 U					0.4 U	
Calcium																		
Chromium	100	100	100		1.6 U			2 B		10.2		15.6 J					2.8 U	
Copper	1000	1000	1300	1500						25 U		0.78 B J					2.1 U	
Hexavalent Chromium	100	100		0.043						50 U		0 U					10 U	
Iron			300	26000														
Lead	5	5	15		2.7 U			3 U		3 U		0.068 B J					2.2 U	
Magnesium																		
Manganese	300	300	50	880														
Manganese	300	300	50															
Mercury	2	2	2	0.57						0.2 U		0.2 U					0.1 U	
Nickel	100	100		730	2.4 U			1.4 B		40 U		1.9					3.9 U	
Potassium																		
Selenium	50	50	50	180						5 U		1.3 B					3.9 U	
Silver	100	100		180						5 U		1 U					0.7 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-75D 6/17/2005	MW-75D 6/24/2006	MW-75D 6/29/2007	MW-75D 6/29/2007	MW-75D 5/21/2008	MW-75D 5/21/2008	MW-75D 10/2/2008	MW-75D 10/2/2008	MW-75S 9/17/1999	MW-75S 4/7/2000	MW-75S 6/6/2003	MW-75S 4/15/2004	MW-75S 4/15/2004	MW-75S 6/10/2004
Sodium																		
Thallium	2	2	2							10 U		0.029 B					1.8 U	
Vanadium	260	720		2.6						50 U		2.3 J						
Zinc	2000	2000		11000	39.4			18.1 B J		1.4 B J		2.3 B					7.2 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-75S 6/17/2005	MW-75S 6/17/2005	MW-75S 6/23/2006	MW-75S 6/29/2007	MW-75S 6/29/2007	MW-75S 5/21/2008	MW-75S 5/21/2008	MW-75S 10/6/2008	MW-75S 10/6/2008	MW-75S 7/6/2010	MW-76 9/14/1999	MW-76 3/28/2000	MW-76 6/2/2003	MW-77 9/10/1999
METAL																		
Antimony	6	6	6	15						10 U		0.056 B			5 U			5 U
Arsenic	10	10	10	0.045						10 U		1 U			5 U			5 U
Barium	2000	2000	2000	7300						21.2 B J		22.7						
Beryllium	4	4	4	73						0.34 B J		1 U			1 U			1 U
Cadmium	5	5	5	18						5 U		1 U			1 U			1 U
Cadmium	5	5	5							5 U		1 U			1 U			1 U
Calcium															108000	120000		194000
Chromium	100	100	100				1.3 B			5 U		5.5 J			5 U		0 U	19
Copper	1000	1000	1300	1500						25 U		1 B			5 U			5 U
Hexavalent Chromium	100	100		0.043	10 U		10 U	10 U		50 U		0 U			10 U		0 U	10 U
Iron			300	26000											220	2000		700
Lead	5	5	15				3.4 J			3 U		0.85 B			5 U		0 U	5 U
Magnesium															13100	13000		36800
Manganese	300	300	50	880											260	200		190
Manganese	300	300	50												260	200		190
Mercury	2	2	2	0.57						0.2 U		0.2 U			0 U			0 U
Nickel	100	100		730			40 U			1.4 B		2.2			5 U		0 U	5 U
Potassium															2700	2300		3600
Selenium	50	50	50	180						5 U		0.41 B			5 U			5 U
Silver	100	100		180						0.6 B		1 U			5 U			5 U
Sodium															21100	14000		7800
Thallium	2	2	2							10 U		1 U			2 U			2 U
Vanadium	260	720		2.6						1.2 B		4.5 J						
Zinc	2000	2000		11000			12.4 JB			6.3 B J		10.1			73		0 U	38
METAL (Dissolved)																		
Antimony	6	6	6	15							10 U		0.063 B					
Arsenic	10	10	10	0.045							10 U		1 U					
Barium	2000	2000	2000	7300							20.7 B		20.6					
Beryllium	4	4	4	73							0.39 B J		1 U					
Cadmium	5	5	5	18							5 U		1 U					
Cadmium	5	5	5								5 U		1 U					
Calcium														57500				
Chromium	100	100	100			1.6 U			5 U		5 U		6.8 J E					
Copper	1000	1000	1300	1500							25 U		0.37 B J					
Hexavalent Chromium	100	100		0.043							50 U		0 U					
Iron			300	26000										20.5 B J				
Lead	5	5	15			2.7 U			3 U		3 U		0.062 B J					
Magnesium														12500				
Manganese	300	300	50	880										28.6				
Manganese	300	300	50											28.6				
Mercury	2	2	2	0.57							0.2 U		0.2 U					
Nickel	100	100		730		2.4 U			1.6 B		1.1 B		1.7					
Potassium														6000				
Selenium	50	50	50	180							5 U		5 U					
Silver	100	100		180							5 U		1 U					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-75S 6/17/2005	MW-75S 6/17/2005	MW-75S 6/23/2006	MW-75S 6/29/2007	MW-75S 6/29/2007	MW-75S 5/21/2008	MW-75S 5/21/2008	MW-75S 10/6/2008	MW-75S 10/6/2008	MW-75S 7/6/2010	MW-76 9/14/1999	MW-76 3/28/2000	MW-76 6/2/2003	MW-77 9/10/1999
Sodium														20700				
Thallium	2	2	2								10 U		1 U					
Vanadium	260	720		2.6							2.1 B		3.6 J					
Zinc	2000	2000		11000		32.6			8.4 B J		6.5 B J		2.5 B					

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-77 3/24/2000	MW-77 4/24/2008	MW-77 4/24/2008	MW-77 10/2/2008	MW-77 10/2/2008	MW-77 7/8/2010	MW-78 9/9/1999	MW-78 3/22/2000	MW-78 4/23/2008	MW-78 4/23/2008	MW-79 9/13/1999	MW-79 3/23/2000	MW-79 4/24/2008
METAL																	
Antimony	6	6	6	15		10 U		2 U			5 U		10 U		5 U		10 U
Arsenic	10	10	10	0.045		5.2 B		4.3 J			5 U		10 U		5 U		10 U
Barium	2000	2000	2000	7300		146 B		125					31.1 B				260
Beryllium	4	4	4	73		4 U		0.19 B			1 U		4 U		1 U		4 U
Cadmium	5	5	5	18		5 U		0.15 B			1 U		5 U		1 U		5 U
Cadmium	5	5	5			5 U		0.15 B			1 U		5 U		1 U		5 U
Calcium					98000						4000	12000			122000	390000	
Chromium	100	100	100			2.2 B		7.5 J			5 U		5 U		5 U		2.2 B
Copper	1000	1000	1300	1500		1.4 B		1.6 B			5 U		6.2 B		5 U		25 U
Hexavalent Chromium	100	100		0.043		50 U		0 U			10 U		50 U		10 U		50 U
Iron			300	26000	15000						76	77			160	360	
Lead	5	5	15			3 U		2.7			5 U		3 U		5 U		3 U
Magnesium					7400						1900	3200			8400	12000	
Manganese	300	300	50	880	4900						28	51			200	440	
Manganese	300	300	50		4900						28	51			200	440	
Mercury	2	2	2	0.57		0.096 B		0.2 U			0 U		0.2 U		0 U		0.2 U
Nickel	100	100		730		64.1		56.2			5 U		2.5 B		5 U		2.7 B
Potassium					3800						1600	6000			2600	4900	
Selenium	50	50	50	180		5 U		5 U			5 U		5 U		5 U		5 U
Silver	100	100		180		1.8 B		1 U			5 U		5 U		5 U		5 U
Sodium					7400						3100	3800			6500	7700	
Thallium	2	2	2			10 U		0.099 B J			2 U		10 U		2 U		10 U
Vanadium	260	720		2.6		50 U		3.9 J					50 U				2.6 B
Zinc	2000	2000		11000		7.9 B		6			20 U		10.3 B		20 U		4.6 B
METAL (Dissolved)																	
Antimony	6	6	6	15			10 U		2 U					10 U			
Arsenic	10	10	10	0.045			6.9 B		5					10 U			
Barium	2000	2000	2000	7300			146 B		112					28.1 B			
Beryllium	4	4	4	73			4 U		1 U					4 U			
Cadmium	5	5	5	18			5 U		1 U					5 U			
Cadmium	5	5	5				5 U		1 U					5 U			
Calcium										96900							
Chromium	100	100	100				1.8 B		6.3 J					5 U			
Copper	1000	1000	1300	1500			25 U		0.54 B J					12.9 B			
Hexavalent Chromium	100	100		0.043			50 U		0 U					50 U			
Iron			300	26000						40000 J							
Lead	5	5	15				3 U		0.19 B J					3 U			
Magnesium										8490							
Manganese	300	300	50	880						8620							
Manganese	300	300	50							8620							
Mercury	2	2	2	0.57			0.2 U		0.2 U					0.2 U			
Nickel	100	100		730			64.2		63.4					1.5 B			
Potassium										3380 B							
Selenium	50	50	50	180			5 U		0.92 B					5 U			
Silver	100	100		180			2.1 B		1 U					5 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-77 3/24/2000	MW-77 4/24/2008	MW-77 4/24/2008	MW-77 10/2/2008	MW-77 10/2/2008	MW-77 7/8/2010	MW-78 9/9/1999	MW-78 3/22/2000	MW-78 4/23/2008	MW-78 4/23/2008	MW-79 9/13/1999	MW-79 3/23/2000	MW-79 4/24/2008
Sodium										7910							
Thallium	2	2	2				7.9 B		0.041 B					10 U			
Vanadium	260	720		2.6			50 U		1 U					50 U			
Zinc	2000	2000		11000			5.6 B J		6.1					18.9 B			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-79 4/24/2008	MW-79 9/15/2008	MW-79 9/15/2008	MW-80 9/10/1999	MW-80 3/28/2000	MW-80 5/1/2008	MW-80 5/1/2008	MW-80 6/21/2010	MW-81D 9/13/1999	MW-81D 4/4/2000	MW-81D 5/23/2008	MW-81D 5/23/2008	MW-81D 10/7/2008	MW-81D 10/7/2008
METAL																		
Antimony	6	6	6	15		0.091 B		5 U		10 U			5 U		10 U		0.12 B	
Arsenic	10	10	10	0.045		1 U		5 U		10 U			5 U		10 U		0.38 B	
Barium	2000	2000	2000	7300		268				192 B					79.3 B J		82.4	
Beryllium	4	4	4	73		0.099 B		1 U		0.64 B			1 U		0.64 B J		1 U	
Cadmium	5	5	5	18		1 U		2		5 U			1 U		5 U		1 U	
Cadmium	5	5	5			1 U		2		5 U			1 U		5 U		1 U	
Calcium								90000	100000				85800	79000				
Chromium	100	100	100			7.1 J		7		11.4			190		3.8 B		15.1 J	
Copper	1000	1000	1300	1500		1.8 B		5 U		25 U			15		2.5 B		2	
Hexavalent Chromium	100	100		0.043		0 U		10 U		50 U			10 U		50 U			
Iron			300	26000				8400	1100				1400	120				
Lead	5	5	15			0.38 B		5 U		3 U			5 U		3 U		0.89 B	
Magnesium								7300	33000				9500	9200				
Manganese	300	300	50	880				4500	200				400	82				
Manganese	300	300	50					4500	200				400	82				
Mercury	2	2	2	0.57		0.2 U		0 U		0.4			0 U		0.2 U		0.2 U	
Nickel	100	100		730		3		66		5 B			1100		2.6 B		5.2 J	
Potassium								3600	5800				1800	1900				
Selenium	50	50	50	180		0.46 B		5 U		5 U			5 U		5 U		5.0 U	
Silver	100	100		180		1 U		5 U		5 U			5 U		0.87 B		1 U	
Sodium								7400	7800				12900	12000				
Thallium	2	2	2			0.032 B		2 U		10 U			2 U		10 U		0.039 B	
Vanadium	260	720		2.6		2.5 J				5.5 B					1.2 B		3.8 J	
Zinc	2000	2000		11000		4.5 B J		29		14.9 B J			39		58 J		13.7	
METAL (Dissolved)																		
Antimony	6	6	6	15	10 U		2 U				10 U					10 U		0.36 B
Arsenic	10	10	10	0.045	10 U		0.99 B				10 U					10 U		1 U
Barium	2000	2000	2000	7300	259		283				174 B					72.9 B		81.5
Beryllium	4	4	4	73	4 U		1 U				0.58 B J					0.73 B J		1 U
Cadmium	5	5	5	18	5 U		1 U				5 U					5 U		1 U
Cadmium	5	5	5		5 U		1 U				5 U					5 U		1 U
Calcium												97900						
Chromium	100	100	100		5 U		4.9 J				7.4					5 U		13 J
Copper	1000	1000	1300	1500	25 U		1.6 B				25 U					25 U		0.74 B
Hexavalent Chromium	100	100		0.043	50 U		0 U				50 U					50 U		
Iron			300	26000								100 U						
Lead	5	5	15		3 U		1 U				3 U					3 U		1 U
Magnesium												34600						
Manganese	300	300	50	880								11 B						
Manganese	300	300	50									11 B						
Mercury	2	2	2	0.57	0.2 U		0.2 U				0.18 B					0.2 U		0.2 U
Nickel	100	100		730	1.6 B		2.4				1.2 B					40 U		3.6
Potassium												7520						
Selenium	50	50	50	180	5 U		0.34 B J				5 U					5 U		1.6 B
Silver	100	100		180	5 U		1 U				5 U					5 U		1 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-79 4/24/2008	MW-79 9/15/2008	MW-79 9/15/2008	MW-80 9/10/1999	MW-80 3/28/2000	MW-80 5/1/2008	MW-80 5/1/2008	MW-80 6/21/2010	MW-81D 9/13/1999	MW-81D 4/4/2000	MW-81D 5/23/2008	MW-81D 5/23/2008	MW-81D 10/7/2008	MW-81D 10/7/2008
Sodium												32900						
Thallium	2	2	2		10 U		1 U				10 U					10 U		1 U
Vanadium	260	720		2.6	50 U		2 J				1.3 B					1.2 B		3.5 J
Zinc	2000	2000		11000	5.2 B J		5.3 J				2.2 B					16.2 B J		5.0 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-81D 7/8/2010	MW-81S 9/13/1999	MW-81S 4/4/2000	MW-81S 5/23/2008	MW-81S 5/23/2008	MW-81S 10/7/2008	MW-81S 10/7/2008	MW-81S 7/9/2010	MW-82 9/10/1999	MW-82 3/31/2000	MW-82 4/25/2008	MW-82 4/25/2008
METAL																
Antimony	6	6	6	15		5 U		10 U		0.12 B			5 U		10 U	
Arsenic	10	10	10	0.045		5 U		10 U		0.24 B			5 U		10 U	
Barium	2000	2000	2000	7300				197 B J		147					34.8 B	
Beryllium	4	4	4	73		1		0.67 B J		1 U			1 U		4 U	
Cadmium	5	5	5	18		1 U		5 U		1 U			1 U		5 U	
Cadmium	5	5	5			1 U		5 U		1 U			1 U		5 U	
Calcium						121000	120000						61300	66000		
Chromium	100	100	100			7		2.6 B		12.9 J			5 U		5 U	
Copper	1000	1000	1300	1500		10		25 U		1.1 B			5 U		25 U	
Hexavalent Chromium	100	100		0.043		10 U		50 U					10 U		50 U	
Iron			300	26000		1500	50 U						2100	2900		
Lead	5	5	15			7		3 U		1 U			5 U		3 U	
Magnesium						16100	17000						8600	12000		
Manganese	300	300	50	880		730	20 U						76	73		
Manganese	300	300	50			730	20 U						76	73		
Mercury	2	2	2	0.57		0 U		0.2 U		0.2 U			0 U		0.2 U	
Nickel	100	100		730		7		2.6 B		3.6 J			5 U		40 U	
Potassium						9300	14000						2300	2800		
Selenium	50	50	50	180		5 U		5 U		5.0 U			5 U		5 U	
Silver	100	100		180		5 U		5 U		1 U			5 U		5 U	
Sodium						20600	19000						6700	7300		
Thallium	2	2	2			2 U		10 U		0.026 B			2 U		10 U	
Vanadium	260	720		2.6				3.2 B		3 J					50 U	
Zinc	2000	2000		11000		36		17.3 B J		17.6			22		3.8 B	
METAL (Dissolved)																
Antimony	6	6	6	15					10 U		0.16 B					10 U
Arsenic	10	10	10	0.045					10 U		1 U					10 U
Barium	2000	2000	2000	7300					188 B		146					35 B
Beryllium	4	4	4	73					0.74 B J		1 U					4 U
Cadmium	5	5	5	18					5 U		1 U					5 U
Cadmium	5	5	5						5 U		1 U					5 U
Calcium					152000							155000				
Chromium	100	100	100						5 U		12 J					5 U
Copper	1000	1000	1300	1500					25 U		1.5 B					25 U
Hexavalent Chromium	100	100		0.043					50 U							50 U
Iron			300	26000	100 U							100 U				
Lead	5	5	15						3 U		1 U					3 U
Magnesium					18600							21800				
Manganese	300	300	50	880	9.6 B							1.3 B				
Manganese	300	300	50		9.6 B							1.3 B				
Mercury	2	2	2	0.57					0.2 U		0.2 U					0.2 U
Nickel	100	100		730					1.8 B		3.1					40 U
Potassium					9640							20700				
Selenium	50	50	50	180					5 U		2.2 B					5 U
Silver	100	100		180					5 U		1 U					5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-81D 7/8/2010	MW-81S 9/13/1999	MW-81S 4/4/2000	MW-81S 5/23/2008	MW-81S 5/23/2008	MW-81S 10/7/2008	MW-81S 10/7/2008	MW-81S 7/9/2010	MW-82 9/10/1999	MW-82 3/31/2000	MW-82 4/25/2008	MW-82 4/25/2008
Sodium					38300							57900				
Thallium	2	2	2						10 U		1 U					10 U
Vanadium	260	720		2.6					1.6 B		3.4 J					50 U
Zinc	2000	2000		11000					9.4 B J		5.0 U					2.1 B J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-82 9/12/2008	MW-82 9/12/2008	MW-82 6/18/2010	MW-83 9/13/1999	MW-83 3/22/2000	MW-83 5/23/2008	MW-83 5/23/2008	MW-83 10/7/2008	MW-83 10/7/2008	MW-84 9/9/1999	MW-84 3/30/2000	MW-84 5/14/2008	MW-84 5/14/2008
METAL																	
Antimony	6	6	6	15	0.049 B			5 U		10 U		0.18 B		5 U		10 U	
Arsenic	10	10	10	0.045	1 U			5 U		10 U		1 U		5 U		10 U	
Barium	2000	2000	2000	7300	30.2					45.7 B J		91.7				45.8 B	
Beryllium	4	4	4	73	1 U			1 U		0.73 B J		1 U		1 U		4 U	
Cadmium	5	5	5		1 U			1 U		5 U		1 U		1 U		0.24 B	
Cadmium	5	5	5	18	1 U			1 U		5 U		1 U		1 U		0.24 B	
Calcium								45200	68000					71300	84000		
Chromium	100	100	100		4.4 J			5 U		1.9 B		12 J		5 U		4 B	
Copper	1000	1000	1300	1500	0.35 B			6		25 U		0.84 B		5 U		4.1 B	
Hexavalent Chromium	100	100		0.043				10 U		95		0 U		10 U		50 U	
Iron			300	26000				11700	12000					1200	610		
Lead	5	5	15		1 U			5 U		3 U		1 U		5 U		3	
Magnesium								14300	18000					7700	8800		
Manganese	300	300	50					180	160					1100	500		
Manganese	300	300	50	880				180	160					1100	500		
Mercury	2	2	2	0.57	0.2 U			0 U		0.2 U		0.2 U		0 U		0.2 U	
Nickel	100	100		730	0.54 B			5 U		1.2 B		1.0 U		5 U		10.5 B	
Potassium								3000	2600					1800	1800		
Selenium	50	50	50	180	5 U			5 U		5 U		5.0 U		5 U		5 U	
Silver	100	100		180	1 U			5 U		5 U		1 U		5 U		5 U	
Sodium								26800	16000					7400	7600		
Thallium	2	2	2		0.047 B			2 U		10 U		0.11 B		2 U		10 U	
Vanadium	260	720		2.6	1.9 J					50 U		2.9 J				1.8 B	
Zinc	2000	2000		11000	3.2 B J			36		8.2 B J		15.9		75		22.3	
METAL (Dissolved)																	
Antimony	6	6	6	15		2 U					10 U		0.11 B				10 U
Arsenic	10	10	10	0.045		0.31 B					10 U		1 U				10 U
Barium	2000	2000	2000	7300		29.8					46.4 B		78.4				34.8 B
Beryllium	4	4	4	73		1 U					0.71 B J		1 U				4 U
Cadmium	5	5	5	18		1 U					5 U		1 U				5 U
Cadmium	5	5	5			1 U					5 U		1 U				5 U
Calcium							68400										
Chromium	100	100	100			4.8 J					5 U		10.7 J				5 U
Copper	1000	1000	1300	1500		0.39 B					25 U		0.31 B				25 U
Hexavalent Chromium	100	100		0.043							50 U		0 U				50 U
Iron			300	26000			100 U										
Lead	5	5	15			1 U					3 U		1 U				3 U
Magnesium							8950										
Manganese	300	300	50	880			2.4 B										
Manganese	300	300	50				2.4 B										
Mercury	2	2	2	0.57		0.2 U					0.2 U		0.2 U				0.2 U
Nickel	100	100		730		0.58 B					40 U		1.2				1.1 B
Potassium							2100 B										
Selenium	50	50	50	180		0.3 B J					5 U		1.3 B				5 U
Silver	100	100		180		1 U					5 U		1 U				5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-82 9/12/2008	MW-82 9/12/2008	MW-82 6/18/2010	MW-83 9/13/1999	MW-83 3/22/2000	MW-83 5/23/2008	MW-83 5/23/2008	MW-83 10/7/2008	MW-83 10/7/2008	MW-84 9/9/1999	MW-84 3/30/2000	MW-84 5/14/2008	MW-84 5/14/2008
Sodium							10200										
Thallium	2	2	2			0.029 B					10 U		0.036 B				10 U
Vanadium	260	720		2.6		1.5 J					50 U		3.3 J				50 U
Zinc	2000	2000		11000		4.7 B J					2.6 B J		5.0 U				6.1 B J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-85 4/11/2000	MW-85 Dup 4/11/2000	MW-85 6/3/2003	MW-85 6/8/2004	MW-85 6/15/2005	MW-85 6/20/2006	MW-85 6/26/2007	MW-85 6/26/2007	MW-85 4/25/2008	MW-85 4/25/2008	MW-85 9/18/2008	MW-85 9/18/2008	MW-86D 9/7/1999	MW-86D 4/3/2000
METAL																		
Antimony	6	6	6	15	5 U								10 U		0.24 B J		5 U	
Arsenic	10	10	10	0.045	5 U								10 U		0.75 B		5 U	
Barium	2000	2000	2000	7300									13 B		10			
Beryllium	4	4	4	73	1 U								4 U		1 U		1 U	
Cadmium	5	5	5		1 U								5 U		1 U		1 U	
Cadmium	5	5	5	18	1 U								5 U		1 U		1 U	
Calcium					70000	69000											34100	41000
Chromium	100	100	100		7.2	5	0 U	2.8 U	3 U	5 U			1.5 B		6.7 J		5 U	
Copper	1000	1000	1300	1500	5 U								25 U		3		5 U	
Hexavalent Chromium	100	100		0.043	10 U		0 U	10 U	10 U	10 U	10 U		50 U		0 U		10 U	
Iron			300	26000	12000												50 U	50 U
Lead	5	5	15		5 U		0 U	2.2 U	2.7 U	3.2 J			3 U		0.79 B		5 U	
Magnesium					38000												14800	16000
Manganese	300	300	50		180												20 U	20 U
Manganese	300	300	50	880	180												20 U	20 U
Mercury	2	2	2	0.57	0.2 U								0.2 U		0.2 U		0 U	
Nickel	100	100		730	5 U		0 U	3.9 U	2.4 U	40 U			1.6 B		2.7		5 U	
Potassium					16000												1800	1700
Selenium	50	50	50	180	5 U								5 U		5 U		5 U	
Silver	100	100		180	5 U								5 U		1 U		5 U	
Sodium					28000												8200	4600
Thallium	2	2	2		2 U								10 U		0.06 B J		2 U	
Vanadium	260	720		2.6									2 B		5 J			
Zinc	2000	2000		11000	180	24	0 U	14.3 B	19.9 B	9.8 JB			2.5 B		15.4		26	
METAL (Dissolved)																		
Antimony	6	6	6	15										10 U		2 U		
Arsenic	10	10	10	0.045										10 U		0.17 B		
Barium	2000	2000	2000	7300										11.3 B		6.3 B		
Beryllium	4	4	4	73										4 U		1 U		
Cadmium	5	5	5	18										5 U		1 U		
Cadmium	5	5	5											5 U		1 U		
Calcium																		
Chromium	100	100	100									5 U		5 U		5.3 J		
Copper	1000	1000	1300	1500										25 U		0.18 B		
Hexavalent Chromium	100	100		0.043										50 U		0 U		
Iron			300	26000														
Lead	5	5	15									3 U		3 U		0.029 B		
Magnesium																		
Manganese	300	300	50	880														
Manganese	300	300	50															
Mercury	2	2	2	0.57										0.2 U		0.2 U		
Nickel	100	100		730								1.9 B		40 U		0.59 B		
Potassium																		
Selenium	50	50	50	180										5 U		0.26 B		
Silver	100	100		180										5 U		1 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-85 4/11/2000	MW-85 Dup 4/11/2000	MW-85 6/3/2003	MW-85 6/8/2004	MW-85 6/15/2005	MW-85 6/20/2006	MW-85 6/26/2007	MW-85 6/26/2007	MW-85 4/25/2008	MW-85 4/25/2008	MW-85 9/18/2008	MW-85 9/18/2008	MW-86D 9/7/1999	MW-86D 4/3/2000
Sodium																		
Thallium	2	2	2											10 U		1 U		
Vanadium	260	720		2.6										1.1 B		1 U		
Zinc	2000	2000		11000								6.6 B J		3.6 B J		7.9		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-86D 5/5/2008	MW-86D 5/5/2008	MW-86S 9/7/1999	MW-86S 3/31/2000	MW-86S 5/5/2008	MW-86S 5/5/2008	MW-87 9/17/1999	MW-87 4/4/2000	MW-87 6/5/2003	MW-87 6/10/2004	MW-87 6/17/2005	MW-87 6/17/2005	MW-87 6/23/2006	MW-87 Dup 6/28/2007
METAL																		
Antimony	6	6	6	15	10 U		5 U		10 U		5 U							
Arsenic	10	10	10	0.045	10 U		5 U		10 U		5 U							
Barium	2000	2000	2000	7300	217				44.1 B									
Beryllium	4	4	4	73	4 U		1 U		4 U		1 U							
Cadmium	5	5	5		5 U		1 U		5 U		1 U							
Cadmium	5	5	5	18	5 U		1 U		5 U		1 U							
Calcium							7900	15000			97200	88000						
Chromium	100	100	100		2.7 B		5 U		5 U		6		0 U	2.8 U			5 U	
Copper	1000	1000	1300	1500	25 U		5 U		25 U		7							
Hexavalent Chromium	100	100		0.043	50 U		10 U		50 U		10 U		0 U	10 U	10 U		10 U	10 U
Iron			300	26000			210	50 U			8200	50 U						
Lead	5	5	15		3 U		5 U		3 U		5 U		0 U	2.2 U			2.1 B	
Magnesium							3200	4900			14000	14000						
Manganese	300	300	50				120	20 U			760	20 U						
Manganese	300	300	50	880			120	20 U			760	20 U						
Mercury	2	2	2	0.57	0.2 U		0 U		0.2 U		0 U							
Nickel	100	100		730	2.4 B J		5 U		40 U		7		0 U	3.9 U			40 U	
Potassium							2800	3200			2100	2000						
Selenium	50	50	50	180	5 U		5 U		5 U		5 U							
Silver	100	100		180	5 U		5 U		5 U		5 U							
Sodium							5700	7300			7500	8000						
Thallium	2	2	2		10 U		2 U		7.8 B J		2 U							
Vanadium	260	720		2.6	1.7 B				50 U									
Zinc	2000	2000		11000	4.2 B J		20 U		6.5 B J		83		0 U	12.6 B			11.1 JB	
METAL (Dissolved)																		
Antimony	6	6	6	15		10 U				10 U								
Arsenic	10	10	10	0.045		10 U				10 U								
Barium	2000	2000	2000	7300		190 B				45.7 B								
Beryllium	4	4	4	73		4 U				4 U								
Cadmium	5	5	5	18		5 U				5 U								
Cadmium	5	5	5			5 U				5 U								
Calcium																		
Chromium	100	100	100			5 U				1.2 B						1.6 U		
Copper	1000	1000	1300	1500		25 U				25 U								
Hexavalent Chromium	100	100		0.043		50 U				50 U								
Iron			300	26000														
Lead	5	5	15			3 U				3 U						2.7 U		
Magnesium																		
Manganese	300	300	50	880														
Manganese	300	300	50															
Mercury	2	2	2	0.57		0.2 U				0.2 U								
Nickel	100	100		730		40 U				1.6 B J						2.4 U		
Potassium																		
Selenium	50	50	50	180		5 U				5 U								
Silver	100	100		180		5 U				5 U								

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-86D 5/5/2008	MW-86D 5/5/2008	MW-86S 9/7/1999	MW-86S 3/31/2000	MW-86S 5/5/2008	MW-86S 5/5/2008	MW-87 9/17/1999	MW-87 4/4/2000	MW-87 6/5/2003	MW-87 6/10/2004	MW-87 6/17/2005	MW-87 6/17/2005	MW-87 6/23/2006	MW-87 Dup 6/28/2007
Sodium																		
Thallium	2	2	2			10 U				7.2 B								
Vanadium	260	720		2.6		50 U				50 U								
Zinc	2000	2000		11000		1.5 B J				6.8 B J						22.8 B		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-87 Dup 6/28/2007	MW-87 6/28/2007	MW-87 6/28/2007	MW-87 5/15/2008	MW-87 5/15/2008	MW-87 10/1/2008	MW-87 10/1/2008	MW-87 7/9/2009	MW-87 7/9/2009	MW-87 7/2/2010	MW-87 7/2/2010	MW-88 4/10/2000	MW-88 6/3/2003	MW-88 6/9/2004
METAL																		
Antimony	6	6	6	15				10 U		0.28 B						5 U		
Arsenic	10	10	10	0.045				10 U		7.1 J						5 U		
Barium	2000	2000	2000	7300				45.5 B		94.8								
Beryllium	4	4	4	73				4 U		0.43 B						1 U		
Cadmium	5	5	5					5 U		0.21 B						1 U		
Cadmium	5	5	5	18				5 U		0.21 B						1 U		
Calcium																50 U		
Chromium	100	100	100					1.8 B		20.5 J						5 U	0 U	2.8 U
Copper	1000	1000	1300	1500				25 U		6.9						5 U		
Hexavalent Chromium	100	100		0.043		10 U		50 U		0 U						10 U	0 U	10 U
Iron			300	26000												99		
Lead	5	5	15					3 U		9.3		0.52 B		3 U		5 U	0 U	2.2 U
Magnesium																50 U		
Manganese	300	300	50													10 U		
Manganese	300	300	50	880												10 U		
Mercury	2	2	2	0.57				0.094 B J		0.2 U						0.2 U		
Nickel	100	100		730				2.4 B		15						5 U	0 U	3.9 U
Potassium																100 U		
Selenium	50	50	50	180				5 U		2 B						5 U		
Silver	100	100		180				5 U		1 U						5 U		
Sodium																4000		
Thallium	2	2	2					10 U		0.16 B J						2 U		
Vanadium	260	720		2.6				2.6 B		10.8 J								
Zinc	2000	2000		11000				17.4 B J		30						20 U	0 U	20.3 B
METAL (Dissolved)																		
Antimony	6	6	6	15					10 U		2 U							
Arsenic	10	10	10	0.045					10 U		1 U							
Barium	2000	2000	2000	7300					29.3 B		28.7							
Beryllium	4	4	4	73					4 U		1 U							
Cadmium	5	5	5	18					5 U		1 U							
Cadmium	5	5	5						5 U		1 U							
Calcium															95200			
Chromium	100	100	100		5 U		5 U		5 U		9.1 J							
Copper	1000	1000	1300	1500					25 U		0.67 B J							
Hexavalent Chromium	100	100		0.043					50 U		0 U							
Iron			300	26000											100 U			
Lead	5	5	15		3 U		3 U		3 U		0.11 B J		1 U		3 U			
Magnesium															14200			
Manganese	300	300	50	880											1.3 B			
Manganese	300	300	50												1.3 B			
Mercury	2	2	2	0.57					0.085 B J		0.2 U							
Nickel	100	100		730	40 U		1.2 B		40 U		2.6							
Potassium															2420 B J			
Selenium	50	50	50	180					5 U		0.8 B							
Silver	100	100		180					5 U		1 U							

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-87 Dup 6/28/2007	MW-87 6/28/2007	MW-87 6/28/2007	MW-87 5/15/2008	MW-87 5/15/2008	MW-87 10/1/2008	MW-87 10/1/2008	MW-87 7/9/2009	MW-87 7/9/2009	MW-87 7/2/2010	MW-87 7/2/2010	MW-88 4/10/2000	MW-88 6/3/2003	MW-88 6/9/2004
Sodium															11100			
Thallium	2	2	2						10 U		0.049 B							
Vanadium	260	720		2.6					2.3 B		1 U							
Zinc	2000	2000		11000	13.7 B J		13.3 B J		7 B J		4.4 B							

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-88 6/16/2005	MW-88 6/23/2006	MW-88 6/28/2007	MW-88 6/28/2007	MW-88 4/29/2008	MW-88 4/29/2008	MW-88 9/25/2008	MW-88 9/25/2008	MW-88 6/25/2010	MW-89 4/11/2000	MW-90 4/11/2000	MW-91 4/10/2000	MW-91 5/7/2008	MW-91 5/7/2008
METAL																		
Antimony	6	6	6	15					10 U		0.12 B			5 U	5 U	5 U	10 U	
Arsenic	10	10	10	0.045					10 U		1 U			5 U	5 U	5 U	10 U	
Barium	2000	2000	2000	7300					271		192 J						152 B	
Beryllium	4	4	4	73					4 U		1 U			1 U	1 U	1 U	0.37 B	
Cadmium	5	5	5						5 U		1 U			1 U	1 U	1 U	5 U	
Cadmium	5	5	5	18					5 U		1 U			1 U	1 U	1 U	5 U	
Calcium														70000	31000	50 U		
Chromium	100	100	100		1.6 U	5 U			1.9 B		15.4 J			8.6	5 U	5 U	5 U	
Copper	1000	1000	1300	1500					25 U		1.9 B			6.1	5 U	5 U	25 U	
Hexavalent Chromium	100	100		0.043	10 U	10 U	10 U		50 U		0 U			10 U	10 U	10 U	50 U	
Iron			300	26000										570	1300	50 U		
Lead	5	5	15		2.7 U	3 U			3 U		0.56 B			5 U	8.5	5 U	3 U	
Magnesium														11000	6100	50 U		
Manganese	300	300	50											510	130	10 U		
Manganese	300	300	50	880										510	130	10 U		
Mercury	2	2	2	0.57					0.2 U		0.2 U			0.2 U	0.2 U	0.2 U	0.2 U	
Nickel	100	100		730	2.4 U	40 U			40 U		3			18	5 U	5 U	2.4 B	
Potassium														1600	1900	100 U		
Selenium	50	50	50	180					5 U		0.68 B			5 U	5 U	5 U	5 U	
Silver	100	100		180					5 U		1 U			5 U	5 U	5 U	5 U	
Sodium														4100	3500	3300		
Thallium	2	2	2						10 U		0.12 B			2 U	2 U	2 U	10 U	
Vanadium	260	720		2.6					1.3 B		4.1 J						1.1 B	
Zinc	2000	2000		11000	23.1 B	3.1 JB			3.9 B		4.8 B			480	43	20 U	15.7 B J	
METAL (Dissolved)																		
Antimony	6	6	6	15						10 U		0.14 B J						10 U
Arsenic	10	10	10	0.045						10 U		1 U						10 U
Barium	2000	2000	2000	7300						269		192						152 B
Beryllium	4	4	4	73						4 U		1 U						4 U
Cadmium	5	5	5	18						5 U		1 U						5 U
Cadmium	5	5	5							5 U		1 U						5 U
Calcium													102000					
Chromium	100	100	100					5 U		5 U		16.8 J						5 U
Copper	1000	1000	1300	1500						25 U		0.96 B						25 U
Hexavalent Chromium	100	100		0.043						50 U		0 U						50 U
Iron			300	26000									100 U					
Lead	5	5	15					3 U		3 U		0.036 B						3 U
Magnesium													23500					
Manganese	300	300	50	880									8.4 B					
Manganese	300	300	50										8.4 B					
Mercury	2	2	2	0.57						0.2 U		0.2 U						0.2 U
Nickel	100	100		730				40 U		40 U		2.6						2.4 B
Potassium													59900					
Selenium	50	50	50	180						5 U		1.3 B J						5 U
Silver	100	100		180						5 U		1 U						5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-88 6/16/2005	MW-88 6/23/2006	MW-88 6/28/2007	MW-88 6/28/2007	MW-88 4/29/2008	MW-88 4/29/2008	MW-88 9/25/2008	MW-88 9/25/2008	MW-88 6/25/2010	MW-89 4/11/2000	MW-90 4/11/2000	MW-91 4/10/2000	MW-91 5/7/2008	MW-91 5/7/2008
Sodium													135000					
Thallium	2	2	2							10 U		0.12 B						10 U
Vanadium	260	720		2.6						50 U		0.61 B J						50 U
Zinc	2000	2000		11000				2.5 B J		20 U		2.5 B						18 B J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-91 9/19/2008	MW-91 9/19/2008	MW-92 4/10/2000	MW-92 5/14/2008	MW-92 5/14/2008	MW-92 9/30/2008	MW-92 9/30/2008	MW-92 6/29/2010	MW-93D 4/15/2004	MW-93D 4/16/2004	MW-93D 4/16/2004	MW-93D 4/26/2004	MW-93D Dup 4/26/2004
METAL																	
Antimony	6	6	6	15	0.058 B		5 U	10 U		0.074 B			0 U	5.8 U		3.9 U	7.8 U
Arsenic	10	10	10	0.045	1 U		5 U	10 U		1 U			0 U	3.2 U		4.1 B	3.4 U
Barium	2000	2000	2000	7300	156 J			102 B		68.9							
Beryllium	4	4	4	73	1 U		1 U	4 U		1 U			0 U	0.3 U		0.16 B	0.12 B
Cadmium	5	5	5		1 U		1 U	5 U		1 U			0.5 B			2.4 B	2 B
Cadmium	5	5	5	18	1 U		1 U	5 U		1 U			0.5 B			2.4 B	2 B
Calcium							16000										
Chromium	100	100	100		22 J		5 U	5 U		8.1 J				3.4 B		16.5	12.4
Copper	1000	1000	1300	1500	1.7 B		5 U	25 U		0.81 B				10.2 B		14.9 B	12.5 B
Hexavalent Chromium	100	100		0.043			10 U	50 U					0 U	10 U		10 U	10 U
Iron			300	26000			250										
Lead	5	5	15		0.7 B		5 U	3 U		0.071 B			0 U	2.3 U		5.9	5.1
Magnesium							5700										
Manganese	300	300	50				61										
Manganese	300	300	50	880			61										
Mercury	2	2	2	0.57	0.2 U		0.2 U	0.2 U		0.2 U			0 U	0.1 U		0.1 U	0.1 U
Nickel	100	100		730	6.4		5 U	1.5 B		1.6			2.4 B			16.1 B	13 B
Potassium							3800										
Selenium	50	50	50	180	5 U		5 U	2.8 B		5 U				4.2 U		3.9 U	3.9 U
Silver	100	100		180	1 U		5 U	5 U		1 U				1.4 U		0.7 U	0.7 U
Sodium							8200										
Thallium	2	2	2		0.072 B		2 U	10 U		0.021 B				1.8 U		1.8 U	1.8 U
Vanadium	260	720		2.6	3.2 J			50 U		1.9 J							
Zinc	2000	2000		11000	8.6		28	2 B		5.7			21.8 B			65	57.7
METAL (Dissolved)																	
Antimony	6	6	6	15		0.16 B J			10 U		0.22 B				5.8 U		
Arsenic	10	10	10	0.045		1 U			10 U		1 U				3.2 U		
Barium	2000	2000	2000	7300		160			90.9 B		68.5						
Beryllium	4	4	4	73		1 U			4 U		1 U				0.3 U		
Cadmium	5	5	5	18		1 U			5 U		1 U				0.4 U		
Cadmium	5	5	5			1 U			5 U		1 U				0.4 U		
Calcium												15400					
Chromium	100	100	100			17.2 J			5 U		10.5 J				2.5 B		
Copper	1000	1000	1300	1500		1.4 B			25 U		0.84 B				3.7 U		
Hexavalent Chromium	100	100		0.043					50 U						10 U		
Iron			300	26000								19.7 B					
Lead	5	5	15			0.31 B			3 U		0.061 B				2.3 U		
Magnesium												5910					
Manganese	300	300	50	880								3.7 B					
Manganese	300	300	50									3.7 B					
Mercury	2	2	2	0.57		0.2 U			0.2 U		0.2 U				0.1 U		
Nickel	100	100		730		6.8			40 U		1.8				1.6 U		
Potassium												3410 B					
Selenium	50	50	50	180		0.3 B J			5 U		5 U				4.2 U		
Silver	100	100		180		1 U			5 U		1 U				1.4 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-91 9/19/2008	MW-91 9/19/2008	MW-92 4/10/2000	MW-92 5/14/2008	MW-92 5/14/2008	MW-92 9/30/2008	MW-92 9/30/2008	MW-92 6/29/2010	MW-93D 4/15/2004	MW-93D 4/16/2004	MW-93D 4/16/2004	MW-93D 4/26/2004	MW-93D Dup 4/26/2004
Sodium												8970					
Thallium	2	2	2			0.083 B			5.9 B		0.026 B J				1.8 U		
Vanadium	260	720		2.6		2.7 J			50 U		2.8 J						
Zinc	2000	2000		11000		14.9			10.8 B J		5.6				13 B		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-93D 4/26/2004	MW-93D Dup 4/26/2004	MW-93D 6/20/2005	MW-93D 6/23/2006	MW-93D 6/27/2007	MW-93D 6/27/2007	MW-93D 5/13/2008	MW-93D 5/13/2008	MW-93D 9/22/2008	MW-93D 9/22/2008	MW-93D 6/28/2010	MW-93S 4/15/2004	MW-93S Dup 4/15/2004
METAL																	
Antimony	6	6	6	15							10 U		0.057 B			3.9 U	3.9 U
Arsenic	10	10	10	0.045							10 U		1 U			3.4 U	3.4 U
Barium	2000	2000	2000	7300							18.6 B		19.8 J				
Beryllium	4	4	4	73							4 U		1 U				0.1 U
Cadmium	5	5	5								5 U		1 U			0.4 U	0.4 U
Cadmium	5	5	5	18							5 U		1 U			0.4 U	0.4 U
Calcium																	
Chromium	100	100	100				1.6 U	5 U			5 U		14.4 J				42.1
Copper	1000	1000	1300	1500							25 U		0.8 B			6.5 B	7 B
Hexavalent Chromium	100	100		0.043			10 U	10 U	10 U		50 U		0 U				37.3
Iron			300	26000													
Lead	5	5	15				2.7 U	3 U			3 U		0.1 B			2.2 U	2.2 U
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57							0.2 U		0.2 U			0.1 U	0.1 U
Nickel	100	100		730			2.4 U	40 U			40 U		1.6			3.9 U	3.9 U
Potassium																	
Selenium	50	50	50	180							5 U		5 U			3.9 U	3.9 U
Silver	100	100		180							5 U		1 U			0.7 U	0.7 U
Sodium																	
Thallium	2	2	2								10 U		1 U			1.8 U	1.8 U
Vanadium	260	720		2.6							50 U		3 J				
Zinc	2000	2000		11000			47.5	7.2 JB			20 U		3.6 B			30.9	23 B
METAL (Dissolved)																	
Antimony	6	6	6	15	3.9 U	3.9 U						10 U		0.052 B J			
Arsenic	10	10	10	0.045	3.4 U	3.4 U						10 U		1 U			
Barium	2000	2000	2000	7300								18 B		19.5			
Beryllium	4	4	4	73	0.1 U	0.1 U						4 U		1 U			
Cadmium	5	5	5	18	0.4 U	0.42 B						5 U		1 U			
Cadmium	5	5	5		0.4 U	0.42 B						5 U		1 U			
Calcium															51900		
Chromium	100	100	100		2.8 U	2.8 U				5 U		5 U		15.4 J			
Copper	1000	1000	1300	1500	2.1 U	2.1 U						25 U		0.68 B			
Hexavalent Chromium	100	100		0.043	10 U	10 U						50 U		0 U			
Iron			300	26000											100 U		
Lead	5	5	15		2.2 U	2.2 U				3 U		3 U		0.081 B			
Magnesium															11400		
Manganese	300	300	50	880											22.5		
Manganese	300	300	50												22.5		
Mercury	2	2	2	0.57	0.1 U	0.1 U						0.2 U		0.2 U			
Nickel	100	100		730	3.9 U	3.9 U				1.3 B		40 U		1.6			
Potassium															3430 B		
Selenium	50	50	50	180	3.9 U	3.9 U						5 U		5 U			
Silver	100	100		180	0.7 U	0.7 U						5 U		1 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-93D 4/26/2004	MW-93D Dup 4/26/2004	MW-93D 6/20/2005	MW-93D 6/23/2006	MW-93D 6/27/2007	MW-93D 6/27/2007	MW-93D 5/13/2008	MW-93D 5/13/2008	MW-93D 9/22/2008	MW-93D 9/22/2008	MW-93D 6/28/2010	MW-93S 4/15/2004	MW-93S Dup 4/15/2004
Sodium															14600		
Thallium	2	2	2		1.8 U	1.8 U						10 U		1 U			
Vanadium	260	720		2.6								50 U		3.7 J			
Zinc	2000	2000		11000	11.7 B	10.4 B				9.9 B J		4.4 B J		5.4			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-93S 4/15/2004	MW-93S Dup 4/15/2004	MW-93S 4/26/2004	MW-93S 4/26/2004	MW-93S 6/20/2005	MW-93S 6/22/2006	MW-93S 6/27/2007	MW-93S 6/27/2007	MW-93S 4/25/2008	MW-93S 4/25/2008	MW-93S 9/15/2008	MW-93S 9/15/2008	MW-93S 6/23/2010
METAL																	
Antimony	6	6	6	15			3.9 U						10 U		0.92 B		
Arsenic	10	10	10	0.045			3.4 U						10 U		0.47 B		
Barium	2000	2000	2000	7300									34.3 B		25.5		
Beryllium	4	4	4	73			0.1 U						4 U		1 U		
Cadmium	5	5	5				0.4 U						5 U		1 U		
Cadmium	5	5	5	18			0.4 U						5 U		1 U		
Calcium																	
Chromium	100	100	100				34.6		9 B	6.7			1.9 B		6.2 J		
Copper	1000	1000	1300	1500			7.2 B						25 U		0.6 B		
Hexavalent Chromium	100	100		0.043			30.5		10 U	10 U	10 U		50 U		0 U		
Iron			300	26000													
Lead	5	5	15				2.2 U		2.7 U	3 U			3 U		1 U		
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57			0.1 U						0.2 U		0.2 U		
Nickel	100	100		730			3.9 U		2.4 U	40 U			40 U		0.62 B		
Potassium																	
Selenium	50	50	50	180			3.9 U						5 U		0.39 B		
Silver	100	100		180			0.7 U						5 U		1 U		
Sodium																	
Thallium	2	2	2				1.8 U						10 U		0.021 B		
Vanadium	260	720		2.6									50 U		2.9 J		
Zinc	2000	2000		11000			26 B		19.9 B	4.3 JB			7 B		2.5 B J		
METAL (Dissolved)																	
Antimony	6	6	6	15	3.9 U	3.9 U		3.9 U						10 U		0.96 B	
Arsenic	10	10	10	0.045	3.4 U	3.4 U		3.4 U						10 U		0.79 B	
Barium	2000	2000	2000	7300										34.9 B		25.9	
Beryllium	4	4	4	73	0.1 U	0.1 U		0.1 U						4 U		1 U	
Cadmium	5	5	5	18	0.4 U	0.4 U		0.4 U						5 U		1 U	
Cadmium	5	5	5		0.4 U	0.4 U		0.4 U						5 U		1 U	
Calcium																	39600
Chromium	100	100	100		39.7	39.9		34.3				2.4 B		1.6 B		6.3 J	
Copper	1000	1000	1300	1500	5.5 B	5.5 B		2.8 B						25 U		0.54 B	
Hexavalent Chromium	100	100		0.043	37.3	37.3		29.5						50 U		0 U	
Iron			300	26000													100 U
Lead	5	5	15		2.2 U	2.2 U		2.2 U				3 U		3 U		1 U	
Magnesium																	8530
Manganese	300	300	50	880													15 U
Manganese	300	300	50														15 U
Mercury	2	2	2	0.57	0.1 U	0.1 U		0.1 U						0.2 U		0.2 U	
Nickel	100	100		730	3.9 U	3.9 U		3.9 U				40 U		40 U		0.38 B	
Potassium																	6910
Selenium	50	50	50	180	3.9 U	3.9 U		3.9 U						5 U		0.77 B J	
Silver	100	100		180	0.7 U	0.7 U		0.7 U						5 U		1 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-93S 4/15/2004	MW-93S Dup 4/15/2004	MW-93S 4/26/2004	MW-93S 4/26/2004	MW-93S 6/20/2005	MW-93S 6/22/2006	MW-93S 6/27/2007	MW-93S 6/27/2007	MW-93S 4/25/2008	MW-93S 4/25/2008	MW-93S 9/15/2008	MW-93S 9/15/2008	MW-93S 6/23/2010
Sodium																	33900
Thallium	2	2	2		1.8 U	1.8 U		1.8 U						10 U		0.019 B	
Vanadium	260	720		2.6										50 U		3.3 J	
Zinc	2000	2000		11000	5.8 U	5.8 U		8 B				3.3 B J		2.8 B J		3.7 B J	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-94 5/8/2008	MW-94 5/8/2008	MW-94 9/29/2008	MW-94 9/29/2008	MW-94 7/8/2009	MW-94 7/8/2009	MW-94 7/7/2010	MW-94 7/7/2010	MW-95 5/2/2008	MW-95 5/2/2008	MW-95 9/11/2008	MW-95 9/11/2008	MW-95 6/23/2010	MW-96D 5/2/2008
METAL																		
Antimony	6	6	6	15	10 U		0.87 B						10 U		2 U			10 U
Arsenic	10	10	10	0.045	10 U		35.5		1 U		15.2		10 U		0.3 B			10 U
Barium	2000	2000	2000	7300	54.7 B		684						76 B		35.2			48.3 B
Beryllium	4	4	4	73	4 U		7.7		1 U		1.6 B		0.56 B		1 U			4 U
Cadmium	5	5	5		5 U		4.4						5 U		1 U			5 U
Cadmium	5	5	5	18	5 U		4.4						5 U		1 U			5 U
Calcium																		
Chromium	100	100	100		5 U		187 J		10.4 J		44.5		8.7		6.7 J			2.7 B
Copper	1000	1000	1300	1500	25 U		172						2.1 B		1.1 B			25 U
Hexavalent Chromium	100	100		0.043	50 U				50 U				50 U					50 U
Iron			300	26000														
Lead	5	5	15		3 U		123		0.36 B		30.4		3 U		0.27 B			3 U
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57	0.2 U		0.57						0.2 U		0.2 U			0.2 U
Nickel	100	100		730	40 U		117		5.9		29.8 B		5.9 B		1.6			40 U
Potassium																		
Selenium	50	50	50	180	5 U		6.3						5 U		0.85 B			5 U
Silver	100	100		180	5 U		1.5						5 U		1 U			5 U
Sodium																		
Thallium	2	2	2		10 U		1.5						10 U		1 U			10 U
Vanadium	260	720		2.6	50 U		192 J						50 U		1.2 J			1.5 B
Zinc	2000	2000		11000	3.3 B J		358						11.5 B J		5.0 U			2.7 B J
METAL (Dissolved)																		
Antimony	6	6	6	15		10 U		0.27 B						10 U		0.051 B		
Arsenic	10	10	10	0.045		10 U		1 U		1 U		10 U		10 U		0.18 B		
Barium	2000	2000	2000	7300		58.2 B		63.5						37.9 B		31.9		
Beryllium	4	4	4	73		0.34 B J		1 U		1 U		4 U		0.57 B J		1 U		
Cadmium	5	5	5	18		5 U		1 U						5 U		1 U		
Cadmium	5	5	5			5 U		1 U						5 U		1 U		
Calcium												16100					104000	
Chromium	100	100	100			5 U		11.1 J		4.3		5 U		1.4 B		5.8 J		
Copper	1000	1000	1300	1500		25 U		0.68 B						25 U		0.48 B		
Hexavalent Chromium	100	100		0.043		50 U				50 U				50 U				
Iron			300	26000								810 J					100 U	
Lead	5	5	15			3 U		0.19 B		0.14 B		2.9 B		3 U		1 U		
Magnesium												7690					9170	
Manganese	300	300	50	880								7.1 B					11.7 B	
Manganese	300	300	50									7.1 B					11.7 B	
Mercury	2	2	2	0.57		0.2 U		0.2 U						0.2 U		0.2 U		
Nickel	100	100		730		4.2 B		1.1		3.5		40 U		40 U		1		
Potassium												3580 B					2810 B	
Selenium	50	50	50	180		5 U		5 U						5 U		0.34 B		
Silver	100	100		180		5 U		1 U						5 U		1 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-94 5/8/2008	MW-94 5/8/2008	MW-94 9/29/2008	MW-94 9/29/2008	MW-94 7/8/2009	MW-94 7/8/2009	MW-94 7/7/2010	MW-94 7/7/2010	MW-95 5/2/2008	MW-95 5/2/2008	MW-95 9/11/2008	MW-95 9/11/2008	MW-95 6/23/2010	MW-96D 5/2/2008
Sodium												17500					20000	
Thallium	2	2	2			10 U		0.15 B J						10 U		1 U		
Vanadium	260	720		2.6		50 U		4.7 J						1.3 B		1.7		
Zinc	2000	2000		11000		16.2 B J		5.7						2.1 B		5.0 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-96D 5/2/2008	MW-96D 9/24/2008	MW-96D 9/24/2008	MW-96D 6/28/2010	MW-96S 5/2/2008	MW-96S 5/2/2008	MW-96S 10/1/2008	MW-96S 10/1/2008	MW-96S Dup 10/1/2008	MW-96S Dup 10/1/2008	MW-96S 7/2/2010	MW-97 5/2/2008	MW-97 5/2/2008
METAL																	
Antimony	6	6	6	15		0.062 B			10 U		0.14 B		0.13 B			10 U	
Arsenic	10	10	10	0.045		0.7 B			10 U		1 U		1 U			10 U	
Barium	2000	2000	2000	7300		57.9 J			42.7 B		40		39.7			41.5 B	
Beryllium	4	4	4	73		0.097 B			0.42 B		1 U		1 U			0.4 B	
Cadmium	5	5	5			1 U			5 U		1 U		1 U			5 U	
Cadmium	5	5	5	18		1 U			5 U		1 U		1 U			5 U	
Calcium																	
Chromium	100	100	100			14.6 J			3.5 B		7.2 J		8 J			2.9 B	
Copper	1000	1000	1300	1500		3.3			25 U		1.1 B		1 B			25 U	
Hexavalent Chromium	100	100		0.043					50 U							50 U	
Iron			300	26000													
Lead	5	5	15			2.6			3 U		0.36 B		0.34 B			3 U	
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57		0.2 U			0.2 U		0.2 U		0.2 U			0.2 U	
Nickel	100	100		730		4.4			1.7 B		2.4		2.4			2.4 B	
Potassium																	
Selenium	50	50	50	180		5 U			5 U		0.76 B		5 U			5 U	
Silver	100	100		180		1 U			5 U		1 U		1 U			5 U	
Sodium																	
Thallium	2	2	2			0.026 B			10 U		0.047 B J		0.047 B J			10 U	
Vanadium	260	720		2.6		5.5 J			2.2 B		5.8 J		4.3 J			50 U	
Zinc	2000	2000		11000		10.7			4.2 B J		4 B		3.8 B			4.7 B J	
METAL (Dissolved)																	
Antimony	6	6	6	15	10 U		2 U			10 U		0.23 B		0.17 B			10 U
Arsenic	10	10	10	0.045	10 U		1 U			10 U		1 U		1 U			10 U
Barium	2000	2000	2000	7300	47.4 B		45.7			39.3 B		38.6		38.6			40.6 B
Beryllium	4	4	4	73	0.53 B J		1 U			0.6 B J		1 U		1 U			0.61 B J
Cadmium	5	5	5	18	5 U		1 U			5 U		1 U		1 U			5 U
Cadmium	5	5	5		5 U		1 U			5 U		1 U		1 U			5 U
Calcium								106000							110000		
Chromium	100	100	100		2.3 B		16.4 J			2.2 B		9 J		8.8 J			5 U
Copper	1000	1000	1300	1500	25 U		0.79 B			25 U		1 B J		0.98 B J			25 U
Hexavalent Chromium	100	100		0.043	50 U					50 U							50 U
Iron			300	26000				100 U							100 U		
Lead	5	5	15		3 U		0.16 B			3 U		0.1 B J		0.079 B J			3 U
Magnesium								17900							19700		
Manganese	300	300	50	880				7.8 B							16.8		
Manganese	300	300	50					7.8 B							16.8		
Mercury	2	2	2	0.57	0.2 U		0.2 U			0.2 U		0.2 U		0.2 U			0.2 U
Nickel	100	100		730	40 U		2.2			40 U		3		2.9			40 U
Potassium								3580 B							3950 B J		
Selenium	50	50	50	180	5 U		5.0 U			5 U		5 U		0.61 B			5 U
Silver	100	100		180	5 U		1 U			5 U		1 U		1 U			5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-96D 5/2/2008	MW-96D 9/24/2008	MW-96D 9/24/2008	MW-96D 6/28/2010	MW-96S 5/2/2008	MW-96S 5/2/2008	MW-96S 10/1/2008	MW-96S 10/1/2008	MW-96S Dup 10/1/2008	MW-96S Dup 10/1/2008	MW-96S 7/2/2010	MW-97 5/2/2008	MW-97 5/2/2008
Sodium								34400							40500		
Thallium	2	2	2		4 B		1 U			10 U		0.073 B		0.046 B			10 U
Vanadium	260	720		2.6	2.1 B		4.5 J			1.2 B		1 U		1.2 J			50 U
Zinc	2000	2000		11000	1.8 B		6.8			2.3 B		10.5		1.6 B			20 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-97 9/19/2008	MW-97 9/19/2008	MW-98D 5/27/2008	MW-98D 5/27/2008	MW-98D 9/8/2008	MW-98D 9/8/2008	MW-98D 6/15/2010	MW-98I 5/23/2008	MW-98I 5/23/2008	MW-98I 9/12/2008	MW-98I 9/12/2008	MW-98I 6/16/2010	MW-98S 5/22/2008	MW-98S 5/22/2008
METAL																		
Antimony	6	6	6	15	2 U		10 U		0.061 B			10 U		0.11 B			10 U	
Arsenic	10	10	10	0.045	0.38 B		10 U		0.33 B			10 U		0.18 B			10 U	
Barium	2000	2000	2000	7300	36.8 J		78.2 B		69			52.2 B J		46.4			200 U	
Beryllium	4	4	4	73	1 U		0.41 B J		1 U			0.61 B J		1 U			4 U	
Cadmium	5	5	5		1 U		5 U		1 U			5 U		1 U			5 U	
Cadmium	5	5	5	18	1 U		5 U		1 U			5 U		1 U			5 U	
Calcium																		
Chromium	100	100	100		13.8 J		5 U		4.3 J			2.2 B		5.6 J E			1.7 B	
Copper	1000	1000	1300	1500	1.1 B		25 U		1.5 B			25 U		0.74 B			0.75 B	
Hexavalent Chromium	100	100		0.043			50 U					50 U					50 UJ	
Iron			300	26000														
Lead	5	5	15		1.5		3 U		0.26 B			3 U		0.34 B			3 U	
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57	0.2 U		0.2 U		0.2 U			0.2 U		0.2 U			0.2 U	
Nickel	100	100		730	2.4		1.1 B		0.51 B			1.2 B		1.2			40 U	
Potassium																		
Selenium	50	50	50	180	0.42 B		5 U		5 U			5 U		0.45 B			5 U	
Silver	100	100		180	1 U		0.6 B		1 U			5 U		1 U			5 U	
Sodium																		
Thallium	2	2	2		1 U		5.1 B		1 U			10 U		0.057 B			10 U	
Vanadium	260	720		2.6	4.4 J		50 U		2 J			50 U		0.72 B J			50 U	
Zinc	2000	2000		11000	5		4.4 B J		4.8 B			3.4 B J		3.9 B J			20 U	
METAL (Dissolved)																		
Antimony	6	6	6	15		0.065 B J		10 U		2 U			10 U		0.081 B			10 U
Arsenic	10	10	10	0.045		1 U		10 U		0.69 B			10 U		0.15 B			10 U
Barium	2000	2000	2000	7300		38.6		74.8 B		66.1			46.7 B		45.6			47.7 B
Beryllium	4	4	4	73		1 U		4 U		1 U			0.67 B J		1 U			4 U
Cadmium	5	5	5	18		1 U		5 U		1 U			5 U		1 U			5 U
Cadmium	5	5	5			1 U		5 U		1 U			5 U		1 U			5 U
Calcium											9620					134000 J		
Chromium	100	100	100			16.6 J		5 U		4.1 J			1.6 B		5.8 J E			5 U
Copper	1000	1000	1300	1500		1.4 B		25 U		0.25 B			25 U		0.48 B			25 U
Hexavalent Chromium	100	100		0.043				50 U					50 U					50 U
Iron			300	26000							10900					100 U		
Lead	5	5	15			0.19 B		3 U		0.025 B J			3 U		1 U			3 U
Magnesium											4300 B					16100		
Manganese	300	300	50	880							710					22.6		
Manganese	300	300	50								710					22.6		
Mercury	2	2	2	0.57		0.2 U		0.2 U		0.2 U			0.2 U		0.2 U			0.2 U
Nickel	100	100		730		2.3		1.2 B		0.42 B			40 U		1			40 U
Potassium											2360 B					3010 B		
Selenium	50	50	50	180		0.97 B J		5 U		5 U			5 U		0.44 B J			5 U
Silver	100	100		180		1 U		5 U		1 U			5 U		1 U			5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-97 9/19/2008	MW-97 9/19/2008	MW-98D 5/27/2008	MW-98D 5/27/2008	MW-98D 9/8/2008	MW-98D 9/8/2008	MW-98D 6/15/2010	MW-98I 5/23/2008	MW-98I 5/23/2008	MW-98I 9/12/2008	MW-98I 9/12/2008	MW-98I 6/16/2010	MW-98S 5/22/2008	MW-98S 5/22/2008
Sodium											3450 B					22900		
Thallium	2	2	2			1 U		5.9 B		1 U			10 U		0.098 B			10 U
Vanadium	260	720		2.6		5.3 J		50 U		1.8			1.2 B		1.5 J			50 U
Zinc	2000	2000		11000		6.2		1.5 B J		3.5 B			3.1 B J		2.4 B J			20 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-98S 9/8/2008	MW-98S 9/8/2008	MW-98S 6/16/2010	MW-99D 5/22/2008	MW-99D 5/22/2008	MW-99D 9/18/2008	MW-99D 9/18/2008	MW-99D 6/22/2010	MW-99S 5/22/2008	MW-99S 5/22/2008	MW-99S 9/24/2008	MW-99S 9/24/2008	MW-99S 6/22/2010	MW-100D 5/22/2008
METAL																		
Antimony	6	6	6	15	0.12 B			10 U		0.2 B J			10 U		0.069 B			10 U
Arsenic	10	10	10	0.045	0.38 B			10 U		0.59 B			10 U		1 U			10 U
Barium	2000	2000	2000	7300	39.7			200 U		49.3			200 U		40.6 J			200 U
Beryllium	4	4	4	73	1 U			4 U		1 U			4 U		1 U			4 U
Cadmium	5	5	5		1 U			5 U		1 U			5 U		1 U			5 U
Cadmium	5	5	5	18	1 U			5 U		1 U			5 U		1 U			5 U
Calcium																		
Chromium	100	100	100		6.4 J			5.2		7.8 J			2.1 B		15.5 J			3.8 B
Copper	1000	1000	1300	1500	1.1 B			25 U		0.6 B			1.2 B		0.75 B			25 U
Hexavalent Chromium	100	100		0.043				50 UJ					50 UJ					50 UJ
Iron			300	26000														
Lead	5	5	15		0.37 B			3 U		0.1 B			3 U		0.077 B			3 U
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57	0.2 U			0.2 U		0.2 U			0.2 U		0.2 U			0.2 U
Nickel	100	100		730	2			1.4 B		0.83 B			1.6 B		2.8			2.1 B
Potassium																		
Selenium	50	50	50	180	0.36 B			5 U		0.74 B			5 U		0.35 B			5 U
Silver	100	100		180	1 U			0.61 B		1 U			5 U		1 U			5 U
Sodium																		
Thallium	2	2	2		1 U			3.8 B		0.081 B J			10 U		1 U			10 U
Vanadium	260	720		2.6	1.3 J			50 U		3.9 J			1.6 B		4.4 J			50 U
Zinc	2000	2000		11000	3.9 B			20 U		7.2			20 U		3.4 B			20 U
METAL (Dissolved)																		
Antimony	6	6	6	15		0.13 B J			10 U		0.11 B J			10 U		2 U		
Arsenic	10	10	10	0.045		0.25 B			10 U		0.45 B			10 U		1 U		
Barium	2000	2000	2000	7300		39.2			30.1 B		39.6			40.5 B		39.2		
Beryllium	4	4	4	73		1 U			4 U		1 U			4 U		1 U		
Cadmium	5	5	5	18		1 U			5 U		1 U			5 U		1 U		
Cadmium	5	5	5			1 U			5 U		1 U			5 U		1 U		
Calcium							133000 J					91500					102000	
Chromium	100	100	100			5.6 J			4.6 B		7.7 J			5 U		15.4 J E		
Copper	1000	1000	1300	1500		0.59 B			25 U		0.51 B			25 U		0.75 B		
Hexavalent Chromium	100	100		0.043					50 U					50 U				
Iron			300	26000			100 U					100 U					100 U	
Lead	5	5	15			0.041 B J			3 U		0.07 B			3 U		0.047 B		
Magnesium							15100					17900					17700	
Manganese	300	300	50	880			15 U					3.5 B					19	
Manganese	300	300	50				15 U					3.5 B					19	
Mercury	2	2	2	0.57		0.2 U			0.2 U		0.2 U			0.2 U		0.2 U		
Nickel	100	100		730		1.2			40 U		0.82 B			1.4 B		2.5		
Potassium							3150 B					4730 B					3940 B	
Selenium	50	50	50	180		0.63 B			5 U		0.4 B			5 U		5.0 U		
Silver	100	100		180		1 U			5 U		1 U			5 U		1 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-98S 9/8/2008	MW-98S 9/8/2008	MW-98S 6/16/2010	MW-99D 5/22/2008	MW-99D 5/22/2008	MW-99D 9/18/2008	MW-99D 9/18/2008	MW-99D 6/22/2010	MW-99S 5/22/2008	MW-99S 5/22/2008	MW-99S 9/24/2008	MW-99S 9/24/2008	MW-99S 6/22/2010	MW-100D 5/22/2008
Sodium							24700					37800					37900	
Thallium	2	2	2			1 U			6.8 B		0.031 B			4 B		1 U		
Vanadium	260	720		2.6		0.87 B			50 U		0.78 B J			50 U		1.0 U		
Zinc	2000	2000		11000		3.3 B			20 U		6.1			20 U		5		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-100D 5/22/2008	MW-100D 9/22/2008	MW-100D 9/22/2008	MW-100D 6/24/2010	MW-100I 5/21/2008	MW-100I 5/21/2008	MW-100I 9/24/2008	MW-100I 9/24/2008	MW-100I 6/24/2010	MW-100S 5/22/2008	MW-100S 5/22/2008	MW-100S Dup 5/22/2008
METAL																
Antimony	6	6	6	15		2 U			10 U		2 U			10 U		10 U
Arsenic	10	10	10	0.045		1 U			10 U		1 U			10 U		10 U
Barium	2000	2000	2000	7300		43.4 J			43.8 B J		40.4 J			200 U		200 U
Beryllium	4	4	4	73		1 U			0.35 B J		1 U			4 U		4 U
Cadmium	5	5	5			1 U			5 U		1 U			5 U		5 U
Cadmium	5	5	5	18		1 U			5 U		1 U			5 U		5 U
Calcium																
Chromium	100	100	100			14.7 J			3.6 B		15.5 J			11		11.1
Copper	1000	1000	1300	1500		1.1 B			25 U		1.5 B			25 U		25 U
Hexavalent Chromium	100	100		0.043					50 U					50 UJ		50 UJ
Iron			300	26000												
Lead	5	5	15			0.28 B			3 U		0.79 B			3 U		3 U
Magnesium																
Manganese	300	300	50													
Manganese	300	300	50	880												
Mercury	2	2	2	0.57		0.2 U			0.2 U		0.2 U			0.2 U		0.2 U
Nickel	100	100		730		4.1			40 U		2.6			40 U		1.6 B
Potassium																
Selenium	50	50	50	180		5 U			5 U		0.36 B			5 U		5 U
Silver	100	100		180		1 U			5 U		1 U			5 U		0.62 B
Sodium																
Thallium	2	2	2			1 U			10 U		1 U			10 U		10 U
Vanadium	260	720		2.6		3 J			50 U		3.1 J			2.5 B		2.6 B
Zinc	2000	2000		11000		3.5 B			6.7 B J		7.1			20 U		20 U
METAL (Dissolved)																
Antimony	6	6	6	15	10 U		2 U			10 U		2 U			10 U	
Arsenic	10	10	10	0.045	10 U		1 U			10 U		1 U			10 U	
Barium	2000	2000	2000	7300	35.8 B		41			42 B		38			36 B	
Beryllium	4	4	4	73	4 U		1 U			4 U		1 U			4 U	
Cadmium	5	5	5	18	5 U		1 U			5 U		1 U			5 U	
Cadmium	5	5	5		5 U		1 U			5 U		1 U			5 U	
Calcium								86300					92200			
Chromium	100	100	100		2.8 B		12.7 J			4 B		17.3 J			9.2	
Copper	1000	1000	1300	1500	25 U		0.69 B			25 U		0.73 B			25 U	
Hexavalent Chromium	100	100		0.043	50 U					50 U					50 U	
Iron			300	26000				100 U					100 U			
Lead	5	5	15		3 U		0.045 B			3 U		0.06 B			3 U	
Magnesium								19600					20100			
Manganese	300	300	50	880				104					8 B			
Manganese	300	300	50					104					8 B			
Mercury	2	2	2	0.57	0.2 U		0.2 U			0.2 U		0.2 U			0.2 U	
Nickel	100	100		730	1.8 B		3.8			40 U		1.9			40 U	
Potassium								2830 B					3700 B			
Selenium	50	50	50	180	5 U		0.46 B J			5 U		5 U			5 U	
Silver	100	100		180	0.73 B		1 U			5 U		1 U			5 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-100D 5/22/2008	MW-100D 9/22/2008	MW-100D 9/22/2008	MW-100D 6/24/2010	MW-100I 5/21/2008	MW-100I 5/21/2008	MW-100I 9/24/2008	MW-100I 9/24/2008	MW-100I 6/24/2010	MW-100S 5/22/2008	MW-100S 5/22/2008	MW-100S Dup 5/22/2008
Sodium								32000					36500			
Thallium	2	2	2		10 U		1 U			10 U		1 U			10 U	
Vanadium	260	720		2.6	1.3 B		2.7 J			50 U		4.9 J			50 U	
Zinc	2000	2000		11000	20 U		6.6			6.2 B J		2 B			20 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-100S Dup 5/22/2008	MW-100S 9/24/2008	MW-100S 9/24/2008	MW-100S 6/22/2010	MW-101D 5/21/2008	MW-101D 5/21/2008	MW-101D 9/12/2008	MW-101D 9/12/2008	MW-101D 6/16/2010	MW-101S 5/22/2008	MW-101S 5/22/2008	MW-101S 9/10/2008	MW-101S 9/10/2008
METAL																	
Antimony	6	6	6	15		0.092 B			10 U		0.2 B			10 U		0.14 B	
Arsenic	10	10	10	0.045		0.45 B			10 U		0.31 B			10 U		0.32 B	
Barium	2000	2000	2000	7300		42.5 J			32.9 B J		38.1			200 U		56.6	
Beryllium	4	4	4	73		0.097 B			0.45 B J		1 U			4 U		1 U	
Cadmium	5	5	5			1 U			5 U		1 U			5 U		1 U	
Cadmium	5	5	5	18		1 U			5 U		1 U			5 U		1 U	
Calcium																	
Chromium	100	100	100			16.6 J			1.7 B		5.6 J			1.3 B		8.1 J	
Copper	1000	1000	1300	1500		3.1			25 U		0.65 B			25 U		0.8 B	
Hexavalent Chromium	100	100		0.043					50 U					50 UJ			
Iron			300	26000													
Lead	5	5	15			1.8			3 U		0.14 B			3 U		0.11 B	
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57		0.2 U			0.2 U		0.2 U			0.2 U		0.2 U	
Nickel	100	100		730		4			2.1 B		2.2			1.4 B		1.9	
Potassium																	
Selenium	50	50	50	180		5 U			5 U		0.79 B			5 U		2 B	
Silver	100	100		180		1 U			5 U		1 U			5 U		1 U	
Sodium																	
Thallium	2	2	2			0.02 B			10 U		0.16 B			10 U		0.045 B	
Vanadium	260	720		2.6		4.7 J			2.9 B		1.2 J			1.4 B		0.95 B J	
Zinc	2000	2000		11000		13			16.5 B J		5.4 J			20 U		5.0 U	
METAL (Dissolved)																	
Antimony	6	6	6	15	10 U		2 U			10 U		0.24 B			10 U		0.12 B
Arsenic	10	10	10	0.045	10 U		1 U			10 U		0.92 B			10 U		1 U
Barium	2000	2000	2000	7300	38.7 B		32.3			33.9 B		38.8			49.8 B		57.5
Beryllium	4	4	4	73	4 U		1 U			0.45 B J		1 U			4 U		1 U
Cadmium	5	5	5	18	5 U		1 U			5 U		1 U			5 U		1 U
Cadmium	5	5	5		5 U		1 U			5 U		1 U			5 U		1 U
Calcium								90000					84600 J				
Chromium	100	100	100		9.4		17.1 J			5 U		5.7 J			5 U		7.9 J
Copper	1000	1000	1300	1500	25 U		0.75 B			25 U		0.42 B			25 U		0.73 B
Hexavalent Chromium	100	100		0.043	50 U					50 U					50 U		
Iron			300	26000				100 U					259				
Lead	5	5	15		3 U		0.081 B			3 U		1 U			3 U		1.0 U
Magnesium								18500					34200				
Manganese	300	300	50	880				49.9					182				
Manganese	300	300	50					49.9					182				
Mercury	2	2	2	0.57	0.2 U		0.2 U			0.2 U		0.2 U			0.2 U		0.2 U
Nickel	100	100		730	40 U		2			2.7 B		2			40 U		2.1
Potassium								3770 B					2100 B				
Selenium	50	50	50	180	5 U		5 U			5 U		0.68 B J			5 U		1.8 B
Silver	100	100		180	5 U		1 U			5 U		1 U			5 U		1 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-100S Dup 5/22/2008	MW-100S 9/24/2008	MW-100S 9/24/2008	MW-100S 6/22/2010	MW-101D 5/21/2008	MW-101D 5/21/2008	MW-101D 9/12/2008	MW-101D 9/12/2008	MW-101D 6/16/2010	MW-101S 5/22/2008	MW-101S 5/22/2008	MW-101S 9/10/2008	MW-101S 9/10/2008
Sodium								35600					13800				
Thallium	2	2	2		10 U		1 U			10 U		0.081 B			10 U		1.0 U
Vanadium	260	720		2.6	50 U		2.7 J			2.7 B		1.1 J			1.6 B		1.1
Zinc	2000	2000		11000	20 U		3.3 B			12.2 B J		4.6 B J			20 U		5.0 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-101S 6/22/2010	MW-102D 4/29/2008	MW-102D 4/29/2008	MW-102D 9/19/2008	MW-102D 9/19/2008	MW-102D 6/23/2010	MW-102S 4/30/2008	MW-102S 4/30/2008	MW-102S 9/17/2008	MW-102S 9/17/2008	MW-102S 6/21/2010	MW-103D 4/30/2008
METAL																
Antimony	6	6	6	15		10 U		0.24 B			10 U		2 U			10 U
Arsenic	10	10	10	0.045		10 U		0.71 B			10 U		0.48 B			10 U
Barium	2000	2000	2000	7300		11.4 B J		10 J			100 B J		95.3			64.7 B J
Beryllium	4	4	4	73		4 U		1 U			4 U		1 U			4 U
Cadmium	5	5	5			5 U		1 U			5 U		1 U			5 U
Cadmium	5	5	5	18		5 U		1 U			5 U		1 U			5 U
Calcium																
Chromium	100	100	100			5 U		12.6 J			1.6 B		12.3 J			5 U
Copper	1000	1000	1300	1500		25 U		0.84 B			0.84 B		2			1 B
Hexavalent Chromium	100	100		0.043		50 U					50 U					50 U
Iron			300	26000												
Lead	5	5	15			3 U		0.15 B			3 U		1.3			3 U
Magnesium																
Manganese	300	300	50													
Manganese	300	300	50	880												
Mercury	2	2	2	0.57		0.2 U		0.2 U			0.2 U		0.2 U			0.2 U
Nickel	100	100		730		40 U		0.9 B			6.8 B		7.8			40 U
Potassium																
Selenium	50	50	50	180		5 U		0.39 B			5 U		0.4 B			5 U
Silver	100	100		180		5 U		1 U			5 U		1 U			5 U
Sodium																
Thallium	2	2	2			10 U		0.019 B			6.8 B J		1 U			10 U
Vanadium	260	720		2.6		50 U		4.7 J			50 U		1.4 J			50 U
Zinc	2000	2000		11000		20 U		3.2 B			8.7 B J		17.8			2.8 B J
METAL (Dissolved)																
Antimony	6	6	6	15			10 U		2 U			10 U		2 U		
Arsenic	10	10	10	0.045			10 U		0.36 B			10 U		1 U		
Barium	2000	2000	2000	7300			7.7 B J		7.3 B			94.1 B J		86.9		
Beryllium	4	4	4	73			4 U		1 U			4 U		1 U		
Cadmium	5	5	5	18			5 U		1 U			5 U		1 U		
Cadmium	5	5	5				5 U		1 U			5 U		1 U		
Calcium					119000					27400					8540	
Chromium	100	100	100				5 U		14.4 J			5 U		7.9 J		
Copper	1000	1000	1300	1500			25 U		0.37 B			0.72 B		1.4 B		
Hexavalent Chromium	100	100		0.043			50 U					50 U				
Iron			300	26000	100 U					1190					100 U	
Lead	5	5	15				3 U		0.068 B			3 U		0.92 B		
Magnesium					25500					7520					4250 B	
Manganese	300	300	50	880	6.8 B					80.3					23	
Manganese	300	300	50		6.8 B					80.3					23	
Mercury	2	2	2	0.57			0.2 U		0.2 U			0.2 U		0.2 U		
Nickel	100	100		730			40 U		0.69 B			7.2 B		6.5		
Potassium					3960 B					1120 B					2400 B	
Selenium	50	50	50	180			5 U		0.84 B J			5 U		0.22 B		
Silver	100	100		180			5 U		1 U			5 U		1 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-101S 6/22/2010	MW-102D 4/29/2008	MW-102D 4/29/2008	MW-102D 9/19/2008	MW-102D 9/19/2008	MW-102D 6/23/2010	MW-102S 4/30/2008	MW-102S 4/30/2008	MW-102S 9/17/2008	MW-102S 9/17/2008	MW-102S 6/21/2010	MW-103D 4/30/2008
Sodium					41100					6400					12900	
Thallium	2	2	2				10 U		1 U			10 U		1 U		
Vanadium	260	720		2.6			50 U		3.5 J			50 U		0.86 B J		
Zinc	2000	2000		11000			5 B J		9.9			9.9 B J		15.9		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-103D 4/30/2008	MW-103D 9/19/2008	MW-103D 9/19/2008	MW-103D 6/18/2010	MW-103S 4/30/2008	MW-103S 4/30/2008	MW-103S 9/19/2008	MW-103S 9/19/2008	MW-103S 6/24/2010	MW-104 5/5/2008	MW-104 5/5/2008	MW-104 10/9/2008	MW-104 10/9/2008	MW-104 6/24/2009
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15		2 U			10 U		2 U			10 U		0.34 B		
Arsenic	10	10	10	0.045		1 U			10 U		1 U			10 U		5		
Barium	2000	2000	2000	7300		59.5 J			90.5 B J		87.3 J			86.1 B		307		
Beryllium	4	4	4	73		1 U			4 U		1 U			4 U		2.5		
Cadmium	5	5	5			1 U			5 U		1 U			5 U		0.85 B		
Cadmium	5	5	5	18		1 U			5 U		1 U			5 U		0.85 B		
Calcium																		
Chromium	100	100	100			18.2 J			5 U		18.6 J			13.2		34.8 J		
Copper	1000	1000	1300	1500		2.2			25 U		1.2 B			25 U		14.6		
Hexavalent Chromium	100	100		0.043					50 U					50 U				
Iron			300	26000														
Lead	5	5	15			0.092 B			3 U		0.26 B			3 U		10.7		0.87 B
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57		0.2 U			0.2 U		0.2 U			0.2 U		0.03 B		
Nickel	100	100		730		3.6			2.4 B		4.1			9.9 B J		31.5 J		
Potassium																		
Selenium	50	50	50	180		5 U			5 U		5 U			5 U		3.7 B J		
Silver	100	100		180		1 U			5 U		1 U			5 U		0.26 B		
Sodium																		
Thallium	2	2	2			1 U			10 U		0.043 B			10 U		0.18 B		
Vanadium	260	720		2.6		1.8 J			50 U		5 J			50 U		27 J		
Zinc	2000	2000		11000		4.3 B			4.1 B J		3.9 B			37.1 J		63.3		
METAL (Dissolved)																		
Antimony	6	6	6	15	10 U		2 U			10 U		0.063 B J			10 U		0.12 B	
Arsenic	10	10	10	0.045	10 U		1 U			10 U		1 U			10 U		1 U	
Barium	2000	2000	2000	7300	61 B J		54.7			90 B J		78.2			82.2 B		72.2	
Beryllium	4	4	4	73	4 U		1 U			4 U		1 U			4 U		1 U	
Cadmium	5	5	5		5 U		1 U			5 U		1 U			5 U		1 U	
Cadmium	5	5	5	18	5 U		1 U			5 U		1 U			5 U		1 U	
Calcium								33500					27400					
Chromium	100	100	100		5 U		15.8 J			5 U		16.6 J			2.6 B		13.2 J	
Copper	1000	1000	1300	1500	25 U		0.4 B			25 U		0.47 B			25 U		0.41 B	
Hexavalent Chromium	100	100		0.043	50 U					50 U					50 U			
Iron			300	26000				100 U					12.8 B					
Lead	5	5	15		3 U		0.063 B			3 U		0.072 B			3 U		1 U	
Magnesium								14900					11100					
Manganese	300	300	50					15 U					5.7 B					
Manganese	300	300	50	880				15 U					5.7 B					
Mercury	2	2	2	0.57	0.2 U		0.2 U			0.2 U		0.2 U			0.2 U		0.2 U	
Nickel	100	100		730	40 U		3.1			1.3 B		3.4			8.2 B J		2.8	
Potassium								2520 B					2240 B					
Selenium	50	50	50	180	5 U		0.46 B J			5 U		0.64 B J			5 U		1.3 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-103D 4/30/2008	MW-103D 9/19/2008	MW-103D 9/19/2008	MW-103D 6/18/2010	MW-103S 4/30/2008	MW-103S 4/30/2008	MW-103S 9/19/2008	MW-103S 9/19/2008	MW-103S 6/24/2010	MW-104 5/5/2008	MW-104 5/5/2008	MW-104 10/9/2008	MW-104 10/9/2008	MW-104 6/24/2009
Silver	100	100		180	5 U		1 U			5 U		1 U			5 U		1 U	
Sodium								10400					8410					
Thallium	2	2	2		3.6 B		1 U			9.7 B		0.037 B			10 U		1 U	
Vanadium	260	720		2.6	50 U		1.7 J			1.8 B		5.2 J			50 U		4.7 J	
Zinc	2000	2000		11000	4.2 B J		3.7 B			2 B J		4 B			35.2 J		9.4 J	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-104 6/24/2009	MW-104 6/23/2010	MW-104 6/23/2010	MW-105 5/5/2008	MW-105 5/5/2008	MW-105 10/2/2008	MW-105 10/2/2008	MW-106 4/29/2008	MW-106 4/29/2008	MW-106 9/29/2008	MW-106 9/29/2008	MW-106 6/18/2010	MW-106 Dup 6/18/2010
METAL																	
Aluminum			200	37000													
Antimony	6	6	6	15				10 U		2 U		10 U		0.086 B			
Arsenic	10	10	10	0.045				10 U		1 U		10 U		1.2			
Barium	2000	2000	2000	7300				46.4 B		47.8		156 B		123			
Beryllium	4	4	4	73				4 U		1 U		4 U		1 U			
Cadmium	5	5	5					5 U		1 U		5 U		1 U			
Cadmium	5	5	5	18				5 U		1 U		5 U		1 U			
Calcium																	
Chromium	100	100	100					2.6 B		7.5 J		6.6		14.8 J			
Copper	1000	1000	1300	1500				25 U		1.1 B		1.2 B		1.7 B			
Hexavalent Chromium	100	100		0.043				50 U				50 U					
Iron			300	26000													
Lead	5	5	15			3 U		3 U		0.36 B		3 U		1			
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57				0.2 U		0.2 U		0.2 U		0.2 U			
Nickel	100	100		730				2.5 B J		3.3		5.8 B		6.3			
Potassium																	
Selenium	50	50	50	180				5 U		0.73 B		5 U		3.3 B			
Silver	100	100		180				5 U		1 U		5 U		1 U			
Sodium																	
Thallium	2	2	2					10 U		0.041 B J		6 B		0.087 B			
Vanadium	260	720		2.6				1.6 B		6.3 J		2 B		2.7 J			
Zinc	2000	2000		11000				4.8 B J		3.5 B		17.7 B		5.8			
METAL (Dissolved)																	
Antimony	6	6	6	15					10 U		2 U		10 U		0.094 B		
Arsenic	10	10	10	0.045					10 U		1 U		10 U		1 U		
Barium	2000	2000	2000	7300					45.6 B		46.1		151 B		135		
Beryllium	4	4	4	73					4 U		1 U		4 U		1 U		
Cadmium	5	5	5						5 U		1 U		5 U		1 U		
Cadmium	5	5	5	18					5 U		1 U		5 U		1 U		
Calcium							9030									130000	131000
Chromium	100	100	100						2.3 B		10.6 J		5 U		10.8 J		
Copper	1000	1000	1300	1500					25 U		1.4 B J		25 U		0.94 B		
Hexavalent Chromium	100	100		0.043					50 U				50 U				
Iron			300	26000			100 U									100 U	100 U
Lead	5	5	15		1 U		3 U		3 U		0.15 B J		3 U		0.31 B		
Magnesium							4600 B									22900	23200
Manganese	300	300	50				4.1 B									1470	1500
Manganese	300	300	50	880			4.1 B									1470	1500
Mercury	2	2	2	0.57					0.2 U		0.2 U		0.2 U		0.2 U		
Nickel	100	100		730					1.6 B J		4.3		1.5 B		4.6		
Potassium							2980 B									74000	74500
Selenium	50	50	50	180					5 U		0.28 B		5 U		5 U		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-104 6/24/2009	MW-104 6/23/2010	MW-104 6/23/2010	MW-105 5/5/2008	MW-105 5/5/2008	MW-105 10/2/2008	MW-105 10/2/2008	MW-106 4/29/2008	MW-106 4/29/2008	MW-106 9/29/2008	MW-106 9/29/2008	MW-106 6/18/2010	MW-106 Dup 6/18/2010
Silver	100	100		180					5 U		1 U		5 U		1 U		
Sodium							11800									87400	88300
Thallium	2	2	2						10 U		0.038 B		7.6 B J		0.078 B J		
Vanadium	260	720		2.6					1.6 B		0.63 B J		50 U		2 J		
Zinc	2000	2000		11000					8.2 B J		11.3		3.2 B		6		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-107 5/6/2008	MW-107 5/6/2008	MW-107 9/10/2008	MW-107 9/10/2008	MW-107 6/18/2010	MW-108D 4/23/2008	MW-108D 4/23/2008	MW-108D 9/5/2008	MW-108D 9/5/2008	MW-108S 4/23/2008	MW-108S 4/23/2008	MW-108S 9/5/2008	MW-108S 9/5/2008
METAL																	
Aluminum			200	37000													
Antimony	6	6	6	15	10 U		0.082 B			10 U		0.072 B		50 U		2.9	
Arsenic	10	10	10	0.045	10 U		0.53 B			10 U		1 U		93.4		78.1	
Barium	2000	2000	2000	7300	182 B		66			7.9 B		7.8 B		1350		1470	
Beryllium	4	4	4	73	4 U		1 U			4 U		1 U		39.2		44.5	
Cadmium	5	5	5		5 U		1 U			5 U		1 U		25 U		8.1	
Cadmium	5	5	5	18	5 U		1 U			5 U		1 U		25 U		8.1	
Calcium																	
Chromium	100	100	100		7.7		14.7 J			5 U		4.3 J		49.9		85.4 J	
Copper	1000	1000	1300	1500	25 U		0.73 B			25 U		0.86 B		274		307	
Hexavalent Chromium	100	100		0.043	50 U					50 U				50 U			
Iron			300	26000													
Lead	5	5	15		3 U		0.16 B			3 U		0.2 B		374		446	
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57	0.2 U		0.2 U			0.2 U		0.2 U		0.27		0.53	
Nickel	100	100		730	5.9 B J		3.5			40 U		0.52 B		337		352	
Potassium																	
Selenium	50	50	50	180	5 U		0.37 B			5 U		5 U		13.8 B		23.5	
Silver	100	100		180	5 U		1 U			5 U		1 U		7.2 B		0.5 B	
Sodium																	
Thallium	2	2	2		10 U		0.031 B			10 U		1 U		17.9 B		2.5	
Vanadium	260	720		2.6	4.7 B		1.9 J			50 U		1.4 J		65.2 B		69.8 J	
Zinc	2000	2000		11000	42.1 J		5.0 U			5.6 B		2.8 B		1130		1010	
METAL (Dissolved)																	
Antimony	6	6	6	15		10 U		0.12 B			10 U		2 U		10 U		2 U
Arsenic	10	10	10	0.045		10 U		1 U			10 U		1 U		10 U		0.42 B
Barium	2000	2000	2000	7300		180 B		66.6			7.3 B		6.8 B		71.2 B		72
Beryllium	4	4	4	73		4 U		1 U			4 U		1 U		4 U		0.09 B
Cadmium	5	5	5			5 U		1 U			5 U		1 U		5 U		1 U
Cadmium	5	5	5	18		5 U		1 U			5 U		1 U		5 U		1 U
Calcium									191000								
Chromium	100	100	100			2.7 B		12 J			5 U		4.3 J		5 U		4.6 J
Copper	1000	1000	1300	1500		25 U		0.61 B			25 U		0.22 B		25 U		0.28 B
Hexavalent Chromium	100	100		0.043		50 U					50 U				50 U		
Iron			300	26000					100 U								
Lead	5	5	15			3 U		1.0 U			3 U		1 U		3 U		0.031 B J
Magnesium									58700								
Manganese	300	300	50						1.6 B								
Manganese	300	300	50	880					1.6 B								
Mercury	2	2	2	0.57		0.2 U		0.059 B			0.2 U		0.2 U		0.2 U		0.2 U
Nickel	100	100		730		2.8 B J		2.8			40 U		0.27 B		5.6 B		7.6
Potassium									25500								
Selenium	50	50	50	180		5 U		0.31 B			5 U		5 U		5 U		0.46 B

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-107 5/6/2008	MW-107 5/6/2008	MW-107 9/10/2008	MW-107 9/10/2008	MW-107 6/18/2010	MW-108D 4/23/2008	MW-108D 4/23/2008	MW-108D 9/5/2008	MW-108D 9/5/2008	MW-108S 4/23/2008	MW-108S 4/23/2008	MW-108S 9/5/2008	MW-108S 9/5/2008
Silver	100	100		180		5 U		1 U			5 U		1 U		5 U		1 U
Sodium									26400								
Thallium	2	2	2			10 U		1.0 U			10 U		1 U		10 U		0.056 B J
Vanadium	260	720		2.6		4.2 B		1.3			50 U		1.5		50 U		1.5
Zinc	2000	2000		11000		18.8 B J		5.0 U			3.2 B		2.5 B		8.6 B		7.7

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-108S 6/22/2009	MW-108S 6/22/2009	MW-108S 7/1/2010	MW-108S 7/1/2010	MW-109D 5/20/2008	MW-109D 5/20/2008	MW-109D 9/17/2008	MW-109D 9/17/2008	MW-109S 5/20/2008	MW-109S 5/20/2008	MW-109S 9/16/2008	MW-109S 9/16/2008	MW-109S 6/21/2010
METAL																	
Aluminum			200	37000													
Antimony	6	6	6	15					10 U		0.081 B		10 U		0.058 B		
Arsenic	10	10	10	0.045	1 U		20.3		10 U		1.6		10 U		1.2		
Barium	2000	2000	2000	7300					418		318		214		172		
Beryllium	4	4	4	73	0.19 B		4 U		4 U		1 U		4 U		0.15 B		
Cadmium	5	5	5		1 U				5 U		1 U		5 U		1 U		
Cadmium	5	5	5	18	1 U				5 U		1 U		5 U		1 U		
Calcium																	
Chromium	100	100	100						5 U		5.5 J		5 U		7.2 J		
Copper	1000	1000	1300	1500					25 U		0.39 B		25 U		1.5 B		
Hexavalent Chromium	100	100		0.043					50 U				50 U				
Iron			300	26000													
Lead	5	5	15		1.2		164		3 U		0.18 B		3 U		1.5		
Magnesium																	
Manganese	300	300	50														
Manganese	300	300	50	880													
Mercury	2	2	2	0.57					0.2 U		0.2 U		0.31		0.62		
Nickel	100	100		730	5.7		187		1.1 B		1.6		2.9 B		6.2		
Potassium																	
Selenium	50	50	50	180					5 U		0.58 B		5 U		0.26 B		
Silver	100	100		180					5 U		1 U		5 U		1 U		
Sodium																	
Thallium	2	2	2						10 U		0.034 B		10 U		0.077 B		
Vanadium	260	720		2.6					50 U		1.4 J		2 B		1.1 J		
Zinc	2000	2000		11000					2 B J		2.5 B		3.9 B J		11.1		
METAL (Dissolved)																	
Antimony	6	6	6	15						10 U		0.052 B		10 U		0.064 B	
Arsenic	10	10	10	0.045		1 U		10 U		10 U		0.47 B		10 U		0.59 B	
Barium	2000	2000	2000	7300						420		306		221		166	
Beryllium	4	4	4	73		0.21 B		4 U		4 U		1 U		4 U		1 U	
Cadmium	5	5	5			1 U				5 U		1 U		5 U		1 U	
Cadmium	5	5	5	18		1 U				5 U		1 U		5 U		1 U	
Calcium								9270									86600
Chromium	100	100	100							5 U		6.3 J		5 U		6.9 J	
Copper	1000	1000	1300	1500						25 U		0.43 B		25 U		0.5 B	
Hexavalent Chromium	100	100		0.043						50 U				50 U			
Iron			300	26000				109									639
Lead	5	5	15			1 U		3 U		3 U		0.16 B		3 U		0.4 B	
Magnesium								4190 B									9410
Manganese	300	300	50					85.3									1800
Manganese	300	300	50	880				85.3									1800
Mercury	2	2	2	0.57						0.2 U		0.2 U		0.1 B		0.073 B	
Nickel	100	100		730		4.3		31.9 B		40 U		1.9		3 B		4.1	
Potassium								3330 B									2710 B
Selenium	50	50	50	180						5 U		0.28 B		5 U		0.36 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-108S 6/22/2009	MW-108S 6/22/2009	MW-108S 7/1/2010	MW-108S 7/1/2010	MW-109D 5/20/2008	MW-109D 5/20/2008	MW-109D 9/17/2008	MW-109D 9/17/2008	MW-109S 5/20/2008	MW-109S 5/20/2008	MW-109S 9/16/2008	MW-109S 9/16/2008	MW-109S 6/21/2010
Silver	100	100		180						5 U		1 U		5 U		1 U	
Sodium								13500									27500
Thallium	2	2	2							10 U		0.022 B		10 U		0.055 B	
Vanadium	260	720		2.6						50 U		1.6 J		50 U		1.7 J	
Zinc	2000	2000		11000						1.9 B		5.3		5.5 B		9.1	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-110 5/14/2008	MW-110 5/14/2008	MW-110 9/22/2008	MW-110 9/22/2008	MW-110 6/21/2010	MW-111 5/16/2008	MW-111 5/16/2008	MW-111 9/15/2008	MW-111 9/15/2008	MW-111 6/30/2010	MW-112 5/1/2008	MW-112 5/1/2008	MW-112 9/3/2008	MW-112 9/3/2008
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15	10 U		2 U			10 U		2 U			10 U		0.14 B	
Arsenic	10	10	10	0.045	10 U		1 U			10 U		0.34 B			10 U		1 U	
Barium	2000	2000	2000	7300	39.9 B		36.8 J			108 B		95			54.6 B		53.8	
Beryllium	4	4	4	73	4 U		1 U			4 U		1 U			4 U		1 U	
Cadmium	5	5	5		5 U		1 U			5 U		1 U			5 U		1 U	
Cadmium	5	5	5	18	5 U		1 U			5 U		1 U			5 U		1 U	
Calcium																		
Chromium	100	100	100		5 U		16.3 J			1.7 B		4.4 J			10.7		16.2 J	
Copper	1000	1000	1300	1500	25 U		0.83 B			0.99 B		0.81 B			25 U		0.58 B	
Hexavalent Chromium	100	100		0.043	50 U					50 U					50 U			
Iron			300	26000														
Lead	5	5	15		3 U		0.22 B			3 U		1 U			3 U		0.14 B	
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57	0.093 B J		0.2 U			0.2 U		0.2 U			0.2 U		0.2 U	
Nickel	100	100		730	40 U		2.7			1.8 B		0.33 B			40 U		0.7 B	
Potassium																		
Selenium	50	50	50	180	5 U		0.21 B			5 U		5 U			5 U		0.83 B	
Silver	100	100		180	5 U		1 U			5 U		1 U			5 U		1 U	
Sodium																		
Thallium	2	2	2		10 U		1 U			10 U		0.032 B			3.9 B		0.046 B	
Vanadium	260	720		2.6	50 U		3.5 J			50 U		1.9 J			1.2 B		1.6 J	
Zinc	2000	2000		11000	16.9 B J		2 B			1.6 B		2 B J			5.4 B J		5.2	
METAL (Dissolved)																		
Antimony	6	6	6	15		10 U		0.078 B J			10 U		2 U			10 U		0.17 B J
Arsenic	10	10	10	0.045		10 U		0.28 B			10 U		1 U			10 U		0.19 B
Barium	2000	2000	2000	7300		39.3 B		35.2			108 B		93.8			54.7 B		54.1
Beryllium	4	4	4	73		4 U		1 U			4 U		1 U			0.57 B J		1 U
Cadmium	5	5	5			5 U		1 U			5 U		1 U			5 U		1 U
Cadmium	5	5	5	18		5 U		1 U			5 U		1 U			5 U		1 U
Calcium									72700					34000				
Chromium	100	100	100			5 U		14.9 J			5 U		4.9 J			8.8		17 J
Copper	1000	1000	1300	1500		25 U		1.1 B			25 U		0.23 B			25 U		0.55 B
Hexavalent Chromium	100	100		0.043		50 U					50 U					50 U		
Iron			300	26000					100 U					2120				
Lead	5	5	15			3 U		0.23 B			3 U		1 U			3 U		0.068 B J
Magnesium									8760					8790				
Manganese	300	300	50						15 U					77.8				
Manganese	300	300	50	880					15 U					77.8				
Mercury	2	2	2	0.57		0.09 B J		0.2 U			0.2 U		0.2 U			0.2 U		0.2 U
Nickel	100	100		730		40 U		2.7			40 U		0.3 B			40 U		0.49 B
Potassium									2380 B					1040 B				
Selenium	50	50	50	180		5 U		5 U			5 U		0.34 B J			5 U		0.97 B

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-110 5/14/2008	MW-110 5/14/2008	MW-110 9/22/2008	MW-110 9/22/2008	MW-110 6/21/2010	MW-111 5/16/2008	MW-111 5/16/2008	MW-111 9/15/2008	MW-111 9/15/2008	MW-111 6/30/2010	MW-112 5/1/2008	MW-112 5/1/2008	MW-112 9/3/2008	MW-112 9/3/2008
Silver	100	100		180		5 U		1 U			5 U		1 U			5 U		1 U
Sodium									10500					4610 B				
Thallium	2	2	2			10 U		1 U			7.3 B		1 U			8.4 B		0.053 B J
Vanadium	260	720		2.6		50 U		3.6 J			50 U		1.8 J			50 U		1.8
Zinc	2000	2000		11000		3.3 B J		3.3 B			2.3 B J		2.7 B J			1.6 B		4.3 B

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-112 6/23/2010	MW-113 10/25/2007	MW-113 5/15/2008	MW-113 5/15/2008	MW-113 9/3/2008	MW-113 9/3/2008	MW-113 7/6/2009	MW-113 7/6/2009	MW-113 7/6/2010	MW-113 7/6/2010	MW-114 5/23/2008	MW-114 5/23/2008	MW-114 10/3/2008	MW-114 10/3/2008
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15		10 U	10 U		0.096 B						10 U		0.11 B	
Arsenic	10	10	10	0.045		15.1	10 U		1 U		1.0 U		10 U		10 U		1 U	
Barium	2000	2000	2000	7300		204	42.9 B		37.5						42.8 B		53.8	
Beryllium	4	4	4	73		4 U	4 U		1 U						4 U		1 U	
Cadmium	5	5	5			5 U	5 U		1 U						5 U		1 U	
Cadmium	5	5	5	18		5 U	5 U		1 U						5 U		1 U	
Calcium																		
Chromium	100	100	100			60.8	2.1 B		4.4 J						1.8 B		5.5 J	
Copper	1000	1000	1300	1500		53.3	25 U		0.45 B						25 U		1 B	
Hexavalent Chromium	100	100		0.043			50 U								10 U			
Iron			300	26000														
Lead	5	5	15			17.8	3 U		0.038 B		0.27 B		3 U		3 U		0.37 B	
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57		4.5	0.097 B J		0.2 U		0.20 U		0.091 B J		0.2 U		0.2 U	
Nickel	100	100		730		79.6	2.1 B		0.38 B						2.5 B		3.7	
Potassium																		
Selenium	50	50	50	180		4.9 B	5 U		5 U						5 U		5 U	
Silver	100	100		180		0.79 B	5 U		1 U						5 U		1 U	
Sodium																		
Thallium	2	2	2			10 U	10 U		0.076 B						4.3 B		0.057 B J	
Vanadium	260	720		2.6		28.4 B	1.9 B		1.4 J						1.1 B		4 J	
Zinc	2000	2000		11000		174 J	18.6 B J		3.7 B						6.7 B J		9.2	
METAL (Dissolved)																		
Antimony	6	6	6	15				10 U		0.15 B J						10 U		0.11 B
Arsenic	10	10	10	0.045				10 U		1 U		1.0 U		10 U		10 U		1 U
Barium	2000	2000	2000	7300				42.1 B		38.4						41.8 B		44.4
Beryllium	4	4	4	73				4 U		1 U						4 U		1 U
Cadmium	5	5	5					5 U		1 U						5 U		1 U
Cadmium	5	5	5	18				5 U		1 U						5 U		1 U
Calcium					165000									80800				
Chromium	100	100	100					5 U		4.3 J						5 U		7 J
Copper	1000	1000	1300	1500				25 U		0.62 B						25 U		0.52 B J
Hexavalent Chromium	100	100		0.043				50 U								10 U		
Iron			300	26000	100 U									100 U				
Lead	5	5	15					3 U		0.087 B J		1.0 U		3 U		3 U		0.049 B J
Magnesium					19700									14100				
Manganese	300	300	50		3.6 B									1.1 B				
Manganese	300	300	50	880	3.6 B									1.1 B				
Mercury	2	2	2	0.57				0.1 B J		0.2 U		0.2 U		0.2 U		0.2 U		0.2 U
Nickel	100	100		730				40 U		0.34 B						1.8 B		4.3
Potassium					19400									2180 B				
Selenium	50	50	50	180				5 U		0.22 B						5 U		0.67 B

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-112 6/23/2010	MW-113 10/25/2007	MW-113 5/15/2008	MW-113 5/15/2008	MW-113 9/3/2008	MW-113 9/3/2008	MW-113 7/6/2009	MW-113 7/6/2009	MW-113 7/6/2010	MW-113 7/6/2010	MW-114 5/23/2008	MW-114 5/23/2008	MW-114 10/3/2008	MW-114 10/3/2008
Silver	100	100		180				5 U		1 U						5 U		1 U
Sodium					262000									9170				
Thallium	2	2	2					10 U		0.12 B J						5.8 B		0.041 B
Vanadium	260	720		2.6				50 U		1.3						50 U		0.57 B J
Zinc	2000	2000		11000				20.5 J		4.9 B						20 U		2.3 B

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-114 7/2/2010	MW-115 4/30/2008	MW-115 4/30/2008	MW-115 9/3/2008	MW-115 9/3/2008	MW-115 6/30/2009	MW-115 6/30/2009	MW-115 7/1/2010	MW-115 7/1/2010	MW-116 5/21/2008	MW-116 5/21/2008	MW-116 9/3/2008	MW-116 9/3/2008	MW-116 7/1/2010
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15		10 U		0.54 B						10 U		0.076 B		
Arsenic	10	10	10	0.045		17.3		15.3		5.8		6 B		10 U		1 U		
Barium	2000	2000	2000	7300		316		305						26.8 B J		26.2		
Beryllium	4	4	4	73		3.1 B		3.1						0.49 B J		1 U		
Cadmium	5	5	5			5 U		0.99 B						0.51 B		0.44 B		
Cadmium	5	5	5	18		5 U		0.99 B						0.51 B		0.44 B		
Calcium																		
Chromium	100	100	100			39.8		52.2 J						2.9 B		8.9 J		
Copper	1000	1000	1300	1500		23.6 B		30.8						25 U		0.9 B		
Hexavalent Chromium	100	100		0.043		50 U								50 U		0 U		
Iron			300	26000														
Lead	5	5	15			39		47.6		5.6 J		2.2 B		3 U		0.28 B		
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57		0.12 B		0.083 B						0.2 U		0.2 U		
Nickel	100	100		730		50.1		57.1						19.4 B		18.6		
Potassium																		
Selenium	50	50	50	180		5 U		2.9 B						5 U		0.39 B		
Silver	100	100		180		5 U		0.13 B						1.4 B		1 U		
Sodium																		
Thallium	2	2	2			3.8 B		0.48 B						10 U		0.099 B		
Vanadium	260	720		2.6		44.1 B		49 J						2.2 B		1.4 J		
Zinc	2000	2000		11000		129 J		134						20.2 J		15.8		
METAL (Dissolved)																		
Antimony	6	6	6	15			10 U		0.097 B J						10 U		0.091 B J	
Arsenic	10	10	10	0.045			6.1 B		5.1		5.4		6 B		10 U		1 U	
Barium	2000	2000	2000	7300			174 B		166						25.7 B		25.1	
Beryllium	4	4	4	73			0.57 B J		1 U						0.41 B J		1 U	
Cadmium	5	5	5				5 U		1 U						0.64 B		0.48 B	
Cadmium	5	5	5	18			5 U		1 U						0.64 B		0.48 B	
Calcium					122000								173000					204000
Chromium	100	100	100				5 U		5.1 J						2.9 B		7.3 J E	
Copper	1000	1000	1300	1500			25 U		1.2 B						25 U		0.86 B	
Hexavalent Chromium	100	100		0.043			50 U								50 U		0 U	
Iron			300	26000	846								9890					100 U
Lead	5	5	15				3 U		1 J		0.021 B J		3 U		3 U		0.12 B J	
Magnesium					22300								18300					41000
Manganese	300	300	50		84.7								723					3940
Manganese	300	300	50	880	84.7								723					3940
Mercury	2	2	2	0.57			0.2 U		0.2 U						0.2 U		0.2 U	
Nickel	100	100		730			40 U		2.8						18.6 B		17.6	
Potassium					18400 J								4810 B					6570
Selenium	50	50	50	180			5 U		0.55 B						5 U		0.59 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-114 7/2/2010	MW-115 4/30/2008	MW-115 4/30/2008	MW-115 9/3/2008	MW-115 9/3/2008	MW-115 6/30/2009	MW-115 6/30/2009	MW-115 7/1/2010	MW-115 7/1/2010	MW-116 5/21/2008	MW-116 5/21/2008	MW-116 9/3/2008	MW-116 9/3/2008	MW-116 7/1/2010
Silver	100	100		180			5 U		1 U						1.5 B		1 U	
Sodium					30700								25400					44100
Thallium	2	2	2				3.7 B		0.039 B J						10 U		0.092 B J	
Vanadium	260	720		2.6			50 U		2						3 B		0.58 B	
Zinc	2000	2000		11000			20 U		5.7						15.8 B J		16.3	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-117 2/26/2009	MW-117 2/26/2009	MW-117 6/23/2010	MW-117 6/23/2010	WPLSS-15 6/28/1991	WPLSS-2 6/28/1991	WPLSS-7 6/28/1991	WPLSS-8 6/28/1991	CW-1 2/7/1991	CW-1 1/26/1994	CW-1 1/26/1994	CW-1 5/6/2008	CW-1 5/6/2008	CW-1 7/7/2010
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15	0.47 B J		0.33 B J		170 U	U	170 U	170 U				10 U		
Arsenic	10	10	10	0.045	0.89 B		1 U		6	U	5 U	5 U				10 U		
Barium	2000	2000	2000	7300	273 J		102									21.4 B J		
Beryllium	4	4	4	73	1 U		1 U		6 U	U	30	7				4 U		
Cadmium	5	5	5		1 U		1 U		20	U	10	10 U				5 U		
Cadmium	5	5	5	18	1 U		1 U		20	U	10	10 U				5 U		
Calcium																		
Chromium	100	100	100		7.1 J		4		2200	30	480	20 U				5 U		
Copper	1000	1000	1300	1500	2.5		1.6 B		190	400	410	120				25 U		
Hexavalent Chromium	100	100		0.043	10 U		10 U									50 U		
Iron			300	26000									4500	6500	6200			
Lead	5	5	15		0.29 B J		0.57 B		8600	9400	6500	11000				3 U		
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57	0.2 U		0.049 B J		0.5 U	U	0.5 U	0.5 U				0.2 U		
Nickel	100	100		730	4.8		1.7		280	80	600	100				3.8 B		
Potassium																		
Selenium	50	50	50	180	1.5 B J		1.3 B		5 U	U	5 U	5 U				5 U		
Silver	100	100		180	1 U		1 U		40 U	U	40 U	40 U				5 U		
Sodium																		
Thallium	2	2	2		0.072 B J		0.13 B		220 U	U	220 U	220 U				10 U		
Vanadium	260	720		2.6	1.4 J		2 J									50 U		
Zinc	2000	2000		11000	4.7 B		4.2 B		2300	500	1200	170				20 U		
METAL (Dissolved)																		
Antimony	6	6	6	15		0.51 B		0.26 B									10 U	
Arsenic	10	10	10	0.045		1 U		1 U									10 U	
Barium	2000	2000	2000	7300		266 J		101									18.3 B J	
Beryllium	4	4	4	73		1 U		1 U									4 U	
Cadmium	5	5	5			1 U		1 U									5 U	
Cadmium	5	5	5	18		1 U		1 U									5 U	
Calcium								117000										14300
Chromium	100	100	100			6.7 J E		3.5									5 U	
Copper	1000	1000	1300	1500		1.6 B		1.4 B									25 U	
Hexavalent Chromium	100	100		0.043		10 U		10 U									50 U	
Iron			300	26000				100 U										7580 J
Lead	5	5	15			0.23 B J		0.094 B									3 U	
Magnesium								16000										7200
Manganese	300	300	50					12.5 B										764
Manganese	300	300	50	880				12.5 B										764
Mercury	2	2	2	0.57		0.2 U		0.044 B									0.2 U	
Nickel	100	100		730		4.3		0.91 B									4 B	
Potassium								102000										1530 B
Selenium	50	50	50	180		0.76 B		0.72 B									5 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	MW-117 2/26/2009	MW-117 2/26/2009	MW-117 6/23/2010	MW-117 6/23/2010	WPLSS-15 6/28/1991	WPLSS-2 6/28/1991	WPLSS-7 6/28/1991	WPLSS-8 6/28/1991	CW-1 2/7/1991	CW-1 1/26/1994	CW-1 1/26/1994	CW-1 5/6/2008	CW-1 5/6/2008	CW-1 7/7/2010
Silver	100	100		180		1 U		1 U									5 U	
Sodium								235000										7370
Thallium	2	2	2			0.15 B J		0.14 B									10 U	
Vanadium	260	720		2.6		1 U		2									50 U	
Zinc	2000	2000		11000		4.2 B		4 B									20 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-1A 6/21/1993	CW-1A 1/26/1994	CW-1A 1/26/1994	CW-1A 5/7/2008	CW-1A 5/7/2008	CW-1A 7/7/2010	CW-2 8/30/1993	CW-2 1/26/1994	CW-2 1/26/1994	CW-2 5/13/2008	CW-2 5/13/2008	CW-2 7/7/2010	CW-3 4/24/1991	CW-3 1/26/1994
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15				10 U						10 U				
Arsenic	10	10	10	0.045				10 U						3.2 B				
Barium	2000	2000	2000	7300				112 B J						49.5 B				
Beryllium	4	4	4	73				4 U						4 U				
Cadmium	5	5	5					5 U						0.68 B				
Cadmium	5	5	5	18				5 U						0.68 B				
Calcium																		
Chromium	100	100	100					5 U						2.7 B				
Copper	1000	1000	1300	1500				1.3 B						16.7 B				
Hexavalent Chromium	100	100		0.043				50 U						50 U				
Iron			300	26000	310	110	60 U				1300	2900	2900				2300	2800
Lead	5	5	15					3 U						3.1				
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57				0.2 U						0.2 U				
Nickel	100	100		730				9.7 B						10 B				
Potassium																		
Selenium	50	50	50	180				5 U						5 U				
Silver	100	100		180				5 U						5 U				
Sodium																		
Thallium	2	2	2					10 U						3.9 B				
Vanadium	260	720		2.6				50 U						50 U				
Zinc	2000	2000		11000				25.6 J						32.2 J				
METAL (Dissolved)																		
Antimony	6	6	6	15					10 U						10 U			
Arsenic	10	10	10	0.045					10 U						10 U			
Barium	2000	2000	2000	7300					112 B J						34.5 B			
Beryllium	4	4	4	73					4 U						4 U			
Cadmium	5	5	5						5 U						5 U			
Cadmium	5	5	5	18					5 U						5 U			
Calcium										6110						22400		
Chromium	100	100	100						5 U						5 U			
Copper	1000	1000	1300	1500					2 B						25 U			
Hexavalent Chromium	100	100		0.043					50 U						50 U			
Iron			300	26000						100 U						663 J		
Lead	5	5	15						3 U						3 U			
Magnesium										5870						9200		
Manganese	300	300	50							35.9						1520		
Manganese	300	300	50	880						35.9						1520		
Mercury	2	2	2	0.57					0.2 U						0.2 U			
Nickel	100	100		730					9.5 B						9.1 B			
Potassium										3410 B						1920 B		
Selenium	50	50	50	180					5 U						5 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-1A 6/21/1993	CW-1A 1/26/1994	CW-1A 1/26/1994	CW-1A 5/7/2008	CW-1A 5/7/2008	CW-1A 7/7/2010	CW-2 8/30/1993	CW-2 1/26/1994	CW-2 1/26/1994	CW-2 5/13/2008	CW-2 5/13/2008	CW-2 7/7/2010	CW-3 4/24/1991	CW-3 1/26/1994
Silver	100	100		180					5 U						5 U			
Sodium										35400						10500		
Thallium	2	2	2						10 U						3.9 B			
Vanadium	260	720		2.6					50 U						50 U			
Zinc	2000	2000		11000					27.1 J						21.3 J			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-3 1/26/1994	CW-3 5/6/2008	CW-3 5/6/2008	CW-3 7/7/2010	CW-3 Dup 7/7/2010	CW-4 12/5/1990	CW-4 1/26/1994	CW-4 1/26/1994	CW-4 5/6/2008	CW-4 5/6/2008	CW-4 7/7/2010	CW-5 3/6/1991	CW-5 1/26/1994	CW-5 1/26/1994
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15		10 U							10 U					
Arsenic	10	10	10	0.045		10 U							10 U					
Barium	2000	2000	2000	7300		18.2 B J							20.4 B J					
Beryllium	4	4	4	73		4 U							4 U					
Cadmium	5	5	5			5 U							5 U					
Cadmium	5	5	5	18		5 U							5 U					
Calcium																		
Chromium	100	100	100			5 U							5 U					
Copper	1000	1000	1300	1500		25 U							25 U					
Hexavalent Chromium	100	100		0.043		50 U							50 U					
Iron			300	26000	2400					530	3400	3300				70	60	60
Lead	5	5	15			3 U							3 U					
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57		0.2 U							0.2 U					
Nickel	100	100		730		7.1 B							6.8 B					
Potassium																		
Selenium	50	50	50	180		5 U							5 U					
Silver	100	100		180		5 U							5 U					
Sodium																		
Thallium	2	2	2			10 U							10 U					
Vanadium	260	720		2.6		50 U							50 U					
Zinc	2000	2000		11000		20 U							20 U					
METAL (Dissolved)																		
Antimony	6	6	6	15			10 U							10 U				
Arsenic	10	10	10	0.045			10 U							10 U				
Barium	2000	2000	2000	7300			17.7 B J							20 B J				
Beryllium	4	4	4	73			4 U							4 U				
Cadmium	5	5	5				5 U							5 U				
Cadmium	5	5	5	18			5 U							5 U				
Calcium								19100	19300						28700			
Chromium	100	100	100				5 U							5 U				
Copper	1000	1000	1300	1500			25 U							25 U				
Hexavalent Chromium	100	100		0.043			50 U							50 U				
Iron			300	26000				6990 J	7040 J						6650 J			
Lead	5	5	15				3 U							3 U				
Magnesium								8380	8490						10800			
Manganese	300	300	50					488	495						483			
Manganese	300	300	50	880				488	495						483			
Mercury	2	2	2	0.57			0.2 U							0.2 U				
Nickel	100	100		730			7.2 B							6.9 B				
Potassium								1490 B	1590 B						1250 B			
Selenium	50	50	50	180			5 U							5 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-3 1/26/1994	CW-3 5/6/2008	CW-3 5/6/2008	CW-3 7/7/2010	CW-3 Dup 7/7/2010	CW-4 12/5/1990	CW-4 1/26/1994	CW-4 1/26/1994	CW-4 5/6/2008	CW-4 5/6/2008	CW-4 7/7/2010	CW-5 3/6/1991	CW-5 1/26/1994	CW-5 1/26/1994
Silver	100	100		180			5 U							5 U				
Sodium								12600	12700						10700			
Thallium	2	2	2				10 U							10 U				
Vanadium	260	720		2.6			50 U							50 U				
Zinc	2000	2000		11000			20 U							20 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-5 5/6/2008	CW-5 5/6/2008	CW-5 7/7/2010	CW-6 8/2/1989	CW-6 6/11/1992	CW-6 1/26/1994	CW-6 1/26/1994	CW-6 5/6/2008	CW-6 5/6/2008	CW-6 7/7/2010	CW-7 1/26/1994	CW-7 1/26/1994	CW-7 5/6/2008	CW-7 5/6/2008
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15	10 U							10 U					10 U	
Arsenic	10	10	10	0.045	10 U							10 U					10 U	
Barium	2000	2000	2000	7300	25.2 B J							33.3 B J					41.4 B J	
Beryllium	4	4	4	73	4 U							4 U					4 U	
Cadmium	5	5	5		5 U							5 U					5 U	
Cadmium	5	5	5	18	5 U							5 U					5 U	
Calcium																		
Chromium	100	100	100		5 U							5 U					5 U	
Copper	1000	1000	1300	1500	25 U							25 U					5.2 B	
Hexavalent Chromium	100	100		0.043	50 U							50 U					50 U	
Iron			300	26000				90	70	3100	3100				3100	3100		
Lead	5	5	15		3 U							3 U					3 U	
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57	0.2 U							0.2 U					0.2 U	
Nickel	100	100		730	40 U							1.2 B					9.1 B	
Potassium																		
Selenium	50	50	50	180	5 U							5 U					5 U	
Silver	100	100		180	5 U							5 U					5 U	
Sodium																		
Thallium	2	2	2		10 U							10 U					10 U	
Vanadium	260	720		2.6	50 U							50 U					50 U	
Zinc	2000	2000		11000	20 U							20 U					20 U	
METAL (Dissolved)																		
Antimony	6	6	6	15		10 U							10 U					10 U
Arsenic	10	10	10	0.045		10 U							10 U					10 U
Barium	2000	2000	2000	7300		27.1 B J							33.7 B J					42.9 B J
Beryllium	4	4	4	73		4 U							4 U					4 U
Cadmium	5	5	5			5 U							5 U					5 U
Cadmium	5	5	5	18		5 U							5 U					5 U
Calcium							32300							32500				
Chromium	100	100	100			5 U							5 U					5 U
Copper	1000	1000	1300	1500		25 U							25 U					6.2 B
Hexavalent Chromium	100	100		0.043		50 U							50 U					50 U
Iron			300	26000			173 J							6240 J				
Lead	5	5	15			3 U							3 U					3 U
Magnesium							7550							11100				
Manganese	300	300	50				435							385				
Manganese	300	300	50	880			435							385				
Mercury	2	2	2	0.57		0.2 U							0.2 U					0.2 U
Nickel	100	100		730		40 U							1.6 B					10 B
Potassium							2270 B							1170 B				
Selenium	50	50	50	180		5 U							5 U					5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-5 5/6/2008	CW-5 5/6/2008	CW-5 7/7/2010	CW-6 8/2/1989	CW-6 6/11/1992	CW-6 1/26/1994	CW-6 1/26/1994	CW-6 5/6/2008	CW-6 5/6/2008	CW-6 7/7/2010	CW-7 1/26/1994	CW-7 1/26/1994	CW-7 5/6/2008	CW-7 5/6/2008
Silver	100	100		180		5 U							5 U					5 U
Sodium							18500							9540				
Thallium	2	2	2			10 U							10 U					10 U
Vanadium	260	720		2.6		50 U							50 U					50 U
Zinc	2000	2000		11000		20 U							20 U					20 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-7 9/11/2008	CW-7 9/11/2008	CW-7 7/7/2010	CW-7A 1/26/1994	CW-7A 1/26/1994	CW-7A 5/6/2008	CW-7A 5/6/2008	CW-7A 7/7/2010	CW-8 1/11/1990	CW-8 6/20/2006	CW-8 5/6/2008	CW-8 5/6/2008	CW-8 9/11/2008	CW-8 9/11/2008
METAL																		
Aluminum			200	37000										34.3 JB				
Antimony	6	6	6	15	0.24 B					10 U					10 U		0.067 B	
Arsenic	10	10	10	0.045	0.86 B					10 U					10 U		1	
Barium	2000	2000	2000	7300	42.3					113 B J				56.7 B	74.8 B		57.8	
Beryllium	4	4	4	73	1 U					4 U					4 U		1 U	
Cadmium	5	5	5		1 U					5 U				5 U	5 U		1 U	
Cadmium	5	5	5	18	1 U					5 U				5 U	5 U		1 U	
Calcium													44000	81800				
Chromium	100	100	100		4.7 J					5 U				5.5	4.3 B		8.9 J	
Copper	1000	1000	1300	1500	6.7					37.4					25 U		1.1 B	
Hexavalent Chromium	100	100		0.043						50 U					50 U			
Iron			300	26000				60 U	60 U				90	58.2 B				
Lead	5	5	15		1.7					3 U				3.7 J	3 U		0.62 B	
Magnesium														18800				
Manganese	300	300	50										5 U	7.4 B				
Manganese	300	300	50	880									5 U	7.4 B				
Mercury	2	2	2	0.57	0.2 U					0.2 U					0.2 U		0.2 U	
Nickel	100	100		730	8.2					8.7 B					40 U		0.6 B	
Potassium																		
Selenium	50	50	50	180	5 U					5 U					5 U		0.72 B	
Silver	100	100		180	1 U					5 U					5 U		1 U	
Sodium													8200	19600				
Thallium	2	2	2		1 U					10 U					10 U		0.021 B	
Vanadium	260	720		2.6	2.6 J					50 U					1 B		1.7 J	
Zinc	2000	2000		11000	9 J					12.2 B J				19.4 JB	16.9 B J		15.8 J	
METAL (Dissolved)																		
Antimony	6	6	6	15		2 U					10 U					10 U		0.057 B
Arsenic	10	10	10	0.045		0.2 B					10 U					10 U		0.43 B
Barium	2000	2000	2000	7300		38.6					119 B J					74.5 B		55.9
Beryllium	4	4	4	73		1 U					4 U					4 U		1 U
Cadmium	5	5	5			1 U					5 U					5 U		1 U
Cadmium	5	5	5	18		1 U					5 U					5 U		1 U
Calcium							4280 B					4840 B						
Chromium	100	100	100			5 J					5 U					4.1 B		9.1 J
Copper	1000	1000	1300	1500		5					9.2 B					25 U		0.65 B
Hexavalent Chromium	100	100		0.043							50 U					50 U		
Iron			300	26000			100 U					100 U						
Lead	5	5	15			1.0 U					3 U					3 U		1.0 U
Magnesium							3670 B					3930 B						
Manganese	300	300	50				54					89.8						
Manganese	300	300	50	880			54					89.8						
Mercury	2	2	2	0.57		0.2 U					0.2 U					0.2 U		0.2 U
Nickel	100	100		730		7.8					9.1 B					40 U		0.4 B
Potassium							2520 B					3040 B						
Selenium	50	50	50	180		5 U					5 U					5 U		0.39 B

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-7 9/11/2008	CW-7 9/11/2008	CW-7 7/7/2010	CW-7A 1/26/1994	CW-7A 1/26/1994	CW-7A 5/6/2008	CW-7A 5/6/2008	CW-7A 7/7/2010	CW-8 1/11/1990	CW-8 6/20/2006	CW-8 5/6/2008	CW-8 5/6/2008	CW-8 9/11/2008	CW-8 9/11/2008
Silver	100	100		180		1 U					5 U					5 U		1 U
Sodium							10600					29200						
Thallium	2	2	2			1 U					10 U					10 U		1 U
Vanadium	260	720		2.6		0.88 B					50 U					2.7 B		0.77 B
Zinc	2000	2000		11000		7.9 J					20 U					44.5 J		11.7 J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-9 2/19/1990	CW-9 2/28/1990	CW-9 4/3/1990	CW-9 7/11/1994	CW-9 7/11/1994	CW-9 4/16/2004	CW-9 4/16/2004	CW-9 5/6/2008	CW-9 5/6/2008	CW-9 9/11/2008	CW-9 9/11/2008	CW-9 7/7/2010	CW-10 4/25/1990	CW-10 6/24/1993
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15	110 U	110 U	100 U	150 U	150 U	5.8 U		10 U		0.38 B				
Arsenic	10	10	10	0.045	11 U	11 U	10 U	6 U	6 U	3.2 U		10 U		1 U				
Barium	2000	2000	2000	7300								55.4 B		46.1				
Beryllium	4	4	4	73	5 U	5 U	5 U	5 U	5 U	0.3 U		4 U		1 U				
Cadmium	5	5	5		10 U	10 U	10 U	10 U	10 U	0.4 U		5 U		1 U				
Cadmium	5	5	5	18	10 U	10 U	10 U	10 U	10 U	0.4 U		5 U		1 U				
Calcium					68000	68000											17000	
Chromium	100	100	100		20 U	20 U	20 U	20 U	20 U	8.7 B		6.6		8.9 J				
Copper	1000	1000	1300	1500	80	10	10 U	20 U	20 U	3.7 U		25 U		2.2				
Hexavalent Chromium	100	100		0.043						10 U		50 U		0 U				
Iron			300	26000	150	150		150	60								150	1000
Lead	5	5	15		160 U	160 U	150 U	100 U	100 U	2.3 U		3 U		0.23 B				
Magnesium																		
Manganese	300	300	50					260	250								5 U	
Manganese	300	300	50	880				260	250								5 U	
Mercury	2	2	2	0.57	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.1 U		0.2 U		0.2 U				
Nickel	100	100		730	50 U	50 U	40 U	40 U	40 U	6.1 B		5.2 B J		5.8				
Potassium																		
Selenium	50	50	50	180	11 U	11 U	10 U	5 U	5 U	4.8 B		5 U		0.36 B				
Silver	100	100		180	20 U	20 U	20 U	40 U	40 U	1.4 U		5 U		1 U				
Sodium					13000	13000											2200 U	
Thallium	2	2	2		220 U	220 U	200 U	200 U	200 U	1.8 U		10 U		1 U				
Vanadium	260	720		2.6								1.7 B		2.4 J				
Zinc	2000	2000		11000	240	20	40	50 U	50 U	20 B		1.7 B J		5.0 U				
METAL (Dissolved)																		
Antimony	6	6	6	15							5.8 U		10 U		0.43 B			
Arsenic	10	10	10	0.045							3.2 U		10 U		0.6 B			
Barium	2000	2000	2000	7300									55 B		47.4			
Beryllium	4	4	4	73							0.3 U		4 U		1 U			
Cadmium	5	5	5								0.4 U		5 U		1 U			
Cadmium	5	5	5	18							0.4 U		5 U		1 U			
Calcium																72400		
Chromium	100	100	100								7.8 B		6.4		9.1 J			
Copper	1000	1000	1300	1500							3.7 U		25 U		0.58 B			
Hexavalent Chromium	100	100		0.043							10 U		50 U		0 U			
Iron			300	26000												100 U		
Lead	5	5	15								2.3 U		3 U		1.0 U			
Magnesium																18400		
Manganese	300	300	50													3.5 B		
Manganese	300	300	50	880												3.5 B		
Mercury	2	2	2	0.57							0.1 U		0.2 U		0.065 B			
Nickel	100	100		730							5.3 B		6.2 B J		3.2			
Potassium																13300		
Selenium	50	50	50	180							4.2 U		5 U		0.54 B			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-9 2/19/1990	CW-9 2/28/1990	CW-9 4/3/1990	CW-9 7/11/1994	CW-9 7/11/1994	CW-9 4/16/2004	CW-9 4/16/2004	CW-9 5/6/2008	CW-9 5/6/2008	CW-9 9/11/2008	CW-9 9/11/2008	CW-9 7/7/2010	CW-10 4/25/1990	CW-10 6/24/1993
Silver	100	100		180							1.4 U		5 U		1 U			
Sodium																37500		
Thallium	2	2	2								1.8 U		10 U		1 U			
Vanadium	260	720		2.6									50 U		1.8			
Zinc	2000	2000		11000							10.8 B		1.4 B J		5.0 U			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-10 10/25/1995	CW-11 4/18/1990	CW-11 10/24/1995	CW-12 2/10/1992	CW-12 9/21/1999	CW-12 3/29/2000	CW-12 6/3/2003	CW-12A 9/21/1999	CW-12A 3/30/2000	CW-13 7/11/1994	CW-13 7/11/1994	CW-13 5/7/2008	CW-13 5/7/2008	CW-13 5/7/2008
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15					5 U			5 U		150 U	150 U			10 U
Arsenic	10	10	10	0.045					5 U			5 U		6 U	6 U			10 U
Barium	2000	2000	2000	7300														86.9 B
Beryllium	4	4	4	73					1 U			1 U		5 U	5 U			4 U
Cadmium	5	5	5						1 U			1 U		10 U	10 U			5 U
Cadmium	5	5	5	18					1 U			1 U		10 U	10 U			5 U
Calcium					17000	35000	42000		72200	61000		64900	68000					
Chromium	100	100	100						5 U		0 U	5 U		30	20 U			2.8 B
Copper	1000	1000	1300	1500					5			5		20 U	20 U			25 U
Hexavalent Chromium	100	100		0.043					10 U		0 U	10 U				50 U		
Iron			300	26000	70 U	70	70 U	1000	1700	1600		1400	480	150	50 U			
Lead	5	5	15						5 U		0 U	5 U		100 U	100 U			3 U
Magnesium					5200		5800		21700	21000		24500	28000					
Manganese	300	300	50		6 U	5 U	8		27	140		48	44	320	270			
Manganese	300	300	50	880	6 U	5 U	8		27	140		48	44	320	270			
Mercury	2	2	2	0.57					0 U			0 U		0.5 U	0.5 U			0.2 U
Nickel	100	100		730					5 U		0 U	5 U		40 U	40 U			5.6 B
Potassium					1100		1900		4000	4600		4100	4300					
Selenium	50	50	50	180					5 U			5 U		5 U	5 U			5 U
Silver	100	100		180					5 U			5 U		40 U	40 U			5 U
Sodium					2600	2500	3200		12400	10000		10600	11000					
Thallium	2	2	2						2 U			2 U		200 U	200 U			10 U
Vanadium	260	720		2.6														50 U
Zinc	2000	2000		11000					23		0 U	20 U		50 U	50 U			11.9 B J
METAL (Dissolved)																		
Antimony	6	6	6	15														
Arsenic	10	10	10	0.045														
Barium	2000	2000	2000	7300														
Beryllium	4	4	4	73														
Cadmium	5	5	5															
Cadmium	5	5	5	18														
Calcium																		
Chromium	100	100	100															
Copper	1000	1000	1300	1500														
Hexavalent Chromium	100	100		0.043													50 U	
Iron			300	26000														
Lead	5	5	15															
Magnesium																		
Manganese	300	300	50															
Manganese	300	300	50	880														
Mercury	2	2	2	0.57														
Nickel	100	100		730														
Potassium																		
Selenium	50	50	50	180														

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-10 10/25/1995	CW-11 4/18/1990	CW-11 10/24/1995	CW-12 2/10/1992	CW-12 9/21/1999	CW-12 3/29/2000	CW-12 6/3/2003	CW-12A 9/21/1999	CW-12A 3/30/2000	CW-13 7/11/1994	CW-13 7/11/1994	CW-13 5/7/2008	CW-13 5/7/2008	CW-13 5/7/2008
Silver	100	100		180														
Sodium																		
Thallium	2	2	2															
Vanadium	260	720		2.6														
Zinc	2000	2000		11000														

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-13 5/7/2008	CW-13 9/11/2008	CW-13 9/11/2008	CW-13 7/7/2010	CW-14 7/11/1994	CW-14 7/11/1994	CW-14 5/20/2008
METAL											
Aluminum			200	37000							
Antimony	6	6	6	15		0.076 B			150 U	150 U	10 U
Arsenic	10	10	10	0.045		1 U			6 U	6 U	10 U
Barium	2000	2000	2000	7300		65.8					59.9 B
Beryllium	4	4	4	73		1 U			5 U	5 U	4 U
Cadmium	5	5	5			1 U			10 U	10 U	0.3 B
Cadmium	5	5	5	18		1 U			10 U	10 U	0.3 B
Calcium											
Chromium	100	100	100			8.5 J			30	30	1.9 B
Copper	1000	1000	1300	1500		2.5			20 U	20 U	18.5 B
Hexavalent Chromium	100	100		0.043		0 U					50 U
Iron			300	26000					130	60	
Lead	5	5	15			0.67 B			100 U	100 U	3.5
Magnesium											
Manganese	300	300	50						110	100	
Manganese	300	300	50	880					110	100	
Mercury	2	2	2	0.57		0.2 U			0.5 U	0.5 U	0.2 U
Nickel	100	100		730		5.6			40 U	40 U	3.8 B
Potassium											
Selenium	50	50	50	180		0.23 B			5 U	5 U	5 U
Silver	100	100		180		1 U			40 U	40 U	5 U
Sodium											
Thallium	2	2	2			0.03 B			200 U	200 U	10 U
Vanadium	260	720		2.6		1 J					1.8 B
Zinc	2000	2000		11000		5.0 U			50 U	50 U	115 J
METAL (Dissolved)											
Antimony	6	6	6	15	10 U		2 U				
Arsenic	10	10	10	0.045	10 U		1 U				
Barium	2000	2000	2000	7300	84.4 B		67.4				
Beryllium	4	4	4	73	4 U		1 U				
Cadmium	5	5	5		5 U		1 U				
Cadmium	5	5	5	18	5 U		1 U				
Calcium								116000			
Chromium	100	100	100		2.6 B		9.3 J				
Copper	1000	1000	1300	1500	25 U		1 B				
Hexavalent Chromium	100	100		0.043			0 U				
Iron			300	26000				100 U			
Lead	5	5	15		3 U		1.0 U				
Magnesium								19100			
Manganese	300	300	50					159			
Manganese	300	300	50	880				159			
Mercury	2	2	2	0.57	0.2 U		0.2 U				
Nickel	100	100		730	5.6 B		5.1				
Potassium								15600			
Selenium	50	50	50	180	5 U		0.31 B				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-13 5/7/2008	CW-13 9/11/2008	CW-13 9/11/2008	CW-13 7/7/2010	CW-14 7/11/1994	CW-14 7/11/1994	CW-14 5/20/2008
Silver	100	100		180	5 U		1 U				
Sodium								44800			
Thallium	2	2	2		10 U		1.0 U				
Vanadium	260	720		2.6	1 B		1				
Zinc	2000	2000		11000	20.1 J		5.0 U				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-14 5/20/2008	CW-14 9/30/2008	CW-14 9/30/2008	CW-15 9/1/1999	CW-15 4/10/2000	CW-15A 7/11/1994	CW-15A 7/11/1994	CW-15A 5/6/2008	CW-15A 5/6/2008	CW-15A 10/9/2008	CW-15A 10/9/2008	CW-15A 7/7/2010	CW-16 8/15/1994	CW-16 5/23/2008
METAL																		
Aluminum			200	37000														
Antimony	6	6	6	15		0.061 B		5 U		150 U	150 U	10 U		0.052 B				10 U
Arsenic	10	10	10	0.045		0.25 B		5 U		6 U	6 U	10 U		1 U				10 U
Barium	2000	2000	2000	7300		43.5						70.9 B		65.3				68.9 B J
Beryllium	4	4	4	73		1 U		1 U		5 U	5 U	4 U		1 U				0.6 B J
Cadmium	5	5	5			1 U		1 U		10 U	10 U	5 U		1 U				5 U
Cadmium	5	5	5	18		1 U		1 U		10 U	10 U	5 U		1 U				5 U
Calcium								121000	140000								65000	
Chromium	100	100	100			11.5 J		5 U		20 U	20 U	1.3 B		10.6 J				4.6 B
Copper	1000	1000	1300	1500		2.7		5 U		20 U	20 U	25 U		1.8 B				25 U
Hexavalent Chromium	100	100		0.043		0 U		10 U				50 U						50 U
Iron			300	26000				1100	12000	200	160						1300	
Lead	5	5	15			0.87 B		5 U		100 U	100 U	3 U		1 U				3 U
Magnesium								31100	30000									
Manganese	300	300	50	880				280	390	1800	1700						24	
Manganese	300	300	50					280	390	1800	1700						24	
Mercury	2	2	2	0.57		0.2 U		0 U		0.5 U	0.5 U	0.2 U		0.018 B				0.2 U
Nickel	100	100		730		5.5		5 U		60	50	9.6 B J		10.5 J				4.3 B
Potassium								1900	2000									
Selenium	50	50	50	180		0.37 B		5 U		5 U	5 U	5 U		1.2 B J				5 U
Silver	100	100		180		1 U		5 U		40 U	40 U	5 U		1 U				5 U
Sodium								11600	13000								8400	
Thallium	2	2	2			0.068 B		2 U		200 U	200 U	10 U		1 U				10 U
Vanadium	260	720		2.6		4.1 J						2.6 B		2.1 J				1.6 B
Zinc	2000	2000		11000		21.9		20 U		410	240	8.9 B J		8.1				4.8 B J
METAL (Dissolved)																		
Antimony	6	6	6	15	10 U		0.053 B						10 U		0.064 B			
Arsenic	10	10	10	0.045	10 U		1 U						10 U		1 U			
Barium	2000	2000	2000	7300	53.7 B		43.8						70.2 B		65.8			
Beryllium	4	4	4	73	4 U		1 U						4 U		1 U			
Cadmium	5	5	5		5 U		1 U						5 U		1 U			
Cadmium	5	5	5	18	5 U		1 U						5 U		1 U			
Calcium																187000		
Chromium	100	100	100		5 U		11.1 J						1.8 B		10.8 J			
Copper	1000	1000	1300	1500	0.79 B		1.5 B						0.73 B		2			
Hexavalent Chromium	100	100		0.043	50 U		0 U						50 U					
Iron			300	26000												100 U		
Lead	5	5	15		3 U		0.15 B						3 U		1 U			
Magnesium																23600		
Manganese	300	300	50	880												315		
Manganese	300	300	50													315		
Mercury	2	2	2	0.57	0.2 U		0.2 U						0.2 U		0.2 U			
Nickel	100	100		730	2.3 B		5						9.7 B J		10.5			
Potassium																12800		
Selenium	50	50	50	180	5 U		5 U						5 U		2.1 B			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-14 5/20/2008	CW-14 9/30/2008	CW-14 9/30/2008	CW-15 9/1/1999	CW-15 4/10/2000	CW-15A 7/11/1994	CW-15A 7/11/1994	CW-15A 5/6/2008	CW-15A 5/6/2008	CW-15A 10/9/2008	CW-15A 10/9/2008	CW-15A 7/7/2010	CW-16 8/15/1994	CW-16 5/23/2008
Silver	100	100		180	5 U		1 U						5 U		1 U			
Sodium																45700		
Thallium	2	2	2		10 U		0.035 B J						10 U		1 U			
Vanadium	260	720		2.6	2.8 B		2.3 J						1.9 B		3.1 J			
Zinc	2000	2000		11000	7.9 B		7.8						10.7 B J		12.5 J			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-16 5/23/2008	CW-16 10/8/2008	CW-16 10/8/2008	CW-17 5/6/2008	CW-17 5/6/2008	CW-17 9/11/2008	CW-17 9/11/2008	CW-17 6/15/2009	CW-17 6/15/2009	CW-17 12/16/2009	CW-17 12/16/2009	CW-17 7/7/2010	CW-18 4/10/1996
METAL																	
Aluminum			200	37000													
Antimony	6	6	6	15		0.11 B		10 U		0.18 B							10 U
Arsenic	10	10	10	0.045		1 U		10 U		0.67 B							6 U
Barium	2000	2000	2000	7300		49		41.1 B		37.4							
Beryllium	4	4	4	73		1 U		4 U		1 U							4 U
Cadmium	5	5	5			1 U		5 U		1 U							1 U
Cadmium	5	5	5	18		1 U		5 U		1 U							1 U
Calcium																	81000
Chromium	100	100	100			16.4 J		10.4		12.3 J							6 U
Copper	1000	1000	1300	1500		1.5 B		1.1 B		348							10 U
Hexavalent Chromium	100	100		0.043		0 U		50 U		0 U							20 U
Iron			300	26000													4200
Lead	5	5	15			0.07 B		4.8		67.7		1.1		0.56 B			6 U
Magnesium																	42000
Manganese	300	300	50	880													2200
Manganese	300	300	50														2200
Mercury	2	2	2	0.57		0.2 U		0.2 U		0.2 U							0.5 U
Nickel	100	100		730		5.4 J		7.6 B J		17.9							660
Potassium																	
Selenium	50	50	50	180		5.0 U		5 U		0.5 B							10 U
Silver	100	100		180		1 U		5 U		1 U							2 U
Sodium																	86000
Thallium	2	2	2			1 U		10 U		0.022 B							10 U
Vanadium	260	720		2.6		2.4 J		50 U		1.7 J							
Zinc	2000	2000		11000		4.9 B		4.2 B J		191 J							70
METAL (Dissolved)																	
Antimony	6	6	6	15	10 U		0.11 B		10 U		2 U						
Arsenic	10	10	10	0.045	10 U		1 U		10 U		1 U						
Barium	2000	2000	2000	7300	65 B		47.8		40.8 B		37.6						
Beryllium	4	4	4	73	0.73 B J		1 U		4 U		1 U						
Cadmium	5	5	5		5 U		1 U		5 U		1 U						
Cadmium	5	5	5	18	5 U		1 U		5 U		1 U						
Calcium																99200	
Chromium	100	100	100		2.1 B		13.9 J		9.9		12.6 J						
Copper	1000	1000	1300	1500	25 U		1.7 B		25 U		0.95 B						
Hexavalent Chromium	100	100		0.043	50 U		0 U		50 U		0 U						
Iron			300	26000												100 U	
Lead	5	5	15		3 U		1 U		3 U		0.61 B J		0.58 B		0.54 B		
Magnesium																11900	
Manganese	300	300	50	880												4 B	
Manganese	300	300	50													4 B	
Mercury	2	2	2	0.57	0.2 U		0.2 U		0.2 U		0.2 U						
Nickel	100	100		730	3.6 B		4.6		4.1 B J		4.3						
Potassium																6250	
Selenium	50	50	50	180	5 U		1.5 B		5 U		0.51 B						

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-16 5/23/2008	CW-16 10/8/2008	CW-16 10/8/2008	CW-17 5/6/2008	CW-17 5/6/2008	CW-17 9/11/2008	CW-17 9/11/2008	CW-17 6/15/2009	CW-17 6/15/2009	CW-17 12/16/2009	CW-17 12/16/2009	CW-17 7/7/2010	CW-18 4/10/1996
Silver	100	100		180	5 U		1 U		5 U		1 U						
Sodium																25800	
Thallium	2	2	2		10 U		1 U		10 U		1.0 U						
Vanadium	260	720		2.6	50 U		4.7 J		50 U		1.7						
Zinc	2000	2000		11000	4.9 B J		5.0 U		23.1 J		5.0 U						

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-18 5/23/2008	CW-18 5/23/2008	CW-20 10/13/2006	CW-20 Dup 10/13/2006	CW-20 5/21/2008	CW-20 5/21/2008	CW-20 9/30/2008	CW-20 9/30/2008	CW-20 7/8/2010	Softail Lift Station 6/20/2006
METAL														
Aluminum			200	37000										35 JB
Antimony	6	6	6	15	10 U				10 U		0.1 B			
Arsenic	10	10	10	0.045	10 U				10 U		1 U			
Barium	2000	2000	2000	7300	58.6 B J				47 B J		42			80.7 B
Beryllium	4	4	4	73	0.56 B J				0.43 B J		1 U			
Cadmium	5	5	5		5 U				5 U		1 U			5 U
Cadmium	5	5	5	18	5 U				5 U		1 U			5 U
Calcium														67000
Chromium	100	100	100		5 U		10.4	5.9	14.2		19.6 J			5 U
Copper	1000	1000	1300	1500	25 U				0.81 B		1.1 B			
Hexavalent Chromium	100	100		0.043	50 U		10 U	10 U	50 U					
Iron			300	26000										31.8 B
Lead	5	5	15		3 U		3 U	3 U	3 U		0.31 B			3.1 J
Magnesium														15900
Manganese	300	300	50	880										4.5 B
Manganese	300	300	50											4.5 B
Mercury	2	2	2	0.57	0.2 U				0.2 U		0.2 U			
Nickel	100	100		730	43.6		1.7 B	1.9 B	40 U		2			
Potassium														
Selenium	50	50	50	180	5 U				5 U		5 U			
Silver	100	100		180	5 U				5 U		1 U			
Sodium														7070
Thallium	2	2	2		10 U				5 B		0.029 B			
Vanadium	260	720		2.6	1.1 B				50 U		3 J			
Zinc	2000	2000		11000	25.6 J		10.4 JB	14.4 JB	131 J		27.7			50.7 J
METAL (Dissolved)														
Antimony	6	6	6	15		10 U				10 U		0.1 B		
Arsenic	10	10	10	0.045		10 U				10 U		1 U		
Barium	2000	2000	2000	7300		56.1 B				43.4 B		40.3		
Beryllium	4	4	4	73		0.72 B J				0.36 B J		1 U		
Cadmium	5	5	5			5 U				5 U		1 U		
Cadmium	5	5	5	18		5 U				5 U		1 U		
Calcium													81400	
Chromium	100	100	100			5 U				5.2		19.7 J		
Copper	1000	1000	1300	1500		25 U				25 U		0.61 B		
Hexavalent Chromium	100	100		0.043		50 U				50 U				
Iron			300	26000									41.1 B J	
Lead	5	5	15			3 U				3 U		0.045 B		
Magnesium													18700	
Manganese	300	300	50	880									15.8	
Manganese	300	300	50										15.8	
Mercury	2	2	2	0.57		0.2 U				0.2 U		0.2 U		
Nickel	100	100		730		38.9 B				1.1 B		1.5		
Potassium													4040 B	
Selenium	50	50	50	180		5 U				5 U		0.44 B		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	CW-18 5/23/2008	CW-18 5/23/2008	CW-20 10/13/2006	CW-20 Dup 10/13/2006	CW-20 5/21/2008	CW-20 5/21/2008	CW-20 9/30/2008	CW-20 9/30/2008	CW-20 7/8/2010	Softail Lift Station 6/20/2006
Silver	100	100		180		5 U				0.6 B		1 U		
Sodium													36200	
Thallium	2	2	2			10 U				10 U		0.019 B J		
Vanadium	260	720		2.6		50 U				50 U		5 J		
Zinc	2000	2000		11000		2 B J				3.2 B J		3.7 B		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Softail Lift Station Deep Foundation 5/20/2008	Softail Lift Station Deep Foundation 5/20/2008	Softail Lift Station Toe of Slope 5/20/2008	Softail Lift Station Toe of Slope 5/20/2008	Cole D 5/1/2008
METAL									
Aluminum			200	37000					
Antimony	6	6	6	15	10 U		10 U		10 U
Arsenic	10	10	10	0.045	10 U		10 U		10 U
Barium	2000	2000	2000	7300	42.7 B		59.3 B		31.3 B
Beryllium	4	4	4	73	4 U		4 U		4 U
Cadmium	5	5	5		5 U		5 U		5 U
Cadmium	5	5	5	18	5 U		5 U		5 U
Calcium									
Chromium	100	100	100		5 U		5 U		5 U
Copper	1000	1000	1300	1500	1.3 B		0.84 B		25 U
Hexavalent Chromium	100	100		0.043	50 U		50 U		50 U
Iron			300	26000					
Lead	5	5	15		3 U		3 U		3 U
Magnesium									
Manganese	300	300	50	880					
Manganese	300	300	50						
Mercury	2	2	2	0.57	0.2 U		0.2 U		0.2 U
Nickel	100	100		730	40 U		1.2 B		40 U
Potassium									
Selenium	50	50	50	180	5 U		5 U		5 U
Silver	100	100		180	5 U		5 U		5 U
Sodium									
Thallium	2	2	2		10 U		10 U		10 U
Vanadium	260	720		2.6	2.2 B		50 U		50 U
Zinc	2000	2000		11000	11.8 B J		26.4 J		3.8 B J
METAL (Dissolved)									
Antimony	6	6	6	15		10 U		10 U	
Arsenic	10	10	10	0.045		10 U		10 U	
Barium	2000	2000	2000	7300		41 B		62 B	
Beryllium	4	4	4	73		4 U		4 U	
Cadmium	5	5	5			5 U		5 U	
Cadmium	5	5	5	18		5 U		5 U	
Calcium									
Chromium	100	100	100			5 U		5 U	
Copper	1000	1000	1300	1500		1.9 B		0.97 B	
Hexavalent Chromium	100	100		0.043		50 U		50 U	
Iron			300	26000					
Lead	5	5	15			3 U		3 U	
Magnesium									
Manganese	300	300	50	880					
Manganese	300	300	50						
Mercury	2	2	2	0.57		0.2 U		0.2 U	
Nickel	100	100		730		40 U		40 U	
Potassium									
Selenium	50	50	50	180		5 U		5 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Softail Lift Station Deep Foundation 5/20/2008	Softail Lift Station Deep Foundation 5/20/2008	Softail Lift Station Toe of Slope 5/20/2008	Softail Lift Station Toe of Slope 5/20/2008	Cole D 5/1/2008
Silver	100	100		180		5 U		5 U	
Sodium									
Thallium	2	2	2			10 U		10 U	
Vanadium	260	720		2.6		50 U		50 U	
Zinc	2000	2000		11000		8.9 B		26	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Cole D 5/1/2008	Cole D 9/12/2008	Cole D 9/12/2008	Cole D 7/9/2010	Cole F 5/1/2008	Cole F 5/1/2008	Cole F 9/8/2008	Cole F 9/8/2008	Cole F 7/8/2010	MW-4 (Cole) 5/1/2008	MW-4 (Cole) 5/1/2008	MW-4 (Cole) 9/8/2008	MW-4 (Cole) 9/8/2008
METAL																	
Aluminum			200	37000													
Antimony	6	6	6	15		0.075 B			10 U		0.23 B			10 U		2 U	
Arsenic	10	10	10	0.045		1 U			10 U		0.45 B			10 U		1 U	
Barium	2000	2000	2000	7300		25.2			31.3 B		32.5			141 B		102	
Beryllium	4	4	4	73		1 U			4 U		1 U			0.55 B		1 U	
Cadmium	5	5	5			1 U			5 U		1 U			5 U		1 U	
Cadmium	5	5	5	18		1 U			5 U		1 U			5 U		1 U	
Calcium																	
Chromium	100	100	100			5.7 J			5 U		4.1 J			1.7 B		5.1 J	
Copper	1000	1000	1300	1500		0.8 B			25 U		1.3 B			25 U		0.8 B	
Hexavalent Chromium	100	100		0.043					50 U					50 U			
Iron			300	26000													
Lead	5	5	15			0.057 B			3 U		0.19 B			3 U		0.39 B	
Magnesium																	
Manganese	300	300	50	880													
Manganese	300	300	50														
Mercury	2	2	2	0.57		0.2 U			0.2 U		0.2 U			0.2 U		0.2 U	
Nickel	100	100		730		0.59 B			40 U		0.5 B			2.5 B		2.1	
Potassium																	
Selenium	50	50	50	180		0.62 B			5 U		5 U			5 U		1.2 B	
Silver	100	100		180		1 U			5 U		1 U			5 U		1 U	
Sodium																	
Thallium	2	2	2			0.067 B			10 U		0.12 B			10 U		0.022 B	
Vanadium	260	720		2.6		2.1 J			50 U		1.8 J			1.5 B		1.4 J	
Zinc	2000	2000		11000		3.1 B J			2.7 B J		5.3			12.3 B J		8.3	
METAL (Dissolved)																	
Antimony	6	6	6	15	10 U		0.073 B			10 U		0.16 B J			10 U		0.2 B J
Arsenic	10	10	10	0.045	10 U		1 U			10 U		0.23 B			10 U		1
Barium	2000	2000	2000	7300	31.7 B		24.9			29.2 B		33.1			139 B		107
Beryllium	4	4	4	73	0.52 B J		1 U			0.66 B J		1 U			0.6 B J		0.15 B
Cadmium	5	5	5		5 U		1 U			5 U		1 U			5 U		1 U
Cadmium	5	5	5	18	5 U		1 U			5 U		1 U			5 U		1 U
Calcium								48800					79500				
Chromium	100	100	100		5 U		5.3 J			5 U		4 J			5 U		8.2 J
Copper	1000	1000	1300	1500	25 U		0.68 B			25 U		1.1 B			25 U		2.1
Hexavalent Chromium	100	100		0.043	50 U					50 U					50 U		
Iron			300	26000				100 U					100 U				
Lead	5	5	15		3 U		1 U			3 U		0.055 B J			3 U		2 J
Magnesium								18100					7930				
Manganese	300	300	50	880				15 U					15 U				
Manganese	300	300	50					15 U					15 U				
Mercury	2	2	2	0.57	0.2 U		0.2 U			0.2 U		0.2 U			0.2 U		0.2 U
Nickel	100	100		730	40 U		0.39 B			40 U		0.4 B			1.5 B		4.9
Potassium								3510 B					1850 B				
Selenium	50	50	50	180	5 U		0.46 B J			5 U		5 U			5 U		1.6 B

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Cole D 5/1/2008	Cole D 9/12/2008	Cole D 9/12/2008	Cole D 7/9/2010	Cole F 5/1/2008	Cole F 5/1/2008	Cole F 9/8/2008	Cole F 9/8/2008	Cole F 7/8/2010	MW-4 (Cole) 5/1/2008	MW-4 (Cole) 5/1/2008	MW-4 (Cole) 9/8/2008	MW-4 (Cole) 9/8/2008
Silver	100	100		180	5 U		1 U			5 U		1 U			5 U		1 U
Sodium								27100					36500				
Thallium	2	2	2		3.5 B		0.041 B			3.2 B		1 U			4.3 B		0.044 B J
Vanadium	260	720		2.6	1.5 B		2 J			50 U		0.84 B			50 U		2.2
Zinc	2000	2000		11000	2.4 B		3.2 B J			8.3 B		4.7 B			9.5 B		14

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	RW-2 4/15/1987	RW-2 7/30/1999	RW-2 3/30/2000	RW-2 6/15/2005	RW-2 6/15/2005	RW-2 4/22/2008	RW-2 4/22/2008	RW-2 9/26/2008	RW-2 9/26/2008	RW-2 7/6/2010	RW-4 Folk 4/14/1987	RW-4 Folk 5/14/2008	RW-4 Folk 5/14/2008
METAL																	
Aluminum			200	37000													
Antimony	6	6	6	15				4.9 U		10 U		0.18 B				10 U	
Arsenic	10	10	10	0.045						10 U		1 U				10 U	
Barium	2000	2000	2000	7300						42.5 B		23.9				90.4 B	
Beryllium	4	4	4	73						4 U		1 U				4 U	
Cadmium	5	5	5					1.1		5 U		1 U				0.59 B	
Cadmium	5	5	5	18				1.1		5 U		1 U				0.59 B	
Calcium						6500	4900										
Chromium	100	100	100					2.8 U		10.6		13.9 J				5 U	
Copper	1000	1000	1300	1500						42.6		5			70	475	
Hexavalent Chromium	100	100		0.043				10 U		50 U						50 U	
Iron			300	26000		2900	190										
Lead	5	5	15					2.7		4.7		0.99 B				28.9	
Magnesium						3600	3200										
Manganese	300	300	50	880		140	23										
Manganese	300	300	50			140	23										
Mercury	2	2	2	0.57						0.2 U		0.2 U				0.2 U	
Nickel	100	100		730				4		11.8 B		5.1			50	14 B	
Potassium						2000	2000										
Selenium	50	50	50	180						5 U		5 U				5 U	
Silver	100	100		180						5 U		1 U				5 U	
Sodium						3600	3800										
Thallium	2	2	2							5.6 B		0.32 B				10 U	
Vanadium	260	720		2.6						1.3 B		4.1 J				50 U	
Zinc	2000	2000		11000	30			37.7		51.7		29.7			40	145	
METAL (Dissolved)																	
Antimony	6	6	6	15					4.9 U		10 U		0.09 B				10 U
Arsenic	10	10	10	0.045							10 U		1 U				10 U
Barium	2000	2000	2000	7300							36.9 B		21.5				86.9 B
Beryllium	4	4	4	73							4 U		1 U				4 U
Cadmium	5	5	5						0.5 U		5 U		1 U				5 U
Cadmium	5	5	5	18					0.5 U		5 U		1 U				5 U
Calcium														4470 B			
Chromium	100	100	100						2.8 U		1.4 B		12 J				5 U
Copper	1000	1000	1300	1500							14 B		3.4				522
Hexavalent Chromium	100	100		0.043							50 U						50 U
Iron			300	26000										100 U			
Lead	5	5	15						2.2 U		3 U		0.15 B				5.9
Magnesium														3340 B			
Manganese	300	300	50	880										5.4 B			
Manganese	300	300	50											5.4 B			
Mercury	2	2	2	0.57							0.2 U		0.2 U				0.2 U
Nickel	100	100		730					3.9 U		11.3 B		4.9				13.6 B
Potassium														1710 B			
Selenium	50	50	50	180							5 U		5 U				5 U

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	RW-2 4/15/1987	RW-2 7/30/1999	RW-2 3/30/2000	RW-2 6/15/2005	RW-2 6/15/2005	RW-2 4/22/2008	RW-2 4/22/2008	RW-2 9/26/2008	RW-2 9/26/2008	RW-2 7/6/2010	RW-4 Folk 4/14/1987	RW-4 Folk 5/14/2008	RW-4 Folk 5/14/2008
Silver	100	100		180							5 U		1 U				5 U
Sodium														5140			
Thallium	2	2	2								10 U		0.15 B J				10 U
Vanadium	260	720		2.6							1.8 B		3.2 J				50 U
Zinc	2000	2000		11000					34.3		54.5		32.6				158 J

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	RW-4 Folk 9/10/2008	RW-4 Folk 9/10/2008	RW-4 Folk 6/18/2009	RW-4 Folk 6/18/2009	RW-4 FOLK 6/25/2010	RW-4 FOLK 6/25/2010	RW-5 10/27/1995	RW-5 12/29/1995	RW-5 7/30/1999	RW-5 3/31/2000	RW-5 4/22/2008	RW-5 4/22/2008	RW-5 9/26/2008
METAL																	
Aluminum			200	37000													
Antimony	6	6	6	15	0.17 B										10 U		0.11 B
Arsenic	10	10	10	0.045	0.17 B										10 U		1 U
Barium	2000	2000	2000	7300	74.2										49.4 B		37.3
Beryllium	4	4	4	73	1 U										4 U		1 U
Cadmium	5	5	5		1 U										5 U		1 U
Cadmium	5	5	5	18	1 U										5 U		1 U
Calcium											80000	82000	67100	72000			
Chromium	100	100	100		6 J										5 U		10.9 J
Copper	1000	1000	1300	1500	398										25 U		0.97 B
Hexavalent Chromium	100	100		0.043											50 U		
Iron			300	26000							70 U	70 U	2300	1500			
Lead	5	5	15		23		6.1 J		9						3 U		0.053 B
Magnesium											28000	29000	26800	30000			
Manganese	300	300	50	880							6 U	6 U	50	180			
Manganese	300	300	50								6 U	6 U	50	180			
Mercury	2	2	2	0.57	0.2 U										0.081 B		0.2 U
Nickel	100	100		730	9										40 U		1.9
Potassium											2200	2300	1700	1800			
Selenium	50	50	50	180	5 U										5 U		5 U
Silver	100	100		180	1 U										5 U		1 U
Sodium											18000	19000	13600	14000			
Thallium	2	2	2		0.078 B										4.3 B		0.12 B
Vanadium	260	720		2.6	2.1 J										1.2 B		3.3 J
Zinc	2000	2000		11000	93.2 J										6.1 B		2.9 B
METAL (Dissolved)																	
Antimony	6	6	6	15		0.13 B										10 U	
Arsenic	10	10	10	0.045		1 U										10 U	
Barium	2000	2000	2000	7300		73.3										50.4 B	
Beryllium	4	4	4	73		1 U										4 U	
Cadmium	5	5	5			1 U										5 U	
Cadmium	5	5	5	18		1 U										5 U	
Calcium										3970 B							
Chromium	100	100	100			7.5 J										5 U	
Copper	1000	1000	1300	1500		274										25 U	
Hexavalent Chromium	100	100		0.043												50 U	
Iron			300	26000						255							
Lead	5	5	15			12.6 J		2.3 J		7.8						3 U	
Magnesium										3590 B							
Manganese	300	300	50	880						29.2							
Manganese	300	300	50							29.2							
Mercury	2	2	2	0.57		0.2 U										0.2 U	
Nickel	100	100		730		8.8										40 U	
Potassium										2710 B							
Selenium	50	50	50	180		0.57 B										5 U	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	RW-4 Folk 9/10/2008	RW-4 Folk 9/10/2008	RW-4 Folk 6/18/2009	RW-4 Folk 6/18/2009	RW-4 FOLK 6/25/2010	RW-4 FOLK 6/25/2010	RW-5 10/27/1995	RW-5 12/29/1995	RW-5 7/30/1999	RW-5 3/31/2000	RW-5 4/22/2008	RW-5 4/22/2008	RW-5 9/26/2008
Silver	100	100		180		1 U										5 U	
Sodium										16300							
Thallium	2	2	2			1.0 U										10 U	
Vanadium	260	720		2.6		2.7										3.1 B	
Zinc	2000	2000		11000		88 J										3.6 B	

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	RW-5 9/26/2008	RW-5 7/7/2010	HERMAN (S-7) 5/14/2008	HERMAN (S-7) 5/14/2008	S-3 6/8/1998	S-3 3/22/2000	S-4 6/8/1998	S-4 3/22/2000	S-9 6/8/1998	S-9 3/22/2000	Spring at Bldg 14 S1 4/30/2008
METAL															
Aluminum			200	37000											
Antimony	6	6	6	15			10 U		0 U	0 U	0 U	0 U	0 U	7.3	27.2
Arsenic	10	10	10	0.045			10 U		33	0 U	0 U	0 U	16	0 U	10 U
Barium	2000	2000	2000	7300			40.5 B								60.1 B J
Beryllium	4	4	4	73			4 U		13	0 U	0 U	0 U	3	0 U	4 U
Cadmium	5	5	5				5 U		18	0 U	0 U	0 U	0 U	0 U	5 U
Cadmium	5	5	5	18			5 U		18	0 U	0 U	0 U	0 U	0 U	5 U
Calcium															
Chromium	100	100	100				5 U		120	0 U	0 U	0 U	28	0 U	4.7 B
Copper	1000	1000	1300	1500			0.97 B								12 B
Hexavalent Chromium	100	100		0.043			50 U		0 U	0 U	0 U	0 U	0 U	0 U	50 U
Iron			300	26000					177000	350	0 U	0 U	47600	190	
Lead	5	5	15				3 U		1000	16	0 U	0 U	0 U	0 U	5.9
Magnesium															
Manganese	300	300	50	880					11400	64	0 U	0 U	3000	18	
Manganese	300	300	50						11400	64	0 U	0 U	3000	18	
Mercury	2	2	2	0.57			0.2 U		0 U	0 U	0 U	0 U	0 U	0 U	0.2 U
Nickel	100	100		730			40 U		180	0 U	0 U	0 U	20	0 U	2.3 B
Potassium															
Selenium	50	50	50	180			5 U		0 U	0 U	0 U	0 U	0 U	0 U	5 U
Silver	100	100		180			5 U		0 U	0 U	0 U	0 U	0 U	0 U	5 U
Sodium															
Thallium	2	2	2				10 U		0 U	0 U	0 U	0 U	0 U	0 U	10 U
Vanadium	260	720		2.6			50 U								50 U
Zinc	2000	2000		11000			5.1 B								191 J
METAL (Dissolved)															
Antimony	6	6	6	15	0.1 B			10 U							
Arsenic	10	10	10	0.045	1 U			10 U							
Barium	2000	2000	2000	7300	36.3			36.2 B							
Beryllium	4	4	4	73	1 U			4 U							
Cadmium	5	5	5		1 U			5 U							
Cadmium	5	5	5	18	1 U			5 U							
Calcium						103000									
Chromium	100	100	100		11 J			5 U							
Copper	1000	1000	1300	1500	0.51 B			25 U							
Hexavalent Chromium	100	100		0.043				50 U							
Iron			300	26000		83.9 B J									
Lead	5	5	15		0.29 B			3 U							
Magnesium						30800									
Manganese	300	300	50	880		26.6									
Manganese	300	300	50			26.6									
Mercury	2	2	2	0.57	0.2 U			0.2 U							
Nickel	100	100		730	1.9			40 U							
Potassium						7200									
Selenium	50	50	50	180	0.56 B			5 U							

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	RW-5 9/26/2008	RW-5 7/7/2010	HERMAN (S-7) 5/14/2008	HERMAN (S-7) 5/14/2008	S-3 6/8/1998	S-3 3/22/2000	S-4 6/8/1998	S-4 3/22/2000	S-9 6/8/1998	S-9 3/22/2000	Spring at Bldg 14 S1 4/30/2008
Silver	100	100		180	1 U			5 U							
Sodium						85500									
Thallium	2	2	2		0.1 B J			10 U							
Vanadium	260	720		2.6	3.7 J			50 U							
Zinc	2000	2000		11000	3.4 B			7.9 B J							

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Spring at Bldg 14 S1 4/30/2008	Spring at Bldg 14 S1 9/5/2008	Spring at Bldg 14 S1 9/5/2008	Spring at Bldg 14 S1 6/24/2009	Spring at Bldg 14 S1 6/24/2009	Spring at Bldg 14 S1 6/25/2010	Spring at Bldg 14 S1 6/25/2010
METAL											
Aluminum			200	37000							
Antimony	6	6	6	15		26.9		15.4 J		3.6 J	
Arsenic	10	10	10	0.045		1.9					
Barium	2000	2000	2000	7300		260					
Beryllium	4	4	4	73		1 U					
Cadmium	5	5	5			0.24 B					
Cadmium	5	5	5	18		0.24 B					
Calcium											
Chromium	100	100	100			30.2 J					
Copper	1000	1000	1300	1500		89.4					
Hexavalent Chromium	100	100		0.043							
Iron			300	26000							
Lead	5	5	15			142		30.4		1.3 B	
Magnesium											
Manganese	300	300	50	880							
Manganese	300	300	50								
Mercury	2	2	2	0.57		0.17 B					
Nickel	100	100		730		3.6					
Potassium											
Selenium	50	50	50	180		0.99 B					
Silver	100	100		180		0.33 B					
Sodium											
Thallium	2	2	2			1 U					
Vanadium	260	720		2.6		3.7 J					
Zinc	2000	2000		11000		246					
METAL (Dissolved)											
Antimony	6	6	6	15	27.2		21.5 J		15.2		5.6 J
Arsenic	10	10	10	0.045	10 U		0.62 B				
Barium	2000	2000	2000	7300	54.2 B J		67.1				
Beryllium	4	4	4	73	4 U		1 U				
Cadmium	5	5	5		5 U		1 U				
Cadmium	5	5	5	18	5 U		1 U				
Calcium											82200
Chromium	100	100	100		4 B		9 J				
Copper	1000	1000	1300	1500	10 B		9.5				
Hexavalent Chromium	100	100		0.043	50 U						
Iron			300	26000							100 U
Lead	5	5	15		3 U		1.4 J		1.3		3 U
Magnesium											12500
Manganese	300	300	50	880							40.7
Manganese	300	300	50								40.7
Mercury	2	2	2	0.57	0.2 U		0.2 U				
Nickel	100	100		730	2.8 B		1.3				
Potassium											8700
Selenium	50	50	50	180	5 U		0.49 B				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Spring at Bldg 14 S1 4/30/2008	Spring at Bldg 14 S1 9/5/2008	Spring at Bldg 14 S1 9/5/2008	Spring at Bldg 14 S1 6/24/2009	Spring at Bldg 14 S1 6/24/2009	Spring at Bldg 14 S1 6/25/2010	Spring at Bldg 14 S1 6/25/2010
Silver	100	100		180	5 U		1 U				
Sodium											30600
Thallium	2	2	2		10 U		1 U				
Vanadium	260	720		2.6	50 U		1.9				
Zinc	2000	2000		11000	175 J		127				

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Spring at Bldg 14 S2 4/30/2008	Spring at Bldg 14 S2 4/30/2008	Spring at Bldg 14 S2 9/5/2008	Spring at Bldg 14 S2 9/5/2008	Spring at Bldg 14 S2 6/24/2009	Spring at Bldg 14 S2 6/24/2009	Spring at Bldg 14 S2 7/9/2010
METAL											
Aluminum			200	37000							
Antimony	6	6	6	15	10 U		0.39 B				0.76 B J
Arsenic	10	10	10	0.045	10 U		1 U				
Barium	2000	2000	2000	7300	71 B J		75.6				
Beryllium	4	4	4	73	4 U		1 U				
Cadmium	5	5	5		5 U		0.21 B				
Cadmium	5	5	5	18	5 U		0.21 B				
Calcium											
Chromium	100	100	100		5 U		7.7 J				
Copper	1000	1000	1300	1500	25 U		75.9				
Hexavalent Chromium	100	100		0.043	50 U						
Iron			300	26000							
Lead	5	5	15		3 U		122		0.033 B		4540
Magnesium											
Manganese	300	300	50	880							
Manganese	300	300	50								
Mercury	2	2	2	0.57	0.2 U		0.2 U				
Nickel	100	100		730	1.4 B		1.8				
Potassium											
Selenium	50	50	50	180	5 U		5 U				
Silver	100	100		180	5 U		1 U				
Sodium											
Thallium	2	2	2		10 U		1 U				
Vanadium	260	720		2.6	50 U		1.9 J				
Zinc	2000	2000		11000	7.8 B J		96.2				
METAL (Dissolved)											
Antimony	6	6	6	15		10 U		0.31 B J			
Arsenic	10	10	10	0.045		10 U		1 U			
Barium	2000	2000	2000	7300		68.8 B J		64.6			
Beryllium	4	4	4	73		4 U		1 U			
Cadmium	5	5	5			5 U		0.12 B			
Cadmium	5	5	5	18		5 U		0.12 B			
Calcium											
Chromium	100	100	100			5 U		4.2 J			
Copper	1000	1000	1300	1500		25 U		12.8			
Hexavalent Chromium	100	100		0.043		50 U					
Iron			300	26000							
Lead	5	5	15			3 U		5.6 J		0.81 B	
Magnesium											
Manganese	300	300	50	880							
Manganese	300	300	50								
Mercury	2	2	2	0.57		0.2 U		0.2 U			
Nickel	100	100		730		2.2 B		1			
Potassium											
Selenium	50	50	50	180		5 U		0.45 B			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Spring at Bldg 14 S2 4/30/2008	Spring at Bldg 14 S2 4/30/2008	Spring at Bldg 14 S2 9/5/2008	Spring at Bldg 14 S2 9/5/2008	Spring at Bldg 14 S2 6/24/2009	Spring at Bldg 14 S2 6/24/2009	Spring at Bldg 14 S2 7/9/2010
Silver	100	100		180		5 U		1 U			
Sodium											
Thallium	2	2	2			8.5 B		1 U			
Vanadium	260	720		2.6		50 U		1.8			
Zinc	2000	2000		11000		4 B J		33.7			

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Spring at Bldg 14 S2 7/9/2010	TATE (S-6) 5/14/2008	TATE (S-6) 5/14/2008	B41S-SW-009 2/8/2008	MC-1 Dup 10/27/1995	MC-5 10/27/1995	MC-5 10/27/1995	PSWS-1 6/8/1998	PSWS-1 3/22/2000	PSWS-2 6/8/1998	PSWS-2 3/22/2000	UTSWS-1 6/8/1998
METAL																
Aluminum			200	37000												
Antimony	6	6	6	15		10 U		40.2				0 U	0 U	0 U	0 U	0 U
Arsenic	10	10	10	0.045		10 U		26				0 U	0 U	0 U	0 U	0 U
Barium	2000	2000	2000	7300		56.7 B		213								
Beryllium	4	4	4	73		4 U		0.58 B				0 U	0 U	0 U	0 U	0 U
Cadmium	5	5	5			5 U		1210				0 U	0 U	0 U	0 U	0 U
Cadmium	5	5	5	18		5 U		1210				0 U	0 U	0 U	0 U	0 U
Calcium									52000	43000						
Chromium	100	100	100			5 U		9190				0 U	0 U	0 U	0 U	0 U
Copper	1000	1000	1300	1500		25 U		238 J								
Hexavalent Chromium	100	100		0.043		50 U						0 U	0 U	0 U	0 U	0 U
Iron			300	26000					120	70 U	0 U	1200	450	1300	270	180
Lead	5	5	15			3 U		67.6				0 U	0 U	0 U	0 U	0 U
Magnesium									13000	9500						
Manganese	300	300	50	880					50	9	9	54	58	61	23	0 U
Manganese	300	300	50						50	9	9	54	58	61	23	0 U
Mercury	2	2	2	0.57		0.2 U		0.24				0 U	0 U	0 U	0 U	0 U
Nickel	100	100		730		3.4 B		3530				0 U	0 U	0 U	0 U	0 U
Potassium									3200	3200						
Selenium	50	50	50	180		5 U		8				0 U	0 U	0 U	0 U	0 U
Silver	100	100		180		5 U		0.83 B				0 U	0 U	0 U	0 U	0 U
Sodium									13000	15000						
Thallium	2	2	2			10 U		10 U				0 U	0 U	0 U	0 U	0 U
Vanadium	260	720		2.6		50 U		129								
Zinc	2000	2000		11000		8 B		4640 J								
METAL (Dissolved)																
Antimony	6	6	6	15	0.098 B		10 U									
Arsenic	10	10	10	0.045			10 U									
Barium	2000	2000	2000	7300			52.6 B									
Beryllium	4	4	4	73			4 U									
Cadmium	5	5	5				5 U									
Cadmium	5	5	5	18			5 U									
Calcium					20300											
Chromium	100	100	100				5 U									
Copper	1000	1000	1300	1500			25 U									
Hexavalent Chromium	100	100		0.043			50 U									
Iron			300	26000	100 U											
Lead	5	5	15		8.3		3 U									
Magnesium					5310											
Manganese	300	300	50	880	1.2 B											
Manganese	300	300	50		1.2 B											
Mercury	2	2	2	0.57			0.2 U									
Nickel	100	100		730			2.2 B									
Potassium					3110 B											
Selenium	50	50	50	180			5 U									

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	Spring at Bldg 14 S2 7/9/2010	TATE (S-6) 5/14/2008	TATE (S-6) 5/14/2008	B41S-SW-009 2/8/2008	MC-1 Dup 10/27/1995	MC-5 10/27/1995	MC-5 10/27/1995	PSWS-1 6/8/1998	PSWS-1 3/22/2000	PSWS-2 6/8/1998	PSWS-2 3/22/2000	UTSWS-1 6/8/1998
Silver	100	100		180			5 U									
Sodium					6790											
Thallium	2	2	2				3.3 B									
Vanadium	260	720		2.6			50 U									
Zinc	2000	2000		11000			6.5 B J									

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	UTSWS-1 3/22/2000	UTSWS-2 6/9/1998	UTSWS-2 3/22/2000	UTSWS-3 6/9/1998	UTSWS-3 3/22/2000	WWPL-SW-001 8/27/2007	WWPL-SW-001 Dup 8/27/2007	WWPL-SW-002 8/27/2007	WWPL-SW-003 8/27/2007	WWPL-SW-004 8/28/2007
METAL														
Aluminum			200	37000										
Antimony	6	6	6	15	0 U	0 U	0 U	0 U	0 U	3.7 B	3.5 B	3.2 B	4.7 B	3.2 B
Arsenic	10	10	10	0.045	0 U	0 U	0 U	0 U	0 U	10 U	10 U	10 U	10 U	10 U
Barium	2000	2000	2000	7300						22.9 B	22.7 B	33.5 B	45.2 B	24.4 B
Beryllium	4	4	4	73	0 U	0 U	0 U	0 U	0 U	4 U	0.37 B	4 U	4 U	4 U
Cadmium	5	5	5		0 U	0 U	0 U	0 U	0 U	2.5 B	2.5 B	5 U	0.39 B	5 U
Cadmium	5	5	5	18	0 U	0 U	0 U	0 U	0 U	2.5 B	2.5 B	5 U	0.39 B	5 U
Calcium														
Chromium	100	100	100		0 U	0 U	0 U	11	0 U	4.5 B	3.6 B	5 U	4.8 B	1.3 B
Copper	1000	1000	1300	1500						25 U	25 U	2.6 B	24.2 B	7.1 B
Hexavalent Chromium	100	100		0.043	0 U	0 U	0 U	0 U	0 U	10 U	10 U	10 U	10 U	10 U
Iron			300	26000	61	140	120	67	120					
Lead	5	5	15		0 U	0 U	0 U	0 U	0 U	3 U	3 U	3 U	20.9	3.7
Magnesium														
Manganese	300	300	50	880	0 U	0 U	11	21	13					
Manganese	300	300	50		0 U	0 U	11	21	13					
Mercury	2	2	2	0.57	0 U	0 U	0 U	0 U	0 U	0.2 U	0.2 U	0.2 U	0.077 B	0.2 U
Nickel	100	100		730	0 U	0 U	0 U	0 U	0 U	6.3 B	5.5 B	1.3 B	13.6 B	3.8 B
Potassium														
Selenium	50	50	50	180	0 U	0 U	0 U	0 U	0 U	5 U	5 U	5 U	5 U	5 U
Silver	100	100		180	0 U	0 U	0 U	0 U	0 U	5 U	5 U	5 U	5 U	5 U
Sodium														
Thallium	2	2	2		0 U	0 U	0 U	0 U	0 U	10 U	10 U	10 U	10 U	10 U
Vanadium	260	720		2.6						50 U	50 U	50 U	6.8 B	50 U
Zinc	2000	2000		11000						58.1	46.4	21.3	221	42.1
METAL (Dissolved)														
Antimony	6	6	6	15										
Arsenic	10	10	10	0.045										
Barium	2000	2000	2000	7300										
Beryllium	4	4	4	73										
Cadmium	5	5	5											
Cadmium	5	5	5	18										
Calcium														
Chromium	100	100	100											
Copper	1000	1000	1300	1500										
Hexavalent Chromium	100	100		0.043										
Iron			300	26000										
Lead	5	5	15											
Magnesium														
Manganese	300	300	50	880										
Manganese	300	300	50											
Mercury	2	2	2	0.57										
Nickel	100	100		730										
Potassium														
Selenium	50	50	50	180										

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	UTSWS-1 3/22/2000	UTSWS-2 6/9/1998	UTSWS-2 3/22/2000	UTSWS-3 6/9/1998	UTSWS-3 3/22/2000	WWPL-SW-001 8/27/2007	WWPL-SW-001 Dup 8/27/2007	WWPL-SW-002 8/27/2007	WWPL-SW-003 8/27/2007	WWPL-SW-004 8/28/2007
Silver	100	100		180										
Sodium														
Thallium	2	2	2											
Vanadium	260	720		2.6										
Zinc	2000	2000		11000										

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	WWPL-SW-005 8/27/2007	TWB-6 7/13/1995
METAL						
Aluminum			200	37000		
Antimony	6	6	6	15	3.8 B	
Arsenic	10	10	10	0.045	10 U	
Barium	2000	2000	2000	7300	79 B	
Beryllium	4	4	4	73	4 U	
Cadmium	5	5	5		5 U	
Cadmium	5	5	5	18	5 U	
Calcium						
Chromium	100	100	100		5 U	260
Copper	1000	1000	1300	1500	2.8 B	620
Hexavalent Chromium	100	100		0.043	10 U	260
Iron			300	26000		
Lead	5	5	15		3.1	68
Magnesium						
Manganese	300	300	50	880		
Manganese	300	300	50			
Mercury	2	2	2	0.57	0.2 U	
Nickel	100	100		730	5.9 B	
Potassium						
Selenium	50	50	50	180	5 U	
Silver	100	100		180	5 U	
Sodium						
Thallium	2	2	2		10 U	
Vanadium	260	720		2.6	1.7 B	
Zinc	2000	2000		11000	44	450
METAL (Dissolved)						
Antimony	6	6	6	15		
Arsenic	10	10	10	0.045		
Barium	2000	2000	2000	7300		
Beryllium	4	4	4	73		
Cadmium	5	5	5			
Cadmium	5	5	5	18		
Calcium						
Chromium	100	100	100			
Copper	1000	1000	1300	1500		
Hexavalent Chromium	100	100		0.043		
Iron			300	26000		
Lead	5	5	15			
Magnesium						
Manganese	300	300	50	880		
Manganese	300	300	50			
Mercury	2	2	2	0.57		
Nickel	100	100		730		
Potassium						
Selenium	50	50	50	180		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.

Table 2.4-5
Groundwater Data Summary - METAL Analyses
Former York Naval Ordnance Plant - York, PA

Location/ID Sample Date Parameter	PA MSC Used Aquifer R (ug/L)	PA MSC Used Aquifer NR (ug/L)	Federal MCL (ug/L)	EPA RSL Tap Water (ug/L)	WWPL-SW-005 8/27/2007	TWB-6 7/13/1995
Silver	100	100		180		
Sodium						
Thallium	2	2	2			
Vanadium	260	720		2.6		
Zinc	2000	2000		11000		

Blank results = analyte not analyzed. U = Not detected. J = Organics; estimated. Inorganics; blank contamination. B = Organics; blank contamination. Inorganics; estimated. E = Inorganics: matrix interference.