

HW-07

EPA Validated Data Summary Report

Dimock Residential Sampling

Sample Date: 2/15/2012

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW07	1-Butanol	10,000.00 U ug/L	1,500.00 ug/L				
HW07	1-Propanol	10,000.00 U ug/L					
HW07	2-Butanol	10,000.00 U ug/L					
HW07	Ethanol	10,000.00 U ug/L					
HW07	Methanol	10,000.00 U ug/L	7,800.00 ug/L				
HW07	Anionic Surfactants	0.01 U mg/L					
HW07	Heterotrophic Plate Count	R cfu/1mL					
HW07	Total Coliform Bacteria	1.00 U cfu/100mL	0.00 cfu/100mL	5.00 %*			
HW07	Ethane	1.20 U ug/L					
HW07	Ethene	1.20 U ug/L					
HW07	Methane	57.00 ug/L	28,000.00 ug/L				
HW07	2-Butoxyethanol	5.00 U ug/L					
HW07	2-Methoxyethanol	10.00 U ug/L	78.00 ug/L				
HW07	2-Methoxyethanol	57.10 U ug/L	78.00 ug/L				
HW07	Diethylene Glycol	25.00 U ug/L	8,000.00 ug/L				
HW07	Ethylene Glycol	10,000.00 U ug/L	31,000.00 ug/L				
HW07	Tetraethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW07	Triethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW07	Bromide	0.50 U mg/L					
HW07	Chloride	23.60 mg/L			250.00 mg/L		250.00 mg/L
HW07	Fluoride	0.10 U mg/L	0.62 mg/L	4.00 mg/L	2.00 mg/L	2.00 mg/L	
HW07	Sulfate	10.40 mg/L			250.00 mg/L		250.00 mg/L
HW07	Mercury	0.20 U ug/L	4.30 ug/L	2.00 ug/L		2.00 ug/L	
HW07-F	Mercury	0.20 U ug/L	4.30 ug/L	2.00 ug/L		2.00 ug/L	

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW07	Aluminum	30.00 U ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW07-F	Aluminum	30.00 U ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW07	Antimony	2.00 U ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW07-F	Antimony	2.00 U ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW07	Arsenic	2.00 U ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW07-F	Arsenic	2.00 U ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW07	Barium	137.00 ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW07-F	Barium	127.00 ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW07	Beryllium	1.00 U ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW07-F	Beryllium	1.00 U ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW07	Boron	50.00 U ug/L	3,100.00 ug/L				
HW07-F	Boron	50.00 U ug/L	3,100.00 ug/L				
HW07	Cadmium	1.00 U ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW07-F	Cadmium	1.00 U ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW07	Calcium	36,500.00 ug/L					
HW07-F	Calcium	36,200.00 ug/L					
HW07	Chromium	2.00 U ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW07-F	Chromium	2.00 U ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW07	Cobalt	1.00 U ug/L	4.70 ug/L				
HW07-F	Cobalt	1.00 U ug/L	4.70 ug/L				
HW07	Copper	7.50 ug/L	620.00 ug/L	1,300.00 ug/L**	1,000.00 ug/L	1,000.00 ug/L***	
HW07-F	Copper	2.00 U ug/L	620.00 ug/L	1,300.00 ug/L**	1,000.00 ug/L	1,000.00 ug/L***	
HW07	Iron	100.00 U ug/L	11,000.00 ug/L		300.00 ug/L		300.00 ug/L
HW07-F	Iron	100.00 U ug/L	11,000.00 ug/L		300.00 ug/L		300.00 ug/L
HW07	Lead	3.20 ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW07-F	Lead	1.00 U ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW07	Lithium	200.00 U ug/L	31.00 ug/L				
HW07-F	Lithium	200.00 U ug/L	31.00 ug/L				
HW07	Magnesium	7,590.00 ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW07-F	Magnesium	7,640.00 ug/L					
HW07	Manganese	148.00 ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW07-F	Manganese	45.60 ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW07	Nickel	3.10 ug/L	300.00 ug/L				
HW07-F	Nickel	2.90 ug/L	300.00 ug/L				
HW07	Potassium	2,000.00 U ug/L					
HW07-F	Potassium	2,000.00 U ug/L					
HW07	Selenium	5.00 U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW07-F	Selenium	5.00 U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW07	Silver	1.00 U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW07-F	Silver	1.00 U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW07	Sodium	9,230.00 ug/L	20,000.00 ug/L				
HW07-F	Sodium	9,270.00 ug/L	20,000.00 ug/L				
HW07	Strontium	200.00 U ug/L	9,300.00 ug/L				
HW07-F	Strontium	200.00 U ug/L	9,300.00 ug/L				
HW07	Thallium	1.00 U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW07-F	Thallium	1.00 U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW07	Tin	200.00 U ug/L	9,300.00 ug/L				
HW07-F	Tin	200.00 U ug/L	9,300.00 ug/L				
HW07	Titanium	200.00 U ug/L					
HW07-F	Titanium	200.00 U ug/L					
HW07	Uranium	2.10 ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	
HW07-F	Uranium	1.90 ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	
HW07	Vanadium	5.00 U ug/L	78.00 ug/L				
HW07-F	Vanadium	5.00 U ug/L	78.00 ug/L				
HW07	Zinc	19.20 ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW07-F	Zinc	13.60 ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW07	Oil and Grease	5.30 UJ mg/L					
HW07	Total Dissolved Solids	141.00 mg/L			500.00 mg/L		500.00 mg/L

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW07	Total Suspended Solids	10.00 U mg/L					
HW07	1-Methylnaphthalene	4.76 U ug/L	97.00 ug/L				
HW07	Acenaphthene	4.76 U ug/L	400.00 ug/L				
HW07	Acenaphthylene	4.76 U ug/L					
HW07	Acetophenone	4.76 U ug/L	1,500.00 ug/L				
HW07	Anthracene	4.76 U ug/L	1,300.00 ug/L				
HW07	Atrazine	4.76 U ug/L	26.00 ug/L	3.00 ug/L		3.00 ug/L	
HW07	Benzo(a)anthracene	4.76 U ug/L	2.90 ug/L				
HW07	Benzo(a)pyrene	4.76 U ug/L	0.29 ug/L	0.20 ug/L		0.20 ug/L	
HW07	Biphenyl	4.76 U ug/L					
HW07	Bromophenyl-4 Phenyl Ether	4.76 U ug/L					
HW07	Butylbenzyl phthalate	4.76 U ug/L	1,400.00 ug/L				
HW07	Caprolactam	4.76 U ug/L	7,700.00 ug/L				
HW07	Carbazole	4.76 U ug/L					
HW07	Chlorobenzenamine-4	4.76 U ug/L	3.20 ug/L				
HW07	Chloronaphthalene-2	4.76 U ug/L	550.00 ug/L				
HW07	Chlorophenol-2	4.76 U ug/L	71.00 ug/L				
HW07	Chlorophenyl-4 phenyl ether	4.76 U ug/L					
HW07	Chrysene	4.76 U ug/L	290.00 ug/L				
HW07	Cresol, parachloro meta-	4.76 U ug/L					
HW07	Cresol-4,6-dinitro-ortho	57.10 U ug/L					
HW07	Cresol-o	4.76 U ug/L	720.00 ug/L				
HW07	Cresol-p	4.76 U ug/L	72.00 ug/L				
HW07	Dibenz(a,h)anthracene	4.76 U ug/L	0.29 ug/L				
HW07	Dibenzofuran	4.76 U ug/L					
HW07	Dichlorobenzidine-3,3'	4.76 U ug/L	11.00 ug/L				
HW07	Dichlorophenol-2,4	4.76 U ug/L	35.00 ug/L				
HW07	Dimethylphenol, 2,4-	4.76 U ug/L	270.00 ug/L				
HW07	Dinitrophenol-2,4	57.10 U ug/L	30.00 ug/L				

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW07	Dinitrotoluene-2,4	4.76 U ug/L					
HW07	Dinitrotoluene-2,6	4.76 U ug/L					
HW07	Ether, bis(2-chloroethyl)	4.76 U ug/L	1.20 ug/L				
HW07	Ether-bis(2-chloroisopropyl)	4.76 U ug/L					
HW07	Fluoranthene	4.76 U ug/L	630.00 ug/L				
HW07	Fluoranthene benzo(k)	4.76 U ug/L	29.00 ug/L				
HW07	Fluoranthene-benzo(b)	4.76 U ug/L	5.60 ug/L				
HW07	Fluorene	4.76 U ug/L	220.00 ug/L				
HW07	Hexachlorobenzene	4.76 U ug/L	4.20 ug/L	1.00 ug/L		1.00 ug/L	
HW07	Hexachlorobutadiene	0.50 U ug/L	26.00 ug/L				
HW07	Hexachlorobutadiene	4.76 U ug/L	26.00 ug/L				
HW07	Hexachlorocyclopentadiene	4.76 U ug/L	22.00 ug/L	50.00 ug/L		50.00 ug/L	
HW07	Hexachloroethane	4.76 U ug/L	5.10 ug/L				
HW07	Isophorone	4.76 U ug/L	6,700.00 ug/L				
HW07	Methane, bis(2-chloroethoxy)	4.76 U ug/L	47.00 ug/L				
HW07	Methylnaphthalene-2	4.76 U ug/L	27.00 ug/L				
HW07	Naphthalene	4.76 U ug/L	14.00 ug/L				
HW07	Naphthalene	0.50 U ug/L	14.00 ug/L				
HW07	Nitroaniline, ortho	4.76 U ug/L	150.00 ug/L				
HW07	Nitroaniline-3	4.76 U ug/L					
HW07	Nitrobenzenamine-4	4.76 U ug/L	61.00 ug/L				
HW07	Nitrobenzene	4.76 U ug/L	12.00 ug/L				
HW07	Nitrophenol-2	4.76 U ug/L					
HW07	Nitrophenol-4	9.52 U ug/L					
HW07	Nitrosodimethylamine-n	4.76 U ug/L	0.04 ug/L				
HW07	Nitrosodiphenylamine-n	4.76 U ug/L	1,000.00 ug/L				
HW07	Pentachlorophenol	57.10 U ug/L	17.00 ug/L	1.00 ug/L		1.00 ug/L	
HW07	Perylene-benzo(ghi)	4.76 U ug/L					
HW07	Phenanthrene	4.76 U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW07	Phenol	4.76 U ug/L	4,500.00 ug/L				
HW07	Phthalate, bis(2-ethylhexyl) (DEHP)	4.76 U ug/L	7.10 ug/L	6.00 ug/L		6.00 ug/L	
HW07	Phthalate, Dimethyl	4.76 U ug/L	1,400.00 ug/L				
HW07	Phthalate, di-n-butyl-	4.76 U ug/L	670.00 ug/L				
HW07	Phthalate, di-n-octyl	4.76 U ug/L					
HW07	Phthalate-diethyl	4.76 U ug/L	11,000.00 ug/L				
HW07	Propylamine,n-nitroso di-n-	4.76 U ug/L	0.93 ug/L				
HW07	Pyrene	4.76 U ug/L	87.00 ug/L				
HW07	Pyrene-indeno(1,2,3-cd)	4.76 U ug/L	3.00 ug/L				
HW07	Tetrachlorobenzene, 1,2,4,5-	4.76 U ug/L	1.20 ug/L				
HW07	Tetrachlorophenol, 2,3,4,6-	4.76 U ug/L	170.00 ug/L				
HW07	Trichlorophenol-2,4,5	4.76 U ug/L	890.00 ug/L				
HW07	Trichlorophenol-2,4,6	4.76 U ug/L	9.04 ug/L				
HW07	TPH - Diesel Range Organics	240.00 U ug/L					
HW07	TPH - Gasoline Range Organics	50.00 U ug/L					
HW07	TPH - Oil Range Organics	950.00 U ug/L					
HW07	1,2-Dibromo-3-chloropropane (DBCP)	2.00 U ug/L	0.03 ug/L	0.20 ug/L		0.20 ug/L	
HW07	4-Methyl-2-pentanone	2.00 U ug/L	1,000.00 ug/L				
HW07	Acetone	2.00 U ug/L					
HW07	Benzene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW07	Bromobenzene	0.50 U ug/L					
HW07	Bromoform	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW07	Butylbenzene	0.50 U ug/L					
HW07	Butylbenzene, sec-	0.50 U ug/L					
HW07	Butylbenzene, tert-	0.50 U ug/L					
HW07	Carbon disulfide	0.50 U ug/L					
HW07	Carbon Tetrachloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW07	Chlorobenzene	0.50 U ug/L		100.00 ug/L			
HW07	Chlorobromomethane	0.50 U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW07	Chloroethane	0.50 U ug/L					
HW07	Chloroform	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW07	Chlorotoluene	0.50 U ug/L	180.00 ug/L				
HW07	Chlorotoluene-p	0.50 U ug/L	190.00 ug/L				
HW07	Cyclohexane	0.50 U ug/L					
HW07	Dibromochloromethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW07	Dibromoethane-1,2	0.50 U ug/L	0.65 ug/L	0.05 ug/L		0.05 ug/L	
HW07	Dibromomethane	0.50 U ug/L					
HW07	Dichlorobenzene-1,2	0.50 U ug/L	280.00 ug/L	600.00 ug/L		600.00 ug/L	
HW07	Dichlorobenzene-1,3	0.50 U ug/L					
HW07	Dichlorobenzene-1,4	0.50 U ug/L	42.00 ug/L	75.00 ug/L		75.00 ug/L	
HW07	Dichlorobromomethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW07	Dichlorodifluoromethane	0.50 U ug/L					
HW07	Dichloroethane-1,1	0.50 U ug/L	240.00 ug/L				
HW07	Dichloroethane-1,2	0.50 U ug/L	15.00 ug/L	5.00 ug/L		5.00 ug/L	
HW07	Dichloroethene-1,2 trans	0.50 U ug/L		100.00 ug/L		100.00 ug/L	
HW07	Dichloroethylene-1,1	0.50 U ug/L		7.00 ug/L		7.00 ug/L	
HW07	Dichloroethylene-1,2 cis	0.50 U ug/L		70.00 ug/L		70.00 ug/L	
HW07	Dichloropropane, 1,2-	0.50 U ug/L	38.00 ug/L	5.00 ug/L		5.00 ug/L	
HW07	Dichloropropane, 1,3-	0.50 U ug/L	290.00 ug/L				
HW07	Dichloropropane, 2,2-	0.50 U ug/L					
HW07	Dichloropropene, 1,1-	0.50 U ug/L					
HW07	Dichloropropene, 1,3 cis-	0.50 U ug/L					
HW07	Dichloropropene, 1,3 trans-	0.50 U ug/L					
HW07	Ethylbenzene	0.50 U ug/L		700.00 ug/L		700.00 ug/L	
HW07	Freon 113	0.50 U ug/L					
HW07	Hexanone, 2-	2.00 U ug/L	34.00 ug/L				
HW07	Isopropylbenzene	0.50 U ug/L					
HW07	Isopropylbenzene-4,methyl-1	0.50 U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW07	m,p-Xylene	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW07	Methyl acetate	0.50 U ug/L					
HW07	Methyl bromide	0.50 U ug/L					
HW07	Methyl chloride	0.50 U ug/L					
HW07	Methyl cyclohexane	0.50 U ug/L					
HW07	Methyl ethyl ketone	2.00 U ug/L	4,900.00 ug/L				
HW07	Methyl tertiary butyl ether (MTBE)	0.50 U ug/L					
HW07	Methylene chloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW07	Propylbenzene-n	0.50 U ug/L					
HW07	Styrene	1.00 U ug/L		100.00 ug/L		100.00 ug/L	
HW07	Tetrachloroethane, 1,1,1,2-	0.50 U ug/L	50.00 ug/L				
HW07	Tetrachloroethane, 1,1,2,2-	0.50 U ug/L	6.60 ug/L				
HW07	Tetrachloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW07	Toluene	0.50 U ug/L		1,000.00 ug/L		1,000.00 ug/L	
HW07	Trichlorobenzene-1,2,3	0.50 U ug/L	5.20 ug/L				
HW07	Trichlorobenzene-1,2,4	0.50 U ug/L	5.20 ug/L	70.00 ug/L		70.00 ug/L	
HW07	Trichloroethane-1,1,1	0.50 U ug/L	7,500.00 ug/L	200.00 ug/L		200.00 ug/L	
HW07	Trichloroethane-1,1,2	0.50 U ug/L	0.41 ug/L	5.00 ug/L		5.00 ug/L	
HW07	Trichloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW07	Trichlorofluoromethane	0.50 U ug/L					
HW07	Trichloropropane-1,2,3	0.50 U ug/L	0.07 ug/L				
HW07	Trimethylbenzene-1,2,4	0.50 U ug/L	15.00 ug/L				
HW07	Trimethylbenzene-1,3,5	0.50 U ug/L	87.00 ug/L				
HW07	Vinyl acetate	0.50 U ug/L					
HW07	Vinyl chloride	0.50 U ug/L		2.00 ug/L		2.00 ug/L	
HW07	Xylene-o	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW07	Nitrogen, Nitrite + Nitrate	0.87 mg/L		10.00 mg/L		10.00 mg/L	
HW07	Total Nitrogen	1.31 mg/L					
HW07	Total Phosphorus as P	0.05 U mg/L					

Sample Number – Code that is used to identify the particular sample. See additional information below:

HW## – Identifies the sample location and indicates that it was collected at well head or closest point to the well head.

F – Indicates that the sample was filtered following collection. The purpose of filtering the sample is to remove any particulates in order to find what metals are actually dissolved in the water sample.

Z – Identifies a duplicate sample. Duplicate samples are collected for every ten samples collected to test the reproducibility of sampling and analytical procedures.

P – Indicates that the sample was collected at the kitchen tap. In some cases this may be following any treatment that the residence may have.

A/B – Designates which residence the sample was collected for sample locations with multiple residences using the same water source (may be a well or a spring).

RO – Indicated that the sample was collected from a residence containing a reverse osmosis treatment system.

N – Designates that the sample was collected from the new well for locations with multiple wells.

Analyte – General term for a substance in the sample. The lab does testing to find specific analytes, or substance in the water sample. The report lists each analyte that the lab tested for and what amounts were found.

TPH - Total Petroleum Hydrocarbons

Result and Units – identifies the actual result for the particular analyte and the measurement used for the particular type of sample. The results may include the following units for the various water sample analyses:

µg /L – Micrograms per liter (abbreviated as µg /L) measurements of the mass of the substance per liter of water. This measurement is commonly known as parts per billion or ppb. Drinking water results are usually reported in µg /L.

mg/L – Milligrams per liter (abbreviated as mg/L) measurements of the mass of the substance per liter of water. This measurement is commonly known as parts per million or ppm.

cfu/100 mL – Total Coliform Bacteria results are reported as colony forming units (cfu) per milliliters of water. Coliform bacteria is not a health threat in itself; it is used to indicate whether other potentially harmful bacteria may be present.

cfu/1mL – Heterotrophic Plate Count Bacteria (HPC) are reported as colony forming units (cfu) per milliliter of water. HPC has no health effects; it is an analytic method used to measure the variety of bacteria that are common in water. The lower the concentration of bacteria in drinking water, the better maintained the water system is.

Absent or Present – Fecal Coliform Bacteria are reported as either being Absent or Present. Fecal Coliform Bacteria are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Disease-causing microbes (pathogens) in these wastes can cause diarrhea, cramps, nausea, headaches,

Trigger Level – established for this project, the trigger levels are based on risk-based screening levels and/or standards for public water supplies. A yellow highlighted result represents an analytical result greater than the established trigger level. Results exceeding a trigger level are referred to an EPA toxicologist for further review.

EPA Primary MCLs – the primary maximum contaminant levels (MCLs) are legally enforceable standards established under the Safe Drinking Water Act to protect public health by limiting the levels of contaminants in public drinking water systems. The MCL is the amount of an analyte (substance) that can be present in a water sample that the government considers acceptable to drink. EPA considers the MCLs when evaluating results from residential drinking water wells.

EPA Secondary MCLs - secondary MCLs are non-enforceable standards regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to public water systems, but does not require systems to comply. However, states may choose to adopt them as enforceable standards.

DEP MCLs (Primary and Secondary) – Chapter 109, Pennsylvania Safe Drinking Water Regulations, defines MCL as the maximum permissible level of a contaminant in water which is delivered to a user of a public water system, and includes the primary and secondary MCLs established under the Federal Safe Drinking Water Act, and MCLs adopted under the act.

* No more than 5.0% samples total coliform-positive in a month. (For water systems that collect fewer than 40 routine samples per month, no more than one sample can be total coliform-positive per month.) Every sample that has total coliform must be analyzed for either fecal coliforms or E. coli if two consecutive TC-positive samples, and one is also positive for E.coli fecal coliforms, system has an acute MCL violation.

** EPA has not established an MCL for lead or copper. Lead and copper are regulated by a Treatment Technique that requires public drinking water systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water system must take additional steps. For lead, the action level is 15 ug/L, and for copper is 1,300 ug/L.

*** The DEP Primary MCLs for lead (5 ug/L) and copper (1,000 ug/L) are applicable only to bottled, vended, retail and bulk water hauling systems, otherwise the DEP uses the federal action levels for lead (15 ug/L), and for copper (1,300 ug/L).

Validation Result Qualifiers - EPA performs a quality check on the lab results. After this quality check, EPA may mark the measurement of certain analytes with a qualifier to give additional information about the measurement. This information can apply to 1) how certain EPA is that the lab detected the analyte and 2) how certain EPA is of the measurement of the analyte once detected. If there is no qualifier by the result, the detection and measurement of the analyte are certain

U – Indicates that the analyte was not detected. If there is a number next to the U, this number is the amount of analyte that would have to be present to be detected by the lab given the particular method and/or instrumentation.

J – This means that the analyte was detected, but the value of the result is an estimate.

UJ - The U before the J means that the analyte was not detected in the sample, but this result may be inaccurate. Some analyte may be present.

R – Indicates that the data has been rejected. For glycol analyses, data with detected concentrations above the Method Detection Limit (MDL) and less than the Reporting Limit (RL) were rejected due to the laboratory not using a second column and/or gas chromatography with mass spectrometry to confirm the identity of the compound listed. For Heterotrophic Plate Count analysis, data were rejected if the laboratory did not run a method blank (i.e. sterility control) for each series of samples plated to determine whether the test samples could have been contaminated during analysis. For semivolatile organic compound analysis, non-detect data have been rejected due to low recoveries of required method quality control checks.

MDL – Is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the concentration of the substance is greater than zero.

RL – Is the lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions, typically set at the lowest standard in the calibration curve