

HW-58

EPA Validated Data Summary Report

Dimock Residential Sampling

Sample Date: 2/14/2012

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW58	1-Butanol	10,000.00 U ug/L	1,500.00 ug/L				
HW58	1-Propanol	10,000.00 U ug/L					
HW58	2-Butanol	10,000.00 U ug/L					
HW58	Ethanol	10,000.00 U ug/L					
HW58	Methanol	10,000.00 U ug/L	7,800.00 ug/L				
HW58	Anionic Surfactants	0.01 U mg/L					
HW58	Heterotrophic Plate Count	R cfu/1mL					
HW58	Total Coliform Bacteria	1.00 UJ cfu/100mL	0.00 cfu/100mL	5.00 %*			
HW58	Ethane	1.20 U ug/L					
HW58	Ethene	1.10 U ug/L					
HW58	Methane	77.00 ug/L	28,000.00 ug/L				
HW58	2-Butoxyethanol	5.00 U ug/L					
HW58	2-Methoxyethanol	R ug/L	78.00 ug/L				
HW58	2-Methoxyethanol	10.00 U ug/L	78.00 ug/L				
HW58	Diethylene Glycol	25.00 U ug/L	8,000.00 ug/L				
HW58	Ethylene Glycol	10,000.00 U ug/L	31,000.00 ug/L				
HW58	Tetraethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW58	Triethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW58	Bromide	0.50 U mg/L					
HW58	Chloride	6.53 mg/L			250.00 mg/L		250.00 mg/L
HW58	Fluoride	0.10 U mg/L	0.62 mg/L	4.00 mg/L	2.00 mg/L	2.00 mg/L	
HW58	Sulfate	10.60 mg/L			250.00 mg/L		250.00 mg/L
HW58	Mercury	0.20 U ug/L	4.30 ug/L	2.00 ug/L		2.00 ug/L	
HW58-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
HW58	Aluminum	30.00 U ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW58-F	Aluminum	30.00 U ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW58	Antimony	2.00 U ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW58-F	Antimony	2.00 U ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW58	Arsenic	1.30 ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW58-F	Arsenic	1.70 ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW58	Barium	192.00 ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW58-F	Barium	204.00 ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW58	Beryllium	1.00 U ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW58-F	Beryllium	1.00 U ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW58	Boron	50.00 U ug/L	3,100.00 ug/L				
HW58-F	Boron	57.40 ug/L	3,100.00 ug/L				
HW58	Cadmium	1.00 U ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW58-F	Cadmium	1.00 U ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW58	Calcium	32,700.00 ug/L					
HW58-F	Calcium	31,700.00 ug/L					
HW58	Chromium	2.00 U ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW58-F	Chromium	2.00 U ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW58	Cobalt	1.00 U ug/L	4.70 ug/L				
HW58-F	Cobalt	1.00 U ug/L	4.70 ug/L				
HW58	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***	
HW58-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***	
HW58	Iron	100.00 U ug/L	11,000.00 ug/L		300.00 ug/L		300.00 ug/L
HW58-F	Iron	100.00 U ug/L	11,000.00 ug/L		300.00 ug/L		300.00 ug/L
HW58	Lead	1.00 U ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW58-F	Lead	1.00 U ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW58	Lithium	200.00 U ug/L	31.00 ug/L				
HW58-F	Lithium	200.00 U ug/L	31.00 ug/L				
HW58	Magnesium	6,540.00 ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW58-F	Magnesium	6,350.00 ug/L					
HW58	Manganese	1.00 U ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW58-F	Manganese	1.00 U ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW58	Nickel	1.20 ug/L	300.00 ug/L				
HW58-F	Nickel	1.30 ug/L	300.00 ug/L				
HW58	Potassium	2,000.00 U ug/L					
HW58-F	Potassium	2,000.00 U ug/L					
HW58	Selenium	5.00 U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW58-F	Selenium	5.00 U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW58	Silver	1.00 U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW58-F	Silver	1.00 U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW58	Sodium	13,000.00 ug/L	20,000.00 ug/L				
HW58-F	Sodium	12,500.00 ug/L	20,000.00 ug/L				
HW58	Strontium	954.00 ug/L	9,300.00 ug/L				
HW58-F	Strontium	917.00 ug/L	9,300.00 ug/L				
HW58	Thallium	1.00 U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW58-F	Thallium	1.00 U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW58	Tin	200.00 U ug/L	9,300.00 ug/L				
HW58-F	Tin	200.00 U ug/L	9,300.00 ug/L				
HW58	Titanium	200.00 U ug/L					
HW58-F	Titanium	200.00 U ug/L					
HW58	Uranium	3.70 ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	
HW58-F	Uranium	4.00 ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	
HW58	Vanadium	5.00 U ug/L	78.00 ug/L				
HW58-F	Vanadium	5.00 U ug/L	78.00 ug/L				
HW58	Zinc	2.00 U ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW58-F	Zinc	2.00 U ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW58	Oil and Grease	5.30 UJ mg/L					
HW58	Total Dissolved Solids	138.00 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
HW58	Total Suspended Solids	10.00 U mg/L					
HW58	1-Methylnaphthalene	4.76 U ug/L	97.00 ug/L				
HW58	Acenaphthene	4.76 U ug/L	400.00 ug/L				
HW58	Acenaphthylene	4.76 U ug/L					
HW58	Acetophenone	4.76 U ug/L	1,500.00 ug/L				
HW58	Anthracene	4.76 U ug/L	1,300.00 ug/L				
HW58	Atrazine	57.10 U ug/L	26.00 ug/L	3.00 ug/L		3.00 ug/L	
HW58	Benzo(a)anthracene	4.76 U ug/L	2.90 ug/L				
HW58	Benzo(a)pyrene	4.76 U ug/L	0.29 ug/L	0.20 ug/L		0.20 ug/L	
HW58	Biphenyl	4.76 U ug/L					
HW58	Bromophenyl-4 Phenyl Ether	4.76 U ug/L					
HW58	Butylbenzyl phthalate	4.76 U ug/L	1,400.00 ug/L				
HW58	Caprolactam	4.76 U ug/L	7,700.00 ug/L				
HW58	Carbazole	4.76 U ug/L					
HW58	Chlorobenzenamine-4	R ug/L	3.20 ug/L				
HW58	Chloronaphthalene-2	4.76 U ug/L	550.00 ug/L				
HW58	Chlorophenol-2	4.76 U ug/L	71.00 ug/L				
HW58	Chlorophenyl-4 phenyl ether	4.76 U ug/L					
HW58	Chrysene	4.76 U ug/L	290.00 ug/L				
HW58	Cresol, parachloro meta-	4.76 U ug/L					
HW58	Cresol-4,6-dinitro-ortho	57.10 UJ ug/L					
HW58	Cresol-o	4.76 U ug/L	720.00 ug/L				
HW58	Cresol-p	4.76 U ug/L	72.00 ug/L				
HW58	Dibenz(a,h)anthracene	4.76 U ug/L	0.29 ug/L				
HW58	Dibenzofuran	4.76 U ug/L					
HW58	Dichlorobenzidine-3,3'	R ug/L	11.00 ug/L				
HW58	Dichlorophenol-2,4	4.76 U ug/L	35.00 ug/L				
HW58	Dimethylphenol, 2,4-	4.76 U ug/L	270.00 ug/L				
HW58	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
HW58	Dinitrotoluene-2,4	4.76 U ug/L					
HW58	Dinitrotoluene-2,6	4.76 U ug/L					
HW58	Ether, bis(2-chloroethyl)	4.76 U ug/L	1.20 ug/L				
HW58	Ether-bis(2-chloroisopropyl)	4.76 U ug/L					
HW58	Fluoranthene	4.76 U ug/L	630.00 ug/L				
HW58	Fluoranthene benzo(k)	4.76 U ug/L	29.00 ug/L				
HW58	Fluoranthene-benzo(b)	4.76 U ug/L	5.60 ug/L				
HW58	Fluorene	4.76 U ug/L	220.00 ug/L				
HW58	Hexachlorobenzene	4.76 U ug/L	4.20 ug/L	1.00 ug/L		1.00 ug/L	
HW58	Hexachlorobutadiene	4.76 U ug/L	26.00 ug/L				
HW58	Hexachlorobutadiene	0.50 U ug/L	26.00 ug/L				
HW58	Hexachlorocyclopentadiene	4.76 U ug/L	22.00 ug/L	50.00 ug/L		50.00 ug/L	
HW58	Hexachloroethane	4.76 U ug/L	5.10 ug/L				
HW58	Isophorone	4.76 U ug/L	6,700.00 ug/L				
HW58	Methane, bis(2-chloroethoxy)	4.76 U ug/L	47.00 ug/L				
HW58	Methylnaphthalene-2	4.76 U ug/L	27.00 ug/L				
HW58	Naphthalene	0.50 U ug/L	14.00 ug/L				
HW58	Naphthalene	4.76 U ug/L	14.00 ug/L				
HW58	Nitroaniline, ortho	4.76 U ug/L	150.00 ug/L				
HW58	Nitroaniline-3	R ug/L					
HW58	Nitrobenzenamine-4	4.76 U ug/L	61.00 ug/L				
HW58	Nitrobenzene	4.76 U ug/L	12.00 ug/L				
HW58	Nitrophenol-2	4.76 U ug/L					
HW58	Nitrophenol-4	9.52 U ug/L					
HW58	Nitrosodimethylamine-n	4.76 U ug/L	0.04 ug/L				
HW58	Nitrosodiphenylamine-n	4.76 U ug/L	1,000.00 ug/L				
HW58	Pentachlorophenol	4.76 U ug/L	17.00 ug/L	1.00 ug/L		1.00 ug/L	
HW58	Perylene-benzo(ghi)	4.76 U ug/L					
HW58	Phenanthrene	4.76 U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW58	Phenol	4.76 U ug/L	4,500.00 ug/L				
HW58	Phthalate, bis(2-ethylhexyl) (DEHP)	4.76 U ug/L	7.10 ug/L	6.00 ug/L		6.00 ug/L	
HW58	Phthalate, Dimethyl	4.76 U ug/L	1,400.00 ug/L				
HW58	Phthalate, di-n-butyl-	4.76 U ug/L	670.00 ug/L				
HW58	Phthalate, di-n-octyl	4.76 U ug/L					
HW58	Phthalate-diethyl	4.76 U ug/L	11,000.00 ug/L				
HW58	Propylamine,n-nitroso di-n-	4.76 U ug/L	0.93 ug/L				
HW58	Pyrene	4.76 U ug/L	87.00 ug/L				
HW58	Pyrene-indeno(1,2,3-cd)	4.76 U ug/L	3.00 ug/L				
HW58	Tetrachlorobenzene, 1,2,4,5-	4.76 U ug/L	1.20 ug/L				
HW58	Tetrachlorophenol, 2,3,4,6-	4.76 U ug/L	170.00 ug/L				
HW58	Trichlorophenol-2,4,5	4.76 U ug/L	890.00 ug/L				
HW58	Trichlorophenol-2,4,6	4.76 U ug/L	9.04 ug/L				
HW58	TPH - Diesel Range Organics	270.00 U ug/L					
HW58	TPH - Gasoline Range Organics	50.00 U ug/L					
HW58	TPH - Oil Range Organics	1,100.00 U ug/L					
HW58	1,2-Dibromo-3-chloropropane (DBCP)	2.00 U ug/L	0.03 ug/L	0.20 ug/L		0.20 ug/L	
HW58	4-Methyl-2-pentanone	2.00 U ug/L	1,000.00 ug/L				
HW58	Acetone	2.00 U ug/L					
HW58	Benzene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW58	Bromobenzene	0.50 U ug/L					
HW58	Bromoform	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW58	Butylbenzene	0.50 U ug/L					
HW58	Butylbenzene, sec-	0.50 U ug/L					
HW58	Butylbenzene, tert-	0.50 U ug/L					
HW58	Carbon disulfide	0.50 U ug/L					
HW58	Carbon Tetrachloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW58	Chlorobenzene	0.50 U ug/L		100.00 ug/L			
HW58	Chlorobromomethane	0.50 U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW58	Chloroethane	0.50 U ug/L					
HW58	Chloroform	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW58	Chlorotoluene	0.50 U ug/L	180.00 ug/L				
HW58	Chlorotoluene-p	0.50 U ug/L	190.00 ug/L				
HW58	Cyclohexane	0.50 U ug/L					
HW58	Dibromochloromethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW58	Dibromoethane-1,2	0.50 U ug/L	0.65 ug/L	0.05 ug/L		0.05 ug/L	
HW58	Dibromomethane	0.50 U ug/L					
HW58	Dichlorobenzene-1,2	0.50 U ug/L	280.00 ug/L	600.00 ug/L		600.00 ug/L	
HW58	Dichlorobenzene-1,3	0.50 U ug/L					
HW58	Dichlorobenzene-1,4	0.50 U ug/L	42.00 ug/L	75.00 ug/L		75.00 ug/L	
HW58	Dichlorobromomethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW58	Dichlorodifluoromethane	0.50 U ug/L					
HW58	Dichloroethane-1,1	0.50 U ug/L	240.00 ug/L				
HW58	Dichloroethane-1,2	0.50 U ug/L	15.00 ug/L	5.00 ug/L		5.00 ug/L	
HW58	Dichloroethene-1,2 trans	0.50 U ug/L		100.00 ug/L		100.00 ug/L	
HW58	Dichloroethylene-1,1	0.50 U ug/L		7.00 ug/L		7.00 ug/L	
HW58	Dichloroethylene-1,2 cis	0.50 U ug/L		70.00 ug/L		70.00 ug/L	
HW58	Dichloropropane, 1,2-	0.50 U ug/L	38.00 ug/L	5.00 ug/L		5.00 ug/L	
HW58	Dichloropropane, 1,3-	0.50 U ug/L	290.00 ug/L				
HW58	Dichloropropane, 2,2-	0.50 U ug/L					
HW58	Dichloropropene, 1,1-	0.50 U ug/L					
HW58	Dichloropropene, 1,3 cis-	0.50 U ug/L					
HW58	Dichloropropene, 1,3 trans-	0.50 U ug/L					
HW58	Ethylbenzene	0.50 U ug/L		700.00 ug/L		700.00 ug/L	
HW58	Freon 113	0.50 U ug/L					
HW58	Hexanone, 2-	2.00 U ug/L	34.00 ug/L				
HW58	Isopropylbenzene	0.50 U ug/L					
HW58	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
HW58	m,p-Xylene	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW58	Methyl acetate	0.50 U ug/L					
HW58	Methyl bromide	0.50 U ug/L					
HW58	Methyl chloride	0.50 U ug/L					
HW58	Methyl cyclohexane	0.50 U ug/L					
HW58	Methyl ethyl ketone	2.00 U ug/L	4,900.00 ug/L				
HW58	Methyl tertiary butyl ether (MTBE)	0.50 U ug/L					
HW58	Methylene chloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW58	Propylbenzene-n	0.50 U ug/L					
HW58	Styrene	1.00 U ug/L		100.00 ug/L		100.00 ug/L	
HW58	Tetrachloroethane, 1,1,1,2-	0.50 U ug/L	50.00 ug/L				
HW58	Tetrachloroethane, 1,1,2,2-	0.50 U ug/L	6.60 ug/L				
HW58	Tetrachloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW58	Toluene	0.50 U ug/L		1,000.00 ug/L		1,000.00 ug/L	
HW58	Trichlorobenzene-1,2,3	0.50 U ug/L	5.20 ug/L				
HW58	Trichlorobenzene-1,2,4	0.50 U ug/L	5.20 ug/L	70.00 ug/L		70.00 ug/L	
HW58	Trichloroethane-1,1,1	0.50 U ug/L	7,500.00 ug/L	200.00 ug/L		200.00 ug/L	
HW58	Trichloroethane-1,1,2	0.50 U ug/L	0.41 ug/L	5.00 ug/L		5.00 ug/L	
HW58	Trichloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW58	Trichlorofluoromethane	0.50 U ug/L					
HW58	Trichloropropane-1,2,3	0.50 U ug/L	0.07 ug/L				
HW58	Trimethylbenzene-1,2,4	0.50 U ug/L	15.00 ug/L				
HW58	Trimethylbenzene-1,3,5	0.50 U ug/L	87.00 ug/L				
HW58	Vinyl acetate	0.50 U ug/L					
HW58	Vinyl chloride	0.50 U ug/L		2.00 ug/L		2.00 ug/L	
HW58	Xylene-o	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW58	Nitrogen, Nitrite + Nitrate	0.75 mg/L		10.00 mg/L		10.00 mg/L	
HW58	Total Nitrogen	1.00 U mg/L					
HW58	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 semivolatiles 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