

HW-13

EPA Validated Data Summary Report

Dimock Residential Sampling

Sample Date: 1/30/2012

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW13	1-Butanol	10,000.00 U ug/L	1,500.00 ug/L				
HW13	1-Propanol	10,000.00 U ug/L					
HW13	2-Butanol	10,000.00 U ug/L					
HW13	Ethanol	10,000.00 U ug/L					
HW13	Methanol	10,000.00 U ug/L	7,800.00 ug/L				
HW13	Anionic Surfactants	0.01 U mg/L					
HW13	Heterotrophic Plate Count	560.00 J cfu/1mL					
HW13	Total Coliform Bacteria	1.00 UJ cfu/100mL	0.00 cfu/100mL	5.00 %*			
HW13	Ethane	24.00 ug/L					
HW13	Ethene	1.10 U ug/L					
HW13	Methane	1,300.00 ug/L	28,000.00 ug/L				
HW13	2-Butoxyethanol	5.00 U ug/L					
HW13	2-Methoxyethanol	10.00 UJ ug/L	78.00 ug/L				
HW13	2-Methoxyethanol	60.00 U ug/L	78.00 ug/L				
HW13	Diethylene Glycol	50.00 U ug/L	8,000.00 ug/L				
HW13	Diethylene glycol	R ug/L	8,000.00 ug/L				
HW13	Ethanol, 2-ethoxy-	10,000.00 U ug/L					
HW13	Ethanol, 2-methoxy-	10,000.00 U ug/L	78.00 ug/L				
HW13	Ethylene glycol	10,000.00 U ug/L	31,000.00 ug/L				
HW13	Ethylene glycol	10,000.00 U ug/L	31,000.00 ug/L				
HW13	Tetraethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW13	Triethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW13	Triethylene glycol	10,000.00 U ug/L	8,000.00 ug/L				
HW13	Bromide	0.50 U mg/L					

Sample Number	Analyte	Result		Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW13	Chloride	8.31	mg/L			250.00 mg/L		250.00 mg/L
HW13	Fluoride	0.10 U	mg/L	0.62 mg/L	4.00 mg/L	2.00 mg/L	2.00 mg/L	
HW13	Sulfate	10.60	mg/L			250.00 mg/L		250.00 mg/L
HW13	Mercury	0.20 U	ug/L	4.30 ug/L	2.00 ug/L		2.00 ug/L	
HW13-F	Mercury	0.20 U	ug/L	4.30 ug/L	2.00 ug/L		2.00 ug/L	
HW13	Aluminum	30.00 U	ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW13-F	Aluminum	30.00 U	ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW13	Antimony	2.00 U	ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW13-F	Antimony	2.00 U	ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW13	Arsenic	2.00 U	ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW13-F	Arsenic	2.00 U	ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW13	Barium	225.00	ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW13-F	Barium	235.00	ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW13	Beryllium	1.00 U	ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW13-F	Beryllium	1.00 U	ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW13	Boron	50.00 U	ug/L	3,100.00 ug/L				
HW13-F	Boron	50.00 U	ug/L	3,100.00 ug/L				
HW13	Cadmium	1.00 U	ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW13-F	Cadmium	1.00 U	ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW13	Calcium	31,900.00	ug/L					
HW13-F	Calcium	33,100.00	ug/L					
HW13	Chromium	2.00 U	ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW13-F	Chromium	2.00 U	ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW13	Cobalt	1.00 U	ug/L	4.70 ug/L				
HW13-F	Cobalt	1.00 U	ug/L	4.70 ug/L				
HW13	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***	
HW13-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***	
HW13	Iron	2,870.00	ug/L	11,000.00 ug/L		300.00 ug/L		300.00 ug/L
HW13-F	Iron	333.00	ug/L	11,000.00 ug/L		300.00 ug/L		300.00 ug/L

Sample Number	Analyte	Result		Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW13	Lead	1.00	U ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW13-F	Lead	1.00	U ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW13	Lithium	200.00	U ug/L	31.00 ug/L				
HW13-F	Lithium	200.00	U ug/L	31.00 ug/L				
HW13	Magnesium	6,620.00	ug/L					
HW13-F	Magnesium	6,840.00	ug/L					
HW13	Manganese	31.00	ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW13-F	Manganese	16.40	ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW13	Nickel	1.60	ug/L	300.00 ug/L				
HW13-F	Nickel	1.30	ug/L	300.00 ug/L				
HW13	Potassium	2,000.00	U ug/L					
HW13-F	Potassium	2,000.00	U ug/L					
HW13	Selenium	5.00	U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW13-F	Selenium	5.00	U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW13	Silver	1.00	U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW13-F	Silver	1.00	U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW13	Sodium	12,600.00	ug/L	20,000.00 ug/L				
HW13-F	Sodium	12,900.00	ug/L	20,000.00 ug/L				
HW13	Strontium	764.00	ug/L	9,300.00 ug/L				
HW13-F	Strontium	774.00	ug/L	9,300.00 ug/L				
HW13	Thallium	1.00	U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW13-F	Thallium	1.00	U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW13	Tin	200.00	U ug/L	9,300.00 ug/L				
HW13-F	Tin	200.00	U ug/L	9,300.00 ug/L				
HW13	Titanium	200.00	U ug/L					
HW13-F	Titanium	200.00	U ug/L					
HW13	Uranium	3.20	ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	
HW13-F	Uranium	3.20	ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	
HW13	Vanadium	5.00	U ug/L	78.00 ug/L				

Sample Number	Analyte	Result		Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW13-F	Vanadium	5.00	U ug/L	78.00 ug/L				
HW13	Zinc	4.00	ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW13-F	Zinc	2.00	U ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW13	Oil and Grease	5.40	U mg/L					
HW13	Total Dissolved Solids	15.00	J mg/L			500.00 mg/L		500.00 mg/L
HW13	Total Suspended Solids	10.00	U mg/L					
HW13	1-Methylnaphthalene	5.00	U ug/L	97.00 ug/L				
HW13	Acenaphthene	5.00	U ug/L	400.00 ug/L				
HW13	Acenaphthylene	5.00	U ug/L					
HW13	Acetophenone	0.22	J ug/L	1,500.00 ug/L				
HW13	Anthracene	5.00	U ug/L	1,300.00 ug/L				
HW13	Atrazine	5.00	U ug/L	26.00 ug/L	3.00 ug/L		3.00 ug/L	
HW13	Benzo(a)anthracene	5.00	U ug/L	2.90 ug/L				
HW13	Benzo(a)pyrene	5.00	U ug/L	0.29 ug/L	0.20 ug/L		0.20 ug/L	
HW13	Biphenyl	5.00	U ug/L					
HW13	Bromophenyl-4 Phenyl Ether	5.00	U ug/L					
HW13	Butylbenzyl phthalate	5.00	U ug/L	1,400.00 ug/L				
HW13	Caprolactam	5.00	U ug/L	7,700.00 ug/L				
HW13	Carbazole	5.00	U ug/L					
HW13	Chlorobenzenamine-4	5.00	U ug/L	3.20 ug/L				
HW13	Chloronaphthalene-2	5.00	U ug/L	550.00 ug/L				
HW13	Chlorophenol-2	5.00	U ug/L	71.00 ug/L				
HW13	Chlorophenyl-4 phenyl ether	5.00	U ug/L					
HW13	Chrysene	5.00	U ug/L	290.00 ug/L				
HW13	Cresol, parachloro meta-	5.00	U ug/L					
HW13	Cresol-4,6-dinitro-ortho	60.00	U ug/L					
HW13	Cresol-o	5.00	U ug/L	720.00 ug/L				
HW13	Cresol-p	5.00	U ug/L	72.00 ug/L				
HW13	Dibenz(a,h)anthracene	5.00	U ug/L	0.29 ug/L				

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW13	Dibenzofuran	5.00 U ug/L					
HW13	Dichlorobenzidine-3,3'	5.00 U ug/L	11.00 ug/L				
HW13	Dichlorophenol-2,4	5.00 U ug/L	35.00 ug/L				
HW13	Dimethylphenol, 2,4-	5.00 U ug/L	270.00 ug/L				
HW13	Dinitrophenol-2,4	60.00 U ug/L	30.00 ug/L				
HW13	Dinitrotoluene-2,4	5.00 U ug/L					
HW13	Dinitrotoluene-2,6	5.00 U ug/L					
HW13	Ether, bis(2-chloroethyl)	5.00 U ug/L	1.20 ug/L				
HW13	Ether-bis(2-chloroisopropyl)	5.00 U ug/L					
HW13	Fluoranthene	5.00 U ug/L	630.00 ug/L				
HW13	Fluoranthene benzo(k)	5.00 U ug/L	29.00 ug/L				
HW13	Fluoranthene-benzo(b)	5.00 U ug/L	5.60 ug/L				
HW13	Fluorene	5.00 U ug/L	220.00 ug/L				
HW13	Hexachlorobenzene	5.00 U ug/L	4.20 ug/L	1.00 ug/L		1.00 ug/L	
HW13	Hexachlorobutadiene	5.00 U ug/L	26.00 ug/L				
HW13	Hexachlorobutadiene	0.50 U ug/L	26.00 ug/L				
HW13	Hexachlorocyclopentadiene	60.00 U ug/L	22.00 ug/L	50.00 ug/L		50.00 ug/L	
HW13	Hexachloroethane	5.00 U ug/L	5.10 ug/L				
HW13	Isophorone	5.00 U ug/L	6,700.00 ug/L				
HW13	Methane, bis(2-chloroethoxy)	5.00 U ug/L	47.00 ug/L				
HW13	Methylnaphthalene-2	5.00 U ug/L	27.00 ug/L				
HW13	Naphthalene	0.50 U ug/L	14.00 ug/L				
HW13	Naphthalene	5.00 U ug/L	14.00 ug/L				
HW13	Nitroaniline, ortho	5.00 U ug/L	150.00 ug/L				
HW13	Nitroaniline-3	5.00 U ug/L					
HW13	Nitrobenzenamine-4	5.00 U ug/L	61.00 ug/L				
HW13	Nitrobenzene	5.00 U ug/L	12.00 ug/L				
HW13	Nitrophenol-2	5.00 U ug/L					
HW13	Nitrophenol-4	60.00 U ug/L					

Sample Number	Analyte	Result		Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW13	Nitrosodimethylamine-n	5.00	U ug/L	0.04 ug/L				
HW13	Nitrosodiphenylamine-n	5.00	U ug/L	1,000.00 ug/L				
HW13	Pentachlorophenol	60.00	U ug/L	17.00 ug/L	1.00 ug/L		1.00 ug/L	
HW13	Perylene-benzo(ghi)	5.00	U ug/L					
HW13	Phenanthrene	5.00	U ug/L					
HW13	Phenol	5.00	U ug/L	4,500.00 ug/L				
HW13	Phthalate, bis(2-ethylhexyl) (DEHP)	5.00	U ug/L	7.10 ug/L	6.00 ug/L		6.00 ug/L	
HW13	Phthalate, Dimethyl	5.00	U ug/L	1,400.00 ug/L				
HW13	Phthalate, di-n-butyl-	5.00	U ug/L	670.00 ug/L				
HW13	Phthalate, di-n-octyl	5.00	U ug/L					
HW13	Phthalate-diethyl	5.00	U ug/L	11,000.00 ug/L				
HW13	Propylamine,n-nitroso di-n-	5.00	U ug/L	0.93 ug/L				
HW13	Pyrene	5.00	U ug/L	87.00 ug/L				
HW13	Pyrene-indeno(1,2,3-cd)	5.00	U ug/L	3.00 ug/L				
HW13	Tetrachlorobenzene, 1,2,4,5-	5.00	U ug/L	1.20 ug/L				
HW13	Tetrachlorophenol, 2,3,4,6-	60.00	U ug/L	170.00 ug/L				
HW13	Trichlorophenol-2,4,5	5.00	U ug/L	890.00 ug/L				
HW13	Trichlorophenol-2,4,6	5.00	U ug/L	9.04 ug/L				
HW13	TPH - Diesel Range Organics	250.00	U ug/L					
HW13	TPH - Gasoline Range Organics	34.00	J ug/L					
HW13	TPH - Oil Range Organics	1,000.00	U ug/L					
HW13	1,2-Dibromo-3-chloropropane (DBCP)	1.00	U ug/L	0.03 ug/L	0.20 ug/L		0.20 ug/L	
HW13	4-Methyl-2-pentanone	2.00	U ug/L	1,000.00 ug/L				
HW13	Acetone	3.30	U ug/L					
HW13	Benzene	0.50	U ug/L		5.00 ug/L		5.00 ug/L	
HW13	Bromobenzene	0.50	U ug/L					
HW13	Bromoform	0.50	U ug/L		80.00 ug/L		80.00 ug/L	
HW13	Butylbenzene	0.50	U ug/L					
HW13	Butylbenzene, sec-	0.50	U ug/L					

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HW13	Butylbenzene, tert-	0.50 U ug/L					
HW13	Carbon disulfide	0.50 U ug/L					
HW13	Carbon Tetrachloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW13	Chlorobenzene	0.50 U ug/L		100.00 ug/L			
HW13	Chlorobromomethane	0.50 U ug/L					
HW13	Chloroethane	0.50 U ug/L					
HW13	Chloroform	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW13	Chlorotoluene	0.50 U ug/L	180.00 ug/L				
HW13	Chlorotoluene-p	0.50 U ug/L	190.00 ug/L				
HW13	Cyclohexane	0.50 UJ ug/L					
HW13	Dibromochloromethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW13	Dibromoethane-1,2	0.50 U ug/L	0.65 ug/L	0.05 ug/L		0.05 ug/L	
HW13	Dibromomethane	0.50 U ug/L					
HW13	Dichlorobenzene-1,2	0.50 U ug/L	280.00 ug/L	600.00 ug/L		600.00 ug/L	
HW13	Dichlorobenzene-1,3	0.50 U ug/L					
HW13	Dichlorobenzene-1,4	0.50 U ug/L	42.00 ug/L	75.00 ug/L		75.00 ug/L	
HW13	Dichlorobromomethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW13	Dichlorodifluoromethane	0.50 U ug/L					
HW13	Dichloroethane-1,1	0.50 U ug/L	240.00 ug/L				
HW13	Dichloroethane-1,2	0.50 U ug/L	15.00 ug/L	5.00 ug/L		5.00 ug/L	
HW13	Dichloroethene-1,2 trans	0.50 U ug/L		100.00 ug/L		100.00 ug/L	
HW13	Dichloroethylene-1,1	0.50 U ug/L		7.00 ug/L		7.00 ug/L	
HW13	Dichloroethylene-1,2 cis	0.50 U ug/L		70.00 ug/L		70.00 ug/L	
HW13	Dichloropropane, 1,2-	0.50 U ug/L	38.00 ug/L	5.00 ug/L		5.00 ug/L	
HW13	Dichloropropane, 1,3-	0.50 U ug/L	290.00 ug/L				
HW13	Dichloropropane, 2,2-	0.50 U ug/L					
HW13	Dichloropropene, 1,1-	0.50 U ug/L					
HW13	Dichloropropene, 1,3 cis-	0.50 U ug/L					
HW13	Dichloropropene, 1,3 trans-	0.50 U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW13	Ethylbenzene	0.50 U ug/L		700.00 ug/L		700.00 ug/L	
HW13	Freon 113	0.50 UJ ug/L					
HW13	Hexanone, 2-	2.00 U ug/L	34.00 ug/L				
HW13	Isopropylbenzene	0.50 U ug/L					
HW13	Isopropylbenzene-4,methyl-1	0.50 U ug/L					
HW13	m,p-Xylene	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW13	Methyl acetate	0.50 UJ ug/L					
HW13	Methyl bromide	0.50 U ug/L					
HW13	Methyl chloride	0.50 U ug/L					
HW13	Methyl cyclohexane	0.50 UJ ug/L					
HW13	Methyl ethyl ketone	2.00 U ug/L	4,900.00 ug/L				
HW13	Methyl tertiary butyl ether (MTBE)	0.50 UJ ug/L					
HW13	Methylene chloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW13	Propylbenzene-n	0.50 U ug/L					
HW13	Styrene	1.00 U ug/L		100.00 ug/L		100.00 ug/L	
HW13	Tetrachloroethane, 1,1,1,2-	0.50 U ug/L	50.00 ug/L				
HW13	Tetrachloroethane, 1,1,2,2-	0.50 U ug/L	6.60 ug/L				
HW13	Tetrachloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW13	Toluene	12.00 ug/L		1,000.00 ug/L		1,000.00 ug/L	
HW13	Trichlorobenzene-1,2,3	0.50 U ug/L	5.20 ug/L				
HW13	Trichlorobenzene-1,2,4	0.50 U ug/L	5.20 ug/L	70.00 ug/L		70.00 ug/L	
HW13	Trichloroethane-1,1,1	0.50 U ug/L	7,500.00 ug/L	200.00 ug/L		200.00 ug/L	
HW13	Trichloroethane-1,1,2	0.50 U ug/L	0.41 ug/L	5.00 ug/L		5.00 ug/L	
HW13	Trichloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW13	Trichlorofluoromethane	0.50 U ug/L					
HW13	Trichloropropane-1,2,3	0.50 U ug/L	0.07 ug/L				
HW13	Trimethylbenzene-1,2,4	0.50 U ug/L	15.00 ug/L				
HW13	Trimethylbenzene-1,3,5	0.50 U ug/L	87.00 ug/L				
HW13	Vinyl acetate	0.50 U ug/L					

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HW13	Vinyl chloride	0.50 U ug/L		2.00 ug/L		2.00 ug/L	
HW13	Xylene-o	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW13	Nitrogen, Nitrite + Nitrate	0.78 mg/L		10.00 mg/L		10.00 mg/L	
HW13	Total Nitrogen	1.45 mg/L					
HW13	Total Phosphorus as P	0.05 U mg/L					

* 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).

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 Heterotropic 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.

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.

TPH - Total Petroleum Hydrocarbons

Key to EPA Validated Data Summary Report

Dimock Residential Sampling

April 4, 2012

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.

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.

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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, or other symptoms. These pathogens may pose a special health risk for infants, young children, and people with severely compromised immune systems.

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.

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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.

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.