

HW-35

EPA Validated Data Summary Report

Dimock Residential Sampling

Sample Date: 1/31/2012

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW35	1-Butanol	10,000.00 U ug/L	1,500.00 ug/L				
HW35	1-Propanol	10,000.00 U ug/L					
HW35	2-Butanol	10,000.00 U ug/L					
HW35	Ethanol	10,000.00 U ug/L					
HW35	Methanol	10,000.00 U ug/L	7,800.00 ug/L				
HW35	Anionic Surfactants	0.01 U mg/L					
HW35	Fecal Coliform Bacteria	1.00 Present	0.00				
HW35	Heterotrophic Plate Count	R cfu/1mL					
HW35	Total Coliform Bacteria	34.00 cfu/100mL	0.00 cfu/100mL	5.00 %*			
HW35	Ethane	1.20 U ug/L					
HW35	Ethene	1.10 U ug/L					
HW35	Methane	6.60 ug/L	28,000.00 ug/L				
HW35	2-Butoxyethanol	5.00 U ug/L					
HW35	2-Methoxyethanol	10.00 U ug/L	78.00 ug/L				
HW35	2-Methoxyethanol	60.00 U ug/L	78.00 ug/L				
HW35	Diethylene Glycol	50.00 U ug/L	8,000.00 ug/L				
HW35	Diethylene glycol	10,000.00 U ug/L	8,000.00 ug/L				
HW35	Ethanol, 2-ethoxy-	10,000.00 U ug/L					
HW35	Ethanol, 2-methoxy-	10,000.00 U ug/L	78.00 ug/L				
HW35	Ethylene glycol	10,000.00 U ug/L	31,000.00 ug/L				
HW35	Ethylene glycol	10,000.00 U ug/L	31,000.00 ug/L				
HW35	Tetraethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW35	Triethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW35	Triethylene glycol	10,000.00 U ug/L	8,000.00 ug/L				

Sample Number	Analyte	Result		Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW35	Bromide	0.50	U mg/L					
HW35	Chloride	50.50	mg/L			250.00 mg/L		250.00 mg/L
HW35	Fluoride	0.10	U mg/L	0.62 mg/L	4.00 mg/L	2.00 mg/L	2.00 mg/L	
HW35	Sulfate	14.30	mg/L			250.00 mg/L		250.00 mg/L
HW35	Mercury	0.20	U ug/L	4.30 ug/L	2.00 ug/L		2.00 ug/L	
HW35-F	Mercury	0.20	U ug/L	4.30 ug/L	2.00 ug/L		2.00 ug/L	
HW35	Aluminum	240.00	ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW35-F	Aluminum	30.00	U ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW35	Antimony	2.00	U ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW35-F	Antimony	2.00	U ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW35	Arsenic	2.00	U ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW35-F	Arsenic	2.00	U ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW35	Barium	101.00	ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW35-F	Barium	73.10	ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW35	Beryllium	1.00	U ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW35-F	Beryllium	1.00	U ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW35	Boron	50.00	U ug/L	3,100.00 ug/L				
HW35-F	Boron	50.00	U ug/L	3,100.00 ug/L				
HW35	Cadmium	1.00	U ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW35-F	Cadmium	1.00	U ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW35	Calcium	14,300.00	ug/L					
HW35-F	Calcium	500.00	U ug/L					
HW35	Chromium	2.00	U ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW35-F	Chromium	2.00	U ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW35	Cobalt	1.00	U ug/L	4.70 ug/L				
HW35-F	Cobalt	1.00	U ug/L	4.70 ug/L				
HW35	Copper	74.00	ug/L	620.00 ug/L	1,300.00 ug/L**	1,000.00 ug/L	1,000.00 ug/L***	
HW35-F	Copper	45.00	ug/L	620.00 ug/L	1,300.00 ug/L**	1,000.00 ug/L	1,000.00 ug/L***	
HW35	Iron	478.00	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
HW35-F	Iron	100.00	U ug/L	11,000.00 ug/L		300.00 ug/L		300.00 ug/L
HW35	Lead	21.20	ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW35-F	Lead	2.40	ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW35	Lithium	200.00	U ug/L	31.00 ug/L				
HW35-F	Lithium	200.00	U ug/L	31.00 ug/L				
HW35	Magnesium	2,280.00	ug/L					
HW35-F	Magnesium	500.00	U ug/L					
HW35	Manganese	5.40	ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW35-F	Manganese	1.70	ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW35	Nickel	1.30	ug/L	300.00 ug/L				
HW35-F	Nickel	1.30	ug/L	300.00 ug/L				
HW35	Potassium	2,000.00	U ug/L					
HW35-F	Potassium	2,000.00	U ug/L					
HW35	Selenium	5.00	U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW35-F	Selenium	5.00	U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW35	Silver	1.00	U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW35-F	Silver	1.00	U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW35	Sodium	28,700.00	ug/L	20,000.00 ug/L				
HW35-F	Sodium	1,000.00	U ug/L	20,000.00 ug/L				
HW35	Strontium	200.00	U ug/L	9,300.00 ug/L				
HW35-F	Strontium	200.00	U ug/L	9,300.00 ug/L				
HW35	Thallium	1.00	U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW35-F	Thallium	1.00	U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW35	Tin	200.00	U ug/L	9,300.00 ug/L				
HW35-F	Tin	200.00	U ug/L	9,300.00 ug/L				
HW35	Titanium	200.00	U ug/L					
HW35-F	Titanium	200.00	U ug/L					
HW35	Uranium	1.00	U ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	
HW35-F	Uranium	1.00	U ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	

Sample Number	Analyte	Result		Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW35	Vanadium	5.00	U ug/L	78.00 ug/L				
HW35-F	Vanadium	5.00	U ug/L	78.00 ug/L				
HW35	Zinc	98.30	ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW35-F	Zinc	96.20	ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW35	Oil and Grease	5.30	U mg/L					
HW35	Total Dissolved Solids	37.00	J mg/L			500.00 mg/L		500.00 mg/L
HW35	Total Suspended Solids	10.00	U mg/L					
HW35	1-Methylnaphthalene	5.00	U ug/L	97.00 ug/L				
HW35	Acenaphthene	5.00	U ug/L	400.00 ug/L				
HW35	Acenaphthylene	5.00	U ug/L					
HW35	Acetophenone	5.00	U ug/L	1,500.00 ug/L				
HW35	Anthracene	5.00	U ug/L	1,300.00 ug/L				
HW35	Atrazine	5.00	U ug/L	26.00 ug/L	3.00 ug/L		3.00 ug/L	
HW35	Benzo(a)anthracene	5.00	U ug/L	2.90 ug/L				
HW35	Benzo(a)pyrene	5.00	U ug/L	0.29 ug/L	0.20 ug/L		0.20 ug/L	
HW35	Biphenyl	5.00	U ug/L					
HW35	Bromophenyl-4 Phenyl Ether	5.00	U ug/L					
HW35	Butylbenzyl phthalate	5.00	U ug/L	1,400.00 ug/L				
HW35	Caprolactam	5.00	U ug/L	7,700.00 ug/L				
HW35	Carbazole	5.00	U ug/L					
HW35	Chlorobenzenamine-4	5.00	U ug/L	3.20 ug/L				
HW35	Chloronaphthalene-2	5.00	U ug/L	550.00 ug/L				
HW35	Chlorophenol-2	5.00	U ug/L	71.00 ug/L				
HW35	Chlorophenyl-4 phenyl ether	5.00	U ug/L					
HW35	Chrysene	5.00	U ug/L	290.00 ug/L				
HW35	Cresol, parachloro meta-	5.00	U ug/L					
HW35	Cresol-4,6-dinitro-ortho	10.00	U ug/L					
HW35	Cresol-o	5.00	U ug/L	720.00 ug/L				
HW35	Cresol-p	5.00	U ug/L	72.00 ug/L				

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW35	Dibenz(a,h)anthracene	5.00 U ug/L	0.29 ug/L				
HW35	Dibenzofuran	5.00 U ug/L					
HW35	Dichlorobenzidine-3,3'	5.00 U ug/L	11.00 ug/L				
HW35	Dichlorophenol-2,4	5.00 U ug/L	35.00 ug/L				
HW35	Dimethylphenol, 2,4-	5.00 U ug/L	270.00 ug/L				
HW35	Dinitrophenol-2,4	5.00 U ug/L	30.00 ug/L				
HW35	Dinitrotoluene-2,4	5.00 U ug/L					
HW35	Dinitrotoluene-2,6	5.00 U ug/L					
HW35	Ether, bis(2-chloroethyl)	5.00 U ug/L	1.20 ug/L				
HW35	Ether-bis(2-chloroisopropyl)	5.00 U ug/L					
HW35	Fluoranthene	5.00 U ug/L	630.00 ug/L				
HW35	Fluoranthene benzo(k)	5.00 U ug/L	29.00 ug/L				
HW35	Fluoranthene-benzo(b)	5.00 U ug/L	5.60 ug/L				
HW35	Fluorene	5.00 U ug/L	220.00 ug/L				
HW35	Hexachlorobenzene	5.00 U ug/L	4.20 ug/L	1.00 ug/L		1.00 ug/L	
HW35	Hexachlorobutadiene	0.50 U ug/L	26.00 ug/L				
HW35	Hexachlorobutadiene	5.00 U ug/L	26.00 ug/L				
HW35	Hexachlorocyclopentadiene	5.00 U ug/L	22.00 ug/L	50.00 ug/L		50.00 ug/L	
HW35	Hexachloroethane	5.00 U ug/L	5.10 ug/L				
HW35	Isophorone	5.00 U ug/L	6,700.00 ug/L				
HW35	Methane, bis(2-chloroethoxy)	5.00 U ug/L	47.00 ug/L				
HW35	Methylnaphthalene-2	5.00 U ug/L	27.00 ug/L				
HW35	Naphthalene	5.00 U ug/L	14.00 ug/L				
HW35	Naphthalene	0.50 U ug/L	14.00 ug/L				
HW35	Nitroaniline, ortho	5.00 U ug/L	150.00 ug/L				
HW35	Nitroaniline-3	5.00 U ug/L					
HW35	Nitrobenzenamine-4	5.00 U ug/L	61.00 ug/L				
HW35	Nitrobenzene	5.00 U ug/L	12.00 ug/L				
HW35	Nitrophenol-2	5.00 U ug/L					

Sample Number	Analyte	Result		Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW35	Nitrophenol-4	10.00	U ug/L					
HW35	Nitrosodimethylamine-n	5.00	U ug/L	0.04 ug/L				
HW35	Nitrosodiphenylamine-n	5.00	U ug/L	1,000.00 ug/L				
HW35	Pentachlorophenol	40.00	U ug/L	17.00 ug/L	1.00 ug/L		1.00 ug/L	
HW35	Perylene-benzo(ghi)	5.00	U ug/L					
HW35	Phenanthrene	5.00	U ug/L					
HW35	Phenol	5.00	U ug/L	4,500.00 ug/L				
HW35	Phthalate, bis(2-ethylhexyl) (DEHP)	5.00	U ug/L	7.10 ug/L	6.00 ug/L		6.00 ug/L	
HW35	Phthalate, Dimethyl	5.00	U ug/L	1,400.00 ug/L				
HW35	Phthalate, di-n-butyl-	5.00	U ug/L	670.00 ug/L				
HW35	Phthalate, di-n-octyl	5.00	U ug/L					
HW35	Phthalate-diethyl	5.00	U ug/L	11,000.00 ug/L				
HW35	Propylamine,n-nitroso di-n-	5.00	U ug/L	0.93 ug/L				
HW35	Pyrene	5.00	U ug/L	87.00 ug/L				
HW35	Pyrene-indeno(1,2,3-cd)	5.00	U ug/L	3.00 ug/L				
HW35	Tetrachlorobenzene, 1,2,4,5-	5.00	U ug/L	1.20 ug/L				
HW35	Tetrachlorophenol, 2,3,4,6-	5.00	U ug/L	170.00 ug/L				
HW35	Trichlorophenol-2,4,5	5.00	U ug/L	890.00 ug/L				
HW35	Trichlorophenol-2,4,6	5.00	U ug/L	9.04 ug/L				
HW35	TPH - Diesel Range Organics	250.00	U ug/L					
HW35	TPH - Gasoline Range Organics	50.00	U ug/L					
HW35	TPH - Oil Range Organics	1,000.00	U ug/L					
HW35	1,2-Dibromo-3-chloropropane (DBCP)	2.00	UJ ug/L	0.03 ug/L	0.20 ug/L		0.20 ug/L	
HW35	4-Methyl-2-pentanone	2.00	U ug/L	1,000.00 ug/L				
HW35	Acetone	2.00	U ug/L					
HW35	Benzene	0.50	U ug/L		5.00 ug/L		5.00 ug/L	
HW35	Bromobenzene	0.50	U ug/L					
HW35	Bromoform	1.00	U ug/L		80.00 ug/L		80.00 ug/L	
HW35	Butylbenzene	0.50	U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW35	Butylbenzene, sec-	0.50 U ug/L					
HW35	Butylbenzene, tert-	0.50 U ug/L					
HW35	Carbon disulfide	0.10 J ug/L					
HW35	Carbon Tetrachloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW35	Chlorobenzene	0.50 U ug/L		100.00 ug/L			
HW35	Chlorobromomethane	0.50 U ug/L					
HW35	Chloroethane	0.50 U ug/L					
HW35	Chloroform	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW35	Chlorotoluene	0.50 U ug/L	180.00 ug/L				
HW35	Chlorotoluene-p	0.50 U ug/L	190.00 ug/L				
HW35	Cyclohexane	0.50 UJ ug/L					
HW35	Dibromochloromethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW35	Dibromoethane-1,2	0.50 U ug/L	0.65 ug/L	0.05 ug/L		0.05 ug/L	
HW35	Dibromomethane	0.50 U ug/L					
HW35	Dichlorobenzene-1,2	0.50 U ug/L	280.00 ug/L	600.00 ug/L		600.00 ug/L	
HW35	Dichlorobenzene-1,3	0.50 U ug/L					
HW35	Dichlorobenzene-1,4	0.50 U ug/L	42.00 ug/L	75.00 ug/L		75.00 ug/L	
HW35	Dichlorobromomethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW35	Dichlorodifluoromethane	0.50 U ug/L					
HW35	Dichloroethane-1,1	0.50 U ug/L	240.00 ug/L				
HW35	Dichloroethane-1,2	0.50 U ug/L	15.00 ug/L	5.00 ug/L		5.00 ug/L	
HW35	Dichloroethene-1,2 trans	0.50 U ug/L		100.00 ug/L		100.00 ug/L	
HW35	Dichloroethylene-1,1	0.50 U ug/L		7.00 ug/L		7.00 ug/L	
HW35	Dichloroethylene-1,2 cis	0.50 U ug/L		70.00 ug/L		70.00 ug/L	
HW35	Dichloropropane, 1,2-	0.50 U ug/L	38.00 ug/L	5.00 ug/L		5.00 ug/L	
HW35	Dichloropropane, 1,3-	0.50 U ug/L	290.00 ug/L				
HW35	Dichloropropane, 2,2-	0.50 U ug/L					
HW35	Dichloropropene, 1,1-	0.50 U ug/L					
HW35	Dichloropropene, 1,3 cis-	0.50 U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW35	Dichloropropene, 1,3 trans-	0.50 U ug/L					
HW35	Ethylbenzene	0.50 U ug/L		700.00 ug/L		700.00 ug/L	
HW35	Freon 113	0.50 UJ ug/L					
HW35	Hexanone, 2-	2.00 U ug/L	34.00 ug/L				
HW35	Isopropylbenzene	0.50 U ug/L					
HW35	Isopropylbenzene-4,methyl-1	0.50 U ug/L					
HW35	m,p-Xylene	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW35	Methyl acetate	1.00 UJ ug/L					
HW35	Methyl bromide	0.50 UJ ug/L					
HW35	Methyl chloride	0.50 U ug/L					
HW35	Methyl cyclohexane	0.50 UJ ug/L					
HW35	Methyl ethyl ketone	2.00 U ug/L	4,900.00 ug/L				
HW35	Methyl tertiary butyl ether (MTBE)	0.50 UJ ug/L					
HW35	Methylene chloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW35	Propylbenzene-n	0.50 U ug/L					
HW35	Styrene	1.00 U ug/L		100.00 ug/L		100.00 ug/L	
HW35	Tetrachloroethane, 1,1,1,2-	0.50 U ug/L	50.00 ug/L				
HW35	Tetrachloroethane, 1,1,2,2-	0.50 U ug/L	6.60 ug/L				
HW35	Tetrachloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW35	Toluene	0.50 U ug/L		1,000.00 ug/L		1,000.00 ug/L	
HW35	Trichlorobenzene-1,2,3	0.50 U ug/L	5.20 ug/L				
HW35	Trichlorobenzene-1,2,4	0.50 U ug/L	5.20 ug/L	70.00 ug/L		70.00 ug/L	
HW35	Trichloroethane-1,1,1	0.50 U ug/L	7,500.00 ug/L	200.00 ug/L		200.00 ug/L	
HW35	Trichloroethane-1,1,2	0.50 U ug/L	0.41 ug/L	5.00 ug/L		5.00 ug/L	
HW35	Trichloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW35	Trichlorofluoromethane	0.50 U ug/L					
HW35	Trichloropropane-1,2,3	0.50 U ug/L	0.07 ug/L				
HW35	Trimethylbenzene-1,2,4	0.50 U ug/L	15.00 ug/L				
HW35	Trimethylbenzene-1,3,5	0.50 U ug/L	87.00 ug/L				

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HW35	Vinyl acetate	0.50 U ug/L					
HW35	Vinyl chloride	0.50 U ug/L		2.00 ug/L		2.00 ug/L	
HW35	Xylene-o	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW35	Nitrogen, Nitrite + Nitrate	2.38 J mg/L		10.00 mg/L		10.00 mg/L	
HW35	Total Nitrogen	2.74 mg/L					
HW35	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 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.

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.