

# HW-52

## 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
HW52	1-Butanol	10,000.00 U ug/L	1,500.00 ug/L				
HW52	1-Propanol	10,000.00 U ug/L					
HW52	2-Butanol	10,000.00 U ug/L					
HW52	Ethanol	10,000.00 U ug/L					
HW52	Methanol	10,000.00 U ug/L	7,800.00 ug/L				
HW52	Anionic Surfactants	0.01 U mg/L					
HW52	Heterotrophic Plate Count	R cfu/1mL					
HW52	Total Coliform Bacteria	1.00 U cfu/100mL	0.00 cfu/100mL	5.00 %*			
HW52	Ethane	14.00 ug/L					
HW52	Ethene	1.10 U ug/L					
HW52	Methane	19,000.00 ug/L	28,000.00 ug/L				
HW52	2-Butoxyethanol	5.00 U ug/L					
HW52	2-Methoxyethanol	60.00 U ug/L	78.00 ug/L				
HW52	2-Methoxyethanol	10.00 U ug/L	78.00 ug/L				
HW52	Diethylene glycol	R ug/L	8,000.00 ug/L				
HW52	Diethylene Glycol	50.00 U ug/L	8,000.00 ug/L				
HW52	Ethanol, 2-ethoxy-	10,000.00 U ug/L					
HW52	Ethanol, 2-methoxy-	10,000.00 U ug/L	78.00 ug/L				
HW52	Ethylene glycol	10,000.00 U ug/L	31,000.00 ug/L				
HW52	Ethylene glycol	10,000.00 U ug/L	31,000.00 ug/L				
HW52	Tetraethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW52	Triethylene glycol	25.00 U ug/L	8,000.00 ug/L				
HW52	Triethylene glycol	10,000.00 U ug/L	8,000.00 ug/L				
HW52	Bromide	0.50 U mg/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW52	Chloride	7.41 mg/L			250.00 mg/L		250.00 mg/L
HW52	Fluoride	0.10 U mg/L	0.62 mg/L	4.00 mg/L	2.00 mg/L	2.00 mg/L	
HW52	Sulfate	8.71 mg/L			250.00 mg/L		250.00 mg/L
HW52	Mercury	0.20 U ug/L	4.30 ug/L	2.00 ug/L		2.00 ug/L	
HW52-F	Mercury	0.20 U ug/L	4.30 ug/L	2.00 ug/L		2.00 ug/L	
HW52	Aluminum	30.00 U ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW52-F	Aluminum	30.00 U ug/L	16,000.00 ug/L		200.00 ug/L		200.00 ug/L
HW52	Antimony	2.00 U ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW52-F	Antimony	2.00 U ug/L	6.00 ug/L	6.00 ug/L		6.00 ug/L	
HW52	Arsenic	2.00 U ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW52-F	Arsenic	2.00 U ug/L	4.50 ug/L	10.00 ug/L		10.00 ug/L	
HW52	Barium	536.00 ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW52-F	Barium	536.00 ug/L	2,900.00 ug/L	2,000.00 ug/L		2,000.00 ug/L	
HW52	Beryllium	1.00 U ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW52-F	Beryllium	1.00 U ug/L	16.00 ug/L	4.00 ug/L		4.00 ug/L	
HW52	Boron	50.00 U ug/L	3,100.00 ug/L				
HW52-F	Boron	50.00 U ug/L	3,100.00 ug/L				
HW52	Cadmium	1.00 U ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW52-F	Cadmium	1.00 U ug/L	6.90 ug/L	5.00 ug/L		5.00 ug/L	
HW52	Calcium	25,500.00 ug/L					
HW52-F	Calcium	25,700.00 ug/L					
HW52	Chromium	2.00 U ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW52-F	Chromium	2.00 U ug/L	3.10 ug/L	100.00 ug/L		100.00 ug/L	
HW52	Cobalt	1.00 U ug/L	4.70 ug/L				
HW52-F	Cobalt	1.00 U ug/L	4.70 ug/L				
HW52	Copper	3.10 ug/L	620.00 ug/L	1,300.00 ug/L**	1,000.00 ug/L	1,000.00 ug/L***	
HW52-F	Copper	2.60 ug/L	620.00 ug/L	1,300.00 ug/L**	1,000.00 ug/L	1,000.00 ug/L***	
HW52	Iron	100.00 U ug/L	11,000.00 ug/L		300.00 ug/L		300.00 ug/L
HW52-F	Iron	100.00 U 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
HW52	Lead	1.00 U ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW52-F	Lead	1.00 U ug/L	15.00 ug/L	15.00 ug/L**		5.00 ug/L***	
HW52	Lithium	200.00 U ug/L	31.00 ug/L				
HW52-F	Lithium	200.00 U ug/L	31.00 ug/L				
HW52	Magnesium	5,140.00 ug/L					
HW52-F	Magnesium	5,170.00 ug/L					
HW52	Manganese	26.80 ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW52-F	Manganese	23.90 ug/L	320.00 ug/L		50.00 ug/L		50.00 ug/L
HW52	Nickel	1.00 ug/L	300.00 ug/L				
HW52-F	Nickel	1.00 ug/L	300.00 ug/L				
HW52	Potassium	2,000.00 U ug/L					
HW52-F	Potassium	2,000.00 U ug/L					
HW52	Selenium	5.00 U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW52-F	Selenium	5.00 U ug/L	78.00 ug/L	50.00 ug/L		50.00 ug/L	
HW52	Silver	1.00 U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW52-F	Silver	1.00 U ug/L	71.00 ug/L		100.00 ug/L		100.00 ug/L
HW52	Sodium	11,400.00 ug/L	20,000.00 ug/L				
HW52-F	Sodium	11,500.00 ug/L	20,000.00 ug/L				
HW52	Strontium	527.00 ug/L	9,300.00 ug/L				
HW52-F	Strontium	530.00 ug/L	9,300.00 ug/L				
HW52	Thallium	1.00 U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW52-F	Thallium	1.00 U ug/L	0.16 ug/L	2.00 ug/L		2.00 ug/L	
HW52	Tin	200.00 U ug/L	9,300.00 ug/L				
HW52-F	Tin	200.00 U ug/L	9,300.00 ug/L				
HW52	Titanium	200.00 U ug/L					
HW52-F	Titanium	200.00 U ug/L					
HW52	Uranium	1.10 ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	
HW52-F	Uranium	1.10 ug/L	47.00 ug/L	30.00 ug/L		30.00 ug/L	
HW52	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
HW52-F	Vanadium	5.00 U ug/L	78.00 ug/L				
HW52	Zinc	21.30 ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW52-F	Zinc	23.80 ug/L	4,700.00 ug/L		5,000.00 ug/L		5,000.00 ug/L
HW52	Oil and Grease	5.60 U mg/L					
HW52	Total Dissolved Solids	113.00 J mg/L			500.00 mg/L		500.00 mg/L
HW52	Total Suspended Solids	10.00 U mg/L					
HW52	1-Methylnaphthalene	5.00 U ug/L	97.00 ug/L				
HW52	Acenaphthene	5.00 U ug/L	400.00 ug/L				
HW52	Acenaphthylene	5.00 U ug/L					
HW52	Acetophenone	5.00 U ug/L	1,500.00 ug/L				
HW52	Anthracene	5.00 U ug/L	1,300.00 ug/L				
HW52	Atrazine	5.00 U ug/L	26.00 ug/L	3.00 ug/L		3.00 ug/L	
HW52	Benzo(a)anthracene	5.00 U ug/L	2.90 ug/L				
HW52	Benzo(a)pyrene	5.00 U ug/L	0.29 ug/L	0.20 ug/L		0.20 ug/L	
HW52	Biphenyl	5.00 U ug/L					
HW52	Bromophenyl-4 Phenyl Ether	5.00 U ug/L					
HW52	Butylbenzyl phthalate	5.00 U ug/L	1,400.00 ug/L				
HW52	Caprolactam	5.00 U ug/L	7,700.00 ug/L				
HW52	Carbazole	5.00 U ug/L					
HW52	Chlorobenzeneamine-4	5.00 U ug/L	3.20 ug/L				
HW52	Chloronaphthalene-2	5.00 U ug/L	550.00 ug/L				
HW52	Chlorophenol-2	5.00 U ug/L	71.00 ug/L				
HW52	Chlorophenyl-4 phenyl ether	5.00 U ug/L					
HW52	Chrysene	5.00 U ug/L	290.00 ug/L				
HW52	Cresol, parachloro meta-	5.00 U ug/L					
HW52	Cresol-4,6-dinitro-ortho	10.00 U ug/L					
HW52	Cresol-o	5.00 U ug/L	720.00 ug/L				
HW52	Cresol-p	5.00 U ug/L	72.00 ug/L				
HW52	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
HW52	Dibenzofuran	5.00 U ug/L					
HW52	Dichlorobenzidine-3,3'	5.00 U ug/L	11.00 ug/L				
HW52	Dichlorophenol-2,4	5.00 U ug/L	35.00 ug/L				
HW52	Dimethylphenol, 2,4-	5.00 U ug/L	270.00 ug/L				
HW52	Dinitrophenol-2,4	5.00 U ug/L	30.00 ug/L				
HW52	Dinitrotoluene-2,4	5.00 U ug/L					
HW52	Dinitrotoluene-2,6	5.00 U ug/L					
HW52	Ether, bis(2-chloroethyl)	5.00 U ug/L	1.20 ug/L				
HW52	Ether-bis(2-chloroisopropyl)	5.00 U ug/L					
HW52	Fluoranthene	5.00 U ug/L	630.00 ug/L				
HW52	Fluoranthene benzo(k)	5.00 U ug/L	29.00 ug/L				
HW52	Fluoranthene-benzo(b)	5.00 U ug/L	5.60 ug/L				
HW52	Fluorene	5.00 U ug/L	220.00 ug/L				
HW52	Hexachlorobenzene	5.00 U ug/L	4.20 ug/L	1.00 ug/L		1.00 ug/L	
HW52	Hexachlorobutadiene	0.50 U ug/L	26.00 ug/L				
HW52	Hexachlorobutadiene	5.00 U ug/L	26.00 ug/L				
HW52	Hexachlorocyclopentadiene	5.00 U ug/L	22.00 ug/L	50.00 ug/L		50.00 ug/L	
HW52	Hexachloroethane	5.00 U ug/L	5.10 ug/L				
HW52	Isophorone	5.00 U ug/L	6,700.00 ug/L				
HW52	Methane, bis(2-chloroethoxy)	5.00 U ug/L	47.00 ug/L				
HW52	Methylnaphthalene-2	0.05 J ug/L	27.00 ug/L				
HW52	Naphthalene	0.06 J ug/L	14.00 ug/L				
HW52	Naphthalene	0.50 U ug/L	14.00 ug/L				
HW52	Nitroaniline, ortho	5.00 U ug/L	150.00 ug/L				
HW52	Nitroaniline-3	5.00 U ug/L					
HW52	Nitrobenzenamine-4	5.00 U ug/L	61.00 ug/L				
HW52	Nitrobenzene	5.00 U ug/L	12.00 ug/L				
HW52	Nitrophenol-2	5.00 U ug/L					
HW52	Nitrophenol-4	10.00 U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW52	Nitrosodimethylamine-n	5.00 U ug/L	0.04 ug/L				
HW52	Nitrosodiphenylamine-n	5.00 U ug/L	1,000.00 ug/L				
HW52	Pentachlorophenol	40.00 U ug/L	17.00 ug/L	1.00 ug/L		1.00 ug/L	
HW52	Perylene-benzo(ghi)	5.00 U ug/L					
HW52	Phenanthrene	5.00 U ug/L					
HW52	Phenol	5.00 U ug/L	4,500.00 ug/L				
HW52	Phthalate, bis(2-ethylhexyl) (DEHP)	5.00 U ug/L	7.10 ug/L	6.00 ug/L		6.00 ug/L	
HW52	Phthalate, Dimethyl	5.00 U ug/L	1,400.00 ug/L				
HW52	Phthalate, di-n-butyl-	5.00 U ug/L	670.00 ug/L				
HW52	Phthalate, di-n-octyl	5.00 U ug/L					
HW52	Phthalate-diethyl	5.00 U ug/L	11,000.00 ug/L				
HW52	Propylamine,n-nitroso di-n-	5.00 U ug/L	0.93 ug/L				
HW52	Pyrene	5.00 U ug/L	87.00 ug/L				
HW52	Pyrene-indeno(1,2,3-cd)	5.00 U ug/L	3.00 ug/L				
HW52	Tetrachlorobenzene, 1,2,4,5-	5.00 U ug/L	1.20 ug/L				
HW52	Tetrachlorophenol, 2,3,4,6-	5.00 U ug/L	170.00 ug/L				
HW52	Trichlorophenol-2,4,5	5.00 U ug/L	890.00 ug/L				
HW52	Trichlorophenol-2,4,6	5.00 U ug/L	9.04 ug/L				
HW52	TPH - Diesel Range Organics	250.00 U ug/L					
HW52	TPH - Gasoline Range Organics	50.00 U ug/L					
HW52	TPH - Oil Range Organics	1,000.00 U ug/L					
HW52	1,2-Dibromo-3-chloropropane (DBCP)	2.00 UJ ug/L	0.03 ug/L	0.20 ug/L		0.20 ug/L	
HW52	4-Methyl-2-pentanone	2.00 U ug/L	1,000.00 ug/L				
HW52	Acetone	2.00 U ug/L					
HW52	Benzene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW52	Bromobenzene	0.50 U ug/L					
HW52	Bromoform	1.00 U ug/L		80.00 ug/L		80.00 ug/L	
HW52	Butylbenzene	0.50 U ug/L					
HW52	Butylbenzene, sec-	0.50 U ug/L					

Sample Number	Analyte	Result	Trigger Levels	EPA Primary MCLs	EPA Secondary MCLs	DEP Primary MCLs	DEP Secondary MCLs
HW52	Butylbenzene, tert-	0.50 U ug/L					
HW52	Carbon disulfide	0.50 U ug/L					
HW52	Carbon Tetrachloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW52	Chlorobenzene	0.50 U ug/L		100.00 ug/L			
HW52	Chlorobromomethane	0.50 U ug/L					
HW52	Chloroethane	0.50 U ug/L					
HW52	Chloroform	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW52	Chlorotoluene	0.50 U ug/L	180.00 ug/L				
HW52	Chlorotoluene-p	0.50 U ug/L	190.00 ug/L				
HW52	Cyclohexane	0.50 UJ ug/L					
HW52	Dibromochloromethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW52	Dibromoethane-1,2	0.50 U ug/L	0.65 ug/L	0.05 ug/L		0.05 ug/L	
HW52	Dibromomethane	0.50 U ug/L					
HW52	Dichlorobenzene-1,2	0.50 U ug/L	280.00 ug/L	600.00 ug/L		600.00 ug/L	
HW52	Dichlorobenzene-1,3	0.50 U ug/L					
HW52	Dichlorobenzene-1,4	0.50 U ug/L	42.00 ug/L	75.00 ug/L		75.00 ug/L	
HW52	Dichlorobromomethane	0.50 U ug/L		80.00 ug/L		80.00 ug/L	
HW52	Dichlorodifluoromethane	0.50 U ug/L					
HW52	Dichloroethane-1,1	0.50 U ug/L	240.00 ug/L				
HW52	Dichloroethane-1,2	0.50 U ug/L	15.00 ug/L	5.00 ug/L		5.00 ug/L	
HW52	Dichloroethene-1,2 trans	0.50 U ug/L		100.00 ug/L		100.00 ug/L	
HW52	Dichloroethylene-1,1	0.50 U ug/L		7.00 ug/L		7.00 ug/L	
HW52	Dichloroethylene-1,2 cis	0.50 U ug/L		70.00 ug/L		70.00 ug/L	
HW52	Dichloropropane, 1,2-	0.50 U ug/L	38.00 ug/L	5.00 ug/L		5.00 ug/L	
HW52	Dichloropropane, 1,3-	0.50 U ug/L	290.00 ug/L				
HW52	Dichloropropane, 2,2-	0.50 U ug/L					
HW52	Dichloropropene, 1,1-	0.50 U ug/L					
HW52	Dichloropropene, 1,3 cis-	0.50 U ug/L					
HW52	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
HW52	Ethylbenzene	0.50 U ug/L		700.00 ug/L		700.00 ug/L	
HW52	Freon 113	0.50 UJ ug/L					
HW52	Hexanone, 2-	2.00 U ug/L	34.00 ug/L				
HW52	Isopropylbenzene	0.50 U ug/L					
HW52	Isopropylbenzene-4,methyl-1	0.50 U ug/L					
HW52	m,p-Xylene	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW52	Methyl acetate	1.00 UJ ug/L					
HW52	Methyl bromide	0.50 U ug/L					
HW52	Methyl chloride	0.50 U ug/L					
HW52	Methyl cyclohexane	0.50 UJ ug/L					
HW52	Methyl ethyl ketone	2.00 U ug/L	4,900.00 ug/L				
HW52	Methyl tertiary butyl ether (MTBE)	0.50 UJ ug/L					
HW52	Methylene chloride	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW52	Propylbenzene-n	0.50 U ug/L					
HW52	Styrene	1.00 U ug/L		100.00 ug/L		100.00 ug/L	
HW52	Tetrachloroethane, 1,1,1,2-	0.50 U ug/L	50.00 ug/L				
HW52	Tetrachloroethane, 1,1,2,2-	0.50 U ug/L	6.60 ug/L				
HW52	Tetrachloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW52	Toluene	0.50 U ug/L		1,000.00 ug/L		1,000.00 ug/L	
HW52	Trichlorobenzene-1,2,3	0.50 U ug/L	5.20 ug/L				
HW52	Trichlorobenzene-1,2,4	0.50 U ug/L	5.20 ug/L	70.00 ug/L		70.00 ug/L	
HW52	Trichloroethane-1,1,1	0.50 U ug/L	7,500.00 ug/L	200.00 ug/L		200.00 ug/L	
HW52	Trichloroethane-1,1,2	0.50 U ug/L	0.41 ug/L	5.00 ug/L		5.00 ug/L	
HW52	Trichloroethylene	0.50 U ug/L		5.00 ug/L		5.00 ug/L	
HW52	Trichlorofluoromethane	0.50 U ug/L					
HW52	Trichloropropane-1,2,3	0.50 U ug/L	0.07 ug/L				
HW52	Trimethylbenzene-1,2,4	0.50 U ug/L	15.00 ug/L				
HW52	Trimethylbenzene-1,3,5	0.50 U ug/L	87.00 ug/L				
HW52	Vinyl acetate	0.50 U ug/L					

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HW52	Vinyl chloride	0.50 U ug/L		2.00 ug/L		2.00 ug/L	
HW52	Xylene-o	1.00 U ug/L		10,000.00 ug/L		10,000.00 ug/L	
HW52	Nitrogen, Nitrite + Nitrate	0.24 mg/L		10.00 mg/L		10.00 mg/L	
HW52	Total Nitrogen	1.00 U mg/L					
HW52	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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## Dimock Residential Sampling

### April 4, 2012

**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.

# Key to EPA Validated Data Summary Report

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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.