### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM- 1 (Transition Zone) and PM-2 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth	Dissolved Oxygen	pH WH, Field	pH-Lab WH, Lab	Specific Cond., Field	Specific Cond., Lab	Water Temp.
		(ft)	(mg/L)	(standard units)	(standard units)	(us/cm)	(us/cm)	(deg C)
PM-1	12/15/2008	85	7.5	5.5	6.0	32	30	16.8
	6/8/2009	85	8.0	5.6	5.9	29	na	16.7
PM-2	12/15/2008	DRY	na	na	na	na	na	na
	6/22/2009	42	na	5.5	5.4	44	na	18.4

	Sampling	Sampling	Hardness, non-	Hardness	Calcium	Magnesium	Potassium	Sodium
Station ID	Date	Depth	carb diss fld.	Total	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	as CaCO3 (mg/l)	(mg/l as CaCO3)	(mg/l as Ca)	(mg/l as Mg)	(mg/l as K)	(mg/l as Na)
PM-1	12/15/2008	85			1.8	1.9	0.51	1.8
	6/8/2009	85			1.7	1.7	0.43	1.7
PM-2	12/15/2008	DRY	na	na	na	na	na	na
	6/22/2009	42			1.7	1.7	0.75	3.3

Station ID	Sampling Date	Sampling Depth	Sodium Adsorption	Sodium Percent	ANC, TIT. 4.5, L	ANC, Unfilt IT Field	Bicarbonate Dissolved	Bromide Dissolved
		(ft)	Ratio		(mg/l as CaCO3)	(mg/L as CaCO3)	(mg/L as HCO3)	(mg/l as Br)
PM-1	12/15/2008	85					11	
	6/8/2009	85					11	

PM-2	12/15/2008	DRY	na	na	na	na	3.8	na
	6/22/2009	42						

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### Pasour Mountain Groundwater Monitoring and Research Station PM- 1 (Transition Zone) and PM-2 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth	Chloride Dissolved	Fluoride Dissolved	Silica Dissolved	Sulfate Dissolved	Solids Dissolved	Solids, Residue at 180 deg C
010110112	2410	(ft)	(mg/l as Cl)	(mg/l as F)	(mg/l as SiO2)	(mg/l as SO4)	(mg/l)	(mg/l)
PM-1	12/15/2008	85	1.3	<0.4	12	<2.0	31	<6.2
	6/8/2009	85	1.3	<0.4	12	<2.0	29	na
PM-2	12/15/2008	DRY	na	na	na	na	na	na
	6/22/2009	42	4.3	<0.4	11	<2.0	38	na

Station ID	Sampling Date	Sampling Depth	Solids, sum of constituents	Nitrogen Ammonia	Nitrogen Ammonia +	Nitrogen Ammonia	Nitrogen dissolved	NO2 + NO3 diss.
		(ft)	diss. (mg/l)	(mg/L as N)	Organic	(mg/L as NH4)	(mg/l as N)	(mg/L as N)
PM-1	12/15/2008	85						0.12
	6/8/2009	85						0.12
PM-2	12/15/2008	DRY						na
	6/22/2009	42						2.20

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/l as N)	Nitrogen, Nitrate Dis (mg/L as N)	Nitrogen, Nitrate Dis (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-1	12/15/2008	85						
	6/8/2009	85						

PM-2	12/15/2008	DRY			
	6/22/2009	42			

### Pasour Mountain Groundwater Monitoring and Research Station PM- 1 (Transition Zone) and PM-2 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Phosphorus Ortho, dis (mg/l as P)	Carbon Dioxide, dis (mg/l as CO2)	Aluminum Dissolved (ug/l as Al)	Antimony Dissolved (ug/l as Sb)	Arsenic Dissolved (ug/l as As)	Barium Dissolved (ug/l as Ba)
PM-1	12/15/2008	85			<50		<2.0	<10
	6/8/2009	85			<50		<2.0	<10
PM-2	12/15/2008	DRY			na		na	na
	6/22/2009	42			<50		<2.0	<10

	Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Station ID	Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	(ug/l as Be)	(ug/I as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
PM-1	12/15/2008	85			<1.0	<10		<2.0
	6/8/2009	85			<1.0	<10		<2.0
PM-2	12/15/2008	DRY			na	na		na
	6/22/2009	42			<1.0	<10		<2.0

Station ID	Sampling Date	Sampling Depth (ft)	Iron Dissolved (ug/l as Fe)	Lead Dissolved (ug/l as Pb)	Manganese Dissolved (ug/l as Mn)	Mercury Dissolved (ug/l as Hg)	Molybdenum Dissolved (ug/l as Mo)	Nickel Dissolved (ug/l as Ni)
PM-1	12/15/2008	85	110	<10	22			<10
	6/8/2009	85	71	<10	13			<10
PM-2	12/15/2008	DRY	na	na	na			na
	6/22/2009	42	<50	<10	130			<10

### Pasour Mountain Groundwater Monitoring and Research Station PM- 1 (Transition Zone) and PM-2 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/l as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-1	12/15/2008	85	<5.0	<5.0	<10			
	6/8/2009	85	<5.0	<5.0	<10			
PM-2	12/15/2008	DRY	na	na	na			
	6/22/2009	42	<5.0	<5.0	<10			

	Sampling	Sampling	Gross alpha,	Gross beta,	Gross Beta, 2x	N-15 / N-14	Radon 222	Radon 222,
Station ID	Date	Depth	2x cl, ss mdc,	diss as	cl, ss mdc,	Stable Isotope	total	2x cl, ss mdc,
		(ft)	wat filt (pci/l)	CS-137 (pci/l)	wat filt (pci/l)	Ratio (per mil)	(pci/l)	wat unfilt (pci/l)
PM-1	12/15/2008	85						
	6/8/2009	85						
PM-2	12/15/2008	DRY						
	6/22/2009	42						

	Sampling	Sampling	RN-222	Uranium	Sulfide	<b>Total Organic Carbon</b>	Turbidity
Station ID	Date	Depth	2 sigma wat	Nat, dissolv	Dissolved	total	total
		(ft)	total (pci/l)	(ug/I as U)	(ug/L as S)	(mg/L)	(NTU)
PM-1	12/15/2008	85			<0.1J6	<2.0	na
	6/8/2009	85			na	na	na
PM-2	12/15/2008	DRY			na	na	na
	6/22/2009	42			na	na	na

### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM- 3 (Transition Zone) and PM-9 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth	Dissolved Oxygen	рН WH, Field	pH-Lab WH, Lab	Specific Cond., Field	Specific Cond., Lab	Water Temp.
		(ft)	(mg/L)	(standard units)	(standard units)	(us/cm)	(us/cm)	(deg C)
PM-3	12/15/2008	110	8.0	5.4	5.8	25	25	16.6
	6/8/2009	110	7.6	5.2	5.2	22	na	16.6
PM-9	12/15/2008	90	7.6	4.9	4.8	22	21	15.9
	6/8/2009	90	8.9	4.5	4.3	20	na	16.5

	Sampling	Sampling	Hardness, non-	Hardness	Calcium	Magnesium	Potassium	Sodium
Station ID	Date	Depth	carb diss fld.	Total	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	as CaCO3 (mg/l)	(mg/l as CaCO3)	(mg/l as Ca)	(mg/l as Mg)	(mg/l as K)	(mg/l as Na)
PM-3	12/15/2008	110			1.3	1.1	0.41	1.8
	6/8/2009	110			1.3	1.0	0.38	1.7
PM-9	12/15/2008	90			0.13	0.32	0.24	2.3
	6/8/2009	90			<0.10	0.29	0.24	2.1

Station ID	Sampling Date	Sampling Depth (ft)	Sodium Adsorption Ratio	Sodium Percent	<b>ANC,</b> <b>TIT. 4.5, L</b> (mg/l as CaCO3)	ANC, Unfilt IT Field (mg/L as CaCO3)	Bicarbonate Dissolved (mg/L as HCO3)	Bromide Dissolved (mg/l as Br)
PM-3	12/15/2008	110					6.8	
	6/8/2009	110					5.2	

PM-9	12/15/2008	90			<1	
	6/8/2009	90			<1	

### Pasour Mountain Groundwater Monitoring and Research Station PM- 3 (Transition Zone) and PM-9 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Chloride Dissolved (mg/l as Cl)	Fluoride Dissolved (mg/l as F)	Silica Dissolved (mg/l as SiO2)	Sulfate Dissolved (mg/l as SO4)	Solids Dissolved (mg/l)	Solids, Residue at 180 deg C (mg/l)
PM-3	12/15/2008	110	1.4	<0.4	11	<2.0	26	<6.2
	6/8/2009	110	1.3	<0.4	11	<2.0	24	na
PM-9	12/15/2008	90	1.8	<0.4	7.3	<2.0	23	<6.2
	6/8/2009	90	1.6	<0.4	7.6	<2.0	20	na

	Sampling	Sampling	Solids, sum of	Nitrogen	Nitrogen	Nitrogen	Nitrogen	NO2 +
Station ID	Date	Depth	constituents	Ammonia	Ammonia +	Ammonia	dissolved	NO3 diss.
		(ft)	diss. (mg/l)	(mg/L as N)	Organic	(mg/L as NH4)	(mg/l as N)	(mg/L as N)
PM-3	12/15/2008	110						0.20
	6/8/2009	110						0.21
PM-9	12/15/2008	90						1.00
	6/8/2009	90						0.98

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/l as N)	Nitrogen, Nitrate Dis (mg/L as N)	<b>Nitrogen,</b> <b>Nitrate Dis</b> (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-3	12/15/2008	110						
	6/8/2009	110						

PM-9	12/15/2008	90			
	6/8/2009	90			

# Pasour Mountain Groundwater Monitoring and Research Station PM- 3 (Transition Zone) and PM-9 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Phosphorus Ortho, dis (mg/l as P)	Carbon Dioxide, dis (mg/l as CO2)	Aluminum Dissolved (ug/l as Al)	Antimony Dissolved (ug/l as Sb)	Arsenic Dissolved (ug/l as As)	Barium Dissolved (ug/l as Ba)
PM-3	12/15/2008	110			<50		<2.0	<10
	6/8/2009	110			<50		<2.0	<10
PM-9	12/15/2008	90			<50		<2.0	15
	6/8/2009	90			<50		<2.0	14

Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
	(ft)	(ug/l as Be)	(ug/l as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
12/15/2008	110			<1.0	<10		<2.0
6/8/2009	110			<1.0	<10		<2.0
12/15/2008	90			<1.0	<10		<2.0
6/8/2009	90			<1.0	<10		<2.0
	Sampling Date 12/15/2008 6/8/2009 12/15/2008 6/8/2009	Sampling Date Sampling Depth (ft)   12/15/2008 110   6/8/2009 110   12/15/2008 90   6/8/2009 90	Sampling Date Sampling Depth Beryllium Dissolved (ug/l as Be)   12/15/2008 110   6/8/2009 110   12/15/2008 90   6/8/2009 90	Sampling DateSampling DepthBeryllium DissolvedBoron Dissolved12/15/2008(ft)(ug/l as Be)(ug/l as B)12/15/2009110	Sampling DateSampling DepthBeryllium DissolvedBoron DissolvedCadmium Dissolved12/15/2008(tft)(ug/l as Be)(ug/l as B)(ug/l as Cd)12/15/2008110<1.0	Sampling DateSampling DepthBeryllium DissolvedBoron DissolvedCadmium DissolvedChromium Dissolved12/15/2008(tft)(ug/l as Be)(ug/l as B)(ug/l as Cd)(ug/l as Cr)12/15/2008110<	Sampling DateSampling DepthBeryllium DissolvedBoron DissolvedCadmium DissolvedChromium DissolvedCobalt Dissolved12/15/2008110(ug/l as Be)(ug/l as B)(ug/l as Cd)(ug/l as Cr)(ug/l as Co)12/15/2008110<

Station ID	Sampling Date	Sampling Depth (ft)	Iron Dissolved (ug/l as Fe)	Lead Dissolved (ug/l as Pb)	Manganese Dissolved (ug/l as Mn)	Mercury Dissolved (ug/l as Hg)	Molybdenum Dissolved (ug/l as Mo)	Nickel Dissolved (ug/l as Ni)
PM-3	12/15/2008	110	90	<10	1.1			<10
	6/8/2009	110	87	<10	1.0			<10
					49			
PM-9	12/15/2008	90	<50	<10	51			<10
	6/8/2009	90	<50	<10				<10

### Pasour Mountain Groundwater Monitoring and Research Station PM- 3 (Transition Zone) and PM-9 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/l as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-3	12/15/2008	110	<5.0	<5.0	<10			
	6/8/2009	110	<5.0	<5.0	<10			
PM-9	12/15/2008	90	<5.0	<5.0	<10			
	6/8/2009	90	<5.0	<5.0	<10			

Station ID	Sampling Date	Sampling Depth	Gross alpha, 2x cl, ss mdc,	Gross beta, diss as	Gross Beta, 2x cl, ss mdc,	N-15 / N-14 Stable Isotope	Radon 222 total	Radon 222, 2x cl, ss mdc,
		(ft)	wat filt (pci/l)	CS-137 (pci/l)	wat filt (pci/l)	Ratio (per mil)	(pci/l)	wat unfilt (pci/l)
PM-3	12/15/2008	110						
	6/8/2009	110						
PM-9	12/15/2008	90						
	6/8/2009	90						

Station ID	Sampling Date	Sampling Depth (ff)	RN-222 2 sigma wat total (pci/l)	Uranium Nat, dissolv (uɑ/l as U)	Sulfide Dissolved (ug/L as S)	Total Organic Carbon total (mg/L)	Turbidity total (NTU)
PM-3	12/15/2008	110		(ug/1 uo o/	<0.1,16	<2.0	na
	6/8/2009	110			na	na	na
				•	•		
PM-9	12/15/2008	90			<0.1J6	<2.0	na
	6/8/2009	90			na	na	na

### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM- 6 (Transition Zone) and PM-7 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth	Dissolved Oxygen	рН WH, Field	pH-Lab WH, Lab	Specific Cond., Field	Specific Cond., Lab	Water Temp.
		(ft)	(mg/L)	(standard units)	(standard units)	(us/cm)	(us/cm)	(deg C)
PM-6	1/22/2009	70	2.5	6.4	6.4	57	53	15.0
	6/15/2009	130	7.2	6.1	6.5	58	na	16.4
PM-7	1/21/2009	70	9.0	5.4	5.5	18	21	15.1
	6/15/2009	70	9.2	4.9	5.2	14	na	16.6

	Sampling	Sampling	Hardness, non-	Hardness	Calcium	Magnesium	Potassium	Sodium
Station ID	Date	Depth	carb diss fld.	Total	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	as CaCO3 (mg/l)	(mg/l as CaCO3)	(mg/l as Ca)	(mg/l as Mg)	(mg/l as K)	(mg/l as Na)
PM-6	1/22/2009	70			4.8*	0.57*	0.71*	7.2*
	6/15/2009	130			6.1	0.66	0.51	7.0
PM-7	1/21/2009	70			1.3*	0.4*	0.48*	4.5*
	6/15/2009	70			0.24*	0.19*	0.16*	2*

Station ID	Sampling Date	Sampling Depth	Sodium Adsorption	Sodium Percent	ANC, TIT. 4.5, L	ANC, Unfilt IT Field	Bicarbonate Dissolved	Bromide Dissolved
		(ft)	Ratio		(mg/l as CaCO3)	(mg/L as CaCO3)	(mg/L as HCO3)	(mg/l as Br)
PM-6	1/22/2009	70					26	
	6/15/2009	130					24	

PM-7	1/21/2009	70			5.2	
	6/15/2009	70			1.8	

\* Represents total analysis in unfiltered samples

### Pasour Mountain Groundwater Monitoring and Research Station PM- 6 (Transition Zone) and PM-7 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Chloride Dissolved (mg/l as Cl)	Fluoride Dissolved (mg/l as F)	Silica Dissolved (mg/l as SiO2)	Sulfate Dissolved (mg/I as SO4)	Solids Dissolved (mg/l)	Solids, Residue at 180 deg C (mg/l)
PM-6	1/22/2009	70	1.2	<0.4	31	<2.0	62	38
	6/15/2009	130	1.2	<0.4	36	<2.0	70	na
PM-7	1/21/2009	70	<1.0	<0.4	7.5	<2.0	62	100
	6/15/2009	70	1.7	<0.4	7.5	<2.0	20	na

Station ID	Sampling Date	Sampling Depth	Solids, sum of constituents	Nitrogen Ammonia	Nitrogen Ammonia +	Nitrogen Ammonia	Nitrogen dissolved	NO2 + NO3 diss
otation ib	Bato	(ft)	diss. (mg/l)	(mg/L as N)	Organic	(mg/L as NH4)	(mg/l as N)	(mg/L as N)
PM-6	1/22/2009	70						<0.02
	6/15/2009	130						<0.02
PM-7	1/21/2009	70						0.02
	6/15/2009	70						<0.02

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/l as N)	Nitrogen, Nitrate Dis (mg/L as N)	Nitrogen, Nitrate Dis (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-6	1/22/2009	70						
	6/15/2009	130						

PM-7	1/21/2009	70			
	6/15/2009	70			

# Pasour Mountain Groundwater Monitoring and Research Station PM- 6 (Transition Zone) and PM-7 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Phosphorus Ortho, dis (mg/l as P)	Carbon Dioxide, dis (mg/l as CO2)	Aluminum Dissolved (ug/l as Al)	Antimony Dissolved (ug/l as Sb)	Arsenic Dissolved (ug/l as As)	Barium Dissolved (ug/l as Ba)
PM-6	1/22/2009	70			<50*		<2.0*	15*
	6/15/2009	130			<50		<2.0	<10
PM-7	1/21/2009	70			2000*		<2.0*	25*
	6/15/2009	70			580*		<2.0*	15*

	Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Station ID	Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	(ug/l as Be)	(ug/l as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
PM-6	1/22/2009	70			<1.0*	<10*		<2.0*
	6/15/2009	130			<1.0	<10		<2.0
PM-7	1/21/2009	70			<1.0*	<10*		<2.0*
	6/15/2009	70			<1.0*	<10*		<2.0*

Station ID	Sampling Date	Sampling Depth	lron Dissolved	Lead Dissolved	Manganese Dissolved	Mercury Dissolved	Molybdenum Dissolved	Nickel Dissolved
		(ft)	(ug/l as Fe)	(ug/l as Pb)	(ug/l as Mn)	(ug/l as Hg)	(ug/l as Mo)	(ug/l as Ni)
PM-6	1/22/2009	70	18000*	<10*	0.57*			<10*
	6/15/2009	130	76	<10	0.66			<10
PM-7	1/21/2009	70	1200*	<10*	180*			<10*
	6/15/2009	70	540*	<10*	100*			<10*

### Pasour Mountain Groundwater Monitoring and Research Station PM- 6 (Transition Zone) and PM-7 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/I as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-6	1/22/2009	70	<5.0*	<5.0*	<10*			
	6/15/2009	130	<5.0	<5.0	<10			
PM-7	1/21/2009	70	<5.0*	<5.0*	12			
	6/15/2009	70	<5.0*	<5.0*	<10*			

Station ID	Sampling Date	Sampling Depth	Gross alpha, 2x cl, ss mdc,	Gross beta, diss as	Gross Beta, 2x cl, ss mdc,	N-15 / N-14 Stable Isotope	Radon 222 total	Radon 222, 2x cl, ss mdc,
		(ft)	wat filt (pci/l)	CS-137 (pci/l)	wat filt (pci/l)	Ratio (per mil)	(pci/l)	wat unfilt (pci/l)
PM-6	1/22/2009	70						
	6/15/2009	130						
PM-7	1/21/2009	70						
	6/15/2009	70						

Station ID	Sampling Date	Sampling Depth (ft)	RN-222 2 sigma wat total (pci/l)	Uranium Nat, dissolv (ug/I as U)	Sulfide Dissolved (ug/L as S)	Total Organic Carbon total (mg/L)	Turbidity total (NTU)
PM-6	1/22/2009	70			<2.0	<2.0	na
	6/15/2009	130			na	na	na
PM-7	1/21/2009	70			<0.1	<2.0	na
	6/15/2009	70			na	na	na

\* Represents total analysis in unfiltered samples

### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM-17 (Shallow Regolith) and PM- 18 (Transition Zone)

Station ID	Sampling Date	Sampling Depth	Dissolved Oxygen	pH WH, Field	pH-Lab WH, Lab	Specific Cond., Field	Specific Cond., Lab	Water Temp.
		(ft)	(mg/L)	(standard units)	(standard units)	(us/cm)	(us/cm)	(deg C)
PM-17	1/21/2009	28	5.2	6.1	6.4	100	92	14.4
	6/15/2009	30	9.5	6.1	6.3	92	na	15.0
PM-18	1/21/2009	80	4.3	7.2	7.1	123	110	15.1
	6/15/2009	119	4.6	7.0	7.1	113	na	16.0

	Sampling	Sampling	Hardness, non-	Hardness	Calcium	Magnesium	Potassium	Sodium
Station ID	Date	Depth	carb diss fld.	Total	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	as CaCO3 (mg/l)	(mg/l as CaCO3)	(mg/l as Ca)	(mg/l as Mg)	(mg/l as K)	(mg/l as Na)
PM-17	1/21/2009	28			4.9	6.1	0.89	8.7
	6/15/2009	30			5.1	6.2	0.78	6.8
PM-18	1/21/2009	80			12	5.8	0.81	7.2
	6/15/2009	119			12	5.4	0.79	6.7

Station ID	Sampling Date	Sampling Depth (ft)	Sodium Adsorption Ratio	Sodium Percent	<b>ANC,</b> <b>TIT. 4.5, L</b> (mg/l as CaCO3)	ANC, Unfilt IT Field (mg/L as CaCO3)	Bicarbonate Dissolved (mg/L as HCO3)	Bromide Dissolved (mg/l as Br)
PM-17	1/21/2009	28					42	
	6/15/2009	30					45	

PM-18	1/21/2009	80			57	
	6/15/2009	119			58	

### Pasour Mountain Groundwater Monitoring and Research Station PM-17 (Shallow Regolith) and PM- 18 (Transition Zone)

Station ID	Sampling Date	Sampling Depth (ft)	Chloride Dissolved (mg/l as Cl)	Fluoride Dissolved (mg/l as F)	Silica Dissolved (mg/l as SiO2)	Sulfate Dissolved (mg/l as SO4)	Solids Dissolved (mg/l)	Solids, Residue at 180 deg C (mg/l)
PM-17	1/21/2009	28	2.9	<0.4	23	<2.0	43	460
	6/15/2009	30	2.5	<0.4	23	<2.0	73	na
PM-18	1/21/2009	80	1.3	<0.4	30	3.8	97	<6.2
	6/15/2009	119	1.3	<0.4	30	3.7	91	na

	Sampling	Sampling	Solids, sum of	Nitrogen	Nitrogen	Nitrogen	Nitrogen	NO2 +
Station ID	Date	Depth	constituents	Ammonia	Ammonia +	Ammonia	dissolved	NO3 diss.
		(ft)	diss. (mg/l)	(mg/L as N)	Organic	(mg/L as NH4)	(mg/l as N)	(mg/L as N)
PM-17	1/21/2009	28						0.26
	6/15/2009	30						0.27
PM-18	1/21/2009	80						0.04
	6/15/2009	119						0.05

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/l as N)	Nitrogen, Nitrate Dis (mg/L as N)	Nitrogen, Nitrate Dis (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-17	1/21/2009	28						
	6/15/2009	30						

PM-18	1/21/2009	80			
	6/15/2009	119			

### Pasour Mountain Groundwater Monitoring and Research Station PM-17 (Shallow Regolith) and PM- 18 (Transition Zone)

Station ID	Sampling Date	Sampling Depth	Phosphorus Ortho. dis	Carbon Dioxide, dis	Aluminum Dissolved	Antimony Dissolved	Arsenic Dissolved	Barium Dissolved
		(ft)	(mg/l as P)	(mg/l as CO2)	(ug/l as Al)	(ug/l as Sb)	(ug/l as As)	(ug/l as Ba)
PM-17	1/21/2009	28			68		<2.0	<10
	6/15/2009	30			<50		<2.0	<10
PM-18	1/21/2009	80			<50		3.0	<10
	6/15/2009	119			<50		3.9	<10

	Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Station ID	Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	(ug/l as Be)	(ug/I as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
PM-17	1/21/2009	28			<1.0	<10		<2.0
	6/15/2009	30			<1.0	<10		<2.0
PM-18	1/21/2009	80			<1.0	<10		<2.0
	6/15/2009	119			<1.0	<10		<2.0

Station ID	Sampling Date	Sampling Depth (ft)	Iron Dissolved (ug/I as Fe)	Lead Dissolved (ug/l as Pb)	Manganese Dissolved (ug/l as Mn)	Mercury Dissolved (ug/l as Hg)	Molybdenum Dissolved (ug/l as Mo)	Nickel Dissolved (ug/l as Ni)
PM-17	1/21/2009	28	60	<10	12			<10
	6/15/2009	30	<50	<10	<10			<10
PM-18	1/21/2009	80	<50	<10	<10			<10
	6/15/2009	119	<50	<10	<10			<10

### Pasour Mountain Groundwater Monitoring and Research Station PM-17 (Shallow Regolith) and PM- 18 (Transition Zone)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/l as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-17	1/21/2009	28	<5.0	<5.0	<10			
	6/15/2009	30	<5.0	<5.0	<10			
PM-18	1/21/2009	80	<5.0	<5.0	<10			
	6/15/2009	119	<5.0	<5.0	<10			

Station ID	Sampling Date	Sampling Depth	Gross alpha, 2x cl, ss mdc,	Gross beta, diss as	Gross Beta, 2x cl, ss mdc,	N-15 / N-14 Stable Isotope	Radon 222 total	Radon 222, 2x cl, ss mdc,
		(ft)	wat filt (pci/l)	CS-137 (pci/l)	wat filt (pci/l)	Ratio (per mil)	(pci/l)	wat unfilt (pci/l)
PM-17	1/21/2009	28						
	6/15/2009	30						
PM-18	1/21/2009	80						
	6/15/2009	119						

Station ID	Sampling Date	Sampling Depth (ft)	RN-222 2 sigma wat total (pci/l)	Uranium Nat, dissolv (ug/I as U)	Sulfide Dissolved (ug/L as S)	Total Organic Carbon total (mg/L)	Turbidity total (NTU)
PM-17	1/21/2009	28			<0.1	<2.0	na
	6/15/2009	30			na	na	na
PM-18	1/21/2009	80			<0.1	<2.0	na
	6/15/2009	119			na	na	na

### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM- 22 (Transition Zone) and PM-25 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Dissolved Oxygen (mg/L)	pH WH, Field (standard units)	pH-Lab WH, Lab (standard units)	Specific Cond., Field (us/cm)	Specific Cond., Lab (us/cm)	Water Temp. (deg C)
PM-22	12/15/2008	85	8.0	5.9	5.9	27	25	16.1
	6/8/2009	87	8.4	5.4	5.5	18	na	16.6
PM-25	12/15/2008	75	8.9	4.4	4.9	12.7	<14.9	16.3
	6/8/2009	70	9.1	4.6	4.5	14	na	16.5

	Sampling	Sampling	Hardness, non-	Hardness	Calcium	Magnesium	Potassium	Sodium
Station ID	Date	Depth	carb diss fld.	Total	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	as CaCO3 (mg/l)	(mg/l as CaCO3)	(mg/l as Ca)	(mg/l as Mg)	(mg/l as K)	(mg/l as Na)
PM-22	12/15/2008	85			0.85	1.0	0.44	1.3
	6/8/2009	87			0.69	0.7	0.34	1.3
PM-25	12/15/2008	75			0.19	0.27	0.24	1.2
	6/8/2009	70			0.12	0.22	0.18	1.2

Station ID	Sampling Date	Sampling Depth (ft)	Sodium Adsorption Ratio	Sodium Percent	<b>ANC,</b> <b>TIT. 4.5, L</b> (mg/l as CaCO3)	ANC, Unfilt IT Field (mg/L as CaCO3)	Bicarbonate Dissolved (mg/L as HCO3)	Bromide Dissolved (mg/l as Br)
PM-22	12/15/2008	85					8.8	
	6/8/2009	87					5.3	

PM-25	12/15/2008	75			<1	
	6/8/2009	70			<1	

### Pasour Mountain Groundwater Monitoring and Research Station PM- 22 (Transition Zone) and PM-25 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Chloride Dissolved (mg/l as Cl)	Fluoride Dissolved (mg/l as F)	Silica Dissolved (mg/l as SiO2)	Sulfate Dissolved (mg/I as SO4)	Solids Dissolved (mg/l)	Solids, Residue at 180 deg C (mg/l)
PM-22	12/15/2008	85	1.1	<0.4	9.5	<2.0	25	<6.2
	6/8/2009	87	1.3	<0.4	9.2	<2.0	20	na
PM-25	12/15/2008	75	1.2	<0.4	7.4	<2.0	20	21
	6/8/2009	70	1.4	<0.4	7.6	<2.0	18	na

	Sampling	Sampling	Solids, sum of	Nitrogen	Nitrogen	Nitrogen	Nitrogen	NO2 +
Station ID	Date	Depth	constituents	Ammonia	Ammonia +	Ammonia	dissolved	NO3 diss.
		(ft)	diss. (mg/l)	(mg/L as N)	Organic	(mg/L as NH4)	(mg/l as N)	(mg/L as N)
PM-22	12/15/2008	85						0.06
	6/8/2009	87						0.11
PM-25	12/15/2008	75						0.32
	6/8/2009	70						0.36

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/l as N)	Nitrogen, Nitrate Dis (mg/L as N)	Nitrogen, Nitrate Dis (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-22	12/15/2008	85						
	6/8/2009	87						

PM-25	12/15/2008	75			
	6/8/2009	70			

### Pasour Mountain Groundwater Monitoring and Research Station PM- 22 (Transition Zone) and PM-25 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Phosphorus Ortho, dis (mg/l as P)	Carbon Dioxide, dis (mg/l as CO2)	Aluminum Dissolved (ug/l as Al)	Antimony Dissolved (ug/l as Sb)	Arsenic Dissolved (ug/l as As)	Barium Dissolved (ug/l as Ba)
PM-22	12/15/2008	85			<50		<2.0	<10
	6/8/2009	87			<50		<2.0	<10
PM-25	12/15/2008	75			<50		<2.0	<10
	6/8/2009	70			<50		<2.0	<10

	Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Station ID	Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	(ug/l as Be)	(ug/I as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
PM-22	12/15/2008	85			<1.0	<10		<2.0
	6/8/2009	87			<1.0	<10		<2.0
PM-25	12/15/2008	75			<1.0	<10		<2.0
	6/8/2009	70			<1.0	<10		<2.0

Station ID	Sampling Date	Sampling Depth (ft)	Iron Dissolved (ug/l as Fe)	Lead Dissolved (ug/l as Pb)	Manganese Dissolved (ug/l as Mn)	Mercury Dissolved (ug/l as Hg)	Molybdenum Dissolved (ug/l as Mo)	Nickel Dissolved (ug/l as Ni)
PM-22	12/15/2008	85	410	<10	21			<10
	6/8/2009	87	130	<10	33			<10
PM-25	12/15/2008	75	<50	<10	32			<10
	6/8/2009	70	<50	<10	37			<10

### Pasour Mountain Groundwater Monitoring and Research Station PM- 22 (Transition Zone) and PM-25 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/l as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-22	12/15/2008	85	<5.0	<5.0	1600			
	6/8/2009	87	<5.0	<5.0	640			
PM-25	12/15/2008	75	<5.0	<5.0	<10			
	6/8/2009	70	<5.0	<5.0	<10			

	Sampling	Sampling	Gross alpha,	Gross beta,	Gross Beta, 2x	N-15 / N-14	Radon 222	Radon 222,
Station ID	Date	Depth	2x cl, ss mdc,	diss as	cl, ss mdc,	Stable Isotope	total	2x cl, ss mdc,
		(ft)	wat filt (pci/l)	CS-137 (pci/l)	wat filt (pci/l)	Ratio (per mil)	(pci/l)	wat unfilt (pci/l)
PM-22	12/15/2008	85						
	6/8/2009	87						
PM-25	12/15/2008	75						
	6/8/2009	70						

Station ID	Sampling Date	Sampling Depth (ft)	RN-222 2 sigma wat total (pci/l)	Uranium Nat, dissolv (ug/I as U)	Sulfide Dissolved (ug/L as S)	Total Organic Carbon total (mg/L)	Turbidity total (NTU)
PM-22	12/15/2008	85			<0.1J6	<2.0	na
	6/8/2009	87			na	na	na
PM-25	12/15/2008	75			<0.1J6	<2.0	na
	6/8/2009	70			na	na	na

### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM-5 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth	Dissolved Oxygen	pH WH, Field (standard units)	pH-Lab WH, Lab	Specific Cond., Field	Specific Cond., Lab	Water Temp.
PM-5	12/15/2008	60	na (IIIg/L)	4.7	5.4	16	16	15.4
	6/22/2008	60	na	4.2	4.9	16	na	16.3

Station ID	Sampling Date	Sampling Depth (ft)	Hardness, non- carb diss fld. as CaCO3 (mg/l)	Hardness Total (mg/l as CaCO3)	Calcium Dissolved (mg/l as Ca)	Magnesium Dissolved (mg/l as Mg)	Potassium Dissolved (mg/l as K)	Sodium Dissolved (mg/l as Na)
PM-5	12/15/2008	60			0.46	0.19	0.28	1.6
	6/22/2008	60			0.17	0.16	0.26	1.7

	Sampling	Sampling	Sodium	Sodium	ANC,	ANC, Unfilt	Bicarbonate	Bromide
Station ID	Date	Depth	Adsorption	Percent	TIT. 4.5, L	IT Field	Dissolved	Dissolved
		(ft)	Ratio		(mg/l as CaCO3)	(mg/L as CaCO3)	(mg/L as HCO3)	(mg/l as Br)
PM-5	12/15/2008	60					2.7	
	6/22/2008	60					1.0	

# Pasour Mountain Groundwater Monitoring and Research Station PM-5 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Chloride Dissolved (mg/l as Cl)	Fluoride Dissolved (mg/l as F)	Silica Dissolved (mg/l as SiO2)	Sulfate Dissolved (mɑ/l as SO4)	Solids Dissolved (mɑ/l)	Solids, Residue at 180 deg C (mɑ/l)
PM-5	12/15/2008	60	1.4	<0.4	7.8	<2.0	18	131
	6/22/2008	60	1.3	<0.4	7.9	<2.0	16	na

Station ID	Sampling Date	Sampling Depth (ft)	Solids, sum of constituents diss. (mg/l)	Nitrogen Ammonia (mg/L as N)	Nitrogen Ammonia + Organic	Nitrogen Ammonia (mg/L as NH4)	Nitrogen dissolved (mg/l as N)	NO2 + NO3 diss. (mg/L as N)
PM-5	12/15/2008	60						0.34
	6/22/2008	60						0.26

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/I as N)	Nitrogen, Nitrate Dis (mg/L as N)	Nitrogen, Nitrate Dis (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-5	12/15/2008	60						
	6/22/2008	60						

# Pasour Mountain Groundwater Monitoring and Research Station PM-5 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Phosphorus Ortho, dis (mg/l as P)	Carbon Dioxide, dis (mg/l as CO2)	Aluminum Dissolved (ug/l as Al)	Antimony Dissolved (ug/l as Sb)	Arsenic Dissolved (ug/l as As)	Barium Dissolved (ug/l as Ba)
PM-5	12/15/2008	60			<50		<2.0	<10
	6/22/2008	60			<50		<2.0	<10

	Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Station ID	Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	(ug/l as Be)	(ug/l as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
PM-5	12/15/2008	60			<1.0	<10		<2.0
	6/22/2008	60			<1.0	<10		<2.0

Station ID	Sampling Date	Sampling Depth (ft)	Iron Dissolved (ug/l as Fe)	Lead Dissolved (ug/l as Pb)	Manganese Dissolved (ug/l as Mn)	Mercury Dissolved (ug/l as Hg)	Molybdenum Dissolved (ug/l as Mo)	Nickel Dissolved (ug/l as Ni)
PM-5	12/15/2008	60	<50	<10	49			<10
	6/22/2008	60	<50	<10	35			<10

# Pasour Mountain Groundwater Monitoring and Research Station PM-5 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/l as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-5	12/15/2008	60	<5.0	<5.0	<10			
	6/22/2008	60	<5.0	<5.0	<10			

Station ID	Sampling Date	Sampling Depth (ft)	Gross alpha, 2x cl, ss mdc, wat filt (pci/l)	Gross beta, diss as CS-137 (pci/l)	Gross Beta, 2x cl, ss mdc, wat filt (pci/l)	N-15 / N-14 Stable Isotope Ratio (per mil)	Radon 222 total (pci/l)	Radon 222, 2x cl, ss mdc, wat unfilt (pci/l)
PM-5	12/15/2008	60						
	6/22/2008	60						

Station ID	Sampling Date	Sampling Depth (ft)	RN-222 2 sigma wat total (pci/l)	Uranium Nat, dissolv (ug/I as U)	Sulfide Dissolved (ug/L as S)	Total Organic Carbon total (mg/L)	Turbidity total (NTU)
PM-5	12/15/2008	60			<0.1 J6	<2	na
	6/22/2008	60			na	na	na

### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM-14 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth	Dissolved Oxygen	pH WH, Field	pH-Lab WH, Lab	Specific Cond., Field	Specific Cond., Lab	Water Temp.
		(π)	(mg/L)	(standard units)	(standard units)	(us/cm)	(us/cm)	(deg C)
PM-14	1/21/2009	45	8.8	5.1	5.1	14	13	14.4
	6/22/2008	45	10.7	4.5	4.8	14	13	16.5

Station ID	Sampling Date	Sampling Depth (ft)	Hardness, non- carb diss fld. as CaCO3 (mg/l)	Hardness Total (mg/l as CaCO3)	Calcium Dissolved (mg/l as Ca)	Magnesium Dissolved (mg/l as Mg)	Potassium Dissolved (mg/l as K)	Sodium Dissolved (mg/l as Na)
PM-14	1/21/2009	45			0.19	0.21	0.19	1.4
	6/22/2008	45			0.20	0.2	0.18	1.3

	Sampling	Sampling	Sodium	Sodium	ANC,	ANC, Unfilt	Bicarbonate	Bromide
Station ID	Date	Depth	Adsorption	Percent	TIT. 4.5, L	IT Field	Dissolved	Dissolved
		(ft)	Ratio		(mg/l as CaCO3)	(mg/L as CaCO3)	(mg/L as HCO3)	(mg/l as Br)
PM-14	1/21/2009	45					<1	
	6/22/2008	45					<1	

# Pasour Mountain Groundwater Monitoring and Research Station PM-14 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Chloride Dissolved (mg/l as Cl)	Fluoride Dissolved (mg/l as F)	Silica Dissolved (mg/l as SiO2)	Sulfate Dissolved (mg/I as SO4)	Solids Dissolved (mg/l)	Solids, Residue at 180 deg C (mg/l)
PM-14	1/21/2009	45	1.2	<0.4	6.8	<2.0	<12	186
	6/22/2008	45	1.2	<0.4	7.3	<2.0	14	na

Station ID	Sampling Date	Sampling Depth (ft)	Solids, sum of constituents diss. (ma/l)	Nitrogen Ammonia (mg/L as N)	Nitrogen Ammonia + Organic	Nitrogen Ammonia (mg/L as NH4)	Nitrogen dissolved (mg/l as N)	NO2 + NO3 diss. (mg/L as N)
PM-14	1/21/2009	45		, ,			,	0.42
	6/22/2008	45						

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/I as N)	Nitrogen, Nitrate Dis (mg/L as N)	Nitrogen, Nitrate Dis (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-14	1/21/2009	45						
	6/22/2008	45						

# Pasour Mountain Groundwater Monitoring and Research Station PM-14 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Phosphorus Ortho, dis (mg/l as P)	Carbon Dioxide, dis (mg/l as CO2)	Aluminum Dissolved (ug/l as Al)	Antimony Dissolved (ug/l as Sb)	Arsenic Dissolved (ug/l as As)	Barium Dissolved (ug/l as Ba)
PM-14	1/21/2009	45			<50		<2.0	<10
	6/22/2008	45			<50		<2.0	<10

	Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Station ID	Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	(ug/l as Be)	(ug/I as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
PM-14	1/21/2009	45			<1.0	<10		<2.0
	6/22/2008	45			<1.0	<10		<2.0

Station ID	Sampling Date	Sampling Depth (ft)	Iron Dissolved (ug/l as Fe)	Lead Dissolved (ug/l as Pb)	Manganese Dissolved (ug/l as Mn)	Mercury Dissolved (ug/l as Hg)	Molybdenum Dissolved (ug/l as Mo)	Nickel Dissolved (ug/l as Ni)
PM-14	1/21/2009	45	<50	<10	28			<10
	6/22/2008	45	<50	<10	29			<10

# Pasour Mountain Groundwater Monitoring and Research Station PM-14 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/l as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-14	1/21/2009	45	<5.0	<5.0	<10			
	6/22/2008	45	<5.0	<5.0	<10			

Station ID	Sampling Date	Sampling Depth (ft)	Gross alpha, 2x cl, ss mdc, wat filt (pci/l)	Gross beta, diss as CS-137 (pci/l)	Gross Beta, 2x cl, ss mdc, wat filt (pci/l)	N-15 / N-14 Stable Isotope Ratio (per mil)	Radon 222 total (pci/l)	Radon 222, 2x cl, ss mdc, wat unfilt (pci/l)
PM-14	1/21/2009	45						
	6/22/2008	45						

Station ID	Sampling Date	Sampling Depth (ft)	RN-222 2 sigma wat total (pci/l)	Uranium Nat, dissolv (ug/I as U)	Sulfide Dissolved (ug/L as S)	Total Organic Carbon total (mg/L)	Turbidity total (NTU)
PM-14	1/21/2009	45			<0.1	<2	na
	6/22/2008	45			na	na	na

### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM-15 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth	Dissolved Oxygen	pH WH, Field	pH-Lab WH, Lab	Specific Cond., Field	Specific Cond., Lab	Water Temp.
		(ft)	(mg/L)	(standard units)	(standard units)	(us/cm)	(us/cm)	(deg C)
PM-15	1/21/2009	48	na	5.2		17.3	18	15.6
	6/22/2008	53	8.0	4.8	5.4	15	na	16.8

Station ID	Sampling Date	Sampling Depth (ft)	Hardness, non- carb diss fld. as CaCO3 (mg/l)	Hardness Total (mg/l as CaCO3)	Calcium Dissolved (mg/l as Ca)	Magnesium Dissolved (mg/l as Mg)	Potassium Dissolved (mg/l as K)	Sodium Dissolved (mg/l as Na)
PM-15	1/21/2009	48			0.44	0.79	0.22	1.3
	6/22/2008	53			0.4	0.73	0.21	1.2

	Sampling	Sampling	Sodium	Sodium	ANC,	ANC, Unfilt	Bicarbonate	Bromide
Station ID	Date	Depth	Adsorption	Percent	TIT. 4.5, L	IT Field	Dissolved	Dissolved
		(ft)	Ratio		(mg/l as CaCO3)	(mg/L as CaCO3)	(mg/L as HCO3)	(mg/l as Br)
PM-15	1/21/2009	48					2.7	
	6/22/2008	53					2.8	

# Pasour Mountain Groundwater Monitoring and Research Station PM-15 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Chloride Dissolved (mg/l as Cl)	Fluoride Dissolved (mg/Las F)	Silica Dissolved (mg/l as SiO2)	Sulfate Dissolved (mg/Las SO4)	Solids Dissolved (mg/l)	Solids, Residue at 180 deg C (mg/l)
PM-15	1/21/2009	48	1.4	<0.4	7.5	<2.0	<12	148
	6/22/2008	53	1.2	<0.4	7.4	<2.0	16	na

Station ID	Sampling Date	Sampling Depth (ft)	Solids, sum of constituents diss. (mg/l)	Nitrogen Ammonia (mg/L as N)	Nitrogen Ammonia + Organic	Nitrogen Ammonia (mg/L as NH4)	Nitrogen dissolved (mg/l as N)	NO2 + NO3 diss. (mg/L as N)
PM-15	1/21/2009	48						0.35
	6/22/2008	53						0.35

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/I as N)	Nitrogen, Nitrate Dis (mg/L as N)	Nitrogen, Nitrate Dis (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-15	1/21/2009	48						
	6/22/2008	53						

# Pasour Mountain Groundwater Monitoring and Research Station PM-15 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Phosphorus Ortho, dis (mg/l as P)	Carbon Dioxide, dis (mg/l as CO2)	Aluminum Dissolved (ug/l as Al)	Antimony Dissolved (ug/l as Sb)	Arsenic Dissolved (ug/l as As)	Barium Dissolved (ug/l as Ba)
PM-15	1/21/2009	48			<50		<2.0	<10
	6/22/2008	53			<50		<2.0	<10

	Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Station ID	Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	(ug/l as Be)	(ug/l as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
PM-15	1/21/2009	48			<1.0	<10		<2.0
	6/22/2008	53			<1.0	<10		<2.0

Station ID	Sampling Date	Sampling Depth (ft)	Iron Dissolved (ug/l as Fe)	Lead Dissolved (ug/l as Pb)	Manganese Dissolved (ug/l as Mn)	Mercury Dissolved (ug/l as Hg)	Molybdenum Dissolved (ug/l as Mo)	Nickel Dissolved (ug/l as Ni)
PM-15	1/21/2009	48	<50	<10	18			<10
	6/22/2008	53	<50	<10	18			<10

### Pasour Mountain Groundwater Monitoring and Research Station PM-15 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/l as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-15	1/21/2009	48	<5.0	<5.0	<10			
	6/22/2008	53	<5.0	<5.0	<10			

Station ID	Sampling Date	Sampling Depth (ft)	Gross alpha, 2x cl, ss mdc, wat filt (pci/l)	Gross beta, diss as CS-137 (pci/l)	Gross Beta, 2x cl, ss mdc, wat filt (pci/l)	N-15 / N-14 Stable Isotope Ratio (per mil)	Radon 222 total (pci/l)	Radon 222, 2x cl, ss mdc, wat unfilt (pci/l)
PM-15	1/21/2009	48						
	6/22/2008	53						

Station ID	Sampling Date	Sampling Depth (ft)	RN-222 2 sigma wat total (pci/l)	Uranium Nat, dissolv (ug/I as U)	Sulfide Dissolved (ug/L as S)	Total Organic Carbon total (mg/L)	Turbidity total (NTU)
PM-15	1/21/2009	48			<0.1	<2	na
	6/22/2008	53			na	na	na

### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM-19 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth	Dissolved Oxygen	pH WH, Field	pH-Lab WH, Lab	Specific Cond., Field	Specific Cond., Lab	Water Temp.
		(ft)	(mg/L)	(standard units)	(standard units)	(us/cm)	(us/cm)	(deg C)
PM-19	1/21/2009	47	0.5	5.6	5.9	107	99	15.2
	6/22/2008	50	0.7	5.5	5.8	95	na	15.8

Station ID	Sampling Date	Sampling Depth (ft)	Hardness, non- carb diss fld. as CaCO3 (mg/l)	Hardness Total (mg/l as CaCO3)	Calcium Dissolved (mg/l as Ca)	Magnesium Dissolved (mg/l as Mg)	Potassium Dissolved (mg/l as K)	Sodium Dissolved (mg/l as Na)
PM-19	1/21/2009	47			3.2	1.3	0.97	14
	6/22/2008	50			3.2	1.2	0.80	13

	Sampling	Sampling	Sodium	Sodium	ANC,	ANC, Unfilt	Bicarbonate	Bromide
Station ID	Date	Depth	Adsorption	Percent	TIT. 4.5, L	IT Field	Dissolved	Dissolved
		(ft)	Ratio		(mg/l as CaCO3)	(mg/L as CaCO3)	(mg/L as HCO3)	(mg/l as Br)
PM-19	1/21/2009	47					29	
	6/22/2008	50					28.0	

# Pasour Mountain Groundwater Monitoring and Research Station PM-19 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth	Chloride Dissolved	Fluoride Dissolved	Silica Dissolved	Sulfate Dissolved	Solids Dissolved	Solids, Residue at 180 deg C
		(ft)	(mg/l as Cl)	(mg/Las F)	(mg/l as SiO2)	(mg/Las SO4)	(mg/l)	(mg/l)
PM-19	1/21/2009	47	8.4	<0.4	14	<2.0	58	<6.2
	6/22/2008	50	5.8	<0.4	14	<2.0	63	na

Station ID	Sampling Date	Sampling Depth (ft)	Solids, sum of constituents diss. (mg/l)	<b>Nitrogen</b> Ammonia (mg/L as N)	Nitrogen Ammonia + Organic	<b>Nitrogen</b> <b>Ammonia</b> (mg/L as NH4)	Nitrogen dissolved (mg/l as N)	NO2 + NO3 diss. (mg/L as N)
PM-19	1/21/2009	47						1.80
	6/22/2008	50						3.70

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/I as N)	Nitrogen, Nitrate Dis (mg/L as N)	Nitrogen, Nitrate Dis (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-19	1/21/2009	47						
	6/22/2008	50						

# Pasour Mountain Groundwater Monitoring and Research Station PM-19 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Phosphorus Ortho, dis (mg/l as P)	Carbon Dioxide, dis (mg/l as CO2)	Aluminum Dissolved (ug/l as Al)	Antimony Dissolved (ug/l as Sb)	Arsenic Dissolved (ug/l as As)	Barium Dissolved (ug/l as Ba)
PM-19	1/21/2009	47			<50		<2.0	<10
	6/22/2008	50			<50		<2.0	<10

	Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Station ID	Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	(ug/l as Be)	(ug/l as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
PM-19	1/21/2009	47			<1.0	<10		<2.0
	6/22/2008	50			<1.0	<10		<2.0

Station ID	Sampling Date	Sampling Depth (ft)	Iron Dissolved (ug/l as Fe)	Lead Dissolved (ug/l as Pb)	Manganese Dissolved (ug/l as Mn)	Mercury Dissolved (ug/l as Hg)	Molybdenum Dissolved (ug/l as Mo)	Nickel Dissolved (ug/l as Ni)
PM-19	1/21/2009	47	<50	<10	47			<10
	6/22/2008	50	<50	<10	50			<10

### Pasour Mountain Groundwater Monitoring and Research Station PM-19 (Shallow Regolith)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/l as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-19	1/21/2009	47	<5.0	<5.0	<10			
	6/22/2008	50	<5.0	<5.0	<10			

Station ID	Sampling Date	Sampling Depth (ft)	Gross alpha, 2x cl, ss mdc, wat filt (pci/l)	Gross beta, diss as CS-137 (pci/l)	Gross Beta, 2x cl, ss mdc, wat filt (pci/l)	N-15 / N-14 Stable Isotope Ratio (per mil)	Radon 222 total (pci/l)	Radon 222, 2x cl, ss mdc, wat unfilt (pci/l)
PM-19	1/21/2009	47						
	6/22/2008	50						

Station ID	Sampling Date	Sampling Depth (ft)	RN-222 2 sigma wat total (pci/l)	Uranium Nat, dissolv (ug/I as U)	Sulfide Dissolved (ug/L as S)	Total Organic Carbon total (mg/L)	Turbidity total (NTU)
PM-19	1/21/2009	47			<0.1	<2.0	na
	6/22/2008	50			na	na	na

#### Water Quality Analysis Pasour Mountain Groundwater Monitoring and Research Station PM-O (Bedrock)

Station ID	Sampling Date	Sampling Depth	Dissolved Oxygen	pH WH, Field	pH-Lab WH, Lab	Specific Cond., Field	Specific Cond., Lab	Water Temp.
		(ft)	(mg/L)	(standard units)	(standard units)	(us/cm)	(us/cm)	(deg C)
PM-O	1/22/2009	na*	0.27	7.9	7.8	157	150	17.3
	6/22/2008	na	8.42	7.0	6.9	90	na	16.9

Station ID	Sampling Date	Sampling Depth (ft)	Hardness, non- carb diss fld. as CaCO3 (mg/l)	Hardness Total (mg/l as CaCO3)	Calcium Dissolved (mg/l as Ca)	Magnesium Dissolved (mg/l as Mg)	Potassium Dissolved (mg/l as K)	Sodium Dissolved (mg/l as Na)
PM-O	1/22/2009	na*			22	4.4	0.52	8.9
	6/22/2008	na			19	0.9	0.61	6.2

Station ID	Sampling	Sampling	Sodium Advantion	Sodium Percent		ANC, Unfilt	Bicarbonate	Bromide
Station ID	Dale	Depin	Ausorption	reicent	111. <b>4.3</b> , L			
		(π)	Ratio		(mg/l as CaCO3)	(mg/L as CaCO3)	(mg/L as HCO3)	(mg/i as Br)
PM-O	1/22/2009	na*					30	
	6/22/2008	na					62	

### Pasour Mountain Groundwater Monitoring and Research Station PM-O (Bedrock)

Station ID	Sampling Date	Sampling Depth (ft)	Chloride Dissolved (mg/l as Cl)	Fluoride Dissolved (mg/l as F)	Silica Dissolved (mg/l as SiO2)	Sulfate Dissolved (mg/l as SO4)	Solids Dissolved (mg/l)	Solids, Residue at 180 deg C (mg/l)
PM-O	1/22/2009	na*	1.3	<0.4	31	<2.0	126	<6.2
	6/22/2008	na	1.2	<0.4	34	<2.0	100	na

Station ID	Sampling Date	Sampling Depth (ft)	Solids, sum of constituents diss. (mg/l)	Nitrogen Ammonia (mg/L as N)	Nitrogen Ammonia + Organic	Nitrogen Ammonia (mg/L as NH4)	Nitrogen dissolved (mg/l as N)	NO2 + NO3 diss. (mg/L as N)
PM-O	1/22/2009	na*						<0.02
	6/22/2008	na						<0.02

Station ID	Sampling Date	Sampling Depth (ft)	Nitrogen Nitrite Dis (mg/I as N)	Nitrogen, Nitrate Dis (mg/L as N)	Nitrogen, Nitrate Dis (mg/L as NO3)	Nitrogen Nitrite Dis (mg/I as NO2)	Nitrogen Organic Dis (mg/l as N)	Phosphate Ortho, dis (mg/l as PO4)
PM-O	1/22/2009	na*						
	6/22/2008	na						

### Pasour Mountain Groundwater Monitoring and Research Station PM-O (Bedrock)

Station ID	Sampling Date	Sampling Depth (ft)	Phosphorus Ortho, dis (mg/l as P)	Carbon Dioxide, dis (mg/l as CO2)	Aluminum Dissolved (ug/l as Al)	Antimony Dissolved (ug/l as Sb)	Arsenic Dissolved (ug/l as As)	Barium Dissolved (ug/l as Ba)
PM-O	1/22/2009	na*			<50		3.3	25
	6/22/2008	na			<50		<2.0	21

	Sampling	Sampling	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper
Station ID	Date	Depth	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved	Dissolved
		(ft)	(ug/l as Be)	(ug/l as B)	(ug/l as Cd)	(ug/l as Cr)	(ug/l as Co)	(ug/l as Cu)
PM-O	1/22/2009	na*			<1.0	<10		<2.0
	6/22/2008	na			<1.0	<10		<2.0

Station ID	Sampling Date	Sampling Depth (ft)	Iron Dissolved (ug/l as Fe)	Lead Dissolved (ug/l as Pb)	Manganese Dissolved (ug/I as Mn)	Mercury Dissolved (ug/l as Hg)	Molybdenum Dissolved (ug/l as Mo)	Nickel Dissolved (ug/l as Ni)
PM-O	1/22/2009	na*	<50	<10	<10			<10
	6/22/2008	na	<50	<10	<10			<10

### Pasour Mountain Groundwater Monitoring and Research Station PM-O (Bedrock)

Station ID	Sampling Date	Sampling Depth (ft)	Selenium Dissolved (ug/l as Se)	Silver Dissolved (ug/l as Ag)	Zinc Dissolved (ug/l as Zn)	Alpha count, 2 sigma wat dis as TH-230 (pci/l)	Alpha radio, wat dis as TH-230 (pci/l)	Beta, 2 sigma wat dis as CS-137 (pci/l)
PM-O	1/22/2009	na*	<5.0	<5.0	120			
	6/22/2008	na	<5.0	<5.0	1900			

Station ID	Sampling Date	Sampling Depth (ft)	Gross alpha, 2x cl, ss mdc, wat filt (pci/l)	Gross beta, diss as CS-137 (pci/l)	Gross Beta, 2x cl, ss mdc, wat filt (pci/l)	N-15 / N-14 Stable Isotope Ratio (per mil)	Radon 222 total (pci/l)	Radon 222, 2x cl, ss mdc, wat unfilt (pci/l)
PM-O	1/22/2009	na*						
	6/22/2008	na						

Station ID	Sampling Date	Sampling Depth (ft)	RN-222 2 sigma wat total (pci/l)	Uranium Nat, dissolv (ug/I as U)	Sulfide Dissolved (ug/L as S)	Total Organic Carbon total (mg/L)	Turbidity total (NTU)
PM-O	1/22/2009	na*			<0.1	<2.0	na
	6/22/2008	na			na	na	na

\* Dedicated submersible pump in the well; pump depth not available; sampled at wellhead spigot