Solid Stream Data

Sample Stream: ESP Hopper Ash-Field 1

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3		Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ng/g	<	13.1	<	20.8	<	20.7	<	20.8	<	18.2	--	100%
Organics, Semi-volatile	Chrysene	SW 8270	ng/g	<	22.2	<	17.9	<	17.8	<	17.9	<	19.3	--	100%
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ng/g	<	30.3	<	11.7	<	11.7	<	11.7	<	17.9	--	100%
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ng/g	<	15.7	<	27.0	<	26.9	<	27.0	<	23.2	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ng/g	<	19.3	<	28.1	<	27.9	<	28.1	<	25.1	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ng/g	<	13.6	<	17.9	<	17.8	<	17.9	<	16.4	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ng/g	<	16.4	<	10.8	<	10.8	<	10.8	<	12.7	--	100%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ng/g	<	11.2	<	17.2	<	17.1	<	17.2	<	15.2	--	100%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ng/g	<	120	<	120	<	120	<	120	<	120	--	100%
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ng/g	<	9.3	<	11.2	<	11.2	<	11.2	<	10.6	--	100%
Organics, Semi-volatile	Diphenylamine	SW 8270	ng/g	<	17.5	<	9.2	<	9.2	<	9.2	<	12.0	--	100%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ng/g	<	16.7	<	22.6	<	22.5	<	22.6	<	20.6	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ng/g	<	21.2	<	15.7	<	15.6	<	15.7	<	17.5	--	100%
Organics, Semi-volatile	Fluorene	SW 8270	ng/g	<	11.2	<	12.7	<	12.6	<	12.7	<	12.2	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ng/g	<	7.8	<	10.5	<	10.4	<	10.5	<	9.6	--	100%
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ng/g	<	23.2	<	17.1	<	17.0	<	17.1	<	19.1	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ng/g	<	296	<	196	<	195	<	196	<	229	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ng/g	<	19.7	<	21.2	<	21.1	<	21.2	<	20.7	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ng/g	<	17.4	<	44.3	<	44.1	<	44.3	<	35.3	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ng/g	<	9.5	<	20.5	<	20.4	<	20.5	<	16.8	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ng/g	<	50	<	50	<	50	<	50	<	50	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ng/g	<	43.5	<	21.0	<	20.9	<	21.0	<	28.5	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ng/g	<	44.2	<	26.2	<	26.1	<	26.2	<	32.2	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ng/g	<	18.8	<	9.0	<	8.9	<	9.0	<	12.2	--	100%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ng/g	<	24.9	<	21.8	<	21.7	<	21.8	<	22.8	--	100%
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ng/g	<	31.3	<	19.9	<	19.8	<	19.9	<	23.7	--	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ng/g	<	24.2	<	15.9	<	15.9	<	15.9	<	18.7	--	100%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ng/g	<	17.5	<	28.1	<	27.9	<	28.1	<	24.5	--	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ng/g	<	14.7	<	12.5	<	12.4	<	12.5	<	13.2	--	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ng/g	<	68.8	<	46.0	<	45.8	<	46.0	<	53.5	--	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ng/g	<	28.7	<	29.6	<	29.5	<	29.6	<	29.3	--	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ng/g	<	17.9	<	12.9	<	12.8	<	12.9	<	14.5	--	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ng/g	<	20.7	<	15.6	<	15.5	<	15.6	<	17.3	--	100%

Solid Stream Data

Sample Stream: ESP Hopper Ash-Field 1

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3		Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	Phenol	SW 8270	ng/g	<	13.3	<	29.4	<	29.3	<	29.4	<	24.0	- -	100%
Organics, Semi-volatile	Pronamide	SW 8270	ng/g	<	24.6	<	8.03	<	8.00	<	8.03	<	13.5	- -	100%
Organics, Semi-volatile	Pyrene	SW 8270	ng/g	<	15.5	<	13.6	<	13.5	<	13.6	<	14.2	- -	100%
Organics, Semi-volatile	Pyridine	SW 8270	ng/g	<	38.5	<	19.6	<	19.5	<	19.6	<	25.9	- -	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ng/g	<	18.7	<	20.2	<	20.1	<	20.2	<	19.7	- -	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ng/g	<	24.3	<	12.8	<	12.7	<	12.8	<	16.6	- -	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ng/g	<	24.1	<	26.6	<	26.5	<	26.6	<	25.7	- -	100%
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ng/g		550	<	19.4	<	19.3	<	19.4		190	775	3%
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ng/g	<	18.6	<	24.8	<	24.7	<	24.8	<	22.7	- -	100%
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ng/g	<	17.1	<	24.2	<	24.1	<	24.2	<	21.8	- -	100%

Solid Stream Data

Sample Stream: ESP Hopper Ash-Field 2

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3	Run 3d	Average	95% CI	DL Ratio
Anions	Chloride	SM407C	ug/g	< 99.90	< 99.70	< 99.80	< 99.80	< 99.8	- -	100%
Anions	Fluoride	EPA 340.2	ug/g	139.00	152.00	83.40	45.40	124.8	90.5	
Metals	Aluminum	SW 6010	ug/g	83,768	89,800	92,100	68,200	88,556	10,691	
Metals	Antimony	ICP-MS	ug/g	4.83	3.87	3.86	3.76	4.19	1.38	
Metals	Arsenic	SW 7060	ug/g	74.2	67.4	74.2	61.1	71.9	9.8	
Metals	Barium	SW 6010	ug/g	449	503	526	467	493	98.3	
Metals	Beryllium	SW 6010	ug/g	18.7	16.5	16.3	19.2	17.2	3.36	
Metals	Cadmium	SW 7131	ug/g	5.73	5.20	5.33	5.03	5.42	0.69	
Metals	Calcium	SW 6010	ug/g	15,230	16,000	15,700	14,800	15,643	964	
Metals	Chromium	SW 6010	ug/g	194	193	271	190	219	111	
Metals	Cobalt	SW 6010	ug/g	41.3	45.5	41.3	38.8	42.7	6.04	
Metals	Copper	SW 6010	ug/g	126	109	218	107	151	146	
Metals	Iron	SW 6010	ug/g	83,968	78,500	77,600	74,600	80,023	8,562	
Metals	Lead	SW 7421	ug/g	103	87.0	97.7	97.3	96.0	20.5	
Metals	Magnesium	SW 6010	ug/g	3,627	4,170	4,420	2,620	4,072	1,007	
Metals	Manganese	SW 6010	ug/g	227	212	209	206	216	24.6	
Metals	Mercury	SW 7471	ug/g	0.096	0.202	0.235	0.258	0.178	0.181	
Metals	Molybdenum	SW 6010	ug/g	49.1	35.5	61.4	38.1	48.7	32.2	
Metals	Nickel	SW 6010	ug/g	165	166	144	154	158	31.1	
Metals	Phosphorus	SW 6010	ug/g	< 72.9	< 71.4	< 71.3	< 72.7	< 71.9	- -	100%
Metals	Potassium	SW 6010	ug/g	17,936	17,800	18,600	16,000	18,112	1,064	
Metals	Selenium	SW 7740	ug/g	15.1	17.3	17.5	16.2	16.6	3.27	
Metals	Silicon	SW 6010	ug/g	221,443	215,000	209,000	218,000	215,148	15,459	
Metals	Sodium	SW 6010	ug/g	6,603	5,660	5,590	5,750	5,951	1,406	
Metals	Strontium	SW 6010	ug/g	309	333	340	300	327	41	
Metals	Titanium	SW 6010	ug/g	6,583	6,410	6,360	6,650	6,451	291	
Metals	Vanadium	SW 6010	ug/g	382	347	341	348	357	55	
Metals	Zinc	SW 6010	ug/g	653	570	566	606	596	122	
Radionuclides	Actinium-228 @ 338 KeV	EPA 901.1	pCi/g	2.3	2.0	2.2	2.4	2.2	0.4	
Radionuclides	Actinium-228 @ 911 KeV	EPA 901.1	pCi/g	2.4	2.2	2.0	2.3	2.2	0.5	
Radionuclides	Actinium-228 @ 968 KeV	EPA 901.1	pCi/g	2.6	2.6	2.7	2.7	2.6	0.1	

Solid Stream Data

Sample Stream: ESP Hopper Ash-Field 2

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3	Run 3d	Average	95% CI	DL Ratio
Radionuclides	Bismuth-212 @ 727 KeV	EPA 901.1	pCi/g	3.4	2.4	2.7	2.7	2.8	1.3	
Radionuclides	Bismuth-214 @ 1120.4 KeV	EPA 901.1	pCi/g	6.6	6.2	6.0	6.0	6.3	0.8	
Radionuclides	Bismuth-214 @ 1764.7 KeV	EPA 901.1	pCi/g	6.1	5.6	5.4	5.6	5.7	0.9	
Radionuclides	Bismuth-214 @ 609.4 KeV	EPA 901.1	pCi/g	6.9	5.5	5.7	6.2	6.0	1.9	
Radionuclides	K-40 @ 1460 KeV	EPA 901.1	pCi/g	18	17	17	19	17	1.4	
Radionuclides	Lead-210 @ 46 KeV	EPA 901.1	pCi/g	7.8	7.3	8.4	7.6	7.8	1.4	
Radionuclides	Lead-212 @ 238 KeV	EPA 901.1	pCi/g	1.8	1.6	2.2	1.9	1.9	0.8	
Radionuclides	Lead-214 @ 295.2 KeV	EPA 901.1	pCi/g	6.6	5.8	5.7	6.0	6.0	1.2	
Radionuclides	Lead-214@ 352.0 KeV	EPA 901.1	pCi/g	6.6	5.7	6.0	6.4	6.1	1.1	
Radionuclides	Radium-226 @ 186.0 KeV	EPA 901.1	pCi/g	11	9.2	8.9	9.5	9.7	2.8	
Radionuclides	Thallium-208 @ 583 KeV	EPA 901.1	pCi/g	2.3	2.2	2.0	2.2	2.2	0.4	
Radionuclides	Thallium-208 @ 860 KeV	EPA 901.1	pCi/g	3.6	ND	3.1	2.6	2.2	4.8	
Radionuclides	Thorium-234 @ 63.3 KeV	EPA 901.1	pCi/g	6.2	5.1	5.1	5.8	5.5	1.6	
Radionuclides	Thorium-234 @ 92.6 KeV	EPA 901.1	pCi/g	4.3	4.6	5.5	4.3	4.8	1.6	
Radionuclides	Uranium-235 @ 143 KeV	EPA 901.1	pCi/g	0.28	0.3	2.2	0.2	0.9	2.8	
Organics, Semi-volatile	1,2,4,5-Tetrachlorobenzene	SW 8270	ng/g	< 19.3	< 13.0	< 13.0		< 15.1	--	100%
Organics, Semi-volatile	1,2,4-Trichlorobenzene	SW 8270	ng/g	< 19.7	< 19.6	< 19.6		< 19.6	--	100%
Organics, Semi-volatile	1,2-Dichlorobenzene	SW 8270	ng/g	< 26.0	< 21.1	< 21.1		< 22.7	--	100%
Organics, Semi-volatile	1,2-Diphenylhydrazine	SW 8270	ng/g	< 100	< 100	< 100		< 100	--	100%
Organics, Semi-volatile	1,3-Dichlorobenzene	SW 8270	ng/g	< 13.2	< 23.9	< 23.9		< 20.3	--	100%
Organics, Semi-volatile	1,4-Dichlorobenzene	SW 8270	ng/g	< 27.0	< 19.6	< 19.6		< 22.1	--	100%
Organics, Semi-volatile	1-Chloronaphthalene	SW 8270	ng/g	< 21.5	< 17.9	< 17.9		< 19.1	--	100%
Organics, Semi-volatile	1-Naphthylamine	SW 8270	ng/g	< 52.1	< 67.6	< 67.6		< 62.4	--	100%
Organics, Semi-volatile	2,3,4,6-Tetrachlorophenol	SW 8270	ng/g	< 16.8	< 15.5	< 15.5		< 15.9	--	100%
Organics, Semi-volatile	2,4,5-Trichlorophenol	SW 8270	ng/g	< 11.0	< 16.9	< 16.9		< 14.9	--	100%
Organics, Semi-volatile	2,4,6-Trichlorophenol	SW 8270	ng/g	< 11.7	< 16.8	< 16.8		< 15.1	--	100%
Organics, Semi-volatile	2,4-Dichlorophenol	SW 8270	ng/g	< 14.8	< 18.9	< 18.9		< 17.5	--	100%
Organics, Semi-volatile	2,4-Dimethylphenol	SW 8270	ng/g	< 36.7	< 43.3	< 43.3		< 41.1	--	100%
Organics, Semi-volatile	2,4-Dinitrophenol	SW 8270	ng/g	< 234	< 139	< 139		< 171	--	100%
Organics, Semi-volatile	2,4-Dinitrotoluene	SW 8270	ng/g	< 18.4	< 19.7	< 19.7		< 19.3	--	100%
Organics, Semi-volatile	2,6-Dichlorophenol	SW 8270	ng/g	< 24.1	< 17.0	< 17.0		< 19.4	--	100%
Organics, Semi-volatile	2,6-Dinitrotoluene	SW 8270	ng/g	< 11.6	< 28.7	< 28.7		< 23.0	--	100%

Solid Stream Data

Sample Stream: ESP Hopper Ash-Field 2

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3	Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	2-Chloronaphthalene	SW 8270	ng/g	<	10.8	<	13.1	<	13.1		<	12.3	- -	100%
Organics, Semi-volatile	2-Chlorophenol	SW 8270	ng/g	<	25.5	<	21.1	<	21.1		<	22.6	- -	100%
Organics, Semi-volatile	2-Methylnaphthalene	SW 8270	ng/g	<	22.0	<	12.1	<	12.1		<	15.4	- -	100%
Organics, Semi-volatile	2-Methylphenol(o-cresol)	SW 8270	ng/g	<	17.8	<	10.3	<	10.3		<	12.8	- -	100%
Organics, Semi-volatile	2-Naphthylamine	SW 8270	ng/g	<	65.1	<	53.3	<	53.3		<	57.2	- -	100%
Organics, Semi-volatile	2-Nitroaniline	SW 8270	ng/g	<	13.4	<	22.1	<	22.1		<	19.2	- -	100%
Organics, Semi-volatile	2-Nitrophenol	SW 8270	ng/g	<	14.7	<	17.4	<	17.4		<	16.5	- -	100%
Organics, Semi-volatile	2-Picoline	SW 8270	ng/g	<	36.4	<	27.5	<	27.5		<	30.5	- -	100%
Organics, Semi-volatile	3,3'-Dichlorobenzidine	SW 8270	ng/g	<	16.4	<	11.1	<	11.1		<	12.9	- -	100%
Organics, Semi-volatile	3-Methylcholanthrene	SW 8270	ng/g	<	26.2	<	16.6	<	16.6		<	19.8	- -	100%
Organics, Semi-volatile	3-Nitroaniline	SW 8270	ng/g	<	17.0	<	13.1	<	13.1		<	14.4	- -	100%
Organics, Semi-volatile	4,6-Dinitro-2-methylphenol	SW 8270	ng/g	<	26.5	<	14.3	<	14.3		<	18.4	- -	100%
Organics, Semi-volatile	4-Aminobiphenyl	SW 8270	ng/g	<	25.0	<	39.6	<	39.6		<	34.7	- -	100%
Organics, Semi-volatile	4-Bromophenyl phenyl	SW 8270	ng/g	<	15.2	<	16.1	<	16.1		<	15.8	- -	100%
Organics, Semi-volatile	4-Chloro-3-methylphenol	SW 8270	ng/g	<	24.1	<	17.1	<	17.1		<	19.4	- -	100%
Organics, Semi-volatile	4-Chlorophenyl phenyl ether	SW 8270	ng/g	<	17.6	<	14.0	<	14.0		<	15.2	- -	100%
Organics, Semi-volatile	4-Methylphenol(p-cresol)	SW 8270	ng/g	<	19.2	<	15.3	<	15.3		<	16.6	- -	100%
Organics, Semi-volatile	4-Nitroaniline	SW 8270	ng/g	<	16.2	<	20.2	<	20.2		<	18.9	- -	100%
Organics, Semi-volatile	4-Nitrophenol	SW 8270	ng/g	<	23.1	<	31.2	<	31.2		<	28.5	- -	100%
Organics, Semi-volatile	7,12-Dimethylbenz(a)anthracene	SW 8270	ng/g	<	64.1	<	44.3	<	44.3		<	50.9	- -	100%
Organics, Semi-volatile	Acenaphthene	SW 8270	ng/g	<	16.0	<	9.06	<	9.06		<	11.4	- -	100%
Organics, Semi-volatile	Acenaphthylene	SW 8270	ng/g	<	7.55	<	13.9	<	13.9		<	11.8	- -	100%
Organics, Semi-volatile	Acetophenone	SW 8270	ng/g	<	15.3	<	18.6	<	18.6		<	17.5	- -	100%
Organics, Semi-volatile	Aniline	SW 8270	ng/g	<	31.2	<	20.5	<	20.5		<	24.1	- -	100%
Organics, Semi-volatile	Anthracene	SW 8270	ng/g	<	19.4	<	12.3	<	12.3		<	14.7	- -	100%
Organics, Semi-volatile	Benzidine	SW 8270	ng/g	<	20.0	<	20.0	<	20.0		<	20.0	- -	100%
Organics, Semi-volatile	Benzo(a)anthracene	SW 8270	ng/g	<	17.2	<	15.0	<	15.0		<	15.7	- -	100%
Organics, Semi-volatile	Benzo(a)pyrene	SW 8270	ng/g	<	12.8	<	17.2	<	17.2		<	15.7	- -	100%
Organics, Semi-volatile	Benzo(b)fluoranthene	SW 8270	ng/g	<	19.0	<	30.2	<	30.2		<	26.5	- -	100%
Organics, Semi-volatile	Benzo(g,h,i)perylene	SW 8270	ng/g	<	16.3	<	34.0	<	34.0		<	28.1	- -	100%
Organics, Semi-volatile	Benzo(k)fluoranthene	SW 8270	ng/g	<	32.3	<	33.3	<	33.3		<	33.0	- -	100%
Organics, Semi-volatile	Benzoic acid	SW 8270	ng/g	<	132	<	1,290	<	1,290		<	904	- -	100%
Organics, Semi-volatile	Benzyl alcohol	SW 8270	ng/g	<	36.1	<	20.3	<	20.3		<	25.6	- -	100%

Solid Stream Data

Sample Stream: ESP Hopper Ash-Field 2

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ng/g	< 13.1	< 20.8	< 20.8		< 18.2	--	100%
Organics, Semi-volatile	Chrysene	SW 8270	ng/g	< 22.3	< 17.9	< 17.9		< 19.4	--	100%
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ng/g	< 30.4	< 11.7	< 11.7		< 17.9	--	100%
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ng/g	< 15.8	< 27.0	< 27.0		< 23.3	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ng/g	< 19.4	< 28.0	< 28.0		< 25.1	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ng/g	< 13.6	< 17.9	< 17.9		< 16.5	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ng/g	< 16.5	< 10.8	< 10.8		< 12.7	--	100%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ng/g	< 11.2	< 17.1	< 17.1		< 15.1	--	100%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ng/g	< 120.0	< 120.0	< 120.0		< 120	--	100%
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ng/g	< 9.4	< 11.2	< 11.2		< 10.6	--	100%
Organics, Semi-volatile	Diphenylamine	SW 8270	ng/g	< 17.6	< 9.22	< 9.22		< 12.0	--	100%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ng/g	< 16.8	< 22.6	< 22.6		< 20.7	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ng/g	< 21.3	< 15.7	< 15.7		< 17.6	--	100%
Organics, Semi-volatile	Fluorene	SW 8270	ng/g	< 11.2	< 12.7	< 12.7		< 12.2	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ng/g	< 7.82	< 10.5	< 10.5		< 9.6	--	100%
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ng/g	< 23.3	< 17.0	< 17.0		< 19.1	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ng/g	< 298	< 196	< 196		< 230	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ng/g	< 19.8	< 21.1	< 21.1		< 20.7	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ng/g	< 17.5	< 44.3	< 44.3		< 35.4	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ng/g	< 9.58	< 20.5	< 20.5		< 16.9	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ng/g	< 50.0	< 50.0	< 50.0		< 50.0	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ng/g	< 43.8	< 20.9	< 20.9		< 28.5	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ng/g	< 44.4	< 26.2	< 26.2		< 32.3	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ng/g	< 18.9	< 8.96	< 8.96		< 12.3	--	100%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ng/g	< 25.1	< 21.8	< 21.8		< 22.9	--	100%
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ng/g	< 31.5	< 19.9	< 19.9		< 23.8	--	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ng/g	< 24.3	< 15.9	< 15.9		< 18.7	--	100%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ng/g	< 17.6	< 28.0	< 28.0		< 24.5	--	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ng/g	< 14.8	< 12.5	< 12.5		< 13.3	--	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ng/g	< 69.1	< 46.0	< 46.0		< 53.7	--	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ng/g	< 28.9	< 29.6	< 29.6		< 29.4	--	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ng/g	< 18.0	< 12.9	< 12.9		< 14.6	--	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ng/g	< 20.8	< 15.6	< 15.6		< 17.3	--	100%

Solid Stream Data

Sample Stream: ESP Hopper Ash-Field 2

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3	Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	Phenol	SW 8270	ng/g	<	13.3	<	29.4	<	29.4		<	24.0	--	100%
Organics, Semi-volatile	Pronamide	SW 8270	ng/g	<	24.7	<	8.0	<	8.0		<	13.6	--	100%
Organics, Semi-volatile	Pyrene	SW 8270	ng/g	<	15.6	<	13.6	<	13.6		<	14.3	--	100%
Organics, Semi-volatile	Pyridine	SW 8270	ng/g	<	38.7	<	19.6	<	19.6		<	26.0	--	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ng/g	<	18.8	<	20.2	<	20.2		<	19.7	--	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ng/g	<	24.4	<	12.8	<	12.8		<	16.7	--	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ng/g	<	24.2	<	26.6	<	26.6		<	25.8	--	100%
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ng/g		467		120	<	19.3			199	593	2%
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ng/g	<	18.7	<	24.8	<	24.8		<	22.8	--	100%
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ng/g	<	17.2	<	24.2	<	24.2		<	21.9	--	100%

Solid Stream Data

Sample Stream: Raw Limestone

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3	Run 3d	Average	95% CI	DL Ratio
Anions	Chloride	SM407C	ug/g	157	189	191	196	179	47	
Anions	Fluoride	EPA 340.2	ug/g	52.5	56.5	67.4	40.20 B	58.8	19.2	
Metals	Aluminum	SW 6010	ug/g	913	976	1040	1,015	976	158	
Metals	Antimony	ICP-MS	ug/g	0.00885	0.01048	0.00254	0.00641	0.00729	0.01042	
Metals	Arsenic	SW 7060	ug/g	< 0.342	< 0.327	< 0.333	< 0.327	< 0.334	- -	100%
Metals	Barium	SW 6010	ug/g	4.77	5.14	4.7	4.66	4.87	0.59	
Metals	Beryllium	SW 6010	ug/g	0.145	0.141	0.124	0.140	0.137	0.028	
Metals	Boron	SW 6010	ug/g	3.71	3.97	2.93	3.95	3.54	1.34	
Metals	Cadmium	SW 7131	ug/g	0.339	0.332	0.326	0.325	0.332	0.016	
Metals	Calcium	SW 6010	ug/g	392,000	394,000	399,000	408,333	395,000	8,957	
Metals	Chromium	SW 6010	ug/g	9.64	9.67	10.1	10.0	9.80	0.64	
Metals	Cobalt	SW 6010	ug/g	1.38	1.5	1.02	1.32	1.30	0.62	
Metals	Copper	SW 6010	ug/g	1.01	1.57	1.86	1.81	1.48	1.07	
Metals	Iron	SW 6010	ug/g	1760	1800	1800	1,885	1,787	57	
Metals	Lead	SW 7421	ug/g	1.18	1.04	1.04	1.07	1.09	0.20	
Metals	Magnesium	SW 6010	ug/g	1220	1240	1240	1,281	1,233	29	
Metals	Manganese	SW 6010	ug/g	208	209	204	215	207	7	
Metals	Mercury	SW 7471	ug/g	0.005 J	0.01 J	< 0.012	0.01 J	0.01	0.01	40%
Metals	Molybdenum	SW 6010	ug/g	0.219 J	< 0.211	< 0.222	0.126 J	< 0.222	- -	50%
Metals	Nickel	SW 6010	ug/g	3.34	2.75	3.39	3.59	3.16	0.88	
Metals	Phosphorus	SW 6010	ug/g	112	94	118	84.17	108	31	
Metals	Potassium	SW 6010	ug/g	342	372	374	386	363	45	
Metals	Selenium	SW 7740	ug/g	3.12	4.74	3.93	4.73	3.93	2.01	
Metals	Silicon	SW 6010	ug/g	479	392	436	466	436	108	
Metals	Sodium	SW 6010	ug/g	20	20.8	22	20.31	20.9	2.5	
Metals	Strontium	SW 6010	ug/g	108	109	107	111	108	2	
Metals	Titanium	SW 6010	ug/g	75	< 0.148	< 0.156	< 0.15	25	107	0.2%
Metals	Vanadium	SW 6010	ug/g	8.11	7.98	8.31	8.14	8.13	0.41	
Metals	Zinc	SW 6010	ug/g	8.65	8.75	8.83	9.06	8.74	0.22	

Solid Stream Data

Sample Stream: Raw Limestone

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3	Run 3d	Average	95% CI	DL Ratio
Ultimate/Proximate	Percent Moisture	D3173	wt %	9.00	9.00	8.00	9.00	8.67	1.43	
Radionuclides	Actinium-228 @ 338 KeV	EPA 901.1	pCi/g	0.26	0.39	0.26	0.33	0.30	0.19	
Radionuclides	Actinium-228 @ 911 KeV	EPA 901.1	pCi/g	0.2	ND	0.3	ND	0.2	0.4	
Radionuclides	Actinium-228 @ 968 KeV	EPA 901.1	pCi/g	ND	ND	ND	ND	ND	- -	
Radionuclides	Bismuth-212 @ 727 KeV	EPA 901.1	pCi/g	ND	ND	ND	ND	ND	- -	
Radionuclides	Bismuth-214 @ 1120.4 KeV	EPA 901.1	pCi/g	ND	ND	ND	ND	ND	- -	
Radionuclides	Bismuth-214 @ 1764.7 KeV	EPA 901.1	pCi/g	0.17	0.41	0.37	ND	0.32	0.32	
Radionuclides	Bismuth-214 @ 609.4 KeV	EPA 901.1	pCi/g	0.21	0.1	0.14	0.10	0.15	0.14	
Radionuclides	K-40 @ 1460 KeV	EPA 901.1	pCi/g	0.66	ND	0.51	ND	0.39	0.86	
Radionuclides	Lead-210 @ 46 KeV	EPA 901.1	pCi/g	ND	ND	0.74	ND	0.25	1.06	
Radionuclides	Lead-212 @ 238 KeV	EPA 901.1	pCi/g	0.11	0.1	0.13	0.16	0.11	0.04	
Radionuclides	Lead-214 @ 295.2 KeV	EPA 901.1	pCi/g	0.14	0.2	0.23	0.12	0.19	0.11	
Radionuclides	Lead-214@ 352.0 KeV	EPA 901.1	pCi/g	0.21	0.16	0.21	0.18	0.19	0.07	
Radionuclides	Radium-226 @ 186.0 KeV	EPA 901.1	pCi/g	0.6	0.66	ND	0.48	0.42	0.91	
Radionuclides	Thallium-208 @ 583 KeV	EPA 901.1	pCi/g	0.21	ND	ND	0.12	0.07	0.30	
Radionuclides	Thallium-208 @ 860 KeV	EPA 901.1	pCi/g	ND	ND	ND	ND	ND	- -	
Radionuclides	Thorium-234 @ 63.3 KeV	EPA 901.1	pCi/g	ND	ND	0.37	0.46	0.12	0.53	
Radionuclides	Thorium-234 @ 92.6 KeV	EPA 901.1	pCi/g	ND	0.25	ND	ND	0.08	0.36	
Radionuclides	Uranium-235 @ 143 KeV	EPA 901.1	pCi/g	ND	ND	ND	ND	ND	- -	

ND= Not Detected, (no detection limit specified)

Solid Stream Data

Sample Stream: Limestone Slurry Solids

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3	Run 3d	Average	95% CI	DL Ratio
Anions	Chloride	SM407C	ug/g	5,270	3,950	2,950	5,590	4,057	2891	
Anions	Fluoride	EPA 340.2	ug/g	99.50	64.10	92.00	98.00	85.20	46.34	
Metals	Aluminum	SW 6010	ug/g	814	609	845	865	756	318	
Metals	Antimony	SW 6010	ug/g	0.020	0.020	0.018	0.014	0.019	0.003	
Metals	Arsenic	SW 7060	ug/g	< 0.34	< 0.32	< 0.34	< 0.36	< 0.33	- -	100%
Metals	Barium	SW 6010	ug/g	5.67	5.15	5.33	5.22	5.39	0.66	
Metals	Beryllium	SW 6010	ug/g	0.15	0.13	0.15	0.14	0.14	0.02	
Metals	Boron	SW 6010	ug/g	241	194	172	258	202	88	
Metals	Cadmium	SW 7131	ug/g	0.61	0.59	0.62	0.63	0.61	0.04	
Metals	Calcium	SW 6010	ug/g	382,490	404,082	390,244	377,174	392,272	27,173	
Metals	Chromium	SW 6010	ug/g	13.39	12.45	14.30	13.70	13.38	2.30	
Metals	Cobalt	SW 6010	ug/g	1.72	1.38	1.35	1.52	1.48	0.51	
Metals	Copper	SW 6010	ug/g	3.75	3.50	3.88	3.62	3.71	0.48	
Metals	Iron	SW 6010	ug/g	2,571	2,214	2,738	2,620	2,508	665	
Metals	Lead	SW 7421	ug/g	0.96	0.94	1.03	1.09	0.98	0.11	
Metals	Magnesium	SW 6010	ug/g	1,456	1,306	1,397	1,457	1,386	187	
Metals	Manganese	SW 6010	ug/g	424	419	445	417	429	33	
Metals	Mercury	SW 7471	ug/g	0.01 J	< 0.01	0.01 J	0.01	< 0.01	- -	29%
Metals	Molybdenum	SW 6010	ug/g	0.24	0.38	0.06 J	< 0.22	0.23	0.40	
Metals	Nickel	SW 6010	ug/g	3.88	3.09	5.12	3.63	4.03	2.54	
Metals	Phosphorus	SW 6010	ug/g	106	110	114	111	110	10	
Metals	Potassium	SW 6010	ug/g	355	298	360	350	338	86	
Metals	Selenium	SW 7740	ug/g	8.11	7.46	9.63	10.67	8.40	2.77	
Metals	Silicon	SW 6010	ug/g	398	263	435	491	365	224	
Metals	Sodium	SW 6010	ug/g	62.37	55.20	47.12	61.52	54.90	18.95	
Metals	Strontium	SW 6010	ug/g	113	109	113	110	112	5.29	
Metals	Titanium	SW 6010	ug/g	< 0.17	< 0.16	< 0.16	< 0.16	< 0.16	- -	100%
Metals	Vanadium	SW 6010	ug/g	7.83	4.72	7.63	7.65	6.73	4.32	
Metals	Zinc	SW 6010	ug/g	10.04	8.82	10.51	9.95	9.79	2.17	

Limestone Slurry Solids - Page 1

Solid Stream Data

Sample Stream: JBR Underflow Slurry Solids

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3	Run 3d	Average	95% CI	DL Ratio
Anions	Chloride	SM407C	ug/g	9,310	9,470	9,870	9,840	9,550	717	
Anions	Fluoride	EPA 340.2	ug/g	684	777	789	594	750	143	
Anions	Sulfate	EPA 300.0	ug/g	500,000	493,000	496,000	495,000	496,333	8,725	
Anions	Sulfite	EPRI-FGD-M2	ug/g	< 240	< 240	< 240	< 240	< 240	- -	100%
Metals	Aluminum	SW 6010	ug/g	1,031	1,184	1,081	1,064	1,099	194	
Metals	Antimony	ICP-MS	ug/g	0.067	0.086	0.066	0.073	0.073	0.028	
Metals	Arsenic	SW 7060	ug/g	< 0.40	< 0.47	< 0.36	< 0.39	< 0.41	- -	100%
Metals	Barium	SW 6010	ug/g	3.61	4.35	4.09	4.08	4.02	0.94	
Metals	Beryllium	SW 6010	ug/g	0.10	0.16	0.13	0.19	0.13	0.07	
Metals	Boron	SW 6010	ug/g	417	445	413	422	425	43	
Metals	Cadmium	SW 7131	ug/g	0.26	0.24	0.24	0.23	0.25	0.04	
Metals	Calcium	SW 6010	ug/g	260,714	256,627	248,786	231,317	255,376	15,059	
Metals	Chromium	SW 6010	ug/g	10.39	12.41	11.10	11.07	11.30	2.54	
Metals	Cobalt	SW 6010	ug/g	0.90	1.19	0.87	1.23	0.99	0.43	
Metals	Copper	SW 6010	ug/g	2.48	3.10	2.61	2.70	2.73	0.81	
Metals	Iron	SW 6010	ug/g	2,060	2,349	2,148	2,112	2,186	369	
Metals	Lead	SW 7421	ug/g	0.86	0.91	0.75	0.87	0.84	0.21	
Metals	Magnesium	SW 6010	ug/g	785	860	795	796	813	102	
Metals	Manganese	SW 6010	ug/g	100	108	100	101	103	11.08	
Metals	Mercury	SW 7471	ug/g	0.19	0.15	0.19	0.16	0.18	0.06	
Metals	Molybdenum	SW 6010	ug/g	1.23	1.65	1.58	1.21	1.48	0.56	
Metals	Nickel	SW 6010	ug/g	2.32	3.36	2.79	2.70	2.82	1.29	
Metals	Phosphorus	SW 6010	ug/g	74.76	92.17	96.48	74.26	87.80	28.57	
Metals	Potassium	SW 6010	ug/g	238	370	312	319	307	164	
Metals	Selenium	SW 7740	ug/g	25.71	25.90	25.00	20.40	25.54	1.18	
Metals	Silicon	SW 6010	ug/g	469	458	414	447	447	72.50	
Metals	Sodium	SW 6010	ug/g	82.62	87.71	82.04	89.21	84.12	7.75	
Metals	Strontium	SW 6010	ug/g	73.21	76.99	71.12	72.60	73.77	7.39	
Metals	Titanium	SW 6010	ug/g	20.12	24.10	18.57	23.37	20.93	7.08	
Metals	Vanadium	SW 6010	ug/g	9.01	10.73	9.82	8.90	9.85	2.14	
Metals	Zinc	SW 6010	ug/g	7.86	8.90	8.33	9.99	8.36	1.30	

Solid Stream Data

Sample Stream: JBR Underflow Slurry Solids

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3	Run 3d	Average	95% CI	DL Ratio
Radionuclides	Actinium-228 @ 338 KeV	EPA 901.1	pCi/g	ND	ND	ND	ND			
Radionuclides	Actinium-228 @ 911 KeV	EPA 901.1	pCi/g	ND	ND	0.16	ND	0.05	0.23	
Radionuclides	Actinium-228 @ 968 KeV	EPA 901.1	pCi/g	ND	ND	ND	ND			
Radionuclides	Bismuth-212 @ 727 KeV	EPA 901.1	pCi/g	ND	ND	ND	ND			
Radionuclides	Bismuth-214 @ 1120.4 KeV	EPA 901.1	pCi/g	0.40	ND	0.35	ND	0.25	0.54	
Radionuclides	Bismuth-214 @ 1764.7 KeV	EPA 901.1	pCi/g	0.11	ND	0.22	0.35	0.11	0.27	
Radionuclides	Bismuth-214 @ 609.4 KeV	EPA 901.1	pCi/g	0.14	ND	0.18	0.25	0.11	0.23	
Radionuclides	K-40 @ 1460 KeV	EPA 901.1	pCi/g	ND	ND	ND	0.79			
Radionuclides	Lead-210 @ 46 KeV	EPA 901.1	pCi/g	0.79	ND	ND	ND	0.26	1.13	
Radionuclides	Lead-212 @ 238 KeV	EPA 901.1	pCi/g	0.07	0.09	0.11	0.13	0.09	0.05	
Radionuclides	Lead-214 @ 295.2 KeV	EPA 901.1	pCi/g	ND	0.16	ND	0.16	0.05	0.23	
Radionuclides	Lead-214@ 352.0 KeV	EPA 901.1	pCi/g	0.17	0.11	0.14	0.16	0.14	0.07	
Radionuclides	Radium-226 @ 186.0 KeV	EPA 901.1	pCi/g	0.54	ND	0.45	ND	0.33	0.72	
Radionuclides	Thallium-208 @ 583 KeV	EPA 901.1	pCi/g	0.15	0.30	0.16	0.14	0.20	0.21	
Radionuclides	Thallium-208 @ 860 KeV	EPA 901.1	pCi/g	ND	ND	ND	0.92			
Radionuclides	Thorium-234 @ 63.3 KeV	EPA 901.1	pCi/g	ND	0.56	ND	ND	0.19	0.80	
Radionuclides	Thorium-234 @ 92.6 KeV	EPA 901.1	pCi/g	ND	0.28	0.33	0.21	0.20	0.44	
Radionuclides	Uranium-235 @ 143 KeV	EPA 901.1	pCi/g	ND	ND	ND	ND	ND		
Aldehydes	Acetaldehyde	SW 8315	ug/g	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	100%
Aldehydes	Formaldehyde	SW 8315	ug/g	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	--	100%
Semi-Volatiles	1,2,4,5-Tetrachlorobenzene	SW 8270	ng/g	< 29	< 30	< 20		< 26	--	100%
Semi-Volatiles	1,2,4-Trichlorobenzene	SW 8270	ng/g	< 29	< 31	< 30		< 30	--	100%
Semi-Volatiles	1,2-Dichlorobenzene	SW 8270	ng/g	< 39	< 40	< 32		< 37	--	100%
Semi-Volatiles	1,2-Diphenylhydrazine	SW 8270	ng/g	< 100	< 100	< 100		< 100	--	100%
Semi-Volatiles	1,3-Dichlorobenzene	SW 8270	ng/g	< 20	< 21	< 36		< 25	--	100%
Semi-Volatiles	1,4-Dichlorobenzene	SW 8270	ng/g	< 40	< 42	< 30		< 37	--	100%
Semi-Volatiles	1-Chloronaphthalene	SW 8270	ng/g	< 32	< 33	< 27		< 31	--	100%
Semi-Volatiles	1-Naphthylamine	SW 8270	ng/g	< 77	< 81	< 102		< 87	--	100%
Semi-Volatiles	2,3,4,6-Tetrachlorophenol	SW 8270	ng/g	< 25	< 26	< 23		< 25	--	100%

Solid Stream Data

Sample Stream: JBR Underflow Slurry Solids

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3	Run 3d		Average	95% CI	DL Ratio
Semi-Volatiles	2,4,5-Trichlorophenol	SW 8270	ng/g	<	16	<	17	<	26		<	20	- -	100%
Semi-Volatiles	2,4,6-Trichlorophenol	SW 8270	ng/g	<	17	<	18	<	25		<	20	- -	100%
Semi-Volatiles	2,4-Dichlorophenol	SW 8270	ng/g	<	22	<	23	<	29		<	25	- -	100%
Semi-Volatiles	2,4-Dimethylphenol	SW 8270	ng/g	<	54	<	57	<	65		<	59	- -	100%
Semi-Volatiles	2,4-Dinitrophenol	SW 8270	ng/g	<	346	<	363	<	210		<	306	- -	100%
Semi-Volatiles	2,4-Dinitrotoluene	SW 8270	ng/g	<	27	<	29	<	30		<	28	- -	100%
Semi-Volatiles	2,6-Dichlorophenol	SW 8270	ng/g	<	36	<	38	<	26		<	33	- -	100%
Semi-Volatiles	2,6-Dinitrotoluene	SW 8270	ng/g	<	17	<	18	<	43		<	26	- -	100%
Semi-Volatiles	2-Chloronaphthalene	SW 8270	ng/g	<	16	<	17	<	20		<	18	- -	100%
Semi-Volatiles	2-Chlorophenol	SW 8270	ng/g	<	38	<	40	<	32		<	36	- -	100%
Semi-Volatiles	2-Methylnaphthalene	SW 8270	ng/g	<	33	<	34	<	18		<	28	- -	100%
Semi-Volatiles	2-Methylphenol(o-cresol)	SW 8270	ng/g	<	26	<	28	<	16		<	23	- -	100%
Semi-Volatiles	2-Naphthylamine	SW 8270	ng/g	<	96	<	101	<	80		<	93	- -	100%
Semi-Volatiles	2-Nitroaniline	SW 8270	ng/g	<	20	<	21	<	33		<	25	- -	100%
Semi-Volatiles	2-Nitrophenol	SW 8270	ng/g	<	22	<	23	<	26		<	24	- -	100%
Semi-Volatiles	2-Picoline	SW 8270	ng/g	<	54	<	57	<	42		<	51	- -	100%
Semi-Volatiles	3,3'-Dichlorobenzidine	SW 8270	ng/g	<	24	<	25	<	17		<	22	- -	100%
Semi-Volatiles	3-Methylcholanthrene	SW 8270	ng/g	<	39	<	41	<	25		<	35	- -	100%
Semi-Volatiles	3-Nitroaniline	SW 8270	ng/g	<	25	<	26	<	20		<	24	- -	100%
Semi-Volatiles	4,6-Dinitro-2-methylphenol	SW 8270	ng/g	<	39	<	41	<	22		<	34	- -	100%
Semi-Volatiles	4-Aminobiphenyl	SW 8270	ng/g	<	37	<	39	<	60		<	45	- -	100%
Semi-Volatiles	4-Bromophenyl phenyl	SW 8270	ng/g	<	23	<	24	<	24		<	23	- -	100%
Semi-Volatiles	4-Chloro-3-methylphenol	SW 8270	ng/g	<	36	<	38	<	26		<	33	- -	100%
Semi-Volatiles	4-Chlorophenyl phenyl ether	SW 8270	ng/g	<	26	<	27	<	21		<	25	- -	100%
Semi-Volatiles	4-Methylphenol(p-cresol)	SW 8270	ng/g	<	28	<	30	<	23		<	27	- -	100%
Semi-Volatiles	4-Nitroaniline	SW 8270	ng/g	<	24	<	25	<	30		<	26	- -	100%
Semi-Volatiles	4-Nitrophenol	SW 8270	ng/g	<	34	<	36	<	47		<	39	- -	100%
Semi-Volatiles	7,12-Dimethylbenz(a)anthracen	SW 8270	ng/g	<	95	<	100	<	67		<	87	- -	100%
Semi-Volatiles	Acenaphthene	SW 8270	ng/g	<	24	<	25	<	14		<	21	- -	100%
Semi-Volatiles	Acenaphthylene	SW 8270	ng/g	<	11	<	12	<	21		<	15	- -	100%
Semi-Volatiles	Acetophenone	SW 8270	ng/g	<	23	<	24	<	28		<	25	- -	100%
Semi-Volatiles	Aniline	SW 8270	ng/g	<	46	<	48	<	31		<	42	- -	100%

Solid Stream Data

Sample Stream: JBR Underflow Slurry Solids

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3	Run 3d		Average	95% CI	DL Ratio
Semi-Volatiles	Anthracene	SW 8270	ng/g	<	29	<	30	<	19		<	26	--	100%
Semi-Volatiles	Benzidine	SW 8270	ng/g	<	20	<	20	<	20		<	20	--	100%
Semi-Volatiles	Benzo(a)anthracene	SW 8270	ng/g	<	26	<	27	<	23		<	25	--	100%
Semi-Volatiles	Benzo(a)pyrene	SW 8270	ng/g	<	19	<	20	<	26		<	22	--	100%
Semi-Volatiles	Benzo(b)fluoranthene	SW 8270	ng/g	<	28	<	30	<	46		<	34	--	100%
Semi-Volatiles	Benzo(g,h,i)perylene	SW 8270	ng/g	<	24	<	25	<	51		<	34	--	100%
Semi-Volatiles	Benzo(k)fluoranthene	SW 8270	ng/g	<	48	<	50	<	50		<	49	--	100%
Semi-Volatiles	Benzoic acid	SW 8270	ng/g	<	196	<	205	<	1,940		<	780	--	100%
Semi-Volatiles	Benzyl alcohol	SW 8270	ng/g	<	53	<	56	<	31		<	47	--	100%
Semi-Volatiles	Butylbenzylphthalate	SW 8270	ng/g	<	19	<	20	<	31		<	24	--	100%
Semi-Volatiles	Chrysene	SW 8270	ng/g	<	33	<	35	<	27		<	32	--	100%
Semi-Volatiles	Di-n-octylphthalate	SW 8270	ng/g	<	45	<	47	<	18		<	37	--	100%
Semi-Volatiles	Dibenz(a,h)anthracene	SW 8270	ng/g	<	23	<	25	<	41		<	30	--	100%
Semi-Volatiles	Dibenz(a,j)acridine	SW 8270	ng/g	<	29	<	30	<	42		<	34	--	100%
Semi-Volatiles	Dibenzofuran	SW 8270	ng/g	<	20	<	21	<	27		<	23	--	100%
Semi-Volatiles	Dibutylphthalate	SW 8270	ng/g	<	24	<	26	<	16		<	22	--	100%
Semi-Volatiles	Diethylphthalate	SW 8270	ng/g	<	17	<	17	<	26		<	20	--	100%
Semi-Volatiles	Dimethylphenethylamine	SW 8270	ng/g	<	120	<	120	<	120		<	120	--	100%
Semi-Volatiles	Dimethylphthalate	SW 8270	ng/g	<	14	<	15	<	17		<	15	--	100%
Semi-Volatiles	Diphenylamine	SW 8270	ng/g	<	26	<	27	<	14		<	22	--	100%
Semi-Volatiles	Ethyl methanesulfonate	SW 8270	ng/g	<	25	<	26	<	34		<	28	--	100%
Semi-Volatiles	Fluoranthene	SW 8270	ng/g	<	32	<	33	<	24		<	29	--	100%
Semi-Volatiles	Fluorene	SW 8270	ng/g	<	17	<	17	<	19		<	18	--	100%
Semi-Volatiles	Hexachlorobenzene	SW 8270	ng/g	<	12	<	12	<	16		<	13	--	100%
Semi-Volatiles	Hexachlorobutadiene	SW 8270	ng/g	<	35	<	36	<	26		<	32	--	100%
Semi-Volatiles	Hexachlorocyclopentadiene	SW 8270	ng/g	<	441	<	462	<	296		<	400	--	100%
Semi-Volatiles	Hexachloroethane	SW 8270	ng/g	<	29	<	31	<	32		<	31	--	100%
Semi-Volatiles	Indeno(1,2,3-cd)pyrene	SW 8270	ng/g	<	26	<	27	<	67		<	40	--	100%
Semi-Volatiles	Isophorone	SW 8270	ng/g	<	14	<	15	<	31		<	20	--	100%
Semi-Volatiles	Methyl methanesulfonate	SW 8270	ng/g	<	50	<	50	<	50		<	50	--	100%
Semi-Volatiles	N-Nitroso-di-n-butylamine	SW 8270	ng/g	<	65	<	68	<	32		<	55	--	100%
Semi-Volatiles	N-Nitrosodimethylamine	SW 8270	ng/g	<	66	<	69	<	40		<	58	--	100%

Solid Stream Data

Sample Stream: JBR Underflow Slurry Solids

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3	Run 3d	Average	95% CI	DL Ratio
Semi-Volatiles	N-Nitrosodiphenylamine	SW 8270	ng/g	< 28	< 29	< 14		< 24	--	100%
Semi-Volatiles	N-Nitrosodipropylamine	SW 8270	ng/g	< 37	< 39	< 33		< 36	--	100%
Semi-Volatiles	N-Nitrosopiperidine	SW 8270	ng/g	< 47	< 49	< 30		< 42	--	100%
Semi-Volatiles	Naphthalene	SW 8270	ng/g	< 36	< 38	< 24		< 33	--	100%
Semi-Volatiles	Nitrobenzene	SW 8270	ng/g	< 26	< 27	< 42		< 32	--	100%
Semi-Volatiles	Pentachlorobenzene	SW 8270	ng/g	< 22	< 23	< 19		< 21	--	100%
Semi-Volatiles	Pentachloronitrobenzene	SW 8270	ng/g	< 102	< 107	< 69		< 93	--	100%
Semi-Volatiles	Pentachlorophenol	SW 8270	ng/g	< 43	< 45	< 45		< 44	--	100%
Semi-Volatiles	Phenacetin	SW 8270	ng/g	< 27	< 28	< 19		< 25	--	100%
Semi-Volatiles	Phenanthrene	SW 8270	ng/g	< 31	< 32	< 24		< 29	--	100%
Semi-Volatiles	Phenol	SW 8270	ng/g	< 20	< 21	< 44		< 28	--	100%
Semi-Volatiles	Pronamide	SW 8270	ng/g	< 37	< 38	< 12		< 29	--	100%
Semi-Volatiles	Pyrene	SW 8270	ng/g	< 23	< 24	< 21		< 23	--	100%
Semi-Volatiles	Pyridine	SW 8270	ng/g	< 57	< 60	< 30		< 49	--	100%
Semi-Volatiles	bis(2-Chloroethoxy)methane	SW 8270	ng/g	< 0	< 29	< 29		< 19	--	100%
Semi-Volatiles	bis(2-Chloroethyl)ether	SW 8270	ng/g	< 28	< 29	< 30		< 29	--	100%
Semi-Volatiles	bis(2-Chloroisopropyl)ether	SW 8270	ng/g	< 36	< 38	< 19		< 31	--	100%
Semi-Volatiles	bis(2-Ethylhexyl)phthalate	SW 8270	ng/g	262	< 95	< 29		108	334	19%
Semi-Volatiles	p-Chloroaniline	SW 8270	ng/g	< 0.03	< 29	< 29		< 19	--	100%
Semi-Volatiles	p-Dimethylaminoazobenzene	SW 8270	ng/g	< 28	< 29	< 37		< 31	--	100%
Semi-Volatiles	p-Dimethylaminoazobe	SW 8270	ng/g	< 26	< 27	< 36		< 30	--	100%

ND= Not Detected, (no detection limit specified).

Liquid Stream Data Summary

Sample Stream: Ash Pond Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Reduced Species	Cyanide	SW 9012	ug/ml	0.0024 J	0.0026 J	0.00084 J	0.0015 J	0.0019	0.0024	
Reduced Species	Ammonia as N	EPA 350.1	ug/ml	0.194	0.255	0.164	0.151	0.204	0.115	
Anions	Chloride	EPA 300	ug/ml	9.28	9.37	7.99	9	8.88	1.92	
Anions	Fluoride	EPA 340.2	ug/ml	0.377	0.461	0.443	0.441	0.427	0.110	
Anions	Phosphate	EPA 365.2	ug/ml	< 0.02	< 0.002	< 0.02	0.00176 J	< 0.014	- -	100%
Anions	Sulfate	EPA 300.0	ug/ml	108	115	117	120	113	12	
Metals, Soluble	Aluminum	SW 6010	ug/ml	0.0167 J	0.0172 J	0.00881 J	0.00481 J	0.014	0.012	
Metals, Soluble	Antimony	SW 6010	ug/ml	< 0.0241	< 0.0241	< 0.0241	< 0.0241	< 0.024	- -	100%
Metals, Soluble	Arsenic	SW 7060	ug/ml	< 0.000657	< 0.000657	< 0.000657	< 0.000657	< 0.00066	- -	100%
Metals, Soluble	Barium	SW 6010	ug/ml	0.147	0.168	0.151	0.15	0.155	0.028	
Metals, Soluble	Beryllium	SW 6010	ug/ml	< 0.000554	0.00058	0.00005 J	0.00018 J	< 0.00055	- -	31%
Metals, Soluble	Boron	SW 6010	ug/ml	1.14	0.97	1.12	1.06	1.08	0.23	
Metals, Soluble	Cadmium	SW 7131	ug/ml	0.0012	0.00058	0.00137	0.00196	0.0011	0.0010	
Metals, Soluble	Calcium	SW 6010	ug/ml	31.4	32.8	34.2	33.6	32.8	3.478	
Metals, Soluble	Chromium	SW 6010	ug/ml	< 0.00249	< 0.00249	0.00218 J	< 0.00249	< 0.0025	- -	53%
Metals, Soluble	Cobalt	SW 6010	ug/ml	< 0.0034	< 0.0034	0.00228 J	0.00164 J	< 0.0034	- -	60%
Metals, Soluble	Copper	SW 6010	ug/ml	0.00364 J	0.00297 J	0.00667	0.00397	0.0044	0.0049	
Metals, Soluble	Iron	SW 6010	ug/ml	3.76	5.63	6.75	6.67	5.38	3.75	
Metals, Soluble	Lead	SW 7421	ug/ml	0.0115	0.0035	0.0098	0.0132	0.0083	0.010	
Metals, Soluble	Magnesium	SW 6010	ug/ml	3.06	3.09	3.19	3.15	3.11	0.17	
Metals, Soluble	Manganese	SW 6010	ug/ml	0.458	0.606	0.603	0.593	0.556	0.210	
Metals, Soluble	Mercury	SW 7470	ug/ml	0.00005	0.00008	0.00005	0.00002 J	0.00006	0.00004	
Metals, Soluble	Molybdenum	SW 6010	ug/ml	0.0447	0.0319	0.0284	0.0248	0.035	0.021	
Metals, Soluble	Nickel	SW 6010	ug/ml	0.0213	0.0172	0.0207	0.0191	0.020	0.0055	
Metals, Soluble	Phosphorus	SW 6010	ug/ml	0.147	< 0.061	0.0179 J	< 0.061	0.065	0.177	16%
Metals, Soluble	Potassium	SW 6010	ug/ml	5.29	5.06	5.68	5.38	5.34	0.78	
Metals, Soluble	Selenium	SW 7740	ug/ml	0.0003 J	0.002	0.0033	0.0016	0.0019	0.0037	
Metals, Soluble	Silicon	SW 6010	ug/ml	3.77	3.34	3.24	3.2	3.45	0.70	
Metals, Soluble	Sodium	SW 6010	ug/ml	12.7	12.4	12.1	12	12.4	0.7	
Metals, Soluble	Strontium	SW 6010	ug/ml	0.334	0.343	0.35	0.346	0.342	0.020	
Metals, Soluble	Tin	SW 6010	ug/ml	< 0.0144	0.0028 J	< 0.0144	< 0.0144	< 0.014	- -	84%

Ash Pond Water - Page 1

Liquid Stream Data Summary

Sample Stream: Ash Pond Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Metals, Soluble	Titanium	SW 6010	ug/ml	0.00042 J	< 0.00236	0.00031 J	0.00024 J	< 0.0024	- -	62%
Metals, Soluble	Vanadium	SW 6010	ug/ml	0.00019 J	0.0118	0.00167 J	0.00116 J	0.0046	0.016	
Metals, Soluble	Zinc	SW 6010	ug/ml	0.0109	0.00881 J	0.00995	0.0102	0.010	0.0026	
Metals, Total	Aluminum	SW 6010	ug/ml	0.0708	0.355	0.102	0.123	0.176	0.387	
Metals, Total	Antimony	SW 6010	ug/ml	0.0146 J	0.0166 J	0.0241	0.0131 J	0.018	0.012	
Metals, Total	Arsenic	SW 7060	ug/ml	0.0004 J	0.0004 J	0.0014	0.0014	0.00073	0.0014	
Metals, Total	Barium	SW 6010	ug/ml	0.144	0.168	0.148	0.144	0.153	0.032	
Metals, Total	Beryllium	SW 6010	ug/ml	0.00013 J	9E-05 J	0.000554	< 0.000554	0.00026	0.000639	
Metals, Total	Boron	SW 6010	ug/ml	0.976	1.02	1.1	0.996	1.03	0.16	
Metals, Total	Cadmium	SW 7131	ug/ml	0.00079	0.0036	0.00105	0.00083	0.0018	0.0039	
Metals, Total	Calcium	SW 6010	ug/ml	32.6	34.8	33.8	32.7	33.7	2.7	
Metals, Total	Chromium	SW 6010	ug/ml	0.00111 J	0.0018 J	0.00194 J	0.00175 J	0.0016	0.0011	
Metals, Total	Cobalt	SW 6010	ug/ml	0.00674	0.00622	0.00619	0.00411	0.0064	0.00077	
Metals, Total	Copper	SW 6010	ug/ml	0.00832	0.00866	0.00493	0.00869	0.0073	0.0051	
Metals, Total	Iron	SW 6010	ug/ml	8.28	12.6	9.8	9.71	10.2	5.4	
Metals, Total	Lead	SW 7421	ug/ml	< 0.0008	0.0435	0.0079	0.0039	0.017	0.057	1%
Metals, Total	Magnesium	SW 6010	ug/ml	3.11	3.26	3.13	3.02	3.17	0.20	
Metals, Total	Manganese	SW 6010	ug/ml	0.487	0.647	0.531	0.497	0.555	0.205	
Metals, Total	Mercury	SW 7470	ug/ml	7E-05	6E-05	2E-05 J	1E-05 J	5E-05	7E-05	
Metals, Total	Molybdenum	SW 6010	ug/ml	0.0761	0.1	0.0761	0.0736	0.084	0.034	
Metals, Total	Nickel	SW 6010	ug/ml	0.0296	0.0195	0.022	0.0269	0.024	0.013	
Metals, Total	Phosphorus	SW 6010	ug/ml	0.0038 J	0.0326 J	0.0446 J	< 0.061	0.027	0.052	
Metals, Total	Potassium	SW 6010	ug/ml	5.87	5.99	5.36	5.4	5.74	0.83	
Metals, Total	Selenium	SW 7740	ug/ml	0.006	0.0043	0.0041	0.0042	0.0048	0.0026	
Metals, Total	Silicon	SW 6010	ug/ml	4.03	3.58	3.48	3.34	3.697	0.728	
Metals, Total	Sodium	SW 6010	ug/ml	13	13.5	12	11.7	12.8	1.9	
Metals, Total	Strontium	SW 6010	ug/ml	0.329	0.35	0.337	0.326	0.339	0.026	
Metals, Total	Tin	SW 6010	ug/ml	< 0.0144	< 0.0144	0.0144	< 0.0144	< 0.014	- -	50%
Metals, Total	Titanium	SW 6010	ug/ml	0.00024 J	0.0008 J	0.001 J	0.00041 J	0.00068	0.0010	
Metals, Total	Vanadium	SW 6010	ug/ml	0.0286	0.0227	0.0202	0.0239	0.024	0.011	
Metals, Total	Zinc	SW 6010	ug/ml	0.0128	0.0124	0.0107	0.011	0.012	0.0028	

Liquid Stream Data Summary

Sample Stream: Ash Pond Water

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a		Run 3d		Average	95% CI	DL Ratio
Aldehydes	Acetaldehyde	SW 8315	ug/ml		0.006		0.102		0.134		61		0.081	0.165	
Aldehydes	Formaldehyde	SW 8315	ug/ml		0.006		0.018		0.022		11		0.015	0.021	
Organics, Semi-volatile	1,2,4,5-Tetrachlorobenzene	SW 8270	ug/L	<	0.561	<	0.556	<	0.386	<	0.371	<	0.501	--	100%
Organics, Semi-volatile	1,2,4-Trichlorobenzene	SW 8270	ug/L	<	0.574	<	0.568	<	0.582	<	0.56	<	0.575	--	100%
Organics, Semi-volatile	1,2-Dichlorobenzene	SW 8270	ug/L	<	0.756	<	0.749	<	0.629	<	0.605	<	0.711	--	100%
Organics, Semi-volatile	1,2-Diphenylhydrazine	SW 8270	ug/L	<	100	<	100	<	100	<	100	<	100	--	100%
Organics, Semi-volatile	1,3-Dichlorobenzene	SW 8270	ug/L	<	0.384	<	0.381	<	0.71	<	0.683	<	0.492	--	100%
Organics, Semi-volatile	1,4-Dichlorobenzene	SW 8270	ug/L	<	0.784	<	0.777	<	0.582	<	0.56	<	0.714	--	100%
Organics, Semi-volatile	1-Chloronaphthalene	SW 8270	ug/L	<	0.625	<	0.619	<	0.532	<	0.511	<	0.592	--	100%
Organics, Semi-volatile	1-Naphthylamine	SW 8270	ug/L	<	1.51	<	1.5	<	2.01	<	1.93	<	1.67	--	100%
Organics, Semi-volatile	2,3,4,6-Tetrachlorophenol	SW 8270	ug/L	<	0.488	<	0.484	<	0.46	<	0.443	<	0.477	--	100%
Organics, Semi-volatile	2,4,5-Trichlorophenol	SW 8270	ug/L	<	0.32	<	0.317	<	0.504	<	0.485	<	0.380	--	100%
Organics, Semi-volatile	2,4,6-Trichlorophenol	SW 8270	ug/L	<	0.339	<	0.336	<	0.501	<	0.482	<	0.392	--	100%
Organics, Semi-volatile	2,4-Dichlorophenol	SW 8270	ug/L	<	0.43	<	0.426	<	0.563	<	0.542	<	0.473	--	100%
Organics, Semi-volatile	2,4-Dimethylphenol	SW 8270	ug/L	<	1.07	<	1.06	<	1.29	<	1.24	<	1.14	--	100%
Organics, Semi-volatile	2,4-Dinitrophenol	SW 8270	ug/L	<	6.8	<	6.73	<	4.14	<	3.98	<	5.89	--	100%
Organics, Semi-volatile	2,4-Dinitrotoluene	SW 8270	ug/L	<	0.534	<	0.529	<	0.585	<	0.563	<	0.549	--	100%
Organics, Semi-volatile	2,6-Dichlorophenol	SW 8270	ug/L	<	0.702	<	0.695	<	0.507	<	0.488	<	0.635	--	100%
Organics, Semi-volatile	2,6-Dinitrotoluene	SW 8270	ug/L	<	0.336	<	0.333	<	0.852	<	0.82	<	0.507	--	100%
Organics, Semi-volatile	2-Chloronaphthalene	SW 8270	ug/L	<	0.315	<	0.312	<	0.388	<	0.373	<	0.338	--	100%
Organics, Semi-volatile	2-Chlorophenol	SW 8270	ug/L	<	0.742	<	0.735	<	0.629	<	0.605	<	0.702	--	100%
Organics, Semi-volatile	2-Methylnaphthalene	SW 8270	ug/L	<	0.641	<	0.635	<	0.36	<	0.347	<	0.545	--	100%
Organics, Semi-volatile	2-Methylphenol(o-cresol)	SW 8270	ug/L	<	0.518	<	0.513	<	0.307	<	0.295	<	0.446	--	100%
Organics, Semi-volatile	2-Naphthylamine	SW 8270	ug/L	<	1.89	<	1.87	<	1.58	<	1.52	<	1.78	--	100%
Organics, Semi-volatile	2-Nitroaniline	SW 8270	ug/L	<	0.39	<	0.387	<	0.656	<	0.631	<	0.478	--	100%
Organics, Semi-volatile	2-Nitrophenol	SW 8270	ug/L	<	0.427	<	0.423	<	0.517	<	0.497	<	0.456	--	100%
Organics, Semi-volatile	2-Picoline	SW 8270	ug/L	<	1.06	<	1.05	<	0.819	<	0.788	<	0.98	--	100%
Organics, Semi-volatile	3,3'-Dichlorobenzidine	SW 8270	ug/L	<	0.476	<	0.471	<	0.33	<	0.317	<	0.426	--	100%
Organics, Semi-volatile	3-Methylcholanthrene	SW 8270	ug/L	<	0.76	<	0.753	<	0.495	<	0.476	<	0.669	--	100%
Organics, Semi-volatile	3-Nitroaniline	SW 8270	ug/L	<	0.494	<	0.489	<	0.389	<	0.374	<	0.457	--	100%
Organics, Semi-volatile	4,6-Dinitro-2-methylphenol	SW 8270	ug/L	<	0.769	<	0.762	<	0.426	<	0.41	<	0.652	--	100%
Organics, Semi-volatile	4-Aminobiphenyl	SW 8270	ug/L	<	0.726	<	0.719	<	1.18	<	1.13	<	0.875	--	100%

Liquid Stream Data Summary

Sample Stream: Ash Pond Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	4-Bromophenyl phenyl	SW 8270	ug/L	< 0.443	< 0.438	< 0.479	< 0.461	< 0.453	--	100%
Organics, Semi-volatile	4-Chloro-3-methylphenol	SW 8270	ug/L	< 0.702	< 0.695	< 0.51	< 0.49	< 0.636	--	100%
Organics, Semi-volatile	4-Chlorophenyl phenyl ether	SW 8270	ug/L	< 0.513	< 0.508	< 0.417	< 0.401	< 0.479	--	100%
Organics, Semi-volatile	4-Methylphenol(p-cresol)	SW 8270	ug/L	< 0.558	< 0.553	< 0.454	< 0.437	< 0.522	--	100%
Organics, Semi-volatile	4-Nitroaniline	SW 8270	ug/L	< 0.47	< 0.465	< 0.6	< 0.577	< 0.512	--	100%
Organics, Semi-volatile	4-Nitrophenol	SW 8270	ug/L	< 0.671	< 0.664	< 0.928	< 0.892	< 0.754	--	100%
Organics, Semi-volatile	7,12-Dimethylbenz(a)anthracene	SW 8270	ug/L	< 1.86	< 1.85	< 1.32	< 1.27	< 1.68	--	100%
Organics, Semi-volatile	Acenaphthene	SW 8270	ug/L	< 0.464	< 0.46	< 0.269	< 0.259	< 0.398	--	100%
Organics, Semi-volatile	Acenaphthylene	SW 8270	ug/L	< 0.219	< 0.217	< 0.414	< 0.398	< 0.283	--	100%
Organics, Semi-volatile	Acetophenone	SW 8270	ug/L	< 0.446	< 0.441	< 0.553	< 0.532	< 0.480	--	100%
Organics, Semi-volatile	Aniline	SW 8270	ug/L	< 0.906	< 0.897	< 0.61	< 0.587	< 0.804	--	100%
Organics, Semi-volatile	Anthracene	SW 8270	ug/L	< 0.564	< 0.559	< 0.364	< 0.35	< 0.496	--	100%
Organics, Semi-volatile	Benzidine	SW 8270	ug/L	< 20	< 20	< 20	< 20	< 20	--	100%
Organics, Semi-volatile	Benzo(a)anthracene	SW 8270	ug/L	< 0.5	< 0.495	< 0.445	< 0.428	< 0.480	--	100%
Organics, Semi-volatile	Benzo(a)pyrene	SW 8270	ug/L	< 0.372	< 0.368	< 0.513	< 0.493	< 0.418	--	100%
Organics, Semi-volatile	Benzo(b)fluoranthene	SW 8270	ug/L	< 0.552	< 0.547	< 0.899	< 0.865	< 0.666	--	100%
Organics, Semi-volatile	Benzo(g,h,i)perylene	SW 8270	ug/L	< 0.473	< 0.468	< 1.01	< 0.971	< 0.650	--	100%
Organics, Semi-volatile	Benzo(k)fluoranthene	SW 8270	ug/L	< 0.94	< 0.931	< 0.989	< 0.951	< 0.953	--	100%
Organics, Semi-volatile	Benzoic acid	SW 8270	ug/L	< 3.84	< 3.81	< 38.2	< 36.8	< 15.3	--	100%
Organics, Semi-volatile	Benzyl alcohol	SW 8270	ug/L	< 1.05	< 1.04	< 0.604	< 0.581	< 0.898	--	100%
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ug/L	0.305 J	0.292 J	< 0.619	< 0.595	< 0.619	--	34%
Organics, Semi-volatile	Chrysene	SW 8270	ug/L	< 0.65	< 0.643	< 0.532	< 0.511	< 0.608	--	100%
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ug/L	< 0.884	< 0.876	< 0.349	< 0.335	< 0.703	--	100%
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ug/L	< 0.46	< 0.456	< 0.803	< 0.772	< 0.573	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ug/L	< 0.564	< 0.559	< 0.834	< 0.802	< 0.652	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ug/L	< 0.396	< 0.392	< 0.532	< 0.511	< 0.440	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ug/L	< 0.479	< 0.474	< 0.321	< 0.309	< 0.425	--	100%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ug/L	< 0.326	< 0.323	< 0.51	< 0.49	< 0.39	--	100%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ug/L	< 120	< 120	< 120	< 120	< 120	--	100%
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ug/L	< 0.272	< 0.269	< 0.333	< 0.32	< 0.291	--	100%
Organics, Semi-volatile	Diphenylamine	SW 8270	ug/L	< 0.513	< 0.508	< 0.274	< 0.264	< 0.432	--	100%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ug/L	< 0.488	< 0.484	< 0.672	< 0.647	< 0.548	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ug/L	< 0.619	< 0.613	< 0.466	< 0.449	< 0.566	--	100%

Liquid Stream Data Summary

Sample Stream: Ash Pond Water

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a		Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	Fluorene	SW 8270	ug/L	<	0.326	<	0.323	<	0.376	<	0.362	<	0.342	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ug/L	<	0.227	<	0.225	<	0.311	<	0.299	<	0.254	--	100%
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ug/L	<	0.678	<	0.671	<	0.507	<	0.488	<	0.619	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ug/L	<	8.66	<	8.58	<	5.83	<	5.61	<	7.69	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ug/L	<	0.577	<	0.571	<	0.629	<	0.605	<	0.592	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ug/L	<	0.51	<	0.505	<	1.32	<	1.27	<	0.78	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ug/L	<	0.279	<	0.276	<	0.61	<	0.587	<	0.388	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ug/L	<	50	<	50	<	50	<	50	<	50	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ug/L	<	1.27	<	1.26	<	0.623	<	0.599	<	1.051	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ug/L	<	1.29	<	1.28	<	0.778	<	0.749	<	1.116	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ug/L	<	0.55	<	0.544	<	0.266	<	0.256	<	0.453	--	100%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ug/L	<	0.729	<	0.722	<	0.648	<	0.623	<	0.700	--	100%
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ug/L	<	0.916	<	0.907	<	0.591	<	0.569	<	0.805	--	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ug/L	<	0.708	<	0.701	<	0.473	<	0.455	<	0.627	--	100%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ug/L	<	0.513	<	0.508	<	0.834	<	0.802	<	0.618	--	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ug/L	<	0.43	<	0.426	<	0.37	<	0.356	<	0.409	--	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ug/L	<	2.01	<	1.99	<	1.37	<	1.31	<	1.79	--	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ug/L	<	0.839	<	0.831	<	0.88	<	0.847	<	0.850	--	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ug/L	<	0.524	<	0.519	<	0.382	<	0.368	<	0.475	--	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ug/L	<	0.604	<	0.598	<	0.463	<	0.446	<	0.555	--	100%
Organics, Semi-volatile	Phenol	SW 8270	ug/L	<	0.387	<	0.384	<	0.874	<	0.841	<	0.548	--	100%
Organics, Semi-volatile	Pronamide	SW 8270	ug/L	<	0.717	<	0.711	<	0.239	<	0.23	<	0.556	--	100%
Organics, Semi-volatile	Pyrene	SW 8270	ug/L	<	0.454	<	0.45	<	0.404	<	0.389	<	0.436	--	100%
Organics, Semi-volatile	Pyridine	SW 8270	ug/L	<	1.13	<	1.12	<	0.582	<	0.56	<	0.944	--	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ug/L	<	0.546	<	0.54	<	0.6	<	0.577	<	0.56	--	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ug/L	<	0.711	<	0.704	<	0.379	<	0.365	<	0.598	--	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ug/L	<	0.705	<	0.698	<	0.79	<	0.76	<	0.731	--	100%
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ug/L	<	1.78	<	1.76	<	0.575		447	<	1.37	--	100%
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ug/L	<	0.543	<	0.537	<	0.738	<	0.71	<	0.606	--	100%
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ug/L	<	0.5	<	0.495	<	0.719	<	0.691	<	0.571	--	100%
Organics, Volatile	1,1,1-Trichloroethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	1,1,2,2-Tetrachloroethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%

Liquid Stream Data Summary

Sample Stream: Ash Pond Water

Analyte Group	Specie	Analytical Method	Units		Run 1			Run 2			Run 3a			Run 3d			Average	95% CI	DL Ratio
Organics, Volatile	1,1,2-Trichloroethane	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	1,1-Dichloroethane	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	1,1-Dichloroethene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	1,2-Dichloroethane	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	1,2-Dichloroethene (total)	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	1,2-Dichloropropane	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	2-Butanone (MEK)	SW 8240	ug/L	<	10		<	10		<	10		<	10		<	10	--	100%
Organics, Volatile	2-Hexanone	SW 8240	ug/L	<	10		<	10		<	10		<	10		<	10	--	100%
Organics, Volatile	4-Methyl-2-pentanone (MIBK)	SW 8240	ug/L	<	10		<	10		<	10		<	10		<	10	--	100%
Organics, Volatile	Acetone	SW 8240	ug/L	<	10			3.3	J		9.7			6	J	<	10	--	28%
Organics, Volatile	Benzene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Bromodichloromethane	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Bromoform	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Bromomethane	SW 8240	ug/L	<	10		<	10		<	10		<	10		<	10	--	100%
Organics, Volatile	Carbon Disulfide	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Carbon Tetrachloride	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Chlorobenzene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Chloroethane	SW 8240	ug/L	<	10		<	10		<	10		<	10		<	10	--	100%
Organics, Volatile	Chloroform	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Chloromethane	SW 8240	ug/L	<	10		<	10		<	10		<	10		<	10	--	100%
Organics, Volatile	Dibromochloromethane	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Ethylbenzene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Methylene Chloride	SW 8240	ug/L	<	5			4.2	J		6.2			7.7		<	5	--	19%
Organics, Volatile	Styrene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Tetrachloroethene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Toluene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Trichloroethene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	Vinyl acetate	SW 8240	ug/L	<	10		<	10		<	10		<	10		<	10	--	100%
Organics, Volatile	Vinyl chloride	SW 8240	ug/L	<	10		<	10		<	10		<	10		<	10	--	100%
Organics, Volatile	Xylenes	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	cis-1,3-Dichloropropene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%
Organics, Volatile	trans-1,3-Dichloropropene	SW 8240	ug/L	<	5		<	5		<	5		<	5		<	5	--	100%

Liquid Stream Data Summary

Sample Stream: Bottom Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Reduced Species	Cyanide	SW 9012	ug/ml	0.0025 J	0.0017 J	0.0017 J	0.0025 J	0.0020	0.0011	
Reduced Species	Ammonia as N	EPA 350.1	ug/ml	0.293	0.421	0.638	0.402	0.451	0.433	
Anions	Chloride	EPA 300	ug/ml	8.39	7.74	7.55	7.62	7.89	1.09	
Anions	Fluoride	EPA 340.2	ug/ml	0.272	0.268	0.302	0.302	0.281	0.046	
Anions	Phosphate	EPA 365.2	ug/ml	0.0396	< 0.02	0.0264	0.0235	0.0253	0.0368	13%
Anions	Sulfate	EPA 300.0	ug/ml	67.5	95.1	79	79.1	80.5	34.4	
Metals, Soluble	Aluminum	SW 6010	ug/ml	0.182	0.302	0.431	0.399	0.305	0.309	
Metals, Soluble	Antimony	SW 6010	ug/ml	< 0.0241	< 0.0241	< 0.0241	< 0.0241	< 0.0241	- -	100%
Metals, Soluble	Arsenic	SW 7060	ug/ml	0.0028	0.0646	0.0031	0.004	0.024	0.088	
Metals, Soluble	Barium	SW 6010	ug/ml	0.0744	0.14	0.0927	0.0919	0.102	0.084	
Metals, Soluble	Beryllium	SW 6010	ug/ml	< 0.000554	< 0.000554	< 0.000554	< 0.000554	< 0.000554	- -	100%
Metals, Soluble	Boron	SW 6010	ug/ml	0.624	1.14	0.849	0.936	0.871	0.643	
Metals, Soluble	Cadmium	SW 7131	ug/ml	< 0.000237	0.00173	0.00131	0.00179	0.00105	0.00208	4%
Metals, Soluble	Calcium	SW 6010	ug/ml	29.1	39	47.4	44.5	38.5	22.8	
Metals, Soluble	Chromium	SW 6010	ug/ml	0.00211 J	0.00419	0.00301	0.00318	0.00310	0.00259	
Metals, Soluble	Cobalt	SW 6010	ug/ml	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	- -	100%
Metals, Soluble	Copper	SW 6010	ug/ml	0.00355 J	0.0116	0.0393	0.00533	0.0182	0.0466	
Metals, Soluble	Iron	SW 6010	ug/ml	0.0199	0.0439	0.0212	0.0059 J	0.0283	0.0335	
Metals, Soluble	Lead	SW 7421	ug/ml	0.009	0.006	0.016	0.017	0.010	0.013	
Metals, Soluble	Magnesium	SW 6010	ug/ml	2.07	2.98	1.71	1.8	2.25	1.63	
Metals, Soluble	Manganese	SW 6010	ug/ml	0.07	0.0918	0.00172	0.00257	0.0545	0.1168	
Metals, Soluble	Mercury	SW 7470	ug/ml	0.00007	0.00002 J	0.00003 J	0.00007	0.00004	0.00007	
Metals, Soluble	Molybdenum	SW 6010	ug/ml	0.0472	0.11	0.0587	0.0593	0.0720	0.0831	
Metals, Soluble	Nickel	SW 6010	ug/ml	0.00016 J	0.011	0.00466 J	0.0026 J	0.0053	0.0135	
Metals, Soluble	Phosphorus	SW 6010	ug/ml	0.0872	0.172	0.0791	0.197	0.113	0.128	
Metals, Soluble	Potassium	SW 6010	ug/ml	3.67	5.64	3.85	3.83	4.39	2.71	
Metals, Soluble	Selenium	SW 7740	ug/ml	0.0038	0.0036	0.0043	0.0035	0.0039	0.0009	
Metals, Soluble	Silicon	SW 6010	ug/ml	4.63	4.61	4.97	4.8	4.74	0.50	
Metals, Soluble	Sodium	SW 6010	ug/ml	9.05	10.4	8.69	8.69	9.38	2.24	
Metals, Soluble	Strontium	SW 6010	ug/ml	0.194	0.423	0.225	0.22	0.281	0.309	
Metals, Soluble	Tin	SW 6010	ug/ml	0.00499 J	< 0.0144	0.00446 J	0.00236 J	< 0.0144	- -	43%

Liquid Stream Data Summary

Sample Stream: Bottom Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units		Run 1			Run 2		Run 3a		Run 3d			Average	95% CI	DL Ratio
Metals, Soluble	Titanium	SW 6010	ug/ml		0.00101	J		0.00226	<	0.00102		0.00076	J		0.0013	0.0022	13%
Metals, Soluble	Vanadium	SW 6010	ug/ml		0.0349			0.00712		0.0453		0.0444			0.0291	0.0490	
Metals, Soluble	Zinc	SW 6010	ug/ml		0.00339			0.0162		0.00565		0.00342			0.0084	0.0170	
Aldehydes	Acetaldehyde	SW 8315	ug/ml		0.006			0.09		0.134		0.09			0.077	0.162	
Aldehydes	Formaldehyde	SW 8315	ug/ml		0.006			0.032		0.03		0.026			0.023	0.036	
Organics, Semi-volatile	1,2,4,5-Tetrachlorobenzene	SW 8270	ug/L	<	0.556		<	0.578	<	0.402	<	0.373		<	0.512	--	100%
Organics, Semi-volatile	1,2,4-Trichlorobenzene	SW 8270	ug/L	<	0.568		<	0.591	<	0.606	<	0.563		<	0.588	--	100%
Organics, Semi-volatile	1,2-Dichlorobenzene	SW 8270	ug/L	<	0.749		<	0.779	<	0.655	<	0.608		<	0.728	--	100%
Organics, Semi-volatile	1,2-Diphenylhydrazine	SW 8270	ug/L	<	100		<	100	<	100	<	100		<	100	--	100%
Organics, Semi-volatile	1,3-Dichlorobenzene	SW 8270	ug/L	<	0.381		<	0.396	<	0.739	<	0.686		<	0.505	--	100%
Organics, Semi-volatile	1,4-Dichlorobenzene	SW 8270	ug/L	<	0.777		<	0.808	<	0.606	<	0.563		<	0.730	--	100%
Organics, Semi-volatile	1-Chloronaphthalene	SW 8270	ug/L	<	0.619		<	0.644	<	0.554	<	0.514		<	0.606	--	100%
Organics, Semi-volatile	1-Naphthylamine	SW 8270	ug/L	<	1.5		<	1.56	<	2.09	<	1.94		<	1.72	--	100%
Organics, Semi-volatile	2,3,4,6-Tetrachlorophenol	SW 8270	ug/L	<	0.484		<	0.503	<	0.479	<	0.445		<	0.489	--	100%
Organics, Semi-volatile	2,4,5-Trichlorophenol	SW 8270	ug/L	<	0.317		<	0.33	<	0.525	<	0.487		<	0.391	--	100%
Organics, Semi-volatile	2,4,6-Trichlorophenol	SW 8270	ug/L	<	0.336		<	0.349	<	0.522	<	0.484		<	0.402	--	100%
Organics, Semi-volatile	2,4-Dichlorophenol	SW 8270	ug/L	<	0.426		<	0.443	<	0.587	<	0.544		<	0.485	--	100%
Organics, Semi-volatile	2,4-Dimethylphenol	SW 8270	ug/L	<	1.06		<	1.1	<	1.34	<	1.24		<	1.17	--	100%
Organics, Semi-volatile	2,4-Dinitrophenol	SW 8270	ug/L	<	6.73		<	7	<	4.31	<	4		<	6.01	--	100%
Organics, Semi-volatile	2,4-Dinitrotoluene	SW 8270	ug/L	<	0.529		<	0.55	<	0.609	<	0.566		<	0.563	--	100%
Organics, Semi-volatile	2,6-Dichlorophenol	SW 8270	ug/L	<	0.695		<	0.723	<	0.528	<	0.49		<	0.649	--	100%
Organics, Semi-volatile	2,6-Dinitrotoluene	SW 8270	ug/L	<	0.333		<	0.346	<	0.888	<	0.824		<	0.522	--	100%
Organics, Semi-volatile	2-Chloronaphthalene	SW 8270	ug/L	<	0.312		<	0.324	<	0.404	<	0.375		<	0.347	--	100%
Organics, Semi-volatile	2-Chlorophenol	SW 8270	ug/L	<	0.735		<	0.764	<	0.655	<	0.608		<	0.718	--	100%
Organics, Semi-volatile	2-Methylnaphthalene	SW 8270	ug/L	<	0.635		<	0.66	<	0.375	<	0.348		<	0.557	--	100%
Organics, Semi-volatile	2-Methylphenol(o-cresol)	SW 8270	ug/L	<	0.513		<	0.534	<	0.32	<	0.297		<	0.456	--	100%
Organics, Semi-volatile	2-Naphthylamine	SW 8270	ug/L	<	1.87		<	1.95	<	1.65	<	1.53		<	1.82	--	100%
Organics, Semi-volatile	2-Nitroaniline	SW 8270	ug/L	<	0.387		<	0.402	<	0.684	<	0.634		<	0.491	--	100%
Organics, Semi-volatile	2-Nitrophenol	SW 8270	ug/L	<	0.423		<	0.44	<	0.538	<	0.5		<	0.467	--	100%
Organics, Semi-volatile	2-Picoline	SW 8270	ug/L	<	1.05		<	1.09	<	0.853	<	0.791		<	0.998	--	100%
Organics, Semi-volatile	3,3'-Dichlorobenzidine	SW 8270	ug/L	<	0.471		<	0.49	<	0.343	<	0.319		<	0.435	--	100%

Liquid Stream Data Summary

Sample Stream: Bottom Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a		Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	3-Methylcholanthrene	SW 8270	ug/L	<	0.753	<	0.783	<	0.515	<	0.478	<	0.684	--	100%
Organics, Semi-volatile	3-Nitroaniline	SW 8270	ug/L	<	0.489	<	0.509	<	0.405	<	0.376	<	0.468	--	100%
Organics, Semi-volatile	4,6-Dinitro-2-methylphenol	SW 8270	ug/L	<	0.762	<	0.792	<	0.443	<	0.411	<	0.666	--	100%
Organics, Semi-volatile	4-Aminobiphenyl	SW 8270	ug/L	<	0.719	<	0.748	<	1.23	<	1.14	<	0.899	--	100%
Organics, Semi-volatile	4-Bromophenyl phenyl	SW 8270	ug/L	<	0.438	<	0.456	<	0.499	<	0.463	<	0.464	--	100%
Organics, Semi-volatile	4-Chloro-3-methylphenol	SW 8270	ug/L	<	0.695	<	0.723	<	0.531	<	0.493	<	0.650	--	100%
Organics, Semi-volatile	4-Chlorophenyl phenyl ether	SW 8270	ug/L	<	0.508	<	0.528	<	0.434	<	0.403	<	0.490	--	100%
Organics, Semi-volatile	4-Methylphenol(p-cresol)	SW 8270	ug/L	<	0.553	<	0.575	<	0.473	<	0.439	<	0.534	--	100%
Organics, Semi-volatile	4-Nitroaniline	SW 8270	ug/L	<	0.465	<	0.484	<	0.625	<	0.58	<	0.525	--	100%
Organics, Semi-volatile	4-Nitrophenol	SW 8270	ug/L	<	0.664	<	0.691	<	0.966	<	0.897	<	0.774	--	100%
Organics, Semi-volatile	7,12-Dimethylbenz(a)anthracene	SW 8270	ug/L	<	1.85	<	1.92	<	1.37	<	1.27	<	1.71	--	100%
Organics, Semi-volatile	Acenaphthene	SW 8270	ug/L	<	0.46	<	0.478	<	0.28	<	0.26	<	0.406	--	100%
Organics, Semi-volatile	Acenaphthylene	SW 8270	ug/L	<	0.217	<	0.226	<	0.431	<	0.4	<	0.291	--	100%
Organics, Semi-volatile	Acetophenone	SW 8270	ug/L	<	0.441	<	0.459	<	0.576	<	0.535	<	0.492	--	100%
Organics, Semi-volatile	Aniline	SW 8270	ug/L	<	0.897	<	0.933	<	0.635	<	0.589	<	0.822	--	100%
Organics, Semi-volatile	Anthracene	SW 8270	ug/L	<	0.559	<	0.581	<	0.379	<	0.352	<	0.506	--	100%
Organics, Semi-volatile	Benzidine	SW 8270	ug/L	<	20	<	20	<	20	<	20	<	20	--	100%
Organics, Semi-volatile	Benzo(a)anthracene	SW 8270	ug/L	<	0.495	<	0.515	<	0.463	<	0.43	<	0.491	--	100%
Organics, Semi-volatile	Benzo(a)pyrene	SW 8270	ug/L	<	0.368	<	0.383	<	0.534	<	0.496	<	0.428	--	100%
Organics, Semi-volatile	Benzo(b)fluoranthene	SW 8270	ug/L	<	0.547	<	0.569	<	0.936	<	0.869	<	0.684	--	100%
Organics, Semi-volatile	Benzo(g,h,i)perylene	SW 8270	ug/L	<	0.468	<	0.487	<	1.05	<	0.976	<	0.668	--	100%
Organics, Semi-volatile	Benzo(k)fluoranthene	SW 8270	ug/L	<	0.931	<	0.968	<	1.03	<	0.956	<	0.976	--	100%
Organics, Semi-volatile	Benzoic acid	SW 8270	ug/L	<	3.81	<	3.96	<	39.8	<	36.9	<	15.86	--	100%
Organics, Semi-volatile	Benzyl alcohol	SW 8270	ug/L	<	1.04	<	1.08	<	0.629	<	0.584	<	0.916	--	100%
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ug/L	<	0.378	<	0.393	<	0.644	<	0.598	<	0.472	--	100%
Organics, Semi-volatile	Chrysene	SW 8270	ug/L	<	0.643	<	0.669	<	0.554	<	0.514	<	0.622	--	100%
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ug/L	<	0.876	<	0.911	<	0.363	<	0.337	<	0.717	--	100%
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ug/L	<	0.456	<	0.474	<	0.836	<	0.776	<	0.589	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ug/L	<	0.559	<	0.581	<	0.868	<	0.806	<	0.669	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ug/L	<	0.392	<	0.408	<	0.554	<	0.514	<	0.451	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ug/L	<	0.474	<	0.493	<	0.334	<	0.31	<	0.434	--	100%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ug/L	<	0.323	<	0.336		1.06	<	0.493		0.463	1.2841	24%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ug/L	<	120	<	120	<	120	<	120	<	120	--	100%

Liquid Stream Data Summary

Sample Stream: Bottom Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a			Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ug/L	<	0.269	<	0.28	<	0.346		<	0.322	<	0.298	--	100%
Organics, Semi-volatile	Diphenylamine	SW 8270	ug/L	<	0.508	<	0.528		0.608		<	0.265	<	0.528	--	46%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ug/L	<	0.484	<	0.503	<	0.7		<	0.65	<	0.562	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ug/L	<	0.613	<	0.638		0.19	J	<	0.451	<	0.638	--	77%
Organics, Semi-volatile	Fluorene	SW 8270	ug/L	<	0.323	<	0.336	<	0.392		<	0.364	<	0.350	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ug/L	<	0.225	<	0.234	<	0.324		<	0.3	<	0.261	--	100%
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ug/L	<	0.671	<	0.698	<	0.528		<	0.49	<	0.632	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ug/L	<	8.58	<	8.92	<	6.07		<	5.64	<	7.86	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ug/L	<	0.571	<	0.594	<	0.655		<	0.608	<	0.607	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ug/L	<	0.505	<	0.525	<	1.37		<	1.27	<	0.800	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ug/L	<	0.276	<	0.287	<	0.635		<	0.589	<	0.399	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ug/L	<	50	<	50	<	50		<	50	<	50	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ug/L	<	1.26	<	1.31	<	0.648		<	0.602	<	1.07	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ug/L	<	1.28	<	1.33	<	0.81		<	0.752	<	1.14	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ug/L	<	0.544	<	0.566		0.621		<	0.257	<	0.566	--	47%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ug/L	<	0.722	<	0.751	<	0.674		<	0.626	<	0.716	--	100%
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ug/L	<	0.907	<	0.943	<	0.615		<	0.571	<	0.822	--	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ug/L	<	0.701	<	0.729	<	0.493		<	0.457	<	0.641	--	100%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ug/L	<	0.508	<	0.528	<	0.868		<	0.806	<	0.635	--	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ug/L	<	0.426	<	0.443	<	0.386		<	0.358	<	0.418	--	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ug/L	<	1.99	<	2.07	<	1.42		<	1.32	<	1.83	--	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ug/L	<	0.831	<	0.864	<	0.916		<	0.851	<	0.870	--	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ug/L	<	0.519	<	0.54	<	0.398		<	0.369	<	0.486	--	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ug/L	<	0.598	<	0.622	<	0.482		<	0.448	<	0.567	--	100%
Organics, Semi-volatile	Phenol	SW 8270	ug/L	<	0.384	<	0.399	<	0.91		<	0.845	<	0.564	--	100%
Organics, Semi-volatile	Pronamide	SW 8270	ug/L	<	0.711	<	0.739	<	0.248		<	0.231	<	0.566	--	100%
Organics, Semi-volatile	Pyrene	SW 8270	ug/L	<	0.45	<	0.468		0.501		<	0.39	<	0.468	--	48%
Organics, Semi-volatile	Pyridine	SW 8270	ug/L	<	1.12	<	1.16	<	0.606		<	0.563	<	0.962	--	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ug/L	<	0.54	<	0.562	<	0.625		<	0.58	<	0.576	--	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ug/L	<	0.704	<	0.732	<	0.395		<	0.367	<	0.610	--	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ug/L	<	0.698	<	0.726	<	0.823		<	0.764	<	0.749	--	100%
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ug/L	<	1.76		1.37	<	0.599			1.03	<	1.76	--	46%
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ug/L	<	0.537	<	0.559	<	0.768		<	0.713	<	0.621	--	100%

Liquid Stream Data Summary

Sample Stream: Bottom Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a			Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ug/L	<	0.495	<	0.515	<	0.748		<	0.695	<	0.586	--	100%
Organics, Volatile	1,1,1-Trichloroethane	SW 8240	ug/L	<	5			<	2.88		<	2.88	<	5	--	100%
Organics, Volatile	1,1,2,2-Tetrachloroethane	SW 8240	ug/L	<	5			<	1.67		<	1.67	<	5	--	100%
Organics, Volatile	1,1,2-Trichloroethane	SW 8240	ug/L	<	5			<	0.932		<	0.932	<	5	--	100%
Organics, Volatile	1,1-Dichloroethane	SW 8240	ug/L	<	5			<	1.64		<	1.64	<	5	--	100%
Organics, Volatile	1,1-Dichloroethene	SW 8240	ug/L	<	5			<	2.09		<	2.09	<	5	--	100%
Organics, Volatile	1,2-Dichloroethane	SW 8240	ug/L	<	5			<	1.07		<	1.07	<	5	--	100%
Organics, Volatile	1,2-Dichloroethene (total)	SW 8240	ug/L	<	5			<	NA		<	NA	<	5	--	100%
Organics, Volatile	1,2-Dichloropropane	SW 8240	ug/L	<	5			<	0.602		<	0.602	<	5	--	100%
Organics, Volatile	2-Butanone (MEK)	SW 8240	ug/L	<	10			<	6.32		<	6.32	<	10	--	100%
Organics, Volatile	2-Hexanone	SW 8240	ug/L	<	10			<	NA		<	NA	<	10	--	100%
Organics, Volatile	4-Methyl-2-pentanone (MIBK)	SW 8240	ug/L	<	10			<	NA		<	NA	<	10	--	100%
Organics, Volatile	Acetone	SW 8240	ug/L	<	10			<	NA		<	NA	<	10	--	100%
Organics, Volatile	Benzene	SW 8240	ug/L	<	5			<	0.848			16.3	<	5	--	100%
Organics, Volatile	Bromodichloromethane	SW 8240	ug/L	<	5			<	NA		<	NA	<	5	--	100%
Organics, Volatile	Bromoform	SW 8240	ug/L	<	5			<	NA		<	NA	<	5	--	100%
Organics, Volatile	Bromomethane	SW 8240	ug/L	<	10			<	5.07		<	5.07	<	10	--	100%
Organics, Volatile	Carbon Disulfide	SW 8240	ug/L	<	5			<	1.73		<	1.73	<	5	--	100%
Organics, Volatile	Carbon Tetrachloride	SW 8240	ug/L	<	5			<	1.22		<	1.22	<	5	--	100%
Organics, Volatile	Chlorobenzene	SW 8240	ug/L	<	5			<	1.2		<	1.2	<	5	--	100%
Organics, Volatile	Chloroethane	SW 8240	ug/L	<	10			<	1.41		<	1.41	<	10	--	100%
Organics, Volatile	Chloroform	SW 8240	ug/L	<	5			<	0.995		<	0.995	<	5	--	100%
Organics, Volatile	Chloromethane	SW 8240	ug/L	<	10			<	1.95		<	1.95	<	10	--	100%
Organics, Volatile	Dibromochloromethane	SW 8240	ug/L	<	5			<	NA		<	NA	<	5	--	100%
Organics, Volatile	Ethylbenzene	SW 8240	ug/L	<	5			<	0.893			2.43	<	5	--	100%
Organics, Volatile	Methylene Chloride	SW 8240	ug/L	<	5				2.94			1.47	<	5	--	46%
Organics, Volatile	Styrene	SW 8240	ug/L	<	5			<	1.36		<	1.36	<	5	--	100%
Organics, Volatile	Tetrachloroethene	SW 8240	ug/L	<	5			<	0.843		<	0.843	<	5	--	100%
Organics, Volatile	Toluene	SW 8240	ug/L	<	5				0.352	J		3.53	<	5	--	88%
Organics, Volatile	Trichloroethene	SW 8240	ug/L	<	5			<	1.3		<	1.3	<	5	--	100%
Organics, Volatile	Vinyl acetate	SW 8240	ug/L	<	10			<	4.01		<	4.01	<	10	--	100%
Organics, Volatile	Vinyl chloride	SW 8240	ug/L	<	10			<	1.67		<	1.67	<	10	--	100%

Liquid Stream Data Summary

Sample Stream: Bottom Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units		Run 1	Run 2		Run 3a		Run 3d		Average	95% CI	DL Ratio
Organics, Volatile	Xylenes	SW 8240	ug/L	<	5		<	2.06		5.78	<	5	--	100%
Organics, Volatile	cis-1,3-Dichloropropene	SW 8240	ug/L	<	5		<	0.459	<	0.459	<	5	--	100%
Organics, Volatile	trans-1,3-Dichloropropene	SW 8240	ug/L	<	5		<	1.35	<	1.35	<	5	--	100%

Liquid Stream Data Summary

Sample Stream: ESP Fly Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Reduced Species	Cyanide	SW 9012	ug/ml	0.0014 J	0.0009 J	0.0022 J	< 0.01	0.0015	0.0016	
Reduced Species	Ammonia as N	EPA 350.1	ug/ml	0.379	0.419	0.355	0.438	0.3843	0.0803	
Anions	Chloride	EPA 300	ug/ml	10.9	10.7	9.71	10.1	10.4	1.6	
Anions	Fluoride	EPA 340.2	ug/ml	0.633	1	0.576	0.698	0.736	0.572	
Anions	Phosphate	EPA 365.2	ug/ml	0.015 J	0.0453	< 0.02	< 0.02	0.023	0.047	14%
Anions	Sulfate	EPA 300.0	ug/ml	238	582	210	236	343	515	
Metals, Soluble	Aluminum	SW 6010	ug/ml	0.381	2.48	0.0307	0.204	0.964	3.291	
Metals, Soluble	Antimony	SW 6010	ug/ml	0.0118 J	< 0.0241	< 0.0241	< 0.0241	< 0.024	- -	67%
Metals, Soluble	Arsenic	SW 7060	ug/ml	0.0108	0.0387	0.0004 J	0.0127	0.017	0.049	
Metals, Soluble	Barium	SW 6010	ug/ml	0.198	0.314	0.213	0.226	0.242	0.157	
Metals, Soluble	Beryllium	SW 6010	ug/ml	< 0.000554	< 0.000554	< 0.000554	< 0.000554	< 0.000554	- -	100%
Metals, Soluble	Boron	SW 6010	ug/ml	7.03	17	5.73	6.16	9.92	15.32	
Metals, Soluble	Cadmium	SW 7131	ug/ml	0.00275	0.00108	0.00426	0.00269	0.0027	0.0040	
Metals, Soluble	Calcium	SW 6010	ug/ml	104	219	93.6	99.2	138.9	172.9	
Metals, Soluble	Chromium	SW 6010	ug/ml	0.0582	0.0619	0.0244	0.0329	0.0482	0.0513	
Metals, Soluble	Cobalt	SW 6010	ug/ml	< 0.0034	< 0.0034	0.00008 J	0.00042 J	< 0.0034	- -	98%
Metals, Soluble	Copper	SW 6010	ug/ml	0.00332 J	0.00236 J	0.00226 J	0.00209 J	0.0026	0.0015	
Metals, Soluble	Iron	SW 6010	ug/ml	0.0131	0.00277 J	0.00289 J	0.00444 J	0.0063	0.0147	
Metals, Soluble	Lead	SW 7421	ug/ml	0.0065	0.004	0.004	0.004	0.0048	0.0036	
Metals, Soluble	Magnesium	SW 6010	ug/ml	3.9	5.39	4.08	3.85	4.46	2.02	
Metals, Soluble	Manganese	SW 6010	ug/ml	0.00372	0.0394	0.0173	0.00213	0.0201	0.0447	
Metals, Soluble	Mercury	SW 7470	ug/ml	< 0.00005	0.00008	< 0.00005	< 0.00005	< 0.00005	- -	38%
Metals, Soluble	Molybdenum	SW 6010	ug/ml	0.513	1.06	0.29	0.425	0.62	0.98	
Metals, Soluble	Nickel	SW 6010	ug/ml	0.0272	0.0122	0.032	0.0273	0.0238	0.0257	
Metals, Soluble	Phosphorus	SW 6010	ug/ml	< 0.061	0.243	0.149	0.13	0.14	0.26	7%
Metals, Soluble	Potassium	SW 6010	ug/ml	8.73	19.4	6.98	8.27	11.70	16.70	
Metals, Soluble	Selenium	SW 7740	ug/ml	0.0331	0.0518	0.0198	0.0259	0.0349	0.0399	
Metals, Soluble	Silicon	SW 6010	ug/ml	4.64	2.78	4.74	4.67	4.05	2.74	
Metals, Soluble	Sodium	SW 6010	ug/ml	17.7	32.8	14.1	16.2	21.5	24.6	
Metals, Soluble	Strontium	SW 6010	ug/ml	0.488	0.926	0.45	0.514	0.621	0.657	
Metals, Soluble	Tin	SW 6010	ug/ml	0.0111 J	0.00125 J	0.00021 J	< 0.0144	0.0042	0.0149	
Metals, Soluble	Titanium	SW 6010	ug/ml	0.00095 J	0.00058 J	0.0475	0.00055 J	0.0163	0.0670	
Metals, Soluble	Vanadium	SW 6010	ug/ml	0.0634	0.12	0.0224	0.0681	0.0686	0.1218	

ESP Fly Ash Sluice Filtrate - Page 1

Liquid Stream Data Summary

Sample Stream: ESP Fly Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2		Run 3a	Run 3d	Average	95% CI	DL Ratio
Metals, Soluble	Zinc	SW 6010	ug/ml	0.00659	9E-05	J	0.204	0.00605	0.0702	0.2879	
Aldehydes	Acetaldehyde	SW 8315	ug/ml	0.014	0.088		0.012	0.086	0.038	0.108	
Aldehydes	Formaldehyde	SW 8315	ug/ml	0.016	0.052		0.022	0.034	0.030	0.048	
Organics, Semi-volatile	1,2,4,5-Tetrachlorobenzene	SW 8270	ug/L	< 0.55	< 0.578		< 0.375	< 0.375	< 0.501	--	100%
Organics, Semi-volatile	1,2,4-Trichlorobenzene	SW 8270	ug/L	< 0.563	< 0.591		< 0.565	< 0.565	< 0.573	--	100%
Organics, Semi-volatile	1,2-Dichlorobenzene	SW 8270	ug/L	< 0.742	< 0.779		< 0.611	< 0.611	< 0.711	--	100%
Organics, Semi-volatile	1,2-Diphenylhydrazine	SW 8270	ug/L	< 100	< 100		< 100	< 100	< 100	--	100%
Organics, Semi-volatile	1,3-Dichlorobenzene	SW 8270	ug/L	< 0.377	< 0.396		< 0.689	< 0.689	< 0.487	--	100%
Organics, Semi-volatile	1,4-Dichlorobenzene	SW 8270	ug/L	< 0.77	< 0.808		< 0.565	< 0.565	< 0.714	--	100%
Organics, Semi-volatile	1-Chloronaphthalene	SW 8270	ug/L	< 0.613	< 0.644		< 0.516	< 0.516	< 0.591	--	100%
Organics, Semi-volatile	1-Naphthylamine	SW 8270	ug/L	< 1.49	< 1.56		< 1.95	< 1.95	< 1.67	--	100%
Organics, Semi-volatile	2,3,4,6-Tetrachlorophenol	SW 8270	ug/L	< 0.479	< 0.503		< 0.447	< 0.447	< 0.476	--	100%
Organics, Semi-volatile	2,4,5-Trichlorophenol	SW 8270	ug/L	< 0.314	< 0.33		< 0.489	< 0.489	< 0.378	--	100%
Organics, Semi-volatile	2,4,6-Trichlorophenol	SW 8270	ug/L	< 0.332	< 0.349		< 0.487	< 0.487	< 0.389	--	100%
Organics, Semi-volatile	2,4-Dichlorophenol	SW 8270	ug/L	< 0.422	< 0.443		< 0.547	< 0.547	< 0.471	--	100%
Organics, Semi-volatile	2,4-Dimethylphenol	SW 8270	ug/L	< 1.05	< 1.1		< 1.25	< 1.25	< 1.13	--	100%
Organics, Semi-volatile	2,4-Dinitrophenol	SW 8270	ug/L	< 6.67	< 7		< 4.02	< 4.02	< 5.90	--	100%
Organics, Semi-volatile	2,4-Dinitrotoluene	SW 8270	ug/L	< 0.524	< 0.55		< 0.568	< 0.568	< 0.547	--	100%
Organics, Semi-volatile	2,6-Dichlorophenol	SW 8270	ug/L	< 0.689	< 0.723		< 0.492	< 0.492	< 0.635	--	100%
Organics, Semi-volatile	2,6-Dinitrotoluene	SW 8270	ug/L	< 0.33	< 0.346		< 0.828	< 0.828	< 0.501	--	100%
Organics, Semi-volatile	2-Chloronaphthalene	SW 8270	ug/L	< 0.309	< 0.324		< 0.377	< 0.377	< 0.337	--	100%
Organics, Semi-volatile	2-Chlorophenol	SW 8270	ug/L	< 0.728	< 0.764		< 0.611	< 0.611	< 0.701	--	100%
Organics, Semi-volatile	2-Methylnaphthalene	SW 8270	ug/L	< 0.629	< 0.66		< 0.35	< 0.35	< 0.55	--	100%
Organics, Semi-volatile	2-Methylphenol(o-cresol)	SW 8270	ug/L	< 0.509	< 0.534		< 0.298	< 0.298	< 0.447	--	100%
Organics, Semi-volatile	2-Naphthylamine	SW 8270	ug/L	< 1.86	< 1.95		< 1.54	< 1.54	< 1.78	--	100%
Organics, Semi-volatile	2-Nitroaniline	SW 8270	ug/L	< 0.383	< 0.402		< 0.637	< 0.637	< 0.474	--	100%
Organics, Semi-volatile	2-Nitrophenol	SW 8270	ug/L	< 0.419	< 0.44		< 0.502	< 0.502	< 0.454	--	100%
Organics, Semi-volatile	2-Picoline	SW 8270	ug/L	< 1.04	< 1.09		< 0.795	< 0.795	< 0.975	--	100%
Organics, Semi-volatile	3,3'-Dichlorobenzidine	SW 8270	ug/L	< 0.467	< 0.49		< 0.32	< 0.32	< 0.43	--	100%
Organics, Semi-volatile	3-Methylcholanthrene	SW 8270	ug/L	< 0.746	< 0.783		< 0.481	< 0.481	< 0.670	--	100%
Organics, Semi-volatile	3-Nitroaniline	SW 8270	ug/L	< 0.485	< 0.509		< 0.378	< 0.378	< 0.457	--	100%
Organics, Semi-volatile	4,6-Dinitro-2-methylphenol	SW 8270	ug/L	< 0.754	< 0.792		< 0.413	< 0.413	< 0.653	--	100%
Organics, Semi-volatile	4-Aminobiphenyl	SW 8270	ug/L	< 0.712	< 0.748		< 1.14	< 1.14	< 0.867	--	100%

Liquid Stream Data Summary

Sample Stream: ESP Fly Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a		Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	4-Bromophenyl phenyl ether	SW 8270	ug/L	<	0.434	<	0.456	<	0.465	<	0.465	<	0.452	--	100%
Organics, Semi-volatile	4-Chloro-3-methylphenol	SW 8270	ug/L	<	0.689	<	0.723	<	0.495	<	0.495	<	0.636	--	100%
Organics, Semi-volatile	4-Chlorophenyl phenyl ether	SW 8270	ug/L	<	0.503	<	0.528	<	0.405	<	0.405	<	0.479	--	100%
Organics, Semi-volatile	4-Methylphenol(p-cresol)	SW 8270	ug/L	<	0.548	<	0.575	<	0.441	<	0.441	<	0.521	--	100%
Organics, Semi-volatile	4-Nitroaniline	SW 8270	ug/L	<	0.461	<	0.484	<	0.583	<	0.583	<	0.509	--	100%
Organics, Semi-volatile	4-Nitrophenol	SW 8270	ug/L	<	0.658	<	0.691	<	0.901	<	0.901	<	0.750	--	100%
Organics, Semi-volatile	7,12-Dimethylbenz(a)anthracene	SW 8270	ug/L	<	1.83	<	1.92	<	1.28	<	1.28	<	1.68	--	100%
Organics, Semi-volatile	Acenaphthene	SW 8270	ug/L	<	0.455	<	0.478	<	0.262	<	0.262	<	0.398	--	100%
Organics, Semi-volatile	Acenaphthylene	SW 8270	ug/L	<	0.215	<	0.226	<	0.402	<	0.402	<	0.281	--	100%
Organics, Semi-volatile	Acetophenone	SW 8270	ug/L	<	0.437	<	0.459	<	0.537	<	0.537	<	0.478	--	100%
Organics, Semi-volatile	Aniline	SW 8270	ug/L	<	0.889	<	0.933	<	0.592	<	0.592	<	0.805	--	100%
Organics, Semi-volatile	Anthracene	SW 8270	ug/L	<	0.553	<	0.581	<	0.354	<	0.354	<	0.496	--	100%
Organics, Semi-volatile	Benzidine	SW 8270	ug/L	<	20	<	20	<	20	<	20	<	20	--	100%
Organics, Semi-volatile	Benzo(a)anthracene	SW 8270	ug/L	<	0.49	<	0.515	<	0.432	<	0.432	<	0.479	--	100%
Organics, Semi-volatile	Benzo(a)pyrene	SW 8270	ug/L	<	0.365	<	0.383	<	0.498	<	0.498	<	0.415	--	100%
Organics, Semi-volatile	Benzo(b)fluoranthene	SW 8270	ug/L	<	0.542	<	0.569	<	0.873	<	0.873	<	0.661	--	100%
Organics, Semi-volatile	Benzo(g,h,i)perylene	SW 8270	ug/L	<	0.464	<	0.487	<	0.981	<	0.981	<	0.644	--	100%
Organics, Semi-volatile	Benzo(k)fluoranthene	SW 8270	ug/L	<	0.922	<	0.968	<	0.961	<	0.961	<	0.950	--	100%
Organics, Semi-volatile	Benzoic acid	SW 8270	ug/L	<	3.77	<	3.96	<	37.1	<	37.1	<	14.9	--	100%
Organics, Semi-volatile	Benzyl alcohol	SW 8270	ug/L	<	1.03	<	1.08	<	0.587	<	0.587	<	0.899	--	100%
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ug/L	<	0.374	<	0.393	<	0.601	<	0.601	<	0.456	--	100%
Organics, Semi-volatile	Chrysene	SW 8270	ug/L	<	0.637	<	0.669	<	0.516	<	0.516	<	0.607	--	100%
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ug/L	<	0.868	<	0.911	<	0.338	<	0.338	<	0.706	--	100%
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ug/L	<	0.451	<	0.474	<	0.78	<	0.78	<	0.568	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ug/L	<	0.553	<	0.581	<	0.81	<	0.81	<	0.648	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ug/L	<	0.389	<	0.408	<	0.516	<	0.516	<	0.438	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ug/L	<	0.47	<	0.493	<	0.312	<	0.312	<	0.425	--	100%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ug/L	<	0.32	<	0.336	<	0.495	<	0.495	<	0.384	--	100%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ug/L	<	120	<	120	<	120	<	120	<	120	--	100%
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ug/L	<	0.267	<	0.28	<	0.323	<	0.323	<	0.290	--	100%
Organics, Semi-volatile	Diphenylamine	SW 8270	ug/L	<	0.503	<	0.528	<	0.266	<	0.266	<	0.432	--	100%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ug/L	<	0.479	<	0.503	<	0.653	<	0.653	<	0.545	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ug/L	<	0.608	<	0.638	<	0.453	<	0.453	<	0.566	--	100%
Organics, Semi-volatile	Fluorene	SW 8270	ug/L	<	0.32	<	0.336	<	0.365	<	0.365	<	0.340	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ug/L	<	0.223	<	0.234	<	0.302	<	0.302	<	0.253	--	100%

ESP Fly Ash Sluice Filtrate - Page 3

Liquid Stream Data Summary

Sample Stream: ESP Fly Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ug/L	< 0.665	< 0.698	< 0.492	< 0.492	< 0.618	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ug/L	< 8.5	< 8.92	< 5.66	< 5.66	< 7.69	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ug/L	< 0.566	< 0.594	< 0.611	< 0.611	< 0.590	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ug/L	< 0.5	< 0.525	< 1.28	< 1.28	< 0.768	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ug/L	< 0.273	< 0.287	< 0.592	< 0.592	< 0.384	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ug/L	< 50	< 50	< 50	< 50	< 50	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ug/L	< 1.25	< 1.31	< 0.605	< 0.605	< 1.055	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ug/L	< 1.27	< 1.33	< 0.756	< 0.756	< 1.119	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ug/L	< 0.539	< 0.566	< 0.259	< 0.259	< 0.455	--	100%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ug/L	< 0.715	< 0.751	< 0.629	< 0.629	< 0.698	--	100%
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ug/L	< 0.898	< 0.943	< 0.574	< 0.574	< 0.805	--	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ug/L	< 0.694	< 0.729	< 0.46	< 0.46	< 0.628	--	100%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ug/L	< 0.503	< 0.528	< 0.81	< 0.81	< 0.614	--	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ug/L	< 0.422	< 0.443	< 0.36	< 0.36	< 0.408	--	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ug/L	< 1.97	< 2.07	< 1.33	< 1.33	< 1.79	--	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ug/L	< 0.823	< 0.864	< 0.855	< 0.855	< 0.847	--	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ug/L	< 0.514	< 0.54	< 0.371	< 0.371	< 0.475	--	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ug/L	< 0.592	< 0.622	< 0.45	< 0.45	< 0.555	--	100%
Organics, Semi-volatile	Phenol	SW 8270	ug/L	< 0.38	< 0.399	< 0.849	< 0.849	< 0.543	--	100%
Organics, Semi-volatile	Pronamide	SW 8270	ug/L	< 0.704	< 0.739	< 0.232	< 0.232	< 0.558	--	100%
Organics, Semi-volatile	Pyrene	SW 8270	ug/L	< 0.446	< 0.468	< 0.392	< 0.392	< 0.435	--	100%
Organics, Semi-volatile	Pyridine	SW 8270	ug/L	< 1.1	< 1.16	< 0.565	< 0.565	< 0.942	--	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ug/L	< 0.535	< 0.562	< 0.583	< 0.583	< 0.560	--	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ug/L	< 0.697	< 0.732	< 0.368	< 0.368	< 0.599	--	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ug/L	< 0.691	< 0.726	< 0.767	< 0.767	< 0.728	--	100%
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ug/L	< 1.74	2.35	< 0.559	< 0.559	< 1.740	--	33%
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ug/L	< 0.532	< 0.559	< 0.716	< 0.716	< 0.602	--	100%
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ug/L	< 0.49	< 0.515	< 0.698	< 0.698	< 0.568	--	100%
Organics, Volatile	1,1,1-Trichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1,2,2-Tetrachloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1,2-Trichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1-Dichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1-Dichloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,2-Dichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%

Liquid Stream Data Summary

Sample Stream: ESP Fly Ash Sluice Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Volatile	1,2-Dichloroethene (total)	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,2-Dichloropropane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	2-Butanone (MEK)	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	2-Hexanone	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	4-Methyl-2-pentanone (MIBK)	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Acetone	SW 8240	ug/L	< 10	< 10	13	< 10	< 10	--	43%
Organics, Volatile	Benzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Bromodichloromethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Bromoform	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Bromomethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Carbon Disulfide	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Carbon Tetrachloride	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Chlorobenzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Chloroethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Chloroform	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Chloromethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Dibromochloromethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Ethylbenzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Methylene Chloride	SW 8240	ug/L	5.5	3.6	5.7	6.5	4.9	2.9	
Organics, Volatile	Styrene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Tetrachloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Toluene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Trichloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Vinyl acetate	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Vinyl chloride	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Xylenes	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	cis-1,3-Dichloropropene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	trans-1,3-Dichloropropene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%

Liquid Stream Data Summary

Sample Stream: Gypsum Pond Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Reduced Species	Cyanide	SW 9012	ug/ml	0.0477	0.0507	0.0473	0.043	0.0486	0.0046	
Reduced Species	Ammonia as N	EPA 350.1	ug/ml	16.7	14.4	14.9	15.3	15.3	3.0	
Anions	Chloride	EPA 300	ug/ml	18300	15200	15700	17300	16,400	4,135	
Anions	Fluoride	EPA 340.2	ug/ml	15.2	13.5	15.9	16.2	14.9	3.1	
Anions	Phosphate	EPA 365.2	ug/ml	0.0264	0.0424	0.0292	0.0292	0.0327	0.0212	
Anions	Sulfate	EPA 300.0	ug/ml	914	1010	1010	709	978	138	
Metals, Soluble	Aluminum	SW 6010	ug/ml	0.497	0.73	1.04	1.15	0.76	0.68	
Metals, Soluble	Antimony	SW 6010	ug/ml	< 0.241	< 0.241	< 0.241	< 0.241	< 0.24	- -	100%
Metals, Soluble	Arsenic	SW 7060	ug/ml	0.132	0.114	0.134	0.132	0.13	0.03	
Metals, Soluble	Barium	SW 6010	ug/ml	1.2	1.16	1.2	1.26	1.19	0.06	
Metals, Soluble	Beryllium	SW 6010	ug/ml	< 0.00554	0.0004 J	0.0009 J	< 0.00554	< 0.0055	- -	68%
Metals, Soluble	Boron	SW 6010	ug/ml	533	497	569	568	533	89	
Metals, Soluble	Cadmium	SW 7131	ug/ml	0.16	0.133	0.153	0.15	0.15	0.03	
Metals, Soluble	Calcium	SW 6010	ug/ml	8800	7160	8390	20100	8,117	2,120	
Metals, Soluble	Chromium	SW 6010	ug/ml	0.0877	0.106	0.11	0.112	0.101	0.030	
Metals, Soluble	Cobalt	SW 6010	ug/ml	0.152	0.0472	0.116	0.106	0.105	0.132	
Metals, Soluble	Copper	SW 6010	ug/ml	0.0431	0.0489	0.0789	0.0738	0.0570	0.0477	
Metals, Soluble	Iron	SW 6010	ug/ml	< 0.0596	< 0.0596	< 0.0596	< 0.0596	< 0.0596	- -	100%
Metals, Soluble	Lead	SW 7421	ug/ml	< 0.0011	< 0.0011	0.0056	0.0052	0.0022	0.0072	16%
Metals, Soluble	Magnesium	SW 6010	ug/ml	708	632	723	722	688	121	
Metals, Soluble	Manganese	SW 6010	ug/ml	121	111	127	127	120	20	
Metals, Soluble	Mercury	SW 7470	ug/ml	0.00019	0.00019	0.00034	0.00023	0.00024	0.00022	
Metals, Soluble	Molybdenum	SW 6010	ug/ml	0.103	0.0552	0.102	0.0886	0.0867	0.0679	
Metals, Soluble	Nickel	SW 6010	ug/ml	0.679	0.57	0.62	0.687	0.623	0.136	
Metals, Soluble	Phosphorus	SW 6010	ug/ml	0.39	0.288	0.355	0.265	0.344	0.129	
Metals, Soluble	Potassium	SW 6010	ug/ml	54.4	45.9	54.4	55.2	51.6	12.2	
Metals, Soluble	Selenium	SW 7740	ug/ml	0.405	0.253	0.424	0.33	0.361	0.233	
Metals, Soluble	Silicon	SW 6010	ug/ml	15.7	14.8	17	16.9	15.8	2.7	
Metals, Soluble	Sodium	SW 6010	ug/ml	99.7	90.2	102	102	97.3	15.5	
Metals, Soluble	Strontium	SW 6010	ug/ml	13.3	12.3	14	13.9	13.2	2.1	
Metals, Soluble	Tin	SW 6010	ug/ml	< 0.144	0.457 J	0.0083 J	< 0.144	0.1791	0.6031	13%

Gypsum Pond Water - Page 1

Liquid Stream Data Summary

Sample Stream: Gypsum Pond Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Metals, Soluble	Titanium	SW 6010	ug/ml	2.39	2.14	2.04	2.04	2.190	0.448	
Metals, Soluble	Vanadium	SW 6010	ug/ml	0.348	0.296	0.323	0.342	0.322	0.065	
Metals, Soluble	Zinc	SW 6010	ug/ml	0.81	0.739	0.868	0.865	0.806	0.161	
Metals, Total	Aluminum	SW 6010	ug/ml	1.91	1.85	2.36	2.83	2.04	0.69	
Metals, Total	Antimony	SW 6010	ug/ml	< 0.0964	< 0.0964	< 0.241	< 0.241	< 0.1446	- -	100%
Metals, Total	Arsenic	SW 7060	ug/ml	0.121	0.118	0.141	0.127	0.127	0.031	
Metals, Total	Barium	SW 6010	ug/ml	1.28	1.08	1.21	1.06	1.19	0.25	
Metals, Total	Beryllium	SW 6010	ug/ml	0.00396	0.00116 J	< 0.00554	0.0012 J	< 0.0055	- -	35%
Metals, Total	Boron	SW 6010	ug/ml	589	472	566	512	542	154	
Metals, Total	Calcium	SW 6010	ug/ml	12200	7720	8470	8340	9,463	5,961	
Metals, Total	Cadmium	SW 7131	ug/ml	0.174	0.185	0.171	0.168	0.177	0.018	
Metals, Total	Chromium	SW 6010	ug/ml	0.0586	0.0476	0.118	0.0646	0.075	0.094	
Metals, Total	Cobalt	SW 6010	ug/ml	0.163	0.113	0.152	0.143	0.143	0.065	
Metals, Total	Copper	SW 6010	ug/ml	0.0633	0.0403	0.0563	0.0824	0.0533	0.0293	
Metals, Total	Iron	SW 6010	ug/ml	0.557	1.01	0.462	0.451	0.676	0.728	
Metals, Total	Lead	SW 7421	ug/ml	0.0022	0.0027	0.0058	0.0043	0.0036	0.0048	
Metals, Total	Magnesium	SW 6010	ug/ml	784	620	744	668	716	212	
Metals, Total	Manganese	SW 6010	ug/ml	135	105	129	116	123	39	
Metals, Total	Mercury	SW 7470	ug/ml	0.00028	0.00031	0.0003	0.00036	0.00030	0.00004	
Metals, Total	Molybdenum	SW 6010	ug/ml	0.0816	0.0749	0.0718	0.0565	0.0761	0.0124	
Metals, Total	Nickel	SW 6010	ug/ml	0.668	0.545	0.678	0.638	0.630	0.184	
Metals, Total	Phosphorus	SW 6010	ug/ml	0.227	0.235	0.246	0.322	0.236	0.024	
Metals, Total	Potassium	SW 6010	ug/ml	53.2	45.9	56	52.2	51.7	13.0	
Metals, Total	Selenium	SW 7740	ug/ml	0.242	0.343	0.212	0.0462	0.2657	0.1705	
Metals, Total	Silicon	SW 6010	ug/ml	19.2	16.9	19	17.1	18.4	3.2	
Metals, Total	Sodium	SW 6010	ug/ml	109	91	107	95.5	102.3	24.5	
Metals, Total	Strontium	SW 6010	ug/ml	15.3	11.7	14.1	12.6	13.7	4.6	
Metals, Total	Tin	SW 6010	ug/ml	< 0.0576	< 0.0576	< 0.144	< 0.144	< 0.086	- -	100%
Metals, Total	Titanium	SW 6010	ug/ml	0.351	0.566	2.38	0.855	1.099	2.769	
Metals, Total	Vanadium	SW 6010	ug/ml	0.158	0.145	0.346	0.163	0.216	0.279	
Metals, Total	Zinc	SW 6010	ug/ml	0.841	0.715	0.884	0.81	0.813	0.218	

Liquid Stream Data Summary

Sample Stream: Gypsum Pond Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Aldehydes	Acetaldehyde	SW 8315	ug/ml	0.002	0.082	0.072	0.074	0.052	0.108	
Aldehydes	Formaldehyde	SW 8315	ug/ml	0.012	0.024	0.034	0.032	0.023	0.027	
Organics, Semi-volatile	1,2,4,5-Tetrachlorobenzene	SW 8270	ug/L	< 0.55		< 0.382	< 0.373	< 0.466	--	100%
Organics, Semi-volatile	1,2,4-Trichlorobenzene	SW 8270	ug/L	< 0.563		< 0.576	< 0.563	< 0.570	--	100%
Organics, Semi-volatile	1,2-Dichlorobenzene	SW 8270	ug/L	< 0.742		< 0.623	< 0.608	< 0.683	--	100%
Organics, Semi-volatile	1,2-Diphenylhydrazine	SW 8270	ug/L	< 100		< 100	< 100	< 100	--	100%
Organics, Semi-volatile	1,3-Dichlorobenzene	SW 8270	ug/L	< 0.377		< 0.703	< 0.686	< 0.540	--	100%
Organics, Semi-volatile	1,4-Dichlorobenzene	SW 8270	ug/L	< 0.77		< 0.576	< 0.563	< 0.673	--	100%
Organics, Semi-volatile	1-Chloronaphthalene	SW 8270	ug/L	< 0.613		< 0.526	< 0.514	< 0.570	--	100%
Organics, Semi-volatile	1-Naphthylamine	SW 8270	ug/L	< 1.49		< 1.99	< 1.94	< 1.74	--	100%
Organics, Semi-volatile	2,3,4,6-Tetrachlorophenol	SW 8270	ug/L	< 0.479		< 0.456	< 0.445	< 0.468	--	100%
Organics, Semi-volatile	2,4,5-Trichlorophenol	SW 8270	ug/L	< 0.314		< 0.499	< 0.487	< 0.407	--	100%
Organics, Semi-volatile	2,4,6-Trichlorophenol	SW 8270	ug/L	< 0.332		< 0.496	< 0.484	< 0.414	--	100%
Organics, Semi-volatile	2,4-Dichlorophenol	SW 8270	ug/L	< 0.422		< 0.558	< 0.544	< 0.490	--	100%
Organics, Semi-volatile	2,4-Dimethylphenol	SW 8270	ug/L	< 1.05		< 1.27	< 1.24	< 1.16	--	100%
Organics, Semi-volatile	2,4-Dinitrophenol	SW 8270	ug/L	< 6.67		< 4.1	< 4	< 5.39	--	100%
Organics, Semi-volatile	2,4-Dinitrotoluene	SW 8270	ug/L	< 0.524		< 0.579	< 0.566	< 0.552	--	100%
Organics, Semi-volatile	2,6-Dichlorophenol	SW 8270	ug/L	< 0.689		< 0.502	< 0.49	< 0.596	--	100%
Organics, Semi-volatile	2,6-Dinitrotoluene	SW 8270	ug/L	< 0.33		< 0.844	< 0.824	< 0.587	--	100%
Organics, Semi-volatile	2-Chloronaphthalene	SW 8270	ug/L	< 0.309		< 0.384	< 0.375	< 0.347	--	100%
Organics, Semi-volatile	2-Chlorophenol	SW 8270	ug/L	< 0.728		< 0.623	< 0.608	< 0.676	--	100%
Organics, Semi-volatile	2-Methylnaphthalene	SW 8270	ug/L	< 0.629		< 0.357	< 0.348	< 0.493	--	100%
Organics, Semi-volatile	2-Methylphenol(o-cresol)	SW 8270	ug/L	< 0.509		< 0.304	< 0.297	< 0.407	--	100%
Organics, Semi-volatile	2-Naphthylamine	SW 8270	ug/L	< 1.86		< 1.57	< 1.53	< 1.72	--	100%
Organics, Semi-volatile	2-Nitroaniline	SW 8270	ug/L	< 0.383		< 0.65	< 0.634	< 0.517	--	100%
Organics, Semi-volatile	2-Nitrophenol	SW 8270	ug/L	< 0.419		< 0.512	< 0.5	< 0.466	--	100%
Organics, Semi-volatile	2-Picoline	SW 8270	ug/L	< 1.04		< 0.811	< 0.791	< 0.926	--	100%
Organics, Semi-volatile	3,3'-Dichlorobenzidine	SW 8270	ug/L	< 0.467		< 0.326	< 0.319	< 0.397	--	100%
Organics, Semi-volatile	3-Methylcholanthrene	SW 8270	ug/L	< 0.746		< 0.49	< 0.478	< 0.618	--	100%
Organics, Semi-volatile	3-Nitroaniline	SW 8270	ug/L	< 0.485		< 0.385	< 0.376	< 0.435	--	100%
Organics, Semi-volatile	4,6-Dinitro-2-methylphenol	SW 8270	ug/L	< 0.754		< 0.422	< 0.411	< 0.588	--	100%
Organics, Semi-volatile	4-Aminobiphenyl	SW 8270	ug/L	< 0.712		< 1.17	< 1.14	< 0.941	--	100%

Liquid Stream Data Summary

Sample Stream: Gypsum Pond Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	4-Bromophenyl phenyl	SW 8270	ug/L	< 0.434		< 0.475	< 0.463	< 0.455	--	100%
Organics, Semi-volatile	4-Chloro-3-methylphenol	SW 8270	ug/L	< 0.689		< 0.505	< 0.493	< 0.597	--	100%
Organics, Semi-volatile	4-Chlorophenyl phenyl ether	SW 8270	ug/L	< 0.503		< 0.413	< 0.403	< 0.458	--	100%
Organics, Semi-volatile	4-Methylphenol(p-cresol)	SW 8270	ug/L	< 0.548		< 0.45	< 0.439	< 0.499	--	100%
Organics, Semi-volatile	4-Nitroaniline	SW 8270	ug/L	< 0.461		< 0.594	< 0.58	< 0.528	--	100%
Organics, Semi-volatile	4-Nitrophenol	SW 8270	ug/L	< 0.658		< 0.919	< 0.897	< 0.789	--	100%
Organics, Semi-volatile	7,12-Dimethylbenz(a)anthracen	SW 8270	ug/L	< 1.83		< 1.3	< 1.27	< 1.57	--	100%
Organics, Semi-volatile	Acenaphthene	SW 8270	ug/L	< 0.455		< 0.267	< 0.26	< 0.361	--	100%
Organics, Semi-volatile	Acenaphthylene	SW 8270	ug/L	< 0.215		< 0.41	< 0.4	< 0.313	--	100%
Organics, Semi-volatile	Acetophenone	SW 8270	ug/L	< 0.437		< 0.548	< 0.535	< 0.493	--	100%
Organics, Semi-volatile	Aniline	SW 8270	ug/L	< 0.889		< 0.604	< 0.589	< 0.747	--	100%
Organics, Semi-volatile	Anthracene	SW 8270	ug/L	< 0.553		< 0.361	< 0.352	< 0.457	--	100%
Organics, Semi-volatile	Benzidine	SW 8270	ug/L	< 20		< 20	< 20	< 20	--	100%
Organics, Semi-volatile	Benzo(a)anthracene	SW 8270	ug/L	< 0.49		< 0.44	< 0.43	< 0.47	--	100%
Organics, Semi-volatile	Benzo(a)pyrene	SW 8270	ug/L	< 0.365		< 0.508	< 0.496	< 0.437	--	100%
Organics, Semi-volatile	Benzo(b)fluoranthene	SW 8270	ug/L	< 0.542		< 0.89	< 0.869	< 0.716	--	100%
Organics, Semi-volatile	Benzo(g,h,i)perylene	SW 8270	ug/L	< 0.464		< 1	< 0.976	< 0.732	--	100%
Organics, Semi-volatile	Benzo(k)fluoranthene	SW 8270	ug/L	< 0.922		< 0.979	< 0.956	< 0.951	--	100%
Organics, Semi-volatile	Benzoic acid	SW 8270	ug/L	< 3.77		< 37.8	< 36.9	< 20.79	--	100%
Organics, Semi-volatile	Benzyl alcohol	SW 8270	ug/L	< 1.03		< 0.598	< 0.584	< 0.814	--	100%
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ug/L	0.296 J		< 0.613	< 0.598	< 0.613	--	51%
Organics, Semi-volatile	Chrysene	SW 8270	ug/L	< 0.637		< 0.526	< 0.514	< 0.582	--	100%
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ug/L	< 0.868		< 0.345	< 0.337	< 0.607	--	100%
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ug/L	< 0.451		< 0.795	< 0.776	< 0.623	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ug/L	< 0.553		< 0.825	< 0.806	< 0.689	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ug/L	< 0.389		< 0.526	< 0.514	< 0.458	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ug/L	< 0.47		< 0.318	< 0.31	< 0.394	--	100%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ug/L	< 0.32		< 0.505	< 0.493	< 0.413	--	100%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ug/L	< 120		< 120	< 120	< 120	--	100%
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ug/L	1.44		1.09	1.02	1.27	2.22	
Organics, Semi-volatile	Diphenylamine	SW 8270	ug/L	< 0.503		< 0.272	< 0.265	< 0.388	--	100%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ug/L	< 0.479		< 0.666	< 0.65	< 0.573	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ug/L	< 0.608		< 0.462	< 0.451	< 0.535	--	100%

Liquid Stream Data Summary

Sample Stream: Gypsum Pond Water

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a		Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	Fluorene	SW 8270	ug/L	<	0.32			<	0.373	<	0.364	<	0.347	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ug/L	<	0.223			<	0.308	<	0.3	<	0.266	--	100%
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ug/L	<	0.665			<	0.502	<	0.49	<	0.584	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ug/L	<	8.5			<	5.77	<	5.64	<	7.14	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ug/L	<	0.566			<	0.623	<	0.608	<	0.595	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ug/L	<	0.5			<	1.3	<	1.27	<	0.90	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ug/L	<	0.273			<	0.604	<	0.589	<	0.439	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ug/L	<	50			<	50	<	50	<	50	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ug/L	<	1.25			<	0.617	<	0.602	<	0.934	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ug/L	<	1.27			<	0.771	<	0.752	<	1.021	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ug/L	<	0.539			<	0.264	<	0.257	<	0.402	--	100%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ug/L	<	0.715			<	0.641	<	0.626	<	0.678	--	100%
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ug/L	<	0.898			<	0.585	<	0.571	<	0.742	--	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ug/L	<	0.694			<	0.469	<	0.457	<	0.582	--	100%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ug/L	<	0.503			<	0.825	<	0.806	<	0.664	--	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ug/L	<	0.422			<	0.367	<	0.358	<	0.395	--	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ug/L	<	1.97			<	1.35	<	1.32	<	1.66	--	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ug/L	<	0.823			<	0.872	<	0.851	<	0.848	--	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ug/L	<	0.514			<	0.378	<	0.369	<	0.446	--	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ug/L	<	0.592			<	0.459	<	0.448	<	0.526	--	100%
Organics, Semi-volatile	Phenol	SW 8270	ug/L	<	0.38			<	0.866	<	0.845	<	0.623	--	100%
Organics, Semi-volatile	Pronamide	SW 8270	ug/L	<	0.704			<	0.236	<	0.231	<	0.470	--	100%
Organics, Semi-volatile	Pyrene	SW 8270	ug/L	<	0.446			<	0.4	<	0.39	<	0.423	--	100%
Organics, Semi-volatile	Pyridine	SW 8270	ug/L	<	1.1			<	0.576	<	0.563	<	0.838	--	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ug/L	<	0.535			<	0.594	<	0.58	<	0.565	--	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ug/L	<	0.697			<	0.375	<	0.367	<	0.536	--	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ug/L	<	0.691			<	0.782	<	0.764	<	0.737	--	100%
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ug/L		14.7				2.03	<	0.556		8.365	80.52	
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ug/L	<	0.532			<	0.73	<	0.713	<	0.631	--	100%
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ug/L	<	0.49			<	0.712	<	0.695	<	0.601	--	100%
Organics, Volatile	1,1,1-Trichloroethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	1,1,2,2-Tetrachloroethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%

Liquid Stream Data Summary

Sample Stream: Gypsum Pond Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Volatile	1,1,2-Trichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1-Dichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1-Dichloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,2-Dichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,2-Dichloroethene (total)	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,2-Dichloropropane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	2-Butanone (MEK)	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	2-Hexanone	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	4-Methyl-2-pentanone (MIBK)	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Acetone	SW 8240	ug/L	< 10	6.8 J	7.1 J	11	< 10	--	26%
Organics, Volatile	Benzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Bromodichloromethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Bromoform	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Bromomethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Carbon Disulfide	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Carbon Tetrachloride	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Chlorobenzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Chloroethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Chloroform	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Chloromethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Dibromochloromethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Ethylbenzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Methylene Chloride	SW 8240	ug/L	< 5	3.8 J	4.9 J	7	< 5	--	22%
Organics, Volatile	Styrene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Tetrachloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Toluene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Trichloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Vinyl acetate	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Vinyl chloride	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Xylenes	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	cis-1,3-Dichloropropene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	trans-1,3-Dichloropropene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%

Liquid Stream Data Summary

Sample Stream: JBR Underflow Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Reduced Species	Cyanide	SW 9012	ug/ml	0.114	0.0372	0.0959	0.0205	0.0824	0.0997	
Reduced Species	Ammonia as N	EPA 350.1	ug/ml	43.9	43	< 40.2	41.6	< 40.2	- -	19%
Anions	Chloride	EPA 300	ug/ml	27,200	24,100	26,900	25,600	26,067	4,248	
Anions	Fluoride	EPA 340.2	ug/ml	23.8	35.1	34.1	34.1	31.0	15.5	
Anions	Phosphate	EPA 365.2	ug/ml	< 0.02	0.118	0.0122 J	< 0.02	0.047	0.153	7%
Anions	Sulfate	EPA 300.0	ug/ml	740	688	709	709	712	65	
Anions	Sulfite	EPRI-FGD-M2	ug/ml	4	1.6	2.4	1.6	2.67	3.04	
Metals, Soluble	Aluminum	SW 6010	ug/ml	10.7	14.4	11.9	12.4	12.3	4.7	
Metals, Soluble	Antimony	SW 6010	ug/ml	< 0.241	< 0.241	< 0.0964	< 0.241	< 0.1928	- -	100%
Metals, Soluble	Arsenic	SW 7060	ug/ml	0.315	0.157	0.121	0.352	0.198	0.256	
Metals, Soluble	Barium	SW 6010	ug/ml	3.33	3.52	3.31	3.99	3.39	0.29	
Metals, Soluble	Beryllium	SW 6010	ug/ml	0.0085	0.0048 J	0.00728	0.0042 J	0.0069	0.0047	
Metals, Soluble	Boron	SW 6010	ug/ml	1450	1430	1310	1480	1,397	188	
Metals, Soluble	Cadmium	SW 7131	ug/ml	0.473	0.47	0.426	0.467	0.456	0.065	
Metals, Soluble	Calcium	SW 6010	ug/ml	20,100	19,300	12,600	19,000	17,333	10,232	
Metals, Soluble	Chromium	SW 6010	ug/ml	0.096	0.0851	0.0277	0.0791	0.0696	0.0912	
Metals, Soluble	Cobalt	SW 6010	ug/ml	0.303	0.303	0.305	0.316	0.304	0.003	
Metals, Soluble	Copper	SW 6010	ug/ml	0.242	0.272	0.203	0.234	0.239	0.086	
Metals, Soluble	Iron	SW 6010	ug/ml	< 0.0596	< 0.0596	< 0.0238	< 0.0596	< 0.0477	- -	100%
Metals, Soluble	Lead	SW 7421	ug/ml	0.0139	0.016	0.009	0.012	0.013	0.009	
Metals, Soluble	Magnesium	SW 6010	ug/ml	1830	1810	1750	1870	1,797	103	
Metals, Soluble	Manganese	SW 6010	ug/ml	318	315	288	326	307	41	
Metals, Soluble	Mercury	SW 7470	ug/ml	0.00056	0.0014	0.00111	0.00125	0.00102	0.00106	
Metals, Soluble	Molybdenum	SW 6010	ug/ml	0.0571	0.0659	0.0695	0.0619	0.0642	0.0158	
Metals, Soluble	Nickel	SW 6010	ug/ml	1.57	1.61	1.37	1.61	1.52	0.32	
Metals, Soluble	Phosphorus	SW 6010	ug/ml	0.675	0.777	0.703	0.916	0.718	0.131	
Metals, Soluble	Potassium	SW 6010	ug/ml	125	125	119	126	123	9	
Metals, Soluble	Selenium	SW 7740	ug/ml	< 0.00288	0.734	0.728	0.814	0.488	1.046	0.1%
Metals, Soluble	Silicon	SW 6010	ug/ml	39.7	44.3	43.3	45.4	42.4	6.0	

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Liquid Stream Data Summary

Sample Stream: JBR Underflow Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Metals, Soluble	Sodium	SW 6010	ug/ml	244	242	246	256	244	5	
Metals, Soluble	Strontium	SW 6010	ug/ml	34.1	33.6	30.9	35	32.9	4.3	
Metals, Soluble	Tin	SW 6010	ug/ml	< 0.144	0.0007 J	< 0.144	< 0.144	< 0.144	--	100%
Metals, Soluble	Titanium	SW 6010	ug/ml	0.762	0.817	0.868	0.739	0.816	0.132	
Metals, Soluble	Vanadium	SW 6010	ug/ml	0.296	0.29	0.138	0.288	0.241	0.222	
Metals, Soluble	Zinc	SW 6010	ug/ml	2.34	2.43	2.18	2.52	2.32	0.31	
Aldehydes	Acetaldehyde	SW 8315	ug/ml	0.008	0.078	0.096	0.072	0.061	0.115	
Aldehydes	Formaldehyde	SW 8315	ug/ml	0.004	0.048	0.2	0.152	0.084	0.255	
Organics, Semi-volatile	1,2,4,5-Tetrachlorobenzene	SW 8270	ug/L	< 0.625	< 0.567	< 0.561	< 0.456	< 0.584	--	100%
Organics, Semi-volatile	1,2,4-Trichlorobenzene	SW 8270	ug/L	< 0.639	< 0.579	< 0.846	< 0.688	< 0.688	--	100%
Organics, Semi-volatile	1,2-Dichlorobenzene	SW 8270	ug/L	< 0.842	< 0.764	< 0.914	< 0.743	< 0.840	--	100%
Organics, Semi-volatile	1,2-Diphenylhydrazine	SW 8270	ug/L	< 100	< 100	< 100	< 100	< 100	--	100%
Organics, Semi-volatile	1,3-Dichlorobenzene	SW 8270	ug/L	< 0.428	< 0.388	< 1.03	< 0.839	< 0.615	--	100%
Organics, Semi-volatile	1,4-Dichlorobenzene	SW 8270	ug/L	< 0.874	< 0.792	< 0.846	< 0.688	< 0.837	--	100%
Organics, Semi-volatile	1-Chloronaphthalene	SW 8270	ug/L	< 0.696	< 0.631	< 0.773	< 0.628	< 0.700	--	100%
Organics, Semi-volatile	1-Naphthylamine	SW 8270	ug/L	< 1.69	< 1.53	< 2.92	< 2.37	< 2.05	--	100%
Organics, Semi-volatile	2,3,4,6-Tetrachlorophenol	SW 8270	ug/L	< 0.544	< 0.493	< 0.669	< 0.544	< 0.569	--	100%
Organics, Semi-volatile	2,4,5-Trichlorophenol	SW 8270	ug/L	< 0.357	< 0.324	< 0.732	< 0.595	< 0.471	--	100%
Organics, Semi-volatile	2,4,6-Trichlorophenol	SW 8270	ug/L	< 0.377	< 0.342	< 0.728	< 0.592	< 0.482	--	100%
Organics, Semi-volatile	2,4-Dichlorophenol	SW 8270	ug/L	< 0.479	< 0.434	< 0.819	< 0.665	< 0.577	--	100%
Organics, Semi-volatile	2,4-Dimethylphenol	SW 8270	ug/L	< 1.19	< 1.08	< 1.87	< 1.52	< 1.38	--	100%
Organics, Semi-volatile	2,4-Dinitrophenol	SW 8270	ug/L	< 7.57	< 6.86	< 6.01	< 4.89	< 6.81	--	100%
Organics, Semi-volatile	2,4-Dinitrotoluene	SW 8270	ug/L	< 0.595	< 0.539	< 0.85	< 0.691	< 0.661	--	100%
Organics, Semi-volatile	2,6-Dichlorophenol	SW 8270	ug/L	< 0.782	< 0.709	< 0.737	< 0.599	< 0.743	--	100%
Organics, Semi-volatile	2,6-Dinitrotoluene	SW 8270	ug/L	< 0.374	< 0.339	< 1.24	< 1.01	< 0.651	--	100%
Organics, Semi-volatile	2-Chloronaphthalene	SW 8270	ug/L	< 0.35	< 0.318	< 0.564	< 0.458	< 0.411	--	100%
Organics, Semi-volatile	2-Chlorophenol	SW 8270	ug/L	< 0.826	< 0.749	< 0.914	< 0.743	< 0.830	--	100%
Organics, Semi-volatile	2-Methylnaphthalene	SW 8270	ug/L	< 0.714	< 0.647	< 0.524	< 0.426	< 0.628	--	100%
Organics, Semi-volatile	2-Methylphenol(o-cresol)	SW 8270	ug/L	< 0.577	< 0.524	< 0.446	< 0.363	< 0.516	--	100%

Liquid Stream Data Summary

Sample Stream: JBR Underflow Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	2-Naphthylamine	SW 8270	ug/L	< 2.11	< 1.91	< 2.3	< 1.87	< 2.11	--	100%
Organics, Semi-volatile	2-Nitroaniline	SW 8270	ug/L	< 0.435	< 0.394	< 0.954	< 0.775	< 0.594	--	100%
Organics, Semi-volatile	2-Nitrophenol	SW 8270	ug/L	< 0.476	< 0.431	< 0.751	< 0.611	< 0.553	--	100%
Organics, Semi-volatile	2-Picoline	SW 8270	ug/L	< 1.18	< 1.07	< 1.19	< 0.967	< 1.15	--	100%
Organics, Semi-volatile	3,3'-Dichlorobenzidine	SW 8270	ug/L	< 0.53	< 0.48	< 0.479	< 0.389	< 0.496	--	100%
Organics, Semi-volatile	3-Methylcholanthrene	SW 8270	ug/L	< 0.846	< 0.768	< 0.719	< 0.585	< 0.778	--	100%
Organics, Semi-volatile	3-Nitroaniline	SW 8270	ug/L	< 0.55	< 0.499	< 0.565	< 0.46	< 0.538	--	100%
Organics, Semi-volatile	4,6-Dinitro-2-methylphenol	SW 8270	ug/L	< 0.856	< 0.776	< 0.619	< 0.503	< 0.750	--	100%
Organics, Semi-volatile	4-Aminobiphenyl	SW 8270	ug/L	< 0.809	< 0.733	< 1.71	< 1.39	< 1.084	--	100%
Organics, Semi-volatile	4-Bromophenyl phenyl	SW 8270	ug/L	< 0.493	< 0.447	< 0.696	< 0.566	< 0.545	--	100%
Organics, Semi-volatile	4-Chloro-3-methylphenol	SW 8270	ug/L	< 0.782	< 0.709	< 0.741	< 0.602	< 0.744	--	100%
Organics, Semi-volatile	4-Chlorophenyl phenyl ether	SW 8270	ug/L	< 0.571	< 0.518	< 0.606	< 0.492	< 0.565	--	100%
Organics, Semi-volatile	4-Methylphenol(p-cresol)	SW 8270	ug/L	< 0.622	< 0.564	< 0.66	< 0.537	< 0.615	--	100%
Organics, Semi-volatile	4-Nitroaniline	SW 8270	ug/L	< 0.523	< 0.475	< 0.872	< 0.709	< 0.623	--	100%
Organics, Semi-volatile	4-Nitrophenol	SW 8270	ug/L	< 0.747	< 0.677	< 1.35	< 1.1	< 0.925	--	100%
Organics, Semi-volatile	7,12-Dimethylbenz(a)anthracene	SW 8270	ug/L	< 2.08	< 1.88	< 1.91	< 1.56	< 1.96	--	100%
Organics, Semi-volatile	Acenaphthene	SW 8270	ug/L	< 0.517	< 0.469	< 0.391	< 0.318	< 0.459	--	100%
Organics, Semi-volatile	Acenaphthylene	SW 8270	ug/L	< 0.244	< 0.222	< 0.601	< 0.489	< 0.356	--	100%
Organics, Semi-volatile	Acetophenone	SW 8270	ug/L	< 0.496	< 0.45	< 0.804	< 0.654	< 0.583	--	100%
Organics, Semi-volatile	Aniline	SW 8270	ug/L	< 1.01	< 0.915	1.57	< 0.72	< 1.010	--	38%
Organics, Semi-volatile	Anthracene	SW 8270	ug/L	< 0.628	< 0.57	< 0.529	< 0.43	< 0.576	--	100%
Organics, Semi-volatile	Benzidine	SW 8270	ug/L	< 20	< 20	< 20	< 20	< 20	--	100%
Organics, Semi-volatile	Benzo(a)anthracene	SW 8270	ug/L	< 0.557	< 0.505	< 0.646	< 0.525	< 0.569	--	100%
Organics, Semi-volatile	Benzo(a)pyrene	SW 8270	ug/L	< 0.414	< 0.375	< 0.745	< 0.606	< 0.511	--	100%
Organics, Semi-volatile	Benzo(b)fluoranthene	SW 8270	ug/L	< 0.615	< 0.558	< 1.31	< 1.06	< 0.828	--	100%
Organics, Semi-volatile	Benzo(g,h,i)perylene	SW 8270	ug/L	< 0.526	< 0.477	< 1.47	< 1.19	< 0.824	--	100%
Organics, Semi-volatile	Benzo(k)fluoranthene	SW 8270	ug/L	< 1.05	< 0.949	< 1.44	< 1.17	< 1.146	--	100%
Organics, Semi-volatile	Benzoic acid	SW 8270	ug/L	< 4.28	4.73	< 55.5	< 45.1	< 55.50	--	86%
Organics, Semi-volatile	Benzyl alcohol	SW 8270	ug/L	< 1.17	< 1.06	< 0.878	< 0.713	< 1.036	--	100%
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ug/L	< 0.425	< 0.385	< 0.899	< 0.731	< 0.570	--	100%
Organics, Semi-volatile	Chrysene	SW 8270	ug/L	< 0.723	< 0.656	< 0.773	< 0.628	< 0.717	--	100%

Liquid Stream Data Summary

Sample Stream: JBR Underflow Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ug/L	< 0.985	< 0.893	< 0.506	< 0.412	< 0.795	--	100%
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ug/L	< 0.512	< 0.465	< 1.17	< 0.949	< 0.716	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ug/L	< 0.628	< 0.57	< 1.21	< 0.985	< 0.803	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ug/L	< 0.441	< 0.4	< 0.773	< 0.628	< 0.538	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ug/L	< 0.533	< 0.483	< 0.466	< 0.379	< 0.494	--	100%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ug/L	< 0.363	< 0.329	< 0.741	< 0.602	< 0.478	--	100%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ug/L	< 120	< 120	< 120	< 120	< 120	--	100%
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ug/L	< 0.303	3.09	3.04	2.65	2.094	4.18	2%
Organics, Semi-volatile	Diphenylamine	SW 8270	ug/L	< 0.571	< 0.518	< 0.399	< 0.324	< 0.496	--	100%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ug/L	< 0.544	< 0.493	< 0.977	< 0.794	< 0.671	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ug/L	< 0.69	< 0.625	< 0.678	< 0.551	< 0.664	--	100%
Organics, Semi-volatile	Fluorene	SW 8270	ug/L	< 0.363	< 0.329	< 0.547	< 0.444	< 0.413	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ug/L	< 0.253	< 0.229	< 0.452	< 0.367	< 0.311	--	100%
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ug/L	< 0.755	< 0.684	< 0.737	< 0.599	< 0.725	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ug/L	< 9.64	< 8.75	< 8.47	< 6.89	< 8.95	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ug/L	< 0.642	< 0.582	< 0.914	< 0.743	< 0.713	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ug/L	< 0.568	< 0.515	< 1.91	< 1.56	< 0.998	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ug/L	< 0.31	< 0.281	< 0.886	< 0.72	< 0.492	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ug/L	< 50	< 50	< 50	< 50	< 50	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ug/L	< 1.42	< 1.28	< 0.905	< 0.736	< 1.20	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ug/L	< 1.44	< 1.3	< 1.13	< 0.919	< 1.29	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ug/L	< 0.612	< 0.555	< 0.387	< 0.315	< 0.518	--	100%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ug/L	< 0.812	< 0.736	< 0.941	< 0.765	< 0.830	--	100%
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ug/L	< 1.02	< 0.925	< 0.859	< 0.698	< 0.935	--	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ug/L	< 0.788	< 0.715	< 0.688	< 0.559	< 0.730	--	100%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ug/L	< 0.571	< 0.518	< 1.21	< 0.985	< 0.766	--	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ug/L	< 0.479	< 0.434	< 0.538	< 0.437	< 0.484	--	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ug/L	< 2.24	< 2.03	< 1.99	< 1.61	< 2.09	--	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ug/L	< 0.934	< 0.847	< 1.28	< 1.04	< 1.020	--	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ug/L	< 0.584	< 0.529	< 0.555	< 0.451	< 0.556	--	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ug/L	< 0.672	< 0.61	< 0.673	< 0.547	< 0.652	--	100%

Liquid Stream Data Summary

Sample Stream: JBR Underflow Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	Phenol	SW 8270	ug/L	< 0.431	< 0.391	< 1.27	< 1.03	< 0.697	--	100%
Organics, Semi-volatile	Pronamide	SW 8270	ug/L	< 0.799	< 0.725	< 0.347	< 0.282	< 0.624	--	100%
Organics, Semi-volatile	Pyrene	SW 8270	ug/L	< 0.506	< 0.459	< 0.587	< 0.477	< 0.517	--	100%
Organics, Semi-volatile	Pyridine	SW 8270	ug/L	< 1.25	< 1.14	< 0.846	< 0.688	< 1.079	--	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ug/L	< 0.608	< 0.551	< 0.872	< 0.709	< 0.677	--	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ug/L	< 0.791	< 0.718	< 0.551	< 0.448	< 0.687	--	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ug/L	< 0.785	< 0.712	< 1.15	< 0.933	< 0.882	--	100%
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ug/L	4	5.11	4.16	2.98	4.42	1.49	
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ug/L	< 0.604	< 0.548	< 1.07	< 0.871	< 0.741	--	100%
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ug/L	< 0.557	< 0.505	< 1.04	< 0.849	< 0.701	--	100%
Organics, Volatile	1,1,1-Trichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1,2,2-Tetrachloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1,2-Trichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1-Dichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,1-Dichloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,2-Dichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,2-Dichloroethene (total)	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	1,2-Dichloropropane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	2-Butanone (MEK)	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	2-Hexanone	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	4-Methyl-2-pentanone (MIBK)	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Acetone	SW 8240	ug/L	< 10	6.8 J	< 10	< 10	< 10	--	60%
Organics, Volatile	Benzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Bromodichloromethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Bromoform	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Bromomethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Carbon Disulfide	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Carbon Tetrachloride	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Chlorobenzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Chloroethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%

Liquid Stream Data Summary

Sample Stream: JBR Underflow Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Volatile	Chloroform	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Chloromethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Dibromochloromethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Ethylbenzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Methylene Chloride	SW 8240	ug/L	< 5	4.6 J	5.7	5	< 5	--	20%
Organics, Volatile	Styrene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Tetrachloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Toluene	SW 8240	ug/L	< 5	2 J	< 5	< 5	< 5	--	71%
Organics, Volatile	Trichloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	Vinyl acetate	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Vinyl chloride	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	--	100%
Organics, Volatile	Xylenes	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	cis-1,3-Dichloropropene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%
Organics, Volatile	trans-1,3-Dichloropropene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	--	100%

Liquid Stream Data Summary

Sample Stream: Limestone Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Reduced Species	Cyanide	SW 9012	ug/ml	0.0593	0.0834	0.003 J	0.0786	0.0486	0.1025	
Reduced Species	Ammonia as N	EPA 350.1	ug/ml	13.9	15.2	13.3	13.8	14.1	2.4	
Anions	Chloride	EPA 300	ug/ml	14,000	12,900	12,300	13,700	13,067	2,142	
Anions	Fluoride	EPA 340.2	ug/ml	2.1	2.02	1.4	1.46	1.84	0.95	
Anions	Phosphate	EPA 365.2	ug/ml	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	- -	100%
Anions	Sulfate	EPA 300.0	ug/ml	827	818	709	709	785	163	
Metals, Soluble	Aluminum	SW 6010	ug/ml	0.089 J	0.0418 J	0.654	0.0725 J	0.2616	0.8463	
Metals, Soluble	Antimony	SW 6010	ug/ml	< 0.241	< 0.241	< 0.241	< 0.241	< 0.241	- -	100%
Metals, Soluble	Arsenic	SW 7060	ug/ml	0.105	0.089	0.0068	0.09	0.067	0.131	
Metals, Soluble	Barium	SW 6010	ug/ml	1.08	1.13	8.48	1.09	3.56	10.58	
Metals, Soluble	Beryllium	SW 6010	ug/ml	0.0005 J	< 0.00554	0.0017 J	< 0.00554	< 0.0055	- -	56%
Metals, Soluble	Boron	SW 6010	ug/ml	443	449	3330	432	1,407	4,137	
Metals, Soluble	Cadmium	SW 7131	ug/ml	0.00736	0.00713	0.00546	0.0053	0.0067	0.0026	
Metals, Soluble	Calcium	SW 6010	ug/ml	7,160	7,030	7,030	6,470	7,073	186	
Metals, Soluble	Chromium	SW 6010	ug/ml	0.0515	0.0523	0.0848	0.0361	0.0629	0.0472	
Metals, Soluble	Cobalt	SW 6010	ug/ml	0.0347	0.0108 J	0.23	0.0207 J	0.0918	0.2987	
Metals, Soluble	Copper	SW 6010	ug/ml	0.0255 J	0.0132 J	0.0923	0.0273 J	0.0437	0.1057	
Metals, Soluble	Iron	SW 6010	ug/ml	< 0.0596	< 0.0596	< 0.0596	< 0.0596	< 0.0596	- -	100%
Metals, Soluble	Lead	SW 7421	ug/ml	0.0011	0.002	0.002	0.005	0.0017	0.0013	
Metals, Soluble	Magnesium	SW 6010	ug/ml	583	592	4470	568	1,882	5,569	
Metals, Soluble	Manganese	SW 6010	ug/ml	17.2	15.5	90.6	12.5	41.1	106.5	
Metals, Soluble	Mercury	SW 7470	ug/ml	0.00006	0.00006	0.00005	0.00006	0.00006	0.00001	
Metals, Soluble	Molybdenum	SW 6010	ug/ml	0.0671	0.0698	0.506	0.102	0.214	0.628	
Metals, Soluble	Nickel	SW 6010	ug/ml	0.303	0.32	1.91	0.302	0.844	2.293	
Metals, Soluble	Phosphorus	SW 6010	ug/ml	0.104	0.246	0.118	0.711	0.156	0.194	
Metals, Soluble	Potassium	SW 6010	ug/ml	41.3	40.9	333	43.7	138.4	418.7	
Metals, Soluble	Selenium	SW 7740	ug/ml	0.105	0.141	0.137	0.157	0.128	0.049	
Metals, Soluble	Silicon	SW 6010	ug/ml	2.38	2.3	16.9	2.38	7.2	20.9	
Metals, Soluble	Sodium	SW 6010	ug/ml	83.3	84.7	687	82.9	285.0	864.9	

Liquid Stream Data Summary

Sample Stream: Limestone Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Metals, Soluble	Strontium	SW 6010	ug/ml	11.3	11.4	85.1	10.9	35.9	105.8	
Metals, Soluble	Tin	SW 6010	ug/ml	0.007 J	< 0.144	< 0.144	0.109 J	< 0.144	--	95%
Metals, Soluble	Titanium	SW 6010	ug/ml	0.725	0.731	< 0.0102	0.0059 J	0.4870	1.0369	0.3%
Metals, Soluble	Vanadium	SW 6010	ug/ml	0.137	0.128	0.29	0.063	0.185	0.226	
Metals, Soluble	Zinc	SW 6010	ug/ml	0.0133 J	0.0307	0.0765	0.0195	0.0402	0.0811	
Aldehydes	Acetaldehyde	SW 8315	ug/ml	0.0042	0.068	0.08	0.076	0.051	0.101	
Aldehydes	Formaldehyde	SW 8315	ug/ml	0.01	0.022	0.03	0.026	0.021	0.025	
Organics, Semi-volatile	1,2,4,5-Tetrachlorobenzene	SW 8270	ug/L	< 0.578	< 0.593	< 0.6	< 0.531	< 0.590	--	100%
Organics, Semi-volatile	1,2,4-Trichlorobenzene	SW 8270	ug/L	< 0.591	< 0.606	< 0.905	< 0.8	< 0.701	--	100%
Organics, Semi-volatile	1,2-Dichlorobenzene	SW 8270	ug/L	< 0.779	< 0.799	< 0.977	< 0.864	< 0.852	--	100%
Organics, Semi-volatile	1,2-Diphenylhydrazine	SW 8270	ug/L	< 100	< 100	< 100	< 100	< 100	--	100%
Organics, Semi-volatile	1,3-Dichlorobenzene	SW 8270	ug/L	< 0.396	< 0.406	< 1.1	< 0.976	< 0.634	--	100%
Organics, Semi-volatile	1,4-Dichlorobenzene	SW 8270	ug/L	< 0.808	< 0.829	< 0.905	< 0.8	< 0.847	--	100%
Organics, Semi-volatile	1-Chloronaphthalene	SW 8270	ug/L	< 0.644	< 0.661	< 0.826	< 0.731	< 0.710	--	100%
Organics, Semi-volatile	1-Naphthylamine	SW 8270	ug/L	< 1.56	< 1.6	< 3.12	< 2.76	< 2.09	--	100%
Organics, Semi-volatile	2,3,4,6-Tetrachlorophenol	SW 8270	ug/L	< 0.503	< 0.516	< 0.715	< 0.633	< 0.578	--	100%
Organics, Semi-volatile	2,4,5-Trichlorophenol	SW 8270	ug/L	< 0.33	< 0.338	< 0.783	< 0.693	< 0.484	--	100%
Organics, Semi-volatile	2,4,6-Trichlorophenol	SW 8270	ug/L	< 0.349	< 0.358	< 0.778	< 0.688	< 0.495	--	100%
Organics, Semi-volatile	2,4-Dichlorophenol	SW 8270	ug/L	< 0.443	< 0.454	< 0.875	< 0.774	< 0.591	--	100%
Organics, Semi-volatile	2,4-Dimethylphenol	SW 8270	ug/L	< 1.1	< 1.13	< 2	< 1.77	< 1.41	--	100%
Organics, Semi-volatile	2,4-Dinitrophenol	SW 8270	ug/L	< 7	< 7.18	< 6.43	< 5.69	< 6.87	--	100%
Organics, Semi-volatile	2,4-Dinitrotoluene	SW 8270	ug/L	< 0.55	< 0.564	< 0.909	< 0.804	< 0.674	--	100%
Organics, Semi-volatile	2,6-Dichlorophenol	SW 8270	ug/L	< 0.723	< 0.742	< 0.788	< 0.697	< 0.751	--	100%
Organics, Semi-volatile	2,6-Dinitrotoluene	SW 8270	ug/L	< 0.346	< 0 355	< 1.32	< 1.17	< 0.674	--	100%
Organics, Semi-volatile	2-Chloronaphthalene	SW 8270	ug/L	< 0.324	< 0.332	< 0.603	< 0.533	< 0.420	--	100%
Organics, Semi-volatile	2-Chlorophenol	SW 8270	ug/L	< 0.764	< 0.784	< 0.977	< 0.864	< 0.842	--	100%
Organics, Semi-volatile	2-Methylnaphthalene	SW 8270	ug/L	< 0.66	< 0.677	< 0.56	< 0.495	< 0.632	--	100%
Organics, Semi-volatile	2-Methylphenol(o-cresol)	SW 8270	ug/L	< 0.534	< 0.548	< 0.477	< 0.422	< 0.520	--	100%
Organics, Semi-volatile	2-Naphthylamine	SW 8270	ug/L	< 1.95	< 2	< 2.46	< 2.18	< 2.14	--	100%

Liquid Stream Data Summary

Sample Stream: Limestone Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	2-Nitroaniline	SW 8270	ug/L	< 0.402	< 0.412	< 1.02	< 0.902	< 0.611	--	100%
Organics, Semi-volatile	2-Nitrophenol	SW 8270	ug/L	< 0.44	< 0.451	< 0.803	< 0.71	< 0.565	--	100%
Organics, Semi-volatile	2-Picoline	SW 8270	ug/L	< 1.09	< 1.12	< 1.27	< 1.13	< 1.16	--	100%
Organics, Semi-volatile	3,3'-Dichlorobenzidine	SW 8270	ug/L	< 0.49	< 0.503	< 0.512	< 0.453	< 0.502	--	100%
Organics, Semi-volatile	3-Methylcholanthrene	SW 8270	ug/L	< 0.783	< 0.803	< 0.769	< 0.68	< 0.785	--	100%
Organics, Semi-volatile	3-Nitroaniline	SW 8270	ug/L	< 0.509	< 0.522	< 0.605	< 0.535	< 0.545	--	100%
Organics, Semi-volatile	4,6-Dinitro-2-methylphenol	SW 8270	ug/L	< 0.792	< 0.812	< 0.662	< 0.585	< 0.755	--	100%
Organics, Semi-volatile	4-Aminobiphenyl	SW 8270	ug/L	< 0.748	< 0.767	< 1.83	< 1.62	< 1.115	--	100%
Organics, Semi-volatile	4-Bromophenyl phenyl	SW 8270	ug/L	< 0.456	< 0.468	< 0.745	< 0.659	< 0.556	--	100%
Organics, Semi-volatile	4-Chloro-3-methylphenol	SW 8270	ug/L	< 0.723	< 0.742	< 0.792	< 0.701	< 0.752	--	100%
Organics, Semi-volatile	4-Chlorophenyl phenyl ether	SW 8270	ug/L	< 0.528	< 0.542	< 0.648	< 0.573	< 0.573	--	100%
Organics, Semi-volatile	4-Methylphenol(p-cresol)	SW 8270	ug/L	< 0.575	< 0.59	< 0.706	< 0.624	< 0.624	--	100%
Organics, Semi-volatile	4-Nitroaniline	SW 8270	ug/L	< 0.484	< 0.496	< 0.932	< 0.824	< 0.637	--	100%
Organics, Semi-volatile	4-Nitrophenol	SW 8270	ug/L	< 0.691	< 0.709	< 1.44	< 1.27	< 0.947	--	100%
Organics, Semi-volatile	7,12-Dimethylbenz(a)anthracene	SW 8270	ug/L	< 1.92	< 1.97	< 2.05	< 1.81	< 1.98	--	100%
Organics, Semi-volatile	Acenaphthene	SW 8270	ug/L	< 0.478	< 0.49	< 0.418	< 0.37	< 0.462	--	100%
Organics, Semi-volatile	Acenaphthylene	SW 8270	ug/L	< 0.226	< 0.232	< 0.643	< 0.569	< 0.367	--	100%
Organics, Semi-volatile	Acetophenone	SW 8270	ug/L	< 0.459	< 0.471	< 0.86	< 0.761	< 0.597	--	100%
Organics, Semi-volatile	Aniline	SW 8270	ug/L	< 0.933	< 0.957	< 0.948	0.996	< 0.946	--	100%
Organics, Semi-volatile	Anthracene	SW 8270	ug/L	< 0.581	< 0.596	< 0.566	< 0.501	< 0.581	--	100%
Organics, Semi-volatile	Benzidine	SW 8270	ug/L	< 20	< 20	< 20	< 20	< 20	--	100%
Organics, Semi-volatile	Benzo(a)anthracene	SW 8270	ug/L	< 0.515	< 0.528	< 0.691	< 0.611	< 0.578	--	100%
Organics, Semi-volatile	Benzo(a)pyrene	SW 8270	ug/L	< 0.383	< 0.393	< 0.797	< 0.705	< 0.524	--	100%
Organics, Semi-volatile	Benzo(b)fluoranthene	SW 8270	ug/L	< 0.569	< 0.584	< 1.4	< 1.24	< 0.851	--	100%
Organics, Semi-volatile	Benzo(g,h,i)perylene	SW 8270	ug/L	< 0.487	< 0.499	< 1.57	< 1.39	< 0.852	--	100%
Organics, Semi-volatile	Benzo(k)fluoranthene	SW 8270	ug/L	< 0.968	< 0.993	< 1.54	< 1.36	< 1.167	--	100%
Organics, Semi-volatile	Benzoic acid	SW 8270	ug/L	< 3.96	< 4.06	< 59.4	< 52.5	< 22.473	--	100%
Organics, Semi-volatile	Benzyl alcohol	SW 8270	ug/L	< 1.08	< 1.11	< 0.938	< 0.83	< 1.043	--	100%
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ug/L	0.319 J	0.355 J	< 0.962	< 0.85	< 0.962	--	42%
Organics, Semi-volatile	Chrysene	SW 8270	ug/L	< 0.669	< 0.686	< 0.826	< 0.731	< 0.727	--	100%
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ug/L	< 0.911	< 0.934	< 0.542	< 0.479	< 0.796	--	100%

Liquid Stream Data Summary

Sample Stream: Limestone Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2			Run 3a			Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ug/L	<	0.474	<	0.486		<	1.25		<	1.1	<	0.737	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ug/L	<	0.581	<	0.596		<	1.3		<	1.15	<	0.826	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ug/L	<	0.408	<	0.418		<	0.826		<	0.731	<	0.551	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ug/L	<	0.493	<	0.506			0.769		<	0.441	<	0.506	--	39%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ug/L	<	0.336	<	0.345			0.482	J	<	0.701	<	0.345	--	41%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ug/L	<	120	<	120		<	120		<	120	<	120	--	100%
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ug/L	<	0.28	<	0.287		<	0.517		<	0.457	<	0.361	--	100%
Organics, Semi-volatile	Diphenylamine	SW 8270	ug/L	<	0.528	<	0.542		<	0.426		<	0.377	<	0.499	--	100%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ug/L	<	0.503	<	0.516		<	1.04		<	0.924	<	0.686	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ug/L	<	0.638	<	0.654		<	0.725		<	0.641	<	0.672	--	100%
Organics, Semi-volatile	Fluorene	SW 8270	ug/L	<	0.336	<	0.345		<	0.585		<	0.517	<	0.422	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ug/L	<	0.234	<	0.24		<	0.483		<	0.427	<	0.319	--	100%
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ug/L	<	0.698	<	0.716		<	0.788		<	0.697	<	0.734	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ug/L	<	8.92	<	9.15		<	9.06		<	8.01	<	9.04	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ug/L	<	0.594	<	0.609		<	0.977		<	0.864	<	0.727	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ug/L	<	0.525	<	0.538		<	2.05		<	1.81	<	1.038	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ug/L	<	0.287	<	0.294		<	0.948		<	0.838	<	0.510	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ug/L	<	50	<	50		<	50		<	50	<	50	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ug/L	<	1.31	<	1.34		<	0.968		<	0.856	<	1.21	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ug/L	<	1.33	<	1.36		<	1.21		<	1.07	<	1.30	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ug/L	<	0.566	<	0.581		<	0.414		<	0.366	<	0.520	--	100%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ug/L	<	0.751	<	0.77		<	1.01		<	0.89	<	0.84	--	100%
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ug/L	<	0.943	<	0.967		<	0.918		<	0.812	<	0.943	--	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ug/L	<	0.729		0.206	J	<	0.735		<	0.65	<	0.735	--	78%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ug/L	<	0.528	<	0.542		<	1.3		<	1.15	<	0.790	--	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ug/L	<	0.443	<	0.454		<	0.575		<	0.509	<	0.491	--	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ug/L	<	2.07	<	2.12		<	2.12		<	1.88	<	2.10	--	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ug/L	<	0.864	<	0.886		<	1.37		<	1.21	<	1.040	--	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ug/L	<	0.54	<	0.554		<	0.594		<	0.525	<	0.563	--	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ug/L	<	0.622	<	0.638		<	0.72		<	0.637	<	0.660	--	100%
Organics, Semi-volatile	Phenol	SW 8270	ug/L	<	0.399	<	0.409		<	1.36		<	1.2	<	0.723	--	100%

Liquid Stream Data Summary

Sample Stream: Limestone Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a		Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	Pronamide	SW 8270	ug/L	<	0.739	<	0.758	<	0.371	<	0.328	<	0.623	--	100%
Organics, Semi-volatile	Pyrene	SW 8270	ug/L	<	0.468	<	0.48	<	0.628	<	0.555	<	0.525	--	100%
Organics, Semi-volatile	Pyridine	SW 8270	ug/L	<	1.16	<	1.19	<	0.905	<	0.8	<	1.085	--	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ug/L	<	0.562	<	0.576	<	0.932	<	0.824	<	0.690	--	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ug/L	<	0.732	<	0.751	<	0.589	<	0.521	<	0.691	--	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ug/L	<	0.726	<	0.745	<	1.23	<	1.09	<	0.900	--	100%
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ug/L		5.17		6.43		399		0.918		137	564	
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ug/L	<	0.559	<	0.573	<	1.15	<	1.01	<	0.761	--	100%
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ug/L	<	0.515	<	0.528	<	1.12	<	0.988	<	0.721	--	100%
Organics, Volatile	1,1,1-Trichloroethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	1,1,2,2-Tetrachloroethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	1,1,2-Trichloroethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	1,1-Dichloroethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	1,1-Dichloroethene	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	1,2-Dichloroethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	1,2-Dichloroethene (total)	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	1,2-Dichloropropane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	2-Butanone (MEK)	SW 8240	ug/L	<	10	<	10		5.1	<	10	<	10	--	66%
Organics, Volatile	2-Hexanone	SW 8240	ug/L	<	10	<	10	<	10	<	10	<	10	--	100%
Organics, Volatile	4-Methyl-2-pentanone (MIBK)	SW 8240	ug/L	<	10	<	10	<	10	<	10	<	10	--	100%
Organics, Volatile	Acetone	SW 8240	ug/L		19		24		24		18		22	7	
Organics, Volatile	Benzene	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	Bromodichloromethane	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	Bromoform	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	Bromomethane	SW 8240	ug/L	<	10	<	10	<	10	<	10	<	10	--	100%
Organics, Volatile	Carbon Disulfide	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	Carbon Tetrachloride	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	Chlorobenzene	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%
Organics, Volatile	Chloroethane	SW 8240	ug/L	<	10	<	10	<	10	<	10	<	10	--	100%
Organics, Volatile	Chloroform	SW 8240	ug/L	<	5	<	5	<	5	<	5	<	5	--	100%

Liquid Stream Data Summary

Sample Stream: Limestone Slurry Filtrate

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a		Run 3d			Average	95% CI	DL Ratio
Organics, Volatile	Chloromethane	SW 8240	ug/L	<	10	<	10	<	10	<	10		<	10	--	100%
Organics, Volatile	Dibromochloromethane	SW 8240	ug/L	<	5	<	5	<	5	<	5		<	5	--	100%
Organics, Volatile	Ethylbenzene	SW 8240	ug/L	<	5	<	5	<	5	<	5		<	5	--	100%
Organics, Volatile	Methylene Chloride	SW 8240	ug/L	<	5		5		5		4.8	J	<	5	--	20%
Organics, Volatile	Styrene	SW 8240	ug/L	<	5	<	5	<	5	<	5		<	5	--	100%
Organics, Volatile	Tetrachloroethene	SW 8240	ug/L	<	5	<	5	<	5	<	5		<	5	--	100%
Organics, Volatile	Toluene	SW 8240	ug/L	<	5	<	5	<	5	<	5		<	5	--	100%
Organics, Volatile	Trichloroethene	SW 8240	ug/L	<	5	<	5	<	5	<	5		<	5	--	100%
Organics, Volatile	Vinyl acetate	SW 8240	ug/L	<	10	<	10	<	10	<	10		<	10	--	100%
Organics, Volatile	Vinyl chloride	SW 8240	ug/L	<	10	<	10	<	10	<	10		<	10	--	100%
Organics, Volatile	Xylenes	SW 8240	ug/L	<	5	<	5	<	5	<	5		<	5	--	100%
Organics, Volatile	cis-1,3-Dichloropropene	SW 8240	ug/L	<	5	<	5	<	5	<	5		<	5	--	100%
Organics, Volatile	trans-1,3-Dichloropropene	SW 8240	ug/L	<	5	<	5	<	5	<	5		<	5	--	100%

Liquid Stream Data Summary

Sample Stream: Cooling Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Reduced Species	Cyanide	SW 9012	ug/ml	0.0019 J	0.0013 J	0.00124 J	0.00269 J	0.00148	0.00091	
Reduced Species	Ammonia as N	EPA 350.1	ug/ml	0.0532	0.0455	0.0421	0.0333	0.047	0.014	
Anions	Chloride	EPA 300	ug/ml	6.55	5.34	5.25	5.26	5.71	1.80	
Anions	Fluoride	EPA 340.2	ug/ml	0.142	0.132	0.128	0.146	0.134	0.018	
Anions	Phosphate	EPA 365.2	ug/ml	0.106	0.114	0.0614	0.0623	0.094	0.070	
Anions	Sulfate	EPA 300.0	ug/ml	6.79	6.51	5.73	6.02	6.34	1.36	
Metals, Soluble	Aluminum	SW 6010	ug/ml	0.0265 J	0.052	0.0151 J	0.0423	0.031	0.047	
Metals, Soluble	Antimony	SW 6010	ug/ml	< 0.0241	< 0.0241	0.0127 J	< 0.0241	< 0.024	- -	65%
Metals, Soluble	Arsenic	SW 7060	ug/ml	< 0.000657	< 0.000657	< 0.000657	< 0.000657	< 0.001	- -	100%
Metals, Soluble	Barium	SW 6010	ug/ml	0.0112	0.0169	0.0113	0.0109	0.013	0.0081	
Metals, Soluble	Beryllium	SW 6010	ug/ml	< 0.000554	< 0.000554	< 0.000554	< 0.000554	< 0.001	- -	100%
Metals, Soluble	Boron	SW 6010	ug/ml	0.0601	2.52	0.196	0.0807	0.93	3.44	
Metals, Soluble	Cadmium	SW 7131	ug/ml	0.00031	0.00522	0.00042	0.00136	0.00198	0.00697	
Metals, Soluble	Calcium	SW 6010	ug/ml	5.13	43.5	8.72	4.97	19.12	52.65	
Metals, Soluble	Chromium	SW 6010	ug/ml	0.00239 J	0.00081 J	0.00291	0.00061 J	0.0020	0.0027	
Metals, Soluble	Cobalt	SW 6010	ug/ml	< 0.0034	< 0.0034	0.00062 J	< 0.0034	< 0.0034	- -	85%
Metals, Soluble	Copper	SW 6010	ug/ml	0.00429	0.00447	0.0959	0.0103	0.035	0.131	
Metals, Soluble	Iron	SW 6010	ug/ml	0.079	0.0844	0.173	0.0923	0.112	0.131	
Metals, Soluble	Lead	SW 7421	ug/ml	0.0023	0.0722	0.0072	0.0121	0.027	0.097	
Metals, Soluble	Magnesium	SW 6010	ug/ml	1.23	4.1	3.95	1.23	3.09	4.01	
Metals, Soluble	Manganese	SW 6010	ug/ml	0.00932	0.188	0.0186	0.0107	0.072	0.250	
Metals, Soluble	Mercury	SW 7470	ug/ml	0.00005	0.00006	0.00004 J	< 0.00005	0.00005	0.00002	
Metals, Soluble	Molybdenum	SW 6010	ug/ml	0.00135 J	0.00184 J	0.00137 J	0.00057 J	0.00152	0.00069	
Metals, Soluble	Nickel	SW 6010	ug/ml	0.00401 J	0.00231 J	0.00012 J	0.0017 J	0.00215	0.00484	
Metals, Soluble	Phosphorus	SW 6010	ug/ml	0.021 J	< 0.061	0.0929	0.0941	< 0.061	- -	21%
Metals, Soluble	Potassium	SW 6010	ug/ml	2.25	2.64	2.38	2.04	2.42	0.49	
Metals, Soluble	Selenium	SW 7740	ug/ml	< 0.00144	< 0.00144	< 0.00144	< 0.00144	< 0.0014	- -	100%
Metals, Soluble	Silicon	SW 6010	ug/ml	3.58	3.55	6.53	3.75	4.55	4.25	
Metals, Soluble	Sodium	SW 6010	ug/ml	5.85	5.62	13.8	5.29	8.42	11.57	
Metals, Soluble	Strontium	SW 6010	ug/ml	0.0265	0.0856	0.0335	0.0251	0.049	0.080	
Metals, Soluble	Tin	SW 6010	ug/ml	< 0.0144	< 0.0144	0.00666 J	< 0.0144	< 0.014	- -	68%
Metals, Soluble	Titanium	SW 6010	ug/ml	0.00141	0.00136	0.00055 J	0.00125	0.00111	0.00120	
Metals, Soluble	Vanadium	SW 6010	ug/ml	0.003	0.0026	0.00256	0.00089 J	0.00272	0.00060	
Metals, Soluble	Zinc	SW 6010	ug/ml	0.00684	0.00616	0.0413	0.00857	0.018	0.050	

Liquid Stream Data Summary

Sample Stream: Cooling Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Metals, Total	Aluminum	SW 6010	ug/ml	2.98	4.6	1.03	1.15	2.87	4.44	
Metals, Total	Antimony	SW 6010	ug/ml	0.036	0.0219 J	0.00859 J	0.0346	0.022	0.034	
Metals, Total	Arsenic	SW 7060	ug/ml	0.0216	< 0.000657	< 0.000657	< 0.000657	0.0074	0.0305	3%
Metals, Total	Barium	SW 6010	ug/ml	0.0322	0.0409	0.0188	0.0181	0.031	0.028	
Metals, Total	Beryllium	SW 6010	ug/ml	9E-05 J	0.00014 J	< 0.000554	< 0.000554	< 0.00055	- -	55%
Metals, Total	Boron	SW 6010	ug/ml	0.247	0.488	0.236	0.0846	0.324	0.354	
Metals, Total	Cadmium	SW 7131	ug/ml	0.00023 J	0.00209	0.00064	0.00031	0.00099	0.00243	
Metals, Total	Calcium	SW 6010	ug/ml	5.91	6.54	5.28	4.62	5.91	1.57	
Metals, Total	Chromium	SW 6010	ug/ml	0.00566	0.00634	0.00283	0.00449	0.00494	0.00462	
Metals, Total	Cobalt	SW 6010	ug/ml	0.00453	0.00682	0.00368	0.00622	0.00501	0.00403	
Metals, Total	Copper	SW 6010	ug/ml	0.0112	0.0132	0.00682	0.00552	0.010	0.00811	
Metals, Total	Iron	SW 6010	ug/ml	4.12	6.21	1.87	1.94	4.07	5.39	
Metals, Total	Lead	SW 7421	ug/ml	0.0163	0.0572	0.0173	0.0092	0.030	0.058	
Metals, Total	Magnesium	SW 6010	ug/ml	1.81	1.89	1.36	1.28	1.69	0.71	
Metals, Total	Manganese	SW 6010	ug/ml	0.193	0.237	0.104	0.0934	0.178	0.168	
Metals, Total	Mercury	SW 7470	ug/ml	0.00003 J	0.00004 J	0.00005	0.00006	0.00004	0.00002	
Metals, Total	Molybdenum	SW 6010	ug/ml	0.00175 J	0.00246 J	0.00295 J	< 0.00463	0.00239	0.00150	
Metals, Total	Nickel	SW 6010	ug/ml	0.00524 J	0.00445 J	< 0.00986	0.00078 J	< 0.010	- -	34%
Metals, Total	Phosphorus	SW 6010	ug/ml	0.138	0.184	< 0.061	< 0.061	0.118	0.196	9%
Metals, Total	Potassium	SW 6010	ug/ml	3.1	2.84	2.33	2.43	2.76	0.97	
Metals, Total	Selenium	SW 7740	ug/ml	0.0214	< 0.00144	< 0.00144	< 0.00144	0.008	0.030	6%
Metals, Total	Silicon	SW 6010	ug/ml	7.01	8.22	4.47	4.56	6.57	4.75	
Metals, Total	Sodium	SW 6010	ug/ml	6.27	5.1	4.81	4.7	5.39	1.92	
Metals, Total	Strontium	SW 6010	ug/ml	0.0295	0.0293	0.0241	0.0224	0.028	0.0076	
Metals, Total	Tin	SW 6010	ug/ml	< 0.0144	< 0.0144	< 0.0144	< 0.0144	< 0.014	- -	100%
Metals, Total	Titanium	SW 6010	ug/ml	0.167	0.235	0.0677	0.069	0.157	0.209	
Metals, Total	Vanadium	SW 6010	ug/ml	0.00881	0.0119	0.00427	0.00629	0.00833	0.010	
Metals, Total	Zinc	SW 6010	ug/ml	0.0275	0.0382	0.0136	0.0136	0.026	0.031	
Aldehydes	Acetaldehyde	SW 8315	ug/ml	0.004	0.066	0.096	0.09	0.055	0.117	
Aldehydes	Formaldehyde	SW 8315	ug/ml	0.0054	0.044	0.03	0.026	0.026	0.049	
Organics, Semi-volatile	1,2,4,5-Tetrachlorobenzene	SW 8270	ug/L	< 0.55	< 0.556	< 0.371	< 0.375	< 0.492	- -	100%
Organics, Semi-volatile	1,2,4-Trichlorobenzene	SW 8270	ug/L	< 0.563	< 0.568	< 0.56	< 0.565	< 0.564	- -	100%
Organics, Semi-volatile	1,2-Dichlorobenzene	SW 8270	ug/L	< 0.742	< 0.749	< 0.605	< 0.611	< 0.699	- -	100%

Liquid Stream Data Summary

Sample Stream: Cooling Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	1,2-Diphenylhydrazine	SW 8270	ug/L	< 100	< 100	< 100	< 100	< 100	- -	100%
Organics, Semi-volatile	1,3-Dichlorobenzene	SW 8270	ug/L	< 0.377	< 0.381	< 0.683	< 0.689	< 0.480	- -	100%
Organics, Semi-volatile	1,4-Dichlorobenzene	SW 8270	ug/L	< 0.77	< 0.777	< 0.56	< 0.565	< 0.702	- -	100%
Organics, Semi-volatile	1-Chloronaphthalene	SW 8270	ug/L	< 0.613	< 0.619	< 0.511	< 0.516	< 0.581	- -	100%
Organics, Semi-volatile	1-Naphthylamine	SW 8270	ug/L	< 1.49	< 1.5	< 1.93	< 1.95	< 1.64	- -	100%
Organics, Semi-volatile	2,3,4,6-Tetrachlorophenol	SW 8270	ug/L	< 0.479	< 0.484	< 0.443	< 0.447	< 0.469	- -	100%
Organics, Semi-volatile	2,4,5-Trichlorophenol	SW 8270	ug/L	< 0.314	< 0.317	< 0.485	< 0.489	< 0.372	- -	100%
Organics, Semi-volatile	2,4,6-Trichlorophenol	SW 8270	ug/L	< 0.332	< 0.336	< 0.482	< 0.487	< 0.383	- -	100%
Organics, Semi-volatile	2,4-Dichlorophenol	SW 8270	ug/L	< 0.422	< 0.426	< 0.542	< 0.547	< 0.463	- -	100%
Organics, Semi-volatile	2,4-Dimethylphenol	SW 8270	ug/L	< 1.05	< 1.06	< 1.24	< 1.25	< 1.12	- -	100%
Organics, Semi-volatile	2,4-Dinitrophenol	SW 8270	ug/L	< 6.67	< 6.73	< 3.98	< 4.02	< 5.79	- -	100%
Organics, Semi-volatile	2,4-Dinitrotoluene	SW 8270	ug/L	< 0.524	< 0.529	< 0.563	< 0.568	< 0.539	- -	100%
Organics, Semi-volatile	2,6-Dichlorophenol	SW 8270	ug/L	< 0.689	< 0.695	< 0.488	< 0.492	< 0.624	- -	100%
Organics, Semi-volatile	2,6-Dinitrotoluene	SW 8270	ug/L	< 0.33	< 0.333	< 0.82	< 0.828	< 0.494	- -	100%
Organics, Semi-volatile	2-Chloronaphthalene	SW 8270	ug/L	< 0.309	< 0.312	< 0.373	< 0.377	< 0.331	- -	100%
Organics, Semi-volatile	2-Chlorophenol	SW 8270	ug/L	< 0.728	< 0.735	< 0.605	< 0.611	< 0.689	- -	100%
Organics, Semi-volatile	2-Methylnaphthalene	SW 8270	ug/L	< 0.629	< 0.635	< 0.347	< 0.35	< 0.54	- -	100%
Organics, Semi-volatile	2-Methylphenol(o-cresol)	SW 8270	ug/L	< 0.509	< 0.513	< 0.295	< 0.298	< 0.439	- -	100%
Organics, Semi-volatile	2-Naphthylamine	SW 8270	ug/L	< 1.86	< 1.87	< 1.52	< 1.54	< 1.75	- -	100%
Organics, Semi-volatile	2-Nitroaniline	SW 8270	ug/L	< 0.383	< 0.387	< 0.631	< 0.637	< 0.467	- -	100%
Organics, Semi-volatile	2-Nitrophenol	SW 8270	ug/L	< 0.419	< 0.423	< 0.497	< 0.502	< 0.446	- -	100%
Organics, Semi-volatile	2-Picoline	SW 8270	ug/L	< 1.04	< 1.05	< 0.788	< 0.795	< 0.959	- -	100%
Organics, Semi-volatile	3,3'-Dichlorobenzidine	SW 8270	ug/L	< 0.467	< 0.471	< 0.317	< 0.32	< 0.418	- -	100%
Organics, Semi-volatile	3-Methylcholanthrene	SW 8270	ug/L	< 0.746	< 0.753	< 0.476	< 0.481	< 0.658	- -	100%
Organics, Semi-volatile	3-Nitroaniline	SW 8270	ug/L	< 0.485	< 0.489	< 0.374	< 0.378	< 0.449	- -	100%
Organics, Semi-volatile	4,6-Dinitro-2-methylphenol	SW 8270	ug/L	< 0.754	< 0.762	< 0.41	< 0.413	< 0.642	- -	100%
Organics, Semi-volatile	4-Aminobiphenyl	SW 8270	ug/L	< 0.712	< 0.719	< 1.13	< 1.14	< 0.854	- -	100%
Organics, Semi-volatile	4-Bromophenyl phenyl	SW 8270	ug/L	< 0.434	< 0.438	< 0.461	< 0.465	< 0.444	- -	100%
Organics, Semi-volatile	4-Chloro-3-methylphenol	SW 8270	ug/L	< 0.689	< 0.695	< 0.49	< 0.495	< 0.625	- -	100%
Organics, Semi-volatile	4-Chlorophenyl phenyl ether	SW 8270	ug/L	< 0.503	< 0.508	< 0.401	< 0.405	< 0.471	- -	100%
Organics, Semi-volatile	4-Methylphenol(p-cresol)	SW 8270	ug/L	< 0.548	< 0.553	< 0.437	< 0.441	< 0.513	- -	100%
Organics, Semi-volatile	4-Nitroaniline	SW 8270	ug/L	< 0.461	< 0.465	< 0.577	< 0.583	< 0.501	- -	100%
Organics, Semi-volatile	4-Nitrophenol	SW 8270	ug/L	< 0.658	< 0.664	< 0.892	< 0.901	< 0.738	- -	100%
Organics, Semi-volatile	7,12-Dimethylbenz(a)anthracene	SW 8270	ug/L	< 1.83	< 1.85	< 1.27	< 1.28	< 1.65	- -	100%
Organics, Semi-volatile	Acenaphthene	SW 8270	ug/L	< 0.455	< 0.46	< 0.259	< 0.262	< 0.391	- -	100%
Organics, Semi-volatile	Acenaphthylene	SW 8270	ug/L	< 0.215	< 0.217	< 0.398	< 0.402	< 0.277	- -	100%

Liquid Stream Data Summary

Sample Stream: Cooling Water

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Run 3a		Run 3d		Average	95% CI	DL Ratio
Organics, Semi-volatile	Acetophenone	SW 8270	ug/L	<	0.437	<	0.441	<	0.532	<	0.537	<	0.470	--	100%
Organics, Semi-volatile	Aniline	SW 8270	ug/L	<	0.889	<	0.897	<	0.587	<	0.592	<	0.791	--	100%
Organics, Semi-volatile	Anthracene	SW 8270	ug/L	<	0.553	<	0.559	<	0.35	<	0.354	<	0.487	--	100%
Organics, Semi-volatile	Benzidine	SW 8270	ug/L	<	20	<	20	<	20	<	20	<	20	--	100%
Organics, Semi-volatile	Benzo(a)anthracene	SW 8270	ug/L	<	0.49	<	0.495	<	0.428	<	0.432	<	0.471	--	100%
Organics, Semi-volatile	Benzo(a)pyrene	SW 8270	ug/L	<	0.365	<	0.368	<	0.493	<	0.498	<	0.409	--	100%
Organics, Semi-volatile	Benzo(b)fluoranthene	SW 8270	ug/L	<	0.542	<	0.547	<	0.865	<	0.873	<	0.651	--	100%
Organics, Semi-volatile	Benzo(g,h,i)perylene	SW 8270	ug/L	<	0.464	<	0.468	<	0.971	<	0.981	<	0.634	--	100%
Organics, Semi-volatile	Benzo(k)fluoranthene	SW 8270	ug/L	<	0.922	<	0.931	<	0.951	<	0.961	<	0.935	--	100%
Organics, Semi-volatile	Benzoic acid	SW 8270	ug/L	<	3.77	<	3.81	<	36.8	<	37.1	<	14.79	--	100%
Organics, Semi-volatile	Benzyl alcohol	SW 8270	ug/L	<	1.03	<	1.04	<	0.581	<	0.587	<	0.884	--	100%
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ug/L	<	0.374	<	0.378	<	0.595	<	0.601	<	0.449	--	100%
Organics, Semi-volatile	Chrysene	SW 8270	ug/L	<	0.637	<	0.643	<	0.511	<	0.516	<	0.597	--	100%
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ug/L	<	0.868	<	0.876	<	0.335	<	0.338	<	0.693	--	100%
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ug/L	<	0.451	<	0.456	<	0.772	<	0.78	<	0.56	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ug/L	<	0.553	<	0.559	<	0.802	<	0.81	<	0.64	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ug/L	<	0.389	<	0.392	<	0.511	<	0.516	<	0.431	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ug/L	<	0.47	<	0.474	<	0.309	<	0.312	<	0.418	--	100%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ug/L	<	0.32	<	0.323	<	0.49	<	0.495	<	0.378	--	100%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ug/L	<	120	<	120	<	120	<	120	<	120	--	100%
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ug/L	<	0.267	<	0.269	<	0.32	<	0.323	<	0.285	--	100%
Organics, Semi-volatile	Diphenylamine	SW 8270	ug/L	<	0.503	<	0.508	<	0.264	<	0.266	<	0.425	--	100%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ug/L	<	0.479	<	0.484	<	0.647	<	0.653	<	0.537	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ug/L	<	0.608	<	0.613	<	0.449	<	0.453	<	0.557	--	100%
Organics, Semi-volatile	Fluorene	SW 8270	ug/L	<	0.32	<	0.323	<	0.362	<	0.365	<	0.335	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ug/L	<	0.223	<	0.225	<	0.299	<	0.302	<	0.249	--	100%
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ug/L	<	0.665	<	0.671	<	0.488	<	0.492	<	0.608	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ug/L	<	8.5	<	8.58	<	5.61	<	5.66	<	7.56	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ug/L	<	0.566	<	0.571	<	0.605	<	0.611	<	0.581	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ug/L	<	0.5	<	0.505	<	1.27	<	1.28	<	0.76	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ug/L	<	0.273	<	0.276	<	0.587	<	0.592	<	0.379	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ug/L	<	50	<	50	<	50	<	50	<	50	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ug/L	<	1.25	<	1.26	<	0.599	<	0.605	<	1.036	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ug/L	<	1.27	<	1.28	<	0.749	<	0.756	<	1.100	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ug/L	<	0.539	<	0.544	<	0.256	<	0.259	<	0.446	--	100%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ug/L	<	0.715	<	0.722	<	0.623	<	0.629	<	0.687	--	100%

Liquid Stream Data Summary

Sample Stream: Cooling Water

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Run 3a	Run 3d	Average	95% CI	DL Ratio
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ug/L	< 0.898	< 0.907	< 0.569	< 0.574	< 0.791	- -	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ug/L	< 0.694	< 0.701	< 0.455	< 0.46	< 0.62	- -	100%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ug/L	< 0.503	< 0.508	< 0.802	< 0.81	< 0.604	- -	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ug/L	< 0.422	< 0.426	< 0.356	< 0.36	< 0.401	- -	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ug/L	< 1.97	< 1.99	< 1.31	< 1.33	< 1.76	- -	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ug/L	< 0.823	< 0.831	< 0.847	< 0.855	< 0.834	- -	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ug/L	< 0.514	< 0.519	< 0.368	< 0.371	< 0.467	- -	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ug/L	< 0.592	< 0.598	< 0.446	< 0.45	< 0.545	- -	100%
Organics, Semi-volatile	Phenol	SW 8270	ug/L	< 0.38	< 0.384	< 0.841	< 0.849	< 0.535	- -	100%
Organics, Semi-volatile	Pronamide	SW 8270	ug/L	< 0.704	< 0.711	< 0.23	< 0.232	< 0.548	- -	100%
Organics, Semi-volatile	Pyrene	SW 8270	ug/L	< 0.446	< 0.45	< 0.389	< 0.392	< 0.428	- -	100%
Organics, Semi-volatile	Pyridine	SW 8270	ug/L	< 1.1	< 1.12	< 0.56	< 0.565	< 0.93	- -	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ug/L	< 0.535	< 0.54	< 0.577	< 0.583	< 0.551	- -	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ug/L	< 0.697	< 0.704	< 0.365	< 0.368	< 0.589	- -	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ug/L	< 0.691	< 0.698	< 0.76	< 0.767	< 0.716	- -	100%
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ug/L	4.56	5.8	< 0.553	< 0.559	3.55	7.2	3%
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ug/L	< 0.532	< 0.537	< 0.71	< 0.716	< 0.593	- -	100%
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ug/L	< 0.49	< 0.495	< 0.691	< 0.698	< 0.559	- -	100%
Organics, Volatile	1,1,1-Trichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	1,1,2,2-Tetrachloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	1,1,2-Trichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	1,1-Dichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	1,1-Dichloroethene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	1,2-Dichloroethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	1,2-Dichloroethene (total)	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	1,2-Dichloropropane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	2-Butanone (MEK)	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	- -	100%
Organics, Volatile	2-Hexanone	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	- -	100%
Organics, Volatile	4-Methyl-2-pentanone (MIBK)	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	- -	100%
Organics, Volatile	Acetone	SW 8240	ug/L	< 10	< 10	12	8 J	< 10	- -	45%
Organics, Volatile	Benzene	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	Bromodichloromethane	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	Bromoform	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%
Organics, Volatile	Bromomethane	SW 8240	ug/L	< 10	< 10	< 10	< 10	< 10	- -	100%
Organics, Volatile	Carbon Disulfide	SW 8240	ug/L	< 5	< 5	< 5	< 5	< 5	- -	100%

Liquid Stream Data Summary

Sample Stream: Cooling Water

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2			Run 3a			Run 3d			Average	95% CI	DL Ratio
Organics, Volatile	Carbon Tetrachloride	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	Chlorobenzene	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	Chloroethane	SW 8240	ug/L	<	10	<	10		<	10		<	10		<	10	- -	100%
Organics, Volatile	Chloroform	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	Chloromethane	SW 8240	ug/L	<	10	<	10		<	10		<	10		<	10	- -	100%
Organics, Volatile	Dibromochloromethane	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	Ethylbenzene	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	Methylene Chloride	SW 8240	ug/L	<	5		3.3	J		4.9	J		4.9	J	<	5	- -	23%
Organics, Volatile	Styrene	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	Tetrachloroethene	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	Toluene	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	Trichloroethene	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	Vinyl acetate	SW 8240	ug/L	<	10	<	10		<	10		<	10		<	10	- -	100%
Organics, Volatile	Vinyl chloride	SW 8240	ug/L	<	10	<	10		<	10		<	10		<	10	- -	100%
Organics, Volatile	Xylenes	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	cis-1,3-Dichloropropene	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%
Organics, Volatile	trans-1,3-Dichloropropene	SW 8240	ug/L	<	5	<	5		<	5		<	5		<	5	- -	100%

Liquid Stream Data Summary

Sample Stream: Coal Pile Run-off

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Average	95% CI	DL Ratio
Aldehydes	Acetaldehyde	SW 8315	ug/ml	0.07	0.112	0.091	0.267	
Aldehydes	Formaldehyde	SW 8315	ug/ml	0.026	0.088	0.057	0.394	
Organics, Semi-volatile	1,2,4,5-Tetrachlorobenzene	SW 8270	ug/L	< 0.709		< 0.709	--	100%
Organics, Semi-volatile	1,2,4-Trichlorobenzene	SW 8270	ug/L	< 0.725		< 0.725	--	100%
Organics, Semi-volatile	1,2-Dichlorobenzene	SW 8270	ug/L	< 0.956		< 0.956	--	100%
Organics, Semi-volatile	1,2-Diphenylhydrazine	SW 8270	ug/L	< 100		< 100	--	100%
Organics, Semi-volatile	1,3-Dichlorobenzene	SW 8270	ug/L	< 0.486		< 0.486	--	100%
Organics, Semi-volatile	1,4-Dichlorobenzene	SW 8270	ug/L	< 0.991		< 0.991	--	100%
Organics, Semi-volatile	1-Chloronaphthalene	SW 8270	ug/L	< 0.79		< 0.79	--	100%
Organics, Semi-volatile	1-Naphthylamine	SW 8270	ug/L	< 1.91		< 1.91	--	100%
Organics, Semi-volatile	2,3,4,6-Tetrachlorophenol	SW 8270	ug/L	< 0.617		< 0.617	--	100%
Organics, Semi-volatile	2,4,5-Trichlorophenol	SW 8270	ug/L	< 0.405		< 0.405	--	100%
Organics, Semi-volatile	2,4,6-Trichlorophenol	SW 8270	ug/L	< 0.428		< 0.428	--	100%
Organics, Semi-volatile	2,4-Dichlorophenol	SW 8270	ug/L	< 0.544		< 0.544	--	100%
Organics, Semi-volatile	2,4-Dimethylphenol	SW 8270	ug/L	< 1.35		< 1.35	--	100%
Organics, Semi-volatile	2,4-Dinitrophenol	SW 8270	ug/L	< 8.59		< 8.59	--	100%
Organics, Semi-volatile	2,4-Dinitrotoluene	SW 8270	ug/L	< 0.675		< 0.675	--	100%
Organics, Semi-volatile	2,6-Dichlorophenol	SW 8270	ug/L	< 0.887		< 0.887	--	100%
Organics, Semi-volatile	2,6-Dinitrotoluene	SW 8270	ug/L	< 0.425		< 0.425	--	100%
Organics, Semi-volatile	2-Chloronaphthalene	SW 8270	ug/L	< 0.398		< 0.398	--	100%
Organics, Semi-volatile	2-Chlorophenol	SW 8270	ug/L	< 0.937		< 0.937	--	100%
Organics, Semi-volatile	2-Methylnaphthalene	SW 8270	ug/L	< 0.81		< 0.81	--	100%
Organics, Semi-volatile	2-Methylphenol(o-cresol)	SW 8270	ug/L	< 0.655		< 0.655	--	100%
Organics, Semi-volatile	2-Naphthylamine	SW 8270	ug/L	< 2.39		< 2.39	--	100%
Organics, Semi-volatile	2-Nitroaniline	SW 8270	ug/L	< 0.493		< 0.493	--	100%
Organics, Semi-volatile	2-Nitrophenol	SW 8270	ug/L	< 0.54		< 0.54	--	100%
Organics, Semi-volatile	2-Picoline	SW 8270	ug/L	< 1.34		< 1.34	--	100%
Organics, Semi-volatile	3,3'-Dichlorobenzidine	SW 8270	ug/L	< 0.601		< 0.601	--	100%
Organics, Semi-volatile	3-Methylcholanthrene	SW 8270	ug/L	< 0.961		< 0.961	--	100%
Organics, Semi-volatile	3-Nitroaniline	SW 8270	ug/L	< 0.625		< 0.625	--	100%

Liquid Stream Data Summary

Sample Stream: Coal Pile Run-off

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Average	95% CI	DL Ratio
Organics, Semi-volatile	4,6-Dinitro-2-methylphenol	SW 8270	ug/L	< 0.972		< 0.972	--	100%
Organics, Semi-volatile	4-Aminobiphenyl	SW 8270	ug/L	< 0.918		< 0.918	--	100%
Organics, Semi-volatile	4-Bromophenyl phenyl	SW 8270	ug/L	< 0.56		< 0.56	--	100%
Organics, Semi-volatile	4-Chloro-3-methylphenol	SW 8270	ug/L	< 0.887		< 0.887	--	100%
Organics, Semi-volatile	4-Chlorophenyl phenyl ether	SW 8270	ug/L	< 0.648		< 0.648	--	100%
Organics, Semi-volatile	4-Methylphenol(p-cresol)	SW 8270	ug/L	< 0.706		< 0.706	--	100%
Organics, Semi-volatile	4-Nitroaniline	SW 8270	ug/L	< 0.594		< 0.594	--	100%
Organics, Semi-volatile	4-Nitrophenol	SW 8270	ug/L	< 0.848		< 0.848	--	100%
Organics, Semi-volatile	7,12-Dimethylbenz(a)anthracene	SW 8270	ug/L	< 2.36		< 2.36	--	100%
Organics, Semi-volatile	Acenaphthene	SW 8270	ug/L	< 0.587		< 0.587	--	100%
Organics, Semi-volatile	Acenaphthylene	SW 8270	ug/L	< 0.277		< 0.277	--	100%
Organics, Semi-volatile	Acetophenone	SW 8270	ug/L	< 0.563		< 0.563	--	100%
Organics, Semi-volatile	Aniline	SW 8270	ug/L	< 1.14		< 1.14	--	100%
Organics, Semi-volatile	Anthracene	SW 8270	ug/L	< 0.713		< 0.713	--	100%
Organics, Semi-volatile	Benzidine	SW 8270	ug/L	< 20		< 20	--	100%
Organics, Semi-volatile	Benzo(a)anthracene	SW 8270	ug/L	< 0.632		< 0.632	--	100%
Organics, Semi-volatile	Benzo(a)pyrene	SW 8270	ug/L	< 0.47		< 0.47	--	100%
Organics, Semi-volatile	Benzo(b)fluoranthene	SW 8270	ug/L	< 0.698		< 0.698	--	100%
Organics, Semi-volatile	Benzo(g,h,i)perylene	SW 8270	ug/L	< 0.598		< 0.598	--	100%
Organics, Semi-volatile	Benzo(k)fluoranthene	SW 8270	ug/L	< 1.19		< 1.19	--	100%
Organics, Semi-volatile	Benzoic acid	SW 8270	ug/L	< 4.86		< 4.86	--	100%
Organics, Semi-volatile	Benzyl alcohol	SW 8270	ug/L	< 1.33		< 1.33	--	100%
Organics, Semi-volatile	Butylbenzylphthalate	SW 8270	ug/L	0.539		0.539	--	
Organics, Semi-volatile	Chrysene	SW 8270	ug/L	< 0.821		< 0.821	--	100%
Organics, Semi-volatile	Di-n-octylphthalate	SW 8270	ug/L	< 1.12		< 1.12	--	100%
Organics, Semi-volatile	Dibenz(a,h)anthracene	SW 8270	ug/L	< 0.582		< 0.582	--	100%
Organics, Semi-volatile	Dibenz(a,j)acridine	SW 8270	ug/L	< 0.713		< 0.713	--	100%
Organics, Semi-volatile	Dibenzofuran	SW 8270	ug/L	< 0.501		< 0.501	--	100%
Organics, Semi-volatile	Dibutylphthalate	SW 8270	ug/L	< 0.605		< 0.605	--	100%
Organics, Semi-volatile	Diethylphthalate	SW 8270	ug/L	< 0.412		< 0.412	--	100%
Organics, Semi-volatile	Dimethylphenethylamine	SW 8270	ug/L	< 120		< 120	--	100%

Coal Pile Run-off - Page 2

Liquid Stream Data Summary

Sample Stream: Coal Pile Run-off

Analyte Group	Specie	Analytical Method	Units	Run 1	Run 2	Average	95% CI	DL Ratio
Organics, Semi-volatile	Dimethylphthalate	SW 8270	ug/L	< 0.344		< 0.344	--	100%
Organics, Semi-volatile	Diphenylamine	SW 8270	ug/L	< 0.648		< 0.648	--	100%
Organics, Semi-volatile	Ethyl methanesulfonate	SW 8270	ug/L	< 0.617		< 0.617	--	100%
Organics, Semi-volatile	Fluoranthene	SW 8270	ug/L	< 0.783		< 0.783	--	100%
Organics, Semi-volatile	Fluorene	SW 8270	ug/L	< 0.412		< 0.412	--	100%
Organics, Semi-volatile	Hexachlorobenzene	SW 8270	ug/L	< 0.287		< 0.287	--	100%
Organics, Semi-volatile	Hexachlorobutadiene	SW 8270	ug/L	< 0.856		< 0.856	--	100%
Organics, Semi-volatile	Hexachlorocyclopentadiene	SW 8270	ug/L	< 10.9		< 10.9	--	100%
Organics, Semi-volatile	Hexachloroethane	SW 8270	ug/L	< 0.729		< 0.729	--	100%
Organics, Semi-volatile	Indeno(1,2,3-cd)pyrene	SW 8270	ug/L	< 0.644		< 0.644	--	100%
Organics, Semi-volatile	Isophorone	SW 8270	ug/L	< 0.352		< 0.352	--	100%
Organics, Semi-volatile	Methyl methanesulfonate	SW 8270	ug/L	< 50		< 50	--	100%
Organics, Semi-volatile	N-Nitroso-di-n-butylamine	SW 8270	ug/L	< 1.61		< 1.61	--	100%
Organics, Semi-volatile	N-Nitrosodimethylamine	SW 8270	ug/L	< 1.63		< 1.63	--	100%
Organics, Semi-volatile	N-Nitrosodiphenylamine	SW 8270	ug/L	< 0.694		< 0.694	--	100%
Organics, Semi-volatile	N-Nitrosodipropylamine	SW 8270	ug/L	< 0.921		< 0.921	--	100%
Organics, Semi-volatile	N-Nitrosopiperidine	SW 8270	ug/L	< 1.16		< 1.16	--	100%
Organics, Semi-volatile	Naphthalene	SW 8270	ug/L	< 0.894		< 0.894	--	100%
Organics, Semi-volatile	Nitrobenzene	SW 8270	ug/L	< 0.648		< 0.648	--	100%
Organics, Semi-volatile	Pentachlorobenzene	SW 8270	ug/L	< 0.544		< 0.544	--	100%
Organics, Semi-volatile	Pentachloronitrobenzene	SW 8270	ug/L	< 2.54		< 2.54	--	100%
Organics, Semi-volatile	Pentachlorophenol	SW 8270	ug/L	< 1.06		< 1.06	--	100%
Organics, Semi-volatile	Phenacetin	SW 8270	ug/L	< 0.663		< 0.663	--	100%
Organics, Semi-volatile	Phenanthrene	SW 8270	ug/L	< 0.763		< 0.763	--	100%
Organics, Semi-volatile	Phenol	SW 8270	ug/L	< 0.49		< 0.49	--	100%
Organics, Semi-volatile	Pronamide	SW 8270	ug/L	< 0.907		< 0.907	--	100%
Organics, Semi-volatile	Pyrene	SW 8270	ug/L	< 0.574		< 0.574	--	100%
Organics, Semi-volatile	Pyridine	SW 8270	ug/L	< 1.42		< 1.42	--	100%
Organics, Semi-volatile	bis(2-Chloroethoxy)methane	SW 8270	ug/L	< 0.69		< 0.69	--	100%
Organics, Semi-volatile	bis(2-Chloroethyl)ether	SW 8270	ug/L	< 0.898		< 0.898	--	100%
Organics, Semi-volatile	bis(2-Chloroisopropyl)ether	SW 8270	ug/L	< 0.891		< 0.891	--	100%

Liquid Stream Data Summary

Sample Stream: Coal Pile Run-off

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2			Average	95% CI	DL Ratio
Organics, Semi-volatile	bis(2-Ethylhexyl)phthalate	SW 8270	ug/L		3.3					3.3	--	
Organics, Semi-volatile	p-Chloroaniline	SW 8270	ug/L	<	0.686				<	0.686	--	100%
Organics, Semi-volatile	p-Dimethylaminoazobenzene	SW 8270	ug/L	<	0.632				<	0.632	--	100%
Organics, Volatile	1,1,1-Trichloroethane	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	1,1,2,2-Tetrachloroethane	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	1,1,2-Trichloroethane	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	1,1-Dichloroethane	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	1,1-Dichloroethene	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	1,2-Dichloroethane	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	1,2-Dichloroethene (total)	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	1,2-Dichloropropane	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	2-Butanone (MEK)	SW 8240	ug/L	<	10	<	10		<	10	--	100%
Organics, Volatile	2-Hexanone	SW 8240	ug/L	<	10	<	10		<	10	--	100%
Organics, Volatile	4-Methyl-2-pentanone (MIBK)	SW 8240	ug/L	<	10	<	10		<	10	--	100%
Organics, Volatile	Acetone	SW 8240	ug/L		60		20			40	254	
Organics, Volatile	Benzene	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Bromodichloromethane	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Bromoform	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Bromomethane	SW 8240	ug/L	<	10	<	10		<	10	--	100%
Organics, Volatile	Carbon Disulfide	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Carbon Tetrachloride	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Chlorobenzene	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Chloroethane	SW 8240	ug/L	<	10	<	10		<	10	--	100%
Organics, Volatile	Chloroform	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Chloromethane	SW 8240	ug/L	<	10	<	10		<	10	--	100%
Organics, Volatile	Dibromochloromethane	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Ethylbenzene	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Methylene Chloride	SW 8240	ug/L	<	5		3.5	J	<	5	--	71%
Organics, Volatile	Styrene	SW 8240	ug/L	<	5	<	5		<	5	--	100%
Organics, Volatile	Tetrachloroethene	SW 8240	ug/L	<	5	<	5		<	5	--	100%

Liquid Stream Data Summary

Sample Stream: Coal Pile Run-off

Analyte Group	Specie	Analytical Method	Units		Run 1		Run 2		Average	95% CI	DL Ratio
Organics, Volatile	Toluene	SW 8240	ug/L	<	5	<	5	<	5	- -	100%
Organics, Volatile	Trichloroethene	SW 8240	ug/L	<	5	<	5	<	5	- -	100%
Organics, Volatile	Vinyl acetate	SW 8240	ug/L	<	10	<	10	<	10	- -	100%
Organics, Volatile	Vinyl chloride	SW 8240	ug/L	<	10	<	10	<	10	- -	100%
Organics, Volatile	Xylenes	SW 8240	ug/L	<	5	<	5	<	5	- -	100%
Organics, Volatile	cis-1,3-Dichloropropene	SW 8240	ug/L	<	5	<	5	<	5	- -	100%
Organics, Volatile	trans-1,3-Dichloropropene	SW 8240	ug/L	<	5	<	5	<	5	- -	100%

APPENDIX I: DEVELOPMENT OF MASS BALANCE EQUATIONS AND EXAMPLE CALCULATIONS

Mass Balances

Mass balances for ash and trace metals around Plant Yates power generation and emission control systems were calculated as a check on data consistency. Mass balances were calculated for the following processes: boiler, ESP, JBR, and total plant. The mathematical expressions used are developed in the paragraphs below.

A general mass balance equation which applies to any system is:

$$\begin{bmatrix}\text{Accumulation of}\\ \text{Mass in System}\end{bmatrix} = \begin{bmatrix}\text{Mass into}\\ \text{System}\end{bmatrix} - \begin{bmatrix}\text{Mass out}\\ \text{of System}\end{bmatrix} + \begin{bmatrix}\text{Mass Generated}\\ \text{in System}\end{bmatrix} \qquad \text{(I-1)}$$

For all species, the generation term in Equation I-1 is equal to zero. Ash is considered to be a component of coal and not to be generated. Mass balance closure is defined by the following expression:

$$\%\ \text{Closure} = 100 * \frac{\text{Out}}{\text{In} - \text{Accumulation}} \qquad \text{(I-2)}$$

Uncertainties for mass balance closures (95% confidence intervals) were calculated using an error propagation analysis method based on ANSI/SME PTC 19.1-1985, "Measurement Uncertainty." The development of this method is treated in Appendix F.

The following sections detail the development of mass balances for the boiler, ESP, JBR and total plant (power generation and emission control systems). The equations are developed from Equation I-1 above. The purpose of this development is to present the variables considered in each mass balance. The equations presented below are simplified for clarity. The exact equations, which are more complex, are presented in Table I-1.

Table I-1
Detailed Mass Balance Equations

Mass Balance About Boiler:

$$\text{Closure} = 100 * \frac{\left(F_{coal}\ (1 - C_{w,coal})\ C_{ash,coal} - Q_{espin}\ C_{ash,espin}\right)\ C_{i,bottomash} + Q_{espin}\ \left(C_{i,espin,v} + C_{i,espin,s}\right)}{F_{coal}\ \left(1 - C_{w,coal}\right)\ C_{i,coal}}$$

Mass Balance About ESP:

$$\text{Closure} = 100 * \frac{\left(Q_{espin}\ C_{ash,espin} - Q_{espout}\ C_{ash,espout}\right)\ C_{i,collected\ ash} + Q_{espout}\ \left(C_{i,espout,v} + C_{i,espout,s}\right)}{Q_{espin}\ \left(C_{i,espin,v} + C_{i,espin,s}\right)}$$

Mass Balance About JBR:

$$\text{Closure} = 100 * \frac{O_{JBR}}{I_{JBR}}$$

where,

$$I_{JBR} = -\frac{\Delta M_i}{\Delta t} + Q_{espout}\ \left(C_{i,espout,v} + C_{i,espout,s}\right) + \left(F_{return,FT128} + F_{return,FT142} + F_{return,FT150B}\right)$$

$$* \ C_{i,return} + F_{makeup,FT150A}\ C_{i,makeup} + F_{ls} \left[\frac{C_{solids,ls}\ C_{i,solids,ls} + \hat{V}_{l,ls}\left(1 - C_{solids,ls}\right)\ C_{i,liq,ls}}{C_{solids,ls}\hat{V}_{s,ls} + \left(1 - C_{solids,ls}\right)\hat{V}_{l,ls}}\right]$$

$$O_{JBR} = F_{bdwn\ FT162A} \left[\frac{C_{solids,bdwn}\ C_{i,solids,bdwn} + \hat{V}_{l,bdwn}\ \left(1 - C_{solids,bdwn}\right)\ C_{i,liq,bdwn}}{C_{solids,bdwn}\ \hat{V}_{s,bdwn} + \left(1 - C_{solids}\right)\ \hat{V}_{l,bdwn}}\right]$$

$$+ \ Q_{stackgas}\ \left(C_{i,stackgas,v} + C_{i,stackgas,s}\right)$$

Table I-1 (Continued)

$$\frac{\Delta M_i}{\Delta t} = \frac{A_{JBR}}{\Delta t}\left[C_{i,solids,JBR}\left(\left[\frac{L_{JBR}C_{solids,JBR}}{C_{solids,JBR}\hat{V}_{s,JBR}+(1-C_{solids,JBR})\hat{V}_{l,JBR}}\right]_t-\left[\frac{L_{JBR}C_{solids,JBR}}{C_{solids,JBR}\hat{V}_{s,JBR}+(1-C_{solids,JBR})\hat{V}_{l,JBR}}\right]_{t-\Delta t}\right)\right.$$
$$\left.+C_{i,liq,JBR}\left(\left[\frac{L_{JBR}(1-C_{solids,JBR})\hat{V}_{l,JBR}}{C_{solids,JBR}\hat{V}_{s,JBR}+(1-C_{solids,JBR})\hat{V}_{l,JBR}}\right]_t-\left[\frac{L_{JBR}+(1-C_{solids,JBR})\hat{V}_{l,JBR}}{C_{solids,JBR}\hat{V}_{s,JBR}+(1-C_{solids,JBR})\hat{V}_{l,JBR}}\right]_{t-\Delta t}\right)\right]$$

Mass Balance About Entire Plant

$$\text{Closure} = 100 * \frac{O_{plant}}{I_{plant}}$$

where,

$$I_{plant} = -\frac{\Delta M_i}{\Delta t} + F_{coal}\,(1-C_{w,coal})\;C_{i,coal} + (F_{return,FT128} + F_{return,FT142} + F_{return,FT150B})\;C_{i,return}$$
$$+ F_{makeup,FT150A}\;C_{i,makeup} + F_{ls}\left[\frac{C_{solids,ls}\;C_{i,solids,ls} + \hat{V}_{l,ls}\,(1-C_{solids,ls})\;C_{i,liq,ls}}{C_{solids,ls}\;\hat{V}_{s,ls} + (1-C_{solids,ls})\;\hat{V}_{l,ls}}\right]$$

$$O_{plant} = Q_{stackgas}\,(C_{i,stackgas,v} + C_{i,stackgas,s})$$
$$+ F_{bdwn,FT162A}\left[\frac{C_{solids,bdwn}\;C_{i,solids,bdwn} + \hat{V}_{l,bdwn}\,(1-C_{solids,bdwn})\;C_{i,liq,bdwn}}{C_{solids,bdwn}\;\hat{V}_{s,bdwn} + (1-C_{solids,bdwn})\;\hat{V}_{l,bdwn}}\right]$$
$$+ \left[F_{coal}\,(1-C_{w,coal})\;C_{ash,coal} - Q_{espin}\;C_{ash,espin}\right]\;C_{i,bottomash}$$
$$+ \left[Q_{espin}\;C_{ash,espin} - Q_{espout}\;C_{ash,espout}\right]\;C_{i,collectedash}$$

Boiler

The following form of Equation I-1 applies to the boiler:

$$\text{Feed Coal} + \text{Air} = \text{Bottom Ash} + \begin{matrix}\text{ESP Inlet Gas}\\ \text{(including entrained particulates)}\end{matrix} \qquad \text{(I-3)}$$

The accumulation term for ash and trace metal species in the boiler is small and was neglected. For ash, Equation I-3 is expressed mathematically as:

$$F_{coal}\, C_{ash,coal} = F_{bottomash} + Q_{espin}\, C_{ash,espin} \qquad \text{(I-4)}$$

Since the bottom ash flow rate could not be measured accurately, Equation I-4 was used to calculate it. The concentrations of trace metal species in combustion air are very low and were neglected. Applied to a trace metal species, Equation I-3 becomes:

$$F_{coal}\, C_{i,coal} = F_{bottomash}\, C_{i,bottomash} + Q_{espin}\, C_{i,espin} \qquad \text{(I-5)}$$

The exact equation used in calculating the data presented in Table 6-2 in Section 6 was obtained by substituting Equation I-4 into Equation I-5 and rewriting in closure format. This equation is located in Table I-1.

ESP

The following form of Equation I-1 applies to the ESP:

$$\text{ESP Inlet Gas} = \text{ESP Outlet Gas} + \text{ESP Collected Fly Ash} \qquad \text{(I-6)}$$

The accumulation term for solids and trace metals is small and was neglected. For ash, Equation I-6, expressed mathematically, becomes:

$$Q_{espin}\, C_{ash,espin} = Q_{espout}\, C_{ash,espout} + F_{collectedash} \qquad \text{(I-7)}$$

Since the collected fly ash flow rate could not be measured, Equation I-7 was used to solve for it. Applied for a trace species, Equation I-6 becomes:

$$Q_{espin}\, C_{i,espin} = Q_{espout}\, C_{i,espout} + F_{collectedash}\, C_{i,collectedash} \qquad \text{(I-8)}$$

The exact equation used in calculating the data presented in Table 6-2 of Section 6 was obtained by substituting Equation I-7 into Equation I-8 and rewriting in closure format. This equation is located in Table I-1.

JBR

The following form of Equation 1 applies to the JBR:

$$\begin{matrix}\text{JBR}\\\text{Accumulation}\end{matrix} = \begin{matrix}\text{ESP}\\\text{Outlet Gas}\end{matrix} + \begin{matrix}\text{Makeup}\\\text{Water}\end{matrix} + \begin{matrix}\text{Return}\\\text{Water}\end{matrix} + \begin{matrix}\text{Limestone}\\\text{Slurry}\end{matrix} + \begin{matrix}\text{Oxidation}\\\text{Air}\end{matrix} - \begin{pmatrix}\text{JBR Slurry}\\\text{Blowdown}\end{pmatrix} + \begin{matrix}\text{Stack}\\\text{Gas}\end{matrix}\Bigg) \qquad \text{(I-9)}$$

In the JBR, because of potential changes in volume or slurry solids concentration, the accumulation of solids and trace metals was not considered to be negligible over the test period. Mass flows of trace metal species in oxidation air are very low and were neglected. For a trace metal species, Equation I-1 becomes:

$$\begin{aligned}\frac{dM_i}{dt} &= Q_{espout}\, C_{i,espout} + F_{makeup}\, C_{i,makeup} + F_{return}\, C_{i,return}\\ &+ \left[F_{ls}\, C_{solids,ls} + F_{ls}\, C_{liq,ls}\, C_{i,liq,ls}\right]\\ &- \left[\left(F_{bdwn}\, C_{solids}\, C_{i,solids} + F_{bdwn}\, C_{liq,bdwn}\, C_{i,liq,bdwn}\right) + Q_{stackgas}\, C_{i,stackgas}\right]\end{aligned} \qquad \text{(I-10)}$$

The accumulation term in Equation I-10 was approximated:

$$\frac{dM_i}{dt} \approx \frac{\Delta M_i}{\Delta t} \qquad \text{(I-11)}$$

ΔM_i, the change in the mass of a species in the JBR over a test period, was calculated with the following equation:

$$\Delta M_i = A_{JBR}\,\Delta\left[\frac{L_{JBR}\,C_{solids,JBR}\,C_{i,solids} + L_{JBR}\left(1 - C_{solids,JBR}\right)\hat{V}_1\,C_{i,liq}}{C_{solids,JBR}\,\hat{V}_s + \left(1 - C_{solids,JBR}\right)\hat{V}_1}\right] \tag{I-12}$$

The exact equation used in calculating the data presented in Table 6-2 of Section 6 was obtained by substituting Equation I-12 into Equation I-10 and rewriting in closure format. This equation is located in Table I-1. Densities used in making the above calculations are as follows: JBR solids (gypsum), 2.32 g/cc; limestone solids ($CaCO_3$), 2.72 g/cc; JBR and limestone liquid phase, 1.00 g/cc.

Total Plant

Equation I-1, applied to the combined power generation/emission control system is:

$$\begin{aligned}\begin{matrix}\Sigma\text{ Accumulation}\\\text{in Each Vessel}\end{matrix} &= \begin{matrix}\text{Comb.}\\\text{Air}\end{matrix} + \begin{matrix}\text{Feed}\\\text{Coal}\end{matrix} + \begin{matrix}\text{Return}\\\text{Water}\end{matrix} + \begin{matrix}\text{Makeup}\\\text{Water}\end{matrix} + \begin{matrix}\text{Oxidated}\\\text{Air}\end{matrix} + \begin{matrix}\text{Limestone}\\\text{Slurry}\end{matrix}\\ &- \left(\begin{matrix}\text{Stack}\\\text{Gas}\end{matrix} + \begin{matrix}\text{Blowdown}\\\text{Slurry}\end{matrix} + \begin{matrix}\text{ESP Collected}\\\text{Fly Ash}\end{matrix} + \begin{matrix}\text{Bottom}\\\text{Ash}\end{matrix}\right)\end{aligned} \tag{I-13}$$

Since most trace metal species will be removed with the bottom and fly ash, the accumulation term in the JBR will be relatively small in the total plant balance. Accumulations in other vessels have been neglected in previous equations and are also neglected in Equation I-13. Trace metals concentrations in the combustion and oxidation air streams are very low and assumed negligible. Expressed mathematically for a trace species, Equation I-13 becomes:

$$\begin{aligned}\frac{\Delta M_{i,JBR}}{\Delta t} &= F_{coal}\,C_{i,coal} + F_{return}\,C_{i,return} + F_{makeup}\,C_{i,makeup}\\ &+ \left[F_{LS}\,C_{solids,LS}\,C_{i,solids,LS} + F_{LS}\,C_{liq,LS}\,C_{i,liq,LS}\right]\\ &- \left[Q_{stackgas}\,C_{stackgas} + F_{bdwn}\,C_{solids,bdwn}\,C_{i,solids,bdwn}\right]\\ &- \left[F_{bdwn}\,C_{liq,bdwn}\,C_{i,liq,bdwn}\right]\\ &- \left[F_{collectedash}\,C_{i,collectedash} + F_{bottomash}\,C_{i,bottomash}\right]\end{aligned} \tag{I-14}$$

The exact equation used in calculating the data presented in Table 6-2 of Section 6 was obtained by substituting Equations I-4 and I-7 into Equation I-14 and rewriting in closure format. This equation is located in Table I-1.

Example Calculations

Emission Factor

The unit-energy-based emission factors were determined by dividing the mass flow rate of a substance being emitted by the heat input to the boiler during testing. Mathematically, Equation 6-3 of Section 6 can be expressed as:

$$\text{Emission Factor for Species i} = \frac{Q_{stackgas}\left(C_{i,stackgas,s} + C_{i,stackgas,v}\right)}{H_{coal}\ F_{coal}\ \left(1 - C_{w,coal}\right)} \qquad \text{(I-15)}$$

Lead will be used for the following example calculation. The following data were taken from tables in Sections 3 and 5.

$Q_{stack\ gas}$ = 456,000 Nm^3/hr

$C_{i,stackgas,s}$ = 0.50 $\mu g/Nm^3$

$C_{i,stackgas,v}$ = <0.22 $\mu g/Nm^3$; for calculations, use 0.11 $\mu g/Nm^3$

H_{coal} = 12,700 Btu/lb

F_{coal} = 91,000 lb/hr (coal rejects subtracted)

$C_{w,coal}$ = 0.117 lb water/lb coal

The emission factor for lead is calculated directly from Equation I-15.

$$\text{Emission Factor, Pb} = 2202.6 * \frac{456{,}000\ (0.50 + 0.11)}{12{,}700 * 91{,}000\ (1 - 0.117)} = 0.6 \frac{\text{lb}}{10^{12}\text{Btu}} \qquad \text{(I-16)}$$

Mass Balance

An example calculation for each of the mass balance equations presented in Table I-1 follows:

In this appendix, aluminum mass balance sample calculations are shown using equations and data from the report. The four sample calculations include boiler closure, ESP closure, JBR closure, and total plant closure.

Boiler Closure. The data required and the location of the data found in the report are shown below:

$C_{i,coal}$ = 1.45 x 10^7 μg/kg (Table 5-6)

F_{coal}= 4.13 x 10^4 kg/hr (9.1 x 10^4 lb/hr) (Table 3-7)

$C_{w,coal}$ = 0.117 kg/kg (Table 3-7)

$C_{ash,coal}$ = 0.111 kg/kg (Table 3-7)

Q_{espin} = 2.84 x 10^5 dscfm (4.5 x 10^5 Nm^3/hr) (Table 3-7)

$C_{ash,espin}$ = 3.64 gr/dscf (0.00896 kg/Nm^3) (Table 3-7)

$C_{i,bottomash}$ = 7.61 x 10^7 μg/kg (Table 5-7)

$C_{i,espin,s}$ = 8.7 x 10^5 μg/Nm^3 (Table 5-2)

$C_{i,espin,v}$ = 146 μg/Nm^3 (Table 5-2)

The material balance around the boiler is represented by the following equation:

$$Closure_{boiler} = 100 * \frac{\left(F_{coal}\left(1-C_{w,coal}\right) C_{ash,coal} - Q_{espin} C_{ash,espin}\right) C_{i,bottomash} + Q_{espin}\left(C_{i,espin,v} + C_{i,espin,s}\right)}{F_{coal}\left(1-C_{w,coal}\right) C_{i,coal}}$$

Substitution of the values listed above results in the following boiler closure for aluminum:

$Closure_{boiler}$ = 74%

ESP Closure. The data used in calculating the material balance closure around the ESP are shown as follows:

Q_{espin} = 2.84 x 10^5 dscfm (4.5 x 10^5 Nm^3/hr) (Table 3-7)

$C_{i,espin,s}$ = 8.7 x 10^5 μg/Nm^3 (Table 5-2)

$C_{i,espin,v}$ = 146 μg/Nm^3 (Table 5-2)

Q_{espout} = Q_{espin} (4.5 x 10^5 Nm^3/hr) (Table 3-7)

$C_{i,espout,s}$ = 1.21 x 10^4 μg/Nm^3 (Table 5-2)

$C_{i,espout,v}$ = 57.5 μg/Nm^3 (Table 5-2)

$C_{ash,espin}$ = 3.64 gr/dscf (8.96 x 10^{-3} kg/Nm^3) (Table 3-7)

$C_{ash,espout}$ = 0.0577 gr/dscf (1.42 x 10^{-4} kg/Nm^3) (Table 3-7)

$C_{i,collectedash}$ = 9.8 x 10^7 μg/kg (Table 5-7)

The material balance closure equation for the ESP is represented by the following equation:

$$Closure_{ESP} = 100 * \frac{(Q_{espin}\ C_{ash,espin} - Q_{espout}\ C_{ash,espout})\ C_{i,collected\ ash} + Q_{espout}\ (C_{i,espout,v} + C_{i,espout,s})}{Q_{espin}\ (C_{i,espin,v} + C_{i,espin,s})}$$

After substitution of the data presented above into this equation, the material balance closure for aluminum around the ESP is calculated to be:

$Closure_{esp}$ = 101%

JBR Closure. Unlike the other unit operations considered at Plant Yates, the accumulation term for the JBR could be important in the material balance calculations. This is because the residence time of the slurry in the JBR is much greater than any of the sampling times. The first step shown is the calculation for one of the runs in Test Period 1. An average accumulation rate was calculated for each test period; the average of these was then used in the mass balance calculations.

Data required to calculate accumulation are as follows:

$C_{i,liq,JBR}$ = 10.7 mg/L (1.07 x 10^7 μg/m^3) (App. H, Run-1)

A_{JBR} = 127 m^2 (Design Drawings)

Δt = 8 hr (Run 1)

$C_{i,solids,JBR}$ = 1.03 x 10^6 μg/kg (App. H, Run 1)

$L_{JBR,t-\Delta t}$ = 4.29 m (Average in Table 6-1)

$V_{s,JBR}$ = 0.000431 m^3/kg (Sp. Gr. = 2.32) (App. I, p. 6)

$V_{l,JBR}$ = 0.001 m^3/kg (Sp. Gr. = 1.0) (App. I, p. 6)

$C_{solids,JBR,t-\Delta t}$ = 0.222 kg/kg (Average % solids in Table 6-1)

$C_{solids,JBR,t}$ = 0.223 kg/kg (Average % solids in Table 6-1)

$L_{JBR,t}$ = 4.3 m (Average level in Table 6-1)

The accumulation term ($\Delta m_i/\Delta t$) is represented by the following equations. The change in mass of aluminum contained in the JBR during the run is calculated:

$$\Delta m_i = A_{JBR}\left[\begin{array}{l} C_{i,solids,JBR}\left[\left[\frac{L_{JBR,t}C_{solids,JBR,t}}{C_{solids,JBR,t}\hat{V}_{s,JBR} + (1-C_{solids,JBR,t})\hat{V}_{l,JBR}}\right] - \left[\frac{L_{JBR,t-\Delta t}C_{solids,JBR,t-\Delta t}}{C_{solids,JBR,t-\Delta t}\hat{V}_{s,JBR} + (1-C_{solids,JBR,t-\Delta t})\hat{V}_{l,JBR}}\right]\right] \\ + C_{i,liq,JBR}\left[\left[\frac{L_{JBR,t}(1-C_{solids,JBR,t})\hat{V}_{l,JBR}}{C_{solids,JBR,t}\hat{V}_{s,JBR} + (1-C_{solids,JBR,t})\hat{V}_{l,JBR}}\right] - \left[\frac{L_{JBR,t-\Delta t}(1-C_{solids,JBR,t-\Delta t})\hat{V}_{l,JBR}}{C_{solids,JBR,t-\Delta t}\hat{V}_{s,JBR} + (1-C_{solids,JBR,t-\Delta t})\hat{V}_{l,JBR}}\right]\right] \end{array}\right]$$

The accumulation of aluminum in the JBR during Run 1 is the change in mass divided by the length of the run and is calculated to be:

$acc = \Delta m_i/\Delta t$ $\qquad$ $acc = 1.37 \times 10^8$ μg/hr

In a similar manner, the accumulations in Runs 2 and 3 were calculated and when combined with the accumulation from Run 1, an average accumulation of 1.42×10^8 μg/hr was calculated. This average accumulation is used with the following data to calculate mass balance closure around the JBR:

$acc_{avg} = 1.42 \times 10^8$ μg/hr

$Q_{espout} = 2.84 \times 10^5$ dscfm (4.5×10^5 Nm³/hr) (Table 3-7)

$C_{i,espout,s} = 1.21 \times 10^4$ μg/Nm³ (Table 5-2)

$C_{i,espout,v} = 57.5$ μg/Nm³ (Table 5-2)

$F_{makeup,FT150A} = 26.8$ gal/min (6.09 m³/hr) (Mat'l bal. average in Table 6-1 Mist Elim/Deck Wash [Ash Pond Return])

$C_{i,makeup} = 0.176$ mg/L (1.76×10^5 μg/m³) (Table 5-10)

$F_{return,FT128} = 78.9$ gal/min (17.9 m³/hr) (Mat'l bal. average in Table 6-1 Transition Duct PW Flow [Gypsum Pond Return])

$F_{return,FT142} = 39.9$ gal/min (9.06 m³/hr) (Mat'l bal. average in Table 6-1)

$F_{return,FT150B} = 6.39$ gal/min (1.45 m³/hr) (Mat'l bal. average in Table 6-1)

$C_{i,return} = 2.04$ mg/L (2.04×10^6 μg/m³) (Table 5-10)

$F_{ls} = 36.5$ gal/min (8.29 m³/hr) (Mat'l bal. average in Table 6-1 Reagent Flow)

$C_{solids,ls}$ = 0.361 kg/kg (Mat'l bal. average in Table 6-1)

$C_{i,liq,ls}$ = 6.78 x 10^{-2} mg/L (6.78 x 10^4 μg/m^3) (App. H, Run 3d substituted for Run 3)

$F_{bdwn,FT162A}$ = 78.4 gal/min (17.8 m^3/hr) (JBR blowdown in Table 6-1)

$C_{solids,bdwn}$ = 0.229 kg/kg (JBR density, mat'l bal. average in Table 6-1)

$C_{i,solids,bdwn}$ = 1.1 x 10^3 μg/gm (1.1 x 10^6 μg/kg) (Table 5-9)

$V_{s,ls}$ = 0.000367 m^3/kg (App. I, p. 6)

$V_{l,ls}$ = 0.001 m^3/kg (App. I, p. 6)

$V_{s,bdwn}$ = 0.00431 m^3/kg (Sp. Gr. = 2.32) (App. I, p. 6)

$V_{l,bdwn}$ = 0.001 m^3/kg (Sp. Gr. = 1.0) (App. I, p. 6)

$C_{i,solids,ls}$ = 756 μg/gm (7.56 x 10^5 μg/kg) (Table 5-9)

$C_{i,liq,bdwn}$ = 12.3 mg/L (1.23 x 10^7 μg/m^3) (Table 5-10)

$Q_{stackgas}$ = 2.88 x 10^5 dscfm (4.56 x 10^5 Nm^3/hr) (Table 3-7)

$C_{i,stackgas,s}$ = 191 μg/Nm^3 (Table 5-2)

$C_{i,stackgas,v}$ = 4.35 μg/Nm^3 (Table 5-2)

With these input values, the terms I_{SBR} and O_{JBR} can be calculated as shown below:

$$I_{JBR} = -\frac{\Delta M_i}{\Delta t} + Q_{espout}\left(C_{i,espout,v} + C_{i,espout,s}\right) + \left(F_{return,FT128} + F_{return,FT142} + F_{return,FT150B}\right)$$

$$* \; C_{i,return} + F_{makeup,FT150A}\, C_{i,makeup} + F_{ls}\left[\frac{C_{solids,ls}\, C_{i,solids,ls} + \hat{V}_{l,ls}\left(1 - C_{solids,ls}\right) C_{i,liq,ls}}{C_{solids,ls}\hat{V}_{s,ls} + \left(1 - C_{solids,ls}\right)\hat{V}_{l,ls}}\right]$$

I_{JBR} = 8.32 x 10^9 μg/hr

$$O_{JBR} = F_{bdwn\ FT162A}\left[\frac{C_{solids,bdwn}\ C_{i,solids,bdwn} + \hat{V}_{l,bdwn}\ (1 - C_{solids,bdwn})\ C_{i,liq,bdwn}}{C_{solids,bdwn}\ \hat{V}_{s,bdwn} + (1 - C_{solids})\ \hat{V}_{l,bdwn}}\right] + Q_{stackgas}\ (C_{i,stackgas,v} + C_{i,stackgas,s})$$

$O_{JBR} = 5.44 \times 10^9\ \mu g/hr$

Mass balance closure for aluminum around the JBR is calculated to be:

$Closure_{JBR} = 100 * O_{JBR}/I_{JBR} = 65\%$

Note that the accumulation of aluminum in the JBR ($1.42 \times 10^8\ \mu g/hr$) is small relative to the throughput (outlet equals $5.5 \times 10^9\ \mu g/hr$). However, the accumulation calculations are based on a single concentration and only reflect changes in the JBR density and level.

Total Plant Closure. All of the data required for the total plant calculations have been specified in previous calculations. The total flow of aluminum into the plant (minus JBR accumulation) is calculated according to the following equation:

$$I_{plant} = -\frac{\Delta M_i}{\Delta t} + F_{coal}\ (1 - C_{w,coal})\ C_{i,coal} + (F_{return,FT128} + F_{return,FT142} + F_{return,FT150B})\ C_{i,return} + F_{makeup,FT150A}\ C_{i,makeup} + F_{ls}\left[\frac{C_{solids,ls}\ C_{i,solids,ls} + \hat{V}_{l,ls}\ (1 - C_{solids,ls})\ C_{i,liq,ls}}{C_{solids,ls}\ \hat{V}_{s,ls} + (1 - C_{solids,ls})\ \hat{V}_{l,ls}}\right]$$

Substituting values defined above, the mass flow of aluminum into the plant becomes:

$I_{plant} = 5.32 \times 10^{11}\ \mu g/hr$

The total flow of aluminum exiting the plant is calculated with the following equation:

$$O_{plant} = Q_{stackgas}\ (C_{i,stackgas,v} + C_{i,stackgas,s}) + F_{bdwn,FT162A}\left[\frac{C_{solids,bdwn}\ C_{i,solids,bdwn} + \hat{V}_{l,bdwn}\ (1 - C_{solids,bdwn})\ C_{i,liq,bdwn}}{C_{solids,bdwn}\ \hat{V}_{s,bdwn} + (1 - C_{solids,bdwn})\ \hat{V}_{l,bdwn}}\right] + [F_{coal}\ (1 - C_{w,coal})\ C_{ash,coal} - Q_{espin}\ C_{ash,espin}]\ C_{i,bottomash} + [Q_{espin}\ C_{ash,espin} - Q_{espout}\ C_{ash,espout}]\ C_{i,collectedash}$$

Again, values previously given are substituted, which results in the outlet mass flow for aluminum being:

$O_{plant} = 3.95 \times 10^{11}\ \mu g/hr$

Using the mass flows inlet and outlet,the overall plant closure for aluminum is calculated:

$Closure_{plant} = 100 * O_{plant}/I_{plant} = 75\%$

Removal Efficiencies

An example will be developed for lead removal in the JBR. Equation 6-4 applied to the JBR becomes:

$$\% \text{ Removal} = \left[\frac{1 - Q_{stackgas}\left(C_{i,stackgas,s} + C_{i,stackgas,v}\right)}{Q_{espout}\left(C_{i,espout,s} + C_{i,espout,v}\right)} \right] * 100 \qquad \text{(I-17)}$$

The following data were obtained from tables in Sections 3 and 5.

$Q_{stackgas} = 456{,}000\ Nm^3/hr$

$C_{i,stackgas,s} = 0.50\ \mu g/Nm^3$

$C_{i,stackgas,v} = <0.22\ \mu g/Nm^3$; for calculations use $0.11\ \mu g/Nm^3$

$Q_{ESPout} = 450{,}000\ Nm^3/hr$

$C_{i,ESPout,s} = 18\ \mu g/Nm^3$

$C_{i,ESPout,v} = 0.4\ \mu g/Nm^3$

The removal efficiency for lead is calculated directly from Equation I-17.

$$\text{Removal Efficiency of JBR for Pb} = \left[1 - \frac{456{,}000\ (0.50 + 0.11)}{450{,}000\ (18 + 0.4)} \right] * 100 = 96.7\% \qquad \text{(I-18)}$$

Nomenclature

A	Cross-sectional area, m^2
C	Concentration $\mu g/Nm^3$ (gas), $\mu g/L$ (liquid), $\mu g/kg$ (solid), or weight fraction (ash or water fraction)
F	Coal flow rate, kg/hr or water/slurry flow rate, m^3/hr
L	Level, m

Q	Gas flow rate, Nm^3/hr
$\hat{V}$,V	Specific volume, m^3/kg

Subscripts

bdwn	JBR blowdown slurry
bottomash	Bottom ash
coal	Feed coal
collectedash	ESP sluiced ash
espin	ESP inlet
espout	ESP outlet
FTx	As indicated by flow transmitter $\dot{x}$ (flow from data acquisition system)
i	Species, i
JBR	JBR
l, liq	Liquid
ls	Limestone slurry
makeup	FGD makeup water (ash pond return)
return	Gypsum pond return
s	Solid phase
solids	Solids
stackgas	Stack gas
v	Vapor phase
w	Water

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