Allegheny County Special Quench Sump Sampling Program

DER Samples

Sample Location		Alkalinity, mg/l	BOD_5, mg/l	NH_3-N, mg/l	pH s.u.	Phenol, µg/l	CN, mg/l	Dissolved Solids, Total mg/l	TPH, mg/l	Total Solids, mg/l	Suspended Solids, total mg/l	As, µg/l	Pb, µg/l	Hg, µg/l	Benzene, µg/l	Napthalene, µg/l	Phenanthrene, µg/l	benzo(a)pyrene, µg/l	CN, free, µg/l
1-3/7-9 Battery	2/3/94	28	3.6	0.29	7.8	64	0.07	376	<0.5	558	182	<100	<25	<1.0	*	*	*	*	2.0
	2/17/94	36	3.5	0.73	8.4	113	0.073	336	0.82	470	134	81.25	<50	<1.0	*	*	*	*	2.0
	2/28/94	34	3.0	0.26	9.0	145	0.075	314	<0.5	558	244	54.7	<50	<1.0	ND	0.7	ND	ND	2.0
	4/21/94	28	2.0	0.26	8.1	60	0.07	360	0.65	552	192	67.48	4.94	<1.0	*	*	*	*	*
	5/19/94	38	3.6	0.23	9.0	75	0.085	342	<2.0	390	48	55.33	<4.0	<1.0	ND	ND	ND	ND	*
B Battery	2/3/94	32	3.0	0.65	7.8	5.0	0.155	404	<0.5	546	142	<100	<25	<1.0	*	3.0	*	*	18.0
	2/17/94	44	1.5	0.63	8.9	83	0.108	440	<0.5	510	70	58.53	<50	<1.0	*	3.0	*	*	5.0
	2/28/94	32	2.4	0.67	8.7	15	0.155	374	<0.5	828	454	73.38	<50	<1.0	ND	1.7	ND	ND	6.0
	4/21/94	30	2.0	0.64	8.3	65	0.25	450	<0.5	514	64	37.56	<4.0	<1.0	*	*	*	*	*
	5/19/94	32	2.0	0.51	8.3	5.0	0.205	344	<2.0	512	168	57.43	4.16	<1.0	ND	ND	ND	ND	*
13-15 Battery	2/3/94	28	1.5	0.33	8.9	10	*	340	<0.5	400	60	*	*	<1.0	*	1.3	*	*	*
	2/17/94	38	0.75	0.29	8.9	35	0.08	306	<0.5	352	46	74.17	<50	<1.0	*	1.1	*	*	6.0
	2/28/94	24	0.6	0.32	8.6	23	0.155	292	<0.5	364	72	90.38	*	<1.0	ND	0.5	ND	ND	5.0
	4/21/94	48	3.0	0.15	9.9	50	0.15	394	2.7	520	126	50	4.53	<1.0	*	*	*	*	*
	5/19/94	30	1.2	0.31	8.6	83	0.2	318	<2.0	362	44	82.54	<4.0	<1.0	ND	ND	ND	ND	*
19-20 Battery	2/3/94	38	4.0	0.65	9.2	144	0.125	342	<0.5	554	212	<100	108	<1.0	*	2.3	*	*	3.0
	2/17/94	36	2.5	0.43	8.6	215	0.11	310	<0.5	454	144	73.13	<50	<1.0	1.5	2.7	*	*	1.0
	2/28/94	28	1.2	*	8.7	63	0.13	*	<0.5	*	*	100.7	<50	<1.0	0.7	1.5	ND	ND	6.0
	4/21/94	28	3.5	0.38	9.4	215	0.3	438	0.65	508	70	<4.0	8.55	<1.0	*	*	*	*	*
	5/19/94	38	6.0	0.57	8.9	288	0.28	324	<2.0	498	174	79.73	8.13	<1.0	2.0	5.97	20.5	ND	*
Quench Water Average		33.5	2.54	.42		87.8	.14	304.2		472.5	132.3								
Intake Average		25.2	1.04	.09		0		97.6		152	23.2								
River Water Intake	2/3/94	22	0.8	0.13	6.7	0	0.001	*	<0.5	190	34	<100	<25	<1.0	*	*	*	*	<1.0
	2/17/94	26	1.6	0.14	6.5	0	<0.001	154	<0.5	204	50	5.72	<50	<1.0	*	*	*	*	<1.0
	2/28/94	26	1.2	*	7.0	0	<0.001	*	1.2	*	*	<4.0	<50	<1.0	ND	ND	ND	ND	<1.0
	4/21/94	26	0.8	0.09	6.3	0	<0.001	174	<0.5	204	30	<4.0	<4.0	<1.0	*	*	*	*	*
	5/19/94	26	0.8	0.09	6.3	0	<0.001	160	<0.5	162	2.0	<4.0	<4.0	<1.0	ND	ND	ND	ND	*

*parameter not analyzed

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Quench Tower	Date	Alkalinity as H_2O, $CaCO_3$, mg/L	BOD, 5 Day, mg/L	Ammonia, N, mg/L	pH, Units	Phenol, (4AAP), PHOH, mg/L	Cyanide Total, CN, mg/L	Dissolved Solids (Total), mg/L	Total Petroleum HC, IR, mg/L	Total Solids, mg/L	Suspended Solids (Total), mg/L	Arsenic, As, mg/L	Lead, Pb, mg/L	Mercury, Hg, mg/L	Benzene, ug/L	Naphthalene, ug/L	Phenanthrene, ug/L	Benzo(a)Pyrene, ug/L
B	01/27/94 02/03/94	34	3.0	0.69	8.1	0.240	0.013	440	0.50	490	98	0.036	0.0040	<0.0002	<5	<10	<10	0.88
	02/17/94 02/28/94	36	1.0	0.85	8.9	0.098	0.007	410	<0.5	610	98	0.037	0.0035	<0.0002	<5	11	<10	0.38
	04/21/94 05/19/94	35	7.0	0.12	9.1	0.089	0.022	420	<0.5	500	57	0.038	<0.003	<0.0002	<5	<10	<10	2.67
#3	01/27/94 02/03/94	36	4.2	0.36	7.5	0.120	0.009	390	<0.5	430	91	0.055	<0.003	<0.0002	<5	<10	<10	0.57
	02/17/94 02/28/94	27	1.0	0.39	7.9	0.120	0.005	330	0.68	550	140	0.063	0.0050	<0.0002	<5	<10	<10	0.74
	04/21/94 05/19/94	29	6.0	<0.05	9.1	0.064	<0.005	330	<0.5	420	51	0.059	<0.003	<0.0002	<5	<10	<10	1.74
#5	01/27/94 02/03/94	36	3.6	0.42	7.9	0.024	0.021	340	0.50	370	54	0.043	<0.003	<0.0002	<5	<10	<10	0.13
	02/17/94 02/28/94	31	2.0	0.50	9.2	0.028	0.005	280	0.76	410	58	0.053	0.0036	<0.0002	<5	<10	<10	0.16
	04/21/94 05/19/94	24	10.0	0.11	10.5	0.015	0.017	380	<0.5	520	92	0.046	<0.003	<0.0002	<5	<10	<10	1.01
#7	01/27/94 02/03/94	32	5.4	0.58	7.6	0.140	<0.005	340	0.74	420	58	0.045	0.0160	<0.0002	<5	<10	<10	0.44
	02/17/94 02/28/94	31	1.0	0.47	8.8	0.250	0.005	310	3.40	520	140	0.052	0.0670	<0.0002	<5	<10	<10	0.77
	04/21/94 05/19/94	26	6.0	<0.05	9.9	0.200	0.025	390	<0.5	480	72	0.032	0.0220	<0.0002	<5	<10	<10	3.99
Quench Water Average		31.4	4.2	0.37		0.116	0.011	363	0.55	477	84	0.047	0.0101	0	0	0.92	0	1.12
Intake Average		28.0	2.3	0.11		0.004	0.002	150	0.00	240	69.7	0.000	0.0034	0	0	0	0	0.00
Intake	01/27/94 02/03/94	34	<1	0.25	6.7	0.012	<0.005	180	<0.5	290	130	<0.005	0.0066	<0.0002	<5	<10	<10	<0.02
	02/17/94 02/28/94	21	2.0	0.07	6.5	< 0.004	0.005	120	<0.5	240	66	<0.005	0.0037	<0.0002	<5	<10	<10	<0.02
	04/21/94 05/19/94	29	5.0	<0.05	8.3	< 0.004	<0.005	150	<0.5	190	13	<0.005	<0.003	<0.0002	<5	<10	<10	<0.02
Typical Contaminated Water Concentrations				2200	8.5	600	1000		4200		200				3E+05			
Water Quality Limits		>20	none	0.02	6-9	0.005	none	500	none	none	none	0.050	0.050	0.012	1	10	0.003	0.003

Denotes analysis for U.S. Steel by Chester, other analyses by Allegheny County

QUENCH.WK4