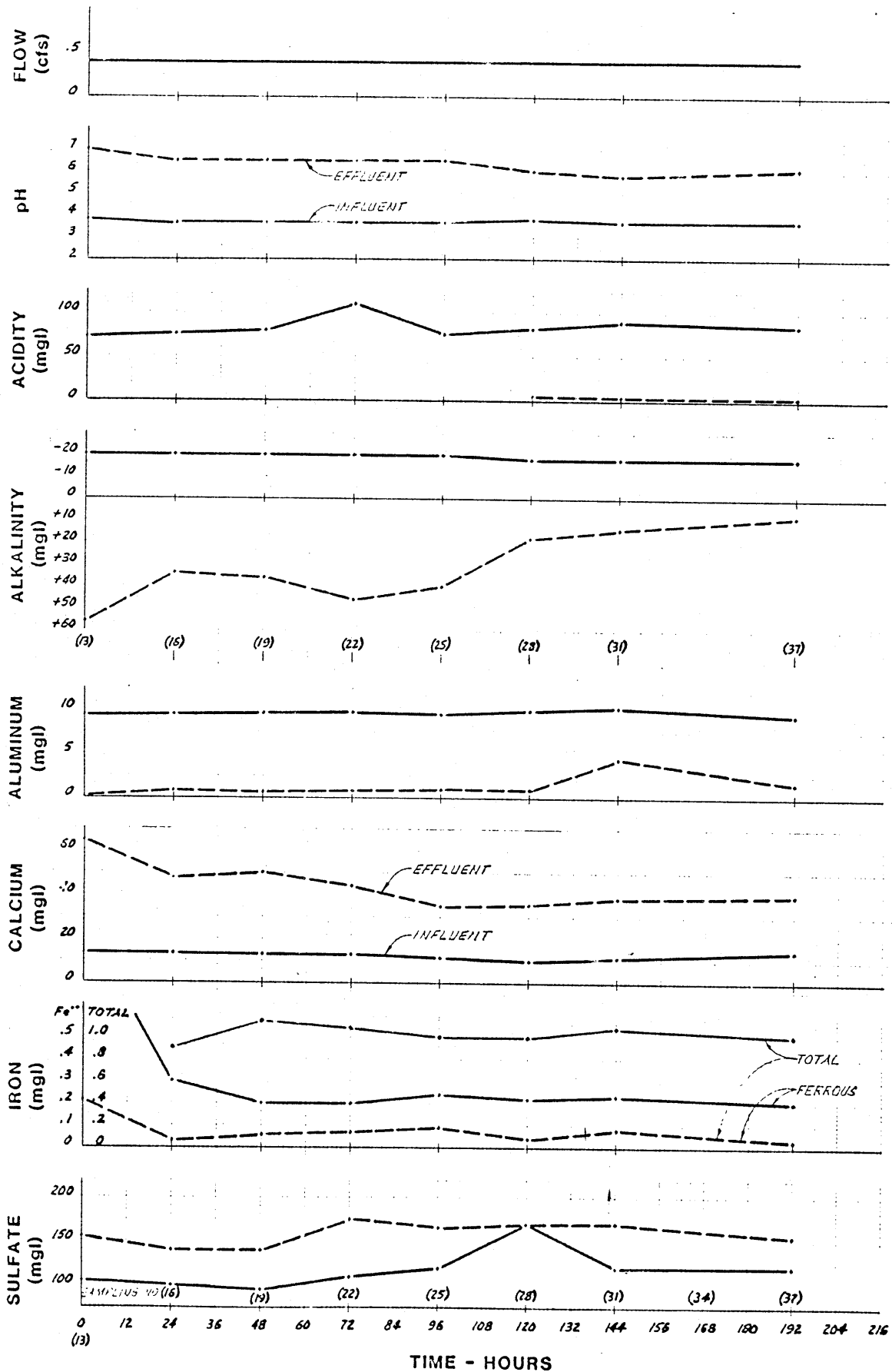


BARRIER #5

SAMPLING NO.	FLOW	LOCATION	FIELD pH	HEAD LOSS	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS	
						mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
31 11/18/79 5:15 PM	0.40	0	3.85		3.70	18	90	0	120	1.10	11.6	10.20		
		1	4.30	0.68	4.20	6	66	4	150	0.90	16.7	9.90		
		2	4.70	0.71	4.50	0	58	6	150	0.30	18.0	9.40		
		3	4.80	0.65	4.60	0	54	6	140	0.20	20.6	8.90		
		4	4.80	0.69	4.50	0	50	5	150	0.10	20.9	8.00		
		5	4.95	0.78	4.60	0	42	8	155	0.10	25.8	6.30		
		6	4.95	0.75	4.70	0	34	8	155	0.00	26.0	6.20		
		7	5.10	0.83	4.80	0	24	8	160	0.00	28.8	4.10		
		8	5.25	0.80	5.00	0	12	8	160	0.00	31.2	2.70		
		9	5.55	0.69	5.40	0	6	8	165	0.00	34.0	1.70		
10	5.75	0.39	5.80	0	4	14	170	0.00	38.7	4.40				
33 11/19/79 9:00 AM	0.40	0	3.90											
		1	4.70	0.79										
		2	4.80	0.73										
		3	4.80	0.66										
		4	4.80	0.70										
		5	4.90	0.21										
		6	4.90	0.72										
		7	5.10	0.89										
		8	5.20	0.84										
		9	7.10	0.75										
10	5.75	0.46												
34 11/19/79 5:30 PM	0.40	0	3.80		3.80	18	90	0	160	1.40	14.3	9.40		
		1	4.35	0.73	4.20	6	72	2	165	1.80	18.9	8.80		
		2	4.60	0.71	4.50	0	62	6	165	1.10	19.6	8.70		
		3	4.70	0.62	4.50	0	62	8	170	0.20	22.4	8.80		
		4	4.80	0.69	4.50	0	56	6	170	0.20	23.6	7.80		
		5	4.95	0.78	4.50	0	46	6	165	0.10	27.0	7.00		
		6	4.90	0.70	4.60	0	42	6	165	0.10	28.4	5.70		
		7	4.95	0.83	4.70	0	28	6	165	0.00	30.4	4.30		
		8	5.10	0.80	4.80	0	16	6	165	0.00	34.8	3.00		
		9	5.25	0.64	5.00	0	8	8	170	0.00	38.0	2.00		
10	5.70	0.44	5.80	0	4	12	170	0.00	40.7	1.50				
36 11/20/79 10:00 AM	0.40	0	3.70											
		1	4.35	0.74										
		2	4.55	0.70										
		3	4.70	0.61										
		4	4.70	0.71										
		5	4.70	0.80										
		6	4.85	0.71										
		7	4.90	0.86										
		8	4.95	0.85										
		9	5.10	0.72										
10	5.30	0.53												
37 11/20/79 5:00 PM	0.40	0	4.10		3.70	18	84	0	120	1.00	14.2	9.20		
		1	4.35	0.70	4.20	6	70	4	145	0.60	18.6	9.10		
		2	4.60	0.71	4.50	0	66	6	150	0.40	21.3	8.90		
		3	4.80	0.65	4.50	0	62	6	150	0.20	22.2	8.60		
		4	4.85	0.69	4.50	0	56	6	150	0.20	21.1	8.60		
		5	4.90	0.80	4.50	0	50	6	150	0.10	25.6	7.40		
		6	4.95	0.70	4.60	0	44	6	150	0.00	27.2	6.80		
		7	5.00	0.88	4.60	0	32	6	150	0.00	32.3	4.80		
		8	5.15	0.83	4.70	0	24	6	150	0.00	34.1	4.60		
		9	5.20	0.71	5.00	0	14	8	150	0.00	37.3	2.70		
10	5.15	0.47	6.10	0	4	8	155	0.00	39.9	1.60				

RUN NO. 2

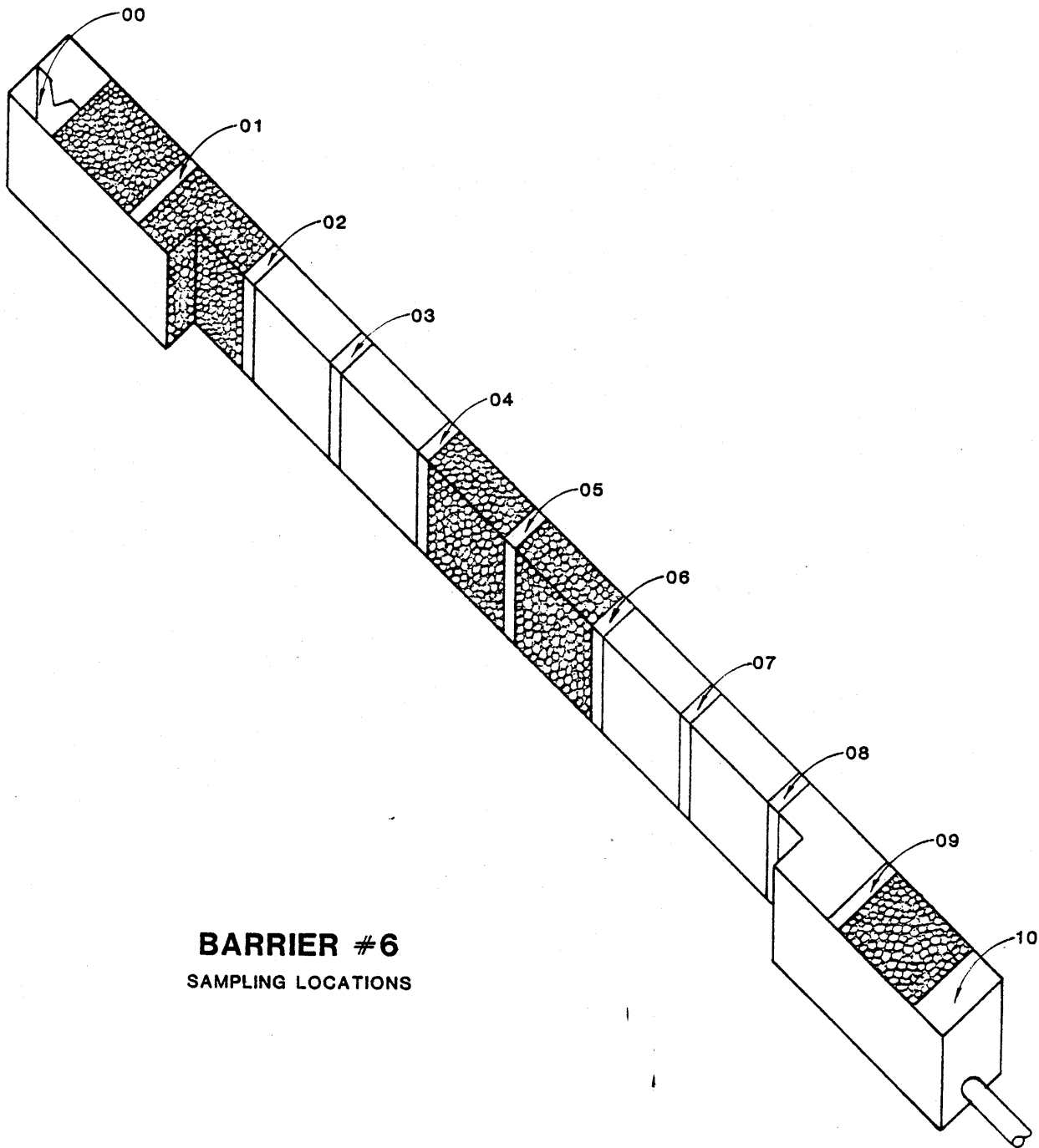


BARRIER NO. 5 SAMPLING 13 THRU 39

BARRIER #5

SAMPLING NO.	FLOW	LOCATION	FIELD pH	HEAD LOSS	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
	cfs			ft		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
39 11/21/79 9:00 AM	0.40	0	3.80										
		1	4.40	0.78									
		2	4.80	0.74									
		3	4.80	0.65									
		4	4.80	0.69									
		5	4.90	0.80									
		6	4.90	0.73									
		7	5.00	0.91									
		8	5.05	0.83									
		9	5.10	0.78									
10	5.30	0.50											

RUN NO. 2



BARRIER #6
SAMPLING LOCATIONS

BARRIER #6

SAMPLING NO.	FLOW	LOCATION	FIELD pH	HEAD LOSS	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
						mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
1 7/10/79 12:00 PM	0.06	0	3.40		3.70	34	90	0	175	1.87			
		1	4.60	1.38	4.80	0	32	78	195	0.14			
		2	5.30	1.58	6.00	0	2	20	200	0.10			
		3	5.90	1.63									
		4	6.10	1.96									
		5	6.20	2.16									
		6	6.50	2.62									
		7	6.60	2.75									
		8	6.80	2.72									
		9	6.80	2.69									
10	6.85	2.77		7.40	0	0	74	210	0.37				
2 8/30/79 12:00 PM	0.06	0	3.80		3.70	62	100	0	175	1.00	17.6	12.12	
		1	4.80	1.99	6.00	0	2	22	215	0.28	79.2	5.64	
		2	6.00	2.77	6.20	0	2	30	215	0.16	63.1	2.52	
		3	5.80	3.34	6.30	0	2	26	210	0.14	55.8	1.76	
		4	6.40	3.89	6.20	0	2	30	210	0.06	56.4	0.92	
		5	6.20	3.80	6.40	0	2	32	210	0.07	54.7	0.52	
		6	6.80	3.86	6.40	0	2	38	205	0.04	58.9	0.46	
		7	6.40	3.74	6.50	0	2	44	205	0.03	65.9	0.38	
		8	6.30	3.64	6.60	0	2	50	205	0.04	96.0	0.30	
		9	6.40	3.71	6.60	0	2	52	205	0.05	67.6	0.24	
10	6.50	2.88	6.70	0	2	54	205	0.02	66.4	0.24			
3 9/6/79 12:00 PM	0.05	0	3.75		3.70	28	7	0	110	6.92	13.1	13.08	
		1	4.80	2.36	4.70	0	2	6	140	1.21	29.4	5.76	
		2	6.10	2.56	6.00	0	4	20	155	0.17	38.3	1.12	
		3		2.63									
		4	6.60	2.85	6.50	0	2	38	145	0.08	41.8	0.54	
		5	6.80	2.79	6.90	0	2	58	150	0.04	52.2	0.18	
		6	7.10	2.82	7.10	0	0	62	150	0.03	63.5	0.14	
		7	6.90	2.82	7.20	0	0	60	170	0.01	67.5	0.16	
		8	6.90	2.79	7.20	0	0	64	235	0.01	97.0	0.08	
		9	6.90	2.98	7.40	0	0	80	250	0.06	112.5	0.48	
10	6.20	3.87	6.80	0	40	16	140	0.84	36.8	2.60			
4 9/10/79 12:00 PM	0.06	0	3.70		3.70	26	90	0	165	0.88	15.0	11.88	
		1		2.35									
		2	4.30	2.40	4.60	0	64	6	180	1.24	24.2	11.88	
		3	4.50	2.50	4.70	0	36	8	180	0.12	32.9	7.32	
		4	5.60	2.82	5.60	0	2	14	200	0.13	45.8	5.76	
		5	6.30	2.79	6.40	0	0	52	205	0.12	59.9	0.32	
		6	6.50	2.84	6.70	0	0	64	195	0.07	65.6	0.10	
		7	6.30	2.84	6.90	0	0	68	195	0.23	66.2	0.08	
		8	6.70	2.83	7.20	0	0	72	195	0.01	67.3	0.02	
		9	6.40	2.94	7.30	0	0	72	190	0.20	77.7	0.14	
10	4.90	3.71	7.30	0	0	74	190	0.12	14.9	0.84			
6 9/13/79 12:00 PM	0.06	0	3.70		3.70	30	92	0	155	1.27	16.2	10.92	
		1	4.50	2.33	4.50	0	70	6	140	0.28	26.0	9.60	
		2		2.23									
		3	4.75	2.36	4.60	0	44	8	150	0.14	35.7	8.76	
		4	4.95	2.75	5.50	0	12	8	160	0.07	51.7	2.82	
		5	6.40	2.76	6.40	0	2	48	185	0.01	76.5	0.16	
		6	6.50	2.81	6.60	0	0	58	165	0.01	79.5	0.14	
		7	6.50	2.81	6.80	0	0	62	160	0.01	81.7	0.10	
		8	6.55	2.82	6.90	0	0	66	160	0.01	114.5	0.06	
		9	6.60	2.88	7.00	0	0	70	160	0.08	99.5	0.18	
10	6.60	3.64	7.10	0	0	70	160	0.10	107.2	0.26			

RUN NO. 1

BARRIER #6

SAMPLING NO.	FLOW	LOCATION	FIELD pH	HEAD LOSS	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS	
						ft	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
7 9/17/79 12:00 PM	0.06	0	3.75		3.70	26	96	0	175	1.47	17.2	10.68		
		1	4.45	2.32	4.50	0	70	6	160	0.49	26.0	10.32		
		2	4.55	2.03	4.70	0	42	8	170	0.18	35.6	6.84		
		3		2.32										
		4	5.15	2.73	5.10	0	10	8	175	0.09	45.2	3.38		
		5	6.10	2.84	6.40	0	0	48	200	0.08	71.4	0.14		
		6	6.00	2.90	6.60	0	0	62	190	0.05	79.4	0.12		
		7	5.80	2.89	6.80	0	0	66	185	0.09	80.4	0.16		
		8	6.20	2.89	6.90	0	0	66	185	0.07	77.4	0.02		
		9	6.20	2.94	7.00	0	0	68	185	0.08	77.8	0.02		
10	6.40	3.88	7.10	0	0	66	180	0.12	83.2	0.08				

RUN NO. 1

15 11/13/79 11:30 AM	0.41	0	3.80										
		1	4.80	2.59									
		2	4.70	2.68									
		3	4.70	2.61									
		4	4.70	2.81									
		5	4.80	2.85									
		6	4.80	2.94									
		7	5.20	0.79									
		8		0.80									
		9		0.76									
10		0.78											

16 11/13/79 6:00 PM	0.41	0	3.80		3.70	20	76	0	140	0.90	14.3	9.60	
		1	4.30	2.60	4.10	10	66	2	90	0.60	13.4	9.50	
		2	4.50	2.69	4.40	2	60	6	110	0.60	17.4	9.60	
		3	4.90	2.61	4.50	0	58	6	120	0.50	17.5	8.80	
		4	4.70	2.85	4.60	0	52	6	125	0.30	18.9	8.70	
		5	4.90	2.84	4.60	0	52	6	160	0.20	17.6	9.10	
		6	4.90	2.92	4.50	0	44	8	120	0.20	19.2	7.70	
		7	5.00	2.89	4.60	0	36	8	130	0.20	26.3	7.10	
		8	5.00	2.77	6.20	0	2	18	155	0.20	55.4	6.20	
		9	5.10	2.78	4.90	0	18	8	135	0.10	28.0	5.00	
10	5.60	1.93	6.10	0	3	14	155	0.10	42.1	3.60			

17 11/14/79 12:30 AM	0.30	0	3.80										
		1	4.20	3.63									
		2	4.45	3.73									
		3	4.75	3.61									
		4	4.80	3.80									
		5	4.80	3.81									
		6	4.80	3.96									
		7	4.90	3.96									
		8	4.90	3.77									
		9	5.00	3.73									
10	5.00	2.95											

18 11/14/79 9:30 AM	0.39	0	3.90										
		1	4.80	2.58									
		2	4.95	2.70									
		3	5.15	2.58									
		4	5.60	2.80									
		5	5.70	2.84									
		6	5.95	2.93									
		7	6.10	2.89									
		8	6.10	2.77									
		9	6.00	2.77									
10	6.20	1.95											

RUN NO. 2

BARRIER #6

SAMPLING NO.	FLOW	LOCATION	FIELD pH	HEAD LOSS	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
						mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
	cfs			ft		ft	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
19 11/14/79 4:30 PM	0.39	0	3.90		3.70	20	78	0	115	1.00	12.7	9.80	
		1	4.50	2.56	4.30	4	64	4	135	0.70	15.5	9.60	
		2	4.65	2.66	4.20	4	64	4	135	0.50	14.9	9.80	
		3	4.70	2.59	4.50	0	60	8	140	0.50	18.4	9.30	
		4	4.90	2.80	4.50	0	60	6	140	0.40	18.6	9.80	
		5	4.95	2.84	4.50	0	52	8	125	0.30	21.9	9.10	
		6	4.85	2.91	4.60	0	50	8	140	0.20	22.6	9.00	
		7	4.90	2.86	4.60	0	50	8	140	0.20	16.4	8.70	
		8	4.90	2.77	4.60	0	50	6	140	0.10	24.3	7.70	
		9	4.90	2.77	4.60	0	46	6	140	0.10	26.2	7.10	
		10	5.00	1.92	4.70	0	36	8	135	0.10	26.5	6.50	
20 11/15/79 12:30 AM	0.30	0	3.70										
		1	4.00	2.58									
		2	4.75	2.68									
		3	4.45	2.56									
		4	4.70	2.75									
		5	4.70	2.76									
		6	4.75	2.91									
		7	4.80	2.86									
		8	4.95	2.72									
		9	4.80	2.73									
		10	4.85	1.85									
21 11/15/79 9:30 AM	0.39	0	3.80										
		1	4.20	2.56									
		2	4.40	2.65									
		3	4.60	2.57									
		4	4.70	2.75									
		5	4.80	2.80									
		6	4.90	2.92									
		7	4.81	2.86									
		8	4.80	2.76									
		9	4.90	2.75									
		10	4.90	1.89									
22 11/15/79 6:30 PM	0.39	0	4.00		3.70	18	80	0	130	1.00	10.8	9.10	
		1	4.30	2.58	4.10	10	70	2	150	0.90	11.9	8.60	
		2	4.50	2.63	4.20	6	66	4	135	0.70	13.3	9.00	
		3	4.80	2.56	4.40	2	64	4	145	0.50	16.4	8.70	
		4	5.00	2.75	4.50	0	66	6	145	0.40	17.8	9.00	
		5	5.00	2.86	4.50	0	58	6	150	0.30	16.4	9.00	
		6	5.00	2.91	4.50	0	56	6	150	0.20	20.6	9.10	
		7	5.00	2.91	4.50	0	56	6	145	0.20	20.2	8.80	
		8	5.10	2.82	4.50	0	52	6	150	0.20	18.1	7.90	
		9	5.10	2.78	4.60	0	46	8	150	0.10	20.8	7.90	
		10	5.00	1.90	4.60	0	44	8	150	0.10	22.5	7.00	
23 11/16/79 1:30 AM	0.30	0	3.80										
		1	3.95	2.68									
		2	4.35	2.73									
		3	4.45	2.71									
		4	4.70	2.85									
		5	4.85	2.86									
		6	4.95	2.96									
		7	4.90	2.96									
		8	4.90	2.82									
		9	4.95	2.88									
		10	4.85	1.95									

RUN NO. 2

BARRIER #6

SAMPLING NO.	FLOW	LOCATION	FIELD pH	HEAD LOSS	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
						mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
24 11/16/79 11:30 AM	0.35	0	3.90										
		1	4.10	2.60									
		2	4.50	2.71									
		3	4.50	2.58									
		4	4.70	2.80									
		5	4.80	2.85									
		6	4.80	2.94									
		7	4.70	2.90									
		8	4.80	2.79									
		9	4.90	2.77									
10	4.90	1.92											
25 11/16/79 5:30 PM	0.39	0	3.85		3.70	20	80	0	145	1.00	12.5	8.90	
		1	4.25	2.59	4.00	10	78	0	135	0.80	12.8	9.40	
		2	4.40	2.65	4.10	8	66	2	145	1.20	12.7	9.80	
		3	4.60	2.58	4.30	4	66	4	150	0.50	17.4	9.10	
		4	4.60	2.80	4.40	2	64	4	150	0.40	15.2	8.90	
		5	4.60	2.84	4.50	0	64	6	150	0.30	18.7	9.30	
		6	4.60	2.93	4.50	0	64	6	155	0.20	16.2	8.60	
		7	4.75	2.88	4.50	0	60	6	155	0.20	18.3	8.80	
		8	4.85	2.78	4.50	0	58	6	155	0.10	19.3	8.00	
		9	4.65	2.79	4.60	0	54	8	150	0.10	19.2	8.30	
10	4.85	1.91	4.50	0	50	6	150	0.10	20.7	7.70			
27 11/17/79 9:30 AM	0.37	0	3.90										
		1	4.10	2.59									
		2	4.35	2.69									
		3	4.60	2.60									
		4	4.90	2.81									
		5	4.80	2.85									
		6	4.80	2.97									
		7	4.70	2.92									
		8	4.80	2.81									
		9	4.90	2.81									
10	4.90	1.94											
28 11/17/79 5:00 PM	0.34	0	3.85		3.70	18	80	0	160	1.00	13.2	9.50	
		1	4.20	2.53	3.90	12	74	0	160	0.90	18.3	9.40	
		2	4.30	2.58	4.10	8	68	2	165	0.70	16.2	9.10	
		3	4.50	2.51	4.30	4	68	4	160	0.60	18.4	9.40	
		4	4.65	2.70	4.40	2	62	4	160	0.50	22.4	10.30	
		5	4.75	2.78	4.50	0	62	6	160	0.30	17.3	9.60	
		6	4.80	2.86	4.50	0	62	6	160	0.20	18.3	8.70	
		7	4.80	2.86	4.60	0	60	6	160	0.20	17.9	9.20	
		8	4.80	2.72	4.50	0	58	6	160	0.10	20.6	8.80	
		9	4.85	2.73	4.50	0	58	6	160	0.10	18.9	8.80	
10	4.90	1.85	4.60	0	56	6	165	0.10	25.4	8.40			
30 11/18/79 11:30 AM	0.37	0	3.80										
		1	4.10	2.60									
		2	4.20	2.67									
		3	4.40	2.58									
		4	4.50	2.78									
		5	4.70	2.80									
		6	4.80	2.95									
		7	4.80	2.90									
		8	4.90	2.77									
		9	4.80	2.77									
10	4.80	1.89											

RUN NO. 2

BARRIER #6

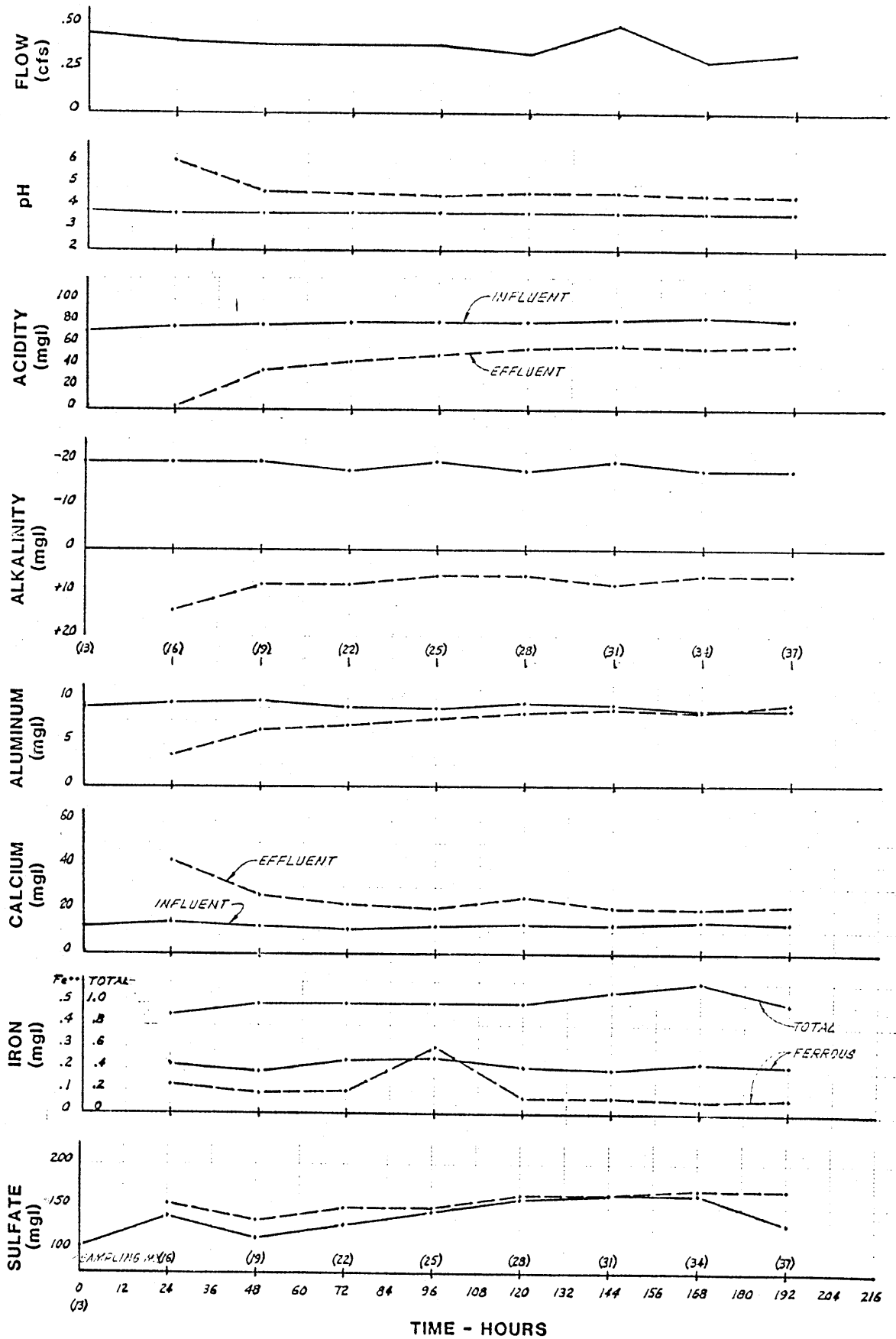
SAMPLING NO.	FLOW	LOCATION	FIELD pH	HEAD LOSS	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
	cfs			ft		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
31 11/18/79 5:30 PM	0.50	0	3.80		3.70	20	82	0	165	1.10	13.0	9.20	
		1	4.15	2.53	3.90	14	76	0	165	1.00	14.9	8.60	
		2	4.20	2.58	4.10	8	72	2	165	0.80	15.8	9.10	
		3	4.35	2.51	4.20	6	68	4	170	0.60	17.5	10.30	
		4	4.50	2.75	4.30	4	68	4	165	0.60	17.9	10.60	
		5	4.60	2.78	4.50	0	64	4	165	0.30	18.7	8.90	
		6	4.80	2.86	4.50	0	62	6	165	0.20	20.1	9.40	
		7	4.75	2.81	4.50	0	62	6	165	0.20	18.0	9.80	
		8	4.80	2.67	4.50	0	64	6	165	0.10	18.6	8.80	
		9	4.75	2.68	4.60	0	58	6	165	0.10	19.8	9.00	
	10	4.80	1.85	4.60	0	58	8	165	0.10	20.7	8.80		
33 11/19/79 9:30 AM	0.37	0	3.90										
		1	4.10	2.56									
		2	4.30	2.63									
		3	4.40	2.56									
		4	4.60	2.76									
		5	4.80	2.82									
		6	4.70	2.91									
		7	4.70	2.88									
		8	4.90	2.75									
		9	4.80	2.74									
	10	4.90	1.89										
34 11/19/79 6:00 PM	0.30	0	3.80		3.70	18	84	0	165	1.20	14.3	8.60	
		1	4.00	2.58	3.90	10	78	0	170	1.20	16.4	9.50	
		2	4.10	2.63	4.10	10	72	2	170	1.00	17.0	9.00	
		3	4.25	2.56	4.20	6	70	2	170	0.70	18.5	9.20	
		4	4.45	2.80	4.30	6	68	4	170	0.50	18.5	9.30	
		5	4.50	2.81	4.40	2	66	8	170	0.40	18.8	9.10	
		6	4.65	2.91	4.50	0	64	8	170	0.30	20.0	8.80	
		7	4.70	2.91	4.50	0	56	6	170	0.20	20.0	9.00	
		8	4.75	2.77	4.50	0	60	8	165	0.20	21.4	9.00	
		9	4.80	2.78	4.50	0	62	6	170	0.10	21.1	8.50	
	10	4.80	1.90	4.50	0	56	6	170	0.20	20.2	8.40		
36 11/20/79 9:30 PM	0.30	0	3.75										
		1	3.95	2.58									
		2	4.45	2.68									
		3	4.50	2.56									
		4	4.50	2.75									
		5	4.55	2.81									
		6	4.60	2.91									
		7	4.70	2.88									
		8	4.85	2.77									
		9	4.65	2.73									
	10	4.75	1.90										
37 11/20/79 5:30 PM	0.34	0	3.70		3.70	18	82	0	130	1.00	13.8	8.60	
		1	4.00	2.68	3.90	14	78	0	145	0.80	16.6	9.50	
		2	4.15	2.73	4.00	8	72	0	150	1.00	16.5	9.60	
		3	4.30	2.66	4.20	6	70	4	150	0.60	18.3	9.00	
		4	4.50	2.85	4.30	4	66	4	150	0.40	17.4	9.20	
		5	4.55	2.93	4.40	2	64	6	145	0.20	18.7	9.10	
		6	4.70	3.01	4.50	0	64	6	145	0.10	19.5	9.00	
		7	4.75	2.98	4.50	0	62	6	145	0.10	17.6	9.70	
		8	4.85	2.87	4.50	0	62	6	165	0.10	21.0	9.80	
		9	4.85	2.86	4.50	0	62	6	170	0.10	20.8	9.00	
	10	4.80	2.00	4.50	0	58	6	170	0.00	21.5	9.30		

RUN NO. 2

BARRIER #6

SAMPLING NO.	FLOW	LOCATION	FIELD pH	HEAD LOSS	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS							
	cfs													ft	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
39	0.33	0	3.80																	
11/21/79		1	4.00	2.53																
10:00 AM		2	4.10	2.63																
		3	4.30	2.51																
		4	4.50	2.75																
		5	4.60	2.81																
		6	4.70	2.86																
		7	4.80	2.84																
		8	4.80	2.70																
		9	4.80	2.71																
		10	4.90	1.85																

RUN NO. 2



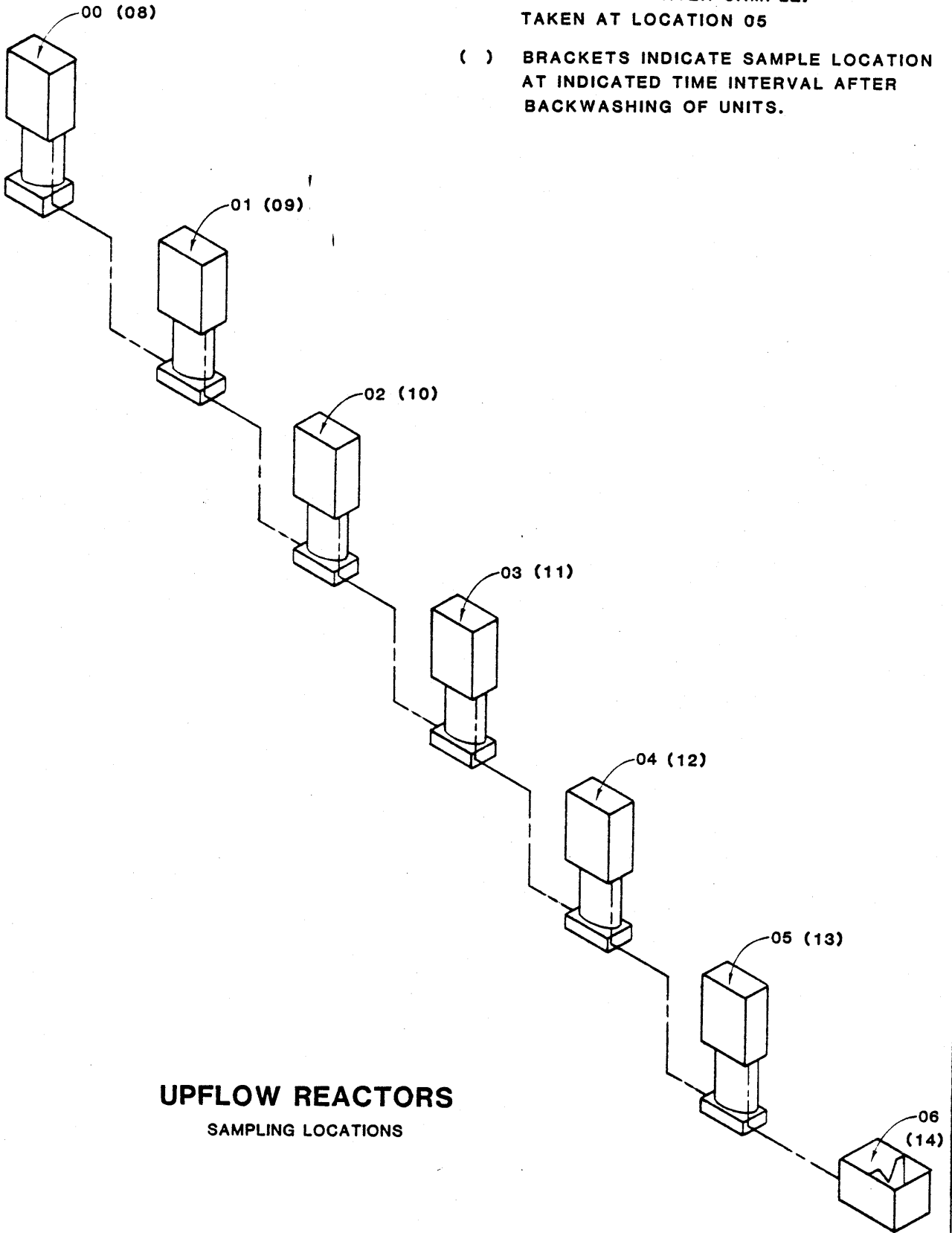
BARRIER NO. 6 SAMPLING 13 THRU 39

BARRIER 6

SAMPLING NO.	LOCATION	MAGNESIUM	MANGANESE	POTASSIUM	SODIUM	SILICA	CHLORIDE	TOTAL SOLIDS	REMARKS
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
2	0	21.00	2.93	1.16	5.1	20.350	5.0	334	SPECIAL TESTS
2	10	21.00	2.82	1.22	5.0	18.740	5.0	472	
3	0	12.60	1.96	2.43	2.8	27.980	3.0	346	
3	10	13.20	1.77	1.60	2.8	10.930	3.0	292	
4	0	19.30	2.48	1.46	4.3	18.480	5.0	382	
4	10	19.90	2.06	1.64	4.9	16.480	5.0	634	
6	0	17.06	2.39	1.30	5.0	20.860	7.0	392	
6	10	17.48	1.83	1.66	5.6	16.700	5.0	500	
7	0	23.00	2.64	1.28	4.3	9.580	4.0	456	
7	10		2.30	1.44	5.0	8.560	5.0	528	

NOTE: 07 BACKWASH WATER SAMPLE.
TAKEN AT LOCATION 05

() BRACKETS INDICATE SAMPLE LOCATION
AT INDICATED TIME INTERVAL AFTER
BACKWASHING OF UNITS.



ALTERNATING REACTORS

SAMPLING NO.	LOCATION	MAGNESIUM	MANGANESE	POTASSIUM	SODIUM	SILICA	CHLORIDE	TOTAL SOLIDS	RES. DISS.	REMARKS
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
4	0	18.60	2.44	1.42	5.0	19.160	5.0	350		
4	6	10.80	2.56	1.44	5.3	18.140	5.8	364		
9	0	23.00	2.12	1.26	5.0	9.243	5.0	362	358	
9	6	24.00	2.11	1.38	5.5	8.230	5.0	386	368	
10	0	19.70	2.10	1.40	4.5	7.480	6.0	430	428	
10	6	20.10	2.14	1.44	4.2	7.180	6.0	414	408	
10	7	10.70		1.56	4.8	8.000	6.0	414	410	
10	13	21.00	2.08	1.38	4.5	7.480	6.0	398	396	
11	0		2.18		3.7			410	406	
11	6	21.00	2.19	1.24	3.4	7.570	4.0	452	448	

SPECIAL TESTS

UPFLOW REACTORS

SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
					cfs							
1 7/10/79 1:00 PM	0.100	0	3.40									
		1	4.60	4.50		52	4	175	0.81		10.56	
		2	4.60	4.60		46			185	0.53		
		3	4.75									
		4	4.80									
		5	4.95									
		6	5.00	4.90	0	12	6	190	0.26			
2 8/30/79 1:00 PM	0.100	0	4.50	4.20	28	78	4	165	1.30	26.1	10.20	
		1	4.60	4.40	2	64	6	190	0.30	30.4	10.92	
		2	5.00	4.50	0	40	6	195	0.10	36.8	8.76	
		3	5.10	4.80	0	22	6	205	0.10	43.5	5.04	
		4	5.50	5.40	0	4	14	210	0.10	50.9	1.62	
		5	5.90	5.80	0	4	18	215	0.10	52.9	0.98	
		6	5.10	4.70	0	54	80	195	0.20	43.1	5.16	
3 9/6/79 1:00 PM	0.100	0	3.65	3.70	34	90	0	145	1.10	15.9	12.00	
		1	4.30	4.40	6	64	4	140	0.38	22.6	11.76	
		2	4.60	4.70	0	34	6	155	0.08	26.1	7.32	
		3	5.20	5.20	0	6	12	155	0.02	31.3	2.04	
		4	6.10	6.20	0	2	24	150	0.01	35.4	0.58	
		5	6.40	6.70	0	2	42	145	0.01	37.5	0.16	
		6	6.50	6.80	0	2	48	140	0.38	41.0	0.08	
4 9/10/79 1:00 PM	0.120	0	3.70	3.70	30	92	0	150	1.20	15.2	11.76	
		1	4.50	4.50	0	46	8	170	0.17	28.3	8.28	
		2	4.70	4.70	0	26	6	175	0.43	36.3	4.44	
		3	5.40	5.60	0	2	14	195	0.16	47.4	0.94	
		4	6.10	6.20	0	0	34	205	0.16	62.9	0.18	
		5	6.30	6.50	0	0	50	200	0.06	66.6	0.54	
		6	6.40	6.70	0	0	54	190	0.02	66.7	0.08	
5 9/12/79 11:00 AM	0.526	0	4.35	4.20	12	82	2	162	1.18	23.7	14.76	
		1	4.60	4.50	0	64	8	170	1.17	31.5	15.12	
		2	4.90	4.60	0	42	8	183	1.26	44.5	14.64	
		3	4.95	4.70	0	24	8	188	1.31	49.7	13.44	
		4	5.15	5.10	0	10	10	198	1.26	58.2	14.76	
		5	5.25	5.50	0	6	10	196	1.28	59.2	14.40	
		6	5.25	5.30	0	8	10	196	1.32	64.5	14.52	
6 9/13/79 1:00 PM	0.629	0	4.20	4.20	10	78	4	120	1.34	24.5	11.16	
		1	4.50	4.50	0	64	8	175	1.43	25.6	12.48	
		2	4.70	4.60	0	42	8	135	1.24	39.0	11.40	
		3	4.70	4.70	0	26	8	150	1.42	45.0	10.20	
		4	4.90	5.00	0	12	8	170	1.54	44.0	12.36	
		5	5.00	5.00	0	6	8	160	1.41	53.2	11.28	
		6	4.95	5.00	0	8	8	175	1.27	52.0	11.28	
7 9/17/79 1:00 PM	0.120	0	4.15	3.90	16	92	0	140	1.60	20.2	11.04	
		1	4.15	4.10	10	84	2	160	1.00	22.2	9.84	
		2	4.50	4.40	4	78	4	155	0.47	24.2	9.60	
		3	4.45	4.50	0	76	6	160	0.29	25.0	9.24	
		4	4.50	4.50	0	74	8	160	0.30	25.6	11.64	
		5	4.50	4.50	0	74	6	160	0.27	25.8	11.28	
		6	4.65	4.50	0	76	8	155	0.32	25.6	11.04	

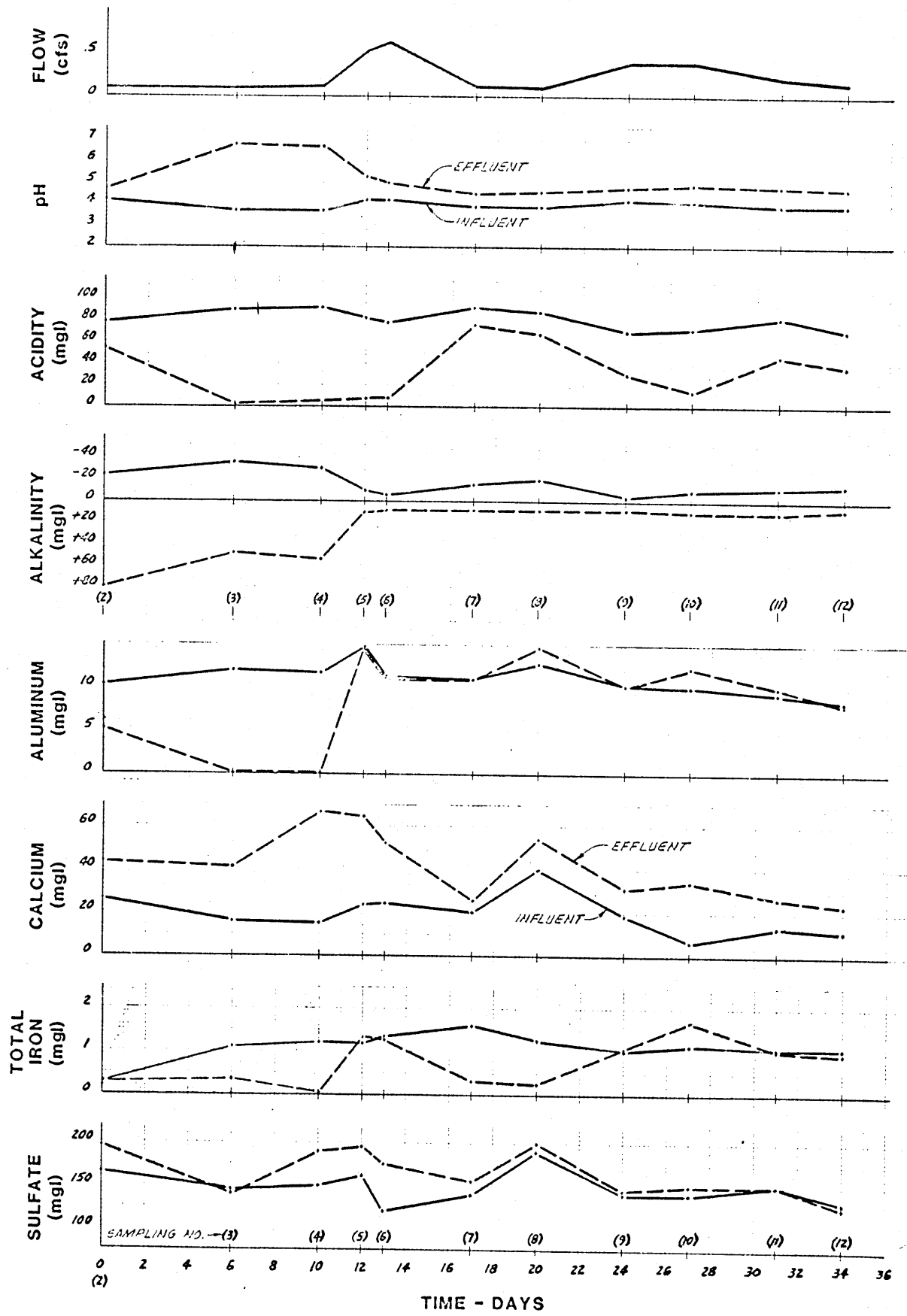
RUN NO. 1

UPFLOW REACTORS

SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
					cfs							
8 9/20/79 1:00 PM	0.100	0	4.10	3.90	20	88	0	190	1.23	39.8	12.84	
		1	4.25	4.10	12	84	2	200	0.85	42.8	17.40	
		2	4.60	4.40	4	78	6	205	0.38	47.4	12.96	
		3	4.70	4.50	0	78	6	200	0.26	47.0	12.84	
		4	4.80	4.60	0	72	8	200	0.20	51.8	12.36	
		5	4.60	4.60	0	72	6	200	0.20	46.8	12.00	
6	4.75	4.60	0	68	8	200	0.26	54.0	14.76			
9 9/24/79 1:00 PM	0.390	0	4.30	4.20	8	70	4	140	1.02	18.7	10.20	
		1	4.55	4.60	0	62	8	145	0.98	21.6	9.00	
		2	4.70	4.60	0	54	8	145	0.78	26.6	9.36	
		3	4.70	4.70	0	42	8	145	0.77	30.0	9.96	
		4	4.90	4.70	0	34	8	145	0.74	32.2	9.24	
		5	4.80	4.80	0	28	8	150	1.06	33.0	9.48	
6	4.80	4.80	0	30	8	145	1.03	31.0	10.20			
10 9/27/79 1:00 PM	0.390	0	4.10	4.10	12	72	2	140	1.14	6.4	10.08	
		1	4.55	4.60	0	62	10	155	1.22	39.3	11.40	
		2	4.70	4.70	0	40	8	155	1.62	24.2	12.84	
		3	4.80	4.60	0	28	8	150	1.35	56.8	10.80	
		4	4.80	4.80	0	14	10	150	1.78	35.4	11.28	
		5	5.00	4.90	0	14	8	150	1.69	34.6	13.44	
6	4.95	4.90	0	14	10	150	1.69	34.2	12.36			
11 10/1/79 1:00 PM	0.218	0	3.85	3.90	12	82	0	150	1.07	13.8	9.36	
		1	4.25	4.20	6	72	4	155	1.59	15.9	11.16	
		2	4.40	4.60	0	64	10	155	1.12	19.2	11.40	
		3	4.70	4.70	0	54	10	150	1.14	24.6	10.56	
		4	4.50	4.80	0	46	10	150	1.11	27.3	8.76	
		5	4.80	4.80	0	46	10	150	1.07	26.8	10.20	
6	4.90	4.80	0	46	10	150	1.04	26.8	10.08			
12 10/4/79 1:00 PM	0.153	0	3.85	3.90	14	70	0	130	1.07	11.7	8.40	
		1	4.05	4.10	8	64	2	130	0.92	12.5	8.16	
		2	4.45	4.60	0	54	8	135	0.99	16.9	7.92	
		3	4.50	4.70	0	46	8	130	0.95	19.7	7.20	
		4	4.50	4.70	0	38	10	130	0.98	22.2	7.56	
		5	4.60	4.70	0	36	8	125	1.01	23.0	8.04	
6	4.60	4.70	0	36	8	125	0.95	23.2	8.16			
13 11/12/79 5:30 PM	0.180	0	3.95	3.80	20	76	0	110	1.12	13.3	8.90	
		1	3.90	4.00	14	66	0	105	1.03	15.1	8.50	
		2	4.70	4.50	0	58	6	110	0.89	20.0	8.20	
		3	5.00	4.70	0	44	6	125	0.73	26.5	7.50	
		4	4.90	4.70	0	42	8	130	0.57	24.6	6.80	
		5	5.00	4.80	0	32	8	135	0.48	27.5	3.40	
6	5.30	5.00	0	14	8	140	0.46	29.6	4.80			
15 11/13/79 8:00 AM	0.220	0	4.30	4.00	10	70	0	115	1.04	16.0	8.80	
		1	4.50	4.30	4	64	4	125	0.80	16.8	8.10	
		2	4.70	4.50	0	60	6	125	0.64	18.0	8.20	
		3	4.80	4.60	0	54	8	125	0.46	16.4	7.80	
		4	4.85	4.60	0	54	8	125	0.43	19.3	7.90	
5	4.80	4.70	0	48	8	130	0.31	20.2	7.20			

RUN NO. 1

RUN NO. 2



UP FLOW SAMPLING 1 THRU 12

UPFLOW REACTORS

SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
16 11/13/79 3:30 PM	0.060	0	4.10	4.00	12	70	0	115	1.00	15.1	8.20	
		1	4.75	4.70	0	40	10	135	0.72	23.9	6.30	
		2	4.80	4.70	0	28	8	135	0.26	26.3	5.40	
		3	5.15	4.80	0	22	8	135	0.58	24.3	4.20	
		4	5.10	5.00	0	14	8	140	0.58	29.0	3.70	
		5	5.50	5.70	0	4	10	145	0.56	31.4	2.50	
17 11/13/79 11:00 PM	0.060	0	4.20	4.00	10	66	0	140	0.90	15.8	9.30	
		1	4.80	4.60	0	46	6	140	0.60	21.0	8.50	
		2	4.90	4.60	0	42	8	150	0.60	23.3	7.30	
		3	4.90	4.60	0	32	6	145	0.50	27.6	6.30	
		4	4.95	4.70	0	24	8	135	0.40	28.7	5.20	
		5	5.00	4.80	0	16	8	140	0.40	31.0	3.80	
18 11/14/79 8:00 AM	0.060	0	4.10	3.90	16	72	0	125	1.00	15.0	8.90	
		1	4.80	4.50	0	50	8	140	0.60	20.5	6.90	
		2	4.90	4.60	0	46	8	130	0.60	22.7	7.30	
		3	4.90	4.60	0	44	6	140	0.40	22.1	6.60	
		4	5.00	4.60	0	36	8	140	0.40	23.4	5.70	
		5	5.00	4.70	0	28	8	140	0.30	26.9	4.50	
19 11/14/79 3:30 PM	0.054	0	4.20	3.90	16	74	0	130	1.10	15.8	9.60	
		1	4.70	4.50	0	56	8	140	0.60	19.1	8.30	
		2	4.90	4.60	0	50	8	125	0.40	20.9	8.00	
		3	4.80	4.60	0	42	6	130	0.30	22.7	6.70	
		4	4.85	4.60	0	40	8	135	0.30	24.2	6.80	
		5	4.90	4.60	0	34	8	135	0.20	26.5	6.00	
20 11/14/79 11:00 PM	0.054	0	4.45	3.90	16	74	0	125	1.10	15.8	9.40	
		1	4.90	4.50	0	58	6	135	0.70	18.7	8.50	
		2	5.00	4.60	0	54	8	140	0.40	19.2	8.30	
		3	5.20	4.60	0	44	8	140	0.30	22.9	7.70	
		4	5.00	4.60	0	44	8	140	0.30	22.8	6.60	
		5	4.90	4.60	0	38	8	140	0.20	25.4	6.00	
21 11/15/79 8:00 AM	0.054	0	3.90	3.90	16	76	0	120	1.10	15.9	9.00	
		1	4.65	4.50	0	58	6	130	0.60	18.7	8.60	
		2	4.70	4.60	0	54	8	135	0.40	18.1	8.20	
		3	4.90	4.60	0	50	8	135	0.30	20.2	8.20	
		4	5.00	4.60	0	46	8	125	0.30	22.1	7.40	
		5	4.90	4.60	0	44	8	140	0.20	23.1	6.80	
22 11/15/79 3:00 PM	0.054	0	4.20	3.90	16	74	0	160	1.00	13.5	8.60	
		1	4.90	4.40	2	64	4	160	0.60	15.7	8.80	
		2	4.80	4.50	0	60	6	160	0.40	17.8	8.90	
		3	4.90	4.50	0	54	6	160	0.20	19.1	8.00	
		4	5.10	4.50	0	52	6	160	0.20	18.5	8.00	
		5	4.90	4.60	0	50	6	165	0.20	18.8	7.40	

RUN NO. 2

UPFLOW REACTORS

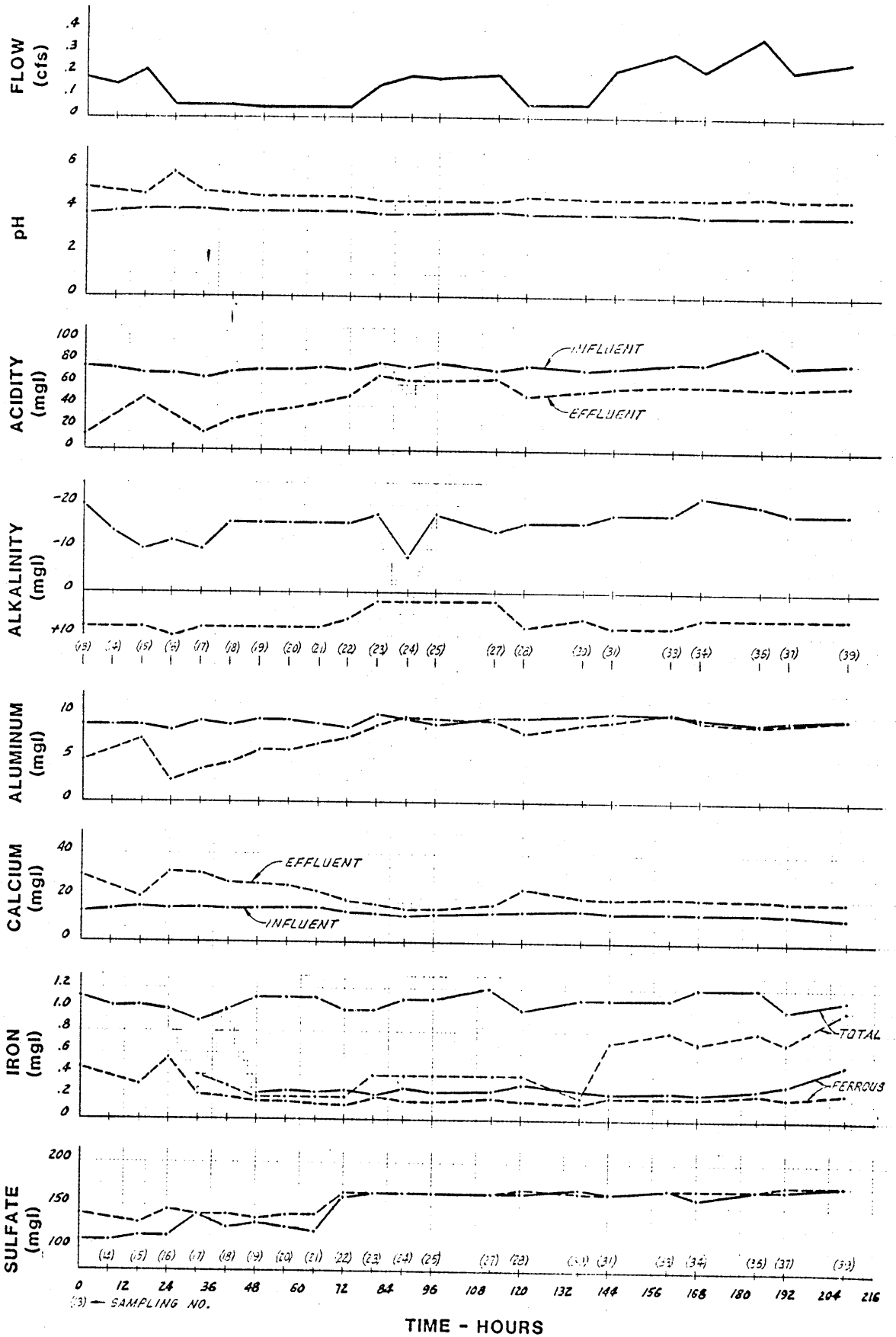
SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
23 11/15/79 11:00 PM	0.150	0	3.80	3.80	18	80	0	165	1.00	12.9	10.10	
		1	4.15	4.00	10	74	0	165	0.90	14.4	9.00	
		2	4.20	4.10	8	72	2	165	0.80	15.2	8.70	
		3	4.40	4.30	4	66	4	165	0.60	15.7	8.90	
		4	4.50	4.30	4	70	4	165	0.40	15.7	9.30	
		5	4.70	4.40	2	68	4	165	0.40	17.2	8.90	
24 11/16/79 8:00 AM	0.190	0	4.30	4.60	8	74	0	165	1.10	18.1	9.60	
		1	4.30	4.20	8	70	2	165	1.00	15.9	9.20	
		2	4.50	4.20	6	68	4	165	0.80	16.0	9.00	
		3	4.85	4.40	2	62	4	165	0.60	16.9	9.70	
		4	4.80	4.40	2	64	4	165	0.50	15.3	9.30	
		5	4.80	4.40	2	64	4	165	0.40	15.2	9.70	
25 11/16/79 3:00 PM	0.180	0	3.90	3.80	18	80	0	165	1.10	13.0	8.90	
		1	4.20	4.00	10	76	0	165	0.90	14.1	8.90	
		2	4.25	4.10	10	72	2	165	0.80	14.9	9.40	
		3	4.30	4.20	6	68	4	165	0.60	15.4	9.50	
		4	4.50	4.30	4	66	4	165	0.50	15.3	8.90	
		5	4.55	4.40	2	64	4	165	0.40	15.3	9.60	
27 11/17/79 8:00 AM	0.200	0	4.00	3.90	14	74	0	165	1.20	13.6	9.80	
		1	4.50	4.20	6	68	4	165	1.00	15.6	9.50	
		2	4.30	4.30	4	64	4	165	0.80	16.4	9.70	
		3	4.50	4.40	2	66	4	165	0.60	17.0	10.00	
		4	4.60	4.40	4	66	4	165	0.50	15.9	9.40	
		5	4.65	4.40	2	66	4	165	0.40	17.2	9.30	
28 11/17/79 3:00 PM	0.060	0	3.85	3.80	16	78	0	165	1.00	14.3	9.70	
		1	4.55	4.50	0	62	6	165	0.90	19.2	8.90	
		2	4.75	4.60	0	58	6	165	0.60	20.0	8.90	
		3	4.85	4.60	0	56	8	165	0.60	21.1	7.60	
		4	4.90	4.60	0	56	8	165	0.40	21.7	7.90	
		5	4.85	4.60	0	50	8	170	0.40	24.3	7.90	
30 11/18/79 8:00 AM	0.068	0	4.00	3.80	16	74	0	170	1.10	14.7	9.90	
		1	4.60	4.30	4	64	4	170	0.80	17.7	8.90	
		2	5.10	4.50	0	62	8	165	0.60	18.0	9.20	
		3	4.80	4.50	0	58	6	170	0.40	18.9	9.50	
		4	4.90	4.50	0	58	6	170	0.30	19.2	9.90	
		5	4.90	4.50	0	54	6	165	0.20	20.2	9.00	
31 11/18/79 3:30 PM	0.220	0	3.85	3.80	18	76	0	165	1.10	13.6	10.20	
		1	4.20	4.00	10	74	0	170	1.00	16.7	10.00	
		2	4.40	4.30	6	68	4	170	0.90	24.8	9.00	
		3	4.50	4.40	2	52	6	170	0.80	16.6	10.50	
		4	4.55	4.50	0	66	8	170	0.70	17.1	9.50	
		5	4.80	4.50	0	58	8	165	0.70	20.0	9.30	
33 11/19/79 8:00 AM	0.300	0	3.95	3.80	18	80	0	170	1.10	13.7	10.10	
		1	4.30	4.10	8	76	2	170	1.00	15.3	9.10	
		2	4.30	4.20	6	72	4	170	0.90	16.3	9.80	
		3	4.70	4.30	6	70	4	170	0.90	16.4	9.90	
		4	4.75	4.40	2	68	6	170	0.80	17.3	9.80	
		5	4.90	4.50	0	60	8	170	0.80	20.4	10.20	

RUN NO. 2

UPFLOW REACTORS

SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
	cfs				mg/l	mg/l	mg/l	mg/l	mg/l			
34 11/19/79 4:00 PM	0.220	0	3.80	3.70	22	80	0	160	1.20	13.2	9.60	
		1	4.00	4.00	14	74	0	170	1.10	14.3	9.50	
		2	4.20	4.10	10	72	2	170	1.00	16.4	9.50	
		3	4.40	4.30	6	68	4	170	0.90	17.0	9.60	
		4	4.55	4.40	2	66	6	170	0.80	18.0	9.20	
		5	4.80	4.50	0	60	6	170	0.70	20.0	9.30	
36 11/20/79 8:00 AM	0.370	0	3.80	3.70	20	96	0	170	1.20	13.4	9.10	
		1	4.10	3.90	14	80	0	170	1.00	15.7	9.20	
		2	4.30	4.10	12	74	2	175	1.00	16.4	8.90	
		3	4.40	4.30	8	72	2	170	0.90	15.8	9.50	
		4	4.60	4.40	2	64	4	170	0.80	16.1	7.30	
		5	4.55	4.60	0	58	6	170	0.80	19.8	8.90	
37 11/20/79 3:30 PM	0.220	0	3.80	3.70	18	78	0	170	1.00	13.0	9.40	
		1	4.10	4.00	10	74	0	170	1.00	14.5	9.70	
		2	4.20	4.30	4	66	4	170	1.00	16.8	9.10	
		3	4.35	4.30	4	68	4	165	1.10	14.5	9.40	
		4	4.50	4.30	4	66	4	170	0.90	17.0	8.90	
		5	4.70	4.50	0	58	6	175	0.70	19.1	9.20	
39 11/21/79 8:00 AM	0.260	0	3.90	3.70	18	80	0	175	1.00	11.4	9.60	
		1	4.00	3.90	10	74	0	175	1.00	14.1	9.70	
		2	4.20	4.10	8	70	2	175	1.00	16.0	9.70	
		3	4.50	4.20	4	68	4	175	1.10	16.0	9.60	
		4	4.55	4.30	4	66	4	175	1.00	15.8	9.90	
		5	4.90	4.50	0	60	6	175	1.10	19.0	9.60	

RUN NO. 2



UP FLOW SAMPLING 13 THRU 39

UPFLOW UNITS

SAMPLE NO.	FLOW	LOCATION	HOT pH	COLD pH	HOT ACIDITY		COLD ACIDITY		HOT ALKALINITY		COLD ALKALINITY		IRON	CALCIUM	ALUMINUM	
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l				
66 7/20/81 800	0.14	0	1.90													
		1	2.30			134				-60			0.43	17.8	12.85	
		2	2.40			108				-64			1.07	28.0	13.23	
		3	2.40			86				-52			0.85	29.2	12.09	
		4	2.50			86				-56			0.58	35.4	10.47	
		5	3.10			72				-36			0.40	35.8	8.57	
67 7/21/81 1000	0.14	0		3.70												
		1	3.10	5.10	84	104				-30			0.58	17.2	13.56	
		2	3.30	5.10	72	106				6			1.95	27.9	13.47	
		3	3.40	5.20	78	90				12			1.87	45.6	12.78	
		4	3.60	5.20	60	66				8			2.23	42.6	17.46	
		5	3.60	5.60	54	62				8			1.91	47.8	14.92	
68 7/21/81 300	0.39	0	3.30	3.60	92	130										
		1	3.40	5.30	78	106			-62	-30			0.38	15.8	13.99	
		2	3.30	4.70	52	124			-50	8			1.01	24.8	12.72	
		3	3.00	4.80	70	100			-30	8			1.07	25.3	12.72	
		4	3.45	4.70	58	100			-34	8			1.92	27.7	11.04	
		5	3.75	5.00	44	110			-34	6			5.85	30.6	20.20	
69 7/21/81 800	0.15	0	3.50	3.70	64	132										
		1	3.50	5.20	52	122			-36	-28			0.45	16.2	13.58	
		2	4.00	5.00	27	114			-26	18			0.98	30.5	10.31	
		3	4.40	5.30	20	80			-6	16			0.86	36.5	8.53	
		4	5.60	6.00	14	70				18			0.75	42.1	6.15	
		5	6.80	6.40	7	68				16			0.48	44.7	3.56	
70 7/22/81 800	0.59	0	3.30	3.80	114	110										
		1	3.50	5.10	72	80							0.51	15.8	13.49	
		2	3.50	5.00	70	88				6			1.12	27.7	11.53	
		3	3.60	5.40	61	74				6			0.97	28.0	11.82	
		4	3.60	5.40	57	100				6			0.72	29.9	10.92	
		5	3.75	5.80	49	74			-28	8			0.34	32.7	9.22	
72 7/22/81 400	0.38	0	3.40	3.70	90	138										
		1	3.60	5.00	56	96							0.52	16.5	13.34	
		2	3.50	5.00	58	104				10			1.11	27.0	12.67	
		3	3.60	5.00	54	98				12			0.87	29.4	11.32	
		4	3.80	5.10	40	100				49			0.61	33.3	9.22	
		5	4.10	5.40	34	76				18			0.73	36.5	8.26	
74 7/22/81 1000	0.18	0	3.50	3.60	92	138										
		1	3.50	5.20	76	108							0.50	16.5	13.36	
		2	3.60	5.00	60	116				16			1.38	28.1	12.47	
		3	3.70	5.20	46	89				16			0.92	32.1	10.58	
		4	4.20	5.30	30	88				16			0.70	34.2	8.71	
		5	5.00	5.70	20	88				20			0.70	42.5	6.10	

RUN NO. 4

UPFLOW REACTORS

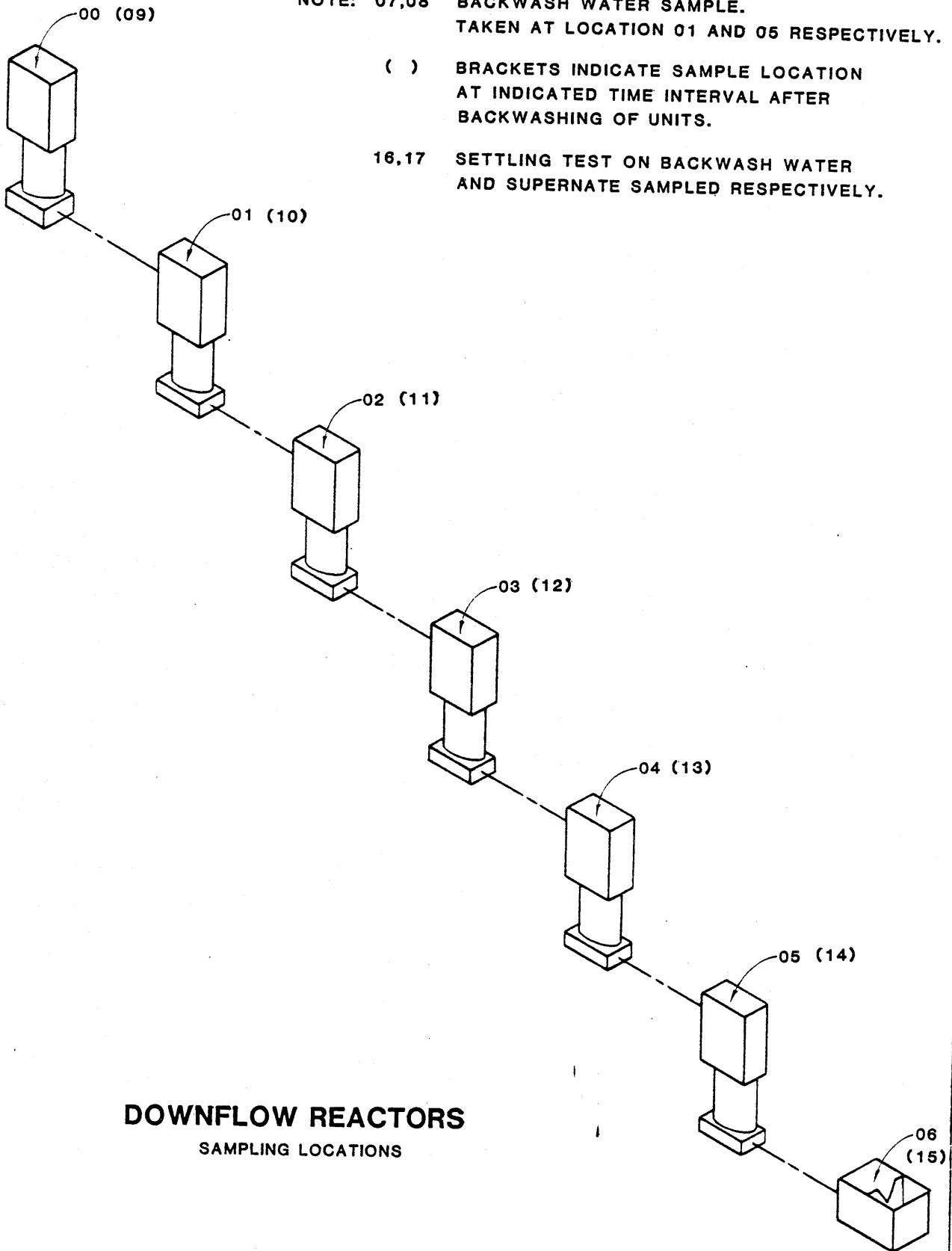
SAMPLING NO.	LOCATION	MAGNESIUM	MANGANESE	POTASSIUM	SODIUM	SILICA	CHLORIDE	TOTAL SOLIDS	RES. DISS.	REMARKS
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
2	1	20.80	2.03	1.22	4.6	22.380	5.8	508		
2	7	20.20	3.01	1.26	4.7	21.360	5.0	480		
3	1	16.00	2.36	1.64	2.7	20.350	4.0	372		
3	7	15.70	2.55	1.78	2.8	22.130	4.0	324		
4	1	19.90	2.47	1.56	4.5	17.600	5.0	418		
4	7	18.80	2.48	2.68	4.9	19.500	5.0	390		
5	1	17.90	2.44	1.44	4.7	19.750	4.5	470		
5	7	17.96	2.42	1.46	4.0	18.900	4.5	476		
6	1	17.52	2.40	1.50	5.0	20.260	5.0	388		
6	7	16.92	2.36	1.40	4.4	21.620	5.0	420		
7	1		2.68	1.46	4.2	9.880	4.0	486		
7	7		2.62	1.40	4.3	9.240	4.0	466		
8	1		2.59	1.38	5.2	8.770	5.0	470	378	
8	14		2.67	1.42	4.8	10.640	5.0	480	460	
9	1	23.00	2.09	1.26	5.6	8.310	5.0	392	390	
9	7	22.00	2.12	1.24	5.1	9.240	5.0	414	392	
9	8	22.00	2.00	1.68	5.0	8.650	5.0	354	352	
9	14	24.00	2.15	1.50	4.6	8.650	5.0	402	362	
10	1	8.90	2.12	1.70	4.5	7.590	6.0	432	418	
10	7	20.50	2.11	1.70	5.2	8.410	6.0	456	418	
10	8	17.30	1.98	1.26	3.7	18.310	6.0	408	398	
10	14	20.40	2.13	1.68	4.4	8.000	5.0	436	386	
11	1	20.50	2.15	1.22	4.0	7.680	4.0	422	420	
11	7	21.70	2.21	1.22	3.7	7.840	4.0	414	398	

SPECIAL TESTS

NOTE: 07,08 BACKWASH WATER SAMPLE.
TAKEN AT LOCATION 01 AND 05 RESPECTIVELY.

() BRACKETS INDICATE SAMPLE LOCATION
AT INDICATED TIME INTERVAL AFTER
BACKWASHING OF UNITS.

16,17 SETTLING TEST ON BACKWASH WATER
AND SUPERNATE SAMPLED RESPECTIVELY.



DOWNFLOW REACTORS

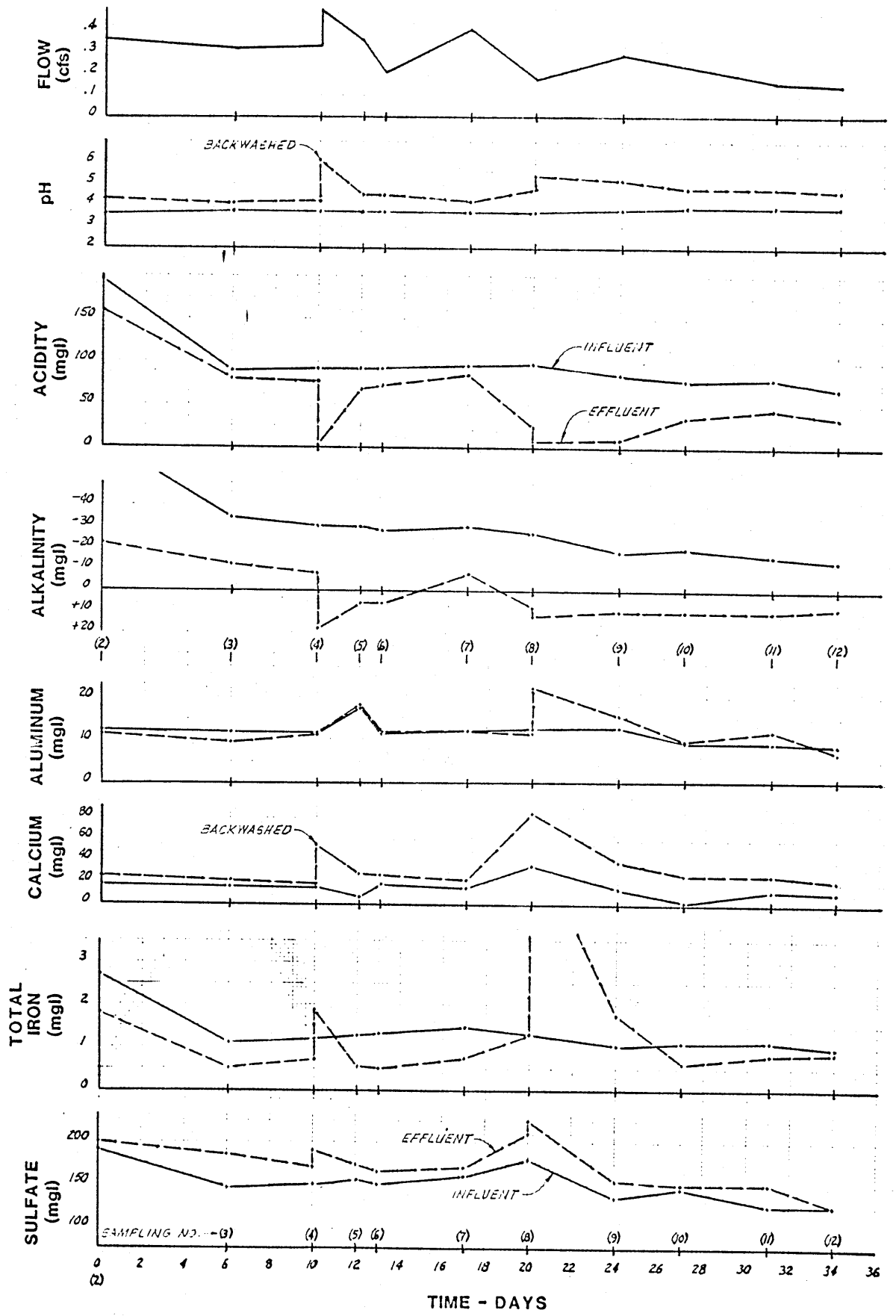
SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
2 8/30/79 1:00 PM	0.360	0	3.80	3.60	70	196	0	190	2.70	18.2	12.48	
		1	4.00	3.90	60	188	0	180	1.00	21.5	12.48	
		2	4.20	4.10	40	174	2	200	0.70	23.3	12.48	
		3	4.50	4.10	32	174	2	200	0.30	23.1	12.12	
		4	4.70	4.30	20	158	4	200	0.70	26.7	11.28	
		5	4.40	4.20	34	164	4	200	0.50	25.1	11.40	
		6	4.60	4.30	26	160	4	200	1.80	25.8	11.64	
3 9/6/79 1:00 PM	0.320	0	3.65	3.70	34	90	0	145	1.10	15.9	12.00	
		1	3.80	3.80	34	90	0	180	0.76	17.2	11.04	
		2	4.00	4.00	20	84	0	175	1.04	19.2	12.36	
		3	4.00	4.00	20	82	0	180	0.46	19.5	11.14	
		4	4.15	4.20	12	80	2	175	0.95	21.7	12.36	
		5	4.20	4.10	16	82	2	170	0.72	21.2	13.56	
		6	4.20	4.10	14	80	2	185	0.50	21.9	9.60	
4 9/10/79 1:00 PM	0.330	0	3.70	3.70	30	92	0	150	1.20	15.2	11.76	
		1	3.90	3.90	20	86	0	165	1.13	17.6	12.12	
		2	4.00	4.00	16	84	0	170	1.23	19.7	11.16	
		3	4.10	4.00	16	80	0	170	0.89	18.9	12.00	
		4	4.20	4.20	8	78	2	170	0.95	20.9	12.00	
		5	4.10	4.10	14	78	2	170	1.16	20.0	12.24	
		6	4.10	4.20	10	78	2	170	0.70	18.9	11.64	
4 9/10/79 2:00 PM	0.500	0	3.70	3.70	30	92	0	150	1.20	15.2	11.76	BACKWASH
		1	4.30	4.50	0	58	8	170	1.26	28.1	12.12	
		2	4.50	4.60	0	34	8	170	1.47	34.5	11.52	
		3	4.80	4.80	0	17	8	175	1.26	41.4	11.40	
		4	5.10	5.40	0	2	10	180	1.46	55.4	9.72	
		5	5.50	5.90	0	2	18	185	1.73	61.1	12.36	
		6	5.60	6.10	0	2	18	1.87	54.3	11.52		
5 9/12/79 10:00 AM	0.350	0	3.75	3.70	30	92	0	155	1.28	6.2	17.52	
		1	3.90	3.80	24	90	0	172	1.18	19.0	16.08	
		2	4.20	4.10	14	78	2	175	0.91	24.7	15.00	
		3	4.45	4.30	10	78	4	154	0.71	24.5	14.28	
		4	4.70	4.50	0	74	6	171	0.48	27.5	16.08	
		5	4.60	4.40	0	74	6	168	0.54	9.2	16.80	
		6	4.65	4.50	0	68	6	172	0.54	28.2	18.12	
6 9/13/79 1:00 PM	0.218	0	3.70	3.70	28	92	0	150	1.32	18.5	11.52	
		1	3.90	3.80	26	92	0					
		2	4.10	4.10	12	80	2	175	0.96	21.7	14.76	
		3	4.30	4.20	10	74	4	180	0.72	24.0	10.56	
		4	4.35	4.40	6	74	6	180	0.47	25.0	11.16	
		5	4.40	4.40	6	72	6	180	0.51	24.2	11.52	
		6	4.50	4.50	0	72	6	165	0.50	26.4	11.88	
7 9/17/79 1:00 PM	0.412	0	3.70	3.70	30	96	0	160	1.47	15.8	12.12	
		1	3.80	3.80	24	98	0	170	1.38	18.8	12.24	
		2	4.00	3.90	18	94	0	145	1.24	19.8	13.32	
		3	4.70	4.10	14	88	0	160	1.09	21.4	12.36	
		4	4.20	4.10	12	88	2	175	0.86	22.6	11.64	
		5	4.25	4.20	12	84	2	175	0.69	22.2	11.40	
		6	4.30	4.20	10	84	2	170	0.74	22.8	12.12	BACKWASH

RUN NO. 1

DOWNFLOW REACTORS

SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
8 9/20/79 1:00 PM	0.183	0	3.80	3.70	26	94	0	175	1.38	33.4	12.60	
		1	4.60	4.50	20	62	6	205	0.97	50.4	11.76	
		2	4.00	3.90	18	84	0	200	1.01	42.8	12.36	
		3	4.80	4.60	0	52	6	210	1.07	59.8	16.80	
		4	4.85	4.70	0	42	8	200	1.04	73.8	11.40	
		5	4.95	4.80	0	20	8	205	1.11	87.6	11.28	
		6	5.00	4.80	0	24	8	210	1.31	85.0	11.64	
8 9/20/79 2:00 PM	0.183	0	3.80	3.70	28	100	0	190	1.25	39.2	12.72	BACKWASH
		1	4.60	4.60	0	64	8	210	2.84	53.8	16.44	
		2	4.70	4.70	0	36	8	210	4.76	64.8	25.08	
		3	4.90	4.90	0	6	8	240	7.33	90.2	35.00	
		4	4.95	4.90	0	8	8	230	4.99	174.0	26.18	
		5	5.20	5.50	0	2	14	240	6.57	108.0	37.50	
		6	5.10	5.40	0	8	12	225	6.04	101.2	22.08	
9 9/24/79 1:00 PM	0.297	0	3.85	3.80	18	84	0	135	1.03	14.3	12.72	
		1	4.50	4.60	0	48	8	150	1.14	22.2	11.04	
		2	4.65	4.70	0	38	4	150	1.20	27.9	14.88	
		3	4.75	4.80	0	26	20	150	1.22	32.3	11.64	
		4	4.95	5.00	0	14	8	150	1.18	35.9	9.72	
		5	4.90	5.20	0	6	10	155	1.47	50.6	14.40	
		6	5.05	5.20	0	10	10	155	1.73	39.5	15.48	
10 9/27/79 1:00 PM	0.297	0	3.80	3.90	20	78	0	145	1.09	1.9	9.36	BACKWASH
		1	4.20	4.20	10	68	2	155	1.04	14.8	10.32	
		2	4.40	4.60	0	60	8	155	2.23	17.2	10.08	
		3	4.70	4.70	0	52	8	155	0.71	21.5	10.20	
		4	4.75	4.70	0	42	10	145	0.66	26.4	10.08	
		5	4.80	4.80	0	34	10	150	0.59	26.4	11.16	
		6	4.90	4.80	0	34	10	150	0.61	27.3	9.60	
11 10/1/79 1:00 PM	0.165	0	3.95	3.90	16	80	0	125	1.11	13.1	9.24	BACKWASH
		1	4.50	4.10	8	76	2	150	2.08	14.6	12.12	
		2	4.75	4.70	0	58	10	150	2.64	22.0	11.28	
		3	4.80	4.70	0	56	10	150	1.23	27.0	11.28	
		4	4.55	4.80	0	48	10	150	1.14	23.2	10.44	
		5	4.80	4.80	0	40	10	145	2.84	31.2	16.80	
		6	4.60	4.80	0	44	10	150	0.82	27.4	12.00	
12 10/4/79 1:00 PM	0.153	0	3.85	3.90	14	68	0	125	0.97	11.2	8.40	
		1	4.00	4.00	10	66	0	125	1.06	12.4	7.92	
		2	4.40	4.60	0	52	8	125	0.84	15.7	9.00	
		3	4.50	4.60	0	48	8	125	0.94	17.1	8.16	
		4	4.30	4.70	0	38	8	125	0.86	21.7	7.68	
		5	4.60	4.70	0	34	8	125	0.93	24.1	6.60	
		6	4.70	4.70	0	34	8	125	0.86	21.3	6.72	
13 11/12/79 5:30 PM	0.220	0	3.70	3.80	20	76	0	100	1.07	11.9	8.50	
		1	3.70	3.90	14	72	0	115	0.99	14.2	7.60	
		2	4.50	4.50	0	56	6	125	0.83	19.3	8.00	
		3	4.90	4.60	0	50	8	125	0.65	21.1	7.80	
		4	4.90	4.60	0	46	8	125	0.53	24.0	6.90	
		5	5.00	4.70	0	38	8	125	0.47	25.1	5.90	
		6	5.00	4.70	0	28	8	130	0.35	29.2	5.60	

RUN NO. 1



DOWN FLOW SAMPLING 2 THRU 12

DOWNFLOW REACTORS

SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
	cfs				mg/l	mg/l	mg/l	mg/l	mg/l			
14 11/12/79 11:00 PM	0.200	0	3.70	3.80	20	74	0	95	1.08	13.6	8.50	
		1	3.80	3.80	16	72	0	110	1.06	15.0	8.80	
		2	4.35	4.40	2	58	6	120	0.81	18.0	8.90	
		3	4.45	4.60	0	56	8	120	0.65	19.4	8.30	
		4	4.75	4.60	0	54	8	120	0.52	19.8	8.00	
		5	4.80	4.60	0	50	8	120	0.43	20.5	8.20	
6	4.60	4.60	0	44	8	125	0.33	22.5	7.50			
15 11/13/79 8:00 AM	0.220	0	3.70	3.80	18	76	0	115	1.12	13.4	9.00	
		1	3.70	3.90	14	74	0	120	1.11	15.7	9.60	
		2	4.65	4.30	4	64	4	125	0.83	16.5	9.20	
		3	4.80	4.50	0	60	6	105	0.67	17.5	8.60	
		4	4.80	4.60	0	56	6	120	0.46	18.3	8.50	
		5	5.00	4.60	0	52	8	120	0.38	19.9	8.30	
6	4.80	4.60	0	52	8	120	0.30	21.1	7.80			
16 11/13/79 3:00 PM	0.330	0	3.95	3.80	20	76	0	110	1.12	13.3	8.90	
		1	4.40	3.80	16	72	0	120	1.08	16.0	8.80	
		2	4.45	4.20	6	64	4	125	0.85	18.6	9.00	
		3	4.65	4.50	0	62	6	100	0.81	15.6	8.40	
		4	4.65	4.50	0	60	6	110	0.69	16.9	8.50	
		5	4.70	4.50	0	58	6	115	0.59	14.4	8.50	
6	4.70	4.60	0	56	8	105	0.50	19.2	8.20			
17 11/13/79 11:00 PM	0.150	0	3.95	3.80	18	74	0	140	1.10	13.4	8.90	
		1	4.10	3.80	20	74	0	140	1.10	13.2	9.10	
		2	4.70	4.10	8	68	2	140	0.80	15.5	9.80	
		3	4.60	4.30	4	64	4	140	0.60	16.2	9.60	
		4	4.70	4.40	2	60	6	115	0.60	16.2	8.90	
		5	4.80	4.50	0	60	8	140	0.50	17.3	9.20	
6	4.65	4.50	0	60	6	140	0.40	18.9	8.50			
18 11/14/79 8:00 AM	0.310	0	3.90	3.70	20	76	0	130	1.10	13.0	9.00	
		1	4.00	3.80	18	74	0	135	1.10	13.9	9.50	
		2	4.30	4.10	10	70	2	140	1.00	15.2	9.70	
		3	4.80	4.30	6	62	4	140	0.80	17.2	9.50	
		4	4.80	4.40	2	62	6	140	0.60	17.6	9.30	
		5	4.80	4.40	2	62	6	135	0.50	17.9	9.30	
6	4.70	4.50	0	60	8	135	0.40	16.9	9.50			
19 11/14/79 3:30 PM	0.330	0	3.90	3.70	20	78	0	115	1.10	13.8	9.60	
		1	4.00	3.80	18	76	0	135	1.10	14.2	9.90	
		2	4.40	4.00	10	70	0	145	0.80	14.9	9.50	
		3	4.40	4.20	6	68	4	140	0.60	15.8	9.60	
		4	4.60	4.40	2	64	6	140	0.50	17.1	9.00	
		5	4.60	4.20	6	64	4	140	0.40	17.6	9.70	
6	4.60	4.50	0	62	6	140	0.30	18.3	9.10			
19 11/14/79 5:00 PM	0.330	0	4.10	3.70	20	82	0	135	1.00	13.2	9.30	BACKWASH
		1	4.15	3.80	18	80	0	140	1.00	12.3	9.20	
		2	4.40	4.10	10	70	2	125	1.10	15.1	9.50	
		3	4.45	4.30	6	68	4	140	1.20	16.3	9.90	
		4	4.65	4.40	2	64	4	140	0.80	17.3	9.50	
		5	4.80	4.50	0	62	6	145	0.80	18.2	9.50	
6	4.85	4.60	0	58	6	145	0.60	20.7	8.30			

RUN NO. 2

DOWNFLOW REACTORS

SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
20 11/14/79 11:00 PM	0.390	0	3.90	3.80	18	76	0	145	1.00	14.0	9.30	
		1	4.10	3.80	18	76	0	145	1.00	14.1	9.30	
		2	4.50	4.00	10	70	0	135	0.90	15.3	9.30	
		3	4.85	4.30	6	68	2	140	0.80	16.6	9.40	
		4	4.65	4.30	4	66	4	130	0.50	17.9	9.20	
		5	4.70	4.40	2	64	4	130	0.50	16.5	9.20	
21 11/15/79 8:00 AM	0.370	0	3.90	3.80	16	76	0	140	1.00	14.8	9.60	
		1	3.95	3.80	16	78	0	145	1.10	13.5	9.30	
		2	4.15	4.10	8	72	2	145	1.00	15.7	9.50	
		3	4.30	4.20	6	68	2	145	0.70	13.8	9.20	
		4	4.50	4.40	2	66	4	150	0.60	15.2	8.80	
		5	4.55	4.30	4	68	6	145	0.60	16.0	9.20	
22 11/15/79 3:00 PM	0.390	0	3.80	3.70	25	88	0	170	1.10	12.0	9.70	
		1	3.90	3.80	20	84	0	170	1.10	12.6	8.80	
		2	4.20	4.00	10	74	0	165	1.00	13.1	9.90	
		3	4.40	4.10	8	68	2	165	0.80	14.6	9.50	
		4	4.50	4.30	8	66	4	170	0.70	15.3	9.20	
		5	4.60	4.30	4	66	4	170	0.60	16.0	9.30	
22 11/15/79 5:00 PM	0.390	0	4.10	3.80	18	80	0	170	1.20	13.3	9.50	BACKWASH
		1	4.30	4.10	6	72	2	170	1.00	16.0	9.40	
		2	4.90	4.30	2	66	4	170	0.90	17.0	9.30	
		3	4.90	4.50	0	62	6	170	0.70	18.9	9.60	
		4	5.00	4.50	0	58	6	170	0.60	18.0	9.00	
		5	5.00	4.50	0	50	6	170	0.70	21.4	8.70	
23 11/15/79 11:00 PM	0.300	0	3.85	3.90	14	76	0	170	1.40	12.7	11.00	
		1	3.90	3.80	18	78	0	170	1.10	13.2	10.00	
		2	4.20	4.00	10	72	0	170	1.00	15.5	10.20	
		3	4.50	4.30	6	64	4	170	0.90	15.1	9.90	
		4	4.80	4.40	2	64	6	170	0.60	16.2	9.70	
		5	4.75	4.50	0	62	6	170	0.60	16.6	10.00	
24 11/16/79 8:00 PM	0.300	0	3.80	3.80	16	74	0	170	1.10	13.9	10.20	
		1	4.20	4.60	10	50	6	170	1.20	16.8	10.50	
		2	4.20	4.20	6	70	2	175	1.00	14.0	10.70	
		3	4.70	4.30	6	68	2	155	0.90	15.8	11.40	
		4	4.90	4.50	0	62	8	160	0.70	14.5	9.80	
		5	4.70	4.40	2	64	6	160	0.60	16.4	9.90	
25 11/16/79 3:00 PM	0.410	0	3.85	3.70	22	96	0	160	1.11	10.9	9.70	
		1	3.95	3.80	18	88	0	160	1.11	13.0	9.70	
		2	4.20	4.00	10	76	0	160	1.11	14.5	9.80	
		3	4.50	4.20	6	70	2	160	0.90	15.3	10.00	
		4	4.65	4.40	2	66	6	160	0.70	16.0	9.90	
		5	4.75	4.50	2	64	6	160	0.60	16.8	9.50	
6	4.80	4.50	2	62	6	155	0.60	13.3	9.30			

BACKWASH

RUN NO. 2

DOWNFLOW REACTORS

SAMPLING NO.	FLOW	LOCATION	FIELD pH	LAB pH	FREE ACIDITY	ACIDITY	ALKALINITY	SULFATES	IRON	CALCIUM	ALUMINUM	REMARKS
					mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
27 11/17/79 8:00 AM	0.390	0	4.10	3.80	18	76	0	160	1.30	11.5	9.40	
		1	4.00	3.90	16	74	0	160	1.10	14.4	10.00	
		2	4.40	4.00	10	72	0	160	1.00	14.5	10.00	
		3	4.50	4.20	6	68	2	160	0.90	15.8	9.30	
		4	4.70	4.50	0	62	6	160	0.60	16.9	9.70	
		5	4.60	4.40	2	64	4	160	0.70	12.0	9.40	
		6	4.55	4.30	8	66	4	160	0.60	16.7	9.70	
28 11/17/79 3:00 PM	0.340	0	3.75	3.80	18	80	0	160	1.20	12.9	9.60	BACKWASH
		1	3.85	3.80	20	78	0	160	1.00	13.7	10.20	
		2	4.05	4.00	12	74	0	165	0.90	14.8	9.80	
		3	4.30	4.20	6	70	2	165	0.40	15.5	8.70	
		4	4.55	4.40	2	68	6	165	0.70	16.2	9.80	
		5	4.80	4.40	2	66	4	160	0.60	16.8	9.00	
		6	4.85	4.50	0	60	6	160	0.40	17.8	9.10	
30 11/18/79 8:00 AM	0.370	0	3.80	3.70	24	78	0	165	1.10	13.4	8.30	
		1	3.90	3.80	20	80	0	165	1.10	13.8	9.70	
		2	4.20	3.90	12	74	0	165	1.00	14.9	9.60	
		3	4.50	4.10	8	70	2	160	0.90	14.8	9.70	
		4	4.50	4.20	4	68	4	165	0.60	16.4	9.90	
		5	4.00	4.30	4	70	4	165	0.60	15.2	8.80	
		6	4.70	4.40	2	66	6	165	0.40	16.2	9.10	
31 11/18/79 3:30 PM	0.300	0	3.70	3.70	14	110	0	160	1.30	12.6	10.00	BACKWASH
		1	3.85	3.70	16	102	0	165	1.10	13.2	10.20	
		2	4.15	4.00	12	72	0	165	1.00	15.5	10.30	
		3	4.35	4.30	4	70	4	165	0.90	16.0	10.00	
		4	4.60	4.50	0	64	6	165	0.60	17.2	9.70	
		5	4.70	4.50	0	62	6	165	0.60	16.4	9.20	
		6	4.75	4.60	0	60	6	160	0.50	17.6	8.80	
33 11/19/79 8:00 AM	0.350	0	3.85	3.80	14	78	0	165	1.10	15.4	9.80	
		1	3.90	3.90	16	76	0	165	1.20	14.4	10.10	
		2	4.20	4.10	10	74	2	165	1.10	14.8	9.70	
		3	4.40	4.30	4	68	2	165	1.00	16.9	10.20	
		4	4.80	4.50	0	62	6	165	0.60	17.1	10.00	
		5	4.80	4.50	0	64	4	165	0.80	16.4	9.90	
		6	4.70	4.50	0	64	6	165	0.70	17.3	10.60	
34 11/19/79 4:00 PM	0.300	0	3.70	3.60	20	82	0	170	1.20	12.4	9.30	
		1	3.75	3.70	18	78	0	170	1.10	13.3	9.00	
		2	4.10	4.00	8	72	0	170	1.10	15.0	9.50	
		3	4.30	4.30	6	68	2	170	0.90	16.4	9.00	
		4	4.50	4.50	0	66	4	170	0.70	17.7	9.10	
		5	4.65	4.60	0	64	6	170	0.60	18.5	8.90	
		6	4.75	4.60	0	60	6	170	0.60	19.6	8.70	
36 11/20/79 8:00 AM	0.330	0	3.80	3.60	20	82	0	165	1.20	13.7	9.20	
		1	4.10	3.70	14	80	0	170	1.20	13.6	9.00	
		2	4.10	3.90	10	74	0	170	1.00	14.9	9.10	
		3	4.50	4.10	6	70	2	170	0.90	15.6	9.30	
		4	4.50	4.30	6	68	4	170	0.70	15.7	9.30	
		5	4.55	4.30	2	68	4	170	0.60	17.5	8.80	
		6	4.70	4.50	0	62	6	170	0.50	16.8	8.80	

RUN NO. 2