

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD--  
NORTH COAST REGION**

SUITE F, 2200 COUNTY CENTER DRIVE  
SANTA ROSA, CALIFORNIA 95401  
Phone: 707--545-2520



July 18, 1973

Mr. Dennis Reinhadt  
633 Cordova Place  
Davis, CA

Attention: Miss Kathy Jefferey

Dear Mr. Reinhadt:

In response to Miss Jefferey's phone request of July 18, 1973, we have enclosed copies of water quality information on Big Sulphur Creek from May 1968 through May 1973.

This information is a summary of monitoring data collected by the Union Oil Company and reported to the Regional Board on a monthly basis.

The sampling station locations are as follows:

Big Sulphur Creek Station No. 1 is located just upstream of Power Units 1 and 2.

Big Sulphur Creek Station No. 5 is located just upstream, of confluence with Squaw Creek.

If we may be of further assistance, please feel free to call on us.

Sincerely,



David M. Snetsinger  
Sanitary Engineering Associate

Enclosures



Big Sulphur Creek

Station # 5

Year 1972

	Date	Time	Flow gpm	Temp °F	pH	DO mg/l	Color	Turb. JTU	SS mg/l	EC µmhos	Ammonia (N) mg/l	Nitrate (N) mg/l	Sulfate mg/l	Boron mg/l
JAN	1/4	0940	3500	36	8.8	12.1	19	5	2.0	289	0	0.3	35	<0.1
FEB	2/1	0920	3500	37	8.4	12.1	4	35	19.2	289	0	2.5	36	0.7
MAR	3/1	0920	10000	45	8.0	11.0	8	5	6.4	236	0	0.8	21	0.3
APR	4/4	0930	1500	58	8.3	9.4	5	5	4.4	359	<1	4.5	48	0.8
MAY	5/9	0855	1500	53	8.0	11.6	4	<5	2.0	387	0	3.2	56	0.7
JUNE	6/6	0910	900	67	8.2	8.7	9	5	1.6	481	0	7.5	153	1.4
JULY	7/6	0930	600	70	7.7	10.2	52	125	406.8	602	0	24.0	132	6.4
AUG	8/2	0905	400	66	7.7	8.4	7	5	<0.1	713	0	17.8	185	4
SEPT	9/6	0940	400	60	7.9	9.6	5	<5	1.6	779	2	16.0	221	3.3
OCT	10/3	0940	350	58	7.8	9.4	6	5	<0.1	777	0	5.0	218	4.6
NOV	11/7	0915	1500	48	8.6	10.3	25	35	19.2	427	0	6.6	87	1.2
DEC	12/5	0915	2500	37	8.6	11.7	20	5	2.8	365	<1	3.6	54	0.3

Big Sulphur Creek

Station # 1

Year 1971

	Date	Time	Flow gpm	Temp °F	pH	DO mg/l	Color	Turb. JTU	SS mg/l	EC µmhos	Ammonia (N) mg/l	Nitrate (N) mg/l	Sulfate mg/l	Boron mg/l
JAN	1/5	1015	7500	44	8.2	11.5	6	<5	1.2	152	0	<0.1	9	<0.1
FEB														
MAR	3/2	0925	1200	42	8.2	11.8	3	<5	1.2	223	0	<0.1	14	0.1
APR	4/6	1015	2500	50	8.33	10.4	5	<5	0.4	166	0	0.2	11	<0.1
MAY	5/4	1030	2500	53	8.4	10.3	3	<5	0.8	239	0	0.2	11	0.1
JUNE	6/8	0935	1000	64	8.1	9.4	9	<5	<0.1	287	0	0.3	17	0.3
JULY	7/7	0955	800	67	8.35	8.6	9	<5	2.0	332	0	0.6	23	0.4
AUG	8/3	0935	300	65	8.2	7.6	4	<5	2.0	436	<1	0.4	34	0.5
SEPT	9/1	0955	300	63	8.0	8.6	7	<5	1.0	418	0	1.1	36	0.5
OCT	10/5	0845	250	59	8.1	8.6	5	<5	2.0	524	0	1.4	36	0.6
NOV	11/9	0910	500	46	8.3	10.5	4	<5	0.8	526	0	1.5	32	0.7
DEC	12/7	0945	700	48	8.3	11.5	7	5	5.2	294	0	0.3	30	0.2

Big Sulphur Creek

Station # 5

Year 1971

	Date	Time	Flow gpm	Temp °F	pH	DO mg/l	Color	Turb. JTU	SS mg/l	EC µmhos	Ammonia (N) mg/l	Nitrate (N) mg/l	Sulfate mg/l	Boron mg/l
JAN	1/5	0945	12,000	45	8.4	11.5	5	<5	1.2	260	0	1.8	31	0.3
FEB														
MAR	3/2	0850	2500	42	8.3	11.9	9	5	2.0	405	0	4.3	65	0.9
APR	4/6	0750	7000	52	8.4	9.5	5	10	4.8	290	0	3.1	36	0.8
MAY	5/4	0950	4000	55	8.45	9.5	8	<5	0.8	344	0	3.4	41	0.7
JUNE	6/8	0910	1200	64	8.25	9.0	8	<5	1.6	409	0	5.0	70	1.0
JULY	7/7	0925	1200	68	8.45	9.7	14	<5	1.2	520	0	6.4	103	1.9
AUG	8/3	0835	500	63	8.35	8.3	10	<5	1.0	650	0	7.4	116	4.1
SEPT	9/1	0925	350	63	8.15	9.4	6	<5	1.2	688	0	11.2	209	4.1
OCT	10/5	0825	450	56	8.07	9.4	7	<5	0.8	773	0	22.4	238	5.5
NOV	11/9	0850	900	44	8.13	9.8	11	<5	0.4	786	0	19.4	316	3.0
DEC	12/7	0715	1100	42	8.4	11.7	8	10	19.2	451	0	7.0	94	1.2

Big Sulphur Creek

Station # 1

Year 1970

	Date	Time	Flow gpm	Temp °F	pH	DO mg/l	Color	Turb. JTU	SS mg/l	EC µmhos	Ammonia (N) mg/l	Nitrate (N) mg/l	Sulfate mg/l	Boron mg/l
JAN	1/6	1020	1500	45	8.1	11.4	8	<5	0.4	189	0	0.3	13	0.3
FEB	2/3	0915	6000	47	8.0	11.1	7	<5	1.6	139	<0.1	<0.1	8	<0.1
MAR	3/3	0950	15,000	45	8.2	11.6	18	<5	.8	128	0	0.0	7	<0.1
APR	4/7	0925	2500	48	8.1	10.5	6	<5	2.0	224	0	0.3	16	0.1
MAY	5/5	1045	1500	56	8.07	10.1	3	<5	8.0	274	0	0.4	17	0.1
JUNE	6/2	0910	800	63	7.85	8.0	9	<5	2.0	350	0	0.4	25	0.3
JULY	7/7	0950	350	67	7.9	7.8	10	<5	3.2	409	0	0.8	35	0.4
AUG	8/4	0915	150	67	8.05	10.1	4	<5	2.0	462	0	1.0	48	0.5
SEPT	9/1	1000	250	62	8.2	6.8	5	<5	2.4	496	0	1.1	40	0.6
OCT	10/6	1030	200	57	8.2	8.2	6	<5	4.4	542	0	1.6	29	0.7
NOV	11/3	0945	400	53	8.07	8.2	12	20	6.0	466	0	1.1	82	0.7
DEC	12/8	0940	10,000	52	7.9	10.2	9	15	8.0	122	0	<0.1	5	<0.1

Big Sulphur Creek

Station # 5

Year 1970

	Date	Time	Flow gpm	Temp °F	pH	DO mg/l	Color	Turb. JTU	SS mg/l	EC µmhos	Ammonia (N) mg/l	Nitrate (N) mg/l	Sulfate mg/l	Boron mg/l
JAN	1/6	1000	2500	45	8.2	11.7	7	<5	1.2	322	0	4.5	52	2.9
FEB	2/3	855	20,000	51	8.1	10.5	10	25	20.4	278	<0.1	2.5	39	0.4
MAR	3/3	0925	25,000	48	8.2	10.6	13	5	8.8	224	0	2.4	30	0.2
APR	4/7	0900	5000	50	8.2	10.8	10	<5	3.6	371	0	5.2	36	2.0
MAY	5/5	1015	2500	57	8.1	9.8	6	<5	4.0	435	0	5.7	72	1.8
JUNE	6/2	0840	1500	63	8.1	9.7	13	15	8.4	550	<1	8.0	115	2.1
JULY	7/7	0940	600	65	8.0	11.1	9	<5	2.0	590	0	9.0	156	11.9
AUG	8/4	0850	400	61	8.15	11.2	18	<5	1.6	672	2	8.8	230	11.1
SEPT	9/1	0930	300	59	8.1	8.6	11	<5	4.4	724	1	14.6	223	8.6
OCT	10/6	1005	225	53	8.3	11.6	15	<5	0.8	800	0	17.0	253	7.8
NOV	11/3	0915	500	49	8.1	11.2	14	<5	3.6	722	0	18.0	218	3.9
DEC	12/8	0910	15,000	54	8.2	9.9	19	31	18.4	208	0	1.8	28	1.0

Big Sulphur Creek

Station # 1

Year 1969

	Date	Time	Flow gpm	Temp °F	pH	DO mg/l	Color	Turb. JTU	SS mg/l	EC µmhos	Ammonia (N) mg/l	Nitrate (N) mg/l	Sulfate mg/l	Boron mg/l
JAN	1/7	1115	3000	49	8.2	10.8	3	<5	<1	232	0	0.2	12	0.1
FEB	2/4	1105	6000	50	8.2	10.9	6	<5	1.2	175	0	0.2	12	0.1
MAR	3/4	1100	9000	50	8.2	10.8	7	<5	3.2	154	0	<0.1	13	<0.1
APR	4/1	1040	3500	55	8.2	10.3	8	<5	1.6	205	0	0.3	0.6	<0.1
MAY	5/6	1120	2500	65	8.2	9.7	7	<5	5.6	235	0	<0.1	12	<0.1
JUNE	6/4	1100	2000	65	8.3	9.4	8	<5	1.6	290	0	0.1	23	0.2
JULY	7/8	0910	800	67	8.1	8.2	12	<5	13.6	359	4	0.6	22	0.4
AUG	8/5	0950	500	66	8.0	8.3	12	<5	<0.1	445	0	0.8	28	0.4
SEPT	9/3	1005	200	66	7.7	7.9	15	<5	0	497	0	1.1	30	0.5
OCT	10/1	1005	125	63	8.1	8.5	8	<5	0.8	491	0	0.7	40	0.6
NOV	11/4	1000	125	58	8.3	11.0	6	<5	2.0	466	0	0.6	37	0.8
DEC	12/2	1110	125	47	8.3	13.0	7	<5	1.2	464	0	1.2	28	0.6



Big Sulphur Creek

Station # 5

Year 1969

	Date	Time	Flow gpm	Temp °F	pH	DO mg/l	Color	Turb. JTU	SS mg/l	EC µmhos	Ammonia (N) mg/l	Nitrate (N) mg/l	Sulfate mg/l	Boron mg/l
JAN	1/7	1005	4000	50	8.25	10.9	18	30	4	392	3	10.0	55	1.7
FEB	2/4	0950	9000	48	8.2	11.2	17	15	13.2	260	9	3.0	33	0.5
MAR	3/4	0950	15,000	47	8.2	11.3	17	10	10.0	240	1	2.1	28	0.4
APR	4/1	0925	4,500	53	8.2	10.4	13	5	6.8	348	0	5.5	50	1.4
MAY	5/6	0950	5000	64	8.2	9.8	12	<5	5.6	360	5	4.1	44	2.7
JUNE	6/4	0945	3000	65	8.3	9.6	9	<5	0.8	432	0	7.7	78	3.8
JULY	7/8	0845	1500	66	8.3	10.0	13	<5	1.2	507	5	6.7	133	5.2
AUG	8/5	0925	1000	65	8.1	11.0	12	<5	2.4	683	0	14.1	196	8.9
SEPT	9/3	0940	550	66	7.8	8.9	20	<5	1.6	749	1	14.5	228	7.3
OCT	10/1	0935	350	61	8.2	9.3	14	<5	1.6	675	0.7	17.8	227	14.1
NOV	11/4	0930	550	57	8.25	10.1	7	<5	2.8	702	3	12.2	204	7.9
DEC	12/2	1030	400	44	8.2	12.3	11	<5	2.0	687	8	13.6	154	3.7

Big Sulphur Creek

Station # 1

Year 1968

	Date	Time	Flow gpm	Temp °F	pH	DO mg/l	Color	Turb. JTU	SS mg/l	EC µmhos	Ammonia (N) mg/l	Nitrate (N) mg/l	Sulfate mg/l	Boron mg/l
JAN														
FEB														
MAR														
APR														
MAY	5/6	1310	1100	68	8.1	9.7	None	<5	0	289	0	0.1	34	0.2
JUNE	6/3	1105	1200	67	8.1	9.3	8	<5	1.2	235	0	0.65	22	0.2
JULY	7/1	1130	640	70	8.1	9.4	7	<5	0.4	375	0	0.8	26	0.38
AUG	8/1	1115	400	72	8.2	9.5	8	<5	1.2	466	0	0.7	20	0.3
SEPT	9/4	1140	450	71	8.2	9.6	6	<5	1.2	504	0	1.1	32	0.8
OCT	10/2	1040	400	60	8.3	10.4	8	<5	0.8	550	0	1.3	31	0.7
NOV	11/7	1035	600	56	8.0	10.8	10	5	2	362	0	0.6	31	0.5
DEC	12/3	1120	1650	47	8.1	11.4	14	30	10	290	0	0.5	29	0.3