

8-70
Lee Lake

Q55

1989

LEE

add to WQA

Date:

ET

STA

W A B O D Y
NAME: Lee

DAM NAME IF I - 002 21

USGS QUADRANG COUNTY Riverside

33 45.0, 117 26.7

OWNER: Temescal Water Co. OPERATOR IF DIFFERENT:

PUBLIC ACCESS/FEES: ?

SURFACE AREA (in acres): 70 VOLUME (in acre-feet): 1100

MEAN DEPTH (in feet): MAXIMUM DEPTH (in feet):

PRINCIPAL INFLOW(S):

Temescal Creek (above Riverside Canal)

PRINCIPAL OUTFLOW(S):

Temescal Creek

DISCHARGERS WITHIN 25 RIVERMILES:

Permit No.	Agency Name	Facility Name	Discharge Q

4 in BP, not on WQA.

BENEFICIAL USES:

stocked fishery

~~AGR, IND, GWR, REC1, REC2, WARM, WILD; excepted~~
~~for MUN by 89-42~~

DESCRIPTION OF AVAILABLE DATA:

~~Torrance Water Co 7/14/83, 6/28/83, 6/10/83, 4/25/83~~

DESCRIPTION OF WATER QUALITY:

~~Appears to be very high in Na and SO_4 , TDR (=TFR?),~~
~~with at least one sample above acute toxic level~~
~~for Fe, and above chronic toxic level for Cu.~~
~~Take level quite variable; intermittent water body.~~

WATER QUALITY PROBLEM(S):

DESCRIPTION OF PROBLEM:

BENEFICIAL USE(S) AFFECTED:

~~WARM, WILD, AGR~~

PROBABLE SOURCE(S):

CURRENT ACTIONS:

PROGRAM(S) DIRECTLY INVOLVED IN CURRENT ACTIONS:

ADDITIONAL ACTIONS:

PROGRAMS DIRECTLY AFFECTED BY STATE AND REGIONAL BOARD ADDITIONAL ACTIONS:

COSTS PER YEAR, CONTRACT (\$): _____ PY: _____ DURATION: _____

Analysis of Tee Lake Data

9/19/89
PMB

	hardness	TDR	Na	Cl	TIN	SO ₄	Mn	Cu	Zn	Fe
7/14/83	327	855*	158	144		220	3.1	.01	.03	.7
6/28/83	245	860*	212	190		194	.17	<.01	<.01	.7
6/10/83	369	840*	150	142		254	1.2	.02	.05	1.2
4/25/83	370	780*	144	135		280	.05	<.01	<.01	.0
Temescal Crk							.018	.12	1.2	
Abj below canal	400	800	100	200	6	70				
		↓?								

EPA criteria

* T dissolved residue @ 180°C

There are no WQO's in current BP for Tee Lake. We compared data to BP objectives for Temescal Creek below canal (Tee Lake is above).

Sulfates & Na are appreciably higher than objectives; TDR values are higher 4 out of 5 dates than TFA objective, but these may not be comparable. High values for Cu & Fe were noted on 6/10/83 (compared to EPA criteria).

1)

1983

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVENUE

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92502

JUL 27 1983



TO Temescal Water Company
P.O. Box 669
Corona, CA. 91720

Lab No. 830714-63

Invoice No. 25254

Submitted	Sampled
By Charles	C. Smith
Date 7/14/83	7/14/83
Time 3:15	2:15pm

SAMPLE MARKED Lee Lake Booster Pump

☐ General Mineral ☐ Inorganic Chemical ☐ General Physical ☐ As Marked ☐ Basic ☐ Domestic

☒ Total Hardness as CaCO ₃ 327 mg/L ☒ Calcium (Ca) 84 mg/L 4.20 me/L ☒ Magnesium (Mg) 28 mg/L 2.33 me/L JKB 7/21	☒ Total Alkalinity as CaCO ₃ 225 mg/L ☒ Hydroxide (OH) NONE mg/L ☒ Carbonate (CO ₃) NONE mg/L ☒ Bicarbonate (HCO ₃) 275 mg/L 4.50 me/L DD 7-22	☒ Electrical Conductivity EC x 10 ⁶ @ 25 C 1390 µmho/cm DD 7-14 ☒ pH 7.3 units DD 7-14	☒ Total Dissolved Residue @ 180 C 855 mg/L JE 7/15		
☒ Sodium (Na) 158 mg/L 6.87 me/L JKB 7/19	☒ Sulfate (SO ₄) 220 mg/L 4.58 me/L DD 7-25	☐ Color units	☐ Arsenic (As) mg/L	☒ Copper (Cu) 0.01 mg/L LJC 7/26	☐ Mercury (Hg) mg/L
☒ Potassium (K) 6 mg/L 0.15 me/L JKB 7/19	☒ Chloride (Cl) 144 mg/L 4.05 me/L DD 7-21	☐ Odor TON	☒ Boron (B) 0.2 mg/L 15 7-21	☒ Iron (Fe) 0.70 mg/L LJC 7/26	☐ MBAS 0.1 mg/L JKB 7/22
☐ Ammonium (NH ₄) mg/L me/L	☐ Nitrate (NO ₃) mg/L me/L	☐ Turbidity NTU	☐ Cadmium (Cd) mg/L	☐ Lead (Pb) mg/L	☐ Selenium (Se) mg/L
☐ Cations Total 13.55 me/L	☐ Anions Total 13.13 me/L	☐ Chromium (Cr) Total mg/L	☒ Manganese (Mn) 3.1 mg/L LJC 7/26	☒ Zinc (Zn) 0.03 mg/L LJC 7/26	

EDWARD S. BABCOCK & SONS, INC.

RECEIVED JUL 20 1983

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CHEMISTS
APPROVED WATER LABORATORY
PHONE 684-1881
AREA CODE 714
LABORATORIES
3215 CHICAGO AVENUE

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92502

JUL 19 1983



TO Temescal Water Company
P.O. Box 669
Corona, CA. 91720

Lab No. 830628-36

Invoice No. 24803

Submitted By Bob
Sampled By RLH

Date 6/28/83 6/28/83

Time 4:45 2:30pm

SAMPLE MARKED Alberhill Turnout

☒ General Mineral	☐ Inorganic Chemical	☐ General Physical	☒ As Marked	☐ Basic	☐ Domestic
☒ Total Hardness as CaCO ₃ 245 mg/L ☒ Calcium (Ca) 58 mg/L 2.90 me/L ☒ Magnesium (Mg) 24 mg/L 2.00 me/L Am 7/11	☒ Total Alkalinity as CaCO ₃ 208 mg/L ☒ Hydroxide (OH) NONE me/L ☒ Carbonate (CO ₃) NONE me/L ☒ Bicarbonate (HCO ₃) 253 mg/L 4.15 me/L DD 6-30	☒ Electrical Conductivity EC x 10 ⁶ @ 25 C 1430 µmho/cm DD 6-29 ☒ pH 7.6 units DD 6-29	☒ Total Dissolved Residue @ 180 C 860 mg/L JE 7/6 ☐ Arsenic (As) mg/L WC 7/18		
☒ Sodium (Na) 212 mg/L 9.22 me/L Am 7/11	☒ Sulfate (SO ₄) 194 mg/L 4.04 me/L Am 7/12	☐ Color units TON	☐ Barium (Ba) mg/L JE 7/11	☐ Fluoride (F) mg/L WC 7/18	☒ MBAS <0.1 mg/L JKB 7/15
☒ Potassium (K) 11 mg/L 0.28 me/L Am 7/11	☒ Chloride (Cl) 190 mg/L 5.35 me/L DD 6-30	☐ Odor TON	☒ Boron (B) 0.3 mg/L JE 7/11	☒ Iron (Fe) 0.78 mg/L WC 7/18	☐ Selenium (Se) mg/L
☐ Ammonium (NH ₄) mg/L me/L	☐ Nitrate (NO ₃) mg/L me/L	☐ Turbidity NTU	☐ Cadmium (Cd) mg/L	☐ Lead (Pb) mg/L	☐ Silver (Ag) mg/L
		☐ Chromium (Cr) Total mg/L	☒ Manganese (Mn) 0.17 mg/L WC 7/18	☒ Zinc (Zn) <0.01 mg/L WC 7/18	
Cations Total 14.40 me/L	Anions Total 12.54 me/L				

EDWARD S. BABCOCK & SONS, INC.

Sherman Babcock

RECEIVED JUN 24 1983



AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY
PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVENUE

ESTABLISHED 1908

EDWARD S. BABCOCK & SONS, INC.

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92502

JUN 23 1983

TO Temescal Water Company
P. O. Box 669
Corona, Calif. 91720

Lab No. 830610-38

Invoice No. 24377

Submitted	Sampled
By Charles	Kim
Date 6/10/83	6/10/83
Time 4:20PM	10:25AM

SAMPLE MARKED Lee Lake

☒ General Mineral ☐ Inorganic Chemical ☐ General Physical ☒ As Marked ☐ Basic ☐ Domestic

☒ Total Hardness as CaCO ₃ 369 mg/L ☒ Calcium (Ca) 94 mg/L 4.70 me/L ☒ Magnesium (Mg) 32 mg/L 2.67 me/L JKB 6/21	☒ Total Alkalinity as CaCO ₃ 213 mg/L ☒ Hydroxide (OH) NONE me/L ☒ Carbonate (CO ₃) NONE me/L ☒ Bicarbonate (HCO ₃) 259 mg/L 4.25 me/L JKB 6/15	☒ Electrical Conductivity EC 10° @ 25 C 1340 µmho/cm DD 6-13 ☒ pH 6.9 units DD 6-13	☒ Total Dissolved Residue @ 180 C 840 mg/L DD 6-22		
☒ Sodium (Na) 150 mg/L 6.52 me/L JKB 6/20	☒ Sulfate (SO ₄) 254 mg/L 5.29 me/L DD 6-17	☐ Color units	☐ Barium (Ba) mg/L	☐ Fluoride (F) mg/L	☒ MBAS <0.1 mg JKB 6/15
☒ Potassium (K) 6 mg/L 0.15 me/L JKB 6/20	☒ Chloride (Cl) 142 mg/L 4.00 me/L DD 6-14	☐ Odor TON	☒ Boron (B) 0.2 mg/L JE 6/16	☒ Iron (Fe) 1.4 mg/L JKB 6/21	☐ Selenium (Se) mg
☐ Ammonium (NH ₄) mg/L me/L	☐ Nitrate (NO ₃) mg/L me/L	☐ Turbidity NTU	☐ Cadmium (Cd) mg/L	☐ Lead (Pb) mg/L	☐ Silver (Ag) m
☐ Cations Total 14.04 me/L	☐ Anions Total 13.54 me/L	☐ Chromium (Cr) Total mg/L	☒ Manganese (Mn) 1.2 mg/L JKB 6/21	☒ Zinc (Zn) 0.05 mg JKB 6/21	

EDWARD S. BABCOCK & SONS, INC.

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY
PHONE 684-1881
AREA CODE 714
LABORATORIES
3215 CHICAGO AVENUE

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92502



TO Temescal Water Company
P.O. Box 669
Corona, CA. 91720

MAY 6 1983

Lab No. 830425-12

Invoice No. 23191

Submitted	Sampled
By Abbott	C. Smith
Date 4/25/83	4/25/83
Time 11:15	9:07am

SAMPLE MARKED Lee Lake

surface sample

☒ General Mineral	☐ Inorganic Chemical	☐ General Physical	☐ As Marked	☐ Basic	☐ Domestic
☒ Total Hardness as CaCO ₃ 370 mg/L ☒ Calcium (Ca) 88 mg/L 4.40 me/L ☒ Magnesium (Mg) 36 mg/L 3.00 me/L WC 5/3	☒ Total Alkalinity as CaCO ₃ 198 mg/L ☒ Hydroxide (OH) none mg/L ☒ Carbonate (CO ₃) 15 mg/L 0.50 me/L ☒ Bicarbonate (HCO ₃) 210 mg/L 3.45 me/L 15 4-25	☒ Electrical Conductivity EC x 10 ⁶ @ 25 C 1320 umho/cm DD 4-25 ☒ pH 8.3 units DD 4-25	☒ Total Dissolved Residue @ 180 C 780 mg/L DD 4-28		
☒ Sodium (Na) 144 mg/L 6.26 me/L WC 5/3	☒ Sulfate (SO ₄) 280 mg/L 5.83 me/L WC 5/2	☐ Color units	☐ Barium (Ba) mg/L	☐ Fluoride (F) mg/L	☒ MBAS < 0.1 mg/L JKB 4/27
☒ Potassium (K) 7 mg/L 0.18 me/L WC 5/3	☒ Chloride (Cl) 135 mg/L 3.80 me/L JC 4/26	☐ Odor TON	☐ Boron (B) mg/L	☒ Iron (Fe) 0.07 mg/L WC 5/3	☐ Selenium (Se) mg/L
☐ Ammonium (NH ₄) mg/L me/L	☐ Nitrate (NO ₃) mg/L me/L	☐ Turbidity NTU	☐ Cadmium (Cd) mg/L	☐ Lead (Pb) mg/L	☐ Silver (Ag) mg/L
☐ Cations Total 13.84 me/L	☐ Anions Total (13.58) me/L	☐ Chromium (Cr) Total mg/L	☒ Manganese (Mn) 0.05 mg/L WC 5/3	☒ Zinc (Zn) < 0.01 mg/L WC 5/3	

EDWARD S. BABCOCK & SONS, INC.

RECEIVED MAY 9 1983