

Fulmor
Lake

(228)

1992

WQA
FIELD FORM

DATE: 8/19/92

AIR TEMP: ~80° F

SAMPLER(S): HMS MMS

WATER BODY: Fulmer Lake

SAMPLE LOCATION

#1: @ Beach

#2: @ N side Far end

#3: Rt. side Far end

#4: _____

H₂O TEMP: #1 21.8

pH: #1 7.44

EC: #1 110 (24)

#2 22.9

#2 7.43

#2 110 (23)

#3 20.7

#3 7.29

#3 95 (22)

#4 _____

#4 _____

#4 _____

LAB ANALYSIS: Minerals

Nutrients

Total Col.

TSS

BOD/CO₂

Fecal Col.

NIBAS

LOS

Fecal Strep

COMMENTS: Partial sample - water mineral water Do

NOT DRINK -

PURPOSE

The purpose of sampling Lake Fulmor was to evaluate the existing water quality conditions of the lake. Sampling was performed to evaluate whether the Basin Plan Objectives and ISWP objectives are being met and if this lake is able to fully support the designated MUN and other beneficial uses (AGR, REC-1, REC-2, WARM, COLD, WILD). The Regional Board does not have previous data on this lake for comparison of these results.

DISCUSSION

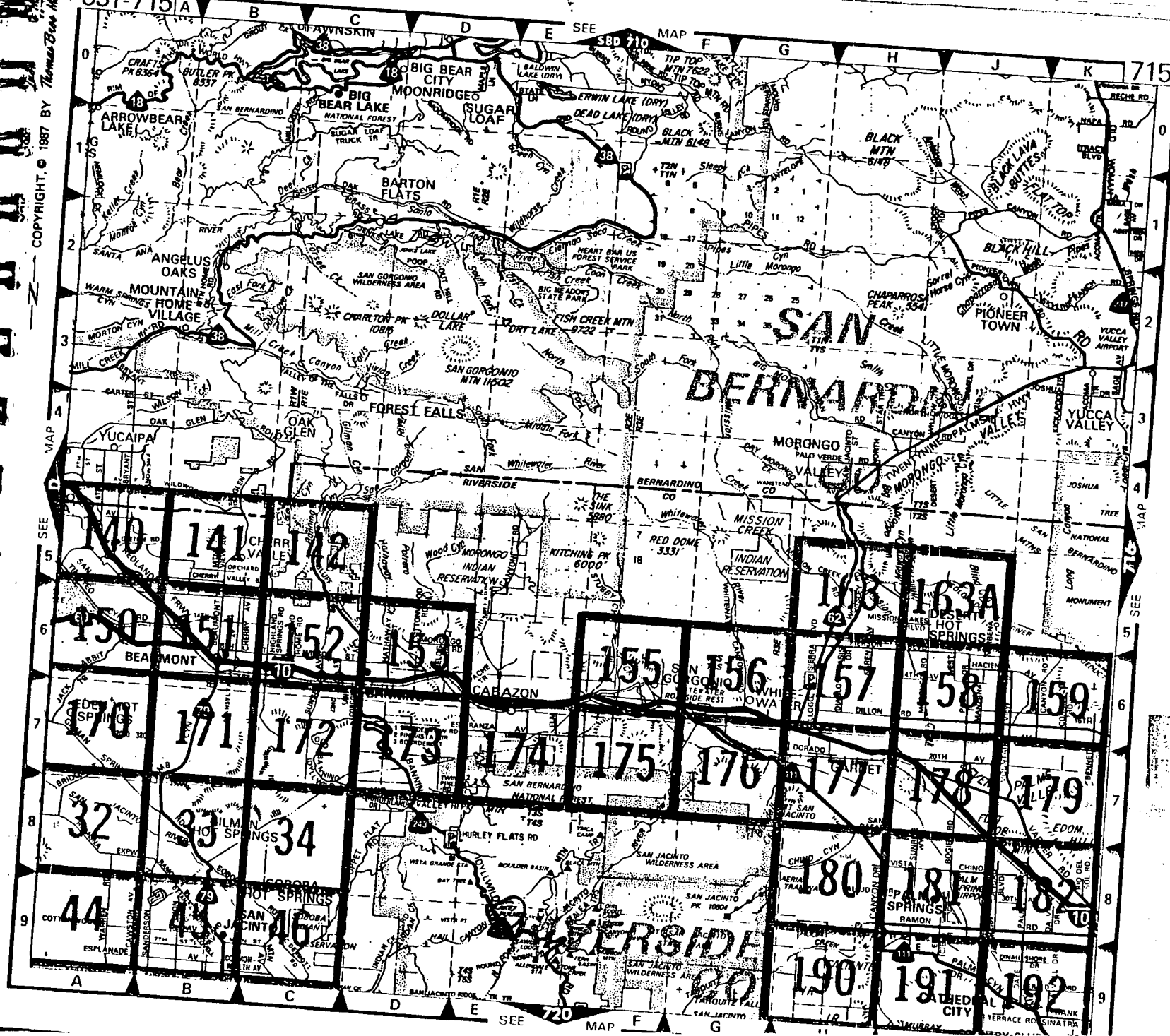
Upon evaluating the data most of the constituents are in compliance with Basin Plan Objectives. Sodium levels were the same for each of the sites, only slightly higher than the objective. Zinc was not in compliance with the objective of 0.3 at only site 2. The biggest problem with this lake is the high levels of Total Coliform which are present. There seems to be a trend and possible explanation to the results. Site 1 was sampled next to the bathrooms and on the down side of them. This is where the largest levels of Coliform can be seen, greater than 16000 MPN. Site 2 was on the up side of the bathrooms but still close enough to have high levels, 1600 MPN. Site 3 which was sampled on the other side of the lake away from the bathrooms, had total coliform levels of 300 MPN. The Health Dept. did post a sign warning of contaminated water. Due to the high levels of coliform present in the lake the beneficial use of MUN is definitely not being met. All organics and pesticides measured (601/602,608) were in compliance with Inland Surface Water Plan.

Fulmor Lake
8/19/92

Constituent	Method	Results			MUN BP Obj.
		#1	#2	#3	
Alkalinity	SM 403	50	50	50	
Ammonia	EPA 350.2	0.4	0.51	0.5	
Bicarbonates	SM403	61	61	61	
Boron	SM 200.7	ND	ND	ND	0.75
Calcium	EPA 200.7	9.8	9.8	9.7	
Carbonates	SM 403	ND	ND	ND	
Chloride	A1000	5	5	5	12
EC	EPA 120.1	116	120	117	
Flouride	EPA 200.7	0.11	0.09	0.09	1
Iron	EPA 200.7	0.08	0.97	0.07	0.3
Magnesium	EPA 200.7	1.5	1.5	1.5	
Nitrate-N	B1011	ND	ND	ND	
pH	EPA 150.1	8.26	7.94	7.84	
Potassium	EPA 200.7	2.3	2.3	2.2	
Sodium	EPA 200.7	13	13	13	10
Sulfate	A1000	ND	ND	ND	15
Tl. Anions	Calc.	1.14	1.14	1.14	
Tl. Cations	Calc.	1.24	1.24	1.23	
TDS	EPA 160.1	110	118	84	150
Tl. Hardness	Calc.	31	31	30	70
Tl. Phosphate	EPA 365.2	0.14	0.09	0.15	
Ammonia-N	EPA 350.2	0.4	0.5	0.5	0.025
Kjeldahl-N	EPA 351.3	2.3	2	2	
Nitrate-N	B1011	ND	ND	ND	10
Nitrite-N	B1011	ND	ND	ND	
Organic-N	Calc.	0.4	1.5	1.5	
Tl. Nitrogen	EPA 350.2	1.8	2	2	
Ortho-phos	EPA 365.2	0.02	0.03	0.03	
Tl. Phos	EPA 365.2	0.46	0.09	0.15	
MBAS	EPA 425.1	ND	ND	ND	0.5
Tl. Coliform		>16000	1600	300	100
Fec. Coliform		900	140	13	
Fecal Strep		<2	4	4	
TSS		12	4	52	
608,601,602		ND	ND	ND	
Temp.		21.8	22.9	20.7	
pH		7.44	7.43	7.29	
EC		110	100	95	

0.5
100

331-715



SHERMAN CO

I think lake really matters
yes

Draft

PURPOSE

The purpose of sampling Lake Fulmor was to evaluate the existing water quality conditions of the lake. Sampling was performed to evaluate whether the Basin Plan Objectives and ISWP objectives are being met and if this lake is able to fully support the designated MUN and other beneficial uses (AGR, REC-1, REC-2, WARM, COLD, WILD). The Regional Board does not have previous data on this lake for comparison to these results.

DISCUSSION

Upon evaluating the data most of the constituents are in compliance with Basin Plan Objectives. Sodium levels were the same ~~throughout~~ ^{for each} the sites, only slightly higher than the objective. Zinc was not in compliance with the objective of 0.3 at only site 2. The biggest problem with this lake is the high levels of Total Coliform which are present. There seems to be a trend and possible explanation to the results. Site 1 was sampled next to the bathrooms and on the down side of them. This is where the largest levels of Coliform can be seen, greater than 16000 ^{MPN}. Site 2 was on the up side of the bathrooms but still close enough to have high levels, 1600 ^{MPN}. Site 3 was sampled on the other side of the lake away from the bathrooms, 300. The Health Dept. did post a sign warning of contaminated water. All organics and pesticides measured (601/602, 608) were in compliance with Inland Surface Water Plan.

Some conclusion on which
beneficial uses ~~are~~ are
probably not being met.

- we should see about getting Health Dept data for air. Also we should find out if they are doing anything about the bacteria problem.

high
D
have
Total coliform
levels of 300 MPN

Draft

Fulmor Lake
8/19/92

Constituent	Method	Results			MUN BP Obj.
		#1	#2	#3	
Alkalinity	SM 403	50	50	50	
Ammonia	EPA 350.2	0.4	0.51	0.5	
Bicarbonates	SM403	61	61	61	
Boron	SM 200.7	ND	ND	ND	0.75
Calcium	EPA 200.7	9.8	9.8	9.7	
Carbonates	SM 403	ND	ND	ND	
Chloride	A1000	5	5	5	12
EC	EPA 120.1	116	120	117	
Flouride	EPA 200.7	0.11	0.09	0.09	1
Iron	EPA 200.7	0.08	0.97	0.07	0.3
Magnesium	EPA 200.7	1.5	1.5	1.5	
Nitrate-N	B1011	ND	ND	ND	
pH	EPA 150.1	8.26	7.94	7.84	
Potassium	EPA 200.7	2.3	2.3	2.2	
Sodium	EPA 200.7	13	13	13	10
Sulfate	A1000	ND	ND	ND	15
Tl. Anions	Calc.	1.14	1.14	1.14	
Tl. Cations	Calc.	1.24	1.24	1.23	
TDS	EPA 160.1	110	118	84	150
Tl. Hardness	Calc.	31	31	30	70
Tl. Phosphate	EPA 365.2	0.14	0.09	0.15	
Ammonia-N	EPA 350.2	0.4	0.5	0.5	0.025
Kjeldahl-N	EPA 351.3	2.3	2	2	
Nitrate-N	B1011	ND	ND	ND	10
Nitrite-N	B1011	ND	ND	ND	
Organic-N	Calc.	0.4	1.5	1.5	
Tl. Nitrogen	EPA 350.2	1.8	2	2	
Ortho-phos	EPA 365.2	0.02	0.03	0.03	
Tl. Phos	EPA 365.2	0.46	0.09	0.15	
MBAS	EPA 425.1	ND	ND	ND	0.5
Tl. Coliform		>16000	1600	300	100
Fec. Coliform		900	140	13	
Fecal Strep		<2	4	4	
TSS		12	4	52	
608,601,602		ND	ND	ND	
Temp.		21.8	22.9	20.7	
pH		7.44	7.43	7.29	
EC		110	100	95	

I wonder why
Iron is high
@ this site

T. Phosphate @ Site 1 may be elevated because of
the toilets, also.

Fulmer Lake + Lake Hemet 8/19/92

3 samples each or 4

✓ Minerals/TSS/MBAS - 8 - 8

Nutrients - 8 plain, 8 H_2SO_4 8 + 8

✓ GC/bc2 - 8 - 16 16

✓ GC8 - - 8 8

✓ Total Coli/Fecal Coli/Fecal Strep - 16 16

* Don't Forget Bact in the morning

Fulmer Lake #1

Time: 9:45

@ beach

weather: 80°F

pH - 7.44

Temp - 21.3 (24°C)

EC - 100

Fulmer Lake #3 1010

Fulmer Lake #2 1000

pH 7.29

@ Lin2 beach

temp - 20.7 °

pH - 7.43

EC (22) 45

temp 22.9 (23)

EC - 100



ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92668 - 714/771-6900

FAX 714/538-1209

CLIENT

California Regional Water
Quality Control Board
Attn: Nancy Martin
2010 Iowa Ave. Suite 100
Riverside, CA 92507

(1079) LAB NO. G36304-01
REPORTED 09/10/92

SAMPLE

Wastewater - H.S.

RECEIVED

08/20/92

IDENTIFICATION

Fulmor Lake #1 - Water Quality Assessment
Date Collected 08/19/92 @ 0945 Hrs.
As Submitted

BASED ON SAMPLE

STANDARD MINERAL ANALYSIS

<u>Constituent</u>	<u>Method</u>	<u>Results</u>
Alkalinity	SM 403	50 mg/l
Ammonia	EPA 350.2	0.4 mg/l
Bicarbonates	SM 403	61 mg/l
Boron	SM 200.7	ND <0.01 mg/l
Calcium	EPA 200.7	9.8 mg/l
Carbonates	SM 403	ND <1 mg/l
Chloride	A1000	5 mg/l
Electrical Conductivity	EPA 120.1	116 μ mhos/cm
Fluoride	EPA 200.7	0.11 mg/l
Iron	EPA 200.7	0.08 mg/l
Magnesium	EPA 200.7	1.5 mg/l
Nitrate Nitrogen	B1011	ND <0.02 mg/l
pH	EPA 150.1	8.26
Potassium	EPA 200.7	2.3 mg/l
Sodium	EPA 200.7	13 mg/l
Sulfate	A1000	ND <1 mg/l
Total Anions	Calculated	1.14 meq/l
Total Cations	Calculated	1.24 meq/l
Total Dissolved Solids	EPA 160.1	110 mg/l
Total Hardness	Calculation	31 mg/l
Total Phosphate	EPA 365.2	0.14 mg/l

Continued on Page 2

SAWPA DES



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Client : California Regional Water
Quality Control Board
Lab No.: G36304-01

COMBINED NUTRIENT ANALYSIS

<u>Constituent</u>	<u>Method</u>	<u>Results</u>
Ammonia Nitrogen	EPA 350.2	0.4 mg/l
Kjeldahl Nitrogen	EPA 351.3	2.3 mg/l
Nitrate Nitrogen	B1011	ND <0.02 mg/l
Nitrite Nitrogen	B1011	ND <0.02 mg/l
Organic Nitrogen	Calculation	0.4 mg/l
Total Nitrogen	EPA 350.2	1.8 mg/l
Orthophosphate Phosphorus	EPA 365.2	0.02 mg/l
Total Phosphorus	EPA 365.2	0.46 mg/l

<u>Constituent</u>	<u>Method</u>	<u>Results</u>
MBAS	EPA 425.1	ND <0.05 mg/l
Total Suspended Solids	EPA 160.2	12 mg/l
Total Coliform		>16,000 MPN/100mls
Fecal Coliform		900 MPN/100mls
Fecal Strep.		<2 MPN/100mls

PESTICIDES & PCBs EPA 608

All Compounds Were None Detected. See Attached List.

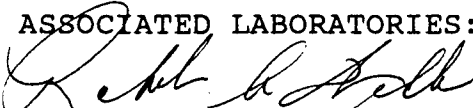
PURGEABLE ORGANICS EPA 601

All Compounds Were None Detected. See Attached List.

PURGEABLE AROMATICS EPA 602

All Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES: by:


Robert A. Webber
Vice President

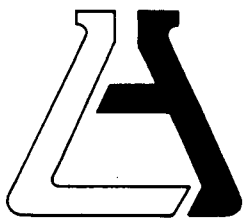
RAW/jaw

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ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92668 - 714/771-6900

FAX 714/538-1209

CLIENT

California Regional Water
Quality Control Board
Attn: Nancy Martin
2010 Iowa Ave. Suite 100
Riverside, CA 92507

(1079) LAB NO. G36304-02
REPORTED 09/10/92

SAMPLE

Wastewater - H.S.

RECEIVED

08/20/92

IDENTIFICATION

Fulmor Lake #2 - Water Quality Assessment
Date Collected 08/19/92 @ 1000 Hrs.
As Submitted

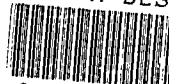
BASED ON SAMPLE

STANDARD MINERAL ANALYSIS

<u>Constituent</u>	<u>Method</u>	<u>Results</u>
Alkalinity	SM 403	50 mg/l
Ammonia	EPA 350.2	0.51 mg/l
Bicarbonates	SM 403	61 mg/l
Boron	SM 200.7	ND <0.01 mg/l
Calcium	EPA 200.7	9.8 mg/l
Carbonates	SM 403	ND <1 mg/l
Chloride	A1000	5 mg/l
Electrical Conductivity	EPA 120.1	120 μ mhos/cm
Fluoride	EPA 200.7	0.09 mg/l
Iron	EPA 200.7	0.97 mg/l
Magnesium	EPA 200.7	1.5 mg/l
Nitrate Nitrogen	B1011	ND <0.02 mg/l
pH	EPA 150.1	7.94
Potassium	EPA 200.7	2.3 mg/l
Sodium	EPA 200.7	13 mg/l
Sulfate	A1000	ND <1 mg/l
Total Anions	Calculated	1.14 meq/l
Total Cations	Calculated	1.24 meq/l
Total Dissolved Solids	EPA 160.1	118 mg/l
Total Hardness	Calculation	31 mg/l
Total Phosphate	EPA 365.2	0.09 mg/l

Continued on Page 2

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Client : California Regional Water
Quality Control Board
Lab No.: G36304-02

COMBINED NUTRIENT ANALYSIS

<u>Constituent</u>	<u>Method</u>	<u>Results</u>
Ammonia Nitrogen	EPA 350.2	0.5 mg/l
Kjeldahl Nitrogen	EPA 351.3	2.0 mg/l
Nitrate Nitrogen	B1011	ND <0.02 mg/l
Nitrite Nitrogen	B1011	ND <0.02 mg/l
Organic Nitrogen	Calculation	1.5 mg/l
Total Nitrogen	EPA 350.2	2.0 mg/l
Orthophosphate Phosphorus	EPA 365.2	0.03 mg/l
Total Phosphorus	EPA 365.2	0.09 mg/l

<u>Constituent</u>	<u>Method</u>	<u>Results</u>
MBAS	EPA 425.1	ND <0.05 mg/l
Total Suspended Solids	EPA 160.2	4 mg/l
Total Coliform		1,600 MPN/100mls
Fecal Coliform		140 MPN/100mls
Fecal Strep.		4 MPN/100mls

PESTICIDES & PCBs EPA 608

All Compounds Were None Detected. See Attached List.

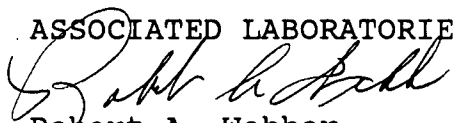
PURGEABLE ORGANICS EPA 601

All Compounds Were None Detected. See Attached List.

PURGEABLE AROMATICS EPA 602

All Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES: by:



Robert A. Webber
Vice President

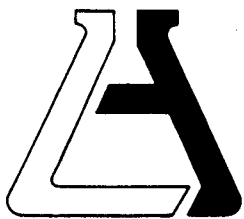
RAW/jaw

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ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92668 - 714/771-6900

FAX 714/538-1209

CLIENT

California Regional Water
Quality Control Board
Attn: Nancy Martin
2010 Iowa Ave. Suite 100
Riverside, CA 92507

(1079) LAB NO. G36304-03
REPORTED 09/10/92

SAMPLE

Wastewater - H.S.

RECEIVED

08/14/92

IDENTIFICATION

Fulmor Lake #3 - Water Quality Assessment

Date Collected 08/19/92 @ 1010 Hrs.

As Submitted

BASED ON SAMPLE

STANDARD MINERAL ANALYSIS

<u>Constituent</u>	<u>Method</u>	<u>Results</u>
Alkalinity	SM 403	50 mg/l
Ammonia	EPA 350.2	0.5 mg/l
Bicarbonates	SM 403	61 mg/l
Boron	SM 200.7	ND <0.01 mg/l
Calcium	EPA 200.7	9.7 mg/l
Carbonates	SM 403	ND <1 mg/l
Chloride	A1000	5 mg/l
Electrical Conductivity	EPA 120.1	117 μ mhos/cm
Fluoride	EPA 200.7	0.09 mg/l
Iron	EPA 200.7	0.07 mg/l
Magnesium	EPA 200.7	1.5 mg/l
Nitrate Nitrogen	B1011	ND <0.02 mg/l
pH	EPA 150.1	7.84
Potassium	EPA 200.7	2.2 mg/l
Sodium	EPA 200.7	13 mg/l
Sulfate	A1000	ND <1 mg/l
Total Anions	Calculated	1.14 meq/l
Total Cations	Calculated	1.23 meq/l
Total Dissolved Solids	EPA 160.1	84 mg/l
Total Hardness	Calculation	30 mg/l
Total Phosphate	EPA 365.2	0.15 mg/l

Continued on Page 2



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Client : California Regional Water
Quality Control Board
Lab No.: G36304-03

COMBINED NUTRIENT ANALYSIS

<u>Constituent</u>	<u>Method</u>	<u>Results</u>
Ammonia Nitrogen	EPA 350.2	0.5 mg/l
Kjeldahl Nitrogen	EPA 351.3	2.0 mg/l
Nitrate Nitrogen	B1011	ND <0.02 mg/l
Nitrite Nitrogen	B1011	ND <0.02 mg/l
Organic Nitrogen	Calculation	1.5 mg/l
Total Nitrogen	EPA 350.2	2.0 mg/l
Orthophosphate Phosphorus	EPA 365.2	0.03 mg/l
Total Phosphorus	EPA 365.2	0.15 mg/l

<u>Constituent</u>	<u>Method</u>	<u>Results</u>
MBAS	EPA 425.1	ND <0.05 mg/l
Total Suspended Solids	EPA 160.2	52 mg/l
Total Coliform		300 MPN/100mls
Fecal Coliform		13 MPN/100mls
Fecal Strep.		4 MPN/100mls

PESTICIDES & PCBs EPA 608

All Compounds Were None Detected. See Attached List.

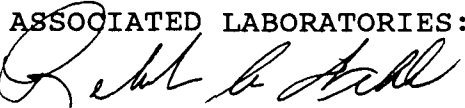
PURGEABLE ORGANICS EPA 601

All Compounds Were None Detected. See Attached List.

PURGEABLE AROMATICS EPA 602

All Compounds Were None Detected. See Attached List.

ASSOCIATED LABORATORIES: by:


Robert A. Webber
Vice President

RAW/jaw

SAWPA DES



001004968





Date 8/19/92 Page 1 of 2

LABORATORY	PROJECT MANAGER
ASSOCIATED	HOPE SMYTHE
SECTION	PHONE NUMBER
PLANNING	782-4493
PROJECT NAME	SAMPLERS: (Signature)
WATER QUALITY ASSESSMENT	<i>Michelle Shaughtressy</i>

SAMPLE NUMBER	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE			SOLID	NO. OF CNTNRS	TESTS REQUIRED
				WATER		AIR			
				Comp.	Grab				
1	Fulmor Lake #1	8/19	0945		✓			7	Minerals, TSS, MBDS, Nutrients, 601/60.2, 608, Total Coliform, Fecal Coli, Fecal Strept
2	Fulmor Lake #2	8/19	1000		✓			7	"
3	Fulmor Lake #3	8/19	1010		✓			7	"
4	Hemet Lake #1	8/19	1125		✓			7	"
5	Hemet Lake #2	8/19	1145		✓			7	"

Received by: (Signature)	Received by: (Signature)	Date/Time
<i>Michelle Shaughtressy</i>	<i>[Signature]</i>	<u>8/20/92</u> <u>1050</u>
Received by: (Signature)	Received by: (Signature)	Date/Time
Received by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
Received by: (Signature)	Date/Time	Received for Laboratory by:
Method of Shipment:		
Special Instructions:		TASK CODE

ESTIMATED COST
 \$2811.00



CHAIN OF CUSTODY RECORD

Date 8/19/92 Page 2 of 2

LABORATORY	ASSOCIATED	PROJECT MANAGER	HOPE SMYTHE
	FUNCTION	PLANNING	PHONE NUMBER
PROJECT NAME		SAMPLERS: (Signature)	
WATER QUALITY ASSESSMENT		<i>Michael LeShaugnessy</i>	

SAMPLE NUMBER	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE			SOLID	NO. OF CONTNRS	TESTS REQUIRED
				WATER	AIR				
				Comp.	Grab				
6	Hemet Lake #3	8/19	1235		✓			7	Minerals, TSS, MBAS, Nutrients
									601/602, 608, Total Coliform
									Fecal Coli, Fecal Strept

Shipped by: (Signature)		Received by: (Signature)		Date/Time	
<i>Michael LeShaugnessy</i>		<i>K. Bari</i>		8/20/92 1030	
Shipped by: (Signature)		Received by: (Signature)		Date/Time	
Shipped by: (Signature)		Received by Mobile Laboratory for field analysis: (Signature)		Date/Time	
Shipped by: (Signature)		Date/Time	Received for Laboratory by:		Date/Time
Method of Shipment:					
Special Instructions:					TASK CODE
					ESTIMATED COST