Carbon Canyon Creek 8-37

248

WQA
FIELD FORM

DATE: 8/17/92 AIR TEMP: 100°+

SAMPLER(S): HMS, MMS, DJB

WATER BODY: Carbon Canyon Creek

SAMPLE LOCATION
#1: (1335) Downstream of La Vida Mineral Springs
#2: (1400) upstream of La Vida Mineral Springs (Sandy Bottom)
#3: (1440) Carbon Cyn Golf Course
#4:

H_2O TEMP: #1	27.9	pH: #1	8.26	EC: #1	4000 (31)
#2	23	#2	7.86	#2	1600 (20)
#3	23	#3	7.86	#3	1600 (20)
#4		#4		#4	

LAB ANALYSIS:

MBAS	Fecal Strep	Enterococcus
Minerals	Fecal Coli	
Nutrients	Total Col	

COMMENTS: * See Map from 1985 for Sampling Sites

PURPOSE

The purpose of sampling Carbon Canyon Creek was to evaluate water quality. Carbon Canyon Creek was last sampled 3/11/1985. Sampling was performed to evaluate whether the Basin Plan Objectives objective of a rec-1 water body were being met. This data will also be compared to previous data taken in 1985 in order to evaluate if trends in water quality parameters are ocurring. (Sampling sites were selected to duplicate 1985 sites.)

DISCUSSION

This creek currently is not listed in the Basin Plan and thus shows no beneficial uses or water quality objectives. This waterbody may be included in the next amendment as a rec-1 waterbody and so these objectives will be compared to the data. The objective for Fecal Coliform states the log mean is less than 200/100 ml based on five or more samples in a 30 day period, and not more than 10% of the samples exceed 400/100 ml for any 30-day period. Only 3 samples were taken on this creek, thus the first part of the objective can not be compared. The latter part states the objective is 400/100 ml for 90% of the samples over 30-day period. All but one of the sites would then meet this objective. This is the 2nd site with a fecal coliform count of 5000 MPN. In 1985 the coliform samples were analyzed by lab incorrectly and thus produced no results. Nitrates went down at all stations in 1992 compared to 1985 data. The other constituent which seem to stand out when compared to 1985 data is TDS. TDS was lower in two stations and higher at the golf course station. The levels of TDS are still predominately high, even though they went down in 1992. The results that did increase in 1992 compared to 1985 data may have increased due to the time of year the 1992 results were obtained. 1985 sampling was done in the spring while the 1992 sampling was performed in the late summer months.

Table 1

Carbon Canyon Creek
1992 vs. 1985

Constituent	1992 #1	1985 #2		1992 #2	1985 #3		1992 #3	1985 #6
Alkalinity	1060	650		398	350		504	325
Bicarbonate	1293	793		486	427		615	397
Boron	2.08	1.2		0.32	0.3		0.24	0.1
Calcium	65	110		122	160		229	160
Carbonate	ND	ND		ND	ND		ND	ND
Chloride	470	321		194	204		177	96
Flouride	1.17	0.7		0.72	0.5		0.56	0.4
Iron	0.03	0.15		ND	0.03		ND	0.3
Magnesium	77	90		109	105		73	46
Nitrate	0.7	2.9		0.3	2.9		0.3	4.9
Potassium	5.4	5		4.2	4		3.9	2
Sodium	712	455		168	166		133	65
Sulfate	330	475		408	560		350	260
Tl. Anions	41.37	32.15		21.95	24.63		22.38	14.98
Tl. Cations	40.68	33		22.46	24.57		23.31	14.76
TDS	2320	2940		1300	1500		1320	870
Hardness	479	650		752	838		871	592
Tl. Phosphate	0.27	ND		0.11	ND		0.32	0.5
MBAS	ND	0.1		ND	<0.1		ND	0.1
Temperature	27.9	19		23	16		23	18

Carbon Canyon Creek
8/17/92

Constituent	Method	Results DnMin	UpMin	Golf
Alkalinity	SM 403	1060	398	504
Ammonia	EPA 350.2	ND	ND	ND
Bicarbonates	SM403	1293	486	615
Boron	SM 200.7	2.08	0.32	0.24
Calcium	EPA 200.7	65	122	229
Carbonates	SM 403	ND	ND	ND
Chloride	A1000	470	194	177
EC	EPA 120.1	3790	1920	1940
Flouride	EPA 200.7	1.17	0.72	0.56
Iron	EPA 200.7	0.03	ND	ND
Magnesium	EPA 200.7	77	109	73
Nitrate-N	B1011	3	1.3	1.55
pH	EPA 150.1	7.47	7.33	7.19
Potassium	EPA 200.7	5.4	4.2	3.9
Sodium	EPA 200.7	712	168	133
Sulfate	A1000	330	408	350
Tl. Anions	Calc.	41.37	21.95	22.38
Tl. Cations	Calc.	40.68	22.46	23.31
TDS	EPA 160.1	2320	1300	1320
Tl. Hardness	Calc.	479	752	871
Tl. Phosphate	EPA 365.2	0.27	0.11	0.32
Ammonia-N	EPA 350.2	ND	ND	ND
Kjeldahl-N	EPA 351.3	1.5	0.7	1.1
Nitrate-N	B1011	0.7	0.3	0.3
Nitrite-N	B1011	0.5	ND	ND
Organic-N	Calc.	1.5	0.7	1.1
Tl. Nitrogen	EPA 350.2	2.2	1	1.4
Ortho-phos	EPA 365.2	0.23	0.08	0.35
Tl. Phos	EPA 365.2	0.27	0.11	0.39
MBAS	EPA 425.1	ND	ND	ND
Tl. Coliform		2400	9000	2400
Fec. Coliform		240	5000	300
Fecal Strep		50	23	30
Enterococcus		45	18	25
Temp.		27.9	23	23
pH		8.26	7.86	7.86
EC		4000	1600	1600

Carbon Cyn #1 8/17/92

Temp - 100°F MBAS/Minerals

Nutrients H_2SO_4 + Plain

Time 1335 Fecal Strep/Fecal/Total Coli/Enterococcus

pH 8.26

temp 27.9 (31)

EC 4000

Carbon Cyn #2 (Sandy Bottom)

time: 1400

pH 7.86

temp 23 (26)

EC 1600

Carbon Cyn #3

time: 1440

pH 7.86

temp 23 (26)

EC 1600

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900 FAX 714/538-1209

CLIENT

California Regional Water Quality Control Board (1079)
Attn: Nancy Martin
2010 Iowa Ave. Suite 100
Riverside, CA 92507

LAB NO. G36088-01

REPORTED 09/16/92

SAMPLE IDENTIFICATION BASED ON SAMPLE

Wastewater - H.S.
Carbon Canyon #1 - Water Quality Assessment
Date Collected 08/17/92 @ 1335 Hrs.
As Submitted

RECEIVED 08/18/92

STANDARD MINERAL ANALYSIS

Constituent	Method	Results	
Alkalinity	SM 403	1,060	mg/l
Ammonia	EPA 350.2	ND <0.1	mg/l
Bicarbonates	SM 403	1,293	mg/l
Boron	SM 200.7	2.08	mg/l
Calcium	EPA 200.7	65	mg/l
Carbonates	SM 403	ND <1	mg/l
Chloride	A1000	470	mg/l
Electrical Conductivity	EPA 120.1	3,790	µmhos/cm
Fluoride	EPA 200.7	1.17	mg/l
Iron	EPA 200.7	0.03	mg/l
Magnesium	EPA 200.7	77	mg/l
Nitrate Nitrogen	B1011	3.0	mg/l
pH	EPA 150.1	7.47	
Potassium	EPA 200.7	5.4	mg/l
Sodium	EPA 200.7	712	mg/l
Sulfate	A1000	330	mg/l
Total Anions	Calculated	41.37	meq/l
Total Cations	Calcutated	40.68	meq/l
Total Dissolved Solids	EPA 160.1	2,320	mg/l
Total Hardness	Calculation	479	mg/l
Total Phosphate	EPA 365.2	0.27	mg/l

Continued on Page 2

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:-1 10M

Client : California Regional Water
Quality Control Board
Lab No.: G36088-01

COMBINED NUTRIENT ANALYSIS

Constituent	Method	Results	
Ammonia Nitrogen	EPA 350.2	ND <0.1	mg/l
Kjeldahl Nitrogen	EPA 351.3	1.5	mg/l
Nitrate Nitrogen	B1011	0.7	mg/l
Nitrite Nitrogen	B1011	0.5	mg/l
Organic Nitrogen	Calculation	1.5	mg/l
Total Nitrogen	EPA 350.2	2.2	mg/l
Orthophosphate Phosphorus	EPA 365.2	0.23	mg/l
Total Phosphorus	EPA 365.2	0.27	mg/l

Constituent	Method	Results	
MBAS	EPA 425.1	ND <0.05	mg/l
Total Coliform		2,400	MPN/100mls
Fecal Coliform		240	MPN/100mls
Fecal Strep.		50	MPN/100mls
Enterococcus		45	Col/100mls

ASSOCIATED LABORATORIES: by:

Robert A. Webber
Vice President

RAW/jaw

SAWPA DES
001004635

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900 FAX 714/538-1209

CLIENT

California Regional Water Quality Control Board (1079)
Attn: Nancy Martin
2010 Iowa Ave. Suite 100
Riverside, CA 92507

LAB NO. G36088-02

REPORTED 09/16/92

SAMPLE IDENTIFICATION: Wastewater - H.S.
Carbon Canyon #2 - Water Quality Assessment
Date Collected 08/17/92 @ 1400 Hrs.
As Submitted

RECEIVED 08/18/92

BASED ON SAMPLE

STANDARD MINERAL ANALYSIS

Constituent	Method	Results	
Alkalinity	SM 403	398	mg/l
Ammonia	EPA 350.2	ND <0.1	mg/l
Bicarbonates	SM 403	486	mg/l
Boron	SM 200.7	0.32	mg/l
Calcium	EPA 200.7	122	mg/l
Carbonates	SM 403	ND <1	mg/l
Chloride	A1000	194	mg/l
Electrical Conductivity	EPA 120.1	1,920	µmhos/cm
Fluoride	EPA 200.7	0.72	mg/l
Iron	EPA 200.7	ND <0.007	mg/l
Magnesium	EPA 200.7	109	mg/l
Nitrate Nitrogen	B1011	1.3	mg/l
pH	EPA 150.1	7.33	
Potassium	EPA 200.7	4.2	mg/l
Sodium	EPA 200.7	168	mg/l
Sulfate	A1000	408	mg/l
Total Anions	Calculated	21.95	meq/l
Total Cations	Calcutated	22.46	meq/l
Total Dissolved Solids	EPA 160.1	1,300	mg/l
Total Hardness	Calculation	752	mg/l
Total Phosphate	EPA 365.2	0.11	mg/l

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Environmental •

Client : California Regional Water
Quality Control Board
Lab No.: G36088-02

COMBINED NUTRIENT ANALYSIS

Constituent	Method	Results	
Ammonia Nitrogen	EPA 350.2	ND <0.1	mg/l
Kjeldahl Nitrogen	EPA 351.3	0.7	mg/l
Nitrate Nitrogen	B1011	0.3	mg/l
Nitrite Nitrogen	B1011	ND <0.03	mg/l
Organic Nitrogen	Calculation	0.7	mg/l
Total Nitrogen	EPA 350.2	1.0	mg/l
Orthophosphate Phosphorus	EPA 365.2	0.08	mg/l
Total Phosphorus	EPA 365.2	0.11	mg/l

Constituent	Method	Results	
MBAS	EPA 425.1	ND <0.05	mg/l
Total Coliform		9,000	MPN/100mls
Fecal Coliform		5,000	MPN/100mls
Fecal Strep.		23	MPN/100mls
Enterococcus		18	Col/100mls

ASSOCIATED LABORATORIES: by:

Robert A. Webber
Vice President

RAW/jaw

SAWPA DES
001004637

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900 FAX 714/538-1209

CLIENT

California Regional Water Quality Control Board (1079)
Attn: Nancy Martin
2010 Iowa Ave. Suite 100
Riverside, CA 92507

LAB NO. G36088-03
REPORTED 09/16/92

SAMPLE IDENTIFICATION BASED ON SAMPLE
Wastewater - H.S.
Carbon Canyon #3 - Water Quality Assessment
Date Collected 08/17/92 @ 1440 Hrs.
As Submitted

RECEIVED 08/18/92

STANDARD MINERAL ANALYSIS

Constituent	Method	Results	
Alkalinity	SM 403	504	mg/l
Ammonia	EPA 350.2	ND <0.01	mg/l
Bicarbonates	SM 403	615	mg/l
Boron	SM 200.7	0.24	mg/l
Calcium	EPA 200.7	229	mg/l
Carbonates	SM 403	ND <1	mg/l
Chloride	A1000	177	mg/l
Electrical Conductivity	EPA 120.1	1,940	µmhos/cm
Fluoride	EPA 200.7	0.56	mg/l
Iron	EPA 200.7	ND <0.007	mg/l
Magnesium	EPA 200.7	73	mg/l
Nitrate Nitrogen	B1011	1.55	mg/l
pH	EPA 150.1	7.19	
Potassium	EPA 200.7	3.9	mg/l
Sodium	EPA 200.7	133	mg/l
Sulfate	A1000	350	mg/l
Total Anions	Calculated	22.38	meq/l
Total Cations	Calcutated	23.31	meq/l
Total Dissolved Solids	EPA 160.1	1,320	mg/l
Total Hardness	Calculation	871	mg/l
Total Phosphate	EPA 365.2	0.32	mg/l

Continued on Page 2

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Environmental •

Client : California Regional Water
Quality Control Board
Lab No.: G36088-03

COMBINED NUTRIENT ANALYSIS

Constituent	Method	Results	
Ammonia Nitrogen	EPA 350.2	ND <0.1	mg/l
Kjeldahl Nitrogen	EPA 351.3	1.1	mg/l
Nitrate Nitrogen	B1011	0.3	mg/l
Nitrite Nitrogen	B1011	ND <0.03	mg/l
Organic Nitrogen	Calculation	1.1	mg/l
Total Nitrogen	EPA 350.2	1.4	mg/l
Orthophosphate Phosphorus	EPA 365.2	0.35	mg/l
Total Phosphorus	EPA 365.2	0.39	mg/l

Constituent	Method	Results	
MBAS	EPA 425.1	ND <0.05	mg/l
Total Coliform		2,400	MPN/100mls
Fecal Coliform		300	MPN/100mls
Fecal Strep.		30	MPN/100mls
Enterococcus		25	Col/100mls

ASSOCIATED LABORATORIES: by:

Robert A. Webber
Vice President

RAW/jaw

SAWPA DES
001004639

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION
3010 IOWA AVENUE, SUITE 100
RIVERSIDE, CA 92507-2409
PHONE: (714) 782-4130

CHAIN OF CUSTODY RECORD

Date 8/17/92 Page 1 of 1

LABORATORY: ASSOCIATED

PROJECT MANAGER: HOPE SMYTHE

SECTION: PLANNING

PHONE NUMBER: 782-4493

PROJECT NAME: WATER QUALITY ASSESSMENT

SAMPLERS: (Signature) Michelle Shaughnessy

SAMPLE NUMBER	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE WATER Comp.	SAMPLE TYPE WATER Grab	SAMPLE TYPE AIR	SOLID	NO. OF CNTNRS	TESTS REQUIRED
1	Carbon Cyn #1	8/17	1335		✓			5	MBAS, Minerals, Fecal Coli, Total Coli
									Fecal Strep, Enterococcus, Nutrients
2	Carbon Cyn #2	8/17	1400		✓			5	"
3	Carbon Cyn #3	8/17	1440		✓			5	"

Relinquished by: (Signature) Michelle Shaughnessy — Received by: (Signature) [illegible] — Date/Time 8/18/92 0830

Relinquished by: (Signature) [illegible] — Received by: (Signature) [illegible] — Date/Time 8/18/92 11:00 AM

Relinquished by: (Signature) — Received by Mobile Laboratory for field analysis: (Signature) — Date/Time

Dispatched by: (Signature) — Date/Time — Received for Laboratory by: — Date/Time

Method of Shipment

Special Instructions:

TASK CODE

ESTIMATED COST

.IFORNIA REGIONAL WATER QUALITY CONTROL BOARD
ITA ANA REGION
OWA AVENUE, SUITE 100
ISIDE, CA 92507-2409
E: (714) 782-4130

CHAIN OF CUSTODY RECORD

Date 8/17/92 Page 1 of 1

ORATORY: ASSOCIATED

PROJECT MANAGER: HOPE SMYTHE

TION: PLANNING

PHONE NUMBER: 782-4493

JECT NAME: WATER QUALITY ASSESSMENT

SAMPLERS: (Signature) Michele Shaughnessy

MPLE IMBER	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE WATER Comp.	WATER Grab	AIR	SOLID	NO. OF CNTNRS	TESTS REQUIRED
1	Carbon Cyn #1	8/17	1335		✓			5	MBAS, Minerals, Fecal Coli, Total Coli
									Fecal Strep, Enterococcus, Nutrients
2	Carbon Cyn #2	8/17	1400		✓			5	"
3	Carbon Cyn #3	8/17	1440		✓			5	"

uished by: (Signature) Michelle Shaughnessy	Received by: (Signature)	Date/Time 8/18/92 83
ul. d by: (Signature)	Received by: (Signature)	Date/Time
uished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
ched by: (Signature) Date/Time	Received for Laboratory by:	Date/Time
d of Shipment		
l Instructions:		TASK CODE
		ESTIMATED COST $

Carbon Canyon Creek

Date: 2/27/85

Tests: MBAS
Minerals- general
Total Coli / Fecal Coli

Sample Stations:

1. Carbon Canyon Regional Park
(One mile NE of Valencia on Carbon Canyon Road (Hwy 142

2. Downstream from La Vida Mineral Springs
At road crossing - 3.3 miles NE of Valencia on
Carbon Canyon Road (Hwy. 142)

3. Upstream from La Vida Mineral Springs
3.6 miles NE of Valencia on Carbon Canyon Road
(Hwy. 142)

4. Rosemary Lane - Sleepy Hollow
4.7 miles NE of Valencia on Carbon Canyon Road
(Hwy. 142)

Carbon Canyon Creek - Continued:

5. Upstream of Sleepy Hollow
5.6 miles NE of Valencia on Carbon Canyon Road (Hwy. 142)
(.2 mi. of Canyon Hills Road)

6. Carbon Canyon Creek Golf Course - upstream of Ornamental lake
6.2 miles NE of Valencia on Carbon Canyon Road (Hwy. 142)

~~The last sample~~ Carbon Cyn Creek was last sampled in 1985.

PURPOSE

The purpose of sampling Carbon Canyon Creek was to evaluate ~~if the~~ water quality ~~has decreased since~~ the 1985 sampling. Sampling was performed to evaluate whether the Basin Plan Objectives objective of a rec-1 water body were being met. This data will also be compared to previous data taken in 1985 in order to evaluate if trends in water quality parameters are ocurring. (Sampling sites were selected to duplicate 1985 sites).

DISCUSSION

This creek currently is not listed in the Basin Plan, ~~Amendment~~ and thus shows no beneficial uses. This waterbody may be included in the next amendment as a rec-1 waterbody and so these objectives will be compared to the data. The objective for Fecal Coliform states the log mean is less than 200/100ml based on five or more samples in a 30 day period, and not more than 10% of the samples exceed 400/100 ml for any 30-day period. Only 3 samples were taken on this creek, thus the first part of the objective can not be compared. The latter part states the objective is 400/100 ml for 90% of the samples over 30-day period. All but one of the sites would then meet this objective. This is the 2nd site with a fecal coliform count of 5000. In 1985, the coliform samples were analyzed by lab incorrectly and thus produced no results. Other constituents which seem to stand out when compared to 1985 data are nitrates and TDS. Nitrates went up at two of the stations. The golf course station (#3) more than doubled and the station upstream of the mineral springs (#2) went up slightly. These levels would still meet the basin plan objectives if this was a MUN waterbody. TDS was lower in two stations and higher at the golf course station. The levels of TDS are still predominately high, even though they went down.

r water quality objectives

-nally

The increased ~~data~~ in results may be due to the time of year sampled. 1985 results were in the spring while the 1992 results were obtained in the late summer months when we samples collected in 1985.

- I'm wondering if some of parameters may be higher in 1992 because of the time of year that we sampled? possibly

- The fact that TDSs were all ND and Nitrates are fairly low ~~would~~ may indicate no septic system problem. But then why are the bacti levels high? hmmm

How could we find out what's causing high coliform levels? sampling at diff times throughout the year? yes - good study point

1985

Resample - Total [illegible]

Date: 3-11-85 Time: 0906 hours

Location Carbon Canyon Regional Park
one mile NE of Valencia on Carbon Canyon Road
(Hwy. 142)

Legal location:

Sample #: 1

Sampled by: NAO

Weather: Cool & Cloudy

Air Temp: ~65°F

Water Temp: 18°C

Water Appearance: Clear

Flow: Less than 0.1 cfs

Resamp e : [illegible]

Date: 3-11-85 Time: 0928 hours

Location [illegible]
(at road crossing)
3.5 miles NE of [illegible] Road (Hwy. 142

Legal location:

Sample #: 2

Sampled by: NAO

Weather: Cool & Cloudy

Air Temp: ~68° F

Water Temp: 17°C

Water Appearance: Clear

Flow: 1.377 cfs

w = 6.2' d = 0.7 v = 10'/9 sec.

Resamp: Total coli / fecal coli

Date: [illegible] Time: [illegible]

Location Carbon Canyon Creek - Upstream of [illegible] Springs - 5.5 miles NE of Valencia on Carbon Canyon Road (Hwy. 142)

Legal location:

Sample #: 3

Sampled by: NAO

Weather:

Air Temp:

Water Temp:

Water Appearance:

Flow:

[illegible] cfs

Resample ~Total coli / Fecal coli

Date: 3-1-[illegible] Time: [illegible]

Location Carbon Canyon Creek - Rosemary Lane (Sleepy Hollow)
4.7 miles NE of Valencia on Carbon Canyon Road (Hwy 142)

Legal location:

Sample #: 4

Sampled by: NAO

Weather: [illegible]

Air Temp:

Water Temp:

Water Appearance:

Flow: 0.75 cfs

Resample - total coli / fecal

Date: Time:

Location Carbon Canyon Creek - Upstream of Sleepy Hollow
[illegible] NE of [illegible] in Carbon Canyon [illegible]
.2 miles NE of Canyon Hills Road

Legal location:

Sample #: 5

Sampled by: MAG

Weather:

Air Temp:

Water Temp:

Water Appearance:

Flow: w = 2.7' d = 0.3 v = 10 / 15 sec.
0.539 cfs

Resample: Total Coli / Fecal Coli

Date: 3-11-95 Time: 1045

Location [illegible] - Golf Course Chem the ornamental [illegible]
[illegible] miles NE of Valencia on Cajon [illegible] (Hwy 42)

Legal location:

Sample #: 6

Sampled by: NAD

Weather: Cool and Cloudy

Air Temp: ~65°F

Water Temp: 17°C

Water Appearance: Clear

Flow: less than 0.5 cfs

Copy sent to State 3/27/85

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

MAR 15 1985

TO Regional Water Quality Control Board #8
6809 Indiana Ave.
Riverside, CA 92506

Lab No. 850311-0139
Invoice No. 40607

	Submitted	Sampled
By		
Date	3-8	
Time	1140	
Time Started	3:10	

NOTE: Sampled on 3-11-85 not 3-8-85 as listed on form

Sample Mark	Standard Plate Count	ml Planted	Coliform Bacteria: Presumptive 24						Presumptive 48	Confirmed 24						Confirmed 48	Tubes +	MPN/100 ml	Fecal 24						Fecal 48	Tubes +	MPN/100 ml
1. Carbon Canyon Cr. [illegible] Park		1.0	+	+	+	+	+	+		+	+	+	+	+	−		4	34	+	+	−	−	−			2	9
		0.1	+	+	+	+	+	+		+	−	+	+	+	−	−	3		+	−	−	−	−			1	
		0.01	−	−	−	+	−	−	+	−	−	−	+	−	−	+	2		−		−	+	−			1	
2. Carbon Canyon creek downstream La Vida Mineral Springs/Restaurant		1.0	+	+	+	+	+	+		+	+	+	+	+	+		5	300	+	+	+	−	−			3	8
		0.1	+	+	+	+	+	+		−	+	−	−	−	+	+	5		−	−	−	−	−			0	
		0.01	−	−	−	−	−	−				−	−	−	−		1				−	−	−			0	
3. Carbon Canyon creek upstream from La Vida Health Springs		40	+	+	+	+	+	+		−	−	−	+	−	−	+	3	11	−	−	−	−	+			1	2
		0.1	+	+	+	+	+	+		−	−	−	−	−	−	+	1		−	−	−	−	−			0	
		0.01	−	−	−	−	−	−			−						0			−						0	

cc: 2

SAWPA DES
001004581

EDWARD S. BABCOCK & SONS, INC.

Sherman Babcock

CALLED

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

MAR 15 1985

TO Regional Water Quality Control Board #8
6809 Indiana Ave.
Riverside, CA 92506

Lab No. 850311-B139
Invoice No. 40607

	Submitted	Sampled
By		
Date	3-8	
Time	11:40	
Time Started	3:40 pm	

NOTE: Sampled on 3-11-85 not 3-8 as listed on form

Sample Mark	Standard Plate Count	Coliform Bacteria: ml Planted	Presumptive	Confirmed	Tubes +	MPN/100 ml	Fecal	Tubes +	MPN/10
4 Carbon Canyon Creek - Rosemary Stone		1.0	24 + + + + + / 48	24 + + + + + / 48	5	170	24 + + + + +	5	80
		0.1	24 + + + + + / 48	24 + − + + − / 48 + −	4		24 − + + + −	3	
		0.01	24 + + − + + / 48 −	24 − − − − − / 48 − + − − −	1		24 − − − −	0	
			24 / 48	24 / 48			24		
5 upstream Sleepy hollow		1.0	24 + + + + + / 48	24 − + − − − / 48 − − − −	1	2	24 − − − − −	0	<2
.2 mi. NE of Canyon Hills Road)		0.1	24 − − − − − / 48 + + + + +	24 − − − − − / 48 − − − − −	0		24 − − − − −	0	
		0.01	24 − − − − − / 48 + + + + +	24 − − − − − / 48 − − − − −	0		24 − − − − −	0	
Carbon Canyon Creek			24 / 48	24 / 48			24		
6 Golf Course		1.0	24 + + + + + / 48	24 + + + + + / 48	5	170	24 − + + + +	4	13
		0.1	24 + + + + + / 48	24 − − − − − / 48 + + + − +	4		24 − − − − −	0	
		0.01	24 − − − − + / 48 + + + +	24 − − − − − / 48 − − + − −	1		24 − − − − −	0	
			24 / 48	24 / 48			24		

cc: 2

SAWPA DES
001004582

EDWARD S. BABCOCK & SONS, INC.

Sherman Babcock

CALLED

Carbon Canyon Creek

Date: 2/27/85

Tests: MBAS

Minerals- general

Total Coli / Fecal Coli

Sample Stations:

1. Carbon Canyon Regional Park
(One mile NE of Valencia on Carbon Canyon Road (Hwy 142

2. Downstream from La Vida Mineral Springs
At road crossing - 3.3 miles NE of Valencia on Carbon Canyon Road (Hwy 142)

3. Upstream from La Vida Mineral Springs
3.6 miles NE of Valencia on Carbon Canyon Road (Hwy 142)

4. Rosemary Lane - Sleepy Hollow
4.7 miles NE of Valencia on Carbon Canyon Road (Hwy 142)

Carbon Canyon Creek - Continued:

5. Upstream of Sleepy Hollow
5.6 miles NE of Valencia on Carbon Canyon Road (Hwy. 142)
(.2 mi. of Canyon Hills Road)

6. Carbon Canyon Creek Golf Course - Upstream of Ornamental lake
6.2 miles NE of Valencia on Carbon Canyon Road (Hwy. 142)

Date: 2-27-85 Time: 1100 Hours

Location Carbon Canyon Regional Park
One mile east of Valencia on Carbon Canyon Road
(Hwy. 142)

Legal location:

Sample #: 1

Sampled by: JES/NAO

Weather: Slight Overcast

Air Temp: 70° F (estimated)

Water Temp: 15°C

Water Appearance: Clear

Flow: 1CFS (estimated)

Date: 2-27-85 Time: 1125 Hours

Location Downstream of La Vida Mineral Springs/Restaurant
(at road crossing)
3.3 miles NE of Valencia on Carbon Canyon Road (Hwy. 142)

Legal location:

Sample #: #2

Sampled by: JES/NAO

Weather: Slightly Overcast

Air Temp: ~ 70° F

Water Temp: 19° C

Water Appearance: Lightly turbid

Flow: 0.75 cfs

(w = 3' d = 0.2' v = 10'/8 sec)

Date: 2-27-85 Time: 1200 Hours

Location Carbon Canyon Creek - Upstream from La Vida Mineral Springs - 3.6 miles NE of Valencia on Carbon Canyon Road (Hwy. 142)

Legal location:

Sample #: # 3

Sampled by: JES/NAO

Weather: Slightly overcast/warm

Air Temp: 70° F - estimated

Water Temp: 16°C

Water Appearance: Clear

Flow: .525 cfs

(w = 3.5' d = .15 v = 5'/5 sec.)

Date: 2-27-85 Time: 1300 Hours

Location Carbon Canyon Creek - Rosemary Lane (Sleepy Hollow)

4.7 miles NE of Valencia on Carbon Canyon Road (Hwy. 142)

Legal location:

Sample #: #4

Sampled by: JES/NAO

Weather: Clear and warm

Air Temp: ~75°F

Water Temp: 17°C

Water Appearance: Clear

Flow: .773 cfs

(w = 2.9' d = .2 v = 10'/7.5 sec.)

Date: 2-27-85 Time: 1330 Hours

Location Carbon Canyon Creek - Upstream of Sleepy Hollow
5.6 miles NE of Valencia on Carbon Canyon Road (Hwy. 14)
.2 miles NE of Canyon Hills Road

Legal location:

Sample #: #5

Sampled by: JES/NAO

Weather: Clear & warm

Air Temp: ~75°F

Water Temp: 18°C

Water Appearance: Clear; algal growth on bottom

Flow: .509 cfs

(d = 0.2' w = 2.8' v = 10'/11 sec.)

Date: 2-27-85 Time: 1350

Location Carbon Canyon Creek - Golf Course (near the ornamental lake)
6.2 miles NE of Valencia on Carbon Canyon Rd. (Hwy. 142)

Legal location:

Sample #: #6

Sampled by: JES / NAO

Weather: Clear & Warm

Air Temp: ~75°F

Water Temp: 18°C

Water Appearance: Clear

Flow: Less than 0.5 cfs

Copy sent to Storz

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502

MAR 18 1985

3/15/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850227-281
Invoice No. 40280

#1

Sample Marked: Carbon Canyon Creek at Regional Park

	Submitted	Sampled
By	Joanne	NAG
Date	2/27	2/27
Time	3:00	

PARAMETER	RESULT	
Total Hardness as $CaCO_3$	604	mg/L
Calcium (Ca)	128	mg/L
Magnesium (Mg)	68	mg/L
Sodium (Na)	212	mg/L
Potassium (K)	6	mg/L
Ammonium (NH_4)	1.2	mg/L
Total Cations	21.51	me/L
Total Alkalinity as $CaCO_3$	270	mg/L
Hydroxide (OH)	None	mg/L
Carbonate (CO_3)	None	mg/L
Bicarbonate (HCO_3)	329	mg/L
Sulfate (SO_4)	540	mg/L
Chloride (Cl)	146	mg/L
Nitrate (NO_3)	5	mg/L
Total Anions	20.83	me/L

PARAMETER	RESULT	
Specific Conductance	1960	umho/cm
pH	7.7	
Total Filterable Residue	1310	mg/L
Carbon Dioxide	10	mg/L
Silica (SiO_2)	14	mg/L
Phosphate (PO_4)	0.3	mg/L
Boron (B)	0.5	mg/L
Fluoride (F)	0.4	mg/L
Iron (Fe)	1.5	mg/L
MBAS	0.1	mg/L

Flow	~1CFS
Temperature	18°C
Time	1100 hours

SAWPA DES
001004583

EDWARD S. BABCOCK & SONS, INC.

Norman Babcock

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502

3/15/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850227-278
Invoice No. 40280

	Submitted	Sampled
Sample Marked: #2 Carbon Canyon Creek at Downstream of LaVida Health Club	By Joanne	NAG
	Date 2/27	2/27
	Time 3:00	

PARAMETER	RESULT		PARAMETER	RESULT	
Total Hardness as $CaCO_3$	650	mg/L	Specific Conductance	2940	umho/cm
Calcium (Ca)	110	mg/L	pH	7.7	
Magnesium (Mg)	90	mg/L	Total Filterable Residue	1840	mg/L
Sodium (Na)	455	mg/L	Carbon Dioxide	20	mg/L
Potassium (K)	5	mg/L	Silica (SiO_2)	21	mg/L
Ammonium (NH_4)	1.7	mg/L	Phosphate (PO_4)	<0.1	mg/L
Total Cations	33.00	me/L	Boron (B)	1.2	mg/L
Total Alkalinity as $CaCO_3$	650	mg/L	Fluoride (F)	0.7	mg/L
Hydroxide (OH)	None	mg/L	Iron (Fe)	0.15	mg/L
Carbonate (CO_3)	None	mg/L	MBAS	0.1	mg/L
Bicarbonate (HCO_3)	793	mg/L			
Sulfate (SO_4)	475	mg/L			
Chloride (Cl)	321	mg/L			
Nitrate (NO_3)	13	mg/L			
Total Anions	32.15	me/L			

Flow 0.75 cfs
Temperature 19° C
Time 1125 hours

SAWPA DES
001004584

EDWARD S. BABCOCK & SONS, INC.
Norman S. Babcock

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CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502

MAR 1 8 1985

3/15/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850227-279
Invoice No. 40280

	Submitted	Sampled
Sample Marked: #3 Carbon Canyon Creek Upstream from LaVida Health Club	By Joanne	NAG
	Date 2/27	2/27
	Time 3:00	

PARAMETER	RESULT	
Total Hardness as $CaCO_3$	838	mg/L
Calcium (Ca)	160	mg/L
Magnesium (Mg)	105	mg/L
Sodium (Na)	166	mg/L
Potassium (K)	4	mg/L
Ammonium (NH_4)	<1	mg/L
Total Cations	24.57	me/L
Total Alkalinity as $CaCO_3$	350	mg/L
Hydroxide (OH)	None	mg/L
Carbonate (CO_3)	None	mg/L
Bicarbonate (HCO_3)	427	mg/L
Sulfate (SO_4)	560	mg/L
Chloride (Cl)	204	mg/L
Nitrate (NO_3)	13	mg/L
Total Anions	24.63	me/L

PARAMETER	RESULT	
Specific Conductance	2130	umho/cm
Total Filterable Residue	1500	mg/L
pH	8.0	
Carbon Dioxide	6	mg/L
Silica (SiO_2)	22	mg/L
Phosphate (PO_4)	<0.1	mg/L
Boron (B)	0.3	mg/L
Fluoride (F)	0.5	mg/L
Iron (Fe)	0.03	mg/L
MBAS	<0.1	mg/L

Flow .525 cfs
Temperature 16 °C
Time 1200 hours

SAWPA DES
001004585

EDWARD S. BABCOCK & SONS, INC.

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502

3/15/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850227-280
Invoice No. 40280

	Submitted	Sampled
Sample Marked: #4 Carbon Canyon Creek Rosemary Ln (Sleepy Hollow)	By Joanne	NAG
	Date 2/27	2/27
	Time 3:00	

PARAMETER	RESULT		PARAMETER	RESULT	
Total Hardness as $CaCO_3$	834	mg/L	Specific Conductance	2070	umho/cm
Calcium (Ca)	175	mg/L	pH	8.0	
Magnesium (Mg)	97	mg/L	Total Filterable Residue	1400	mg/L
Sodium (Na)	131	mg/L	Carbon Dioxide	6	mg/L
Potassium (K)	3	mg/L	Silica (SiO_2)	30	mg/L
Ammonium (NH_4)	1	mg/L	Phosphate (PO_4)	0.3	mg/L
Total Cations	22.51	me/L	Boron (B)	0.4	mg/L
Total Alkalinity as $CaCO_3$	388	mg/L	Fluoride (F)	0.4	mg/L
Hydroxide (OH)	None	mg/L	Iron (Fe)	0.41	mg/L
Carbonate (CO_3)	None	mg/L	MBAS	<0.1	mg/L
Bicarbonate (HCO_3)	473	mg/L			
Sulfate (SO_4)	470	mg/L			
Chloride (Cl)	179	mg/L			
Nitrate (NO_3)	21	mg/L			
Total Anions	22.94	me/L			

Flow .773 cfs
Temperature 17 °C
Time 1300 Hours

SAWPA DES
001004586

EDWARD S. BABCOCK & SONS, INC.

Norman Babcock

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502

MAR 18 1985

3/15/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850227-277
Invoice No. 40280

	Submitted	Sampled
By	Joanne	NAG
Date	2/27	2/27
Time	3:00	

Sample Marked: #5 Carbon Canyon Creek
Upstream of Sleepy Hollow

PARAMETER	RESULT	
Total Hardness as $CaCO_3$	1000	mg/L
Calcium (Ca)	250	mg/L
Magnesium (Mg)	90	mg/L
Sodium (Na)	128	mg/L
Potassium (K)	2	mg/L
Ammonium (NH_4)	2	mg/L
Total Cations	25.73	me/L
Total Alkalinity as $CaCO_3$	448	mg/L
Hydroxide (OH)	None	mg/L
Carbonate (CO_3)	15	mg/L
Bicarbonate (HCO_3)	515	mg/L
Sulfate (SO_4)	470	mg/L
Chloride (Cl)	181	mg/L
Nitrate (NO_3)	19	mg/L
Total Anions	24.14	me/L

PARAMETER	RESULT	
Specific Conductance	2070	umho/cm
pH	7.8	
Total Filterable Residue	1480	mg/L
Carbon Dioxide	10	mg/L
Silica (SiO_2)	34	mg/L
Phosphate (PO_4)	0.6	mg/L
Boron (B)	0.3	mg/L
Fluoride (F)	0.4	mg/L
Iron (Fe)	0.14	mg/L
MBAS	0.1	mg/L

Flow .509 cfs
Temperature 18 °C
Hours 1330 Hours

SAWPA DES
001004587

EDWARD S. BABCOCK & SONS, INC.

Sherman Babcock

AGRICULTURAL CONSULTANTS
CHEMISTS
APPROVED WATER LABORATORY

PHONE 684-1881
AREA CODE 714

LABORATORIES
3215 CHICAGO AVE.

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P.O. BOX 432
RIVERSIDE, CALIFORNIA 92502

3/15/85

To: Regional Water Quality Control Board #8
6809 Indiana Avenue, Suite 200
Riverside, CA 92506

Lab No. 850227-282
Invoice No. 40280

	Submitted	Sampled
By	Joanne	NAG
Date	2/27	2/27
Time	3:00	0

Sample Marked: #6 Carbon Canyon Creek
at golf course

PARAMETER	RESULT		PARAMETER	RESULT	
Total Hardness as $CaCO_3$	592	mg/L	Specific Conductance	1310	umho/cm
Calcium (Ca)	160	mg/L	pH	7.5	
Magnesium (Mg)	46	mg/L	Total Filterable Residue	870	mg/L
Sodium (Na)	65	mg/L	Carbon Dioxide	17	mg/L
Potassium (K)	2	mg/L	Silica (SiO_2)	41	mg/L
Ammonium (NH_4)	1.4	mg/L	Phosphate (PO_4)	0.5	mg/L
Total Cations	14.79	me/L	Boron (B)	0.1	mg/L
Total Alkalinity as $CaCO_3$	325	mg/L	Fluoride (F)	0.4	mg/L
Hydroxide (OH)	None	mg/L	Iron (Fe)	0.30	mg/L
Carbonate (CO_3)	None	mg/L	MBAS	0.1	mg/L
Bicarbonate (HCO_3)	397	mg/L			
Sulfate (SO_4)	260	mg/L			
Chloride (Cl)	96	mg/L			
Nitrate (NO_3)	22	mg/L			
Total Anions	14.98	me/L			

Flow <0.5 cfs
Temperature 18°C
Time 1350 hours

SAWPA DES
001004588

EDWARD S. BABCOCK & SONS, INC.
Sherman Babcock

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

ESTABLISHED 1906

EDWARD S. BABCOCK & SONS, INC.

P. O. BOX 432
RIVERSIDE, CALIFORNIA 92502

Resampled

This is incorrect into - Tested it as drinking water instead of surface water.

MAR 1 1985

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
MAR - 4 1985
SANTA ANA

NOTE

TO Regional Water Quality Control Board #8
6809 Indiana Avenue Suite 200
Riverside, CA 92506

Lab No. 850227-1530
Invoice No. 40281

	Submitted	Sampled
By	Joanne	
Date	2-27	2-27
Time	3:00	

Time Started 3:30 pm

Sample Mark	Standard Plate Count	Coliform Bacteria: ml Planted	Presumptive	Confirmed	Tubes +	MPN/100 ml	Fecal	Tubes +	MPN/100
Carbon Canyon Regional Park	75700	10	24 + + + + + / 48	24 + + + + + / 48	5	>16	24 + + + + +	5	>16
Downstream La Via Health Club	75700	10	24 + + + + + / 48	24 + + + + + / 48	5	>16	24 + + + + +	5	>16
Carbon Cyn Cr. upstream of La Vida	75700	10	24 + + + + + / 48	24 + + + + + / 48	5	>16	24 + + + + +	5	>16
Carbon Cyn Cr. at Rosemary Ln.	75700	10	24 + + + + + / 48	24 + + + + + / 48	5	>16	24 + + + + +	5	>16
Carbon Canyon Cr. upstream of Sleepy Hollow	75700	10	24 + + + + + / 48	24 + + + + + / 48	5	>16	24 + + + + +	5	>16
Carbon Canyon Cr. at Golf Course	75700	10	24 + + + + + / 48	24 + + + + + / 48	5	>16	24 + + + + +	5	>16
			24 / 48	24 / 48			24		
			24 / 48	24 / 48			24		
			24 / 48	24 / 48			24		
			24 / 48	24 / 48			24		
			24 / 48	24 / 48			24		
			24 / 48	24 / 48			24		

SAWPA DES
001004589

EDWARD S. BABCOCK & SONS, INC.

Sherman Babcock

CALLED

1992

ALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
NTA ANA REGION
09 INDIANA AVENUE, SUITE 200
VERSIDE, CALIFORNIA 92506
IONE: (714) 684-9330

June 27, 1983

Mr. Ron Campbell
General Manager
Elsinore Valley Municipal Water District
33751 Mission Trail Lane
Elsinore, CA 92330

Dear Mr. Campbell:

Proposed Discharge Limitations for
Regional Wastewater Treatment Facility

On May 13, 1983 the Regional Board adopted an updated Water Quality Control Plan for the Santa Ana River Basin. This Plan must now be approved by the State Water Resources Control Board and the Environmental Protection Agency. However, we do not expect any significant changes to result from their review.

The new Plan will require some minor changes in waste discharge requirements for the proposed regional system. In order to be consistent with the new Plan, and to insure that our proposed requirements are clear and known to all interested parties, we are providing the following information.

We have provided tentative requirements for the first three wastewater discharge alternatives recommended by your Blue Ribbon Advisory Committee, as well as for discharge to Lake Elsinore, to Temescal Wash within the Santa Ana Watershed, and to the San Jacinto River, even though these last three alternatives may not be among those now being seriously considered. This letter will supercede our previous letters of September 25, 1979, December 5, 1980 and May 14, 1981 on this subject.

The proposed waste discharge requirements (or NPDES permit values) listed below are subject to change after agency review and public hearing and are only official when adopted by the Regional Board, but they represent the staff's current recommendations.

Assumption 1 - Discharge of Effluent to Percolation Ponds located at Scales Way and Grand Avenue Site Near Lakeland Village.

This is considered a discharge to the Elsinore Ground Water Basin.

Proposed Waste Discharge Requirements

I.	Total Filtrable Residue	700 mg/l
	Total Hardness	290 mg/l
	Sodium	120 mg/l
	Chloride	125 mg/l
	Sulfate	100 mg/l
	Ammonia Nitrogen	14 mg/l
	Increment for TFR	250 mg/l

II. Unless additional land is acquired, or reclamation uses found the total amount of effluent discharged into percolation ponds should be limited to 1 MGD.

The discharge of waste shall not cause a nuisance, or shall there be any discharge to the Lake.

Assumption 2 - Discharge of Effluent to Percolation Ponds located (a) near Nichols Road (east of freeway); (b) near Nichols Road (west of freeway); (c) Alberhill area.

This is considered a discharge to the watershed of Lee Lake Subbasin.

Proposed Waste Discharge Requirements:

I.	Total Filtrable Residue	750 mg/l
	Total Hardness	330 mg/l
	Sodium	150 mg/l
	Chloride	150 mg/l
	Sulfate	150 mg/l
	Ammonia Nitrogen	14 mg/l
	Increment for TFR	250 mg/l

II. Effluent must be kept underground (if effluent rises and flows off of property controlled by discharger requirement similar to discharge to Temescal Wash must be met).

Assumption 3 - Discharge of Effluent to Percolation Ponds in McVicker Canyon.

This is considered a discharge to the Elsinore Ground Water Basin.

Proposed Waste Discharge Requirements

I.	Total Filtrable Residue	700 mg/l
	Total Hardness	290 mg/l
	Sodium	120 mg/l
	Chloride	125 mg/l
	Sulfate	100 mg/l
	Ammonia Nitrogen	14 mg/l
	Increment for TFR	250 mg/l

II. The amount of effluent discharged may be limited to assimilating capacity of basin for Total Filtrable Residue and Nitrate.

Assumption 4 - Direct Discharge of Effluent to Lake Elsinore.

This is considered a discharge to the lake at a point in the lake below elevation of 1250 feet. (No recharge of effluent to Elsinore Ground Water Basin).

Proposed NPDES Permit

I. The effluent must comply with Section 60315, Non-restricted Recreational Impoundment of Title 22 of California Administrative Code, (tertiary treatment).

II.	BOD	20 mg/l
	Suspended Solids	20 mg/l
	Total Nitrogen	1.5 mg/l
	Total Phosphorus	0.5 mg/l
	Total Filtrable Residue	850 mg/l
	Total Coliform	2.2/100 mg/l
	Turbidity	2 turbidity units

Assumption 5 - Discharge to Temescal Wash within the Santa Ana Watershed.

This is considered a discharge to the Santa Ana River, Reach 3. (Temescal Wash downstream from a point about 1/4 miles past the City of Lake Elsinore).

Proposed NPDES Permit

I.a. Direct discharge - the effluent must comply with Section 60315. Non-restricted Recreational Impoundments of Title 22 of California Administrative Code (tertiary treatment).

I.b. Indirect discharge - the effluent must have been kept underground for a sufficient period of time and distance to insure removal of all bacteria and viruses.

II.	Total Filtrable Residue	700 mg/l
	Total Hardness	330 mg/l
	Sodium	170 mg/l
	Chloride	165 mg/l
	Sulfate	180 mg/l
	Ammonia-Nitrogen	14 mg/l
	BOD	20 mg/l
	Suspended Solids	20 mg/l
	Turbidity	2 Turbidity units
	Coliform	2.2/100 mg/l

Assumption 6 - Discharge to the San Jacinto River Direct

This is considered a direct discharge to San Jacinto River, Lake Elsinore, and Elsinore Ground Water Basin.

Proposed NPDES Permit

1. The effluent must comply with Section 60315, Non-Restricted Recreational Impoundments of Title 22 of California Administrative Code (tertiary treatment).

II.	Total Filtrable Residue	700 mg/l
	Total Hardness	290 mg/l
	Sodium	120 mg/l
	Chloride	125 mg/l
	Total Nitrogen	1.5 mg/l
	Sulfate	100 mg/l
	BOD	20 mg/l
	Suspended Solids	20 mg/l
	Total Phosphate	0.5 mg/l
	Turbidity	2 Turbidity units
	Coliform	2.2/100 mg/l

Sincerely,

JAMES W. ANDERSON
Executive Officer

cc: John Grantham, James Montgomery Engineers - Pasadena

RRN:kyb