WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

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JAMES F. STAHL
Chief Engineer and General Manager

MAR 2 8 2003

File No: 20-04.01-55

Mr. Harold J. Singer, Executive Officer
California Regional Water Quality Control Board
Lahontan Region - Victorville Branch
15428 Civic Drive, Suite 100
Victorville, CA 92392-2359

Dear Mr. Singer:

Palmdale Water Reclamation Plant
WQCB Order No. and 6-00-57
Monitoring and Reporting Program No. 00-57
WDID No. 6B190107069
Annual Monitoring Report 2002

Enclosed please find the 2002 Annual Monitoring Report for the Palmdale Water Reclamation Plant. This report provides a concise summary of monitoring data and events which occurred during 2002.

Very truly yours,

James F. Stahl

Raymond Tremblay
Supervising Engineer,
Monitoring Section

RT:NM:ras
Enclosure

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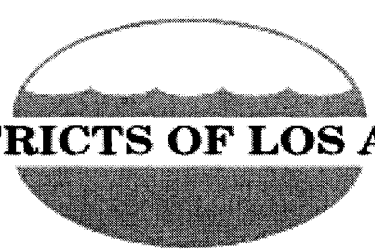
PALMDALE WATER RECLAMATION PLANT

ANNUAL MONITORING REPORT

2002

RWQCB ORDER NO. 6-00-57
MONITORING & REPORTING PROGRAM NO. 00-57



SANITATION DISTRICTS OF LOS ANGELES COUNTY

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

Copies of this report have been sent to:

USEPA
Region IX
75 Hawthorne Street
San Francisco, CA 94105

California State Department of Health Services
Attn: Ms. Vera Melnyk Vecchio, District Engineer
Drinking Water Field Operations Branch
1449 West Temple Street, Suite 202
Los Angeles, CA 90026

County of Los Angeles Department of Health Services
Attn: Mr. Richard Wagener, Acting Bureau Director of Environmental Protection
2525 Corporate Place, Room 150
Monterey Park, CA 91754

L.A. County Dept. of Public Works
Attn: Mr. Rod Kubomoto
Waste Management Division, 7th Floor
P. O. Box 1460
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Mr. Lewis Trout
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Los Angeles World Airports
Environmental Management Division
7301 World Way West
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The Tree Mover
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Antelope Valley Products
Mr. Jack Fortner & Mr. James L. Harris
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Alta Loma, CA 91701

Harrington Farms
Mr. Lee Harrington
3380 Highway 33
Maricopa, CA 93252

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

Antelope Valley Farming, LCC
Mr. Craig Van Dam
9753 East Avenue F-8
Lancaster, CA 93535

For additional information on this report or this treatment plant, the following individuals can be contacted:

Nikos Melitas	(562) 699-7411, ext. 2837
Ray Tremblay	(562) 699-7411, ext. 2803

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

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PALMDALE WATER RECLAMATION PLANT

CHAPTER 1

PERMIT COMPLIANCE AND RECLAIMED WATER USE REPORT

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

CHAPTER 1

PERMIT COMPLIANCE AND RECLAIMED WATER USE REPORT

1.1 INTRODUCTION

This report contains the annual report for the Waste Discharge Permit held by the Palmdale Water Reclamation Plant (WRP) for the year 2002.

1.2 PERMIT REQUIREMENTS

Waste Discharge and Monitoring and Reporting Requirements

1. The waste discharge requirements for the Palmdale WRP from the California Regional Water Quality Control Board, Lahontan Region (RWQCB) is Board Order No. 6-00-57, which was adopted on June 14, 2000 by the RWQCB.

2. The monitoring and reporting requirements for the Palmdale WRP is the Revised Monitoring and Reporting Program No. 00-57, as revised on June 14, 2000 by the RWQCB.

This report satisfies the annual reporting requirements under Board Order Nos. 6-93-18 and 6-00-57, and Monitoring and Reporting Program No 6-00-57.

Compliance Discussion

The waste discharge requirements adopted on June 14, 2000 include over 9,000 numeric limitations that must be met each year based on quantitative results of final effluent and receiving water sampling and analysis. During 2002, the Palmdale WRP met these limits with greater than 99 percent success.

Average and Daily BOD_5

On November 13, the soluble BOD_5 in the effluent from ponds 4-7 exceeded the maximum daily limit of 45 mg/l with a value of >48 mg/l. The exact soluble BOD_5 concentration could not be determined due to an error in laboratory analysis. A make-up of the November 13 sample was taken on November 21 and had a BOD_5 level of 40 mg/l. In November, the 30-day average limit of 30 mg/L for secondary effluent soluble BOD_5 was also exceeded with a value of >38 mg/L in the effluent from ponds 4-7. An accurate 30-day average level could not be determined due to the inaccuracy (>48 mg/l) of the sample taken on November 13. A discussion of these exceedances was inadvertently omitted in the November monthly report. The most probable cause of the BOD_5 exceedances was the presence of nitrifying bacteria in the samples. As a result of significant populations of nitrifying bacteria in the secondary effluent, higher BOD_5 values are generated due to the production of nitrogenous BOD_5 (from the oxidation of ammonia to nitrate). Analysis of the November data from Palmdale WRP showed soluble carbonaceous BOD values below 3 mg/l in all weekly samples. This demonstrates that most of the BOD_5 demand was due to nitrification.

Effluent pH

The pH of the effluent from ponds 2 and 3 exceeded the upper limit of 9.0, specified in Effluent Limitation I.A.3, in July (pH of 9.9 in one of the five collected samples), September (pH values of 9.1, 9.2, 9.7, 9.5 in four weekly samples), October (pH values of 9.7, 9.8, 9.9, 9.4, 9.7 in five weekly samples), and November (pH values of 9.1, 9.3, 9.5, 9.3 in four weekly samples). These incidents were the result of biological activity in the oxidation ponds. The ponds were designed to be facultative (typical pH range: 6.0-9.0). Often, the ponds tend to become more aerobic during high wind episodes and spring and fall pond overturn periods resulting in higher pH levels.

Monitoring and Reporting Discussion

Effluent BOD_5

On July 16, soluble BOD_5 and soluble carbonaceous BOD_5 concentrations in the weekly effluent sample from ponds 4-7 could not be determined precisely due to problems in the laboratory analysis. Only estimates of <120 mg/L for the total soluble BOD_5, and >14 mg/L for the soluble carbonaceous BOD_5 (soluble CBOD) were provided. Due to this uncertainty, compliance with the monthly average and maximum daily BOD_5 limits of 30mg/L and 45 mg/L, respectively, cannot be determined. This was a laboratory error and there is no reason to believe that there was a BOD_5 exceedance due to the plant's operation. On July 16, the plant was functioning normally as indicated by the below the monthly average influent flow, and a typical effluent soluble COD level (74 mg/l).

Groundwater Monitoring

During 2002 monitoring wells MW20-25 were installed and monitoring well MW3 was destroyed (see Table 1.1) at the Palmdale site, in accordance with the Districts' Corrective Action Plan, which was approved by the RWQCB on March 30, 2001. Although construction of wells, MW23 and MW24, was completed in 2002, permanent pumps were not installed in these wells, thus monitoring samples collected from these two wells in the last quarter (December) of 2002 were obtained using temporary pumps. Locations of the monitoring wells, constructed in 2002 are shown in Figure 2.1. Table 1.1 summarizes the monitoring wells that were destroyed in 2002, the existing wells which remain in service, and the newly constructed wells. Also shown in Table 1.1 and Figure 2.1 are the wells that have been constructed in the first quarter of 2003.

Table 1.1 Wells Destroyed in 2002, Wells Remaining in 2002, and Newly Constructed Wells in 2002/2003 at Palmdale WRP Effluent Application Area.

Wells destroyed in 2002	Wells remaining in service	Wells constructed in 2002	Wells constructed in first quarter of 2003
MW3	MW1, MW2, MW4, MW15-19	MW20-25	MW26-29

The annual average nitrate level at MW4 increased from 8.62 mg/l in 2001 to 9.72 mg/l in 2002. In January, July, and November 2002, monitoring well MW4 indicated nitrate concentrations of 9.65, 10.3, and 9.2 mg/l respectively. The 2002 average nitrate concentration of 9.72 mg/l, approaches the Maximum Contaminant Level for drinking water of 10 mg/l (reference Title 22 of the California Code of Regulations). MW4 is located down gradient of a commercial sod production and is also located (down gradient) of the Districts' effluent application site. The

findings presented in the Districts 1999 report entitled "Preliminary Groundwater Quality Assessment Report for the Palmdale Water Reclamation Plant" (Groundwater Report), indicate that well MW4 is influenced by nearby/adjacent commercial agricultural operations. A groundwater investigation is currently being undertaken (work associated with groundwater degradation analysis) to determine if and to what extent the Districts' land application operations impact water quality at the MW4 location. In 2002, the average TDS level at MW4 was 657 mg/l, which is similar to the 2001 average concentration (660 mg/l).

In January 2002, monitoring well MW18 indicated a concentration of 10.1 mg/l; however, the concentration decreased to 5.9 and 5.3 mg/l in October and November 2002 respectively. In the Districts' 1999 Groundwater Report, it was concluded that the impacts on groundwater observed at MW18 were attributed to the overlying commercial farming activity and was likely the result of crop fertilization practices. This commercial farming operation ceased in October 2002.

Historical nitrate and TDS concentrations at monitoring wells MW1-4, and MW15-19, are shown in Appendix A.

Supply well SW10 was sampled twice in October 2002 with an average nitrate concentration of 11.9 mg/l, which is above the drinking water Maximum Contaminant Level of 10 mg/l. Early in October 2002 the nitrate concentration at SW10 was 9.73 mg/l while later in the month the concentration increased to 14 mg/l. The TDS concentration also increased from 626 mg/l early in October to 840 mg/l later in the month. SW10 is used as an alternate irrigation supply well for commercial production sod irrigation. SW10 is not used often because of the high sand content in the water. The presence of sand in SW10 water and the significant historical fluctuations in the well's water quality indicate that the well may be compromised. Fluctuations in nitrate concentration at SW10 since 1996, when the well was installed, are shown in Figure 1.1. In 2000, the nitrate levels at SW10 were below 5 mg/l. SW10 was not sampled in 2001 because it was not found in operation. Large swings in nitrate over short periods of time, as shown in Figure 1.1, are not typical of groundwater behavior and may be a result of well failure. Nitrate levels in SW10 may be attributed to fertilizers applied at the adjacent sod farm, short circuiting in the well, or Districts effluent application practices, or a combination of thereof. The relative contribution of each source is not known. The Districts 1999 Groundwater Report indicates that effluent application practices may have an impact on groundwater quality at SW10. As previously mentioned, the Districts are currently performing an investigation to characterize the groundwater condition around the Palmdale effluent application area (groundwater degradation study) and will attempt to identify the source(s) contributing to nitrate levels at SW10. The Districts also plan to work with LAWA and with the agricultural operator (A-G Sod Farms, Inc.) to check the integrity of the SW10 casing and implement corrective action if necessary. To date the Districts have not inspected SW10 because it is an active well belonging to A-G Sod Farms, Inc. and inspection would require removal of the well head and pump.

Supply wells, SW7, SW13, SW14, and SWE were not sampled in 2002. Districts staff made several attempts during 2002 to sample SW7 and SW13 but the wells were not found to be in operation at those times. Supply wells SW14 and SWE were not in service in 2002. Similarly, supply wells SW1, SW5, and SWH2 were sampled only once during 2002 (semiannual sampling is required). The Districts made several attempts to collect a second sample during 2002 but during those attempts the wells were not operating. Table 1.2 summarizes the sampling and operating status of the supply wells in 2002.

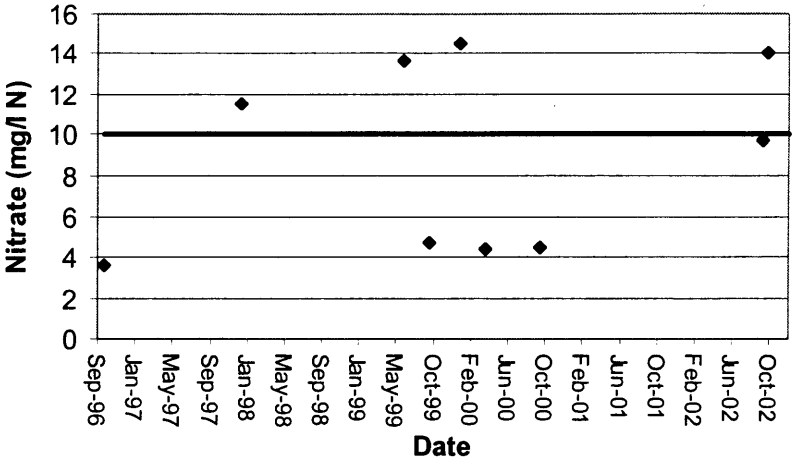


Figure 1.1 Fluctuations in nitrate concentrations at supply well SW10.

Table 1.2 Supply Well Sampling and Operating Conditions in 2002

Well	1st Semiannual Sampling Event	2nd Semiannual Sampling Event
SW1	In service / Sampled	In service periodically / Not found in operation
SW2	In service / Sampled	In service / Sampled
SW5	In service / Sampled	In service periodically / Not found in operation
SW7	In service periodically after July 2002 / Not found in operation	In service periodically after July 2002 / Not found in operation
SW8	In service / Sampled	In service / Sampled
SW9	In service / Sampled	In service / Sampled
SW10	In service periodically / Sampled twice in October	In service periodically / Sampled twice in October
SW13	In service periodically until October 2002 / Not found in operation	In service periodically until October 2002 / Not found in operation
SW14	Out of service	Out of service
SWE	Out of service	Out of service
SWH2	Sampled	In service periodically / Not found in operation

The semiannual field parameters, pH, electrical conductivity, temperature and dissolved oxygen were not obtained in 2002, except at supply well SWH2. These parameters were not determined during sampling due to problems with the field measuring device. The field measuring device was repaired in late 2002. These parameters will be obtained in 2003 on a regular basis. The Districts have reviewed the requirement to take field measurements at each well with the laboratory staff, and arrangements have been made to use alternative means to measure field parameters in the event of a future malfunction of the field measuring device. Analysis of 2,3,7,8 TCDD for supply wells SW1 and SW8 was inadvertently missed in 2002. Future laboratory analysis at these wells will include 2,3,7,8 TCDD. Lysimeter samples were not analyzed for

sodium in 2002 but will be analyzed in the future. The Districts plan to conduct makeup sampling in 2003 for these missed parameters.

Lysimeters L1, L3, L4, L6, L8, and L16 were sampled during 2002. On many occasions, complete analysis of lysimeter samples was not possible due to the insufficient moisture, or no moisture, in the sample. Lysimeters L3, and L4 did not generate any moisture during the second half of the year, while lysimeter L13 did not generate any moisture during the whole year. Limited or no moisture in a lysimeter sample can be a result of dry soil or inability of the lysimeter to collect enough moisture due to its inability to maintain sufficient suction. As the previously mentioned in past reports, the Districts believe that lysimeters are inappropriate for measuring vadose zone water quality for this particular application.

Estimated groundwater flow direction at the sampled wells is shown in Figure 6-2. The groundwater flow direction depicted is based on limited data and may not provide an accurate representation of actual groundwater conditions. The Districts are currently working with a California Certified Hydrogeologist to develop more accurate groundwater flow diagrams, which will submitted to the RWQCB later in 2003.

Graphical summaries of historical groundwater nitrate and TDS levels are shown in Appendix A.

1.3 BIOSOLIDS MANAGEMENT

Approximately 2.65 MG of digested biosolids were conveyed to the drying beds during 2002. This quantity is equivalent to 453.7 dry tons of biosolids. It is estimated that approximately 388.5 tons of dried biosolids were added to the stockpile during 2002. Approximately 427 (38 from 2001) dry tons of biosolids were removed from the site during 2002 for off-site composting. Biosolids were hauled off site to San Joaquin Composting, Inc. in Kern County, California.

1.4 OPERATIONAL AND MAINTENANCE ACTIVITIES

Palmdale WRP operates on-site oxidation ponds. Pond 1 has been out of service for over 5 years due to a damaged effluent pipeline. Pond 1 will remain off-line (out of service) until the need for additional oxidation capacity arises in the future.

Ponds 4 and 5 are aerated, which permits pond BOD loadings in excess of 60 lbs/acre/day, while maintaining the remaining ponds below the BOD limit.

1.5 EFFLUENT REUSE

Reclaimed water for irrigation and disposal was delivered to the Los Angeles World Airports (LAWA) irrigation site during 2002. The irrigation/disposal areas are shown in Figure 2-1 (See Chapter 2).

The LAWA irrigation site is a 2,560 acre area located north and northeast of the Palmdale WRP. During the year, the Sanitation Districts entered into a lease with LAWA for the use of this land. Only a portion of this area is currently dedicated to agricultural irrigation. Reclaimed water that is not used for irrigation is discharged to other portions of the LAWA site for disposal. The areas used for irrigation and the responsible operators are:

Harrington Farms	-	24 acres for growing pistachio trees
Tree Mover, Inc.	-	40 acres for growing Christmas trees, gourds, and landscape plants
Antelope Valley Products	-	20 acres for growing chestnut trees
Antelope Valley Farms, LLC	-	320 acres for growing livestock fodder (alfalfa hay and oats)

In 2002, approximately 38.47 MG of reclaimed water were used by Harrington Farms, 83.06 MG by Tree Mover, and 58.69 MG by Antelope Valley Products. Also in 2002, two center-pivot irrigation systems were constructed and placed into operation by Antelope Valley Farming on land leased from LAWA by the Districts. Antelope Valley Farming began irrigating forage crops in March 2002. During 2002, Antelope Valley Farming used 519.03 MG for this purpose.

NAME AND ADDRESS OF USERS

The Tree Mover
Anthony P./Thomas A. Baal
P.O Box 2471
Lancaster, CA 93539-2471

Harrington Farms
Mr. Lee Harrington
3380 Highway 33
Maricopa, CA 93252

Antelope Valley Products
Mr. Jack Fortner & Mr. James L. Harris
8081 Sunflower Avenue
Alta Loma, CA 91701

Antelope Valley Farming, LCC
Mr. Craig Van Dam
9753 East Avenue F-8
Lancaster, CA 93535

TABLE 1-3
PALMDALE WATER RECLAMATION PLANT
RECLAIMED WATER USAGE MONITORING REPORT- 2002
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57
WDID NO. 6B190107069

User	Reclaimed Water Delivered and Used (Million Gallons)		Use Area	Type of Use
	Daily Mean	Annual Total	(Acres)	
Harrington Farms	0.105	38.47	24	Pistachio Orchard Irrigation
Tree Mover, Inc.	0.228	83.06	40	Irrigation of Christmas trees, gourds, and landscape plants
Antelope Valley Products	0.161	58.69	20	Chestnut Orchard Irrigation
Antelope Valley Farming	1.422	519.03	320	Livestock fodder Irrigation
TOTALS	1.916	699.25	404	

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

PALMDALE WATER RECLAMATION PLANT

CHAPTER 2

WASTEWATER FACILITIES AND STAFF

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

CHAPTER 2

WASTEWATER FACILITIES AND STAFF

2.1 SANITATION DISTRICTS OVERVIEW

The Districts operate eleven wastewater treatment plants, listed in Table 2-1, and approximately 1,200 miles of trunk sewers in Los Angeles County. In addition, approximately 9,400 miles of lateral sewers, operated by other agencies, connect to the trunk sewers.

As indicated in Table 2-1, seven treatment plants, including the Joint Water Pollution Control Plant (JWPCP), are grouped into an integrated sewerage system, known as the Joint Outfall System, which treats approximately 95% of the Districts' sewage. These seven plants are all on a single network of sewers. JWPCP is the downstream plant and the other six are upstream plants. Flows from the upstream plants can be bypassed to a limited extent to JWPCP. Sludge from the upstream plants is returned to the sewer system and conveyed to JWPCP for further treatment (anaerobic digestion and dewatering) and disposal.

Two plants, the Saugus and Valencia Water Reclamation Plants, also comprise an integrated system with sludge processing and disposal taking place at the Valencia WRP. These plants are located in the City of Santa Clarita.

The Palmdale and Lancaster WRPs are stand alone facilities, and both these plants have sludge processing facilities.

Seven of the plants provide tertiary treatment consisting of inert media filtration following activated sludge secondary treatment. La Cañada WRP uses extended aeration activated sludge to provide secondary treatment. Two plants, Lancaster and Palmdale WRPs, use oxidation ponds to provide secondary treatment. The Lancaster WRP, in addition, provides a unique form of tertiary treatment to a portion of its effluent; a unit of the Lancaster WRP known as the Antelope Valley Tertiary Treatment Plant removes part of the phosphate in secondary effluent that is then filtered and chlorinated. The phosphate removal inhibits algae growth in recreational lakes that receive the effluent. During the first 10 months of 2002, JWPCP provided pure oxygen activated sludge secondary treatment to approximately two-thirds of its flow, with the balance of flow receiving advanced primary treatment. Beginning October 30, 2002, the JWPCP began providing secondary treatment to all flow.

Most of the plants operate with more than one discharge permit. Of the eleven plants, eight have NPDES permits; three do not. The three that do not have NPDES permits are the Lancaster, Palmdale, and La Cañada WRPs; their permits cover both Waste Discharge Requirements (WDR) and reclaimed water requirements (WRR). Except for the JWPCP, all of the plants have reuse (non-NPDES) permits and provide reclaimed water for reuse. The Pomona, San Jose Creek and Whittier Narrows WRPs are also covered by a permit with requirements for groundwater replenishment.

TABLE 2-1
SANITATION DISTRICTS
WASTEWATER TREATMENT PLANTS

Plant	Design Capacity (MGD)	Treatment Level	Sludge Treatment Facilities	NPDES Permit	Reuse Permit	Groundwater Recharge Permit
Joint Outfall Sewerage System						
La Cañada WRP	0.2	Secondary[3]			X	
Long Beach WRP	25	Tertiary[1]		X	X	
Los Coyotes WRP	37.5	Tertiary[1]		X	X	
Pomona WRP	15	Tertiary[1]		X	X	X
San Jose Creek WRP	100	Tertiary[1]		X	X	X
Whittier Narrows WRP	15	Tertiary[1]		X	X	X
Joint Water Pollution Control Plant (JWPCP)	400	Secondary[2]	X	X		
Subtotal	592.7					
Santa Clarita Valley Sewerage System						
Saugus WRP	6.5	Tertiary[1]		X	X	
Valencia WRP	12.6	Tertiary[1]	X	X	X	
Subtotal	19.1					
Stand-alone Plants						
Lancaster WRP	16	Secondary[4]	X		X	
(Antelope Valley Tertiary Treatment Plant)[5]	0.6[5]	Tertiary[5]				
Palmdale WRP	15.0	Secondary[4]	X		X	
Subtotal	31.0					
Entire Sanitation Districts						
Total	642.8					

1. Tertiary treatment consists of activated sludge secondary followed by inert media filtration and disinfection.
2. During the first 10 months of 2002, the JWPCP had 385 MGD of advanced primary treatment capacity plus 200 MGD of pure oxygen activated sludge secondary capacity, and the final effluent was a blend of primary and secondary effluents.
3. The La Cañada WRP has extended aeration activated sludge secondary treatment.
4. The Lancaster and Palmdale WRPs have oxidation ponds.
5. The Antelope Valley Tertiary Treatment Plant, which is part of the Lancaster WRP (consisting of phosphate removal, filtration and chlorination processes), treats a portion of the Lancaster WRP effluent.

2.2 PALMDALE WATER RECLAMATION PLANT

The Palmdale WRP is located at 39300 30th Street East, Palmdale, California, 93550.

As indicated in Table 2-1, the plant has one wastewater permit for irrigation with and disposal of reclaimed water. Figure 2-1 shows the details of the plant (including both 30th and 40th street sites), the City of Los Angeles World Airports' (LAWA) irrigation site, and the locations of the groundwater monitoring wells.

Process Description

Figure 2-2 is a process schematic of the plant that uses the following process sequence: comminution, primary sedimentation and oxidation ponds. Primary sludge and primary skimmings are anaerobically digested. The digested sludge is dried in drying beds and stockpiled on site.

Chronology

The chronology in Table 2-2 is provided as background in understanding how the plant evolved to its present state of development.

Facility Improvements in 2002

There were no new facilities or modifications to existing facilities in 2002. In 2002, the Districts continued to implement improvements in effluent application practices at the LAWA land application and reuse sites.

Treatment Plant Operators

Operators at the Palmdale WRP and their certifications are listed in Table 2-3.

TABLE 2-2
CHRONOLOGY
PALMDALE WATER RECLAMATION PLANT

Item	Contract Number	Date
District 20 formed		08/07/51
Palmdale Treatment Plant completed (0.75 MGD)	767	09/04/53
District 20 enlarged (0.75 TO 2.5 MGD)		1956
Oxidation Ponds 5 and 6	1122	09/22/57
Digester Tank No. 2	1135	01/08/58
Dike Lining Pond 6	1239	10/03/58
Percolation Ponds 1 and 2	1237	11/03/58
District 20 Effluent Line	1238	11/14/58
Dike Lining Pond 5	1255	01/27/59
Effluent use for irrigation began		05/01/59
Oxidation ponds 1-4 and percolation ponds 1-4 combined	1398	08/03/61
District 20 Stage I Expansion (2.5 MGD to 3.1 MGD)	1996	09/14/72
Interim disposal ponds 6-9		10/80
Effluent Relief Line (24-inch)	2671	01/09/84
DOA Effluent Delivery Line (18-inch)		01/20/84
Stage II Expansion (3.1 MGD to 6.5 MGD)	2883	02/22/89
Oxidation Ponds 4 and 5	2975	05/05/89
Primary Effluent Relief Line	3055	07/19/90
Stage III Expansion (6.5 MGD to 8 MGD)	3098	07/14/93
Pond Effluent System	3168	10/30/92
Fire Protection & Water Supply Improvements	3213	11/04/92
Stage IV Groundwater Monitoring Facilities	3340	12/29/95
Stage IV Expansion (8.0 MGD to 15.0 MGD)	3341	02/26/97*

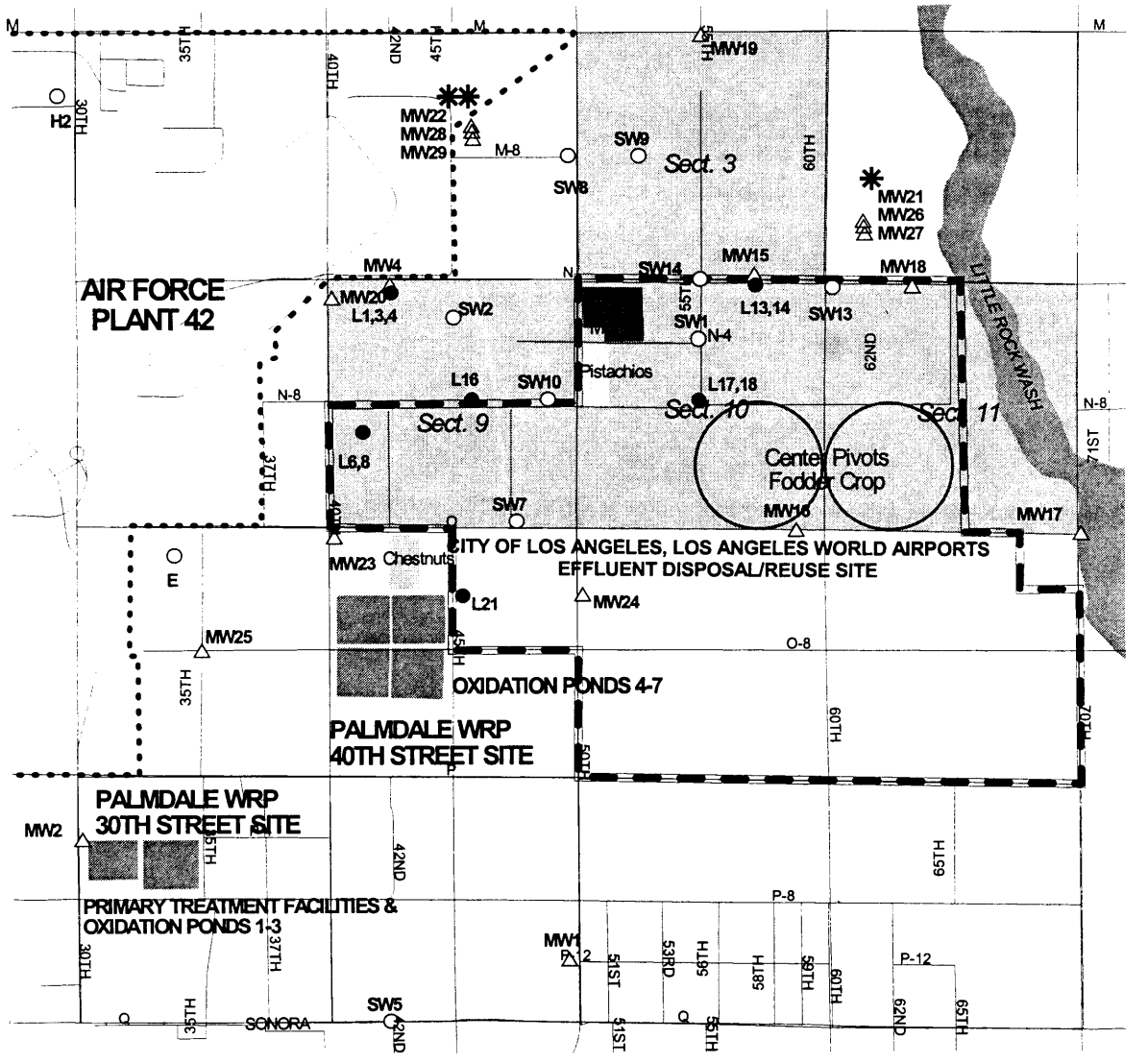
* The treatment facilities for Stage IV expansion were placed in operation in July 1996.

TABLE 2-3

TREATMENT PLANT OPERATORS
PALMDALE WATER RECLAMATION PLANT
ANNUAL REPORT - 2002

Operator	Shift	Certification
Tim Linn, Supervisor	Day	Grade III
Roberto Martinez	Day	Grade III
William Zeller	Day	Grade II
James Barrick	Day	Grade II

FIGURE 2-1
PALMDALE WATER RECLAMATION PLANT
Effluent Spreading/Reuse Sites, Wells and Lysimeters



*	**
MW21 - Shallow MW26 - Medium MW27 - Deep	MW22 - Shallow MW28 - Medium MW29 - Deep

- ○ SUPPLY WELL
- △ MONITORING WELL
- ● LYSIMETER
- PREVIOUS EFFLUENT DISPOSAL/REUSE AREA
- NEW LEASED AREA
- AIR FORCE PLANT 42

N

SANITATION DISTRICTS OF LOS ANGELES COUNTY

UPDATED: 03/20/03 P:\GIS\Palm\Monthly Report

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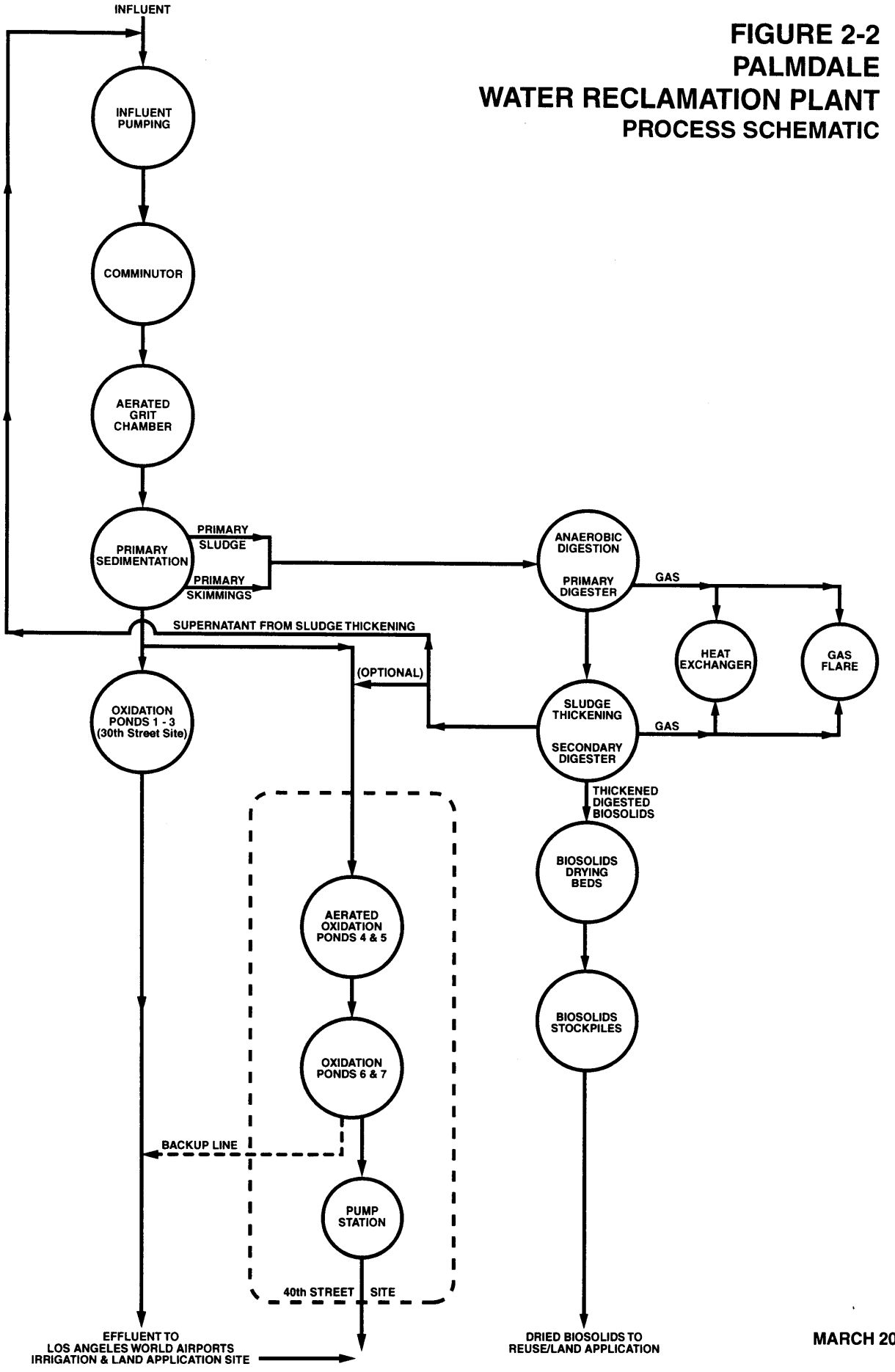
FIGURE 2-2
PALMDALE
WATER RECLAMATION PLANT
PROCESS SCHEMATIC



MARCH 2003

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PALMDALE WATER RECLAMATION PLANT

CHAPTER 3

LABORATORIES

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

CHAPTER 3

LABORATORIES

3.1 INTRODUCTION

The Sanitation Districts operate ten laboratories located at nine of its eleven treatment plants. The laboratories are divided into two categories: treatment plant laboratories (TPLs) and water quality laboratories (WQLs).

The eight treatment plant laboratories are the Long Beach, Los Coyotes, Pomona, San Jose Creek, Whittier Narrows, Saugus, Valencia and Lancaster TPLs. These laboratories are concerned primarily with process control of the treatment plants. Additional duties of the TPLs include a portion of the monitoring (generally simpler tests which do not require specialized equipment or expertise) pursuant to waste discharge and water reclamation permits.

The two water quality laboratories are the San Jose Creek and Joint Water Pollution Control Plant (JWPCP) WQLs. They utilize specialized equipment and expertise to perform tests which the TPLs are unable to perform. Note that there are both a San Jose Creek WQL and a San Jose Creek TPL. The JWPCP WQL also functions as a TPL; it includes a group which conducts process control tests for the JWPCP.

There are no laboratories at the La Cañada and Palmdale plants; consequently, the San Jose Creek TPL also functions as the TPL for the La Cañada WRP and the Lancaster TPL also functions as the TPL for the Palmdale WRP.

3.2 QUALITY ASSURANCE ACTIVITIES

The Quality Assurance (QA) Group of the Sanitation Districts Laboratory Section is responsible for monitoring the validity and quality of analytical data produced in all ten laboratories. In order to accomplish this goal, a quality assurance plan prepared by the QA Group is strictly adhered to. The plan includes routine QA activities that are performed in the laboratories in order to assure the defensibility of data reported.

In 2002, routine QA activities that were performed, both intralaboratory and interlaboratory, included, but were not limited to, the following:

Intralaboratory Quality Control

1. A routine practice of running laboratory control samples, duplicates and matrix spikes or duplicate spikes for every tenth sample was maintained. Control limits have been established for both precision and accuracy for most analytes, and quality control data were plotted on the control charts. For situations where the data were outside of the control limits, corrective action was initiated and maintained at the bench level until the problems were solved.

2. A reagent or method blank was routinely run with each batch of samples as a contamination check.

3. Calibration standards were analyzed as required. For some tests, a calibration check standard was used to check the calibration curve. These solutions had a concentration mid-point of the calibration curve and were prepared from chemicals that were of a different lot than that used for the calibration curve.

4. For some organic constituents, surrogate standards were added to every sample, duplicate, spike, and blank. Results were compared to established acceptance limits. When unacceptable QA results were obtained, corrective action was performed.

5. Instrument QA was also done (e.g., for GC/MS, mass calibration and tuning were performed to meet ion abundance criteria, etc.).

6. In 2002 at San Jose Creek WQL and JWPCP WQL, chemical and bacteriological suitability testing was conducted monthly on laboratory purified water used for microbiological testing.

7. The annual Inhibitory Residue Test was performed in 2002.

8. Positive, negative, and sterility checks were performed on each batch of prepared media.

9. The Biology Group performed routine toxicity bioassay QA by running a known toxicant with every batch of samples. They also performed other QA activities as required for a biology laboratory.

Interlaboratory Quality Control

1. The nine laboratories supplying data for NPDES monitoring programs (all the laboratories except Lancaster) participated in the EPA's Discharge Monitoring Report (DMR) QA by analyzing chemistry samples purchased from Environmental Resource Associates (one of the EPA certified suppliers). Overall performance was satisfactory.

2. In 2002, to comply with a NPDES permit requirement, the San Jose Creek WQL Biology Group performed bioassay testing for standard toxicants purchased from Environmental Resource Associates (one of the EPA certified suppliers). Overall performance was satisfactory.

3. In 2002, all ten Districts' laboratories participated in the California Department of Health Services' (DHS) Environmental Laboratory Accreditation Program (ELAP) Performance Evaluation (PE) study. Overall performance was satisfactory.

4. The Districts' ten laboratories analyzed microbiology samples purchased from Environmental Resource Associates (one of the EPA certified suppliers) in 2002 as part of its ELAP certification for microbiology. Overall performance was satisfactory.

5. Quality control samples in the form of QC check standards, either prepared in-house or purchased from commercial sources, were issued by the QA Group to all Districts' laboratories. In situations where the results were not acceptable, the analysts and their supervisors were informed and error resolutions were performed. This consisted of checking calculations, data transcription, instrumentation, methodology, etc. Follow-up check samples were issued to verify that the analyses were back in control. QA check

samples issued in 2002 (including those for error resolution) consisted of 1,341 samples and 1,964 tests. Only 3.9% of the samples required error resolution.

6. The QA group also issued split samples collected from one of the water reclamation plants to assess analysis in a real environmental matrix. Results of these analyses were also submitted to the QA Group for statistical evaluation.

7. An MF coliform standard and multiple analyst plate count was distributed to all the laboratories on a monthly basis.

8. In 2002, all ten laboratories were site visited and audited by the California DHS, as part of the laboratories' ELAP re-certification process. All ten laboratories have been re-certified through October-December, 2003.

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

PALMDALE WATER RECLAMATION PLANT

CHAPTER 4

WASTEWATER MONITORING DATA

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

CHAPTER 4

2002 WASTEWATER MONITORING DATA

4.1 ORGANIZATION OF THE DATA

The monitoring programs at the Sanitation Districts wastewater treatment plants can be rather complex; consequently, the following explanation is provided to aid in interpreting the data.

Data are maintained in two databases:

1. An **operational database** for data which normally are monitored daily or weekly and are used for the day-to-day operation of the plants. These include flow, BOD, suspended solids, etc. Many of the parameters included in the operational database must be monitored and reported in accordance with the requirements listed in the NPDES permit, waste discharge requirements or reuse permit of each plant.

Monthly and annual averages are presented along with other descriptive statistics.

2. A **laboratory database** for data which normally are monitored monthly or less often. These include primarily metals and organic compounds. Separate data summaries are presented for:
   - **Influent monitoring**
   - **Effluent monitoring**

Each treatment plant has operation and laboratory data sets presented in its own annual report. One exception is the San Jose Creek WRP which consists of two independently operated units; San Jose Creek East (Stages I and II) and San Jose Creek West (Stage III). Separate data sets for each of these plants is presented in the San Jose Creek WRP annual report. The results of all samples are presented together with descriptive statistics. This data summary may contain results which were not reported in monthly monitoring reports. These additional data can result from sampling conducted for purposes other than routine monitoring. The additional sampling may be done by other agencies (Regional Water Quality Control Board or USEPA) or by the Sanitation Districts for a special study or as a sampling follow-up to a questionable sample.

4.2 LABORATORY TEST CODES

The Sanitation Districts use a unique 3-character code to identify each constituent in the laboratory database. Priority pollutants and other significant constituents are organized into the following groups:

Test Group	Test Code Series
Physical Properties and Solids	100
Nitrogens and Sulfurs	200
Miscellaneous	300
Carbons	400
Chlorinated Pesticides and PCBs	500
Volatile Organic Compounds	600
Metals	700
Base-Neutral/Acid Extractable	800
CompoundsDioxins	D00
Furans	F00

In the laboratory data summaries, the constituents are sorted in numerical order according to the test code. Both the constituent name and test code are given at the top of each column in the data summary. Table 4-1 is provided for assistance in finding specific constituents in the summaries. One can first look for the desired constituent in this table (arranged alphabetically) to find the test code. Then, knowing the test code, one can find the desired constituent and its data in the tables which follow Table 4-1 (arranged in numeric order).

Statistical summaries follow the influent and effluent data and effluent limits follow the effluent statistical summaries.

4.3 DETECTION LIMITS

Sample results below the method detection limits are indicated by the use of the less than symbol (<). A few parameters, such as DDT and PCBs are reported as sums. In those cases, we have chosen to report total detected DDT and total detected PCBs. Results which were below the detection limit were not included in the sum. Consequently, if none of the isomers were detected, the total is reported as zero.

4.4 PERMIT LIMITS

A single plant may have several permits and several sets of limits which, at a maximum, consist of the following:

- **NPDES Permit Limits** for discharge to navigable waterways.
- **Waste Discharge Requirements** for effluent disposal to sites other than those covered by NPDES requirements (e.g., Lancaster and Palmdale WRPs).
- **Reuse Permit Limits** for nonpotable use in irrigation, impoundments, etc.
- **Recharge Permit Limits** for groundwater replenishment in the Montebello Forebay.
- **California Drinking Water Standards** are included by reference in many reuse permits and in the recharge permit. Drinking Water Standards are specified in Title 22, Chapter 15, Article 3, Sections 64421-64473 of the California Code of Regulations. Note the following:

    1. Primary Drinking Water Standards are health-related.

    2. Secondary Drinking Water Standards are not health-related. They are concerned with palatability and aesthetic acceptance.

- **Radioactivity requirements** are included by reference in most permits. Radioactivity requirements are specified in Title 22, Chapter 15, Article 3, Sections 64441-64443 of the California Code of Regulations. The radioactivity standards are a subset of the drinking water standards; however, the permits use language which suggests that radioactivity should be treated separately from the drinking water standards. The permits have separate paragraphs requiring compliance with radioactivity standards and with drinking water standards. Furthermore, the permits require compliance only for trace constituents or other substances

in the drinking water standards, which suggests that radioactivity is not a substance, but, rather, is a quality.

- **Action Levels** of the California Department of Health Services (DHS) are included by reference in the recharge permit. Action levels are given in a letter dated October 24, 1990 from the DHS Office of Drinking Water.

- **Taste and Odor Thresholds** are listed in the DHS Action Levels for several constituents; however, these thresholds are not considered to be applicable to reclaimed water as it is not delivered directly to users for use as potable water.

The permits limits may be expressed in terms of an instantaneous maximum, daily maximum, 7-day average and/or 30-day average. Longer averaging periods have lower limits. In general then, the limits listed in Table 4-4 are 30-day averages (which have the lowest values).

The reuse permits require compliance with the Drinking Water Standards maximum contaminant levels that normally apply to 24-hour composite samples or grab samples. The Montebello Forebay permit, however, requires compliance with the Drinking Water Standards and action levels based on a running 12-month average.

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
% MOISTURE	158
% ORGANIC MATTER	406
1,1,1,2-TETRACHLOROETHANE	6D5
1,1,1-TRICHLOROETHANE	603
1,1,2,2-TETRACHLOROETHANE	653
1,1,2-TRICHLOROETHANE	618
1,1-DICHLOROETHANE	616
1,1-DICHLOROETHENE	605
1,1-DICHLOROPROPENE	6C7
1,2,3,4-TETRAMETHYLBENZENE	686
1,2,3-TRICHLOROBENZENE	889
1,2,3-TRICHLOROPROPANE	6D6
1,2,4,5-TETRACHLOROBENZENE	8E7
1,2,4-TRICHLOROBENZENE	846
1,2-DIBROMO-3-CHLOROPROPANE	6C3
1,2-DIBROMOETHANE	673
1,2-DICHLOROBENZENE	819
1,2-DICHLOROETHANE	619
1,2-DICHLOROETHANE-D4	S10
1,2-DICHLOROPROPANE	650
1,2-DIPHENYLHYDRAZINE	829
1,3,5-TRICHLOROBENZENE	899
1,3,5-TRIMETHYLBENZENE	661
1,3-BUTADIENE	675
1,3-DICHLOROBENZENE	820
1,3-DICHLOROPROPANE	6C5
1,4-DICHLOROBENZENE	821
1,4-DICHLOROBENZENE-D4	I01
1,4-DICHLOROBENZENE-D4	S20
1,4-DICHLOROBUTANE	S08
1,4-DIOXANE	696
1,4-NAPHTHOQUINONE	8C7
1234678HEPCHLRDIBENZDIOXIN	D27
1234678HEPTCHLORDIBENZFURAN	F23
1234789HEPTCHLORDIBENZFURAN	F24
123478HEXCHLORDIBENZDIOXIN	D24
123478HEXCHLORODIBENZOFURAN	F19
1234TETRCHLORDIBENZDIOXIN	D18
123678HEXCHLORDIBENZDIOXIN	D25
123678HEXCHLORODIBENZOFURAN	F20
123789HEXCHLORDIBENZDIOXIN	D26
123789HEXCHLORODIBENZOFURAN	F22
12378PENCHLORDIBENZDIOXIN	D22
12378PENTACHLORODIBENZFURA	F17
123TRICHLORODIBENZODIOXIN	D14
123TRICHLORODIBENZOFURAN	F15
12478PENCHLORDIBENZDIOXIN	D23
124TRICHLORODIBENZODIOXIN	D15
1278TETRCHLORDIBENZDIOXIN	D19

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
12DICHLORODIBENZOFURAN	F13
1378TETRCHLORDIBENZDIOXIN	D20
16DICHLORODIBENZODIOXIN	D11
178TRICHLORODIBENZODIOXIN	D16
1-BROMO-2-FLUOROETHANE	I05
1CHLORODIBENZODIOXIN	D09
1CHLORODIBENZOFURAN	F09
1-METHYLNAPHTHALENE	894
1-METHYLPHENANTHRENE	896
1-NAPHTHYLAMINE	8C8
1-PROPANOL	671
2,2-DICHLOROPROPANE	6C6
2,3,4,5-TETRACHLOROPHENOL	687
2,3,4,6-TETRACHLOROPHENOL	8E8
2,3,4-TRICHLOROPHENOL	693
2,3,5,6-TETRACHLOROPHENOL	688
2,3,5-TRICHLOROPHENOL	689
2,3,5-TRIMETHYLNAPHTHALENE	898
2,3,6-TRICHLOROPHENOL	690
2,3,7,8-TCDD	844
2,3-BENZOFLUORENE	884
2,3-DICHLOROANILINE	864
2,4,5,6-TETRACHLORO-M-XYLENE	S13
2,4,5-T	5C1
2,4,5-TP(SILVEX)	518
2,4,5-TRICHLOROPHENOL	691
2,4,6-TRIBROMOPHENOL	S06
2,4,6-TRICHLOROPHENOL	664
2,4,6-TRICHLOROPHENOL	856
2,4-D(ACID)	517
2,4-DB	5C2
2,4-DICHLOROPHENOL	658
2,4-DICHLOROPHENOL	847
2,4-DIMETHYLPHENOL	626
2,4-DIMETHYLPHENOL	848
2,4-DINITROPHENOL	849
2,4-DINITROTOLUENE	826
2,6-DICHLOROPHENOL	8A9
2,6-DIMETHYLNAPHTHALENE	892
2,6-DINITROTOLUENE	827
2.4-DP (DICHLORPROP)	5B7
234678HEXCHLORODIBENZOFURAN	F21
23478PENTACHLORODIBENZFURAN	F18
2378TETRACHLORODIBENZOFURAN	F16
2378TETRCHLORDIBENZDIOXIN	D21
237TRICHLORODIBENZODIOXIN	D17
23DICHLORODIBENZODIOXIN	D12
23DICHLORODIBENZOFURAN	F14
27DICHLORODIBENZODIOXIN	D13

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
2-ACETYLAMINOFLUORENE	8A2
2-BUTANONE	680
2CHLORODIBENZODIOXIN	D10
2CHLORODIBENZOFURAN	F10
2-CHLOROETHYLVINYLETHER	648
2-CHLORONAPHTHALENE	815
2-CHLOROPHENOL	657
2-CHLOROPHENOL	845
2-ETHYLTOLUENE	660
2-FLUOROBIPHENYL	S05
2-FLUOROPHENOL	S01
2-HEXANONE	699
2-METHYL FLUORANTHENE	887
2-METHYL-4,6DINITROPHENOL	850
2-METHYLNAPHTHALENE	895
2-METHYLNAPHTHALENE	8C6
2-NAPHTHYLAMINE	8C9
2-NITROPHENOL	851
2-PROPANOL	672
3,3'-DICHLOROBENZIDINE	822
3,3'-DIMETHYLBENZIDINE	8B3
3,4,5-TRICHLOROPHENOL	692
3,6-DIMETHYLPHENANTHRENE	893
3CHLORODIBENZOFURAN	F11
3-METHYLCHOLANTHRENE	8C4
4-AMINOBIPHENYL	8A3
4-BROMOFLUOROBENZENE	S12
4-BROMOPHENYL PHENYLETHER	813
4-CHLORO-3-METHYLPHENOL	656
4-CHLORO-3-METHYLPHENOL	853
4CHLORODIBENZOFURAN	F12
4-CHLOROPHENYLPHENYLETHER	816
4-METHYL-2-PENTANONE	681
4-NITROPHENOL	852
5-NITRO-O-TOLUIDINE	8D9
7,12-DIMETHYLBENZ(A)ANTHRACENE	8B2
7,12DIMETHYLBENZ(A)ANTHRACENE	888
9,10-DIPHENYLANTHRACENE	883
90 FATHEAD ACUTE	B18
90 MENIDIA ACUTE	B19
ACENAPHTHENE	800
ACENAPHTHENE-D10	S22
ACENAPHTHYLENE	801
ACETIC ACID	639
ACETONE	676
ACETONITRILE	665
ACETOPHENONE	8A1
ACID CONC.	344
ACIDITY	318

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
ACROLEIN	654
ACRYLONITRILE	655
ACTINOLITE FIBERS	CA1
ADA (ANTHRAQUINONE DSA)	329
AEROBIC PLATE COUNT	354
AIR (O2 + AR + N2)	331
ALDRIN	512
ALGAE COUNT	360
ALLYL CHLORIDE	6B8
ALPHA-BHC	508
ALUMINUM	707
AMMONIA NITROGEN	1S6
AMMONIA NITROGEN	201
AMOSITE FIBERS	CA2
ANAEROBIC PLATE COUNT	355
ANTHOPHYLLITE FIBERS	CA3
ANTHRACENE	802
ANTIMONY	725
ARGON (AR)	333
AROCLOR 1016	535
AROCLOR 1221	536
AROCLOR 1232	537
AROCLOR 1242	519
AROCLOR 1248	538
AROCLOR 1254	520
AROCLOR 1260	539
ARSENIC	705
ATRAZINE	550
AVAILABLE CALCIUM OXIDE	321
AVAILABLE CYANIDE	212
AVAILABLE PHOSPHORUS	339
BACTERIOPHAGE	382
BARIUM	706
BENZENE	620
BENZIDINE	803
BENZO(A)ANTHRACENE	804
BENZO(A)PYRENE	805
BENZO(B)FLUORANTHENE	806
BENZO(E)PYRENE	890
BENZO(G.H.I.)PERYLENE	807
BENZO(K)FLUORANTHENE	808
BENZYL ALCOHOL	8A4
BENZYL CHLORIDE	678
BERYLLIUM	726
BETA-BHC	523
BICARBONATE ALKALINITY	306
BIOLOGICAL EXAMINATION	X06
BIPHENYL	891
BIS(2-CHLOROETHYL)ETHER	810

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
BIS(2-CL-ETHOXY)METHANE	809
BIS(2-CL-ISOPROPYL)ETHER	811
BISMUTH	727
BORON	314
BROMIDE	319
BROMOCHLOROMETHANE	6B9
BROMODICHLOROMETHANE	608
BROMOETHANE	694
BROMOFORM	610
BROMOMETHANE	646
BULK DENSITY	161
BUTANE	635
BUTYLBENZYL PHTHALATE	814
BUTYRIC ACID	642
C. PERFRINGENS	B51
CADMIUM	708
CALCIUM	703
CALCIUM-HARDNESS	701
CAM TEST	C01
CAMPYLOBACTER	386
CARBAZOLE	859
CARBON DIOXIDE (CO2)	336
CARBON DISULFIDE	285
CARBON DISULFIDE	698
CARBON MONOXIDE (CO)	337
CARBON TETRACHLORIDE	604
CARBONACEOUS BOD5 (CBOD5	412
CARBONATE ALKALINITY	307
CARBONYL SULFIDE	284
CATION EXCH. CAPACITY	108
CCL4 ACTIVITY (CARBON)	121
CERIO. CHRONIC-SURVIVAL	B06
CERIO.CHRONIC-REPRODUCTION	B07
CERIUM	728
CESIUM	729
CHLORIDE	301
CHLORIDE MASS EMISS. RATE	973
CHLORINATED PESTICIDES	5B0
CHLORINE DEMAND	303
CHLORINE REQUIR.	304
CHLORINE RESIDUAL	302
CHLOROBENZENE	611
CHLOROBENZENE-D5	I04
CHLOROBENZILATE	8A6
CHLOROETHANE	647
CHLOROFORM	602
CHLOROMETHANE	649
CHLOROPHYLL A	364
CHLOROPICRIN	6B3

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
CHLOROPRENE	6C2
CHLORPYRIFOS	5D8
CHRYSENE	817
CHRYSENE-D12	S24
CHRYSOTILE FIBERS	CA4
CIS-1,2-DICHLOROETHYLENE	677
CIS-1,3-DICHLOROPROPENE	651
CIS-CHLORDANE	526
CIS-CHLORDENE	541
CIS-NONACHLOR	543
CLOSTRIDIUM PERFRINGENS	375
CN AMENABLE TO CHLORINE	210
COBALT	711
COLOR, APPARENT	104
COLOR,TRUE	132
CONDUCTIVITY	102
CONDUCTIVITY	1S4
COPPER	712
CROCIDOLITE FIBERS	CA5
CRYPTOSPORIDIUM	B53
DALAPON	5B5
DECACH3CYCLOPENTASILOXANE	6E0
DECACHLOROBIPHENYL	S14
DECAFLUOROBIPHENYL	S04
DECAMETHYLTETRASILOXANE	6G0
DELTA-BHC	524
DEMETON	5D3
DEPTH TO BOTTOM	901
DEPTH TO WATER	1S8
DEPTH TO WATER	900
DEUTERIUM	133
DIALLATE	8A7
DIAZINON	5D9
DIBENZO(A,H)ANTHRACENE	818
DIBENZOFURAN	8A8
DIBROMOCHLOROMETHANE	609
DIBROMOFLUOROMETHANE	S09
DICAMBA	5B6
DICHLORODIBENZODIOXINS	D02
DICHLORODIBENZOFURANS	F02
DICHLORVOS	5B1
DICYCLOPENTADIENE	6B5
DIELDRIN	513
DIETHYL PHTHALATE	823
DIETHYL SULFIDE	290
DIETHYLAMINE	6E3
DIETHYLHEXYL PHTHALATE	812
DI-ISOPROPYL ETHER	6F4
DIMETHOATE	5C7

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
DIMETHYL PHTHALATE	824
DIMETHYL SULFIDE	286
DIMETHYLDISULFIDE	291
DI-N-BUTYL PHTHALATE	825
DI-N-OCTYL PHTHALATE	828
DINOSEB	5C3
DIPHENYLAMINE	8B5
DIQUAT	5E1
DISSOLVED CARBON DIOXIDE	409
DISSOLVED ORGANIC CARBON	455
DISSOLVED OXYGEN	115
DISSOLVED OXYGEN	1S3
DISULFOTON	5C8
DIVERSITY INDEX	361
DODECACH3CYCLOHEXSILOXANE	6G3
DODECAMETHYLPENTASILOXANE	6G1
E. COLI	B50
ECE (SOIL SALINITY)	E01
EDTA	327
EDTA-IRON(I)	347
ENDOSULFAN I	531
ENDOSULFAN II	532
ENDOSULFAN SULFATE	533
ENDRIN	514
ENDRIN ALDEHYDE	534
ENTEROCOCCUS	359
ENTEROCOCCUS (MF)	357
ENTEROPATHOGENIC E. COLI	383
EPA EXTRACTION PROCEDURE	172
ETHANE	633
ETHANOL	623
ETHYL ACETATE	6E4
ETHYL BENZENE	624
ETHYL MERCAPTAN	260
ETHYL MERCAPTAN	283
ETHYL METHACRYLATE	6D8
ETHYL METHANESULFONATE	8B6
ETHYL PARATHION	5D1
ETHYL-TERT BUTYL ETHER	6F5
FAMPHUR	8B7
FATHEAD 96H-ACUTE-100%EFF	B02
FATHEAD 96H-ACUTE-CONC	B03
FATHEAD 96H-ACUTE-TITLE22	B01
FATHEAD CHRONIC-GROWTH	B05
FATHEAD CHRONIC-SURVIVAL	B04
FECAL COLIFORM	351
FECAL COLIFORM (MF)	356
FECAL STREPTOCOCCUS	353
FERRIC IRON	746

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
FERROUS IRON	745
FIELD CONDUCTIVITY	906
FIELD DISSOLVED CO2	908
FIELD DISSOLVED O2	907
FIELD HYDROGEN SULFIDE	910
FIELD PH	905
FIELD TOTAL ALKALINITY	909
FIELD WATER TEMPERATURE	904
FLASH POINT	105
FLOATABLE SOLIDS	157
FLOC/FILAMENT SURVEY	X10
FLOW	Z01
FLUORANTHENE	830
FLUORENE	831
FLUORIDE	313
FLUORIDE MASS EMISS. RATE	974
FLUOROBENZENE	I03
FLUOROMETER READING	362
FORMALDEHYDE	697
FREE ALKALI	345
FREE CYANIDE	207
FREON 11 (CCL3F)	669
FREON 12 (CCL2F2)	668
FREON 21 (CHCL2F)	670
FREON TF	617
GAMMA RADIATION	372
GC/MS SCAN	X03
GIARDIA	B52
GOLD	730
GROSS ALPHA RADIOACTIVITY	370
GROSS BETA RADIOACTIVITY	371
GUTHION	5D4
HEAT OF COMBUSTION	112
HEATING VALUE OF GAS	338
HEPTACHLOR	510
HEPTACHLOR EPOXIDE	511
HEPTACHLORODIBENZODIOXINS	D07
HEPTACHLORODIBENZOFURANS	F07
HEXACH3CYCLOTRISILOXANE	6G2
HEXACHLOROBENZENE	832
HEXACHLOROBUTADIENE	833
HEXACHLOROCYCLOPENTADIENE	834
HEXACHLORODIBENZODIOXINS	D06
HEXACHLORODIBENZOFURANS	F06
HEXACHLOROETHANE	835
HEXACHLOROPROPENE	8B8
HEXAMETHYLDISILOXANE	6F8
HEXANE	637
HEXAVALENT CHROMIUM	710

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
HOLD FOR TEST ASSIGNMENT	170
HPLC SCAN	X09
HYDROCARBONS-METHOD 418.1	C18
HYDROCARBONS-MODIFIED8015	C15
HYDROGEN (H2)	340
HYDROGEN CYANIDE	209
HYDROGEN SULFIDE	261
HYDROGEN SULFIDE	281
HYDROSCAN	173
HYDROXIDE ALKALINITY	308
HYMENOLEPIS	392
INDENO(1,2,3-C,D)PYRENE	836
INFRARED SCAN	X02
ION CHROMATOGRAPHY SCAN	X08
IRON	713
ISOBUTYL ALCOHOL	6C9
ISOBUTYL MERCAPTAN	289
ISOBUTYRALDEHYDE	6E7
ISOBUTYRIC ACID	641
ISODRIN	8B9
ISOPHORONE	837
ISOPROPYL ACETATE	6E8
ISOPROPYL ETHER	6E9
ISOPROPYL MERCAPTAN	287
ISOPROPYLBENZENE	684
ISOSAFROLE	8C1
ISOVALERIC ACID	643
KEPONE	5C5
KEPONE	8C2
LANTHANUM	731
LAS	343
LEAD	714
LIMONENE	659
LINDANE (GAMMA-BHC)	509
LITHIUM	715
LOWER EXPLOSIVE LIMIT	1B0
M+P CRESOL	862
M+P-CRESOL	628
M+P-XYLENE	695
MACROCYSTIS-GERMINATION	B09
MACROCYSTIS-GERMTUBLENGTH	B10
MAGNESIUM	704
MAGNESIUM-HARDNESS	702
MALATHION	5D5
MANGANESE	716
MBAS	315
MCPA	5B9
MCPP	5B8
M-DICHLOROBENZENE	614

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
M-DINITROBENZENE	8B4
MENIDIA ACUTE,%SURVIVAL	B17
MENIDIA-GROWTH	B15
MENIDIA-SURVIVAL	B14
MERCAPTANS	258
MERCURY	717
METALS SCAN	X05
METHACRYLONITRILE	6D1
METHANE	632
METHANE (CH4)	335
METHANOL	622
METHAPYRILENE	8C3
METHOXYCLOR	516
METHYL CELLOSOLVE	6F1
METHYL FORMATE	6F2
METHYL IODIDE	6D2
METHYL MERCAPTAN	259
METHYL MERCAPTAN	282
METHYL METHACRYLATE	6D7
METHYL METHANESULFONATE	8C5
METHYL PARATHION	5C9
METHYL PYRENE	886
METHYLCYCLOHEXANE	I02
METHYLENE BROMIDE	6D3
METHYLENE CHLORIDE	601
METHYL-TERT-BUTYL-ETHER	662
MEVINPHOS	5B2
MICROSCOPIC EXAM	X04
MICROTOX-15	B32
MICROTOX-5	B31
MIREX	552
M-NITROANILINE	8D2
MOLYBDENUM	732
MONOCHLORODIBENZODIOXINS	D01
MONOCHLORODIBENZOFURANS	F01
M-XYLENE	666
MYSID-FECUNDITY	B12
MYSID-GROWTH	B13
MYSID-SURVIVAL	B11
NALED (DIBROM)	5B3
N-AMYL ACETATE	6E1
NAPHTHALENE	838
NAPHTHALENE-D8	S21
N-BUTYL ACETATE	6E2
N-BUTYL MERCAPTAN	295
N-DECANE	865
N-HEPTANE	6E5
N-HEXANE	6E6
NICKEL	718

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
NID	316
NITRATE NITROGEN	1S7
NITRATE NITROGEN	204
NITRITE NITROGEN	205
NITROBENZENE	839
NITROBENZENE-D5	S03
NITROGEN (N2)	334
NITROMETHANE	6B0
N-NITROSODIETHYLAMINE	8D5
N-NITROSODIMETHYLAMINE	840
N-NITROSODI-N-BUTYLAMINE	8D4
N-NITROSODI-N-PROPYLAMINE	841
N-NITROSODIPHENYLAMINE	857
N-NITROSOMETHYLETHYLAMINE	8D6
N-NITROSOPIPERIDINE	8D7
N-NITROSOPYRROLIDINE	8D8
NO TEST REQUESTED	999
NOCARDIA	358
N-OCTADECANE	866
NONMETHANE ORGANICS (TCA)	415
NONMETHANE ORGANICS TO-12	416
NON-POLAR OIL AND GREASE	414
NONVOLATILE DISSOL SOLIDS	166
NOX (AS NO2)	211
N-PROPYL MERCAPTAN	293
N-PROPYLBENZENE	685
O,O,O-TRIETHYLPHOSPHOROTHIOATE	8F1
O+P DICHLOROBENZENE	674
O+P-XYLENE	667
OBJECTIONABLE INSOLUBLES	322
O-CRESOL	627
O-CRESOL	861
OCTACH3CYCLOTETRASILOXANE	6D9
OCTACHLORODIBENZODIOXIN	D08
OCTACHLORODIBENZOFURAN	F08
OCTAMETHYLTRISILOXANE	6F9
O-DICHLOROBENZENE	613
ODOR	109
ODOR CHARACTERIZATION	X07
OIL & GREASE	408
OIL & GREASE MASS EM.RATE	975
O-NITROANILINE	8D1
OP'-DDD	503
OP'-DDE	501
OP'-DDT	505
ORGANIC LEAD	7A1
ORGANIC NITROGEN	202
ORTHO PHOSPHATE	311
O-TOLUIDINE	8E9

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
OXYCHLORDANE	529
OXYGEN (O2)	332
O-XYLENE	629
P(DIMETHYLAMINO)AZOBENZENE	8B1
PAINT FILTER TEST	127
PALLADIUM	M02
PARAQUAT	5E2
PCB CONGENER 101	567
PCB CONGENER 105	568
PCB CONGENER 110	569
PCB CONGENER 114	570
PCB CONGENER 118	571
PCB CONGENER 119	572
PCB CONGENER 123	573
PCB CONGENER 126	574
PCB CONGENER 128	575
PCB CONGENER 138	576
PCB CONGENER 149	577
PCB CONGENER 151	578
PCB CONGENER 153	579
PCB CONGENER 156	580
PCB CONGENER 157	581
PCB CONGENER 158	582
PCB CONGENER 167	583
PCB CONGENER 168	584
PCB CONGENER 169	585
PCB CONGENER 170	586
PCB CONGENER 177	587
PCB CONGENER 18	554
PCB CONGENER 180	588
PCB CONGENER 183	589
PCB CONGENER 187	590
PCB CONGENER 189	591
PCB CONGENER 194	592
PCB CONGENER 200	593
PCB CONGENER 201	594
PCB CONGENER 206	595
PCB CONGENER 28	555
PCB CONGENER 37	556
PCB CONGENER 44	557
PCB CONGENER 49	558
PCB CONGENER 52	559
PCB CONGENER 66	560
PCB CONGENER 70	561
PCB CONGENER 74	562
PCB CONGENER 77	563
PCB CONGENER 81	564
PCB CONGENER 87	565
PCB CONGENER 99	566

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
P-CHLOROANILINE	8A5
PCNB(PENTACHLORONITROBENZENE)	5D7
P-CRESOL	863
P-DICHLOROBENZENE	615
PEAK FLOW	Z02
PENTACHLOROBENZENE	8E1
PENTACHLORODIBENZODIOXINS	D05
PENTACHLORODIBENZOFURANS	F05
PENTACHLORONITROBENZENE	8E2
PENTACHLOROPHENOL	663
PENTACHLOROPHENOL	854
PENTANE	636
PERCENT METHANE IN GAS	902
PERCENT OXYGEN IN GAS	903
PERCHLORATE	3B2
PERMANENT GASES, TOTAL	330
PERYLENE	897
PERYLENE-D12	S25
PH	101
PH	1S1
PHENACETIN	8E3
PHENANTHRENE	842
PHENANTHRENE-D10	S23
PHENOL	855
PHENOL(BY GC)	631
PHENOL-D5	S02
PHENOLS	312
PHENYLACETIC ACID	860
PHORATE	5D2
PHOSGENE	6B2
PHTHALATE ESTERS	6B4
PHYS/CHEM PROPERTIES	X01
PICLORAM	5C4
PLATINUM	M01
PLUTONIUM	128
P-NITROANILINE	8D3
POLYCHLORINATED PHENOLS	6B1
POTASSIUM	325
POTASSIUM	719
POTASSIUM-40	131
PP'-DDD	504
PP'-DDE	502
PP'-DDT	506
P-PHENYLENEDIAMINE	8E4
PRODUCTION DATA	PRD
PRONAMIDE	8E5
PROPANE	634
PROPIONIC ACID	640
PROPIONITRILE	6D4

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
P-TERPHENYL-D14	S07
PURPLE URCHIN FERTILIZAT.	B23
P-XYLENE	630
PYRENE	843
PYRIDINE	858
RADIUM 226+228	126
RADON	123
RAINFALL	998
REDOX	1S5
RELATIVE % HUMIDITY	159
SAFROLE	8E6
SALINITY	317
SALMONELLA	385
SAMPLE VOLUME	165
SAR	107
SEC-BUTYL MERCAPTAN	288
SELENASTRUM CHRONIC-GROW'	B08
SELENIUM	720
SEMI-VOLATILE TTO	T10
SER	106
SETTLEABLE SOLIDS	156
SIEVE ANALYSIS <#100SIEVE	379
SIEVE ANALYSIS >#10 SIEVE	176
SIEVE ANALYSIS >#100SIEVE	378
SIEVE ANALYSIS >#30 SIEVE	177
SIEVE ANALYSIS >#45 SIEVE	178
SIEVE ANALYSIS >#60 SIEVE	179
SIEVE ANALYSIS >3/4"SIEVE	376
SIEVE ANALYSIS >3/8"SIEVE	377
SILICON	721
SILVER	722
SIMAZINE	551
SLAKING RATE-40 DEG C INC	323
SLUDGE VOLUME (CYLINDER)	162
SLUDGE VOLUME INDEX	164
SLUDGE VOLUME-SETTLEOMETER	163
SODIUM	723
SODIUM POTASSIUM TARTRATE	346
SOLUBLE ALUMINUM	775
SOLUBLE ANTIMONY	757
SOLUBLE ARSENIC	755
SOLUBLE BARIUM	756
SOLUBLE BERYLLIUM	771
SOLUBLE BOD	402
SOLUBLE CADMIUM	758
SOLUBLE CALCIUM	753
SOLUBLE CALCIUM-HARDNESS	751
SOLUBLE CARBOHYDRATES	413
SOUBLE CARBONACEOUS BOD	462

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
SOLUBLE CHLORIDE	341
SOLUBLE CHROMIUM	759
SOLUBLE COBALT	761
SOLUBLE COD	404
SOLUBLE COPPER	762
SOLUBLE IRON	763
SOLUBLE LEAD	764
SOLUBLE MAGNESIUM	754
SOLUBLE MAGNESIUM-HARDNESS	752
SOLUBLE MANGANESE	766
SOLUBLE MERCURY	767
SOLUBLE MOLYBDENUM	782
SOLUBLE NICKEL	768
SOLUBLE ORTHO-PHOSPHATE	342
SOLUBLE PHOSPHATE	320
SOLUBLE POTASSIUM	769
SOLUBLE SELENIUM	770
SOLUBLE SILICON	776
SOLUBLE SILVER	772
SOLUBLE SODIUM	773
SOLUBLE SULFATE	263
SOLUBLE SULFIDE	252
SOLUBLE THALLIUM	784
SOLUBLE TIN	785
SOLUBLE VANADIUM	787
SOLUBLE ZINC	774
SORBITOL	328
SPECIFIC GRAVITY	113
SPINDLE NO. (VISCOSITY)	118
STANDARD PLATE COUNT	352
STATIC FISH BIOASSAY	363
STICKLEBACK ACUTE,%SURVIVAL	B16
STRONTIUM	733
STRONTIUM-90	124
STYRENE	682
SULFATE	257
SULFATE MASS EMISS. RATE	972
SULFATE REDUCING BACTERIA	374
SULFITE	254
SULFUR DIOXIDE	292
SUSPENDED SOLIDS	151
SUSPENDED SOLIDS @ PH 7	150
SYM-TRINITROBENZENE	8F2
T. INTERMEDIUS/NOVELLUS	397
T. NEAPOLITANUS	398
T. THIOOXIDANS	399
T-1,4-DICHLORO-2-BUTENE	6C4
TANNIN & LIGNIN	407
TASTE	110

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
TCLP EXTRACTION	174
TECHNICAL CHLORDANE	540
TEMPERATURE	111
TEMPERATURE	1S2
TEMPERATURE (VISCOSITY)	120
TERT AMYL METHYL ETHER	6F6
TERT BUTYL ALCOHOL	6F7
TERT-BUTYL MERCAPTAN	294
TETRACHLORODIBENZODIOXINS	D04
TETRACHLORODIBENZOFURANS	F04
TETRACHLOROETHYLENE	607
TETRAHYDROFURAN	679
THALLIUM	734
THERMOPHILIC FUNGI	381
THIOCYANATE	256
THIONAZIN	5C6
THIOSULFATE	253
THORIUM	129
TICH	522
TIN	735
TITANIUM	736
TOLUENE	621
TOLUENE-D8	S11
TOPSMELT ACUTE	B22
TOPSMELT CHRONIC GROWTH	B21
TOPSMELT CHRONIC SURVIVAL	B20
TOTAL ALKALINITY	305
TOTAL ASBESTOS	CA0
TOTAL ASCARIS	389
TOTAL BOD	401
TOTAL CARBAMATE PESTICIDES	5B4
TOTAL CHROMIUM	709
TOTAL COD	403
TOTAL COLIFORM	350
TOTAL COLIFORM (MF)	349
TOTAL CYANIDE	206
TOTAL DETECTABLE DDT	507
TOTAL DETECTABLE PCBS	521
TOTAL DETECTED CHLORDANES	530
TOTAL DETECTED PESTICIDES	549
TOTAL DISSOLVED SOLIDS	155
TOTAL ENTERIC BACTERIA	384
TOTAL ENTERIC VIRUSES	395
TOTAL FUNGI	380
TOTAL HARDNESS	309
TOTAL HCH	525
TOTAL HYDROCARBONS	417
TOTAL KJELDAHL NITROGEN	203
TOTAL LIPIDS	411

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
TOTAL METALS	M03
TOTAL NITROG.MASS EM.RATE	971
TOTAL NITROGEN	208
TOTAL NITROGEN	326
TOTAL NO3 + NO2 NITROGEN	951
TOTAL ORGANIC CARBON	405
TOTAL ORGANIC HALOGEN(TOX)	410
TOTAL PARASITES	388
TOTAL PARTICULATES	160
TOTAL PHOSPHATE	310
TOTAL PHOSPHOROUS	324
TOTAL SOLIDS	153
TOTAL SULFIDE	251
TOTAL SULFUR	255
TOTAL SURFACTANTS	3B1
TOTAL THIOBACILLUS SP	396
TOTAL TOXIC ORGANICS	T01
TOTAL XYLENE ISOMERS	6B7
TOXAPHENE	515
TOXIC ORGANIC MGT PLAN	TMP
TOXOCARA	393
TRANS-1,2-DICHLOROETHYLENE	645
TRANS-1,3-DICHLOROPROPENE	652
TRANS-CHLORDANE	527
TRANS-CHLORDENE	542
TRANS-NONACHLOR	528
TRANSPARENCY (SECCHI DISK)	116
TREMOLITE FIBERS	CA6
TRIBUTYL TIN	553
TRICHLORODIBENZODIOXINS	D03
TRICHLORODIBENZOFURANS	F03
TRICHLOROETHYLENE	606
TRICHURIS	391
TRIETHYLAMINE	6F3
TRIPHENYLENE	885
TRITIUM	122
TTO FOR ALUMINUM FORMING	T11
TTO FOR COIL COATING	T02
TTO FOR COPPER FORMING	T03
TTO FOR E&EC SUBCAT A&B	T04
TTO FOR E&EC SUBCAT C	T05
TTO FOR ELECTROPL&METAL FINISHING	T06
TTO FOR INDUSTRIAL LAUNDRY	T12
TTO FOR METAL MOLD & CAST	T07
TTO FOR TRUCK WASHES	T08
TURBIDITY	103
URANIUM	125
UV ABSORBING ORGANICS	149
VALERIC ACID	644

TABLE 4-1
LABORATORY DATABASE
CONSTITUENTS IN ALPHABETICAL ORDER

TEST DESCRIPTION	TEST CODE
VANADIUM	737
VANADIUM-48	130
VAPAM (METAM-SODIUM)	5D6
VIABLE ASCARIS	390
VINYL ACETATE	625
VINYL CHLORIDE	612
VISCOMETER SPINDLE RPM	119
VISCOSITY	114
VISCOSITY(BROOKFIELD LVT)	117
VOLATILE ACIDS	638
VOLATILE DISSOLVED SOLIDS	168
VOLATILE SUSPENDED SOLIDS	152
VOLATILE TOTAL SOLIDS	154
VOLATILE TTO	T09
W.E.T. DI WATER	175
WASTE EXTRACTION TEST	171
YERSINIA	387
ZINC	724

TABLE 4-2
OPERATIONAL DATA
PALMDALE WATER RECLAMATION PLANT

2002 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

PLANT FLOWS (MGD)			
MONTH	TOTAL PLANT INFLUENT [1]	MAXIMUM INFLUENT [1]	TOTAL EFFLUENT TO LAWA SITE
JAN	9.08	13.0	9.14
FEB	8.87	12.8	8.63
MAR	8.80	12.6	8.06
APR	8.81	12.6	7.53
MAY	9.03	12.5	7.22
JUN	8.81	13.2	6.83
JUL	8.74	13.0	7.15
AUG	8.74	12.7	7.22
SEP	9.04	12.7	7.85
OCT	8.94	12.6	8.21
NOV	8.98	12.3	7.81
DEC	8.97	12.7	7.84
MEAN	8.90	12.7	7.79
MAX	9.08	13.2	9.14
MIN	8.74	12.3	6.83
LIMITS: MEAN MAX MIN	15.0	37.5	

NOTE: 1. Represents influent to secondary treatment.

TABLE 4-2
OPERATIONAL DATA
PALMDALE WATER RECLAMATION PLANT

2002 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

OXIDATION POND FREEBOARD						
MONTH	POND 2	POND 3	POND 4	POND 5	POND 6	POND 7
	INCHES	INCHES	INCHES	INCHES	INCHES	INCHES
JAN	37	37	39	39	29	29
FEB	37	37	39	39	29	29
MAR	37	37	39	39	29	29
APR	37	37	39	39	29	29
MAY	37	37	39	39	29	29
JUN	37	37	39	39	29	29
JUL	37	37	40	40	29	30
AUG	37	37	40	40	29	30
SEP	37	37	40	40	29	30
OCT	37	37	40	40	29	30
NOV	37	37	40	40	29	30
DEC	37	37	40	40	29	30
MEAN	37	37	40	40	29	30
MAX	37	37	40	40	29	30
MIN	37	37	39	39	29	29
LIMITS: MEAN MAX MIN	24	24	24	24	24	24

TABLE 4-2
OPERATIONAL DATA
PALMDALE WATER RECLAMATION PLANT

2002 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

MONTH	PLANT FLOW	COD	BIOCHEMICAL OXYGEN DEMAND		
	INFLUENT	INFLUENT	INFLUENT	PRIMARY EFFLUENT	
	30-DAY AVERAGE	WEEKLY VALUE	WEEKLY VALUE	WEEKLY VALUE	30-DAY AVERAGE
	MGD	mg/L	mg/L	mg/L	mg/L
JAN	9.29	523	240	193	194
FEB	8.93	579	245	205	196
MAR	8.83	527	236	201	205
APR	8.80	565	294	209	200
MAY	8.93	541	300	217	221
JUN	9.01	559	289	207	212
JUL	8.65	528	275	212	211
AUG	8.78	521	280	186	191
SEP	8.85	521	276	185	189
OCT	9.02	625	240	177	174
NOV	8.95	565	258	185	185
DEC	8.95	624	293	205	194
MEAN	8.92	556	269	199	198
MAX	9.29	625	300	217	221
MIN	8.65	521	236	177	174
LIMITS: MEAN MAX MIN					

TABLE 4-2
OPERATIONAL DATA
PALMDALE WATER RECLAMATION PLANT

2002 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

SECONDARY EFFLUENT TO LOS ANGELES WORLD AIRPORTS SITE (COMPOSITE SAMPLING)			
MONTH	INHIBITED SOLUBLE BOD	SOLUBLE BOD	SOLUBLE COD
	mg/L	mg/L	mg/L
JAN			
FEB			
MAR			
APR	6		
MAY		37	
JUN			
JUL			
AUG			
SEP			
OCT			
NOV			
DEC			
MEAN	6	37	0
MAX	6	37	0
MIN	6	37	0
LIMITS:			
MEAN		30	
MAX		45	
MIN			

Sampling from January through July was composited to represent gravity and pressure lines.

TABLE 4-2
OPERATIONAL DATA
PALMDALE WATER RECLAMATION PLANT

2002 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

SECONDARY EFFLUENT POND 2&3 TO LOS ANGELES WORLD AIRPORTS SITE (LAWA)			
MONTH	SOLUBLE CARBONACEOUS BOD (SCBOD)	SOLUBLE BOD	SOLUBLE COD
	mg/L	mg/L	mg/L
JAN	20[1] > SCBOD >11[2]	20	100
FEB	19[1] > SCBOD >10[2]	19	139
MAR	25[1] > SCBOD >14[2]	25	164
APR	7	20	148
MAY	9	25	134
JUN	5	9	118
JUL	<3	4	93
AUG	<3	6	103
SEP	<2	5	93
OCT	<3	< 7	86
NOV	<5	9	80
DEC	6	13	83
MEAN	9 > MEAN >5	< 13	112
MAX	25 > MAX >14	25	164
MIN	< 2	4	80
LIMITS: MEAN MAX MIN		 30 45	

[1] Inhibited soluble BOD cannot exceed the soluble BOD.

[2] Estimated value due to error in analysis.

TABLE 4-2
OPERATIONAL DATA
PALMDALE WATER RECLAMATION PLANT

2002 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

SECONDARY EFFLUENT POND 4-7 TO LOS ANGELES WORLD AIRPORTS SITE (LAWA)			
MONTH	SOLUBLE CARBONACEOUS BOD (SCBOD)	SOLUBLE BOD	SOLUBLE COD
	mg/L	mg/L	mg/L
JAN	12[1] > SCBOD >7[2]	12	86
FEB	10	17	88
MAR	7	18	106
APR	9	19	103
MAY	5	13	80
JUN	4	11	69
JUL	43[1] > SCBOD >7[2]	<43	85
AUG	<5	14	64
SEP	<3	12	68
OCT	<3	11	70
NOV	<3	>38[2]	71
DEC	<5	28	60
MEAN	9 > MEAN >4	19 > MEAN >16	79
MAX	43 > MAX >10	43 > MAX >38	106
MIN	< 3	< 11	60
LIMITS:			
MEAN		30	
MAX		45	
MIN			

[1] Inhibited soluble BOD cannot exceed the soluble BOD.

[2] Estimated value due to error in analysis.

TABLE 4-2
OPERATIONAL DATA
PALMDALE WATER RECLAMATION PLANT

2002 MONITORING DATA
MONTHLY AVERAGES
WQCB ORDER NO. 6-00-57
MONITORING AND REPORTING PROGRAM NO. 00-57

SYMBOL	EXPLANATION
*	NO DISCHARGE UNDER THIS BOARD ORDER ON THIS DATE. THE SUMMARY REFLECTS ALL DATA SHOWN.
A	PARTIAL OR NO SAMPLE OBTAINED DUE TO SAMPLER MALFUNCTION.
B	ERROR IN TESTING PROCEDURE. INVALID RESULTS OBTAINED.
C	INSUFFICIENT SAMPLE VOLUME FOR PERFORMING ALL TESTS.
D	HOLIDAY WORK SCHEDULE. INSUFFICIENT MANPOWER TO PERFORM ALL TESTS.
E	INSUFFICIENT MANPOWER TO PERFORM ALL TESTS.
F	NECESSARY TESTING EQUIPMENT OUT OF SERVICE.
G	FLOW METER OUT OF SERVICE.
J	AVERAGE VALUE.
K	VALUE CALCULATED FROM AVERAGE VALUE.

TABLE 4-3
PALMDALE WATER RECLAMATION PLANT
2002 INFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	ANNUAL MAXIMUM	ANNUAL MINIMUM
155	TOTAL DISSOLVED SOLIDS	MG/L	478						480			540			499	540	478
201	AMMONIA NITROGEN	MG/L	26.0	27.0	25.2	25.5	25.5	27.0	24.6	24.9	25.2	27.6	27.6	33.9	26.7	33.9	24.6
203	TOTAL KJELDAHL NITROGEN (Calculated)	MG/L	38.2	40.6	42.2	39.5	41.4	37.9	33.0	35.8	36.7	39.5	44.0	49.8	39.9	49.8	33.0
204	NITRATE NITROGEN	MG/L	< 0.01	< 0.01	0.03	0.02	< 0.01	< 0.01	< 0.1	0.03	0.02	0.01	< 0.01	< 0.04	0.01 - < 0.03	< 0.1	< 0.01
206	TOTAL CYANIDE	MG/L												< 0.01	0 - < 0.01	< 0.01	< 0.01
312	PHENOLS	MG/L												0.041	0.041	0.041	0.041
315	MBAS	MG/L	11.8	14.3	12.1	14.2	14.6	12.0	16.1	12.0	13.5	10.6	15.7	13.6	13.4	16.1	10.6
401	TOTAL BOD (Average)	MG/L	240	245	236	294	302	289	275	273	276	240	258	293	268	302	236
403	TOTAL COD (Average)	MG/L	523	579	527	565	550	559	528	509	521	625	565	624	556	625	509
502	PP'-DDE	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
504	PP'-DDD	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
506	PP'-DDT	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
508	ALPHA-BHC	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
509	LINDANE (GAMMA-BHC)	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
510	HEPTACHLOR	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
511	HEPTACHLOR EPOXIDE	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
512	ALDRIN	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
513	DIELDRIN	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
514	ENDRIN	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
515	TOXAPHENE	UG/L												< 1.9	0 - < 1.9	< 1.9	< 1.9
519	AROCLOR 1242	UG/L												< 1.2	0 - < 1.2	< 1.2	< 1.2
520	AROCLOR 1254	UG/L												< 1.2	0 - < 1.2	< 1.2	< 1.2
523	BETA-BHC	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
524	DELTA-BHC	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
531	ENDOSULFAN I	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
532	ENDOSULFAN II	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
533	ENDOSULFAN SULFATE	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
534	ENDRIN ALDEHYDE	UG/L												< 0.12	0 - < 0.12	< 0.12	< 0.12
535	AROCLOR 1016	UG/L												< 1.2	0 - < 1.2	< 1.2	< 1.2
536	AROCLOR 1221	UG/L												< 1.2	0 - < 1.2	< 1.2	< 1.2
537	AROCLOR 1232	UG/L												< 1.2	0 - < 1.2	< 1.2	< 1.2
538	AROCLOR 1248	UG/L												< 1.2	0 - < 1.2	< 1.2	< 1.2
539	AROCLOR 1260	UG/L												< 1.2	0 - < 1.2	< 1.2	< 1.2
540	TECHNICAL CHLORDANE	UG/L												< 0.62	0 - < 0.62	< 0.62	< 0.62
601	METHYLENE CHLORIDE	UG/L												0.7	0.7	0.7	0.7
602	CHLOROFORM	UG/L												2.4[1] / 3[2]	2.7	3	2.4
603	1,1,1-TRICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
604	CARBON TETRACHLORIDE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
605	1,1-DICHLOROETHENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
606	TRICHLOROETHYLENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
607	TETRACHLOROETHYLENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
608	BROMODICHLOROMETHANE	UG/L												0.8[1] / 1.9[2]	1.4	1.9	0.8
609	DIBROMOCHLOROMETHANE	UG/L												1.1[1] / 3.8[2]	2.5	3.8	1.1
610	BROMOFORM	UG/L												1.9[1] / 4.1[2]	3	4.1	1.9
611	CHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
612	VINYL CHLORIDE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
613	O-DICHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
614	M-DICHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
615	P-DICHLOROBENZENE	UG/L												3.3	3.3	3.3	3.3
616	1,1-DICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
618	1,1,2-TRICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
619	1,2-DICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
620	BENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
621	TOLUENE	UG/L												0.7	0.7	0.7	0.7
624	ETHYL BENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
645	TRANS-1,2-DICHLOROETHYLENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
646	BROMOMETHANE	UG/L												< 1	0 - < 1	< 1	< 1

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

TABLE 4-3
PALMDALE WATER RECLAMATION PLANT
2002 INFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL		
															AVERAGE	MAXIMUM	MINIMUM
647	CHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
648	2-CHLOROETHYLVINYLETHER	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
649	CHLOROMETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
650	1,2-DICHLOROPROPANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
651	CIS-1,3-DICHLOROPROPENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
652	TRANS-1,3-DICHLOROPROPENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
653	1,1,2,2-TETRACHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
654	ACROLEIN	UG/L												< 5	0 - < 5	< 5	< 5
655	ACRYLONITRILE	UG/L												< 5	0 - < 5	< 5	< 5
705	ARSENIC	MG/L												< 0.001	0 - < 0.001	< 0.001	< 0.001
706	BARIUM	MG/L												0.037	0.037	0.037	0.037
708	CADMIUM	MG/L												< 0.0004	0 - < 0.0004	< 0.0004	< 0.0004
709	TOTAL CHROMIUM	MG/L												< 0.01	0 - < 0.01	< 0.01	< 0.01
712	COPPER	MG/L												0.044	0.044	0.044	0.044
714	LEAD	MG/L												0.003	0.003	0.003	0.003
716	MANGANESE	MG/L												0.02	0.02	0.02	0.02
717	MERCURY	MG/L												0.00019	0.00019	0.00019	0.00019
718	NICKEL	MG/L												< 0.02	0 - < 0.02	< 0.02	< 0.02
720	SELENIUM	MG/L												< 0.001	0 - < 0.001	< 0.001	< 0.001
722	SILVER	MG/L												< 0.025	0 - < 0.025	< 0.025	< 0.025
724	ZINC	MG/L												0.27	0.27	0.27	0.27
725	ANTIMONY	MG/L												0.0005	0.0005	0.0005	0.0005
726	BERYLLIUM	MG/L												< 0.0005	0 - < 0.0005	< 0.0005	< 0.0005
734	THALLIUM	MG/L												< 0.001	0 - < 0.001	< 0.001	< 0.001
800	ACENAPHTHENE	UG/L												< 50	0 - < 50	< 50	< 50
801	ACENAPHTHYLENE	UG/L												< 500	0 - < 500	< 500	< 500
802	ANTHRACENE	UG/L												< 500	0 - < 500	< 500	< 500
803	BENZIDINE	UG/L												< 250	0 - < 250	< 250	< 250
804	BENZO(A)ANTHRACENE	UG/L												< 250	0 - < 250	< 250	< 250
805	BENZO(A)PYRENE	UG/L												< 500	0 - < 500	< 500	< 500
806	BENZO(B)FLUORANTHENE	UG/L												< 500	0 - < 500	< 500	< 500
807	BENZO(GHI)PERYLENE	UG/L												< 250	0 - < 250	< 250	< 250
808	BENZO(K)FLUORANTHENE	UG/L												< 500	0 - < 500	< 500	< 500
809	BIS(2-CL-ETHOXY)METHANE	UG/L												< 250	0 - < 250	< 250	< 250
810	BIS(2-CHLOROETHYL)ETHER	UG/L												< 50	0 - < 50	< 50	< 50
811	BIS(2-CL-ISOPROPYL)ETHER	UG/L												< 100	0 - < 100	< 100	< 100
812	DIETHYLHEXYL PHTHALATE	UG/L												670	670	670	670
813	4-BROMOPHENYL PHENYLETHER	UG/L												< 250	0 - < 250	< 250	< 250
814	BUTYLBENZYL PHTHALATE	UG/L												< 500	0 - < 500	< 500	< 500
815	2-CHLORONAPHTHALENE	UG/L												< 500	0 - < 500	< 500	< 500
816	4-CHLOROPHENYLPHENYLETHER	UG/L												< 250	0 - < 250	< 250	< 250
817	CHRYSENE	UG/L												< 500	0 - < 500	< 500	< 500
818	DIBENZO(A,H)ANTHRACENE	UG/L												< 500	0 - < 500	< 500	< 500
819	1,2-DICHLOROBENZENE	UG/L												< 100	0 - < 100	< 100	< 100
820	1,3-DICHLOROBENZENE	UG/L												< 50	0 - < 50	< 50	< 50
821	1,4-DICHLOROBENZENE	UG/L												< 50	0 - < 50	< 50	< 50
822	3,3'-DICHLOROBENZIDINE	UG/L												< 250	0 - < 250	< 250	< 250
823	DIETHYL PHTHALATE	UG/L												140	140	140	140
824	DIMETHYL PHTHALATE	UG/L												< 100	0 - < 100	< 100	< 100
825	DI-N-BUTYL PHTHALATE	UG/L												< 500	0 - < 500	< 500	< 500
826	2,4-DINITROTOLUENE	UG/L												< 250	0 - < 250	< 250	< 250
827	2,6-DINITROTOLUENE	UG/L												< 250	0 - < 250	< 250	< 250
828	DI-N-OCTYL PHTHALATE	UG/L												< 500	0 - < 500	< 500	< 500
829	1,2-DIPHENYLHYDRAZINE	UG/L												< 50	0 - < 50	< 50	< 50
830	FLUORANTHENE	UG/L												< 50	0 - < 50	< 50	< 50
831	FLUORENE	UG/L												< 500	0 - < 500	< 500	< 500
832	HEXACHLOROBENZENE	UG/L												< 50	0 - < 50	< 50	< 50

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

TABLE 4-3
PALMDALE WATER RECLAMATION PLANT
2002 INFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL		
															AVERAGE	MAXIMUM	MINIMUM
833	HEXACHLOROBUTADIENE	UG/L												< 50	0 - < 50	< 50	< 50
834	HEXACHLOROCYCLOPENTADIENE	UG/L												< 250	0 - < 250	< 250	< 250
835	HEXACHLOROETHANE	UG/L												< 50	0 - < 50	< 50	< 50
836	INDENO(1,2,3-C,D)PYRENE	UG/L												< 500	0 - < 500	< 500	< 500
837	ISOPHORONE	UG/L												< 50	0 - < 50	< 50	< 50
838	NAPHTHALENE	UG/L												< 50	0 - < 50	< 50	< 50
839	NITROBENZENE	UG/L												< 50	0 - < 50	< 50	< 50
840	N-NITROSODIMETHYLAMINE	UG/L												< 250	0 - < 250	< 250	< 250
841	N-NITROSODI-N-PROPYLAMINE	UG/L												< 250	0 - < 250	< 250	< 250
842	PHENANTHRENE	UG/L												< 250	0 - < 250	< 250	< 250
843	PYRENE	UG/L												< 500	0 - < 500	< 500	< 500
844	2,3,7,8-TCDD	NG/L												< 0.49	0 - < 0.49	< 0.49	< 0.49
845	2-CHLOROPHENOL	UG/L												< 250	0 - < 250	< 250	< 250
846	1,2,4-TRICHLOROBENZENE	UG/L												< 250	0 - < 250	< 250	< 250
847	2,4-DICHLOROPHENOL	UG/L												< 250	0 - < 250	< 250	< 250
848	2,4-DIMETHYLPHENOL	UG/L												< 100	0 - < 100	< 100	< 100
849	2,4-DINITROPHENOL	UG/L												< 250	0 - < 250	< 250	< 250
850	2-METHYL-4,6DINITROPHENOL	UG/L												< 250	0 - < 250	< 250	< 250
851	2-NITROPHENOL	UG/L												< 500	0 - < 500	< 500	< 500
852	4-NITROPHENOL	UG/L												< 500	0 - < 500	< 500	< 500
853	4-CHLORO-3-METHYLPHENOL	UG/L												< 50	0 - < 50	< 50	< 50
854	PENTACHLOROPHENOL	UG/L												< 250	0 - < 250	< 250	< 250
855	PHENOL	UG/L												190	190	190	190
856	2,4,6-TRICHLOROPHENOL	UG/L												< 500	0 - < 500	< 500	< 500
857	N-NITROSODIPHENYLAMINE	UG/L												< 50	0 - < 50	< 50	< 50
C15	HYDROCARBONS-MODIFIED8015	MG/L		19.3			1.6						1.6	16.7	9.8	19.3	1.6

[1] First Semiannual make-up

[2] Second Semiannual

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

TABLE 4-4
PALMDALE WATER RECLAMATION PLANT
2002 POND 2&3 EFFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	ANNUAL MAXIMUM	ANNUAL MINIMUM
101	pH (Average)	PH	8.6	8.7	8.6	8.4	8.7	8.7	8.9	8.9	9.4	9.7	9.3	8.8	8.9	9.7	8.4
111	TEMPERATURE (Average)	DEG.C.	7.1	9.6	12.1	14.6	18.7	21.2	23	21.5	20.6	16.7	10.7	7.8	15.3	23	7.1
115	DISSOLVED OXYGEN (Average)	MG/L	5.7	6.3	6	6.3	6	4	4.5	4.6	4.6	7.1	6.6	4.5	5.5	7.1	4
151	SUSPENDED SOLIDS (Average)	MG/L	157	170	150	318	257	251	187	310	289	180	103	130	209	318	103
155	TOTAL DISSOLVED SOLIDS	MG/L	483	532	625	632	680	722	686	723	721	670	644	612	644	723	483
201	AMMONIA NITROGEN	MG/L	10.6	10.5	5.2	< 0.1	< 0.01	0.8	< 0.1	0.1	< 0.1	1.4	2.4	4.6	2.97 - < 2.99	10.6	< 0.01
203	TOTAL KJELDAHL NITROGEN (Calculated)	MG/L	24.1	31.5	29.1	< 33.1	< 36.11	22.4	< 15.8	32.5	< 26.1	24.4	14.8	19.5	24.8 - < 25.8	< 36.1	< 14.8
204	NITRATE NITROGEN	MG/L	0.19	0.2	0.45	0.23	0.41	0.38	0.05	0.07	0.03	0.06	0.06	< 0.04	0.18 - < 0.18	0.45	0.03
206	TOTAL CYANIDE	MG/L												< 0.01	0 - < 0.01	< 0.01	< 0.01
257	SULFATE	MG/L	59	57	64	77	109	103	107	96	117	103	80	70	87	117	57
301	CHLORIDE	MG/L	99.2	108	123	133	150	168	186	191	197	190	187	163	158	197	99
312	PHENOLS	MG/L												< 0.005	0 - < 0.005	< 0.005	< 0.005
315	MBAS	MG/L	0.3	0.5	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.8	0.3	0.3	0.8	0.1
405	TOTAL ORGANIC CARBON	MG/L		59.4			56.4					48.2		42.6	51.7	59.4	42.6
408	OIL & GREASE (Average)	MG/L	8.4	16.5		18.1	< 5		5.3	6.6		< 5		< 5	6.9 - < 8.7	18.1	< 5
502	PP'-DDE	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
504	PP'-DDD	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
506	PP'-DDT	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
508	ALPHA-BHC	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
509	LINDANE (GAMMA-BHC)	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
510	HEPTACHLOR	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
511	HEPTACHLOR EPOXIDE	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
512	ALDRIN	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
513	DIELDRIN	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
514	ENDRIN	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
515	TOXAPHENE	UG/L												< 2	0 - < 2	< 2	< 2
519	AROCLOR 1242	UG/L												< 1.3	0 - < 1.3	< 1.3	< 1.3
520	AROCLOR 1254	UG/L												< 1.3	0 - < 1.3	< 1.3	< 1.3
523	BETA-BHC	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
524	DELTA-BHC	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
531	ENDOSULFAN I	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
532	ENDOSULFAN II	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
533	ENDOSULFAN SULFATE	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
534	ENDRIN ALDEHYDE	UG/L												< 0.13	0 - < 0.13	< 0.13	< 0.13
535	AROCLOR 1016	UG/L												< 1.3	0 - < 1.3	< 1.3	< 1.3
536	AROCLOR 1221	UG/L												< 1.3	0 - < 1.3	< 1.3	< 1.3
537	AROCLOR 1232	UG/L												< 1.3	0 - < 1.3	< 1.3	< 1.3
538	AROCLOR 1248	UG/L												< 1.3	0 - < 1.3	< 1.3	< 1.3
539	AROCLOR 1260	UG/L												< 1.3	0 - < 1.3	< 1.3	< 1.3
540	TECHNICAL CHLORDANE	UG/L												< 0.67	0 - < 0.67	< 0.67	< 0.67
601	METHYLENE CHLORIDE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
602	CHLOROFORM	UG/L		0.77			< 0.5					< 0.5		< 0.5	0.19 - < 0.57	0.77	< 0.5
603	1,1,1-TRICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
604	CARBON TETRACHLORIDE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
605	1,1-DICHLOROETHENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
606	TRICHLOROETHYLENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
607	TETRACHLOROETHYLENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
608	BROMODICHLOROMETHANE	UG/L		< 0.5			< 0.5					< 0.5		< 0.5	0 - < 0.5	< 0.5	< 0.5
609	DIBROMOCHLOROMETHANE	UG/L		< 0.5			< 0.5					< 0.5		< 0.5	0 - < 0.5	< 0.5	< 0.5
610	BROMOFORM	UG/L		< 0.5			< 0.5					< 0.5		< 0.5	0 - < 0.5	< 0.5	< 0.5
611	CHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
612	VINYL CHLORIDE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
613	O-DICHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
614	M-DICHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
615	P-DICHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
616	1,1-DICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
618	1,1,2-TRICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
619	1,2-DICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
620	BENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
621	TOLUENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5

TABLE 4-4
PALMDALE WATER RECLAMATION PLANT
2002 POND 2&3 EFFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	ANNUAL MAXIMUM	ANNUAL MINIMUM
624	ETHYL BENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
645	TRANS-1,2-DICHLOROETHYLENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
646	BROMOMETHANE	UG/L												< 1	0 - < 1	< 1	< 1
647	CHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
648	2-CHLOROETHYLVINYLETHER	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
649	CHLOROMETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
650	1,2-DICHLOROPROPANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
651	CIS-1,3-DICHLOROPROPENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
652	TRANS-1,3-DICHLOROPROPENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
653	1,1,2,2-TETRACHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
654	ACROLEIN	UG/L												< 5	0 - < 5	< 5	< 5
655	ACRYLONITRILE	UG/L												< 5	0 - < 5	< 5	< 5
662	METHYL-TERT-BUTYL-ETHER	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
705	ARSENIC	MG/L												< 0.001	0 - < 0.001	< 0.001	< 0.001
706	BARIUM	MG/L												0.023	0.023	0.023	0.023
708	CADMIUM	MG/L												< 0.0004	0 - < 0.0004	< 0.0004	< 0.0004
709	TOTAL CHROMIUM	MG/L												< 0.01	0 - < 0.01	< 0.01	< 0.01
710	HEXAVALENT CHROMIUM	MG/L												< 0.001	0 - < 0.001	< 0.001	< 0.001
712	COPPER	MG/L		0.024			0.032					0.026		0.026	0.027	0.032	0.024
714	LEAD	MG/L												< 0.002	0 - < 0.002	< 0.002	< 0.002
717	MERCURY	MG/L												< 0.00004	0 - < 0.00004	< 0.00004	< 0.00004
718	NICKEL	MG/L												< 0.02	0 - < 0.02	< 0.02	< 0.02
720	SELENIUM	MG/L		< 0.0010			< 0.0010					< 0.0010		< 0.0010	0 - < 0.0010	< 0.0010	< 0.0010
722	SILVER	MG/L												< 0.025	0 - < 0.025	< 0.025	< 0.025
723	SODIUM	MG/L	106	120[1]	116	129	148[1]	158	173	183	179	177[1]	151	146	149	183	106
724	ZINC	MG/L		0.16			0.24					0.13		0.20	0.18	0.24	0.13
725	ANTIMONY	MG/L												0.0005	0.0005	0.0005	0.0005
726	BERYLLIUM	MG/L												< 0.0005	0 - < 0.0005	< 0.0005	< 0.0005
734	THALLIUM	MG/L												< 0.001	0 - < 0.001	< 0.001	< 0.001
800	ACENAPHTHENE	UG/L												< 1	0 - < 1	< 1	< 1
801	ACENAPHTHYLENE	UG/L												< 10	0 - < 10	< 10	< 10
802	ANTHRACENE	UG/L												< 10	0 - < 10	< 10	< 10
803	BENZIDINE	UG/L												< 5	0 - < 5	< 5	< 5
804	BENZO(A)ANTHRACENE	UG/L												< 5	0 - < 5	< 5	< 5
805	BENZO(A)PYRENE	UG/L												< 10	0 - < 10	< 10	< 10
806	BENZO(B)FLUORANTHENE	UG/L												< 10	0 - < 10	< 10	< 10
807	BENZO(GHI)PERYLENE	UG/L												< 5	0 - < 5	< 5	< 5
808	BENZO(K)FLUORANTHENE	UG/L												< 10	0 - < 10	< 10	< 10
809	BIS(2-CL-ETHOXY)METHANE	UG/L												< 5	0 - < 5	< 5	< 5
810	BIS(2-CHLOROETHYL)ETHER	UG/L												< 1	0 - < 1	< 1	< 1
811	BIS(2-CL-ISOPROPYL)ETHER	UG/L												< 2	0 - < 2	< 2	< 2
812	DIETHYLHEXYL PHTHALATE	UG/L												5.4	5.4	5.4	5.4
813	4-BROMOPHENYL PHENYLETHER	UG/L												< 5	0 - < 5	< 5	< 5
814	BUTYLBENZYL PHTHALATE	UG/L												< 10	0 - < 10	< 10	< 10
815	2-CHLORONAPHTHALENE	UG/L												< 10	0 - < 10	< 10	< 10
816	4-CHLOROPHENYLPHENYLETHER	UG/L												< 5	0 - < 5	< 5	< 5
817	CHRYSENE	UG/L												< 10	0 - < 10	< 10	< 10
818	DIBENZO(A,H)ANTHRACENE	UG/L												< 10	0 - < 10	< 10	< 10
819	1,2-DICHLOROBENZENE	UG/L												< 2	0 - < 2	< 2	< 2
820	1,3-DICHLOROBENZENE	UG/L												< 1	0 - < 1	< 1	< 1
821	1,4-DICHLOROBENZENE	UG/L												< 1	0 - < 1	< 1	< 1
822	3,3'-DICHLOROBENZIDINE	UG/L												< 5	0 - < 5	< 5	< 5
823	DIETHYL PHTHALATE	UG/L												< 2	0 - < 2	< 2	< 2
824	DIMETHYL PHTHALATE	UG/L												< 2	0 - < 2	< 2	< 2
825	DI-N-BUTYL PHTHALATE	UG/L												< 10	0 - < 10	< 10	< 10
826	2,4-DINITROTOLUENE	UG/L												< 5	0 - < 5	< 5	< 5
827	2,6-DINITROTOLUENE	UG/L												< 5	0 - < 5	< 5	< 5
828	DI-N-OCTYL PHTHALATE	UG/L												< 10	0 - < 10	< 10	< 10
829	1,2-DIPHENYLHYDRAZINE	UG/L												< 1	0 - < 1	< 1	< 1
830	FLUORANTHENE	UG/L												< 1	0 - < 1	< 1	< 1

TABLE 4-4
PALMDALE WATER RECLAMATION PLANT
2002 POND 2&3 EFFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL		
															AVERAGE	MAXIMUM	MINIMUM
831	FLUORENE	UG/L												< 10	0 - < 10	< 10	< 10
832	HEXACHLOROBENZENE	UG/L												< 1	0 - < 1	< 1	< 1
833	HEXACHLOROBUTADIENE	UG/L												< 1	0 - < 1	< 1	< 1
834	HEXACHLOROCYCLOPENTADIENE	UG/L												< 5	0 - < 5	< 5	< 5
835	HEXACHLOROETHANE	UG/L												< 1	0 - < 1	< 1	< 1
836	INDENO(1,2,3-C,D)PYRENE	UG/L												< 10	0 - < 10	< 10	< 10
837	ISOPHORONE	UG/L												< 1	0 - < 1	< 1	< 1
838	NAPHTHALENE	UG/L												< 1	0 - < 1	< 1	< 1
839	NITROBENZENE	UG/L												< 1	0 - < 1	< 1	< 1
840	N-NITROSODIMETHYLAMINE	UG/L												< 5	0 - < 5	< 5	< 5
841	N-NITROSODI-N-PROPYLAMINE	UG/L												< 5	0 - < 5	< 5	< 5
842	PHENANTHRENE	UG/L												< 5	0 - < 5	< 5	< 5
843	PYRENE	UG/L												< 10	0 - < 10	< 10	< 10
844	2,3,7,8-TCDD	NG/L												< 0.53	0 - < 0.53	< 0.53	< 0.53
845	2-CHLOROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
846	1,2,4-TRICHLOROBENZENE	UG/L												< 5	0 - < 5	< 5	< 5
847	2,4-DICHLOROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
848	2,4-DIMETHYLPHENOL	UG/L												< 2	0 - < 2	< 2	< 2
849	2,4-DINITROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
850	2-METHYL-4,6DINITROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
851	2-NITROPHENOL	UG/L												< 10	0 - < 10	< 10	< 10
852	4-NITROPHENOL	UG/L												< 10	0 - < 10	< 10	< 10
853	4-CHLORO-3-METHYLPHENOL	UG/L												< 1	0 - < 1	< 1	< 1
854	PENTACHLOROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
855	PHENOL	UG/L												< 1	0 - < 1	< 1	< 1
856	2,4,6-TRICHLOROPHENOL	UG/L												< 10	0 - < 10	< 10	< 10
857	N-NITROSODIPHENYLAMINE	UG/L												< 1	0 - < 1	< 1	< 1
C15	HYDROCARBONS-MODIFIED8015	MG/L		4.54			< 1.30					3.20		NA	0 - < 2.45	4.54	< 0.77

NA - Not Analyzed in December. A make-up sample with a value of 0.77 mg/L was taken on 2/19/2003.
[1]Average value.

TABLE 4-4
PALMDALE WATER RECLAMATION PLANT
2002 POND 4-7 EFFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL		
															AVERAGE	MAXIMUM	MINIMUM
101	pH (Average)	PH	8.4	8.2	8.6	8.4	8.6	8.6	8.6	8.3	8.1	8	8	7.7	8.3	8.6	7.7
111	TEMPERATURE (Average)	DEG.C.	7.4	9.7	12	15.1	17.9	21.1	22.7	21.3	21.3	17.1	11	7.6	15.4	22.7	7.4
115	DISSOLVED OXYGEN (Average)	MG/L	5.4	5.8	6.1	5.1	5.5	4.9	2.8	3	3.4	5.1	3.7	3.4	4.5	6.1	2.8
151	SUSPENDED SOLIDS (Average)	MG/L	102	95	69	78	59	67	114	98	80	63	70	81	81	114	59
155	TOTAL DISSOLVED SOLIDS	MG/L	469	509	573	597	573	587	584	565	524	540	533	547	550	597	469
201	AMMONIA NITROGEN	MG/L	22.5	23.6	22.0	24.6	16.2	17.1	11.3	9.5	8.8	17.4	21.0	17.4	17.6	24.6	8.8
203	TOTAL KJELDAHL NITROGEN (Calculated)	MG/L	37.2	45.4	45.1	47.9	28.8	24.4	22.7	22.7	28.8	32.2	31.4	28.6	32.9	47.9	22.7
204	NITRATE NITROGEN	MG/L	0.10	0.05	0.03	0.03	0.24	0.1	0.28	0.25	0.21	0.16	0.35	1.52	0.28	1.52	0.03
206	TOTAL CYANIDE	MG/L												< 0.01	0 - < 0.01	< 0.01	< 0.01
257	SULFATE	MG/L	66	61	61	71	80	82	86	62	76	71	64	64	70	86	61
301	CHLORIDE	MG/L	92	104	117	118	130	135	137	134	136	145	152	153	129	153	92
312	PHENOLS	MG/L												< 0.006	0 - < 0.006	< 0.006	< 0.006
315	MBAS	MG/L	0.2	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.4	0.1
405	TOTAL ORGANIC CARBON	MG/L		48.8			40.4					36.4		40.7	41.6	48.8	36.4
408	OIL & GREASE (Average)	MG/L	11	11.6		10	< 5		< 5	< 5		< 5		< 5	4.1 - < 7.2	11.6	< 5
502	PP'-DDE	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
504	PP'-DDD	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
506	PP'-DDT	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
508	ALPHA-BHC	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
509	LINDANE (GAMMA-BHC)	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
510	HEPTACHLOR	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
511	HEPTACHLOR EPOXIDE	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
512	ALDRIN	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
513	DIELDRIN	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
514	ENDRIN	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
515	TOXAPHENE	UG/L												< 95	0 - < 95	< 95	< 95
519	AROCLOR 1242	UG/L												< 63	0 - < 63	< 63	< 63
520	AROCLOR 1254	UG/L												< 63	0 - < 63	< 63	< 63
523	BETA-BHC	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
524	DELTA-BHC	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
531	ENDOSULFAN I	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
532	ENDOSULFAN II	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
533	ENDOSULFAN SULFATE	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
534	ENDRIN ALDEHYDE	UG/L												< 6.3	0 - < 6.3	< 6.3	< 6.3
535	AROCLOR 1016	UG/L												< 63	0 - < 63	< 63	< 63
536	AROCLOR 1221	UG/L												< 63	0 - < 63	< 63	< 63
537	AROCLOR 1232	UG/L												< 63	0 - < 63	< 63	< 63
538	AROCLOR 1248	UG/L												< 63	0 - < 63	< 63	< 63
539	AROCLOR 1260	UG/L												< 63	0 - < 63	< 63	< 63
540	TECHNICAL CHLORDANE	UG/L												< 32	0 - < 32	< 32	< 32
601	METHYLENE CHLORIDE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
602	CHLOROFORM	UG/L		< 0.5			< 0.5					< 0.5		< 0.5	0 - < 0.5	< 0.5	< 0.5
603	1,1,1-TRICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
604	CARBON TETRACHLORIDE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
605	1,1-DICHLOROETHENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
606	TRICHLOROETHYLENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
607	TETRACHLOROETHYLENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
608	BROMODICHLOROMETHANE	UG/L		< 0.5			< 0.5					< 0.5		< 0.5	0 - < 0.5	< 0.5	< 0.5
609	DIBROMOCHLOROMETHANE	UG/L		< 0.5			< 0.5					< 0.5		< 0.5	0 - < 0.5	< 0.5	< 0.5
610	BROMOFORM	UG/L		< 0.5			< 0.5					< 0.5		< 0.5	0 - < 0.5	< 0.5	< 0.5
611	CHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
612	VINYL CHLORIDE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
613	O-DICHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
614	M-DICHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
615	P-DICHLOROBENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
616	1,1-DICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
618	1,1,2-TRICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
619	1,2-DICHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
620	BENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
621	TOLUENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
624	ETHYL BENZENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5

TABLE 4-4
PALMDALE WATER RECLAMATION PLANT
2002 POND 4-7 EFFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	ANNUAL MAXIMUM	ANNUAL MINIMUM
645	TRANS-1,2-DICHLOROETHYLENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
646	BROMOMETHANE	UG/L												< 1	0 - < 1	< 1	< 1
647	CHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
648	2-CHLOROETHYLVINYLETHER	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
649	CHLOROMETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
650	1,2-DICHLOROPROPANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
651	CIS-1,3-DICHLOROPROPENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
652	TRANS-1,3-DICHLOROPROPENE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
653	1,1,2,2-TETRACHLOROETHANE	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
654	ACROLEIN	UG/L												< 5	0 - < 5	< 5	< 5
655	ACRYLONITRILE	UG/L												< 5	0 - < 5	< 5	< 5
662	METHYL-TERT-BUTYL-ETHER	UG/L												< 0.5	0 - < 0.5	< 0.5	< 0.5
705	ARSENIC	MG/L												< 0.001	0 - < 0.001	< 0.001	< 0.001
706	BARIUM	MG/L												0.015	0.015	0.015	0.015
708	CADMIUM	MG/L												< 0.0004	0 - < 0.0004	< 0.0004	< 0.0004
709	TOTAL CHROMIUM	MG/L												< 0.01	0 - < 0.01	< 0.01	< 0.01
710	HEXAVALENT CHROMIUM	MG/L												< 0.001	0 - < 0.001	< 0.001	< 0.001
712	COPPER	MG/L		0.028			0.010					0.009		0.016	0.016	0.028	0.009
714	LEAD	MG/L												< 0.002	0 - < 0.002	< 0.002	< 0.002
717	MERCURY	MG/L												< 0.00004	0 - < 0.00004	< 0.00004	< 0.00004
718	NICKEL	MG/L												< 0.02	0 - < 0.02	< 0.02	< 0.02
720	SELENIUM	MG/L		< 0.0010			< 0.0010					< 0.0010		< 0.0010	0 - < 0.0010	< 0.0010	< 0.0010
722	SILVER	MG/L												< 0.025	0 - < 0.025	< 0.025	< 0.025
723	SODIUM	MG/L	98.5	119[1]	107	117	125[1]	130	130	127[1]	122	127	125	127	121.2	130	98.5
724	ZINC	MG/L		0.30			0.12					0.07		0.10	0.15	0.30	0.07
725	ANTIMONY	MG/L												< 0.0005	0 - < 0.0005	< 0.0005	< 0.0005
726	BERYLLIUM	MG/L												< 0.0005	0 - < 0.0005	< 0.0005	< 0.0005
734	THALLIUM	MG/L												< 0.001	0 - < 0.001	< 0.001	< 0.001
800	ACENAPHTHENE	UG/L												< 1	0 - < 1	< 1	< 1
801	ACENAPHTHYLENE	UG/L												< 10	0 - < 10	< 10	< 10
802	ANTHRACENE	UG/L												< 10	0 - < 10	< 10	< 10
803	BENZIDINE	UG/L												< 5	0 - < 5	< 5	< 5
804	BENZO(A)ANTHRACENE	UG/L												< 5	0 - < 5	< 5	< 5
805	BENZO(A)PYRENE	UG/L												< 10	0 - < 10	< 10	< 10
806	BENZO(B)FLUORANTHENE	UG/L												< 10	0 - < 10	< 10	< 10
807	BENZO(GHI)PERYLENE	UG/L												< 5	0 - < 5	< 5	< 5
808	BENZO(K)FLUORANTHENE	UG/L												< 10	0 - < 10	< 10	< 10
809	BIS(2-CL-ETHOXY)METHANE	UG/L												< 5	0 - < 5	< 5	< 5
810	BIS(2-CHLOROETHYL)ETHER	UG/L												< 1	0 - < 1	< 1	< 1
811	BIS(2-CL-ISOPROPYL)ETHER	UG/L												< 2	0 - < 2	< 2	< 2
812	DIETHYLHEXYL PHTHALATE	UG/L												5.4	5.4	5.4	5.4
813	4-BROMOPHENYL PHENYLETHER	UG/L												< 5	0 - < 5	< 5	< 5
814	BUTYLBENZYL PHTHALATE	UG/L												< 10	0 - < 10	< 10	< 10
815	2-CHLORONAPHTHALENE	UG/L												< 10	0 - < 10	< 10	< 10
816	4-CHLOROPHENYLPHENYLETHER	UG/L												< 5	0 - < 5	< 5	< 5
817	CHRYSENE	UG/L												< 10	0 - < 10	< 10	< 10
818	DIBENZO(A,H)ANTHRACENE	UG/L												< 10	0 - < 10	< 10	< 10
819	1,2-DICHLOROBENZENE	UG/L												< 2	0 - < 2	< 2	< 2
820	1,3-DICHLOROBENZENE	UG/L												< 1	0 - < 1	< 1	< 1
821	1,4-DICHLOROBENZENE	UG/L												< 1	0 - < 1	< 1	< 1
822	3,3'-DICHLOROBENZIDINE	UG/L												< 5	0 - < 5	< 5	< 5
823	DIETHYL PHTHALATE	UG/L												< 2	0 - < 2	< 2	< 2
824	DIMETHYL PHTHALATE	UG/L												< 2	0 - < 2	< 2	< 2
825	DI-N-BUTYL PHTHALATE	UG/L												< 10	0 - < 10	< 10	< 10
826	2,4-DINITROTOLUENE	UG/L												< 5	0 - < 5	< 5	< 5
827	2,6-DINITROTOLUENE	UG/L												< 5	0 - < 5	< 5	< 5
828	DI-N-OCTYL PHTHALATE	UG/L												< 10	0 - < 10	< 10	< 10
829	1,2-DIPHENYLHYDRAZINE	UG/L												< 1	0 - < 1	< 1	< 1
830	FLUORANTHENE	UG/L												< 1	0 - < 1	< 1	< 1
831	FLUORENE	UG/L												< 10	0 - < 10	< 10	< 10
832	HEXACHLOROBENZENE	UG/L												< 1	0 - < 1	< 1	< 1

TABLE 4-4
PALMDALE WATER RECLAMATION PLANT
2002 POND 4-7 EFFLUENT MONITORING LABORATORY DATA

TEST CODE	CONSTITUENT	UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL AVERAGE	ANNUAL MAXIMUM	ANNUAL MINIMUM
833	HEXACHLOROBUTADIENE	UG/L												< 1	0 - < 1	< 1	< 1
834	HEXACHLOROCYCLOPENTADIENE	UG/L												< 5	0 - < 5	< 5	< 5
835	HEXACHLOROETHANE	UG/L												< 1	0 - < 1	< 1	< 1
836	INDENO(1,2,3-C,D)PYRENE	UG/L												< 10	0 - < 10	< 10	< 10
837	ISOPHORONE	UG/L												< 1	0 - < 1	< 1	< 1
838	NAPHTHALENE	UG/L												< 1	0 - < 1	< 1	< 1
839	NITROBENZENE	UG/L												< 1	0 - < 1	< 1	< 1
840	N-NITROSODIMETHYLAMINE	UG/L												< 5	0 - < 5	< 5	< 5
841	N-NITROSODI-N-PROPYLAMINE	UG/L												< 5	0 - < 5	< 5	< 5
842	PHENANTHRENE	UG/L												< 5	0 - < 5	< 5	< 5
843	PYRENE	UG/L												< 10	0 - < 10	< 10	< 10
844	2,3,7,8-TCDD	NG/L												< 0.37	0 - < 0.37	< 0.37	< 0.37
845	2-CHLOROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
846	1,2,4-TRICHLOROBENZENE	UG/L												< 5	0 - < 5	< 5	< 5
847	2,4-DICHLOROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
848	2,4-DIMETHYLPHENOL	UG/L												< 2	0 - < 2	< 2	< 2
849	2,4-DINITROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
850	2-METHYL-4,6DINITROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
851	2-NITROPHENOL	UG/L												< 10	0 - < 10	< 10	< 10
852	4-NITROPHENOL	UG/L												< 10	0 - < 10	< 10	< 10
853	4-CHLORO-3-METHYLPHENOL	UG/L												< 1	0 - < 1	< 1	< 1
854	PENTACHLOROPHENOL	UG/L												< 5	0 - < 5	< 5	< 5
855	PHENOL	UG/L												< 1	0 - < 1	< 1	< 1
856	2,4,6-TRICHLOROPHENOL	UG/L												< 10	0 - < 10	< 10	< 10
857	N-NITROSODIPHENYLAMINE	UG/L												< 1	0 - < 1	< 1	< 1
C15	HYDROCARBONS-MODIFIED8015	MG/L		3.88			< 1.3					< 0.05		NA	0 - < 1.53	3.88	< 0.05

NA - Not Analyzed in December. A make-up sample with a value of 0.89 mg/L was taken on 2/19/2003.
[1]Average value.

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

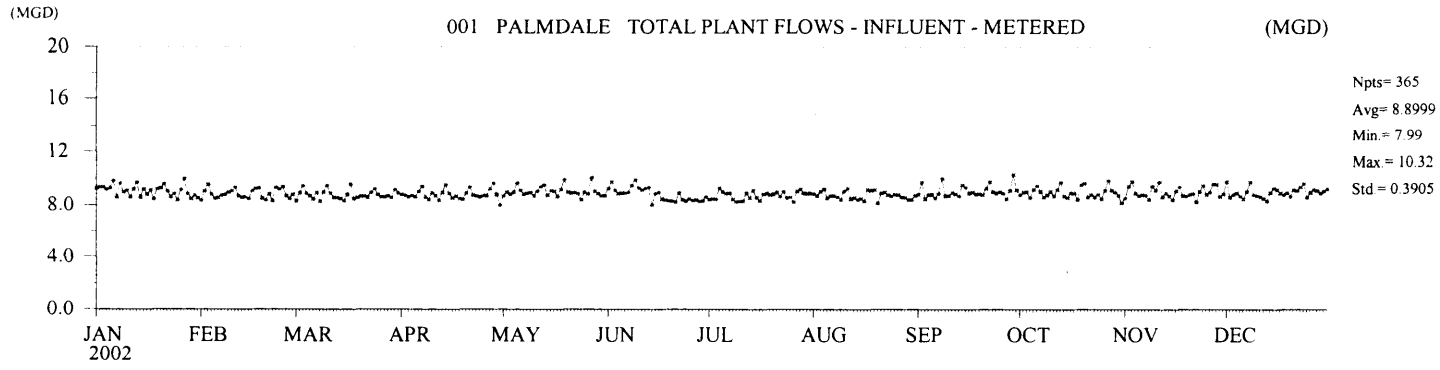
PALMDALE WATER RECLAMATION PLANT

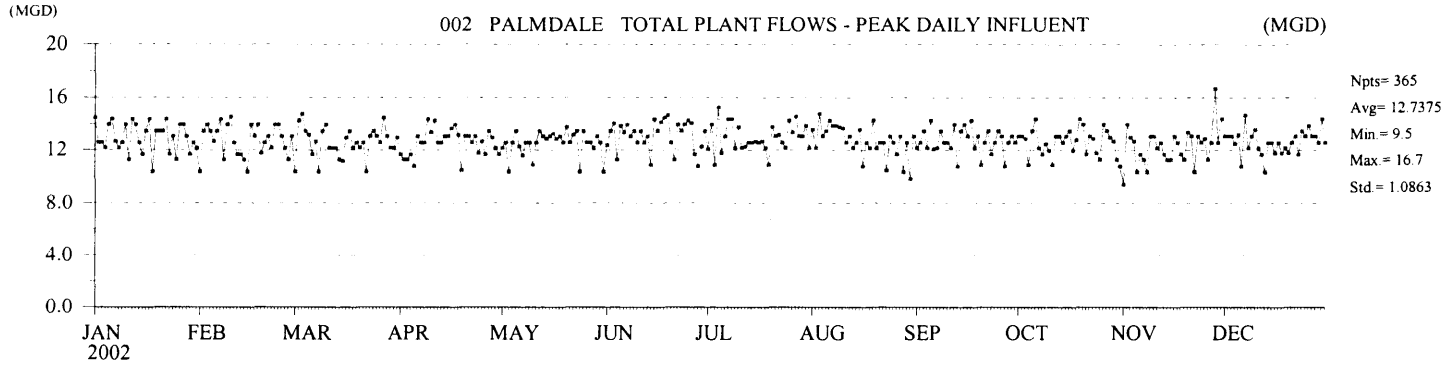
FIGURE 4-1

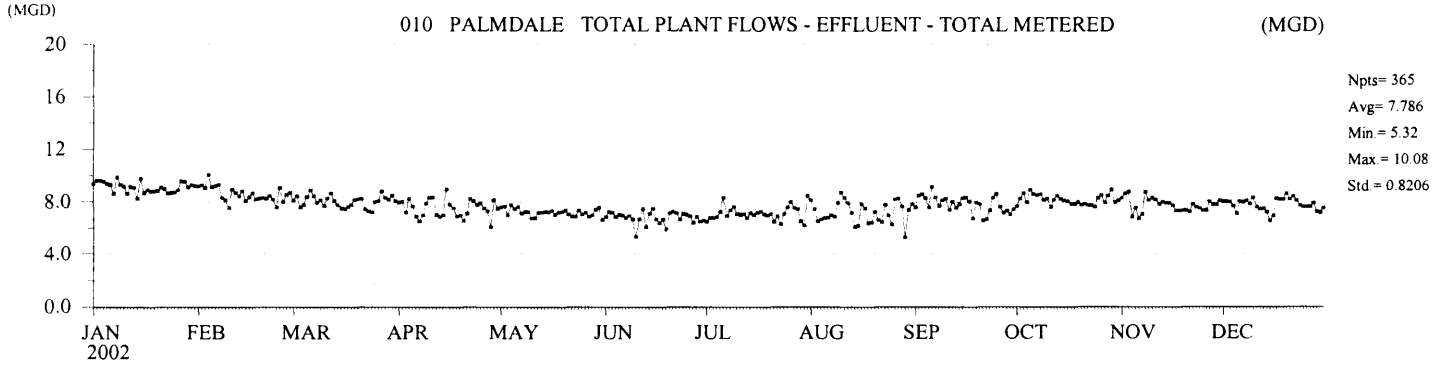
GRAPHICAL SUMMARIES

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

PALMDALE WRP
(JAN 1, 2002) - (DEC 31, 2002)
365 Days







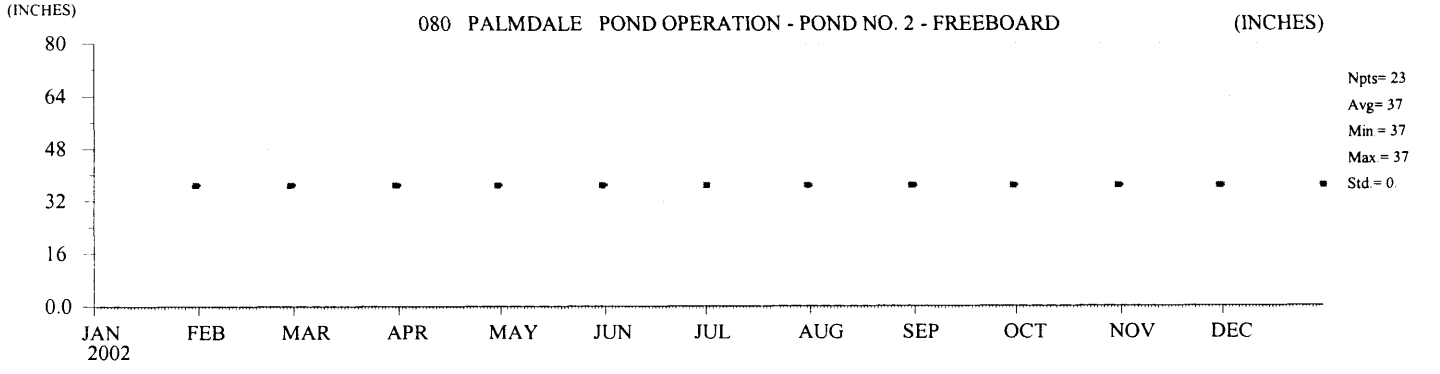


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EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

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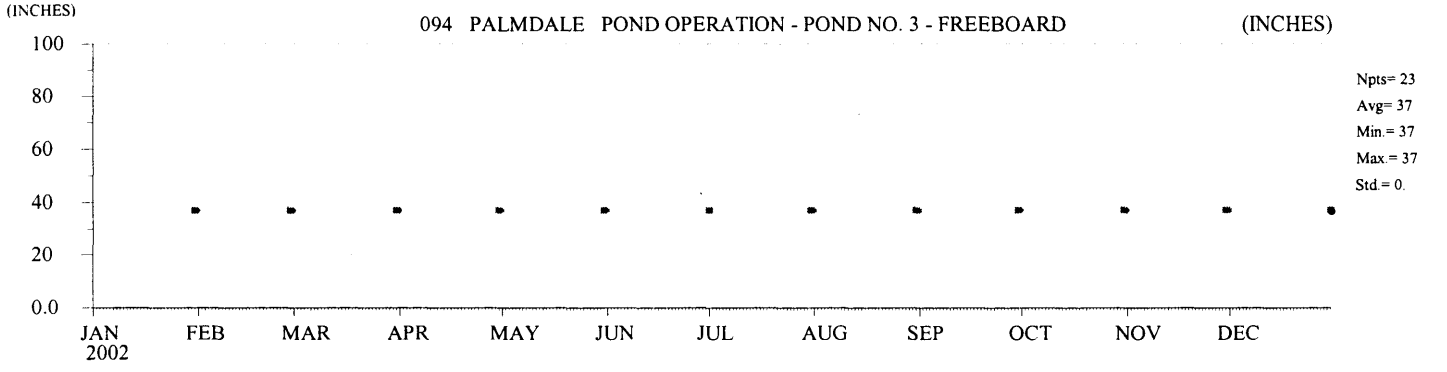
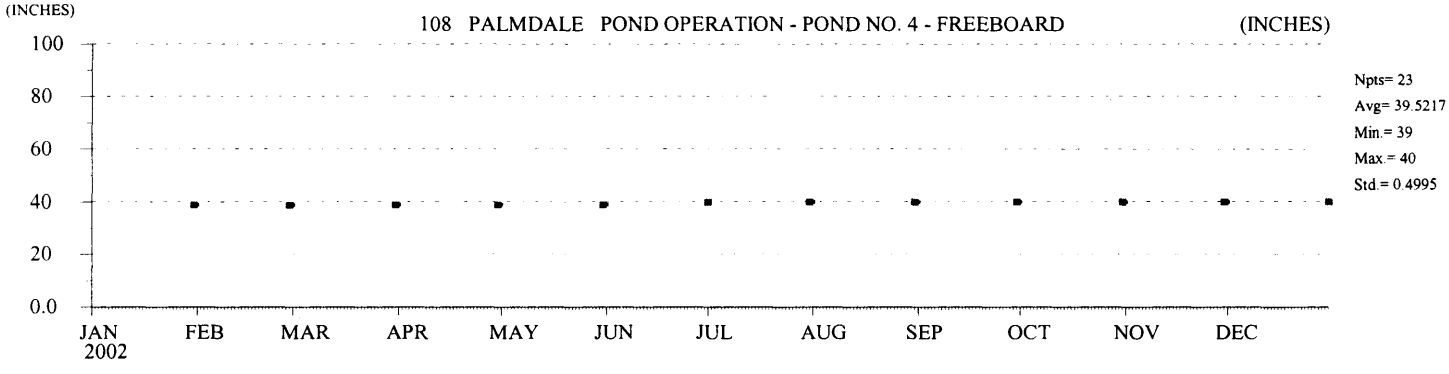
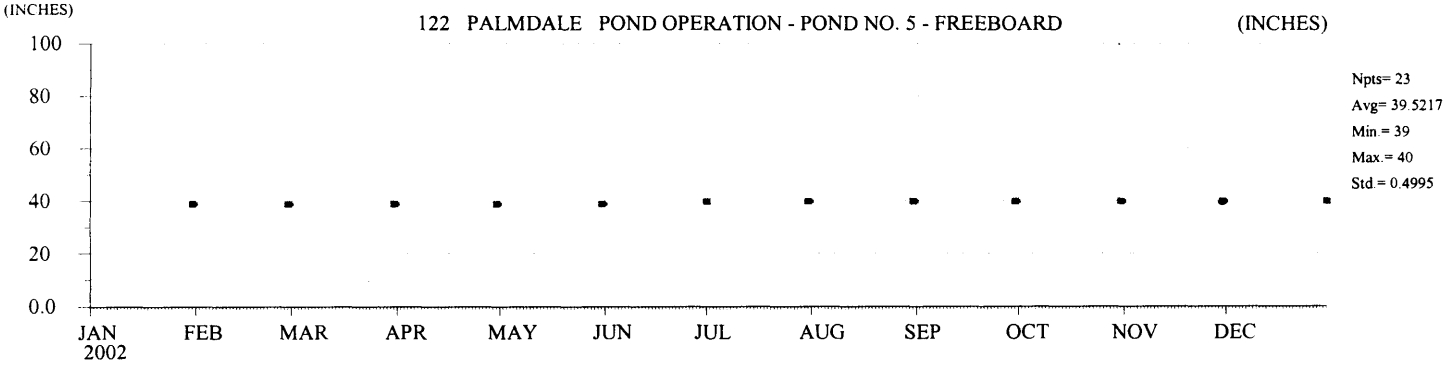
(JAN 1, 2002) - (DEC 31, 2002)
365 Days







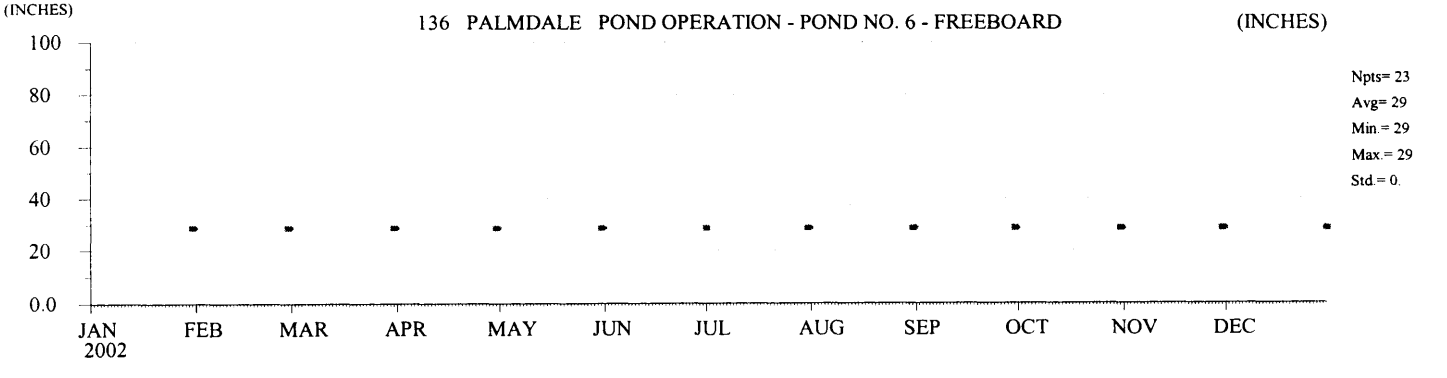


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EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

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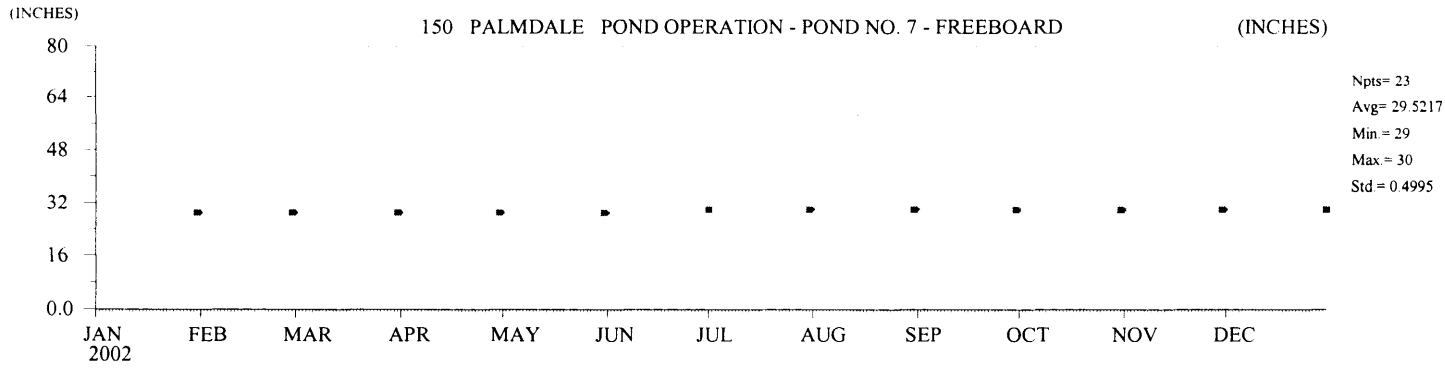
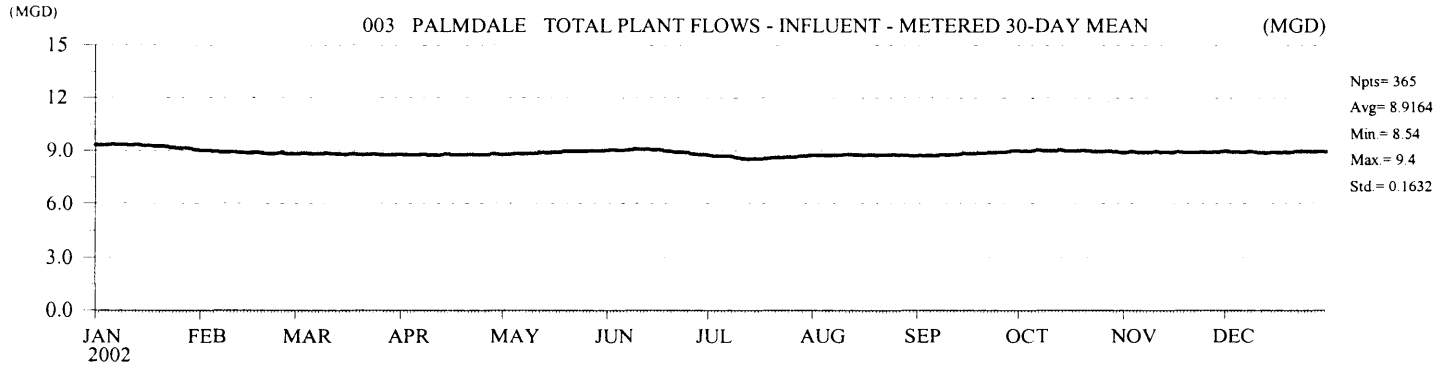
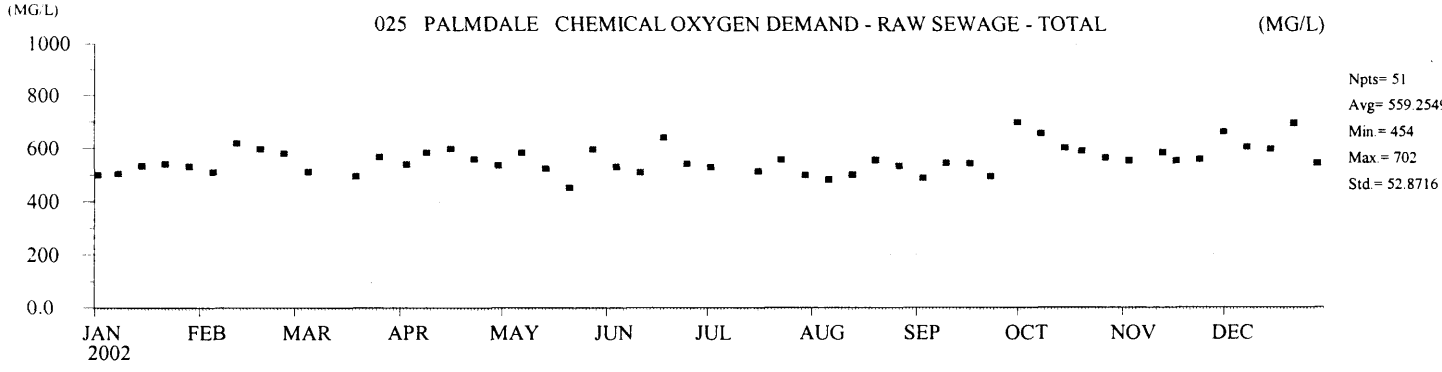
(JAN 1, 2002) - (DEC 31, 2002)
365 Days







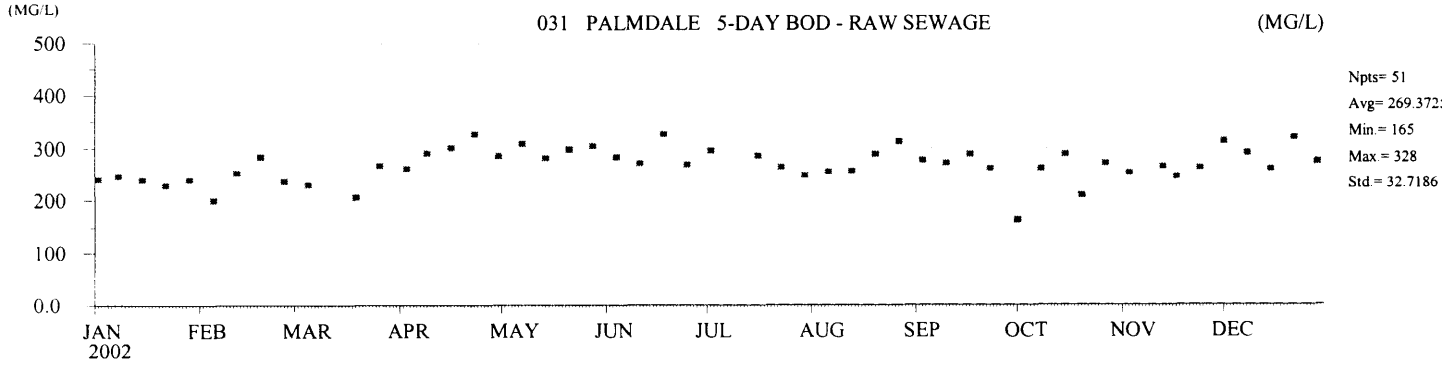


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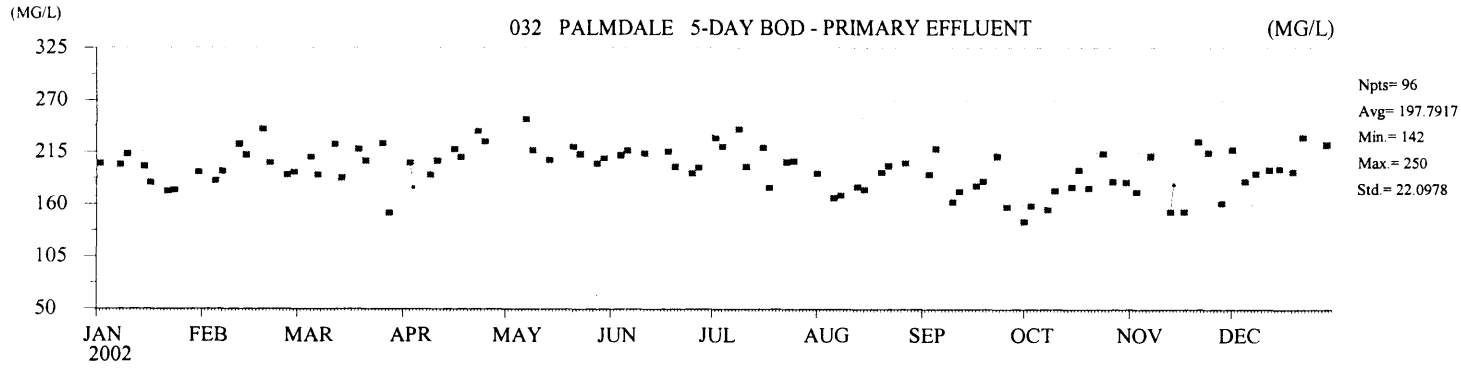
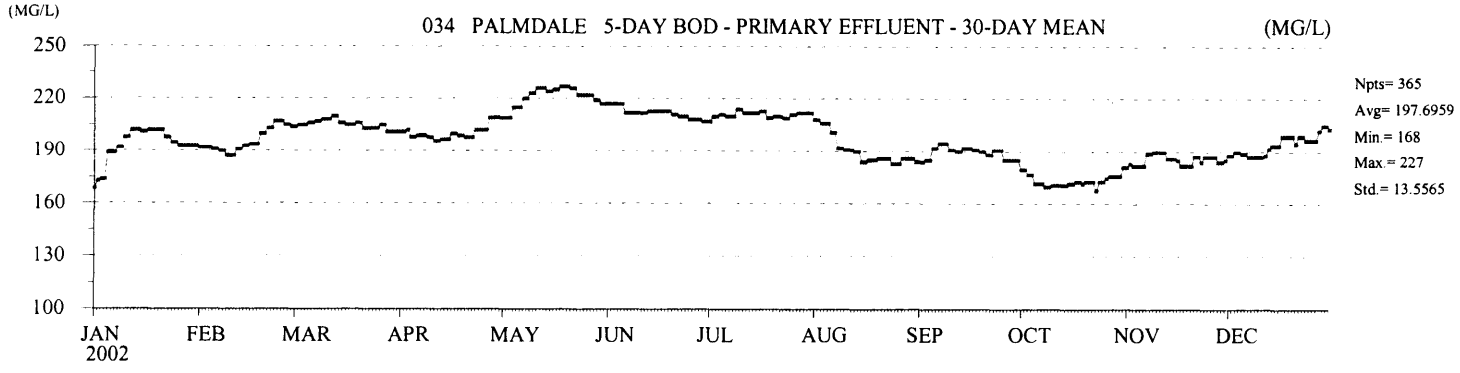
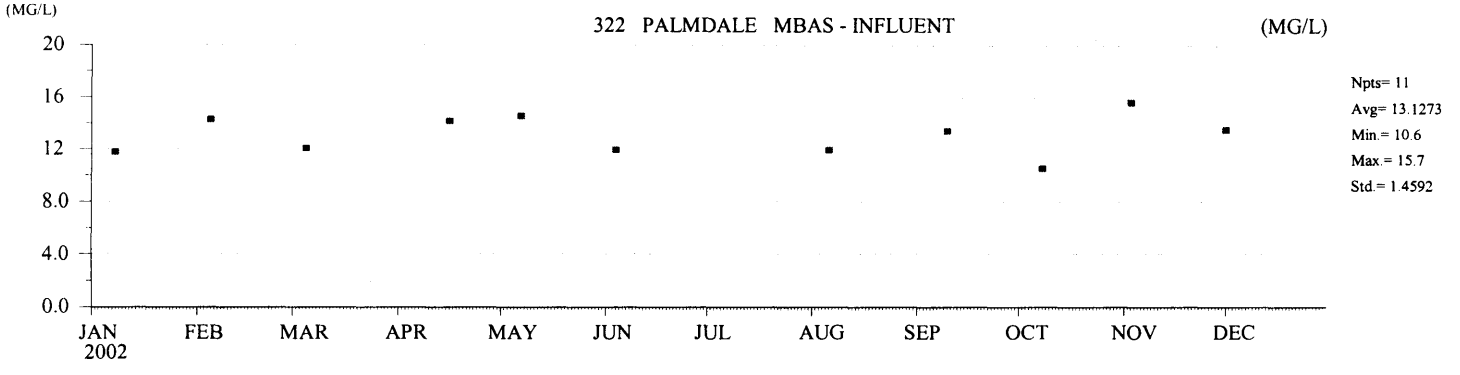
EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

PALMDALE WRP
(JAN 1, 2002) - (DEC 31, 2002)
365 Days







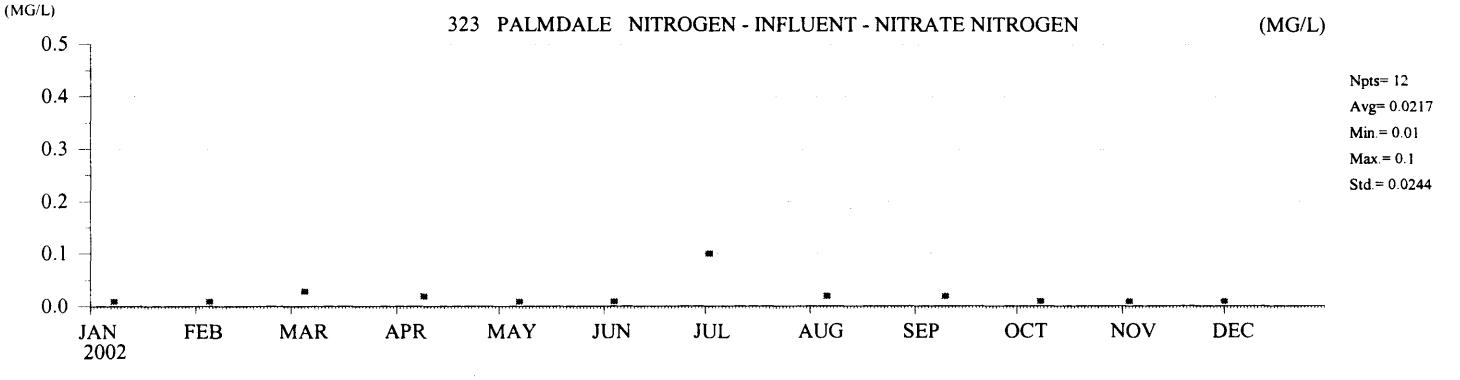


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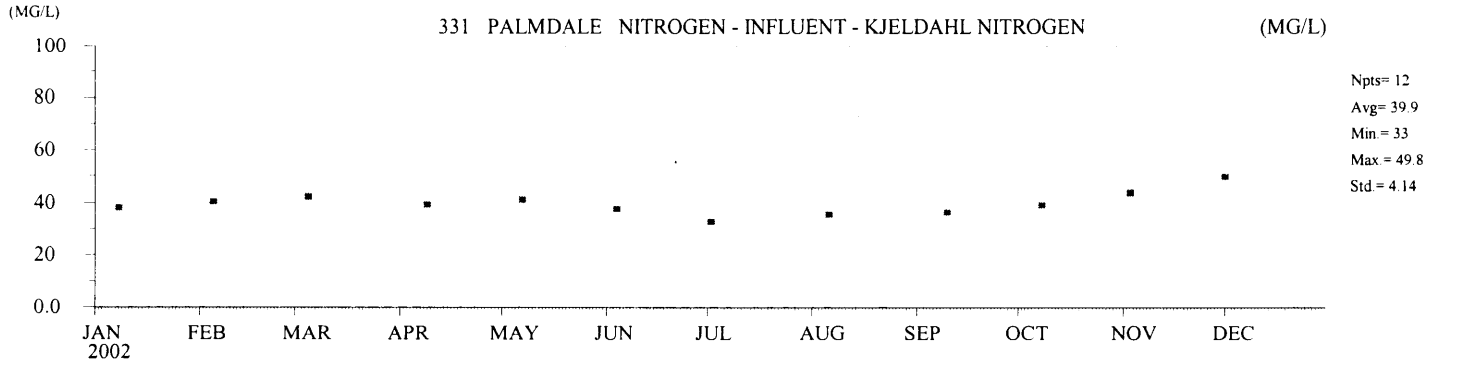
EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

PALMDALE WRP
(JAN 1, 2002) - (DEC 31, 2002)
365 Days



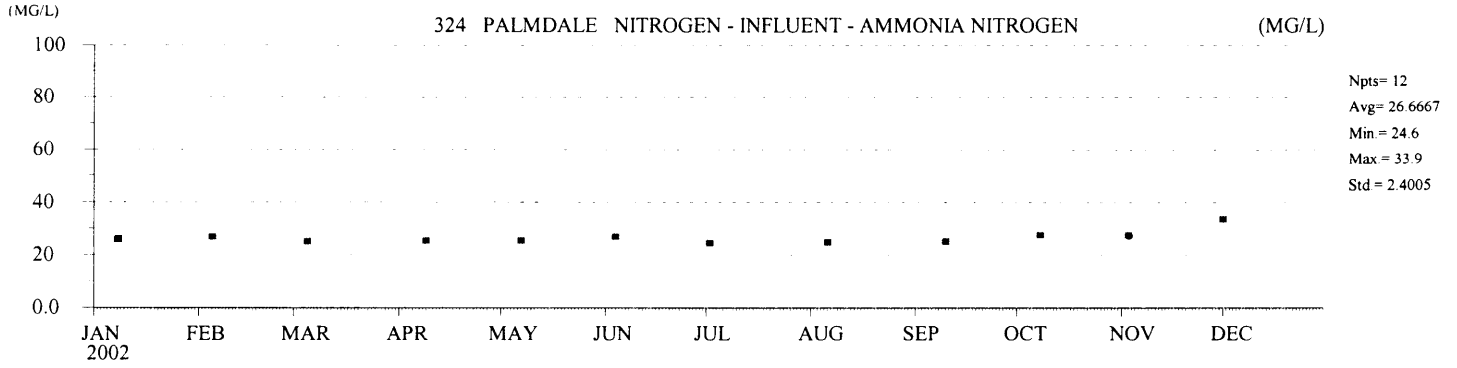


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EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER.

PALMDALE WATER RECLAMATION PLANT

CHAPTER 5

LONG TERM
WASTEWATER MONITORING SUMMARIES

CHAPTER 5

LONG TERM WASTEWATER MONITORING SUMMARIES

5.1 INTRODUCTION

Long term monitoring summaries are provided to show trends in wastewater quality and the effects of changes in plant operations. Annual averages are presented in both graphical and tabular form. Only a limited number of parameters, primarily metals, are reported. No permit limits are indicated because they have changed during the life of this plant. The figures and tables in this chapter are for observation of long term trends. Non-detect values are reported here with actual numerical values without the less than designation (<) or, in the cases of Total Detectable DDT and PCBs, as zero. In addition, in cases where a range in concentration is reported for the annual average, the upper non-detect value of that range is reported as the annual average in Table 5-1 and Figure 5-1. Often, the reported value is actually the method detection level for the constituent. As such, in some cases (e.g., Oil & Grease), a rise in the concentration in the table and graph simply indicates an increase in the analytical detection level from previous years.

5.2 TABULAR SUMMARIES

Table 5-1 presents tabular summaries of the data presented graphically in Figure 5-1. Parameters in the tabular summaries are generally arranged in numerical order of the laboratory test codes which are described in Chapter 4. The 2002 effluent values, presented in Table 5-1, are flow-weighted averages of effluent values from ponds 2-3 and ponds 4-7.

5.3 GRAPHICAL SUMMARIES

Long term summaries of selected influent and effluent parameters are presented in a series of graphs all included under Figure 5-1. Parameters are generally arranged in numerical order of the laboratory test codes which are described in Chapter 4. Where both influent and effluent values for the same parameter are reported, they are combined in a single graph. The graphs present annual means for the period 1975-2002.

TABLE 5-1 (Page 1 of 7)
LONG TERM TABULAR SUMMARIES
PALMDALE WATER RECLAMATION PLANT (Annual Averages)

Parameter	Flow	Flow	pH	pH	Suspended Solids	Suspended Solids	Total Dissolved Solids	Total Dissolved Solids
Test Code	001	001	101	101	151	151	155	155
Sample Location	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
Sample Type	Cont.	Cont.			24-hr	24-hr	24-hr	24-hr
Units	MGD	MGD	pH	pH	mg/L	mg/L	mg/L	mg/L
1975	1.58	0.51	7.5	8.4	326	162	422	477
1976	1.62	0.74	7.4	8.0	289	119	381	468
1977	1.61	0.77	7.4	8.1	421	114	389	465
1978	1.71	0.84	7.4	8.0	426	127	405	460
1979	1.83	0.92	7.6	8.1	400	115	382	456
1980	1.94	0.86	7.6	8.0	289	118	378	436
1981	2.06	0.60	7.2	7.9	295	132	390	442
1982	2.22	0.78	7.2	7.7	232	140	369	393
1983	2.39	0.92	6.9	7.6	247	143	358	389
1984	2.79	1.49	7.2	7.5	266	108	368	427
1985	3.29	2.21	7.3	7.8	210	88	426	470
1986	3.78	2.36	7.4	7.8	242	77	404	462
1987	4.57	3.26	7.5	7.6	203	127	423	462
1988	4.79	3.45	7.5	7.8	244	136	498	554
1989	6.44	3.59	7.6	7.8	341	122	539	667
1990	7.17	4.88	7.5	8.0	306	119	525	593
1991	7.86	4.89	8.1	8.2	351	141	525	581
1992	7.43	5.53	7.5	8.1	290	139	605	469
1993	7.53	6.33	7.6	8.3	299	124		590
1994	7.70	6.70	7.5	8.3	344	110		543
1995	7.82	7.21	7.5	8.3	267	117		526
1996	7.95	7.27	7.3	8.3	230	114		497
1997	8.26	7.54	7.3	8.2	226	117		496
1998	8.32	8.18	7.6	8.4	208	118		489
1999	8.57	7.80	7.5	8.2	254	114		483
2000	9.06	8.28	7.6	8.3	256	110	499	516
2001	9.17	8.44	7.5	8.2	257	106	490	531
2002	8.90	7.79	7.4	8.3	234	89	499	556

TABLE 5-1 (Page 2 of 7)
LONG TERM TABULAR SUMMARIES
PALMDALE WATER RECLAMATION PLANT (Annual Averages)

Parameter	Ammonia-Nitrogen	Organic-Nitrogen	Nitrate-Nitrogen	Nitrite-Nitrogen	Nitrate-Nitrogen plus Nitrite-Nitrogen	Total Nitrogen	Total Cyanide	Sulfate
Test Code	201	202	204	205	951	208	206	257
Sample Location	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Sample Type	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1975								
1976								
1977								
1978								
1979								
1980								
1981	8.60	16.00	0.40					
1982	12.30	15.20	0.52					
1983	12.20	17.20	0.19					
1984	11.60	13.40	0.06				0.02	62
1985	15.70	12.00	0.11				0.01	62
1986	18.00	10.80	0.21	0.10	0.31	29.11	0.01	72
1987	17.10	13.20	0.10	0.10	0.20	30.50	0.03	77
1988	13.30	23.20	0.09	0.20	0.29	36.79	0.01	100
1989	9.70	19.50	0.25	0.42	0.67	29.87	0.01	103
1990	13.30	9.00	0.11	0.28	0.39	22.69	0.01	72
1991	10.23	15.08	2.60	0.59	3.19	28.50	0.01	84
1992	8.02	15.31	1.87	1.66	3.53	26.87	0.01	79
1993	7.24	13.69	2.49	1.40	3.89	24.82	0.01	69
1994	8.31	14.06	1.63	1.41	3.04	25.41	0.01	88
1995	9.65	14.83	0.65	1.41	2.06	26.54	0.01	85
1996	9.04	13.40	1.19	1.52	2.71	25.15	0.01	74
1997	9.04	11.97	1.40	0.66	2.06	23.07	0.01	72
1998	9.10	13.93	1.56	0.87	2.43	25.46	0.01	73
1999	11.84	12.78	1.52	0.63	2.15	26.75	0.01	72
2000	11.60	12.60	1.17	1.19	2.36	26.56	0.01	88
2001	13.90	12.70	0.82	0.02	0.84	27.45	0.01	101
2002	16.70	15.70	0.27	0.41	0.68	33.20	0.01	71

TABLE 5-1 (Page 3 of 7)
LONG TERM TABULAR SUMMARIES
PALMDALE WATER RECLAMATION PLANT (Annual Averages)

Parameter	Chloride	Phenols	Phenols	Fluoride	Boron	Detergents (MBAS)	Detergents (MBAS)
Test Code	301	312	312	313	314	315	315
Sample Location	Effluent	Influent	Effluent	Effluent	Effluent	Influent	Effluent
Sample Type	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1975		0.05	0.002			8.4	0.09
1976		0.07	0.003			8.2	0.16
1977		0.17	0.003			8.4	0.10
1978		0.07	0.006			9.1	0.11
1979		0.06	0.004			8.2	0.28
1980		0.05	0.007			5.6	0.16
1981		0.04	0.001			6.1	0.10
1982		0.03	0.003			5.5	0.18
1983		0.04	0.005			3.1	0.12
1984	45	0.05	0.007			5.4	0.14
1985	60	0.06	0.009			5.7	0.21
1986	64	0.06	0.010			6.5	0.16
1987	79	0.05	0.009	0.19	0.47	5.7	0.70
1988	101	0.05	0.005	0.28	0.43	3.8	0.30
1989	123	0.04	0.014	0.26	0.43	6.7	0.45
1990	143	0.05	0.002	0.34	0.55	7.7	0.22
1991	112	0.07	0.016	0.27	0.53	5.8	0.39
1992	112	0.09	0.010	0.28	0.47	5.2	0.26
1993	103	0.06	0.010	0.23	0.70	7.2	0.19
1994	119	0.12	0.003	0.28	0.56	7.2	0.20
1995	98	0.10	0.004	0.24	0.50	5.6	0.19
1996	95	0.05	0.005	0.43	0.48	6.1	0.19
1997	102	0.13	0.001	0.25	0.47	6.9	0.20
1998	102	0.05	0.001	0.25	0.47	7.7	0.25
1999	102	0.03	0.004	0.25	0.44	8.7	0.27
2000	110	0.01	0.006	0.31	0.50	11.7	0.24
2001	119	0.05	0.007	0.29	0.44	10.6	0.31
2002	131	0.04	0.006		0.28	13.4	0.20

EXHIBIT I-3 TO RESPONSE OF CITY OF LOS ANGELES TO DISCOVERY ORDER

TABLE 5-1 (Page 4 of 7)
LONG TERM TABULAR SUMMARIES
PALMDALE WATER RECLAMATION PLANT (Annual Averages)

Parameter	BOD	BOD (401/402)*	COD	COD (403/404)*	Oil & Grease	Oil & Grease	Total Detectable DDT	Total Detectable DDT
Test Code	401	401	403	403	408	408	507	507
Sample Location	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
Sample Type	24-hr	24-hr	24-hr	24-hr	Grab	Grab	24-hr	24-hr
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L
1975	165	36		277	176	5.0	0.45	0.08
1976	175	30		250	161	8.5	0.45	0.14
1977	186	30		255	155	5.6	0.36	0.11
1978	240	48		274	146	9.4	0.31	0.06
1979	201	51		290	134	14.4	0.14	0.07
1980	199	49		275	161	6.6	0.10	0.06
1981	180	34		277	99	8.4	0.10	0.06
1982	220	47	665	290	84	8.0	0.03	0.00
1983	264	41	728	284	59	7.0	0.00	0.00
1984	248	55	567	229	70	8.0	0.08	0.00
1985	271	49	614	209	66	11.0	0.02	0.01
1986	275	25	602	103	71	3.4	0.01	0.00
1987	248	28	545	103	41	4.9	0.00	0.00
1988	286	21	630	94	50	3.9	0.00	0.00
1989	276	21	633	87	31	1.2	0.01	0.00
1990	276	24	589	94	42	1.7	0.01	0.00
1991	282	22	599	89	54	1.6	0.04	0.00
1992	274	19	633	68	72	1.9	0.01	0.01
1993	258	25	583	72	50	1.5	0.00	0.00
1994	265	25	581	72		1.3	0.00	0.00
1995	245	21	507	75		1.6	0.01	0.00
1996	236	27	491	73		1.6	0.00	0.00
1997	255	16	509	80		1.7	0.00	0.00
1998	233	27	481	72		1.8	0.01	0.00
1999	238	23	538	78		2.6	0.00	0.00
2000	235	26	535	65		2.7	0.01	0.01
2001	243	22	538	88		5.0	0.00	0.00
2002	268	19	556	81		7.3		

* Before 1986, tests were based on un-filtered samples. As of 1986, tests have been based on filtered samples.

TABLE 5-1 (Page 5 of 7)
LONG TERM TABULAR SUMMARIES
PALMDALE WATER RECLAMATION PLANT (Annual Averages)

Parameter	Total Detectable PCBs	Total Detectable PCBs	Arsenic	Arsenic	Barium	Barium	Cadmium	Cadmium
Test Code	521	521	705	705	706	706	708	708
Sample Location	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
Sample Type	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr
Units	ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1975	1.49	0.30		0.011		0.09		0.002
1976	0.45	0.05		0.004		0.10		0.003
1977	0.82	0.13		0.003		0.06		0.002
1978	0.82	0.28		0.002		0.11		0.003
1979	0.80	0.21		0.003		0.20		0.003
1980	0.29	0.18		0.002		0.11		0.003
1981	0.20	0.20		0.001		0.16		0.002
1982	0.07	0.00		0.001		0.05		0.000
1983	0.00	0.00		0.001		0.04		0.001
1984	0.08	0.00		0.001		0.20		0.001
1985	0.07	0.07		0.002		0.03		0.004
1986	0.00	0.00		0.002		0.02		0.002
1987	0.00	0.00	0.003	0.004		0.04	0.001	0.006
1988	0.00	0.00	0.005	0.003		0.04	0.010	0.010
1989	0.03	0.00	0.008	0.002	0.07	0.03	0.010	0.010
1990	0.00	0.00	0.002	0.001	0.06	0.03	0.003	0.008
1991	0.00	0.00	0.003	0.001	0.06	0.03	0.006	0.005
1992	0.00	0.00	0.003	0.001	0.09	0.03	0.010	0.010
1993	0.00	0.00	0.002	0.001	0.06	0.02	0.010	0.010
1994	0.00	0.00	0.001	0.001	0.06	0.02	0.003	0.003
1995	0.00	0.00	0.002	0.000	0.06	0.02	0.003	0.003
1996	0.00	0.00	0.001	0.001	0.06	0.02	0.003	0.003
1997	0.00	0.00	0.002	0.003	0.05	0.11	0.003	0.003
1998	0.00	0.00	0.001	0.001	0.05	0.03	0.003	0.003
1999	0.00	0.00	0.001	0.001	0.05	0.02	0.002	0.002
2000	0.01	0.01	0.002	0.001	0.07	0.02	0.002	0.002
2001	0.00	0.00	0.001	0.001	0.07	0.02	0.002	0.002
2002			0.001	0.001	0.04	0.02	0.0004	0.0004

TABLE 5-1 (Page 6 of 7)
LONG TERM TABULAR SUMMARIES
PALMDALE WATER RECLAMATION PLANT (Annual Averages)

Parameter	Total Chromium	Total Chromium	Copper	Copper	Iron	Iron	Lead	Lead
Test Code	709	709	712	712	713	713	714	714
Sample Location	Influent	Effluent	Influent	Effluent	Influent	Effluent	Influent	Effluent
Sample Type	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr	24-hr
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1975		0.01		0.02		0.710		0.02
1976		0.01		0.02		0.360		0.03
1977		0.00		0.06		0.260		0.03
1978		0.01		0.02		0.290		0.04
1979		0.01		0.03		0.380		0.03
1980		0.00		0.03		0.360		0.02
1981		0.00		0.02		0.240		0.02
1982		0.00		0.03		0.400		0.02
1983		0.01		0.03		0.500		0.01
1984		0.01		0.02		0.300		0.01
1985		0.01		0.03		0.210		0.01
1986		0.01		0.04		0.470		0.02
1987	0.03	0.02	0.07	0.03		1.040	0.03	0.02
1988	0.01	0.02	0.05	0.03		0.890	0.02	0.02
1989	0.02	0.02	0.07	0.02	0.69	0.520	0.04	0.04
1990	0.02	0.02	0.09	0.02	0.92	0.310	0.04	0.04
1991	0.02	0.02	0.06	0.02	0.75	0.470	0.04	0.04
1992	0.02	0.02	0.06	0.02	1.00	1.030	0.04	0.04
1993	0.02	0.02	0.06	0.02			0.04	0.04
1994	0.01	0.01	0.06	0.01			0.02	0.02
1995	0.01	0.01	0.07	0.02			0.02	0.02
1996	0.01	0.01	0.08	0.02			0.02	0.02
1997	0.02	0.01	0.07	0.14			0.02	0.02
1998	0.04	0.04	0.08	0.03			0.02	0.02
1999	0.02	0.01	0.05	0.01			0.01	0.01
2000	0.08	0.01	0.07	0.01			0.01	0.01
2001	0.01	0.01	0.07	0.02		0.19	0.01	0.01
2002	0.01	0.01	0.04	0.02			0.003	0.002