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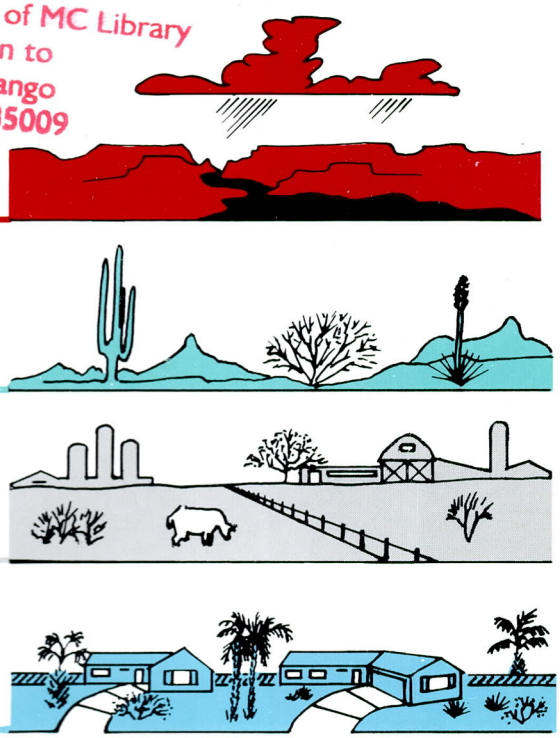

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Stormwater Quality Report
City of Glendale, Arizona

Second Quarter

February 11, 1999

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Stormwater Quality Report

Second Quarter, Sampling Year 1999

October 1, 1998 through December 31, 1998

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For

City of Glendale, Arizona

February 11, 1999

Stormwater Quality Report
City of Glendale, Arizona

Second Quarter

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Introduction

The Flood Control District of Maricopa County operates and maintains four land based stormwater monitoring stations and the United States Geological Survey operates and maintains one land based monitoring station for the City of Glendale for compliance with their National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge permit. This report contains data from the fall 1998 seasonal rainfall.

A contractor working for the City of Glendale installed equipment in early October. The equipment was placed into service on October 20, 1998. A brief report of the installation is included.

Data is presented in the following manner. First, only data from the fall of 1998 is included. Second, only data required in the City of Glendale's permit is reported here. Finally, in addition to the tabular data, each event for each site is presented in validation form. Validation form lists the analyte and result, plus the analysis date, data flags, any relevant quality control data, and comments about data.

Storm Summaries

This is a summary of sampled storm events in the second quarter of the 1999 sample year, which was October 1 through December 31, 1998. Of the several storm events measured during the fall, only two were sampled. No samples were collected at Butler and Industrial Park. There were two distinct rainy periods during the quarter: one in late October and one in early December. Little rain fell during November.

Troubleshooting of the equipment is mentioned in the Storm Summaries but is detailed in the Maintenance Summaries. Following are detailed descriptions of the sampled events.

Storm of October 25, 1998

This storm event produced rainfall over much of the Glendale area. Rainfall totals ranged from 0.18 inches to 0.34 inches. The following table shows rainfall totals for each sampler site.

Storm of October 25, 1998

SITE	RAINFALL (inches)	SAMPLES COLLECTED
ARROW	0.18	YES (1)
BUTLER	0.34	NO (2)
CITRUS	0.26	YES
INDUSTRIAL PARK	0.20	NO (2)
OLIVE	0.32	NO (3)

(1) Composite samples collected and analyzed, though rainfall was short of being representative.
(2) Insufficient runoff to collect samples
(3) USGS did not sample this event.

The equipment worked well during the first event since being activated on October 20, 1998. There was insufficient runoff at BUTLER and INDPARK to complete sampling. Grab samples were not taken at any site because the flow was too low when the sites were visited. This was due in part to the failure of the ALERT system during this event. Erroneous rainfall totals were given by the system, and thus the storm did not appear as strong as it actually was.

Storm of December 6, 1998

The storm of December 6, 1998 was widespread over most of Glendale. Rainfall totals were between 0.30 and 0.40 inches. The table below provides a record of rainfall data.

Storm of December 6, 1998

SITE	RAINFALL (inches)	SAMPLES COLLECTED
ARROW	0.39	NO (1)
BUTLER	0.31	NO (1)
CITRUS	0.39	YES
INDUSTRIAL PARK	0.31	NO (1)
OLIVE	0.36	NO (2)

(1) Equipment Failure
(2) USGS did not sample this event.

Samples were collected only at the CITRUS site during this event. Grab samples were taken from the outlet and the automatic sampler collected composite samples. The remaining sites did not sample, excepting the OLIVE site, because of equipment problems. The USGS did not sample at the OLIVE site during this storm.

Other Storm Events Not Sampled

There were several other rain events that occurred during the fall. The rainfall section provides rainfall totals for each site. Some rainfall amounts appear to have been representative, but were not sampled. Below is a table that provides explanation for their not being sampled. All events with rainfall less than 0.20 inches are not included because, by definition, they are not representative.

Events with rainfall > 0.20 inches but not sampled

SITE	DATE	RAIN	REASON
BUTLER	10/25/98	0.34	Insufficient runoff
INDPARK	10/25/98	0.20	Insufficient runoff
OLIVE	10/25/98	0.32	USGS did not sample
BUTLER	10/30/98	0.20	Insufficient runoff
INDPARK	10/30/98	0.24	Battery failed
OLIVE	10/30/98	0.31	USGS did not sample
ARROW	12/2/98	0.31	Battery failed.
CITRUS	12/2/98	0.28	Insufficient runoff
OLIVE	12/2/98	0.28	USGS did not sample
ARROW	12/6/98	0.39	Raingauge was plugged and did not activate sampler.
BUTLER	12/6/98	0.31	Distributor jammed / Insufficient runoff
INDPARK	12/6/98	0.31	Battery failed
OLIVE	12/6/98	0.36	USGS did not sample

Maintenance Summary

This section details maintenance activities and problems during the second quarter. In general, sampling equipment worked well. Any problems or difficulties are detailed for each site below.

ARROW – near Skunk Creek and 79th Avenue

The equipment worked well after being activated on October 20, 1998. and during the first event of October 25. Full samples were collected in the composite jars.

The batteries went dead twice, which caused the storm on December 2 to be missed. A solar panel was installed at this site on December 28, 1998. The battery voltage has remained at or above 13.0 volts since. Furthermore, a cellular telephone was installed on January 5, 1999.

A storm of December 6, 1998 was missed because the sampler did not activate. Since rainfall seemed adequate for sampler initiation, equipment was checked and the raingauge funnel was found to be plugged with bird droppings. Since the sampler activates on both level and flow, the plugged raingauge funnel caused the storm to be missed. The funnel is now checked regularly.

BUTLER – near 56th Drive and Orchid Lane

The equipment worked well after being activated on October 20, 1998. Equipment functioned during the first event of October 25, but the observed flows and high water marks indicated that the peak flow was not very high. Speaking with local residents confirmed that there were no significant flows in the channel during the storms of October 25 – 26 even though the total rainfall was 0.70 inches for the period.

Batteries at this site went dead a few times. A solar panel was installed on December 30, 1998. Battery voltage has remained at or above 13.2 volts since.

The sampler failed to sample the storm of December 6, 1998 due to a jammed distributor. This problem first occurred during the installation of the equipment in October, but was thought to be corrected the following day when the distributor tubing was replaced with a longer piece of tubing. The distributor worked fine during the storm of October 25. An attempt to fix the problem in the field on December 7 failed. The sampler was taken to the office for evaluation. The distributor arm mechanism was binding internally. It was repaired and tested. The sampler was returned to the field on December 10.

A small storm on December 15, 1998 was not sampled. There were no equipment related problems. However, it is apparent that flows in the channel do

not develop enough head to sample over a three to six hour period. A small weir, 1 1/2 inches in height is proposed to allow head to develop over the intake tubing. This will be installed by mid-January 1999. The hydraulics of the weir are not expected to have much impact on the overall water surface elevation. It is estimated that at 100 cfs, the water surface elevation will only increase by 0.18 inches. The weir will be made of mortar and is not expected to impact water quality in the channel.

CITRUS – near Grovers and 71st Avenue

The equipment worked well after being activated on October 20, 1998. The first storm occurred on October 25 in which the equipment functioned properly. A second event occurred on December 6 and again, the equipment functioned well. Although there were no battery problems at this site, a solar panel was installed on December 30 to prevent battery failures.

INDUSTRIAL PARK – near New River channel

The equipment worked well after being activated on October 20, 1998. During the storm of October 25, however, the sampler pumped too much sample into the composite jars. The sampler did not collect enough actual samples because the initial runoff estimate was too high. (The amount of each sample was too high, but the number of samples collected was too few.) The sampling interval was decreased from 2000 cubic feet to 400 cubic feet.

The battery failed during the event of October 30 and again during a storm of December 6. On both occasions, the sampling program began, but was unable to complete due to a dead battery. A solar panel was installed on December 30, 1998. The panel has kept the battery charged to 13.0 volts or greater since.

OLIVE – 67th Avenue north of Olive Avenue

The United States Geological Survey has maintained this site through an agreement with the Flood Control District for a number of years. The initial agreement expired on September 30, 1998. For this reason, no samples were collected during the fall 1998 quarter. The USGS will begin sampling again during the winter quarter of 1999.

Grab Sample Techniques

Grab samples are taken directly from the runoff discharge. Ideally, grab samples are taken on the rising limb of the runoff hydrograph. This may not always be possible. However, the collection time is recorded and the actual point of collection can be plotted on the hydrograph. The grab samples are collected in one of two ways. First, if the flow is not too great, the sampling person can collect a sample directly from the flow. Second, if the flow is too high, an apparatus is used to allow collection from above the runoff.

The apparatus is made from PVC piping. Bottles are placed into various sizes of PVC pipe and samples are collected directly into the sample bottles. Once collected, the samples are preserved and placed on ice.

Monitoring Station Setup

Background

On October 20, 1998, the Flood Control District of Maricopa County setup the four NPDES storm water monitoring sites previously installed by the city of Glendale's contractor. Charlie Klenner and Dave Gardner of FCD set up the stations.

Below is a description of each station and the setup. Parameters used, such as slope, are also given as well as an explanation of why that number was chosen.

ARROW

SITE CHARACTERISTICS

LOCATION	S02 T3N R1E – 79TH AVE AT SKUNK CREEK
ROUGHNESS	0.020
PIPE SLOPE	0.0010 FT/FT
INTAKE TUBING LENGTH	44 FEET (65 FEET)
SAMPLING INTERVAL	3500 CUBIC FEET
BASIN SIZE	180 ACRES
LAND USE TYPE	COMMERCIAL
PHONE	602-809-0277 (cellular)

The setup at this site was not difficult because the installation was done previously.

- The sampler was programmed.

- The intake tubing was cut, leaving extra tubing to enable the sampler to be removed from the cabinet for easier access. The actual length of the tubing is 44 feet. However, during calibration of the sample volume of 450 mL, it was necessary to use 65 feet as the length in the program. This is typical of Teflon tubing. Once the tubing length was set to 65 feet, the volume calibration was accurate.

- The slope was unavailable at the time of set up. It was measured locally using a tape measure and level. The local slope was found to be 0.01 feet/feet. The As-Built pipe slope was later found to be 0.0004 feet/feet. Because this slope seems low, the pipe slope was set to 0.0010 feet/feet.

- The sample collection interval was set to 2500 cubic feet. Because actual flow characteristics are unknown, 2500 cf was used as a starting point. The pipe diameter is 96 inches and the basin served is chiefly a large asphalt parking lot. Because of the imperviousness of the basin, it is expected to produce large quantities of runoff. Adjustments will be made during the first few storm events. There have been two storm events at this site since the initial setup of the equipment. Rainfall of 0.70 inches and 0.10 inches produced large amounts of runoff. For this reason, the sampling interval was reset to 3500 cubic feet.

- The roughness of 0.020 was chosen due to the conditions of Skunk Creek, which the pipe outlets into. Skunk Creek has low, thick vegetation which will influence the flow out of the pipe which has a roughness itself of 0.013 to 0.015.

BUTLER

SITE CHARACTERISTICS

LOCATION	S32 T3N R2E – ORCHID LANE AT 56TH DRIVE
ROUGHNESS	0.018
PIPE SLOPE	0.010 FT/FT
INTAKE TUBING LENGTH	57 FEET (63 FEET)
SAMPLING INTERVAL	100 CUBIC FEET
BASIN SIZE	30 ACRES
LAND USE TYPE	RESIDENTIAL
PHONE	602-930-7101

The setup at this site was not difficult because the installation was done previously.

- The sampler was programmed.

- The intake tubing was cut, leaving extra tubing to enable the sampler to be removed from the cabinet for easier access. The actual length of the tubing is 57 feet. However, during calibration of the sample volume of 450 mL, it was necessary to use 63 feet as the length in the program. This is typical of Teflon tubing. Once the tubing length was set to 63 feet, the volume calibration was accurate.

- The slope was set to 0.0060, which is the As-Built pipe slope. A survey of the channel was conducted on December 22, 1998. Slope was found to be 0.01 ft/ft.

- The sample collection interval was set to 150 cubic feet. Because actual flow characteristics are unknown, 150 cf was used as a starting point. The channel width is 60 inches and the basin served is mostly residential with grass front yards and fenced back yards. Because much of the rainfall on the basin will not runoff, except for large storms, the basin should not produce large amounts of runoff. Subsequent storm events with 0.20 inches to 0.70 inches of rain have produced no more than 2000 cubic feet of runoff. Interval was changed to 100 cubic feet.

- The roughness coefficient is 0.018 at this site. This number was chosen due to the slightly irregular channel surface and downstream flow characteristics in the Butler Park basin.

CITRUS

SITE CHARACTERISTICS

LOCATION	S36 T4N R1E – 71 ST AVE AT GROVERS
ROUGHNESS	0.018
PIPE SLOPE	0.0046 FT/FT
INTAKE TUBING LENGTH	31 FEET (40 FEET)
SAMPLING INTERVAL	600 CUBIC FEET
BASIN SIZE	60 ACRES
LAND USE TYPE	NEWER RESIDENTIAL
PHONE	602-334-4814

The setup at this site was not difficult because the installation was done previously.

- The sampler was programmed.

- The intake tubing was cut, leaving extra tubing to enable the sampler to be removed from the cabinet for easier access. The actual length of the tubing is 31 feet. However, during calibration of the sample volume of 450 mL, it was necessary to use 40 feet as the length in the program. This is typical of Teflon tubing. Once the tubing length was set to 40 feet, the volume calibration was accurate.

- The slope was unavailable at the time of set up. It was measured locally using a tape measure and level. The local slope was found to be 0.0067 feet/feet. The As-Built pipe slope was later found to be 0.0046 feet/feet. The As-Built slope is being used.

- The sample collection interval was set to 800 cubic feet. Because actual flow characteristics are unknown, 800 cf was used as a starting point. The pipe diameter is 42 inches and the basin served is mixed new and old residential. Most of the residential lots have non-grass lawns. All lots have fenced back yards. The majority of the runoff will be from streets, which are a small portion of the basin area. Adjustments will be made during the first few storm events.

- The chosen roughness coefficient is 0.018. The outfall channel is smooth, yet irregular (cobbles) with little or no vegetation. The outlet pipe being sampled is concrete with roughness of 0.013 to 0.015, but is increased to compensate for the channel conditions.

INDPARK

SITE CHARACTERISTICS

LOCATION	S05 T2N R1E – ORANGEWOOD ALIGNMENT AT WEST BANK OF NEW RIVER
ROUGHNESS	0.018
PIPE SLOPE	0.0033 FT/FT
INTAKE TUBING LENGTH	24 FEET (26 FEET)
SAMPLING INTERVAL	400 CUBIC FEET
BASIN SIZE	30 ACRES
LAND USE TYPE	INDUSTRIAL
PHONE	602-772-0842

The setup at this site was not difficult because the installation was done previously.

- The sampler was programmed.

- The intake tubing was cut, leaving extra tubing to enable the sampler to be removed from the cabinet for easier access. The actual length of the tubing is 24 feet. However, during calibration of the sample volume of 450 mL, it was necessary to use 26 feet as the length in the program. This is typical of Teflon tubing. Once the tubing length was set to 26 feet, the volume calibration was accurate.

- The slope was unavailable at the time of set up. It was measured locally using a tape measure and level. The local slope was found to be 0.013 feet/feet. Because this slope seems steep, the pipe slope was set to 0.0033 feet/feet. Soon, a level survey will be done at the invert of both ends of the pipe, and, with the distance, the slope will be calculated.

- The sample collection interval was set to 1200 cubic feet. Because actual flow characteristics are unknown, 1200 cf was used as a starting point. The pipe diameter is 54 inches and the basin served is about have developed and half undeveloped industrial area. Exposed surfaces are parking areas and building roofs. Because of the imperviousness of the basin, it is expected to produce large quantities of runoff. However, it is unknown how much runoff will be lost in the two inlet channels. Adjustments will be made during the first few storm events.

Roughness was chosen to be 0.018. The concrete pipe will have a roughness of 0.013 to 0.015. However, debris and sediment may enter the culvert and increase the roughness value slightly.

Data from Fall 1998

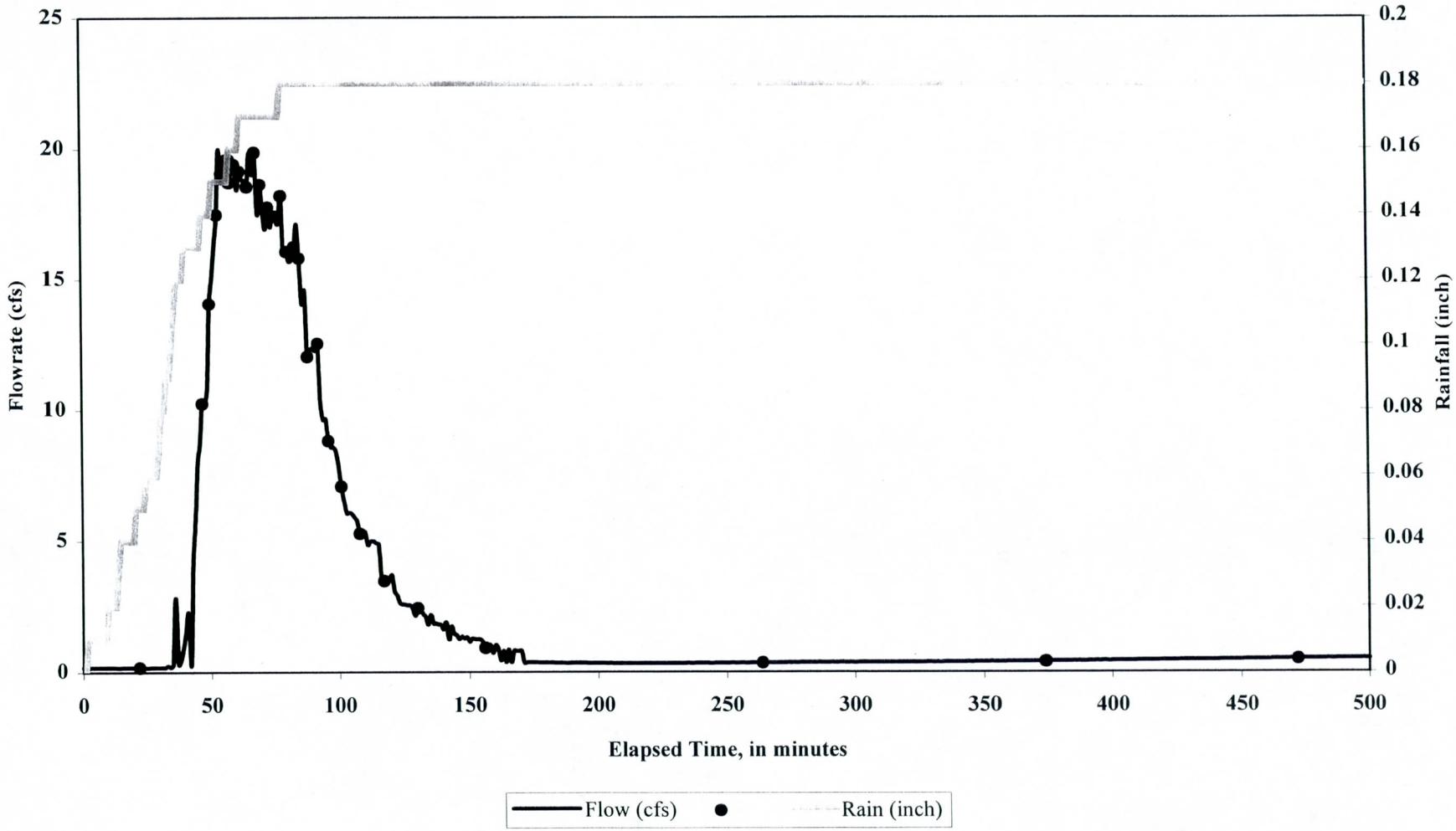
The remainder of this report contains data. The following data are included:

- Storm Hydrographs
- Rainfall Data from each monitoring site
- Printed tables of data from the fall. Included are required data for Glendale's NPDES permit.
- Validation Tables. These data show a validation of the data on an individual basis for each storm event. One table is included for each site for each sampled event.
- Hard copies of data.
- Copies of maintenance and storm sheets.
- Disk of data files.

Storm Hydrographs

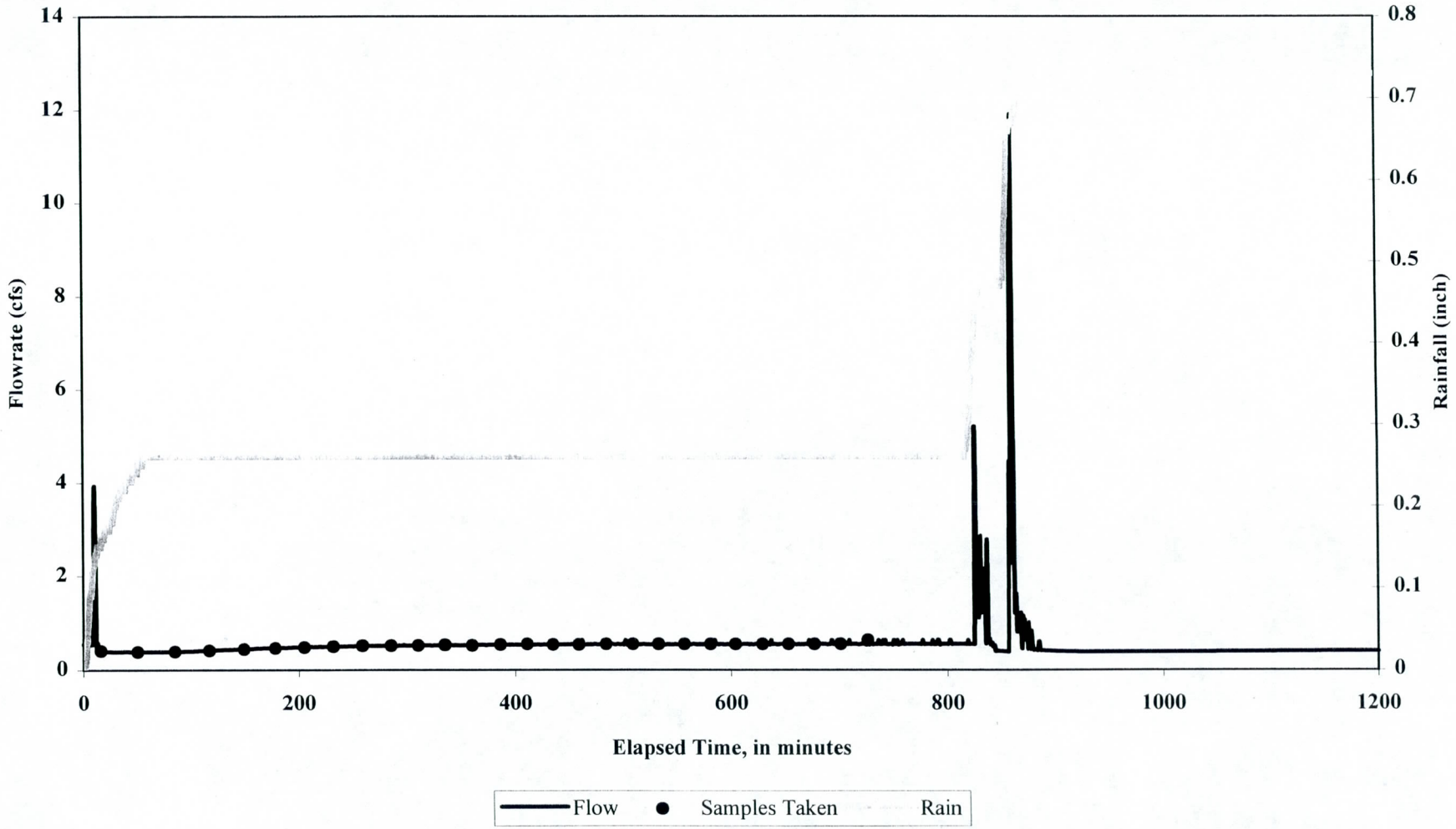
Glendale Arrow

25 October 1998



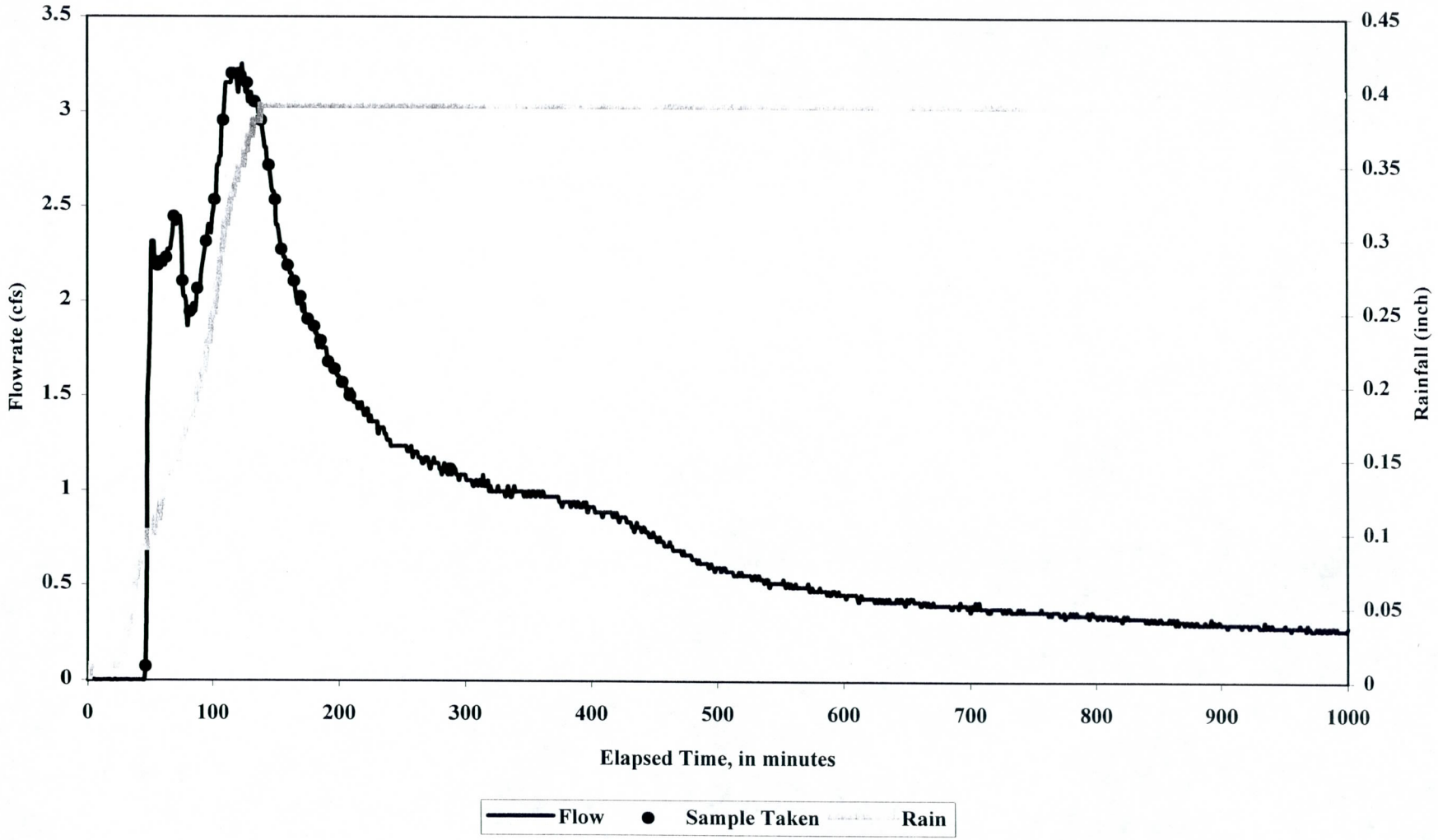
Glendale CITRUS

25 October 1998



Glendale CITRUS

06 December 1998



Rainfall Data

Gauge Rainfall

Gage Number	OLIVE
Location	Olive and 67th Avenue

	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999
1												
2						0.28						
3												
4												
5												
6						0.36						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.13						
16												
17												
18												
19												
20												
21				0.05								
22												
23												
24												
25				0.32								
26												
27												
28					0.05							
29												
30				0.31								
31												
Month Total	0.00	0.00	0.00	0.68	0.05	0.77	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall

Gage Number	BUTLER
Location	56th Drive and Orchid Lane

	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999
1												
2						0.16						
3												
4												
5												
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.08						
16												
17												
18												
19												
20												
21												
22												
23												
24												
25				0.36								
26				0.36								
27												
28					0.05							
29					0.01							
30				0.20								
31												
Month Total	0.00	0.00	0.00	0.92	0.06	0.55	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall

Gage Number: INDUSTRIAL PARK

Location: New River north of Glendale Avenue (sampler gauge and ALERT gauge 5505)

	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999
1												
2						0.16						
3												
4												
5												
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25				0.20								
26				0.44								
27												
28					0.08							
29					0.08							
30				0.24								
31												
Month Total	0.00	0.00	0.00	0.88	0.16	0.47	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall

Gage Number	CITRUS
Location	Grovers at 71st Avenue (sampler gauge and ALERT gauge 5595)

	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999
1												
2						0.28						
3												
4												
5												
6						0.39						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.11						
16												
17												
18												
19												
20												
21												
22												
23												
24												
25				0.26								
26				0.47								
27												
28					0.12							
29					0.04							
30				0.08								
31												
Month Total	0.00	0.00	0.00	0.81	0.16	0.78	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall

Gage Number: ARROW

Location: Skunk Creek near 79th Avenue (sampler gauge and ALERT gauges 5520 & 5595)

	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999
1												
2						0.31						
3												
4												
5												
6						0.39						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.07						
16												
17												
18												
19												
20												
21												
22												
23												
24												
25				0.18								
26				0.47								
27												
28					0.12							
29					0.04							
30				0.08								
31												
Month Total	0.00	0.00	0.00	0.73	0.16	0.77	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall

Gage Number 5520

Location ACDC at 67th Avenue

	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999
1												
2						0.31						
3												
4												
5												
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.12						
16												
17						0.04						
18												
19												
20												
21												
22												
23												
24												
25				0.39								
26				0.52								
27												
28					0.12							
29												
30				0.20								
31												
Month Total	0.00	0.00	0.00	1.11	0.12	0.78	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall

Gage Number: 5595

Location: New River at Bell Road

	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999
1												
2						0.28						
3												
4												
5												
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.04						
16												
17												
18												
19												
20												
21												
22												
23												
24												
25				0.08								
26				0.24								
27												
28					0.12							
29					0.04							
30				0.08								
31												
Month Total	0.00	0.00	0.00	0.40	0.16	0.63	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall

Gage Number: 5595

Location: New River at Bell Road

	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999
1												
2						0.28						
3												
4												
5												
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.04						
16												
17												
18												
19												
20												
21												
22												
23												
24												
25				0.08								
26				0.24								
27												
28					0.12							
29					0.04							
30				0.08								
31												
Month Total	0.00	0.00	0.00	0.40	0.16	0.63	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall

Gage Number	5505
Location	New River at Glendale Avenue

	July 1998	August 1998	September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999	May 1999	June 1999
1												
2						0.16						
3												
4												
5												
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25				0.20								
26				0.43								
27												
28					0.08							
29					0.04							
30				0.24								
31												
Month Total	0.00	0.00	0.00	0.87	0.12	0.47	0.00	0.00	0.00	0.00	0.00	0.00

Data Tables

ARROW (Glendale)

Skunk Creek (north bank) at 79th Avenue alignment

Glendale ARROW

Skunk Creek near 79th Avenue

Date of Sampling	10/25/1998
Time	1557
Representative Storm Event	N
Agency Collecting Sample	FCD
Agency Analyzing Sample	BOLIN
Drainage Area (acres) (DA)	180
Impervious Area (acres) (IA)	0
Land Use - Residential	0
Land Use - Commercial	180
Land Use - Industrial	0
Land Use - Undeveloped	0
Sampling Duration (minutes) (DRN)	472
Storm Duration (minutes)	78
Runoff Sampled (cubic feet) (RUN)	70,200
Total Storm Runoff (cubic feet)	80,000
Instantaneous Discharge (cfs)	19.9
Preceeding Dry Period (days) (ANT)	33
Total Storm Rainfall (inch)	0.18
Rainfall Sampled (inch) (TRN)	0.18
Maximum 5-minute rain intensity (MAX5)	0.48
Sample Temperature (deg. C)	4
Effluent Temperature (deg. C)	20
Ambient Temperature (deg. C)	NM
Barometric Pressure (mm Hg)	NM
pH, Effluent (standard units)	7.74
pH, Lab (standard units)	6.4
Specific Conductance, FIELD (us/cm)	--
Specific Conductance, LAB (us/cm)	--
Oxygen Dissolved (% saturation)	--
Oxygen Dissolved (mg/l)	--
Electrical Conductivity (umhos/cm)	--
BOD5 (mg/l)	--
COD High Level (mg/l)	194
Chloride (mg/l as Cl)	11
Cyanide Total (mg/l as Cn)	0.01
Fecal Coliform (MPN/100mL)	--
Fecal Streptococci (MPN/100mL)	--
Solids Residue at 180 Deg. C (TDS) (mg/l)	178
Residue, Total at 105 Deg. C (TSS) (mg/l)	83
Nitrogen No2 + No3, Total (mg/l as N)	0.36
TKN Nitrogen (mg/l as N)	--
Nitrogen, Ammonia + Organic, Total (mg/l as N)	--
Nitrogen Nitrate Total (mg/l as N)	0.13
Nitrogen Nitrite Total (mg/l as N)	0.23
Nitrogen Ammonia Total (mg/l as N)	1
Nitrogen Organic Total (mg/l as N)	--
Phosphorous Total (mg/l as P)	0.6
Phosphorous Dissolved (mg/l as P)	0.17
Phosphorous Ortho (mg/l as P)	0.12
Sulfate Dissolved (mg/l)	13
Hexavalent Chromium Total (mg/l)	<0.010

Glendale ARROW

Skunk Creek near 79th Avenue

Date of Sampling	10/25/1998
Phenols Total Recoverable (ug/l)	5.1
Oil and Grease Total Recoverable (mg/l)	--
Organic Carbon, Total (mg/l)	25
Bicarbonate Whole Field (mg/l as HCo3)	--
Bicarbonate Dissolved, Field (mg/l as HCo3)	--
Carbonate Water Field (mg/l as Co3)	--
Carbonate Water Dissolved, Field, (mg/l as Co3)	--
Alkalinity Water Field Total (mg/l as CaCo3)	--
Alkalinity Dissolved Water Field Total (mg/l as CaCo3)	--
Alkalinity LAB (mg/l as CaCo3)	54
Silica Dissolved (mg/l as SiO2)	--
Hardness (mg/l)	76
Antimony (ug/l as Sb)	<5
Antimony Dissolved (ug/l as Sb)	<4
Arsenic Total (ug/l as As)	8
Arsenic Dissolved (ug/l as As)	<5
Barium Dissolved (ug/l as Ba)	--
Beryllium Total Recoverable (ug/l as Be)	<2
Beryllium Dissolved (ug/l as Be)	<2
Cadmium Total Recoverable (ug/l as Cd)	0.38
Cadmium Dissolved (ug/l as Cd)	<0.2
Calcium Dissolved (mg/l as Ca)	--
Chromium Total Recoverable (ug/l as Cr)	5.3
Chromium Dissolved (ug/l as Cr)	2.2
Cobalt Dissolved (ug/l as Co)	--
Copper, Total Recoverable, (ug/l as Cu)	30
Copper, Dissolved, (ug/l as Cu)	<15
Iron, Dissolved, (ug/l as Fe)	--
Lead, Total Recoverable, (ug/l as Pb)	<5
Lead, Dissolved, (ug/l as Pb)	<5
Lithium, Dissolved, (ug/l as Li)	--
Magnesium, Dissolved, (mg/l as Mg)	--
Manganese, Dissolved, (ug/l as Mn)	--
Mercury, Total Recoverable, (ug/l as Hg)	<0.2
Mercury, Dissolved, (ug/l as Hg)	<0.2
Molybdenum, Dissolved, (ug/l as Mo)	--
Nickel, Total Recoverable, (ug/l as Ni)	14
Nickel, Dissolved, (ug/l as Ni)	3.9
Potassium, Dissolved, (mg/l as K)	--
Selenium, Total, (ug/l as Se)	<5
Selenium, Dissolved, (ug/l as Se)	<5
Silver, Total Recoverable, (ug/l as Ag)	<40
Silver, Dissolved, (ug/l as Ag)	<50
Sodium, Dissolved, (mg/l as Na)	--
Strontium, Dissolved, (ug/l as Sr)	--
Thallium, Total, (ug/l as Tl)	<1
Thallium, Dissolved, (ug/l as Tl)	<1
Vanadium, Dissolved, (ug/l as V)	--
Zinc, Total Recoverable, (ug/l as Zn)	160
Zinc, Dissolved, (ug/l as Zn)	90

Glendale ARROW

Skunk Creek near 79th Avenue

Date of Sampling	10/25/1998
Diazinon, Total, (ug/l)	--
Ethion, Total, (ug/l)	--
Malathion, Total, (ug/l)	--
Methyl Parathion, Total, (ug/l)	--
Parathion, Total, (ug/l)	--
Trithion, Total, (ug/l)	--
Di-syston, Total, (ug/l)	--
Phorate, Total, (ug/l)	--
Chlorpyrifos, Total, (ug/l)	--
DEF, Total, (ug/l)	--
Fonofos(Dy-fonate), WWT, (ug/l)	--
Aldrin, Total, (ug/l)	<1.0
BHC - ALPHA, (ug/l)	<1.0
BHC - Gamma (Lindane), (ug/l)	<1.0
BHC - DELTA, (ug/l)	<1.0
Aroclor 1016, PCB, Total, (ug/l)	<1.0
Aroclor 1221, PCB, Total, (ug/l)	<10
Aroclor 1232, PCB, Total, (ug/l)	<1.0
Aroclor 1242, PCB, Total, (ug/l)	<1.0
Aroclor 1248, PCB, Total, (ug/l)	<1.0
Aroclor 1254, PCB, Total, (ug/l)	<1.0
Aroclor 1260, PCB, Total, (ug/L)	<1.0
Chlordane, Total, (ug/l)	<1.0
P,P' DDD, Total, (ug/l)	<1.0
P,P' DDE, Total, (ug/l)	<1.0
P, P' DDT, Total, (ug/l)	<2.0
Dieldrin, Total, (ug/l)	<1.0
Endo-Sulfan Alpha, Total, (ug/l)	<1.0
Endo-Sulfan Beta, Total, (ug/l)	<1.0
Endo-Sulfan Sulfate, Total, (ug/l)	<1.0
Endrin Aldehyde, Total, (ug/l)	<1.0
Endrin, Total, (ug/l)	<1.0
Heptachlor, Total, (ug/l)	<1.0
Heptachlor Epoxide, Total, (ug/l)	<1.0
Toxaphene, Total, (ug/l)	<1.0
Methoxychlor, Total, (ug/l)	--
Beta Benzene Hexachloride, Total, (ug/l)	<1.0
1,1,2,2-Tetrachloroethane, Total, (ug/l)	--
1,1,1,2-Tetrachloroethane, Total,(ug/l)	--
Tetrachloroethene, PCE, Total, (ug/l)	--
1,1,1- Trichloroethane, Total, (ug/l)	--
1,1,2- Trichloroethane, Total, (ug/l)	--
Trichloroethene, Total, (ug/l)	--
1,1- Dichloroethane, Total, (ug/l)	--
1,1- Dichloroethene, Total, (ug/l)	--
1,2- Dichloroethane, Total, (ug/l)	--
1,2- Dichloropropane, Total, (ug/l)	--
2- Chloroethylvinyl Ether, Total, (ug/l)	--
cis-1,3-Dichloropropene, (ug/l)	--
trans-1,2- Dichloroethene, (ug/l)	--

Glendale ARROW

Skunk Creek near 79th Avenue

Date of Sampling	10/25/1998
trans-1,3- Dichloropropene, (ug/l)	--
Benzene, Total, (ug/l)	--
Bromodichloromethane, Total, (ug/l)	--
Bromoform, Total, (ug/l)	--
Carbon Tetrachloride, Total, (ug/l)	--
Chlorobenzene, Total, (ug/l)	--
Chloroethane, (ug/l)	--
Chloroform, Total, (ug/l)	--
Ethyl-Benzene, Total, (ug/l)	--
Methylene Chloride, Total, (ug/l)	--
Toluene, Total, (ug/l)	--
Trichlorofluoromethane, Total, (ug/l)	--
Vinyl Chloride, Total, (ug/l)	--
Chlorodibromomethane, Total, (ug/l)	--
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)	--
Acetone, Total, (ug/l)	--
2-Butanone, (ug/l)	--
Carbon Disulfide, Total, (ug/l)	--
1,2 Dichloroethene, Total, (ug/l)	--
Xylenes, Total, (ug/l)	--
2-Hexanone, Total, (ug/l)	--
Styrene, Total, (ug/l)	--
Acrolein, Total, (ug/l)	--
Acrylonitirile, Total, (ug/l)	--
Bromobenzene, Water Whole, Total, (ug/l)	--
1,3-Dichloropropane, Water Whole, Total, (ug/l)	--
Methyl Bromide, Total, (ug/l)	--
Methyl Chloride, Total, (ug/l)	--
Parachloro Toluene, Total, (ug/l)	--
Dibromoethane, Total, (ug/l)	--
Acenaphthene, Total, (ug/l)	<5.0
Acenaphthylene, Total, (ug/l)	<10
Anthracene, Total, (ug/l)	<5.0
Benzidine, Total, (ug/l)	<20
Benzoic Acid, Total, (ug/l)	<50
Benzo (a) Anthracene, Total, (ug/l)	<5.0
Benzo (b) Fluoranthene, Total, (ug/l)	<5.0
Benzo (k) Fluoranthene, Total, (ug/l)	<5.0
Benzo (ghi) Perylene, Total, (ug/l)	<5.0
Benzo (a) Pyrene, Total, (ug/l)	<5.0
Benzyl Alcohol, Total, (ug/l)	<10
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	<10
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	<10
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	<10
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	<10
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	<5.0
Butyl Benzyl Phthalate, Total, (ug/l)	<5.0
2-Chloronapthalene, Total, (ug/l)	<5.0
2-Chlorophenol, Total, (ug/l)	<10
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	<10

Glendale ARROW

Skunk Creek near 79th Avenue

Date of Sampling	10/25/1998
Chrysene, Total, (ug/l)	<5.0
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	<5.0
Di-N-Butyl Phthalate, Total, (ug/l)	<5.0
1,3- Dichlorobenzene, Total, (ug/l)	<5.0
1,4- Dichlorobenzene, Total, (ug/l)	<5.0
1,2- Dichlorobenzene, Total, (ug/l)	<5.0
3,3'- Dichlorobenzidine, Total, (ug/l)	<5.0
2,4- Dichlorophenol, Total, (ug/l)	<10
Diethyl Phthalate, Total, (ug/l)	<5.0
2,4- Dimethylphenol, Total, (ug/l)	<10
Dimethyl Phthalate, Total, (ug/l)	<5.0
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	<10
2,4- Dinitrophenol, Total, (ug/l)	<20
2,4- Dinitrotoluene, Total, (ug/l)	<5.0
2,6- Dinitrotoluene, Total, (ug/l)	<5.0
Di-N-Octyl-Phthalate, Total, (ug/l)	<5.0
Fluoranthene, Total, (ug/l)	<5.0
Fluorene, Total, (ug/l)	<5.0
Hexachlorobenzene, Total, (ug/l)	<10
Hexachlorobutadiene, Total, (ug/l)	<10
Hexachlorocyclopentadiene, Total, (ug/l)	<5.0
Hexachloroethane, Total, (ug/l)	<10
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	<5.0
Isophorone, Total, (ug/l)	<10
Naphthalene, Total, (ug/l)	<5.0
Nitrobenzene, Total, (ug/l)	<10
2-Nitrophenol, Total, (ug/l)	<10
4-Nitrophenol, Total, (ug/l)	<5.0
N-Nitrosodiphenylamine, Total, (ug/l)	<5.0
N-Nitrosodi-N-Propylamine, Total, (ug/l)	<5.0
Pentachlorophenol, Total, (ug/l)	<10
Phenanthrene, Total, (ug/l)	<5.0
Phenol, Total, (ug/l)	<5.0
Pyrene, Total, (ug/l)	<5.0
1,2,4-Trichlorobenzene, Total, (ug/l)	<5.0
2,4,5- Trichlorophenol, Total, (ug/l)	<5.0
2,4,6- Trichlorophenol, Total, (ug/l)	<5.0
N-Nitrosodimethylamine, Total, (ug/l)	<5.0
1,2- Diphenylhydrazine, Total, (ug/l)	<5.0
Dichlorodifluoromethane, Total, (ug/l)	--
Parachloro-Meta-Cresol, Total, (ug/l)	--

BUTLER (Glendale)

near Orchid Drive and 56th Drive

Glendale BUTLER

Orchid Lane and 56th Drive

Date of Sampling	
Time	No Data
Representative Storm Event	No Data
Agency Collecting Sample	No Data
Agency Analyzing Sample	No Data
Drainage Area (acres) (DA)	No Data
Impervious Area (acres) (IA)	No Data
Land Use - Residential	No Data
Land Use - Commercial	No Data
Land Use - Industrial	No Data
Land Use - Undeveloped	No Data
Sampling Duration (minutes) (DRN)	No Data
Storm Duration (minutes)	No Data
Runoff Sampled (cubic feet) (RUN)	No Data
Total Storm Runoff (cubic feet)	No Data
Instantaneous Discharge (cfs)	No Data
Preceeding Dry Period (days) (ANT)	No Data
Total Storm Rainfall (inch)	No Data
Rainfall Sampled (inch) (TRN)	No Data
Maximum 5-minute rain intensity (MAX5)	No Data
Sample Temperature (deg. C)	No Data
Effluent Temperature (deg. C)	No Data
Ambient Temperature (deg. C)	No Data
Barometric Pressure (mm Hg)	No Data
pH, Effluent (standard units)	No Data
pH, Lab (standard units)	No Data
Specific Conductance, FIELD (us/cm)	No Data
Specific Conductance, LAB (us/cm)	No Data
Oxygen Dissolved (% saturation)	No Data
Oxygen Dissolved (mg/l)	No Data
Electrical Conductivity (umhos/cm)	No Data
BOD5 (mg/l)	No Data
COD High Level (mg/l)	No Data
Chloride (mg/l as Cl)	No Data
Cyanide Total (mg/l as Cn)	No Data
Fecal Coliform (MPN/100mL)	No Data
Fecal Streptococci (MPN/100mL)	No Data
Solids Residue at 180 Deg. C (TDS) (mg/l)	No Data
Residue, Total at 105 Deg. C (TSS) (mg/l)	No Data
Nitrogen No2 + No3, Total (mg/l as N)	No Data
TKN Nitrogen (mg/l as N)	No Data
Nitrogen, Ammonia + Organic, Total (mg/l as N)	No Data
Nitrogen Nitrate Total (mg/l as N)	No Data
Nitrogen Nitrite Total (mg/l as N)	No Data
Nitrogen Ammonia Total (mg/l as N)	No Data
Nitrogen Organic Total (mg/l as N)	No Data
Phosphorous Total (mg/l as P)	No Data
Phosphorous Dissolved (mg/l as P)	No Data
Phosphorous Ortho (mg/l as P)	No Data
Sulfate Dissolved (mg/l)	No Data
Hexavalent Chromium Total (mg/l)	No Data

Glendale BUTLER

Orchid Lane and 56th Drive

Date of Sampling	
Phenols Total Recoverable (ug/l)	No Data
Oil and Grease Total Recoverable (mg/l)	No Data
Organic Carbon, Total (mg/l)	No Data
Bicarbonate Whole Field (mg/l as HCo3)	No Data
Bicarbonate Dissolved, Field (mg/l as HCo3)	No Data
Carbonate Water Field (mg/l as Co3)	No Data
Carbonate Water Dissolved, Field, (mg/l as Co3)	No Data
Alkalinity Water Field Total (mg/l as CaCo3)	No Data
Alkalinity Dissolved Water Field Total (mg/l as CaCo3)	No Data
Alkalinity LAB (mg/l as CaCo3)	No Data
Silica Dissolved (mg/l as SiO2)	No Data
Hardness (mg/l)	No Data
Antimony (ug/l as Sb)	No Data
Antimony Dissolved (ug/l as Sb)	No Data
Arsenic Total (ug/l as As)	No Data
Arsenic Dissolved (ug/l as As)	No Data
Barium Dissolved (ug/l as Ba)	No Data
Beryllium Total Recoverable (ug/l as Be)	No Data
Beryllium Dissolved (ug/l as Be)	No Data
Cadmium Total Recoverable (ug/l as Cd)	No Data
Cadmium Dissolved (ug/l as Cd)	No Data
Calcium Dissolved (mg/l as Ca)	No Data
Chromium Total Recoverable (ug/l as Cr)	No Data
Chromium Dissolved (ug/l as Cr)	No Data
Cobalt Dissolved (ug/l as Co)	No Data
Copper, Total Recoverable, (ug/l as Cu)	No Data
Copper, Dissolved, (ug/l as Cu)	No Data
Iron, Dissolved, (ug/l as Fe)	No Data
Lead, Total Recoverable, (ug/l as Pb)	No Data
Lead, Dissolved, (ug/l as Pb)	No Data
Lithium, Dissolved, (ug/l as Li)	No Data
Magnesium, Dissolved, (mg/l as Mg)	No Data
Manganese, Dissolved, (ug/l as Mn)	No Data
Mercury, Total Recoverable, (ug/l as Hg)	No Data
Mercury, Dissolved, (ug/l as Hg)	No Data
Molybdenum, Dissolved, (ug/l as Mo)	No Data
Nickel, Total Recoverable, (ug/l as Ni)	No Data
Nickel, Dissolved, (ug/l as Ni)	No Data
Potassium, Dissolved, (mg/l as K)	No Data
Selenium, Total, (ug/l as Se)	No Data
Selenium, Dissolved, (ug/l as Se)	No Data
Silver, Total Recoverable, (ug/l as Ag)	No Data
Silver, Dissolved, (ug/l as Ag)	No Data
Sodium, Dissolved, (mg/l as Na)	No Data
Strontium, Dissolved, (ug/l as Sr)	No Data
Thallium, Total, (ug/l as Tl)	No Data
Thallium, Dissolved, (ug/l as Tl)	No Data
Vanadium, Dissolved, (ug/l as V)	No Data
Zinc, Total Recoverable, (ug/l as Zn)	No Data
Zinc, Dissolved, (ug/l as Zn)	No Data

Glendale BUTLER Orchid Lane and 56th Drive	
Date of Sampling	
Diazinon, Total, (ug/l)	No Data
Ethion, Total, (ug/l)	No Data
Malathion, Total, (ug/l)	No Data
Methyl Parathion, Total, (ug/l)	No Data
Parathion, Total, (ug/l)	No Data
Trithion, Total, (ug/l)	No Data
Di-syston, Total, (ug/l)	No Data
Phorate, Total, (ug/l)	No Data
Chlorpyrifos, Total, (ug/l)	No Data
DEF, Total, (ug/l)	No Data
Fonofos(Dy-fonate), WWT, (ug/l)	No Data
Aldrin, Total, (ug/l)	No Data
BHC - ALPHA, (ug/l)	No Data
BHC - Gamma (Lindane), (ug/l)	No Data
BHC - DELTA, (ug/l)	No Data
Aroclor 1016, PCB, Total, (ug/l)	No Data
Aroclor 1221, PCB, Total, (ug/l)	No Data
Aroclor 1232, PCB, Total, (ug/l)	No Data
Aroclor 1242, PCB, Total, (ug/l)	No Data
Aroclor 1248, PCB, Total, (ug/l)	No Data
Aroclor 1254, PCB, Total, (ug/l)	No Data
Aroclor 1260, PCB, Total, (ug/L)	No Data
Chlordane, Total, (ug/l)	No Data
P,P' DDD, Total, (ug/l)	No Data
P,P' DDE, Total, (ug/l)	No Data
P, P' DDT, Total, (ug/l)	No Data
Dieldrin, Total, (ug/l)	No Data
Endo-Sulfan Alpha, Total, (ug/l)	No Data
Endo-Sulfan Beta, Total, (ug/l)	No Data
Endo-Sulfan Sulfate, Total, (ug/l)	No Data
Endrin Aldehyde, Total, (ug/l)	No Data
Endrin, Total, (ug/l)	No Data
Heptachlor, Total, (ug/l)	No Data
Heptachlor Epoxide, Total, (ug/l)	No Data
Toxaphene, Total, (ug/l)	No Data
Methoxychlor, Total, (ug/l)	No Data
Beta Benzene Hexachloride, Total, (ug/l)	No Data
1,1,2,2-Tetrachloroethane, Total, (ug/l)	No Data
1,1,1,2-Tetrachloroethane, Total,(ug/l)	No Data
Tetrachloroethene, PCE, Total, (ug/l)	No Data
1,1,1- Trichloroethane, Total, (ug/l)	No Data
1,1,2- Trichloroethane, Total, (ug/l)	No Data
Trichloroethene, Total, (ug/l)	No Data
1,1- Dichloroethane, Total, (ug/l)	No Data
1,1- Dichloroethene, Total, (ug/l)	No Data
1,2- Dichloroethane, Total, (ug/l)	No Data
1,2- Dichloropropane, Total, (ug/l)	No Data
2- Chloroethylvinyl Ether, Total, (ug/l)	No Data
cis-1,3-Dichloropropene, (ug/l)	No Data
trans-1,2- Dichloroethene, (ug/l)	No Data

Glendale BUTLER

Orchid Lane and 56th Drive

Date of Sampling	
trans-1,3- Dichloropropene, (ug/l)	No Data
Benzene, Total, (ug/l)	No Data
Bromodichloromethane, Total, (ug/l)	No Data
Bromoform, Total, (ug/l)	No Data
Carbon Tetrachloride, Total, (ug/l)	No Data
Chlorobenzene, Total, (ug/l)	No Data
Chloroethane, (ug/l)	No Data
Chloroform, Total, (ug/l)	No Data
Ethyl-Benzene, Total, (ug/l)	No Data
Methylene Chloride, Total, (ug/l)	No Data
Toluene, Total, (ug/l)	No Data
Trichlorofluoromethane, Total, (ug/l)	No Data
Vinyl Chloride, Total, (ug/l)	No Data
Chlorodibromomethane, Total, (ug/l)	No Data
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)	No Data
Acetone, Total, (ug/l)	No Data
2-Butanone, (ug/l)	No Data
Carbon Disulfide, Total, (ug/l)	No Data
1,2 Dichloroethene, Total, (ug/l)	No Data
Xylenes, Total, (ug/l)	No Data
2-Hexanone, Total, (ug/l)	No Data
Styrene, Total, (ug/l)	No Data
Acrolein, Total, (ug/l)	No Data
Acrylonitirile, Total, (ug/l)	No Data
Bromobenzene, Water Whole, Total, (ug/l)	No Data
1,3-Dichloropropane, Water Whole, Total, (ug/l)	No Data
Methyl Bromide, Total, (ug/l)	No Data
Methyl Chloride, Total, (ug/l)	No Data
Parachloro Toluene, Total, (ug/l)	No Data
Dibromoethane, Total, (ug/l)	No Data
Acenaphthene, Total, (ug/l)	No Data
Acenaphthylene, Total, (ug/l)	No Data
Anthracene, Total, (ug/l)	No Data
Benzidine, Total, (ug/l)	No Data
Benzoic Acid, Total, (ug/l)	No Data
Benzo (a) Anthracene, Total, (ug/l)	No Data
Benzo (b) Fluoranthene, Total, (ug/l)	No Data
Benzo (k) Fluoranthene, Total, (ug/l)	No Data
Benzo (ghi) Perylene, Total, (ug/l)	No Data
Benzo (a) Pyrene, Total, (ug/l)	No Data
Benzyl Alcohol, Total, (ug/l)	No Data
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	No Data
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	No Data
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	No Data
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	No Data
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	No Data
Butyl Benzyl Phthalate, Total, (ug/l)	No Data
2-Chloronapthalene, Total, (ug/l)	No Data
2-Chlorophenol, Total, (ug/l)	No Data
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	No Data

Glendale BUTLER

Orchid Lane and 56th Drive

Date of Sampling	
Chrysene, Total, (ug/l)	No Data
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	No Data
Di-N-Butyl Phthalate, Total, (ug/l)	No Data
1,3- Dichlorobenzene, Total, (ug/l)	No Data
1,4- Dichlorobenzene, Total, (ug/l)	No Data
1,2- Dichlorobenzene, Total, (ug/l)	No Data
3,3'- Dichlorobenzidine, Total, (ug/l)	No Data
2,4- Dichlorophenol, Total, (ug/l)	No Data
Diethyl Phthalate, Total, (ug/l)	No Data
2,4- Dimethylphenol, Total, (ug/l)	No Data
Dimethyl Phthalate, Total, (ug/l)	No Data
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	No Data
2,4- Dinitrophenol, Total, (ug/l)	No Data
2,4- Dinitrotoluene, Total, (ug/l)	No Data
2,6- Dinitrotoluene, Total, (ug/l)	No Data
Di-N-Octyl-Phthalate, Total, (ug/l)	No Data
Fluoranthene, Total, (ug/l)	No Data
Fluorene, Total, (ug/l)	No Data
Hexachlorobenzene, Total, (ug/l)	No Data
Hexachlorobutadiene, Total, (ug/l)	No Data
Hexachlorocyclopentadiene, Total, (ug/l)	No Data
Hexachloroethane, Total, (ug/l)	No Data
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	No Data
Isophorone, Total, (ug/l)	No Data
Naphthalene, Total, (ug/l)	No Data
Nitrobenzene, Total, (ug/l)	No Data
2-Nitrophenol, Total, (ug/l)	No Data
4-Nitrophenol, Total, (ug/l)	No Data
N-Nitrosodiphenylamine, Total, (ug/l)	No Data
N-Nitrosodi-N-Propylamine, Total, (ug/l)	No Data
Pentachlorophenol, Total, (ug/l)	No Data
Phenanthrene, Total, (ug/l)	No Data
Phenol, Total, (ug/l)	No Data
Pyrene, Total, (ug/l)	No Data
1,2,4-Trichlorobenzene, Total, (ug/l)	No Data
2,4,5- Trichlorophenol, Total, (ug/l)	No Data
2,4,6- Trichlorophenol, Total, (ug/l)	No Data
N-Nitrosodimethylamine, Total, (ug/l)	No Data
1,2- Diphenylhydrazine, Total, (ug/l)	No Data
Dichlorodifluoromethane, Total, (ug/l)	No Data
Parachloro-Meta-Cresol, Total, (ug/l)	No Data

CITRUS (Glendale)

Grovers and 71st Avenues

Glendale CITRUS

Grovers at 71st Avenue

Date of Sampling	10/25/1998
Time	1550
Representative Storm Event	N
Agency Collecting Sample	FCD
Agency Analyzing Sample	BOLIN
Drainage Area (acres) (DA)	60
Impervious Area (acres) (IA)	UA
Land Use - Residential	UA
Land Use - Commercial	UA
Land Use - Industrial	UA
Land Use - Undeveloped	UA
Sampling Duration (minutes) (DRN)	726
Storm Duration (minutes)	56
Runoff Sampled (cubic feet) (RUN)	22,470
Total Storm Runoff (cubic feet)	23,000
Instantaneous Discharge (cfs)	3.8
Preceeding Dry Period (days) (ANT)	33
Total Storm Rainfall (inch)	0.26
Rainfall Sampled (inch) (TRN)	0.26
Maximum 5-minute rain intensity (MAX5)	1.08
Sample Temperature (deg. C)	4
Effluent Temperature (deg. C)	19.1
Ambient Temperature (deg. C)	NM
Barometric Pressure (mm Hg)	NM
pH, Effluent (standard units)	8.85
pH, Lab (standard units)	7.3
Specific Conductance, FIELD (us/cm)	--
Specific Conductance, LAB (us/cm)	--
Oxygen Dissolved (% saturation)	--
Oxygen Dissolved (mg/l)	--
Electrical Conductivity (umhos/cm)	--
BOD5 (mg/l)	--
COD High Level (mg/l)	190
Chloride (mg/l as Cl)	<5.0
Cyanide Total (mg/l as Cn)	<0.01
Fecal Coliform (MPN/100mL)	--
Fecal Streptococci (MPN/100mL)	--
Solids Residue at 180 Deg. C (TDS) (mg/l)	75
Residue, Total at 105 Deg. C (TSS) (mg/l)	308
Nitrogen No2 + No3, Total (mg/l as N)	0.3
TKN Nitrogen (mg/l as N)	--
Nitrogen, Ammonia + Organic, Total (mg/l as N)	--
Nitrogen Nitrate Total (mg/l as N)	0.3
Nitrogen Nitrite Total (mg/l as N)	<0.1
Nitrogen Ammonia Total (mg/l as N)	<0.6
Nitrogen Organic Total (mg/l as N)	--
Phosphorous Total (mg/l as P)	0.44
Phosphorous Dissolved (mg/l as P)	0.12
Phosphorous Ortho (mg/l as P)	0.06
Sulfate Dissolved (mg/l)	<5.0
Hexavalent Chromium Total (mg/l)	<0.010

Glendale CITRUS

Grovers at 71st Avenue

Date of Sampling	10/25/1998
Phenols Total Recoverable (ug/l)	<5
Oil and Grease Total Recoverable (mg/l)	--
Organic Carbon, Total (mg/l)	27
Bicarbonate Whole Field (mg/l as HCo3)	--
Bicarbonate Dissolved, Field (mg/l as HCo3)	--
Carbonate Water Field (mg/l as Co3)	--
Carbonate Water Dissolved, Field, (mg/l as Co3)	--
Alkalinity Water Field Total (mg/l as CaCo3)	--
Alkalinity Dissolved Water Field Total (mg/l as CaCo3)	--
Alkalinity LAB (mg/l as CaCo3)	52
Silica Dissolved (mg/l as SiO2)	--
Hardness (mg/l)	101
Antimony (ug/l as Sb)	<5
Antimony Dissolved (ug/l as Sb)	<4
Arsenic Total (ug/l as As)	<5
Arsenic Dissolved (ug/l as As)	<5
Barium Dissolved (ug/l as Ba)	--
Beryllium Total Recoverable (ug/l as Be)	<2
Beryllium Dissolved (ug/l as Be)	<2
Cadmium Total Recoverable (ug/l as Cd)	0.33
Cadmium Dissolved (ug/l as Cd)	<0.2
Calcium Dissolved (mg/l as Ca)	--
Chromium Total Recoverable (ug/l as Cr)	11
Chromium Dissolved (ug/l as Cr)	<2
Cobalt Dissolved (ug/l as Co)	--
Copper, Total Recoverable, (ug/l as Cu)	19
Copper, Dissolved, (ug/l as Cu)	<15
Iron, Dissolved, (ug/l as Fe)	--
Lead, Total Recoverable, (ug/l as Pb)	12
Lead, Dissolved, (ug/l as Pb)	<5
Lithium, Dissolved, (ug/l as Li)	--
Magnesium, Dissolved, (mg/l as Mg)	--
Manganese, Dissolved, (ug/l as Mn)	--
Mercury, Total Recoverable, (ug/l as Hg)	<0.2
Mercury, Dissolved, (ug/l as Hg)	<0.2
Molybdenum, Dissolved, (ug/l as Mo)	--
Nickel, Total Recoverable, (ug/l as Ni)	20
Nickel, Dissolved, (ug/l as Ni)	<2
Potassium, Dissolved, (mg/l as K)	--
Selenium, Total, (ug/l as Se)	<5
Selenium, Dissolved, (ug/l as Se)	<5
Silver, Total Recoverable, (ug/l as Ag)	<40
Silver, Dissolved, (ug/l as Ag)	<50
Sodium, Dissolved, (mg/l as Na)	--
Strontium, Dissolved, (ug/l as Sr)	--
Thallium, Total, (ug/l as Tl)	<1
Thallium, Dissolved, (ug/l as Tl)	<1
Vanadium, Dissolved, (ug/l as V)	--
Zinc, Total Recoverable, (ug/l as Zn)	90
Zinc, Dissolved, (ug/l as Zn)	20

Glendale CITRUS

Grovers at 71st Avenue

Date of Sampling	10/25/1998
Diazinon, Total, (ug/l)	--
Ethion, Total, (ug/l)	--
Malathion, Total, (ug/l)	--
Methyl Parathion, Total, (ug/l)	--
Parathion, Total, (ug/l)	--
Trithion, Total, (ug/l)	--
Di-syston, Total, (ug/l)	--
Phorate, Total, (ug/l)	--
Chlorpyrifos, Total, (ug/l)	--
DEF, Total, (ug/l)	--
Fonofos(Dy-fonate), WWT, (ug/l)	--
Aldrin, Total, (ug/l)	<1.0
BHC - ALPHA, (ug/l)	<1.0
BHC - Gamma (Lindane), (ug/l)	<1.0
BHC - DELTA, (ug/l)	<1.0
Aroclor 1016, PCB, Total, (ug/l)	<1.0
Aroclor 1221, PCB, Total, (ug/l)	<10
Aroclor 1232, PCB, Total, (ug/l)	<1.0
Aroclor 1242, PCB, Total, (ug/l)	<1.0
Aroclor 1248, PCB, Total, (ug/l)	<1.0
Aroclor 1254, PCB, Total, (ug/l)	<1.0
Aroclor 1260, PCB, Total, (ug/L)	<1.0
Chlordane, Total, (ug/l)	<1.0
P,P' DDD, Total, (ug/l)	<1.0
P,P' DDE, Total, (ug/l)	<1.0
P, P' DDT, Total, (ug/l)	<2.0
Dieldrin, Total, (ug/l)	<1.0
Endo-Sulfan Alpha, Total, (ug/l)	<1.0
Endo-Sulfan Beta, Total, (ug/l)	<1.0
Endo-Sulfan Sulfate, Total, (ug/l)	<1.0
Endrin Aldehyde, Total, (ug/l)	<1.0
Endrin, Total, (ug/l)	<1.0
Heptachlor, Total, (ug/l)	<1.0
Heptachlor Epoxide, Total, (ug/l)	<1.0
Toxaphene, Total, (ug/l)	<1.0
Methoxychlor, Total, (ug/l)	--
Beta Benzene Hexachloride, Total, (ug/l)	<1.0
1,1,2,2-Tetrachloroethane, Total, (ug/l)	--
1,1,1,2-Tetrachloroethane, Total,(ug/l)	--
Tetrachloroethene, PCE, Total, (ug/l)	--
1,1,1- Trichloroethane, Total, (ug/l)	--
1,1,2- Trichloroethane, Total, (ug/l)	--
Trichloroethene, Total, (ug/l)	--
1,1- Dichloroethane, Total, (ug/l)	--
1,1- Dichloroethene, Total, (ug/l)	--
1,2- Dichloroethane, Total, (ug/l)	--
1,2- Dichloropropane, Total, (ug/l)	--
2- Chloroethylvinyl Ether, Total, (ug/l)	--
cis-1,3-Dichloropropene, (ug/l)	--
trans-1,2- Dichloroethene, (ug/l)	--

Glendale CITRUS

Grovers at 71st Avenue

Date of Sampling	10/25/1998
trans-1,3- Dichloropropene, (ug/l)	--
Benzene, Total, (ug/l)	--
Bromodichloromethane, Total, (ug/l)	--
Bromoform, Total, (ug/l)	--
Carbon Tetrachloride, Total, (ug/l)	--
Chlorobenzene, Total, (ug/l)	--
Chloroethane, (ug/l)	--
Chloroform, Total, (ug/l)	--
Ethyl-Benzene, Total, (ug/l)	--
Methylene Chloride, Total, (ug/l)	--
Toluene, Total, (ug/l)	--
Trichlorofluoromethane, Total, (ug/l)	--
Vinyl Chloride, Total, (ug/l)	--
Chlorodibromomethane, Total, (ug/l)	--
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)	--
Acetone, Total, (ug/l)	--
2-Butanone, (ug/l)	--
Carbon Disulfide, Total, (ug/l)	--
1,2 Dichloroethene, Total, (ug/l)	--
Xylenes, Total, (ug/l)	--
2-Hexanone, Total, (ug/l)	--
Styrene, Total, (ug/l)	--
Acrolein, Total, (ug/l)	--
Acrylonitirile, Total, (ug/l)	--
Bromobenzene, Water Whole, Total, (ug/l)	--
1,3-Dichloropropane, Water Whole, Total, (ug/l)	--
Methyl Bromide, Total, (ug/l)	--
Methyl Chloride, Total, (ug/l)	--
Parachloro Toluene, Total, (ug/l)	--
Dibromoethane, Total, (ug/l)	--
Acenaphthene, Total, (ug/l)	<5.0
Acenaphthylene, Total, (ug/l)	<10
Anthracene, Total, (ug/l)	<5.0
Benzidine, Total, (ug/l)	<20
Benzoic Acid, Total, (ug/l)	<50
Benzo (a) Anthracene, Total, (ug/l)	<5.0
Benzo (b) Fluoranthene, Total, (ug/l)	<5.0
Benzo (k) Fluoranthene, Total, (ug/l)	<5.0
Benzo (ghi) Perylene, Total, (ug/l)	<5.0
Benzo (a) Pyrene, Total, (ug/l)	<5.0
Benzyl Alcohol, Total, (ug/l)	<10
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	<10
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	<10
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	<10
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	<10
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	<5.0
Butyl Benzyl Phthalate, Total, (ug/l)	<5.0
2-Chloronapthalene, Total, (ug/l)	<5.0
2-Chlorophenol, Total, (ug/l)	<10
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	<10

Glendale CITRUS

Grovers at 71st Avenue

Date of Sampling	10/25/1998
Chrysene, Total, (ug/l)	<5.0
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	<5.0
Di-N-Butyl Phthalate, Total, (ug/l)	<5.0
1,3- Dichlorobenzene, Total, (ug/l)	<5.0
1,4- Dichlorobenzene, Total, (ug/l)	<5.0
1,2- Dichlorobenzene, Total, (ug/l)	<5.0
3,3'- Dichlorobenzidine, Total, (ug/l)	<5.0
2,4- Dichlorophenol, Total, (ug/l)	<10
Diethyl Phthalate, Total, (ug/l)	<5.0
2,4- Dimethylphenol, Total, (ug/l)	<10
Dimethyl Phthalate, Total, (ug/l)	<5.0
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	<10
2,4- Dinitrophenol, Total, (ug/l)	<20
2,4- Dinitrotoluene, Total, (ug/l)	<5.0
2,6- Dinitrotoluene, Total, (ug/l)	<5.0
Di-N-Octyl-Phthalate, Total, (ug/l)	<5.0
Fluoranthene, Total, (ug/l)	<5.0
Fluorene, Total, (ug/l)	<5.0
Hexachlorobenzene, Total, (ug/l)	<10
Hexachlorobutadiene, Total, (ug/l)	<10
Hexachlorocyclopentadiene, Total, (ug/l)	<5.0
Hexachloroethane, Total, (ug/l)	<10
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	<5.0
Isophorone, Total, (ug/l)	<10
Naphthalene, Total, (ug/l)	<5.0
Nitrobenzene, Total, (ug/l)	<10
2-Nitrophenol, Total, (ug/l)	<10
4-Nitrophenol, Total, (ug/l)	<5.0
N-Nitrosodiphenylamine, Total, (ug/l)	<5.0
N-Nitrosodi-N-Propylamine, Total, (ug/l)	<5.0
Pentachlorophenol, Total, (ug/l)	<10
Phenanthrene, Total, (ug/l)	<5.0
Phenol, Total, (ug/l)	<5.0
Pyrene, Total, (ug/l)	<5.0
1,2,4-Trichlorobenzene, Total, (ug/l)	<5.0
2,4,5- Trichlorophenol, Total, (ug/l)	<5.0
2,4,6- Trichlorophenol, Total, (ug/l)	<5.0
N-Nitrosodimethylamine, Total, (ug/l)	<5.0
1,2- Diphenylhydrazine, Total, (ug/l)	<5.0
Dichlorodifluoromethane, Total, (ug/l)	--
Parachloro-Meta-Cresol, Total, (ug/l)	--

INDPK (Glendale)

New River (west bank) between Glendale and Northern Avenues

Glendale INDPK near Orangewood and 107th Avenue	
Date of Sampling	
Time	No Data
Representative Storm Event	No Data
Agency Collecting Sample	No Data
Agency Analyzing Sample	No Data
Drainage Area (acres) (DA)	No Data
Impervious Area (acres) (IA)	No Data
Land Use - Residential	No Data
Land Use - Commercial	No Data
Land Use - Industrial	No Data
Land Use - Undeveloped	No Data
Sampling Duration (minutes) (DRN)	No Data
Storm Duration (minutes)	No Data
Runoff Sampled (cubic feet) (RUN)	No Data
Total Storm Runoff (cubic feet)	No Data
Instantaneous Discharge (cfs)	No Data
Preceeding Dry Period (days) (ANT)	No Data
Total Storm Rainfall (inch)	No Data
Rainfall Sampled (inch) (TRN)	No Data
Maximum 5-minute rain intensity (MAX5)	No Data
Sample Temperature (deg. C)	No Data
Effluent Temperature (deg. C)	No Data
Ambient Temperature (deg. C)	No Data
Barometric Pressure (mm Hg)	No Data
pH, Effluent (standard units)	No Data
pH, Lab (standard units)	No Data
Specific Conductance, FIELD (us/cm)	No Data
Specific Conductance, LAB (us/cm)	No Data
Oxygen Dissolved (% saturation)	No Data
Oxygen Dissolved (mg/l)	No Data
Electrical Conductivity (umhos/cm)	No Data
BOD5 (mg/l)	No Data
COD High Level (mg/l)	No Data
Chloride (mg/l as Cl)	No Data
Cyanide Total (mg/l as Cn)	No Data
Fecal Coliform (MPN/100mL)	No Data
Fecal Streptococci (MPN/100mL)	No Data
Total Dissolved Solids (mg/l)	No Data
Total Suspended Solids (mg/l)	No Data
Nitrogen No2 + No3, Total (mg/l as N)	No Data
TKN Nitrogen (mg/l as N)	No Data
Nitrogen, Ammonia + Organic, Total (mg/l as N)	No Data
Nitrogen Nitrate Total (mg/l as N)	No Data
Nitrogen Nitrite Total (mg/l as N)	No Data
Nitrogen Ammonia Total (mg/l as N)	No Data
Nitrogen Organic Total (mg/l as N)	No Data
Phosphorous Total (mg/l as P)	No Data
Phosphorous Dissolved (mg/l as P)	No Data
Phosphorous Ortho (mg/l as P)	No Data
Sulfate Dissolved (mg/l)	No Data
Hexavalent Chromium Total (mg/l)	No Data

Glendale INDPK near Orangewood and 107th Avenue	
Date of Sampling	
Phenols Total Recoverable (ug/l)	No Data
Oil and Grease Total Recoverable (mg/l)	No Data
Organic Carbon, Total (mg/l)	No Data
Bicarbonate Whole Field (mg/l as HCo3)	No Data
Bicarbonate Dissolved, Field (mg/l as HCo3)	No Data
Carbonate Water Field (mg/l as Co3)	No Data
Carbonate Water Dissolved, Field, (mg/l as Co3)	No Data
Alkalinity Water Field Total (mg/l as CaCo3)	No Data
Alkalinity Dissolved Water Field Total (mg/l as CaCo3)	No Data
Alkalinity LAB (mg/l as CaCo3)	No Data
Silica Dissolved (mg/l as SiO2)	No Data
Hardness (mg/l)	No Data
Antimony (ug/l as Sb)	No Data
Antimony Dissolved (ug/l as Sb)	No Data
Arsenic Total (ug/l as As)	No Data
Arsenic Dissolved (ug/l as As)	No Data
Barium Dissolved (ug/l as Ba)	No Data
Beryllium Total Recoverable (ug/l as Be)	No Data
Beryllium Dissolved (ug/l as Be)	No Data
Cadmium Total Recoverable (ug/l as Cd)	No Data
Cadmium Dissolved (ug/l as Cd)	No Data
Calcium Dissolved (mg/l as Ca)	No Data
Chromium Total Recoverable (ug/l as Cr)	No Data
Chromium Dissolved (ug/l as Cr)	No Data
Cobalt Dissolved (ug/l as Co)	No Data
Copper, Total Recoverable, (ug/l as Cu)	No Data
Copper, Dissolved, (ug/l as Cu)	No Data
Iron, Dissolved, (ug/l as Fe)	No Data
Lead, Total Recoverable, (ug/l as Pb)	No Data
Lead, Dissolved, (ug/l as Pb)	No Data
Lithium, Dissolved, (ug/l as Li)	No Data
Magnesium, Dissolved, (mg/l as Mg)	No Data
Manganese, Dissolved, (ug/l as Mn)	No Data
Mercury, Total Recoverable, (ug/l as Hg)	No Data
Mercury, Dissolved, (ug/l as Hg)	No Data
Molybdenum, Dissolved, (ug/l as Mo)	No Data
Nickel, Total Recoverable, (ug/l as Ni)	No Data
Nickel, Dissolved, (ug/l as Ni)	No Data
Potassium, Dissolved, (mg/l as K)	No Data
Selenium, Total, (ug/l as Se)	No Data
Selenium, Dissolved, (ug/l as Se)	No Data
Silver, Total Recoverable, (ug/l as Ag)	No Data
Silver, Dissolved, (ug/l as Ag)	No Data
Sodium, Dissolved, (mg/l as Na)	No Data
Strontium, Dissolved, (ug/l as Sr)	No Data
Thallium, Total, (ug/l as Tl)	No Data
Thallium, Dissolved, (ug/l as Tl)	No Data
Vanadium, Dissolved, (ug/l as V)	No Data
Zinc, Total Recoverable, (ug/l as Zn)	No Data
Zinc, Dissolved, (ug/l as Zn)	No Data

Glendale INDPK near Orangewood and 107th Avenue	
Date of Sampling	
Diazinon, Total, (ug/l)	No Data
Ethion, Total, (ug/l)	No Data
Malathion, Total, (ug/l)	No Data
Methyl Parathion, Total, (ug/l)	No Data
Parathion, Total, (ug/l)	No Data
Trithion, Total, (ug/l)	No Data
Di-syston, Total, (ug/l)	No Data
Phorate, Total, (ug/l)	No Data
Chlorpyrifos, Total, (ug/l)	No Data
DEF, Total, (ug/l)	No Data
Fonofos(Dy-fonate), WWT, (ug/l)	No Data
Aldrin, Total, (ug/l)	No Data
BHC - ALPHA, (ug/l)	No Data
BHC - Gamma (Lindane), (ug/l)	No Data
BHC - DELTA, (ug/l)	No Data
Aroclor 1016, PCB, Total, (ug/l)	No Data
Aroclor 1221, PCB, Total, (ug/l)	No Data
Aroclor 1232, PCB, Total, (ug/l)	No Data
Aroclor 1242, PCB, Total, (ug/l)	No Data
Aroclor 1248, PCB, Total, (ug/l)	No Data
Aroclor 1254, PCB, Total, (ug/l)	No Data
Aroclor 1260, PCB, Total, (ug/L)	No Data
Chlordane, Total, (ug/l)	No Data
P,P' DDD, Total, (ug/l)	No Data
P,P' DDE, Total, (ug/l)	No Data
P, P' DDT, Total, (ug/l)	No Data
Dieldrin, Total, (ug/l)	No Data
Endo-Sulfan Alpha, Total, (ug/l)	No Data
Endo-Sulfan Beta, Total, (ug/l)	No Data
Endo-Sulfan Sulfate, Total, (ug/l)	No Data
Endrin Aldehyde, Total, (ug/l)	No Data
Endrin, Total, (ug/l)	No Data
Heptachlor, Total, (ug/l)	No Data
Heptachlor Epoxide, Total, (ug/l)	No Data
Toxaphene, Total, (ug/l)	No Data
Methoxychlor, Total, (ug/l)	No Data
Beta Benzene Hexachloride, Total, (ug/l)	No Data
1,1,2,2-Tetrachloroethane, Total, (ug/l)	No Data
1,1,1,2-Tetrachloroethane, Total,(ug/l)	No Data
Tetrachloroethene, PCE, Total, (ug/l)	No Data
1,1,1- Trichloroethane, Total, (ug/l)	No Data
1,1,2- Trichloroethane, Total, (ug/l)	No Data
Trichloroethene, Total, (ug/l)	No Data
1,1- Dichloroethane, Total, (ug/l)	No Data
1,1- Dichloroethene, Total, (ug/l)	No Data
1,2- Dichloroethane, Total, (ug/l)	No Data
1,2- Dichloropropane, Total, (ug/l)	No Data
2- Chloroethylvinyl Ether, Total, (ug/l)	No Data
cis-1,3-Dichloropropene, (ug/l)	No Data
trans-1,2- Dichloroethene, (ug/l)	No Data

Glendale INDPK

near Orangewood and 107th Avenue

Date of Sampling	
trans-1,3- Dichloropropene, (ug/l)	No Data
Benzene, Total, (ug/l)	No Data
Bromodichloromethane, Total, (ug/l)	No Data
Bromoform, Total, (ug/l)	No Data
Carbon Tetrachloride, Total, (ug/l)	No Data
Chlorobenzene, Total, (ug/l)	No Data
Chloroethane, (ug/l)	No Data
Chloroform, Total, (ug/l)	No Data
Ethyl-Benzene, Total, (ug/l)	No Data
Methylene Chloride, Total, (ug/l)	No Data
Toluene, Total, (ug/l)	No Data
Trichlorofluoromethane, Total, (ug/l)	No Data
Vinyl Chloride, Total, (ug/l)	No Data
Chlorodibromomethane, Total, (ug/l)	No Data
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)	No Data
Acetone, Total, (ug/l)	No Data
2-Butanone, (ug/l)	No Data
Carbon Disulfide, Total, (ug/l)	No Data
1,2 Dichloroethene, Total, (ug/l)	No Data
Xylenes, Total, (ug/l)	No Data
2-Hexanone, Total, (ug/l)	No Data
Styrene, Total, (ug/l)	No Data
Acrolein, Total, (ug/l)	No Data
Acrylonitirile, Total, (ug/l)	No Data
Bromobenzene, Water Whole, Total, (ug/l)	No Data
1,3-Dichloropropane, Water Whole, Total, (ug/l)	No Data
Methyl Bromide, Total, (ug/l)	No Data
Methyl Chloride, Total, (ug/l)	No Data
Parachloro Toluene, Total, (ug/l)	No Data
Dibromoethane, Total, (ug/l)	No Data
Acenaphthene, Total, (ug/l)	No Data
Acenaphthylene, Total, (ug/l)	No Data
Anthracene, Total, (ug/l)	No Data
Benzidine, Total, (ug/l)	No Data
Benzoic Acid, Total, (ug/l)	No Data
Benzo (a) Anthracene, Total, (ug/l)	No Data
Benzo (b) Fluoranthene, Total, (ug/l)	No Data
Benzo (k) Fluoranthene, Total, (ug/l)	No Data
Benzo (ghi) Perylene, Total, (ug/l)	No Data
Benzo (a) Pyrene, Total, (ug/l)	No Data
Benzyl Alcohol, Total, (ug/l)	No Data
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	No Data
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	No Data
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	No Data
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	No Data
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	No Data
Butyl Benzyl Phthalate, Total, (ug/l)	No Data
2-Chloronapthalene, Total, (ug/l)	No Data
2-Chlorophenol, Total, (ug/l)	No Data
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	No Data

Glendale INDPK

near Orangewood and 107th Avenue

Date of Sampling	
Chrysene, Total, (ug/l)	No Data
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	No Data
Di-N-Butyl Phthalate, Total, (ug/l)	No Data
1,3- Dichlorobenzene, Total, (ug/l)	No Data
1,4- Dichlorobenzene, Total, (ug/l)	No Data
1,2- Dichlorobenzene, Total, (ug/l)	No Data
3,3'- Dichlorobenzidine, Total, (ug/l)	No Data
2,4- Dichlorophenol, Total, (ug/l)	No Data
Diethyl Phthalate, Total, (ug/l)	No Data
2,4- Dimethylphenol, Total, (ug/l)	No Data
Dimethyl Phthalate, Total, (ug/l)	No Data
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	No Data
2,4- Dinitrophenol, Total, (ug/l)	No Data
2,4- Dinitrotoluene, Total, (ug/l)	No Data
2,6- Dinitrotoluene, Total, (ug/l)	No Data
Di-N-Octyl-Phthalate, Total, (ug/l)	No Data
Fluoranthene, Total, (ug/l)	No Data
Fluorene, Total, (ug/l)	No Data
Hexachlorobenzene, Total, (ug/l)	No Data
Hexachlorobutadiene, Total, (ug/l)	No Data
Hexachlorocyclopentadiene, Total, (ug/l)	No Data
Hexachloroethane, Total, (ug/l)	No Data
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	No Data
Isophorone, Total, (ug/l)	No Data
Naphthalene, Total, (ug/l)	No Data
Nitrobenzene, Total, (ug/l)	No Data
2-Nitrophenol, Total, (ug/l)	No Data
4-Nitrophenol, Total, (ug/l)	No Data
N-Nitrosodiphenylamine, Total, (ug/l)	No Data
N-Nitrosodi-N-Propylamine, Total, (ug/l)	No Data
Pentachlorophenol, Total, (ug/l)	No Data
Phenanthrene, Total, (ug/l)	No Data
Phenol, Total, (ug/l)	No Data
Pyrene, Total, (ug/l)	No Data
1,2,4-Trichlorobenzene, Total, (ug/l)	No Data
2,4,5- Trichlorophenol, Total, (ug/l)	No Data
2,4,6- Trichlorophenol, Total, (ug/l)	No Data
N-Nitrosodimethylamine, Total, (ug/l)	No Data
1,2- Diphenylhydrazine, Total, (ug/l)	No Data
Dichlorodifluoromethane, Total, (ug/l)	No Data
Parachloro-Meta-Cresol, Total, (ug/l)	No Data

OLIVE (Glendale)

67th Avenue north of Olive Avenue

Glendale OLIVE

Olive and 67th Avenues

Date of Sampling	
Time	No Data
Representative Storm Event	No Data
Agency Collecting Sample	No Data
Agency Analyzing Sample	No Data
Drainage Area (acres) (DA)	No Data
Impervious Area (acres) (IA)	No Data
Land Use - Residential	No Data
Land Use - Commercial	No Data
Land Use - Industrial	No Data
Land Use - Undeveloped	No Data
Sampling Duration (minutes)	No Data
Storm Duration (minutes) (DRN)	No Data
Runoff Sampled (cubic feet) (RUN)	No Data
Total Storm Runoff (cubic feet)	No Data
Instantaneous Discharge (cfs)	No Data
Preceeding Dry Period (days) (ANT)	No Data
Total Storm Rainfall (inch)	No Data
Rainfall Sampled (inch) (TRN)	No Data
Maximum 5-minute rain intensity (MAX5)	No Data
Sample Temperature (deg. C)	No Data
Effluent Temperature (deg. C)	No Data
Ambient Temperature (deg. C)	No Data
Barometric Pressure (mm Hg)	No Data
pH, Effluent (standard units)	No Data
pH, Lab (standard units)	No Data
Specific Conductance, FIELD (us/cm)	No Data
Specific Conductance, LAB (us/cm)	No Data
Oxygen Dissolved (% saturation)	No Data
Oxygen Dissolved (mg/l)	No Data
Electrical Conductivity (umhos/cm)	No Data
BOD5 (mg/l)	No Data
COD High Level (mg/l)	No Data
Chloride (mg/l as Cl)	No Data
Cyanide Total (mg/l as Cn)	No Data
Fecal Coliform (CFU/100mL)	No Data
Fecal Streptococci (CFU/100mL)	No Data
Solids Residue at 180 Deg. C (TDS) (mg/l)	No Data
Residue, Total at 105 Deg. C (TSS) (mg/l)	No Data
Nitrogen No2 + No3, Total (mg/l as N)	No Data
TKN Nitrogen (mg/l as N)	No Data
Nitrogen, Ammonia + Organic, Total (mg/l as N)	No Data
Nitrogen Nitrate Total (mg/l as N)	No Data
Nitrogen Nitrite Total (mg/l as N)	No Data
Nitrogen Ammonia Total (mg/l as N)	No Data
Nitrogen Organic Total (mg/l as N)	No Data
Phosphorous Total (mg/l as P)	No Data
Phosphorous Dissolved (mg/l as P)	No Data
Phosphorous Ortho (mg/l as P)	No Data
Sulfate Dissolved (mg/l)	No Data
Hexavalent Chromium Total (mg/l)	No Data

Glendale OLIVE

Olive and 67th Avenues

Date of Sampling	
Phenols Total Recoverable (ug/l)	No Data
Oil and Grease Total Recoverable (mg/l)	No Data
Organic Carbon, Total (mg/l)	No Data
Bicarbonate Whole Field (mg/l as HCo3)	No Data
Bicarbonate Dissolved, Field (mg/l as HCo3)	No Data
Carbonate Water Field (mg/l as Co3)	No Data
Carbonate Water Dissolved, Field, (mg/l as Co3)	No Data
Alkalinity Water Field Total (mg/l as CaCo3)	No Data
Alkalinity Dissolved Water Field Total (mg/l as CaCo3)	No Data
Alkalinity LAB (mg/l as CaCo3)	No Data
Silica Dissolved (mg/l as SiO2)	No Data
Hardness (mg/l)	No Data
Antimony (ug/l as Sb)	No Data
Antimony Dissolved (ug/l as Sb)	No Data
Arsenic Total (ug/l as As)	No Data
Arsenic Dissolved (ug/l as As)	No Data
Barium Dissolved (ug/l as Ba)	No Data
Beryllium Total Recoverable (ug/l as Be)	No Data
Beryllium Dissolved (ug/l as Be)	No Data
Cadmium Total Recoverable (ug/l as Cd)	No Data
Cadmium Dissolved (ug/l as Cd)	No Data
Calcium Dissolved (mg/l as Ca)	No Data
Chromium Total Recoverable (ug/l as Cr)	No Data
Chromium Dissolved (ug/l as Cr)	No Data
Cobalt Dissolved (ug/l as Co)	No Data
Copper, Total Recoverable, (ug/l as Cu)	No Data
Copper, Dissolved, (ug/l as Cu)	No Data
Iron, Dissolved, (ug/l as Fe)	No Data
Lead, Total Recoverable, (ug/l as Pb)	No Data
Lead, Dissolved, (ug/l as Pb)	No Data
Lithium, Dissolved, (ug/l as Li)	No Data
Magnesium, Dissolved, (mg/l as Mg)	No Data
Manganese, Dissolved, (ug/l as Mn)	No Data
Mercury, Total Recoverable, (ug/l as Hg)	No Data
Mercury, Dissolved, (ug/l as Hg)	No Data
Molybdenum, Dissolved, (ug/l as Mo)	No Data
Nickel, Total Recoverable, (ug/l as Ni)	No Data
Nickel, Dissolved, (ug/l as Ni)	No Data
Potassium, Dissolved, (mg/l as K)	No Data
Selenium, Total, (ug/l as Se)	No Data
Selenium, Dissolved, (ug/l as Se)	No Data
Silver, Total Recoverable, (ug/l as Ag)	No Data
Silver, Dissolved, (ug/l as Ag)	No Data
Sodium, Dissolved, (mg/l as Na)	No Data
Strontium, Dissolved, (ug/l as Sr)	No Data
Thallium, Total, (ug/l as Tl)	No Data
Thallium, Dissolved, (ug/l as Tl)	No Data
Vanadium, Dissolved, (ug/l as V)	No Data
Zinc, Total Recoverable, (ug/l as Zn)	No Data
Zinc, Dissolved, (ug/l as Zn)	No Data

Glendale OLIVE

Olive and 67th Avenues

Date of Sampling	
Diazinon, Total, (ug/l)	No Data
Ethion, Total, (ug/l)	No Data
Malathion, Total, (ug/l)	No Data
Methyl Parathion, Total, (ug/l)	No Data
Parathion, Total, (ug/l)	No Data
Trithion, Total, (ug/l)	No Data
Di-syston, Total, (ug/l)	No Data
Phorate, Total, (ug/l)	No Data
Chlorpyrifos, Total, (ug/l)	No Data
DEF, Total, (ug/l)	No Data
Fonofos(Dy-fonate), WWT, (ug/l)	No Data
Aldrin, Total, (ug/l)	No Data
BHC - ALPHA, (ug/l)	No Data
BHC - Gamma (Lindane), (ug/l)	No Data
BHC - DELTA, (ug/l)	No Data
Aroclor 1016, PCB, Total, (ug/l)	No Data
Aroclor 1221, PCB, Total, (ug/l)	No Data
Aroclor 1232, PCB, Total, (ug/l)	No Data
Aroclor 1242, PCB, Total, (ug/l)	No Data
Aroclor 1248, PCB, Total, (ug/l)	No Data
Aroclor 1254, PCB, Total, (ug/l)	No Data
Aroclor 1260, PCB, Total, (ug/L)	No Data
Chlordane, Total, (ug/l)	No Data
P,P' DDD, Total, (ug/l)	No Data
P,P' DDE, Total, (ug/l)	No Data
P, P' DDT, Total, (ug/l)	No Data
Dieldrin, Total, (ug/l)	No Data
Endo-Sulfan Alpha, Total, (ug/l)	No Data
Endo-Sulfan Beta, Total, (ug/l)	No Data
Endo-Sulfan Sulfate, Total, (ug/l)	No Data
Endrin Aldehyde, Total, (ug/l)	No Data
Endrin, Total, (ug/l)	No Data
Heptachlor, Total, (ug/l)	No Data
Heptachlor Epoxide, Total, (ug/l)	No Data
Toxaphene, Total, (ug/l)	No Data
Methoxychlor, Total, (ug/l)	No Data
Beta Benzene Hexachloride, Total, (ug/l)	No Data
1,1,2,2-Tetrachloroethane, Total, (ug/l)	No Data
1,1,1,2-Tetrachloroethane, Total,(ug/l)	No Data
Tetrachloroethene, PCE, Total, (ug/l)	No Data
1,1,1- Trichloroethane, Total, (ug/l)	No Data
1,1,2- Trichloroethane, Total, (ug/l)	No Data
Trichloroethene, Total, (ug/l)	No Data
1,1- Dichloroethane, Total, (ug/l)	No Data
1,1- Dichloroethene, Total, (ug/l)	No Data
1,2- Dichloroethane, Total, (ug/l)	No Data
1,2- Dichloropropane, Total, (ug/l)	No Data
2- Chloroethylvinyl Ether, Total, (ug/l)	No Data
cis-1,3-Dichloropropene, (ug/l)	No Data
trans-1,2- Dichloroethene, (ug/l)	No Data

Glendale OLIVE

Olive and 67th Avenues

Date of Sampling	
trans-1,3- Dichloropropene, (ug/l)	No Data
Benzene, Total, (ug/l)	No Data
Bromodichloromethane, Total, (ug/l)	No Data
Bromoform, Total, (ug/l)	No Data
Carbon Tetrachloride, Total, (ug/l)	No Data
Chlorobenzene, Total, (ug/l)	No Data
Chloroethane, (ug/l)	No Data
Chloroform, Total, (ug/l)	No Data
Ethyl-Benzene, Total, (ug/l)	No Data
Methylene Chloride, Total, (ug/l)	No Data
Toluene, Total, (ug/l)	No Data
Trichlorofluoromethane, Total, (ug/l)	No Data
Vinyl Chloride, Total, (ug/l)	No Data
Chlorodibromomethane, Total, (ug/l)	No Data
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)	No Data
Acetone, Total, (ug/l)	No Data
2-Butanone, (ug/l)	No Data
Carbon Disulfide, Total, (ug/l)	No Data
1,2 Dichloroethene, Total, (ug/l)	No Data
Xylenes, Total, (ug/l)	No Data
2-Hexanone, Total, (ug/l)	No Data
Styrene, Total, (ug/l)	No Data
Acrolein, Total, (ug/l)	No Data
Acrylonitirile, Total, (ug/l)	No Data
Bromobenzene, Water Whole, Total, (ug/l)	No Data
1,3-Dichloropropane, Water Whole, Total, (ug/l)	No Data
Methyl Bromide, Total, (ug/l)	No Data
Methyl Chloride, Total, (ug/l)	No Data
Parachloro Toluene, Total, (ug/l)	No Data
Dibromoethane, Total, (ug/l)	No Data
Acenaphthene, Total, (ug/l)	No Data
Acenaphthylene, Total, (ug/l)	No Data
Anthracene, Total, (ug/l)	No Data
Benzidine, Total, (ug/l)	No Data
Benzoic Acid, Total, (ug/l)	No Data
Benzo (a) Anthracene, Total, (ug/l)	No Data
Benzo (b) Fluoranthene, Total, (ug/l)	No Data
Benzo (k) Fluoranthene, Total, (ug/l)	No Data
Benzo (ghi) Perylene, Total, (ug/l)	No Data
Benzo (a) Pyrene, Total, (ug/l)	No Data
Benzyl Alcohol, Total, (ug/l)	No Data
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	No Data
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	No Data
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	No Data
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	No Data
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	No Data
Butyl Benzyl Phthalate, Total, (ug/l)	No Data
2-Chloronapthalene, Total, (ug/l)	No Data
2-Chlorophenol, Total, (ug/l)	No Data
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	No Data

Glendale OLIVE

Olive and 67th Avenues

Date of Sampling	
Chrysene, Total, (ug/l)	No Data
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	No Data
Di-N-Butyl Phthalate, Total, (ug/l)	No Data
1,3- Dichlorobenzene, Total, (ug/l)	No Data
1,4- Dichlorobenzene, Total, (ug/l)	No Data
1,2- Dichlorobenzene, Total, (ug/l)	No Data
3,3'- Dichlorobenzidine, Total, (ug/l)	No Data
2,4- Dichlorophenol, Total, (ug/l)	No Data
Diethyl Phthalate, Total, (ug/l)	No Data
2,4- Dimethylphenol, Total, (ug/l)	No Data
Dimethyl Phthalate, Total, (ug/l)	No Data
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	No Data
2,4- Dinitrophenol, Total, (ug/l)	No Data
2,4- Dinitrotoluene, Total, (ug/l)	No Data
2,6- Dinitrotoluene, Total, (ug/l)	No Data
Di-N-Octyl-Phthalate, Total, (ug/l)	No Data
Fluoranthene, Total, (ug/l)	No Data
Fluorene, Total, (ug/l)	No Data
Hexachlorobenzene, Total, (ug/l)	No Data
Hexachlorobutadiene, Total, (ug/l)	No Data
Hexachlorocyclopentadiene, Total, (ug/l)	No Data
Hexachloroethane, Total, (ug/l)	No Data
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	No Data
Isophorone, Total, (ug/l)	No Data
Naphthalene, Total, (ug/l)	No Data
Nitrobenzene, Total, (ug/l)	No Data
2-Nitrophenol, Total, (ug/l)	No Data
4-Nitrophenol, Total, (ug/l)	No Data
N-Nitrosodiphenylamine, Total, (ug/l)	No Data
N-Nitrosodi-N-Propylamine, Total, (ug/l)	No Data
Pentachlorophenol, Total, (ug/l)	No Data
Phenanthrene, Total, (ug/l)	No Data
Phenol, Total, (ug/l)	No Data
Pyrene, Total, (ug/l)	No Data
1,2,4-Trichlorobenzene, Total, (ug/l)	No Data
2,4,5- Trichlorophenol, Total, (ug/l)	No Data
2,4,6- Trichlorophenol, Total, (ug/l)	No Data
N-Nitrosodimethylamine, Total, (ug/l)	No Data
1,2- Diphenylhydrazine, Total, (ug/l)	No Data
Dichlorodifluoromethane, Total, (ug/l)	No Data
Parachloro-Meta-Cresol, Total, (ug/l)	No Data

Validation Tables

Glendale ARROW

Skunk Creek near 79th Avenue

25 October 1998

	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
Sample Temperature (deg. C)		4												
Effluent Temperature (deg. C)		20												
Ambient Temperature (deg. C)		NM												
Barometric Pressure (mm Hg)		NM												
pH, Effluent, Field (standard units)		7.74				10/26/1998								
pH, Lab (standard units)	150.1	6.4	std units		R	10/27/1998	Immediate			<15	n/a			pH analyzed in lab, and not immediately
Specific Conductance, FIELD (us/cm)		--												
Specific Conductance, LAB (us/cm)		--												
Oxygen Dissolved (% saturation)		--												
Oxygen Dissolved (mg/l)	360.1	--	mg/l				Immediate							
Electrical Conductivity (umhos/cm)	2510B	--	umhos/cm				20 days							
BOD5 (mg/l)	405.1	--	mg/l	1			48 hours			<30	n/a			
COD High Level (mg/l)	410.4	194	mg/l	1		11/09/1998	28 days			<30	n/a			
Chloride (mg/l as Cl)	4500	11	mg/l			11/17/1998	28 days							
Cyanide Total (mg/l as Cn)	4500	0.01	mg/l			11/06/1998	14 days							
Fecal Coliform (MPN/100mL)	9221D	--	CFU/100ml	2			6 hours			<30	n/a			
Fecal Streptococci (MPN/100mL)	9230B	--	CFU/100ml	2			6 hours			<30	n/a			
Total Dissolved Solids (mg/l)	2540C	178	mg/l	10		10/30/1998	7 days			<15	n/a			
Total Suspended Solids (mg/l)	160.2	83	mg/l	10		10/30/1998	7 days			<15	n/a			
Nitrogen No2 + No3, Total (mg/l as N)	4500	0.36	mg/l	0.05		11/16/1998				<15	n/a			
TKN Nitrogen (mg/l as N)	351.3	--	mg/l				28 days							
Nitrogen, Ammonia + Organic, Total (mg/l as N)	calc.	--	mg/l											
Nitrogen Nitrate Total (mg/l as N)	calc.	0.13	mg/l				48 hours							
Nitrogen Nitrite Total (mg/l as N)	300.0	0.23	mg/l			10/26/1998	48 hours							
Nitrogen Ammonia Total (mg/l as N)	350.2	1	mg/l			10/29/1998	28 days							
Nitrogen Organic Total (mg/l as N)	calc.	--	mg/l											
Phosphorous Total (mg/l as P)	365.3	0.6	mg/l	0.05		11/20/1998	28 days			<15	3.5			
Phosphorous Dissolved (mg/l as P)	365.3	0.17	mg/l			11/19/1998	28 days							
Phosphorous Ortho (mg/l as P)	4500P	0.12	mg/l	0.05		10/27/1998	48 hours			<15	0			
Sulfate Dissolved (mg/l)	300.0	13	mg/l			11/13/1998	28 days							
Hexavalent Chromium Total (mg/l)	3500	<0.010	mg/l			10/27/1998	24 hours							
Phenols Total Recoverable (ug/l)	420.1	5.1	ug/l			11/04/1998	28 days							
Oil and Grease Total Recoverable (mg/l)	413.1	--	mg/l	0.2			28 days	<30	n/a	<50	n/a			
Organic Carbon, Total (mg/l)	5310C	25	mg/l			11/16/1998	28 days							
Bicarbonate Whole Field (mg/l as HCo3)		--												
Bicarbonate Dissolved, Field (mg/l as HCo3)		--												
Carbonate Water Field (mg/l as Co3)		--												
Carbonate Water Dissolved, Field, (mg/l as Co3)		--												
Alkalinity Water Field Total (mg/l as CaCo3)		--												
Alkalinity Dissolved Water Field Total (mg/l as CaCo3)		--												
Alkalinity LAB (mg/l as CaCo3)	2320B	54	mg/l			11/09/1998	14 days							
Silica Dissolved (mg/l as SiO2)		--												
Hardness (mg/l)	2340B	76	mg/l	1		11/04/1998	6 months			<15	n/a			
Antimony (ug/l as Sb)	3113B	<5	ug/l			11/08/1998	6 months							
Antimony Dissolved (ug/l as Sb)	200.9	<4	ug/l			11/25/1998	6 months							
Arsenic Total (ug/l as As)	3113B	8	ug/l			11/11/1998	6 months							
Arsenic Dissolved (ug/l as As)	200.9	<5	ug/l			11/11/1998	6 months							
Barium Dissolved (ug/l as Ba)		--												

R - Rejected Data

Glendale ARROW

Skunk Creek near 79th Avenue

25 October 1998

	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
Beryllium Total Recoverable (ug/l as Be)	200.7	<2	ug/l			11/04/1998	6 months							
Beryllium Dissolved (ug/l as Be)	200.7	<2	ug/l			11/03/1998	6 months							
Cadmium Total Recoverable (ug/l as Cd)	7131	0.38	ug/l	0.2		11/11/1998	6 months	<25		<35				
Cadmium Dissolved (ug/l as Cd)	7131	<0.2	ug/l			11/11/1998	6 months							
Calcium Dissolved (mg/l as Ca)		--												
Chromium Total Recoverable (ug/l as Cr)	7191	5.3	ug/l	1		11/12/1998	6 months	<25		<35				
Chromium Dissolved (ug/l as Cr)	7191	2.2	ug/l			11/12/1998	6 months							
Cobalt Dissolved (ug/l as Co)		--												
Copper, Total Recoverable, (ug/l as Cu)	3113B	30	ug/l	1		11/04/1998	6 months	<25		<35				
Copper, Dissolved, (ug/l as Cu)	200.9	<15	ug/l			11/03/1998	6 months							
Iron, Dissolved, (ug/l as Fe)		--												
Lead, Total Recoverable, (ug/l as Pb)	3113B	<5	ug/l	1		11/06/1998	6 months	<25		<35				
Lead, Dissolved, (ug/l as Pb)	200.9	<5	ug/l			11/06/1998	6 months							
Lithium, Dissolved, (ug/l as Li)		--												
Magnesium, Dissolved, (mg/l as Mg)		--												
Manganese, Dissolved, (ug/l as Mn)		--												
Mercury, Total Recoverable, (ug/l as Hg)	245.1	<0.2	ug/l			11/09/1998	6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l			11/09/1998	6 months							
Molybdenum, Dissolved, (ug/l as Mo)		--												
Nickel, Total Recoverable, (ug/l as Ni)	249.2	14	ug/l	2		11/11/1998	6 months	<25		<35				
Nickel, Dissolved, (ug/l as Ni)	249.2	3.9	ug/l			11/11/1998	6 months							
Potassium, Dissolved, (mg/l as K)		--												
Selenium, Total, (ug/l as Se)	3113B	<5	ug/l			11/03/1998	6 months							
Selenium, Dissolved, (ug/l as Se)	200.9	<5	ug/l			11/10/1998	6 months							
Silver, Total Recoverable, (ug/l as Ag)	200.7	<40	ug/l			11/04/1998	6 months							
Silver, Dissolved, (ug/l as Ag)	200.7	<50	ug/l			11/03/1998	6 months							
Sodium, Dissolved, (mg/l as Na)		--												
Strontium, Dissolved, (ug/l as Sr)		--												
Thallium, Total, (ug/l as Tl)	200.9	<1	ug/l			11/04/1998	6 months							
Thallium, Dissolved, (ug/l as Tl)	200.9	<1	ug/l			11/04/1998	6 months							
Vanadium, Dissolved, (ug/l as V)		--												
Zinc, Total Recoverable, (ug/l as Zn)	200.7	160	ug/l	1		11/04/1998	6 months	<25		<35				
Zinc, Dissolved, (ug/l as Zn)	200.7	90	ug/l			11/03/1998	6 months							
Diazinon, Total, (ug/l)		--												
Ethion, Total, (ug/l)		--												
Malathion, Total, (ug/l)		--												
Methyl Parathion, Total, (ug/l)		--												
Parathion, Total, (ug/l)		--												
Trithion, Total, (ug/l)		--												
Di-syston, Total, (ug/l)		--												
Phorate, Total, (ug/l)		--												
Chlorpyrifos, Total, (ug/l)		--												
DEF, Total, (ug/l)		--												
Fonofos(Dy-fonate), WWT, (ug/l)		--												
EPA Method 608 Extraction						10/29/1998	7 days							
Aldrin, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
BHC - ALPHA, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
BHC - Gamma (Lindane), (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							

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	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
BHC - DELTA, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1016, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1221, PCB, Total, (ug/l)	608	<10	ug/l			11/06/1998	40 days							
Aroclor 1232, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1242, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1248, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1254, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1260, PCB, Total, (ug/L)	608	<1.0	ug/l			11/06/1998	40 days							
Chlordane, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
P,P' DDD, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
P,P' DDE, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
P, P' DDT, Total, (ug/l)	608	<2.0	ug/l			11/06/1998	40 days							
Dieldrin, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endo-Sulfan Alpha, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endo-Sulfan Beta, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endo-Sulfan Sulfate, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endrin Aldehyde, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endrin, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Heptachlor, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Heptachlor Epoxide, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Toxaphene, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Methoxychlor, Total, (ug/l)		--												
Beta Benzene Hexachloride, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
1,1,2,2-Tetrachloroethane, Total, (ug/l)	624	--	ug/l				14 days							
1,1,1,2-Tetrachloroethane, Total,(ug/l)		--												
Tetrachloroethene, PCE, Total, (ug/l)	624	--	ug/l				14 days							
1,1,1- Trichloroethane, Total, (ug/l)	624	--	ug/l				14 days							
1,1,2- Trichloroethane, Total, (ug/l)	624	--	ug/l				14 days							
Trichloroethene, Total, (ug/l)	624	--	ug/l				14 days							
1,1- Dichloroethane, Total, (ug/l)	624	--	ug/l				14 days							
1,1- Dichloroethene, Total, (ug/l)	624	--	ug/l				14 days							
1,2- Dichloroethane, Total, (ug/l)	624	--	ug/l				14 days							
1,2- Dichloropropane, Total, (ug/l)	624	--	ug/l				14 days							
2- Chloroethylvinyl Ether, Total, (ug/l)	624	--	ug/l				14 days							
cis-1,3-Dichloropropene, (ug/l)	624	--	ug/l				14 days							
trans-1,2- Dichloroethene, (ug/l)	624	--	ug/l				14 days							
trans-1,3- Dichloropropene, (ug/l)	624	--	ug/l				14 days							
Benzene, Total, (ug/l)	624	--	ug/l				14 days							
Bromodichloromethane, Total, (ug/l)	624	--	ug/l				14 days							
Bromoform, Total, (ug/l)	624	--	ug/l				14 days							
Carbon Tetrachloride, Total, (ug/l)	624	--	ug/l				14 days							
Chlorobenzene, Total, (ug/l)	624	--	ug/l				14 days							
Chloroethane, (ug/l)	624	--	ug/l				14 days							
Chloroform, Total, (ug/l)	624	--	ug/l				14 days							
Ethyl-Benzene, Total, (ug/l)	624	--	ug/l				14 days							
Methylene Chloride, Total, (ug/l)		--	ug/l											
Toluene, Total, (ug/l)	624	--	ug/l				14 days							
Trichlorofluoromethane, Total, (ug/l)	624	--	ug/l				14 days							

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	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
Vinyl Chloride, Total, (ug/l)	624	--	ug/l				14 days							
Chlorodibromomethane, Total, (ug/l)	624	--	ug/l				14 days							
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)		--												
Acetone, Total, (ug/l)	624	--	ug/l				14 days							
2-Butanone, (ug/l)	624	--	ug/l				14 days							
Carbon Disulfide, Total, (ug/l)	624	--	ug/l				14 days							
1,2 Dichloroethene, Total, (ug/l)	624	--	ug/l				14 days							
Xylenes, Total, (ug/l)	624	--	ug/l				14 days							
2-Hexanone, Total, (ug/l)	624	--	ug/l				14 days							
Styrene, Total, (ug/l)	624	--	ug/l				14 days							
Acrolein, Total, (ug/l)	624	--	ug/l				14 days							
Acrylonitirile, Total, (ug/l)	624	--	ug/l				14 days							
Bromobenzene, Water Whole, Total, (ug/l)		--												
1,3-Dichloropropane, Water Whole, Total, (ug/l)		--												
Methyl Bromide, Total, (ug/l)	624	--	ug/l				14 days							
Methyl Chloride, Total, (ug/l)	624	--	ug/l				14 days							
Parachloro Toluene, Total, (ug/l)		--												
Dibromoethane, Total, (ug/l)		--												
EPA Method 625 Extraction						10/28/1998	7 days							
Acenaphthene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Acenaphthylene, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Anthracene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Benzidine, Total, (ug/l)	625	<20	ug/l			11/26/1998	40 days							
Benzoic Acid, Total, (ug/l)	625	<50	ug/l			11/26/1998	40 days							
Benzo (a) Anthracene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Benzo (b) Fluoranthene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Benzo (k) Fluoranthene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Benzo (ghi) Perylene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Benzyl Alcohol, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Butyl Benzyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
2-Chloronapthalene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
2-Chlorophenol, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Chrysene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Di-N-Butyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
1,3- Dichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
1,4- Dichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
1,2- Dichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
3,3'- Dichlorobenzidine, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
2,4- Dichlorophenol, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Diethyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							

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Glendale ARROW
Skunk Creek near 79th Avenue

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	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
2,4- Dimethylphenol, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Dimethyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
2,4- Dinitrophenol, Total, (ug/l)	625	<20	ug/l			11/26/1998	40 days							
2,4- Dinitrotoluene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
2,6- Dinitrotoluene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Di-N-Octyl-Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Fluoranthene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Fluorene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Hexachlorobenzene, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Hexachlorobutadiene, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Hexachlorocyclopentadiene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Hexachloroethane, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Isophorone, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Naphthalene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Nitrobenzene, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
2-Nitrophenol, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
4-Nitrophenol, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
N-Nitrosodiphenylamine, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
N-Nitrosodi-N-Propylamine, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Pentachlorophenol, Total, (ug/l)	625	<10	ug/l			11/26/1998	40 days							
Phenanthrene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Phenol, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
Pyrene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
1,2,4-Trichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
2,4,5- Trichlorophenol, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							
2,4,6- Trichlorophenol, Total, (ug/l)	625	<5.0	ug/l			11/26/1998	40 days							

R - Rejected Data

Glendale CITRUS

Grovers at 71st Avenue

25 October 1998

	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
Sample Temperature (deg. C)		4												
Effluent Temperature (deg. C)		19.1												
Ambient Temperature (deg. C)		NM												
Barometric Pressure (mm Hg)		NM												
pH, Effluent, Field (standard units)		8.85				10/26/1998								
pH, Lab (standard units)	150.1	7.3	std units		R	10/27/1998	Immediate			<15	n/a			pH analyzed in lab, and not immediately
Specific Conductance, FIELD (us/cm)		--												
Specific Conductance, LAB (us/cm)		--												
Oxygen Dissolved (% saturation)		--												
Oxygen Dissolved (mg/l)	360.1	--	mg/l				Immediate							
Electrical Conductivity (umhos/cm)	2510B	--	umhos/cm				20 days							
BOD5 (mg/l)	405.1	--	mg/l	1			48 hours			<30	n/a			
COD High Level (mg/l)	410.4	190	mg/l	1		11/09/1998	28 days			<30	n/a			
Chloride (mg/l as Cl)	4500	<5.0	mg/l			11/17/1998	28 days							
Cyanide Total (mg/l as Cn)	4500	<0.01	mg/l			11/06/1998	14 days							
Fecal Coliform (MPN/100mL)	9221D	--	CFU/100ml	2			6 hours			<30	n/a			
Fecal Streptococci (MPN/100mL)	9230B	--	CFU/100ml	2			6 hours			<30	n/a			
Total Dissolved Solids (mg/l)	2540C	75	mg/l	10		10/30/1998	7 days			<15	n/a			
Total Suspended Solids (mg/l)	160.2	308	mg/l	10		10/30/1998	7 days			<15	n/a			
Nitrogen No2 + No3, Total (mg/l as N)	4500	0.3	mg/l	0.05		11/16/1998				<15	n/a			
TKN Nitrogen (mg/l as N)	351.3	--	mg/l				28 days							
Nitrogen, Ammonia + Organic, Total (mg/l as N)	calc.	--	mg/l											
Nitrogen Nitrate Total (mg/l as N)	calc.	0.3	mg/l				48 hours							
Nitrogen Nitrite Total (mg/l as N)	300.0	<0.1	mg/l			10/26/1998	48 hours							
Nitrogen Ammonia Total (mg/l as N)	350.2	<0.6	mg/l			10/29/1998	28 days							
Nitrogen Organic Total (mg/l as N)	calc.	--	mg/l											
Phosphorous Total (mg/l as P)	365.3	0.44	mg/l	0.05		11/17/1998	28 days			<15	3.5			
Phosphorous Dissolved (mg/l as P)	365.3	0.12	mg/l			11/19/1998	28 days							
Phosphorous Ortho (mg/l as P)	4500P	0.06	mg/l	0.05		10/27/1998	48 hours			<15	0			
Sulfate Dissolved (mg/l)	300.0	<5.0	mg/l			11/13/1998	28 days							
Hexavalent Chromium Total (mg/l)	3500	<0.010	mg/l			10/27/1998	24 hours							
Phenols Total Recoverable (ug/l)	420.1	<5	ug/l			11/04/1998	28 days							
Oil and Grease Total Recoverable (mg/l)	413.1	--	mg/l	0.2			28 days	<30	n/a	<50	n/a			
Organic Carbon, Total (mg/l)	5310C	27	mg/l			11/16/1998	28 days							
Bicarbonate Whole Field (mg/l as HCo3)		--												
Bicarbonate Dissolved, Field (mg/l as HCo3)		--												
Carbonate Water Field (mg/l as Co3)		--												
Carbonate Water Dissolved, Field, (mg/l as Co3)		--												
Alkalinity Water Field Total (mg/l as CaCo3)		--												
Alkalinity Dissolved Water Field Total (mg/l as CaCo3)		--												
Alkalinity LAB (mg/l as CaCo3)	2320B	52	mg/l			11/09/1998	14 days							
Silica Dissolved (mg/l as SiO2)		--												
Hardness (mg/l)	2340B	101	mg/l	1		11/04/1998	6 months			<15	n/a			
Antimony (ug/l as Sb)	3113B	<5	ug/l			11/08/1998	6 months							
Antimony Dissolved (ug/l as Sb)	200.9	<4	ug/l			11/25/1998	6 months							
Arsenic Total (ug/l as As)	3113B	<5	ug/l			11/11/1998	6 months							
Arsenic Dissolved (ug/l as As)	200.9	<5	ug/l			11/11/1998	6 months							
Barium Dissolved (ug/l as Ba)		--												

R - Rejected Data

Glendale CITRUS

Grovers at 71st Avenue

25 October 1998

	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
Beryllium Total Recoverable (ug/l as Be)	200.7	<2	ug/l			11/04/1998	6 months							
Beryllium Dissolved (ug/l as Be)	200.7	<2	ug/l			11/03/1998	6 months							
Cadmium Total Recoverable (ug/l as Cd)	7131	0.33	ug/l	0.2		11/11/1998	6 months	<25		<35				
Cadmium Dissolved (ug/l as Cd)	7131	<0.2	ug/l			11/11/1998	6 months							
Calcium Dissolved (mg/l as Ca)		--												
Chromium Total Recoverable (ug/l as Cr)	7191	11	ug/l	1		11/12/1998	6 months	<25		<35				
Chromium Dissolved (ug/l as Cr)	7191	<2	ug/l			11/12/1998	6 months							
Cobalt Dissolved (ug/l as Co)		--												
Copper, Total Recoverable, (ug/l as Cu)	3113B	19	ug/l	1		11/04/1998	6 months	<25		<35				
Copper, Dissolved, (ug/l as Cu)	200.9	<15	ug/l			11/03/1998	6 months							
Iron, Dissolved, (ug/l as Fe)		--												
Lead, Total Recoverable, (ug/l as Pb)	3113B	12	ug/l	1		11/06/1998	6 months	<25		<35				
Lead, Dissolved, (ug/l as Pb)	200.9	<5	ug/l			11/06/1998	6 months							
Lithium, Dissolved, (ug/l as Li)		--												
Magnesium, Dissolved, (mg/l as Mg)		--												
Manganese, Dissolved, (ug/l as Mn)		--												
Mercury, Total Recoverable, (ug/l as Hg)	245.1	<0.2	ug/l			11/09/1998	6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l			11/05/1998	6 months							
Molybdenum, Dissolved, (ug/l as Mo)		--												
Nickel, Total Recoverable, (ug/l as Ni)	249.2	20	ug/l	2		11/11/1998	6 months	<25		<35				
Nickel, Dissolved, (ug/l as Ni)	249.2	<2	ug/l			11/11/1998	6 months							
Potassium, Dissolved, (mg/l as K)		--												
Selenium, Total, (ug/l as Se)	3113B	<5	ug/l			11/03/1998	6 months							
Selenium, Dissolved, (ug/l as Se)	200.9	<5	ug/l			11/10/1998	6 months							
Silver, Total Recoverable, (ug/l as Ag)	200.7	<40	ug/l			11/04/1998	6 months							
Silver, Dissolved, (ug/l as Ag)	200.7	<50	ug/l			11/03/1998	6 months							
Sodium, Dissolved, (mg/l as Na)		--												
Strontium, Dissolved, (ug/l as Sr)		--												
Thallium, Total, (ug/l as Tl)	200.9	<1	ug/l			11/04/1998	6 months							
Thallium, Dissolved, (ug/l as Tl)	200.9	<1	ug/l			11/04/1998	6 months							
Vanadium, Dissolved, (ug/l as V)		--												
Zinc, Total Recoverable, (ug/l as Zn)	200.7	90	ug/l	1		11/04/1998	6 months	<25		<35				
Zinc, Dissolved, (ug/l as Zn)	200.7	20	ug/l			11/03/1998	6 months							
Diazinon, Total, (ug/l)		--												
Ethion, Total, (ug/l)		--												
Malathion, Total, (ug/l)		--												
Methyl Parathion, Total, (ug/l)		--												
Parathion, Total, (ug/l)		--												
Trithion, Total, (ug/l)		--												
Di-syston, Total, (ug/l)		--												
Phorate, Total, (ug/l)		--												
Chlorpyrifos, Total, (ug/l)		--												
DEF, Total, (ug/l)		--												
Fonofos(Dy-fonate), WWT, (ug/l)		--												
EPA Method 608 Extraction						10/29/1998	7 days							
Aldrin, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
BHC - ALPHA, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
BHC - Gamma (Lindane), (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							

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	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
BHC - DELTA, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1016, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1221, PCB, Total, (ug/l)	608	<10	ug/l			11/06/1998	40 days							
Aroclor 1232, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1242, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1248, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1254, PCB, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Aroclor 1260, PCB, Total, (ug/L)	608	<1.0	ug/l			11/06/1998	40 days							
Chlordane, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
P,P' DDD, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
P,P' DDE, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
P, P' DDT, Total, (ug/l)	608	<2.0	ug/l			11/06/1998	40 days							
Dieldrin, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endo-Sulfan Alpha, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endo-Sulfan Beta, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endo-Sulfan Sulfate, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endrin Aldehyde, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Endrin, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Heptachlor, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Heptachlor Epoxide, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Toxaphene, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
Methoxychlor, Total, (ug/l)		--												
Beta Benzene Hexachloride, Total, (ug/l)	608	<1.0	ug/l			11/06/1998	40 days							
1,1,2,2-Tetrachloroethane, Total, (ug/l)	624	--	ug/l				14 days							
1,1,1,2-Tetrachloroethane, Total,(ug/l)		--												
Tetrachloroethene, PCE, Total, (ug/l)	624	--	ug/l				14 days							
1,1,1- Trichloroethane, Total, (ug/l)	624	--	ug/l				14 days							
1,1,2- Trichloroethane, Total, (ug/l)	624	--	ug/l				14 days							
Trichloroethene, Total, (ug/l)	624	--	ug/l				14 days							
1,1- Dichloroethane, Total, (ug/l)	624	--	ug/l				14 days							
1,1- Dichloroethene, Total, (ug/l)	624	--	ug/l				14 days							
1,2- Dichloroethane, Total, (ug/l)	624	--	ug/l				14 days							
1,2- Dichloropropane, Total, (ug/l)	624	--	ug/l				14 days							
2- Chloroethylvinyl Ether, Total, (ug/l)	624	--	ug/l				14 days							
cis-1,3-Dichloropropene, (ug/l)	624	--	ug/l				14 days							
trans-1,2- Dichloroethene, (ug/l)	624	--	ug/l				14 days							
trans-1,3- Dichloropropene, (ug/l)	624	--	ug/l				14 days							
Benzene, Total, (ug/l)	624	--	ug/l				14 days							
Bromodichloromethane, Total, (ug/l)	624	--	ug/l				14 days							
Bromoform, Total, (ug/l)	624	--	ug/l				14 days							
Carbon Tetrachloride, Total, (ug/l)	624	--	ug/l				14 days							
Chlorobenzene, Total, (ug/l)	624	--	ug/l				14 days							
Chloroethane, (ug/l)	624	--	ug/l				14 days							
Chloroform, Total, (ug/l)	624	--	ug/l				14 days							
Ethyl-Benzene, Total, (ug/l)	624	--	ug/l				14 days							
Methylene Chloride, Total, (ug/l)		--	ug/l											
Toluene, Total, (ug/l)	624	--	ug/l				14 days							
Trichlorofluoromethane, Total, (ug/l)	624	--	ug/l				14 days							

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Vinyl Chloride, Total, (ug/l)	624	--	ug/l				14 days							
Chlorodibromomethane, Total, (ug/l)	624	--	ug/l				14 days							
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)		--												
Acetone, Total, (ug/l)	624	--	ug/l				14 days							
2-Butanone, (ug/l)	624	--	ug/l				14 days							
Carbon Disulfide, Total, (ug/l)	624	--	ug/l				14 days							
1,2 Dichloroethene, Total, (ug/l)	624	--	ug/l				14 days							
Xylenes, Total, (ug/l)	624	--	ug/l				14 days							
2-Hexanone, Total, (ug/l)	624	--	ug/l				14 days							
Styrene, Total, (ug/l)	624	--	ug/l				14 days							
Acrolein, Total, (ug/l)	624	--	ug/l				14 days							
Acrylonitirile, Total, (ug/l)	624	--	ug/l				14 days							
Bromobenzene, Water Whole, Total, (ug/l)		--												
1,3-Dichloropropane, Water Whole, Total, (ug/l)		--												
Methyl Bromide, Total, (ug/l)	624	--	ug/l				14 days							
Methyl Chloride, Total, (ug/l)	624	--	ug/l				14 days							
Parachloro Toluene, Total, (ug/l)		--												
Dibromoethane, Total, (ug/l)		--												
EPA Method 625 Extraction						10/28/1998	7 days							
Acenaphthene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Acenaphthylene, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Anthracene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Benzidine, Total, (ug/l)	625	<20	ug/l			11/05/1998	40 days							
Benzoic Acid, Total, (ug/l)	625	<50	ug/l			11/05/1998	40 days							
Benzo (a) Anthracene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Benzo (b) Fluoranthene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Benzo (k) Fluoranthene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Benzo (ghi) Perylene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Benzyl Alcohol, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Butyl Benzyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
2-Chloronapthalene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
2-Chlorophenol, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Chrysene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Di-N-Butyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
1,3- Dichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
1,4- Dichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
1,2- Dichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
3,3'- Dichlorobenzidine, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
2,4- Dichlorophenol, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Diethyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							

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	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
2,4- Dimethylphenol, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Dimethyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
2,4- Dinitrophenol, Total, (ug/l)	625	<20	ug/l			11/05/1998	40 days							
2,4- Dinitrotoluene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
2,6- Dinitrotoluene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Di-N-Octyl-Phthalate, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Fluoranthene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Fluorene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Hexachlorobenzene, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Hexachlorobutadiene, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Hexachlorocyclopentadiene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Hexachloroethane, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Isophorone, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Naphthalene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Nitrobenzene, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
2-Nitrophenol, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
4-Nitrophenol, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
N-Nitrosodiphenylamine, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
N-Nitrosodi-N-Propylamine, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Pentachlorophenol, Total, (ug/l)	625	<10	ug/l			11/05/1998	40 days							
Phenanthrene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Phenol, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
Pyrene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
1,2,4-Trichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
2,4,5- Trichlorophenol, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							
2,4,6- Trichlorophenol, Total, (ug/l)	625	<5.0	ug/l			11/05/1998	40 days							

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	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
Sample Temperature (deg. C)		4				12/06/1998								
Effluent Temperature (deg. C)		11.6				12/06/1998								
Ambient Temperature (deg. C)		NM												
Barometric Pressure (mm Hg)		NM												
pH, Effluent (standard units)		8.52				12/06/1998								
pH, Lab (standard units)	150.1	7.8	std units			12/07/1998	Immediate			<15	n/a			
Specific Conductance, FIELD (us/cm)		--												
Specific Conductance, LAB (us/cm)		--												
Oxygen Dissolved (% saturation)		--												
Oxygen Dissolved (mg/l)	360.1	--	mg/l				Immediate							
Electrical Conductivity (umhos/cm)	2510B	--	umhos/cm				20 days							
BOD5 (mg/l)	405.1	20	mg/l	1		12/07/1998	48 hours			<30	n/a			
COD High Level (mg/l)	410.4	47	mg/l	1		12/07/1998	28 days			<30	n/a			
Chloride (mg/l as Cl)	4500	<5.0	mg/l			12/10/1998	28 days							
Cyanide Total (mg/l as Cn)	4500	<0.01	mg/l			12/11/1998	14 days							
Fecal Coliform (MPN/100mL)	9221D	200	CFU/100ml	2		12/06/1998	6 hours			<30	n/a			
Fecal Streptococci (MPN/100mL)	9230B	2400	CFU/100ml	2		12/06/1998	6 hours			<30	n/a			
Total Dissolved Solids (mg/l)	2540C	100	mg/l	10		12/10/1998	7 days			<15	n/a			
Total Suspended Solids (mg/l)	160.2	36	mg/l	10		12/09/1998	7 days			<15	n/a			
Nitrogen No2 + No3, Total (mg/l as N)	calc.	0.22	mg/l	0.05		12/08/1998				<15	n/a			
TKN Nitrogen (mg/l as N)	351.3	2.33	mg/l			12/14/1998	28 days							
Nitrogen, Ammonia + Organic, Total (mg/l as N)	calc.	2.33	mg/l											
Nitrogen Nitrate Total (mg/l as N)	300.0	0.22	mg/l			12/08/1998	48 hours							
Nitrogen Nitrite Total (mg/l as N)	300.0	<0.1	mg/l			12/08/1998	48 hours							
Nitrogen Ammonia Total (mg/l as N)	350.2	0.11	mg/l			12/11/1998	28 days							
Nitrogen Organic Total (mg/l as N)	calc.	2.22	mg/l											
Phosphorous Total (mg/l as P)	365.3	0.32	mg/l	0.05		12/22/1998	28 days			<15	3.5			
Phosphorous Dissolved (mg/l as P)	365.3	0.31	mg/l		R	01/05/1999	28 days							Analysis beyond hold time
Phosphorous Ortho (mg/l as P)	4500P	0.28	mg/l	0.05		12/04/1998	48 hours			<15	0			
Sulfate Dissolved (mg/l)	300.0	--	mg/l				28 days							
Hexavalent Chromium Total (mg/l)	3500	<0.01	mg/l			12/07/1998	24 hours							
Phenols Total Recoverable (ug/l)	420.1	--	ug/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.1	<5.0	mg/l	0.2		12/08/1998	28 days	<30	n/a	<50	n/a			
Organic Carbon, Total (mg/l)	5310C	9	mg/l			12/29/1998	28 days							
Bicarbonate Whole Field (mg/l as HCo3)		--												
Bicarbonate Dissolved, Field (mg/l as HCo3)		--												
Carbonate Water Field (mg/l as Co3)		--												
Carbonate Water Dissolved, Field, (mg/l as Co3)		--												
Alkalinity Water Field Total (mg/l as CaCo3)		--												
Alkalinity Dissolved Water Field Total (mg/l as CaCo3)		--												
Alkalinity LAB (mg/l as CaCo3)	2320B	32	mg/l			12/10/1998	14 days							
Silica Dissolved (mg/l as SiO2)		--												
Hardness (mg/l)	2340B	40	mg/l	1		12/18/1998	6 months			<15	n/a			
Antimony (ug/l as Sb)	3113B	<5	ug/l			12/18/1998	6 months							
Antimony Dissolved (ug/l as Sb)	200.9	<4	ug/l			12/18/1998	6 months							
Arsenic Total (ug/l as As)	3113B	<5	ug/l			12/21/1998	6 months							
Arsenic Dissolved (ug/l as As)	200.9	<5	ug/l			12/07/1998	6 months							
Barium Dissolved (ug/l as Ba)		--												

R - Rejected Data

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	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
Beryllium Total Recoverable (ug/l as Be)	200.7	<2	ug/l			12/18/1998	6 months							
Beryllium Dissolved (ug/l as Be)	200.7	<2	ug/l			12/15/1998	6 months							
Cadmium Total Recoverable (ug/l as Cd)	7131	<0.2	ug/l	0.2		12/16/1998	6 months	<25		<35				
Cadmium Dissolved (ug/l as Cd)	7131	<0.2	ug/l			12/16/1998	6 months							
Calcium Dissolved (mg/l as Ca)		--												
Chromium Total Recoverable (ug/l as Cr)	7191	1.8	ug/l	1		12/16/1998	6 months	<25		<35				
Chromium Dissolved (ug/l as Cr)	7191	4.3	ug/l			12/16/1998	6 months							
Cobalt Dissolved (ug/l as Co)		--												
Copper, Total Recoverable, (ug/l as Cu)	3113B	6	ug/l	1		12/31/1998	6 months	<25		<35				
Copper, Dissolved, (ug/l as Cu)	200.9	<15	ug/l			12/15/1998	6 months							
Iron, Dissolved, (ug/l as Fe)		--												
Lead, Total Recoverable, (ug/l as Pb)	3113B	<5	ug/l	1		12/17/1998	6 months	<25		<35				
Lead, Dissolved, (ug/l as Pb)	200.9	<5	ug/l			12/28/1998	6 months							
Lithium, Dissolved, (ug/l as Li)		--												
Magnesium, Dissolved, (mg/l as Mg)		--												
Manganese, Dissolved, (ug/l as Mn)		--												
Mercury, Total Recoverable, (ug/l as Hg)	245.1	<0.2	ug/l			12/15/1998	6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l			12/10/1998	6 months							
Molybdenum, Dissolved, (ug/l as Mo)		--												
Nickel, Total Recoverable, (ug/l as Ni)	249.2	6.8	ug/l	2		12/17/1998	6 months	<25		<35				
Nickel, Dissolved, (ug/l as Ni)	249.2	4.8	ug/l			12/17/1998	6 months							
Potassium, Dissolved, (mg/l as K)		--												
Selenium, Total, (ug/l as Se)	3113B	<5	ug/l			12/16/1998	6 months							
Selenium, Dissolved, (ug/l as Se)	200.9	<5	ug/l			12/16/1998	6 months							
Silver, Total Recoverable, (ug/l as Ag)	200.7	<40	ug/l			12/18/1998	6 months							
Silver, Dissolved, (ug/l as Ag)	200.7	<50	ug/l			12/15/1998	6 months							
Sodium, Dissolved, (mg/l as Na)		--												
Strontium, Dissolved, (ug/l as Sr)		--												
Thallium, Total, (ug/l as Tl)	200.9	<1	ug/l			12/15/1998	6 months							
Thallium, Dissolved, (ug/l as Tl)	200.9	<1	ug/l			12/15/1998	6 months							
Vanadium, Dissolved, (ug/l as V)		--												
Zinc, Total Recoverable, (ug/l as Zn)	200.7	50	ug/l	1		12/18/1998	6 months	<25		<35				
Zinc, Dissolved, (ug/l as Zn)	200.7	<20	ug/l			12/15/1998	6 months							
Diazinon, Total, (ug/l)		--												
Ethion, Total, (ug/l)		--												
Malathion, Total, (ug/l)		--												
Methyl Parathion, Total, (ug/l)		--												
Parathion, Total, (ug/l)		--												
Trithion, Total, (ug/l)		--												
Di-syston, Total, (ug/l)		--												
Phorate, Total, (ug/l)		--												
Chlorpyrifos, Total, (ug/l)		--												
DEF, Total, (ug/l)		--												
Fonofos(Dy-fonate), WWT, (ug/l)		--												
EPA Method 608 Extraction						12/07/1998	7 days							
Aldrin, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
BHC - ALPHA, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
BHC - Gamma (Lindane), (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							

R - Rejected Data

Glendale CITRUS

06 December 1998

	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
BHC - DELTA, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Aroclor 1016, PCB, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Aroclor 1221, PCB, Total, (ug/l)	608	<10	ug/l			12/19/1998	40 days							
Aroclor 1232, PCB, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Aroclor 1242, PCB, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Aroclor 1248, PCB, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Aroclor 1254, PCB, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Aroclor 1260, PCB, Total, (ug/L)	608	<1.0	ug/l			12/19/1998	40 days							
Chlordane, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
P,P' DDD, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
P,P' DDE, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
P, P' DDT, Total, (ug/l)	608	<2.0	ug/l			12/19/1998	40 days							
Dieldrin, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Endo-Sulfan Alpha, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Endo-Sulfan Beta, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Endo-Sulfan Sulfate, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Endrin Aldehyde, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Endrin, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Heptachlor, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Heptachlor Epoxide, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Toxaphene, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
Methoxychlor, Total, (ug/l)		--												
Beta Benzene Hexachloride, Total, (ug/l)	608	<1.0	ug/l			12/19/1998	40 days							
1,1,2,2-Tetrachloroethane, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
1,1,1,2-Tetrachloroethane, Total,(ug/l)		--												
Tetrachloroethene, PCE, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
1,1,1- Trichloroethane, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
1,1,2- Trichloroethane, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Trichloroethene, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
1,1- Dichloroethane, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
1,1- Dichloroethene, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
1,2- Dichloroethane, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
1,2- Dichloropropane, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
2- Chloroethylvinyl Ether, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
cis-1,3-Dichloropropene, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
trans-1,2- Dichloroethene, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
trans-1,3- Dichloropropene, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Benzene, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Bromodichloromethane, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Bromoform, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Carbon Tetrachloride, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Chlorobenzene, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Chloroethane, (ug/l)	624	<20	ug/l			12/09/1998	14 days							
Chloroform, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Ethyl-Benzene, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Methylene Chloride, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Toluene, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Trichlorofluoromethane, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							

Glendale CITRUS

06 December 1998

	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
Vinyl Chloride, Total, (ug/l)	624	<20	ug/l			12/09/1998	14 days							
Chlorodibromomethane, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)	624	<8	ug/l			12/09/1998	14 days							
Acetone, Total, (ug/l)	624	<100	ug/l			12/09/1998	14 days							
2-Butanone, (ug/l)	624	<40	ug/l			12/09/1998	14 days							
Carbon Disulfide, Total, (ug/l)	624	<40	ug/l			12/09/1998	14 days							
1,2 Dichloroethene, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Xylenes, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
2-Hexanone, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Styrene, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Acrolein, Total, (ug/l)	624	<200	ug/l			12/09/1998	14 days							
Acrylonitirile, Total, (ug/l)	624	<40	ug/l			12/09/1998	14 days							
Bromobenzene, Water Whole, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
1,3-Dichloropropane, Water Whole, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Methyl Bromide, Total, (ug/l)	624	<20	ug/l			12/09/1998	14 days							
Methyl Chloride, Total, (ug/l)	624	<20	ug/l			12/09/1998	14 days							
Parachloro Toluene, Total, (ug/l)	624	<8	ug/l			12/09/1998	14 days							
Dibromoethane, Total, (ug/l)	624	--	ug/l				14 days							
EPA Method 625 Extraction						12/07/1998	7 days							
Acenaphthene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Acenaphthylene, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Anthracene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Benzidine, Total, (ug/l)	625	<20	ug/l			12/10/1998	40 days							
Benzoic Acid, Total, (ug/l)	625	<50	ug/l			12/10/1998	40 days							
Benzo (a) Anthracene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Benzo (b) Fluoranthene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Benzo (k) Fluoranthene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Benzo (ghi) Perylene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Benzyl Alcohol, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Butyl Benzyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
2-Chloronapthalene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
2-Chlorophenol, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Chrysene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Di-N-Butyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
1,3- Dichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
1,4- Dichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
1,2- Dichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
3,3'- Dichlorobenzidine, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
2,4- Dichlorophenol, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Diethyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							

Glendale CITRUS

06 December 1998

	Method	Result	Units	Required Method Detection Limit	Flags	Date Analyzed	Allowable Holding Time	Required MS/MSD Precision (% RPD)	Actual MS/MSD Precision (%RPD)	Required Sample Duplication Precision (% RPD)	Actual Sample Duplication Precision (% RPD)	Other QA/QC Comments (out of spec)	Field Blank Detects	Comments
2,4- Dimethylphenol, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Dimethyl Phthalate, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
2,4- Dinitrophenol, Total, (ug/l)	625	<20	ug/l			12/10/1998	40 days							
2,4- Dinitrotoluene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
2,6- Dinitrotoluene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Di-N-Octyl-Phthalate, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Fluoranthene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Fluorene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Hexachlorobenzene, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Hexachlorobutadiene, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Hexachlorocyclopentadiene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Hexachloroethane, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Isophorone, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Naphthalene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Nitrobenzene, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
2-Nitrophenol, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
4-Nitrophenol, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
N-Nitrosodiphenylamine, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
N-Nitrosodi-N-Propylamine, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Pentachlorophenol, Total, (ug/l)	625	<10	ug/l			12/10/1998	40 days							
Phenanthrene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Phenol, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
Pyrene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
1,2,4-Trichlorobenzene, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
2,4,5- Trichlorophenol, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							
2,4,6- Trichlorophenol, Total, (ug/l)	625	<5.0	ug/l			12/10/1998	40 days							

Hard Copies of Data

Data Checksheet

Site	GLENDALE CITRUS
Municipality	GLENDALE
Sample Date	10-25-1998

Date Received	01-05-1999

Laboratory Used	BOLIN
Laboratory Contact	STEPHANIE
FCD Sample ID Number	GIC-102598
Lab Sample ID Number	9810-07632-001
Laboratory Invoice Number	048043

Initial Review Complete	X	Date	1-7-99
Lab Contacted		Date	
Lab Review Complete		Date	
Second Review Complete		Date	
Additional Review Necessary			

Comments

Data Validation Table Complete	✓	Date	1-7-99

Data Entered Into Database	X	Date	1-7-99

Bolin Laboratories Inc.

17631 N. 25th Avenue • Phoenix, Arizona 85023
(602) 942 8220 • FAX (602) 942 1050

Maricopa County Flood Control
Environmental Branch
2801 West Durango
Phoenix, AZ 85009
Attn: Dave Gardner

Received: 10/26/98
Reported: 12/08/98
Invoice No: 048043

Project Name: NPDES Stormwater Analysis

Matrix: Storm Water
Sample No: 9810-07632-001
Sample ID: G1C-102598 (Citrus)

Time Sampled: 15:50
Date Sampled: 10/25/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Chemical Oxygen Demand	EPA 410.4	190.	mg/L	20.	11/09/98
P as Total Phosphate	EPA 365.3	0.44	mg/L	0.05	11/17/98
Total Phosphate	CALCULATION	1.3	mg/L	0.15	11/17/98
Solids, Total Suspended	EPA 160.2	308.	mg/L	1.	10/30/98
Total Dissolved Solids	SM 2540C	75.	mg/L	1.	10/30/98
pH	EPA 150.1	7.3	Std Unit		10/27/98
Total Alkalinity (as CaCO3)	SM 2320B	52.	mg/L	2.	11/09/98
Sulfate, Dissolved	SM 4500 SO4	<5.0	mg/L	5.0	11/13/98
Chloride	EPA 300.0	<5.0	mg/L	5.0	11/17/98
Chromium, hexavalent	SM 3500-CR D	<0.010	mg/L	0.010	10/27/98
Nitrogen as Nitrite	SM 4500 NO2 B	<0.1	mg/L	0.1	10/26/98
P as Orthophosphate	SM 4500 PE	0.06	mg/L	0.05	10/27/98
Phosphorus, Dissolved	EPA 365.3	0.12	mg/L	0.05	11/19/98
Nitrogen as Ammonia	EPA 350.2	<0.6	mg/L	0.03	10/29/98
Cyanide, Total	SM 4500 CN E	<0.01	mg/L	0.01	11/06/98
Total Organic Carbon	SM 5310C	26.9	mg/L	0.2	11/16/98
Phenolics, Total	EPA 420.1	<0.0050	mg/L	0.0050	11/04/98
N-Nitrosodimethylamine	EPA 625	ND	ug/L	5.0	11/05/98
Phenol	EPA 625	ND	ug/L	5.0	11/05/98
Aniline	EPA 625	ND	ug/L	5.0	11/05/98
Bis(2-chloroethyl)ether	EPA 625	ND	ug/L	10.	11/05/98
2-Chlorophenol	EPA 625	ND	ug/L	10.	11/05/98
1,3-Dichlorobenzene	EPA 625	ND	ug/L	5.0	11/05/98
1,4-Dichlorobenzene	EPA 625	ND	ug/L	5.0	11/05/98
Benzyl alcohol	EPA 625	ND	ug/L	10.	11/05/98
1,2-Dichlorobenzene	EPA 625	ND	ug/L	5.0	11/05/98
2-Methylphenol	EPA 625	ND	ug/L	5.0	11/05/98
Bis(2-chloroisopropyl)ether	EPA 625	ND	ug/L	10.	11/05/98
4-Methylphenol (p-Cresol)	EPA 625	ND	ug/L	5.0	11/05/98
N-Nitrosodi-n-propylamine	EPA 625	ND	ug/L	5.0	11/05/98
Hexachloroethane	EPA 625	ND	ug/L	10.	11/05/98
Nitrobenzene	EPA 625	ND	ug/L	10.	11/05/98

Bolin Laboratories Inc.

17631 N. 25th Avenue • Phoenix, Arizona 85023
(602) 942 8220 • FAX (602) 942 1050

Matrix: Storm Water
Sample No: 9810-07632-001

Time Sampled: 15:50
Date Sampled: 10/25/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Isophorone	EPA 625	ND	ug/L	10.	11/05/98
2,4-Dimethylphenol	EPA 625	ND	ug/L	10.	11/05/98
Benzoic acid	EPA 625	ND	ug/L	50.	11/05/98
2-Nitrophenol	EPA 625	ND	ug/L	10.	11/05/98
Bis(2-chloroethoxy)methane	EPA 625	ND	ug/L	10.	11/05/98
2,4-Dichlorophenol	EPA 625	ND	ug/L	10.	11/05/98
1,2,4-Trichlorobenzene	EPA 625	ND	ug/L	5.0	11/05/98
Naphthalene	EPA 625	ND	ug/L	5.0	11/05/98
Hexachlorobutadiene	EPA 625	ND	ug/L	5.0	11/05/98
4-Chloroaniline	EPA 625	ND	ug/L	5.0	11/05/98
4-Chloro-3-methylphenol	EPA 625	ND	ug/L	5.0	11/05/98
2-Methylnaphthalene	EPA 625	ND	ug/L	5.0	11/05/98
Hexachlorocyclopentadiene	EPA 625	ND	ug/L	5.0	11/05/98
2,4,6-Trichlorophenol	EPA 625	ND	ug/L	5.0	11/05/98
2,4,5-Trichlorophenol	EPA 625	ND	ug/L	5.0	11/05/98
2-Chloronaphthalene	EPA 625	ND	ug/L	5.0	11/05/98
2-Nitroaniline	EPA 625	ND	ug/L	5.0	11/05/98
Dimethyl Phthalate	EPA 625	ND	ug/L	5.0	11/05/98
2,6-Dinitrotoluene	EPA 625	ND	ug/L	5.0	11/05/98
Acenaphthylene	EPA 625	ND	ug/L	10.	11/05/98
3-Nitroaniline	EPA 625	ND	ug/L	5.0	11/05/98
Acenaphthene	EPA 625	ND	ug/L	5.0	11/05/98
2,4-Dinitrophenol	EPA 625	ND	ug/L	20.	11/05/98
4-Nitrophenol	EPA 625	ND	ug/L	5.0	11/05/98
Dibenzofuran	EPA 625	ND	ug/L	5.0	11/05/98
2,4-Dinitrotoluene	EPA 625	ND	ug/L	5.0	11/05/98
Diethyl Phthalate	EPA 625	ND	ug/L	5.0	11/05/98
4-Chlorophenylphenylether	EPA 625	ND	ug/L	10.	11/05/98
Fluorene	EPA 625	ND	ug/L	5.0	11/05/98
2-Methyl-4,6-Dinitrophenol	EPA 625	ND	ug/L	10.	11/05/98
4-Nitroaniline	EPA 625	ND	ug/L	5.0	11/05/98
N-Nitrosodiphenylamine	EPA 625	ND	ug/L	5.0	11/05/98
1,2-Diphenylhydrazine	EPA 625	ND *	ug/L	5.0	11/05/98
4-Bromophenylphenylether	EPA 625	ND	ug/L	5.0	11/05/98
Hexachlorobenzene	EPA 625	ND	ug/L	10.	11/05/98
Pentachlorophenol	EPA 625	ND	ug/L	10.	11/05/98
Phenanthrene	EPA 625	ND	ug/L	5.0	11/05/98
Anthracene	EPA 625	ND	ug/L	5.0	11/05/98
Di-n-butylphthalate	EPA 625	ND	ug/L	5.0	11/05/98
Fluoranthene	EPA 625	ND	ug/L	5.0	11/05/98
Benzidine	EPA 625	ND L,C	ug/L	20.	11/05/98
Pyrene	EPA 625	ND	ug/L	5.0	11/05/98

Bolin Laboratories Inc.

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Matrix: Storm Water
Sample No: 9810-07632-001

Time Sampled: 15:50
Date Sampled: 10/25/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Butylbenzyl Phthalate	EPA 625	ND	ug/L	5.0	11/05/98
Bis(2-ethylhexyl)phthalate	EPA 625	ND	ug/L	10.	11/05/98
Benzo (a) anthracene	EPA 625	ND	ug/L	5.0	11/05/98
3,3'-Dichlorobenzidine	EPA 625	ND C	ug/L	5.0	11/05/98
Chrysene	EPA 625	ND	ug/L	5.0	11/05/98
Di-n-octylphthalate	EPA 625	ND	ug/L	5.0	11/05/98
Benzo (b) fluoranthene	EPA 625	ND	ug/L	5.0	11/05/98
Benzo (k) fluoranthene	EPA 625	ND	ug/L	5.0	11/05/98
Benzo (a) pyrene	EPA 625	ND	ug/L	5.0	11/05/98
Indeno (1,2,3-cd) pyrene	EPA 625	ND	ug/L	5.0	11/05/98
Dibenzo (a,h) anthracene	EPA 625	ND	ug/L	5.0	11/05/98
Benzo (g,h,i) perylene	EPA 625	ND	ug/L	5.0	11/05/98
2,3,7,8-TCDD (Screen)	EPA 625	ND T	ug/L	10.	11/05/98
Extraction	EPA 625				10/28/98
Surrogate:	EPA 625				11/05/98
***d5-Phenol	EPA 625	15 S	% Recovery		11/05/98
***2-Fluorophenol	EPA 625	21	% Recovery		11/05/98
***d5-Nitrobenzene	EPA 625	61	% Recovery		11/05/98
***2-Fluorobiphenyl	EPA 625	55	% Recovery		11/05/98
***2,4,6-Tribromophenol	EPA 625	51	% Recovery		11/05/98
***d14-Terphenyl	EPA 625	44	% Recovery		11/05/98
4,4'-DDD	EPA 608	ND C	ug/L	1.0	11/06/98
4,4'-DDE	EPA 608	ND C	ug/L	1.0	11/06/98
4,4'-DDT	EPA 608	ND	ug/L	2.0	11/06/98
Aldrin	EPA 608	ND C	ug/L	1.0	11/06/98
alpha-BHC	EPA 608	ND C	ug/L	1.0	11/06/98
Chlordane	EPA 608	ND	ug/L	1.0	11/06/98
delta-BHC	EPA 608	ND C	ug/L	1.0	11/06/98
Dieldrin	EPA 608	ND C	ug/L	1.0	11/06/98
Endosulfan I	EPA 608	ND C	ug/L	1.0	11/06/98
Endosulfan II	EPA 608	ND C	ug/L	1.0	11/06/98
Endosulfan Sulfate	EPA 608	ND C	ug/L	1.0	11/06/98
Endrin	EPA 608	ND C	ug/L	1.0	11/06/98
Endrin Aldehyde	EPA 608	ND C	ug/L	1.0	11/06/98
Heptachlor	EPA 608	ND	ug/L	1.0	11/06/98
Heptachlor Epoxide	EPA 608	ND C	ug/L	1.0	11/06/98
Lindane (gamma BHC)	EPA 608	ND C	ug/L	1.0	11/06/98
PCB 1016	EPA 608	ND	ug/L	1.0	11/06/98
PCB 1221	EPA 608	ND	ug/L	10	11/06/98
PCB 1232	EPA 608	ND	ug/L	1.0	11/06/98
PCB 1242	EPA 608	ND	ug/L	1.0	11/06/98
PCB 1248	EPA 608	ND	ug/L	1.0	11/06/98

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Matrix: Storm Water
Sample No: 9810-07632-001

Time Sampled: 15:50
Date Sampled: 10/25/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
PCB 1254	EPA 608	ND	ug/L	1.0	11/06/98
PCB 1260	EPA 608	ND	ug/L	1.0	11/06/98
Toxaphene	EPA 608	ND	ug/L	1.0	11/06/98
beta-BHC	EPA 608	ND C	ug/L	1.0	11/06/98
Extraction	EPA 608				10/29/98
Surrogate:	EPA 608				11/06/98
***Dibutylchlorendate	EPA 608	138 S1	% Recovery		11/06/98
Metals Digestion for ICP	EPA 200.7				11/03/98
Metals Digestion for GFAA	SM 3030E				11/03/98
Antimony	SM 3113B	<0.005	mg/L	0.005	11/08/98
Arsenic	SM 3113B	<0.005	mg/L	0.005	11/11/98
Beryllium	EPA 200.7	<0.002	mg/L	0.002	11/04/98
Calcium	EPA 200.7	34.	mg/L	1.	11/04/98
Copper	EPA 200.7	0.019	mg/L	0.015	11/04/98
Lead	SM 3113B	0.012	mg/L	0.005	11/06/98
Magnesium	EPA 200.7	4.	mg/L	1.	11/04/98
Mercury	EPA 245.1	<0.0002	mg/L	0.0002	11/09/98
Selenium	SM 3113B	<0.005	mg/L	0.005	11/03/98
Silver	EPA 200.7	<0.04	mg/L	0.04	11/04/98
Hardness, Total (Ca & Mg)	SM 2340B	101	mg/L	7.	11/04/98
Zinc	EPA 200.7	0.09	mg/L	0.02	11/04/98
Thallium	EPA 200.9	<0.001	mg/L	0.001	11/04/98
Chromium	EPA 218.2	0.011	mg/L	0.002	11/12/98
Cadmium	EPA 213.2	0.00033	mg/L	0.0002	11/11/98
Nickel	EPA 249.2	0.020	mg/L	0.002	11/11/98
Cadmium, Dissolved	EPA 213.2	<0.0002	mg/L	0.0002	11/11/98
Chromium, Dissolved	EPA 218.2	<0.002	mg/L	0.002	11/12/98
Nickel, Dissolved	EPA 249.2	<0.002	mg/L	0.002	11/11/98
Antimony, Dissolved	EPA 200.9	<0.004	mg/L	0.004	11/25/98
Arsenic, Dissolved	EPA 200.9	<0.005	mg/L	0.005	11/11/98
Beryllium, Dissolved	EPA 200.7	<0.002	mg/L	0.002	11/03/98
Copper, Dissolved	EPA 200.7	<0.015	mg/L	0.015	11/03/98
Lead, Dissolved	EPA 200.9	<0.005	mg/L	0.005	11/06/98
Mercury, Dissolved	EPA 245.1	<0.0002	mg/L	0.0002	11/05/98
Selenium, Dissolved	EPA 200.9	<0.005	mg/L	0.005	11/10/98
Silver, Dissolved	EPA 200.7	<0.05	mg/L	0.05	11/03/98
Thallium, Dissolved	EPA 200.9	<0.001	mg/L	0.001	11/04/98
Zinc, Dissolved	EPA 200.7	0.02	mg/L	0.02	11/03/98
Nitrate plus Nitrite	SM 4500 NO3E	0.3	mg/L	0.05	11/16/98
Nitrogen as Nitrate	CALCULATION	0.3	mg/L		12/04/98

C = Continuing Calibration was above method control limits. Data was not impacted.

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* = 1,2-Diphenylhydrazine oxidizes to azobenzene under GC operating conditions. This compound was calibrated as azobenzene.
T = Result based on a Tentatively Identified Compound search.
S = Surrogate recovery was outside the laboratory acceptance limits due to matrix interference. Data may have been impacted, but is considered valid.
L = The Laboratory Fortified Blank Spike Duplicate was outside the laboratory acceptance limits. The Laboratory Fortified Blank Spike was acceptable.
Unable to provide data for Total Nitrogen due to laboratory error.
S1 = Surrogate recovery was above laboratory acceptance criteria.

Ammonia analyzed by Aquatic Consulting, Tempe AZ. #AZ0003.
Phenol analyzed by McKenzie Labs, Phoenix AZ, #AZ0034.
Total & Dissolved Cadmium, Chromium & Nickel analyzed by BC Labs, Bakersfield CA, #AZ0345.

S. Kaufman

Authorized Signatory
ADHS License No.: AZ0004

Data Checksheet

Site	ARROW
Municipality	GLENDALE
Sample Date	10-25-98

Date Received	1-5-99

Laboratory Used	BURIN
Laboratory Contact	STEPHANIE
FCD Sample ID Number	G2C-102598
Lab Sample ID Number	~~G2C-102598~~ 9810-07632-002
Laboratory Invoice Number	048043

Initial Review Complete	X	Date	1-7-99
Lab Contacted		Date	
Lab Review Complete		Date	
Second Review Complete		Date	
Additional Review Necessary			

Comments

Data Validation Table Complete	✓	Date	1-7-99

Data Entered Into Database	✓	Date	1-7-99

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Maricopa County Flood Control
Environmental Branch
2801 West Durango
Phoenix, AZ 85009
Attn: Dave Gardner

Received: 10/26/98
Reported: 12/08/98
Invoice No: 048043

Project Name: NPDES Stormwater Analysis

Matrix: Storm Water
Sample No: 9810-07632-002
Sample ID: G2C-102598 (Arrow)

Time Sampled: 15:57
Date Sampled: 10/25/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Chemical Oxygen Demand	EPA 410.4	194.	mg/L	20.	11/09/98
P as Total Phosphate	EPA 365.3	0.6 D1	mg/L	0.3	11/20/98
Total Phosphate	CALCULATION	1.9	mg/L	0.15	11/20/98
Total Kjeldahl Nitrogen	EPA 351.3	<1.0	mg/L	1.0	11/13/98
Solids, Total Suspended	EPA 160.2	83.	mg/L	1.	10/30/98
Total Dissolved Solids	SM 2540C	178.	mg/L	1.	10/30/98
pH	EPA 150.1	6.4	Std Unit		10/27/98
Total Alkalinity (as CaCO3)	SM 2320B	54.	mg/L	2.	11/09/98
Sulfate, Dissolved	EPA 300.0	13. D1 *	mg/L	30	11/13/98
Chloride	EPA 300.0	11.	mg/L	5.0	11/17/98
Chromium, hexavalent	SM 3500-CR D	<0.010	mg/L	0.010	10/27/98
Nitrogen as Nitrite	SM 4500 NO2 B	0.23 D1	mg/L	0.2	10/26/98
P as Orthophosphate	SM 4500 PE	0.12	mg/L	0.05	10/27/98
Phosphorus, Dissolved	EPA 365.3	0.17	mg/L	0.05	11/19/98
Nitrogen as Ammonia	EPA 350.2	1.00	mg/L	0.03	10/29/98
Organic Nitrogen	CALCULATION	<1.0	mg/L		12/04/98
Cyanide, Total	SM 4500 CN E	0.01	mg/L	0.01	11/06/98
Total Organic Carbon	SM 5310C	24.5	mg/L	0.2	11/16/98
Phenolics, Total	EPA 420.1	0.0051	mg/L	0.0050	11/04/98
N-Nitrosodimethylamine	EPA 625	ND	ug/L	5.0	11/26/98
Phenol	EPA 625	ND	ug/L	5.0	11/26/98
Aniline	EPA 625	ND	ug/L	5.0	11/26/98
Bis(2-chloroethyl)ether	EPA 625	ND	ug/L	10.	11/26/98
2-Chlorophenol	EPA 625	ND	ug/L	10.	11/26/98
1,3-Dichlorobenzene	EPA 625	ND	ug/L	5.0	11/26/98
1,4-Dichlorobenzene	EPA 625	ND	ug/L	5.0	11/26/98
Benzyl alcohol	EPA 625	ND	ug/L	10.	11/26/98
1,2-Dichlorobenzene	EPA 625	ND	ug/L	5.0	11/26/98
2-Methylphenol	EPA 625	ND	ug/L	5.0	11/26/98
Bis(2-chloroisopropyl)ether	EPA 625	ND	ug/L	10.	11/26/98
4-Methylphenol (p-Cresol)	EPA 625	ND	ug/L	5.0	11/26/98
N-Nitrosodi-n-propylamine	EPA 625	ND	ug/L	5.0	11/26/98

Bolin Laboratories Inc.

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Matrix: Storm Water
Sample No: 9810-07632-002

Time Sampled: 15:57
Date Sampled: 10/25/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Hexachloroethane	EPA 625	ND	ug/L	10.	11/26/98
Nitrobenzene	EPA 625	ND	ug/L	10.	11/26/98
Isophorone	EPA 625	ND	ug/L	10.	11/26/98
2,4-Dimethylphenol	EPA 625	ND	ug/L	10.	11/26/98
Benzoic acid	EPA 625	ND	ug/L	50.	11/26/98
2-Nitrophenol	EPA 625	ND	ug/L	10.	11/26/98
Bis(2-chloroethoxy)methane	EPA 625	ND	ug/L	10.	11/26/98
2,4-Dichlorophenol	EPA 625	ND	ug/L	10.	11/26/98
1,2,4-Trichlorobenzene	EPA 625	ND	ug/L	5.0	11/26/98
Naphthalene	EPA 625	ND	ug/L	5.0	11/26/98
Hexachlorobutadiene	EPA 625	ND	ug/L	5.0	11/26/98
4-Chloroaniline	EPA 625	ND	ug/L	5.0	11/26/98
4-Chloro-3-methylphenol	EPA 625	ND	ug/L	5.0	11/26/98
2-Methylnaphthalene	EPA 625	ND	ug/L	5.0	11/26/98
Hexachlorocyclopentadiene	EPA 625	ND	ug/L	5.0	11/26/98
2,4,6-Trichlorophenol	EPA 625	ND	ug/L	5.0	11/26/98
2,4,5-Trichlorophenol	EPA 625	ND	ug/L	5.0	11/26/98
2-Chloronaphthalene	EPA 625	ND	ug/L	5.0	11/26/98
2-Nitroaniline	EPA 625	ND	ug/L	5.0	11/26/98
Dimethyl Phthalate	EPA 625	ND	ug/L	5.0	11/26/98
2,6-Dinitrotoluene	EPA 625	ND	ug/L	5.0	11/26/98
Acenaphthylene	EPA 625	ND	ug/L	10.	11/26/98
3-Nitroaniline	EPA 625	ND	ug/L	5.0	11/26/98
Acenaphthene	EPA 625	ND	ug/L	5.0	11/26/98
2,4-Dinitrophenol	EPA 625	ND	ug/L	20.	11/26/98
4-Nitrophenol	EPA 625	ND	ug/L	5.0	11/26/98
Dibenzofuran	EPA 625	ND	ug/L	5.0	11/26/98
2,4-Dinitrotoluene	EPA 625	ND	ug/L	5.0	11/26/98
Diethyl Phthalate	EPA 625	ND	ug/L	5.0	11/26/98
4-Chlorophenylphenylether	EPA 625	ND	ug/L	10.	11/26/98
Fluorene	EPA 625	ND	ug/L	5.0	11/26/98
2-Methyl-4,6-Dinitrophenol	EPA 625	ND	ug/L	10.	11/26/98
4-Nitroaniline	EPA 625	ND	ug/L	5.0	11/26/98
N-Nitrosodiphenylamine	EPA 625	ND	ug/L	5.0	11/26/98
1,2-Diphenylhydrazine	EPA 625	ND *	ug/L	5.0	11/26/98
4-Bromophenylphenylether	EPA 625	ND	ug/L	5.0	11/26/98
Hexachlorobenzene	EPA 625	ND	ug/L	10.	11/26/98
Pentachlorophenol	EPA 625	ND	ug/L	10.	11/26/98
Phenanthrene	EPA 625	ND	ug/L	5.0	11/26/98
Anthracene	EPA 625	ND	ug/L	5.0	11/26/98
Di-n-butylphthalate	EPA 625	ND	ug/L	5.0	11/26/98
Fluoranthene	EPA 625	ND	ug/L	5.0	11/26/98

Bolin Laboratories Inc.

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(602) 942 8220 • FAX (602) 942 1050

Matrix: Storm Water
Sample No: 9810-07632-002

Time Sampled: 15:57
Date Sampled: 10/25/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Benzidine	EPA 625	ND	ug/L	20.	11/26/98
Pyrene	EPA 625	ND	ug/L	5.0	11/26/98
Butylbenzyl Phthalate	EPA 625	ND	ug/L	5.0	11/26/98
Bis(2-ethylhexyl)phthalate	EPA 625	ND	ug/L	10.	11/26/98
Benzo (a) anthracene	EPA 625	ND	ug/L	5.0	11/26/98
3,3'-Dichlorobenzidine	EPA 625	ND	ug/L	5.0	11/26/98
Chrysene	EPA 625	ND	ug/L	5.0	11/26/98
Di-n-octylphthalate	EPA 625	ND	ug/L	5.0	11/26/98
Benzo (b) fluoranthene	EPA 625	ND	ug/L	5.0	11/26/98
Benzo (k) fluoranthene	EPA 625	ND	ug/L	5.0	11/26/98
Benzo (a) pyrene	EPA 625	ND	ug/L	5.0	11/26/98
Indeno (1,2,3-cd) pyrene	EPA 625	ND	ug/L	5.0	11/26/98
Dibenzo (a,h) anthracene	EPA 625	ND	ug/L	5.0	11/26/98
Benzo (g,h,i) perylene	EPA 625	ND	ug/L	5.0	11/26/98
2,3,7,8-TCDD (Screen)	EPA 625	ND T	ug/L	10.	11/26/98
Extraction	EPA 625				10/28/98
Surrogate:	EPA 625				11/26/98
***d5-Phenol	EPA 625	28.0	% Recovery		11/26/98
***2-Fluorophenol	EPA 625	36.8	% Recovery		11/26/98
***d5-Nitrobenzene	EPA 625	71.5	% Recovery		11/26/98
***2-Fluorobiphenyl	EPA 625	66.4	% Recovery		11/26/98
***2,4,6-Tribromophenol	EPA 625	75.7	% Recovery		11/26/98
***d14-Terphenyl	EPA 625	70.9	% Recovery		11/26/98
4,4'-DDD	EPA 608	ND C	ug/L	1.0	11/06/98
4,4'-DDE	EPA 608	ND C	ug/L	1.0	11/06/98
4,4'-DDT	EPA 608	ND	ug/L	2.0	11/06/98
Aldrin	EPA 608	ND C	ug/L	1.0	11/06/98
alpha-BHC	EPA 608	ND C	ug/L	1.0	11/06/98
Chlordane	EPA 608	ND	ug/L	1.0	11/06/98
delta-BHC	EPA 608	ND C	ug/L	1.0	11/06/98
Dieldrin	EPA 608	ND C	ug/L	1.0	11/06/98
Endosulfan I	EPA 608	ND C	ug/L	1.0	11/06/98
Endosulfan II	EPA 608	ND C	ug/L	1.0	11/06/98
Endosulfan Sulfate	EPA 608	ND C	ug/L	1.0	11/06/98
Endrin	EPA 608	ND C	ug/L	1.0	11/06/98
Endrin Aldehyde	EPA 608	ND C	ug/L	1.0	11/06/98
Heptachlor	EPA 608	ND	ug/L	1.0	11/06/98
Heptachlor Epoxide	EPA 608	ND C	ug/L	1.0	11/06/98
Lindane (gamma BHC)	EPA 608	ND C	ug/L	1.0	11/06/98
PCB 1016	EPA 608	ND	ug/L	1.0	11/06/98
PCB 1221	EPA 608	ND	ug/L	10	11/06/98
PCB 1232	EPA 608	ND	ug/L	1.0	11/06/98

Bolin Laboratories Inc.

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(602) 942 8220 • FAX (602) 942 1050

Matrix: Storm Water
Sample No: 9810-07632-002

Time Sampled: 15:57
Date Sampled: 10/25/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
PCB 1242	EPA 608	ND	ug/L	1.0	11/06/98
PCB 1248	EPA 608	ND	ug/L	1.0	11/06/98
PCB 1254	EPA 608	ND	ug/L	1.0	11/06/98
PCB 1260	EPA 608	ND	ug/L	1.0	11/06/98
Toxaphene	EPA 608	ND	ug/L	1.0	11/06/98
beta-BHC	EPA 608	ND C	ug/L	1.0	11/06/98
Extraction	EPA 608				10/29/98
Surrogate:	EPA 608				11/06/98
***Dibutylchlorendate	EPA 608	147 S1	% Recovery		11/06/98
Metals Digestion for ICP	EPA 200.7				11/03/98
Metals Digestion for GFAA	SM 3030E				11/03/98
Antimony	SM 3113B	<0.005	mg/L	0.005	11/08/98
Arsenic	SM 3113B	0.008	mg/L	0.005	11/11/98
Beryllium	EPA 200.7	<0.002	mg/L	0.002	11/04/98
Calcium	EPA 200.7	24.	mg/L	1.	11/04/98
Copper	EPA 200.7	0.030	mg/L	0.015	11/04/98
Lead	SM 3113B	<0.005	mg/L	0.005	11/06/98
Magnesium	EPA 200.7	4.	mg/L	1.	11/04/98
Mercury	EPA 245.1	<0.0002	mg/L	0.0002	11/09/98
Selenium	SM 3113B	<0.005	mg/L	0.005	11/03/98
Silver	EPA 200.7	<0.04	mg/L	0.04	11/04/98
Hardness, Total (Ca & Mg)	SM 2340B	76	mg/L	7.	11/04/98
Zinc	EPA 200.7	0.16	mg/L	0.02	11/04/98
Thallium	EPA 200.9	<0.001	mg/L	0.001	11/04/98
Chromium	EPA 218.2	0.0053	mg/L	0.001	11/12/98
Cadmium	EPA 213.2	0.00038	mg/L	0.0002	11/11/98
Nickel	EPA 249.2	0.014	mg/L	0.002	11/11/98
Cadmium, Dissolved	EPA 213.2	<0.0002	mg/L	0.0002	11/11/98
Chromium, Dissolved	EPA 218.2	0.0022	mg/L	0.001	11/12/98
Nickel, Dissolved	EPA 249.2	0.0039	mg/L	0.002	11/11/98
Antimony, Dissolved	EPA 200.9	<0.004	mg/L	0.004	11/25/98
Arsenic, Dissolved	EPA 200.9	<0.005	mg/L	0.005	11/11/98
Beryllium, Dissolved	EPA 200.7	<0.002	mg/L	0.002	11/03/98
Copper, Dissolved	EPA 200.7	<0.015	mg/L	0.015	11/03/98
Lead, Dissolved	EPA 200.9	<0.005	mg/L	0.005	11/06/98
Mercury, Dissolved	EPA 245.1	<0.0002	mg/L	0.0002	11/05/98
Selenium, Dissolved	EPA 200.9	<0.005	mg/L	0.005	11/10/98
Silver, Dissolved	EPA 200.7	<0.05	mg/L	0.05	11/03/98
Thallium, Dissolved	EPA 200.9	<0.001	mg/L	0.001	11/04/98
Zinc, Dissolved	EPA 200.7	0.09	mg/L	0.02	11/03/98
Nitrate plus Nitrite	SM 4500 NO3E	0.36	mg/L	0.05	11/16/98
Nitrogen as Nitrate	CALCULATION	0.13	mg/L	0.01	11/23/98

Bolin Laboratories Inc.

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For EPA 625 analysis sample was diluted x5 because of matrix.
In EPA 625 analysis Perylene-d12 (Internal standard) was high but the associated analytes were non-detect. Data is still valid.
C = Continuing Calibration was above method control limits. Data was not impacted.
D1* = Sample was diluted due to limited sample.
D1 = Sample was diluted by a factor of 2 due to high concentration of target analyte.
S1 = Surrogate recovery was above laboratory acceptance criteria.
Ammonia analyzed by Aquatic Consulting, Tempe AZ. #AZ0003.
Phenol analyzed by McKenzie Labs, Phoenix AZ, #AZ0034.
Total & Dissolved Cadmium, Chromium & Nickel analyzed by BC Labs, Bakersfield CA, #AZ0345.
* = 1,2-Diphenylhydrazine oxidizes to azobenzene under GC operating conditions. This compound was calibrated as azobenzene.
T = Result based on a Tentatively Identified Compound search.

S. Kaufman

Authorized Signatory
ADHS License No.: AZ0004

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Quality Control Data Report

Client: MCFCD
Bolin Sample ID: 9810-7632 Diss

Analyte	Method	Date Analyzed	Spk Conc. (ppm)	MS %Rec	MSD %Rec	Blk (ppm)	ICV %Rec	CCV %Rec
Beryllium	EPA 200.7	11/3/98	0.2	106	108	<PQL	106	100
Copper	EPA 200.7	11/3/98	1	102	104	<PQL	102	96
Silver	EPA 200.7	11/3/98	0.5	80	78	<PQL	106	105
Zinc	EPA 200.7	11/3/98	1	119	121	<PQL	106	107
Antimony	EPA 200.9/SM 3113B	11/25/98	0.020	115	125	<PQL	90	95
Arsenic	EPA 200.9/SM 3113B	11/11/98	0.020	130	120	<PQL	90	90
Lead	EPA 200.9/SM 3113B	11/6/98	0.020	100	105	<PQL	100	95
Selenium	EPA 200.9/SM 3113B	11/10/98	0.020	70	75	<PQL	100	100
Thallium	EPA 200.9/SM 3113B	11/4/98	0.020	60	85	<PQL	95	90
Mercury	EPA 245.1	11/5/98	0.005	94	90	<PQL	94	94

MI Matrix Interference
ICV Initial Calibration Verification
CCV Continuing Calibration Verification
MS is Matrix Spike
MSD is a Matrix Spike Duplicate.
RPD is Relative Percent Difference
BLK is a Blank

Bolin Laboratories Inc.

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Quality Control Data Report

Client: MCFCD
Bolin Sample ID: 9810-7632 Total

Analyte	Method	Date Analyzed	Spk Conc. (ppm)	MS %Rec	MSD %Rec	Blk (ppm)	ICV %Rec	CCV %Rec
Beryllium	EPA 200.7	11/4/98	0.2	101	100	<PQL	103	104
Calcium	EPA 200.7	11/4/98	30	103	105	<PQL	103	105
Copper	EPA 200.7	11/4/98	1	98	99	<PQL	95	101
Magnesium	EPA 200.7	11/4/98	30	96	98	<PQL	97	102
Silver	EPA 200.7	11/4/98	0.5	100	100	<PQL	100	104
Zinc	EPA 200.7	11/4/98	1	104	106	<PQL	102	102
Antimony	EPA 200.9/SM 3113B	11/8/98	0.020	80	100	<PQL	100	100
Arsenic	EPA 200.9/SM 3113B	11/11/98	0.020	100	100	<PQL	95	100
Lead	EPA 200.9/SM 3113B	11/6/98	0.020	85	90	<PQL	90	90
Selenium	EPA 200.9/SM 3113B	11/3/98	0.020	95	110	<PQL	100	110
Thallium	EPA 200.9/SM 3113B	11/4/98	0.020	114	122	<PQL	104	98
Mercury	EPA 245.1	11/5/98	0.005	94	90	<PQL	92	94

MI Matrix Interference
ICV Initial Calibration Verification
CCV Continuing Calibration Verification
MS is Matrix Spike
MSD is a Matrix Spike Duplicate.
RPD is Relative Percent Difference
BLK is a Blank

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Quality Control Data Report

Client: Maricopa County Flood Control
Bolin Sample ID: 9810-7632 (1-2)

Analyte	Method	Date Analyzed	Spk Conc. (ppb)	Blk (ppb)	Blk-Spk Conc. ppb	Blk-Spk %Rec	Blk MSD Conc. ppb	Blk MSD %Rec	RPD	ICV %Rec	CCV %Rec
Alpha-BHC	EPA 608	11/6/98	5.0	<PQL	3.98	80	4.35	87	9	128*	124*
Beta-BHC	EPA 608	11/6/98	5.0	<PQL	4.22	84	4.57	91	8	144*	143*
Gamma(Lindane)-BHC	EPA 608	11/6/98	5.0	<PQL	4.40	88	4.73	95	7	143*	135*
Delta-BHC	EPA 608	11/6/98	5.0	<PQL	4.21	84	4.59	92	9	132*	127*
Heptachlor	EPA 608	11/6/98	5.0	<PQL	3.85	77	4.24	85	10	106	95
Aldrin	EPA 608	11/6/98	5.0	<PQL	4.22	84	4.36	87	3	128*	125*
Heptachlor Epoxide	EPA 608	11/6/98	5.0	<PQL	4.32	86	4.62	92	7	132*	124*
Endosulfan I	EPA 608	11/6/98	5.0	<PQL	4.34	87	4.44	89	2	131*	127*
Dieldrin	EPA 608	11/6/98	5.0	<PQL	4.27	85	4.59	92	7	142*	136*
4.4.-DDE	EPA 608	11/6/98	5.0	<PQL	3.91	78	4.24	85	8	117*	114
Endrin	EPA 608	11/6/98	5.0	<PQL	4.65	93	4.93	99	6	150*	139*
Endosulfan II	EPA 608	11/6/98	5.0	<PQL	4.60	92	4.81	96	4	154*	148*
4.4-DDD	EPA 608	11/6/98	5.0	<PQL	4.60	92	4.80	96	4	154*	148*
Endrin Aldehyde	EPA 608	11/6/98	5.0	<PQL	5.66	113	6.87	137	19	143*	137*
Endosulfan Sulfate	EPA 608	11/6/98	5.0	<PQL	4.68	94	4.92	98	5	140*	132*
4.4-DDT	EPA 608	11/6/98	5.0	<PQL	4.62	92	4.78	96	3	104	90

ICV Initial Calibration Verification
CCV Continuing Calibration Verification
BLK is a Blank
BLK-SPK is a Blank Spike

Bolin Laboratories Inc.

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Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9810-7632

Analyte	Method	Date Analyzed	Spk Conc	MS %Rec	MSD %Rec	RPD	Blk	ICV %Rec	CCV %Rec
Solids, Total Suspended	160.2	10/29/98	N/A	N/A	N/A	######	<1.0	98	-
Chemical Oxygen Demand	410.4	11/9/98	30	94	100	6.1856	<20	104	93
Total Dissolved Solids	SM 2540C	10/30/98	N/A	N/A	N/A	######	<1.0	98	-
Total Phosphorous	365.3	11/17/98	0.1	86	89	3.4286	<0.05	95	103
Dissolved Phosphorous	365.2	11/19/98	0.1	93	98	5.2356	<0.01	100	100
Nitite	SM 4500 NO2 B	10/27/98	0.1	98	100	2.0202	<0.01	109	109
Nitrate	SM 4500 NO3 E	11/16/98	0.565	103	96	7.0352	<0.05	102	99
Hexavalent Chromium	SM 3500	10/27/98	0.2	93	90	3.2787	<0.01	99	101
Total Cyanide	335.2	11/6/98	0.05	92	89	3.3149	<0.01	104	94
Alkalinity	SM 2320B	10/29/98	100	98	98	0	<2.0	97	-
Sulfate	SM 4500 SO4	11/13/98	20	107	103	3.8095	<5.0	92	109
Chloride	SM 4500 CL-B	11/17/98	20	116	106	9.009	<5.0	96	104
Ortho-Phosphate	365.3	10/27/98	0.1	101	97	4.0404	<0.05	96	110
Total Kjeldahl Nitrogen	351.4	11/13/98	2	92	104	12.245	<0.5	103	103
Total Organic Carbons	SM 5310C	11/16/98	5	98	100	2.0202	0.1	95	100

ICV Initial Calibration Verification
CCV Continuing Calibration Verification
MS is Matrix Spike
MSD is a Matrix Spike Duplicate.
RPD is Relative Percent Difference
BLK is a Blank

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)

BOLIN LABORATORIES
17631 N. 25TH AVE.
PHOENIX, AZ 85023
STEPHANIE KAUFMAN

Date of Report: 12/09/98
Sample Matrix: DIGESTATES

Samples Affected: 98-13127-1 - 98-13127-9

Constituents	Method Blank Readings	Units
Dissolved Cadmium	< 0.2	µg/L
Dissolved Chromium	< 1.	µg/L
Dissolved Nickel	< 2.0	µg/L

Quality Control Officer

Anthony Bonanno

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)

BOLIN LABORATORIES
17631 N. 25TH AVE.
PHOENIX, AZ 85023
STEPHANIE KAUFMAN

Date of Report: 12/09/98
Sample Matrix: DIGESTATES

Samples Affected: 98-13127-1 - 98-13127-9

Constituents	QC Sample ID	Sample Result	Sample Duplicate	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Sample R.P.D.	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Dissolved Cadmium	12866-1	< 0.2	< 0.2	2.518	2.679	2.500	2.500	µg/L	<PQL	6.	20	100.	107.	85 - 115
Dissolved Chromium	13127-1-X4	4.64	4.44	45.52	46.	40.00	40.00	µg/L	<PQL	1.	20	102.	103.	85 - 115
Dissolved Nickel	13127-1	15.39	14.6	37.9	38.48	25.00	25.00	µg/L	5.	2.	20	90.	92.	85 - 115

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

There are no matrix spikes associated with the total metals. The samples were digested before BCL received the samples.

Quality Control Officer

Anthony Sorenson

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Laboratory Control Sample)

BOLIN LABORATORIES
17631 N. 25TH AVE.
PHOENIX, AZ 85023
STEPHANIE KAUFMAN

Date of Report: 12/09/98
Sample Matrix: DIGESTATES

Samples Affected: 98-13127-1 - 98-13127-9

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Dissolved Cadmium	LCSW	2.689	2.5	µg/L	108.	85 - 115
Dissolved Chromium	LCSW	10.46	10.	µg/L	105.	85 - 115
Dissolved Nickel	LCSW	27.3	25.	µg/L	109.	85 - 115

Quality Control Officer

Anthony Bonanno

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Bolin Laboratories Inc.

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(602) 942-8220 • Fax(602) 942-1050

❑ 440 N. Alvernon, Suite 103, Tucson AZ 85711
(520) 327-1234 • Fax(502) 327-0518

CHAIN OF CUSTODY RECORD

Page_____of_____

Laboratory Sample No. 9810-07632

CLIENT INFORMATION

Client Name	Address	City	State	Zip	Phone	Fax
FLOOD CONTROL	2801 W DURANGO	PHOENIX	AZ	85009	506-8401	506-4[illegible]

Project Name	Project Number	Contact	P.O. No.	Fax Results ❑	QC Report ☑	Special Detection Limits ❑
GLENDALE NPDES		DAVE GARDNER				

SAMPLE TYPE CODES

DW=Drinking Water, S=Soil/Solid, WW=Waste Water, T=Travel Blank, SW=Surface Water, F=Food, GW=Ground Water, G=Sludge, O=Other_____

TURN AROUND TIME

❑ Standard 10 - 15 Day
❑ Standard UST 3 to 5 Day
❑ Other_____

★ Laboratory Authorization Required for Rush ★

REQUESTED ANALYSES

Client's Sample Identification	Date	Time	Sample Location	Composite	Grab	Sample Type	Compliance	No. of Containers	pH ✓ (Bolin Use Only)	NPDES Parameters	Diss. Total Metals	[illegible]	TSS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	LAB NO.
GLC-102598	10/15/98	1550	CITRUS	X		SW		7		X		X	X	X	X	X	X	X	X	X	X	X	X		-01
GZC-102598	10/15/98	1557	ARROW	X		SW		7		X		X	X	X	X	X	X	X	X	X	X	X	X		-02

Comments / Special Instructions: No Analyses of parameters past hold time.
[illegible] time for [illegible] (2) ★ [illegible], As, Be, Cd, Cr, Cu, Pb, Hg, Ni, [illegible], Zn
GLC - pH [illegible] detected

SAMPLE CONDITION UPON RECEIPT		
No. of Containers	26	
Temperature Blank	Amb	
Custody Seals	Y	N
Seals Intact	Y	N
Preserved	Y	N

WHITE-LAB YELLOW-LAB PINK-CLIENT

	RELINQUISHED BY		SAMPLES RECEIVED BY	
①	Signature [illegible]	Date 10/26/98	Signature	Date
	Printed Name DAVID GARDNER	Time 1430	Printed Name	Time
②	Signature	Date	Signature	Date
	Printed Name	Time	Printed Name	Time
③	Signature	Date	Signature	Date
	Printed Name	Time	Printed Name	Time

Data Checksheet

Site	CITRUS
Municipality	GLENDALE
Sample Date	12-6-98

Date Received	2-3-99

Laboratory Used	BOLIN
Laboratory Contact	STEPHANIE
FCD Sample ID Number	GC120698 G/C
Lab Sample ID Number	9812-08818-001,-002
Laboratory Invoice Number	49101

Initial Review Complete	✓	Date	2-10-99
Lab Contacted		Date	
Lab Review Complete		Date	
Second Review Complete		Date	
Additional Review Necessary			

Comments
- dissolved phosphorous analyzed past 28 day hold time

Data Validation Table Complete	✓	Date	2-10-99

Data Entered Into Database	✓	Date	2-10-99

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Maricopa County Flood Control
Environmental Branch
2801 West Durango
Phoenix, AZ 85009
Attn: Dave Gardner

Received: 12/06/98
Reported: 1/15/99
Invoice No: 049101

Project Name: NPDES Stormwater Analysis

Matrix: Storm Water
Sample No: 9812-08818-001
Sample ID: GC120698G (Citrus)

Time Sampled: 16:15
Date Sampled: 12/06/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Biochemical Oxygen Demand	EPA 405.1	20.	mg/L	1.0	12/07/98
Fecal Coliform	SM 9221D	200.	MPN/100ml		12/06/98
Fecal Streptococcus	SM 9230B	2,400.	MPN/100ml		12/06/98
Oil & Grease	EPA 413.1	<5.0	mg/L	5.0	12/08/98
Carbon tetrachloride	EPA 624	ND	ug/L	8	12/09/98
Bromomethane	EPA 624	ND	ug/L	20	12/09/98
Benzene	EPA 624	ND	ug/L	8	12/09/98
trans-1,3-Dichloropropene	EPA 624	ND	ug/L	8	12/09/98
trans 1,2-Dichloroethylene	EPA 624	ND	ug/L	8	12/09/98
cis 1,3-Dichloropropene	EPA 624	ND	ug/L	8	12/09/98
2-Chloroethylvinyl ether	EPA 624	ND	ug/L	8	12/09/98
1,4-Dichlorobenzene	EPA 624	ND	ug/L	8	12/09/98
1,3-Dichlorobenzene	EPA 624	ND	ug/L	8	12/09/98
1,2-Dichloropropane	EPA 624	ND	ug/L	8	12/09/98
1,2-Dichloroethane	EPA 624	ND	ug/L	8	12/09/98
1,2-Dichlorobenzene	EPA 624	ND	ug/L	8	12/09/98
1,1-Dichloroethylene	EPA 624	ND	ug/L	8	12/09/98
1,1-Dichloroethane	EPA 624	ND	ug/L	8	12/09/98
Trichloroethylene (TCE)	EPA 624	ND	ug/L	8	12/09/98
1,1,2-Trichloroethane	EPA 624	ND	ug/L	8	12/09/98
1,1,1-Trichloroethane	EPA 624	ND	ug/L	8	12/09/98
Toluene	EPA 624	ND	ug/L	8	12/09/98
Ethylbenzene	EPA 624	ND	ug/L	8	12/09/98
m,p-Xylenes	EPA 624	ND Y	ug/L	8	12/09/98
o-Xylene	EPA 624	ND Y	ug/L	8	12/09/98
Tetrachloroethylene (PCE)	EPA 624	ND	ug/L	8	12/09/98
1,1,2,2-Tetrachloroethane	EPA 624	ND	ug/L	8	12/09/98
Chloromethane	EPA 624	ND	ug/L	20	12/09/98
Chloroform	EPA 624	ND	ug/L	8	12/09/98
Bromodichloromethane	EPA 624	ND	ug/L	8	12/09/98
Bromoform	EPA 624	ND	ug/L	8	12/09/98
Chlorobenzene	EPA 624	ND	ug/L	8	12/09/98

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Matrix: Storm Water
Sample No: 9812-08818-001

Time Sampled: 16:15
Date Sampled: 12/06/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Chloroethane	EPA 624	ND	ug/L	20	12/09/98
Dichloromethane	EPA 624	ND	ug/L	20	12/09/98
Trichlorofluoromethane	EPA 624	ND	ug/L	20	12/09/98
Dichlorodifluoromethane	EPA 624	ND Y	ug/L	20	12/09/98
Vinyl Chloride	EPA 624	ND	ug/L	20	12/09/98
Dibromochloromethane	EPA 624	ND	ug/L	8	12/09/98
Total Trihalomethanes	EPA 624	ND	ug/L	8	12/09/98
Acrolein	EPA 624	ND T,Y	ug/L	200	12/09/98
Acrylonitrile	EPA 624	ND Y	ug/L	40	12/09/98
Surrogates:	EPA 624				12/09/98
***Pentafluorobenzene	EPA 624	82.	% Recovery		12/09/98
***1,2-dichloroethane-d4	EPA 624	90.	% Recovery		12/09/98
***4-bromofluorobenzene	EPA 624	70.	% Recovery		12/09/98
***1,2-dichlorobenzene-d4	EPA 624	90.	% Recovery		12/09/98
Acetone	EPA 624	ND Y	ug/L	100	12/09/98
2-Butanone (MEK)	EPA 624	ND Y	ug/L	40	12/09/98
Carbon disulfide	EPA 624	ND Y	ug/L	40	12/09/98
2-Hexanone (MBK)	EPA 624	ND Y	ug/L	40	12/09/98
Styrene	EPA 624	ND Y	ug/L	8	12/09/98
Total Xylenes	EPA 624	ND Y	ug/L	8	12/09/98
Trichlorotrifluoroethane	EPA 624	ND Y	ug/L	8	12/09/98
cis 1,2-Dichloroethylene	EPA 624	ND Y	ug/L	8	12/09/98
m,p-Xylenes	EPA 624	ND Y	ug/L	8	12/09/98
o-Xylene	EPA 624	ND Y	ug/L	8	12/09/98
Dichlorodifluoromethane	EPA 624	ND Y	ug/L	20	12/09/98

For EPA 624, the sample was diluted x4 due to matrix interferences.
T = Result based on a Tentatively Identified Compound search.
Y = Compound not listed in cited method.

S. Kaufman

Authorized Signatory
ADHS License No.: AZ0004

Bolin Laboratories Inc.

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Maricopa County Flood Control
Environmental Branch
2801 West Durango
Phoenix, AZ 85009
Attn: Dave Gardner

Received: 12/06/98
Reported: 1/15/99
Invoice No: 049101

Project Name: NPDES Stormwater Analysis

Matrix: Storm Water
Sample No: 9812-08818-002
Sample ID: GC120698C (Citrus)

Time Sampled: 16:15
Date Sampled: 12/06/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
pH	EPA 150.1	7.8	Std Unit		12/07/98
Chemical Oxygen Demand	EPA 410.4	47.	mg/L	20.	12/07/98
Chloride	SM4500 Cl-B	<5.0	mg/L	5.0	12/10/98
Cyanide, Total	SM 4500 CN E	<0.01	mg/L	0.01	12/11/98
Total Dissolved Solids	SM 2540C	100.	mg/L	1.	12/10/98
Solids, Total Suspended	EPA 160.2	36.	mg/L	1.	12/09/98
Nitrogen as Ammonia	EPA 350.2	0.11	mg/L	0.03	12/11/98
Nitrogen as Nitrite	SM4500 NO2	<0.1	mg/L	0.1	12/08/98
Organic Nitrogen	CALCULATION	2.22	mg/L	0.5	1/04/99
P as Total Phosphate	EPA 365.3	0.32	mg/L	0.05	12/22/98
Phosphorus, Dissolved	EPA 365.3	0.31	mg/L	0.05	1/05/99
P as Orthophosphate	SM 4500 PE	0.28	mg/L	0.05	12/04/98
Total Organic Carbon	SM 5310C	9.0	mg/L	0.2	12/29/98
Total Alkalinity (as CaCO3)	SM 2320B	32.	mg/L	2.	12/10/98
Chromium, hexavalent	SM 3500-CR D	<0.01	mg/L	0.01	12/07/98
Nitrogen, Total	CALCULATION	2.55	mg/L	0.5	1/04/99
Metals Digestion for ICP	EPA 200.7				12/11/98
Metals Digestion for GFAA	SM 3030E				12/11/98
Antimony	SM 3113B	<0.005	mg/L	0.005	12/18/98
Arsenic	SM 3113B	<0.005	mg/L	0.005	12/21/98
Beryllium	EPA 200.7	<0.002	mg/L	0.002	12/18/98
Calcium	EPA 200.7	13.	mg/L	1.	12/18/98
Copper	SM 3113B	0.006 M2	mg/L	0.005	12/31/98
Lead	SM 3113B	<0.005	mg/L	0.005	12/17/98
Magnesium	EPA 200.7	2.	mg/L	1.	12/18/98
Mercury	EPA 245.1	<0.0002	mg/L	0.0002	12/15/98
Selenium	SM 3113B	<0.005	mg/L	0.005	12/16/98
Silver	EPA 200.7	<0.04	mg/L	0.04	12/18/98
Hardness, Total (Ca & Mg)	SM 2340B	40	mg/L	7.	12/18/98
Zinc	EPA 200.7	0.05	mg/L	0.02	12/18/98
Thallium	EPA 200.9	<0.001	mg/L	0.001	12/15/98
Cadmium	EPA 213.2	<0.0002	mg/L	0.0002	12/16/98

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Matrix: Storm Water
Sample No: 9812-08818-002

Time Sampled: 16:15
Date Sampled: 12/06/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Chromium	EPA 218.2	0.0018	mg/L	0.001	12/16/98
Nickel	EPA 249.2	0.0068	mg/L	0.002	12/17/98
Antimony, Dissolved	EPA 200.9	<0.004	mg/L	0.004	12/18/98
Arsenic, Dissolved	EPA 200.9	<0.005	mg/L	0.005	12/07/98
Beryllium, Dissolved	EPA 200.7	<0.002	mg/L	0.002	12/15/98
Copper, Dissolved	EPA 200.7	<0.015	mg/L	0.015	12/15/98
Lead, Dissolved	EPA 200.9	<0.005	mg/L	0.005	12/28/98
Mercury, Dissolved	EPA 245.1	<0.0002	mg/L	0.0002	12/10/98
Selenium, Dissolved	EPA 200.9	<0.005	mg/L	0.005	12/16/98
Silver, Dissolved	EPA 200.7	<0.05	mg/L	0.05	12/15/98
Thallium, Dissolved	EPA 200.9	<0.001	mg/L	0.001	12/15/98
Zinc, Dissolved	EPA 200.7	<0.02	mg/L	0.02	12/15/98
Cadmium, Dissolved	EPA 213.2	<0.0002	mg/L	0.0002	12/16/98
Chromium, Dissolved	EPA 218.2	0.0043	mg/L	0.001	12/16/98
Nickel, Dissolved	EPA 249.2	0.0048	mg/L	0.002	12/17/98
N-Nitrosodimethylamine	EPA 625	ND	ug/L	5.0	12/10/98
Phenol	EPA 625	ND	ug/L	5.0	12/10/98
Aniline	EPA 625	ND	ug/L	5.0	12/10/98
Bis(2-chloroethyl)ether	EPA 625	ND	ug/L	10.	12/10/98
2-Chlorophenol	EPA 625	ND	ug/L	10.	12/10/98
1,3-Dichlorobenzene	EPA 625	ND	ug/L	5.0	12/10/98
1,4-Dichlorobenzene	EPA 625	ND	ug/L	5.0	12/10/98
Benzyl alcohol	EPA 625	ND	ug/L	10.	12/10/98
1,2-Dichlorobenzene	EPA 625	ND	ug/L	5.0	12/10/98
2-Methylphenol	EPA 625	ND	ug/L	5.0	12/10/98
Bis(2-chloroisopropyl)ether	EPA 625	ND	ug/L	10.	12/10/98
4-Methylphenol (p-Cresol)	EPA 625	ND	ug/L	5.0	12/10/98
N-Nitrosodi-n-propylamine	EPA 625	ND	ug/L	5.0	12/10/98
Hexachloroethane	EPA 625	ND	ug/L	10.	12/10/98
Nitrobenzene	EPA 625	ND	ug/L	10.	12/10/98
Isophorone	EPA 625	ND	ug/L	10.	12/10/98
2,4-Dimethylphenol	EPA 625	ND	ug/L	10.	12/10/98
Benzoic acid	EPA 625	ND	ug/L	50.	12/10/98
2-Nitrophenol	EPA 625	ND	ug/L	10.	12/10/98
Bis(2-chloroethoxy)methane	EPA 625	ND	ug/L	10.	12/10/98
2,4-Dichlorophenol	EPA 625	ND	ug/L	10.	12/10/98
1,2,4-Trichlorobenzene	EPA 625	ND	ug/L	5.0	12/10/98
Naphthalene	EPA 625	ND	ug/L	5.0	12/10/98
Hexachlorobutadiene	EPA 625	ND	ug/L	5.0	12/10/98
4-Chloroaniline	EPA 625	ND	ug/L	5.0	12/10/98
4-Chloro-3-methylphenol	EPA 625	ND	ug/L	5.0	12/10/98
2-Methylnaphthalene	EPA 625	ND	ug/L	5.0	12/10/98

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Matrix: Storm Water
Sample No: 9812-08818-002

Time Sampled: 16:15
Date Sampled: 12/06/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Hexachlorocyclopentadiene	EPA 625	ND	ug/L	5.0	12/10/98
2,4,6-Trichlorophenol	EPA 625	ND	ug/L	5.0	12/10/98
2,4,5-Trichlorophenol	EPA 625	ND	ug/L	5.0	12/10/98
2-Chloronaphthalene	EPA 625	ND	ug/L	5.0	12/10/98
2-Nitroaniline	EPA 625	ND	ug/L	5.0	12/10/98
Dimethyl Phthalate	EPA 625	ND	ug/L	5.0	12/10/98
2,6-Dinitrotoluene	EPA 625	ND	ug/L	5.0	12/10/98
Acenaphthylene	EPA 625	ND	ug/L	10.	12/10/98
3-Nitroaniline	EPA 625	ND	ug/L	5.0	12/10/98
Acenaphthene	EPA 625	ND	ug/L	5.0	12/10/98
2,4-Dinitrophenol	EPA 625	ND L	ug/L	20.	12/10/98
4-Nitrophenol	EPA 625	ND	ug/L	5.0	12/10/98
Dibenzofuran	EPA 625	ND	ug/L	5.0	12/10/98
2,4-Dinitrotoluene	EPA 625	ND	ug/L	5.0	12/10/98
Diethyl Phthalate	EPA 625	ND	ug/L	5.0	12/10/98
4-Chlorophenylphenylether	EPA 625	ND	ug/L	10.	12/10/98
Fluorene	EPA 625	ND	ug/L	5.0	12/10/98
2-Methyl-4,6-Dinitrophenol	EPA 625	ND	ug/L	10.	12/10/98
4-Nitroaniline	EPA 625	ND	ug/L	5.0	12/10/98
N-Nitrosodiphenylamine	EPA 625	ND	ug/L	5.0	12/10/98
1,2-Diphenylhydrazine	EPA 625	ND *	ug/L	5.0	12/10/98
4-Bromophenylphenylether	EPA 625	ND	ug/L	5.0	12/10/98
Hexachlorobenzene	EPA 625	ND	ug/L	10.	12/10/98
Pentachlorophenol	EPA 625	ND	ug/L	10.	12/10/98
Phenanthrene	EPA 625	ND	ug/L	5.0	12/10/98
Anthracene	EPA 625	ND	ug/L	5.0	12/10/98
Di-n-butylphthalate	EPA 625	ND	ug/L	5.0	12/10/98
Fluoranthene	EPA 625	ND	ug/L	5.0	12/10/98
Benzidine	EPA 625	ND	ug/L	20.	12/10/98
Pyrene	EPA 625	ND	ug/L	5.0	12/10/98
Butylbenzyl Phthalate	EPA 625	ND	ug/L	5.0	12/10/98
Bis(2-ethylhexyl)phthalate	EPA 625	ND	ug/L	10.	12/10/98
Benzo (a) anthracene	EPA 625	ND	ug/L	5.0	12/10/98
3,3'-Dichlorobenzidine	EPA 625	ND	ug/L	5.0	12/10/98
Chrysene	EPA 625	ND	ug/L	5.0	12/10/98
Di-n-octylphthalate	EPA 625	ND	ug/L	5.0	12/10/98
Benzo (b) fluoranthene	EPA 625	ND	ug/L	5.0	12/10/98
Benzo (k) fluoranthene	EPA 625	ND	ug/L	5.0	12/10/98
Benzo (a) pyrene	EPA 625	ND	ug/L	5.0	12/10/98
Indeno (1,2,3-cd) pyrene	EPA 625	ND	ug/L	5.0	12/10/98
Dibenzo (a,h) anthracene	EPA 625	ND	ug/L	5.0	12/10/98
Benzo (g,h,i) perylene	EPA 625	ND	ug/L	5.0	12/10/98

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Matrix: Storm Water
Sample No: 9812-08818-002

Time Sampled: 16:15
Date Sampled: 12/06/1998

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
2,3,7,8-TCDD (Screen)	EPA 625	ND T	ug/L	500.	12/10/98
Extraction	EPA 625				12/07/98
Surrogate:	EPA 625				12/10/98
***d5-Phenol	EPA 625	32	% Recovery		12/10/98
***2-Fluorophenol	EPA 625	45	% Recovery		12/10/98
***d5-Nitrobenzene	EPA 625	77	% Recovery		12/10/98
***2-Fluorobiphenyl	EPA 625	72	% Recovery		12/10/98
***2,4,6-Tribromophenol	EPA 625	82	% Recovery		12/10/98
***d14-Terphenyl	EPA 625	66	% Recovery		12/10/98
4,4'-DDD	EPA 608	ND	ug/L	1.0	12/19/98
4,4'-DDE	EPA 608	ND	ug/L	1.0	12/19/98
4,4'-DDT	EPA 608	ND	ug/L	2.0	12/19/98
Aldrin	EPA 608	ND	ug/L	1.0	12/19/98
alpha-BHC	EPA 608	ND	ug/L	1.0	12/19/98
Chlordane	EPA 608	ND	ug/L	1.0	12/19/98
delta-BHC	EPA 608	ND	ug/L	1.0	12/19/98
Dieldrin	EPA 608	ND	ug/L	1.0	12/19/98
Endosulfan I	EPA 608	ND	ug/L	1.0	12/19/98
Endosulfan II	EPA 608	ND	ug/L	1.0	12/19/98
Endosulfan Sulfate	EPA 608	ND	ug/L	1.0	12/19/98
Endrin	EPA 608	ND	ug/L	1.0	12/19/98
Endrin Aldehyde	EPA 608	ND	ug/L	1.0	12/19/98
Heptachlor	EPA 608	ND	ug/L	1.0	12/19/98
Heptachlor Epoxide	EPA 608	ND	ug/L	1.0	12/19/98
Lindane (gamma BHC)	EPA 608	ND	ug/L	1.0	12/19/98
PCB 1016	EPA 608	ND	ug/L	1.0	12/19/98
PCB 1221	EPA 608	ND	ug/L	10	12/19/98
PCB 1232	EPA 608	ND	ug/L	1.0	12/19/98
PCB 1242	EPA 608	ND	ug/L	1.0	12/19/98
PCB 1248	EPA 608	ND	ug/L	1.0	12/19/98
PCB 1254	EPA 608	ND	ug/L	1.0	12/19/98
PCB 1260	EPA 608	ND	ug/L	1.0	12/19/98
Toxaphene	EPA 608	ND	ug/L	1.0	12/19/98
beta-BHC	EPA 608	ND	ug/L	1.0	12/19/98
Extraction	EPA 608				12/07/98
Surrogate:	EPA 608				12/19/98
***Dibutylchlorendate	EPA 608	113	% Recovery		12/19/98
Total Kjeldahl Nitrogen	EPA 351.3	2.33	mg/L	0.03	12/14/98
Nitrate plus Nitrite	SM 4500 NO3E	0.22	mg/L	0.05	12/08/98
Nitrogen as Nitrate	CALCULATION	0.22	mg/L	0.1	12/08/98

* = 1,2-Diphenylhydrazine oxidizes to azobenzene under GC operating conditions. This compound was

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calibrated as azobenzene.
L = The Laboratory Fortified Blank Spike duplicate was outside the laboratory acceptance limits. The Laboratory Fortified Blank Spike was acceptable. The data may have been impacted but is considered valid.
T = Result based on a Tentatively Identified Compound search.
TKN & Ammonia analyzed by Aquatic Consulting, Tempe AZ. #AZ0003.
Total & Dissolved Cadmium, Chromium & Nickel analyzed by BC Labs, Bakersfield CA, #AZ0345.
M2 = Matrix spike recovery was outside the laboratory acceptance limits. The Laboratory Fortified Blank recovery was acceptable. The data may have been impacted, but is considered valid.

E. Kaufman

Authorized Signatory
ADHS License No.: AZ0004

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Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9812-8818-2 total

Analyte	Method	Date Analyzed	Spk Conc. (ppm)	MS %Rec	MSD %Rec	Blk (ppm)	ICV %Rec	CCV %Rec
Beryllium	EPA 200.7	12/18/98	0.2	102	104	<PQL	97	98
Calcium	EPA 200.7	12/18/98	30	130	134	<PQL	100	105
Copper	SM3113B	12/31/99	1	Matrix Interference		<PQL	100	100
Magnesium	EPA 200.7	12/18/98	30	126	120	<PQL	97	100
Silver	EPA 200.7	12/18/98	0.5	103	103	<PQL	101	96
Zinc	EPA 200.7	12/18/98	1	111	114	<PQL	97	104
Antimony	EPA 200.9/SM 3113B	12/18/98	0.020	80	100	<PQL	100	100
Arsenic	EPA 200.9/SM 3113B	12/21/98	0.020	90	100	<PQL	100	95
Lead	EPA 200.9/SM 3113B	12/17/98	0.020	120	130	<PQL	110	110
Selenium	EPA 200.9/SM 3113B	12/16/98	0.020	90	100	<PQL	100	100
Thallium	EPA 200.9/SM 3113B	12/15/98	0.020	94	97	<PQL	100	97
Mercury	EPA 245.1	12/15/98	0.005	94	100	<PQL	102	100

MI Matrix Interference
ICV Initial Calibration Verification
CCV Continuing Calibration Verification
MS is Matrix Spike
MSD is a Matrix Spike Duplicate.
RPD is Relative Percent Difference
BLK is a Blank

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Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9812-8818-2 dissolved

Analyte	Method	Date Analyzed	Spk Conc. (ppm)	MS %Rec	MSD %Rec	Blk (ppm)	ICV %Rec	CCV %Rec
Beryllium	EPA 200.7	12/15/98	0.1	108	106	<PQL	96	96
Copper	EPA 200.7	12/15/98	1	105	104	<PQL	96	94
Silver	EPA 200.7	12/15/98	0.5	96	91	<PQL	102	96
Zinc	EPA 200.7	12/15/98	1	112	108	<PQL	96	94
Antimony	EPA 200.9/SM 3113B	12/15/98	0.020	90	100	<PQL	100	90
Arsenic	EPA 200.9/SM 3113B	12/18/98	0.020	125	110	<PQL	100	90
Lead	EPA 200.9/SM 3113B	12/17/98	0.020	130	130	<PQL	105	110
Selenium	EPA 200.9/SM 3113B	12/16/98	0.020	80	95	<PQL	100	100
Thallium	EPA 200.9/SM 3113B	12/15/98	0.020	94	97	<PQL	97	104
Mercury	EPA 245.1	12/10/98	0.005	104	104	<PQL	100	98

MI Matrix Interference
ICV Initial Calibration Verification
CCV Continuing Calibration Verification
MS is Matrix Spike
MSD is a Matrix Spike Duplicate.
RPD is Relative Percent Difference
BLK is a Blank

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Quality Control Data Report

Client: Maricopa County Flood Control
Bolin Sample ID: 9812-8818-2

Analyte	Method	Date Analyzed	Spk Conc. (ppb)	Blk (ppb)	Blk-Spk Conc. ppb	Blk-Spk %Rec	Blk Spk Dup Conc. ppb	Blk Spk Dup %Rec	RPD	ICV %Rec	CCV %Rec
Alpha-BHC	EPA 608	12/19/98	5.0	<PQL	4.42	88	4.31	86	3	105	90
Beta-BHC	EPA 608	12/19/98	5.0	<PQL	5.23	105	5.37	107	3	104	100
Gamma(Lindane)-BHC	EPA 608	12/19/98	5.0	<PQL	4.73	95	4.84	97	2	104	97
Delta-BHC	EPA 608	12/19/98	5.0	<PQL	5.13	103	5.12	102	0	104	96
Heptachlor	EPA 608	12/19/98	5.0	<PQL	4.35	87	4.76	95	9	105	96
Aldrin	EPA 608	12/19/98	5.0	<PQL	4.50	90	4.70	94	4	102	93
Heptachlor Epoxide	EPA 608	12/19/98	5.0	<PQL	4.95	99	5.23	105	6	102	98
Endosulfan I	EPA 608	12/19/98	5.0	<PQL	4.98	100	5.29	106	6	102	97
Dieldrin	EPA 608	12/19/98	5.0	<PQL	5.23	105	5.40	108	3	105	95
4,4,-DDE	EPA 608	12/19/98	5.0	<PQL	5.28	106	5.49	110	4	103	95
Endrin	EPA 608	12/19/98	5.0	<PQL	5.43	109	5.62	112	3	104	99
Endosulfan II	EPA 608	12/19/98	5.0	<PQL	5.57	111	6.08	122	9	105	109
4,4-DDD	EPA 608	12/19/98	5.0	<PQL	6.07	121	6.42	128	6	102	110
Endrin Aldehyde	EPA 608	12/19/98	5.0	<PQL	5.43	109	5.80	116	7	103	86
Endosulfan Sulfate	EPA 608	12/19/98	5.0	<PQL	5.43	109	5.81	116	7	105	101
4,4-DDT	EPA 608	12/19/98	5.0	<PQL	5.55	111	6.22	124	11	101	100

ICV Initial Calibration Verification
CCV Continuing Calibration Verification
Blk is a Blank
Blk Spk is a Blank Spike
Blk Spk Dup is a Blank Spike Duplicate
RPD is Relative Percent Difference

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Quality Control Data Report

Client: Maricopa County Flood Control
Bolin Sample ID: 9812-8818-1

Analyte	Method	Date Analyzed	Spk Conc. (ppb)	BLK MS Conc. UNITS	BLK MS %Rec	BLK MSD Conc. UNITS	BLK MSD %Rec	RPD	BLK (ppb)	CCV %Rec
1,1-Dichloroethylene	EPA 624	12/9/98	10	11.0	110	10.5	105	5	<PQL	
Benzene	EPA 624	12/9/98	10	10.4	104	9.8	98.4	6	<PQL	
Trichloroethylene	EPA 624	12/9/98	10	10.3	103	9.8	97.9	5	<PQL	
Toluene	EPA 624	12/9/98	10	10.2	102	9.7	97.0	5	<PQL	
Chlorobenzene	EPA 624	12/9/98	10	10.4	104	9.9	99.0	5	<PQL	
Chloromethane	EPA 624	12/9/98	10						<PQL	104
Vinylchloride	EPA 624	12/9/98	10						<PQL	130
1,1-Dichloroethylene	EPA 624	12/9/98	10						<PQL	111
1,1-Dichloroethane	EPA 624	12/9/98	10						<PQL	105
Chloroform	EPA 624	12/9/98	10						<PQL	106
1,2-Dichloropropane	EPA 624	12/9/98	10						<PQL	100
Toluene	EPA 624	12/9/98	10						<PQL	104
Chlorobenzene	EPA 624	12/9/98	10						<PQL	101
Ethylbenzene	EPA 624	12/9/98	10						<PQL	106
Bromoform	EPA 624	12/9/98	10						<PQL	104
1,1,2,2-Tetrachloroethane	EPA 624	12/9/98	10						<PQL	98.4

CCV = Continuing Calibration Verification.
MS = Matrix Spike.
MSD = Matrix Spike Duplicate.
RPD = Relative Percent Difference.
BLK = Blank.

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Quality Control Data Report

Client: Maricopa County Flood Control
Bolin Sample ID: 9812-8818

Analyte	Method	Date Analyzed	Spk Conc. (ppb)	BS Conc.	BS %Rec	BSD Conc.	BSD %Rec	RPD	BLK (ppb)	CCV %Rec
N-nitrosodimethylamine	EPA 625	12/9/98	100	50	50	41	41	20	<PQL	*
Phenol	EPA 625	12/9/98	200	65	33	53	27	20	<PQL	*
Aniline	EPA 625	12/9/98	100	76	76	66	66	14	<PQL	*
Bis(2-chloroethyl)ether	EPA 625	12/9/98	100	83	83	69	69	18	<PQL	*
2-Chlorophenol	EPA 625	12/9/98	200	134	67	117	59	14	<PQL	*
1,3-Dichlorobenzene	EPA 625	12/9/98	100	68	68	46	46	39	<PQL	*
1,4-Dichlorobenzene	EPA 625	12/9/98	100	70	70	47	47	39	<PQL	*
Benzyl Alcohol	EPA 625	12/9/98	100	64	64	57	57	12	<PQL	*
1,2-Dichlorobenzene	EPA 625	12/9/98	100	73	73	51	51	35	<PQL	*
2-methylphenol	EPA 625	12/9/98	200	128	64	118	59	8	<PQL	*
Bis(2-chloroisopropyl)ether	EPA 625	12/9/98	100	78	78	65	65	18	<PQL	*
4-methylphenol	EPA 625	12/9/98	200	123	62	105	53	16	<PQL	*
N-Nitrosodi-n-propylamine	EPA 625	12/9/98	100	77	77	75	75	3	<PQL	*
Hexachloroethane	EPA 625	12/9/98	100	61	61	37	37	49	<PQL	*
Benzoic Acid	EPA 625	12/9/98	100	45	45	42	42	7	<PQL	*
Nitrobenzene	EPA 625	12/9/98	100	81	81	71	71	13	<PQL	*
Isophorone	EPA 625	12/9/98	100	78	78	77	77	1	<PQL	*
2-Nitrophenol	EPA 625	12/9/98	200	150	75	135	68	11	<PQL	*
2,4-Dimethylphenol	EPA 625	12/9/98	200	146	73	134	67	9	<PQL	*
bis(2-Chloroethoxy)methane	EPA 625	12/9/98	100	79	79	73	73	8	<PQL	*
2,6-Dichlorophenol	EPA 625	12/9/98	200	147	74	138	69	6	<PQL	*
2,4-Dichlorophenol	EPA 625	12/9/98	200	159	80	152	76	5	<PQL	*
1,2,4-Trichlorobenzene	EPA 625	12/9/98	100	72	72	54	54	29	<PQL	*
Naphthalene	EPA 625	12/9/98	100	79	79	65	65	19	<PQL	*
4-chloroaniline	EPA 625	12/9/98	100	85	85	86	86	1	<PQL	*
Hexachlorobutadiene	EPA 625	12/9/98	100	71	71	44	44	47	<PQL	*
2-methylnaphthalene	EPA 625	12/9/98	100	73	73	66	66	10	<PQL	*
4-Chloro-3-methylphenol	EPA 625	12/9/98	200	151	76	151	76	0	<PQL	*
Hexachlorocyclopentadiene	EPA 625	12/9/98	100	69	69	54	54	24	<PQL	*
2,4,6-Trichlorophenol	EPA 625	12/9/98	200	453	227	159	80	96	<PQL	*
2,4,5-Trichlorophenol	EPA 625	12/9/98	200	151	76	152	76	1	<PQL	*
2-Chloronaphthalene	EPA 625	12/9/98	100	74	74	72	72	3	<PQL	*
2-nitroaniline	EPA 625	12/9/98	100	73	73	77	77	5	<PQL	*
Acenaphthylene	EPA 625	12/9/98	100	78	78	75	75	4	<PQL	*

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Dimethyl phthalate	EPA 625	12/9/98	100	74	74	78	78	5	<PQL	*
2,6-Dinitrotoluene	EPA 625	12/9/98	100	79	79	79	79	0	<PQL	*
Acenaphthene	EPA 625	12/9/98	100	81	81	79	79	3	<PQL	*
3-nitroaniline	EPA 625	12/9/98	100	74	74	78	78	5	<PQL	*
2,4-Dinitrophenol	EPA 625	12/9/98	200	166	83	166	83	0	<PQL	*
Dibenzofuran	EPA 625	12/9/98	100	81	81	79	79	3	<PQL	*
2,4-Dinitrotoluene	EPA 625	12/9/98	100	89	89	91	91	2	<PQL	*
4-Nitrophenol	EPA 625	12/9/98	200	91	46	82	41	10	<PQL	*
Fluorene	EPA 625	12/9/98	100	80	80	80	80	0	<PQL	*
Diethylphthalate	EPA 625	12/9/98	100	87	87	89	89	2	<PQL	*
4-Chlorophenylphenylether	EPA 625	12/9/98	100	83	83	79	79	5	<PQL	*
4-nitroaniline	EPA 625	12/9/98	100	83	83	88	88	6	<PQL	*
2-Methyl-4,6-dinitrophenol	EPA 625	12/9/98	200	171	86	180	90	5	<PQL	*
Diphenylamine	EPA 625	12/9/98	100	74	74	74	74	0	<PQL	*
Azobenzene	EPA 625	12/9/98	100	86	86	89	89	3	<PQL	*
4-Bromophenoxybenzene	EPA 625	12/9/98	100	71	71	73	73	3	<PQL	*
Hexachlorobenzene	EPA 625	12/9/98	100	88	88	84	84	5	<PQL	*
Pentachlorophenol	EPA 625	12/9/98	200	182	91	190	95	4	<PQL	*
Phenanthrene	EPA 625	12/9/98	100	87	87	86	86	1	<PQL	*
Anthracene	EPA 625	12/9/98	100	87	87	86	86	1	<PQL	*
Di-n-butylphthalate	EPA 625	12/9/98	100	93	93	93	93	0	<PQL	*
Fluoranthene	EPA 625	12/9/98	100	88	88	88	88	0	<PQL	*
Pyrene	EPA 625	12/9/98	100	90	90	96	96	6	<PQL	*
Benzidine	EPA 625	12/9/98	100	115	115	129	129	11	<PQL	*
Butylbenzylphthalate	EPA 625	12/9/98	100	80	80	83	83	4	<PQL	*
Benzo(a)anthracene	EPA 625	12/9/98	100	84	84	82	82	2	<PQL	*
Chrysene	EPA 625	12/9/98	100	98	98	95	95	3	<PQL	*
3,3'-Dichlorobenzidine	EPA 625	12/9/98	100	67	67	69	69	3	<PQL	*
bis(2-Ethylhexyl)phthalate	EPA 625	12/9/98	100	84	84	84	84	0	<PQL	*
Di-n-octylphthalate	EPA 625	12/9/98	100	79	79	83	83	5	<PQL	*
Benzo(b)fluoranthene	EPA 625	12/9/98	100	84	84	88	88	5	<PQL	*
Benzo(k)fluoranthene	EPA 625	12/9/98	100	84	84	85	85	1	<PQL	*
Benzo(a)pyrene	EPA 625	12/9/98	100	83	83	86	86	4	<PQL	*
Indeno(1,2,3-cd)pyrene	EPA 625	12/9/98	100	81	81	80	80	1	<PQL	*
Dibenzo(a,h)anthracene	EPA 625	12/9/98	100	84	84	84	84	0	<PQL	*
Benzo(g,h,I)perylene	EPA 625	12/9/98	100	84	84	83	83	1	<PQL	*

CCV = Continuing Calibration Verification.
MS = Matrix Spike.
MSD = Matrix Spike Duplicate.
RPD = Relative Percent Difference.
BLK = Blank.

* The calibration curve was used to determine average IS value.

Bolin Laboratories Inc.

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CHAIN OF CUSTODY RECORD

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Laboratory Sample No. 9812-8818

CLIENT INFORMATION

Client Name	Address	City	State	Zip	Phone	Fax
FLOOD CONTROL DIST	2801 W DURANGO	PHOENIX	AZ	85009	506 5401	506 4[illegible]

Project Name	Project Number	Contact	P.O. No.	Fax Results ❑	QC Report ☒	Special Detection Limits ❑
GLENDALE NPDES		DAVE GARDNER				

SAMPLE TYPE CODES

DW=Drinking Water, S=Soil/Solid, WW=Wastewater, T=Travel Blank, SW=Surface Water, F=Food, GW=Groundwater, G=Sludge, O=Other_____

TURN AROUND TIME

❑ Standard 10 - 15 Day
❑ Other_____

Laboratory Authorization Required for Rush ★ ★

REQUESTED ANALYSES

Client's Sample Identification	Date	Time	Sample Location	Composite	Grab	Sample Type	Compliance	No. of Containers	pH ✓ (Bolin Use Only)	624		NPDES													LAB NO
GC120698G	12/6/98	1615	CITRUS		X	SW		8				X	X	X	X										-01
GC120698C	12/6/98	1615	CITRUS	X		SW		13				X					X	X	X	X					-02
TRAVEL BLANK						T				X															-03

Comments / Special Instructions: *Great No Cyan [illegible] Bottles provided.
** 1 SL AS Be Cd Cr Cu Pb Hg Ni Se Ag Tl Zn
** 1 AS Be Cd Cr Cu Pb Hg Ni Se Ag Tl Zn

SAMPLE CONDITION UPON RECEIPT

No. of Containers	25
Temperature	on Ice
Custody Seals	Y N
Seals Intact	Y N
Preserved	Y N

	RELINQUISHED BY		SAMPLES RECEIVED BY	
①	Signature [signature]	Date 12/6/98	Signature [signature]	Date 12/6/98
	Printed Name DAVID GARDNER	Time 1528	Printed Name [illegible]	Time 1525
②	Signature	Date	Signature	Date
	Printed Name	Time	Printed Name	Time
③	Signature	Date	Signature	Date
	Printed Name	Time	Printed Name	Time

WHITE-LAB YELLOW-LAB PINK-CLIENT

Records

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	ARROW	DATE	10-20-98
ARRIVAL TIME	1230	DEPARTURE TIME	
SERVICED BY	DG CK		
SAMPLER MODEL NUMBER	900 MAX ~~FA0798MPC0~~	SAMPLER SERIAL/ ASSET NUMBER	FA0798MPC016010
PT SERIAL NUMBER/ ASSET NUMBER	E03990698	RAINGAGE SERIAL/ ASSET NUMBER	A11288

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	13.2 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	44 length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	4.5 depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	4.5"
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS No phone

Slope 0.03'/3'

Pipe diam = 96"

Intake tube set to 65'

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	BUTLER		DATE	10/20/98	
ARRIVAL TIME	300	DEPARTURE TIME		SERVICED BY	DG CK
SAMPLER MODEL NUMBER	900 MAX		SAMPLER SERIAL/ ASSET NUMBER	FA 0798 MPC 016012	
PT SERIAL NUMBER/ ASSET NUMBER			RAINGAGE SERIAL/ ASSET NUMBER		

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	130 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	57 length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	7.63 depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	425 mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

Int 500 cf

NOTES / ACTIONS phone 930-7101

set intake tubing to 63'

Slope 0.01 / 3'

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	CITRUS	DATE	10/20/98
ARRIVAL TIME	138	DEPARTURE TIME	
SERVICED BY	DG CK		
SAMPLER MODEL NUMBER	900 MAX	SAMPLER SERIAL/ ASSET NUMBER	FA0798MPC016011
PT SERIAL NUMBER/ ASSET NUMBER	I0399 1698	RAINGAGE SERIAL/ ASSET NUMBER	A1287

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	13.2 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	31-35 length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	6.0"
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	480 mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Phone = 334-4814

Slope = 0.02'/3' = 0.0067 n=0.018

Pipe Diam = 42"

Intake tubing set to 40' (31' actual)

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	IND PARK		DATE	10-20-98	
ARRIVAL TIME	930	DEPARTURE TIME		SERVICED BY	DG CK
SAMPLER MODEL NUMBER	900 MAX		SAMPLER SERIAL/ ASSET NUMBER	FA0798MPC016009	
PT SERIAL NUMBER/ ASSET NUMBER			RAINGAGE SERIAL/ ASSET NUMBER	A1283 (2149)	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	13.0 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	~~24~~ 26 length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	5.5"
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	480 mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS PHONE 772-0842

PIPE DIAM = 54"

SLOPE $\frac{.04'}{3'}$ 0.013'/'

Date: 10/08/1998

STORM EVENT LOG SHEET

SITE:	BUTLER

DATE:	10/26/98	TIME:	1400

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: (YES) NO

IF NO, WHAT WERE PROBLEM(S):

insufficient flow
rain = 0.71"
flow = ~~4~~ (C = 0.05)

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	—
Effluent Temperature	—

GRAB SAMPLES: Take grab samples from discharge only!

Grab Samples Taken?	YES	(NO)
Preservatives added to bottles?	YES	(NO)

STORM EVENT LOG SHEET

SITE:	CITRUS

DATE:	10/26/98	TIME:	1255

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: (YES) NO

IF NO, WHAT WERE PROBLEM(S):

FIELD PARAMETERS:

Sampler Start Time	1550 10/25/98
Effluent pH	8.85
Effluent Temperature	19.1

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	(NO)
Preservatives added to bottles?	YES	(NO)

too late to take grab samples – storm occurred on Sunday 10/25/98.

STORM EVENT LOG SHEET

SITE:	INDPK		
DATE:	10/26/98	TIME:	1330

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

- pumped too much sample
- inlet filled w/ debris
- battery voltage low 11.5-11.7v

0.66" rain / ≈ 8800 c.f. runoff (C = 0.12)

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	—
Effluent Temperature	—

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	ARROW			DATE	11-4-98
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Bob Dave
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	13.4 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS battery may be low

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	BUTLER		DATE	11-4-98	
ARRIVAL TIME	1230	DEPARTURE TIME		SERVICED BY	DG BU
SAMPLER MODEL NUMBER	900 MAX		SAMPLER SERIAL/ ASSET NUMBER		
PT SERIAL NUMBER/ ASSET NUMBER			RAINGAGE SERIAL/ ASSET NUMBER		

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	13.4 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS cleaned & reset

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	CITRUS			DATE	11-4-98
ARRIVAL TIME	1330	DEPARTURE TIME	1340	SERVICED BY	RN DC
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	12.6 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	INDPK		DATE	11-4-98	
ARRIVAL TIME	1130	DEPARTURE TIME		SERVICED BY	DG BN
SAMPLER MODEL NUMBER	900 MAX		SAMPLER SERIAL/ ASSET NUMBER		
PT SERIAL NUMBER/ ASSET NUMBER			RAINGAGE SERIAL/ ASSET NUMBER		

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	13.2 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS replaced battery & bottles

Date: 10/08/1998

STORM EVENT LOG SHEET

SITE:	Citrus		
DATE:	12-2-98	TIME:	0950

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: (YES) NO

IF NO, WHAT WERE PROBLEM(S):

0.28" rain – not much runoff

samples not collected

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	
Effluent Temperature	

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

STORM EVENT LOG SHEET

SITE:	ARROW

DATE:	12-6-98	TIME:	1600

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES (NO)

IF NO, WHAT WERE PROBLEM(S):

sampler didn't start
appeared to be a lot of rain

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	
Effluent Temperature	

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

STORM EVENT LOG SHEET

SITE:	BUTLER

DATE:	12/6/98	TIME:	

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

Jammed distributor.

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	
Effluent Temperature	

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

STORM EVENT LOG SHEET

SITE:	CITRUS

DATE:	12/6/95	TIME:	1615

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

_____

_____

_____

_____

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	8.52
Effluent Temperature	11.6 C

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

STORM EVENT LOG SHEET

SITE:	Ind Park

DATE:	12-6-98	TIME:	1535

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES (NO)

IF NO, WHAT WERE PROBLEM(S):

Battery failure - no samples collected!

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	
Effluent Temperature	

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Glendale ARROW			DATE	12-7-98
ARRIVAL TIME	1315	DEPARTURE TIME		SERVICED BY	RWN DEC
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE plugged funnel	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS - raingage plugged - cleaned out funnel
- downloaded data
- cleaned intake tubing w/ liquinox / water

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	GLENDALE BUTLER			DATE	12-7-98
ARRIVAL TIME	1400	DEPARTURE TIME		SERVICED BY	RWR / DEG
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	FA 0798MPC 016012
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	12.5V volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS cleaned intake tubing w/ Liquinox/water
Jammed distributor - unable to repair in field
removed head for office evaluation

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	GLENDALE CITRUS			DATE	12-7-98
ARRIVAL TIME	1340	DEPARTURE TIME		SERVICED BY	RWN DEG
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	11.7v volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE missing funnel screen	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS - cleaned intake tubing w/ Liquinox/water
- downloaded data

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	GLENDALE IND PIL			DATE	12-7-98
ARRIVAL TIME	1240	DEPARTURE TIME		SERVICED BY	RWN / DEG
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	12.2 old 13.6 new
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS raingage plugged - cleaned out funnel
- downloaded data
- reset sampler

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Glendale Butler	DATE	12-10-98
ARRIVAL TIME	1030	DEPARTURE TIME	
SERVICED BY	DEC RWN		
SAMPLER MODEL NUMBER	900	SAMPLER SERIAL/ ASSET NUMBER	0798MPC016012
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED/ SERVICED/ CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	12.5 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	5.80"
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	460 mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS
- calibrate depth sensor @ 5.80" inches
- calibrated sample vol.

STORM EVENT LOG SHEET

SITE:	Citrus Park

DATE:	12/15/98	TIME:	0945

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

Station was sampling, Left alone
Took Six samples, two were Low.

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	
Effluent Temperature	

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

STORM EVENT LOG SHEET

SITE:	Skunk Creek Sports Complex

DATE:	12/19/98	TIME:	0925

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

.07 precip. program running. No sample taken. Everything looks good.

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	
Effluent Temperature	

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

STORM EVENT LOG SHEET

SITE:	Butler Park

DATE:	12/15/98	TIME:	1000

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

Sampler in process of taking samples. Water looks too low to collect much. a weir will be needed to get better results.

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	
Effluent Temperature	

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

STORM EVENT LOG SHEET

SITE:	CITRUS

DATE:	12/15	TIME:	1500

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

0.11" rain - samples not taken

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	
Effluent Temperature	

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

STORM EVENT LOG SHEET

SITE:	Industrial Park

DATE:	12/15/98	TIME:	0850

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

01 precip recorded as of 0850. No flow in channel. Left alone.

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	
Effluent Temperature	

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken?	YES	NO
Preservatives added to bottles?	YES	NO

WATER QUALITY SAMPLE MAINTENANCE LOG SHEET

SITE	Skonk Creek (Arrow)	DATE	12/17/98
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	(Rew)
SAMPLER MODEL NUMBER		SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
old 12.4 BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	(YES) NO	(YES) NO	13.4 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Change Battery, reinstall Sample bottles.

Restart program.

(Rew)

Date: 10/08/1998

WATER QUALITY SAMPLE MAINTENANCE LOG SHEET

SITE	Butler Park	DATE	12/17/98
ARRIVAL TIME		DEPARTURE TIME	
SERVICED BY	Rw		
SAMPLER MODEL NUMBER		SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
old 11.4 BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	13.2 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS change battery, install sample bottles, restart program

RW

Date: 10/08/1998

WATER QUALITY SAMPLE MAINTENANCE LOG SHEET

SITE	Citrus	DATE	12/17/98
ARRIVAL TIME		DEPARTURE TIME	
SERVICED BY	RCW		
SAMPLER MODEL NUMBER		SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
old 12.2 BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	13.2 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Change battery, restart program and reinstall sample bottles.

RCW

Date: 10/08/1998

WATER QUALITY SAMPLE MAINTENANCE LOG SHEET

SITE	Industrial Park	DATE	12/17/98
ARRIVAL TIME		DEPARTURE TIME	
SERVICED BY	RWM		
SAMPLER MODEL NUMBER		SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED/ SERVICED/ CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE old 11.9 #	YES NO	GOOD FAIR POOR	YES NO	YES NO	13.4 volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Battery change, normal maintenance schedule

Restart program Everything looks good

RWM

Date: 10/08/1998

WATER QUALITY SAMPLE MAINTENANCE LOG SHEET

SITE	Skunk Creek Allen			DATE	12/2/98
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	New
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS old 12.8 # 14

New 13.2 # 01

Site is ready for any storms

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Butler Park			DATE	12/23/98
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Rey
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Site ready for any storm

11 old # 12.7

05 new # 13.4

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Citrus Park	DATE	12/3/98
ARRIVAL TIME		DEPARTURE TIME	
		SERVICED BY	NW
SAMPLER MODEL NUMBER		SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS

old # 08 12.2

new # 06 13.4

Site is ready for any storm

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Industrial Park		DATE	12/23/98	
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Rev
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS #13 12.5 ok

#07 13.1 rev

Site is ready for any storms.

Date: 10/08/1998

WATER QUALITY SAMPLE MAINTENANCE LOG SHEET

SITE	ARROL (S/Conk Creek)			DATE	12/28/98
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	(RW) (CFK)
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL Install Panel	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	14.2
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Installed Solar Panel + Battery for phone.

Date: 10/08/1998

WATER QUALITY SAMPLE MAINTENANCE LOG SHEET

SITE	Butler Park	DATE	12/28/98
ARRIVAL TIME		DEPARTURE TIME	
SERVICED BY	Rem		
SAMPLER MODEL NUMBER		SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE Battery change	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS change battery and check site, inspect station

WATER QUALITY SAMPLE MAINTENANCE LOG SHEET

SITE	Citrus Park	DATE	12/28/98
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Rey
SAMPLER MODEL NUMBER		SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE Battery change	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Inspect Site, Station change battery

WATER QUALITY SAMPLF MAINTENANCE LOG SHEET

SITE	Industrial Park			DATE	12/28/98
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Battery changed, site check

Date: 10/08/1998

WATER QUALITY SAMPLE MAINTENANCE LOG SHEET

SITE	Butler Park	DATE	12/30/98
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Rey
SAMPLER MODEL NUMBER		SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL Installed Panel	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Installed Panel and 12 volt 40 Amp Battery

Rey

Date: 10/08/1998

WATER QUALITY SAMPL(MAINTENANCE LOG SHEET

SITE	Citrus Park	DATE	12/30/98
ARRIVAL TIME		DEPARTURE TIME	
		SERVICED BY	Rey
SAMPLER MODEL NUMBER		SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER		RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL Installed Panel	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Installed Solar Panel & 12 volt 40 Amp battery

Rey

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Industrial Park			DATE	12/30/98
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Ray
SAMPLER MODEL NUMBER				SAMPLER SERIAL/ ASSET NUMBER	
PT SERIAL NUMBER/ ASSET NUMBER				RAINGAGE SERIAL/ ASSET NUMBER	

	CHECKED / SERVICED / CALIBRATED	CONDITION	REPLACED?	NEEDS REPLACING?	NOTES
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	volts
SOLAR PANEL Install Panel	YES NO N/A	GOOD FAIR POOR	YES NO	YES NO	
CONNECTION CABLES	YES NO	GOOD FAIR POOR	YES NO	YES NO	
RAINGAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	
SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	length (feet)
SAMPLER PUMP TUBING	YES NO	GOOD FAIR POOR	YES NO	YES NO	
DEPTH SENSOR	YES NO	GOOD FAIR POOR	YES NO	YES NO	depth (inch)
CALIBRATE DEPTH SENSOR	YES NO	GOOD FAIR POOR	N/A	N/A	
CALIBRATE SAMPLE VOLUME	YES NO	GOOD FAIR POOR	N/A	N/A	mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS Install Panel and heavy duty 12 volt 40 Amp battery

Ray

Date: 10/08/1998