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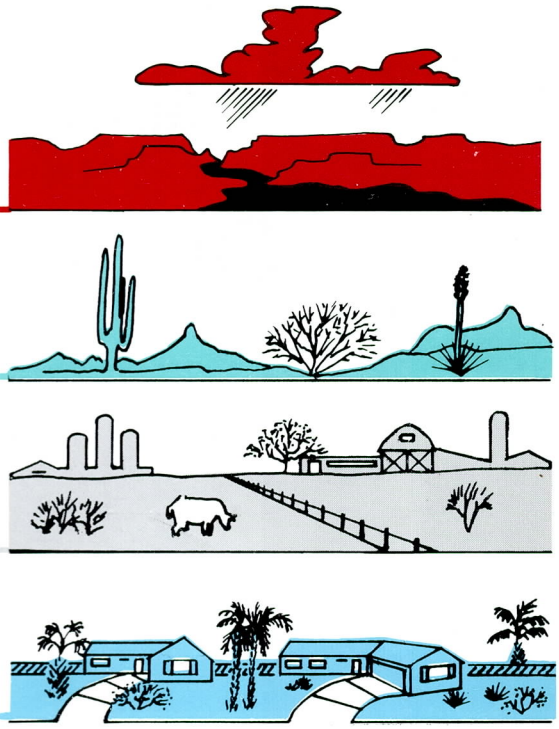

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Stormwater Quality Report
City of Glendale, Arizona

Third Quarter

May 5, 1999

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Stormwater Quality Report

Third Quarter, Sampling Year 1999

January 1 through March 31, 1999

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For
City of Glendale, Arizona

May 5, 1999

Stormwater Quality Report
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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 winter 1999 seasonal rainfall, January 1 through March 31, 1999.

Data is presented in the following manner. First, only data from the winter of 1999 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 January 1 through March 31, 1999. Due to persistent strong La Nina weather conditions, there were few opportunities to collect samples during this period.

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 February 4, 1999

This storm event produced rainfall over much of the Glendale area. Rainfall totals ranged from 0.26 inches to 0.41 inches. The following table shows rainfall totals for each sampler site.

Storm of February 4, 1999

SITE	RAINFALL (inches)	SAMPLES COLLECTED
ARROW	0.26	YES
BUTLER	0.41	YES
CITRUS	0.31	NO (1)
INDUSTRIAL PARK	0.31	YES
OLIVE	0.20	NO (2)

(1) Insufficient runoff to collect samples
(2) USGS did not sample this event.

All equipment worked well during this event. Grab samples were taken at the sampled sites from the discharge. There was adequate runoff at all sites except CITRUS where, despite 0.31 inch of rain, runoff was minimal. The 71st Avenue channel had little flow during the event.

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
CITRUS	2/4/99	0.31	Insufficient runoff
OLIVE	2/4/99	0.20	USGS did not sample
INDPK	3/16/99	0.40	Non representative rainfall... occurred too quickly
OLIVE	3/16/99	0.33	Non representative rainfall... occurred too quickly

Both Industrial Park and Olive experienced enough rainfall to be representative, the rainfall fell too quickly. Winter storms must have a minimum duration of 5.2 hours. Rainfall at both sites was well below that criterion with the total rain falling within 1.5 hours.

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 continues to work well. There were no significant maintenance activities at this site during the January 1 – March 31, 1999 period. The battery is changed and recharged approximately every two weeks. The cellular telephone at this site drains batteries at a rate greater that the solar panel is able to charge.

BUTLER – near 56th Drive and Orchid Lane

The equipment continues to work well. No significant maintenance activities occurred at this site during the review period.

A small weir was added approximately fifty feet downstream from the equipment box. The weir allows water to back up and provide enough head for the intake tubing to work effectively. There are slots cut into the weir allowing water to drain after an event and to allow dry weather flows to pass through.

CITRUS – near Grovers and 71st Avenue

The equipment continues to work well. There were no significant maintenance activities at this site during the review period.

INDUSTRIAL PARK – near New River channel

No significant maintenance activities are reported at this site during the review period. Equipment continues to work well.

OLIVE – 67th Avenue north of Olive Avenue

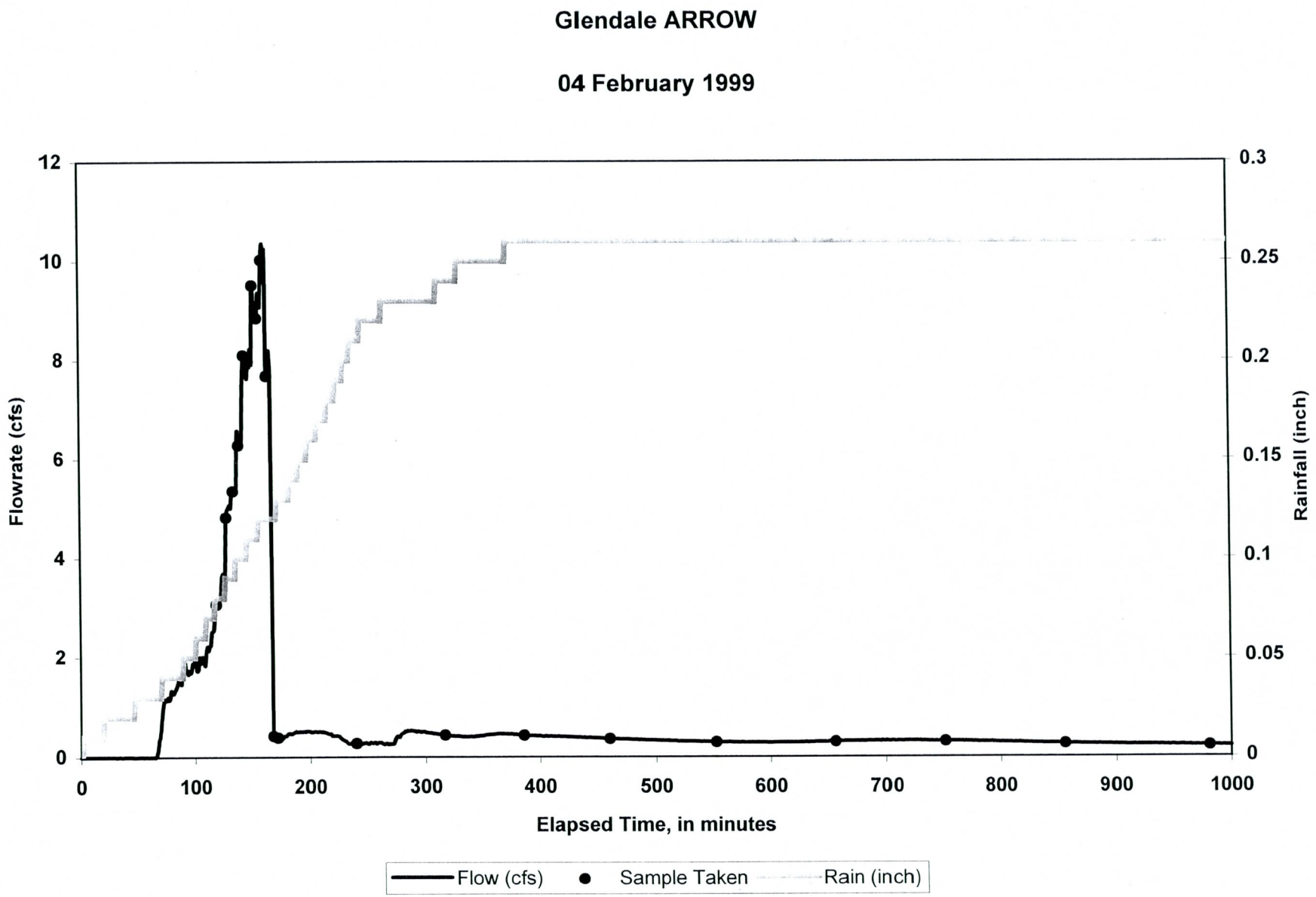
The USGS began sampling at this site during March 1999. However, they did not sample the storm of February 4, 1999. The USGS reports no equipment problems at this site during the review period.

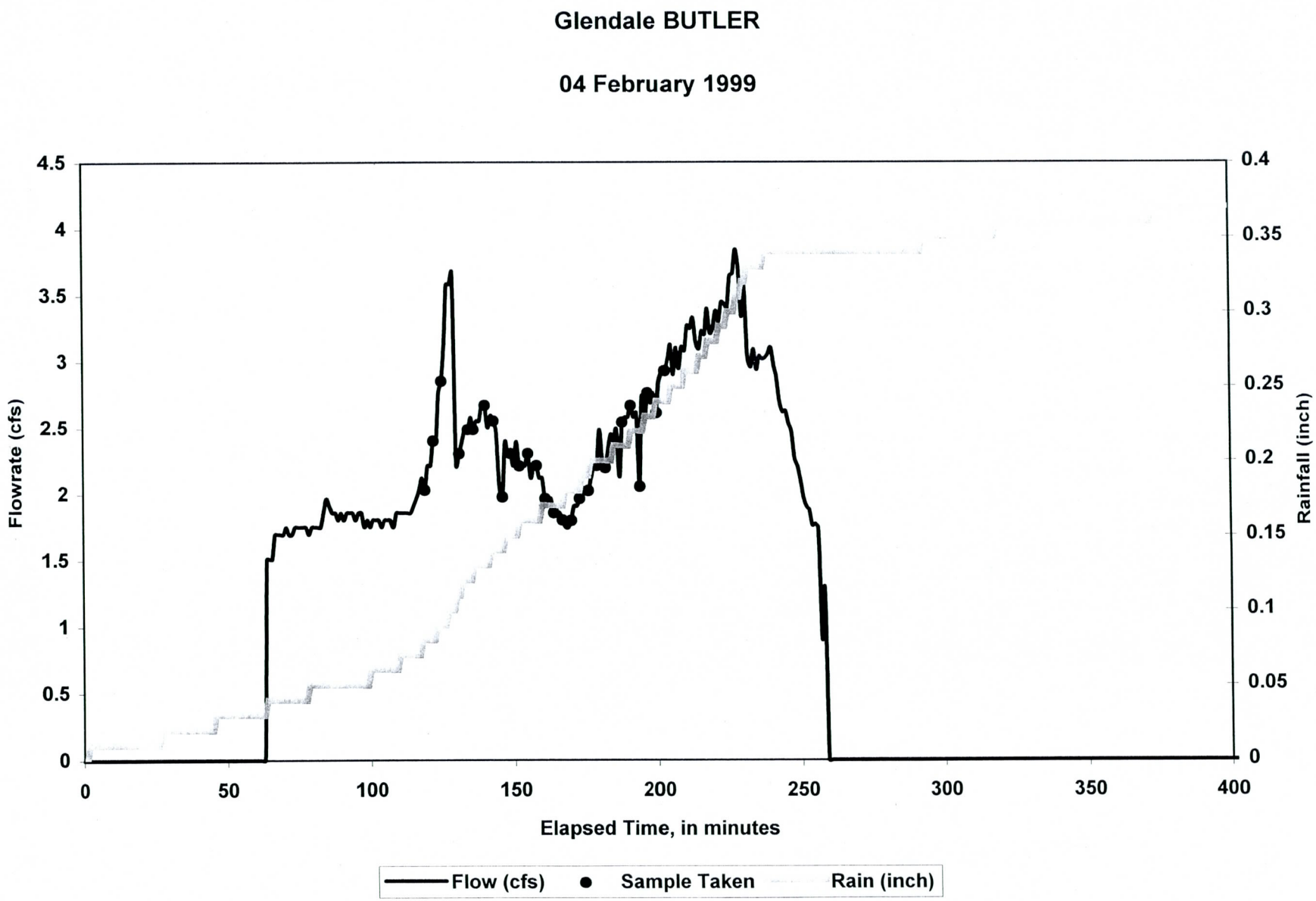
Data from Winter 1999

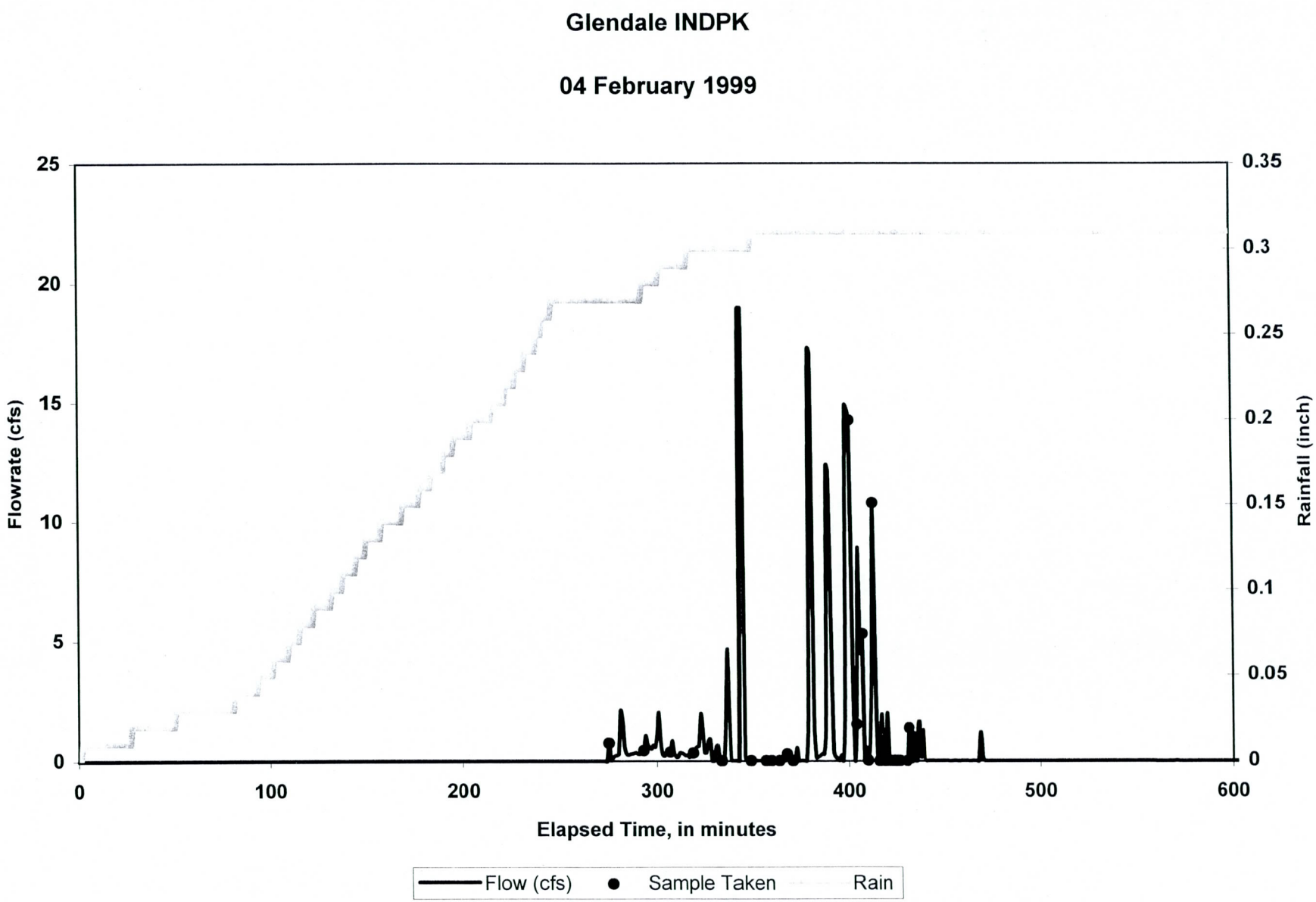
The remainder of this report contains data. The following data are included:

- 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
04 February 1999
Flowrate (cfs)
Rainfall (inch)
Elapsed Time, in minutes
0
2
4
6
8
10
12
0
0.05
0.1
0.15
0.2
0.25
0.3
0
100
200
300
400
500
600
700
800
900
1000
Flow (cfs)
Sample Taken
Rain (inch)


Glendale BUTLER
04 February 1999
Flowrate (cfs)
Rainfall (inch)
Elapsed Time, in minutes
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0
50
100
150
200
250
300
350
400
Flow (cfs)
Sample Taken
Rain (inch)


Glendale INDPK
04 February 1999
Flowrate (cfs)
Rainfall (inch)
Elapsed Time, in minutes
0
5
10
15
20
25
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0
100
200
300
400
500
600
Flow (cfs)
Sample Taken
Rain

Rainfall Data

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								0.26				
5												
6						0.39						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.07						
16									0.12			
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	0.26	0.12	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								0.26				
5												
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.08						
16									0.12			
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	0.26	0.12	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								0.41				
5												
6						0.39						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.11						
16									0.13			
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	0.41	0.13	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								0.31				
5												
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15												
16									0.40			
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	0.31	0.40	0.00	0.00	0.00

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								0.18				
5								0.02				
6						0.36						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.13						
16									0.33			
17												
18												
19												
20												
21				0.05								
22												
23												
24												
25				0.32			0.03					
26												
27												
28					0.05							
29												
30				0.31								
31												
Month Total	0.00	0.00	0.00	0.68	0.05	0.77	0.03	0.20	0.33	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								0.24				
5								0.08				
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15												
16									0.43			
17												
18												
19												
20												
21												
22												
23												
24												
25				0.20			0.04					
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	0.04	0.32	0.43	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								0.20				
5								0.08				
6						0.31		0.04				
7												
8												
9												
10												
11												
12												
13												
14												
15						0.12						
16									0.08			
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	0.32	0.08	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								0.24				
5								0.12				
6						0.31						
7												
8												
9												
10												
11												
12												
13												
14												
15						0.04						
16									0.04			
17									0.04			
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	0.36	0.08	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	02/04/1999
Time	1750
Representative Storm Event	Y
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)	981
Storm Duration (minutes)	373
Runoff Sampled (cubic feet) (RUN)	41,300
Total Storm Runoff (cubic feet)	44,000
Instantaneous Discharge (cfs)	10.4
Preceeding Dry Period (days) (ANT)	49
Total Storm Rainfall (inch)	0.26
Rainfall Sampled (inch) (TRN)	0.26
Maximum 5-minute rain intensity (MAX5)	0.12
Sample Temperature (deg. C)	4
Effluent Temperature (deg. C)	13.8
Ambient Temperature (deg. C)	NM
Barometric Pressure (mm Hg)	NM
pH, Effluent (standard units)	8.7
pH, Lab (standard units)	--
Specific Conductance, FIELD (us/cm)	--
Specific Conductance, LAB (us/cm)	--
Oxygen Dissolved (% saturation)	--
Oxygen Dissolved (mg/l)	--
Electrical Conductivity (umhos/cm)	--
BOD5 (mg/l)	14
COD High Level (mg/l)	74
Chloride (mg/l as Cl)	8
Cyanide Total (mg/l as Cn)	<0.01
Fecal Coliform (MPN/100mL)	500
Fecal Streptococci (MPN/100mL)	16000
Solids Residue at 180 Deg. C (TDS) (mg/l)	146
Residue, Total at 105 Deg. C (TSS) (mg/l)	106
Nitrogen No2 + No3, Total (mg/l as N)	0.25
TKN Nitrogen (mg/l as N)	5.19
Nitrogen, Ammonia + Organic, Total (mg/l as N)	5.19
Nitrogen Nitrate Total (mg/l as N)	0.18
Nitrogen Nitrite Total (mg/l as N)	0.07
Nitrogen Ammonia Total (mg/l as N)	2.63
Nitrogen Organic Total (mg/l as N)	2.56
Phosphorous Total (mg/l as P)	0.91
Phosphorous Dissolved (mg/l as P)	5.19
Phosphorous Ortho (mg/l as P)	0.17
Sulfate Dissolved (mg/l)	18
Hexavalent Chromium Total (mg/l)	--

Glendale ARROW

Skunk Creek near 79th Avenue

Date of Sampling	02/04/1999
Phenols Total Recoverable (ug/l)	13
Oil and Grease Total Recoverable (mg/l)	9
Organic Carbon, Total (mg/l)	51.2
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)	48
Silica Dissolved (mg/l as SiO2)	--
Hardness (mg/l)	64
Antimony (ug/l as Sb)	<5
Antimony Dissolved (ug/l as Sb)	<4
Arsenic Total (ug/l as As)	9
Arsenic Dissolved (ug/l as As)	7
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)	0.7
Cadmium Dissolved (ug/l as Cd)	0.5
Calcium Dissolved (mg/l as Ca)	--
Chromium Total Recoverable (ug/l as Cr)	4.6
Chromium Dissolved (ug/l as Cr)	2.9
Cobalt Dissolved (ug/l as Co)	--
Copper, Total Recoverable, (ug/l as Cu)	15
Copper, Dissolved, (ug/l as Cu)	<15
Iron, Dissolved, (ug/l as Fe)	--
Lead, Total Recoverable, (ug/l as Pb)	9
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)	10
Nickel, Dissolved, (ug/l as Ni)	6
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)	310
Zinc, Dissolved, (ug/l as Zn)	70

Glendale ARROW

Skunk Creek near 79th Avenue

Date of Sampling	02/04/1999
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)	<8
1,1,1,2-Tetrachloroethane, Total,(ug/l)	--
Tetrachloroethene, PCE, Total, (ug/l)	<8
1,1,1- Trichloroethane, Total, (ug/l)	<8
1,1,2- Trichloroethane, Total, (ug/l)	<8
Trichloroethene, Total, (ug/l)	<8
1,1- Dichloroethane, Total, (ug/l)	<8
1,1- Dichloroethene, Total, (ug/l)	<8
1,2- Dichloroethane, Total, (ug/l)	<8
1,2- Dichloropropane, Total, (ug/l)	<8
2- Chloroethylvinyl Ether, Total, (ug/l)	<8
cis-1,3-Dichloropropene, (ug/l)	<8
trans-1,2- Dichloroethene, (ug/l)	<8

Glendale ARROW

Skunk Creek near 79th Avenue

Date of Sampling	02/04/1999
trans-1,3- Dichloropropene, (ug/l)	<8
Benzene, Total, (ug/l)	<8
Bromodichloromethane, Total, (ug/l)	<8
Bromoform, Total, (ug/l)	<8
Carbon Tetrachloride, Total, (ug/l)	<8
Chlorobenzene, Total, (ug/l)	<8
Chloroethane, (ug/l)	<20
Chloroform, Total, (ug/l)	<8
Ethyl-Benzene, Total, (ug/l)	<8
Methylene Chloride, Total, (ug/l)	<8
Toluene, Total, (ug/l)	<8
Trichlorofluoromethane, Total, (ug/l)	<20
Vinyl Chloride, Total, (ug/l)	<20
Chlorodibromomethane, Total, (ug/l)	<8
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)	--
Acetone, Total, (ug/l)	<100
2-Butanone, (ug/l)	<40
Carbon Disulfide, Total, (ug/l)	<40
1,2 Dichloroethene, Total, (ug/l)	<8
Xylenes, Total, (ug/l)	<8
2-Hexanone, Total, (ug/l)	<40
Styrene, Total, (ug/l)	<8
Acrolein, Total, (ug/l)	<200
Acrylonitirile, Total, (ug/l)	<40
Bromobenzene, Water Whole, Total, (ug/l)	--
1,3-Dichloropropane, Water Whole, Total, (ug/l)	<8
Methyl Bromide, Total, (ug/l)	<20
Methyl Chloride, Total, (ug/l)	<20
Parachloro Toluene, Total, (ug/l)	--
Dibromoethane, Total, (ug/l)	--
Acenaphthene, Total, (ug/l)	<10
Acenaphthylene, Total, (ug/l)	<10
Anthracene, Total, (ug/l)	<10
Benzidine, Total, (ug/l)	<50
Benzoic Acid, Total, (ug/l)	<10
Benzo (a) Anthracene, Total, (ug/l)	<10
Benzo (b) Fluoranthene, Total, (ug/l)	<10
Benzo (k) Fluoranthene, Total, (ug/l)	<10
Benzo (ghi) Perylene, Total, (ug/l)	<10
Benzo (a) Pyrene, Total, (ug/l)	<10
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)	100
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	<10
Butyl Benzyl Phthalate, Total, (ug/l)	<10
2-Chloronapthalene, Total, (ug/l)	<10
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	02/04/1999
Chrysene, Total, (ug/l)	<10
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	<10
Di-N-Butyl Phthalate, Total, (ug/l)	<10
1,3- Dichlorobenzene, Total, (ug/l)	<10
1,4- Dichlorobenzene, Total, (ug/l)	<10
1,2- Dichlorobenzene, Total, (ug/l)	<10
3,3'- Dichlorobenzidine, Total, (ug/l)	<10
2,4- Dichlorophenol, Total, (ug/l)	<10
Diethyl Phthalate, Total, (ug/l)	<10
2,4- Dimethylphenol, Total, (ug/l)	<10
Dimethyl Phthalate, Total, (ug/l)	<10
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	<10
2,4- Dinitrophenol, Total, (ug/l)	<10
2,4- Dinitrotoluene, Total, (ug/l)	<10
2,6- Dinitrotoluene, Total, (ug/l)	<10
Di-N-Octyl-Phthalate, Total, (ug/l)	<10
Fluoranthene, Total, (ug/l)	<10
Fluorene, Total, (ug/l)	<10
Hexachlorobenzene, Total, (ug/l)	<10
Hexachlorobutadiene, Total, (ug/l)	<10
Hexachlorocyclopentadiene, Total, (ug/l)	<10
Hexachloroethane, Total, (ug/l)	<10
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	<10
Isophorone, Total, (ug/l)	<10
Naphthalene, Total, (ug/l)	<10
Nitrobenzene, Total, (ug/l)	<10
2-Nitrophenol, Total, (ug/l)	<10
4-Nitrophenol, Total, (ug/l)	<10
N-Nitrosodiphenylamine, Total, (ug/l)	<10
N-Nitrosodi-N-Propylamine, Total, (ug/l)	<10
Pentachlorophenol, Total, (ug/l)	<10
Phenanthrene, Total, (ug/l)	<10
Phenol, Total, (ug/l)	<10
Pyrene, Total, (ug/l)	<10
1,2,4-Trichlorobenzene, Total, (ug/l)	<10
2,4,5- Trichlorophenol, Total, (ug/l)	<10
2,4,6- Trichlorophenol, Total, (ug/l)	<10
N-Nitrosodimethylamine, Total, (ug/l)	<10
1,2- Diphenylhydrazine, Total, (ug/l)	<10
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	02/04/1999
Time	1733
Representative Storm Event	Y
Agency Collecting Sample	FCD
Agency Analyzing Sample	BOLIN
Drainage Area (acres) (DA)	30
Impervious Area (acres) (IA)	--
Land Use - Residential	30
Land Use - Commercial	0
Land Use - Industrial	0
Land Use - Undeveloped	0
Sampling Duration (minutes) (DRN)	203
Storm Duration (minutes)	373
Runoff Sampled (cubic feet) (RUN)	18,000
Total Storm Runoff (cubic feet)	27,500
Instantaneous Discharge (cfs)	3.8
Preceeding Dry Period (days) (ANT)	49
Total Storm Rainfall (inch)	0.37
Rainfall Sampled (inch) (TRN)	0.36
Maximum 5-minute rain intensity (MAX5)	0.24
Sample Temperature (deg. C)	4
Effluent Temperature (deg. C)	12.5
Ambient Temperature (deg. C)	NM
Barometric Pressure (mm Hg)	NM
pH, Effluent (standard units)	9.2
pH, Lab (standard units)	--
Specific Conductance, FIELD (us/cm)	--
Specific Conductance, LAB (us/cm)	--
Oxygen Dissolved (% saturation)	--
Oxygen Dissolved (mg/l)	--
Electrical Conductivity (umhos/cm)	--
BOD5 (mg/l)	27
COD High Level (mg/l)	87
Chloride (mg/l as Cl)	7
Cyanide Total (mg/l as Cn)	<0.01
Fecal Coliform (MPN/100mL)	17000
Fecal Streptococci (MPN/100mL)	2400
Solids Residue at 180 Deg. C (TDS) (mg/l)	100
Residue, Total at 105 Deg. C (TSS) (mg/l)	34
Nitrogen No2 + No3, Total (mg/l as N)	0.85
TKN Nitrogen (mg/l as N)	4.47
Nitrogen, Ammonia + Organic, Total (mg/l as N)	4.47
Nitrogen Nitrate Total (mg/l as N)	0.85
Nitrogen Nitrite Total (mg/l as N)	<0.1
Nitrogen Ammonia Total (mg/l as N)	1.47
Nitrogen Organic Total (mg/l as N)	3
Phosphorous Total (mg/l as P)	0.46
Phosphorous Dissolved (mg/l as P)	0.12
Phosphorous Ortho (mg/l as P)	0.23
Sulfate Dissolved (mg/l)	7
Hexavalent Chromium Total (mg/l)	--

Glendale BUTLER

Orchid Lane and 56th Drive

Date of Sampling	02/04/1999
Phenols Total Recoverable (ug/l)	18
Oil and Grease Total Recoverable (mg/l)	11
Organic Carbon, Total (mg/l)	18.1
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)	46
Silica Dissolved (mg/l as SiO2)	--
Hardness (mg/l)	44
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)	8
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)	0.4
Cadmium Dissolved (ug/l as Cd)	0.4
Calcium Dissolved (mg/l as Ca)	--
Chromium Total Recoverable (ug/l as Cr)	4.1
Chromium Dissolved (ug/l as Cr)	3.8
Cobalt Dissolved (ug/l as Co)	--
Copper, Total Recoverable, (ug/l as Cu)	<15
Copper, Dissolved, (ug/l as Cu)	16
Iron, Dissolved, (ug/l as Fe)	--
Lead, Total Recoverable, (ug/l as Pb)	8
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)	6.8
Nickel, Dissolved, (ug/l as Ni)	4.5
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)	290
Zinc, Dissolved, (ug/l as Zn)	30

Glendale BUTLER

Orchid Lane and 56th Drive

Date of Sampling	02/04/1999
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)	<8
1,1,1,2-Tetrachloroethane, Total,(ug/l)	--
Tetrachloroethene, PCE, Total, (ug/l)	<8
1,1,1- Trichloroethane, Total, (ug/l)	<8
1,1,2- Trichloroethane, Total, (ug/l)	<8
Trichloroethene, Total, (ug/l)	<8
1,1- Dichloroethane, Total, (ug/l)	<8
1,1- Dichloroethene, Total, (ug/l)	<8
1,2- Dichloroethane, Total, (ug/l)	<8
1,2- Dichloropropane, Total, (ug/l)	<8
2- Chloroethylvinyl Ether, Total, (ug/l)	<8
cis-1,3-Dichloropropene, (ug/l)	<8
trans-1,2- Dichloroethene, (ug/l)	<8

Glendale BUTLER

Orchid Lane and 56th Drive

Date of Sampling	02/04/1999
trans-1,3- Dichloropropene, (ug/l)	<8
Benzene, Total, (ug/l)	<8
Bromodichloromethane, Total, (ug/l)	<8
Bromoform, Total, (ug/l)	<8
Carbon Tetrachloride, Total, (ug/l)	<8
Chlorobenzene, Total, (ug/l)	<8
Chloroethane, (ug/l)	<20
Chloroform, Total, (ug/l)	<8
Ethyl-Benzene, Total, (ug/l)	<8
Methylene Chloride, Total, (ug/l)	<8
Toluene, Total, (ug/l)	<8
Trichlorofluoromethane, Total, (ug/l)	<20
Vinyl Chloride, Total, (ug/l)	<20
Chlorodibromomethane, Total, (ug/l)	<8
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)	--
Acetone, Total, (ug/l)	<100
2-Butanone, (ug/l)	<40
Carbon Disulfide, Total, (ug/l)	<40
1,2 Dichloroethene, Total, (ug/l)	<8
Xylenes, Total, (ug/l)	<8
2-Hexanone, Total, (ug/l)	<40
Styrene, Total, (ug/l)	<8
Acrolein, Total, (ug/l)	<200
Acrylonitirile, Total, (ug/l)	<40
Bromobenzene, Water Whole, Total, (ug/l)	--
1,3-Dichloropropane, Water Whole, Total, (ug/l)	<8
Methyl Bromide, Total, (ug/l)	<20
Methyl Chloride, Total, (ug/l)	<20
Parachloro Toluene, Total, (ug/l)	--
Dibromoethane, Total, (ug/l)	--
Acenaphthene, Total, (ug/l)	<5
Acenaphthylene, Total, (ug/l)	<5
Anthracene, Total, (ug/l)	<5
Benzidine, Total, (ug/l)	<5
Benzoic Acid, Total, (ug/l)	9.1
Benzo (a) Anthracene, Total, (ug/l)	<5
Benzo (b) Fluoranthene, Total, (ug/l)	<5
Benzo (k) Fluoranthene, Total, (ug/l)	<5
Benzo (ghi) Perylene, Total, (ug/l)	<5
Benzo (a) Pyrene, Total, (ug/l)	<5
Benzyl Alcohol, Total, (ug/l)	<5
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	<5
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	<5
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	<5
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	9.4
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	<5
Butyl Benzyl Phthalate, Total, (ug/l)	<5
2-Chloronapthalene, Total, (ug/l)	<5
2-Chlorophenol, Total, (ug/l)	<5
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	<5

Glendale BUTLER

Orchid Lane and 56th Drive

Date of Sampling	02/04/1999
Chrysene, Total, (ug/l)	<5
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	<5
Di-N-Butyl Phthalate, Total, (ug/l)	<5
1,3- Dichlorobenzene, Total, (ug/l)	<5
1,4- Dichlorobenzene, Total, (ug/l)	<5
1,2- Dichlorobenzene, Total, (ug/l)	<5
3,3'- Dichlorobenzidine, Total, (ug/l)	<5
2,4- Dichlorophenol, Total, (ug/l)	<5
Diethyl Phthalate, Total, (ug/l)	<5
2,4- Dimethylphenol, Total, (ug/l)	<5
Dimethyl Phthalate, Total, (ug/l)	<5
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	<5
2,4- Dinitrophenol, Total, (ug/l)	<5
2,4- Dinitrotoluene, Total, (ug/l)	<5
2,6- Dinitrotoluene, Total, (ug/l)	<5
Di-N-Octyl-Phthalate, Total, (ug/l)	<5
Fluoranthene, Total, (ug/l)	<5
Fluorene, Total, (ug/l)	<5
Hexachlorobenzene, Total, (ug/l)	<5
Hexachlorobutadiene, Total, (ug/l)	<5
Hexachlorocyclopentadiene, Total, (ug/l)	<5
Hexachloroethane, Total, (ug/l)	<5
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	<5
Isophorone, Total, (ug/l)	<5
Naphthalene, Total, (ug/l)	<5
Nitrobenzene, Total, (ug/l)	<5
2-Nitrophenol, Total, (ug/l)	<5
4-Nitrophenol, Total, (ug/l)	<5
N-Nitrosodiphenylamine, Total, (ug/l)	<5
N-Nitrosodi-N-Propylamine, Total, (ug/l)	<5
Pentachlorophenol, Total, (ug/l)	<5
Phenanthrene, Total, (ug/l)	<5
Phenol, Total, (ug/l)	<5
Pyrene, Total, (ug/l)	<5
1,2,4-Trichlorobenzene, Total, (ug/l)	<5
2,4,5- Trichlorophenol, Total, (ug/l)	<5
2,4,6- Trichlorophenol, Total, (ug/l)	<5
N-Nitrosodimethylamine, Total, (ug/l)	<5
1,2- Diphenylhydrazine, Total, (ug/l)	<5
Dichlorodifluoromethane, Total, (ug/l)	--
Parachloro-Meta-Cresol, Total, (ug/l)	--

CITRUS (Glendale)

Grovers and 71st Avenues

Glendale CITRUS

Grovers at 71st 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
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 CITRUS

Grovers at 71st 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 CITRUS

Grovers at 71st 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 CITRUS

Grovers at 71st 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 CITRUS

Grovers at 71st 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

INDPK (Glendale)

New River (west bank) between Glendale and Northern Avenues

Glendale INDPK

near Orangewood and 107th Avenue

Date of Sampling	02/04/1999
Time	2022
Representative Storm Event	Y
Agency Collecting Sample	FCD
Agency Analyzing Sample	BOLIN
Drainage Area (acres) (DA)	30
Impervious Area (acres) (IA)	--
Land Use - Residential	0
Land Use - Commercial	0
Land Use - Industrial	30
Land Use - Undeveloped	0
Sampling Duration (minutes) (DRN)	433
Storm Duration (minutes)	351
Runoff Sampled (cubic feet) (RUN)	15,000
Total Storm Runoff (cubic feet)	15,400
Instantaneous Discharge (cfs)	19
Preceeding Dry Period (days) (ANT)	49
Total Storm Rainfall (inch)	0.31
Rainfall Sampled (inch) (TRN)	0.31
Maximum 5-minute rain intensity (MAX5)	0.24
Sample Temperature (deg. C)	4
Effluent Temperature (deg. C)	11
Ambient Temperature (deg. C)	NM
Barometric Pressure (mm Hg)	NM
pH, Effluent (standard units)	7.03
pH, Lab (standard units)	NM
Specific Conductance, FIELD (us/cm)	--
Specific Conductance, LAB (us/cm)	--
Oxygen Dissolved (% saturation)	--
Oxygen Dissolved (mg/l)	--
Electrical Conductivity (umhos/cm)	--
BOD5 (mg/l)	17
COD High Level (mg/l)	71
Chloride (mg/l as Cl)	<5.0
Cyanide Total (mg/l as Cn)	<0.01
Fecal Coliform (MPN/100mL)	50000
Fecal Streptococci (MPN/100mL)	3000
Total Dissolved Solids (mg/l)	84
Total Suspended Solids (mg/l)	34
Nitrogen No2 + No3, Total (mg/l as N)	2
TKN Nitrogen (mg/l as N)	3.81
Nitrogen, Ammonia + Organic, Total (mg/l as N)	3.81
Nitrogen Nitrate Total (mg/l as N)	1.8
Nitrogen Nitrite Total (mg/l as N)	0.07
Nitrogen Ammonia Total (mg/l as N)	2.53
Nitrogen Organic Total (mg/l as N)	1.28
Phosphorous Total (mg/l as P)	0.55
Phosphorous Dissolved (mg/l as P)	0.12
Phosphorous Ortho (mg/l as P)	0.29
Sulfate Dissolved (mg/l)	--
Hexavalent Chromium Total (mg/l)	--

Glendale INDPK

near Orangewood and 107th Avenue

Date of Sampling	02/04/1999
Phenols Total Recoverable (ug/l)	5.8
Oil and Grease Total Recoverable (mg/l)	<5.0
Organic Carbon, Total (mg/l)	15.2
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)	48
Silica Dissolved (mg/l as SiO2)	--
Hardness (mg/l)	44
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)	<0.2
Cadmium Dissolved (ug/l as Cd)	<0.2
Calcium Dissolved (mg/l as Ca)	--
Chromium Total Recoverable (ug/l as Cr)	2
Chromium Dissolved (ug/l as Cr)	<1
Cobalt Dissolved (ug/l as Co)	--
Copper, Total Recoverable, (ug/l as Cu)	<15
Copper, Dissolved, (ug/l as Cu)	20
Iron, Dissolved, (ug/l as Fe)	--
Lead, Total Recoverable, (ug/l as Pb)	<5
Lead, Dissolved, (ug/l as Pb)	86
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)	5
Nickel, Dissolved, (ug/l as Ni)	2.1
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)	210
Zinc, Dissolved, (ug/l as Zn)	30

Glendale INDPK

near Orangewood and 107th Avenue

Date of Sampling	02/04/1999
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)	<8
1,1,1,2-Tetrachloroethane, Total,(ug/l)	--
Tetrachloroethene, PCE, Total, (ug/l)	<8
1,1,1- Trichloroethane, Total, (ug/l)	<8
1,1,2- Trichloroethane, Total, (ug/l)	<8
Trichloroethene, Total, (ug/l)	<8
1,1- Dichloroethane, Total, (ug/l)	<8
1,1- Dichloroethene, Total, (ug/l)	<8
1,2- Dichloroethane, Total, (ug/l)	<8
1,2- Dichloropropane, Total, (ug/l)	<8
2- Chloroethylvinyl Ether, Total, (ug/l)	<8
cis-1,3-Dichloropropene, (ug/l)	<8
trans-1,2- Dichloroethene, (ug/l)	<8

Glendale INDPK

near Orangewood and 107th Avenue

Date of Sampling	02/04/1999
trans-1,3- Dichloropropene, (ug/l)	<8
Benzene, Total, (ug/l)	<8
Bromodichloromethane, Total, (ug/l)	<8
Bromoform, Total, (ug/l)	<8
Carbon Tetrachloride, Total, (ug/l)	<8
Chlorobenzene, Total, (ug/l)	<8
Chloroethane, (ug/l)	<20
Chloroform, Total, (ug/l)	<8
Ethyl-Benzene, Total, (ug/l)	<8
Methylene Chloride, Total, (ug/l)	<8
Toluene, Total, (ug/l)	<8
Trichlorofluoromethane, Total, (ug/l)	<20
Vinyl Chloride, Total, (ug/l)	<20
Chlorodibromomethane, Total, (ug/l)	<8
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)	--
Acetone, Total, (ug/l)	<100
2-Butanone, (ug/l)	<40
Carbon Disulfide, Total, (ug/l)	<40
1,2 Dichloroethene, Total, (ug/l)	<8
Xylenes, Total, (ug/l)	<8
2-Hexanone, Total, (ug/l)	<40
Styrene, Total, (ug/l)	<8
Acrolein, Total, (ug/l)	<200
Acrylonitirile, Total, (ug/l)	<40
Bromobenzene, Water Whole, Total, (ug/l)	--
1,3-Dichloropropane, Water Whole, Total, (ug/l)	<8
Methyl Bromide, Total, (ug/l)	<20
Methyl Chloride, Total, (ug/l)	<20
Parachloro Toluene, Total, (ug/l)	--
Dibromoethane, Total, (ug/l)	--
Acenaphthene, Total, (ug/l)	<5
Acenaphthylene, Total, (ug/l)	<10
Anthracene, Total, (ug/l)	<5
Benzidine, Total, (ug/l)	<50
Benzoic Acid, Total, (ug/l)	<50
Benzo (a) Anthracene, Total, (ug/l)	<5
Benzo (b) Fluoranthene, Total, (ug/l)	<5
Benzo (k) Fluoranthene, Total, (ug/l)	<5
Benzo (ghi) Perylene, Total, (ug/l)	<5
Benzo (a) Pyrene, Total, (ug/l)	<5
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
Butyl Benzyl Phthalate, Total, (ug/l)	<10
2-Chloronapthalene, Total, (ug/l)	<5
2-Chlorophenol, Total, (ug/l)	<5
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	<5

Glendale INDPK near Orangewood and 107th Avenue	
Date of Sampling	02/04/1999
Chrysene, Total, (ug/l)	<5
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	<5
Di-N-Butyl Phthalate, Total, (ug/l)	<5
1,3- Dichlorobenzene, Total, (ug/l)	<5
1,4- Dichlorobenzene, Total, (ug/l)	<5
1,2- Dichlorobenzene, Total, (ug/l)	<5
3,3'- Dichlorobenzidine, Total, (ug/l)	<5
2,4- Dichlorophenol, Total, (ug/l)	<5
Diethyl Phthalate, Total, (ug/l)	<5
2,4- Dimethylphenol, Total, (ug/l)	<5
Dimethyl Phthalate, Total, (ug/l)	<5
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	<10
2,4- Dinitrophenol, Total, (ug/l)	<10
2,4- Dinitrotoluene, Total, (ug/l)	<5
2,6- Dinitrotoluene, Total, (ug/l)	<5
Di-N-Octyl-Phthalate, Total, (ug/l)	<5
Fluoranthene, Total, (ug/l)	<5
Fluorene, Total, (ug/l)	<5
Hexachlorobenzene, Total, (ug/l)	<10
Hexachlorobutadiene, Total, (ug/l)	<5
Hexachlorocyclopentadiene, Total, (ug/l)	<5
Hexachloroethane, Total, (ug/l)	<10
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	<5
Isophorone, Total, (ug/l)	<10
Naphthalene, Total, (ug/l)	<5
Nitrobenzene, Total, (ug/l)	<10
2-Nitrophenol, Total, (ug/l)	<5
4-Nitrophenol, Total, (ug/l)	<5
N-Nitrosodiphenylamine, Total, (ug/l)	<5
N-Nitrosodi-N-Propylamine, Total, (ug/l)	<5
Pentachlorophenol, Total, (ug/l)	<10
Phenanthrene, Total, (ug/l)	<5
Phenol, Total, (ug/l)	<5
Pyrene, Total, (ug/l)	<5
1,2,4-Trichlorobenzene, Total, (ug/l)	<5
2,4,5- Trichlorophenol, Total, (ug/l)	<5
2,4,6- Trichlorophenol, Total, (ug/l)	<5
N-Nitrosodimethylamine, Total, (ug/l)	<5
1,2- Diphenylhydrazine, Total, (ug/l)	<5
Dichlorodifluoromethane, Total, (ug/l)	--
Parachloro-Meta-Cresol, Total, (ug/l)	--

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

ARROW (Glendale)

Skunk Creek (north bank) at 79th Avenue alignment

Glendale ARROW

Skunk Creek near 79th Avenue

04 February 1999

	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				02/04/1999								
Effluent Temperature (deg. C)		13.8				02/04/1999								
Ambient Temperature (deg. C)		NM												
Barometric Pressure (mm Hg)		NM												
pH, Effluent, Field (standard units)		8.7				02/04/1999								
pH, Lab (standard units)	150.1	NA	std units				Immediate			<15	n/a			
Specific Conductance, FIELD (us/cm)		NA												
Specific Conductance, LAB (us/cm)		NA												
Oxygen Dissolved (% saturation)		NA												
Oxygen Dissolved (mg/l)	360.1	NA	mg/l				Immediate							
Electrical Conductivity (umhos/cm)	2510B	NA	umhos/cm				20 days							
BOD5 (mg/l)	405.1	14	mg/l	1		02/05/1999	48 hours			<30	n/a			
COD High Level (mg/l)	410.4	74	mg/l	1		02/10/1999	28 days			<30	n/a			
Chloride (mg/l as Cl)	4500	8	mg/l			02/25/1999	28 days							
Cyanide Total (mg/l as Cn)	4500	<0.01	mg/l			02/16/1999	14 days							
Fecal Coliform (MPN/100mL)	9221D	500	CFU/100ml	2		02/05/1999	6 hours			<30	n/a			
Fecal Streptococci (MPN/100mL)	9230B	16000	CFU/100ml	2		02/05/1999	6 hours			<30	n/a			
Total Dissolved Solids (mg/l)	2540C	146	mg/l	10		02/11/1999	7 days			<15	n/a			
Total Suspended Solids (mg/l)	160.2	106	mg/l	10		02/11/1999	7 days			<15	n/a			
Nitrogen No2 + No3, Total (mg/l as N)	4500	0.25	mg/l	0.05		02/08/1999				<15	n/a			
TKN Nitrogen (mg/l as N)	351.3	5.19	mg/l			02/10/1999	28 days							
Nitrogen, Ammonia + Organic, Total (mg/l as N)	calc.	5.19	mg/l											
Nitrogen Nitrate Total (mg/l as N)	calc.	0.18	mg/l			02/08/1999	48 hours							
Nitrogen Nitrite Total (mg/l as N)	300.0	0.07	mg/l			02/05/1999	48 hours							
Nitrogen Ammonia Total (mg/l as N)	350.2	2.63	mg/l			02/11/1999	28 days							
Nitrogen Organic Total (mg/l as N)	calc.	2.56	mg/l			02/19/1999								
Phosphorous Total (mg/l as P)	365.3	0.91	mg/l	0.05		03/02/1999	28 days			<15	3.5			
Phosphorous Dissolved (mg/l as P)	365.3	5.19	mg/l			02/10/1999	28 days							
Phosphorous Ortho (mg/l as P)	4500P	0.17	mg/l	0.05		02/05/1999	48 hours			<15	0			
Sulfate Dissolved (mg/l)	300.0	18	mg/l			02/25/1999	28 days							
Hexavalent Chromium Total (mg/l)	3500	NA	mg/l				24 hours							
Phenols Total Recoverable (ug/l)	420.1	13	ug/l			02/17/1999	28 days							
Oil and Grease Total Recoverable (mg/l)	413.1	9	mg/l	0.2		02/22/1999	28 days	<30	n/a	<50	n/a			
Organic Carbon, Total (mg/l)	5310C	51.2	mg/l			02/19/1999	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	48	mg/l			02/15/1999	14 days							
Silica Dissolved (mg/l as SiO2)		--												
Hardness (mg/l)	2340B	64	mg/l	1		03/19/1999	6 months			<15	n/a			
Antimony (ug/l as Sb)	3113B	<5	ug/l			02/16/1999	6 months							
Antimony Dissolved (ug/l as Sb)	200.9	<4	ug/l			02/16/1999	6 months							
Arsenic Total (ug/l as As)	3113B	9	ug/l			02/18/1999	6 months							
Arsenic Dissolved (ug/l as As)	200.9	7	ug/l			02/22/1999	6 months							
Barium Dissolved (ug/l as Ba)		--												

Glendale ARROW

Skunk Creek near 79th Avenue

04 February 1999

	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			02/23/1999	6 months							
Beryllium Dissolved (ug/l as Be)	200.7	<2	ug/l			03/02/1999	6 months							
Cadmium Total Recoverable (ug/l as Cd)	7131	0.7	ug/l	0.2		04/27/1999	6 months	<25		<35				
Cadmium Dissolved (ug/l as Cd)	7131	0.5	ug/l			04/27/1999	6 months							
Calcium Dissolved (mg/l as Ca)		--												
Chromium Total Recoverable (ug/l as Cr)	7191	4.6	ug/l	1		02/23/1999	6 months	<25		<35				
Chromium Dissolved (ug/l as Cr)	7191	2.9	ug/l			02/23/1999	6 months							
Cobalt Dissolved (ug/l as Co)		--												
Copper, Total Recoverable, (ug/l as Cu)	3113B	15	ug/l	1		02/23/1999	6 months	<25		<35				
Copper, Dissolved, (ug/l as Cu)	200.9	<15	ug/l			03/02/1999	6 months							
Iron, Dissolved, (ug/l as Fe)		--												
Lead, Total Recoverable, (ug/l as Pb)	3113B	9	ug/l	1		02/18/1999	6 months	<25		<35				
Lead, Dissolved, (ug/l as Pb)	200.9	<5	ug/l			02/22/1999	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			02/11/1999	6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1	0.2	ug/l			02/16/1999	6 months							
Molybdenum, Dissolved, (ug/l as Mo)		--												
Nickel, Total Recoverable, (ug/l as Ni)	249.2	10	ug/l	2		02/24/1999	6 months	<25		<35				
Nickel, Dissolved, (ug/l as Ni)	249.2	6	ug/l			02/24/1999	6 months							
Potassium, Dissolved, (mg/l as K)		--												
Selenium, Total, (ug/l as Se)	3113B	<5	ug/l			02/18/1999	6 months							
Selenium, Dissolved, (ug/l as Se)	200.9	<5	ug/l			02/22/1999	6 months							
Silver, Total Recoverable, (ug/l as Ag)	200.7	<40	ug/l			02/23/1999	6 months							
Silver, Dissolved, (ug/l as Ag)	200.7	<50	ug/l			03/17/1999	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			02/23/1999	6 months							
Thallium, Dissolved, (ug/l as Tl)	200.9	<1	ug/l			02/16/1999	6 months							
Vanadium, Dissolved, (ug/l as V)		--												
Zinc, Total Recoverable, (ug/l as Zn)	200.7	310	ug/l	1		02/23/1999	6 months	<25		<35				
Zinc, Dissolved, (ug/l as Zn)	200.7	70	ug/l			03/02/1999	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						02/10/1999	7 days							
Aldrin, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
BHC - ALPHA, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
BHC - Gamma (Lindane), (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							

Glendale ARROW

Skunk Creek near 79th Avenue

04 February 1999

	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			02/20/1999	40 days							
Aroclor 1016, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1221, PCB, Total, (ug/l)	608	<10	ug/l			03/04/1999	40 days							
Aroclor 1232, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1242, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1248, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1254, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1260, PCB, Total, (ug/L)	608	<1.0	ug/l			03/04/1999	40 days							
Chlordane, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
P,P' DDD, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
P,P' DDE, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
P, P' DDT, Total, (ug/l)	608	<2.0	ug/l			02/20/1999	40 days							
Dieldrin, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endo-Sulfan Alpha, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endo-Sulfan Beta, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endo-Sulfan Sulfate, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endrin Aldehyde, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endrin, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Heptachlor, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Heptachlor Epoxide, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Toxaphene, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Methoxychlor, Total, (ug/l)		--												
Beta Benzene Hexachloride, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
1,1,2,2-Tetrachloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1,1,2-Tetrachloroethane, Total,(ug/l)		--												
Tetrachloroethene, PCE, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1,1- Trichloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1,2- Trichloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Trichloroethene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1- Dichloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1- Dichloroethene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,2- Dichloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,2- Dichloropropane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
2- Chloroethylvinyl Ether, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
cis-1,3-Dichloropropene, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
trans-1,2- Dichloroethene, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
trans-1,3- Dichloropropene, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Benzene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Bromodichloromethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Bromoform, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Carbon Tetrachloride, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Chlorobenzene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Chloroethane, (ug/l)	624	<20	ug/l			02/12/1999	14 days							
Chloroform, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Ethyl-Benzene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Methylene Chloride, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Toluene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Trichlorofluoromethane, Total, (ug/l)	624	<20	ug/l			02/12/1999	14 days							

Glendale ARROW

Skunk Creek near 79th Avenue

04 February 1999

	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			02/12/1999	14 days							
Chlorodibromomethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)		--												
Acetone, Total, (ug/l)	624	<100	ug/l			02/12/1999	14 days							
2-Butanone, (ug/l)	624	<40	ug/l			02/12/1999	14 days							
Carbon Disulfide, Total, (ug/l)	624	<40	ug/l			02/12/1999	14 days							
1,2 Dichloroethene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Xylenes, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
2-Hexanone, Total, (ug/l)	624	<40	ug/l			02/12/1999	14 days							
Styrene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Acrolein, Total, (ug/l)	624	<200	ug/l			02/12/1999	14 days							
Acrylonitirile, Total, (ug/l)	624	<40	ug/l			02/12/1999	14 days							
Bromobenzene, Water Whole, Total, (ug/l)		--												
1,3-Dichloropropane, Water Whole, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Methyl Bromide, Total, (ug/l)	624	<20	ug/l			02/12/1999	14 days							
Methyl Chloride, Total, (ug/l)	624	<20	ug/l			02/12/1999	14 days							
Parachloro Toluene, Total, (ug/l)		--												
Dibromoethane, Total, (ug/l)		--												
EPA Method 625 Extraction						02/08/1999	7 days							
Acenaphthene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Acenaphthylene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Anthracene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Benzidine, Total, (ug/l)	625	<50	ug/l			03/03/1999	40 days							
Benzoic Acid, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Benzo (a) Anthracene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Benzo (b) Fluoranthene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Benzo (k) Fluoranthene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Benzo (ghi) Perylene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Benzyl Alcohol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	625	100	ug/l			03/03/1999	40 days							
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Butyl Benzyl Phthalate, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2-Chloronapthalene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2-Chlorophenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Chrysene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Di-N-Butyl Phthalate, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
1,3- Dichlorobenzene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
1,4- Dichlorobenzene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
1,2- Dichlorobenzene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
3,3'- Dichlorobenzidine, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2,4- Dichlorophenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Diethyl Phthalate, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							

Glendale ARROW

Skunk Creek near 79th Avenue

04 February 1999

	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			03/03/1999	40 days							
Dimethyl Phthalate, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2,4- Dinitrophenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2,4- Dinitrotoluene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2,6- Dinitrotoluene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Di-N-Octyl-Phthalate, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Fluoranthene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Fluorene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Hexachlorobenzene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Hexachlorobutadiene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Hexachlorocyclopentadiene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Hexachloroethane, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Isophorone, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Naphthalene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Nitrobenzene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2-Nitrophenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
4-Nitrophenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
N-Nitrosodiphenylamine, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
N-Nitrosodi-N-Propylamine, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Pentachlorophenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Phenanthrene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Phenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
Pyrene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
1,2,4-Trichlorobenzene, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2,4,5- Trichlorophenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							
2,4,6- Trichlorophenol, Total, (ug/l)	625	<10	ug/l			03/03/1999	40 days							

BUTLER (Glendale)

near Orchid Drive and 56th Drive

Glendale BUTLER
Orchid Lane at 56th Drive

04 February 1999

	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				02/04/1999								
Effluent Temperature (deg. C)		12.5				02/04/1999								
Ambient Temperature (deg. C)		NM												
Barometric Pressure (mm Hg)		NM												
pH, Effluent, Field (standard units)		9.2				02/04/1999								
pH, Lab (standard units)	150.1	--	std units				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	27	mg/l	1		02/05/1999	48 hours			<30	n/a			
COD High Level (mg/l)	410.4	87	mg/l	1		02/10/1999	28 days			<30	n/a			
Chloride (mg/l as Cl)	4500	7	mg/l			02/08/1999	28 days							
Cyanide Total (mg/l as Cn)	4500	<0.01	mg/l			02/16/1999	14 days							
Fecal Coliform (MPN/100mL)	9221D	17000	CFU/100ml	2		02/05/1999	6 hours			<30	n/a			
Fecal Streptococci (MPN/100mL)	9230B	2400	CFU/100ml	2		02/05/1999	6 hours			<30	n/a			
Total Dissolved Solids (mg/l)	2540C	100	mg/l	10		02/10/1999	7 days			<15	n/a			
Total Suspended Solids (mg/l)	160.2	34	mg/l	10		02/11/1999	7 days			<15	n/a			
Nitrogen No2 + No3, Total (mg/l as N)	4500	0.85	mg/l	0.05		03/02/1999				<15	n/a			
TKN Nitrogen (mg/l as N)	351.3	4.47	mg/l			02/10/1999	28 days							
Nitrogen, Ammonia + Organic, Total (mg/l as N)	calc.	4.47	mg/l											
Nitrogen Nitrate Total (mg/l as N)	calc.	0.85	mg/l			02/06/1999	48 hours							
Nitrogen Nitrite Total (mg/l as N)	300.0	<0.1	mg/l			02/05/1999	48 hours							
Nitrogen Ammonia Total (mg/l as N)	350.2	1.47	mg/l			02/11/1999	28 days							
Nitrogen Organic Total (mg/l as N)	calc.	3	mg/l											
Phosphorous Total (mg/l as P)	365.3	0.46	mg/l	0.05		03/02/1999	28 days			<15	3.5			
Phosphorous Dissolved (mg/l as P)	365.3	0.12	mg/l			02/10/1999	28 days							
Phosphorous Ortho (mg/l as P)	4500P	0.23	mg/l	0.05		02/05/1999	48 hours			<15	0			
Sulfate Dissolved (mg/l)	300.0	7	mg/l			03/01/1999	28 days							
Hexavalent Chromium Total (mg/l)	3500	--	mg/l				24 hours							
Phenols Total Recoverable (ug/l)	420.1	18	ug/l			02/23/1999	28 days							
Oil and Grease Total Recoverable (mg/l)	413.1	11	mg/l	0.2		02/22/1999	28 days	<30	n/a	<50	n/a			
Organic Carbon, Total (mg/l)	5310C	18.1	mg/l			02/19/1999	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	46	mg/l			02/15/1999	14 days							
Silica Dissolved (mg/l as SiO2)		--												
Hardness (mg/l)	2340B	44	mg/l	1		03/19/1999	6 months			<15	n/a			
Antimony (ug/l as Sb)	3113B	<5	ug/l			02/16/1999	6 months							
Antimony Dissolved (ug/l as Sb)	200.9	<4	ug/l			02/16/1999	6 months							
Arsenic Total (ug/l as As)	3113B	<5	ug/l			02/18/1999	6 months							
Arsenic Dissolved (ug/l as As)	200.9	8	ug/l			02/22/1999	6 months							
Barium Dissolved (ug/l as Ba)		--												

Glendale BUTLER
Orchid Lane at 56th Drive

04 February 1999

	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			02/24/1999	6 months							
Beryllium Dissolved (ug/l as Be)	200.7	<2	ug/l			03/02/1999	6 months							
Cadmium Total Recoverable (ug/l as Cd)	7131	0.4	ug/l	0.2		04/27/1999	6 months	<25		<35				
Cadmium Dissolved (ug/l as Cd)	7131	0.4	ug/l			04/27/1999	6 months							
Calcium Dissolved (mg/l as Ca)		--												
Chromium Total Recoverable (ug/l as Cr)	7191	4.1	ug/l	1		02/23/1999	6 months	<25		<35				
Chromium Dissolved (ug/l as Cr)	7191	3.8	ug/l			02/23/1999	6 months							
Cobalt Dissolved (ug/l as Co)		--												
Copper, Total Recoverable, (ug/l as Cu)	3113B	<15	ug/l	1		02/24/1999	6 months	<25		<35				
Copper, Dissolved, (ug/l as Cu)	200.9	16	ug/l			03/02/1999	6 months							
Iron, Dissolved, (ug/l as Fe)		--												
Lead, Total Recoverable, (ug/l as Pb)	3113B	8	ug/l	1		02/18/1999	6 months	<25		<35				
Lead, Dissolved, (ug/l as Pb)	200.9	<5	ug/l			02/22/1999	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			02/11/1999	6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l			02/16/1999	6 months							
Molybdenum, Dissolved, (ug/l as Mo)		--												
Nickel, Total Recoverable, (ug/l as Ni)	249.2	6.8	ug/l	2		02/24/1999	6 months	<25		<35				
Nickel, Dissolved, (ug/l as Ni)	249.2	4.5	ug/l			02/24/1999	6 months							
Potassium, Dissolved, (mg/l as K)		--												
Selenium, Total, (ug/l as Se)	3113B	<5	ug/l			02/18/1999	6 months							
Selenium, Dissolved, (ug/l as Se)	200.9	<5	ug/l			02/22/1999	6 months							
Silver, Total Recoverable, (ug/l as Ag)	200.7	<40	ug/l			02/23/1999	6 months							
Silver, Dissolved, (ug/l as Ag)	200.7	<50	ug/l			03/17/1999	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			02/23/1999	6 months							
Thallium, Dissolved, (ug/l as Tl)	200.9	<1	ug/l			02/05/1999	6 months							
Vanadium, Dissolved, (ug/l as V)		--												
Zinc, Total Recoverable, (ug/l as Zn)	200.7	290	ug/l	1		02/24/1999	6 months	<25		<35				
Zinc, Dissolved, (ug/l as Zn)	200.7	30	ug/l			03/02/1999	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						02/10/1999	7 days							
Aldrin, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
BHC - ALPHA, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
BHC - Gamma (Lindane), (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							

Glendale BUTLER
Orchid Lane at 56th Drive

04 February 1999

	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			02/20/1999	40 days							
Aroclor 1016, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1221, PCB, Total, (ug/l)	608	<10	ug/l			03/04/1999	40 days							
Aroclor 1232, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1242, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1248, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1254, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1260, PCB, Total, (ug/L)	608	<1.0	ug/l			03/04/1999	40 days							
Chlordane, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
P,P' DDD, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
P,P' DDE, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
P, P' DDT, Total, (ug/l)	608	<2.0	ug/l			02/20/1999	40 days							
Dieldrin, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endo-Sulfan Alpha, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endo-Sulfan Beta, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endo-Sulfan Sulfate, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endrin Aldehyde, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endrin, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Heptachlor, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Heptachlor Epoxide, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Toxaphene, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Methoxychlor, Total, (ug/l)		--												
Beta Benzene Hexachloride, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
1,1,2,2-Tetrachloroethane, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
1,1,1,2-Tetrachloroethane, Total,(ug/l)		--												
Tetrachloroethene, PCE, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
1,1,1- Trichloroethane, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
1,1,2- Trichloroethane, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Trichloroethene, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
1,1- Dichloroethane, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
1,1- Dichloroethene, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
1,2- Dichloroethane, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
1,2- Dichloropropane, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
2- Chloroethylvinyl Ether, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
cis-1,3-Dichloropropene, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
trans-1,2- Dichloroethene, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
trans-1,3- Dichloropropene, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Benzene, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Bromodichloromethane, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Bromoform, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Carbon Tetrachloride, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Chlorobenzene, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Chloroethane, (ug/l)	624	<20	ug/l			02/13/1999	14 days							
Chloroform, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Ethyl-Benzene, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Methylene Chloride, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Toluene, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Trichlorofluoromethane, Total, (ug/l)	624	<20	ug/l			02/13/1999	14 days							

Glendale BUTLER
Orchid Lane at 56th Drive

04 February 1999

	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			02/13/1999	14 days							
Chlorodibromomethane, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)		--												
Acetone, Total, (ug/l)	624	<100	ug/l			02/13/1999	14 days							
2-Butanone, (ug/l)	624	<40	ug/l			02/13/1999	14 days							
Carbon Disulfide, Total, (ug/l)	624	<40	ug/l			02/13/1999	14 days							
1,2 Dichloroethene, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Xylenes, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
2-Hexanone, Total, (ug/l)	624	<40	ug/l			02/13/1999	14 days							
Styrene, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Acrolein, Total, (ug/l)	624	<200	ug/l			02/13/1999	14 days							
Acrylonitirile, Total, (ug/l)	624	<40	ug/l			02/13/1999	14 days							
Bromobenzene, Water Whole, Total, (ug/l)		--												
1,3-Dichloropropane, Water Whole, Total, (ug/l)	624	<8	ug/l			02/13/1999	14 days							
Methyl Bromide, Total, (ug/l)	624	<20	ug/l			02/13/1999	14 days							
Methyl Chloride, Total, (ug/l)	624	<20	ug/l			02/13/1999	14 days							
Parachloro Toluene, Total, (ug/l)		--												
Dibromoethane, Total, (ug/l)		--												
EPA Method 625 Extraction						02/08/1999	7 days							
Acenaphthene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Acenaphthylene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Anthracene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Benzidine, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Benzoic Acid, Total, (ug/l)	625	9.1	ug/l			02/27/1999	40 days							
Benzo (a) Anthracene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Benzo (b) Fluoranthene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Benzo (k) Fluoranthene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Benzo (ghi) Perylene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Benzyl Alcohol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	625	9.4	ug/l			02/27/1999	40 days							
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Butyl Benzyl Phthalate, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2-Chloronapthalene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2-Chlorophenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Chrysene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Di-N-Butyl Phthalate, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
1,3- Dichlorobenzene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
1,4- Dichlorobenzene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
1,2- Dichlorobenzene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
3,3'- Dichlorobenzidine, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2,4- Dichlorophenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Diethyl Phthalate, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							

Glendale BUTLER
Orchid Lane at 56th Drive

04 February 1999

	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	<5	ug/l			02/27/1999	40 days							
Dimethyl Phthalate, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2,4- Dinitrophenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2,4- Dinitrotoluene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2,6- Dinitrotoluene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Di-N-Octyl-Phthalate, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Fluoranthene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Fluorene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Hexachlorobenzene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Hexachlorobutadiene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Hexachlorocyclopentadiene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Hexachloroethane, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Isophorone, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Naphthalene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Nitrobenzene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2-Nitrophenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
4-Nitrophenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
N-Nitrosodiphenylamine, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
N-Nitrosodi-N-Propylamine, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Pentachlorophenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Phenanthrene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Phenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
Pyrene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
1,2,4-Trichlorobenzene, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2,4,5- Trichlorophenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							
2,4,6- Trichlorophenol, Total, (ug/l)	625	<5	ug/l			02/27/1999	40 days							

INDPK (Glendale)

New River (west bank) between Glendale and Northern Avenues

Glendale IND PARK

New River Channel near Orangewood

04 February 1999

	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				02/04/1999								
Effluent Temperature (deg. C)		11				02/04/1999								
Ambient Temperature (deg. C)		NM												
Barometric Pressure (mm Hg)		NM												
pH, Effluent, Field (standard units)		7.03				02/04/1999								
pH, Lab (standard units)	150.1	NM	std units				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	17	mg/l	1		02/05/1999	48 hours			<30	n/a			
COD High Level (mg/l)	410.4	71	mg/l	1		02/15/1999	28 days			<30	n/a			
Chloride (mg/l as Cl)	4500	<5.0	mg/l			02/08/1999	28 days							
Cyanide Total (mg/l as Cn)	4500	<0.01	mg/l			02/16/1999	14 days							
Fecal Coliform (MPN/100mL)	9221D	50000	CFU/100ml	2		02/05/1999	6 hours			<30	n/a			
Fecal Streptococci (MPN/100mL)	9230B	3000	CFU/100ml	2		02/05/1999	6 hours			<30	n/a			
Total Dissolved Solids (mg/l)	2540C	84	mg/l	10		02/11/1999	7 days			<15	n/a			
Total Suspended Solids (mg/l)	160.2	34	mg/l	10		02/11/1999	7 days			<15	n/a			
Nitrogen No2 + No3, Total (mg/l as N)	4500	2	mg/l	0.05						<15	n/a			
TKN Nitrogen (mg/l as N)	351.3	3.81	mg/l			02/10/1999	28 days							
Nitrogen, Ammonia + Organic, Total (mg/l as N)	calc.	3.81	mg/l											
Nitrogen Nitrate Total (mg/l as N)	calc.	1.8	mg/l			02/08/1999	48 hours							Filter w/in 48hrs, analyze w/in 28 days
Nitrogen Nitrite Total (mg/l as N)	300.0	0.07	mg/l			02/05/1999	48 hours							
Nitrogen Ammonia Total (mg/l as N)	350.2	2.53	mg/l			02/11/1999	28 days							
Nitrogen Organic Total (mg/l as N)	calc.	1.28	mg/l											
Phosphorous Total (mg/l as P)	365.3	0.55	mg/l	0.05		03/02/1999	28 days			<15	3.5			
Phosphorous Dissolved (mg/l as P)	365.3	0.12	mg/l			03/05/1999	28 days							Analyzed at 28 days
Phosphorous Ortho (mg/l as P)	4500P	0.29	mg/l	0.05		02/05/1999	48 hours			<15	0			
Sulfate Dissolved (mg/l)	300.0	--	mg/l				28 days							
Hexavalent Chromium Total (mg/l)	3500	--	mg/l				24 hours							
Phenols Total Recoverable (ug/l)	420.1	5.8	ug/l			02/17/1999	28 days							
Oil and Grease Total Recoverable (mg/l)	413.1	<5.0	mg/l	0.2		02/22/1999	28 days	<30	n/a	<50	n/a			
Organic Carbon, Total (mg/l)	5310C	15.2	mg/l			02/19/1999	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	48	mg/l			02/15/1999	14 days							
Silica Dissolved (mg/l as SiO2)		--												
Hardness (mg/l)	2340B	44	mg/l	1		03/19/1999	6 months			<15	n/a			
Antimony (ug/l as Sb)	3113B	<5	ug/l			02/16/1999	6 months							
Antimony Dissolved (ug/l as Sb)	200.9	<4	ug/l			02/16/1999	6 months							
Arsenic Total (ug/l as As)	3113B	<5	ug/l			02/18/1999	6 months							
Arsenic Dissolved (ug/l as As)	200.9	<5	ug/l			02/22/1999	6 months							
Barium Dissolved (ug/l as Ba)		--												

Glendale IND PARK

New River Channel near Orangewood

04 February 1999

	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			02/23/1999	6 months							
Beryllium Dissolved (ug/l as Be)	200.7	<2	ug/l			03/10/1999	6 months							
Cadmium Total Recoverable (ug/l as Cd)	7131	<0.2	ug/l	0.2		04/27/1999	6 months	<25		<35				
Cadmium Dissolved (ug/l as Cd)	7131	<0.2	ug/l			04/27/1999	6 months							
Calcium Dissolved (mg/l as Ca)		--												
Chromium Total Recoverable (ug/l as Cr)	7191	2	ug/l	1		02/23/1999	6 months	<25		<35				
Chromium Dissolved (ug/l as Cr)	7191	<1	ug/l			02/23/1999	6 months							
Cobalt Dissolved (ug/l as Co)		--												
Copper, Total Recoverable, (ug/l as Cu)	3113B	<15	ug/l	1		02/23/1999	6 months	<25		<35				
Copper, Dissolved, (ug/l as Cu)	200.9	20	ug/l			03/02/1999	6 months							
Iron, Dissolved, (ug/l as Fe)		--												
Lead, Total Recoverable, (ug/l as Pb)	3113B	<5	ug/l	1		02/18/1999	6 months	<25		<35				
Lead, Dissolved, (ug/l as Pb)	200.9	86	ug/l			02/22/1999	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			02/11/1999	6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l			02/26/1999	6 months							
Molybdenum, Dissolved, (ug/l as Mo)		--												
Nickel, Total Recoverable, (ug/l as Ni)	249.2	5	ug/l	2		02/24/1999	6 months	<25		<35				
Nickel, Dissolved, (ug/l as Ni)	249.2	2.1	ug/l			02/24/1999	6 months							
Potassium, Dissolved, (mg/l as K)		--												
Selenium, Total, (ug/l as Se)	3113B	<5	ug/l			02/18/1999	6 months							
Selenium, Dissolved, (ug/l as Se)	200.9	<5	ug/l			02/22/1999	6 months							
Silver, Total Recoverable, (ug/l as Ag)	200.7	<40	ug/l			02/23/1999	6 months							
Silver, Dissolved, (ug/l as Ag)	200.7	<50	ug/l			03/17/1999	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			02/23/1999	6 months							
Thallium, Dissolved, (ug/l as Tl)	200.9	<1	ug/l			02/16/1999	6 months							
Vanadium, Dissolved, (ug/l as V)		--												
Zinc, Total Recoverable, (ug/l as Zn)	200.7	210	ug/l	1		02/23/1999	6 months	<25		<35				
Zinc, Dissolved, (ug/l as Zn)	200.7	30	ug/l			03/02/1999	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						02/10/1999	7 days							
Aldrin, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
BHC - ALPHA, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
BHC - Gamma (Lindane), (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							

R - Rejected Data

Glendale IND PARK

New River Channel near Orangewood

04 February 1999

	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			02/20/1999	40 days							
Aroclor 1016, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1221, PCB, Total, (ug/l)	608	<10	ug/l			03/04/1999	40 days							
Aroclor 1232, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1242, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1248, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1254, PCB, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
Aroclor 1260, PCB, Total, (ug/L)	608	<1.0	ug/l			03/04/1999	40 days							
Chlordane, Total, (ug/l)	608	<1.0	ug/l			03/04/1999	40 days							
P,P' DDD, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
P,P' DDE, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
P, P' DDT, Total, (ug/l)	608	<2.0	ug/l			02/20/1999	40 days							
Dieldrin, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endo-Sulfan Alpha, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endo-Sulfan Beta, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endo-Sulfan Sulfate, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endrin Aldehyde, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Endrin, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Heptachlor, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Heptachlor Epoxide, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Toxaphene, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
Methoxychlor, Total, (ug/l)		--												
Beta Benzene Hexachloride, Total, (ug/l)	608	<1.0	ug/l			02/20/1999	40 days							
1,1,2,2-Tetrachloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1,1,2-Tetrachloroethane, Total,(ug/l)		--												
Tetrachloroethene, PCE, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1,1- Trichloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1,2- Trichloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Trichloroethene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1- Dichloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,1- Dichloroethene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,2- Dichloroethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
1,2- Dichloropropane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
2- Chloroethylvinyl Ether, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
cis-1,3-Dichloropropene, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
trans-1,2- Dichloroethene, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
trans-1,3- Dichloropropene, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Benzene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Bromodichloromethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Bromoform, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Carbon Tetrachloride, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Chlorobenzene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Chloroethane, (ug/l)	624	<20	ug/l			02/12/1999	14 days							
Chloroform, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Ethyl-Benzene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Methylene Chloride, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Toluene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Trichlorofluoromethane, Total, (ug/l)	624	<20	ug/l			02/12/1999	14 days							

R - Rejected Data

Glendale IND PARK

New River Channel near Orangewood

04 February 1999

	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			02/12/1999	14 days							
Chlorodibromomethane, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
4- Methyl, 2- Pentanone, (MIBK), Total, (ug/L)		--												
Acetone, Total, (ug/l)	624	<100	ug/l			02/12/1999	14 days							
2-Butanone, (ug/l)	624	<40	ug/l			02/12/1999	14 days							
Carbon Disulfide, Total, (ug/l)	624	<40	ug/l			02/12/1999	14 days							
1,2 Dichloroethene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Xylenes, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
2-Hexanone, Total, (ug/l)	624	<40	ug/l			02/12/1999	14 days							
Styrene, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Acrolein, Total, (ug/l)	624	<200	ug/l			02/12/1999	14 days							
Acrylonitirile, Total, (ug/l)	624	<40	ug/l			02/12/1999	14 days							
Bromobenzene, Water Whole, Total, (ug/l)		--												
1,3-Dichloropropane, Water Whole, Total, (ug/l)	624	<8	ug/l			02/12/1999	14 days							
Methyl Bromide, Total, (ug/l)	624	<20	ug/l			02/12/1999	14 days							
Methyl Chloride, Total, (ug/l)	624	<20	ug/l			02/12/1999	14 days							
Parachloro Toluene, Total, (ug/l)		--												
Dibromoethane, Total, (ug/l)		--												
EPA Method 625 Extraction						02/08/1999	7 days							
Acenaphthene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Acenaphthylene, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
Anthracene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Benzidine, Total, (ug/l)	625	<50	ug/l			02/26/1999	40 days							
Benzoic Acid, Total, (ug/l)	625	<50	ug/l			02/26/1999	40 days							
Benzo (a) Anthracene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Benzo (b) Fluoranthene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Benzo (k) Fluoranthene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Benzo (ghi) Perylene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Benzyl Alcohol, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Butyl Benzyl Phthalate, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
2-Chloronapthalene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
2-Chlorophenol, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Chrysene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Di-N-Butyl Phthalate, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
1,3- Dichlorobenzene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
1,4- Dichlorobenzene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
1,2- Dichlorobenzene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
3,3'- Dichlorobenzidine, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
2,4- Dichlorophenol, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Diethyl Phthalate, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							

Glendale IND PARK

New River Channel near Orangewood

04 February 1999

	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	<5	ug/l			02/26/1999	40 days							
Dimethyl Phthalate, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
2,4- Dinitrophenol, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
2,4- Dinitrotoluene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
2,6- Dinitrotoluene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Di-N-Octyl-Phthalate, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Fluoranthene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Fluorene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Hexachlorobenzene, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
Hexachlorobutadiene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Hexachlorocyclopentadiene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Hexachloroethane, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Isophorone, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
Naphthalene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Nitrobenzene, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
2-Nitrophenol, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
4-Nitrophenol, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
N-Nitrosodiphenylamine, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
N-Nitrosodi-N-Propylamine, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Pentachlorophenol, Total, (ug/l)	625	<10	ug/l			02/26/1999	40 days							
Phenanthrene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Phenol, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
Pyrene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
1,2,4-Trichlorobenzene, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
2,4,5- Trichlorophenol, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							
2,4,6- Trichlorophenol, Total, (ug/l)	625	<5	ug/l			02/26/1999	40 days							

Hard Copies of Data

Data Checksheet

Site	ARROW
Municipality	GLENDALE
Sample Date	FEBRUARY 4, 1999

Date Received	MAY 4, 1999

Laboratory Used	BOLIN
Laboratory Contact	STEPHANIE
FCD Sample ID Number	GA2499G, GAC020499
Lab Sample ID Number	9902-01148-003 (G), 9902-01169-002 (C)
Laboratory Invoice Number	51339 (G), 51342 (C)

Initial Review Complete	✓	Date	5-4-99
Lab Contacted		Date	
Lab Review Complete		Date	
Second Review Complete		Date	
Additional Review Necessary			

Comments

Data Validation Table Complete	✓	Date	5-4-99

Data Entered Into Database	✓	Date	5-4-99

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: 2/05/99
Reported: 3/22/99
Invoice No: 051339

Project Name: Glendale NPDES

Matrix: Storm Water
Sample No: 9902-01148-003
Sample ID: GA2499G (Arrow)

Time Sampled: 21:15
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Biochemical Oxygen Demand	EPA 405.1	14.	mg/L	1.0	2/05/99
Coliform, Fecal (MPN)	SM 9221D	500.	MPN/100ml	20.	2/05/99
Fecal Streptococcus	SM 9230B	16,000.	MPN/100ml	20.	2/05/99
Oil & Grease	EPA 413.1	9.	mg/L	5.0	2/22/99
Carbon tetrachloride	EPA 624	ND	ug/L	8	2/12/99
Bromomethane	EPA 624	ND	ug/L	20	2/12/99
Benzene	EPA 624	ND	ug/L	8	2/12/99
trans-1,3-Dichloropropene	EPA 624	ND	ug/L	8	2/12/99
trans 1,2-Dichloroethylene	EPA 624	ND	ug/L	8	2/12/99
cis 1,3-Dichloropropene	EPA 624	ND	ug/L	8	2/12/99
2-Chloroethylvinyl ether	EPA 624	ND	ug/L	8	2/12/99
1,4-Dichlorobenzene	EPA 624	ND	ug/L	8	2/12/99
1,3-Dichlorobenzene	EPA 624	ND	ug/L	8	2/12/99
1,2-Dichloropropane	EPA 624	ND	ug/L	8	2/12/99
1,2-Dichloroethane	EPA 624	ND	ug/L	8	2/12/99
1,2-Dichlorobenzene	EPA 624	ND	ug/L	8	2/12/99
1,1-Dichloroethylene	EPA 624	ND	ug/L	8	2/12/99
1,1-Dichloroethane	EPA 624	ND	ug/L	8	2/12/99
Trichloroethylene (TCE)	EPA 624	ND	ug/L	8	2/12/99
1,1,2-Trichloroethane	EPA 624	ND	ug/L	8	2/12/99
1,1,1-Trichloroethane	EPA 624	ND	ug/L	8	2/12/99
Toluene	EPA 624	ND	ug/L	8	2/12/99
Ethylbenzene	EPA 624	ND	ug/L	8	2/12/99
m,p-Xylenes	EPA 624	ND Y	ug/L	8	2/12/99
o-Xylene	EPA 624	ND Y	ug/L	8	2/12/99
Tetrachloroethylene (PCE)	EPA 624	ND	ug/L	8	2/12/99
1,1,2,2-Tetrachloroethane	EPA 624	ND	ug/L	8	2/12/99
Chloromethane	EPA 624	ND	ug/L	20	2/12/99
Chloroform	EPA 624	ND	ug/L	8	2/12/99
Bromodichloromethane	EPA 624	ND	ug/L	8	2/12/99
Bromoform	EPA 624	ND	ug/L	8	2/12/99
Chlorobenzene	EPA 624	ND	ug/L	8	2/12/99

Bolin Laboratories Inc.

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(602) 942 8220 • FAX (602) 942 1050

Matrix: Storm Water
Sample No: 9902-01148-003

Time Sampled: 21:15
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Chloroethane	EPA 624	ND	ug/L	20	2/12/99
Dichloromethane	EPA 624	ND	ug/L	20	2/12/99
Trichlorofluoromethane	EPA 624	ND	ug/L	20	2/12/99
Dichlorodifluoromethane	EPA 624	ND Y	ug/L	20	2/12/99
Vinyl Chloride	EPA 624	ND	ug/L	20	2/12/99
Dibromochloromethane	EPA 624	ND	ug/L	8	2/12/99
Total Trihalomethanes	EPA 624	ND	ug/L	8	2/12/99
Acrolein	EPA 624	ND T,Y	ug/L	200	2/12/99
Acrylonitrile	EPA 624	ND Y	ug/L	40	2/12/99
Surrogates:	EPA 624				2/12/99
***Pentafluorobenzene	EPA 624	80.	% Recovery		2/12/99
***1,2-dichloroethane-d4	EPA 624	86.	% Recovery		2/12/99
***4-bromofluorobenzene	EPA 624	76.	% Recovery		2/12/99
***1,2-dichlorobenzene-d4	EPA 624	84.	% Recovery		2/12/99
Acetone	EPA 624	ND Y	ug/L	100	2/12/99
2-Butanone (MEK)	EPA 624	ND Y	ug/L	40	2/12/99
Carbon disulfide	EPA 624	ND Y	ug/L	40	2/12/99
2-Hexanone (MBK)	EPA 624	ND Y	ug/L	40	2/12/99
Styrene	EPA 624	ND Y	ug/L	8	2/12/99
Total Xylenes	EPA 624	ND Y	ug/L	8	2/12/99
Trichlorotrifluoroethane	EPA 624	ND Y	ug/L	8	2/12/99
cis 1,2-Dichloroethylene	EPA 624	ND Y	ug/L	8	2/12/99
m,p-Xylenes	EPA 624	ND Y	ug/L	8	2/12/99
o-Xylene	EPA 624	ND Y	ug/L	8	2/12/99
Dichlorodifluoromethane	EPA 624	ND Y	ug/L	20	2/12/99

For EPA 624, the sample was diluted by a factor of 4 due to sample matrix.
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.

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

Matrix: Storm Water
Sample No: 9902-01169-002

Time Sampled: 3:00
Date Sampled: 2/05/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Heptachlor Epoxide	EPA 608	ND	ug/L	1.0	2/20/99
Lindane (gamma BHC)	EPA 608	ND	ug/L	1.0	2/20/99
PCB 1016	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1221	EPA 608	ND	ug/L	10	3/04/99
PCB 1232	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1242	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1248	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1254	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1260	EPA 608	ND L1	ug/L	1.0	3/04/99
Toxaphene	EPA 608	ND	ug/L	1.0	3/04/99
beta-BHC	EPA 608	ND	ug/L	1.0	2/20/99
Extraction	EPA 608				2/10/99
Surrogate:	EPA 608				2/20/99
***Dibutylchlorendate	EPA 608	118	% Recovery		2/20/99
Chemical Oxygen Demand	EPA 410.4	74.	mg/L	20.	2/10/99
Chloride	EPA 300.0	8	mg/L	5.0	2/25/99
Total Dissolved Solids	SM 2540C	146.	mg/L	1.	2/11/99
Solids, Total Suspended	EPA 160.2	106.	mg/L	1.	2/11/99
Nitrogen as Ammonia	EPA 350.2	2.63	mg/L	0.03	2/11/99
Nitrogen as Nitrite	SM 4500 NO2B	0.07	mg/L	0.01	2/05/99
Organic Nitrogen	CALCULATION	2.56	mg/L		2/11/99
Total Kjeldahl Nitrogen	EPA 351.3	5.19	mg/L	0.03	2/10/99
P as Total Phosphate	EPA 365.3	0.91 D1	mg/L	0.3	3/02/99
Phosphorus, Dissolved	EPA 365.3	5.19	mg/L	0.03	2/10/99
P as Orthophosphate	SM 4500 PE	0.17	mg/L	0.05	2/05/99
Phenolics, Total	EPA 420.1	0.013	mg/L	0.005	2/17/99
Total Organic Carbon	SM 5310C	51.2	mg/L	0.2	2/19/99
Total Alkalinity (as CaCO3)	SM 2320B	48.	mg/L	2.	2/15/99
Hardness (EDTA Titrimetric)	SM 2340C	64.	mg/L		3/19/99
Metals Digestion for ICP	EPA 200.7				2/12/99
Metals Digestion for GFAA	SM 3030E				2/12/99
Antimony	SM 3113B	<0.005	mg/L	0.005	2/16/99
Arsenic	SM 3113B	0.009	mg/L	0.005	2/18/99
Beryllium	EPA 200.7	<0.002	mg/L	0.002	2/23/99
Cadmium	SM 3113B	0.0007	mg/L	0.0002	4/27/99
Copper	EPA 200.7	0.015	mg/L	0.015	2/23/99
Lead	SM 3113B	0.009	mg/L	0.005	2/18/99
Mercury	EPA 245.1	<0.0002	mg/L	0.0002	2/11/99
Selenium	SM 3113B	<0.005	mg/L	0.005	2/18/99
Silver	EPA 200.7	<0.04	mg/L	0.04	2/23/99
Zinc	EPA 200.7	0.31	mg/L	0.03	2/23/99
Nitrate plus Nitrite	SM 4500 NO3E	0.25	mg/L	0.05	2/08/99

Bolin Laboratories Inc.

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

Matrix: Storm Water
Sample No: 9902-01169-002

Time Sampled: 3:00
Date Sampled: 2/05/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Nitrogen as Nitrate	CALCULATION	0.18	mg/L		2/08/99
Sulfate, Dissolved	EPA 300.0	18	mg/L	5.0	2/25/99
Acenaphthene	EPA 625	ND	ug/L	10.	3/03/99
Acenaphthylene	EPA 625	ND	ug/L	10.	3/03/99
Aniline	EPA 625	ND Y	ug/L	10.	3/03/99
Anthracene	EPA 625	ND	ug/L	10.	3/03/99
Benzidine	EPA 625	ND Y	ug/L	50.0	3/03/99
Benzo (a) anthracene	EPA 625	ND	ug/L	10.	3/03/99
Benzo (b) fluoranthene	EPA 625	ND	ug/L	10.	3/03/99
Benzo (k) fluoranthene	EPA 625	ND	ug/L	10.	3/03/99
Benzo (a) pyrene	EPA 625	ND	ug/L	10.	3/03/99
Benzo (g,h,i) perylene	EPA 625	ND	ug/L	10.	3/03/99
Benzoic acid	EPA 625	ND Y	ug/L	10.	3/03/99
Benzyl alcohol	EPA 625	ND Y	ug/L	10.	3/03/99
Butylbenzyl Phthalate	EPA 625	ND	ug/L	10.	3/03/99
Bis(2-chloroethyl)ether	EPA 625	ND	ug/L	10.	3/03/99
Bis(2-chloroethoxy)methane	EPA 625	ND	ug/L	10.	3/03/99
Bis(2-chloroisopropyl)ether	EPA 625	ND	ug/L	10.	3/03/99
Bis(2-ethylhexyl)phthalate	EPA 625	100.	ug/L	10.	3/03/99
4-Bromophenylphenylether	EPA 625	ND	ug/L	10.	3/03/99
4-Chloroaniline	EPA 625	ND Y	ug/L	10.	3/03/99
2-Chloronaphthalene	EPA 625	ND	ug/L	10.	3/03/99
4-Chlorophenylphenylether	EPA 625	ND	ug/L	10.	3/03/99
Chrysene	EPA 625	ND	ug/L	10.	3/03/99
Dibenzo (a,h) anthracene	EPA 625	ND	ug/L	10.	3/03/99
Dibenzofuran	EPA 625	ND Y	ug/L	10.	3/03/99
Di-n-butylphthalate	EPA 625	ND	ug/L	10.	3/03/99
1,2-Dichlorobenzene	EPA 625	ND	ug/L	10.	3/03/99
1,3-Dichlorobenzene	EPA 625	ND	ug/L	10.	3/03/99
1,4-Dichlorobenzene	EPA 625	ND	ug/L	10.	3/03/99
3,3'-Dichlorobenzidine	EPA 625	ND	ug/L	10.	3/03/99
Diethyl Phthalate	EPA 625	ND	ug/L	10.	3/03/99
Dimethyl Phthalate	EPA 625	ND	ug/L	10.	3/03/99
2,4-Dinitrotoluene	EPA 625	ND	ug/L	10.	3/03/99
2,6-Dinitrotoluene	EPA 625	ND	ug/L	10.	3/03/99
Di-n-octylphthalate	EPA 625	ND	ug/L	10.	3/03/99
1,2-Diphenylhydrazine	EPA 625	ND Y	ug/L	10.	3/03/99
Fluoranthene	EPA 625	ND	ug/L	10.	3/03/99
Fluorene	EPA 625	ND	ug/L	10.	3/03/99
Hexachlorobenzene	EPA 625	ND	ug/L	10.	3/03/99
Hexachlorobutadiene	EPA 625	ND	ug/L	10.	3/03/99
Hexachlorocyclopentadiene	EPA 625	ND Y	ug/L	10.	3/03/99

Bolin Laboratories Inc.

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(602) 942 8220 • FAX (602) 942 1050

Matrix: Storm Water
Sample No: 9902-01169-002

Time Sampled: 3:00
Date Sampled: 2/05/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Hexachloroethane	EPA 625	ND	ug/L	10.	3/03/99
Indeno (1,2,3-cd) pyrene	EPA 625	ND	ug/L	10.	3/03/99
Isophorone	EPA 625	ND	ug/L	10.	3/03/99
2-Methylnaphthalene	EPA 625	ND Y	ug/L	10.	3/03/99
Naphthalene	EPA 625	ND	ug/L	10.	3/03/99
2-Nitroaniline	EPA 625	ND Y	ug/L	10.	3/03/99
3-Nitroaniline	EPA 625	ND Y	ug/L	10.	3/03/99
4-Nitroaniline	EPA 625	ND Y	ug/L	10.	3/03/99
Nitrobenzene	EPA 625	ND	ug/L	10.	3/03/99
N-Nitrosodimethylamine	EPA 625	ND Y	ug/L	10.	3/03/99
N-Nitrosodiphenylamine	EPA 625	ND Y	ug/L	10.	3/03/99
N-Nitrosodi-n-propylamine	EPA 625	ND	ug/L	10.	3/03/99
Phenanthrene	EPA 625	ND	ug/L	10.	3/03/99
Pyrene	EPA 625	ND	ug/L	10.	3/03/99
1,2,4-Trichlorobenzene	EPA 625	ND	ug/L	10.	3/03/99
4-Chloro-3-methylphenol	EPA 625	ND	ug/L	10.	3/03/99
2-Chlorophenol	EPA 625	ND	ug/L	10.	3/03/99
2,4-Dichlorophenol	EPA 625	ND	ug/L	10.	3/03/99
2,4-Dimethylphenol	EPA 625	ND	ug/L	10.	3/03/99
2,4-Dinitrophenol	EPA 625	ND	ug/L	10.	3/03/99
2-Methyl-4,6-Dinitrophenol	EPA 625	ND	ug/L	10.	3/03/99
2-Methylphenol	EPA 625	ND Y	ug/L	10.	3/03/99
4-Methylphenol (p-Cresol)	EPA 625	ND Y	ug/L	10.	3/03/99
2-Nitrophenol	EPA 625	ND	ug/L	10.	3/03/99
4-Nitrophenol	EPA 625	ND	ug/L	10.	3/03/99
Pentachlorophenol	EPA 625	ND	ug/L	10.	3/03/99
Phenol	EPA 625	ND	ug/L	10.	3/03/99
2,4,5-Trichlorophenol	EPA 625	ND Y	ug/L	10.	3/03/99
2,4,6-Trichlorophenol	EPA 625	ND	ug/L	10.	3/03/99
2,3,7,8-TCDD (Screen)	EPA 625	ND T	ug/L	10.	3/03/99
Extraction	EPA 625				2/08/99
Surrogate:	EPA 625				3/03/99
***2-Fluorophenol	EPA 625	11.8	% Recovery		3/03/99
***d6-Phenol	EPA 625	9.40 C	% Recovery		3/03/99
***d5-Nitrobenzene	EPA 625	24.4	% Recovery		3/03/99
***2-Fluorobiphenyl	EPA 625	23.1	% Recovery		3/03/99
***2,4,6-Tribromophenol	EPA 625	29.5	% Recovery		3/03/99
***d14-Terphenyl	EPA 625	19.4	% Recovery		3/03/99

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

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Method 625 was performed by Legend Technical Services, St.Paul MN, #AZ0557.

* = 1,2-Diphenyl hydrazine oxidizes to azobenzene under GC operating conditions. This compound was calibrated as azobenzene.
C = The Phenol-d6 Surrogate was outside of the QC limit.
D1 = Sample was diluted due to high concentration of target analyte.
L1 = The Laboratory Fortified Blank Spike was outside the laboratory acceptance limits due to an error when the spiking solution was made up. The pesticide Laboratory Fortified Blank Spike and duplicate were acceptable.
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: 2/05/99
Reported: 3/22/99
Invoice No: 051342

Project Name: Glendale NPDES

Matrix: Storm Water
Sample No: 9902-01169-002
Sample ID: GAC020499 (Arrow)

Time Sampled: 3:00
Date Sampled: 2/05/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Cyanide, Total	SM 4500 CN E	<0.01	mg/L	0.01	2/16/99
Filtration for Diss Metals					2/18/99
Antimony, Dissolved	EPA 200.9	<0.004	mg/L	0.004	2/16/99
Arsenic, Dissolved	EPA 200.9	0.007	mg/L	0.005	2/22/99
Beryllium, Dissolved	EPA 200.7	<0.002	mg/L	0.002	3/02/99
Cadmium, Dissolved	SM 3113B	0.0005	mg/L	0.0002	4/27/99
Copper, Dissolved	EPA 200.7	<0.015	mg/L	0.015	3/02/99
Lead, Dissolved	EPA 200.9	<0.005	mg/L	0.005	2/22/99
Mercury, Dissolved	EPA 245.1	0.0002	mg/L	0.0002	2/16/99
Selenium, Dissolved	EPA 200.9	<0.005	mg/L	0.005	2/22/99
Silver, Dissolved	EPA 200.7	<0.05	mg/L	0.05	3/17/99
Thallium, Dissolved	EPA 200.9	<0.001	mg/L	0.001	2/16/99
Zinc, Dissolved	EPA 200.7	0.07	mg/L	0.02	3/02/99
Chromium	EPA 218.2	0.0046	mg/L	0.001	2/23/99
Chromium, Dissolved	EPA 218.2	0.0029	mg/L	0.001	2/23/99
Nickel	EPA 249.2	0.010	mg/L	0.001	2/24/99
Nickel, Dissolved	EPA 249.2	0.0060	mg/L	0.001	2/24/99
Thallium	EPA 279.2	<0.001	mg/L	0.001	2/23/99
4,4'-DDD	EPA 608	ND	ug/L	1.0	2/20/99
4,4'-DDE	EPA 608	ND	ug/L	1.0	2/20/99
4,4'-DDT	EPA 608	ND	ug/L	2.0	2/20/99
Aldrin	EPA 608	ND	ug/L	1.0	2/20/99
alpha-BHC	EPA 608	ND	ug/L	1.0	2/20/99
Chlordane	EPA 608	ND	ug/L	1.0	3/04/99
delta-BHC	EPA 608	ND	ug/L	1.0	2/20/99
Dieldrin	EPA 608	ND	ug/L	1.0	2/20/99
Endosulfan I	EPA 608	ND	ug/L	1.0	2/20/99
Endosulfan II	EPA 608	ND	ug/L	1.0	2/20/99
Endosulfan Sulfate	EPA 608	ND	ug/L	1.0	2/20/99
Endrin	EPA 608	ND	ug/L	1.0	2/20/99
Endrin Aldehyde	EPA 608	ND	ug/L	1.0	2/20/99
Heptachlor	EPA 608	ND	ug/L	1.0	2/20/99

Data Checksheet

Site	BUTLER
Municipality	GLENDALE
Sample Date	FEBRUARY 4, 1999

Date Received	MAY 4, 1999

Laboratory Used	BRIN
Laboratory Contact	STEPHANIE
FCD Sample ID Number	GBG020499 / GBG020499C
Lab Sample ID Number	9902-01148-007 / 9902-01148-009
Laboratory Invoice Number	051339

Initial Review Complete	✓	Date	5-4-99
Lab Contacted		Date	
Lab Review Complete		Date	
Second Review Complete		Date	
Additional Review Necessary			

Comments

Data Validation Table Complete	✓	Date	5-4-99

Data Entered Into Database	✓	Date	5-4-99

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

Received: 2/05/99
Reported: 3/22/99
Invoice No: 051339

Project Name: Glendale NPDES

Matrix: Storm Water
Sample No: 9902-01148-007
Sample ID: GBG020499 (Butler)

Time Sampled: 18:40
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Biochemical Oxygen Demand	EPA 405.1	27.	mg/L	1.0	2/05/99
Coliform, Fecal (MPN)	SM 9221D	17,000.	MPN/100ml	20.	2/05/99
Fecal Streptococcus	SM 9230B	2,400.	MPN/100ml	20.	2/05/99
Oil & Grease	EPA 413.1	11.	mg/L	5.0	2/22/99
Carbon tetrachloride	EPA 624	ND	ug/L	8	2/13/99
Bromomethane	EPA 624	ND	ug/L	20	2/13/99
Benzene	EPA 624	ND	ug/L	8	2/13/99
trans-1,3-Dichloropropene	EPA 624	ND	ug/L	8	2/13/99
trans 1,2-Dichloroethylene	EPA 624	ND	ug/L	8	2/13/99
cis 1,3-Dichloropropene	EPA 624	ND	ug/L	8	2/13/99
2-Chloroethylvinyl ether	EPA 624	ND	ug/L	8	2/13/99
1,4-Dichlorobenzene	EPA 624	ND	ug/L	8	2/13/99
1,3-Dichlorobenzene	EPA 624	ND	ug/L	8	2/13/99
1,2-Dichloropropane	EPA 624	ND	ug/L	8	2/13/99
1,2-Dichloroethane	EPA 624	ND	ug/L	8	2/13/99
1,2-Dichlorobenzene	EPA 624	ND	ug/L	8	2/13/99
1,1-Dichloroethylene	EPA 624	ND	ug/L	8	2/13/99
1,1-Dichloroethane	EPA 624	ND	ug/L	8	2/13/99
Trichloroethylene (TCE)	EPA 624	ND	ug/L	8	2/13/99
1,1,2-Trichloroethane	EPA 624	ND	ug/L	8	2/13/99
1,1,1-Trichloroethane	EPA 624	ND	ug/L	8	2/13/99
Toluene	EPA 624	ND	ug/L	8	2/13/99
Ethylbenzene	EPA 624	ND	ug/L	8	2/13/99
m,p-Xylenes	EPA 624	ND Y	ug/L	8	2/13/99
o-Xylene	EPA 624	ND Y	ug/L	8	2/13/99
Tetrachloroethylene (PCE)	EPA 624	ND	ug/L	8	2/13/99
1,1,2,2-Tetrachloroethane	EPA 624	ND	ug/L	8	2/13/99
Chloromethane	EPA 624	ND	ug/L	20	2/13/99
Chloroform	EPA 624	ND	ug/L	8	2/13/99
Bromodichloromethane	EPA 624	ND	ug/L	8	2/13/99
Bromoform	EPA 624	ND	ug/L	8	2/13/99
Chlorobenzene	EPA 624	ND	ug/L	8	2/13/99

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Matrix: Storm Water
Sample No: 9902-01148-007

Time Sampled: 18:40
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Chloroethane	EPA 624	ND	ug/L	20	2/13/99
Dichloromethane	EPA 624	ND	ug/L	20	2/13/99
Trichlorofluoromethane	EPA 624	ND	ug/L	20	2/13/99
Dichlorodifluoromethane	EPA 624	ND Y	ug/L	20	2/13/99
Vinyl Chloride	EPA 624	ND	ug/L	20	2/13/99
Dibromochloromethane	EPA 624	ND	ug/L	8	2/13/99
Total Trihalomethanes	EPA 624	ND	ug/L	8	2/13/99
Acrolein	EPA 624	ND T,Y	ug/L	200	2/13/99
Acrylonitrile	EPA 624	ND Y	ug/L	40	2/13/99
Surrogates:	EPA 624				2/13/99
***Pentafluorobenzene	EPA 624	82.	% Recovery		2/13/99
***1,2-dichloroethane-d4	EPA 624	88.	% Recovery		2/13/99
***4-bromofluorobenzene	EPA 624	76.	% Recovery		2/13/99
***1,2-dichlorobenzene-d4	EPA 624	83.	% Recovery		2/13/99
Acetone	EPA 624	ND Y	ug/L	100	2/13/99
2-Butanone (MEK)	EPA 624	ND Y	ug/L	40	2/13/99
Carbon disulfide	EPA 624	ND Y	ug/L	40	2/13/99
2-Hexanone (MBK)	EPA 624	ND Y	ug/L	40	2/13/99
Styrene	EPA 624	ND Y	ug/L	8	2/13/99
Total Xylenes	EPA 624	ND Y	ug/L	8	2/13/99
Trichlorotrifluoroethane	EPA 624	ND Y	ug/L	8	2/13/99
cis 1,2-Dichloroethylene	EPA 624	ND Y	ug/L	8	2/13/99
m,p-Xylenes	EPA 624	ND Y	ug/L	8	2/13/99
o-Xylene	EPA 624	ND Y	ug/L	8	2/13/99
Dichlorodifluoromethane	EPA 624	ND Y	ug/L	20	2/13/99

For EPA 624, the sample was diluted by a factor of 4 due to sample matrix.
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: 2/05/99
Reported: 3/22/99
Invoice No: 051339

Project Name: Glendale NPDES

Matrix: Storm Water
Sample No: 9902-01148-009
Sample ID: GBG020499C (Butler)

Time Sampled: 18:40
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Cyanide, Total	SM 4500 CN E	<0.01	mg/L	0.01	2/16/99
Chemical Oxygen Demand	EPA 410.4	87.	mg/L	20.	2/10/99
Chloride	EPA 300.0	7.	mg/L	5.0	2/08/99
Total Dissolved Solids	SM 2540C	100.	mg/L	1.	2/10/99
Solids, Total Suspended	EPA 160.2	34.	mg/L	1.	2/11/99
Nitrogen as Ammonia	EPA 350.2	1.47	mg/L	0.03	2/11/99
Nitrogen as Nitrate	EPA 300.0	0.85	mg/L	0.1	2/06/99
Nitrogen as Nitrite	EPA 300.0	<0.1	mg/L	0.1	2/05/99
Nitrate plus Nitrite	CALCULATION	0.85	mg/L	0.1	3/02/99
Organic Nitrogen	CALCULATION	3.	mg/L		2/10/99
Total Kjeldahl Nitrogen	EPA 351.3	4.47	mg/L	0.03	2/10/99
P as Total Phosphate	EPA 365.3	0.46	mg/L	0.05	3/02/99
Total Phosphate	CALCULATION	1.4	mg/L	0.15	3/02/99
Phosphorus, Dissolved	EPA 365.3	0.12	mg/L	0.05	2/10/99
P as Orthophosphate	SM 4500 PE	0.23	mg/L	0.05	2/05/99
Phenolics, Total	EPA 420.1	0.018	mg/L	0.0050	2/23/99
Total Organic Carbon	SM 5310C	18.1	mg/L	0.2	2/19/99
Total Alkalinity (as CaCO3)	SM 2320B	46.	mg/L	2.	2/15/99
Sulfate, Dissolved	EPA 300.0	7	mg/L	5.0	3/01/99
4,4'-DDD	EPA 608	ND	ug/L	1.0	2/20/99
4,4'-DDE	EPA 608	ND	ug/L	1.0	2/20/99
4,4'-DDT	EPA 608	ND	ug/L	2.0	2/20/99
Aldrin	EPA 608	ND	ug/L	1.0	2/20/99
alpha-BHC	EPA 608	ND	ug/L	1.0	2/20/99
Chlordane	EPA 608	ND	ug/L	1.0	3/04/99
delta-BHC	EPA 608	ND	ug/L	1.0	2/20/99
Dieldrin	EPA 608	ND	ug/L	1.0	2/20/99
Endosulfan I	EPA 608	ND	ug/L	1.0	2/20/99
Endosulfan II	EPA 608	ND	ug/L	1.0	2/20/99
Endosulfan Sulfate	EPA 608	ND	ug/L	1.0	2/20/99
Endrin	EPA 608	ND	ug/L	1.0	2/20/99
Endrin Aldehyde	EPA 608	ND	ug/L	1.0	2/20/99

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(602) 942 8220 • FAX (602) 942 1050

Matrix: Storm Water
Sample No: 9902-01148-009

Time Sampled: 18:40
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Heptachlor	EPA 608	ND	ug/L	1.0	2/20/99
Heptachlor Epoxide	EPA 608	ND	ug/L	1.0	2/20/99
Lindane (gamma BHC)	EPA 608	ND	ug/L	1.0	2/20/99
PCB 1016	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1221	EPA 608	ND	ug/L	10	3/04/99
PCB 1232	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1242	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1248	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1254	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1260	EPA 608	ND L1	ug/L	1.0	3/04/99
Toxaphene	EPA 608	ND	ug/L	1.0	3/04/99
beta-BHC	EPA 608	ND	ug/L	1.0	2/20/99
Extraction	EPA 608				2/10/99
Surrogate:	EPA 608				2/20/99
***Dibutylchlorendate	EPA 608	161 S1	% Recovery		2/20/99
Metals Digestion for ICP	EPA 200.7				2/12/99
Metals Digestion for GFAA	SM 3030E				2/12/99
Antimony	SM 3113B	<0.005	mg/L	0.005	2/16/99
Arsenic	SM 3113B	<0.005	mg/L	0.005	2/18/99
Beryllium	EPA 200.7	<0.002	mg/L	0.002	2/24/99
Cadmium	SM 3113B	0.0004	mg/L	0.0002	4/27/99
Copper	EPA 200.7	<0.015	mg/L	0.015	2/24/99
Lead	SM 3113B	0.008	mg/L	0.005	2/18/99
Mercury	EPA 245.1	<0.0002	mg/L	0.0002	2/11/99
Selenium	SM 3113B	<0.005	mg/L	0.005	2/18/99
Silver	EPA 200.7	<0.04	mg/L	0.04	2/23/99
Zinc	EPA 200.7	0.29	mg/L	0.02	2/24/99
Filtration for Diss Metals					2/18/99
Antimony, Dissolved	EPA 200.9	<0.004	mg/L	0.004	2/16/99
Arsenic, Dissolved	EPA 200.9	0.008	mg/L	0.005	2/22/99
Beryllium, Dissolved	EPA 200.7	<0.002	mg/L	0.002	3/02/99
Cadmium, Dissolved	SM 3113B	0.0004	mg/L	0.0002	4/27/99
Copper, Dissolved	EPA 200.7	0.016	mg/L	0.015	3/02/99
Lead, Dissolved	EPA 200.9	<0.005	mg/L	0.005	2/22/99
Mercury, Dissolved	EPA 245.1	<0.0002	mg/L	0.0002	2/16/99
Selenium, Dissolved	EPA 200.9	<0.005	mg/L	0.005	2/22/99
Silver, Dissolved	EPA 200.7	<0.05	mg/L	0.05	3/17/99
Thallium, Dissolved	EPA 200.9	<0.001	mg/L	0.001	2/05/99
Zinc, Dissolved	EPA 200.7	0.03	mg/L	0.02	3/02/99
Hardness (EDTA Titrimetric)	SM 2340C	44.	ppm		3/19/99
Thallium	EPA 279.2	<0.001	mg/L	0.001	2/23/99
Nickel	EPA 249.2	0.0068	mg/L	0.001	2/24/99

Bolin Laboratories Inc.

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

Matrix: Storm Water
Sample No: 9902-01148-009

Time Sampled: 18:40
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Chromium	EPA 218.2	0.0041	mg/L	0.001	2/23/99
Chromium, Dissolved	EPA 218.2	0.0038	mg/L	0.001	2/23/99
Nickel, Dissolved	EPA 249.2	0.0045	mg/L	0.001	2/24/99
Acenaphthene	EPA 625	ND	ug/L	5.0	2/27/99
Acenaphthylene	EPA 625	ND	ug/L	5.0	2/27/99
Aniline	EPA 625	ND Y	ug/L	5.0	2/27/99
Anthracene	EPA 625	ND	ug/L	5.0	2/27/99
Benzidine	EPA 625	ND Y	ug/L	50.	2/27/99
Benzo (a) anthracene	EPA 625	ND	ug/L	5.0	2/27/99
Benzo (b) fluoranthene	EPA 625	ND	ug/L	5.0	2/27/99
Benzo (k) fluoranthene	EPA 625	ND	ug/L	5.0	2/27/99
Benzo (a) pyrene	EPA 625	ND	ug/L	5.0	2/27/99
Benzo (g,h,i) perylene	EPA 625	ND	ug/L	5.0	2/27/99
Benzoic acid	EPA 625	9.1 Y	ug/L	5.0	2/27/99
Benzyl alcohol	EPA 625	ND Y	ug/L	5.0	2/27/99
Butylbenzyl Phthalate	EPA 625	ND	ug/L	5.0	2/27/99
Bis(2-chloroethyl)ether	EPA 625	ND	ug/L	5.0	2/27/99
Bis(2-chloroethoxy)methane	EPA 625	ND	ug/L	5.0	2/27/99
Bis(2-chloroisopropyl)ether	EPA 625	ND	ug/L	5.0	2/27/99
Bis(2-ethylhexyl)phthalate	EPA 625	9.4	ug/L	5.0	2/27/99
4-Bromophenylphenylether	EPA 625	ND	ug/L	5.0	2/27/99
4-Chloroaniline	EPA 625	ND Y	ug/L	5.0	2/27/99
2-Chloronaphthalene	EPA 625	ND	ug/L	5.0	2/27/99
4-Chlorophenylphenylether	EPA 625	ND	ug/L	5.0	2/27/99
Chrysene	EPA 625	ND	ug/L	5.0	2/27/99
Dibenzo (a,h) anthracene	EPA 625	ND	ug/L	5.0	2/27/99
Dibenzofuran	EPA 625	ND Y	ug/L	5.0	2/27/99
Di-n-butylphthalate	EPA 625	ND	ug/L	5.0	2/27/99
1,2-Dichlorobenzene	EPA 625	ND	ug/L	5.0	2/27/99
1,3-Dichlorobenzene	EPA 625	ND	ug/L	5.0	2/27/99
1,4-Dichlorobenzene	EPA 625	ND	ug/L	5.0	2/27/99
3,3'-Dichlorobenzidine	EPA 625	ND	ug/L	5.0	2/27/99
Diethyl Phthalate	EPA 625	ND	ug/L	5.0	2/27/99
Dimethyl Phthalate	EPA 625	ND	ug/L	5.0	2/27/99
2,4-Dinitrotoluene	EPA 625	ND	ug/L	5.0	2/27/99
2,6-Dinitrotoluene	EPA 625	ND	ug/L	5.0	2/27/99
Di-n-octylphthalate	EPA 625	ND	ug/L	5.0	2/27/99
1,2-Diphenylhydrazine	EPA 625	ND *, Y	ug/L	5.0	2/27/99
Fluoranthene	EPA 625	ND	ug/L	5.0	2/27/99
Fluorene	EPA 625	ND	ug/L	5.0	2/27/99
Hexachlorobenzene	EPA 625	ND	ug/L	5.0	2/27/99
Hexachlorobutadiene	EPA 625	ND	ug/L	5.0	2/27/99

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Matrix: Storm Water
Sample No: 9902-01148-009

Time Sampled: 18:40
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Hexachlorocyclopentadiene	EPA 625	ND Y	ug/L	5.0	2/27/99
Hexachloroethane	EPA 625	ND	ug/L	5.0	2/27/99
Indeno (1,2,3-cd) pyrene	EPA 625	ND	ug/L	5.0	2/27/99
Isophorone	EPA 625	ND	ug/L	5.0	2/27/99
2-Methylnaphthalene	EPA 625	ND Y	ug/L	5.0	2/27/99
Naphthalene	EPA 625	ND	ug/L	5.0	2/27/99
2-Nitroaniline	EPA 625	ND Y	ug/L	5.0	2/27/99
3-Nitroaniline	EPA 625	ND Y	ug/L	5.0	2/27/99
4-Nitroaniline	EPA 625	ND Y	ug/L	5.0	2/27/99
Nitrobenzene	EPA 625	ND	ug/L	5.0	2/27/99
N-Nitrosodimethylamine	EPA 625	ND Y	ug/L	5.0	2/27/99
N-Nitrosodiphenylamine	EPA 625	ND Y	ug/L	5.0	2/27/99
N-Nitrosodi-n-propylamine	EPA 625	ND	ug/L	5.0	2/27/99
Phenanthrene	EPA 625	ND	ug/L	5.0	2/27/99
Pyrene	EPA 625	ND	ug/L	5.0	2/27/99
1,2,4-Trichlorobenzene	EPA 625	ND	ug/L	5.0	2/27/99
4-Chloro-3-methylphenol	EPA 625	ND	ug/L	5.0	2/27/99
2-Chlorophenol	EPA 625	ND	ug/L	5.0	2/27/99
2,4-Dichlorophenol	EPA 625	ND	ug/L	5.0	2/27/99
2,4-Dimethylphenol	EPA 625	ND	ug/L	5.0	2/27/99
2,4-Dinitrophenol	EPA 625	ND	ug/L	5.0	2/27/99
2-Methyl-4,6-Dinitrophenol	EPA 625	ND	ug/L	5.0	2/27/99
2-Methylphenol	EPA 625	ND Y	ug/L	5.0	2/27/99
4-Methylphenol (p-Cresol)	EPA 625	ND Y	ug/L	5.0	2/27/99
2-Nitrophenol	EPA 625	ND	ug/L	5.0	2/27/99
4-Nitrophenol	EPA 625	ND	ug/L	5.0	2/27/99
Pentachlorophenol	EPA 625	ND	ug/L	5.0	2/27/99
Phenol	EPA 625	ND	ug/L	5.0	2/27/99
2,4,5-Trichlorophenol	EPA 625	ND Y	ug/L	5.0	2/27/99
2,4,6-Trichlorophenol	EPA 625	ND	ug/L	5.0	2/27/99
2,3,7,8-TCDD (Screen)	EPA 625	ND T	ug/L	10.	2/27/99
Extraction	EPA 625				2/08/99
Surrogate:	EPA 625				2/27/99
***2-Fluorophenol	EPA 625	48.1	% Recovery		2/27/99
***d6-Phenol	EPA 625	23.3	% Recovery		2/27/99
***d5-Nitrobenzene	EPA 625	31.5	% Recovery		2/27/99
***2-Fluorobiphenyl	EPA 625	57.3	% Recovery		2/27/99
***2,4,6-Tribromophenol	EPA 625	83.6	% Recovery		2/27/99
***d14-Terphenyl	EPA 625	119	% Recovery		2/27/99

Dissolved & Total Thallium, Nickel & Chromium analyzed by BC Labs, Bakersfield CA, #AZ0345.
TKN & Ammonia analyzed by Aquatic Consulting, Tempe AZ. #AZ0003.

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Phenol analyzed by McKenzie Labs, Phoenix AZ, #AZ0034.
EPA Method 625 performed by Legend Technical Services, St.Paul MN, #AZ0557.

* = 1,2-Diphenyl hydrazine oxidizes to azobenzene under GC operation conditions. This compound was calibrated as azobenzene.
L1 = The Laboratory Fortified Blank Spike was outside the laboratory acceptance limits due to an error when the spiking solution was made up. The pesticide Laboratory Fortified Blank Spike and duplicate were acceptable.
S1 = Surrogate recovery was above laboratory acceptance limits. Data was not impacted.
Y = Compound not listed in cited method.
T = Result based on a Tentatively Identified Compound search.

Authorized Signatory
ADHS License No.: AZ0004

Data Checksheet

Site	INO PARK
Municipality	GLENDALE
Sample Date	FEBRUARY 4, 1999

Date Received	MAY 4, 1999

Laboratory Used	BRLIN
Laboratory Contact	STEPHANIE
FCD Sample ID Number	GI 2499G, GIC020499
Lab Sample ID Number	9902.01148.001(G) / 9902.01169.004(C)
Laboratory Invoice Number	051339 (G) / 051342 (C)

Initial Review Complete	✓	Date	5-4-99
Lab Contacted		Date	
Lab Review Complete		Date	
Second Review Complete		Date	
Additional Review Necessary			

Comments

Data Validation Table Complete	✓	Date	5-4-99

Data Entered Into Database	✓	Date	5-4-99

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

Received: 2/05/99
Reported: 3/22/99
Invoice No: 051339

Project Name: Glendale NPDES

Matrix: Storm Water
Sample No: 9902-01148-001
Sample ID: G12499G (INDPK)

Time Sampled: 21:46
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Biochemical Oxygen Demand	EPA 405.1	17.	mg/L	1.0	2/05/99
Coliform, Fecal (MPN)	SM 9221D	50,000.	MPN/100ml	20.	2/05/99
Fecal Streptococcus	SM 9230B	3,000.	MPN/100ml	20.	2/05/99
Oil & Grease	EPA 413.1	<5.0	mg/L	5.0	2/22/99
Carbon tetrachloride	EPA 624	ND	ug/L	8	2/12/99
Bromomethane	EPA 624	ND	ug/L	20	2/12/99
Benzene	EPA 624	ND	ug/L	8	2/12/99
trans-1,3-Dichloropropene	EPA 624	ND	ug/L	8	2/12/99
trans 1,2-Dichloroethylene	EPA 624	ND	ug/L	8	2/12/99
cis 1,3-Dichloropropene	EPA 624	ND	ug/L	8	2/12/99
2-Chloroethylvinyl ether	EPA 624	ND	ug/L	8	2/12/99
1,4-Dichlorobenzene	EPA 624	ND	ug/L	8	2/12/99
1,3-Dichlorobenzene	EPA 624	ND	ug/L	8	2/12/99
1,2-Dichloropropane	EPA 624	ND	ug/L	8	2/12/99
1,2-Dichloroethane	EPA 624	ND	ug/L	8	2/12/99
1,2-Dichlorobenzene	EPA 624	ND	ug/L	8	2/12/99
1,1-Dichloroethylene	EPA 624	ND	ug/L	8	2/12/99
1,1-Dichloroethane	EPA 624	ND	ug/L	8	2/12/99
Trichloroethylene (TCE)	EPA 624	ND	ug/L	8	2/12/99
1,1,2-Trichloroethane	EPA 624	ND	ug/L	8	2/12/99
1,1,1-Trichloroethane	EPA 624	ND	ug/L	8	2/12/99
Toluene	EPA 624	ND	ug/L	8	2/12/99
Ethylbenzene	EPA 624	ND	ug/L	8	2/12/99
m,p-Xylenes	EPA 624	ND Y	ug/L	8	2/12/99
o-Xylene	EPA 624	ND Y	ug/L	8	2/12/99
Tetrachloroethylene (PCE)	EPA 624	ND	ug/L	8	2/12/99
1,1,2,2-Tetrachloroethane	EPA 624	ND	ug/L	8	2/12/99
Chloromethane	EPA 624	ND	ug/L	20	2/12/99
Chloroform	EPA 624	ND	ug/L	8	2/12/99
Bromodichloromethane	EPA 624	ND	ug/L	8	2/12/99
Bromoform	EPA 624	ND	ug/L	8	2/12/99
Chlorobenzene	EPA 624	ND	ug/L	8	2/12/99

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Matrix: Storm Water
Sample No: 9902-01148-001

Time Sampled: 21:46
Date Sampled: 2/04/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Chloroethane	EPA 624	ND	ug/L	20	2/12/99
Dichloromethane	EPA 624	ND	ug/L	20	2/12/99
Trichlorofluoromethane	EPA 624	ND	ug/L	20	2/12/99
Dichlorodifluoromethane	EPA 624	ND Y	ug/L	20	2/12/99
Vinyl Chloride	EPA 624	ND	ug/L	20	2/12/99
Dibromochloromethane	EPA 624	ND	ug/L	8	2/12/99
Total Trihalomethanes	EPA 624	ND	ug/L	8	2/12/99
Acrolein	EPA 624	ND T,Y	ug/L	200	2/12/99
Acrylonitrile	EPA 624	ND Y	ug/L	40	2/12/99
Surrogates:	EPA 624				2/12/99
***Pentafluorobenzene	EPA 624	80.	% Recovery		2/12/99
***1,2-dichloroethane-d4	EPA 624	87.	% Recovery		2/12/99
***4-bromofluorobenzene	EPA 624	76.	% Recovery		2/12/99
***1,2-dichlorobenzene-d4	EPA 624	84.	% Recovery		2/12/99
Acetone	EPA 624	ND Y	ug/L	100	2/12/99
2-Butanone (MEK)	EPA 624	ND Y	ug/L	40	2/12/99
Carbon disulfide	EPA 624	ND Y	ug/L	40	2/12/99
2-Hexanone (MBK)	EPA 624	ND Y	ug/L	40	2/12/99
Styrene	EPA 624	ND Y	ug/L	8	2/12/99
Total Xylenes	EPA 624	ND Y	ug/L	8	2/12/99
Trichlorotrifluoroethane	EPA 624	ND Y	ug/L	8	2/12/99
cis 1,2-Dichloroethylene	EPA 624	ND Y	ug/L	8	2/12/99
m,p-Xylenes	EPA 624	ND Y	ug/L	8	2/12/99
o-Xylene	EPA 624	ND Y	ug/L	8	2/12/99
Dichlorodifluoromethane	EPA 624	ND Y	ug/L	20	2/12/99

For EPA 624, the sample was diluted by a factor of 4 due to sample matrix.
T = Result based on a Tentatively Identified Compound search.
Y = Compound not listed in cited method.

S. Nauyman

Authorized Signatory
ADHS License No.: AZ0004

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

Received: 2/05/99
Reported: 3/22/99
Invoice No: 051342

Project Name: Glendale NPDES

Matrix: Storm Water
Sample No: 9902-01169-004
Sample ID: GIC020499 (INDPK)

Time Sampled: 9:10
Date Sampled: 2/05/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Cyanide, Total	SM 4500 CN E	<0.01	mg/L	0.01	2/16/99
Filtration for Diss Metals					2/18/99
Antimony, Dissolved	EPA 200.9	<0.004	mg/L	0.004	2/16/99
Arsenic, Dissolved	EPA 200.9	<0.005	mg/L	0.005	2/22/99
Beryllium, Dissolved	EPA 200.7	<0.002	mg/L	0.002	3/10/99
Cadmium, Dissolved	SM 3113B	<0.0002	mg/L	0.0002	4/27/99
Copper, Dissolved	EPA 200.7	0.020	mg/L	0.015	3/02/99
Lead, Dissolved	EPA 200.9	0.086 D1	mg/L	0.020	2/22/99
Mercury, Dissolved	EPA 245.1	<0.0002	mg/L	0.0002	2/26/99
Selenium, Dissolved	EPA 200.9	<0.005	mg/L	0.005	2/22/99
Silver, Dissolved	EPA 200.7	<0.05	mg/L	0.05	3/17/99
Thallium, Dissolved	EPA 200.9	<0.001	mg/L	0.001	2/16/99
Zinc, Dissolved	EPA 200.7	0.03	mg/L	0.02	3/02/99
Chromium	EPA 218.2	0.0020	mg/L	0.001	2/23/99
Chromium, Dissolved	EPA 218.2	<0.001	mg/L	0.001	2/23/99
Nickel	EPA 249.2	0.0050	mg/L	0.001	2/24/99
Nickel, Dissolved	EPA 249.2	0.0021	mg/L	0.001	2/24/99
Thallium	EPA 279.2	<0.001	mg/L	0.001	2/23/99
4,4'-DDD	EPA 608	ND	ug/L	1.0	2/20/99
4,4'-DDE	EPA 608	ND	ug/L	1.0	2/20/99
4,4'-DDT	EPA 608	ND	ug/L	2.0	2/20/99
Aldrin	EPA 608	ND	ug/L	1.0	2/20/99
alpha-BHC	EPA 608	ND	ug/L	1.0	2/20/99
Chlordane	EPA 608	ND	ug/L	1.0	3/04/99
delta-BHC	EPA 608	ND	ug/L	1.0	2/20/99
Dieldrin	EPA 608	ND	ug/L	1.0	2/20/99
Endosulfan I	EPA 608	ND	ug/L	1.0	2/20/99
Endosulfan II	EPA 608	ND	ug/L	1.0	2/20/99
Endosulfan Sulfate	EPA 608	ND	ug/L	1.0	2/20/99
Endrin	EPA 608	ND	ug/L	1.0	2/20/99
Endrin Aldehyde	EPA 608	ND	ug/L	1.0	2/20/99
Heptachlor	EPA 608	ND	ug/L	1.0	2/20/99

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Matrix: Storm Water
Sample No: 9902-01169-004

Time Sampled: 9:10
Date Sampled: 2/05/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Heptachlor Epoxide	EPA 608	ND	ug/L	1.0	2/20/99
Lindane (gamma BHC)	EPA 608	ND	ug/L	1.0	2/20/99
PCB 1016	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1221	EPA 608	ND	ug/L	10	3/04/99
PCB 1232	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1242	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1248	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1254	EPA 608	ND	ug/L	1.0	3/04/99
PCB 1260	EPA 608	ND L1	ug/L	1.0	3/04/99
Toxaphene	EPA 608	ND	ug/L	1.0	3/04/99
beta-BHC	EPA 608	ND	ug/L	1.0	2/20/99
Extraction	EPA 608				2/10/99
Surrogate:	EPA 608				2/20/99
***Dibutylchlorendate	EPA 608	180 S1	% Recovery		2/20/99
Chemical Oxygen Demand	EPA 410.4	71.	mg/L	20.	2/15/99
Chloride	EPA 300.0	<5.0	mg/L	5.0	2/08/99
Total Dissolved Solids	SM 2540C	84.	mg/L	1.	2/11/99
Solids, Total Suspended	EPA 160.2	34.	mg/L	1.	2/11/99
Nitrogen as Ammonia	EPA 350.2	2.53	mg/L	0.03	2/11/99
Nitrogen as Nitrite	SM 4500 NO2B	0.07	mg/L	0.01	2/05/99
Organic Nitrogen	CALCULATION	1.28	mg/L		2/11/99
Total Kjeldahl Nitrogen	EPA 351.3	3.81	mg/L	0.03	2/10/99
P as Total Phosphate	EPA 365.3	0.55 D1	mg/L	0.1	3/02/99
Phosphorus, Dissolved	EPA 365.3	0.12	mg/L	0.05	3/05/99
P as Orthophosphate	SM 4500 PE	0.29	mg/L	0.05	2/05/99
Phenolics, Total	EPA 420.1	0.0058	mg/L	0.005	2/17/99
Total Organic Carbon	SM 5310C	15.2	mg/L	0.2	2/19/99
Total Alkalinity (as CaCO3)	SM 2320B	48.	mg/L	2.	2/15/99
Hardness (EDTA Titrimetric)	SM 2340C	44.	mg/L		3/19/99
Sulfide, Dissolved	SM4500-S D	<0.1	mg/L	0.1	2/12/99
Metals Digestion for ICP	EPA 200.7				2/12/99
Metals Digestion for GFAA	SM 3030E				2/12/99
Antimony	SM 3113B	<0.005	mg/L	0.005	2/16/99
Arsenic	SM 3113B	<0.005	mg/L	0.005	2/18/99
Beryllium	EPA 200.7	<0.002	mg/L	0.002	2/23/99
Cadmium	SM 3113B	<0.0002	mg/L	0.0002	4/27/99
Copper	EPA 200.7	<0.015	mg/L	0.015	2/23/99
Lead	SM 3113B	<0.005	mg/L	0.005	2/18/99
Mercury	EPA 245.1	<0.0002	mg/L	0.0002	2/11/99
Selenium	SM 3113B	<0.005	mg/L	0.005	2/18/99
Silver	EPA 200.7	<0.04	mg/L	0.04	2/23/99
Zinc	EPA 200.7	0.21	mg/L	0.03	2/23/99

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Matrix: Storm Water
Sample No: 9902-01169-004

Time Sampled: 9:10
Date Sampled: 2/05/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Nitrate plus Nitrite	SM 4500 NO3E	2.0 D1	mg/L	0.05	2/08/99
Nitrogen as Nitrate	CALCULATION	1.8	mg/L		2/08/99
Acenaphthene	EPA 625	ND	ug/L	5.0	2/26/99
Acenaphthylene	EPA 625	ND	ug/L	10.	2/26/99
Aniline	EPA 625	ND Y	ug/L	5.0	2/26/99
Anthracene	EPA 625	ND	ug/L	5.0	2/26/99
Benzidine	EPA 625	ND Y	ug/L	50.	2/26/99
Benzo (a) anthracene	EPA 625	ND	ug/L	5.0	2/26/99
Benzo (b) fluoranthene	EPA 625	ND	ug/L	5.0	2/26/99
Benzo (k) fluoranthene	EPA 625	ND	ug/L	5.0	2/26/99
Benzo (a) pyrene	EPA 625	ND	ug/L	5.0	2/26/99
Benzo (g,h,i) perylene	EPA 625	ND	ug/L	5.0	2/26/99
Benzoic acid	EPA 625	ND Y	ug/L	50.	2/26/99
Benzyl alcohol	EPA 625	ND Y	ug/L	10.	2/26/99
Butylbenzyl Phthalate	EPA 625	ND	ug/L	5.0	2/26/99
Bis(2-chloroethyl)ether	EPA 625	ND	ug/L	10.	2/26/99
Bis(2-chloroethoxy)methane	EPA 625	ND	ug/L	10.	2/26/99
Bis(2-chloroisopropyl)ether	EPA 625	ND	ug/L	10.	2/26/99
Bis(2-ethylhexyl)phthalate	EPA 625	ND	ug/L	10.	2/26/99
4-Bromophenylphenylether	EPA 625	ND	ug/L	5.0	2/26/99
4-Chloroaniline	EPA 625	ND Y	ug/L	5.0	2/26/99
2-Chloronaphthalene	EPA 625	ND	ug/L	5.0	2/26/99
4-Chlorophenylphenylether	EPA 625	ND	ug/L	10.	2/26/99
Chrysene	EPA 625	ND	ug/L	5.0	2/26/99
Dibenzo (a,h) anthracene	EPA 625	ND	ug/L	5.0	2/26/99
Dibenzofuran	EPA 625	ND Y	ug/L	5.0	2/26/99
Di-n-butylphthalate	EPA 625	ND	ug/L	5.0	2/26/99
1,2-Dichlorobenzene	EPA 625	ND	ug/L	5.0	2/26/99
1,3-Dichlorobenzene	EPA 625	ND	ug/L	5.0	2/26/99
1,4-Dichlorobenzene	EPA 625	ND	ug/L	5.0	2/26/99
3,3'-Dichlorobenzidine	EPA 625	ND	ug/L	5.0	2/26/99
Diethyl Phthalate	EPA 625	ND	ug/L	5.0	2/26/99
Dimethyl Phthalate	EPA 625	ND	ug/L	5.0	2/26/99
2,4-Dinitrotoluene	EPA 625	ND	ug/L	5.0	2/26/99
2,6-Dinitrotoluene	EPA 625	ND	ug/L	5.0	2/26/99
Di-n-octylphthalate	EPA 625	ND	ug/L	5.0	2/26/99
1,2-Diphenylhydrazine	EPA 625	ND *, Y	ug/L	5.0	2/26/99
Fluoranthene	EPA 625	ND	ug/L	5.0	2/26/99
Fluorene	EPA 625	ND	ug/L	5.0	2/26/99
Hexachlorobenzene	EPA 625	ND	ug/L	10.	2/26/99
Hexachlorobutadiene	EPA 625	ND	ug/L	5.0	2/26/99
Hexachlorocyclopentadiene	EPA 625	ND Y	ug/L	5.0	2/26/99

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(602) 942 8220 • FAX (602) 942 1050

Matrix: Storm Water
Sample No: 9902-01169-004

Time Sampled: 9:10
Date Sampled: 2/05/1999

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Hexachloroethane	EPA 625	ND	ug/L	10.	2/26/99
Indeno (1,2,3-cd) pyrene	EPA 625	ND	ug/L	5.0	2/26/99
Isophorone	EPA 625	ND	ug/L	10.	2/26/99
2-Methylnaphthalene	EPA 625	ND Y	ug/L	5.0	2/26/99
Naphthalene	EPA 625	ND	ug/L	5.0	2/26/99
2-Nitroaniline	EPA 625	ND Y	ug/L	5.0	2/26/99
3-Nitroaniline	EPA 625	ND Y	ug/L	5.0	2/26/99
4-Nitroaniline	EPA 625	ND Y	ug/L	5.0	2/26/99
Nitrobenzene	EPA 625	ND	ug/L	10.	2/26/99
N-Nitrosodimethylamine	EPA 625	ND Y	ug/L	5.0	2/26/99
N-Nitrosodiphenylamine	EPA 625	ND Y	ug/L	5.0	2/26/99
N-Nitrosodi-n-propylamine	EPA 625	ND	ug/L	5.0	2/26/99
Phenanthrene	EPA 625	ND	ug/L	5.0	2/26/99
Pyrene	EPA 625	ND	ug/L	5.0	2/26/99
1,2,4-Trichlorobenzene	EPA 625	ND	ug/L	5.0	2/26/99
4-Chloro-3-methylphenol	EPA 625	ND	ug/L	5.0	2/26/99
2-Chlorophenol	EPA 625	ND	ug/L	5.0	2/26/99
2,4-Dichlorophenol	EPA 625	ND	ug/L	5.0	2/26/99
2,4-Dimethylphenol	EPA 625	ND	ug/L	5.0	2/26/99
2,4-Dinitrophenol	EPA 625	ND	ug/L	10.	2/26/99
2-Methyl-4,6-Dinitrophenol	EPA 625	ND	ug/L	10.	2/26/99
2-Methylphenol	EPA 625	ND Y	ug/L	5.0	2/26/99
4-Methylphenol (p-Cresol)	EPA 625	ND Y	ug/L	5.0	2/26/99
2-Nitrophenol	EPA 625	ND	ug/L	5.0	2/26/99
4-Nitrophenol	EPA 625	ND	ug/L	5.0	2/26/99
Pentachlorophenol	EPA 625	ND	ug/L	10.	2/26/99
Phenol	EPA 625	ND	ug/L	5.0	2/26/99
2,4,5-Trichlorophenol	EPA 625	ND Y	ug/L	5.0	2/26/99
2,4,6-Trichlorophenol	EPA 625	ND	ug/L	5.0	2/26/99
2,3,7,8-TCDD (Screen)	EPA 625	ND T	ug/L	10.	2/26/99
Extraction	EPA 625				2/08/99
Surrogate:	EPA 625				2/26/99
***2-Fluorophenol	EPA 625	14.9	% Recovery		2/26/99
***d6-Phenol	EPA 625	10.4	% Recovery		2/26/99
***d5-Nitrobenzene	EPA 625	29.6	% Recovery		2/26/99
***2-Fluorobiphenyl	EPA 625	27.2	% Recovery		2/26/99
***2,4,6-Tribromophenol	EPA 625	34.9	% Recovery		2/26/99
***d14-Terphenyl	EPA 625	32.8	% Recovery		2/26/99

EPA Method 625 performed by Legend Technical Services, St.Paul MN, #AZ0557.
Phenol analyzed by McKenzie Labs, Phoenix AZ, #AZ0034.
Dissolved & Total Thallium, Chromium & Nickel analyzed by BC Labs, Bakersfield CA, #AZ0345.

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TKN & Ammonia analyzed by Aquatic Consulting, Tempe AZ. #AZ0003.

* = 1,2-Diphenyl hydrazine oxidizes to azobenzene under GC operating conditions. This compound was calibrated as azobenzene.
D1 = Sample was diluted due to high concentration of target analyte.
S1 = Surrogate recovery was above laboratory acceptance limits. Data was not impacted.
L1 = The Laboratory Fortified Blank Spike was outside the laboratory acceptance limits due to an error when the spiking solution was made up. The pesticide Laboratory Fortified Blank Spike and duplicate were acceptable.
Y = Compound not listed in cited method.
T = Result based on a Tentatively Identified Compound search.

S. Kaufman

Authorized Signatory
ADHS License No.: AZ0004

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

Received: 2/05/99
Reported: 3/22/99
Invoice No: 051339

Project Name: Glendale NPDES

PARAMETER	METHOD	RESULTS	UNITS	PQL	DATE ANALYZED
Matrix: Storm Water					
Sample No: 9902-01148-005			Time Sampled:	20:40	
Sample ID: GC2499G (Citrus)			Date Sampled:	2/04/1999	
Biochemical Oxygen Demand	EPA 405.1	8.	mg/L	1.0	2/05/99
Coliform, Fecal (MPN)	SM 9221D	9,000.	MPN/100ml	20.	2/05/99
Fecal Streptococcus	SM 9230B	2,200.	MPN/100ml	20.	2/05/99

The analyst failed to inoculate one row of tubes during the analysis. In calculating the Most Probable number(MPN), we assumed all five tubes would have been positive giving a combination of 5-5-3.

S Kaufman

Authorized Signatory
ADHS License No.: AZ0004

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Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9902-1169-2,4

Analyte	Method	Date Analyzed	Spk Conc.	MS %Rec	MSD %Rec	RPD	Blk	ICV %Rec	CCV %Rec
Chemical Oxygen Demand	EPA 410.4	2/10/99	30	91	95	4	<PQL	101	104
Total Suspended Solids	EPA 160.2	2/11/99	N/A	N/A	N/A	N/A	<PQL	104	-
Chloride	EPA 300.0	2/25/99	20	*	94	N/A	<PQL	102	100
Sulfate	EPA 300.0	2/25/99	20	*	100	N/A	<PQL	104	109
Nitrate	SM 4500 NO3B	2/8/99	0.565	107	104	3	<PQL	99	104
Nitrite	SM 4500 NO2B	2/5/99	0.1	96	101	5	<PQL	100	100
Total Dissolved Solids	EPA 160.3	2/10/99	N/A	N/A	N/A	N/A	<PQL	98	96
Orthophosphorous	SM 4500 PE	2/5/99	0.1	103	99	4	<PQL	97	95
Total Phosphorous	EPA 365.3	3/2/99	0.1	100	113	12	<PQL	91	95
Total Cyanide	SM 4500 CNE	2/17/99	0.05	110	111	1	<PQL	94	92
Alkalinity	SM 2320B	2/15/99	100	116	112	4	<PQL	94	98
TOC	SM 5310C	2/19/99	5	99	100	1	<PQL	106	96

* Injection Error

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: Maricopa County Flood Control
Bolin Sample ID: 9902-1169-2,4

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	MS Conc.	MS %Rec	ICV %Rec	CCV %Rec
Alpha-BHC	EPA 608	0218/99	5.0	<PQL	3.91	78	4.12	82	5	8.11	162	103	114
Beta-BHC	EPA 608	2/18/99	5.0	<PQL	4.24	85	4.50	90	6	7.71	154	100	113
Gamma(Lindane)-BHC	EPA 608	2/18/99	5.0	<PQL	4.08	82	4.33	87	6	8.40	168	103	112
Delta-BHC	EPA 608	2/18/99	5.0	<PQL	4.44	89	4.67	93	5	8.25	165	103	114
Heptachlor	EPA 608	2/18/99	5.0	<PQL	4.28	86	4.53	91	6	9.88	198	104	101
Aldrin	EPA 608	2/18/99	5.0	<PQL	3.74	75	4.01	80	7	8.24	165	98	109
Heptachlor Epoxide	EPA 608	2/18/99	5.0	<PQL	4.02	80	4.31	86	7	8.60	172	98	111
Endosulfan I	EPA 608	2/18/99	5.0	<PQL	4.07	81	4.36	87	7	8.43	169	98	109
Dieldrin	EPA 608	2/18/99	5.0	<PQL	4.20	84	4.45	89	6	8.90	178	98	109
4,4,-DDE	EPA 608	2/18/99	5.0	<PQL	4.42	88	4.63	93	5	8.52	170	102	100
Endrin	EPA 608	2/18/99	5.0	<PQL	4.67	93	4.86	97	4	9.42	188	102	109
Endosulfan II	EPA 608	2/18/99	5.0	<PQL	4.60	92	4.81	96	4	8.56	171	103	107
4,4-DDD	EPA 608	2/18/99	5.0	<PQL	4.63	93	4.86	97	5	8.83	177	103	105
Endrin Aldehyde	EPA 608	2/18/99	5.0	<PQL	4.43	89	4.36	87	2	7.50	150	101	106
Endosulfan Sulfate	EPA 608	2/18/99	5.0	<PQL	4.77	95	4.90	98	3	8.44	169	103	103
4,4-DDT	EPA 608	2/18/99	5.0	<PQL	5.24	105	5.28	106	1	9.95	199	105	92

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
MS is Matrix Spike

Bolin Laboratories Inc.

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Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9902-1169 Diss

Analyte	Method	Date Analyzed	Spk Conc. (ppm)	MS %Rec	MSD %Rec	Blk (ppm)	ICV %Rec	CCV %Rec
Berylium	EPA 200.7	3/10/99	0.5	101	100	<PQL	96	92
Cadmium	PA 200.9/SM 3113	4/27/99	0.002	110	110	<PQL	105	110
Copper	EPA 200.7	3/2/99	1	104	101	<PQL	104	97
Silver	EPA 200.7	3/17/99	0.5	73	75	<PQL	94	91
Zinc	EPA 200.7	3/2/99	1	103	100	<PQL	103	95
Antimony	PA 200.9/SM 3113	2/16/99	0.02	88	108		110	110
Arsenic	PA 200.9/SM 3113	2/22/99	0.020	120	115	<PQL	110	105
Lead	PA 200.9/SM 3113	2/22/99	0.020	110	105	<PQL	110	105
Selenium	PA 200.9/SM 3113	2/22/99	0.020	90	90		105	100
Thallium	PA 200.9/SM 3113	2/16/99	0.020	102	100	<PQL	93	93
Mercury	EPA 245.1	2/16/99	0.005	MI	MI	<PQL	96	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

Bolin Laboratories Inc.

17631 N. 25th Avenue • Phoenix, Arizona 85023
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Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9902-1169 Total

Analyte	Method	Date Analyzed	Spk Conc. (ppm)	MS %Rec	MSD %Rec	Blk (ppm)	ICV %Rec	CCV %Rec
Berylium	EPA 200.7	2/23/99	0.5	104	99	<PQL	96	99
Cadmium	PA 200.9/SM 3113	2/24/99	0.002	110	110	<PQL	110	110
Copper	EPA 200.7	2/23/99	1	102	96	<PQL	96	100
Silver	EPA 200.7	2/23/99	0.5	105	98	<PQL	99	102
Zinc	EPA 200.7	2/23/99	1	109	100	<PQL	96	101
Antimony	PA 200.9/SM 3113	2/16/99	0.02	88	108		110	110
Arsenic	PA 200.9/SM 3113	2/18/99	0.020	85	110	<PQL	100	105
Lead	PA 200.9/SM 3113	2/18/99	0.020	105	105	<PQL	95	105
Selenium	PA 200.9/SM 3113	2/18/99	0.020	110	75		90	105
Mercury	EPA 245.1	2/11/99	0.005	126	130	<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

BC LABORATORIES

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

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

Date of Report: 03/25/99
Sample Matrix: SURFACE WATER

Samples Affected: 99-02101-1 - 99-02101-6

Constituents	ICV % Found	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	CCB Readings After	Units	Method Blank Readings	Units
Dissolved Chromium	100.	104.	92.	90 - 110	< 1.	< 1.	µg/L	< 1.	µg/L
Dissolved Nickel	103.	104.	104.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Chromium	100.	92.	91.	90 - 110	< 1.	< 1.	µg/L	< 1.	µg/L
Total Nickel	103.	104.	105.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Thallium	101.	108.	104.	90 - 110	< 1.	< 1.	µg/L	< 1.	µg/L

ICV = Initial Calibration Verification; CCV = Continuing Calibration Verification
CCB = Continuing Calibration Blank

Quality Control Officer

Anthony Bonanno

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Precision & Accuracy)

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

Date of Report: 03/25/99
Sample Matrix: SURFACE WATE

Samples Affected: 99-02101-1 - 99-02101-6

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 Chromium	DISS-02101-1	3.83	3.42	13.43	13.51	10.00	10.00	µg/L	<PQL	1.	20	96.	97.	85 - 115
Dissolved Nickel	DISS-02101-3	10.11	9.69	34.79	34.82	25.00	25.00	µg/L	<PQL	0.	20	99.	99.	85 - 115
Total Chromium	TAD-02101-5	4.61	4.38	14.04	14.01	10.00	10.00	µg/L	<PQL	0.	20	94.	94.	85 - 115
Total Nickel	DISS-02101-3	10.11	9.69	34.79	34.82	25.00	25.00	µg/L	<PQL	0.	20	99.	99.	85 - 115
Total Thallium	TAD-02101-1	< 1.	< 1.	21.7	21.44	25.00	25.00	µg/L	<PQL	1.	20	86.	85.	85 - 115

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

Quality Control Officer

Anthony Bonanno

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Laboratory Control Sample)

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

Date of Report: 03/25/99
Sample Matrix: SURFACE WATER

Samples Affected: 99-02101-1 - 99-02101-6

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Dissolved Chromium	LFB-10-LCS	9.58	10.	µg/L	96.	85 - 115
Dissolved Nickel	LFB-25-LCS	27.13	25.	µg/L	109.	85 - 115
Total Chromium	LFB-10-LCS	9.58	10.	µg/L	96.	85 - 115
Total Nickel	LFB-25-LCS	27.13	25.	µg/L	109.	85 - 115
Total Thallium	LFB-25-LCS	24.53	25.	µg/L	98.	85 - 115

Quality Control Officer

Anthony Bonanno

LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Preparation & Analysis Information)

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

Date of Report: 03/25/99
Sample Matrix: SURFACE WATER

Samples Affected: 99-02101-1 - 99-02101-6

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Dissolved Chromium	EPA-600-4-79-02	02/04/99	FIELD	EPA-7191	02/23/99	KAS
Dissolved Nickel	EPA-600-4-79-02	02/04/99	FIELD	EPA-249.2	02/24/99	KAS
Total Chromium	EPA-3020	02/05/99	BOLIN	EPA-7191	02/23/99	KAS
Total Nickel	EPA-3020	02/05/99	BOLIN	EPA-249.2	02/24/99	KAS
Total Thallium	EPA-3020	02/05/99	BOLIN	EPA-7841	02/23/99	KAS

Lab #99-02101-3 through 99-02101-6 were filtered on 02/05/99.

Quality Control Officer

Anthony Bonanno

McKENZIE LABORATORIES

Date: 01-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902083
Project:

QC SUMMARY REPORT

Method Blank

Analyte	Result	PQL	Qual	Units	DF	Test Code	Date Prepared	Date Analyzed	Analyst	Batch ID
Phenolics, Total Recoverable	<0.0050	0.0050		mg/L	1	EPA420.1	2/17/99	2/17/99	KA	420.1-2/18/99

McKENZIE LABORATORIES

Date: 01-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902083
Project:

QC SUMMARY REPORT

Sample Duplicate

Analyte	Result	PQL	Units	RPD Ref Val	% RPD	RPD Limit	Test Code	Date Prepared	Date Analyzed	Analyst	Qual
Sample ID: **9902096-01AD**		Batch ID:	420.1-2/18/99								
Client ID:											
Phenolics, Total Recoverable	<0.0050	0.0050	mg/L	<0.0050	0%	20	EPA420.1	2/17/99	2/17/99	KA	

McKENZIE LABORATORIES

Date: 01-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902083
Project:

QC SUMMARY REPORT

Sample Matrix Spike

Analyte	Result	PQL	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Limit	Qual
Sample ID: **9902096-01AS**	Batch ID: 420.1-2/18/99			Test Code: EPA420.1				Date Analyzed: 2/17/99			
Client ID:				Units: mg/L				Date Prepared: 2/17/99			
Phenolics, Total Recoverable	0.09030	0.0050	0.1000	<0.0050	90%	80	120				

McKENZIE LABORATORIES

Date: 01-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902083
Project:

QC SUMMARY REPORT

Blank Spike (primary source)

Analyte	Result	PQL	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Limit	Qual
Sample ID: LCS	Batch ID: 420.1-2/18/99			Test Code: EPA420.1				Date Analyzed: 2/17/99			
				Units: mg/L				Date Prepared: 2/17/99			
Phenolics, Total Recoverable	0.1027	0.0050	0.1000	<0.0050	103%	85	115				

McKENZIE LABORATORIES

Date: 01-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902083
Project:

QC SUMMARY REPORT

Secondary Source QC Sample

Analyte	Result	PQL	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Limit	Qual
Sample ID: LCSV	Batch ID: 420.1-2/18/99			Test Code: EPA420.1				Date Analyzed: 2/17/99			
				Units: mg/L				Date Prepared: 2/17/99			
Phenolics, Total Recoverable	0.09780	0.0050	0.1000	<0.0050	98%	85	115				

Bolin Laboratories Inc.

❑ 17631 N. 25th Ave. Phoenix AZ 85023
(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. 9902 01169

CLIENT INFORMATION

Client Name	Address	City	State	Zip	Phone	Fax
FLOOD CONTROL	2801 W DURANGO	PHX	AZ	85009		

Project Name	Project Number	Contact	P.O. No.	Fax Results ❑	QC Report ☑	Special Detection Limits ❑
GLENDALE NPDES		D. 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)	See Attached Sheet	BOD, NO2, NO3	Other 35 TDS	Total Cd	Total Cr	Total Cu	Total Pb	Total Hg	Total Ni	Total Se	Total Ag	Total Tl	Total Zn	LAB NO
GAC02Ø499	2/5/99	0300	ARROW	X		SW		7															02
GIC02Ø499	2/5/99	0910	INDPK	X		SW		5															04

Comments / Special Instructions: * Total metals: Sb, As, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Tl, Zn ** Dissolved metals Sb, As, Be, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag, Tl, Zn,

SAMPLE CONDITION UPON RECEIPT

No. of Containers	12
Temperature	ice
Custody Seals	Y ~~N~~
Seals Intact	Y ~~N~~
Preserved	Y (N)

RELINQUISHED BY

	Signature	Date	Printed Name	Time
①	[signature]	2/5/99	DAVID GARDNER	1408
②				
③				

SAMPLES RECEIVED BY

Signature	Date	Printed Name	Time
[signature]	2-5-99	J Kimbrough	[illegible]

WHITE-LAB YELLOW-LAB PINK-CLIENT

Bolin Laboratories Inc.

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

Quality Control Data Report

Client: Maricopa County Flood Control
Bolin Sample ID: 9902-1148-9

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	MS Conc.	MS %Rec	ICV %Rec	CCV %Rec
Alpha-BHC	EPA 608	0218/99	5.0	<PQL	3.91	78	4.12	82	5	8.11	162	103	114
Beta-BHC	EPA 608	2/18/99	5.0	<PQL	4.24	85	4.50	90	6	7.71	154	100	113
Gamma(Lindane)-BHC	EPA 608	2/18/99	5.0	<PQL	4.08	82	4.33	87	6	8.40	168	103	112
Delta-BHC	EPA 608	2/18/99	5.0	<PQL	4.44	89	4.67	93	5	8.25	165	103	114
Heptachlor	EPA 608	2/18/99	5.0	<PQL	4.28	86	4.53	91	6	9.88	198	104	101
Aldrin	EPA 608	2/18/99	5.0	<PQL	3.74	75	4.01	80	7	8.24	165	98	109
Heptachlor Epoxide	EPA 608	2/18/99	5.0	<PQL	4.02	80	4.31	86	7	8.60	172	98	111
Endosulfan I	EPA 608	2/18/99	5.0	<PQL	4.07	81	4.36	87	7	8.43	169	98	109
Dieldrin	EPA 608	2/18/99	5.0	<PQL	4.20	84	4.45	89	6	8.90	178	98	109
4,4,-DDE	EPA 608	2/18/99	5.0	<PQL	4.42	88	4.63	93	5	8.52	170	102	100
Endrin	EPA 608	2/18/99	5.0	<PQL	4.67	93	4.86	97	4	9.42	188	102	109
Endosulfan II	EPA 608	2/18/99	5.0	<PQL	4.60	92	4.81	96	4	8.56	171	103	107
4,4-DDD	EPA 608	2/18/99	5.0	<PQL	4.63	93	4.86	97	5	8.83	177	103	105
Endrin Aldehyde	EPA 608	2/18/99	5.0	<PQL	4.43	89	4.36	87	2	7.50	150	101	106
Endosulfan Sulfate	EPA 608	2/18/99	5.0	<PQL	4.77	95	4.90	98	3	8.44	169	103	103
4,4-DDT	EPA 608	2/18/99	5.0	<PQL	5.24	105	5.28	106	1	9.95	199	105	92

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
MS is Matrix Spike

Bolin Laboratories Inc.

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(602) 942 8220 • FAX (602) 942 1050

Quality Control Data Report

Client: Maricopa County Flood Control
Bolin Sample ID: 9902-1148-1, 3

Analyte	Method	Date Analyzed	Spk Conc. (ppb)	MS %Rec	BLK MS Conc. UNITS	BLK MS %Rec	BLK MSD Conc. UNITS	BLK MSD %Rec	RPD	BLK (ppb)	CCV %Rec
1,1-Dichloroethylene	EPA 624	2/12/99	10	98.7	10.1	101	9.49	94.9	6	<PQL	
Benzene	EPA 624	2/12/99	10	103	10.3	103	9.99	100	3	<PQL	
Trichloroethylene	EPA 624	2/12/99	10	104	10.6	106	10.2	102	4	<PQL	
Toluene	EPA 624	2/12/99	10	103	10.4	104	10.0	100	4	<PQL	
Chlorobenzene	EPA 624	2/12/99	10	104	10.5	105	10.1	101	4	<PQL	
Chloromethane	EPA 624	2/12/99	10							<PQL	101
Vinylchloride	EPA 624	2/12/99	10							<PQL	100
1,1-Dichloroethylene	EPA 624	2/12/99	10							<PQL	101
1,1-Dichloroethane	EPA 624	2/12/99	10							<PQL	105
Chloroform	EPA 624	2/12/99	10							<PQL	104
1,2-Dichloropropane	EPA 624	2/12/99	10							<PQL	102
Toluene	EPA 624	2/12/99	10							<PQL	102
Chlorobenzene	EPA 624	2/12/99	10							<PQL	103
Ethylbenzene	EPA 624	2/12/99	10							<PQL	104
Bromoform	EPA 624	2/12/99	10							<PQL	104
1,1,2,2-Tetrachloroethane	EPA 624	2/12/99	10							<PQL	104

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

Bolin Laboratories Inc.

17631 N. 25th Avenue • Phoenix, Arizona 85023
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Quality Control Data Report

Client: Maricopa County Flood Control
Bolin Sample ID: 9902-1148-7

Analyte	Method	Date Analyzed	Spk Conc. (ppb)	MS %Rec	BLK MS Conc. UNITS	BLK MS %Rec	BLK MSD Conc. UNITS	BLK MSD %Rec	RPD	BLK (ppb)	CCV %Rec
1,1-Dichloroethylene	EPA 624	2/13/99	10	98.7	10.1	101	9.49	94.9	6	<PQL	
Benzene	EPA 624	2/13/99	10	103	10.3	103	9.99	100	3	<PQL	
Trichloroethylene	EPA 624	2/13/99	10	104	10.6	106	10.2	102	4	<PQL	
Toluene	EPA 624	2/13/99	10	103	10.4	104	10.0	100	4	<PQL	
Chlorobenzene	EPA 624	2/13/99	10	104	10.5	105	10.1	101	4	<PQL	
Chloromethane	EPA 624	2/13/99	10							<PQL	101
Vinylchloride	EPA 624	2/13/99	10							<PQL	100
1,1-Dichloroethylene	EPA 624	2/13/99	10							<PQL	101
1,1-Dichloroethane	EPA 624	2/13/99	10							<PQL	105
Chloroform	EPA 624	2/13/99	10							<PQL	104
1,2-Dichloropropane	EPA 624	2/13/99	10							<PQL	102
Toluene	EPA 624	2/13/99	10							<PQL	102
Chlorobenzene	EPA 624	2/13/99	10							<PQL	103
Ethylbenzene	EPA 624	2/13/99	10							<PQL	104
Bromoform	EPA 624	2/13/99	10							<PQL	104
1,1,2,2-Tetrachloroethane	EPA 624	2/13/99	10							<PQL	104

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

Bolin Laboratories Inc.

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

Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9902-1148

Analyte	Method	Date Analyzed	Spk Conc. (ppm)	MS %Rec	MSD %Rec	RPD	Blk (ppb)	ICV %Rec	CCV %Rec
BOD	EPA 405.1	2/5/99	N/A	N/A	N/A		<PQL		
Oil and Grease	EPA 413.1	2/22/99	N/A	N/A	N/A		<PQL	102	

MS/MSD are Matrix Spikes
ICV is Initial Calibration Verification
CCV is Continuing Calibration Verification
RPD is Relative Percent Difference
BLK is a Blank

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Preparation & Analysis Information)

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

Date of Report: 03/25/99
Sample Matrix: SURFACE WATER

Samples Affected: 99-02101-1 - 99-02101-6

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Dissolved Chromium	EPA-600-4-79-02	02/04/99	FIELD	EPA-7191	02/23/99	KAS
Dissolved Nickel	EPA-600-4-79-02	02/04/99	FIELD	EPA-249.2	02/24/99	KAS
Total Chromium	EPA-3020	02/05/99	BOLIN	EPA-7191	02/23/99	KAS
Total Nickel	EPA-3020	02/05/99	BOLIN	EPA-249.2	02/24/99	KAS
Total Thallium	EPA-3020	02/05/99	BOLIN	EPA-7841	02/23/99	KAS

Lab #99-02101-3 through 99-02101-6 were filtered on 02/05/99.

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 - LEVEL III
(Instrumental & Blank Parameters)

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

Date of Report: 03/25/99
Sample Matrix: SURFACE WATER

Samples Affected: 99-02101-1 - 99-02101-6

Constituents	ICV % Found	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	CCB Readings After	Units	Method Blank Readings	Units
Dissolved Chromium	100.	104.	92.	90 - 110	< 1.	< 1.	µg/L	< 1.	µg/L
Dissolved Nickel	103.	104.	104.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Chromium	100.	92.	91.	90 - 110	< 1.	< 1.	µg/L	< 1.	µg/L
Total Nickel	103.	104.	105.	90 - 110	<10.	<10.	µg/L	<10.	µg/L
Total Thallium	101.	108.	104.	90 - 110	< 1.	< 1.	µg/L	< 1.	µg/L

ICV = Initial Calibration Verification; CCV = Continuing Calibration Verification
CCB = Continuing Calibration Blank

Quality Control Officer

Anthony Bonanno

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BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Precision & Accuracy)

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

Date of Report: 03/25/99
Sample Matrix: SURFACE W/

Samples Affected: 99-02101-1 - 99-02101-6

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	Accurac Contro Limits
Dissolved Chromium	DISS-02101-1	3.83	3.42	13.43	13.51	10.00	10.00	µg/L	<PQL	1.	20	96.	97.	85 - 1
Dissolved Nickel	DISS-02101-3	10.11	9.69	34.79	34.82	25.00	25.00	µg/L	<PQL	0.	20	99.	99.	85 - 1
Total Chromium	TAD-02101-5	4.61	4.38	14.04	14.01	10.00	10.00	µg/L	<PQL	0.	20	94.	94.	85 - 1
Total Nickel	DISS-02101-3	10.11	9.69	34.79	34.82	25.00	25.00	µg/L	<PQL	0.	20	99.	99.	85 - 1
Total Thallium	TAD-02101-1	< 1.	< 1.	21.7	21.44	25.00	25.00	µg/L	<PQL	1.	20	86.	85.	85 - 1

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

Quality Control Officer

Anthony Bonanno

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BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT - LEVEL III
(Laboratory Control Sample)

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

Date of Report: 03/25/99
Sample Matrix: SURFACE WATER

Samples Affected: 99-02101-1 - 99-02101-6

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
Dissolved Chromium	LFB-10-LCS	9.58	10.	µg/L	96.	85 - 115
Dissolved Nickel	LFB-25-LCS	27.13	25.	µg/L	109.	85 - 115
Total Chromium	LFB-10-LCS	9.58	10.	µg/L	96.	85 - 115
Total Nickel	LFB-25-LCS	27.13	25.	µg/L	109.	85 - 115
Total Thallium	LFB-25-LCS	24.53	25.	µg/L	98.	85 - 115

Quality Control Officer

Anthony Bonanno

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Bolin Laboratories Inc.

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

Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9902-1148 Diss

Analyte	Method	Date Analyzed	Spk Conc. (ppm)	MS %Rec	MSD %Rec	Blk (ppm)	ICV %Rec	CCV %Rec
Berylium	EPA 200.7	3/2/99	0.5	103	100	<PQL	98	98
Cadmium	PA 200.9/SM 3113	4/27/99	0.002	110	110	<PQL	105	110
Copper	EPA 200.7	3/2/99	1	104	101	<PQL	104	97
Silver	EPA 200.7	3/17/99	0.5	73	75	<PQL	94	91
Zinc	EPA 200.7	3/2/99	1	103	100	<PQL	103	95
Arsenic	PA 200.9/SM 3113	2/22/99	0.020	120	115	<PQL	110	105
Lead	PA 200.9/SM 3113	2/22/99	0.020	110	105	<PQL	110	105
Selenium	PA 200.9/SM 3113	2/22/99	0.020	90	90		105	100
Thallium	PA 200.9/SM 3113	2/5/99	0.020	MI	MI	<PQL	96	101
Mercury	EPA 245.1	2/16/99	0.005	MI	MI	<PQL	96	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

Bolin Laboratories Inc.

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

Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9902-1148 Total

Analyte	Method	Date Analyzed	Spk Conc. (ppm)	MS %Rec	MSD %Rec	Blk (ppm)	ICV %Rec	CCV %Rec
Berylium	EPA 200.7	2/24/99	0.5	75	75	<PQL	98	101
Cadmium	PA 200.9/SM 3113	4/27/99	0.002	110	110	<PQL	110	110
Copper	EPA 200.7	2/24/99	1	73	72	<PQL	98	104
Silver	EPA 200.7	2/23/99	0.5	75	74	<PQL	98	99
Zinc	EPA 200.7	2/24/99	1	84	82	<PQL	99	96
Antimony	PA 200.9/SM 3113	2/16/99	0.020	84	83	<PQL	92	99
Arsenic	PA 200.9/SM 3113	2/18/99	0.020	85	110	<PQL	100	105
Lead	PA 200.9/SM 3113	2/18/99	0.020	105	105	<PQL	95	105
Selenium	PA 200.9/SM 3113	2/18/99	0.020	110	75	<PQL	90	105
Mercury	EPA 245.1	2/11/99	0.005	126	130	<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

McKENZIE LABORATORIES

Date: 02-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902197
Project:

QC SUMMARY REPORT

Method Blank

Analyte	Result	PQL	Qual	Units	DF	Test Code	Date Prepared	Date Analyzed	Analyst	Batch ID
Phenolics, Total Recoverable	<0.0050	0.0050		mg/L	1	EPA420.1	2/23/99	2/23/99	KA	420.1-2/23/99

McKENZIE LABORATORIES

Date: 02-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902197
Project:

QC SUMMARY REPORT

Sample Duplicate

Analyte	Result	PQL	Units	RPD Ref Val	% RPD	RPD Limit	Test Code	Date Prepared	Date Analyzed	Analyst	Qual
Sample ID: **9902149-01AD**		Batch ID:	420.1-2/23/99								
Client ID:											
Phenolics, Total Recoverable	<0.0050	0.0050	mg/L	<0.0050	0%	20	EPA420.1	2/23/99	2/23/99	KA	

McKENZIE LABORATORIES

Date: 02-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902197
Project:

QC SUMMARY REPORT

Sample Matrix Spike

Analyte	Result	PQL	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Limit	Qual
Sample ID: **9902149-01AS**	Batch ID: 420.1-2/23/99			Test Code: EPA420.1				Date Analyzed: 2/23/99			
Client ID:				Units: mg/L				Date Prepared: 2/23/99			
Phenolics, Total Recoverable	0.09710	0.0050	0.1000	<0.0050	97%	80	120				

McKENZIE LABORATORIES

Date: 02-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902197
Project:

QC SUMMARY REPORT

Blank Spike (primary source)

Analyte	Result	PQL	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Limit	Qual
Sample ID: **LCS**	Batch ID: 420.1-2/23/99			Test Code: EPA420.1				Date Analyzed: 2/23/99			
				Units: mg/L				Date Prepared: 2/23/99			
Phenolics, Total Recoverable	0.09570	0.0050	0.1000	<0.0050	96%	85	115				

McKENZIE LABORATORIES

Date: 02-Mar-99

CLIENT: Bolin Laboratories Inc
Work Order: 9902197
Project:

QC SUMMARY REPORT

Secondary Source QC Sample

Analyte	Result	PQL	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Limit	Qual
Sample ID: **LCSV**	Batch ID: 420.1-2/23/99			Test Code: EPA420.1				Date Analyzed: 2/23/99			
				Units: mg/L				Date Prepared: 2/23/99			
Phenolics, Total Recoverable	0.09960	0.0050	0.1000	<0.0050	100%	85	115				

Bolin Laboratories Inc.

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Quality Control Data Report

Client: Maricopa County Flood Control District
Bolin Sample ID: 9902-1148

Analyte	Method	Date Analyzed	Spk Conc.	MS %Rec	MSD %Rec	RPD	Blk	ICV %Rec	CCV %Rec
Chemical Oxygen Demand	EPA 410.4	2/10/99	30	91	95	4	<PQL	101	104
Total Suspended Solids	EPA 160.2	2/11/99	N/A	N/A	N/A	N/A	<PQL	104	-
Chloride	EPA 300.0	2/8/99	20	*	94	N/A	<PQL	102	100
Nitrate	EPA 300.0	2/6/99	4.54	107	104	3	<PQL	99	104
Nitrite	EPA 300.0	2/5/99	2.03	96	101	5	<PQL	100	100
Dissolved Sulfate	EPA 300.0	3/11/99	20	97	98	1	<PQL	102	104
Total Dissolved Solids	EPA 160.3	2/10/99	N/A	N/A	N/A	N/A	<PQL	98	96
Orthophosphorous	SM 4500 PE	2/5/99	0.1	103	99	4	<PQL	97	95
Total Phosphorous	EPA 365.3	3/2/99	0.1	100	113	12	<PQL	91	95
Total Dissolved Phosphorous	EPA 365.3	2/10/99	0.1	*	*	#####	<PQL	91	95
Total Cyanide	SM 4500 CNE	2/17/99	0.05	110	111	1	<PQL	94	92
Alkalinity	SM 2320B	2/15/99	100	116	112	4	<PQL	94	98
TOC	SM 5310C	2/19/99	5	99	100	1	<PQL	106	96

* Above Calibration Curve

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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CHAIN OF CUSTODY RECORD

Page 1 of 1

Laboratory Sample No. 9902-1148

CLIENT INFORMATION

Client Name	Address	City	State	Zip	Phone	Fax
FloodControl	2801 W Durango	Phoenix	AZ	85009	506-8401	506-4601

Project Name	Project Number	Contact	P.O. No.	Fax Results ☐	QC Report ☒	Special Detection Limits ☐
Glendale NPDES		D. 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)	See Attached	BOD	FC	FC-Strep	O&G	1624	Cn Cod Cl TDS	TSS NH3 NO3 NO2	NO3+NO2 ON	TKN TP PO4 OP	Phenol TOC	Alk Hardness Cond	Lab Gas	Metals ★	Residual Metals ★★	LAB NO
GI 2499G	2/4/99	2146	INDPK		X			8		X		X	X	X	X										01
																									02
GA 2499G	2/4/99	2115	ARROW		X			8		X		X	X	X	X										03
																									04
GC 2499G	2/4/99	2040	CHRUS		X			8		X		X	X	~~X~~	~~X~~	Cancel per Dave G.									05
																									06
GBG020499	2/4/99	1840	BUTLER		X			8		X		X	X	X	X										07
Travel Blank															X										08
			Butler	X													X	X	X	X	X	X	X	X	09

Comments / Special Instructions: ★ Add Butler Composite per Dave 2/5/99 JL.

★ Metals: ✓ ~~All~~ Diss Metals: Sb As Be Cd Cr Cu Pb Hg Ni Se Ag Tl Zn Sb Mo Tl

SAMPLE CONDITION UPON RECEIPT

No. of Containers	34
Temperature	On Ice
Custody Seals	Y (N)
Seals Intact	Y N
Preserved	(Y) N

	RELINQUISHED BY		SAMPLES RECEIVED BY	
①	Signature: David Gardner	Date: 2/5/99	Signature: Zeeba R Mirza	Date: 2/5/99
	Printed Name: DAVID GARDNER	Time: 0021	Printed Name: ZEEBA K. MIRZA	Time: 0001
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	Glendale Arrow	DATE	1-5-99
ARRIVAL TIME		DEPARTURE TIME	
SERVICED BY	DG RWN		
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

installed cell phone

checked operation

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	BUTLER			DATE	14 JAN 99
ARRIVAL TIME	830	DEPARTURE TIME	915	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	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	440 mL
CLEANED SAMPLE INTAKE TUBING	YES NO	GOOD FAIR POOR	N/A	N/A	

NOTES / ACTIONS installed 1½" concrete weir
calibrated sample vol to 440mL
changed intake tubing length to 56' (teflon)
(changed teflon setting to vinyl in program)
Used rating and input it into program (head v. flow

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Arroc (Sleepy Creek)			DATE	1-21-99
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	[illegible]
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 ?	new 13.4 old 11.2 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	Clean & Flush Funnel
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	

Station has cell phone!

NOTES / ACTIONS 11.82 needing exchange battery

Installed directly from Factory, New battery has been charged, discharged and charged. 13.4 [illegible]

Date: 10/08/1998

WATER QUALITY SAMPLER ' \INTENANCE LOG SHEET

SITE	Citrus Park			DATE	1/21/99
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	(Rm)
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 Door is not closing properly. Door hatton at closure side is beat out. I will try and get some tools and correct problem.

(Rm)

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Industrial Park	DATE	2/3/99
ARRIVAL TIME		DEPARTURE TIME	
SERVICED BY	(Rau)		
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 Install safety rail for lowering sampler
Break up concrete on N/side of station house
and remove. This is for the technicians safety
when lowering their sample.

(Rau)

Date: 10/08/1998

STORM EVENT LOG SHEET

SITE:	Arrow Head

DATE:	2/4/99	TIME:	2115

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: (YES) NO

IF NO, WHAT WERE PROBLEM(S):

Equipment collecting samples ice in

FIELD PARAMETERS:

Sampler Start Time	2/4/99	10:03 pm
Effluent pH	8.7	
Effluent Temperature	13.8c°	

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:	2/4/99	TIME:	~~0640~~ 1840

DID EQUIPMENT OPERATE PROPERLY DURING EVENT? YES NO

IF NO, WHAT WERE PROBLEM(S):

0.41" rain TR 2/5/99 0930

need to clean channel of debris

FIELD PARAMETERS:

Sampler Start Time	
Effluent pH	9.2
Effluent Temperature	12.5

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 Park

DATE:	2/4/99	TIME:	2040

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: (YES) NO

IF NO, WHAT WERE PROBLEM(S):

Equipment in process of sampling ice in
2/5/99, <4000cf. runoff
0.31" rain
not enough runoff to collect composites

FIELD PARAMETERS:

Sampler Start Time	1/25/99
Effluent pH	9.03
Effluent Temperature	13.4 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:	Industrial Park

DATE:	2/4/99	TIME:	2146

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

in process of collecting samples

0.31" rain 5/8 bottles full 2/5/99 0910
collected composites

FIELD PARAMETERS:

Sampler Start Time	~~0930~~ ~~2/4/99~~
Effluent pH	7.03
Effluent Temperature	11.c

GRAB SAMPLES: Take grab samples from discharge only!

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

EQUIPMENT CLEANING CHECKLIST

Site	Arrow Park		
Date	2/9/99	Time	0955
Serviced By:	[illegible]		

C	Data Downloaded to DTU?

1. Halt program
2. Connect extension tubing to the distributor tubing on the underside of the sampler.
3. Press the Purge Key on 800 models or the Manual key on 900 models.
4. On 900 models, press the Pump Operation key and then the select Purge.
5. Follow the steps below and check each as it is done.

✓	Pump approximately 1/2 gallon tap water through tubing.
✓	Pump approximately 1/2 gallon of Liquinox through tubing.
✓	Pump a large quantity of tap water through tubing.
	Pump a small amount of Nitric Acid (pH 3 - 4) through tubing.
✓	Pump approximately 1/2 - 1 gallon deionized water through tubing.

6. Disconnect the extension tubing and make sure the distributor tubing is seated properly.
7. Replace the base and clean bottles.
8. If the data has been downloaded to the DTU, START the program from the beginning.
9. If the data has not been downloaded, RESUME the program.

EQUIPMENT CLEANING CHECKLIST

Site	Butler Park		
Date	2/9/99	Time	0930
Serviced By:	RW DCB		

C	Data Downloaded to DTU?

1. Halt program
2. Connect extension tubing to the distributor tubing on the underside of the sampler.
3. Press the Purge Key on 800 models or the Manual key on 900 models.
4. On 900 models, press the Pump Operation key and then the select Purge.
5. Follow the steps below and check each as it is done.

✓	Pump approximately 1/2 gallon tap water through tubing.
✓	Pump approximately 1/2 gallon of Liquinox through tubing.
✓	Pump a large quantity of tap water through tubing.
	Pump a small amount of Nitric Acid (pH 3 - 4) through tubing.
✓	Pump approximately 1/2 - 1 gallon deionized water through tubing.

6. Disconnect the extension tubing and make sure the distributor tubing is seated properly.
7. Replace the base and clean bottles.
8. If the data has been downloaded to the DTU, START the program from the beginning.
9. If the data has not been downloaded, RESUME the program.

EQUIPMENT CLEANING CHECKLIST

Site	citrus Park		
Date	2/9/99	**Time**	1025
Serviced By:	Ruy PEC		

✓	**Data Downloaded to DTU?**

1. Halt program
2. Connect extension tubing to the distributor tubing on the underside of the sampler.
3. Press the Purge Key on 800 models or the Manual key on 900 models.
4. On 900 models, press the Pump Operation key and then the select Purge.
5. Follow the steps below and check each as it is done.

✓	**Pump approximately 1/2 gallon tap water through tubing.**
✓	**Pump approximately 1/2 gallon of Liquinox through tubing.**
✓	**Pump a large quantity of tap water through tubing.**
	Pump a small amount of Nitric Acid (pH 3 - 4) through tubing.
✓	**Pump approximately 1/2 - 1 gallon deionized water through tubing.**

6. Disconnect the extension tubing and make sure the distributor tubing is seated properly.
7. Replace the base and clean bottles.
8. If the data has been downloaded to the DTU, START the program from the beginning.
9. If the data has not been downloaded, RESUME the program.

EQUIPMENT CLEANING CHECKLIST

Site	Industrial Park		
Date	2/9/99	Time	0900
Serviced By:	[illegible]		

✓	Data Downloaded to DTU?

1. Halt program
2. Connect extension tubing to the distributor tubing on the underside of the sampler.
3. Press the Purge Key on 800 models or the Manual key on 900 models.
4. On 900 models, press the Pump Operation key and then the select Purge.
5. Follow the steps below and check each as it is done.

✓	Pump approximately 1/2 gallon tap water through tubing.
✓	Pump approximately 1/2 gallon of Liquinox through tubing.
✓	Pump a large quantity of tap water through tubing.
	Pump a small amount of Nitric Acid (pH 3 - 4) through tubing.
✓	Pump approximately 1/2 - 1 gallon deionized water through tubing.

6. Disconnect the extension tubing and make sure the distributor tubing is seated properly.
7. Replace the base and clean bottles.
8. If the data has been downloaded to the DTU, START the program from the beginning.
9. If the data has not been downloaded, RESUME the program.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Arrow			DATE	2/23/99
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
BATTERY VOLTAGE	YES NO	GOOD FAIR POOR	YES NO	YES NO	old 11.1 new 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 out battery, check program (Running) everything looked good.

RW

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Butler Park	DATE	2/23/99
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
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 check battery and program. Everything looked good. Channel clear, had some water behind weir.

RW

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Citrus		DATE	2/23/99	
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	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 checked battery voltage, everything checked out fine. Program "running".

(Rem)

Date: 10/08/1998

STORM EVENT LOG SHEET

SITE:	Arrow Park ARROW

DATE:	03/08/99	TIME:	0920

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

No precip recorded. check battery 14.0 volts.
check rain gauge, Everything looked good.

DEB NEW

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 BUTLER
DATE: 03/08/99	TIME: 08 45

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

0.01 Precip, reset and restart program
Everything looked good, need to slot weir for
drainage.
DFG RCW

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 Park CITRUS
DATE: 03/08/99	TIME: 0905

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

Precip 0.01, Reset and Restart program.
Check tipping buckets Station looked good.

DEU [illegible]

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 INDPK
DATE: 3/8/99	TIME: 0810

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

~~IF NO, WHAT~~ WERE PROBLEM(S):

Read 0.02, Reset and Restart program
Everything looked good

DEB RAW

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

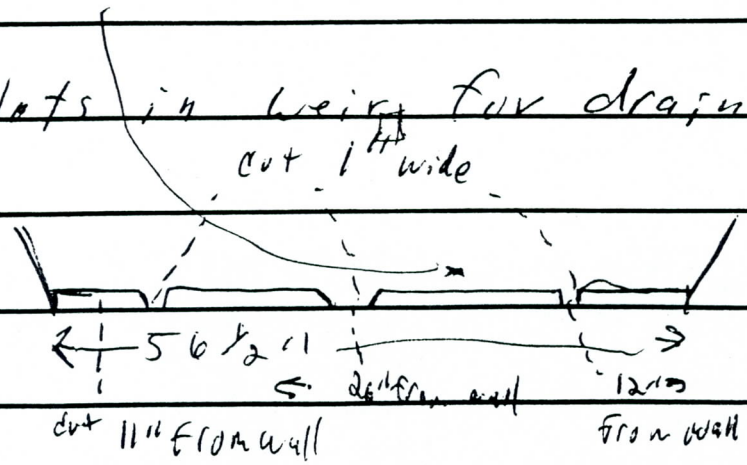
WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Butler Park	DATE	3/10/99
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Rec
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

cut three slots in weir for drainage.
clean channel.



Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Butler Park	DATE	3/11/99
ARRIVAL TIME		DEPARTURE TIME	
SERVICED BY	RWW		
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 Remove fractured section of weir, clean up and install new weir section. Sweep out channel. Slots cut in weir for drainage is working very well. Channel dry behind weir, by sampler.

RW

Date: 10/08/1998

STORM EVENT LOG SHEET

SITE	Arrow Rte

DATE	3/16/99	TIME	1010

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

Sampler operating upon arrival.
Precip reading 0.06 ✓
Too high flows 56-62 cfs

revisit @ 1515
cleaned debris

FIELD PARAMETERS:

Discharge at time of Grab		cfs
pH (Inlet/pH)		
Effluent Temperature		°C

GRAB SAMPLES: Take grab samples from discharge only!

Grab Samples Taken	YES	NO
Preservatives Added	YES	NO

STORM EVENT LOG SHEET

SITE:	BUTLER

DATE:	3-16-99	TIME:	0930

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

0.07" rain
-sampler started 5402 cf.
4 full bottles iced
will re-visit

FIELD PARAMETERS:

Discharge at time of Grabs		cfs
Effluent pH		
Effluent Temperature		°C

GRAB SAMPLES: Take grab samples from discharge only!

Grab Samples taken	YES	NO	no flow @ time of visit
Flow proportional samples taken	YES	NO	

STORM EVENT LOG SHEET

[redacted]	BUTLER

[redacted]	3/16/99	[redacted]	1550

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

cleaned / reset 0.06"
changed interval to 500 cf.

FIELD PARAMETERS:

Discharge at time of Grab		cfs
[redacted]		[redacted]
Effluent Temperature		[redacted]

GRAB SAMPLES: Take grab samples from discharge only!

[redacted]	YES	NO
[redacted]	YES	NO

STORM EVENT LOG SHEET

SITE:	Citrus ~~Park~~

DATE:	3/16/99	TIME:	0950

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

check sampler, Precip reading 0.06
Started Sampling, dumped samples, reset
bottles and restart program.

FIELD PARAMETERS:

Discharge Active at Grabs		cfs
pH		
Effluent Temperature		°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 PK

DATE	3-16-99	TIME	0910

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

0.13" rain - no runoff.

FIELD PARAMETERS:

Discharge Initiation		
pH		
Effluent Temperature		

GRAB SAMPLES: Take grab samples from discharge only!

Grab Samples Taken	YES	NO
Preservatives added	YES	NO

STORM EVENT LOG SHEET

SITE:	Industrial Park

DATE:	3/16/99	TIME:	2100

DID EQUIPMENT OPERATE PROPERLY DURING EVENT: YES NO

IF NO, WHAT WERE PROBLEM(S):

_____

_____

_____

_____

FIELD PARAMETERS:

Discharge [illegible]		cfs
[illegible]	8.4	
Effluent Temperature	8.0	°C

GRAB SAMPLES:

Take grab samples from discharge only!

Grab Samples Taken	YES	NO
Required gas additions [illegible]	YES	NO

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	ARROY			DATE	3/18/97
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	[illegible]
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 clean intake line, put in clean bottles

restart program. check Battery voltage 13.6

[illegible]

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Butler Park			DATE	3/18/99
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 Clean intake line, put in clean bottles

restart program.

Date: 10/08/1998

WATER QUALITY SAMPLER / INTENANCE LOG SHEET

SITE	Industrial Park	DATE	3/18/99
ARRIVAL TIME		DEPARTURE TIME	
SERVICED BY	[illegible]		
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 clean in take line, put in clean bottles

restart program

[illegible]

Date: 10/08/1998

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Arrow	DATE	3/22/99
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	13.3 new 11.9 old 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 out main battery, check program

Date: 10/08/1998