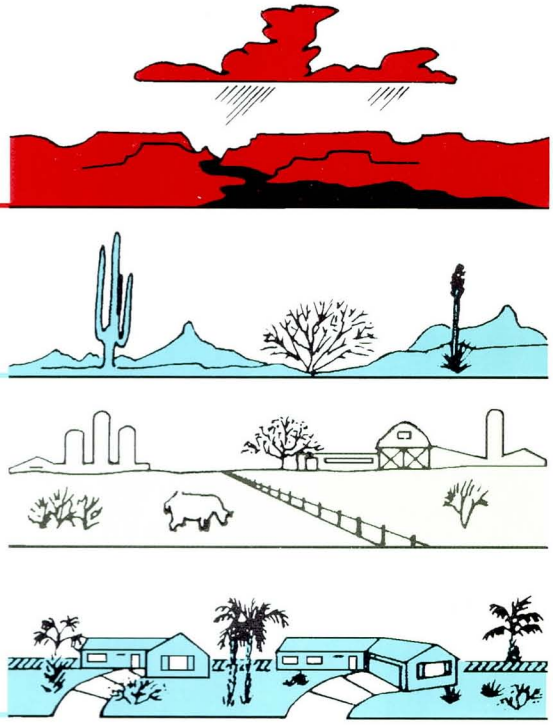
Property of
Flood Control District of MC Library
Please Return to
2801 W Durango
Phoenix, AZ 85009



FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Stormwater Quality Report
City of Glendale, Arizona

Second Quarter 2003

March 14, 2003

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Stormwater Quality Report

Second Quarter, Sampling Year 2003

October 1, 2002 through December 31, 2002

Property of
Flood Control District of MC Library
Please Return to
2801 W. Durango
Phoenix, AZ 85009

For

City of Glendale, Arizona

March 14, 2003

Prepared by:

Kenneth D. Fossum
USGS Hydrologist

Reviewed by:

Matthew A. Oller
FCDMC Hydrologist

Stormwater Quality Report
City of Glendale, Arizona

Second Quarter 2003

March 14, 2003

Introduction

The U.S. Geological Survey operates and maintains five land based stormwater monitoring stations for the City of Glendale for compliance with their National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit.

This report details stormwater sampling and equipment upkeep for the five Glendale stations for the period from October 1, 2002 through December 31, 2002.

During storm events, only representative storm events are sampled. A representative storm event has occurred when the following criteria have been met **and there has been no rainfall greater than 0.10 inches within the previous 72 hours.**

GLENDALE	RAINFALL	DURATION
WINTER (October – March)	**0.2 – 0.7 INCHES**	**5.2 – 15.6 HOURS**
SUMMER (April – September)	**0.2 – 0.8 INCHES**	**2.2 – 6.5 HOURS**

Storm duration is defined as the time period from start to end of a sustained rainfall. Sustained rainfall is defined as rainfall that continues without a gap of greater than 150 consecutive minutes. If a gap greater than 150 consecutive minutes occurs, then the rainfall is considered to be from a separate storm event. Summer months are April through September and winter months are October through March.

Representative Storm Event Summaries

This is a summary of representative storm events that occurred during the second quarter of the 2003 sample year, from October 1 through December 31, 2002. One representative storm event occurred during this period and was sampled. The following is a description of the sampled event.

The storm event of November 29 - 30, 2002, produced rainfall valley wide. The storm was a representative storm event at the Arrow, Butler, and Citrus sites. Grab samples were analyzed for the Arrow, Butler, and Citrus sites. Composite samples were collected and analyzed at the Arrow site. Composite samples were collected but were not analyzed at the Butler and Citrus sites due to insufficient sample volume for analysis. Rainfall totals in Glendale ranged from 0.30 to 0.44 inches.

Storm Event of November 29 – 30, 2002

SITE NAME	RAINFALL (inches)	REPRESENTATIVE EVENT	SAMPLES ANALYZED
ARROW	0.32	YES	YES (Grab and Composite)
BUTLER	0.44	YES	YES (Grab Only)
CITRUS	0.30	YES	YES (Grab Only)

Table 1 of this report, lists storm events with rainfall greater than 0.20 inches of rain (Glendale minimum winter rainfall criteria). Table 1 also specifies reasons why samples were not collected and/or analyzed. Table 2 of this report, summarizes data retrievals from the sites.

TABLE 1
SUMMARY OF GLENDALE STORM EVENTS WITH RAINFALL > 0.20 INCHES BUT NOT SAMPLED OCTOBER 1, 2002 – DECEMBER 31, 2002

SITE	DATE	RAIN (inches)	REASONS NOT SAMPLED
IND PARK	11/29 – 30/02	0.27	72 HOUR RULE
OLIVE	11/29 – 30/02	0.67	72 HOUR RULE
OLIVE	12/23/02	0.22	DURATION TOO SHORT

TABLE 2
SUMMARY OF DATA RETRIEVALS OCTOBER 1, 2002 – DECEMBER 31, 2002

SITE	DATE	RETRIEVAL TYPE
ARROW	10/18/02	Phone - Weekly
ARROW	10/24/02	Onsite
ARROW	10/28/02	Onsite
ARROW	11/01/02	Phone - Weekly
ARROW	11/08/02	Onsite
ARROW	11/15/02	Phone - Weekly
ARROW	11/22/02	Phone - Weekly
ARROW	11/29/02	Onsite
ARROW	12/03/02	Onsite
ARROW	12/13/02	Onsite
ARROW	12/20/02	Phone - Weekly
ARROW	12/23/02	Onsite
ARROW	12/27/02	Onsite
BUTLER	10/01/02	Onsite
BUTLER	10/11/02	Phone - Weekly
BUTLER	10/16/02	Onsite
BUTLER	10/24/02	Onsite

BUTLER	10/28/02	Onsite
BUTLER	11/01/02	Phone - Weekly
BUTLER	11/08/02	Phone - Weekly
BUTLER	11/15/02	Phone - Weekly
BUTLER	11/22/02	Phone - Weekly
BUTLER	11/29/02	Phone - Weekly
BUTLER	12/03/02	Onsite
BUTLER	12/13/02	Phone - Weekly
BUTLER	12/20/02	Phone - Weekly
BUTLER	12/27/02	Onsite

CITRUS	10/01/02	Onsite
CITRUS	10/11/02	Phone - Weekly
CITRUS	10/16/02	Onsite
CITRUS	10/24/02	Onsite
CITRUS	10/28/02	Onsite
CITRUS	11/01/02	Phone - Weekly
CITRUS	11/08/02	Phone - Weekly
CITRUS	11/15/02	Phone - Weekly
CITRUS	11/22/02	Phone - Weekly
CITRUS	11/29/02	Phone - Weekly
CITRUS	12/03/02	Onsite
CITRUS	12/13/02	Phone - Weekly
CITRUS	12/20/02	Phone - Weekly
CITRUS	12/27/02	Onsite

IND PARK	10/01/02	Onsite
IND PARK	10/11/02	Phone - Weekly
IND PARK	10/16/02	Onsite
IND PARK	10/24/02	Onsite
IND PARK	10/28/02	Onsite
IND PARK	11/01/02	Phone - Weekly
IND PARK	11/08/02	Phone - Weekly
IND PARK	11/15/02	Phone - Weekly
IND PARK	11/22/02	Phone - Weekly
IND PARK	11/29/02	Phone - Weekly
IND PARK	12/03/02	Onsite
IND PARK	12/13/02	Phone - Weekly
IND PARK	12/20/02	Phone - Weekly
IND PARK	12/27/02	Onsite

OLIVE	10/04/02	Phone - Weekly
OLIVE	10/11/02	Phone - Weekly
OLIVE	10/18/02	Phone - Weekly
OLIVE	10/24/02	Phone - Storm
OLIVE	10/28/02	Phone - Storm
OLIVE	11/01/02	Phone - Weekly
OLIVE	11/08/02	Phone - Weekly
OLIVE	11/15/02	Phone - Weekly
OLIVE	11/22/02	Phone - Weekly
OLIVE	11/29/02	Phone - Weekly
OLIVE	11/30/02	Phone - Storm
OLIVE	12/06/02	Phone - Weekly
OLIVE	12/13/02	Phone - Weekly
OLIVE	12/18/02	Phone - Storm
OLIVE	12/21/02	Phone - Storm
OLIVE	12/24/02	Phone - Storm
OLIVE	12/27/02	Phone - Weekly

Maintenance Summary

This section details maintenance activities and problems that occurred from October 1 through December 31, 2002. All water quality samplers are SIGMA 900 MAX models with the exception of the Olive stormwater station, which uses an ISCO model 3700 sampler.

ARROW

Sampler was reinstalled on October 16. The sampler was reset on October 18, 24, 28, November 8, 29, and December 3, 13, 17, 22. The phone battery was replaced on October 16, 28, November 8, 25, 29, and December 3, 13, 17, 23, 27. All sampler tubing and collection bottles were cleaned on October 16, and December 3, 17. Pulled data with the DTU unit on October 24, 28, November 8, 29, and December 3, 13, 23, 27. Sampler battery was replaced on November 29 and December 17. Reattached intake and pressure transducer real good on December 13.

BUTLER

The sampler was reset on October 1, 16, 24, 28, November 29, and December 3, 17, 21, 27. All sampler tubing and collection bottles were cleaned on October 1, and December 3. Pulled data with the DTU unit on October 1, 16, 24, 28, and December 3, 27. Reprogrammed for winter sampling criteria on October 1.

CITRUS

The sampler was reset on October 1, 16, 24, 28, November 29, and December 3, 17, 21, 27. All sampler tubing and collection bottles were cleaned on December 3, 17, 21, 23. Pulled data with the DTU unit on October 1, 16, 24, 28, and December 3, 27. Reprogrammed sampler for winter sampling criteria on October 1. Replaced faulty raingage sensor on October 24.

INDUSTRIAL PARK

The sampler was reset on October 1, 16, 24, 28, and December 3, 17, 21, 27. All sampler tubing and collection bottles were cleaned on December 3. Pulled data with the DTU unit on October 1, 16, 24, 28, and December 3, 27. Reprogrammed sampler for winter sampling criteria on October 1. Replaced sampler battery on December 3.

OLIVE

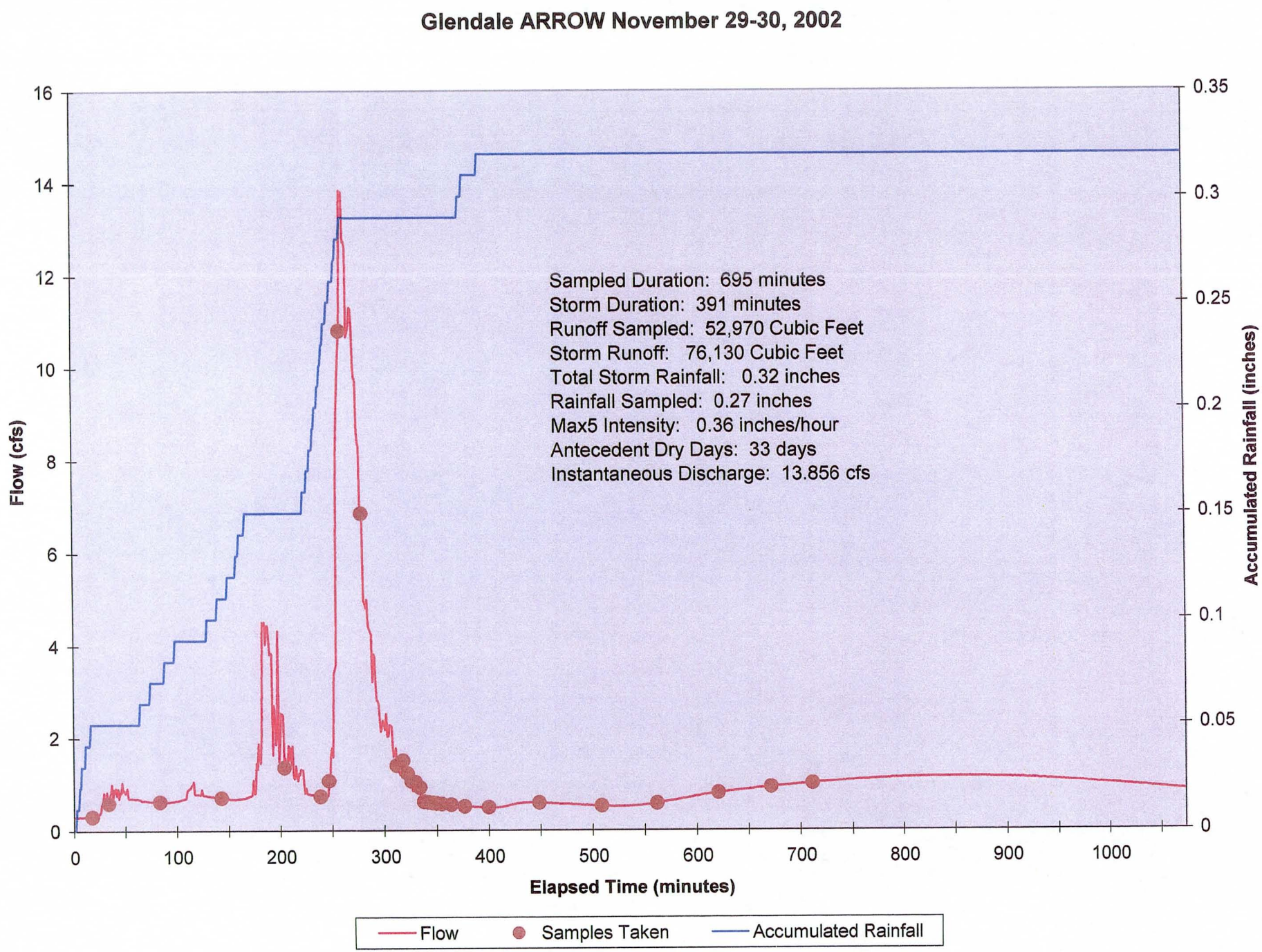
All sampler tubing and collection bottle were cleaned on October 1, 28. The data logger battery was replaced on December 3.

Data compiled for October 1 through December 31, 2002

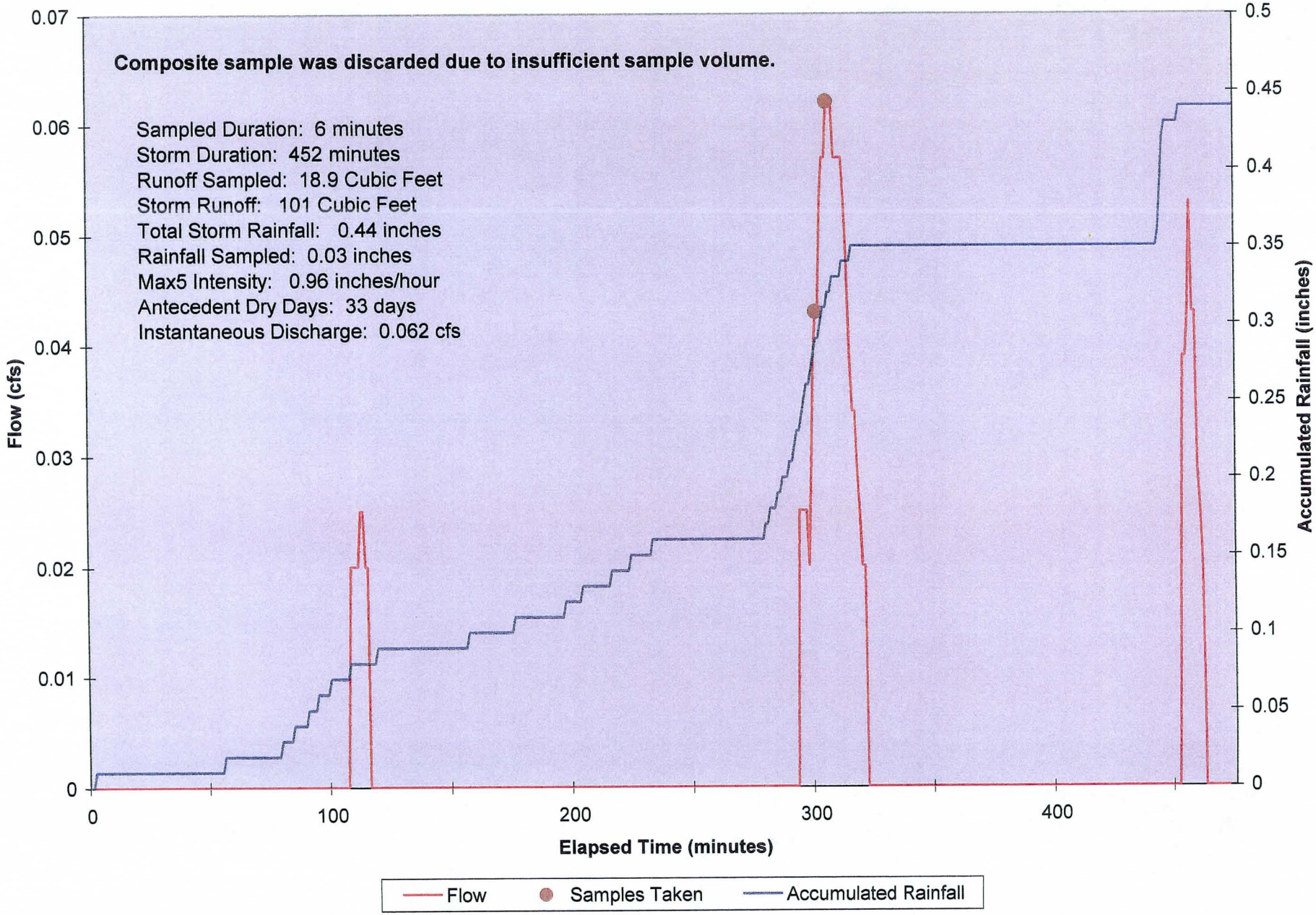
The remainder of this report contains data. The following data are included:

- Storm Hydrographs.
- Rainfall tables for five Glendale NPDES raingages.
- Rainfall data for four Glendale ALERT raingages.
- Analytical Data Tables.
- Data Validation Tables.
- Lab Reports.
- Quality Control Data.
- Chain of Custody Forms.
- Operation and maintenance and storm event log sheets.

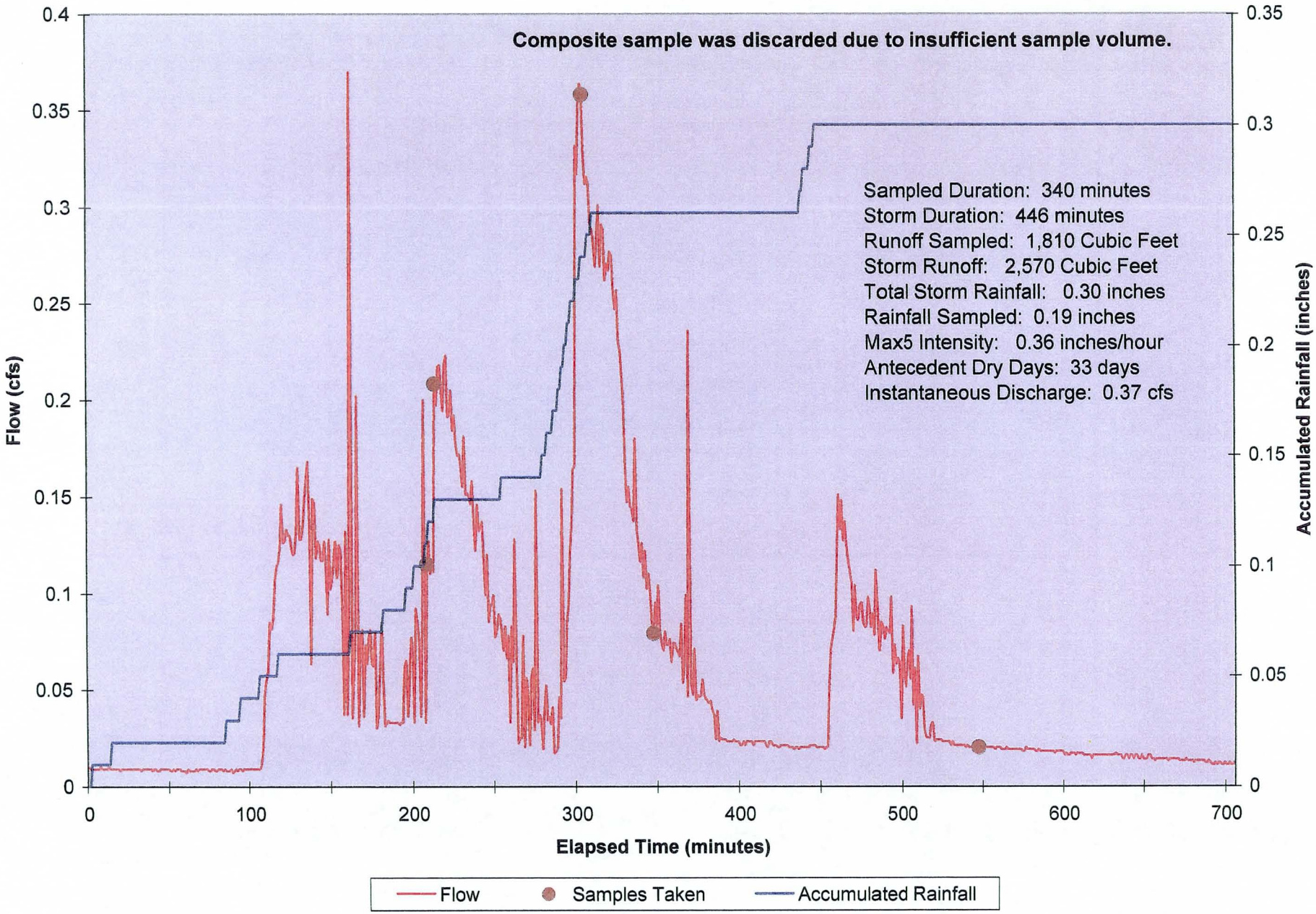
Storm Hydrographs


Glendale ARROW November 29-30, 2002
Sampled Duration: 695 minutes
Storm Duration: 391 minutes
Runoff Sampled: 52,970 Cubic Feet
Storm Runoff: 76,130 Cubic Feet
Total Storm Rainfall: 0.32 inches
Rainfall Sampled: 0.27 inches
Max5 Intensity: 0.36 inches/hour
Antecedent Dry Days: 33 days
Instantaneous Discharge: 13.856 cfs
Flow (cfs)
Accumulated Rainfall (inches)
Elapsed Time (minutes)
0
2
4
6
8
10
12
14
16
0.05
0.1
0.15
0.2
0.25
0.3
0.35
100
200
300
400
500
600
700
800
900
1000
Flow
Samples Taken
Accumulated Rainfall

Glendale BUTLER November 29-30, 2002



Glendale CITRUS November 29-30, 2002



STORM WATER QUALITY RAINFALL GAGES

Gauge Rainfall (inches)

Gage Number: ARROW

Location: Skunk Creek near 79th Avenue

	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003
1		0.02		Gage								
2				not								
3				working								
4				"								
5				"								
6				"								
7				"								
8				"								
9	0.02		Gage	"								
10			not	"								
11			working	"								
12			"	"								
13			"	"								
14	0.24		"	Gage								
15			"	not								
16			"	working								
17			"			0.07						
18			"									
19			"									
20			"			0.03						
21			"									
22			"									
23	0.40		"			0.10						
24			"									
25			"									
26			"	0.06								
27			"									
28			Gage									
29			not		0.34							
30			working		0.03							
31												
Month Total	0.66	0.02	0.00	0.06	0.37	0.20	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall (inches)

Gage Number	BUTLER
Location	56th Drive and Orchid Lane

	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003
1												
2												
3												
4												
5												
6			1.20									
7			0.66									
8			0.02									
9												
10			0.13									
11												
12												
13												
14	1.29											
15	0.01											
16												
17						0.05						
18												
19												
20						0.06						
21												
22												
23	0.36			0.03		0.14						
24												
25												
26				0.19								
27												
28			0.19									
29					0.45							
30					0.09							
31												
Month Total	1.66	0.00	2.20	0.22	0.54	0.25	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall (inches)

Gage Number	CITRUS
Location	Grovers at 71st Avenue

	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003
1												
2				0.03								
3												
4												
5												
6			0.26									
7			0.95									
8			0.02									
9												
10												
11												
12												
13												
14	0.11											
15	0.02											
16												
17						0.05						
18												
19												
20						0.05						
21												
22												
23	0.42					0.13						
24												
25												
26				0.05								
27												
28												
29					0.32							
30					0.04							
31												
Month Total	0.55	0.00	1.23	0.08	0.36	0.23	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall (inches)

Gage Number	INDUSTRIAL PARK
Location	New River north of Glendale Avenue

	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003
1												
2				0.08								
3												
4												
5												
6			0.83									
7			0.72									
8			0.03									
9												
10												
11												
12												
13												
14	0.04											
15												
16												
17						0.03						
18												
19												
20						0.16						
21												
22												
23	0.36					0.05						
24												
25												
26				0.08								
27												
28												
29					0.38							
30					0.01							
31												
Month Total	0.40	0.00	1.58	0.16	0.39	0.24	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall (inches)

Gage Number	OLIVE
Location	Olive and 67th Avenue

	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003
1												
2												
3												
4												
5												
6			1.61									
7			1.47									
8			0.04									
9												
10			0.10									
11												
12												
13												
14	1.38											
15	0.04											
16												
17						0.19						
18												
19												
20						0.11						
21												
22												
23	0.46			0.05		0.22						
24												
25												
26				0.15								
27												
28			0.38									
29					0.69							
30					0.08							
31												
Month Total	1.88	0.00	3.60	0.20	0.77	0.52	0.00	0.00	0.00	0.00	0.00	0.00

FLOOD CONTROL DISTRICT
A.L.E.R.T GAGES

Gauge Rainfall (inches)

Gage Number	4785
Location	Butler Park

	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003
1												
2												
3												
4												
5												
6			0.91									
7			0.43									
8			0.08									
9												
10			0.08									
11												
12												
13												
14	1.02											
15		---										
16		---										
17		---				0.08						
18		---										
19												
20						0.04						
21												
22												
23	0.31					0.12						
24												
25												
26				0.16								
27												
28			0.12									
29					0.31							
30					0.12							
31												
Month Total	1.33	0.00	1.62	0.16	0.43	0.24	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall (inches)

Gage Number: 5505

Location: New River at Glendale Avenue

	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003
1												
2												
3												
4												
5												
6			0.59									
7			0.51									
8			0.04									
9												
10												
11												
12												
13												
14	0.04											
15												
16												
17												
18												
19												
20						0.04						
21												
22												
23	0.08					0.04						
24												
25												
26				0.08								
27												
28												
29					0.47							
30		---										
31												
Month Total	0.12	0.00	1.14	0.08	0.47	0.08	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall (inches)

Gage Number 5520

Location ACDC at 67th Avenue

	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003
1												
2				0.04								
3												
4												
5			---									
6			0.39									
7			0.94									
8			---									
9												
10												
11												
12												
13												
14	0.24											
15												
16												
17						0.04						
18												
19												
20						0.04						
21												
22												
23	0.28					0.12						
24												
25												
26				0.04								
27												
28												
29					0.31							
30					0.04							
31												
Month Total	0.52	0.00	1.33	0.08	0.35	0.20	0.00	0.00	0.00	0.00	0.00	0.00

Gauge Rainfall (inches)

Gage Number	5595
Location	New River and Bell Road

	July 2002	August 2002	September 2002	October 2002	November 2002	December 2002	January 2003	February 2003	March 2003	April 2003	May 2003	June 2003
1		0.04										
2		0.04										
3												
4												
5												
6			0.59									
7			1.30									
8												
9												
10												
11												
12												
13												
14	0.16											
15	0.04											
16												
17						0.04						
18												
19												
20						0.04						
21												
22												
23	0.39					0.12						
24												
25												
26				0.08								
27				0.04								
28												
29					0.24							
30					0.04							
31												
Month Total	0.59	0.08	1.89	0.12	0.28	0.20	0.00	0.00	0.00	0.00	0.00	0.00

Data Tables

Glendale ARROW
Skunk Creek near 79th Avenue

Date of Sampling	11/29/02
Time	2228
Representative Storm Event	Y
Agency Collecting Sample	USGS
Agency Analyzing Sample	DEL MAR
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)	695
Storm Duration (minutes)	391
Runoff Sampled (cubic feet) (RUN)	52970
Total Storm Runoff (cubic feet)	76130
Instantaneous Discharge (cfs)	13.8
Preceeding Dry Period (days) (ANT)	33
Total Storm Rainfall (inch)	0.32
Rainfall Sampled (inch) (TRN)	0.27
Maximum 5-minute rain intensity (in/hr)(MAX5)	0.36
Sample Temperature (deg. C)	3.0
Effluent Temperature (deg. C)	15.0
Ambient Temperature (deg. C)	15.5
Barometric Pressure (mm Hg)	732
pH, Effluent (standard units)	7.71
pH, Lab (standard units)	6.8
Specific Conductance, FIELD (us/cm)	216
Specific Conductance, LAB (us/cm)	230
Oxygen Dissolved (% saturation)	NM
Oxygen Dissolved (mg/l)	5.76
BOD5 (mg/l)	15
COD High Level (mg/l)	160
Chloride Total (mg/l as Cl)	8.6
Flouride Total (mg/l as F)	0.27
Sulfate Total (mg/l)	18
Cyanide Total (mg/l as Cn)	<0.02
Fecal Coliform (MPN/100ml)	50000
Fecal Streptococci (MPN/100ml)	30000
E. Coli (MPN/100 ml)	50000
Solids Residue at 180 Deg. C (TDS) (mg/l)	110
Residue, Total at 105 Deg. C (TSS) (mg/l)	36
Nitrogen NO_2 + NO_3, Total (mg/l as N)	0.82
TKN Nitrogen (mg/l as N)	2.2
Nitrogen, Ammonia + Organic, Total (mg/l as N)	NA
Nitrogen Nitrate Total (mg/l as N)	0.78
Nitrogen Nitrite Total (mg/l as N)	<0.10
Nitrogen Ammonia Total (mg/l as N)	1
Nitrogen Organic Total (mg/l as N)	1.2
Phosphorous Total (mg/l as P)	0.12
Phosphorous Dissolved (mg/l as P)	0.16

Glendale ARROW
Skunk Creek near 79th Avenue

Date of Sampling	11/29/02
Time	2228
Phosphorous Ortho (mg/l as P)	<0.50
Phenols Total Recoverable (ug/l)	<0.10
Oil and Grease Total Recoverable (mg/l)	1.3
Organic Carbon, Total (mg/l)	21
Bicarbonate Whole Field (mg/l as HCO_3)	39
Bicarbonate Dissolved, Field (mg/l as HCO_3)	34
Carbonate Water Field (mg/l as CO_3)	0
Carbonate Water Dissolved, Field, (mg/l as CO_3)	0
Alkalinity Water Field Total (mg/l as $CaCO_3$)	32
Alkalinity Dissolved Water Field Total (mg/l as $CaCO_3$)	28
Alkalinity LAB (mg/l as $CaCO_3$)	32
Hardness (mg/l)	69
Antimony Total (ug/l as Sb)	5.3
Antimony Dissolved (ug/l as Sb)	3.8
Arsenic Total (ug/l as As)	2.9
Arsenic Dissolved (ug/l as As)	1.9
Beryllium Total Recoverable (ug/l as Be)	<0.5
Beryllium Dissolved (ug/l as Be)	<0.5
Cadmium Total Recoverable (ug/l as Cd)	<1
Cadmium Dissolved (ug/l as Cd)	<1
Calcium Total Recoverable (mg/l as Ca)	21
Chromium Total Recoverable (ug/l as Cr)	7
Chromium Dissolved (ug/l as Cr)	1.3
Copper, Total Recoverable, (ug/l as Cu)	73
Copper, Dissolved, (ug/l as Cu)	11
Lead, Total Recoverable, (ug/l as Pb)	9.8
Lead, Dissolved, (ug/l as Pb)	<1
Magnesium, Total Recoverable, (mg/l as Mg)	4.1
Mercury, Total Recoverable, (ug/l as Hg)	<0.2
Mercury, Dissolved, (ug/l as Hg)	<0.2
Nickel, Total Recoverable, (ug/l as Ni)	7.8
Nickel, Dissolved, (ug/l as Ni)	2.9
Potassium, Total Recoverable, (mg/l as K)	4.2
Selenium, Total, (ug/l as Se)	<2
Selenium, Dissolved, (ug/l as Se)	<2
Silver, Total Recoverable, (ug/l as Ag)	<1
Silver, Dissolved, (ug/l as Ag)	<1
Sodium, Total Recoverable, (mg/l as Na)	11
Thallium, Total, (ug/l as Tl)	<1
Thallium, Dissolved, (ug/l as Tl)	<1
Zinc, Total Recoverable, (ug/l as Zn)	50
Zinc, Dissolved, (ug/l as Zn)	58
Aldrin, Total, (ug/l)	<0.11
BHC - ALPHA, (ug/l)	<0.11
BHC - Gamma (Lindane), (ug/l)	<0.11
BHC - DELTA, (ug/l)	<0.23
Aroclor 1016, PCB, Total, (ug/l)	<1.1
Aroclor 1221, PCB, Total, (ug/l)	<1.1

Glendale ARROW
Skunk Creek near 79th Avenue

Date of Sampling	11/29/02
Time	2228
Aroclor 1232, PCB, Total, (ug/l)	<1.1
Aroclor 1242, PCB, Total, (ug/l)	<1.1
Aroclor 1248, PCB, Total, (ug/l)	<1.1
Aroclor 1254, PCB, Total, (ug/l)	<1.1
Aroclor 1260, PCB, Total, (ug/L)	<1.1
Chlordane, Total, (ug/l)	<1.1
P,P' DDD, Total, (ug/l)	<0.11
P,P' DDE, Total, (ug/l)	<0.11
P, P' DDT, Total, (ug/l)	<0.11
Dieldrin, Total, (ug/l)	<0.11
Endo-Sulfan Alpha, Total, (ug/l)	<0.11
Endo-Sulfan Beta, Total, (ug/l)	<0.11
Endo-Sulfan Sulfate, Total, (ug/l)	<0.23
Endrin, Total, (ug/l)	<0.11
Endrin Aldehyde, Total, (ug/l)	<0.11
Endrin Ketone, Total, (ug/l)	<0.11
Heptachlor, Total, (ug/l)	<0.11
Heptachlor Epoxide, Total, (ug/l)	<0.11
Methoxychlor, Total, (ug/l)	<0.11
Toxaphene, Total, (ug/l)	<0.11
Benzene, Total, (ug/l)	<2
Bromodichloromethane, Total, (ug/l)	<2
Bromoform, Total, (ug/l)	<5
Bromomethane (ug/l)	<5
Carbon Tetrachloride, Total, (ug/l)	<2.5
Chlorobenzene, Total, (ug/l)	<2
Dibromochloromethane (ug/l)	<2
Chloroethane, (ug/l)	<5
Chloroform, Total, (ug/l)	<2
Chloromethane (ug/l)	<5
1,2- Dichlorobenzene, Total, (ug/l)	<2
1,3- Dichlorobenzene, Total, (ug/l)	<2
1,4- Dichlorobenzene, Total, (ug/l)	<2
1,1- Dichloroethane, Total, (ug/l)	<2
1,2- Dichloroethane, Total, (ug/l)	<2
1,1- Dichloroethene, Total, (ug/l)	<5
trans-1,2- Dichloroethene, (ug/l)	<2
1,2- Dichloropropane, Total, (ug/l)	<2
cis-1,3-Dichloropropene, (ug/l)	<2
trans-1,3- Dichloropropene, (ug/l)	<2
Ethylbenzene, Total, (ug/l)	<2
Methylene Chloride, Total, (ug/l)	<5
1,1,2,2-Tetrachloroethane, Total, (ug/l)	<2
Tetrachloroethene, PCE, Total, (ug/l)	<2
Toluene, Total, (ug/l)	<2
1,1,1- Trichloroethane, Total, (ug/l)	<2
1,1,2- Trichloroethane, Total, (ug/l)	<2
Trichloroethene, Total, (ug/l)	<2

Glendale ARROW Skunk Creek near 79th Avenue	
Date of Sampling	11/29/02
Time	2228
Trichlorofluoromethane, Total, (ug/l)	<5
Vinyl Chloride, Total, (ug/l)	<2
Acenaphthene, Total, (ug/l)	<23
Acenaphthylene, Total, (ug/l)	<23
Anthracene, Total, (ug/l)	<23
Benzidine, Total, (ug/l)	<230
Benzo (a) Anthracene, Total, (ug/l)	<23
Benzo (b) Fluoranthene, Total, (ug/l)	<23
Benzo (k) Fluoranthene, Total, (ug/l)	<23
Benzo (ghi) Perylene, Total, (ug/l)	<46
Benzo (a) Pyrene, Total, (ug/l)	<46
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	<23
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	<23
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	<23
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	<110
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	<46
Butyl Benzyl Phthalate, Total, (ug/l)	<23
2-Chloronapthalene, Total, (ug/l)	<23
2-Chlorophenol, Total, (ug/l)	<23
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	<23
Chrysene, Total, (ug/l)	<23
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	<46
Di-N-Butyl Phthalate, Total, (ug/l)	<46
1,3- Dichlorobenzene, Total, (ug/l)	<23
1,4- Dichlorobenzene, Total, (ug/l)	<23
1,2- Dichlorobenzene, Total, (ug/l)	<23
3,3'- Dichlorobenzidine, Total, (ug/l)	<46
2,4- Dichlorophenol, Total, (ug/l)	<23
Diethyl Phthalate, Total, (ug/l)	<23
2,4- Dimethylphenol, Total, (ug/l)	<23
Dimethyl Phthalate, Total, (ug/l)	<23
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	<46
2,4- Dinitrophenol, Total, (ug/l)	<69
2,4- Dinitrotoluene, Total, (ug/l)	<23
2,6- Dinitrotoluene, Total, (ug/l)	<23
Di-N-Octyl-Phthalate, Total, (ug/l)	<46
1,2- Diphenylhydrazine, Total, (ug/l)	<46
Fluoranthene, Total, (ug/l)	<23
Fluorene, Total, (ug/l)	<23
Hexachlorobenzene, Total, (ug/l)	<23
Hexachlorobutadiene, Total, (ug/l)	<46
Hexachlorocyclopentadiene, Total, (ug/l)	<92
Hexachloroethane, Total, (ug/l)	<23
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	<46
Isophorone, Total, (ug/l)	<23
Naphthalene, Total, (ug/l)	<23
Nitrobenzene, Total, (ug/l)	<23
2-Nitrophenol, Total, (ug/l)	<23

Glendale ARROW Skunk Creek near 79th Avenue	
Date of Sampling	11/29/02
Time	2228
4-Nitrophenol, Total, (ug/l)	<23
N-Nitrosodiphenylamine, Total, (ug/l)	<69
N-Nitrosodi-N-Propylamine, Total, (ug/l)	<23
Pentachlorophenol, Total, (ug/l)	<46
Phenanthrene, Total, (ug/l)	<23
Phenol, Total, (ug/l)	<23
Pyrene, Total, (ug/l)	<23
1,2,4-Trichlorobenzene, Total, (ug/l)	<23
2,4,6- Trichlorophenol, Total, (ug/l)	<23
N-Nitrosodimethylamine, Total, (ug/l)	<46

Glendale BUTLER Orchid Lane and 56th Drive	
Date of Sampling	11/29/02
Time	2312
Representative Storm Event	Y
Agency Collecting Sample	USGS
Agency Analyzing Sample	DEL MAR
Drainage Area (acres) (DA)	30
Impervious Area (acres) (IA)	0
Land Use - Residential	30
Land Use - Commercial	0
Land Use - Industrial	0
Land Use - Undeveloped	0
Sampling Duration (minutes) (DRN)	6
Storm Duration (minutes)	452
Runoff Sampled (cubic feet) (RUN)	19
Total Storm Runoff (cubic feet)	101
Instantaneous Discharge (cfs)	0.062
Preceeding Dry Period (days) (ANT)	33
Total Storm Rainfall (inch)	0.44
Rainfall Sampled (inch) (TRN)	0.03
Maximum 5-minute rain intensity (in/hr)(MAX5)	0.96
Sample Temperature (deg. C)	3.0
Effluent Temperature (deg. C)	15.0
Ambient Temperature (deg. C)	15.0
Barometric Pressure (mm Hg)	732
pH, Effluent (standard units)	7.62
Specific Conductance, FIELD (us/cm)	239
Oxygen Dissolved (% saturation)	NM
Oxygen Dissolved (mg/l)	6.22
BOD5 (mg/l)	11
Fecal Coliform (MPN/100ml)	2200
Fecal Streptococci (MPN/100ml)	17000
E. Coli (MPN/100 ml)	1700
Oil and Grease Total Recoverable (mg/l)	1.3
Bicarbonate Whole Field (mg/l as HCO_3)	NM
Bicarbonate Dissolved, Field (mg/l as HCO_3)	NM
Carbonate Water Field (mg/l as CO_3)	NM
Carbonate Water Dissolved, Field, (mg/l as CO_3)	NM
Alkalinity Water Field Total (mg/l as $CaCO_3$)	NM
Alkalinity Dissolved Water Field Total (mg/l as $CaCO_3$)	NM
Benzene, Total, (ug/l)	<2
Bromodichloromethane, Total, (ug/l)	<2
Bromoform, Total, (ug/l)	<5
Bromomethane (ug/l)	<5
Carbon Tetrachloride, Total, (ug/l)	<2.5
Chlorobenzene, Total, (ug/l)	<2
Dibromochloromethane	<2
Chloroethane, (ug/l)	<5
Chloroform, Total, (ug/l)	<2
Chloromethane (ug/l)	<5
1,2- Dichlorobenzene, Total, (ug/l)	<2
1,3- Dichlorobenzene, Total, (ug/l)	<2
1,4- Dichlorobenzene, Total, (ug/l)	<2
1,1- Dichloroethane, Total, (ug/l)	<2

Glendale BUTLER

Orchid Lane and 56th Drive

Date of Sampling	11/29/02
Time	2312
1,2- Dichloroethane, Total, (ug/l)	<2
1,1- Dichloroethene, Total, (ug/l)	<5
trans-1,2- Dichloroethene, (ug/l)	<2
1,2- Dichloropropane, Total, (ug/l)	<2
cis-1,3-Dichloropropene, (ug/l)	<2
trans-1,3- Dichloropropene, (ug/l)	<2
Ethylbenzene, Total (ug/l)	<2
Methylene Chloride, Total, (ug/l)	<5
1,1,2,2-Tetrachloroethane, Total, (ug/l)	<2
Tetrachloroethene, PCE, Total, (ug/l)	<2
Toluene, Total, (ug/l)	<2
1,1,1- Trichloroethane, Total, (ug/l)	<2
1,1,2- Trichloroethane, Total, (ug/l)	<2
Trichloroethene, Total, (ug/l)	<2
Trichlorofluoromethane, Total, (ug/l)	<5
Vinyl Chloride, Total, (ug/l)	<2

Glendale CITRUS Grovers at 71st Avenue	
Date of Sampling	11/29/02
Time	2318
Representative Storm Event	Y
Agency Collecting Sample	USGS
Agency Analyzing Sample	DEL MAR
Drainage Area (acres) (DA)	60
Impervious Area (acres) (IA)	NM
Land Use - Residential	NM
Land Use - Commercial	NM
Land Use - Industrial	NM
Land Use - Undeveloped	NM
Sampling Duration (minutes) (DRN)	340
Storm Duration (minutes)	446
Runoff Sampled (cubic feet) (RUN)	1810
Total Storm Runoff (cubic feet)	2570
Instantaneous Discharge (cfs)	0.37
Preceeding Dry Period (days) (ANT)	33
Total Storm Rainfall (inch)	0.3
Rainfall Sampled (inch) (TRN)	0.19
Maximum 5-minute rain intensity (in/hr)(MAX5)	0.36
Sample Temperature (deg. C)	3.0
Effluent Temperature (deg. C)	16.5
Ambient Temperature (deg. C)	15.5
Barometric Pressure (mm Hg)	732
pH, Effluent (standard units)	8.0
Specific Conductance, FIELD (us/cm)	171
Oxygen Dissolved (% saturation)	NM
Oxygen Dissolved (mg/l)	7.13
BOD5 (mg/l)	6.5
Fecal Coliform (MPN/100ml)	9000
Fecal Streptococci (MPN/100ml)	50000
E. Coli (MPN/100 ml)	9000
Oil and Grease Total Recoverable (mg/l)	<1
Bicarbonate Whole Field (mg/l as HCO_3)	NM
Bicarbonate Dissolved, Field (mg/l as HCO_3)	NM
Carbonate Water Field (mg/l as CO_3)	NM
Carbonate Water Dissolved, Field, (mg/l as CO_3)	NM
Alkalinity Water Field Total (mg/l as $CaCO_3$)	NM
Alkalinity Dissolved Water Field Total (mg/l as $CaCO_3$)	NM
Benzene, Total, (ug/l)	<2
Bromodichloromethane, Total, (ug/l)	<2
Bromoform, Total, (ug/l)	<5
Bromomethane (ug/l)	<5
Carbon Tetrachloride, Total, (ug/l)	<2.5
Chlorobenzene, Total, (ug/l)	<2
Dibromochloromethane (ug/l)	<2
Chloroethane, (ug/l)	<5
Chloroform, Total, (ug/l)	<2
Chloromethane (ug/l)	<5
1,2- Dichlorobenzene, Total, (ug/l)	<2
1,3- Dichlorobenzene, Total, (ug/l)	<2
1,4- Dichlorobenzene, Total, (ug/l)	<2
1,1- Dichloroethane, Total, (ug/l)	<2

Glendale CITRUS
Grovers at 71st Avenue

Date of Sampling	11/29/02
Time	2318
1,2- Dichloroethane, Total, (ug/l)	<2
1,1- Dichloroethene, Total, (ug/l)	<5
trans-1,2- Dichloroethene, (ug/l)	<2
1,2- Dichloropropane, Total, (ug/l)	<2
cis-1,3-Dichloropropene, (ug/l)	<2
trans-1,3- Dichloropropene, (ug/l)	<2
Ethylbenzene, Total, (ug/l)	<2
Methylene Chloride, Total, (ug/l)	<5
1,1,2,2-Tetrachloroethane, Total, (ug/l)	<2
Tetrachloroethene, PCE, Total, (ug/l)	<2
Toluene, Total, (ug/l)	<2
1,1,1- Trichloroethane, Total, (ug/l)	<2
1,1,2- Trichloroethane, Total, (ug/l)	<2
Trichloroethene, Total, (ug/l)	<2
Trichlorofluoromethane, Total, (ug/l)	<5
Vinyl Chloride, Total, (ug/l)	<2

Glendale ARROW

Storm of November 29, 2002

	Method	Result	Units	Required Method Detection Limit	Data Qualifiers	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)	Lab	3.0	deg. C	0.5		11/30/02	Immediate							
Effluent Temperature (deg. C)	Field	15.0	deg. C	0.5		11/29/02	Immediate							
Ambient Temperature (deg. C)	Field	15.5	deg. C	0.5		11/29/02	Immediate							
Barometric Pressure (mm Hg)	Field	732	mm Hg	1		11/29/02	Immediate							
pH, Effluent, Field (standard units)	Field	7.71	std units	0.1		11/29/02	Immediate							
pH, Lab (standard units)	USGS	6.8	std units	0.1		12/5/02	6 months							
Specific Conductance, FIELD (us/cm)	Field	216	us/cm	1		11/29/02	Immediate							
Specific Conductance, LAB (us/cm)	2510B	230	us/cm	2		12/6/02	6 months							
Oxygen Dissolved (mg/l)	Field	5.76	mg/l	0.01		11/29/02	Immediate							
BOD5 (mg/l)	405.1	15	mg/l	2		12/1/02	48 hours			<20	3			
COD High Level (mg/l)	410.4	160	mg/l	20		12/9/02	28 days	<15	0.4					
Chloride (mg/l as Cl)	300.0	8.6	mg/l	0.5		12/2/02	28 days	<15	0.7	<15	0.2			
Flouride (mg/l as F)	300.0	0.27	mg/l	0.1		12/2/02	28 days	<20	0	<20	0			
Sulfate Total (mg/l)	300.0	18	mg/l	0.5		12/2/02	28 days	<15	0.3	<15	0.4			
Cyanide Total (mg/l as Cn)	4500-CN,C-E	<0.02	mg/l	0.02		12/4/02	14 days	<15	2.0					
Fecal Coliform (MPN/100ml)	9221D	50000	MPN/100ml	2		11/30/02	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	30000	MPN/100ml	2		11/30/02	6 hours							
E. Coli (MPN/100 ml)	9221F	50000	MPN/100 ml	2		11/30/02	6 hours							
Total Dissolved Solids (mg/l)	2540C	110	mg/l	20		12/6/02	6 months			<20	8			
Total Suspended Solids (mg/l)	160.2	36	mg/l	20		12/2/02	6 months							
Nitrogen NO_2 + NO_3, Total (mg/l as N)	300.0	0.82	mg/l	0.1		12/2/02	28 days							
TKN Nitrogen (mg/l as N)	351.3	2.2	mg/l	0.5		12/9/02	28 days	<15	2					
Nitrogen Nitrate Total (mg/l as N)	300.0	0.78	mg/l	0.1		12/2/02	48 hours	<15	0.4	<15	0.4			
Nitrogen Nitrite Total (mg/l as N)	300.0	<0.10	mg/l	0.1		12/2/02	48 hours	<15	0.8	<15	0.4			
Nitrogen Ammonia Total (mg/l as N)	350.3	1	mg/l	0.05	Q5	12/11/02	28 days	<20	3	<200	9			inadequate chemical preservation
Nitrogen Organic Total (mg/l as N)	calculation	1.2	mg/l	0.5		12/11/02	28 days							
Phosphorous Total (mg/l as P)	365.3	0.12	mg/l	0.05		12/6/02	28 days	<15	3					
Phosphorous Dissolved (mg/l as P)	365.3	0.16	mg/l	0.05		12/5/02	28 days							
Phosphorous Ortho (mg/l as P)	365.3	<0.50	mg/l	0.5		12/2/02	48 hours	<20	0.2	<15	0.2			
Phenols Total Recoverable (ug/l)	420.1	<0.10	ug/l	0.1		12/10/02	28 days	<20	0.7					
Oil and Grease Total Recoverable (mg/l)	413.1	1.3	mg/l	1		12/5/02	28 days			<15	10			
Organic Carbon, Total (mg/l)	415.1	21	mg/l	5		12/5/02	28 days	<20	0.9					
Bicarbonate Whole Field (mg/l as HCO_3)	USGS	39	mg/l	0.1		12/4/02	14 days							
Bicarbonate Dissolved, Field (mg/l as HCO_3)	USGS	34	mg/l	0.1		12/4/02	14 days							
Carbonate Water Field (mg/l as CO_3)	USGS	0	mg/l	0.1		12/4/02	14 days							
Carbonate Water Dissolved, Field, (mg/l as CO_3)	USGS	0	mg/l	0.1		12/4/02	14 days							
Alkalinity Water Field Total (mg/l as $CaCO_3$)	USGS	32	mg/l	0.1		12/4/02	14 days							
Alkalinity Dissolved Water Field Total (mg/l as $CaCO_3$)	USGS	28	mg/l	0.1		12/4/02	14 days							
Alkalinity LAB (mg/l as $CaCO_3$)	2320B	32	mg/l	5		12/6/02	14 days							
Hardness (mg/l)	2340B	69	mg/l	1		12/9/02	6 months							
Antimony Total Recoverable (ug/l as Sb)	200.9	5.3	ug/l	2		12/9/02	6 months	<20	2					
Antimony Dissolved (ug/l as Sb)	200.9	3.8	ug/l	2		12/6/02	6 months	<20	0.5					
Arsenic Total (ug/l as As)	200.8	2.9	ug/l	1		12/9/02	6 months	<20	0.4					
Arsenic Dissolved (ug/l as As)	200.8	1.9	ug/l	1		12/6/02	6 months	<20	0.2					
Beryllium Total Recoverable (ug/l as Be)	200.9	<0.5	ug/l	0.5		12/9/02	6 months	<20	1					
Beryllium Dissolved (ug/l as Be)	200.8	<0.5	ug/l	0.5		12/6/02	6 months	<20	0.5					
Cadmium Total Recoverable (ug/l as Cd)	200.9	<1	ug/l	0.5		12/9/02	6 months	<20	2					
Cadmium Dissolved (ug/l as Cd)	200.9	<1	ug/l	0.5		12/6/02	6 months	<20	1					
Calcium Total Recoverable (mg/l as Ca)	200.7	21	mg/l	2		12/9/02	6 months	<20	0.5	<20	2			
Chromium Total Recoverable (ug/l as Cr)	200.9	7	ug/l	4		12/9/02	6 months	<20	0.9					
Chromium Dissolved (ug/l as Cr)	200.9	1.3	ug/l	4		12/6/02	6 months	<20	0.8					
Copper, Total Recoverable, (ug/l as Cu)	200.9	73	ug/l	4		12/9/02	6 months	<20	2					
Copper, Dissolved, (ug/l as Cu)	200.8	11	ug/l	1		12/6/02	6 months	<20	0.8					
Lead, Total Recoverable, (ug/l as Pb)	200.9	9.8	ug/l	2		12/9/02	6 months	<20	1					
Lead, Dissolved, (ug/l as Pb)	200.9	<1	ug/l	2		12/6/02	6 months	<20	0	<20	0.9			

Glendale ARROW

Storm of November 29, 2002

	Method	Result	Units	Required Method Detection Limit	Data Qualifiers	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
Magnesium, Total Recoverable, (mg/l as Mg)	200.7	4.1	mg/l	0.5		12/9/02	6 months							
Mercury, Total Recoverable, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		12/3/02	6 months	<15	9	<15	0.2			
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		12/6/02	6 months	<15	0.6	<15	1			
Nickel, Total Recoverable, (ug/l as Ni)	200.9	7.8	ug/l	4		12/9/02	6 months	<20	1					
Nickel, Dissolved, (ug/l as Ni)	200.9	2.9	ug/l	4		12/6/02	6 months	<20	0.4					
Potassium, Total Recoverable, (mg/l as K)	258.1	4.2	mg/l	1		12/23/02	6 months	<15	0	<15	0			
Selenium, Total, (ug/l as Se)	200.9	<2	ug/l	1		12/9/02	6 months	<20	2					
Selenium, Dissolved, (ug/l as Se)	200.9	<2	ug/l	1		12/6/02	6 months	<20	2					
Silver, Total Recoverable, (ug/l as Ag)	200.9	<1	ug/l	1		12/9/02	6 months	<20	2					
Silver, Dissolved, (ug/l as Ag)	200.8	<1	ug/l	1		12/6/02	6 months	<20	0.6					
Sodium, Total Recoverable, (mg/l as Na)	273.1	11	mg/l	5		12/18/02	6 months	<15	0	<15	0			
Thallium, Total, (ug/l as Tl)	200.9	<1	ug/l	1		12/9/02	6 months	<20	0.1					
Thallium, Dissolved, (ug/l as Tl)	200.9	<1	ug/l	1		12/6/02	6 months	<20	0.1					
Zinc, Total Recoverable, (ug/l as Zn)	200.7	50	ug/l	50		12/9/02	6 months	<20	0.9	<20	2			
Zinc, Dissolved, (ug/l as Zn)	200.7	58	ug/l	50		12/12/02	6 months	<20	3	<20	1			
EPA Method 608 Extraction						12/6/02	7 days							
Aldrin, Total, (ug/l)	608	<0.11	ug/l	0.11		12/14/02	40 days	<20	3					
BHC - ALPHA, (ug/l)	608	<0.11	ug/l	0.11		12/14/02	40 days							
BHC - Gamma (Lindane), (ug/l)	608	<0.11	ug/l	0.11		12/14/02	40 days	<20	8					
BHC - DELTA, (ug/l)	608	<0.23	ug/l	0.23		12/14/02	40 days							
Aroclor 1016, PCB, Total, (ug/l)	608	<1.1	ug/l	1.1		12/7/02	40 days	<35	4					
Aroclor 1221, PCB, Total, (ug/l)	608	<1.1	ug/l	1.1		12/7/02	40 days							
Aroclor 1232, PCB, Total, (ug/l)	608	<1.1	ug/l	1.1		12/7/02	40 days							
Aroclor 1242, PCB, Total, (ug/l)	608	<1.1	ug/l	1.1		12/7/02	40 days							
Aroclor 1248, PCB, Total, (ug/l)	608	<1.1	ug/l	1.1		12/7/02	40 days							
Aroclor 1254, PCB, Total, (ug/l)	608	<1.1	ug/l	1.1		12/7/02	40 days							
Aroclor 1260, PCB, Total, (ug/l)	608	<1.1	ug/l	1.1		12/7/02	40 days	<25	3					
Chlordane, Total, (ug/l)	608	<1.1	ug/l	1.1		12/14/02	40 days							
P,P' DDD, Total, (ug/l)	608	<0.11	ug/l	0.11		12/14/02	40 days	<20	6					
P,P' DDE, Total, (ug/l)	608	<0.11	ug/l	0.11	N1	12/14/02	40 days	<20	7					CCV recovery low
P, P' DDT, Total, (ug/l)	608	<0.11	ug/l	0.11	N1	12/14/02	40 days	<20	6					CCV recovery low
Dieldrin, Total, (ug/l)	608	<0.11	ug/l	0.11	N1	12/14/02	40 days	<20	6					CCV recovery low
Endo-Sulfan Alpha, Total, (ug/l)	608	<0.11	ug/l	0.11	N1	12/14/02	40 days	<20	6					CCV recovery low
Endo-Sulfan Beta, Total, (ug/l)	608	<0.11	ug/l	0.11	N1	12/14/02	40 days							CCV recovery low
Endo-Sulfan Sulfate, Total, (ug/l)	608	<0.23	ug/l	0.23	N1	12/14/02	40 days							CCV recovery low
Endrin, Total, (ug/l)	608	<0.11	ug/l	0.11	N1	12/14/02	40 days	<20	6					CCV recovery low
Endrin Aldehyde, Total, (ug/l)	608	<0.11	ug/l	0.11	N1	12/14/02	40 days							CCV recovery low
Endrin Ketone, Total, (ug/l)	608	<0.11	ug/l	0.11	N1	12/14/02	40 days							CCV recovery low
Heptachlor, Total, (ug/l)	608	<0.11	ug/l	0.11		12/14/02	40 days	<20	7					
Heptachlor Epoxide, Total, (ug/l)	608	<0.11	ug/l	0.11		12/14/02	40 days							
Methoxychlor, Total, (ug/l)	608	<0.11	ug/l	0.11	N1	12/14/02	40 days	<25	4					CCV recovery low
Toxaphene, Total, (ug/l)	608	<0.11	ug/l	0.11		12/14/02	40 days							
EPA Method 624 Extraction						12/10/02	7 days							
Benzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	6			
Bromodichloromethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.5	<20	3			
Bromoform, Total, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	3	<20	3			
Bromomethane (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	2	<20	12			
Carbon Tetrachloride, Total, (ug/l)	624	<2.5	ug/l	2.5		12/10/02	14 days	<20	5	<20	6			
Chlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.8	<20	2			
Dibromochloromethane	624	<2	ug/l	2		12/10/02	14 days	<20	0.9	<20	1			
Chloroethane, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	5	<20	12			
Chloroform, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0	<20	6			
Chloromethane (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	2	<20	12			
1,2- Dichlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.8	<20	6			
1,3- Dichlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	3	<20	3			
1,4- Dichlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	3	<20	3			

Glendale ARROW

Storm of November 29, 2002

	Method	Result	Units	Required Method Detection Limit	Data Qualifiers	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
1,1- Dichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	1	<20	7			
1,2- Dichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	6			
1,1- Dichloroethene, Total, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	4	<20	8			
trans-1,2- Dichloroethene, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	5			
1,2- Dichloropropane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	1	<20	6			
cis-1,3-Dichloropropene, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.4	<20	4			
trans-1,3- Dichloropropene, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	3	<20	2			
Ethylbenzene, Total (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	3			
Methylene Chloride, Total, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	3	<20	10			
1,1,2,2-Tetrachloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.9	<20	7			
Tetrachloroethene, PCE, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	5	<20	6			
Toluene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	5			
1,1,1- Trichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	4	<20	7			
1,1,2- Trichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	4	<20	1			
Trichloroethene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	6			
Trichlorofluoromethane, Total, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	6	<20	12			
Vinyl Chloride, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	8	<20	7			
EPA Method 625 Extraction						12/3/02	7 days							
Acenaphthene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days			<20	4			Matrix interference
Acenaphthylene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Anthracene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Benzidine, Total, (ug/l)	625	<230	ug/l	230	D1	12/6/02	40 days							Matrix interference
Benzo (a) Anthracene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Benzo (b) Fluoranthene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Benzo (k) Fluoranthene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Benzo (ghi) Perylene, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
Benzo (a) Pyrene, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
Bis-(2-Chloroethoxy)-Methane, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Bis-(2-Chloroethyl)-Ether, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Bis-(2-Chloroisopropyl)-Ether, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Bis(2-Ethyl Hexyl) Phthalate, Total, (ug/l)	625	<110	ug/l	110	V1,D1	12/6/02	40 days							Matrix interference,CCV recovery high
4-Bromo-Phenyl Phenyl Ether, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
Butyl Benzyl Phthalate, Total, (ug/l)	625	<23	ug/l	23	V1,D1	12/6/02	40 days							Matrix interference,CCV recovery high
2-Chloronapthalene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
2-Chlorophenol, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days			<20	6			Matrix interference
4-Chloro-Phenyl Phenyl Ether, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Chrysene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Dibenzo-[a,h]-Anthracene, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
Di-N-Butyl Phthalate, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
1,3-Dichlorobenzene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
1,4-Dichlorobenzene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days			<20	3			Matrix interference
1,2-Dichlorobenzene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
3,3'-Dichlorobenzidine, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
2,4-Dichlorophenol, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Diethyl Phthalate, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
2,4- Dimethylphenol, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Dimethyl Phthalate, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
2-Methyl-4,6-Dinitrophenol, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
2,4- Dinitrophenol, Total, (ug/l)	625	<69	ug/l	69	D1	12/6/02	40 days							Matrix interference
2,4- Dinitrotoluene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days			<20	4			Matrix interference
2,6- Dinitrotoluene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Di-N-Octyl-Phthalate, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
1,2- Diphenylhydrazine, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days			<20	4			Matrix interference
Fluoranthene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Fluorene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Hexachlorobenzene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference

Glendale ARROW

Storm of November 29, 2002

	Method	Result	Units	Required Method Detection Limit	Data Qualifiers	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
Hexachlorobutadiene, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
Hexachlorocyclopentadiene, Total, (ug/l)	625	<92	ug/l	92	D1	12/6/02	40 days							Matrix interference
Hexachloroethane, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference
Isophorone, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Naphthalene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Nitrobenzene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
2-Nitrophenol, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
4-Nitrophenol, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days			<30	11			Matrix interference
N-Nitrosodiphenylamine, Total, (ug/l)	625	<69	ug/l	69	D1	12/6/02	40 days							Matrix interference
N-Nitrosodi-N-Propylamine, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days			<20	8			Matrix interference
Pentachlorophenol, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days			<25	7			Matrix interference
Phenanthrene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
Phenol, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days			<20	0.2			Matrix interference
Pyrene, Total, (ug/l)	625	<23	ug/l	23	V1,D1	12/6/02	40 days			<20	1			Matrix interference,CCV recovery high
1,2,4-Trichlorobenzene, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days			<20	0.5			Matrix interference
2,4,6- Trichlorophenol, Total, (ug/l)	625	<23	ug/l	23	D1	12/6/02	40 days							Matrix interference
N-Nitrosodimethylamine, Total, (ug/l)	625	<46	ug/l	46	D1	12/6/02	40 days							Matrix interference

Data Validation Sheet

Glendale BUTLER

Storm of November 29, 2002

	Method	Result	Units	Required Method Detection Limit	Data Qualifiers	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)	Lab	3.0	deg. C	0.5		11/30/02	Immediate							
Effluent Temperature (deg. C)	Field	15.0	deg. C	0.5		11/29/02	Immediate							
Ambient Temperature (deg. C)	Field	15.0	deg. C	0.5		11/29/02	Immediate							
Barometric Pressure (mm Hg)	Field	732	mm Hg	1		11/29/02	Immediate							
pH, Effluent, Field (standard units)	Field	7.62	std units	0.1		11/29/02	Immediate							
Specific Conductance, FIELD (us/cm)	Field	239	us/cm	1		11/29/02	Immediate							
Oxygen Dissolved (mg/l)	Field	6.22	mg/l	0.01		11/29/02	Immediate							
BOD5 (mg/l)	405.1	11	mg/l	2		12/1/02	48 hours			<20	3			
Fecal Coliform (MPN/100ml)	9221E	2200	MPN/100ml	2		11/30/02	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	17000	MPN/100ml	2		11/30/02	6 hours							
E. Coli (MPN/100 ml)	9221F	1700	MPN/100 ml	2		11/30/02	6 hours							
Oil and Grease Total Recoverable (mg/l)	413.1	1.3	mg/l	1		12/9/02	28 days			<15	3			
Bicarbonate Whole Field (mg/l as HCO_3)	USGS	NM	mg/l	0.1			14 days							
Bicarbonate Dissolved, Field (mg/l as HCO_3)	USGS	NM	mg/l	0.1			14 days							
Carbonate Water Field (mg/l as CO_3)	USGS	NM	mg/l	0.1			14 days							
Carbonate Water Dissolved, Field, (mg/l as CO_3)	USGS	NM	mg/l	0.1			14 days							
Alkalinity Water Field Total (mg/l as $CaCO_3$)	USGS	NM	mg/l	0.1			14 days							
Alkalinity Dissolved Water Field Total (mg/l as $CaCO_3$)	USGS	NM	mg/l	0.1			14 days							
EPA Method 624 Extraction							7 days							
Benzene, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	0.4	<20	7			
Bromodichloromethane, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	2	<20	8			
Bromoform, Total, (ug/l)	624	<5	ug/l	5		12/11/02	14 days	<20	9	<20	7			
Bromomethane (ug/l)	624	<5	ug/l	5		12/11/02	14 days	<20	2	<20	8			
Carbon Tetrachloride, Total, (ug/l)	624	<2.5	ug/l	2.5		12/11/02	14 days	<20	3	<20	9			
Chlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	0.4	<20	9			
Dibromochloromethane	624	<2	ug/l	2		12/11/02	14 days	<20	5	<20	10			
Chloroethane, (ug/l)	624	<5	ug/l	5		12/11/02	14 days	<20	8	<20	6			
Chloroform, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	2	<20	9			
Chloromethane (ug/l)	624	<5	ug/l	5		12/11/02	14 days	<20	5	<20	9			
1,2- Dichlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	2	<20	8			
1,3- Dichlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	0.4	<20	8			
1,4- Dichlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	2	<20	5			
1,1- Dichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	1	<20	8			
1,2- Dichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	4	<20	5			
1,1- Dichloroethene, Total, (ug/l)	624	<5	ug/l	5		12/11/02	14 days	<20	1	<20	9			
trans-1,2- Dichloroethene, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	0.7	<20	8			
1,2- Dichloropropane, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	2	<20	7			
cis-1,3-Dichloropropene, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	0.3	<20	5			
trans-1,3- Dichloropropene, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	4	<20	6			
Ethylbenzene, Total (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	0.4	<20	9			
Methylene Chloride, Total, (ug/l)	624	<5	ug/l	5		12/11/02	14 days	<20	5	<20	12			
1,1,2,2-Tetrachloroethane, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	2	<20	2			
Tetrachloroethene, PCE, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	1	<20	9			
Toluene, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	0.4	<20	6			
1,1,1- Trichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	2	<20	8			
1,1,2- Trichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	4	<20	5			
Trichloroethene, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	0.2	<20	6			
Trichlorofluoromethane, Total, (ug/l)	624	<5	ug/l	5		12/11/02	14 days	<20	6	<20	13			
Vinyl Chloride, Total, (ug/l)	624	<2	ug/l	2		12/11/02	14 days	<20	2	<20	3			

NM = NOT MEASURED

Data Validation Sheet

Glendale CITRUS

Storm of November 29, 2002

	Method	Result	Units	Required Method Detection Limit	Data Qualifiers	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)	Lab	3.0	deg. C	0.5		11/30/02	Immediate							
Effluent Temperature (deg. C)	Field	16.5	deg. C	0.5		11/29/02	Immediate							
Ambient Temperature (deg. C)	Field	15.5	deg. C	0.5		11/29/02	Immediate							
Barometric Pressure (mm Hg)	Field	732	mm Hg	1		11/29/02	Immediate							
pH, Effluent, Field (standard units)	Field	8.0	std units	0.1		11/29/02	Immediate							
Specific Conductance, FIELD (us/cm)	Field	171	us/cm	1		11/29/02	Immediate							
Oxygen Dissolved (mg/l)	Field	7.13	mg/l	0.01		11/29/02	Immediate							
BOD5 (mg/l)	405.1	6.5	mg/l	2		12/1/02	48 hours			<20	3			
Fecal Coliform (MPN/100ml)	9221E	9000	MPN/100ml	2		11/30/02	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	50000	MPN/100ml	2		11/30/02	6 hours							
E. Coli (MPN/100 ml)	9221F	9000	MPN/100 ml	2		11/30/02	6 hours							
Oil and Grease Total Recoverable (mg/l)	413.1	<1	mg/l	1		12/5/02	28 days			<15	10			
Bicarbonate Whole Field (mg/l as HCO_3)	USGS	NM	mg/l	0.1			14 days							
Bicarbonate Dissolved, Field (mg/l as HCO_3)	USGS	NM	mg/l	0.1			14 days							
Carbonate Water Field (mg/l as CO_3)	USGS	NM	mg/l	0.1			14 days							
Carbonate Water Dissolved, Field, (mg/l as CO_3)	USGS	NM	mg/l	0.1			14 days							
Alkalinity Water Field Total (mg/l as $CaCO_3$)	USGS	NM	mg/l	0.1			14 days							
Alkalinity Dissolved Water Field Total (mg/l as $CaCO_3$)	USGS	NM	mg/l	0.1			14 days							
EPA Method 624 Extraction							7 days							
Benzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	6			
Bromodichloromethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.5	<20	3			
Bromoform, Total, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	3	<20	3			
Bromomethane (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	2	<20	12			
Carbon Tetrachloride, Total, (ug/l)	624	<2.5	ug/l	2.5		12/10/02	14 days	<20	5	<20	6			
Chlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.8	<20	2			
Dibromochloromethane	624	<2	ug/l	2		12/10/02	14 days	<20	0.9	<20	1			
Chloroethane, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	5	<20	12			
Chloroform, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0	<20	6			
Chloromethane (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	2	<20	12			
1,2- Dichlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.8	<20	6			
1,3- Dichlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	3	<20	3			
1,4- Dichlorobenzene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	3	<20	3			
1,1- Dichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	1	<20	7			
1,2- Dichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	6			
1,1- Dichloroethene, Total, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	4	<20	8			
trans-1,2- Dichloroethene, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	5			
1,2- Dichloropropane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	1	<20	6			
cis-1,3-Dichloropropene, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.4	<20	4			
trans-1,3- Dichloropropene, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	3	<20	2			
Ethylbenzene, Total (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	3			
Methylene Chloride, Total, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	3	<20	10			
1,1,2,2-Tetrachloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	0.9	<20	7			
Tetrachloroethene, PCE, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	5	<20	6			
Toluene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	5			
1,1,1- Trichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	4	<20	7			
1,1,2- Trichloroethane, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	4	<20	1			
Trichloroethene, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	2	<20	6			
Trichlorofluoromethane, Total, (ug/l)	624	<5	ug/l	5		12/10/02	14 days	<20	6	<20	12			
Vinyl Chloride, Total, (ug/l)	624	<2	ug/l	2		12/10/02	14 days	<20	8	<20	7			

NM = NOT MEASURED

Hard Copies of Data

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02
Issued: 12/11/02

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PLK0832-01	Arrow-Grab	Water
PLK0832-02	Trip Blank	Water

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted.

QA/QC CRITERIA: All analyses met method criteria.

EXPLANATION OF DATA QUALIFIERS: No further explanation of data qualifiers needed.

Del Mar Analytical, Phoenix (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-968
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-085
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-362

Maricopa County -Flood Control Distr 2801 West Durango Street Phoenix, AZ 85009 Attention: Matt Oller	Client Project ID: Glendale NPDES Stormwater Report Number: PLK0832	Sampled: 11/30/02 Received: 11/30/02	

TOTAL RECOVERABLE OIL & GREASE (EPA 413.2)

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0832-01 (Arrow-Grab - Water)								
Oil & Grease	EPA 413.2	P2L0410	1.0	1.3	1	12/4/02	12/5/02	

The reporting limit for this sample was adjusted by a factor of 1.04 to account for the applicable preparation factor.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0832-01 (Arrow-Grab - Water)								
Benzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Bromodichloromethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Bromoform	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Bromomethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Carbon tetrachloride	EPA 624	P2L1004	2.5	ND	1	12/10/02	12/10/02	
Chlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Dibromochloromethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Chloroethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Chloroform	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Chloromethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
1,2-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,3-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,4-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1-Dichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,2-Dichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1-Dichloroethene	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
trans-1,2-Dichloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,2-Dichloropropane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
cis-1,3-Dichloropropene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
trans-1,3-Dichloropropene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Ethylbenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Methylene chloride	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
1,1,2,2-Tetrachloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Tetrachloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Toluene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1,1-Trichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1,2-Trichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Trichloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Trichlorofluoromethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Vinyl chloride	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Surrogate: Dibromofluoromethane (80-120%)				*106 %*				
Surrogate: Toluene-d8 (80-120%)				*102 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*100 %*				

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-968
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-085
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-362

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0832-02 (Trip Blank - Water)								
Benzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Bromodichloromethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Bromoform	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Bromomethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Carbon tetrachloride	EPA 624	P2L1004	2.5	ND	1	12/10/02	12/10/02	
Chlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Dibromochloromethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Chloroethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Chloroform	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Chloromethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
1,2-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,3-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,4-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1-Dichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,2-Dichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1-Dichloroethene	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
trans-1,2-Dichloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,2-Dichloropropane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
cis-1,3-Dichloropropene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
trans-1,3-Dichloropropene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Ethylbenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Methylene chloride	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
1,1,2,2-Tetrachloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Tetrachloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Toluene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1,1-Trichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1,2-Trichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Trichloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Trichlorofluoromethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Vinyl chloride	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Surrogate: Dibromofluoromethane (80-120%)				*107 %*				
Surrogate: Toluene-d8 (80-120%)				*103 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*99 %*				

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0832-01 (Arrow-Grab - Water)								
Biochemical Oxygen Demand	EPA 405.1	P2L0204	2.0	**15**	1	12/1/02	12/6/02	

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

MICROBIOLOGICALS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			MPN/100 ml	MPN/100 m				
Sample ID: PLK0832-01 (Arrow-Grab - Water)								
E. Coli	SM9221F	P2L0103	2.0	**50000**	1	11/30/02	12/2/02	
Fecal Coliform	SM 9221E	P2L0103	2.0	**50000**	1	11/30/02	12/2/02	
Fecal Streptococcus	SM9230B	P2L0104	2.0	**30000**	1	11/30/02	12/2/02	

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

TOTAL RECOVERABLE OIL & GREASE (EPA 413.2)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0410 Extracted: 12/04/02										
Blank Analyzed: 12/04/02 (P2L0410-BLK1)										
Oil & Grease	ND	1.0	mg/l							
LCS Analyzed: 12/04/02 (P2L0410-BS1)										
Oil & Grease	11.9	1.0	mg/l	10.0		119	85-135			
LCS Dup Analyzed: 12/04/02 (P2L0410-BSD1)										
Oil & Grease	13.1	1.0	mg/l	10.0		131	85-135	10	15	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
Blank Analyzed: 12/10/02 (P2L1004-BLK1)										
Benzene	ND	2.0	ug/l							
Bromodichloromethane	ND	2.0	ug/l							
Bromoform	ND	5.0	ug/l							
Bromomethane	ND	5.0	ug/l							
Carbon tetrachloride	ND	2.5	ug/l							
Chlorobenzene	ND	2.0	ug/l							
Dibromochloromethane	ND	2.0	ug/l							
Chloroethane	ND	5.0	ug/l							
Chloroform	ND	2.0	ug/l							
Chloromethane	ND	5.0	ug/l							
1,2-Dichlorobenzene	ND	2.0	ug/l							
1,3-Dichlorobenzene	ND	2.0	ug/l							
1,4-Dichlorobenzene	ND	2.0	ug/l							
1,1-Dichloroethane	ND	2.0	ug/l							
1,2-Dichloroethane	ND	2.0	ug/l							
1,1-Dichloroethene	ND	5.0	ug/l							
trans-1,2-Dichloroethene	ND	2.0	ug/l							
1,2-Dichloropropane	ND	2.0	ug/l							
cis-1,3-Dichloropropene	ND	2.0	ug/l							
trans-1,3-Dichloropropene	ND	2.0	ug/l							
Ethylbenzene	ND	2.0	ug/l							
Methylene chloride	ND	5.0	ug/l							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/l							
Tetrachloroethene	ND	2.0	ug/l							
Toluene	ND	2.0	ug/l							
1,1,1-Trichloroethane	ND	2.0	ug/l							
1,1,2-Trichloroethane	ND	2.0	ug/l							
Trichloroethene	ND	2.0	ug/l							
Trichlorofluoromethane	ND	5.0	ug/l							
Vinyl chloride	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: Toluene-d8	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*ug/l*	*25.0*		*97*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
LCS Analyzed: 12/10/02 (P2L1004-BS1)										
Benzene	23.5	2.0	ug/l	25.0		94	37-151			
Bromodichloromethane	23.0	2.0	ug/l	25.0		92	35-155			
Bromoform	25.6	5.0	ug/l	25.0		102	45-169			
Bromomethane	23.6	5.0	ug/l	25.0		94	5-242			
Carbon tetrachloride	25.7	2.5	ug/l	25.0		103	70-140			
Chlorobenzene	25.8	2.0	ug/l	25.0		103	37-160			
Dibromochloromethane	25.6	2.0	ug/l	25.0		102	53-149			
Chloroethane	21.6	5.0	ug/l	25.0		86	14-230			
Chloroform	22.7	2.0	ug/l	25.0		91	51-138			
Chloromethane	19.7	5.0	ug/l	25.0		79	5-273			
1,2-Dichlorobenzene	28.0	2.0	ug/l	25.0		112	18-190			
1,3-Dichlorobenzene	27.2	2.0	ug/l	25.0		109	59-156			
1,4-Dichlorobenzene	27.2	2.0	ug/l	25.0		109	18-190			
1,1-Dichloroethane	21.6	2.0	ug/l	25.0		86	59-155			
1,2-Dichloroethane	21.8	2.0	ug/l	25.0		87	49-155			
1,1-Dichloroethene	23.0	5.0	ug/l	25.0		92	5-234			
trans-1,2-Dichloroethene	23.0	2.0	ug/l	25.0		92	54-156			
1,2-Dichloropropane	22.6	2.0	ug/l	25.0		90	5-210			
cis-1,3-Dichloropropene	24.2	2.0	ug/l	25.0		97	5-227			
trans-1,3-Dichloropropene	25.5	2.0	ug/l	25.0		102	17-183			
Ethylbenzene	25.0	2.0	ug/l	25.0		100	37-162			
Methylene chloride	20.3	5.0	ug/l	25.0		81	5-221			
1,1,2,2-Tetrachloroethane	25.0	2.0	ug/l	25.0		100	46-157			
Tetrachloroethene	26.2	2.0	ug/l	25.0		105	64-148			
Toluene	23.9	2.0	ug/l	25.0		96	47-150			
1,1,1-Trichloroethane	23.1	2.0	ug/l	25.0		92	52-162			
1,1,2-Trichloroethane	25.8	2.0	ug/l	25.0		103	52-150			
Trichloroethene	24.4	2.0	ug/l	25.0		98	71-157			
Trichlorofluoromethane	22.9	5.0	ug/l	25.0		92	17-181			
Vinyl chloride	22.2	2.0	ug/l	25.0		89	5-251			
Surrogate: Dibromofluoromethane	*25.1*		*ug/l*	*25.0*		*100*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.8*		*ug/l*	*25.0*		*95*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
LCS Dup Analyzed: 12/10/02 (P2L1004-BSD1)										
Benzene	24.9	2.0	ug/l	25.0		100	37-151	6	20	
Bromodichloromethane	23.6	2.0	ug/l	25.0		94	35-155	3	20	
Bromoform	24.9	5.0	ug/l	25.0		100	45-169	3	20	
Bromomethane	26.5	5.0	ug/l	25.0		106	5-242	12	20	
Carbon tetrachloride	27.4	2.5	ug/l	25.0		110	70-140	6	20	
Chlorobenzene	26.2	2.0	ug/l	25.0		105	37-160	2	20	
Dibromochloromethane	25.3	2.0	ug/l	25.0		101	53-149	1	20	
Chloroethane	24.3	5.0	ug/l	25.0		97	14-230	12	20	
Chloroform	24.2	2.0	ug/l	25.0		97	51-138	6	20	
Chloromethane	22.3	5.0	ug/l	25.0		89	5-273	12	20	
1,2-Dichlorobenzene	26.3	2.0	ug/l	25.0		105	18-190	6	20	
1,3-Dichlorobenzene	26.3	2.0	ug/l	25.0		105	59-156	3	20	
1,4-Dichlorobenzene	26.3	2.0	ug/l	25.0		105	18-190	3	20	
1,1-Dichloroethane	23.1	2.0	ug/l	25.0		92	59-155	7	20	
1,2-Dichloroethane	23.1	2.0	ug/l	25.0		92	49-155	6	20	
1,1-Dichloroethene	25.0	5.0	ug/l	25.0		100	5-234	8	20	
trans-1,2-Dichloroethene	24.2	2.0	ug/l	25.0		97	54-156	5	20	
1,2-Dichloropropane	24.1	2.0	ug/l	25.0		96	5-210	6	20	
cis-1,3-Dichloropropene	25.2	2.0	ug/l	25.0		101	5-227	4	20	
trans-1,3-Dichloropropene	25.9	2.0	ug/l	25.0		104	17-183	2	20	
Ethylbenzene	25.7	2.0	ug/l	25.0		103	37-162	3	20	
Methylene chloride	22.4	5.0	ug/l	25.0		90	5-221	10	20	
1,1,2,2-Tetrachloroethane	23.3	2.0	ug/l	25.0		93	46-157	7	20	
Tetrachloroethene	27.7	2.0	ug/l	25.0		111	64-148	6	20	
Toluene	25.2	2.0	ug/l	25.0		101	47-150	5	20	
1,1,1-Trichloroethane	24.8	2.0	ug/l	25.0		99	52-162	7	20	
1,1,2-Trichloroethane	26.1	2.0	ug/l	25.0		104	52-150	1	20	
Trichloroethene	25.8	2.0	ug/l	25.0		103	71-157	6	20	
Trichlorofluoromethane	25.8	5.0	ug/l	25.0		103	17-181	12	20	
Vinyl chloride	23.7	2.0	ug/l	25.0		95	5-251	7	20	
Surrogate: Dibromofluoromethane	*25.5*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: Toluene-d8	*25.7*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.1*		*ug/l*	*25.0*		*96*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
Matrix Spike Analyzed: 12/10/02 (P2L1004-MS1)					**Source: PLK0838-01**					
Benzene	24.9	2.0	ug/l	25.0	ND	100	37-151			
Bromodichloromethane	21.5	2.0	ug/l	25.0	ND	86	35-155			
Bromoform	24.0	5.0	ug/l	25.0	ND	96	45-169			
Bromomethane	27.0	5.0	ug/l	25.0	ND	108	5-242			
Carbon tetrachloride	28.8	2.5	ug/l	25.0	ND	115	70-140			
Chlorobenzene	26.0	2.0	ug/l	25.0	ND	104	37-160			
Dibromochloromethane	22.5	2.0	ug/l	25.0	ND	90	53-149			
Chloroethane	24.9	5.0	ug/l	25.0	ND	100	14-230			
Chloroform	23.1	2.0	ug/l	25.0	ND	92	51-138			
Chloromethane	22.2	5.0	ug/l	25.0	ND	89	5-273			
1,2-Dichlorobenzene	24.7	2.0	ug/l	25.0	ND	99	18-190			
1,3-Dichlorobenzene	26.2	2.0	ug/l	25.0	ND	105	59-156			
1,4-Dichlorobenzene	26.4	2.0	ug/l	25.0	ND	106	18-190			
1,1-Dichloroethane	22.7	2.0	ug/l	25.0	ND	91	59-155			
1,2-Dichloroethane	20.4	2.0	ug/l	25.0	ND	82	49-155			
1,1-Dichloroethene	25.8	5.0	ug/l	25.0	ND	103	5-234			
trans-1,2-Dichloroethene	25.4	2.0	ug/l	25.0	ND	102	54-156			
1,2-Dichloropropane	22.2	2.0	ug/l	25.0	ND	89	5-210			
cis-1,3-Dichloropropene	22.7	2.0	ug/l	25.0	ND	91	5-227			
trans-1,3-Dichloropropene	22.4	2.0	ug/l	25.0	ND	90	17-183			
Ethylbenzene	26.4	2.0	ug/l	25.0	ND	106	37-162			
Methylene chloride	21.0	5.0	ug/l	25.0	ND	84	5-221			
1,1,2,2-Tetrachloroethane	22.6	2.0	ug/l	25.0	ND	90	46-157			
Tetrachloroethene	30.0	2.0	ug/l	25.0	ND	120	64-148			
Toluene	25.0	2.0	ug/l	25.0	ND	100	47-150			
1,1,1-Trichloroethane	25.7	2.0	ug/l	25.0	ND	103	52-162			
1,1,2-Trichloroethane	22.3	2.0	ug/l	25.0	ND	89	52-150			
Trichloroethene	25.8	2.0	ug/l	25.0	ND	103	71-157			
Trichlorofluoromethane	26.7	5.0	ug/l	25.0	ND	107	17-181			
Vinyl chloride	28.0	2.0	ug/l	25.0	ND	112	5-251			
Surrogate: Dibromofluoromethane	*23.6*		*ug/l*	*25.0*		*94*	*80-120*			
Surrogate: Toluene-d8	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.5*		*ug/l*	*25.0*		*102*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-968
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-085
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-362

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
Matrix Spike Dup Analyzed: 12/10/02 (P2L1004-MSD1)					**Source: PLK0838-01**					
Benzene	**24.5**	2.0	ug/l	25.0	ND	98	37-151	2	20	
Bromodichloromethane	**21.6**	2.0	ug/l	25.0	ND	86	35-155	0.5	20	
Bromoform	**23.3**	5.0	ug/l	25.0	ND	93	45-169	3	20	
Bromomethane	**26.5**	5.0	ug/l	25.0	ND	106	5-242	2	20	
Carbon tetrachloride	**27.5**	2.5	ug/l	25.0	ND	110	70-140	5	20	
Chlorobenzene	**25.8**	2.0	ug/l	25.0	ND	103	37-160	0.8	20	
Dibromochloromethane	**22.7**	2.0	ug/l	25.0	ND	91	53-149	0.9	20	
Chloroethane	**23.7**	5.0	ug/l	25.0	ND	95	14-230	5	20	
Chloroform	**23.1**	2.0	ug/l	25.0	ND	92	51-138	0	20	
Chloromethane	**21.8**	5.0	ug/l	25.0	ND	87	5-273	2	20	
1,2-Dichlorobenzene	**24.9**	2.0	ug/l	25.0	ND	100	18-190	0.8	20	
1,3-Dichlorobenzene	**25.5**	2.0	ug/l	25.0	ND	102	59-156	3	20	
1,4-Dichlorobenzene	**25.7**	2.0	ug/l	25.0	ND	103	18-190	3	20	
1,1-Dichloroethane	**22.4**	2.0	ug/l	25.0	ND	90	59-155	1	20	
1,2-Dichloroethane	**20.9**	2.0	ug/l	25.0	ND	84	49-155	2	20	
1,1-Dichloroethene	**24.7**	5.0	ug/l	25.0	ND	99	5-234	4	20	
trans-1,2-Dichloroethene	**24.9**	2.0	ug/l	25.0	ND	100	54-156	2	20	
1,2-Dichloropropane	**21.9**	2.0	ug/l	25.0	ND	88	5-210	1	20	
cis-1,3-Dichloropropene	**22.8**	2.0	ug/l	25.0	ND	91	5-227	0.4	20	
trans-1,3-Dichloropropene	**23.0**	2.0	ug/l	25.0	ND	92	17-183	3	20	
Ethylbenzene	**25.8**	2.0	ug/l	25.0	ND	103	37-162	2	20	
Methylene chloride	**20.3**	5.0	ug/l	25.0	ND	81	5-221	3	20	
1,1,2,2-Tetrachloroethane	**22.4**	2.0	ug/l	25.0	ND	90	46-157	0.9	20	
Tetrachloroethene	**28.4**	2.0	ug/l	25.0	ND	114	64-148	5	20	
Toluene	**24.6**	2.0	ug/l	25.0	ND	98	47-150	2	20	
1,1,1-Trichloroethane	**24.6**	2.0	ug/l	25.0	ND	98	52-162	4	20	
1,1,2-Trichloroethane	**23.1**	2.0	ug/l	25.0	ND	92	52-150	4	20	
Trichloroethene	**25.2**	2.0	ug/l	25.0	ND	101	71-157	2	20	
Trichlorofluoromethane	**25.1**	5.0	ug/l	25.0	ND	100	17-181	6	20	
Vinyl chloride	**25.8**	2.0	ug/l	25.0	ND	103	5-251	8	20	
Surrogate: Dibromofluoromethane	*23.6*		*ug/l*	*25.0*		*94*	*80-120*			
Surrogate: Toluene-d8	*25.5*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.4*		*ug/l*	*25.0*		*98*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0832

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0204 Extracted: 12/01/02										
Blank Analyzed: 12/06/02 (P2L0204-BLK1)										
Biochemical Oxygen Demand	ND	2.0	mg/l							
LCS Analyzed: 12/06/02 (P2L0204-BS1)										
Biochemical Oxygen Demand	197	2.0	mg/l	198		99	85-115			
Duplicate Analyzed: 12/06/02 (P2L0204-DUP1)					**Source: PLK0832-01**					
Biochemical Oxygen Demand	15.4	2.0	mg/l		15			3	20	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr 2801 West Durango Street Phoenix, AZ 85009 Attention: Matt Oller	Client Project ID: Glendale NPDES Stormwater Report Number: PLK0832	Sampled: 11/30/02 Received: 11/30/02

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit

NR Not reported.

RPD Relative Percent Difference

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02
Issued: 1/10/03

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PLK0839-01	Arrow-Comp	Water
PLK0839-01RE1	Arrow-Comp	Water
PLK0839-01RE2	Arrow-Comp	Water
PLK0839-01RE3	Arrow-Comp	Water
PLK0839-02	Arrow-Comp	Water

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The ICPMS analyses were subcontracted to Del Mar Analytical - 2852 Alton Avenue - Irvine, CA 92606 (AZ0428). The Nitrate-N/Nitrite-N (EPA 353.2) analysis was subcontracted to Transwest Geochem - 3725 E. Atlanta Ave., Suite 1 - Phoenix, AZ 85040-2961 (AZ0133). Results are attached.

QA/QC CRITERIA: All analyses met method criteria.

EXPLANATION OF DATA QUALIFIERS:
The D1 flag on the 625 indicates that the reporting limit was raised due to sample matrix effects.
The N1 flag on the 608 indicates that the Calibration Verification recovery was below the method control limit for this analyte.
The N1 flag on the fluoride, nitrate, nitrite, nitrate/nitrite, orthophosphate, chloride and sulfate indicates that the results are reported for batch QC purposes only. See original analysis for final result.

Del Mar Analytical, Phoenix (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

TOTAL RECOVERABLE METALS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Calcium	EPA 200.7	P2L0607	2.0	**21**	1	12/6/02	12/9/02	
Magnesium	EPA 200.7	P2L0607	0.50	**4.1**	1	12/6/02	12/9/02	
Mercury	EPA 245.1	P2L0320	0.00020	ND	1	12/3/02	12/3/02	
Sodium	EPA 273.1	P2L0607	5.0	**11**	1	12/6/02	12/18/02	
Zinc	EPA 200.7	P2L0607	0.050	**0.50**	1	12/6/02	12/9/02	
Sample ID: PLK0839-01RE1 (Arrow-Comp - Water)								
Potassium	EPA 258.1	P2L2315	1.0	**4.2**	1	12/6/02	12/23/02	

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

DISSOLVED METALS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-02 (Arrow-Comp - Water)								
Mercury, Dissolved	EPA 245.1	P2L0620	0.00020	ND	1	12/6/02	12/6/02	
Zinc, Dissolved	EPA 200.7	P2L1110	0.050	**0.058**	1	12/11/02	12/12/02	

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-968
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-085
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-362

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			mg/l	mg/l				
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Alkalinity as CaCO3	SM2320B	P2L0906	5.0	**32**	1	12/6/02	12/6/02	
Ammonia-N	EPA 350.3	P2L1113	0.050	**1.0**	1	12/11/02	12/11/02	Q5
			%	%				
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Cation/Anion Balance	Calculation	P2L2422	NA	**19.0**	1	12/24/02	12/24/02	
			mg/l	mg/l				
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Chloride	EPA 300.0	P2L0203	0.50	**8.6**	1	12/2/02	12/2/02	
Hardness (CaCO3)	SM2340B	P2L0607	1.0	**69**	1	12/6/02	12/9/02	
			umhos/cm	umhos/cm				
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Specific Conductance	SM2510B	P2L0603	2.0	**230**	1	12/6/02	12/6/02	
			mg/l	mg/l				
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Total Dissolved Solids	SM2540C	P2L0617	20	**110**	1	12/6/02	12/6/02	
Total Suspended Solids	EPA 160.2	P2L0213	10	**36**	1	12/2/02	12/2/02	
Sample ID: PLK0839-01RE2 (Arrow-Comp - Water)								
Fluoride	EPA 300.0	P2L0203	0.10	**0.27**	1	12/2/02	12/2/02	
Nitrate/Nitrite-N	EPA 300.0	P2L0203	0.10	**0.82**	1	12/2/02	12/2/02	
Nitrate-N	EPA 300.0	P2L0203	0.10	**0.78**	1	12/2/02	12/2/02	
Nitrite-N	EPA 300.0	P2L0203	0.10	ND	1	12/2/02	12/2/02	
Orthophosphate	EPA 300.0	P2L0203	0.50	ND	1	12/2/02	12/2/02	
Sulfate	EPA 300.0	P2L0203	0.50	**18**	1	12/2/02	12/2/02	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01RE3 (Arrow-Comp - Water)								
Fluoride	EPA 300.0	P2L0203	1.0	ND	10	12/2/02	12/2/02	N1
Nitrate/Nitrite-N	EPA 300.0	P2L0203	1.0	ND	10	12/2/02	12/2/02	N1
Nitrate-N	EPA 300.0	P2L0203	1.0	ND	10	12/2/02	12/2/02	N1
Nitrite-N	EPA 300.0	P2L0203	1.0	ND	10	12/2/02	12/2/02	N1
Orthophosphate	EPA 300.0	P2L0203	5.0	ND	10	12/2/02	12/2/02	N1
Sulfate	EPA 300.0	P2L0203	5.0	**16**	10	12/2/02	12/2/02	N1

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

NITROGEN, ORGANIC (Calculation)

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Organic Nitrogen	Calculation	P2L1117	0.50	**1.2**	1	12/11/02	12/11/02	

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Total Kjeldahl Nitrogen	SM4500-N-O,C	C2L0907	0.50	**2.2**	1	12/9/02	12/9/02	

DEL MAR ANALYTICAL, COLTON (AZ0062)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Acenaphthene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Acenaphthylene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Anthracene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Benzidine	EPA 625	2L03030	230	ND	2.3	12/3/02	12/6/02	D1
Benzo(a)anthracene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Benzo(b,k)fluoranthene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Benzo(g,h,i)perylene	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
Benzo(a)pyrene	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
Bis(2-chloroethoxy)methane	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Bis(2-chloroethyl)ether	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Bis(2-chloroisopropyl)ether	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Bis(2-ethylhexyl)phthalate	EPA 625	2L03030	110	ND	2.3	12/3/02	12/6/02	V1 , D1
4-Bromophenyl phenyl ether	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
Butyl benzyl phthalate	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	V1 , D1
2-Chloronaphthalene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
4-Chloro-3-methylphenol	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
2-Chlorophenol	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
4-Chlorophenyl phenyl ether	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Chrysene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Dibenz(a,h)anthracene	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
Di-n-butyl phthalate	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
1,3-Dichlorobenzene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
1,4-Dichlorobenzene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
1,2-Dichlorobenzene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
3,3-Dichlorobenzidine	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
2,4-Dichlorophenol	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Diethyl phthalate	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
2,4-Dimethylphenol	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Dimethyl phthalate	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
4,6-Dinitro-2-methylphenol	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
2,4-Dinitrophenol	EPA 625	2L03030	69	ND	2.3	12/3/02	12/6/02	D1
2,4-Dinitrotoluene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
2,6-Dinitrotoluene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Di-n-octyl phthalate	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
1,2-Diphenylhydrazine/Azobenzen	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
Fluoranthene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Fluorene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Hexachlorobenzene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Hexachlorobutadiene	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
Hexachlorocyclopentadiene	EPA 625	2L03030	92	ND	2.3	12/3/02	12/6/02	D1
Hexachloroethane	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Indeno(1,2,3-cd)pyrene	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
Isophorone	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Naphthalene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Nitrobenzene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
2-Nitrophenol	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
4-Nitrophenol	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
n-Nitrosodiphenylamine	EPA 625	2L03030	69	ND	2.3	12/3/02	12/6/02	D1
n-Nitroso-di-n-propylamine	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Pentachlorophenol	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
Phenanthrene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Phenol	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
Pyrene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	V1 , D1
1,2,4-Trichlorobenzene	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
2,4,6-Trichlorophenol	EPA 625	2L03030	23	ND	2.3	12/3/02	12/6/02	D1
n-Nitrosodimethylamine	EPA 625	2L03030	46	ND	2.3	12/3/02	12/6/02	D1
Surrogate: 2-Fluorophenol (30-110%)				*61 %*				D1
Surrogate: Phenol-d6 (40-115%)				*66 %*				D1
Surrogate: 2,4,6-Tribromophenol (55-130%)				*87 %*				D1
Surrogate: Nitrobenzene-d5 (40-115%)				*66 %*				D1
Surrogate: 2-Fluorobiphenyl (40-115%)				*72 %*				D1
Surrogate: Terphenyl-d14 (40-130%)				*78 %*				D1

DEL MAR ANALYTICAL, IRVINE (AZ0428

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Aldrin	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	
alpha-BHC	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	
beta-BHC	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
delta-BHC	EPA 608	2L06031	0.23	ND	1.1	12/6/02	12/14/02	
gamma-BHC (Lindane)	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	
Chlordane	EPA 608	2L06031	1.1	ND	1.1	12/6/02	12/14/02	
4,4'-DDD	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	
4,4'-DDE	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
4,4'-DDT	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
Dieldrin	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
Endosulfan I	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
Endosulfan II	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
Endosulfan sulfate	EPA 608	2L06031	0.23	ND	1.1	12/6/02	12/14/02	N1
Endrin	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
Endrin aldehyde	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
Endrin ketone	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
Heptachlor	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	
Heptachlor epoxide	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	
Methoxychlor	EPA 608	2L06031	0.11	ND	1.1	12/6/02	12/14/02	N1
Toxaphene	EPA 608	2L06031	5.7	ND	1.1	12/6/02	12/14/02	
Surrogate: Tetrachloro-m-xylene (35-120%)				*71 %*				
Surrogate: Decachlorobiphenyl (45-120%)				*72 %*				

DEL MAR ANALYTICAL, IRVINE (AZ0428

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Aroclor 1016	EPA 608	2L06031	1.1	ND	1.1	12/6/02	12/7/02	
Aroclor 1221	EPA 608	2L06031	1.1	ND	1.1	12/6/02	12/7/02	
Aroclor 1232	EPA 608	2L06031	1.1	ND	1.1	12/6/02	12/7/02	
Aroclor 1242	EPA 608	2L06031	1.1	ND	1.1	12/6/02	12/7/02	
Aroclor 1248	EPA 608	2L06031	1.1	ND	1.1	12/6/02	12/7/02	
Aroclor 1254	EPA 608	2L06031	1.1	ND	1.1	12/6/02	12/7/02	
Aroclor 1260	EPA 608	2L06031	1.1	ND	1.1	12/6/02	12/7/02	
Surrogate: Decachlorobiphenyl (35-135%)				*99 %*				

DEL MAR ANALYTICAL, IRVINE (AZ0428

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METALS

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Antimony	EPA 200.8	2L06040	2.0	**5.3**	1	12/6/02	12/9/02	
Arsenic	EPA 200.8	2L06040	1.0	**2.9**	1	12/6/02	12/9/02	
Beryllium	EPA 200.8	2L06040	0.50	ND	1	12/6/02	12/9/02	
Cadmium	EPA 200.8	2L06040	1.0	ND	1	12/6/02	12/9/02	
Chromium	EPA 200.8	2L06040	1.0	**7.0**	1	12/6/02	12/9/02	
Copper	EPA 200.8	2L06040	2.0	**73**	1	12/6/02	12/9/02	
Lead	EPA 200.8	2L06040	1.0	**9.8**	1	12/6/02	12/9/02	
Nickel	EPA 200.8	2L06040	1.0	**7.8**	1	12/6/02	12/9/02	
Selenium	EPA 200.8	2L06040	2.0	ND	1	12/6/02	12/9/02	
Silver	EPA 200.8	2L06040	1.0	ND	1	12/6/02	12/9/02	
Thallium	EPA 200.8	2L06040	1.0	ND	1	12/6/02	12/9/02	

DEL MAR ANALYTICAL, IRVINE (AZ0428

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

DISSOLVED METALS

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-02 (Arrow-Comp - Water)								
Antimony	EPA 200.8-Diss	2L05089	2.0	**3.8**	1	12/5/02	12/6/02	
Arsenic	EPA 200.8-Diss	2L05089	1.0	**1.9**	1	12/5/02	12/6/02	
Beryllium	EPA 200.8-Diss	2L05089	0.50	ND	1	12/5/02	12/6/02	
Cadmium	EPA 200.8-Diss	2L05089	1.0	ND	1	12/5/02	12/6/02	
Chromium	EPA 200.8-Diss	2L05089	1.0	**1.3**	1	12/5/02	12/6/02	
Copper	EPA 200.8-Diss	2L05089	2.0	**11**	1	12/5/02	12/6/02	
Lead	EPA 200.8-Diss	2L05089	1.0	ND	1	12/5/02	12/6/02	
Nickel	EPA 200.8-Diss	2L05089	1.0	**2.9**	1	12/5/02	12/6/02	
Selenium	EPA 200.8-Diss	2L05089	2.0	ND	1	12/5/02	12/6/02	
Silver	EPA 200.8-Diss	2L05089	1.0	ND	1	12/5/02	12/6/02	
Thallium	EPA 200.8-Diss	2L05089	1.0	ND	1	12/5/02	12/6/02	

DEL MAR ANALYTICAL, IRVINE (AZ0428

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0839-01 (Arrow-Comp - Water)								
Chemical Oxygen Demand	EPA 410.4	2L09040	20	**160**	1	12/9/02	12/9/02	
Total Cyanide	SM4500-CN-C,E	2L04062	0.020	ND	1	12/4/02	12/4/02	
Phenols	EPA 420.1	2L07032	0.10	ND	1	12/7/02	12/10/02	
Phosphorus	EPA 365.3	2L06028	0.050	**0.12**	1	12/6/02	12/6/02	
Total Organic Carbon	EPA 415.1	2L05073	5.0	**21**	5	12/5/02	12/5/02	

DEL MAR ANALYTICAL, IRVINE (AZ0428

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

TOTAL RECOVERABLE METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0320 Extracted: 12/03/02										
Blank Analyzed: 12/03/02 (P2L0320-BLK1)										
Mercury	ND	0.00020	mg/l							
LCS Analyzed: 12/03/02 (P2L0320-BS1)										
Mercury	**0.00477**	0.00020	mg/l	0.00500		95	85-115			
LCS Dup Analyzed: 12/03/02 (P2L0320-BSD1)										
Mercury	**0.00478**	0.00020	mg/l	0.00500		96	85-115	0.2	15	
Matrix Spike Analyzed: 12/03/02 (P2L0320-MS1)					**Source: PLK0785-02**					
Mercury	**0.00528**	0.00020	mg/l	0.00500	ND	106	85-115			
Matrix Spike Dup Analyzed: 12/03/02 (P2L0320-MSD1)					**Source: PLK0785-02**					
Mercury	**0.00481**	0.00020	mg/l	0.00500	ND	96	85-115	9	15	
Batch: P2L0607 Extracted: 12/06/02										
Blank Analyzed: 12/09/02 (P2L0607-BLK1)										
Calcium	ND	2.0	mg/l							
Magnesium	ND	0.50	mg/l							
Sodium	ND	5.0	mg/l							
Zinc	ND	0.050	mg/l							
LCS Analyzed: 12/09/02 (P2L0607-BS1)										
Calcium	**10.5**	2.0	mg/l	10.0		105	85-115			
Magnesium	**10.5**	0.50	mg/l	10.0		105	85-115			
Sodium	**56.0**	50	mg/l	50.0		112	85-115			
Zinc	**1.07**	0.050	mg/l	1.00		107	85-115			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

TOTAL RECOVERABLE METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0607 Extracted: 12/06/02										
LCS Dup Analyzed: 12/09/02 (P2L0607-BSD1)										
Calcium	10.7	2.0	mg/l	10.0		107	85-115	2	20	
Magnesium	10.6	0.50	mg/l	10.0		106	85-115	0.9	20	
Sodium	56.0	50	mg/l	50.0		112	85-115	0	15	
Zinc	1.09	0.050	mg/l	1.00		109	85-115	2	20	
Matrix Spike Analyzed: 12/09/02 (P2L0607-MS1)					**Source: PLL0037-02**					
Calcium	19.4	2.0	mg/l	10.0	9.1	103	70-130			
Magnesium	15.7	0.50	mg/l	10.0	5.3	104	70-130			
Sodium	72.0	50	mg/l	50.0	16	112	85-115			
Zinc	1.09	0.050	mg/l	1.00	0.031	106	70-130			
Matrix Spike Dup Analyzed: 12/09/02 (P2L0607-MSD1)					**Source: PLL0037-02**					
Calcium	19.3	2.0	mg/l	10.0	9.1	102	70-130	0.5	20	
Magnesium	15.7	0.50	mg/l	10.0	5.3	104	70-130	0	20	
Sodium	72.0	50	mg/l	50.0	16	112	85-115	0	15	
Zinc	1.10	0.050	mg/l	1.00	0.031	107	70-130	0.9	20	
Batch: P2L2315 Extracted: 12/23/02										
Blank Analyzed: 12/23/02 (P2L2315-BLK1)										
Potassium	ND	1.0	mg/l							
LCS Analyzed: 12/23/02 (P2L2315-BS2)										
Potassium	11.1	1.0	mg/l	10.0		111	85-115			
LCS Dup Analyzed: 12/23/02 (P2L2315-BSD2)										
Potassium	11.1	1.0	mg/l	10.0		111	85-115	0	15	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

TOTAL RECOVERABLE METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L2315 Extracted: 12/23/02										
Matrix Spike Analyzed: 12/23/02 (P2L2315-MS1)					**Source: PLL0424-03**					
Potassium	**18.0**	2.0	mg/l	10.0	7.0	110	85-115			
Matrix Spike Dup Analyzed: 12/23/02 (P2L2315-MSD1)					**Source: PLL0424-03**					
Potassium	**18.0**	2.0	mg/l	10.0	7.0	110	85-115	0	15	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0620 Extracted: 12/06/02										
Blank Analyzed: 12/06/02 (P2L0620-BLK1)										
Mercury, Dissolved	ND	0.00020	mg/l							
Blank Analyzed: 12/06/02 (P2L0620-BLK2)										
Mercury, Dissolved	ND	0.00020	mg/l							
LCS Analyzed: 12/06/02 (P2L0620-BS1)										
Mercury, Dissolved	**0.00477**	0.00020	mg/l	0.00500		95	85-115			
LCS Dup Analyzed: 12/06/02 (P2L0620-BSD1)										
Mercury, Dissolved	**0.00484**	0.00020	mg/l	0.00500		97	85-115	1	15	
Matrix Spike Analyzed: 12/06/02 (P2L0620-MS1)					**Source: PLL0101-01**					
Mercury, Dissolved	**0.00466**	0.00020	mg/l	0.00500	ND	93	85-115			
Matrix Spike Dup Analyzed: 12/06/02 (P2L0620-MSD1)					**Source: PLL0101-01**					
Mercury, Dissolved	**0.00463**	0.00020	mg/l	0.00500	ND	93	85-115	0.6	15	
Batch: P2L1110 Extracted: 12/11/02										
Blank Analyzed: 12/12/02 (P2L1110-BLK1)										
Zinc, Dissolved	ND	0.050	mg/l							
Blank Analyzed: 12/12/02 (P2L1110-BLK2)										
Zinc, Dissolved	ND	0.050	mg/l							
LCS Analyzed: 12/12/02 (P2L1110-BS1)										
Zinc, Dissolved	**1.04**	0.050	mg/l	1.00		104	85-115			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1110 Extracted: 12/11/02										
LCS Dup Analyzed: 12/12/02 (P2L1110-BSD1)										
Zinc, Dissolved	1.03	0.050	mg/l	1.00		103	85-115	1	20	
Matrix Spike Analyzed: 12/12/02 (P2L1110-MS1)					**Source: PLL0190-01**					
Zinc, Dissolved	1.08	0.050	mg/l	1.00	0.045	104	70-130			
Matrix Spike Dup Analyzed: 12/12/02 (P2L1110-MSD1)					**Source: PLL0190-01**					
Zinc, Dissolved	1.05	0.050	mg/l	1.00	0.045	100	70-130	3	20	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0203 Extracted: 12/02/02										
Blank Analyzed: 12/02/02 (P2L0203-BLK1)										
Chloride	ND	0.50	mg/l							
Fluoride	ND	0.10	mg/l							
Nitrate/Nitrite-N	ND	0.10	mg/l							
Nitrate-N	ND	0.10	mg/l							
Nitrite-N	ND	0.10	mg/l							
Orthophosphate	ND	0.50	mg/l							
Sulfate	ND	0.50	mg/l							
LCS Analyzed: 12/02/02 (P2L0203-BS1)										
Chloride	**4.85**	0.50	mg/l	5.00		97	90-110			
Fluoride	**2.76**	0.10	mg/l	2.50		110	90-110			
Nitrate-N	**2.45**	0.10	mg/l	2.50		98	90-110			
Nitrite-N	**2.42**	0.10	mg/l	2.50		97	90-110			
Orthophosphate	**4.83**	0.50	mg/l	5.00		97	90-110			
Sulfate	**5.02**	0.50	mg/l	5.00		100	90-110			
LCS Dup Analyzed: 12/02/02 (P2L0203-BSD1)										
Chloride	**4.84**	0.50	mg/l	5.00		97	90-110	0.2	15	
Fluoride	**2.76**	0.10	mg/l	2.50		110	90-110	0	20	
Nitrate-N	**2.44**	0.10	mg/l	2.50		98	90-110	0.4	15	
Nitrite-N	**2.41**	0.10	mg/l	2.50		96	90-110	0.4	15	
Orthophosphate	**4.84**	0.50	mg/l	5.00		97	90-110	0.2	15	
Sulfate	**5.00**	0.50	mg/l	5.00		100	90-110	0.4	15	
Matrix Spike Analyzed: 12/02/02 (P2L0203-MS1)					**Source: PLK0839-01RE3**					
Chloride	**55.7**	5.0	mg/l	50.0	7.4	97	80-120			
Fluoride	**27.7**	1.0	mg/l	25.0	0.75	108	80-120			
Nitrate-N	**25.0**	1.0	mg/l	25.0	0.61	98	80-120			
Nitrite-N	**24.2**	1.0	mg/l	25.0	ND	97	80-120			
Orthophosphate	**48.5**	5.0	mg/l	50.0	ND	97	80-120			
Sulfate	**65.7**	5.0	mg/l	50.0	16	99	80-120			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0203 Extracted: 12/02/02										
Matrix Spike Dup Analyzed: 12/02/02 (P2L0203-MSD1)					**Source: PLK0839-01RE3**					
Chloride	55.3	5.0	mg/l	50.0	7.4	96	80-120	0.7	15	
Fluoride	27.7	1.0	mg/l	25.0	0.75	108	80-120	0	20	
Nitrate-N	25.1	1.0	mg/l	25.0	0.61	98	80-120	0.4	15	
Nitrite-N	24.0	1.0	mg/l	25.0	ND	96	80-120	0.8	15	
Orthophosphate	48.4	5.0	mg/l	50.0	ND	97	80-120	0.2	20	
Sulfate	65.5	5.0	mg/l	50.0	16	99	80-120	0.3	15	
Batch: P2L0213 Extracted: 12/02/02										
Blank Analyzed: 12/02/02 (P2L0213-BLK1)										
Total Suspended Solids	ND	10	mg/l							
Duplicate Analyzed: 12/02/02 (P2L0213-DUP1)					**Source: PLK0766-01**					
Total Suspended Solids	38.0	10	mg/l		34			11	20	
Duplicate Analyzed: 12/02/02 (P2L0213-DUP2)					**Source: PLK0841-01**					
Total Suspended Solids	20.0	10	mg/l		20			0	20	
Reference Analyzed: 12/02/02 (P2L0213-SRM1)										
Total Suspended Solids	47.0	10	mg/l	47.7		99	75-107			
Batch: P2L0603 Extracted: 12/06/02										
Duplicate Analyzed: 12/06/02 (P2L0603-DUP1)					**Source: PLK0783-01**					
Specific Conductance	1830	2.0	umhos/cm		1800			2	10	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0603 Extracted: 12/06/02										
Reference Analyzed: 12/06/02 (P2L0603-SRM1)										
Specific Conductance	**1430**	2.0	umhos/cm	1410		101	90-110			
Batch: P2L0617 Extracted: 12/06/02										
Blank Analyzed: 12/06/02 (P2L0617-BLK1)										
Total Dissolved Solids	ND	20	mg/l							
LCS Analyzed: 12/06/02 (P2L0617-BS1)										
Total Dissolved Solids	**384**	20	mg/l	400		96	80-115			
Duplicate Analyzed: 12/06/02 (P2L0617-DUP1)					**Source: PLK0839-01**					
Total Dissolved Solids	**102**	20	mg/l		110			8	20	
Batch: P2L0906 Extracted: 12/06/02										
Duplicate Analyzed: 12/06/02 (P2L0906-DUP1)					**Source: PLL0205-01**					
Alkalinity as CaCO3	**135**	5.0	mg/l		140			4	20	
Reference Analyzed: 12/06/02 (P2L0906-SRM1)										
Alkalinity as CaCO3	**55.0**	5.0	mg/l	51.8		106	88.6-112			
Batch: P2L1113 Extracted: 12/11/02										
Blank Analyzed: 12/11/02 (P2L1113-BLK1)										
Ammonia-N	ND	0.050	mg/l							

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1113 Extracted: 12/11/02										
LCS Analyzed: 12/11/02 (P2L1113-BS1)										
Ammonia-N	0.990	0.050	mg/l	1.00		99	85-115			
LCS Dup Analyzed: 12/11/02 (P2L1113-BSD1)										
Ammonia-N	1.08	0.050	mg/l	1.00		108	85-115	9	200	
Matrix Spike Analyzed: 12/11/02 (P2L1113-MS1)					**Source: PLL0004-01**					
Ammonia-N	0.902	0.050	mg/l	0.500	0.38	104	70-130			
Matrix Spike Dup Analyzed: 12/11/02 (P2L1113-MSD1)					**Source: PLL0004-01**					
Ammonia-N	0.927	0.050	mg/l	0.500	0.38	109	70-130	3	20	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C2L0907 Extracted: 12/09/02										
Blank Analyzed: 12/09/02 (C2L0907-BLK1)										
Total Kjeldahl Nitrogen	ND	0.50	mg/l							
LCS Analyzed: 12/09/02 (C2L0907-BS1)										
Total Kjeldahl Nitrogen	**10.1**	0.50	mg/l	10.0		101	85-120			
Matrix Spike Analyzed: 12/09/02 (C2L0907-MS1)					**Source: CLK0236-02**					
Total Kjeldahl Nitrogen	**10.4**	0.50	mg/l	10.0	1.1	93	85-120			
Matrix Spike Dup Analyzed: 12/09/02 (C2L0907-MSD1)					**Source: CLK0236-02**					
Total Kjeldahl Nitrogen	**10.6**	0.50	mg/l	10.0	1.1	95	85-120	2	15	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L03030 Extracted: 12/03/02										
Blank Analyzed: 12/06/02 (2L03030-BLK1)										
Acenaphthene	ND	10	ug/l							
Acenaphthylene	ND	10	ug/l							
Anthracene	ND	10	ug/l							
Benzidine	ND	100	ug/l							
Benzo(a)anthracene	ND	10	ug/l							
Benzo(b,k)fluoranthene	ND	10	ug/l							
Benzo(g,h,i)perylene	ND	20	ug/l							
Benzo(a)pyrene	ND	20	ug/l							
Bis(2-chloroethoxy)methane	ND	10	ug/l							
Bis(2-chloroethyl)ether	ND	10	ug/l							
Bis(2-chloroisopropyl)ether	ND	10	ug/l							
Bis(2-ethylhexyl)phthalate	ND	50	ug/l							
4-Bromophenyl phenyl ether	ND	20	ug/l							
Butyl benzyl phthalate	ND	10	ug/l							
2-Chloronaphthalene	ND	10	ug/l							
4-Chloro-3-methylphenol	ND	10	ug/l							
2-Chlorophenol	ND	10	ug/l							
4-Chlorophenyl phenyl ether	ND	10	ug/l							
Chrysene	ND	10	ug/l							
Dibenz(a,h)anthracene	ND	20	ug/l							
Di-n-butyl phthalate	ND	20	ug/l							
1,3-Dichlorobenzene	ND	10	ug/l							
1,4-Dichlorobenzene	ND	10	ug/l							
1,2-Dichlorobenzene	ND	10	ug/l							
3,3-Dichlorobenzidine	ND	20	ug/l							
2,4-Dichlorophenol	ND	10	ug/l							
Diethyl phthalate	ND	10	ug/l							
2,4-Dimethylphenol	ND	10	ug/l							
Dimethyl phthalate	ND	10	ug/l							
4,6-Dinitro-2-methylphenol	ND	20	ug/l							
2,4-Dinitrophenol	ND	30	ug/l							
2,4-Dinitrotoluene	ND	10	ug/l							
2,6-Dinitrotoluene	ND	10	ug/l							

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-968
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-085
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-362

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L03030 Extracted: 12/03/02										
Blank Analyzed: 12/06/02 (2L03030-BLK1)										
Di-n-octyl phthalate	ND	20	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	20	ug/l							
Fluoranthene	ND	10	ug/l							
Fluorene	ND	10	ug/l							
Hexachlorobenzene	ND	10	ug/l							
Hexachlorobutadiene	ND	20	ug/l							
Hexachlorocyclopentadiene	ND	40	ug/l							
Hexachloroethane	ND	10	ug/l							
Indeno(1,2,3-cd)pyrene	ND	20	ug/l							
Isophorone	ND	10	ug/l							
Naphthalene	ND	10	ug/l							
Nitrobenzene	ND	10	ug/l							
2-Nitrophenol	ND	10	ug/l							
4-Nitrophenol	ND	10	ug/l							
n-Nitrosodiphenylamine	ND	30	ug/l							
n-Nitroso-di-n-propylamine	ND	10	ug/l							
Pentachlorophenol	ND	20	ug/l							
Phenanthrene	ND	10	ug/l							
Phenol	ND	10	ug/l							
Pyrene	ND	10	ug/l							
1,2,4-Trichlorobenzene	ND	10	ug/l							
2,4,6-Trichlorophenol	ND	10	ug/l							
n-Nitrosodimethylamine	ND	20	ug/l							
Surrogate: 2-Fluorophenol	*121*		*ug/l*	*200*		*60*	*30-110*			
Surrogate: Phenol-d6	*126*		*ug/l*	*200*		*63*	*40-115*			
Surrogate: 2,4,6-Tribromophenol	*163*		*ug/l*	*200*		*82*	*55-130*			
Surrogate: Nitrobenzene-d5	*61.7*		*ug/l*	*100*		*62*	*40-115*			
Surrogate: 2-Fluorobiphenyl	*65.4*		*ug/l*	*100*		*65*	*40-115*			
Surrogate: Terphenyl-d14	*74.0*		*ug/l*	*100*		*74*	*40-130*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L03030 Extracted: 12/03/02										
LCS Analyzed: 12/06/02 (2L03030-BS1)										
Acenaphthene	**80.9**	10	ug/l	100		81	55-120			
4-Chloro-3-methylphenol	**83.5**	10	ug/l	100		84	55-130			
2-Chlorophenol	**76.3**	10	ug/l	100		76	40-120			
1,4-Dichlorobenzene	**61.3**	10	ug/l	100		61	40-120			
2,4-Dinitrotoluene	**93.1**	10	ug/l	100		93	60-130			
1,2-Diphenylhydrazine/Azobenzene	**79.6**	20	ug/l	100		80	65-135			
4-Nitrophenol	**82.5**	10	ug/l	100		82	50-140			
n-Nitroso-di-n-propylamine	**79.6**	10	ug/l	100		80	45-135			
Pentachlorophenol	**77.8**	20	ug/l	100		78	60-135			
Phenol	**66.4**	10	ug/l	100		66	40-120			
Pyrene	**86.2**	10	ug/l	100		86	50-130			
1,2,4-Trichlorobenzene	**64.7**	10	ug/l	100		65	50-120			
Surrogate: 2-Fluorophenol	*128*		*ug/l*	*200*		*64*	*30-110*			
Surrogate: Phenol-d6	*138*		*ug/l*	*200*		*69*	*40-115*			
Surrogate: 2,4,6-Tribromophenol	*188*		*ug/l*	*200*		*94*	*55-130*			
Surrogate: Nitrobenzene-d5	*69.2*		*ug/l*	*100*		*69*	*40-115*			
Surrogate: 2-Fluorobiphenyl	*74.4*		*ug/l*	*100*		*74*	*40-115*			
Surrogate: Terphenyl-d14	*80.3*		*ug/l*	*100*		*80*	*40-130*			
LCS Dup Analyzed: 12/06/02 (2L03030-BSD1)										
Acenaphthene	**77.8**	10	ug/l	100		78	55-120	4	20	
4-Chloro-3-methylphenol	**77.4**	10	ug/l	100		77	55-130	8	20	
2-Chlorophenol	**71.8**	10	ug/l	100		72	40-120	6	20	
1,4-Dichlorobenzene	**63.1**	10	ug/l	100		63	40-120	3	20	
2,4-Dinitrotoluene	**89.1**	10	ug/l	100		89	60-130	4	20	
1,2-Diphenylhydrazine/Azobenzene	**76.3**	20	ug/l	100		76	65-135	4	20	
4-Nitrophenol	**74.2**	10	ug/l	100		74	50-140	11	30	
n-Nitroso-di-n-propylamine	**73.8**	10	ug/l	100		74	45-135	8	20	
Pentachlorophenol	**72.8**	20	ug/l	100		73	60-135	7	25	
Phenol	**66.5**	10	ug/l	100		66	40-120	0.2	20	
Pyrene	**87.2**	10	ug/l	100		87	50-130	1	20	
1,2,4-Trichlorobenzene	**64.4**	10	ug/l	100		64	50-120	0.5	20	
Surrogate: 2-Fluorophenol	*121*		*ug/l*	*200*		*60*	*30-110*			
Surrogate: Phenol-d6	*128*		*ug/l*	*200*		*64*	*40-115*			
Surrogate: 2,4,6-Tribromophenol	*175*		*ug/l*	*200*		*88*	*55-130*			
Surrogate: Nitrobenzene-d5	*65.2*		*ug/l*	*100*		*65*	*40-115*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L03030 Extracted: 12/03/02										
LCS Dup Analyzed: 12/06/02 (2L03030-BSD1)										
Surrogate: 2-Fluorobiphenyl	*71.5*		*ug/l*	*100*		*72*	*40-115*			
Surrogate: Terphenyl-d14	*79.1*		*ug/l*	*100*		*79*	*40-130*			

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L06031 Extracted: 12/06/02										
Blank Analyzed: 12/07/02 (2L06031-BLK1)										
Aldrin	ND	0.10	ug/l							
alpha-BHC	ND	0.10	ug/l							
beta-BHC	ND	0.10	ug/l							
delta-BHC	ND	0.20	ug/l							
gamma-BHC (Lindane)	ND	0.10	ug/l							
Chlordane	ND	1.0	ug/l							
4,4'-DDD	ND	0.10	ug/l							
4,4'-DDE	ND	0.10	ug/l							
4,4'-DDT	ND	0.10	ug/l							
Dieldrin	ND	0.10	ug/l							
Endosulfan I	ND	0.10	ug/l							
Endosulfan II	ND	0.10	ug/l							
Endosulfan sulfate	ND	0.20	ug/l							
Endrin	ND	0.10	ug/l							
Endrin aldehyde	ND	0.10	ug/l							
Endrin ketone	ND	0.10	ug/l							
Heptachlor	ND	0.10	ug/l							
Heptachlor epoxide	ND	0.10	ug/l							
Methoxychlor	ND	0.10	ug/l							
Toxaphene	ND	5.0	ug/l							
Surrogate: Tetrachloro-m-xylene	*0.327*		*ug/l*	*0.500*		*65*	*35-120*			
Surrogate: Decachlorobiphenyl	*0.427*		*ug/l*	*0.500*		*85*	*45-120*			
LCS Analyzed: 12/07/02 (2L06031-BS1)										
Aldrin	**0.439**	0.10	ug/l	0.500		88	45-115			
alpha-BHC	**0.432**	0.10	ug/l	0.500		86	50-115			
beta-BHC	**0.491**	0.10	ug/l	0.500		98	65-115			
delta-BHC	**0.466**	0.20	ug/l	0.500		93	70-115			
gamma-BHC (Lindane)	**0.429**	0.10	ug/l	0.500		86	55-115			
4,4'-DDD	**0.441**	0.10	ug/l	0.500		88	65-120			
4,4'-DDE	**0.436**	0.10	ug/l	0.500		87	65-115			
4,4'-DDT	**0.522**	0.10	ug/l	0.500		104	70-120			
Dieldrin	**0.421**	0.10	ug/l	0.500		84	60-115			
Endosulfan I	**0.459**	0.10	ug/l	0.500		92	60-115			
Endosulfan II	**0.488**	0.10	ug/l	0.500		98	55-115			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L06031 Extracted: 12/06/02										
LCS Analyzed: 12/07/02 (2L06031-BS1)										
Endosulfan sulfate	**0.483**	0.20	ug/l	0.500		97	65-120			
Endrin	**0.472**	0.10	ug/l	0.500		94	65-115			
Endrin aldehyde	**0.458**	0.10	ug/l	0.500		92	65-115			
Endrin ketone	**0.444**	0.10	ug/l	0.500		89	65-115			
Heptachlor	**0.497**	0.10	ug/l	0.500		99	55-120			
Heptachlor epoxide	**0.446**	0.10	ug/l	0.500		89	60-115			
Methoxychlor	**0.563**	0.10	ug/l	0.500		113	70-115			
Surrogate: Tetrachloro-m-xylene	*0.407*		*ug/l*	*0.500*		*81*	*35-120*			
Surrogate: Decachlorobiphenyl	*0.481*		*ug/l*	*0.500*		*96*	*45-120*			
Matrix Spike Analyzed: 12/07/02 (2L06031-MS1)					**Source: ILL0148-01**					
Aldrin	**0.509**	0.12	ug/l	0.625	ND	81	35-115			
gamma-BHC (Lindane)	**0.484**	0.12	ug/l	0.625	ND	77	35-125			
4,4'-DDD	**0.516**	0.12	ug/l	0.625	ND	83	55-120			
4,4'-DDE	**0.501**	0.12	ug/l	0.625	ND	80	55-115			
4,4'-DDT	**0.609**	0.12	ug/l	0.625	ND	97	55-145			
Dieldrin	**0.492**	0.12	ug/l	0.625	ND	79	50-115			
Endosulfan I	**0.531**	0.12	ug/l	0.625	ND	85	45-115			
Endrin	**0.549**	0.12	ug/l	0.625	ND	88	60-115			
Heptachlor	**0.528**	0.12	ug/l	0.625	ND	84	35-125			
Methoxychlor	**0.659**	0.12	ug/l	0.625	ND	105	35-135			
Surrogate: Tetrachloro-m-xylene	*0.455*		*ug/l*	*0.625*		*73*	*35-120*			
Surrogate: Decachlorobiphenyl	*0.568*		*ug/l*	*0.625*		*91*	*45-120*			
Matrix Spike Dup Analyzed: 12/07/02 (2L06031-MSD1)					**Source: ILL0148-01**					
Aldrin	**0.526**	0.12	ug/l	0.625	ND	84	35-115	3	20	
gamma-BHC (Lindane)	**0.522**	0.12	ug/l	0.625	ND	84	35-125	8	20	
4,4'-DDD	**0.548**	0.12	ug/l	0.625	ND	88	55-120	6	20	
4,4'-DDE	**0.537**	0.12	ug/l	0.625	ND	86	55-115	7	20	
4,4'-DDT	**0.646**	0.12	ug/l	0.625	ND	103	55-145	6	20	
Dieldrin	**0.521**	0.12	ug/l	0.625	ND	83	50-115	6	20	
Endosulfan I	**0.566**	0.12	ug/l	0.625	ND	91	45-115	6	20	
Endrin	**0.584**	0.12	ug/l	0.625	ND	93	60-115	6	20	
Heptachlor	**0.569**	0.12	ug/l	0.625	ND	91	35-125	7	20	
Methoxychlor	**0.685**	0.12	ug/l	0.625	ND	110	35-135	4	25	
Surrogate: Tetrachloro-m-xylene	*0.495*		*ug/l*	*0.625*		*79*	*35-120*			
Surrogate: Decachlorobiphenyl	*0.600*		*ug/l*	*0.625*		*96*	*45-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L06031 Extracted: 12/06/02										
Blank Analyzed: 12/07/02 (2L06031-BLK1)										
Aroclor 1016	ND	1.0	ug/l							
Aroclor 1221	ND	1.0	ug/l							
Aroclor 1232	ND	1.0	ug/l							
Aroclor 1242	ND	1.0	ug/l							
Aroclor 1248	ND	1.0	ug/l							
Aroclor 1254	ND	1.0	ug/l							
Aroclor 1260	ND	1.0	ug/l							
Surrogate: Decachlorobiphenyl	*0.485*		*ug/l*	*0.500*		*97*	*35-135*			
LCS Analyzed: 12/07/02 (2L06031-BS2)										
Aroclor 1016	**3.72**	1.0	ug/l	4.00		93	45-115			
Aroclor 1260	**4.51**	1.0	ug/l	4.00		113	55-115			
Surrogate: Decachlorobiphenyl	*0.581*		*ug/l*	*0.500*		*116*	*35-135*			
Matrix Spike Analyzed: 12/07/02 (2L06031-MS2)					**Source: ILL0148-02**					
Aroclor 1016	**4.94**	1.4	ug/l	5.71	ND	87	45-115			
Aroclor 1260	**6.03**	1.4	ug/l	5.71	ND	106	55-120			
Surrogate: Decachlorobiphenyl	*0.771*		*ug/l*	*0.714*		*108*	*35-135*			
Matrix Spike Dup Analyzed: 12/07/02 (2L06031-MSD2)					**Source: ILL0148-02**					
Aroclor 1016	**4.73**	1.4	ug/l	5.71	ND	83	45-115	4	35	
Aroclor 1260	**5.88**	1.4	ug/l	5.71	ND	103	55-120	3	25	
Surrogate: Decachlorobiphenyl	*0.747*		*ug/l*	*0.714*		*105*	*35-135*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L06040 Extracted: 12/06/02										
Blank Analyzed: 12/10/02 (2L06040-BLK1)										
Antimony	ND	2.0	ug/l							
Arsenic	ND	1.0	ug/l							
Beryllium	ND	0.50	ug/l							
Cadmium	ND	1.0	ug/l							
Chromium	ND	1.0	ug/l							
Copper	ND	2.0	ug/l							
Lead	ND	1.0	ug/l							
Nickel	ND	1.0	ug/l							
Selenium	ND	2.0	ug/l							
Silver	ND	1.0	ug/l							
Thallium	ND	1.0	ug/l							
LCS Analyzed: 12/09/02 (2L06040-BS1)										
Antimony	**88.0**	2.0	ug/l	80.0		110	85-115			
Arsenic	**83.8**	1.0	ug/l	80.0		105	85-115			
Beryllium	**83.3**	0.50	ug/l	80.0		104	85-115			
Cadmium	**85.5**	1.0	ug/l	80.0		107	85-115			
Chromium	**87.5**	1.0	ug/l	80.0		109	85-115			
Copper	**82.9**	2.0	ug/l	80.0		104	85-115			
Lead	**81.2**	1.0	ug/l	80.0		102	85-115			
Nickel	**83.6**	1.0	ug/l	80.0		104	85-115			
Selenium	**85.0**	2.0	ug/l	80.0		106	85-115			
Silver	**85.6**	1.0	ug/l	80.0		107	85-115			
Thallium	**81.6**	1.0	ug/l	80.0		102	85-115			
Matrix Spike Analyzed: 12/09/02 (2L06040-MS1)					**Source: ILL0080-01**					
Antimony	**88.2**	2.0	ug/l	80.0	0.49	110	70-130			
Arsenic	**83.8**	1.0	ug/l	80.0	ND	105	70-130			
Beryllium	**88.2**	0.50	ug/l	80.0	ND	110	70-130			
Cadmium	**81.6**	1.0	ug/l	80.0	0.060	102	70-130			
Chromium	**85.3**	1.0	ug/l	80.0	1.1	105	70-130			
Copper	**430**	2.0	ug/l	80.0	360	88	70-130			
Lead	**78.1**	1.0	ug/l	80.0	2.3	95	70-130			
Nickel	**84.5**	1.0	ug/l	80.0	6.1	98	70-130			
Selenium	**81.4**	2.0	ug/l	80.0	1.1	100	70-130			
Silver	**79.2**	1.0	ug/l	80.0	ND	99	70-130			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L06040 Extracted: 12/06/02										
Matrix Spike Analyzed: 12/09/02 (2L06040-MS1)					**Source: ILL0080-01**					
Thallium	76.3	1.0	ug/l	80.0	0.18	95	70-130			
Matrix Spike Dup Analyzed: 12/09/02 (2L06040-MSD1)					**Source: ILL0080-01**					
Antimony	89.9	2.0	ug/l	80.0	0.49	112	70-130	2	20	
Arsenic	84.1	1.0	ug/l	80.0	ND	105	70-130	0.4	20	
Beryllium	89.4	0.50	ug/l	80.0	ND	112	70-130	1	20	
Cadmium	82.9	1.0	ug/l	80.0	0.060	104	70-130	2	20	
Chromium	86.1	1.0	ug/l	80.0	1.1	106	70-130	0.9	20	
Copper	437	2.0	ug/l	80.0	360	96	70-130	2	20	
Lead	77.3	1.0	ug/l	80.0	2.3	94	70-130	1	20	
Nickel	85.6	1.0	ug/l	80.0	6.1	99	70-130	1	20	
Selenium	83.1	2.0	ug/l	80.0	1.1	102	70-130	2	20	
Silver	80.4	1.0	ug/l	80.0	ND	100	70-130	2	20	
Thallium	76.2	1.0	ug/l	80.0	0.18	95	70-130	0.1	20	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L05089 Extracted: 12/05/02										
Blank Analyzed: 12/06/02 (2L05089-BLK1)										
Antimony	ND	2.0	ug/l							
Arsenic	ND	1.0	ug/l							
Beryllium	ND	0.50	ug/l							
Cadmium	ND	1.0	ug/l							
Chromium	ND	1.0	ug/l							
Copper	ND	2.0	ug/l							
Lead	ND	1.0	ug/l							
Nickel	ND	1.0	ug/l							
Selenium	ND	2.0	ug/l							
Silver	ND	1.0	ug/l							
Thallium	ND	1.0	ug/l							
LCS Analyzed: 12/06/02 (2L05089-BS1)										
Antimony	**86.9**	2.0	ug/l	80.0		109	85-115			
Arsenic	**82.2**	1.0	ug/l	80.0		103	85-115			
Beryllium	**80.1**	0.50	ug/l	80.0		100	85-115			
Cadmium	**83.3**	1.0	ug/l	80.0		104	85-115			
Chromium	**83.5**	1.0	ug/l	80.0		104	85-115			
Copper	**81.5**	2.0	ug/l	80.0		102	85-115			
Lead	**79.8**	1.0	ug/l	80.0		100	85-115			
Nickel	**81.7**	1.0	ug/l	80.0		102	85-115			
Selenium	**81.8**	2.0	ug/l	80.0		102	85-115			
Silver	**84.3**	1.0	ug/l	80.0		105	85-115			
Thallium	**84.8**	1.0	ug/l	80.0		106	85-115			
Matrix Spike Analyzed: 12/06/02 (2L05089-MS1)					**Source: PLK0839-02**					
Antimony	**93.0**	2.0	ug/l	80.0	3.8	112	70-130			
Arsenic	**83.7**	1.0	ug/l	80.0	1.9	102	70-130			
Beryllium	**81.9**	0.50	ug/l	80.0	ND	102	70-130			
Cadmium	**84.0**	1.0	ug/l	80.0	0.064	105	70-130			
Chromium	**84.0**	1.0	ug/l	80.0	1.3	103	70-130			
Copper	**91.4**	2.0	ug/l	80.0	11	100	70-130			
Lead	**79.7**	1.0	ug/l	80.0	0.44	99	70-130			
Nickel	**84.2**	1.0	ug/l	80.0	2.9	102	70-130			
Selenium	**79.5**	2.0	ug/l	80.0	ND	99	70-130			
Silver	**84.4**	1.0	ug/l	80.0	ND	106	70-130			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L05089 Extracted: 12/05/02										
Matrix Spike Analyzed: 12/06/02 (2L05089-MS1)					**Source: PLK0839-02**					
Thallium	84.5	1.0	ug/l	80.0	ND	106	70-130			
Matrix Spike Dup Analyzed: 12/06/02 (2L05089-MSD1)					**Source: PLK0839-02**					
Antimony	92.5	2.0	ug/l	80.0	3.8	111	70-130	0.5	20	
Arsenic	83.5	1.0	ug/l	80.0	1.9	102	70-130	0.2	20	
Beryllium	82.3	0.50	ug/l	80.0	ND	103	70-130	0.5	20	
Cadmium	83.0	1.0	ug/l	80.0	0.064	104	70-130	1	20	
Chromium	83.3	1.0	ug/l	80.0	1.3	102	70-130	0.8	20	
Copper	90.7	2.0	ug/l	80.0	11	100	70-130	0.8	20	
Lead	79.3	1.0	ug/l	80.0	0.44	99	70-130	0.5	20	
Nickel	83.9	1.0	ug/l	80.0	2.9	101	70-130	0.4	20	
Selenium	78.2	2.0	ug/l	80.0	ND	98	70-130	2	20	
Silver	83.9	1.0	ug/l	80.0	ND	105	70-130	0.6	20	
Thallium	84.6	1.0	ug/l	80.0	ND	106	70-130	0.1	20	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L04062 Extracted: 12/04/02										
Blank Analyzed: 12/04/02 (2L04062-BLK1)										
Total Cyanide	ND	0.020	mg/l							
LCS Analyzed: 12/04/02 (2L04062-BS1)										
Total Cyanide	**0.189**	0.020	mg/l	0.200		94	90-110			
Matrix Spike Analyzed: 12/04/02 (2L04062-MS1)					**Source: ILL0076-01**					
Total Cyanide	**0.170**	0.020	mg/l	0.200	ND	85	70-115			
Matrix Spike Dup Analyzed: 12/04/02 (2L04062-MSD1)					**Source: ILL0076-01**					
Total Cyanide	**0.167**	0.020	mg/l	0.200	ND	84	70-115	2	15	
Batch: 2L05073 Extracted: 12/05/02										
Blank Analyzed: 12/05/02 (2L05073-BLK1)										
Total Organic Carbon	ND	1.0	mg/l							
LCS Analyzed: 12/05/02 (2L05073-BS1)										
Total Organic Carbon	**10.4**	1.0	mg/l	10.0		104	90-110			
Matrix Spike Analyzed: 12/05/02 (2L05073-MS1)					**Source: ILL0024-04**					
Total Organic Carbon	**11.4**	1.0	mg/l	5.00	6.4	100	80-120			
Matrix Spike Dup Analyzed: 12/05/02 (2L05073-MSD1)					**Source: ILL0024-04**					
Total Organic Carbon	**11.3**	1.0	mg/l	5.00	6.4	98	80-120	0.9	20	
Batch: 2L06028 Extracted: 12/06/02										
Blank Analyzed: 12/06/02 (2L06028-BLK1)										
Phosphorus	ND	0.050	mg/l							

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L06028 Extracted: 12/06/02										
LCS Analyzed: 12/06/02 (2L06028-BS1)										
Phosphorus	**0.920**	0.050	mg/l	1.00		92	80-120			
Matrix Spike Analyzed: 12/06/02 (2L06028-MS1)					**Source: ILL0176-01**					
Phosphorus	**0.947**	0.050	mg/l	1.00	0.024	92	65-130			
Matrix Spike Dup Analyzed: 12/06/02 (2L06028-MSD1)					**Source: ILL0176-01**					
Phosphorus	**0.974**	0.050	mg/l	1.00	0.024	95	65-130	3	15	
Batch: 2L07032 Extracted: 12/07/02										
Blank Analyzed: 12/10/02 (2L07032-BLK1)										
Phenols	ND	0.10	mg/l							
LCS Analyzed: 12/10/02 (2L07032-BS1)										
Phenols	**0.470**	0.10	mg/l	0.500		94	90-110			
Matrix Spike Analyzed: 12/10/02 (2L07032-MS1)					**Source: ILL0179-02**					
Phenols	**0.422**	0.10	mg/l	0.500	ND	84	65-155			
Matrix Spike Dup Analyzed: 12/10/02 (2L07032-MSD1)					**Source: ILL0179-02**					
Phenols	**0.419**	0.10	mg/l	0.500	ND	84	65-155	0.7	20	
Batch: 2L09040 Extracted: 12/09/02										
Blank Analyzed: 12/09/02 (2L09040-BLK1)										
Chemical Oxygen Demand	ND	20	mg/l							

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES

Report Number: PLK0839

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 2L09040 Extracted: 12/09/02										
LCS Analyzed: 12/09/02 (2L09040-BS1)										
Chemical Oxygen Demand	504	20	mg/l	500		101	90-110			
Matrix Spike Analyzed: 12/09/02 (2L09040-MS1)					Source: ILL0042-01					
Chemical Oxygen Demand	969	40	mg/l	1000	ND	97	90-110			
Matrix Spike Dup Analyzed: 12/09/02 (2L09040-MSD1)					Source: ILL0042-01					
Chemical Oxygen Demand	973	40	mg/l	1000	ND	97	90-110	0.4	15	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr 2801 West Durango Street Phoenix, AZ 85009 Attention: Matt Oller	Client Project ID: Glendale NPDES Report Number: PLK0839	Sampled: 11/30/02 Received: 11/30/02

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

D1	Sample required dilution due to matrix interference. See case narrative.
N1	See case narrative.
Q5	Sample received with inadequate chemical preservation, but preserved by the laboratory.
V1	CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not reported.
RPD	Relative Percent Difference

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

TRANSWEST GEOCHEM

December 13, 2002

Linda Eshelman
Del Mar Analytical
9830 S. 51st Street
Suite B-120
Phoenix, AZ 85044

RE: PLK0839-MCFC
Work Order No.: 0212008

Dear Linda,
Transwest Geochem, Inc. received 1 sample on 12/2/2002 2:15:00 PM for the analyses presented in the following report.

The Case Narrative of this report addresses any Quality Control and/or Quality Assurance issues associated with this Work Order.

If you have any questions regarding these test results, please feel free to call us at (602) 437-0330.

Sincerely,

Vic Nielsen
Project Manager

ADHS License No. AZM133/AZ0133

3725 E. Atlanta Ave. • Suite 2 • Phoenix, Arizona 85040 • (602) 437-0330 • 1-800-927-5183 • Fax (602) 437-0660

Client: Del Mar Analytical
Work Order: 0212008
Project Name:
Project Number: PLK0839-MCFC

Date Printed: 13-Dec-02

CASE NARRATIVE

Transwest Geochem, Inc. uses the methods outlined in the following references:

Code of Federal Regulations, 40CFR, Part 136, Revised July 1995.

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992 and 19th Edition, 1995.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Revised March 1983.

Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, Revised August 1993.

Methods for the Determination of Metals in Environmental Samples, EPA/600/R-94/111, Revised May 1994.

Hach, Water Analysis Handbook, 2nd Edition, 1992.

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.

Secondary Source QC Sample (LCSV) results may not be reported for all methods and/or analysis dates.

All method blanks, laboratory spikes, and/or matrix spikes met quality control objectives for the parameters associated with this Work Order except as detailed below or on the Data Qualifier page of this report. Data Qualifiers used in this report are in accordance with ADEQ Arizona Data Qualifiers, Revision 1.0 05/13/2002.

Data qualifiers ("flags") contained within this analytical report have been issued to explain a quality control deficiency, and do not affect the quality (validity) of the data unless noted otherwise in the case narrative.

3725 E Atlanta Ave. • Suite 2 • Phoenix, Arizona 85040 • (602) 437-0330 • 1-800-927-5183 • Fax (602) 437-0660

TRANSWEST GEOCHEM

Date Printed 12-Dec-02

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Project Name:
Project Number: PLK0839
Work Order: 0212008
Date Received: 02-Dec-02

Work Order Sample Summary

Client Sample ID	Lab Sample ID	Test Code	Collection Date
PLK0839-01	0212008-01A	EPA353.2	11/30/2002 8:00:00 AM

TRANSWEST GEOCHEM

Date Printed 12-Dec-02

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Project Name:
Project Number: PLK0839
Work Order: 0212008
Date Received: 02-Dec-02

Definitions

Analytical Spike (AS)	The AS is a known amount of a target analyte added to a sample after it has been distilled, digested, or extracted and is ready for analysis. The AS is generally performed if the MS has failed. It is used to indicate interference that arises from sample distillation, digestion, or extraction as opposed to interference that is innate to the matrix.
Continuing Curve Verification (CCV)	The CCV is also referred to as a curve check. This is a standard analyzed at specified intervals during an analysis. The CCV verifies the stability and accuracy of the calibration curve. There are specific CCV recovery acceptance criteria for each method.
Dilution Factor (DF)	The DF is an indication of how much a sample had to be diluted in order to quantitate it on a standard curve. The DF is indicated in the reported sample result. The sample PQL increases as the dilution increases.
Internal Standard (IS)	The IS is a compound that is similar to the organic compound of interest in terms of chemical composition but is unique in that it is rare in the environment. The same concentration of IS is added to every sample for some organic methods.
Laboratory Control Sample (LCS)	The LCS is also referred to as a blank spike. The LCS is an addition of a known amount of a target analyte (from the same source as calibration standards or spikes) to an aliquot of deionized water or other appropriate clean matrix. The LCS is processed through the entire method procedure in the same manner as samples.
Matrix Spike (MS)	The MS is a known amount of a target analyte added to a sample. The MS is processed through the entire method procedure in the same manner as samples.
Method Blank (MB)	The MB is an aliquot of deionized water or other appropriate clean matrix that is thought to be free of the analyte in question. The MB is processed through the entire extraction or analysis procedure and is used to indicate contamination in the lab.
Method Detection Limit (MDL)	The MDL is the lowest level of detection of which a method is capable.
Practical Quantitation Limit (PQL)	The PQL is the lowest value at which Transwest Geochem can detect an analyte in matrix with a high degree of confidence. The PQL will increase as the DF increases. The PQL is greater than or equal to the MDL.
Relative Percent Difference (RPD)	The RPD is a measure of precision (the ability to obtain the same result on re-analysis of the same sample). It is calculated using the result of a sample, MS, LCS, or LCSV and its associated duplicate result.
Secondary Source QC Sample (LCSV)	The LCSV is also referred to as a second source laboratory control sample. It is the same type of standard as a calibration or spiking standard but is obtained from a different source. The LCSV is an indication of the primary standard quality, method performance, and instrument performance.
Surrogate	A surrogate compound is similar to the organic compound of interest in terms of chemical composition but is unique in that it is rare in the environment. When surrogates are used, they are added to every sample, blank and standard. Surrogate recovery is used as an indication of extraction and/or analytical success.
Trip Blank (TB)	The TB is a portion of deionized water preserved in the same manner as the samples. The TB travels from the lab, to the field, and then back to the lab with the samples from the field. The TB serves as an indication of contamination introduced during sample transportation.

TRANSWEST GEOCHEM

Date Printed 12-Dec-02

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0212008
Lab ID: 0212008-01
Project Name:
Project Number: PLK0839

Client Sample ID: PLK0839-01
Collection Date: 11/30/2002 8:00:00 AM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Test Code	Date Prepared	Date Analyzed	Analyst	Batch ID
Nitrate-Nitrite (As N)	1.3	0.50		mg/L	1.0	EPA353.2	N/A	12/12/02	TL	NO3_W-12/11/2002

Confidential and Privileged

TRANSWEST GEOCHEM

Date: 12-Dec-02

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0212008
Project: PLK0839

QC SUMMARY REPORT

Method Blank

Analyte	Result	PQL	Qual	Units	DF	Test Code	Date Prepared	Date Analyzed	Analyst	Batch ID
Nitrate (As N)	<0.50	0.50		mg/L	1	EPA353.2	N/A	12/12/02	TL	NO3_W-12/11/2002
Nitrate-Nitrite (As N)	<0.50	0.50		mg/L	1	EPA353.2	N/A	12/12/02	TL	NO3_W-12/11/2002

TRANSWEST GEOCHEM

Date: 12-Dec-02

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0212008
Project: PLK0839

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: **0212040-01AD** Batch ID: NO3_W-12/11/2002											
Client ID:											
Nitrate-Nitrite (As N)	1.2	0.50	mg/L	1.238	0%	20	EPA353.2	N/A	12/12/02	TL	
Sample ID: **0212011-04AD** Batch ID: NO3_W-12/11/2002											
Client ID:											
Nitrate-Nitrite (As N)	1.3	0.50	mg/L	1.270	2%	20	EPA353.2	N/A	12/12/02	TL	

TRANSWEST GEOCHEM

Date: 12-Dec-02

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0212008
Project: PLK0839

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: **0212040-01AS**	Batch ID: NO3_W-12/11/2002			Test Code: EPA353.2				Date Analyzed: 12/12/02 00:00			
Client ID:				Units: mg/L				Date Prepared: N/A			
Nitrate-Nitrite (As N)	5.929	0.50	5.000	0.6146	106%	90	110				
Sample ID: **0212011-04AS**	Batch ID: NO3_W-12/11/2002			Test Code: EPA353.2				Date Analyzed: 12/12/02 00:00			
Client ID:				Units: mg/L				Date Prepared: N/A			
Nitrate-Nitrite (As N)	5.171	0.50	5.000	0.6341	91%	90	110				

TRANSWEST GEOCHEM

Date: 12-Dec-02

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0212008
Project: PLK0839

QC SUMMARY REPORT

Blank Spike

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: NO3_W-12/11/2002			Test Code: EPA353.2				Date Analyzed: 12/12/02 00:00			
				Units: mg/L				Date Prepared: N/A			
Nitrate-Nitrite (As N)	5.237	0.50	5.000	<0.50	105%	90	110				

USGS
science for a changing world

Ocala Water Quality & Research Laboratory

OWQRL Data Retrieval System

U.S. Geological Survey, WRD - Ocala Water Quality & Research Laboratory
4500 SW 40th Avenue - Ocala, Florida
Telephone (352)237-5514 FLDEP CompQAP # 910161G
Processing Date: 12/26/2002

Lab ID Number: 200301506	**Field ID Number:** 333751112133	**Station ID Number:** 333751112133801	**Date:** 11/29/2002	**Time:** 22:28	
Station Name: ARROW	**Site Type:** N/A	**State Code:** 4	**County Code:** 13	**NWIS Record #:** N/A	**SMS Control #:** N/A
Sample Medium: 9	**Geologic Unit:** N/A	**Analysis Status:** H	**Analysis Source:** 9	**Hydrologic Condition:** 9	**Sample Type:** 9
Hydrologic Event: J	**Project Account:** 967116800	**Analysis Cost:** $182.30	**District/User Code:** 04		

Lab Code	Watstore #	Parameter Name	Analysis Method	Reporting Units	Reported Value	Lab Remark	Analysis Date/Time
0027	70300(A)	RESIDUE DISSOLVED AT 180 C	I-1750-85	mg/L	105	V	12/4/2002 9:11:00 AM
0068	00403(A)	PH (LABORATORY)	I-1586-85	pH Units	6.8		12/5/2002 3:39:00 PM
0070	90410(A)	ALKALINITY TOT AS CACO3 (LAB)	I-2030-85	mg/L	34		12/5/2002 3:39:00 PM
0169	00530(B)	RESIDUE TOT NON-FILT AT 105C	I-3765-85	mg/L	123		12/4/2002 9:02:00 AM
1983	00666(D)	PHOSPHORUS AS P DISSOLVED	I-2600-85	mg/L	0.16		12/5/2002 10:42:00 AM
1984	00665(D)	PHOSPHORUS AS P TOTAL	I-4600-85	mg/L	0.46		12/5/2002 10:38:00 AM
1986	00625(D)	NITROGEN NH3+ORG-N TOTAL	I-4552-85	mg/L	3		12/9/2002 9:20:00 AM
3000	99898(0)	QWSU LAB ID NUMBER	- -	Number	200301506		12/20/2002 3:02:21 AM
		JULIAN LOGIN					12/20/2002

3001	99899(0)	DATE	- -	Number	2002338		3:02:21 AM
3014	01027(4)	CADMIUM TOTAL (ICP/T)	EPA-200.7	ug/L	0.5		12/10/2002 8:25:00 PM
3025	01042(1)	COPPER TOTAL (ICP/T)	EPA-200.7	ug/L	59		12/10/2002 8:28:00 PM
3029	01051(4)	LEAD TOTAL (ICP/T)	EPA-200.7	ug/L	7.2		12/10/2002 8:34:00 PM
3056	01092(1)	ZINC TOTAL (ICP/T)	EPA-200.7	ug/L	210	D	12/10/2002 8:38:00 PM
3063	00340(0)	CHEMICAL OXYGEN DEMAND (EPA)	EPA-410.4	mg/L	64		12/10/2002 9:07:00 AM
3071	00610(F)	NITROGEN NH3-N TOTAL	I-4522-85	mg/L	1.1		12/6/2002 10:46:00 AM
3073	00630(E)	NITROGEN NO2+NO3-N TOTAL	I-4545-85	mg/L	0.85		12/6/2002 9:39:00 AM
3157	99870(8)	DIGESTION IN BOTTLE	EPA-1638	Number	1		12/4/2002 9:12:00 AM

Definitions of remark codes.

Remark Code V for lab code 27 indicates Analysis verified by lab Re-Run
Remark Code D for lab code 3056 indicates Analysis performed in duplicate

Close this Window

Create Downloadable Text File Of This One Sample

Privacy Statement || *Disclaimer*
The URL for this page is <http://owqrl.er.usgs.gov/DisplayPrimary.asp>.
If you have any questions or comments about this document, contact the Webmaster
Last modified: December 14, 2001

Parameter Name	Lab Code	Watstore Code	Method	Detection Level	Bottle Requirements
RESIDUE DISSOLVED AT 180 C	27	70300(A)	I-1750-85	1 mg/L	FU
PH (LABORATORY)	68	00403(A)	I-1586-85	0.1 pH Units	RU
ALKALINITY TOT AS CACO3 (LAB)	70	90410(A)	I-2030-85	1 mg/L	RU
RESIDUE TOT NON-FILT AT 105C	169	00530(B)	I-3765-85	1 mg/L	SUSO
PHOSPHORUS AS P DISSOLVED	1983	00666(D)	I-2600-85	0.02 mg/L	FCA
PHOSPHORUS AS P TOTAL	1984	00665(D)	I-4600-85	0.02 mg/L	WCA
NITROGEN NH3+ORG-N TOTAL	1986	00625(D)	I-4552-85	0.2 mg/L	WCA
CADMIUM TOTAL (ICP/T)	3014	01027(4)	EPA-200.7	0.5 ug/L	RA
COPPER TOTAL (ICP/T)	3025	01042(1)	EPA-200.7	2 ug/L	RA
LEAD TOTAL (ICP/T)	3029	01051(4)	EPA-200.7	2 ug/L	RA
ZINC TOTAL (ICP/T)	3056	01092(1)	EPA-200.7	2 ug/L	RA
CHEMICAL OXYGEN DEMAND (EPA)	3063	00340(0)	EPA-410.4	5 mg/L	COD
NITROGEN NH3-N TOTAL	3071	00610(F)	I-4522-85	0.01 mg/L	RCC
NITROGEN NO2-N TOTAL	3072	00615(B)	I-4540-85	0.01 mg/L	RCC
NITROGEN NO2+NO3-N TOTAL	3073	00630(E)	I-4545-85	0.02 mg/L	RCC
PHOSPHORUS PO4-P TOTAL	3074	70507(H)	I-4601-85	0.01 mg/L	RCC

Glendale ARROW - Skunk Creek and 79th Avenue November 29 - 30, 2002

Watstore	Parameter	Type	Lab Runid	Reported Value	Most Prob. Value	Std. Deviation	Z-Value
403	pH	QA/QC Sample	PHS2-00234	8.069	7.95	0.203	0.59
403	pH	QA/QC Sample	PHS2-00234	6.692	6.6	0.22	0.42
608	NH3 Diss	Standard	NUT05-00136	1	1	0.05	-0.01
608	NH3 Diss	Standard	NUT05-00136	0.247	0.25	0.0125	-0.28
608	NH3 Diss	Standard	NUT05-00136	0.1	0.1	0.005	-0.1
608	NH3 Diss	Standard	NUT05-00136	0.503	0.5	0.025	0.1
608	NH3 Diss	Corr Coef	NUT05-00136	0.999937	1	0.005	-0.01
608	NH3 Diss	Immd. Standard	NUT05-00136	0.241	0.25	0.0125	-0.72
608	NH3 Diss	Immd. Standard	NUT05-00136	0.487	0.5	0.025	-0.52
608	NH3 Diss	Immd. Standard	NUT05-00136	1.071	1	0.05	1.42
608	NH3 Diss	Immd. Standard	NUT05-00136	1.039	1	0.05	0.78
608	NH3 Diss	Immd. Standard	NUT05-00136	0.246	0.25	0.0125	-0.32
608	NH3 Diss	Immd. Standard	NUT05-00136	0.091	0.01	0.0005	162
608	NH3 Diss	QA/QC Sample	NUT05-00136	0.422	0.433	0.03	-0.37
608	NH3 Diss	QA/QC Sample	NUT05-00136	0.036	0.047	0.0215	-0.53
608	NH3 Diss	QA/QC Sample	NUT05-00136	0.255	0.26	0.04	-0.14
608	NH3 Diss	QA/QC Sample	NUT05-00136	0.828	0.781	0.0766	0.6
608	NH3 Diss	Spike	NUT05-00136	108	100	7.5	1.07
608	NH3 Diss	Spike	NUT05-00136	112	100	7.5	1.6
608	NH3 Diss	Spike	NUT05-00136	109.8	100	7.5	1.31
610	NH3 Total	Standard	NUT05-00136	0.253	0.25	0.0125	0.2
610	NH3 Total	Standard	NUT05-00136	1.001	1	0.05	0.02
610	NH3 Total	Standard	NUT05-00136	0.105	0.1	0.005	1
610	NH3 Total	Standard	NUT05-00136	0.496	0.5	0.025	-0.16
610	NH3 Total	Corr Coef	NUT05-00136	0.99992	1	0.005	-0.02
610	NH3 Total	Immd. Standard	NUT05-00136	0.125	0.1	0.005	5
610	NH3 Total	Immd. Standard	NUT05-00136	1.045	1	0.05	0.9
610	NH3 Total	Immd. Standard	NUT05-00136	1.033	1	0.05	0.66
610	NH3 Total	Immd. Standard	NUT05-00136	0.5	0.5	0.025	0
610	NH3 Total	Immd. Standard	NUT05-00136	0.286	0.25	0.0125	2.88
610	NH3 Total	Immd. Standard	NUT05-00136	0.261	0.25	0.0125	0.88
610	NH3 Total	QA/QC Sample	NUT05-00136	0.245	0.26	0.04	-0.39
610	NH3 Total	QA/QC Sample	NUT05-00136	0.128	0.15	0.021	-1.07
610	NH3 Total	QA/QC Sample	NUT05-00136	0.045	0.047	0.0215	-0.11
610	NH3 Total	QA/QC Sample	NUT05-00136	0.783	0.781	0.0766	0.02
610	NH3 Total	QA/QC Sample	NUT05-00136	0.626	0.58	0.039	1.18
610	NH3 Total	QA/QC Sample	NUT05-00136	0.119	0.127	0.01	-0.85
610	NH3 Total	Spike	NUT05-00136	95.2	100	7.5	-0.64
610	NH3 Total	Spike	NUT05-00136	94.8	100	7.5	-0.69
610	NH3 Total	Spike	NUT05-00136	92.5	100	7.5	-1
625	TKN Total	Standard	NUT18-00017	1.982	2	0.1	-0.18
625	TKN Total	Standard	NUT18-00017	0.525	0.5	0.025	1
625	TKN Total	Standard	NUT18-00017	1.074	1	0.05	1.47
625	TKN Total	Standard	NUT18-00017	2.936	3	0.15	-0.43
625	TKN Total	Standard	NUT18-00017	4.033	4	0.2	0.16
625	TKN Total	Standard	NUT18-00017	0.245	0.2	0.01	4.5
625	TKN Total	Corr Coef	NUT18-00017	0.999492	1	0.005	-0.1
625	TKN Total	Immd. Standard	NUT18-00017	3.955	4	0.2	-0.23
625	TKN Total	Immd. Standard	NUT18-00017	1.98	2	0.1	-0.2
625	TKN Total	Immd. Standard	NUT18-00017	1.129	1	0.05	2.58
625	TKN Total	QA/QC Sample	NUT18-00017	0.955	0.838	0.113	1.04
625	TKN Total	QA/QC Sample	NUT18-00017	1.798	1.823	0.337	-0.07
625	TKN Total	Spike	NUT18-00017	104.8	100	7.5	0.64
630	NO2+NO3 Total	Standard	NUT07-00135	0.505	0.5	0.025	0.2
630	NO2+NO3 Total	Standard	NUT07-00135	0.255	0.25	0.0125	0.36
630	NO2+NO3 Total	Standard	NUT07-00135	0.997	1	0.05	-0.07
630	NO2+NO3 Total	Standard	NUT07-00135	0.102	0.1	0.005	0.3
630	NO2+NO3 Total	Corr Coef	NUT07-00135	0.999875	1	0.005	-0.03

Glendale ARROW - Skunk Creek and 79th Avenue November 29 - 30, 2002

Watstore	Parameter	Type	Lab Runid	Reported Value	Most Prob. Value	Std. Deviation	Z-Value
630	NO2+NO3 Total	Immd. Standard	NUT07-00135	0.256	0.25	0.0125	0.48
630	NO2+NO3 Total	Immd. Standard	NUT07-00135	0.501	0.5	0.025	0.04
630	NO2+NO3 Total	Immd. Standard	NUT07-00135	0.25	0.25	0.0125	0
630	NO2+NO3 Total	Immd. Standard	NUT07-00135	0.105	0.1	0.005	1
630	NO2+NO3 Total	Immd. Standard	NUT07-00135	1.022	1	0.05	0.44
630	NO2+NO3 Total	Immd. Standard	NUT07-00135	1.013	1	0.05	0.26
630	NO2+NO3 Total	QA/QC Sample	NUT07-00135	0.305	0.3	0.06	0.07
630	NO2+NO3 Total	QA/QC Sample	NUT07-00135	0.049	0.055	0.0458	-0.12
630	NO2+NO3 Total	QA/QC Sample	NUT07-00135	0.887	0.866	0.0872	0.24
630	NO2+NO3 Total	Spike	NUT07-00135	90	100	7.5	-1.33
665	Total Phosphorus	Standard	NUT21-00016	1.503	1.5	0.075	0.03
665	Total Phosphorus	Standard	NUT21-00016	0.77	0.75	0.0375	0.53
665	Total Phosphorus	Standard	NUT21-00016	0.019	0	0.01	1.9
665	Total Phosphorus	Standard	NUT21-00016	0.499	0.5	0.025	-0.04
665	Total Phosphorus	Standard	NUT21-00016	0.052	0.05	0.0025	0.6
665	Total Phosphorus	Standard	NUT21-00016	0.098	0.1	0.005	-0.4
665	Total Phosphorus	Standard	NUT21-00016	0.983	1	0.05	-0.35
665	Total Phosphorus	Standard	NUT21-00016	0.245	0.25	0.0125	-0.44
665	Total Phosphorus	Corr Coef	NUT21-00016	0.999804	1	0.005	-0.04
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.049	0.05	0.0025	-0.4
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.771	0.75	0.0375	0.56
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.097	0.1	0.005	-0.6
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.051	0.05	0.0025	0.4
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.016	0.02	0.005	-0.8
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.998	1	0.05	-0.04
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.774	0.75	0.0375	0.64
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.499	0.5	0.025	-0.04
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.097	0.1	0.005	-0.6
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.016	0.02	0.005	-0.8
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.096	0.1	0.005	-0.8
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.248	0.25	0.0125	-0.16
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.503	0.5	0.025	0.12
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.778	0.75	0.0375	0.75
665	Total Phosphorus	Immd. Standard	NUT21-00016	1.524	1.5	0.075	0.32
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.244	0.25	0.0125	-0.48
665	Total Phosphorus	Immd. Standard	NUT21-00016	0.246	0.25	0.0125	-0.32
665	Total Phosphorus	QA/QC Sample	NUT21-00016	0.787	0.755	0.031	1.03
665	Total Phosphorus	QA/QC Sample	NUT21-00016	1.194	1.138	0.0728	0.77
665	Total Phosphorus	QA/QC Sample	NUT21-00016	0.396	0.412	0.016	-1
665	Total Phosphorus	QA/QC Sample	NUT21-00016	0.226	0.23	0.03	-0.13
665	Total Phosphorus	QA/QC Sample	NUT21-00016	1.211	1.138	0.0728	1
665	Total Phosphorus	QA/QC Sample	NUT21-00016	0.128	0.132	0.009	-0.44
665	Total Phosphorus	QA/QC Sample	NUT21-00016	0.768	0.755	0.031	0.42
665	Total Phosphorus	Spike	NUT21-00016	103.8	100	7.5	0.51
665	Total Phosphorus	Spike	NUT21-00016	100.1	100	7.5	0.01
665	Total Phosphorus	Spike	NUT21-00016	103.3	100	7.5	0.44
665	Total Phosphorus	Spike	NUT21-00016	100.8	100	7.5	0.11
665	Total Phosphorus	Spike	NUT21-00016	103.8	100	7.5	0.51
665	Diss Phosphorus	Spike	NUT21-00016	102.1	100	7.5	0.28
666	Diss Phosphorus	Standard	NUT19-00017	1.503	1.5	0.075	0.03
666	Diss Phosphorus	Standard	NUT19-00017	0.019	0	0.01	1.9
666	Diss Phosphorus	Standard	NUT19-00017	0.052	0.05	0.0025	0.6
666	Diss Phosphorus	Standard	NUT19-00017	0.245	0.25	0.0125	-0.44
666	Diss Phosphorus	Standard	NUT19-00017	0.77	0.75	0.0375	0.53
666	Diss Phosphorus	Standard	NUT19-00017	0.098	0.1	0.005	-0.4
666	Diss Phosphorus	Standard	NUT19-00017	0.499	0.5	0.025	-0.04
666	Diss Phosphorus	Standard	NUT19-00017	0.983	1	0.05	-0.35
666	Diss Phosphorus	Corr Coef	NUT19-00017	0.999804	1	0.005	-0.04

Glendale ARROW - Skunk Creek and 79th Avenue November 29 - 30, 2002

Watstore	Parameter	Type	Lab Runid	Reported Value	Most Prob. Value	Std. Deviation	Z-Value
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.246	0.25	0.0125	-0.32
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.771	0.75	0.0375	0.56
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.097	0.1	0.005	-0.6
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.051	0.05	0.0025	0.4
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.016	0.02	0.005	-0.8
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.998	1	0.05	-0.04
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.774	0.75	0.0375	0.64
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.499	0.5	0.025	-0.04
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.097	0.1	0.005	-0.6
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.049	0.05	0.0025	-0.4
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.016	0.02	0.005	-0.8
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.096	0.1	0.005	-0.8
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.248	0.25	0.0125	-0.16
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.244	0.25	0.0125	-0.48
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.503	0.5	0.025	0.12
666	Diss Phosphorus	Immd. Standard	NUT19-00017	0.778	0.75	0.0375	0.75
666	Diss Phosphorus	Immd. Standard	NUT19-00017	1.524	1.5	0.075	0.32
666	Diss Phosphorus	QA/QC Sample	NUT19-00017	0.787	0.755	0.031	1.03
666	Diss Phosphorus	QA/QC Sample	NUT19-00017	1.194	1.138	0.0728	0.77
666	Diss Phosphorus	QA/QC Sample	NUT19-00017	0.396	0.412	0.016	-1
666	Diss Phosphorus	QA/QC Sample	NUT19-00017	0.226	0.23	0.03	-0.13
666	Diss Phosphorus	QA/QC Sample	NUT19-00017	1.211	1.138	0.0728	1
666	Diss Phosphorus	QA/QC Sample	NUT19-00017	0.128	0.132	0.009	-0.44
666	Diss Phosphorus	QA/QC Sample	NUT19-00017	0.768	0.755	0.031	0.42
671	PO4 Diss	Standard	NUT07-00135	0.05	0.05	0.0025	-0.04
671	PO4 Diss	Standard	NUT07-00135	0.1	0.1	0.005	0
671	PO4 Diss	Standard	NUT07-00135	0.025	0.025	0.0013	0.08
671	PO4 Diss	Standard	NUT07-00135	0.005	0.005	0.0005	0
671	PO4 Diss	Standard	NUT07-00135	0.002	0.002	0.0005	0.4
671	PO4 Diss	Standard	NUT07-00135	0.01	0.01	0.0005	0
671	PO4 Diss	Standard	NUT07-00135	0	0	0.001	-0.3
671	PO4 Diss	Corr Coef	NUT07-00135	0.99999	1	0.005	0
671	PO4 Diss	Immd. Standard	NUT07-00135	0.024	0.01	0.0005	27.6
671	PO4 Diss	Immd. Standard	NUT07-00135	0.009	0.005	0.0003	16.4
671	PO4 Diss	Immd. Standard	NUT07-00135	0.098	0.05	0.0025	19.08
671	PO4 Diss	Immd. Standard	NUT07-00135	0.05	0.025	0.0013	19.84
671	PO4 Diss	Immd. Standard	NUT07-00135	0.049	0.025	0.0013	19.44
671	PO4 Diss	QA/QC Sample	NUT07-00135	0.71	0.711	0.0208	-0.03
671	PO4 Diss	QA/QC Sample	NUT07-00135	0.124	0.128	0.004	-1
671	PO4 Diss	QA/QC Sample	NUT07-00135	0.737	0.741	0.035	-0.12
671	PO4 Diss	QA/QC Sample	NUT07-00135	0.04	0.041	0.0055	-0.2
671	PO4 Diss	QA/QC Sample	NUT07-00135	0.04	0.041	0.0055	-0.25
671	PO4 Diss	Spike	NUT07-00135	84.2	100	7.5	-2.11
1027	Cd Total ICP	Standard	CD11-00130	99.821	100	5	-0.04
1027	Cd Total ICP	Standard	CD11-00130	199.4	200	10	-0.06
1027	Cd Total ICP	Standard	CD11-00130	507.89	500	25	0.32
1027	Cd Total ICP	Standard	CD11-00130	1005.8	1000	50	0.12
1027	Cd Total ICP	Corr Coef	CD11-00130	0.9999	1	0.005	-0.02
1027	Cd Total ICP	Immd. Standard	CD11-00130	5.144	5	0.5	0.29
1027	Cd Total ICP	Immd. Standard	CD11-00130	2.214	2	0.2	1.07
1027	Cd Total ICP	Immd. Standard	CD11-00130	101.7	100	50	0.03
1027	Cd Total ICP	Immd. Standard	CD11-00130	1.134	1	0.2	0.67
1027	Cd Total ICP	Immd. Standard	CD11-00130	204.27	200	10	0.43
1027	Cd Total ICP	Immd. Standard	CD11-00130	1058.3	1000	50	1.17
1027	Cd Total ICP	Immd. Standard	CD11-00130	25.546	25	1.25	0.44
1027	Cd Total ICP	Immd. Standard	CD11-00130	49.688	50	2.5	-0.12
1027	Cd Total ICP	Immd. Standard	CD11-00130	10.316	10	1	0.32
1027	Cd Total ICP	QA/QC Sample	CD11-00130	3.364	3.4	0.21	-0.17

Glendale ARROW - Skunk Creek and 79th Avenue November 29 - 30, 2002

Watstore	Parameter	Type	Lab Runid	Reported Value	Most Prob. Value	Std. Deviation	Z-Value
1027	Cd Total ICP	QA/QC Sample	CD11-00130	10.205	10.4	0.5	-0.39
1027	Cd Total ICP	Spike	CD11-00130	98	100	7.5	-0.27
1027	Cd Total ICP	Spike	CD11-00130	96	100	7.5	-0.53
1042	Cu Total ICP	Standard	CU11-00128	1010.1	1000	50	0.2
1042	Cu Total ICP	Standard	CU11-00128	198.7	200	10	-0.13
1042	Cu Total ICP	Standard	CU11-00128	508.3	500	25	0.33
1042	Cu Total ICP	Standard	CU11-00128	99.86	100	5	-0.03
1042	Cu Total ICP	Corr Coef	CU11-00128	0.9999	1	0.005	-0.02
1042	Cu Total ICP	Immd. Standard	CU11-00128	25.258	25	1.25	0.21
1042	Cu Total ICP	Immd. Standard	CU11-00128	1003.1	1000	50	0.06
1042	Cu Total ICP	Immd. Standard	CU11-00128	98.679	100	5	-0.26
1042	Cu Total ICP	Immd. Standard	CU11-00128	196.85	200	10	-0.32
1042	Cu Total ICP	Immd. Standard	CU11-00128	49.681	50	2.5	-0.13
1042	Cu Total ICP	QA/QC Sample	CU11-00128	14.397	14.3	0.8	0.12
1042	Cu Total ICP	QA/QC Sample	CU11-00128	21.156	20.6	1	0.56
1042	Cu Total ICP	Spike	CU11-00128	99	100	7.5	-0.13
1042	Cu Total ICP	Spike	CU11-00128	98	100	7.5	-0.27
1051	Pb Total ICP	Standard	PB11-00129	98.434	100	5	-0.31
1051	Pb Total ICP	Standard	PB11-00129	196.9	200	10	-0.31
1051	Pb Total ICP	Standard	PB11-00129	1000.25	1000	50	0.01
1051	Pb Total ICP	Standard	PB11-00129	504.11	500	25	0.16
1051	Pb Total ICP	Corr Coef	PB11-00129	0.9999	1	0.005	-0.02
1051	Pb Total ICP	Immd. Standard	PB11-00129	199.66	200	10	-0.03
1051	Pb Total ICP	Immd. Standard	PB11-00129	24.979	25	1.25	-0.02
1051	Pb Total ICP	Immd. Standard	PB11-00129	100.241	100	5	0.05
1051	Pb Total ICP	Immd. Standard	PB11-00129	48.644	50	2.5	-0.54
1051	Pb Total ICP	Immd. Standard	PB11-00129	9.709	10	1	-0.29
1051	Pb Total ICP	Immd. Standard	PB11-00129	4.803	5	0.5	-0.39
1051	Pb Total ICP	Immd. Standard	PB11-00129	1048.52	1000	50	0.97
1051	Pb Total ICP	QA/QC Sample	PB11-00129	20.458	21.5	1.33	-0.78
1051	Pb Total ICP	QA/QC Sample	PB11-00129	11.198	11.4	0.7	-0.29
1051	Pb Total ICP	Spike	PB11-00129	98	100	7.5	-0.27
1051	Pb Total ICP	Spike	PB11-00129	99	100	7.5	-0.13
1092	Zn Total ICP	Standard	ZN10-00131	101.18	100	5	0.24
1092	Zn Total ICP	Standard	ZN10-00131	513.75	500	25	0.55
1092	Zn Total ICP	Standard	ZN10-00131	1013.1	1000	50	0.26
1092	Zn Total ICP	Standard	ZN10-00131	202.08	200	10	0.21
1092	Zn Total ICP	Corr Coef	ZN10-00131	0.9999	1	0.005	-0.02
1092	Zn Total ICP	Immd. Standard	ZN10-00131	50.023	50	2.5	0.01
1092	Zn Total ICP	Immd. Standard	ZN10-00131	2.228	2	0.1	2.28
1092	Zn Total ICP	Immd. Standard	ZN10-00131	10.525	10	0.5	1.05
1092	Zn Total ICP	Immd. Standard	ZN10-00131	5.3	5	0.25	1.2
1092	Zn Total ICP	Immd. Standard	ZN10-00131	25.843	25	1.25	0.67
1092	Zn Total ICP	Spike	ZN10-00131	103	100	7.5	0.4
1092	Zn Total ICP	Spike	ZN10-00131	101	100	7.5	0.13
70300	Diss Solids	QA/QC Sample	ROE01-0013	236.8	242	12	-0.43
70300	Diss Solids	QA/QC Sample	ROE01-0013	368.4	370	19	-0.08
70300	Diss Solids	QA/QC Sample	ROE01-0014	251.2	242	12	0.77
70300	Diss Solids	QA/QC Sample	ROE01-0014	370	370	19	0
90410	Alkalinity Total	QA/QC Sample	ALK1-00251	5.422	6	1.49	-0.39
90410	Alkalinity Total	QA/QC Sample	ALK1-00251	61.535	61.8	2.52	-0.11

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02
Issued: 12/11/02

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PLK0844-01	Butler-Grab	Water
PLK0844-02	Trip Blank	Water

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted.

QA/QC CRITERIA: All analyses met method criteria.

EXPLANATION OF DATA QUALIFIERS: No further explanation of data qualifiers needed.

Del Mar Analytical, Phoenix (AZ0426)

for Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

TOTAL RECOVERABLE OIL & GREASE (EPA 413.2)

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0844-01 (Butler-Grab - Water)								
Oil & Grease	EPA 413.2	P2L0622	1.0	**1.3**	1	12/6/02	12/9/02	

The reporting limit for this sample was adjusted by a factor of 1.02 to account for the applicable preparation factor.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0844-01 (Butler-Grab - Water)								
Benzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Bromodichloromethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Bromoform	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
Bromomethane	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
Carbon tetrachloride	EPA 624	P2L1008	2.5	ND	1	12/10/02	12/11/02	
Chlorobenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Dibromochloromethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Chloroethane	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
Chloroform	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Chloromethane	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
1,2-Dichlorobenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,3-Dichlorobenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,4-Dichlorobenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,1-Dichloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,2-Dichloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,1-Dichloroethene	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
trans-1,2-Dichloroethene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,2-Dichloropropane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
cis-1,3-Dichloropropene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
trans-1,3-Dichloropropene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Ethylbenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Methylene chloride	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
1,1,2,2-Tetrachloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Tetrachloroethene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Toluene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,1,1-Trichloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,1,2-Trichloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Trichloroethene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Trichlorofluoromethane	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
Vinyl chloride	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Surrogate: Dibromofluoromethane (80-120%)				*93 %*				
Surrogate: Toluene-d8 (80-120%)				*102 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*98 %*				

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0844-02 (Trip Blank - Water)								
Benzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Bromodichloromethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Bromoform	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
Bromomethane	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
Carbon tetrachloride	EPA 624	P2L1008	2.5	ND	1	12/10/02	12/11/02	
Chlorobenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Dibromochloromethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Chloroethane	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
Chloroform	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Chloromethane	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
1,2-Dichlorobenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,3-Dichlorobenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,4-Dichlorobenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,1-Dichloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,2-Dichloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,1-Dichloroethene	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
trans-1,2-Dichloroethene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,2-Dichloropropane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
cis-1,3-Dichloropropene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
trans-1,3-Dichloropropene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Ethylbenzene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Methylene chloride	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
1,1,2,2-Tetrachloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Tetrachloroethene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Toluene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,1,1-Trichloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
1,1,2-Trichloroethane	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Trichloroethene	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Trichlorofluoromethane	EPA 624	P2L1008	5.0	ND	1	12/10/02	12/11/02	
Vinyl chloride	EPA 624	P2L1008	2.0	ND	1	12/10/02	12/11/02	
Surrogate: Dibromofluoromethane (80-120%)				*101 %*				
Surrogate: Toluene-d8 (80-120%)				*102 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*100 %*				

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0844-01 (Butler-Grab - Water)								
Biochemical Oxygen Demand	EPA 405.1	P2L0204	2.0	**11**	1	12/1/02	12/6/02	

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

MICROBIOLOGICALS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			MPN/100 ml	MPN/100 m				
Sample ID: PLK0844-01 (Butler-Grab - Water)								
E. Coli	SM9221F	P2L0103	2.0	**1700**	1	11/30/02	12/3/02	
Fecal Coliform	SM 9221E	P2L0103	2.0	**2200**	1	11/30/02	12/3/02	
Fecal Streptococcus	SM9230B	P2L0104	2.0	**17000**	1	11/30/02	12/3/02	

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

TOTAL RECOVERABLE OIL & GREASE (EPA 413.2)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0622 Extracted: 12/06/02										
Blank Analyzed: 12/09/02 (P2L0622-BLK1)										
Oil & Grease	ND	1.0	mg/l							
LCS Analyzed: 12/09/02 (P2L0622-BS1)										
Oil & Grease	**11.6**	1.0	mg/l	10.0		116	85-135			
LCS Dup Analyzed: 12/09/02 (P2L0622-BSD1)										
Oil & Grease	**11.9**	1.0	mg/l	10.0		119	85-135	3	15	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1008 Extracted: 12/10/02										
Blank Analyzed: 12/10/02 (P2L1008-BLK1)										
Benzene	ND	2.0	ug/l							
Bromodichloromethane	ND	2.0	ug/l							
Bromoform	ND	5.0	ug/l							
Bromomethane	ND	5.0	ug/l							
Carbon tetrachloride	ND	2.5	ug/l							
Chlorobenzene	ND	2.0	ug/l							
Dibromochloromethane	ND	2.0	ug/l							
Chloroethane	ND	5.0	ug/l							
Chloroform	ND	2.0	ug/l							
Chloromethane	ND	5.0	ug/l							
1,2-Dichlorobenzene	ND	2.0	ug/l							
1,3-Dichlorobenzene	ND	2.0	ug/l							
1,4-Dichlorobenzene	ND	2.0	ug/l							
1,1-Dichloroethane	ND	2.0	ug/l							
1,2-Dichloroethane	ND	2.0	ug/l							
1,1-Dichloroethene	ND	5.0	ug/l							
trans-1,2-Dichloroethene	ND	2.0	ug/l							
1,2-Dichloropropane	ND	2.0	ug/l							
cis-1,3-Dichloropropene	ND	2.0	ug/l							
trans-1,3-Dichloropropene	ND	2.0	ug/l							
Ethylbenzene	ND	2.0	ug/l							
Methylene chloride	ND	5.0	ug/l							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/l							
Tetrachloroethene	ND	2.0	ug/l							
Toluene	ND	2.0	ug/l							
1,1,1-Trichloroethane	ND	2.0	ug/l							
1,1,2-Trichloroethane	ND	2.0	ug/l							
Trichloroethene	ND	2.0	ug/l							
Trichlorofluoromethane	ND	5.0	ug/l							
Vinyl chloride	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*25.2*		*ug/l*	*25.0*		*101*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1008 Extracted: 12/10/02										
LCS Analyzed: 12/10/02 (P2L1008-BS1)										
Benzene	25.8	2.0	ug/l	25.0		103	37-151			
Bromodichloromethane	25.3	2.0	ug/l	25.0		101	35-155			
Bromoform	23.5	5.0	ug/l	25.0		94	45-169			
Bromomethane	25.4	5.0	ug/l	25.0		102	5-242			
Carbon tetrachloride	26.9	2.5	ug/l	25.0		108	70-140			
Chlorobenzene	25.2	2.0	ug/l	25.0		101	37-160			
Dibromochloromethane	25.3	2.0	ug/l	25.0		101	53-149			
Chloroethane	27.1	5.0	ug/l	25.0		108	14-230			
Chloroform	25.9	2.0	ug/l	25.0		104	51-138			
Chloromethane	26.0	5.0	ug/l	25.0		104	5-273			
1,2-Dichlorobenzene	24.8	2.0	ug/l	25.0		99	18-190			
1,3-Dichlorobenzene	25.6	2.0	ug/l	25.0		102	59-156			
1,4-Dichlorobenzene	25.3	2.0	ug/l	25.0		101	18-190			
1,1-Dichloroethane	27.2	2.0	ug/l	25.0		109	59-155			
1,2-Dichloroethane	24.6	2.0	ug/l	25.0		98	49-155			
1,1-Dichloroethene	27.6	5.0	ug/l	25.0		110	5-234			
trans-1,2-Dichloroethene	26.4	2.0	ug/l	25.0		106	54-156			
1,2-Dichloropropane	25.5	2.0	ug/l	25.0		102	5-210			
cis-1,3-Dichloropropene	27.6	2.0	ug/l	25.0		110	5-227			
trans-1,3-Dichloropropene	26.0	2.0	ug/l	25.0		104	17-183			
Ethylbenzene	25.7	2.0	ug/l	25.0		103	37-162			
Methylene chloride	25.1	5.0	ug/l	25.0		100	5-221			
1,1,2,2-Tetrachloroethane	24.2	2.0	ug/l	25.0		97	46-157			
Tetrachloroethene	26.6	2.0	ug/l	25.0		106	64-148			
Toluene	25.4	2.0	ug/l	25.0		102	47-150			
1,1,1-Trichloroethane	26.9	2.0	ug/l	25.0		108	52-162			
1,1,2-Trichloroethane	24.8	2.0	ug/l	25.0		99	52-150			
Trichloroethene	26.2	2.0	ug/l	25.0		105	71-157			
Trichlorofluoromethane	27.9	5.0	ug/l	25.0		112	17-181			
Vinyl chloride	30.0	2.0	ug/l	25.0		120	5-251			
Surrogate: Dibromofluoromethane	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: Toluene-d8	*26.2*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1008 Extracted: 12/10/02										
LCS Dup Analyzed: 12/10/02 (P2L1008-BSD1)										
Benzene	27.6	2.0	ug/l	25.0		110	37-151	7	20	
Bromodichloromethane	27.5	2.0	ug/l	25.0		110	35-155	8	20	
Bromoform	25.2	5.0	ug/l	25.0		101	45-169	7	20	
Bromomethane	27.5	5.0	ug/l	25.0		110	5-242	8	20	
Carbon tetrachloride	29.3	2.5	ug/l	25.0		117	70-140	9	20	
Chlorobenzene	27.5	2.0	ug/l	25.0		110	37-160	9	20	
Dibromochloromethane	27.9	2.0	ug/l	25.0		112	53-149	10	20	
Chloroethane	28.9	5.0	ug/l	25.0		116	14-230	6	20	
Chloroform	28.2	2.0	ug/l	25.0		113	51-138	9	20	
Chloromethane	28.4	5.0	ug/l	25.0		114	5-273	9	20	
1,2-Dichlorobenzene	26.9	2.0	ug/l	25.0		108	18-190	8	20	
1,3-Dichlorobenzene	27.8	2.0	ug/l	25.0		111	59-156	8	20	
1,4-Dichlorobenzene	26.7	2.0	ug/l	25.0		107	18-190	5	20	
1,1-Dichloroethane	29.4	2.0	ug/l	25.0		118	59-155	8	20	
1,2-Dichloroethane	25.9	2.0	ug/l	25.0		104	49-155	5	20	
1,1-Dichloroethene	30.2	5.0	ug/l	25.0		121	5-234	9	20	
trans-1,2-Dichloroethene	28.5	2.0	ug/l	25.0		114	54-156	8	20	
1,2-Dichloropropane	27.4	2.0	ug/l	25.0		110	5-210	7	20	
cis-1,3-Dichloropropene	29.1	2.0	ug/l	25.0		116	5-227	5	20	
trans-1,3-Dichloropropene	27.6	2.0	ug/l	25.0		110	17-183	6	20	
Ethylbenzene	28.1	2.0	ug/l	25.0		112	37-162	9	20	
Methylene chloride	28.2	5.0	ug/l	25.0		113	5-221	12	20	
1,1,2,2-Tetrachloroethane	24.8	2.0	ug/l	25.0		99	46-157	2	20	
Tetrachloroethene	29.2	2.0	ug/l	25.0		117	64-148	9	20	
Toluene	27.0	2.0	ug/l	25.0		108	47-150	6	20	
1,1,1-Trichloroethane	29.2	2.0	ug/l	25.0		117	52-162	8	20	
1,1,2-Trichloroethane	26.0	2.0	ug/l	25.0		104	52-150	5	20	
Trichloroethene	27.9	2.0	ug/l	25.0		112	71-157	6	20	
Trichlorofluoromethane	31.8	5.0	ug/l	25.0		127	17-181	13	20	
Vinyl chloride	29.1	2.0	ug/l	25.0		116	5-251	3	20	
Surrogate: Dibromofluoromethane	*25.6*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: Toluene-d8	*25.9*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.9*		*ug/l*	*25.0*		*104*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1008 Extracted: 12/10/02										
Matrix Spike Analyzed: 12/10/02 (P2L1008-MS1)					**Source: PLL0101-01**					
Benzene	26.6	2.0	ug/l	25.0	ND	106	37-151			
Bromodichloromethane	26.7	2.0	ug/l	25.0	ND	107	35-155			
Bromoform	24.4	5.0	ug/l	25.0	ND	98	45-169			
Bromomethane	24.6	5.0	ug/l	25.0	ND	98	5-242			
Carbon tetrachloride	27.7	2.5	ug/l	25.0	ND	111	70-140			
Chlorobenzene	26.0	2.0	ug/l	25.0	ND	104	37-160			
Dibromochloromethane	26.7	2.0	ug/l	25.0	ND	107	53-149			
Chloroethane	25.3	5.0	ug/l	25.0	ND	101	14-230			
Chloroform	27.1	2.0	ug/l	25.0	ND	108	51-138			
Chloromethane	24.4	5.0	ug/l	25.0	ND	98	5-273			
1,2-Dichlorobenzene	25.4	2.0	ug/l	25.0	ND	102	18-190			
1,3-Dichlorobenzene	26.5	2.0	ug/l	25.0	ND	106	59-156			
1,4-Dichlorobenzene	25.5	2.0	ug/l	25.0	ND	102	18-190			
1,1-Dichloroethane	28.0	2.0	ug/l	25.0	ND	112	59-155			
1,2-Dichloroethane	26.2	2.0	ug/l	25.0	ND	105	49-155			
1,1-Dichloroethene	28.0	5.0	ug/l	25.0	ND	112	5-234			
trans-1,2-Dichloroethene	27.0	2.0	ug/l	25.0	ND	108	54-156			
1,2-Dichloropropane	26.5	2.0	ug/l	25.0	ND	106	5-210			
cis-1,3-Dichloropropene	28.8	2.0	ug/l	25.0	ND	115	5-227			
trans-1,3-Dichloropropene	27.1	2.0	ug/l	25.0	ND	108	17-183			
Ethylbenzene	26.6	2.0	ug/l	25.0	ND	106	37-162			
Methylene chloride	26.3	5.0	ug/l	25.0	ND	105	5-221			
1,1,2,2-Tetrachloroethane	24.2	2.0	ug/l	25.0	ND	97	46-157			
Tetrachloroethene	27.5	2.0	ug/l	25.0	ND	110	64-148			
Toluene	26.4	2.0	ug/l	25.0	ND	106	47-150			
1,1,1-Trichloroethane	28.5	2.0	ug/l	25.0	ND	114	52-162			
1,1,2-Trichloroethane	25.6	2.0	ug/l	25.0	ND	102	52-150			
Trichloroethene	41.4	2.0	ug/l	25.0	16	102	71-157			
Trichlorofluoromethane	28.7	5.0	ug/l	25.0	ND	115	17-181			
Vinyl chloride	24.3	2.0	ug/l	25.0	ND	97	5-251			
Surrogate: Dibromofluoromethane	*26.1*		*ug/l*	*25.0*		*104*	*80-120*			
Surrogate: Toluene-d8	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.0*		*ug/l*	*25.0*		*104*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1008 Extracted: 12/10/02										
Matrix Spike Dup Analyzed: 12/10/02 (P2L1008-MSD1)					**Source: PLL0101-01**					
Benzene	26.5	2.0	ug/l	25.0	ND	106	37-151	0.4	20	
Bromodichloromethane	27.2	2.0	ug/l	25.0	ND	109	35-155	2	20	
Bromoform	26.7	5.0	ug/l	25.0	ND	107	45-169	9	20	
Bromomethane	25.2	5.0	ug/l	25.0	ND	101	5-242	2	20	
Carbon tetrachloride	26.9	2.5	ug/l	25.0	ND	108	70-140	3	20	
Chlorobenzene	26.1	2.0	ug/l	25.0	ND	104	37-160	0.4	20	
Dibromochloromethane	28.0	2.0	ug/l	25.0	ND	112	53-149	5	20	
Chloroethane	27.4	5.0	ug/l	25.0	ND	110	14-230	8	20	
Chloroform	27.7	2.0	ug/l	25.0	ND	111	51-138	2	20	
Chloromethane	25.7	5.0	ug/l	25.0	ND	103	5-273	5	20	
1,2-Dichlorobenzene	25.9	2.0	ug/l	25.0	ND	104	18-190	2	20	
1,3-Dichlorobenzene	26.4	2.0	ug/l	25.0	ND	106	59-156	0.4	20	
1,4-Dichlorobenzene	26.0	2.0	ug/l	25.0	ND	104	18-190	2	20	
1,1-Dichloroethane	28.4	2.0	ug/l	25.0	ND	114	59-155	1	20	
1,2-Dichloroethane	27.3	2.0	ug/l	25.0	ND	109	49-155	4	20	
1,1-Dichloroethene	28.3	5.0	ug/l	25.0	ND	113	5-234	1	20	
trans-1,2-Dichloroethene	27.2	2.0	ug/l	25.0	ND	109	54-156	0.7	20	
1,2-Dichloropropane	27.0	2.0	ug/l	25.0	ND	108	5-210	2	20	
cis-1,3-Dichloropropene	28.7	2.0	ug/l	25.0	ND	115	5-227	0.3	20	
trans-1,3-Dichloropropene	28.1	2.0	ug/l	25.0	ND	112	17-183	4	20	
Ethylbenzene	26.5	2.0	ug/l	25.0	ND	106	37-162	0.4	20	
Methylene chloride	27.6	5.0	ug/l	25.0	ND	110	5-221	5	20	
1,1,2,2-Tetrachloroethane	24.8	2.0	ug/l	25.0	ND	99	46-157	2	20	
Tetrachloroethene	27.2	2.0	ug/l	25.0	ND	109	64-148	1	20	
Toluene	26.3	2.0	ug/l	25.0	ND	105	47-150	0.4	20	
1,1,1-Trichloroethane	27.8	2.0	ug/l	25.0	ND	111	52-162	2	20	
1,1,2-Trichloroethane	26.6	2.0	ug/l	25.0	ND	106	52-150	4	20	
Trichloroethene	41.3	2.0	ug/l	25.0	16	101	71-157	0.2	20	
Trichlorofluoromethane	27.0	5.0	ug/l	25.0	ND	108	17-181	6	20	
Vinyl chloride	24.7	2.0	ug/l	25.0	ND	99	5-251	2	20	
Surrogate: Dibromofluoromethane	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: Toluene-d8	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0844

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0204 Extracted: 12/01/02										
Blank Analyzed: 12/06/02 (P2L0204-BLK1)										
Biochemical Oxygen Demand	ND	2.0	mg/l							
LCS Analyzed: 12/06/02 (P2L0204-BS1)										
Biochemical Oxygen Demand	**197**	2.0	mg/l	198		99	85-115			
Duplicate Analyzed: 12/06/02 (P2L0204-DUP1)					**Source: PLK0832-01**					
Biochemical Oxygen Demand	**15.4**	2.0	mg/l		15			3	20	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr 2801 West Durango Street Phoenix, AZ 85009 Attention: Matt Oller	Client Project ID: Glendale NPDES Stormwater Report Number: PLK0844	Sampled: 11/30/02 Received: 11/30/02

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit

NR Not reported.

RPD Relative Percent Difference

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02
Issued: 12/11/02

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PLK0833-01	Citrus-Grab	Water
PLK0833-02	Trip Blank	Water

SAMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation.

HOLDING TIMES: Holding times were met.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted.

QA/QC CRITERIA: All analyses met method criteria.

EXPLANATION OF DATA QUALIFIERS: No further explanation of data qualifiers needed.

Del Mar Analytical, Phoenix (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

TOTAL RECOVERABLE OIL & GREASE (EPA 413.2)

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0833-01 (Citrus-Grab - Water)								
Oil & Grease	EPA 413.2	P2L0410	1.0	ND	1	12/4/02	12/5/02	

The reporting limit for this sample was adjusted by a factor of 1.02 to account for the applicable preparation factor.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0833-01 (Citrus-Grab - Water)								
Benzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Bromodichloromethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Bromoform	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Bromomethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Carbon tetrachloride	EPA 624	P2L1004	2.5	ND	1	12/10/02	12/10/02	
Chlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Dibromochloromethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Chloroethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Chloroform	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Chloromethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
1,2-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,3-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,4-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1-Dichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,2-Dichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1-Dichloroethene	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
trans-1,2-Dichloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,2-Dichloropropane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
cis-1,3-Dichloropropene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
trans-1,3-Dichloropropene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Ethylbenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Methylene chloride	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
1,1,2,2-Tetrachloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Tetrachloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Toluene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1,1-Trichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1,2-Trichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Trichloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Trichlorofluoromethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Vinyl chloride	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Surrogate: Dibromofluoromethane (80-120%)				*110 %*				
Surrogate: Toluene-d8 (80-120%)				*103 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*100 %*				

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	Reporting Limit ug/l	Sample Result ug/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0833-02 (Trip Blank - Water)								
Benzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Bromodichloromethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Bromoform	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Bromomethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Carbon tetrachloride	EPA 624	P2L1004	2.5	ND	1	12/10/02	12/10/02	
Chlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Dibromochloromethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Chloroethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Chloroform	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Chloromethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
1,2-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,3-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,4-Dichlorobenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1-Dichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,2-Dichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1-Dichloroethene	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
trans-1,2-Dichloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,2-Dichloropropane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
cis-1,3-Dichloropropene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
trans-1,3-Dichloropropene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Ethylbenzene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Methylene chloride	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
1,1,2,2-Tetrachloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Tetrachloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Toluene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1,1-Trichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
1,1,2-Trichloroethane	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Trichloroethene	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Trichlorofluoromethane	EPA 624	P2L1004	5.0	ND	1	12/10/02	12/10/02	
Vinyl chloride	EPA 624	P2L1004	2.0	ND	1	12/10/02	12/10/02	
Surrogate: Dibromofluoromethane (80-120%)				*110 %*				
Surrogate: Toluene-d8 (80-120%)				*103 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*102 %*				

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PLK0833-01 (Citrus-Grab - Water)								
Biochemical Oxygen Demand	EPA 405.1	P2L0204	2.0	**6.5**	1	12/1/02	12/6/02	

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

MICROBIOLOGICALS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			MPN/100 ml	MPN/100 m				
Sample ID: PLK0833-01 (Citrus-Grab - Water)								
E. Coli	SM9221F	P2L0103	2.0	**9000**	1	11/30/02	12/3/02	
Fecal Coliform	SM 9221E	P2L0103	2.0	**9000**	1	11/30/02	12/3/02	
Fecal Streptococcus	SM9230B	P2L0104	2.0	**50000**	1	11/30/02	12/2/02	

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

TOTAL RECOVERABLE OIL & GREASE (EPA 413.2)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0410 Extracted: 12/04/02										
Blank Analyzed: 12/04/02 (P2L0410-BLK1)										
Oil & Grease	ND	1.0	mg/l							
LCS Analyzed: 12/04/02 (P2L0410-BS1)										
Oil & Grease	**11.9**	1.0	mg/l	10.0		119	85-135			
LCS Dup Analyzed: 12/04/02 (P2L0410-BSD1)										
Oil & Grease	**13.1**	1.0	mg/l	10.0		131	85-135	10	15	

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
Blank Analyzed: 12/10/02 (P2L1004-BLK1)										
Benzene	ND	2.0	ug/l							
Bromodichloromethane	ND	2.0	ug/l							
Bromoform	ND	5.0	ug/l							
Bromomethane	ND	5.0	ug/l							
Carbon tetrachloride	ND	2.5	ug/l							
Chlorobenzene	ND	2.0	ug/l							
Dibromochloromethane	ND	2.0	ug/l							
Chloroethane	ND	5.0	ug/l							
Chloroform	ND	2.0	ug/l							
Chloromethane	ND	5.0	ug/l							
1,2-Dichlorobenzene	ND	2.0	ug/l							
1,3-Dichlorobenzene	ND	2.0	ug/l							
1,4-Dichlorobenzene	ND	2.0	ug/l							
1,1-Dichloroethane	ND	2.0	ug/l							
1,2-Dichloroethane	ND	2.0	ug/l							
1,1-Dichloroethene	ND	5.0	ug/l							
trans-1,2-Dichloroethene	ND	2.0	ug/l							
1,2-Dichloropropane	ND	2.0	ug/l							
cis-1,3-Dichloropropene	ND	2.0	ug/l							
trans-1,3-Dichloropropene	ND	2.0	ug/l							
Ethylbenzene	ND	2.0	ug/l							
Methylene chloride	ND	5.0	ug/l							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/l							
Tetrachloroethene	ND	2.0	ug/l							
Toluene	ND	2.0	ug/l							
1,1,1-Trichloroethane	ND	2.0	ug/l							
1,1,2-Trichloroethane	ND	2.0	ug/l							
Trichloroethene	ND	2.0	ug/l							
Trichlorofluoromethane	ND	5.0	ug/l							
Vinyl chloride	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: Toluene-d8	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*ug/l*	*25.0*		*97*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
LCS Analyzed: 12/10/02 (P2L1004-BS1)										
Benzene	23.5	2.0	ug/l	25.0		94	37-151			
Bromodichloromethane	23.0	2.0	ug/l	25.0		92	35-155			
Bromoform	25.6	5.0	ug/l	25.0		102	45-169			
Bromomethane	23.6	5.0	ug/l	25.0		94	5-242			
Carbon tetrachloride	25.7	2.5	ug/l	25.0		103	70-140			
Chlorobenzene	25.8	2.0	ug/l	25.0		103	37-160			
Dibromochloromethane	25.6	2.0	ug/l	25.0		102	53-149			
Chloroethane	21.6	5.0	ug/l	25.0		86	14-230			
Chloroform	22.7	2.0	ug/l	25.0		91	51-138			
Chloromethane	19.7	5.0	ug/l	25.0		79	5-273			
1,2-Dichlorobenzene	28.0	2.0	ug/l	25.0		112	18-190			
1,3-Dichlorobenzene	27.2	2.0	ug/l	25.0		109	59-156			
1,4-Dichlorobenzene	27.2	2.0	ug/l	25.0		109	18-190			
1,1-Dichloroethane	21.6	2.0	ug/l	25.0		86	59-155			
1,2-Dichloroethane	21.8	2.0	ug/l	25.0		87	49-155			
1,1-Dichloroethene	23.0	5.0	ug/l	25.0		92	5-234			
trans-1,2-Dichloroethene	23.0	2.0	ug/l	25.0		92	54-156			
1,2-Dichloropropane	22.6	2.0	ug/l	25.0		90	5-210			
cis-1,3-Dichloropropene	24.2	2.0	ug/l	25.0		97	5-227			
trans-1,3-Dichloropropene	25.5	2.0	ug/l	25.0		102	17-183			
Ethylbenzene	25.0	2.0	ug/l	25.0		100	37-162			
Methylene chloride	20.3	5.0	ug/l	25.0		81	5-221			
1,1,2,2-Tetrachloroethane	25.0	2.0	ug/l	25.0		100	46-157			
Tetrachloroethene	26.2	2.0	ug/l	25.0		105	64-148			
Toluene	23.9	2.0	ug/l	25.0		96	47-150			
1,1,1-Trichloroethane	23.1	2.0	ug/l	25.0		92	52-162			
1,1,2-Trichloroethane	25.8	2.0	ug/l	25.0		103	52-150			
Trichloroethene	24.4	2.0	ug/l	25.0		98	71-157			
Trichlorofluoromethane	22.9	5.0	ug/l	25.0		92	17-181			
Vinyl chloride	22.2	2.0	ug/l	25.0		89	5-251			
Surrogate: Dibromofluoromethane	*25.1*		*ug/l*	*25.0*		*100*	*80-120*			
Surrogate: Toluene-d8	*25.8*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*23.8*		*ug/l*	*25.0*		*95*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
LCS Dup Analyzed: 12/10/02 (P2L1004-BSD1)										
Benzene	**24.9**	2.0	ug/l	25.0		100	37-151	6	20	
Bromodichloromethane	**23.6**	2.0	ug/l	25.0		94	35-155	3	20	
Bromoform	**24.9**	5.0	ug/l	25.0		100	45-169	3	20	
Bromomethane	**26.5**	5.0	ug/l	25.0		106	5-242	12	20	
Carbon tetrachloride	**27.4**	2.5	ug/l	25.0		110	70-140	6	20	
Chlorobenzene	**26.2**	2.0	ug/l	25.0		105	37-160	2	20	
Dibromochloromethane	**25.3**	2.0	ug/l	25.0		101	53-149	1	20	
Chloroethane	**24.3**	5.0	ug/l	25.0		97	14-230	12	20	
Chloroform	**24.2**	2.0	ug/l	25.0		97	51-138	6	20	
Chloromethane	**22.3**	5.0	ug/l	25.0		89	5-273	12	20	
1,2-Dichlorobenzene	**26.3**	2.0	ug/l	25.0		105	18-190	6	20	
1,3-Dichlorobenzene	**26.3**	2.0	ug/l	25.0		105	59-156	3	20	
1,4-Dichlorobenzene	**26.3**	2.0	ug/l	25.0		105	18-190	3	20	
1,1-Dichloroethane	**23.1**	2.0	ug/l	25.0		92	59-155	7	20	
1,2-Dichloroethane	**23.1**	2.0	ug/l	25.0		92	49-155	6	20	
1,1-Dichloroethene	**25.0**	5.0	ug/l	25.0		100	5-234	8	20	
trans-1,2-Dichloroethene	**24.2**	2.0	ug/l	25.0		97	54-156	5	20	
1,2-Dichloropropane	**24.1**	2.0	ug/l	25.0		96	5-210	6	20	
cis-1,3-Dichloropropene	**25.2**	2.0	ug/l	25.0		101	5-227	4	20	
trans-1,3-Dichloropropene	**25.9**	2.0	ug/l	25.0		104	17-183	2	20	
Ethylbenzene	**25.7**	2.0	ug/l	25.0		103	37-162	3	20	
Methylene chloride	**22.4**	5.0	ug/l	25.0		90	5-221	10	20	
1,1,2,2-Tetrachloroethane	**23.3**	2.0	ug/l	25.0		93	46-157	7	20	
Tetrachloroethene	**27.7**	2.0	ug/l	25.0		111	64-148	6	20	
Toluene	**25.2**	2.0	ug/l	25.0		101	47-150	5	20	
1,1,1-Trichloroethane	**24.8**	2.0	ug/l	25.0		99	52-162	7	20	
1,1,2-Trichloroethane	**26.1**	2.0	ug/l	25.0		104	52-150	1	20	
Trichloroethene	**25.8**	2.0	ug/l	25.0		103	71-157	6	20	
Trichlorofluoromethane	**25.8**	5.0	ug/l	25.0		103	17-181	12	20	
Vinyl chloride	**23.7**	2.0	ug/l	25.0		95	5-251	7	20	
Surrogate: Dibromofluoromethane	*25.5*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: Toluene-d8	*25.7*		*ug/l*	*25.0*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.1*		*ug/l*	*25.0*		*96*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
Matrix Spike Analyzed: 12/10/02 (P2L1004-MS1)					**Source: PLK0838-01**					
Benzene	**24.9**	2.0	ug/l	25.0	ND	100	37-151			
Bromodichloromethane	**21.5**	2.0	ug/l	25.0	ND	86	35-155			
Bromoform	**24.0**	5.0	ug/l	25.0	ND	96	45-169			
Bromomethane	**27.0**	5.0	ug/l	25.0	ND	108	5-242			
Carbon tetrachloride	**28.8**	2.5	ug/l	25.0	ND	115	70-140			
Chlorobenzene	**26.0**	2.0	ug/l	25.0	ND	104	37-160			
Dibromochloromethane	**22.5**	2.0	ug/l	25.0	ND	90	53-149			
Chloroethane	**24.9**	5.0	ug/l	25.0	ND	100	14-230			
Chloroform	**23.1**	2.0	ug/l	25.0	ND	92	51-138			
Chloromethane	**22.2**	5.0	ug/l	25.0	ND	89	5-273			
1,2-Dichlorobenzene	**24.7**	2.0	ug/l	25.0	ND	99	18-190			
1,3-Dichlorobenzene	**26.2**	2.0	ug/l	25.0	ND	105	59-156			
1,4-Dichlorobenzene	**26.4**	2.0	ug/l	25.0	ND	106	18-190			
1,1-Dichloroethane	**22.7**	2.0	ug/l	25.0	ND	91	59-155			
1,2-Dichloroethane	**20.4**	2.0	ug/l	25.0	ND	82	49-155			
1,1-Dichloroethene	**25.8**	5.0	ug/l	25.0	ND	103	5-234			
trans-1,2-Dichloroethene	**25.4**	2.0	ug/l	25.0	ND	102	54-156			
1,2-Dichloropropane	**22.2**	2.0	ug/l	25.0	ND	89	5-210			
cis-1,3-Dichloropropene	**22.7**	2.0	ug/l	25.0	ND	91	5-227			
trans-1,3-Dichloropropene	**22.4**	2.0	ug/l	25.0	ND	90	17-183			
Ethylbenzene	**26.4**	2.0	ug/l	25.0	ND	106	37-162			
Methylene chloride	**21.0**	5.0	ug/l	25.0	ND	84	5-221			
1,1,2,2-Tetrachloroethane	**22.6**	2.0	ug/l	25.0	ND	90	46-157			
Tetrachloroethene	**30.0**	2.0	ug/l	25.0	ND	120	64-148			
Toluene	**25.0**	2.0	ug/l	25.0	ND	100	47-150			
1,1,1-Trichloroethane	**25.7**	2.0	ug/l	25.0	ND	103	52-162			
1,1,2-Trichloroethane	**22.3**	2.0	ug/l	25.0	ND	89	52-150			
Trichloroethene	**25.8**	2.0	ug/l	25.0	ND	103	71-157			
Trichlorofluoromethane	**26.7**	5.0	ug/l	25.0	ND	107	17-181			
Vinyl chloride	**28.0**	2.0	ug/l	25.0	ND	112	5-251			
Surrogate: Dibromofluoromethane	*23.6*		*ug/l*	*25.0*		*94*	*80-120*			
Surrogate: Toluene-d8	*25.4*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*25.5*		*ug/l*	*25.0*		*102*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L1004 Extracted: 12/10/02										
Matrix Spike Dup Analyzed: 12/10/02 (P2L1004-MSD1)					**Source: PLK0838-01**					
Benzene	**24.5**	2.0	ug/l	25.0	ND	98	37-151	2	20	
Bromodichloromethane	**21.6**	2.0	ug/l	25.0	ND	86	35-155	0.5	20	
Bromoform	**23.3**	5.0	ug/l	25.0	ND	93	45-169	3	20	
Bromomethane	**26.5**	5.0	ug/l	25.0	ND	106	5-242	2	20	
Carbon tetrachloride	**27.5**	2.5	ug/l	25.0	ND	110	70-140	5	20	
Chlorobenzene	**25.8**	2.0	ug/l	25.0	ND	103	37-160	0.8	20	
Dibromochloromethane	**22.7**	2.0	ug/l	25.0	ND	91	53-149	0.9	20	
Chloroethane	**23.7**	5.0	ug/l	25.0	ND	95	14-230	5	20	
Chloroform	**23.1**	2.0	ug/l	25.0	ND	92	51-138	0	20	
Chloromethane	**21.8**	5.0	ug/l	25.0	ND	87	5-273	2	20	
1,2-Dichlorobenzene	**24.9**	2.0	ug/l	25.0	ND	100	18-190	0.8	20	
1,3-Dichlorobenzene	**25.5**	2.0	ug/l	25.0	ND	102	59-156	3	20	
1,4-Dichlorobenzene	**25.7**	2.0	ug/l	25.0	ND	103	18-190	3	20	
1,1-Dichloroethane	**22.4**	2.0	ug/l	25.0	ND	90	59-155	1	20	
1,2-Dichloroethane	**20.9**	2.0	ug/l	25.0	ND	84	49-155	2	20	
1,1-Dichloroethene	**24.7**	5.0	ug/l	25.0	ND	99	5-234	4	20	
trans-1,2-Dichloroethene	**24.9**	2.0	ug/l	25.0	ND	100	54-156	2	20	
1,2-Dichloropropane	**21.9**	2.0	ug/l	25.0	ND	88	5-210	1	20	
cis-1,3-Dichloropropene	**22.8**	2.0	ug/l	25.0	ND	91	5-227	0.4	20	
trans-1,3-Dichloropropene	**23.0**	2.0	ug/l	25.0	ND	92	17-183	3	20	
Ethylbenzene	**25.8**	2.0	ug/l	25.0	ND	103	37-162	2	20	
Methylene chloride	**20.3**	5.0	ug/l	25.0	ND	81	5-221	3	20	
1,1,2,2-Tetrachloroethane	**22.4**	2.0	ug/l	25.0	ND	90	46-157	0.9	20	
Tetrachloroethene	**28.4**	2.0	ug/l	25.0	ND	114	64-148	5	20	
Toluene	**24.6**	2.0	ug/l	25.0	ND	98	47-150	2	20	
1,1,1-Trichloroethane	**24.6**	2.0	ug/l	25.0	ND	98	52-162	4	20	
1,1,2-Trichloroethane	**23.1**	2.0	ug/l	25.0	ND	92	52-150	4	20	
Trichloroethene	**25.2**	2.0	ug/l	25.0	ND	101	71-157	2	20	
Trichlorofluoromethane	**25.1**	5.0	ug/l	25.0	ND	100	17-181	6	20	
Vinyl chloride	**25.8**	2.0	ug/l	25.0	ND	103	5-251	8	20	
Surrogate: Dibromofluoromethane	*23.6*		*ug/l*	*25.0*		*94*	*80-120*			
Surrogate: Toluene-d8	*25.5*		*ug/l*	*25.0*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.4*		*ug/l*	*25.0*		*98*	*80-120*			

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr
2801 West Durango Street
Phoenix, AZ 85009
Attention: Matt Oller

Client Project ID: Glendale NPDES Stormwater

Report Number: PLK0833

Sampled: 11/30/02
Received: 11/30/02

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2L0204 Extracted: 12/01/02										
Blank Analyzed: 12/06/02 (P2L0204-BLK1)										
Biochemical Oxygen Demand	ND	2.0	mg/l							
LCS Analyzed: 12/06/02 (P2L0204-BS1)										
Biochemical Oxygen Demand	197	2.0	mg/l	198		99	85-115			
Duplicate Analyzed: 12/06/02 (P2L0204-DUP1)					**Source: PLK0832-01**					
Biochemical Oxygen Demand	15.4	2.0	mg/l		15			3	20	

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control Distr 2801 West Durango Street Phoenix, AZ 85009 Attention: Matt Oller	Client Project ID: Glendale NPDES Stormwater Report Number: PLK0833	Sampled: 11/30/02 Received: 11/30/02

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit

NR Not reported.

RPD Relative Percent Difference

Linda Eshelman
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

U.S. GEOLOGICAL SURVEY, WRD, SURFACE-WATER QUALITY FIELD NOTES

BQA-1 3/92 (3rd printing, 1st ed.)

Proj. Name, No. MARICOPA URBAN - 967116800 Date NOVEMBER 29, 2002

Station ARROW Sta.No. 333751112133801

Sampled By HEMAUER & FOSSUM Mean Time 2228 SMS Cntrl. No.

Record No. 00300060 Sample Purpose (71999) :

SAMPLES COLLECTED

Nutrients ☒ TOC ☐
Major Ions ☐ DOC ☐
SOC ☐ Vol. Filt. ____ mL
BOD ☐ Turbidity ☐
COD ☒ ☐
☐

ORGANICS / TR. ELEMENTS
Pesticide ☐ Unfiltered ☒
VOC ☐ Filtered ☐
BNA ☐ Suspended ☐
☐ Bottom ☐

Sediment Conc. ☐
Sediment Size ☐
Sed. Bot. Material ☐
Sand Split/Break ☐
Radiochemical ☐
Isotope ☐
☐

FIELD MEASUREMENTS

					R	E	
Q. Inst. (00061)	13.8	cfs	meas.	Alkalinity (00419/39086)	32	28	mg/L
Gage Ht (00065)	1.43	ft.	rating est.	Bicarbonate (00450/00453)	39	34	mg/L
Temp. Water (00010)	15.0	°C		Carbonate (00447/00452)	0	0	mg/L
Temp. Air (00020)	15.5	°C		Hydroxide (—)	—	—	mg/L
pH (00400)	7.71	units		E. Coli (31633)	—		col./100 mL; Rmk
Sp. Cond. (00095)	216	µS/cm 25 °C		FC (31625)	—		col./100 mL; Rmk
Dis. Oxy. (00300)	5.76	mg/L		FS (31673)	—		col./100 mL; Rmk
DO Sat. (00301)	—	%		Other:			
Bar. Press. (00025)	732	mm Hg					

SAMPLING CONDITIONS

Location: Wading, cable, ice, boat, bridge, upstr., downstr., side bridge @ ft mile, above, below gage, and

Sampling site: Pool Riffle Open Channel Braided Backwater Sampler Type AUTO - SIGMA

Sample Method: EWI EDI OTHER AUTO SAMPLER Sampler ID

Nozzle size 3/8" Nozzle Made of TEFLON Bottle type, size 8 - 2L GLASS

Sample Split: Churn Cone Other ____ Made of TEFLON

LB ____ RB ____ Stream Width ____ Sampling Pts. CENTROID OF FLOW

Bottom: Bedrock Rock Cobble Gravel Sand Mud Concrete Other

Stage Conditions:
A Not Determined; 4 Stable, low; 5 Falling; 6 Stable, high; 9 Stable, normal; 7 Peak; 8 Rising

LABORATORY SCHEDULES

Lab Schedules Req. (or copy of lab request form attached ☒)

3134

Lab Codes Add (A) Delete (D) :
3072(D), 3074(D)

Observations:
(Codes: 0-none 1-mild 2-moderate 3-serious 4-extreme)
(option: LEAVE BLANK IF NONE)

Floating debris	(01345) :	
Floating garbage	(01320) :	
Floating algae mats	(01325) :	
Fish kill	(01340) :	
Detergent suds	(01305) :	
Turbidity	(01350) :	
Atms. Odor	(01330) :	
Oil-grease	(01300) :	

Sampling		GHT
Start Time		
Mean Time =		
End Time		

Hydrologic Event: 9 Routine samp. A Spg. breakup B Ice Cover
1 Drought 2 Spill 3 Reg. Flow 4 Snowmelt 7 Flood
Other T-STORM Ice Thickness ____ Ice cover ____

Stream color(s): brown green blue gray other

Stream Mixing: Excellent Good Fair Poor Clarity/Turbidity:

Weather: Clear Partly Cloudy Cloudy Light Medium Heavy Snow Rain
Calm Light Breeze Very Gusty Windy Very Cold Warm Hot Other

Other Observations

81395 (MGD) = 0.569
82381 (PRECIP) = 0.32 in.
00129 (MAX5) = 0.36 in/hr.
00135 (STM LENGTH) = 6.52 hours
00132 (DRY DAYS) = 33 days

(Cont. p. 3,4)

Checked by Date

TEMPERATURE Lab Tested Thermometer used? ☐ Yes ☒ No If NO, explain in remarks

Thermometer Checked w/ASTM within ± 0.5°C; Date

AMPULE LOT NUMBERS: nitric acid _____ mercuric chloride _____ nitric acid/potassium dichromate

pH
Mtr W-no. W-495252 METER Make/Model CORNING CHECKMATE 90

electrode no. | electrode type

pH Buffer	pH Buffer Temp °C	Initial Reading	Adj. Reading	Remarks
7.00	18.5	7.00	7.00	OK
10.01	18.5	10.01	10.01	OK

☒ unfiltered sample ☐ filtered sample

Temp correction factors for buffers applied? ☒ YES ☐ NO

stirrer used? ☐ YES ☒ NO
if yes, ☐ magnetic stirrer ☐ manually stirred

pH subsample from or pH measurement location : Churn sample bottle (single point at) ____ sta ____ depth ____ vertical avg of ____ points
x-sec average of ____ points

Sample Temp = 15.0°C

FIELD pH = 7.71 USE: 7.71

SPECIFIC CONDUCTANCE
Mtr W-no. W-495252 METER Make/Model CORNING CHECKMATE 90

probe no.

standard value	Temp Std °C	Initial Reading	Adj. Reading	Remarks
0	18.5	0	0	OK
1413 µS	18.5	1413 µS	1413 µS	OK

correction factor applied? ☐ YES ☒ NO
☒ auto temp compensated meter
☐ manual temp compensated meter
corr. factor = _____

SC subsample from or SC measurement location : Churn sample bottle (single point at) ____ sta ____ depth ____ vertical avg of ____ points
x-sec avg of ____ points

FIELD CONDUCTANCE = 216 µS USE: 216 µS

DISSOLVED OXYGEN W-no. _____ METER Make/Model YSI-55

D.O. measurement location or D.O. subsample from : (single point at) ____ sta ____ depth ____ vertical avg of ____ points ____ x-sec avg of ____ points
BOD bottle

Calibration :
☒ Air Calibration in Water
☐ Air-Saturation Deionized Water
☐ Air Calibration Chamber in Air
☐ Calibration by Winkler Titration (attach Supplementary Winkler page)

D.O. Zero Check (using zero D.O. solution) ☐ YES ☒ NO
Thermister Check ☐ YES ☒ NO

BAR. PRESS. 732 mm Hg; (mm = in. X 25.4)
Salinity Corr. Factor —
H_2O Temp. 15.0 °C
Chart D.O. Sat. 9.69 mg/L
stirrer used? ☐ YES ☒ NO if yes, ☐ magnetic stirrer ☐ manually stirred
Meter D.O. Sat. 9.69 mg/L; Adjusted to — (if corr. factor applicable)

DISSOLVED OXYGEN IN STREAM = 5.76 mg/L

QUALITY ASSURANCE SAMPLES
Were quality assurance samples collected?
☐ YES ☒ NO If YES indicate type(s) :

	Organic-free	DI	water from sampling site
Replicate	☐	☐	☐
Spike	☐	☐	☐
Field Blank	☐	☐	Supplementary page w/additional QA sample info attached ☐
Trip Blank	☐	☐	

Other ☐ Indicate Type(s) :

Calibration Notes and Remarks
USED INTERNAL THERMISTOR IN CORNING METER.

ALKALINITY

pH	△ pH	Vol acid DC or mL	△Vol acid DC or mL	△ pH / △ Vol acid
RAW				
6.86		0		
5.80	1.06	100	100	.011
5.67	.13	110	10	.013
5.50	.17	120	10	.017
5.32	.18	130	10	.018
5.10	.22	140	10	.022
4.82	.28	150	10	.028
4.50	.32	160	10	.032
4.25	.25	170	10	.025
4.05	.20	180	10	.020
FILTERED				
6.98		0		
5.81	1.17	80	80	.015
5.68	.13	90	10	.013
5.55	.13	100	10	.013
5.34	.21	110	10	.021
5.05	.29	120	10	.029
4.75	.30	130	10	.030
4.45	.30	140	10	.030
4.21	.24	150	10	.024
4.01	.20	160	10	.020

Acid: 1.60 N 0.1600 N 0.01639N OTHER _____

Acid Lot No. : _____

Sample Volume : 50 mL

☒ Filtered ☒ Unfiltered

Sample stirred : ☒ magnetically ☐ manually

pH: Start _____ End _____

	R	F
DC (Digital Counts) or Vol. titrated at End Point near pH 8.3 :	0	0
Digital Counts or Vol. titrated at End Point near pH 4.5 :	160	140

☒ Incremental Equivalence ☐ Fixed End Point ☐ Gran Titration

Date 12/4/02 Time 1230

CALCULATIONS :

$$CO_3^{-2} = A \times \frac{F_1}{\text{mL sample}} \times CF \;*$$

$$HCO_3^{-1} = [B - 2(A)] \times \frac{F_2}{\text{mL sample}} \times CF; \;*$$

$$\text{ALKALINITY as } CaCO_3 = B \times \frac{F_3}{\text{mL sample}} \times CF \;*$$

	R	F
A = DC or mLs acid from initial pH to endpoint near 8.3 =	0	0
B = DC or mLs acid from initial pH to endpoint near 4.5 =	160	140

* APPLY CORRECTION FACTOR (CF) IF ACID USED FOR BURETTE TITRATION HAS NONSTANDARD NORMALITY– CF = corr. factor = H_2SO_4 normality/0.01639

FACTORS	DIGITAL COUNT TITRATION (DC) Using 0.1600 normal	Using 1.60 normal
F_1	12.0	120
F_2	12.2	122
F_3	10.0	100

FACTORS	BURETTE * TITRATION (mL) Using ml of 0.01639 normal H_2SO_4
F_1	983.5
F_2	1000
F_3	820.2

(IMPORTANT : CF NOT APPLICABLE FOR THE DIGITAL TITRATION FACTORS SHOWN; use only with nonstandard normality BURETTE titration)

	R	F	
ALKALINITY (00419/39086)	32	28	mg/L as $CaCO_3$
BICARBONATE (00450/00453)	39	34	mg/L as HCO_3^{-1}
CARBONATE (00447/00452)	0	0	mg/L as CO_3^{-2}

NOTE: ATTACH OUTPUT COPY IF ALKALINITY VALUES ARE CALCULATED USING A COMPUTER PROGRAM

OBSERVATIONS/CALCULATIONS :

DelMar Analytical
2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9596 FAX (858) 505-9689
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

CHAIN OF CUSTODY FORM

Client Name/Address: MATT OLLER
FCDMC
2801 W. DURANGO
PHOENIX, AZ 85009

Project/PO Number: GLENDALE
NPDES STORMWATER

Project Manager: MATT OLLER

Phone Number: 602-506-4663

Sampler: HEMAUER & FOSSUM

Fax Number: 602-506-4601

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	BOD[1]	FECAL STREP[1]	FECAL COLIFORM[1]	E. COLI[1]	OIL + GREASE[2]	624[2]				Special Instructions
ARROW - GRAB	S	MISC.	8	11/30/02	0800	4	X	X	X	X	X	X		PLK0832-01		SEE CONTRACT

Analysis Required

Relinquished By: [signature] Date/Time: 11/30/02 1020
Received by: Date/Time: 11/30/02

Relinquished By: Date/Time:
Received by: LE Date/Time:

Relinquished By: LE 11/30/02 Date/Time:
Received in Lab by: [signature] Date/Time: 11/30/02 1020

Turnaround Time: (Check) SEE CONTRACT
same day ____ 72 hours ____
24 hours ____ 5 days ✓
48 hours ____ normal ✓

Sample Integrity: (Check)
intact ✓ on ice ✓ 3C

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Del Mar Analytical
2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 92406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

CHAIN OF CUSTODY FORM

Quote #: _____ Page 1 of 1

Client Name/Address: MATT OLLER, FCDMC, 2801 W. DURANGO, PHOENIX, AZ 85009

Project/PO Number: GLENDALE NPDES STORMWATER

Project Manager: MATT OLLER

Phone Number: 602-506-4663

Sampler: HEMAUER & FOSSUM

Fax Number: 602-506-4601

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	SB, AR, BE, CD, CR, CU, PB (TOTAL & DISS)	HG, NI, SE, AG, TL, ZN	608, 625	TDS / TSS	NH_3, NO_3, NO_2	NO_2 + NO_3	NORG, TKN	PHENOLICS, CN, TOC, COD, CL	ALKALINITY HARDNESS	SULFATE, DISS.				Special Instructions
ARROW - COMP	S	5 gal glass	1		N	X	X	X	X	X	X	X	X	X	X			PLK0839-01	SEE CONTRACT

Relinquished By:	Date/Time:	Received by:	Date/Time:	Turnaround Time: (Check) SEE CONTRACT
[signature]	11/30/02 1022			same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received by:	Date/Time:	24 hours ____ 5 days ____
				48 hours ____ normal ✓
Relinquished By:	Date/Time:	Received in Lab by: [signature]	Date/Time: 113002/1022	Sample Integrity: (Check) intact ✓ on ice ✓ 3°C

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

COC-GB

Del Mar Analytical

2852 Alton Ave., Irvine, CA 9262 Ph (949) 261-1022 Fax (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1046
9484 Chesapeake Drive, Suite 805, San Diego, CA 9212 Ph (619) 505-9596 Fax (619) 505-9689
9830 South 51st Street, Suite B-120, Phoenix, AZ 8504 Ph (480) 785-0043 Fax (480) 785-0851

CHAIN OF CUSTODY FORM
SUBCONTRACT ORDER

O 2/2008

SENDING LABORATORY:
Del Mar Analytical - Phoenix
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044
Phone: (480) 785-0043
Fax: (480) 785-0851
Project Manager: Linda Eshelman
Project: PLK0839-MCFC

RECEIVING LABORATORY:
Transwest Geochem (out)
3725 E. Atlanta Ave Ste 1
Phoenix, AZ 85040-2961
Phone: 602-437-0330
Fax: 602-470-0660

SAMPLE INTEGRITY:
Please complete upon receipt
intact: ☑ Y ☐ N SH Initials
on ice: ☑ Y ☐ N SH Initials
Temp: °C ☑ Y ☐ N SH Initials
1.8

Sample Description	Sample Matrix	Sampling Date/Time	Analysis Required	Date Due	Expires	# of Cont.	Sample Bottle Type
PLK0839-01	Water	11/30/02 08:00	NO3/NO2-N (353.2)	Standard TAT	12/28/02 08:00	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other

Special Instructions:
None

pH=1

Relinquished By: 12-2-2 Date/Time: 1415
Received By: Date/Time: 12/2/02 1415

Relinquished By Date/Time:
Received By: Date/Time:

U.S. GEOLOGICAL SURVEY – NATIONAL WATER QUALITY LABORATORY
ANALYTICAL SERVICES REQUEST

THIS SECTION MANDATORY FOR SAMPLE LOGIN

NWIS RECORD NUMBER / SAMPLE TRACKING ID	User Code	Project Account	LAB USE ONLY / NWQL LABORATORY ID
	0 0 4	9671 [redacted] 1 6 8 0 0	

STATION ID	Begin Date (YYYYMMDD)	Begin Time	Medium Code	Sample Type
3 3 3 7 5 1 1 1 2 1 3 3 8 0 1	2 0 0 2 1 1 2 9	2 2 2 8	9	9

District Contact Phone Number	End Date (YYYYMMDD)	End Time	District Contact Email
480-736-1093 Ext. 230			kdfossum@usgs.gov

SITE / SAMPLE / SPECIAL PROJECT INFORMATION (Optional)

State	County	Geologic Unit Code	Analysis Status*	Analysis Source*	Hydrologic Condition*	Hydrologic Event*	Chain of Custody	Sample Set
04	013		H	9	9	J		1

NWQL Proposal Number	NWQL Contact Name	NWQL Contact Email	Program/Project

Station Name: ARROW **Field ID:** 333751112133801

Comments to NWQL: **Pared NPDES Sample. Send to Ocala Lab.**

NEEDS EPA HOLDING TIMES

Hazard (please explain):

ANALYTICAL WORK REQUESTS: SCHEDULES AND LAB CODES (CIRCLE A=add D=delete)

SCHED 1: 3134 SCHED 2: ____ SCHED 3: ____ SCHED 4: ____ SCHED 5: ____ SCHED 6: ____

Lab Code: 3072 A (D)	Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D
Lab Code: 3074 A (D)	Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D
Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D	Lab Code: ____ A D

SHIPPING INFORMATION (Please fill in number of containers sent)

	ALF	1	COD		FA		FCN		IQE		IRM	1	RA	1	RU		SUR		TPCN
	BGC		CRB		FAM	1	FU		IQL		MBAS		RAM		RUR	1	SUSO		UAS
	C18		CU		FAR		FUS		IQM		OAG		RAR		RURCT		TBI	1	WCA
	CC		CUR	1	FCA		GCC		IRE		PHE		RCB		RURCV		TBY		
	CHY		DOC		FCC		GCV		IRL		PIC		RCN		RUS		TOC	1	RCC

NWQL Login Comments:

Collected by: Kenneth D. Fossum Phone No. 480-736-1093 Ext. 230 Date Shipped: 12/2/02

FIELD VALUES

Lab/P Code	Value	Remark	Lab/P Code	Value	Remark	Lab/P Code	Value	Remark
21/00095 Specific Conductance uS/cm @ 25 deg C	216		51/00400 pH Standard Units	7.71		2/39086 Alkalinity – IT mg/L as CaCO3	—	—
/			/			/		

Field Comments:

*MANDATORY FOR NWIS

Revised 04/00

Chain of Custody Forms

FedEx Express USA Airbill

FedEx Tracking Number 8358 4750 1305

Form I.D. No. 0215

Sender's Copy

1 From Please print and press hard.

Date 12/2/02 Sender's FedEx Account Number 1426-9217-1

Sender's Name KEN FOSSUM Phone (480) 736-1090

Company US GEOLOGICAL SURVEY

Address 1769 W UNIVERSITY DR

Dept./Floor/Suite/Room

City TEMPE State AZ ZIP 85281

2 Your Internal Billing Reference First 24 characters will appear on invoice. 9671-16800

3 To

Recipient's Name OCALA LAB Phone (352) 237-5514

Company U.S. GEOLOGICAL SURVEY

Address 4500 S.W. 40TH AVE

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Dept./Floor/Suite/Room

City OCALA State FL ZIP 34470-5731

Try online shipping at fedex.com

By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.

Questions? Visit our Web site at fedex.com or call 1.800.Go.FedEx® 800.463.3339.

0223873843

4a Express Package Service — Packages up to 150 lbs. Delivery commitment may be later in some areas.

- [x] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service — Packages over 150 lbs. Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging — * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [x] Other

6 Special Handling — Include FedEx address in Section 3.

- [ ] SATURDAY Delivery Available ONLY for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] HOLD Weekday at FedEx Location NOT Available for FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. Credit Card No. Exp. Date

Total Packages	Total Weight	Total Declared Value†
1	30	$ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details.

FedEx Use Only

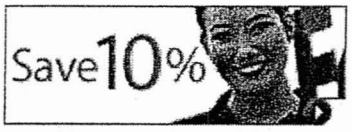
8 Release Signature Sign to authorize delivery without obtaining signature.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

447

SRF • Rev. Date 4/02 • Part #157610S • ©1994–2002 FedEx • PRINTED IN U.S.A.

FULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE



Track Shipments

Quick Help

Detailed Results

Tracking Number	835847501305
Reference Number	9671-16800
Ship Date	12/02/2002
Delivered To	Recept/Frnt desk
Delivery Location	OCALA FL
Delivery Date/Time	12/03/2002 10:37
Signed For By	A.HOMBLE
Service Type	Priority Overnight

Tracking Options
- Obtain a Signature Proof of Delivery
- Email these tracking results to one or more recipients
- Track More Shipments

Scan Activity	Date/Time	Comments
DeliveredOCALA FL	12/03/2002 10:37	
Arrived at Sort FacilityMEMPHIS TN	12/03/2002 10:01	
On FedEx vehicle for deliveryOCALA FL	12/03/2002 09:24	
Arrived at FedEx Destination LocationOCALA FL	12/03/2002 09:12	
Left FedEx RampORLANDO FL	12/03/2002 07:47	
Arrived at FedEx RampORLANDO FL	12/03/2002 06:54	
Left FedEx Sort FacilityMEMPHIS TN	12/03/2002 05:50	
Left FedEx RampPHOENIX AZ	12/02/2002 20:34	
Left FedEx Origin LocationTEMPE AZ	12/02/2002 19:37	
Arrived at FedEx RampPHOENIX AZ	12/02/2002 18:55	
Picked up by FedExTEMPE AZ	12/02/2002 14:12	

Email Your Detailed Tracking Results

Enter your email (optional), up to three email addresses as recipients, add your message, and click on **Send Email**.

From

To

To

To

Add a message to this email.

Send Email

fedex.com Terms of Use | Contact Us!
This site is protected by copyright and trademark laws under U.S. and International law. Review our privacy policy. All rights reserved.
© 1995-2002 FedEx

FedEx Express
Customer Support Trace
3875 Airways Boulevard
Module H, 4th Floor
Memphis, TN 38116

U.S. Mail: PO Box 727
Memphis, TN 38194-4643

Telephone: 901-369-3600

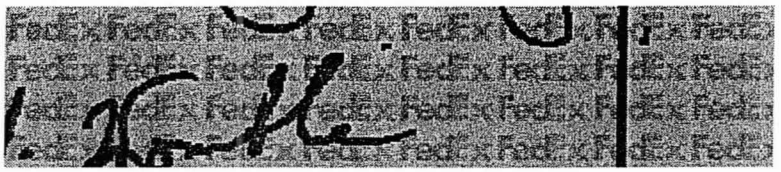
12/5/2002

Dear Customer:

Here is the proof of delivery for the shipment with tracking number **835847501305**. Our records reflect the following information.

Delivery Information:

Signed For By: A.HOMBLE



Delivery Location: 4500 SW 40TB AVE
Delivery Date: December 3, 2002
Delivery Time: 1037

Shipping Information:

Tracking No: 835847501305

Ship Date: December 2, 2002

Recipient:
OCALA LAB
U S GEOLOGICAL SURVEY
4500 S W 40TH AVE
OCALA, FL 34470
US

Shipper:
KEN FOSSUM
US GEOLOGICAL SURVEY
1769 W UNIVERSITY DR
TEMPE, AZ 85281
US

Shipment Reference Information: 9671-16800

Thank you for choosing FedEx Express. We look forward to working with you in the future.

FedEx Worldwide Customer Service
1-800-Go-FedEx®
Reference No.: R2002120500065023211

U.S. GEOLOGICAL SURVEY, WRD, SURFACE-WATER QUALITY FIELD NOTES

BQA-1 3/92 (3rd printing, 1st ed.)

Proj. Name, No. MARICOPA URBAN - 9671 16800 Date [redacted] NOVEMBER 29, 2002

Station BUTLER Sta.No. 333346112104501

Sampled By HEMAKER + FOSSUM Mean Time 2312 SMS Cntrl. No.

Record No. Sample Purpose (71999) :

SAMPLES COLLECTED

Nutrients ☐ TOC ☐
Major Ions ☐ DOC ☐
SOC ☐ Vol. Filt. ____ mL
BOD ☐ Turbidity ☐
COD ☐ ____ ☐
____ ☐

ORGANICS / TR. ELEMENTS
Pesticide ☐ Unfiltered ☐
VOC ☐ Filtered ☐
BNA ☐ Suspended ☐
____ ☐ Bottom ☐

Sediment Conc. ☐
Sediment Size ☐
Sed. Bot. Material ☐
Sand Split/Break ☐
Radiochemical ☐
Isotope ☐
☐

FIELD MEASUREMENTS

				R	F	
Q. Inst. (00061)	0.062	cfs	meas.	Alkalinity (00419/39086)	—	— mg/L
Gage Ht (00065)	0.062	ft.	rating est.	Bicarbonate (00450/00453)	—	— mg/L
Temp. Water (00010)	15.0	°C		Carbonate (00447/00452)	—	— mg/L
Temp. Air (00020)	15.0	°C		Hydroxide (—)	—	— mg/L
pH (00400)	7.62	units		E. Coli (31633)	—	col./100 mL; Rmk
Sp. Cond. (00095)	239	µS/cm 25 °C		FC (31625)	—	col./100 mL; Rmk
Dis. Oxy. (00300)	6.22	mg/L		FS (31673)	—	col./100 mL; Rmk
DO Sat. (00301)	—	%		Other:		
Bar. Press. (00025)	732	mm Hg				

SAMPLING CONDITIONS

Location: Wading, cable, ice, boat, bridge, upstr., downstr., side bridge @ ft mile, above, below gage, and

Sampling site: Pool Riffle Open Channel Braided Backwater Sampler Type AUTO-SIGMA

Sample Method: EWI EDI OTHER AUTO SAMPLER Sampler ID

Nozzle size 3/8" Nozzle Made of TEFLON Bottle type, size 8 - 2L GLASS

Sample Split Churn Cone Other ____ Made of TEFLON

LB ____ RB ____ Stream Width ____ Sampling Pts. CENTROID OF FLOW

Bottom: Bedrock Rock Cobble Gravel Sand Mud Concrete Other

LABORATORY SCHEDULES

Lab Schedules Req. (or copy of lab request form attached ☐)

SAMPLES TO DELMAR ONLY

Lab Codes Add (A) Delete (D) :

Stage Conditions:
A Not Determined
4 Stable, low
9 Stable, normal
5 Falling
6 Stable, high
7 Peak
8 Rising

Observations:
(Codes: 0-none 1-mild 2-moderate 3-serious 4-extreme)
(option: LEAVE BLANK IF NONE)

Floating debris	(01345) :	
Floating garbage	(01320) :	
Floating algae mats	(01325) :	
Fish kill	(01340) :	
Detergent suds	(01305) :	
Turbidity	(01350) :	
Atms. Odor	(01330) :	
Oil-grease	(01300) :	

Hydrologic Event: 9 Routine samp. A Spg. breakup B Ice Cover
1 Drought 2 Spill 3 Reg. Flow 4 Snowmelt 7 Flood
Other I-STORM Ice Thickness ____ Ice cover

Stream color(s): brown green blue gray other

Stream Mixing: Excellent Good Fair Poor Clarity/Turbidity:

Weather: Clear Partly Cloudy Cloudy Light Medium Heavy Snow Rain
Calm Light Breeze Very Gusty Windy Very Cold Warm Hot Other

Other Observations

81395 (MGD) = 0.0007 PARTIAL
82381 (PRECIP) = 0.44 inches SAMPLE
00129 (MAX 5) = 0.96 in/hr. <1L
00135 (STM. LENGTH) = 7.53 hours
00132 (DRY DAYS) = 33 days DISCARDED

(Cont. p. 3,4)

Sampling	GHT
Start Time	
Mean Time =	
End Time	

Checked by Date

TEMPERATURE Lab Tested Thermometer used? ☐ Yes ☒ No If NO, explain in remarks

Thermometer Checked w/ASTM within ± 0.5°C; Date

AMPULE LOT NUMBERS: nitric acid _____ mercuric chloride _____ nitric acid/potassium dichromate

pH

Mtr W-no. W-495252 METER Make/Model CORNING CHECKMATE 90

electrode no. electrode type

pH Buffer	pH Buffer Temp °C	Initial Reading	Adj. Reading	Remarks
7.00	18.5	7.00	7.00	OK
10.01	18.5	10.01	10.01	OK

☒ unfiltered sample ☐ filtered sample

Temp correction factors for buffers applied? ☒ YES ☐ NO

stirrer used? ☐ YES ☒ NO

if yes, ☐ magnetic stirrer ☐ manually stirred

pH subsample from or pH measurement location : Churn sample bottle (single point at) ____ sta ____ depth vertical avg of ____ points x-sec average of ____ points

Sample Temp = 15.0°C

FIELD pH = 7.62 USE: 7.62

SPECIFIC CONDUCTANCE

Mtr W-no. W-495252 METER Make/Model CORNING CHECKMATE 90

probe no.

standard value	Temp Std °C	Initial Reading	Adj. Reading	Remarks
0	18.5	0	0	OK
1413 µS	18.5	1413 µS	1413 µS	OK

correction factor applied? ☐ YES ☒ NO

☒ auto temp compensated meter

☐ manual temp compensated meter

corr. factor = _____

SC subsample from or SC measurement location : Churn sample bottle (single point at) ____ sta ____ depth vertical avg of ____ points x-sec avg of ____ points

FIELD CONDUCTANCE = 239 µS USE: 239 µS

DISSOLVED OXYGEN W-no. _____ METER Make/Model YSI-55

D.O. measurement location or D.O. subsample from : (single point at) ____ sta ____ depth vertical avg of ____ points x-sec avg of ____ points BOD bottle

Calibration :

☒ Air Calibration in Water ☐ Air Calibration Chamber in Air

☐ Air-Saturation Deionized Water ☐ Calibration by Winkler Titration (attach Supplementary Winkler page)

D.O. Zero Check (using zero D.O. solution) ☐ YES ☒ NO

Thermister Check ☐ YES ☒ NO

BAR. PRESS. 732 mm Hg; (mm = in. X 25.4)

Salinity Corr. Factor —

H_2O Temp. 15.0 °C

Chart D.O. Sat. 9.69 mg/L

stirrer used? ☐ YES ☒ NO if yes, ☐ magnetic stirrer ☐ manually stirred

Meter D.O. Sat. 9.69 mg/L; Adjusted to — (if corr. factor applicable)

DISSOLVED OXYGEN IN STREAM = 6.22 mg/L

QUALITY ASSURANCE SAMPLES

Were quality assurance samples collected? ☐ YES ☒ NO If YES indicate type(s) :

	Organic-free	DI	water from sampling site
Replicate	☐	☐	☐
Spike	☐	☐	☐
Field Blank	☐	☐	Supplementary page w/additional QA sample info attached ☐
Trip Blank	☐	☐	

Other ☐ Indicate Type(s) :

Calibration Notes and Remarks

USED INTERNAL THERMISTOR IN CORNING METER.

Del Mar Analytical
2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
10[redacted]oley D[redacted]A, Colt[redacted]2324 [redacted]09) 37[redacted]
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 7[redacted]44 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9589
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd., Suite 3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

CHAIN OF CUSTODY FORM

Client Name/Address: MATT OLLER
FCDMC
2801 W. DURANGO
PHOENIX, AZ 85009

Project/PO Number: GLENDALE NPDES STORMWATER

Project Manager: MATT OLLER

Phone Number: 602-506-4663

Sampler: FOSSUM/HEMAUER

Fax Number: 602-506-4601

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	BOD 1	FECAL STREP 1	FECAL COLIFORM 1	E. COLI 1	OIL+GREASE 2	624 2				Special Instructions
BUTLER-GRAB	S	MISC.	8	11/30/02	0700	Y	X	X	X	X	X	X				PLK0844-01

no 9

Relinquished By: [signature] Date/Time: 11/30/02 1020
Received by: Date/Time:

Relinquished By: Date/Time:
Received by: Date/Time:

Relinquished By: Date/Time:
Received in Lab by: [signature] Date/Time: 11/30/02 1020

Turnaround Time: (Check) SEE CONTRACT
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal ✓

Sample Integrity: (Check)
intact ✓ on ice ✓ 3°C

PLEASE NOTE TEMP.

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92606 (949) 26[illegible]022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) [illegible]7 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) [illegible]4 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9589
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd., Suite 3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

CHAIN OF CUSTODY FORM

Client Name/Address: MATT OLLER, FCDMC, 2801 W. DURANGO, PHOENIX, AZ 85009

Project/PO Number: GLENDALE NPDES STORMWATER

Project Manager: MATT OLLER

Phone Number: 602-506-4663

Sampler: FOSSUM/HEMAUER

Fax Number: 602-506-4601

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	SB, AR, BA, CO, CR, CU, PB (TOTAL + DISS.)	HG, NI, SE, AG, TL, ZN	608, 625	TDS/TSS	NH3, NO3, NO2, NO2+NO3	NO2, TKN, P (TOTAL, DISS, ORTHO)	PHENOLICS, CN-, TOC, COD, CL-	ALKALINITY	HARDNESS	SULFATE, DISS.	Special Instructions
BUTLER - COMP.	SW	2L ~~Spgl~~ glass	1	11/29/02	2312	N	X	X	X	X	X	X	X	X	X	X	SEE CONTRACT

DISCARDED

Relinquished By:	Date /Time:	Received by:	Date /Time:	Turnaround Time: (Check) SEE CONTRACT
[signature]	11/30/02 1022			same day ____ 72 hours ____
Relinquished By:	Date /Time:	Received by:	Date /Time:	24 hours ____ 5 days ____
				48 hours ____ normal ✓
Relinquished By:	Date /Time:	Received in Lab by: [signature]	Date /Time: 11/30/02/1022	Sample Integrity: (Check) intact ✓ on ice ✓

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

PLEASE NOTE TEMP.

U.S. GEOLOGICAL SURVEY, WRD, SURFACE-WATER QUALITY FIELD NOTES

BQA-1 3/92 (3rd printing, 1st ed.)

Proj. Name, No. MARICOPA URBAN-967116800 Date NOVEMBER 29, 2002

Station CITRUS Sta.No. 333840112123601

Sampled By HEMAUER + FOSSUM Mean Time 2318 SMS Cntrl. No.

Record No. Sample Purpose (71999) :

SAMPLES COLLECTED

Nutrients ☐ TOC ☐
Major Ions ☐ DOC ☐
SOC ☐ Vol. Filt. ____ mL
BOD ☐ Turbidity ☐
COD ☐ ____ ☐
____ ☐

ORGANICS / TR. ELEMENTS
Pesticide ☐ Unfiltered ☐
VOC ☐ Filtered ☐
BNA ☐ Suspended ☐
☐ Bottom ☐

Sediment Conc. ☐
Sediment Size ☐
Sed. Bot. Material ☐
Sand Split/Break ☐
Radiochemical ☐
Isotope ☐
☐

LABORATORY SCHEDULES
Lab Schedules Req. (or copy of lab request form attached ☐)

SAMPLES TO DELMAR ONLY

Lab Codes Add (A) Delete (D) :

FIELD MEASUREMENTS

				R	F	
Q. Inst. (00061)	0.36	cfs	meas.	Alkalinity (00419/39086)	—	— mg/L
Gage Ht (00065)	0.22	ft.	rating est.	Bicarbonate (00450/00453)	—	— mg/L
Temp. Water (00010)	16.5	°C		Carbonate (00447/00452)	—	— mg/L
Temp. Air (00020)	15.5	°C		Hydroxide ( )	—	— mg/L
pH (00400)	8.00	units		E. Coli (31633)	—	col./100 mL; Rmk
Sp. Cond. (00095)	171	µS/cm 25 °C		FC (31625)	—	col./100 mL; Rmk
Dis. Oxy. (00300)	7.13	mg/L		FS (31673)	—	col./100 mL; Rmk
DO Sat. (00301)	—	%		Other:		
Bar. Press. (00025)	732	mm Hg				

SAMPLING CONDITIONS

Location: Wading, cable, ice, boat, bridge, upstr., downstr., side bridge @ ft mile, above, below gage, and

Sampling site: Pool Riffle Open Channel Braided Backwater Sampler Type AUTO-SIGMA

Sample Method: EWI EDI OTHER AUTO SAMPLER Sampler ID

Nozzle size 3/8" Nozzle Made of TEFLON Bottle type, size 8 - 2L GLASS

Sample Split: Churn Cone Other ____ Made of TEFLON

LB ____ RB ____ Stream Width ____ Sampling Pts. CENTROID OF FLOW

Bottom: Bedrock Rock Cobble Gravel Sand Mud Concrete Other

Stage Conditions:
A Not Determined
4 Stable, low
9 Stable, normal
5 Falling
6 Stable, high
7 Peak
8 Rising

Hydrologic Event: 9 Routine samp. A Spg. breakup B Ice Cover
1 Drought 2 Spill 3 Reg. Flow 4 Snowmelt 7 Flood
Other J-STORM Ice Thickness ____ Ice cover

Stream color(s): brown green blue gray other

Stream Mixing: Excellent Good Fair Poor Clarity/Turbidity:

Weather: Clear Partly Cloudy Cloudy Light Medium Heavy Snow Rain
Calm Light Breeze Very Gusty Windy Very Cold Warm Hot Other

Observations:
(Codes: 0-none 1-mild 2-moderate 3-serious 4-extreme)
(option: LEAVE BLANK IF NONE)

Floating debris	(01345) :	
Floating garbage	(01320) :	
Floating algae mats	(01325) :	
Fish kill	(01340) :	
Detergent suds	(01305) :	
Turbidity	(01350) :	
Atms. Odor	(01330) :	
Oil-grease	(01300) :	

Sampling		GHT
Start Time		
Mean Time =		
End Time		

Other Observations

81395 (MGD) = 0.019 PARTIAL
82381 (PRECIP) = 0.30 inches SAMPLE
00129 (MAX 5) = 0.36 in/hr 2L
00135 (STM. LENGTH) = 7.43 hours
00132 (DRY DAYS) = 33 days DISCARDED

(Cont. p. 3,4)

Checked by Date

TEMPERATURE

Lab Tested Thermometer used? ☐ Yes ☒ No — If NO, explain in remarks

Thermometer Checked w/ASTM within ± 0.5 °C; Date

AMPULE LOT NUMBERS: nitric acid _____ mercuric chloride _____

nitric acid/potassium dichromate

pH

Mtr W-no. W-495252 METER Make/Model CORNING CHECKMATE 90

electrode no. electrode type

pH Buffer	pH Buffer Temp °C	Initial Reading	Adj. Reading	Remarks
7.00	18.5	7.00	7.00	OK
10.01	18.5	10.01	10.01	OK

☒ unfiltered sample ☐ filtered sample

Temp correction factors for buffers applied? ☒ YES ☐ NO

stirrer used? ☐ YES ☒ NO

if yes, ☐ magnetic stirrer ☐ manually stirred

pH subsample from or pH measurement location : Churn sample bottle (single point at) ____ sta ____ depth vertical avg of ____ points

x-sec average of ____ points

Sample Temp = 16.5 °C

FIELD pH = 8.00 USE: 8.00

SPECIFIC CONDUCTANCE

Mtr W-no. W-495252 METER Make/Model CORNING CHECKMATE 90

probe no.

standard value	Temp Std °C	Initial Reading	Adj. Reading	Remarks
0	18.5	0	0	OK
1413 µS	18.5	1413 µS	1413 µS	OK

correction factor applied? ☐ YES ☒ NO

☒ auto temp compensated meter

☐ manual temp compensated meter

corr. factor = _____

SC subsample from or SC measurement location : Churn sample bottle (single point at) ____ sta ____ depth vertical avg of ____ points

x-sec avg of ____ points

FIELD CONDUCTANCE = 170.7 µS USE: 171 µS

DISSOLVED OXYGEN

W-no. _____ METER Make/Model YSI-55

D.O. measurement location or D.O. subsample from : (single point at) ____ sta ____ depth vertical avg of ____ points x-sec avg of ____ points

BOD bottle

Calibration :

☒ Air Calibration in Water ☐ Air Calibration Chamber in Air

☐ Air-Saturation Deionized Water ☐ Calibration by Winkler Titration (attach Supplementary Winkler page)

D.O. Zero Check (using zero D.O. solution) ☐ YES ☒ NO

Thermister Check ☐ YES ☒ NO

BAR. PRESS. 732 mm Hg; (mm = in. X 25.4)

Salinity Corr. Factor —

H_2O Temp. 16.5 °C

Chart D.O. Sat. 9.38 mg/L

stirrer used? ☐ YES ☒ NO if yes, ☐ magnetic stirrer ☐ manually stirred

Meter D.O. Sat. 9.38 mg/L; Adjusted to — (if corr. factor applicable)

DISSOLVED OXYGEN IN STREAM = 7.13 mg/L

QUALITY ASSURANCE SAMPLES

Were quality assurance samples collected?

☐ YES ☒ NO If YES indicate type(s) :

	Organic-free	DI	water from sampling site
Replicate	☐	☐	☐
Spike	☐	☐	☐
Field Blank	☐	☐	Supplementary page w/additional QA sample info attached ☐
Trip Blank	☐	☐	

Other ☐ Indicate Type(s) :

Calibration Notes and Remarks

USED INTERNAL THERMISTOR IN CORNING METER

Del Mar Analytical
285[redacted]ve., Irv[redacted]92606 [redacted] (949) 26[redacted]
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) [redacted]67 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) [redacted]44 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9589
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd., Suite 3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

CHAIN OF CUSTODY FORM

Client Name/Address: MATT OLLER
FCDMC
2801 W. DURANGO
PHOENIX, AZ 85009

Project/PO Number: GLENDALE
NPDES STORMWATER

Project Manager: MATT OLLER

Phone Number: 602-506-4663

Sampler: HEMAUER & FOSSUM

Fax Number: 602-506-4601

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	BOD[1]	FECAL STREP[1]	FECAL COLIFORM[1]	E. COLI[1]	OIL + GREASE[2]	624[2]				Special Instructions
CITRUS - GRAB	S	MISC.	8	11/30/02	0730	Y	X	X	X	X	X	X				PLK0833-01
									NO							

Relinquished By:	Date /Time:	Received by:	Date /Time:	Turnaround Time: (Check) SEE CONTRACT
[signature]	11/30/02 1020			same day ____ 72 hours ____
Relinquished By:	Date /Time:	Received by:	Date /Time:	24 hours ____ 5 days ____
	LE 11/30/02	LE	11-30-02	48 hours ____ normal ✓
Relinquished By:	Date /Time:	Received in Lab by:	Date /Time:	Sample Integrity: (Check)
		[signature]	11/30/02 1020	intact ✓ on ice ✓ 3°C

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

PLEASE NOTE TEMP

Del Mar Analytical
2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
7277 Hayvenhurst, Suite B-12, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779-1843
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9596 FAX (858) 505-9689
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

CHAIN OF CUSTODY FORM

Client Name/Address: MATT OLLER
FCDMC
2801 W. DURANGO
PHOENIX, AZ 85009

Project/PO Number: GLENDALE
NPDES STORMWATER

Project Manager: MATT OLLER

Phone Number: 602-506-4663

Sampler: HEMAUER & FOSSUM

Fax Number: 602-506-4601

Analysis Required (TOTAL & DISS.)

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	SB, AR, BE, CD, CR, CU, PB	HG, NI, SE, AG, TL, ZN	608, 625	TDS/TSS	NH3, NO3, NO2, NO2+NO3	NO3, TKN	PHENOLICS (TOTAL, DISS, ORTHO), CN, TOC	COD, CL-	ALKALINITY, HARDNESS	SULFATE, DISS.	Special Instructions
CITRUS - COMP.	S	glass	1	11/29/02	2318	N	X	X	X	X	X	X	X	X	X	X	SEE CONTRACT

DISCARDED

Relinquished By:	Date/Time:	Received by:	Date/Time:	Turnaround Time: (Check) SEE CONTRAC
Kenneth Fo	11/30/02 1022			same day ____ 72 hours ____
Relinquished By:	Date/Time:	Received by:	Date/Time:	24 hours ____ 5 days ____
				48 hours ____ normal ✓
Relinquished By:	Date/Time:	Received in Lab by:	Date/Time:	Sample Integrity: (Check)
		[illegible]	113002/1022	intact ✓ on ice ✓ 3°C

Note: By relinquishing samples to Del Mar Analytical, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

Operation and maintenance and storm event log sheets

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	10/16/02
ARRIVAL TIME	1025	DEPARTURE TIME	1055	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.0 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 RE-INSTALLED REPAIRED SIGMA SAMPLER,
2 CLEANED SAMPLER AND TUBING, DROPPED OFF CLEAN
3 BOTTLES, CHANGED PHONE BATTERY.

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	10/18/02
ARRIVAL TIME	1230	DEPARTURE TIME	1300	SERVICED BY	FOSSUM / HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.0 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 TESTING BEEPER SYSTEM - OK, RESET

2 SAMPLER

3

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	10/24/02
ARRIVAL TIME	1040	DEPARTURE TIME	1050	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.8 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA W/DTU, RESET, CHANGED BEEPER

2 PROGRAMMING TO CALL USGS.

3

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	10/28/02
ARRIVAL TIME	1045	DEPARTURE TIME	1100	SERVICED BY	FOSSUM HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.8 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA, RESET SAMPLER, CHANGED PHONE

2 BATTERY

3

Date: 9/25/02

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	11/8/02
ARRIVAL TIME	1020	DEPARTURE TIME	1030	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.5 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 CHANGED PHONE BATTERY, PULLED DATA W/ DTU,

2 RESET SAMPLER.

3

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	11/25/02
ARRIVAL TIME	1110	DEPARTURE TIME	1115	SERVICED BY	HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.7 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 CHANGED PHONE BATTERY

2

3

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	11/29/02
ARRIVAL TIME	1353	DEPARTURE TIME	1430	SERVICED BY	HEMAUER/FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.6 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 CHANGED PHONE BATTERY CHANGED SAMPLER BATTERY

2 PULLED DATA, RESET SAMPLER

3

STORM EVENT LOG SHEET

1. Site: ARROW Your Name: HEMAUER & FOSSUM

2. Date: 11/30/02 Time: 0800

SAMPLER PARAMETERS

3. Rainfall: 0.33 in

4. Flow: 1.07 cfs

5. Level: 15.6 in

O&M PARAMETERS

6. Did sampling equipment operate during event? Yes or No? Describe problems.

7. Battery voltage: 12.3 volts

8. Power On or Off? If power off (Mesa), reset circuit breaker and check/replace fuse if necessary.

FIELD PARAMETERS

9. Discharge (flow) at time of grabs 1.07 cfs

10. pH 7.71 su

11. Air Temperature 15.5 deg. C

12. Water Temperature 15.0 deg. C

13. Specific Conductance 216 uS/cm

14. Dissolved Oxygen 5.76 mg/L

15. Barometric Pressure 732 mmHg

GRAB SAMPLES Take grabs from discharge only!

16. Grab samples taken? Yes or No?

17. Preservatives added to bottles? Yes or No?

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	12/03/02
ARRIVAL TIME	0945	DEPARTURE TIME	0955	SERVICED BY	FOSSUM / HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.3 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA, CLEANED INTAKE TUBING, DROPPED OFF

2 CLEAN BOTTLES, RESET SAMPLER, CHANGED PHONE BATTERY

3

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	12/13/02
ARRIVAL TIME	1130	DEPARTURE TIME	1215	SERVICED BY	FOSSUM/HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.4 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 SITE WAS DRY FOR ONCE. TIED DOWN

2 INTAKE AND PT REAL GOOD. CHANGED

3 PHONE BATTERY, PULLED DATA, RESET.

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	12/17/02
ARRIVAL TIME	1230	DEPARTURE TIME	1250	SERVICED BY	HEMAUER/FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900 (circled)	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES (circled) NO	12.8 volts
SOLAR PANEL CLEAN	YES (circled) NO	
CABLES AND CONNECTIONS GOOD	YES (circled) NO	
CELLULAR ANTENNA	YES (circled) NO	
PHONE TONE	YES (circled) NO	
RAINGAGE (screen, funnel, tipping bucket)	YES (circled) NO	
SAMPLE TUBING (intake, pump, distributor)	YES (circled) NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES (circled) NO	
CALIBRATED DEPTH SENSOR	YES (circled) NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES (circled) NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 CLEANED INTAKE TUBING, DROPPED OFF CLEAN
2 BOTTLES, CHANGED PHONE AND SAMPLER
3 BATTERIES, RESET

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	12/22/02
ARRIVAL TIME	0800	DEPARTURE TIME	0805	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				(SIGMA - 900)	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	(YES) NO	12.5 volts
SOLAR PANEL CLEAN	(YES) NO	
CABLES AND CONNECTIONS GOOD	(YES) NO	
CELLULAR ANTENNA	(YES) NO	
PHONE TONE	(YES) NO	
RAINGAGE (screen, funnel, tipping bucket)	(YES) NO	
SAMPLE TUBING (intake, pump, distributor)	(YES) NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES (NO)	
CALIBRATED DEPTH SENSOR	YES (NO)	depth (in)
CALIBRATED SAMPLE VOLUME	YES (NO)	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.
1 RESET SAMPLER
2
3

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	12/23/02
ARRIVAL TIME	0930	DEPARTURE TIME	0938	SERVICED BY	FOSSUM / HEMAVER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.5 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 POLLED DATA WITH DTW, CHANGED PHONE BATTERY

2

3

STORMWATER O&M LOG SHEET

SITE	ARROW			DATE	12/27/02
ARRIVAL TIME	0925	DEPARTURE TIME	0935	SERVICED BY	FOSSUM/HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.4 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA, CHANGED PHONE BATTERY

2

3

STORMWATER O&M LOG SHEET

SITE	BUTLER			DATE	10/1/02
ARRIVAL TIME	0905	DEPARTURE TIME	0920	SERVICED BY	HEMAUER/FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900 (circled)	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES (circled) NO	12.9 volts
SOLAR PANEL CLEAN	YES (circled) NO	
CABLES AND CONNECTIONS GOOD	YES (circled) NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES (circled) NO	
RAINGAGE (screen, funnel, tipping bucket)	YES (circled) NO	
SAMPLE TUBING (intake, pump, distributor)	YES (circled) NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES (circled) NO	
CALIBRATED DEPTH SENSOR	YES (circled) NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO (circled)	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA W/DTU, CLEANED BOTTLES;

2 CLEANED INTAKE + TUBING, PROGRAMMED

3 FOR WINTER SAMPLING, RESET

STORMWATER O&M LOG SHEET

SITE	BUTLER			DATE	10/16/02
ARRIVAL TIME	1130	DEPARTURE TIME	1145	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.0 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA W/DTU, RESET

2

3

STORMWATER O&M LOG SHEET

SITE	BUTLER			DATE	10/24/02
ARRIVAL TIME	1110	DEPARTURE TIME	1120	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.7 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA W/DTU, RESET, CHANGED BEEPER

2 PROGRAMMING TO CALL USGS.

3

STORMWATER O&M LOG SHEET

SITE	BUTLER			DATE	10/28/02
ARRIVAL TIME	1005	DEPARTURE TIME	1015	SERVICED BY	FOSSUM HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.7 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA RESET SAMPLER

2

3

STORMWATER O&M LOG SHEET

SITE	BUTLER			DATE	11/29/02
ARRIVAL TIME	1330	DEPARTURE TIME	1335	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.7 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 RESET SAMPLER

2

3

STORM EVENT LOG SHEET

1. Site: BUTLER Your Name: HEMAUER + FOSSUM

2. Date: 11/30/02 Time: 0700

SAMPLER PARAMETERS

3. Rainfall: 0.44 in

4. Flow: TRICKLE cfs

5. Level: — ft

O&M PARAMETERS

6. Did sampling equipment operate during event? **Yes or No?** Describe problems.

7. Battery voltage: 12.6 **volts**

8. Power **On or Off?** If power off (Mesa), reset circuit breaker and check/replace fuse if necessary.

FIELD PARAMETERS

9. Discharge (flow) at time of grabs TRICKLE **cfs**

10. pH 7.62 **su**

11. Air Temperature 15.0 **deg. C**

12. Water Temperature 15.0 **deg. C**

13. Specific Conductance 239 **uS/cm**

14. Dissolved Oxygen 6.22 **mg/L**

15. Barometric Pressure 732 **mmHg**

GRAB SAMPLES Take grabs from discharge only!

16. Grab samples taken? **Yes or No?**

17. Preservatives added to bottles? **Yes or No?**

STORMWATER O&M LOG SHEET

SITE	BUTLER			DATE	12/03/02
ARRIVAL TIME	1020	DEPARTURE TIME	1030	SERVICED BY	FOSSUM / HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.5 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA, CLEANED INTAKE TUBING, DROPPED OFF

2 CLEAN BOTTLES RESET SAMPLER

3

Date: 11/4/02

STORMWATER O&M LOG SHEET

SITE	BUTLER			DATE	12/17/02
ARRIVAL TIME	1305	DEPARTURE TIME	1310	SERVICED BY	Fossum / HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.7 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 RESET SAMPLER

2

3

STORMWATER O&M LOG SHEET

SITE	BUTLER			DATE	12/21/02
ARRIVAL TIME	1220	DEPARTURE TIME	1225	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.6 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 RESET SAMPLER

2

3

STORMWATER O&M LOG SHEET

SITE	BUTLER			DATE	12/27/02
ARRIVAL TIME	1005	DEPARTURE TIME	1015	SERVICED BY	FOSSUM / HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.5 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA RESET SAMPLER

2

3

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	10/1/02
ARRIVAL TIME	0940	DEPARTURE TIME	0955	SERVICED BY	Fossum/Hemauer
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.2 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA, PROGRAMMED FOR WINTER SAMPLING, RESET

2

3

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	10/16/02
ARRIVAL TIME	1100	DEPARTURE TIME	1115	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.5 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA W/DTU, RESET

2

3

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	10/18/02
ARRIVAL TIME	1130	DEPARTURE TIME	1220	SERVICED BY	FOSSUM / HERMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.1 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 TESTING BEEPER SYSTEM - MODEM DOES NOT
2 APPEAR TO BE CALLING OUT. RAIN GAGE ONLY
3 READING 50% OF TIPS

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	10/24/02
ARRIVAL TIME	0945	DEPARTURE TIME	1035	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.1 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA W/DTU, RESET, REPLACED RAINGAGE
2 SENSOR, CHANGED BEEPER PROGRAMMING TO CALL
3 USGS.

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	10/28/02
ARRIVAL TIME	1105	DEPARTURE TIME	1115	SERVICED BY	FOSSUM HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.8 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA, RESET SAMPLER

2

3

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	11/29/02
ARRIVAL TIME	1345	DEPARTURE TIME	1350	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.4 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.
1 RESET SAMPLER
2
3

STORM EVENT LOG SHEET

1. Site: CITRUS Your Name: FOSSUM / HEMAUER

2. Date: 11/30/02 Time: 0730

SAMPLER PARAMETERS

3. Rainfall: .31 in

4. Flow: 0.01 cfs

5. Level: .803 ~~ft~~ IN.

O&M PARAMETERS

6. Did sampling equipment operate during event? **Yes or No?** Describe problems.

7. Battery voltage: 13.2 **volts**

8. Power **On or Off?** If power off (Mesa), reset circuit breaker and check/replace fuse if necessary.

FIELD PARAMETERS

9. Discharge (flow) at time of grabs 0.01 **cfs**

10. pH 8.00 **su**

11. Air Temperature 15.5 **deg. C**

12. Water Temperature 16.5 **deg. C**

13. Specific Conductance 170.7 **uS/cm**

14. Dissolved Oxygen 7.13 **mg/L**

15. Barometric Pressure 732 **mmHg**

GRAB SAMPLES Take grabs from discharge only!

16. Grab samples taken? **Yes or No?**

17. Preservatives added to bottles? **Yes or No?**

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	12/3/02
ARRIVAL TIME	0930	DEPARTURE TIME	0940	SERVICED BY	FOSSUM / HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.8 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA CLEANED INTAKE TUBING, DROPPED

2 OFF CLEAN BOTTLES. RESET SAMPLER

3

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	12/17/02
ARRIVAL TIME	1210	DEPARTURE TIME	1220	SERVICED BY	HEMAUER/FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.4 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 CLEANED INTAKE TUBING, DROPPED OFF CLEAN

2 BOTTLES, RESET

3

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	12/21/02
ARRIVAL TIME	1320	DEPARTURE TIME	1330	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.0 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 CLEANED INTAKE TUBING AND BOTTLES, RESET SAMPLER.

2

3

STORMWATER O&M LOG SHEET

SITE	CITRWS			DATE	12/23/02
ARRIVAL TIME	0950	DEPARTURE TIME	1200	SERVICED BY	FOSSUM / HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.9 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 CLEANED BOTTLES AND INTAKE TUBING

2

3

STORMWATER O&M LOG SHEET

SITE	CITRUS			DATE	12/27/02
ARRIVAL TIME	0910	DEPARTURE TIME	0920	SERVICED BY	HEMAUER/FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.9 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA W/DTU, RESET SAMPLER

2

3

STORMWATER O&M LOG SHEET

SITE	IND PARK			DATE	10/1/02
ARRIVAL TIME	0830	DEPARTURE TIME	0845	SERVICED BY	Fossum / Hemauer
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.8 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	~~YES NO~~	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 POLLED DATA, PROGRAMMED FOR WINTER SAMPLING,

2 RESET

3

Date: 9/25/02

STORMWATER O&M LOG SHEET

SITE	IND PARK			DATE	10/16/02
ARRIVAL TIME	0955	DEPARTURE TIME	1010	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.7 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA W/DTU, RESET

2

3

STORMWATER O&M LOG SHEET

SITE	IND PARK			DATE	10/24/02
ARRIVAL TIME	1210	DEPARTURE TIME	1225	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.6 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA W/DTU, RESET, CHANGED BEEPER

2 PROGRAMMING TO CALL USGS.

3

STORMWATER O&M LOG SHEET

SITE	IND PARK			DATE	10/28/02
ARRIVAL TIME	0930	DEPARTURE TIME	0940	SERVICED BY	Fossum Hemauer
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.5 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA, RESET SAMPLER, CHECKED PHONE LINE

2 SEEMS OK - NEED TO CHECK MODEM

3

STORMWATER O&M LOG SHEET

SITE	IND PARK			DATE	11/29/02
ARRIVAL TIME	1445	DEPARTURE TIME	1502	SERVICED BY	HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.6 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.
1 ~~TRIED TO~~ RESET SAMPLER ~~UNSUCCESSFUL~~, EMPTIED 1 BOTTLE
2
3

Date: 11/4/02

STORMWATER O&M LOG SHEET

SITE	IND PARK			DATE	12/03/02
ARRIVAL TIME	1100	DEPARTURE TIME	1135	SERVICED BY	FOSSUM / HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	13.1 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA, CLEANED INTAKE TUBING + CAROUSEL

2 DROPPED OFF CLEAN BOTTLES, RESET SAMPLER,

3 CHANGED BATTERY

STORMWATER O&M LOG SHEET

SITE	IND PARK			DATE	12/17/02
ARRIVAL TIME	1340	DEPARTURE TIME	1345	SERVICED BY	Fossum / Hemauer
SAMPLER - MODEL NUMBER 1345				(SIGMA - 900)	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	(YES) NO	12.9 volts
SOLAR PANEL CLEAN	(YES) NO	
CABLES AND CONNECTIONS GOOD	(YES) NO	
CELLULAR ANTENNA	(YES) NO	
PHONE TONE	(YES) NO	
RAINGAGE (screen, funnel, tipping bucket)	(YES) NO	
SAMPLE TUBING (intake, pump, distributor)	(YES) NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES (NO)	
CALIBRATED DEPTH SENSOR	YES (NO)	depth (in)
CALIBRATED SAMPLE VOLUME	YES (NO)	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 RESET SAMPLER

2

3

STORMWATER O&M LOG SHEET

SITE	IND PARK			DATE	12/21/02
ARRIVAL TIME	1250	DEPARTURE TIME	1255	SERVICED BY	FOSSUM
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.9 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 RESET SAMPLER

2

3

STORMWATER O&M LOG SHEET

SITE	IND PARK			DATE	12/27/02
ARRIVAL TIME	1035	DEPARTURE TIME	1045	SERVICED BY	FOSSUM / HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.7 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 PULLED DATA, RESET SAMPLER

2

3

STORMWATER O&M LOG SHEET

SITE	~~PEORIA~~ OLIVE			DATE	10/8/02
ARRIVAL TIME	0925	DEPARTURE TIME	0930	SERVICED BY	Fossum/Hemauer
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	~~YES~~ NO	volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES ~~NO~~	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES ~~NO~~	depth (in)
CALIBRATED SAMPLE VOLUME	YES ~~NO~~	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 DROPPED OFF CLEAN BOTTLE - CLEANED INTAKE +

2 TUBING.

3

Date: 9/25/02

STORMWATER O&M LOG SHEET

SITE	OLIVE			DATE	10/28/02
ARRIVAL TIME	0950	DEPARTURE TIME	1000	SERVICED BY	Fossum HEMAUER
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	12.2 volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 DROPPED OFF CLEAN BOTTLE, CLEANED TUBING

2

3

STORMWATER O&M LOG SHEET

SITE	OLIVE			DATE	12/03/02
ARRIVAL TIME	1009	DEPARTURE TIME	1014	SERVICED BY	Fossum Hemauer
SAMPLER - MODEL NUMBER				SIGMA - 900	ISCO - 3700

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	volts
SOLAR PANEL CLEAN	YES NO	
CABLES AND CONNECTIONS GOOD	YES NO	
CELLULAR ANTENNA	YES NO	
PHONE TONE	YES NO	
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING AND COLLECTION BOTTLE	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

SPECIFY ITEMS REMOVED/REPLACED/REPAIRED/INSTALLED. INCLUDE SERIAL NO IF SAMPLER OR PT INSTALLED/REMOVED.

1 CHANGED CR10 BATTERY, N TANK @ 400 PSI

2

3