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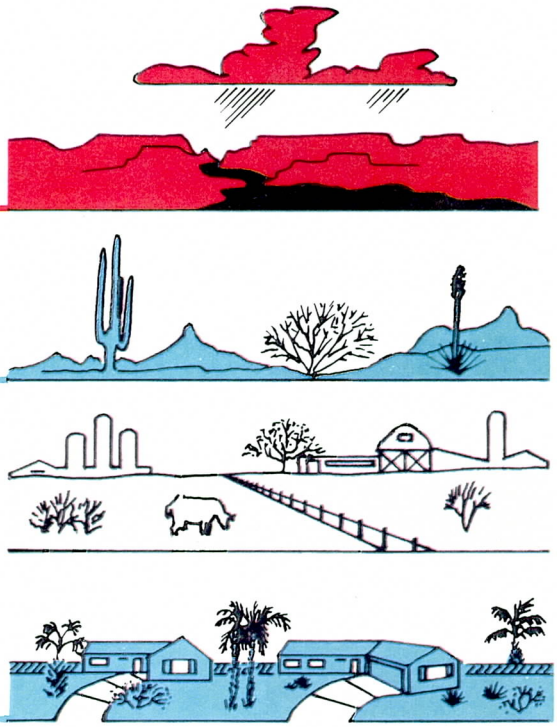

FLOOD CONTROL
DISTRICT OF
MARICOPA COUNTY

Stormwater Quality Report
City of Mesa, Arizona

Third and Fourth Quarters 2001

August 8, 2001

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Stormwater Quality Report

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Third and Fourth Quarters, Sampling Year 2001

January 1, 2001 through June 30, 2001

For

City of Mesa, Arizona

August 8, 2001

Prepared by:

Julie R. Cox
Water Quality Hydrologist

Reviewed by:

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Water Quality Program Coordinator

Stormwater Quality Report
City of Mesa, Arizona

Third and Fourth Quarters 2001

August 8, 2001

Introduction

The Flood Control District of Maricopa County operates and maintains five land based stormwater monitoring stations for the City of Mesa for compliance with their National Pollutant Discharge Elimination System (NPDES) stormwater discharge permit.

This report details stormwater sampling and equipment upkeep for the five Mesa stations for the period from January 1, 2001 through June 30, 2001.

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.**

MESA	RAINFALL	DURATION
SUMMER (July – September)	**0.24 – 0.72 INCHES**	**2.4 – 7.2 HOURS**
WINTER (October – March)	**0.22 – 0.66 INCHES**	**5.9 – 17.7 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 July 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 3rd quarter of the 2001 sample year, from January 1 through March 31, 2001. Two representative storm events occurred during this period and both were sampled. The following is a description of the two sampled events.

The storm event of January 8-9, 2001 produced rainfall valley wide. Rainfall totals in Mesa ranged from 0.08 to 0.47 inches. Site specific rainfall amounts for the five Mesa stormwater stations are listed in Table 1 below.

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TABLE 1

Storm Event of January 8-9, 2001

SITE NAME	RAINFALL (inches)	REPRESENTATIVE EVENT	SAMPLES ANALYZED
SIXTH	0.44	YES	YES (grab)
LINDSAY	0.47	YES	YES (grab)
FALCON	0.40	YES	NO
GRANDVIEW	0.46	YES	YES (grab + composite)
DOBSON	0.33	YES	YES (grab)

Grab samples were collected and analyzed for the Sixth, Lindsay, Grandview, and Dobson sites. A composite sample was collected and analyzed for the Grandview site. Composite samples were not collected from the other four sites, due to automated samplers not activating. The cause of the four equipment failures may be related to the fact that the pressure transducers require calibration.

The storm event of January 27, 2001 produced rainfall valley wide. Rainfall totals in Mesa ranged from 0.47 to 0.75 inches. Site specific rainfall amounts for the five Mesa stormwater stations are listed in Table 2 below.

TABLE 2

Storm Events of January 27, 2001

SITE NAME	RAINFALL (inches)	REPRESENTATIVE EVENT	SAMPLES ANALYZED
SIXTH (am)	0.55[1]	NO	NO
SIXTH (pm)	0.31[1]	NO	NO
LINDSAY (am)	0.51[2]	NO	NO
FALCON (am)	0.66	YES	YES (grab)
GRANDVIEW (am)	0.54[1]	NO	NO
GRANDVIEW (pm)	0.32[1]	NO	NO
DOBSON (am)	0.44	NO	NO
DOBSON (pm)	0.30	NO	NO

[1]Data from ALERT gage 4545.
[2]Data from ALERT gage 6545.

Table 3 on Page 4 of this report lists storm events with rainfall greater than or equal to 0.22 inches of rain (Mesa minimum winter rainfall criteria). Table 3 also specifies reasons why samples were not collected and/or analyzed.

TABLE 3
SUMMARY OF MESA WINTER STORM EVENTS WITH RAINFALL > 0.22 INCHES BUT NOT SAMPLED JANUARY 1, 2001 – MARCH 31, 2001

SITE	DATE	RAIN (inches)	REASONS NOT SAMPLED
FALCON	1/8-1/9/01	0.40	MISSED REPRESENTATIVE EVENT. NEITHER GRAB NOR COMPOSITE SAMPLES WERE COLLECTED. AUTOSAMPLER DID NOT OPERATE.
SIXTH	1/12/01	0.31[1]	DURATION TOO SHORT
LINDSAY	1/12/01	0.35[2]	DURATION TOO SHORT
FALCON	1/12/01	0.35[3]	DURATION TOO SHORT, 72-HR RULE
GRANDVIEW	1/12/01	0.31[4]	DURATION TOO SHORT
DOBSON	1/12/01	0.35[5]	DURATION TOO SHORT
SIXTH	1/15-1/16/01	0.35[1]	DURATION TOO SHORT
LINDSAY	1/15-1/16/01	0.43[2]	DURATION TOO SHORT
FALCON	1/15-1/16/01	0.43[3]	DURATION TOO SHORT
GRANDVIEW	1/15-1/16/01	0.35[4]	DURATION TOO SHORT
DOBSON	1/15-1/16/01	0.31[5]	DURATION TOO SHORT
SIXTH	1/16/01	0.23[1]	72-HR RULE, DURATION TOO SHORT
FALCON	1/16/01	0.27[3]	72-HR RULE, DURATION TOO SHORT
GRANDVIEW	1/16/01	0.23[4]	72-HR RULE, DURATION TOO SHORT
SIXTH	1/27/01 (am)	0.54[1]	DURATION TOO SHORT
LINDSAY	1/27/01	0.51[2]	DURATION TOO SHORT
GRANDVIEW	1/27/01 (am)	0.54[4]	DURATION TOO SHORT
DOBSON	1/27/01 (am)	0.44	DURATION TOO SHORT
SIXTH	1/27/01 (pm)	0.32[1]	72-HR RULE, DURATION TOO SHORT
GRANDVIEW	1/27/01 (pm)	0.32[4]	72-HR RULE, DURATION TOO SHORT
DOBSON	1/27/01 (pm)	0.30	72-HR RULE, DURATION TOO SHORT
SIXTH	2/28/01	0.24[1]	DURATION TOO SHORT
GRANDVIEW	2/28/01	0.24[4]	DURATION TOO SHORT
DOBSON	2/28/01	0.28[5]	DURATION TOO SHORT
SIXTH	3/7/01 (am1)	0.32	DURATION TOO SHORT
LINDSAY	3/7/01	1.14	RAIN > 0.66 INCH
FALCON	3/7/01	1.03	RAIN > 0.66 INCH
GRANDVIEW	3/7/01	0.32[4]	DURATION TOO SHORT
DOBSON	3/7/01	1.09	RAIN > 0.66 INCH
SIXTH	3/7/01 (am2)	0.95[6]	72-HR RULE, RAIN > 0.66 INCH
GRANDVIEW	3/7/01	1.14[4]	72-HR RULE, RAIN > 0.66 INCH
SIXTH	3/10/01	0.24[1]	72-HR RULE, DURATION TOO SHORT
GRANDVIEW	3/10/01	0.24[4]	72-HR RULE, DURATION TOO SHORT

[1]Data from ALERT gage 4545.
[2]Data from ALERT gage 6545.
[3]Data from ALERT gage 4555.
[4]Data from ALERT gage 4545.
[5]Data from ALERT gage 4535.
[6]Data from log sheet (storm total was 1.27").

Operations and Maintenance

Equipment repairs, replacement, and cleaning are detailed in the Maintenance Summary section of this report.

Maintenance Summary

This section details maintenance activities and problems that occurred from January 1 through June 30, 2001. The period from April 1 through June 30, 2001 is normal downtime for Mesa samplers. Samples are typically not collected during this time.

Prior to June 2001, all Mesa automated samplers were SIGMA 800 models. During June and July 2001, the older SIGMA models were replaced with five new ISCO samplers. The ISCO samplers were installed at the existing station locations.

SIXTH AND HORNE

All sampler tubing was cleaned on January 9.

The desiccant was replaced on February 27.

The new ISCO sampler installation was not completed as of June 30.

LINDSAY AND BROADWAY

All sampler tubing was cleaned on January 9 and January 16

The desiccant was replaced on February 27.

Confined space entry activity for the new ISCO sampler installation occurred on June 19. The sampler was programmed and calibrated prior to July 1.

FALCON FIELD

All sampler tubing was cleaned on January 9 and January 29.

The desiccant was replaced on February 27.

Confined space entry activity for the new ISCO sampler installation occurred on June 18 and 19. The sampler was programmed and calibrated prior to July 1.

GRANDVIEW AND HORNE

All sampler tubing was cleaned on January 9.

The desiccant was replaced on February 27.

Confined space entry activity for the new ISCO sampler installation occurred on June 21. The sampler was programmed and calibrated prior to July 1.

DOBSON AND BROADWAY

All sampler tubing was cleaned on January 9, January 16, January 29, and March 9.

The desiccant was replaced on February 27.

Confined space entry activity for the new ISCO sampler installation occurred on June 20. The new ISCO sampler installation was not completed as of June 30.

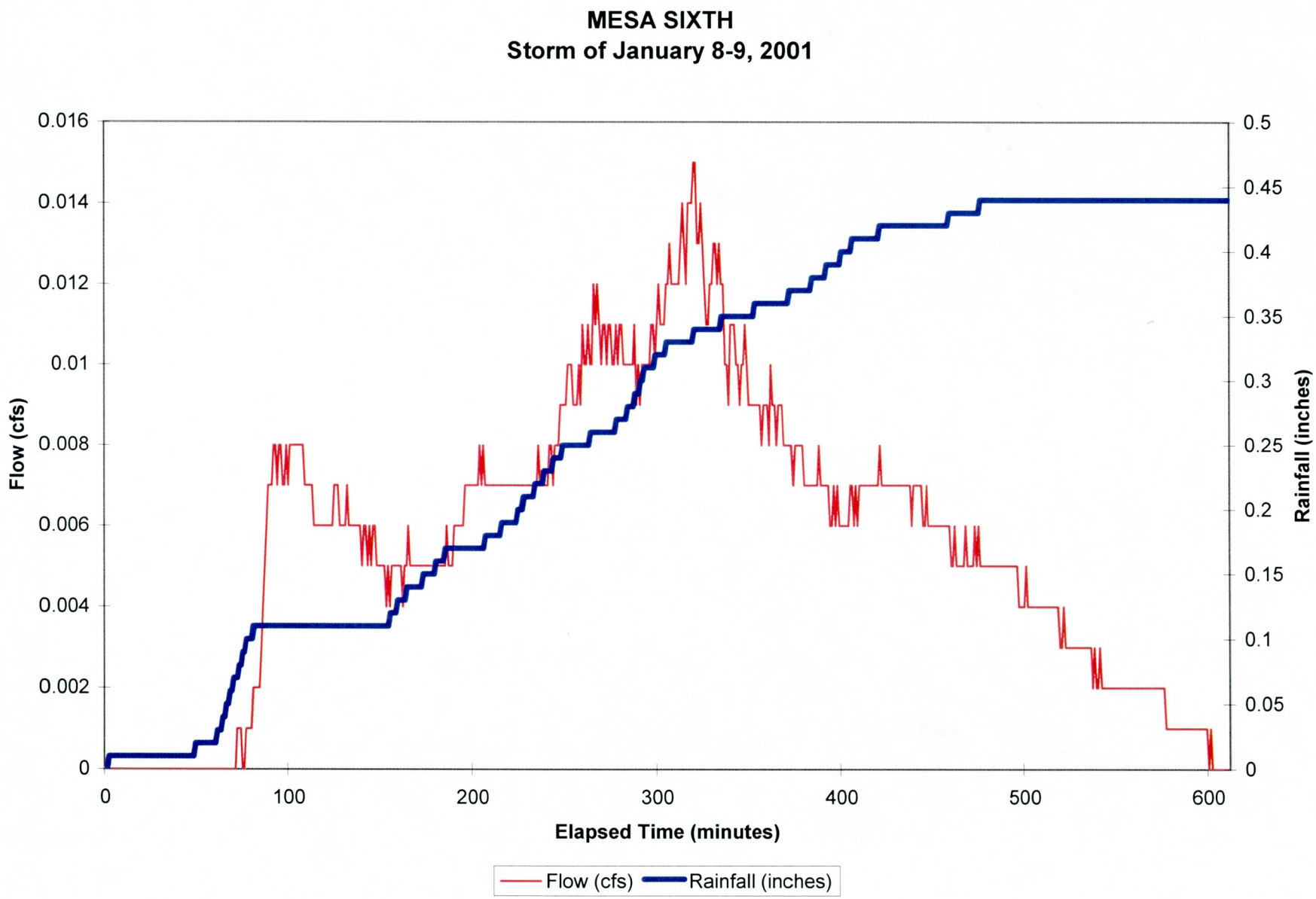
Data compiled for January through March 2001

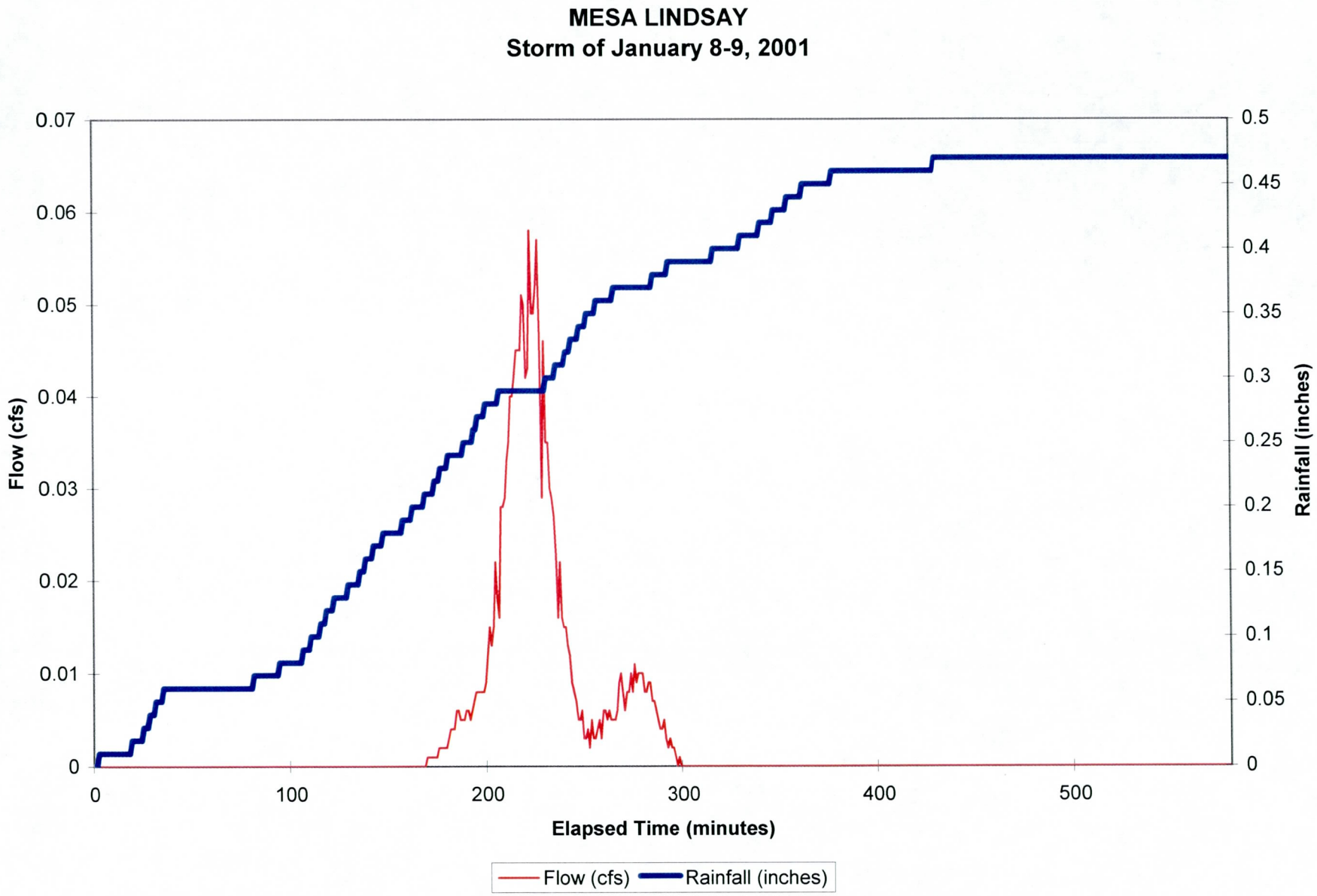
The remainder of this report contains data. The following data are included:

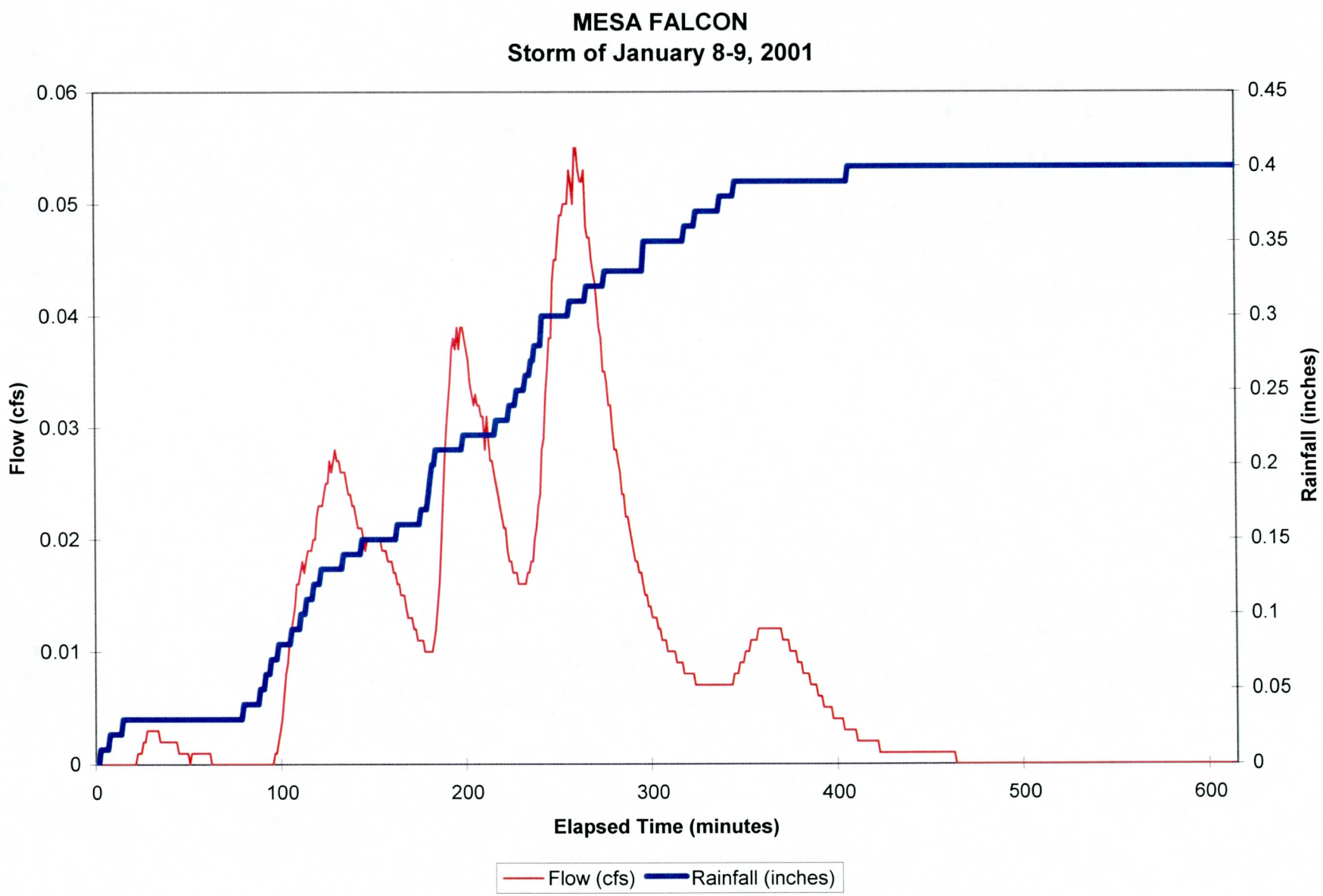
- Storm Hydrographs.
- Rainfall tables for five Mesa NPDES raingages.
- Analytical Data Tables.
- Data Validation Tables.
- Lab Reports.
- Quality Control Data.
- Chain of Custody Forms.
- Operation and maintenance and storm event log sheets.

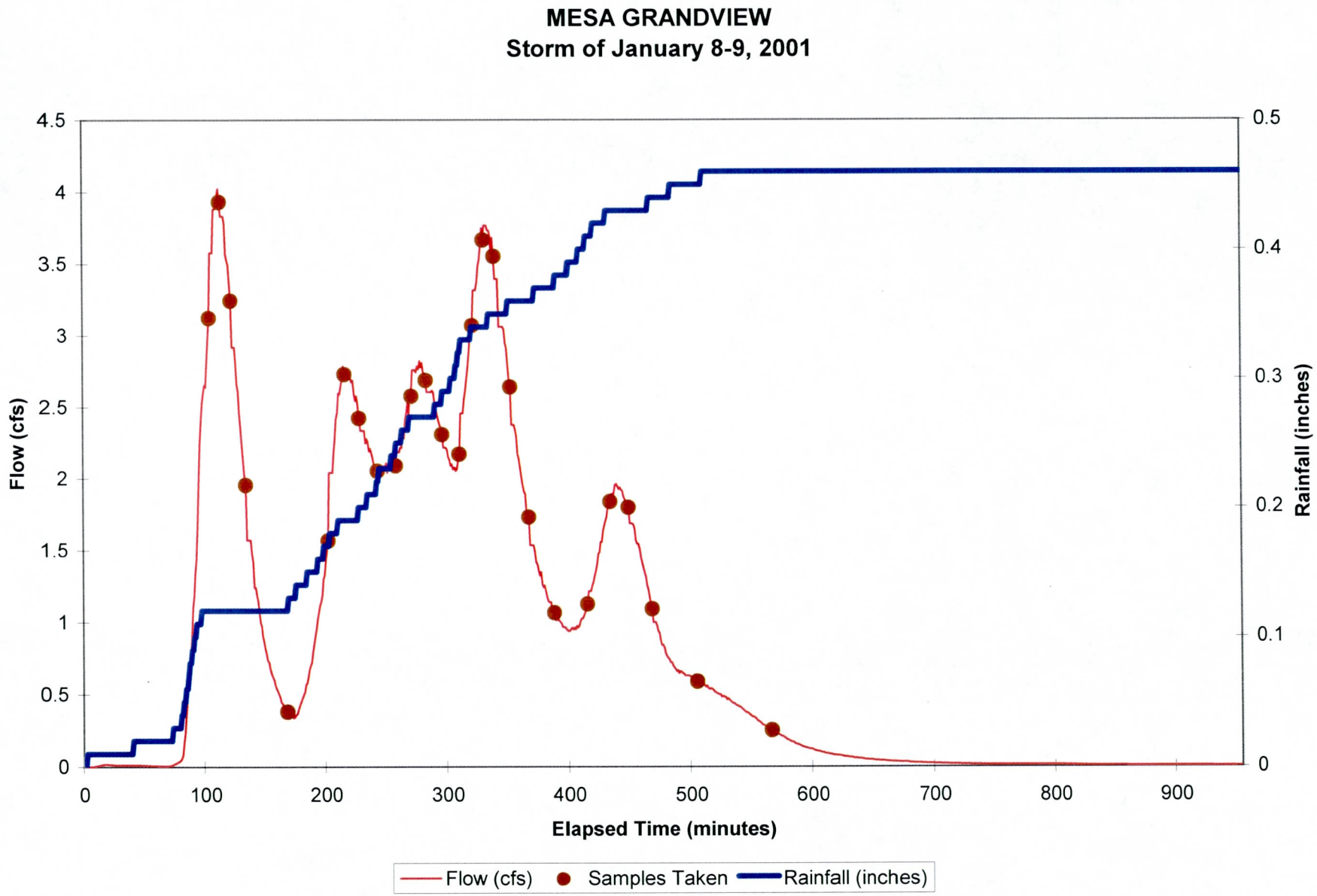
Storm Hydrographs

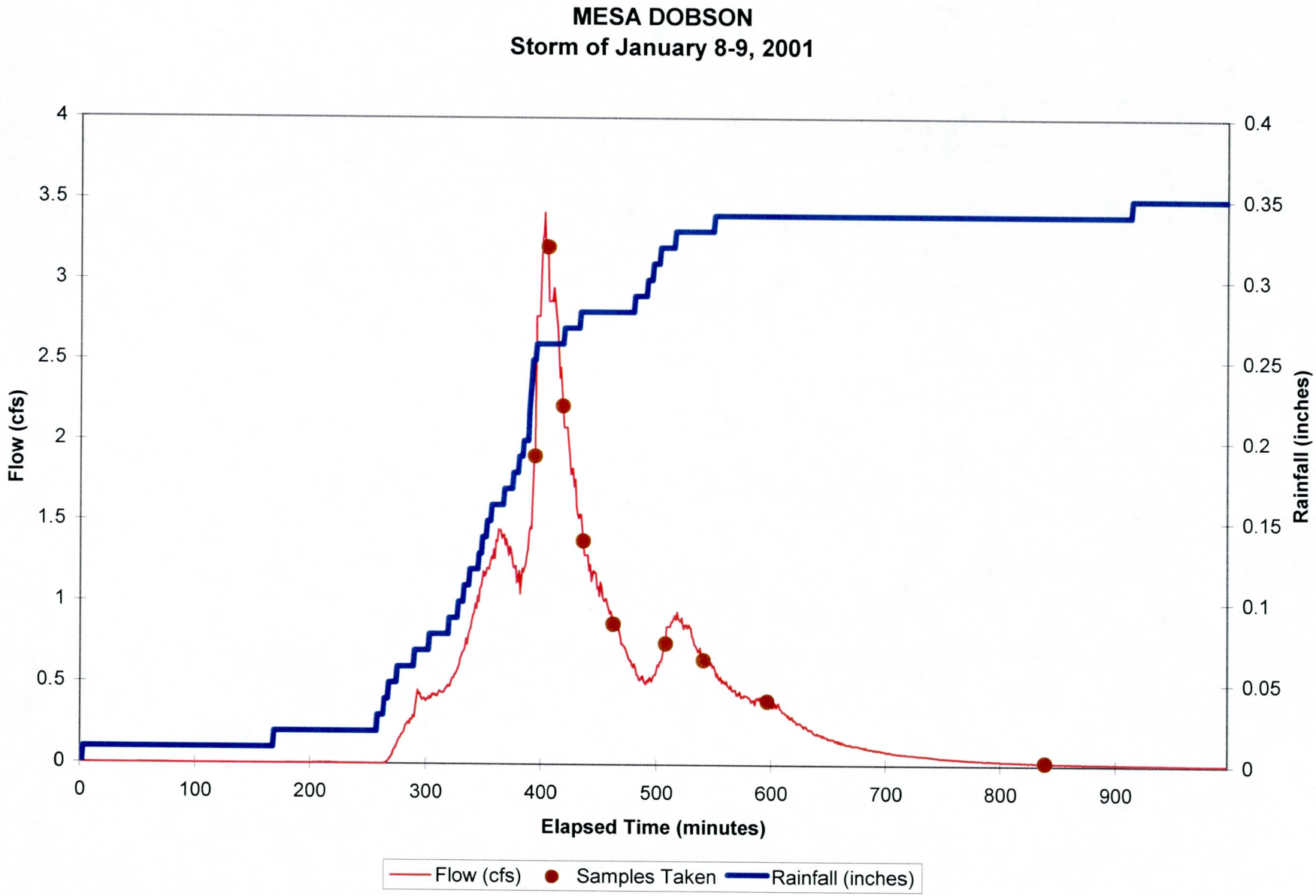
Storm of January 8-9, 2001


MESA SIXTH
Storm of January 8-9, 2001
Flow (cfs)
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
Rainfall (inches)
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
100
200
300
400
500
600
Elapsed Time (minutes)
Flow (cfs)
Rainfall (inches)

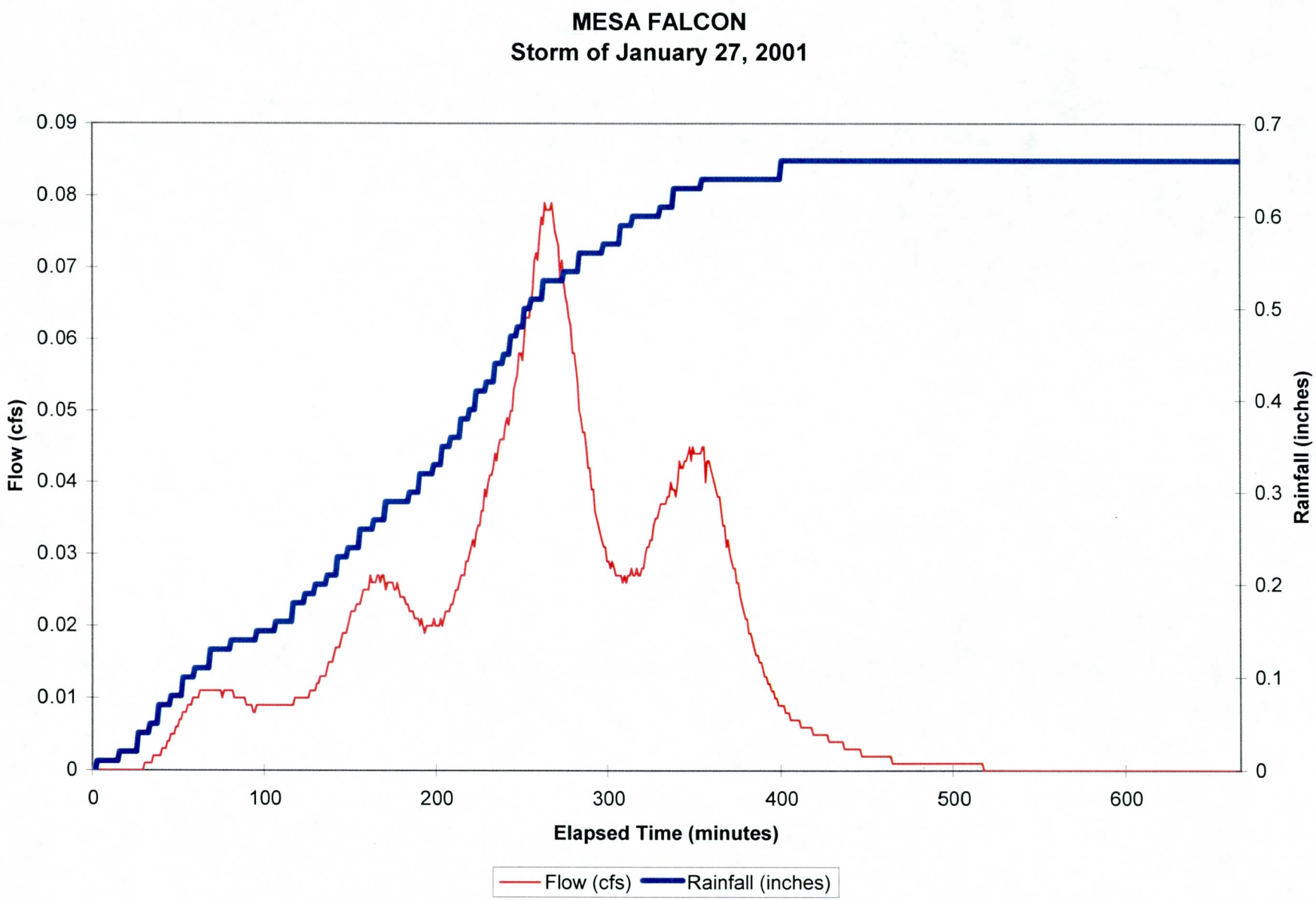

MESA LINDSAY
Storm of January 8-9, 2001
Flow (cfs)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
Rainfall (inches)
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
100
200
300
400
500
Elapsed Time (minutes)
Flow (cfs)
Rainfall (inches)


MESA FALCON
Storm of January 8-9, 2001
Flow (cfs)
Rainfall (inches)
Elapsed Time (minutes)
0.06
0.05
0.04
0.03
0.02
0.01
0
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
100
200
300
400
500
600
Flow (cfs)
Rainfall (inches)


MESA GRANDVIEW
Storm of January 8-9, 2001
Flow (cfs)
Rainfall (inches)
Elapsed Time (minutes)
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
0.1
0.2
0.3
0.4
0.5
100
200
300
400
500
600
700
800
900
Flow (cfs)
Samples Taken
Rainfall (inches)


MESA DOBSON
Storm of January 8-9, 2001
Flow (cfs)
Rainfall (inches)
Elapsed Time (minutes)
0
0.5
1
1.5
2
2.5
3
3.5
4
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0
100
200
300
400
500
600
700
800
900
Flow (cfs)
Samples Taken
Rainfall (inches)

Storm of January 27, 2001


MESA FALCON
Storm of January 27, 2001
Flow (cfs)
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
Rainfall (inches)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
100
200
300
400
500
600
Elapsed Time (minutes)
Flow (cfs)
Rainfall (inches)

Rainfall Data

Gauge Rainfall (in.)

Gauge Number	Sixth (1001)
Location	Horne and Sixth Street

	July 2000	August 2000	September 2000	October 2000	November 2000	December 2000	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001
1									0.04*			
2												
3												
4				0.17	0.03							
5										0.63*		
6					0.31					0.20*		
7									1.27**			
8		0.03		0.01			0.33					
9							0.12					
10				0.96	0.08				0.24*	0.04*		
11				0.24								
12							0.63*					
13												
14								0.12*				
15							0.04*					
16							0.63*					
17		0.05										
18				0.01								
19				0.01								
20												
21				0.22						0.31*		
22				0.39						0.04*		
23				0.24**								
24												
25								0.12**				
26												
27				0.63			0.94*	0.16*				
28		0.09		0.16				0.23*				
29												
30	0.09	0.05		0.34								
31		0.46										
Month Total	0.09	0.68	0.00	3.38	0.42	0.00	2.69	0.63	1.55	1.22	0.00	0.00

*Data from ALERT gage 4545.
**Data from log sheet.

Gauge Rainfall (in.)

Gauge Number	Lindsay (1002)
Location	Broadway and Lindsay

	July 2000	August 2000	September 2000	October 2000	November 2000	December 2000	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001
1												
2												
3												
4				0.21	0.03							
5										0.51*		
6					0.27					0.24*		
7									1.14**			
8							0.37					
9							0.12					
10				0.97	0.09				0.12*	0.04*		
11			0.01	0.26								
12							0.55*					
13								0.02**				
14								0.12*				
15							0.04*					
16							0.63*					
17		0.68										
18				0.04								
19				0.01								
20												
21				0.32						0.35*		
22				0.41								
23				0.24**								
24												
25								0.12*				
26			0.03									
27				0.90			0.71*	0.16*				
28		0.01		0.28				0.23*				
29												
30	0.15	0.37		0.47**								
31												
Month Total	0.15	1.06	0.04	4.11	0.39	0.00	2.42	0.65	1.26	1.14	0.00	0.00

*Data from ALERT gage 6545.
**Data from log sheet.

Gauge Rainfall (in.)

Gauge Number	Falcon Field (1003)
Location	Falcon Field Airport

	July 2000	August 2000	September 2000	October 2000	November 2000	December 2000	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001
1												
2												
3												
4				0.50	0.05							
5										0.55*		
6				0.03	0.20					0.24*		
7									1.02**			
8				0.02			0.23					
9							0.18					
10				0.42	0.06				0.08*	0.04*		
11				0.14								
12							0.55*					
13								0.01**				
14								0.16*				
15							0.04*					
16					0.01		0.67*					
17		0.08										
18												
19												
20												
21				0.16**						0.47*		
22				0.67**								
23				0.32**								
24												
25						0.03		0.09**				
26			0.02									
27				0.99**			0.72	0.15**				
28		0.02		0.2**				0.08**				
29												
30	0.38	0.02		0.4**								
31		0.21										
Month Total	0.38	0.33	0.02	3.85	0.32	0.03	2.39	0.49	1.10	1.30	0.00	0.00

*Data from ALERT gage 4555.
**Data from log sheet.

Gauge Rainfall (in.)

Gauge Number	Grandview (1004)
Location	Home and Grandview

	July 2000	August 2000	September 2000	October 2000	November 2000	December 2000	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001
1									0.04*			
2												
3												
4				0.16	0.03							
5										0.63*		
6					0.26					0.2*		
7									1.46*			
8				0.01			0.33					
9							0.13					
10				1.06	0.08				0.24*	0.04*		
11				0.21	0.01							
12							0.63*					
13								0.04**				
14								0.12*				
15							0.04*					
16							0.63*					
17		0.22										
18				0.03								
19				0.02								
20												
21				0.21						0.31*		
22		0.04		0.40						0.04*		
23				0.24**								
24		0.05										
25								0.12*				
26												
27				0.75			0.94*	0.16*				
28		0.11		0.29				0.23*				
29												
30	0.16			0.39**								
31												
Month Total	0.16	0.42	0.00	3.77	0.38	0.00	2.70	0.67	1.74	1.22	0.00	0.00

*Data from ALERT gage 4545.
**Data from log sheet.

Gauge Rainfall (in.)

Gauge Number	Dobson (1005)
Location	Dobson and Broadway

	July 2000	August 2000	September 2000	October 2000	November 2000	December 2000	January 2001	February 2001	March 2001	April 2001	May 2001	June 2001
1												
2												
3												
4				0.13								
5										0.67*		
6					0.35					0.2*		
7		0.07			0.01				1.09**			
8							0.26					
9							0.09					
10				0.51	0.02				0.12*	0.04*		
11			0.01	0.16								
12							0.59*					
13								0.03**				
14								0.08*				
15							0.04*					
16							0.63*					
17		0.28										
18												
19				0.04**								
20												
21				0.45						0.24*		
22				0.91								
23				0.12**								
24				0.04**								
25								0.12**				
26												
27				0.91			0.77	0.16*				
28		0.26		0.13			0.02	0.27*				
29		0.01										
30	0.20	0.51		0.35**								
31	0.01			0.04**								
Month Total	0.21	1.13	0.01	3.79	0.38	0.00	2.40	0.66	1.21	1.15	0.00	0.00

*Data from ALERT gage 4535.
**Data from log sheet.

Analytical Data Tables

Storm of January 8-9, 2001

Sixth (Mesa 1)

Horne and Sixth Street

MESA 1 - HORNE & SIXTH STREET	METHOD	RESULTS
Date of Sampling		1/9/01
Time		0002
Representative Storm Event		Y
Agency Collecting Sample		FCD
Agency Analyzing Sample		DEL MAR
Drainage Area (acres) (DA)		193
Impervious Area (acres) (IA)		121
Land Use - Residential		193
Land Use - Commercial		0
Land Use - Industrial		0
Land Use - Undeveloped		0
Sampling Duration (minutes) (DRN)		0
Storm Duration (minutes)		475
Runoff Sampled (cubic feet) (RUN)		0
Total Storm Runoff (cubic feet)		204
Instantaneous Discharge (cfs)		0.015
Preceeding Dry Period (days) (ANT)		59
Total Storm Rainfall (inch)		0.44
Rainfall Sampled (inch) (TRN)		0
Maximum 5-minute rain intensity (in/hr) (MAX5)		0.36
Sample Temperature (deg. C)	Lab	0
Effluent Temperature (deg. C)	Field	16
pH, Effluent (standard units)	Field	7.7
BOD5 (mg/l)	405.1	22
COD High Level (mg/l)	410.4	NA
Fecal Coliform (MPN/100mL)	9221E	300
Fecal Streptococci (MPN/100mL)	9230B	17,000
E. coli (MPN/100mL)	9221F	170
Total Dissolved Solids (mg/l)	2540C	NA
Total Suspended Solids (mg/l)	160.2	NA
TKN Nitrogen (mg/l as N)	4500NOC	NA
Nitrogen Nitrate Total (mg/l as N)	300.0	NA
Nitrogen Ammonia Total (mg/l as N)	350.3	NA
Nitrogen Organic Total (mg/l as N)	CALC	NA

NM = not measured
NA = not analyzed

MESA 1 - HORNE & SIXTH STREET	METHOD	RESULTS
Date of Sampling		1/9/01
Phosphorous Total (mg/l as P)	365.3	NA
Phosphorous Dissolved (mg/l as P)	365.3	NA
Oil and Grease Total Recoverable (mg/l)	413.2	1.6
Hardness (mg/l)	2340B	NA
Cadmium Total Recoverable (ug/l as Cd)	200.9	NA
Cadmium Dissolved (ug/l as Cd)	200.9	NA
Chromium Total Recoverable (ug/l as Cr)	200.9	NA
Chromium Dissolved (ug/l as Cr)	200.9	NA
Copper, Total Recoverable, (ug/l as Cu)	200.9	NA
Copper, Dissolved, (ug/l as Cu)	200.7	NA
Lead, Total Recoverable, (ug/l as Pb)	200.9	NA
Lead, Dissolved, (ug/l as Pb)	200.9	NA
Mercury, Total Recoverable, (ug/l as Hg)	245.1	NA
Mercury, Dissolved, (ug/l as Hg)	245.1	NA
Zinc, Total Recoverable, (ug/l as Zn)	200.7	NA
Zinc, Dissolved, (ug/l as Zn)	200.7	NA
P,P' DDE, Total, (ug/l)	608	NA
Methylene Chloride, Total, (ug/l)	624	< 5
Toluene, Total, (ug/l)	624	< 2
Benzo (a) Pyrene, Total, (ug/l)	625	NA
Chrysene, Total, (ug/l)	625	NA
Fluoranthene, Total, (ug/l)	625	NA
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	NA
Pyrene, Total, (ug/l)	625	NA

NM = not measured
NA = not analyzed

Lindsay (Mesa 2)

near Broadway and Lindsay Roads (Windsor)

MESA 2 - LINDSAY & BROADWAY	METHOD	RESULTS
Date of Sampling		1/8/01
Time		2314
Representative Storm Event		Y
Agency Collecting Sample		FCD
Agency Analyzing Sample		DEL MAR
Drainage Area (acres) (DA)		145
Impervious Area (acres) (IA)		37
Land Use - Residential		unknown
Land Use - Commercial		unknown
Land Use - Industrial		unknown
Land Use - Undeveloped		unknown
Sampling Duration (minutes) (DRN)		0
Storm Duration (minutes)		428
Runoff Sampled (cubic feet) (RUN)		0
Total Storm Runoff (cubic feet)		111
Instantaneous Discharge (cfs)		0.058 cfs
Preceeding Dry Period (days) (ANT)		59
Total Storm Rainfall (inch)		0.47
Rainfall Sampled (inch) (TRN)		0
Maximum 5-minute rain intensity (in/hr)(MAX5)		0.24
Sample Temperature (deg. C)	Lab	0
Effluent Temperature (deg. C)	Field	6
pH, Effluent (standard units)	Field	8.1
BOD5 (mg/l)	405.1	11
COD High Level (mg/l)	410.4	NA
Fecal Coliform (MPN/100ml)	9221E	170
Fecal Streptococci (MPN/100ml)	9230B	5,000
E. Coli (MPN/100 ml)	9221F	110
Total Dissolved Solids (mg/l)	2540C	NA
Total Suspended Solids (mg/l)	160.2	NA
TKN Nitrogen (mg/l as N)	4500NOC	NA
Nitrogen Nitrate Total (mg/l as N)	300.0	NA
Nitrogen Ammonia Total (mg/l as N)	350.3	NA
Nitrogen Organic Total (mg/l as N)	CALC	NA

NM = not measured
NA = not analyzed

MESA 2 - LINDSAY & BROADWAY	METHOD	RESULTS
Date of Sampling		1/8/01
Phosphorous Total (mg/l as P)	365.3	NA
Phosphorous Dissolved (mg/l as P)	365.3	NA
Oil and Grease Total Recoverable (mg/l)	413.2	5.3
Hardness (mg/l)	2340B	NA
Cadmium Total Recoverable (ug/l as Cd)	200.9	NA
Cadmium Dissolved (ug/l as Cd)	200.9	NA
Chromium Total Recoverable (ug/l as Cr)	200.9	NA
Chromium Dissolved (ug/l as Cr)	200.9	NA
Copper, Total Recoverable, (ug/l as Cu)	200.9	NA
Copper, Dissolved, (ug/l as Cu)	200.8	NA
Lead, Total Recoverable, (ug/l as Pb)	200.9	NA
Lead, Dissolved, (ug/l as Pb)	200.9	NA
Mercury, Total Recoverable, (ug/l as Hg)	245.1	NA
Mercury, Dissolved, (ug/l as Hg)	245.1	NA
Zinc, Total Recoverable, (ug/l as Zn)	200.7	NA
Zinc, Dissolved, (ug/l as Zn)	200.7	NA
P,P' DDE, Total, (ug/l)	608	NA
Methylene Chloride, Total, (ug/l)	624	<5
Toluene, Total, (ug/l)	624	<2
Benzo (a) Pyrene, Total, (ug/l)	625	NA
Chrysene, Total, (ug/l)	625	NA
Fluoranthene, Total, (ug/l)	625	NA
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	NA
Pyrene, Total, (ug/l)	625	NA

NM = not measured
NA = not analyzed

Grandview (Mesa 4)

Horne and Grandview

MESA 4 - HORNE & GRANDVIEW	METHOD	RESULTS
Date of Sampling		1/9/01
Time		Grb0032 Comp1037
Representative Storm Event		Y
Agency Collecting Sample		FCD
Agency Analyzing Sample		DEL MAR
Drainage Area (acres) (DA)		145
Impervious Area (acres) (IA)		37
Land Use - Residential		unknown
Land Use - Commercial		unknown
Land Use - Industrial		unknown
Land Use - Undeveloped		unknown
Sampling Duration (minutes) (DRN)		463
Storm Duration (minutes)		509
Runoff Sampled (cubic feet) (RUN)		46,020
Total Storm Runoff (cubic feet)		48,960
Instantaneous Discharge (cfs)		4.02
Preceeding Dry Period (days) (ANT)		58
Total Storm Rainfall (inch)		0.46
Rainfall Sampled (inch) (TRN)		0.34
Maximum 5-minute rain intensity (in/hr)(MAX5)		0.36
Sample Temperature (deg. C)	Lab	0
Effluent Temperature (deg. C)	Field	7
pH, Effluent (standard units)	Field	7.8
BOD5 (mg/l)	405.1	16
COD High Level (mg/l)	410.4	60
Fecal Coliform (MPN/100ml)	9221E	170
Fecal Streptococci (MPN/100ml)	9230B	22,000
E. Coli (MPN/100 ml)	9221F	170
Total Dissolved Solids (mg/l)	2540C	50
Total Suspended Solids (mg/l)	160.2	16
TKN Nitrogen (mg/l as N)	4500NOC	0.95
Nitrogen Nitrate Total (mg/l as N)	300.0	0.72
Nitrogen Ammonia Total (mg/l as N)	350.3	0.65
Nitrogen Organic Total (mg/l as N)	CALC	<0.5

NM = not measured
NA = not analyzed

MESA 4 - HORNE & GRANDVIEW	METHOD	RESULTS
Date of Sampling		1/9/01
Phosphorous Total (mg/l as P)	365.3	0.24
Phosphorous Dissolved (mg/l as P)	365.3	0.24
Oil and Grease Total Recoverable (mg/l)	413.2	5.3
Hardness (mg/l)	2340B	23
Cadmium Total Recoverable (ug/l as Cd)	200.9	<0.5
Cadmium Dissolved (ug/l as Cd)	200.9	<0.5
Chromium Total Recoverable (ug/l as Cr)	200.9	<4
Chromium Dissolved (ug/l as Cr)	200.9	<4
Copper, Total Recoverable, (ug/l as Cu)	200.9	18
Copper, Dissolved, (ug/l as Cu)	200.7	13
Lead, Total Recoverable, (ug/l as Pb)	200.9	<2
Lead, Dissolved, (ug/l as Pb)	200.9	<2
Mercury, Total Recoverable, (ug/l as Hg)	245.1	<0.2
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2
Zinc, Total Recoverable, (ug/l as Zn)	200.7	<50
Zinc, Dissolved, (ug/l as Zn)	200.7	93
P,P' DDE, Total, (ug/l)	608	<0.11
Methylene Chloride, Total, (ug/l)	624	<5
Toluene, Total, (ug/l)	624	<2
Benzo (a) Pyrene, Total, (ug/l)	625	<20
Chrysene, Total, (ug/l)	625	<10
Fluoranthene, Total, (ug/l)	625	<10
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<20
Pyrene, Total, (ug/l)	625	<10

NM = not measured
NA = not analyzed

Dobson (Mesa 5)

Dobson Road south of Broadway

MESA 5 - DOBSON AND BROADWAY	METHOD	RESULTS
Date of Sampling		1/9/01
Time		0032
Representative Storm Event		Y
Agency Collecting Sample		FCD
Agency Analyzing Sample		DEL MAR
Drainage Area (acres) (DA)		63
Impervious Area (acres) (IA)		56
Land Use - Residential		0
Land Use - Commercial		100
Land Use - Industrial		0
Land Use - Undeveloped		0
Sampling Duration (minutes) (DRN)		445
Storm Duration (minutes)		912
Runoff Sampled (cubic feet) (RUN)		14,340
Total Storm Runoff (cubic feet)		20,340
Instantaneous Discharge (cfs)		3.42
Preceeding Dry Period (days) (ANT)		59
Total Storm Rainfall (inch)		0.35
Rainfall Sampled (inch) (TRN)		0.09
Maximum 5-minute rain intensity (in/hr)(MAX5)		0.60
Sample Temperature (deg. C)	Lab	0
Effluent Temperature (deg. C)	Field	17
pH, Effluent (standard units)	Field	8.1
BOD5 (mg/l)	405.1	62
COD High Level (mg/l)	410.4	NA
Fecal Coliform (MPN/100ml)	9221E	1,700
Fecal Streptococci (MPN/100ml)	9230B	9,000
E. Coli (MPN/100 ml)	9221F	1,700
Total Dissolved Solids (mg/l)	2540C	NA
Total Suspended Solids (mg/l)	160.2	NA
TKN Nitrogen (mg/l as N)	4500NOC	NA
Nitrogen Nitrate Total (mg/l as N)	300.0	NA
Nitrogen Ammonia Total (mg/l as N)	350.3	NA
Nitrogen Organic Total (mg/l as N)	CALC	NA

NM = not measured
NA = not analyzed

MESA 5 - DOBSON AND BROADWAY	METHOD	RESULTS
Date of Sampling		1/9/01
Phosphorous Total (mg/l as P)	365.3	NA
Phosphorous Dissolved (mg/l as P)	365.3	NA
Oil and Grease Total Recoverable (mg/l)	413.2	5.3
Hardness (mg/l)	2340B	NA
Cadmium Total Recoverable (ug/l as Cd)	200.9	NA
Cadmium Dissolved (ug/l as Cd)	200.9	NA
Chromium Total Recoverable (ug/l as Cr)	200.9	NA
Chromium Dissolved (ug/l as Cr)	200.9	NA
Copper, Total Recoverable, (ug/l as Cu)	200.9	NA
Copper, Dissolved, (ug/l as Cu)	200.8	NA
Lead, Total Recoverable, (ug/l as Pb)	200.9	NA
Lead, Dissolved, (ug/l as Pb)	200.9	NA
Mercury, Total Recoverable, (ug/l as Hg)	245.1	NA
Mercury, Dissolved, (ug/l as Hg)	245.1	NA
Zinc, Total Recoverable, (ug/l as Zn)	200.7	NA
Zinc, Dissolved, (ug/l as Zn)	200.7	NA
P,P' DDE, Total, (ug/l)	608	NA
Methylene Chloride, Total, (ug/l)	624	<5
Toluene, Total, (ug/l)	624	<2
Benzo (a) Pyrene, Total, (ug/l)	625	NA
Chrysene, Total, (ug/l)	625	NA
Fluoranthene, Total, (ug/l)	625	NA
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	NA
Pyrene, Total, (ug/l)	625	NA

NM = not measured
NA = not analyzed

Storm of January 27, 2001

Falcon (Mesa 3)

at Mesa Falcon Field Airport

MESA 3 - FALCON FIELD	METHOD	RESULTS
Date of Sampling		1/27/01
Time		0515
Representative Storm Event		Y
Agency Collecting Sample		MESA
Agency Analyzing Sample		DEL MAR
Drainage Area (acres) (DA)		171
Impervious Area (acres) (IA)		111
Land Use - Residential		unknown
Land Use - Commercial		unknown
Land Use - Industrial		unknown
Land Use - Undeveloped		unknown
Sampling Duration (minutes) (DRN)		0
Storm Duration (minutes)		399
Runoff Sampled (cubic feet) (RUN)		0
Total Storm Runoff (cubic feet)		623
Instantaneous Discharge (cfs)		0.079
Preceeding Dry Period (days) (ANT)		10
Total Storm Rainfall (inch)		0.66
Rainfall Sampled (inch) (TRN)		0
Maximum 5-minute rain intensity (in/hr)(MAX5)		0.24
Sample Temperature (deg. C)	Lab	2
Effluent Temperature (deg. C)	Field	NM
pH, Effluent (standard units)	Field	NM
BOD5 (mg/l)	405.1	6
COD High Level (mg/l)	410.4	NA
Fecal Coliform (MPN/100ml)	9221E	80
Fecal Streptococci (MPN/100ml)	9230B	800
E. Coli (MPN/100 ml)	9221F	22
Total Dissolved Solids (mg/l)	2540C	NA
Total Suspended Solids (mg/l)	160.2	NA
TKN Nitrogen (mg/l as N)	4500NOC	NA
Nitrogen Nitrate Total (mg/l as N)	300.0	NA
Nitrogen Ammonia Total (mg/l as N)	350.3	NA
Nitrogen Organic Total (mg/l as N)	CALC	NA

NM = not measured
NA = not analyzed

MESA 3 - FALCON FIELD	METHOD	RESULTS
Date of Sampling		1/27/01
Phosphorous Total (mg/l as P)	365.3	NA
Phosphorous Dissolved (mg/l as P)	365.3	NA
Oil and Grease Total Recoverable (mg/l)	413.2	2.2
Hardness (mg/l)	2340B	NA
Cadmium Total Recoverable (ug/l as Cd)	200.9	NA
Cadmium Dissolved (ug/l as Cd)	200.9	NA
Chromium Total Recoverable (ug/l as Cr)	200.9	NA
Chromium Dissolved (ug/l as Cr)	200.9	NA
Copper, Total Recoverable, (ug/l as Cu)	200.9	NA
Copper, Dissolved, (ug/l as Cu)	200.8	NA
Lead, Total Recoverable, (ug/l as Pb)	200.9	NA
Lead, Dissolved, (ug/l as Pb)	200.9	NA
Mercury, Total Recoverable, (ug/l as Hg)	245.1	NA
Mercury, Dissolved, (ug/l as Hg)	245.1	NA
Zinc, Total Recoverable, (ug/l as Zn)	200.7	NA
Zinc, Dissolved, (ug/l as Zn)	200.7	NA
P,P' DDE, Total, (ug/l)	608	NA
Methylene Chloride, Total, (ug/l)	624	<5
Toluene, Total, (ug/l)	624	<2
Benzo (a) Pyrene, Total, (ug/l)	625	NA
Chrysene, Total, (ug/l)	625	NA
Fluoranthene, Total, (ug/l)	625	NA
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	NA
Pyrene, Total, (ug/l)	625	NA

NM = not measured
NA = not analyzed

Data Validation Tables

Storm of January 8-9, 2001

Mesa Horne and Sixth

Storm of January 8-9, 2001

	Method	Result	Units	Method Reporting 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)		0	deg. C			1/9/01	Immediate							
Effluent Temperature (deg. C)		16	deg. C			1/9/01	Immediate							
pH, Effluent (standard units)		7.7	std. Units			1/9/01	Immediate							
BOD5 (mg/l)	405.1	22	mg/l	2	K3	1/15/01	48 hours			<20	7.69			Seed depletion outside limits; extracted 1/10.
COD High Level (mg/l)			mg/l				28 days							
Fecal Coliform (MPN/100ml)	9221E	300	MPN/100ml	2		1/9/01	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	17,000	MPN/100ml	2		1/9/01	6 hours							
E. Coli (MPN/100 ml)	9221F	170	MPN/100ml	2		1/9/01	6 hours							
Total Dissolved Solids (mg/l)			mg/l				7 days							
Total Suspended Solids (mg/l)			mg/l				7 days							
TKN Nitrogen (mg/l as N)			mg/l				28 days							
Nitrogen Nitrate Total (mg/l as N)			mg/l				48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)			mg/l				calculation							
Phosphorous Total (mg/l as P)			mg/l				28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2	1.6	mg/l	1		1/9/01	28 days			<20	0			
Hardness (mg/l)			mg/l				6 months							
Cadmium Total Recoverable (ug/l as Cd)			ug/l				6 months							
Cadmium Dissolved (ug/l as Cd)			ug/l				6 months							
Chromium Total Recoverable (ug/l as Cr)			ug/l				6 months							
Chromium Dissolved (ug/l as Cr)			ug/l				6 months							
Copper, Total Recoverable, (ug/l as Cu)			ug/l				6 months							
Copper, Dissolved, (ug/l as Cu)			ug/l				6 months							
Lead, Total Recoverable, (ug/l as Pb)			ug/l				6 months							
Lead, Dissolved, (ug/l as Pb)			ug/l				6 months							
Mercury, Total Recoverable, (ug/l as Hg)			ug/l				6 months							
Mercury, Dissolved, (ug/l as Hg)			ug/l				6 months							
Zinc, Total Recoverable, (ug/l as Zn)			ug/l				6 months							
Zinc, Dissolved, (ug/l as Zn)			ug/l				6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)			ug/l				40 days							
EPA Method 624 Extraction	624					1/17/01	7 days							
Methylene Chloride, Total, (ug/l)	624	< 5	ug/l	5		1/17/01	14 days							
Toluene, Total, (ug/l)	624	< 2	ug/l	2		1/17/01	14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)			ug/l				40 days							
Chrysene, Total, (ug/l)			ug/l				40 days							
Fluoranthene, Total, (ug/l)			ug/l				40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)			ug/l				40 days							
Pyrene, Total, (ug/l)			ug/l				40 days							

Grab Sample

Mesa Lindsay and Broadway

Storm of January 8-9, 2001

	Method	Result	Units	Method Reporting 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)		0	deg. C			1/9/01	Immediate							
Effluent Temperature (deg. C)		6	deg. C			1/8/01	Immediate							
pH, Effluent (standard units)		8.1	std. Units			1/8/01	Immediate							
BOD5 (mg/l)	405.1	11	mg/l	2	K3	1/15/01	48 hours			<20	7.69			Seed depletion outside limits; extracted 1/10.
COD High Level (mg/l)			mg/l				28 days							
Fecal Coliform (MPN/100ml)	9221E	170	MPN/100ml	2		1/9/01	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	5,000	MPN/100ml	2		1/9/01	6 hours							
E. Coli (MPN/100 ml)	9221F	110	MPN/100ml	2		1/9/01	6 hours							
Total Dissolved Solids (mg/l)			mg/l				7 days							
Total Suspended Solids (mg/l)			mg/l				7 days							
TKN Nitrogen (mg/l as N)			mg/l				28 days							
Nitrogen Nitrate Total (mg/l as N)			mg/l				48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)			mg/l				calculation							
Phosphorous Total (mg/l as P)			mg/l				28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2	5.3	mg/l	1		1/9/01	28 days			<20	0			
Hardness (mg/l)			mg/l				6 months							
Cadmium Total Recoverable (ug/l as Cd)			ug/l				6 months							
Cadmium Dissolved (ug/l as Cd)			ug/l				6 months							
Chromium Total Recoverable (ug/l as Cr)			ug/l				6 months							
Chromium Dissolved (ug/l as Cr)			ug/l				6 months							
Copper, Total Recoverable, (ug/l as Cu)			ug/l				6 months							
Copper, Dissolved, (ug/l as Cu)			ug/l				6 months							
Lead, Total Recoverable, (ug/l as Pb)			ug/l				6 months							
Lead, Dissolved, (ug/l as Pb)			ug/l				6 months							
Mercury, Total Recoverable, (ug/l as Hg)			ug/l				6 months							
Mercury, Dissolved, (ug/l as Hg)			ug/l				6 months							
Zinc, Total Recoverable, (ug/l as Zn)			ug/l				6 months							
Zinc, Dissolved, (ug/l as Zn)			ug/l				6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)			ug/l				40 days							
EPA Method 624 Extraction	624					1/17/01	7 days							
Methylene Chloride, Total, (ug/l)	624	< 5	ug/l	5		1/17/01	14 days							
Toluene, Total, (ug/l)	624	< 2	ug/l	2		1/17/01	14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)			ug/l				40 days							
Chrysene, Total, (ug/l)			ug/l				40 days							
Fluoranthene, Total, (ug/l)			ug/l				40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)			ug/l				40 days							
Pyrene, Total, (ug/l)			ug/l				40 days							

Grab Sample

Mesa Horne and Grandview

Storm of January 8-9, 2001

	Method	Result	Units	Method Reporting 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)		0	deg. C			1/9/01	Immediate							
Effluent Temperature (deg. C)		7	deg. C			1/9/01	Immediate							
pH, Effluent (standard units)		7.8	std. Units			1/9/01	Immediate							
BOD5 (mg/l)	405.1	16	mg/l	2	K3	1/15/01	48 hours			<20	7.69			Seed depletion outside limits; extracted 1/10.
COD High Level (mg/l)			mg/l				28 days							
Fecal Coliform (MPN/100ml)	9221E	170	MPN/100ml	2		1/9/01	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	22,000	MPN/100ml	2		1/9/01	6 hours							
E. Coli (MPN/100 ml)	9221F	170	MPN/100ml	2		1/9/01	6 hours							
Total Dissolved Solids (mg/l)			mg/l				7 days							
Total Suspended Solids (mg/l)			mg/l				7 days							
TKN Nitrogen (mg/l as N)			mg/l				28 days							
Nitrogen Nitrate Total (mg/l as N)			mg/l				48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)			mg/l				calculation							
Phosphorous Total (mg/l as P)			mg/l				28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2	1.6	mg/l	1		1/9/01	28 days			<20	0			
Hardness (mg/l)			mg/l				6 months							
Cadmium Total Recoverable (ug/l as Cd)			ug/l				6 months							
Cadmium Dissolved (ug/l as Cd)			ug/l				6 months							
Chromium Total Recoverable (ug/l as Cr)			ug/l				6 months							
Chromium Dissolved (ug/l as Cr)			ug/l				6 months							
Copper, Total Recoverable, (ug/l as Cu)			ug/l				6 months							
Copper, Dissolved, (ug/l as Cu)			ug/l				6 months							
Lead, Total Recoverable, (ug/l as Pb)			ug/l				6 months							
Lead, Dissolved, (ug/l as Pb)			ug/l				6 months							
Mercury, Total Recoverable, (ug/l as Hg)			ug/l				6 months							
Mercury, Dissolved, (ug/l as Hg)			ug/l				6 months							
Zinc, Total Recoverable, (ug/l as Zn)			ug/l				6 months							
Zinc, Dissolved, (ug/l as Zn)			ug/l				6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)			ug/l				40 days							
EPA Method 624 Extraction	624					1/17/01	7 days							
Methylene Chloride, Total, (ug/l)	624	< 5	ug/l	5	S4	1/17/01	14 days							Surrogate recovery range 80-120; result 121%
Toluene, Total, (ug/l)	624	< 2	ug/l	2	S4	1/17/01	14 days	<20	0.364	<20	0			Surrogate recovery range 80-120; result 121%
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)			ug/l				40 days							
Chrysene, Total, (ug/l)			ug/l				40 days							
Fluoranthene, Total, (ug/l)			ug/l				40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)			ug/l				40 days							
Pyrene, Total, (ug/l)			ug/l				40 days							

Grab Sample

Mesa Horne and Grandview

Storm of January 8-9, 2001

	Method	Result	Units	Method Reporting 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)		NM	deg. C				Immediate							Not measured.
Effluent Temperature (deg. C)		NM	deg. C				Immediate							Not measured.
pH, Effluent (standard units)		NM	std. Units				Immediate							Not measured.
BOD5 (mg/l)			mg/l				48 hours							
COD High Level (mg/l)	410.4	60	mg/l	20		1/12/01	28 days	<20	1.49					
Fecal Coliform (MPN/100ml)			MPN/100ml				6 hours							
Fecal Streptococci (MPN/100ml)			MPN/100ml				6 hours							
E. Coli (MPN/100 ml)			MPN/100ml				6 hours							
Total Dissolved Solids (mg/l)	2540C	50	mg/l	20		1/9/01	7 days			<5	1.32			
Total Suspended Solids (mg/l)	160.2	16	mg/l	10		1/11/01	7 days							
TKN Nitrogen (mg/l as N)	4500NOC	0.95	mg/l	0.5		1/11/01	28 days	<15	6.06					
Nitrogen Nitrate Total (mg/l as N)	300.0	0.72	mg/l	0.1		1/11/01	48 hours	<20	3.63	<20	0			
Nitrogen Ammonia Total (mg/l as N)	350.3	0.65	mg/l	0.05	N1 Q8	1/18/01	28 days			<20	1.82			See case narrative.
Nitrogen Organic Total (mg/l as N)	calc	<0.5	mg/l	0.5		3/8/01	calculation							
Phosphorous Total (mg/l as P)	365.3	0.24	mg/l	0.05	M2 Q11	1/16/01	28 days	<20	37.1					MS recovery low; sample heterogenous.
Phosphorous Dissolved (mg/l as P)	365.3	0.24	mg/l	0.05	M2 Q11	1/16/01	28 days	<20	37.1					MS recovery low; sample heterogenous.
Oil and Grease Total Recoverable (mg/l)			mg/l				28 days							
Hardness (mg/l)	2340B	23	mg/l	1		1/11/01	6 months							
Cadmium Total Recoverable (ug/l as Cd)	200.9	<0.5	ug/l	0.5		1/12/01	6 months	<20	4.11					
Cadmium Dissolved (ug/l as Cd)	200.9	<0.5	ug/l	0.5		1/12/01	6 months	<20	4.11					
Chromium Total Recoverable (ug/l as Cr)	200.9	<4	ug/l	4		1/12/01	6 months	<20	1.10					
Chromium Dissolved (ug/l as Cr)	200.9	<4	ug/l	4		1/12/01	6 months	<20	1.10					
Copper, Total Recoverable, (ug/l as Cu)	200.9	18	ug/l	4		1/12/01	6 months	<20	4.32					
Copper, Dissolved, (ug/l as Cu)	200.7	13	ug/l	2.5		1/15/01	6 months	<20	0					
Lead, Total Recoverable, (ug/l as Pb)	200.9	<2	ug/l	2		1/12/01	6 months	<20	3.65					
Lead, Dissolved, (ug/l as Pb)	200.9	<2	ug/l	2		1/12/01	6 months	<20	3.65					
Mercury, Total Recoverable, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		1/10/01	6 months	<20	2.70					
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		1/10/01	6 months	<20	2.70					
Zinc, Total Recoverable, (ug/l as Zn)	200.7	<50	ug/l	50		1/10/01	6 months	<20	0					
Zinc, Dissolved, (ug/l as Zn)	200.7	93	ug/l	50		1/12/01	6 months	<20	2.00	<20	0.102			
EPA Method 608 Extraction	608					1/10/01	7 days							
P,P' DDE, Total, (ug/l)	608	<0.11	ug/l	0.11		1/11/01	40 days			<20	1.51			
EPA Method 624 Extraction							7 days							
Methylene Chloride, Total, (ug/l)			ug/l				14 days							
Toluene, Total, (ug/l)			ug/l				14 days							
EPA Method 625 Extraction	625					1/10/01	7 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<20	ug/l	20		1/16/01	40 days							
Chrysene, Total, (ug/l)	625	<10	ug/l	10		1/16/01	40 days							
Fluoranthene, Total, (ug/l)	625	<10	ug/l	10		1/16/01	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<20	ug/l	20		1/16/01	40 days							
Pyrene, Total, (ug/l)	625	<10	ug/l	10	M1 S7	1/16/01	40 days	<20	11.4					MS recovery high; surrogate recovery < MAL.

Composite Sample

Mesa Dobson and Broadway

Storm of January 8-9, 2001

	Method	Result	Units	Method Reporting 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)		0	deg. C			1/9/01	Immediate							
Effluent Temperature (deg. C)		17	deg. C			1/8/01	Immediate							
pH, Effluent (standard units)		8.1	std. Units			1/8/01	Immediate							
BOD5 (mg/l)	405.1	62	mg/l	2	K3	1/15/01	48 hours			<20	7.69			Seed depletion outside limits; extracted 1/10.
COD High Level (mg/l)			mg/l				28 days							
Fecal Coliform (MPN/100ml)	9221E	1,700	MPN/100ml	2		1/9/01	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	9,000	MPN/100ml	2		1/9/01	6 hours							
E. Coli (MPN/100 ml)	9221F	1,700	MPN/100ml	2		1/9/01	6 hours							
Total Dissolved Solids (mg/l)			mg/l				7 days							
Total Suspended Solids (mg/l)			mg/l				7 days							
TKN Nitrogen (mg/l as N)			mg/l				28 days							
Nitrogen Nitrate Total (mg/l as N)			mg/l				48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)			mg/l				calculation							
Phosphorous Total (mg/l as P)			mg/l				28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2	11	mg/l	1		1/9/01	28 days			<20	0			
Hardness (mg/l)			mg/l				6 months							
Cadmium Total Recoverable (ug/l as Cd)			ug/l				6 months							
Cadmium Dissolved (ug/l as Cd)			ug/l				6 months							
Chromium Total Recoverable (ug/l as Cr)			ug/l				6 months							
Chromium Dissolved (ug/l as Cr)			ug/l				6 months							
Copper, Total Recoverable, (ug/l as Cu)			ug/l				6 months							
Copper, Dissolved, (ug/l as Cu)			ug/l				6 months							
Lead, Total Recoverable, (ug/l as Pb)			ug/l				6 months							
Lead, Dissolved, (ug/l as Pb)			ug/l				6 months							
Mercury, Total Recoverable, (ug/l as Hg)			ug/l				6 months							
Mercury, Dissolved, (ug/l as Hg)			ug/l				6 months							
Zinc, Total Recoverable, (ug/l as Zn)			ug/l				6 months							
Zinc, Dissolved, (ug/l as Zn)			ug/l				6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)			ug/l				40 days							
EPA Method 624 Extraction	624					1/17/01	7 days							
Methylene Chloride, Total, (ug/l)	624	< 5	ug/l	5		1/17/01	14 days							
Toluene, Total, (ug/l)	624	< 2	ug/l	2		1/17/01	14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)			ug/l				40 days							
Chrysene, Total, (ug/l)			ug/l				40 days							
Fluoranthene, Total, (ug/l)			ug/l				40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)			ug/l				40 days							
Pyrene, Total, (ug/l)			ug/l				40 days							

Grab Sample

Storm of January 27, 2001

Mesa Falcon

Storm of January 27, 2001

	Method	Result	Units	Method Reporting 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)		2	deg. C				Immediate							
Effluent Temperature (deg. C)		NM	deg. C				Immediate							Not measured.
pH, Effluent (standard units)		NM	std. Units				Immediate							Not measured.
BOD5 (mg/l)	405.1	6	mg/l	3		1/27/01	48 hours			<10	66.7			RPD exceeded 10% limit.
COD High Level (mg/l)			mg/l				28 days							
Fecal Coliform (MPN/100ml)	9221E	80	MPN/100ml	2		1/27/01	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	800	MPN/100ml	2		1/27/01	6 hours							
E. Coli (MPN/100 ml)	9221F	22	MPN/100ml	2		1/27/01	6 hours							
Total Dissolved Solids (mg/l)			mg/l				7 days							
Total Suspended Solids (mg/l)			mg/l				7 days							
TKN Nitrogen (mg/l as N)			mg/l				28 days							
Nitrogen Nitrate Total (mg/l as N)			mg/l				48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)			mg/l				calculation							
Phosphorous Total (mg/l as P)			mg/l				28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2	2.2	mg/l	1		1/30/01	28 days			<20	2.49			
Hardness (mg/l)			mg/l				6 months							
Cadmium Total Recoverable (ug/l as Cd)			ug/l				6 months							
Cadmium Dissolved (ug/l as Cd)			ug/l				6 months							
Chromium Total Recoverable (ug/l as Cr)			ug/l				6 months							
Chromium Dissolved (ug/l as Cr)			ug/l				6 months							
Copper, Total Recoverable, (ug/l as Cu)			ug/l				6 months							
Copper, Dissolved, (ug/l as Cu)			ug/l				6 months							
Lead, Total Recoverable, (ug/l as Pb)			ug/l				6 months							
Lead, Dissolved, (ug/l as Pb)			ug/l				6 months							
Mercury, Total Recoverable, (ug/l as Hg)			ug/l				6 months							
Mercury, Dissolved, (ug/l as Hg)			ug/l				6 months							
Zinc, Total Recoverable, (ug/l as Zn)			ug/l				6 months							
Zinc, Dissolved, (ug/l as Zn)			ug/l				6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)			ug/l				40 days							
EPA Method 624 Extraction	624					2/2/01	7 days							
Methylene Chloride, Total, (ug/l)	624	<5	ug/l	5		2/2/01	14 days							
Toluene, Total, (ug/l)	624	<2	ug/l	2		2/2/01	14 days	<20	7.25	<20	2.54			
EPA Method 625 Extraction							7 days							
Benzo (a) Anthracene, Total, (ug/l)			ug/l				40 days							
Chrysene, Total, (ug/l)			ug/l				40 days							
Fluoranthene, Total, (ug/l)			ug/l				40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)			ug/l				40 days							
Pyrene, Total, (ug/l)			ug/l				40 days							

Grab Sample

Lab Reports and Quality Control Data

Storm of January 8-9, 2001

Lab Reports and Quality Control Data
Del Mar Analytical (Grab Samples)

Del Mar Analytical

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: Mesa-NPDES Stormwater

Report Number: PKA0078

Sampled: 01/08/01-01/09/01
Received: 01/09/01
Issued: 01/18/01

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PKA0078-01	DOBSON	Water
PKA0078-02	Lindsay	Water
PKA0078-03	Horne & 6th	Water
PKA0078-04	Horne & Grandview	Water
PKA0078-05	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.

QA/QC CRITERIA: All analyses met method criteria.

OBSERVATIONS: No significant observations were made.

SUBCONTRACTED: The Fecal Coliform, Fecal Strep, and E.Coli analyses were performed at Severn Trent Laboratories, Inc. (ADHS #AZ0613) Results are attached.

DEL MAR ANALYTICAL , PHOENIX (AZ0426)

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: Mesa-NPDES Stormwater

Report Number: PKA0078

Sampled: 01/08/01-01/09/01
Received: 01/09/01

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: PKA0078-01 (DOBSON - Water)								
Oil & Grease	EPA 413.2	P1A0918	1.0	**11**	1	1/9/01	1/9/01	
Sample ID: PKA0078-02 (Lindsay - Water)								
Oil & Grease	EPA 413.2	P1A0918	1.0	**5.3**	1	1/9/01	1/9/01	
Sample ID: PKA0078-03 (Horne & 6th - Water)								
Oil & Grease	EPA 413.2	P1A0918	1.0	**1.6**	1	1/9/01	1/9/01	
Sample ID: PKA0078-04 (Horne & Grandview - Water)								
Oil & Grease	EPA 413.2	P1A0918	1.0	**1.6**	1	1/9/01	1/9/01	

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: Mesa-NPDES Stormwater

Report Number: PKA0078

Sampled: 01/08/01-01/09/01
Received: 01/09/01

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: PKA0078-01 (DOBSON - Water)								
Methylene chloride	EPA 624	P1A1702	5.0	ND	1	1/17/01	1/17/01	
Toluene	EPA 624	P1A1702	2.0	ND	1	1/17/01	1/17/01	
Surrogate: Dibromofluoromethane (80-120%)				*119 %*				
Surrogate: Toluene-d8 (65-125%)				*108 %*				
Surrogate: 4-Bromofluorobenzene (65-130%)				*102 %*				
Sample ID: PKA0078-02 (Lindsay - Water)								
Methylene chloride	EPA 624	P1A1702	5.0	ND	1	1/17/01	1/17/01	
Toluene	EPA 624	P1A1702	2.0	ND	1	1/17/01	1/17/01	
Surrogate: Dibromofluoromethane (80-120%)				*117 %*				
Surrogate: Toluene-d8 (65-125%)				*105 %*				
Surrogate: 4-Bromofluorobenzene (65-130%)				*104 %*				
Sample ID: PKA0078-03 (Horne & 6th - Water)								
Methylene chloride	EPA 624	P1A1702	5.0	ND	1	1/17/01	1/17/01	
Toluene	EPA 624	P1A1702	2.0	ND	1	1/17/01	1/17/01	
Surrogate: Dibromofluoromethane (80-120%)				*116 %*				
Surrogate: Toluene-d8 (65-125%)				*105 %*				
Surrogate: 4-Bromofluorobenzene (65-130%)				*104 %*				
Sample ID: PKA0078-04 (Horne & Grandview - Water)								
Methylene chloride	EPA 624	P1A1702	5.0	ND	1	1/17/01	1/17/01	
Toluene	EPA 624	P1A1702	2.0	ND	1	1/17/01	1/17/01	
Surrogate: Dibromofluoromethane (80-120%)				*121 %*				S4
Surrogate: Toluene-d8 (65-125%)				*102 %*				
Surrogate: 4-Bromofluorobenzene (65-130%)				*103 %*				

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: Mesa-NPDES Stormwater

Report Number: PKA0078

Sampled: 01/08/01-01/09/01
Received: 01/09/01

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: PKA0078-05 (Trip Blank - Water)								
Methylene chloride	EPA 624	P1A1702	5.0	ND	1	1/17/01	1/17/01	
Toluene	EPA 624	P1A1702	2.0	ND	1	1/17/01	1/17/01	
Surrogate: Dibromofluoromethane (80-120%)				*119 %*				
Surrogate: Toluene-d8 (65-125%)				*105 %*				
Surrogate: 4-Bromofluorobenzene (65-130%)				*102 %*				

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: Mesa-NPDES Stormwater

Report Number: PKA0078

Sampled: 01/08/01-01/09/01
Received: 01/09/01

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKA0078-01 (DOBSON - Water)								
Biochemical Oxygen Demand	EPA 405.1	P1A1010	2.0	**62**	1	1/10/01	1/15/01	K3
Sample ID: PKA0078-02 (Lindsay - Water)								
Biochemical Oxygen Demand	EPA 405.1	P1A1010	2.0	**11**	1	1/10/01	1/15/01	K3
Sample ID: PKA0078-03 (Horne & 6th - Water)								
Biochemical Oxygen Demand	EPA 405.1	P1A1010	2.0	**22**	1	1/10/01	1/15/01	K3
Sample ID: PKA0078-04 (Horne & Grandview - Water)								
Biochemical Oxygen Demand	EPA 405.1	P1A1010	2.0	**16**	1	1/10/01	1/15/01	K3

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: Mesa-NPDES Stormwater

Report Number: PKA0078

Sampled: 01/08/01-01/09/01
Received: 01/09/01

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: P1A0918 Extracted: 01/09/01										
Blank Analyzed: 01/09/01 (P1A0918-BLK1)										
Oil & Grease	ND	1.0	mg/l							
LCS Analyzed: 01/09/01 (P1A0918-BS1)										
Oil & Grease	**11.6**	1.0	mg/l	10.0		116	100-130			
LCS Dup Analyzed: 01/09/01 (P1A0918-BSD1)										
Oil & Grease	**11.6**	1.0	mg/l	10.0		116	100-130	0	20	

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Report Number: PKA0078

Sampled: 01/08/01-01/09/01
Received: 01/09/01

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: P1A1702 Extracted: 01/17/01										
Blank Analyzed: 01/17/01 (P1A1702-BLK1)										
Methylene chloride	ND	5.0	ug/l							
Toluene	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*26.9*		*ug/l*	*25.0*		*108*	*80-120*			
Surrogate: Toluene-d8	*25.9*		*ug/l*	*25.0*		*104*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*25.9*		*ug/l*	*25.0*		*104*	*65-130*			
LCS Analyzed: 01/17/01 (P1A1702-BS1)										
Toluene	**26.6**	2.0	ug/l	25.0		106	47-150			
Surrogate: Dibromofluoromethane	*26.7*		*ug/l*	*25.0*		*107*	*80-120*			
Surrogate: Toluene-d8	*24.9*		*ug/l*	*25.0*		*99.6*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*25.8*		*ug/l*	*25.0*		*103*	*65-130*			
LCS Dup Analyzed: 01/17/01 (P1A1702-BSD1)										
Toluene	**26.6**	2.0	ug/l	25.0		106	47-150	0	20	
Surrogate: Dibromofluoromethane	*27.5*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*25.3*		*ug/l*	*25.0*		*101*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*26.1*		*ug/l*	*25.0*		*104*	*65-130*			
Matrix Spike Analyzed: 01/17/01 (P1A1702-MS1)					**Source: PKA0116-06**					
Toluene	**27.4**	2.0	ug/l	25.0	ND	110	47-150			
Surrogate: Dibromofluoromethane	*28.7*		*ug/l*	*25.0*		*115*	*80-120*			
Surrogate: Toluene-d8	*26.3*		*ug/l*	*25.0*		*105*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*24.4*		*ug/l*	*25.0*		*97.6*	*65-130*			
Matrix Spike Dup Analyzed: 01/17/01 (P1A1702-MSD1)					**Source: PKA0116-06**					
Toluene	**27.5**	2.0	ug/l	25.0	ND	110	47-150	0.364	20	
Surrogate: Dibromofluoromethane	*28.6*		*ug/l*	*25.0*		*114*	*80-120*			
Surrogate: Toluene-d8	*26.5*		*ug/l*	*25.0*		*106*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*25.4*		*ug/l*	*25.0*		*102*	*65-130*			

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: Mesa-NPDES Stormwater

Report Number: PKA0078

Sampled: 01/08/01-01/09/01
Received: 01/09/01

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1A1010 Extracted: 01/10/01										
Blank Analyzed: 01/15/01 (P1A1010-BLK1)										
Biochemical Oxygen Demand	ND	2.0	mg/l							
LCS Analyzed: 01/15/01 (P1A1010-BS1)										
Biochemical Oxygen Demand	**214**	2.0	mg/l	198		108	85-115			
Duplicate Analyzed: 01/15/01 (P1A1010-DUP1)					**Source: PKA0074-01**					
Biochemical Oxygen Demand	**10800**	200	mg/l		10000			7.69	20	

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Received: 01/09/01

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

K3 The seed depletion was outside the method acceptance limits.

S4 Surrogate recovery was above laboratory and method acceptance limits. No target analytes were detected in the sample.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not reported.

RPD Relative Percent Difference

Linda Eshelman
Project Manager

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Lab Reports and Quality Control Data
Severn Trent

Severn Trent Services

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402 N. Neely Street Gilbert, Arizona 85233 Tel: (480) 926-3761 Fax: (480) 926-3868

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044

Attention: Linda Eshelman

Report Date: January 22, 2001
Date/Time Received: 01/09/01 0200
Project Identification: FCD-Mesa
Sample Description: Stormwater
Purchase Order Number:

LAB RESULTS

Analytical Method	Parameter Description	Sample Identification	Sample Date / Time	Analysis Date	Lab Identification	Reporting Limit	Analytical Results	Units
SM9221E	Fecal Coliform by MTF	Dobson	01/08/01 2230	1/9/2001 0407	C01-083	2	1700	MPN/100ml
SM9221F	E. Coli - MPN			01/09/01 0407		2	1700	MPN/100ml
SM9230B	Fecal Streptococcus by MTF			01/09/01 0416	C01-084	2	9000	MPN/100ml
SM9221E	Fecal Coliform by MTF	Lindsay	01/08/01 2314	01/09/01 0433	C01-085	2	170	MPN/100ml
SM9221F	E. Coli - MPN			01/09/01 0433		2	110	MPN/100ml
SM9230B	Fecal Streptococcus by MTF			01/09/01 0442	C01-086	2	5000	MPN/100ml
SM9221E	Fecal Coliform by MTF	Horne & 6th	01/09/01 0002	01/09/01 0507	C01-087	2	300	MPN/100ml
SM9221F	E. Coli - MPN			01/09/01 0507		2	170	MPN/100ml
SM9230B	Fecal Streptococcus by MTF			01/09/01 0516	C01-088	2	17000	MPN/100ml
SM9221E	Fecal Coliform by MTF	Horne & Grandview	01/09/01 0032	01/09/01 0525	C01-089	2	170	MPN/100ml
SM9221F	E. Coli - MPN			01/09/01 0525		2	170	MPN/100ml
SM9230B	Fecal Streptococcus by MTF			01/09/01 0534	C01-090	2	22000	MPN/100ml

Analytes reported as N.D. were not present above the stated limit of detection.
SEVERN TRENT ENVIRONMENTAL SERVICES, Chandler - ADHS Licensure AZ0613

Stephen J. Rot
Laboratory Director

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Lab Reports and Quality Control Data
Del Mar Analytical (Composite Sample)

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01
Issued: 01/23/01

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PKA0086-01	Grandview + Horne	Water
PKA0086-02	Grandview + Horne	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.

QA/QC CRITERIA: One or more QC parameters exceeded acceptance limits for method 625. See Corrective Action Report.

OBSERVATIONS: Ammonia was detected in the associated method blank for sample PKA0086-01. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.

SUBCONTRACTED: The dissolved copper analysis was performed at NEL Laboratories. (ADHS #AZ0520) Results are attached.

DEL MAR ANALYTICAL , PHOENIX (AZ0426)

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

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: PKA0086-01 (Grandview + Horne - Water)								
Benzo(a)pyrene	EPA 625	P1A1023	20	ND	1	1/10/01	1/16/01	
Chrysene	EPA 625	P1A1023	10	ND	1	1/10/01	1/16/01	
Fluoranthene	EPA 625	P1A1023	10	ND	1	1/10/01	1/16/01	
Indeno(1,2,3-cd)pyrene	EPA 625	P1A1023	20	ND	1	1/10/01	1/16/01	
Pyrene	EPA 625	P1A1023	10	ND	1	1/10/01	1/16/01	
Surrogate: 2-Fluorophenol (21-100%)				*98.1 %*				
Surrogate: Phenol-d6 (10-94%)				*91.5 %*				
Surrogate: 2,4,6-Tribromophenol (10-123%)				*102 %*				
Surrogate: Nitrobenzene-d5 (35-114%)				*76.0 %*				
Surrogate: 2-Fluorobiphenyl (43-116%)				*94.6 %*				
Surrogate: Terphenyl-d14 (33-141%)				*103 %*				

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

TOTAL RECOVERABLE METALS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKA0086-01 (Grandview + Horne - Water)								
Cadmium	EPA 200.9	P1A1114	0.00050	ND	1	1/11/01	1/12/01	
Calcium	EPA 200.7	P1A1009	2.0	**7.4**	1	1/10/01	1/10/01	
Chromium	EPA 200.9	P1A1114	0.0040	ND	1	1/11/01	1/12/01	
Copper	EPA 200.9	P1A1114	0.0040	**0.018**	1	1/11/01	1/12/01	
Lead	EPA 200.9	P1A1114	0.0020	ND	1	1/11/01	1/12/01	
Magnesium	EPA 200.7	P1A1009	0.50	**1.1**	1	1/10/01	1/11/01	
Mercury	EPA 245.1	P1A1021	0.00020	ND	1	1/10/01	1/10/01	
Potassium	EPA 258.1	P1A1009	1.0	**1.9**	1	1/10/01	1/15/01	
Sodium	EPA 273.1	P1A1009	5.0	ND	1	1/10/01	1/15/01	
Zinc	EPA 200.7	P1A1009	0.050	ND	1	1/10/01	1/10/01	

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2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

DISSOLVED METALS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKA0086-02 (Grandview + Horne - Water)								
Cadmium, Dissolved	EPA 200.9	P1A1114	0.00050	ND	1	1/11/01	1/12/01	
Chromium, Dissolved	EPA 200.9	P1A1114	0.0040	ND	1	1/11/01	1/12/01	
Lead, Dissolved	EPA 200.9	P1A1114	0.0020	ND	1	1/11/01	1/12/01	
Mercury, Dissolved	EPA 245.1	P1A1021	0.00020	ND	1	1/10/01	1/10/01	
Zinc, Dissolved	EPA 200.7	P1A1112	0.050	**0.093**	1	1/11/01	1/12/01	

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			mg/l	mg/l				
Sample ID: PKA0086-01 (Grandview + Horne - Water)								
Alkalinity as CaCO3	SM2320B	P1A1012	5.0	**21**	1	1/10/01	1/10/01	
Ammonia-N	EPA 350.3	P1A1810	0.050	**0.65**	1	1/18/01	1/18/01	N1,Q8
			%	%				
Sample ID: PKA0086-01 (Grandview + Horne - Water)								
Cation/Anion Balance	Calculation	P1A1809	NA	**1.90**	1	1/18/01	1/18/01	Neg
			mg/l	mg/l				
Sample ID: PKA0086-01 (Grandview + Horne - Water)								
Chemical Oxygen Demand	EPA 410.4	P1A1128	20	**60**	1	1/11/01	1/12/01	
Chloride	EPA 300.0	P1A1019	0.50	**5.3**	1	1/10/01	1/11/01	
Fluoride	EPA 300.0	P1A1019	0.10	**0.24**	1	1/10/01	1/11/01	
Hardness (CaCO3)	SM2340B	P1A1009	1.0	**23**	1	1/10/01	1/11/01	
Nitrate-N	EPA 300.0	P1A1019	0.10	**0.72**	1	1/10/01	1/11/01	
Phosphorous, Dissolved	EPA 365.3	P1A1224	0.050	**0.24**	1	1/16/01	1/16/01	
Phosphorus	EPA 365.3	P1A1224	0.050	**0.24**	1	1/16/01	1/16/01	
			umhos/cm	umhos/cm				
Sample ID: PKA0086-01 (Grandview + Horne - Water)								
Specific Conductance	SM2510B	P1A1106	2.0	**85**	1	1/11/01	1/11/01	
			mg/l	mg/l				
Sample ID: PKA0086-01 (Grandview + Horne - Water)								
Sulfate	EPA 300.0	P1A1019	0.50	**3.9**	1	1/10/01	1/11/01	
Total Dissolved Solids	SM2540C	P1A0913	20	**50**	1	1/9/01	1/9/01	
Total Suspended Solids	EPA 160.2	P1A1105	10	**16**	1	1/11/01	1/11/01	

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District 2801 West Durango Street Phoenix, AZ 85009 Attention: Julie Cox	Client Project ID: None Specified Report Number: PKA0086	Sampled: 01/09/01 Received: 01/09/01

NITROGEN, ORGANIC (Calculation)

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKA0086-01 (Grandview + Horne - Water)								
Organic Nitrogen	Calculation	P1A1819	0.50	ND	1	1/18/01	3/8/01	

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKA0086-01 (Grandview + Horne - Water)								
Total Kjeldahl Nitrogen	SM4500-N-O,C	C1A1010	0.50	**0.95**	1	1/10/01	1/11/01	

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

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: PKA0086-01 (Grandview + Horne - Water)								
4,4'-DDE	EPA 608	I1A1041	0.11	ND	1	1/10/01	1/11/01	
Surrogate: Tetrachloro-m-xylene (30-120%)				*41.1 %*				
Surrogate: Decachlorobiphenyl (30-120%)				*47.0 %*				

The reporting limit for this sample was adjusted by a factor of 1.12 to account for the applicable preparation factor.

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Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

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: P1A1023 Extracted: 01/10/01										
Blank Analyzed: 01/16/01 (P1A1023-BLK1)										
Benzo(a)pyrene	ND	20	ug/l							
Chrysene	ND	10	ug/l							
Fluoranthene	ND	10	ug/l							
Indeno(1,2,3-cd)pyrene	ND	20	ug/l							
Pyrene	ND	10	ug/l							
Surrogate: 2-Fluorophenol	*71.1*		*ug/l*	*100*		*71.1*	*21-100*			
Surrogate: Phenol-d6	*64.4*		*ug/l*	*100*		*64.4*	*10-94*			
Surrogate: 2,4,6-Tribromophenol	*68.7*		*ug/l*	*100*		*68.7*	*10-123*			
Surrogate: Nitrobenzene-d5	*30.8*		*ug/l*	*50.0*		*61.6*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*38.2*		*ug/l*	*50.0*		*76.4*	*43-116*			
Surrogate: Terphenyl-d14	*46.6*		*ug/l*	*50.0*		*93.2*	*33-141*			
LCS Analyzed: 01/16/01 (P1A1023-BS1)										
Pyrene	**56.2**	10	ug/l	50.0		112	52-115			
Surrogate: 2-Fluorophenol	*94.1*		*ug/l*	*100*		*94.1*	*21-100*			
Surrogate: Phenol-d6	*85.4*		*ug/l*	*100*		*85.4*	*10-94*			
Surrogate: 2,4,6-Tribromophenol	*101*		*ug/l*	*100*		*101*	*10-123*			
Surrogate: Nitrobenzene-d5	*43.0*		*ug/l*	*50.0*		*86.0*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*45.2*		*ug/l*	*50.0*		*90.4*	*43-116*			
Surrogate: Terphenyl-d14	*50.3*		*ug/l*	*50.0*		*101*	*33-141*			
Matrix Spike Analyzed: 01/16/01 (P1A1023-MS1)					**Source: PKA0087-06**					
Pyrene	**62.2**	10	ug/l	50.0	ND	124	52-115			M1
Surrogate: 2-Fluorophenol	*39.0*		*ug/l*	*200*		*19.5*	*21-100*			*S7*
Surrogate: Phenol-d6	*79.2*		*ug/l*	*200*		*39.6*	*10-94*			
Surrogate: 2,4,6-Tribromophenol	*170*		*ug/l*	*200*		*85.0*	*10-123*			
Surrogate: Nitrobenzene-d5	*40.8*		*ug/l*	*100*		*40.8*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*58.3*		*ug/l*	*100*		*58.3*	*43-116*			
Surrogate: Terphenyl-d14	*102*		*ug/l*	*100*		*102*	*33-141*			

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

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: P1A1023 Extracted: 01/10/01										
Matrix Spike Dup Analyzed: 01/16/01 (P1A1023-MSD1)					**Source: PKA0087-06**					
Pyrene	**55.5**	10	ug/l	50.0	ND	111	52-115	11.4	20	
Surrogate: 2-Fluorophenol	*70.5*		*ug/l*	*100*		*70.5*	*21-100*			
Surrogate: Phenol-d6	*73.2*		*ug/l*	*100*		*73.2*	*10-94*			
Surrogate: 2,4,6-Tribromophenol	*93.6*		*ug/l*	*100*		*93.6*	*10-123*			
Surrogate: Nitrobenzene-d5	*36.4*		*ug/l*	*50.0*		*72.8*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*40.7*		*ug/l*	*50.0*		*81.4*	*43-116*			
Surrogate: Terphenyl-d14	*48.6*		*ug/l*	*50.0*		*97.2*	*33-141*			

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Maricopa County -Flood Control District
2801 West Durango Street
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Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

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: P1A1009 Extracted: 01/10/01										
Blank Analyzed: 01/10/01 (P1A1009-BLK1)										
Calcium	ND	2.0	mg/l							
Magnesium	ND	0.50	mg/l							
Potassium	ND	1.0	mg/l							
Sodium	ND	5.0	mg/l							
Zinc	ND	0.050	mg/l							
LCS Analyzed: 01/10/01 (P1A1009-BS1)										
Calcium	**9.53**	2.0	mg/l	10.0		95.3	85-115			
Magnesium	**9.63**	0.50	mg/l	10.0		96.3	85-115			
Potassium	**10.0**	1.0	mg/l	10.0		100	85-115			
Sodium	**52.9**	5.0	mg/l	50.0		106	85-115			
Zinc	**0.957**	0.050	mg/l	1.00		95.7	85-115			
Matrix Spike Analyzed: 01/10/01 (P1A1009-MS1)					**Source: PKA0086-01**					
Calcium	**17.3**	2.0	mg/l	10.0	7.4	99.0	70-130			
Magnesium	**10.7**	0.50	mg/l	10.0	1.1	96.0	70-130			
Potassium	**11.8**	1.0	mg/l	10.0	1.9	99.0	85-115			
Sodium	**57.0**	5.0	mg/l	50.0	ND	106	85-115			
Zinc	**1.02**	0.050	mg/l	1.00	ND	98.7	70-130			
Matrix Spike Dup Analyzed: 01/10/01 (P1A1009-MSD1)					**Source: PKA0086-01**					
Calcium	**17.2**	2.0	mg/l	10.0	7.4	98.0	70-130	0.580	20	
Magnesium	**10.9**	0.50	mg/l	10.0	1.1	98.0	70-130	1.85	20	
Potassium	**11.7**	1.0	mg/l	10.0	1.9	98.0	85-115	0.851	20	
Sodium	**56.2**	5.0	mg/l	50.0	ND	104	85-115	1.41	20	
Zinc	**1.02**	0.050	mg/l	1.00	ND	98.7	70-130	0	20	

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

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: P1A1021 Extracted: 01/10/01										
Blank Analyzed: 01/10/01 (P1A1021-BLK1)										
Mercury	ND	0.00020	mg/l							
LCS Analyzed: 01/10/01 (P1A1021-BS1)										
Mercury	**0.00505**	0.00020	mg/l	0.00500		101	85-115			
Matrix Spike Analyzed: 01/10/01 (P1A1021-MS1)					**Source: PKA0093-03**					
Mercury	**0.00548**	0.00020	mg/l	0.00500	ND	110	85-115			
Matrix Spike Dup Analyzed: 01/10/01 (P1A1021-MSD1)					**Source: PKA0093-03**					
Mercury	**0.00563**	0.00020	mg/l	0.00500	ND	113	85-115	2.70	20	
Batch: P1A1114 Extracted: 01/11/01										
Blank Analyzed: 01/12/01 (P1A1114-BLK1)										
Cadmium	ND	0.00050	mg/l							
Chromium	ND	0.0040	mg/l							
Copper	ND	0.0040	mg/l							
Lead	ND	0.0020	mg/l							
Blank Analyzed: 01/12/01 (P1A1114-BLK2)										
Cadmium	ND	0.00050	mg/l							
Chromium	ND	0.0040	mg/l							
Copper	ND	0.0040	mg/l							
Lead	ND	0.0020	mg/l							
LCS Analyzed: 01/12/01 (P1A1114-BS1)										
Cadmium	**0.00199**	0.0010	mg/l	0.00200		99.5	85-115			
Chromium	**0.0406**	0.0080	mg/l	0.0400		102	85-115			
Copper	**0.0415**	0.0080	mg/l	0.0400		104	85-115			
Lead	**0.0397**	0.0040	mg/l	0.0400		99.3	85-115			

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

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: P1A1114 Extracted: 01/11/01										
Matrix Spike Analyzed: 01/12/01 (P1A1114-MS1)					**Source: PKA0107-01**					
Cadmium	**0.00167**	0.0010	mg/l	0.00200	ND	83.5	70-130			
Chromium	**0.0729**	0.0080	mg/l	0.0400	0.027	115	70-130			
Copper	**0.0996**	0.016	mg/l	0.0400	0.056	109	70-130			
Lead	**0.0446**	0.0040	mg/l	0.0400	ND	106	70-130			
Matrix Spike Dup Analyzed: 01/12/01 (P1A1114-MSD1)					**Source: PKA0107-01**					
Cadmium	**0.00174**	0.0010	mg/l	0.00200	ND	87.0	70-130	4.11	20	
Chromium	**0.0721**	0.0080	mg/l	0.0400	0.027	113	70-130	1.10	20	
Copper	**0.104**	0.016	mg/l	0.0400	0.056	120	70-130	4.32	20	
Lead	**0.0430**	0.0040	mg/l	0.0400	ND	102	70-130	3.65	20	

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Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1A1021 Extracted: 01/10/01										
Blank Analyzed: 01/10/01 (P1A1021-BLK1)										
Mercury, Dissolved	ND	0.00020	mg/l							
LCS Analyzed: 01/10/01 (P1A1021-BS1)										
Mercury, Dissolved	**0.00505**	0.00020	mg/l	0.00500		101	85-115			
Matrix Spike Analyzed: 01/10/01 (P1A1021-MS1)					**Source: PKA0093-03**					
Mercury, Dissolved	**0.00548**	0.00020	mg/l	0.00500	ND	110	85-115			
Matrix Spike Dup Analyzed: 01/10/01 (P1A1021-MSD1)					**Source: PKA0093-03**					
Mercury, Dissolved	**0.00563**	0.00020	mg/l	0.00500	ND	113	85-115	2.70	20	
Batch: P1A1112 Extracted: 01/11/01										
Blank Analyzed: 01/12/01 (P1A1112-BLK1)										
Zinc, Dissolved	ND	0.050	mg/l							
Blank Analyzed: 01/12/01 (P1A1112-BLK2)										
Zinc, Dissolved	ND	0.050	mg/l							
LCS Analyzed: 01/12/01 (P1A1112-BS1)										
Zinc, Dissolved	**0.977**	0.050	mg/l	1.00		97.7	85-115			
LCS Dup Analyzed: 01/12/01 (P1A1112-BSD1)										
Zinc, Dissolved	**0.978**	0.050	mg/l	1.00		97.8	85-115	0.102	20	
Matrix Spike Analyzed: 01/12/01 (P1A1112-MS1)					**Source: PKA0100-06**					
Zinc, Dissolved	**0.960**	0.050	mg/l	1.00	ND	96.0	70-130			

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1A1112 Extracted: 01/11/01										
Matrix Spike Dup Analyzed: 01/12/01 (P1A1112-MSD1)					**Source: PKA0100-06**					
Zinc, Dissolved	**0.941**	0.050	mg/l	1.00	ND	94.1	70-130	2.00	20	
Batch: P1A1114 Extracted: 01/11/01										
Blank Analyzed: 01/12/01 (P1A1114-BLK1)										
Cadmium, Dissolved	ND	0.00050	mg/l							
Chromium, Dissolved	ND	0.0040	mg/l							
Lead, Dissolved	ND	0.0020	mg/l							
Blank Analyzed: 01/12/01 (P1A1114-BLK2)										
Cadmium, Dissolved	ND	0.00050	mg/l							
Chromium, Dissolved	ND	0.0040	mg/l							
Lead, Dissolved	ND	0.0020	mg/l							
LCS Analyzed: 01/12/01 (P1A1114-BS1)										
Cadmium, Dissolved	**0.00199**	0.0010	mg/l	0.00200		99.5	85-115			
Chromium, Dissolved	**0.0406**	0.0080	mg/l	0.0400		102	85-115			
Lead, Dissolved	**0.0397**	0.0040	mg/l	0.0400		99.3	85-115			
Matrix Spike Analyzed: 01/12/01 (P1A1114-MS1)					**Source: PKA0107-01**					
Cadmium, Dissolved	**0.00167**	0.0010	mg/l	0.00200	ND	83.5	70-130			
Chromium, Dissolved	**0.0729**	0.0080	mg/l	0.0400	0.027	115	70-130			
Lead, Dissolved	**0.0446**	0.0040	mg/l	0.0400	ND	106	70-130			
Matrix Spike Dup Analyzed: 01/12/01 (P1A1114-MSD1)					**Source: PKA0107-01**					
Cadmium, Dissolved	**0.00174**	0.0010	mg/l	0.00200	ND	87.0	70-130	4.11	20	
Chromium, Dissolved	**0.0721**	0.0080	mg/l	0.0400	0.027	113	70-130	1.10	20	
Lead, Dissolved	**0.0430**	0.0040	mg/l	0.0400	ND	102	70-130	3.65	20	

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1A0913 Extracted: 01/09/01										
Blank Analyzed: 01/09/01 (P1A0913-BLK1)										
Total Dissolved Solids	ND	20	mg/l							
LCS Analyzed: 01/09/01 (P1A0913-BS1)										
Total Dissolved Solids	**360**	20	mg/l	400		90.0	80-115			
Duplicate Analyzed: 01/09/01 (P1A0913-DUP1)					**Source: PKA0079-01**					
Total Dissolved Solids	**456**	20	mg/l		450			1.32	5	
Duplicate Analyzed: 01/09/01 (P1A0913-DUP2)					**Source: PKA0083-09**					
Total Dissolved Solids	**410**	20	mg/l		400			2.47	5	
Batch: P1A1012 Extracted: 01/10/01										
Duplicate Analyzed: 01/10/01 (P1A1012-DUP1)					**Source: PKA0083-07**					
Alkalinity as CaCO3	**126**	5.0	mg/l		130			3.13	20	
Duplicate Analyzed: 01/10/01 (P1A1012-DUP2)					**Source: PKA0092-02**					
Alkalinity as CaCO3	**92.0**	5.0	mg/l		92			0	20	
Reference Analyzed: 01/10/01 (P1A1012-SRM1)										
Alkalinity as CaCO3	**33.0**	5.0	mg/l	33.7		97.9	89-111			
Batch: P1A1019 Extracted: 01/10/01										
Blank Analyzed: 01/11/01 (P1A1019-BLK1)										
Chloride	ND	0.50	mg/l							
Fluoride	ND	0.10	mg/l							
Nitrate-N	ND	0.10	mg/l							
Sulfate	ND	0.50	mg/l							

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
Received: 01/09/01

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1A1019 Extracted: 01/10/01										
LCS Analyzed: 01/11/01 (P1A1019-BS1)										
Chloride	**5.02**	0.50	mg/l	5.00		100	90-110			
Fluoride	**2.45**	0.10	mg/l	2.50		98.0	90-110			
Nitrate-N	**2.49**	0.10	mg/l	2.50		99.6	90-110			
Sulfate	**4.98**	0.50	mg/l	5.00		99.6	90-110			
LCS Dup Analyzed: 01/11/01 (P1A1019-BSD1)										
Chloride	**5.01**	0.50	mg/l	5.00		100	90-110	0.199	20	
Fluoride	**2.48**	0.10	mg/l	2.50		99.2	90-110	1.22	20	
Nitrate-N	**2.49**	0.10	mg/l	2.50		99.6	90-110	0	20	
Sulfate	**4.98**	0.50	mg/l	5.00		99.6	90-110	0	20	
Matrix Spike Analyzed: 01/11/01 (P1A1019-MS1)					**Source: PKA0101-08**					
Chloride	**218**	5.0	mg/l	5.00	180	760	80-120			M1
Fluoride	**2.70**	1.0	mg/l	2.50	ND	93.6	80-120			
Nitrate-N	**8.11**	1.0	mg/l	2.50	5.9	88.4	80-120			
Sulfate	**113**	5.0	mg/l	5.00	110	60.0	80-120			M1
Matrix Spike Dup Analyzed: 01/11/01 (P1A1019-MSD1)					**Source: PKA0101-08**					
Chloride	**226**	5.0	mg/l	5.00	180	920	80-120	3.60	20	M1
Fluoride	**2.90**	1.0	mg/l	2.50	ND	102	80-120	7.14	20	
Nitrate-N	**8.41**	1.0	mg/l	2.50	5.9	100	80-120	3.63	20	
Sulfate	**117**	5.0	mg/l	5.00	110	140	80-120	3.48	20	M2
Batch: P1A1105 Extracted: 01/11/01										
Blank Analyzed: 01/11/01 (P1A1105-BLK1)										
Total Suspended Solids	ND	10	mg/l							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1A1105 Extracted: 01/11/01										
Duplicate Analyzed: 01/11/01 (P1A1105-DUP1)					**Source: PKA0042-01**					
Total Suspended Solids	ND	10	mg/l		ND				5	
Duplicate Analyzed: 01/11/01 (P1A1105-DUP2)					**Source: PKA0106-04**					
Total Suspended Solids	ND	10	mg/l		ND				5	
Reference Analyzed: 01/11/01 (P1A1105-SRM1)										
Total Suspended Solids	**91.0**	10	mg/l	90.1		101	85-115			
Batch: P1A1106 Extracted: 01/11/01										
Duplicate Analyzed: 01/11/01 (P1A1106-DUP1)					**Source: PKA0086-01**					
Specific Conductance	**84.8**	2.0	umhos/cm		85			0.236	10	
Reference Analyzed: 01/11/01 (P1A1106-SRM1)										
Specific Conductance	**1450**	2.0	umhos/cm	1410		103	90-110			
Batch: P1A1128 Extracted: 01/11/01										
Blank Analyzed: 01/12/01 (P1A1128-BLK1)										
Chemical Oxygen Demand	ND	20	mg/l							
LCS Analyzed: 01/12/01 (P1A1128-BS1)										
Chemical Oxygen Demand	**193**	20	mg/l	200		96.5	90-110			
Matrix Spike Analyzed: 01/12/01 (P1A1128-MS1)					**Source: PKA0130-01**					
Chemical Oxygen Demand	**608**	50	mg/l	500	130	95.6	70-130			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1A1128 Extracted: 01/11/01										
Matrix Spike Dup Analyzed: 01/12/01 (P1A1128-MSD1)					**Source: PKA0130-01**					
Chemical Oxygen Demand	**599**	50	mg/l	500	130	93.8	70-130	1.49	20	
Batch: P1A1224 Extracted: 01/16/01										
Blank Analyzed: 01/16/01 (P1A1224-BLK1)										
Phosphorous, Dissolved	ND	0.050	mg/l							
Phosphorus	ND	0.050	mg/l							
LCS Analyzed: 01/16/01 (P1A1224-BS1)										
Phosphorous, Dissolved	**0.463**	0.050	mg/l	0.500		92.6	80-120			
Phosphorus	**0.463**	0.050	mg/l	0.500		92.6	80-120			
Matrix Spike Analyzed: 01/16/01 (P1A1224-MS1)					**Source: PKA0124-01**					
Phosphorous, Dissolved	**0.402**	0.050	mg/l	0.500	ND	73.8	80-120			M2
Phosphorus	**0.402**	0.050	mg/l	0.500	ND	73.8	75-125			M2
Matrix Spike Dup Analyzed: 01/16/01 (P1A1224-MSD1)					**Source: PKA0124-01**					
Phosphorous, Dissolved	**0.585**	0.050	mg/l	0.500	ND	110	80-120	37.1	20	Q11
Phosphorus	**0.585**	0.050	mg/l	0.500	ND	110	75-125	37.1	20	Q11
Batch: P1A1810 Extracted: 01/18/01										
Blank Analyzed: 01/18/01 (P1A1810-BLK1)										
Ammonia-N	**0.0566**	0.050	mg/l							N1
LCS Analyzed: 01/18/01 (P1A1810-BS1)										
Ammonia-N	**0.490**	0.050	mg/l	0.500		98.0	90-110			

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Maricopa County -Flood Control District 2801 West Durango Street Phoenix, AZ 85009 Attention: Julie Cox	Client Project ID: None Specified Report Number: PKA0086	Sampled: 01/09/01 Received: 01/09/01

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INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1A1810 Extracted: 01/18/01										
LCS Dup Analyzed: 01/18/01 (P1A1810-BSD1)										
Ammonia-N	**0.499**	0.050	mg/l	0.500		99.8	90-110	1.82	20	

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

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INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: C1A1010 Extracted: 01/10/01										
Blank Analyzed: 01/11/01 (C1A1010-BLK1)										
Total Kjeldahl Nitrogen	ND	0.50	mg/l							
LCS Analyzed: 01/11/01 (C1A1010-BS1)										
Total Kjeldahl Nitrogen	**9.52**	0.50	mg/l	10.0		95.2	85-120			
Matrix Spike Analyzed: 01/11/01 (C1A1010-MS1)					**Source: CKA0046-01**					
Total Kjeldahl Nitrogen	**8.96**	0.50	mg/l	10.0	ND	89.6	65-125			
Matrix Spike Dup Analyzed: 01/11/01 (C1A1010-MSD1)					**Source: CKA0046-01**					
Total Kjeldahl Nitrogen	**9.52**	0.50	mg/l	10.0	ND	95.2	65-125	6.06	15	

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: None Specified

Report Number: PKA0086

Sampled: 01/09/01
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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: I1A1041 Extracted: 01/10/01										
Blank Analyzed: 01/10/01 (I1A1041-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	*0.241*		*ug/l*	*0.500*		*48.2*	*30-120*			
Surrogate: Decachlorobiphenyl	*0.238*		*ug/l*	*0.500*		*47.6*	*30-120*			
LCS Analyzed: 01/10/01 (I1A1041-BS1)										
Aldrin	**0.447**	0.10	ug/l	0.500		89.4	42-115			
alpha-BHC	**0.435**	0.10	ug/l	0.500		87.0	37-115			
beta-BHC	**0.445**	0.10	ug/l	0.500		89.0	45-115			
delta-BHC	**0.491**	0.20	ug/l	0.500		98.2	45-130			
gamma-BHC (Lindane)	**0.446**	0.10	ug/l	0.500		89.2	40-115			
4,4'-DDD	**0.514**	0.10	ug/l	0.500		103	55-120			
4,4'-DDE	**0.460**	0.10	ug/l	0.500		92.0	50-115			

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ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1A1041 Extracted: 01/10/01										
LCS Analyzed: 01/10/01 (I1A1041-BS1)										
4,4'-DDT	**0.525**	0.10	ug/l	0.500		105	55-115			
Dieldrin	**0.467**	0.10	ug/l	0.500		93.4	50-115			
Endosulfan I	**0.452**	0.10	ug/l	0.500		90.4	45-115			
Endosulfan II	**0.513**	0.10	ug/l	0.500		103	50-115			
Endosulfan sulfate	**0.500**	0.20	ug/l	0.500		100	65-120			
Endrin	**0.542**	0.10	ug/l	0.500		108	45-115			
Endrin aldehyde	**0.411**	0.10	ug/l	0.500		82.2	45-115			
Endrin ketone	**0.457**	0.10	ug/l	0.500		91.4	55-140			
Heptachlor	**0.473**	0.10	ug/l	0.500		94.6	35-115			
Heptachlor epoxide	**0.457**	0.10	ug/l	0.500		91.4	40-115			
Methoxychlor	**0.528**	0.10	ug/l	0.500		106	55-120			
Surrogate: Tetrachloro-m-xylene	*0.372*		*ug/l*	*0.500*		*74.4*	*30-120*			
Surrogate: Decachlorobiphenyl	*0.287*		*ug/l*	*0.500*		*57.4*	*30-120*			
LCS Dup Analyzed: 01/11/01 (I1A1041-BSD1)										
Aldrin	**0.459**	0.10	ug/l	0.500		91.8	42-115	2.65	20	
alpha-BHC	**0.440**	0.10	ug/l	0.500		88.0	37-115	1.14	20	
beta-BHC	**0.430**	0.10	ug/l	0.500		86.0	45-115	3.43	20	
delta-BHC	**0.484**	0.20	ug/l	0.500		96.8	45-130	1.44	20	
gamma-BHC (Lindane)	**0.453**	0.10	ug/l	0.500		90.6	40-115	1.56	20	
4,4'-DDD	**0.507**	0.10	ug/l	0.500		101	55-120	1.37	20	
4,4'-DDE	**0.467**	0.10	ug/l	0.500		93.4	50-115	1.51	20	
4,4'-DDT	**0.521**	0.10	ug/l	0.500		104	55-115	0.765	20	
Dieldrin	**0.464**	0.10	ug/l	0.500		92.8	50-115	0.644	20	
Endosulfan I	**0.453**	0.10	ug/l	0.500		90.6	45-115	0.221	20	
Endosulfan II	**0.499**	0.10	ug/l	0.500		99.8	50-115	2.77	20	
Endosulfan sulfate	**0.503**	0.20	ug/l	0.500		101	65-120	0.598	20	
Endrin	**0.539**	0.10	ug/l	0.500		108	45-115	0.555	20	
Endrin aldehyde	**0.358**	0.10	ug/l	0.500		71.6	45-115	13.8	20	
Endrin ketone	**0.463**	0.10	ug/l	0.500		92.6	55-140	1.30	20	
Heptachlor	**0.481**	0.10	ug/l	0.500		96.2	35-115	1.68	20	

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ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: I1A1041 Extracted: 01/10/01										
LCS Dup Analyzed: 01/11/01 (I1A1041-BSD1)										
Heptachlor epoxide	**0.462**	0.10	ug/l	0.500		92.4	40-115	1.09	20	
Methoxychlor	**0.543**	0.10	ug/l	0.500		109	55-120	2.80	20	
Surrogate: Tetrachloro-m-xylene	*0.364*		*ug/l*	*0.500*		*72.8*	*30-120*			
Surrogate: Decachlorobiphenyl	*0.363*		*ug/l*	*0.500*		*72.6*	*30-120*			

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Maricopa County -Flood Control District 2801 West Durango Street Phoenix, AZ 85009 Attention: Julie Cox	Client Project ID: None Specified Report Number: PKA0086	Sampled: 01/09/01 Received: 01/09/01

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
N1	See case narrative.
Neg	The result is a negative value.
Q11	Sample is heterogeneous. Sample homogeneity could not be readily achieved using routine laboratory practices.
Q8	Insufficient sample received to meet method QC requirements. QC requirements satisfy ADEQ policies 0154 and 0155.
S7	Surrogate recovery was below laboratory and method acceptance limits. Unable to confirm matrix effect.
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.

Del Mar Analytical

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

SAMPLE PKA0086-01
DATE 1/16/01
ANALYST Tim

ANION	CONC. mg/L	CONC. meq	CATION	CONC. mg/L	CONC. meq
Alkalinity	21.00	0.42	Sodium	4.2	0.18
Chloride	5.32	0.15	Potassium	1.90	0.05
Nitrate	0.72	0.05	Calcium	7.41	0.37
Sulfate	3.89	0.08	Magnesium	1.07	0.09
Fluoride	0.24	0.01			
SUM	31.17	0.72		14.58	0.69
EC X .01 =		0.85			0.85

Anion-Cation Balance= -1.9%

EC	84.96	TDS	50
		EC X 0.65 =	55.224

Lab Reports and Quality Control Data
NEL Laboratories

NEL LABORATORIES
Reno • Las Vegas • Boise
Phoenix • So. California

Reno Division
4750 Longley Lane, Suite 106 • Reno, Nevada 89502
775-348-2522 • Fax: 775-348-2546
1-800-368-5221

CLIENT: Del Mar Analytical
9830 S. 51st. St. Ste. B-120
Phoenix, AZ 85044
ATTN: Linda Eshelman

PROJECT NAME: PKA0086-MAR
PROJECT #: NA

NEL ORDER ID: P0101017

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 1/10/01.

Samples were analyzed as received.

Where applicable we have included the following quality control data:

Method blank - used to demonstrate absence of contamination or interferences in the analytical process.
Laboratory Control Spike (LCS) - used to demonstrate laboratory ability to perform the method within specifications by spiking representative analytes into a clean matrix.
Surrogates - compounds added to each sample to ensure that the method requirements are met for each individual sample.

Should you have any questions or comments, please feel free to contact our Client Services department at (602) 437-0099.

Greg Jordan
Lab Manager

1/19/01
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

NEL LABORATORIES

CLIENT:	Del Mar Analytical	CLIENT ID:	**PKA0086-02**
PROJECT ID:	PKA0086-MAR	DATE SAMPLED:	1/9/01
PROJECT #:	NA	NEL SAMPLE ID:	P0101017-01
TEST:	**Dissolved Metals**		
MATRIX:	Aqueous	ANALYST:	FRM

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Copper, Dissolved	0.013	0.0025 mg/L	0.5	EPA 200.7	1/15/01	1/15/01

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT:	Del Mar Analytical	CLIENT ID:	**Method Blank**
PROJECT ID:	PKA0086-MAR	DATE SAMPLED:	NA
PROJECT #:	NA	NEL SAMPLE ID:	P101017I-BLK

TEST: **Dissolved Metals**

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Copper, Dissolved	ND	0.0025 mg/L	0.5	EPA 200.7	1/15/01	1/15/01

D.F. - Dilution Factor

ND - Not Detected

This report shall not be reproduced except in full, without the written approval of the laboratory.

CLIENT: Del Mar Analytical
PROJECT ID: PKA0086-MAR
PROJECT #: NA
TEST: **Metals**
MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Copper, Dissolved	P101017I-LCS	0.5	0.486	97	85 - 115	
Copper, Dissolved	P0101017-01-MS	0.5	0.506	99	70 - 130	
Copper, Dissolved	P0101017-01-MSD	0.5	0.506	99	70 - 130	0.

ND - Not Detected

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Storm of January 27, 2001

Lab Reports and Quality Control Data
Del Mar Analytical (Grab Sample)

Del Mar Analytical

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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-9596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Maricopa County -Flood Control District 2801 West Durango Street Phoenix, AZ 85009 Attention: Julie Cox	Client Project ID: MESA NPDES STORMWATER Report Number: PKA0424	Sampled: 01/27/01 Received: 01/29/01 Issued: 02/05/01

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PKA0424-01	Falcon Field	Water
PKA0424-02	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 to an outside laboratory.

QA/QC CRITERIA: All analyses met method criteria.

EXPLANATION OF DATA QUALIFIERS: The Fecal Coliform, Fecal Strep, E Coli and BOD analyses were performed at Severn Trent Environmental Services. (ADHS #0613) Results are attached.

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.

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: MESA NPDES STORMWATER

Report Number: PKA0424

Sampled: 01/27/01
Received: 01/29/01

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: PKA0424-01 (Falcon Field - Water)								
Oil & Grease	EPA 413.2	P1A3018	1.0	**2.2**	1	1/30/01	1/30/01	

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: MESA NPDES STORMWATER

Report Number: PKA0424

Sampled: 01/27/01
Received: 01/29/01

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: PKA0424-01 (Falcon Field - Water)								
Methylene chloride	EPA 624	P1B0204	5.0	ND	1	2/2/01	2/2/01	
Toluene	EPA 624	P1B0204	2.0	ND	1	2/2/01	2/2/01	
Surrogate: Dibromofluoromethane (80-120%)				*107 %*				
Surrogate: Toluene-d8 (65-125%)				*108 %*				
Surrogate: 4-Bromofluorobenzene (65-130%)				*108 %*				
Sample ID: PKA0424-02 (TRIP BLANK - Water)								
Methylene chloride	EPA 624	P1B0204	5.0	ND	1	2/2/01	2/2/01	
Toluene	EPA 624	P1B0204	2.0	ND	1	2/2/01	2/2/01	
Surrogate: Dibromofluoromethane (80-120%)				*105 %*				
Surrogate: Toluene-d8 (65-125%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (65-130%)				*108 %*				

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Maricopa County -Flood Control District 2801 West Durango Street Phoenix, AZ 85009 Attention: Julie Cox	Client Project ID: MESA NPDES STORMWATER Report Number: PKA0424	Sampled: 01/27/01 Received: 01/29/01

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: P1A3018 Extracted: 01/30/01										
Blank Analyzed: 01/30/01 (P1A3018-BLK1)										
Oil & Grease	ND	1.0	mg/l							
LCS Analyzed: 01/30/01 (P1A3018-BS1)										
Oil & Grease	**11.9**	1.0	mg/l	10.0		119	100-130			
LCS Dup Analyzed: 01/30/01 (P1A3018-BSD1)										
Oil & Grease	**12.2**	1.0	mg/l	10.0		122	100-130	2.49	20	

Linda Eshelman
Project Manager

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Maricopa County -Flood Control District
2801 West Durango Street
Phoenix, AZ 85009
Attention: Julie Cox

Client Project ID: MESA NPDES STORMWATER

Report Number: PKA0424

Sampled: 01/27/01
Received: 01/29/01

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: P1B0204 Extracted: 02/02/01										
Blank Analyzed: 02/02/01 (P1B0204-BLK1)										
Methylene chloride	ND	5.0	ug/l							
Toluene	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*27.7*		*ug/l*	*25.0*		*111*	*80-120*			
Surrogate: Toluene-d8	*26.8*		*ug/l*	*25.0*		*107*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*25.9*		*ug/l*	*25.0*		*104*	*65-130*			
LCS Analyzed: 02/02/01 (P1B0204-BS1)										
Toluene	**27.9**	2.0	ug/l	25.0		112	47-150			
Surrogate: Dibromofluoromethane	*27.5*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*27.2*		*ug/l*	*25.0*		*109*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*26.1*		*ug/l*	*25.0*		*104*	*65-130*			
LCS Dup Analyzed: 02/02/01 (P1B0204-BSD1)										
Toluene	**27.2**	2.0	ug/l	25.0		109	47-150	2.54	20	
Surrogate: Dibromofluoromethane	*27.6*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*27.3*		*ug/l*	*25.0*		*109*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*26.3*		*ug/l*	*25.0*		*105*	*65-130*			
Matrix Spike Analyzed: 02/02/01 (P1B0204-MS1)					**Source: PKB0020-01**					
Toluene	**28.6**	2.0	ug/l	25.0	ND	114	47-150			
Surrogate: Dibromofluoromethane	*26.6*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: Toluene-d8	*28.0*		*ug/l*	*25.0*		*112*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*26.2*		*ug/l*	*25.0*		*105*	*65-130*			
Matrix Spike Dup Analyzed: 02/02/01 (P1B0204-MSD1)					**Source: PKB0020-01**					
Toluene	**26.6**	2.0	ug/l	25.0	ND	106	47-150	7.25	20	
Surrogate: Dibromofluoromethane	*26.5*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: Toluene-d8	*27.3*		*ug/l*	*25.0*		*109*	*65-125*			
Surrogate: 4-Bromofluorobenzene	*27.4*		*ug/l*	*25.0*		*110*	*65-130*			

Linda Eshelman
Project Manager

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Maricopa County -Flood Control District 2801 West Durango Street Phoenix, AZ 85009 Attention: Julie Cox	Client Project ID: MESA NPDES STORMWATER Report Number: PKA0424	Sampled: 01/27/01 Received: 01/29/01

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

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Lab Reports and Quality Control Data
Severn Trent

Severn Trent Services

3333 S. Old Price Road Chandler, Arizona 85248 Tel: (480) 899-0191 Fax: (480) 899-0349

402 N. Neely Street Gilbert, Arizona 85233 Tel: (480) 926-3761 Fax: (480) 926-3868

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044

Attention: Linda Eshelman

Report Date: February 18, 2001
Date/Time Received: 01/27/01 0650
Project Identification: FCD-Mesa
Sample Description: Stormwater
Purchase Order Number:

LAB RESULTS

Analytical Method	Parameter Description	Sample Identification	Sample Date / Time	Analysis Date	Lab Identification	Reporting Limit	Analytical Results	Units
405.1	Biochemical Oxygen Demand	Falcon Field	01/27/01 0430	01/27/01 1145	C01-298	3	6*	mg/L
SM9221E	Fecal Coliform by MTF	Falcon Field	01/27/01 0430	01/27/01 0817	C01-299	2	80	MPN/100ml
SM9221F	E. Coli - MPN			01/27/01 0817		2	22	MPN/100ml
SM9230B	Fecal Streptococcus by MTF	Falcon Field	01/27/01 0430	01/27/01 0824	C01-300	2	800	MPN/100ml

* See attached QA/QC report.
Analytes reported as N.D. were not present above the stated limit of detection.
SEVERN TRENT ENVIRONMENTAL SERVICES, Chandler - ADHS Licensure AZ0613

Stephen J. Rot
Laboratory Director

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Severn Trent Services

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402 N. Neely Street Gilbert, Arizona 85233 Tel: (480) 926-3761 Fax: (480) 926-3868

Del Mar Analytical
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044

Attention: Linda Eshelman

Report Date: Feb 18, 2001

Project Identification: FCD-Mesa FALCON
Matrix: Stormwater
Anaylsis Date: 01/27/01 1145

BOD QUALITY CONTROL REPORT

Analytical Method	Laboratory ID	Blank Result mg/L 0.0-0.2	Spike Conc. mg/L 356-436mg/L	LCS Analytical Result mg/L	Percent Recovery	Sample Duplicates Analytical Result mg/L	Analytical Result mg/l	Relative Percent Difference		QC Limits
405.1	Laboratory Control Sample (LCS)	0	396	431	109%	431	431	0.0%		0-10%
405.1	Seeded Control uptake in sample					0.6	0.6	0.0%		0.6-1.0
405.1	C01-298					8	4	66.7%	*	0-10%

* RPD (Relative Percent Difference) exceeds QC limits.
Analytes reported as N.D. were not present above the stated limit of detection.
SEVERN TRENT ENVIRONMENTAL SERVICES, Chandler - ADHS Licensure AZ0613

Stephen J. Rot
Laboratory Director

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Chain of Custody Forms

Storm of January 8-9, 2001

Del Mar Analytical

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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: FCD 2801 W Durango Rd PHX, AZ 85009

Project/PO Number: MoSH NPDES Stormwater

Project Manager: Julie Cox

Phone Number: 602-506-8401

Sampler:

Fax Number: 602-506-4601

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	BOD (1)	Fecal coliform (1)	Fecal Strep (1)	E. Coli (1)	624 (2)	626 (2)							Special Instructions
Dobson	S	Misc	8	1-8-01 2330	Y	X	X	X	X	X	X							only report Methylene chloride & Toluene for 624
Lindsay				1-8-01 2344		X	X	X	X	X	X							
Horne + 16th				1-8-01 2402		X	X	X	X	X	X							
Travel Blank					Y													
Temp Blank					N													
Horne + Grandview				1-9-01 2470		X	X	X	X	X	X							

Relinquished By:	Date /Time:	Received by:	Date /Time:	Turnaround Time: (Check)
James Sutton	1-9-01 0200			same day ____ 72 hours ____
Relinquished By:	Date /Time:	Received by:	Date /Time:	24 hours ____ 5 days ____
[illegible]	010901 0330	D. Richardson	1/9/01 0830	48 hours ____ normal ✓
Relinquished By:	Date /Time:	Received in Lab by:	Date /Time:	Sample Integrity: (Check)
		[illegible]	010901 0200	intact ✓ on ice 0°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

COC GB

Del Mar Analytical
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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: Flood Control of Maricopa County, 2801 W. Durango, Phx, AZ 85009

Project/PO Number: 1-9-01

Project Manager: Julie Cox (602) 506-8401

Phone Number: (602) 506-8401

Sampler: James Sutton

Fax Number:

Analysis Required: 1037

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	Special Instructions
Grandview + Horne	S	1 Liter Glass	5	1-9-01 1037	None	PKA0086-01/02

Composite Samples See list

Relinquished By:	Date /Time:	Received by:	Date /Time:
James Sutton	1-9-01 1232		1/9/01
Relinquished By:	Date /Time:	Received by:	Date /Time:
		CLD	
Relinquished By:	Date /Time:	Received in Lab by: Carmine Rene	Date /Time: 1/9/01 1232

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

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.

COC-GB

Storm of January 27, 2001

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: FCD 2801 W DURANGO PHX AZ 85009

Project/PO Number: MEGA NPDES STORMWATER

Project Manager: JULIE COX

Phone Number: 602 506 8401

Sampler: COLLUM HUNTER

Fax Number: 602 506 4601

Analysis Required: BOD (1), FECAL COLIFORM (1), FECAL STREP (1), E COLI (1), 624 (2), O&G (3)

ONLY REPORT METHYLENE CHLORIDE & TOLUENE FOR 624.

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	BOD	Fecal Coliform	Fecal Strep	E Coli	624	O&G							Special Instructions
Falcon Field	S	misc	8	1/27/01 0430A	Y	X	X	X	X	X	X			PKA0424-01				
Travel Blank					Y									TRAVEL BLK —				NONE REC'D BY LAB
Temp Blank					N									TEMP BLK —				NONE REC'D BY LAB
						COI-298	COI-299	COI-300	COI-299									

Relinquished By:	Date /Time:	Received by:	Date /Time:
COLLUM HUNTER	1/27/01 5:15AM	James Sutton	1-27-01 5:15A
James Sutton	1-27-01 0650	[illegible]	1-29-01 0852
[illegible]	012901 0852	Received in Lab by: [illegible]	012701 0650

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

Sample Integrity: (Check)
intact ✓ on ice 2°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.

[illegible] 1/29/01 0915 [illegible] 1/29/01 0915

COC-GB

Maintenance and Storm Event Log Sheets

Sixth (Mesa 1)

Horne and Sixth Street

STORM EVENT LOG SHEET

1. Site: Howe / Cty Your Name: Sutton

2. Date: 1-8-01 Time: 2348

2019 start storm

SAMPLER PARAMETERS

3. Rainfall: .30 in

4. Flow: .010 cfs

5. Level: .50 in

6. Velocity: Ø ft/sec

O&M PARAMETERS

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

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs .010 **cfs**

11. pH 7.7 **su**

12. Temperature 16° **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

EQUIPMENT CLEANING CHECKLIST

Halt for 72 hrs

Site	Hornet 1
Date	1-9-01
Time	10:20
Serviced By:	

Flow - ∅ Level - .05 in Rain - .45 in

Yes	Data Downloaded to DTU?

DTU # 1128 Cell #2

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

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

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	6th ST & Horne			DATE	01-15-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	[illegible]
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	500 900 other

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	Good
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	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 ReStart program

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	6th St & Horne			DATE	01-16-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Ren
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	vo...
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Shut off, Storm not Long enough. 72 hour Shut down

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	6th ST & Horne			DATE	01-08-01		
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Rcen		
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800	900	other

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	Good
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	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 Start program

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	64th Horne			DATE	1-31-01
ARRIVAL TIME	0755	DEPARTURE TIME	0810	SERVICED BY	NAUD
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	vol
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (i
CALIBRATED SAMPLE VOLUME	YES NO	ml

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

1 Restart Program

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	6th St & Hoffman			DATE	02/26/01
ARRIVAL TIME	1255	DEPARTURE TIME	1405	SERVICED BY	(illegible)
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	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 Shutdown, 72 hours Rain 0.12

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	64th St & Horne			DATE	02-27-01
ARRIVAL TIME	210	DEPARTURE TIME	215	SERVICED BY	Dem
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	500 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	vc
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (i
CALIBRATED SAMPLE VOLUME	YES NO	ml

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

1 Change out PT filter

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	6th St & Horne			DATE	03-06-01
ARRIVAL TIME	7:37	DEPARTURE TIME	7:45	SERVICED BY	Ken
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	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. Restart program and check phone
2.
3.

STORM EVENT LOG SHEET

1. Site: Horne/Lot 4 Your Name: Sutton

2. Date: 3-7-01 Time: 3:35

SAMPLER PARAMETERS

3. Rainfall: .14 **in**

4. Flow: Ø **cfs**

5. Level: .04 **in**

6. Velocity: Ø **ft/sec**

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
Not enough Rainfall/flow

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs N/A **cfs**

11. pH N/A **su**

12. Temperature N/A **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

STORM EVENT LOG SHEET

1. Site: 6th / Horne Your Name: Sutton

2. Date: 3-7-01 Time: 1346

SAMPLER PARAMETERS

3. Rainfall: 1.27 **in**

4. Flow: Ø **cfs**

5. Level: Ø **in**

6. Velocity: Ø **ft/sec**

O&M PARAMETERS

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

Equipment didn't operate

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs N/A **cfs**

11. pH N/A **su**

12. Temperature N/A **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

FCD/USGS STORMWATER O&M LOG SHEET

SITE	6th ST & Horne			DATE	03-08-01
ARRIVAL TIME	940	DEPARTURE TIME	9:28	SERVICED BY	Rend SLS
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	volt
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 (tap, liquinox, tap, nitric, DI)	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 Check station, Re Start program. Rain Read 1.27 for 03-07-01

2 Empty ice water out of Sampler

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	6th ST & Horne			DATE	03/12/01
ARRIVAL TIME	1012	DEPARTURE TIME	1017	SERVICED BY	Rem
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 oth

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	de
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Re Start programs

2

3

Date: 9

FCD/USGS STORMWATER O&M LOG SHEET

SITE	6th ST & Horne			DATE	03/28/01		
ARRIVAL TIME	955	DEPARTURE TIME	1005	SERVICED BY	Ken		
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800	900	other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Remove bottles, loose equipment, mesh changing stations out.

2

3

Date: 3/

Lindsay (Mesa 2)

near Broadway and Lindsay Roads (Windsor)

STORM EVENT LOG SHEET

1. Site: Lindsay Your Name: Sutton

2. Date: 1-8-01 Time: 2150

SAMPLER PARAMETERS

2019 start time

3. Rainfall: .13 .4 @ 0115 in

4. Flow: Ø cfs

5. Level: Ø in

6. Velocity: Ø ft/sec

O&M PARAMETERS

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

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs .038 **cfs**

11. pH 8.1 **su**

12. Temperature 6° **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

EQUIPMENT CLEANING CHECKLIST

Halt for 72 HRS

Site	Lindsay		
Date	1-9-01	Time	1145
Serviced By:			

Flow- Ø Level- Ø Rain- .49 in

Yes	Data Downloaded to DTU?

DTU #1128 Cell #5

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

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

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway & Lindsay			DATE	01-15-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Rem
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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	Good
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	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 Start program

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway & Lindsay			DATE	01-16-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Peen
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth ( )
CALIBRATED SAMPLE VOLUME	YES NO	( )

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

1 Shut station off, Storm not long enough. 72hrs Shut down

2

3

EQUIPMENT CLEANING CHECKLIST

Site	Broadway & Lindsay		
Date	1-16-01	Time	1320
Serviced By:	Sutton		

Halt for 72 Hours

NO	Data Downloaded to DTU?

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

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

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway & Lindsay			DATE	01-18-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Ren
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	500 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	vol
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in
CALIBRATED SAMPLE VOLUME	YES NO	m

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

1 ReStart program

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway + Lindsay			DATE	1-31-01
ARRIVAL TIME	905	DEPARTURE TIME	910	SERVICED BY	Nard
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	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 Restart Program

2

3

STORM EVENT LOG SHEET

1. Site: Lindsay / Broadway Your Name: Sutton

2. Date: 2-13-01 Time: 2253

SAMPLER PARAMETERS

3. Rainfall: .02 **in**

4. Flow: Ø **cfs**

5. Level: Ø **in**

6. Velocity: _____ **ft/sec**

O&M PARAMETERS

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

_____

_____

_____

8. Battery voltage: _____ **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs _____ **cfs**

11. pH _____ **su**

12. Temperature _____ **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway & Lindsay			DATE	02-26-01	
ARRIVAL TIME	1:40	DEPARTURE TIME	1:45	SERVICED BY	Rem	
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800	900 other

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 (tap, liquinox, tap, nitric, DI)	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 Rain, Shut down 72 hours

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway / Lindsay			DATE	02-27-01
ARRIVAL TIME	250	DEPARTURE TIME	255	SERVICED BY	Reed
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	V:
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (i
CALIBRATED SAMPLE VOLUME	YES NO	ml

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

1 change PT Filter

2

3

Date 01 2000

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Lindsay + Broadway			DATE	03-06-01
ARRIVAL TIME	8:25	DEPARTURE TIME	8:35	SERVICED BY	[illegible]
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	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. Restart program, check phone and rain gauge.
2.
3.

STORM EVENT LOG SHEET

1. Site: Lindsay Your Name: Sutton

2. Date: 3-7-01 Time: 0405

SAMPLER PARAMETERS

3. Rainfall: .20 in

4. Flow: Ø cfs

5. Level: Ø in

6. Velocity: Ø ft/sec

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
Not enough Rainfall / flow

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs N/A **cfs**

11. pH N/A **su**

12. Temperature N/A **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

STORM EVENT LOG SHEET

1. Site: ~~Dobson~~ Broadway & Lindsay Your Name: Sutton

2. Date: 3-7-01 Time: 1420

SAMPLER PARAMETERS

3. Rainfall: 1.14 in

4. Flow: Ø cfs

5. Level: 101 in

6. Velocity: Ø ft/sec

O&M PARAMETERS

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

Equipment didn't operate

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs N/A **cfs**

11. pH N/A **su**

12. Temperature N/A **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway & Lindsay			DATE	03/08/01
ARRIVAL TIME	1015	DEPARTURE TIME	1030	SERVICED BY	Rap SLS
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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	clear
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	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 Remove ice from sampler base, check phone, Rain 1.14 03/07/01

2 Restart program

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway & Lindsay			DATE	03-12-01
ARRIVAL TIME	932	DEPARTURE TIME	940	SERVICED BY	[illegible]
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 oth

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	de
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Re Start program

2

3

Date: 5/

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway & Lindsay			DATE	03/28/01
ARRIVAL TIME	1055	DEPARTURE TIME	1100	SERVICED BY	[illegible]
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Remove loose equipment, MC&A to change stations out.

2

3

Date: 8/10

Falcon (Mesa 3)

at Mesa Falcon Field Airport

STORM EVENT LOG SHEET

1. Site: Falcon Field Your Name: Sutton

2. Date: 1-9-01 Time: 2453

2049 Strom Street

SAMPLER PARAMETERS

3. Rainfall: .33 **in**

4. Flow: .032 **cfs**

5. Level: .99 **in**

6. Velocity: Ø **ft/sec**

O&M PARAMETERS

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

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs Ø **cfs**

11. pH Ø **su**

12. Temperature Ø **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

EQUIPMENT CLEANING CHECKLIST

Halt for 72HRS

Site	Falcon Field
Date	1-9-01
Time	1120
Serviced By:	

Flow - Ø Level - Rain - .33in

Yes — Data Downloaded to DTU?

DTU # 1128 Cell #4

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

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

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	01-15-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	[illegible]
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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	good
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	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 Start program

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	01-16-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Glen
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	vo...
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Turn off Station, 72 hours Storm not long enough

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	01-18-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Allen
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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	Good
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	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 ReStart program, check Alert funnel, Storm water funnel

2

3

EQUIPMENT CLEANING CHECKLIST

Site	Falcon Field
Date	1-29-01
Time	0830
Serviced By:	JhS, DS

#1128 Cell#2 Sampler didn't sample during storm event

Yes	Data Downloaded to DTU?

Shut down for 72 hrs

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

No	Pump approximately 1/2 gallon tap water through tubing.
No	Pump approximately 1/2 gallon of Liquinox through tubing.
No	Pump a large quantity of tap water through tubing.
No	Pump a small amount of Nitric Acid (pH 3 - 4) through tubing.
No	Pump approximately 1/2 - 1 gallon deionized water through tubing.

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	1-31-01
ARRIVAL TIME	8:40	DEPARTURE TIME	8:50	SERVICED BY	NAUD
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	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 Restart Program, change PT from vertical to Horizontal

2

3

STORM EVENT LOG SHEET

1. Site: Falcon Field Your Name: Sutton

2. Date: 2-13-01 Time: 2230

SAMPLER PARAMETERS

3. Rainfall: .01 **in**

4. Flow: Ø **cfs**

5. Level: Ø **in**

6. Velocity: _____ **ft/sec**

O&M PARAMETERS

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

_____

_____

_____

8. Battery voltage: _____**volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs _____ **cfs**

11. pH _____ **su**

12. Temperature _____ **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	02-26-01
ARRIVAL TIME	1:20	DEPARTURE TIME	1:25	SERVICED BY	Rem
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	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 Rain 0.08 Station still active. No samples. left running.

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	02-27-01
ARRIVAL TIME	0730	DEPARTURE TIME	0750	SERVICED BY	Pen
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	vc
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Remove ice from Sampler, clean base and wipe down, dry
2 outside of bottles, leave sampler running. 0.09 rain recorded
3 on Sampler at this time.

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	02-27-01
ARRIVAL TIME	242	DEPARTURE TIME	247	SERVICED BY	Peer
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	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 Change out PT Filter

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	02-28-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	[illegible]
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	300 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth
CALIBRATED SAMPLE VOLUME	YES NO	

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

Check Station, Rainfall 0. , Station shut down for 72 hours. Total 0.32., .09 last week, 0.23 this storm 5 hour gap, .08 02/28/01 0.15 02/27/01 Shut down

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	03-06-01		
ARRIVAL TIME	8 02	DEPARTURE TIME	8 10	SERVICED BY	(Rcw)		
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	600	900	other

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 (tap, liquinox, tap, nitric, DI)	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. Restart program, check phone and rain gauge.
2.
3.

STORM EVENT LOG SHEET

1. Site: Falcon Field Your Name: Sutton

2. Date: 3-7-01 Time: 0350

SAMPLER PARAMETERS

3. Rainfall: .23 **in**

4. Flow: Ø **cfs**

5. Level: .12 **in**

6. Velocity: Ø **ft/sec**

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
Not enough Rainfall / flow

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs N/A **cfs**

11. pH N/A **su**

12. Temperature N/A **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

STORM EVENT LOG SHEET

1. Site: Falon Field Your Name: Sutton

2. Date: 3-7-01 Time: 1405

SAMPLER PARAMETERS

3. Rainfall: 1.02 **in**

4. Flow: Ø **cfs**

5. Level: Ø **in**

6. Velocity: Ø **ft/sec**

O&M PARAMETERS

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

Equipment didn't operate

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs N/A **cfs**

11. pH N/A **su**

12. Temperature N/A **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	03-08-01
ARRIVAL TIME	9:45	DEPARTURE TIME	1000	SERVICED BY	Pew / Fbl
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 / 900 / other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	volt
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	clear
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (li
CALIBRATED SAMPLE VOLUME	YES NO	ml

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

1 Empty ice water from base, Rain read 1.03 for 03-07-01

2 Program restarted.

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	03-12-01
ARRIVAL TIME	954	DEPARTURE TIME	1000	SERVICED BY	[illegible]
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 oth

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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	clean, clear
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	de
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Restart program

2

3

Date: 3/

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	03/28/01
ARRIVAL TIME	1040	DEPARTURE TIME	1045	SERVICED BY	Rcen
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	ap
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Remove loose equipment, mesh changing out Stations

2

3

Date: 5/10

Grandview (Mesa 4)

Horne and Grandview

STORM EVENT LOG SHEET

1. Site: Grandview / Home Your Name: Sutton

2. Date: 1-9-19 Time: ~~2425~~ 0025

2019 start storm

SAMPLER PARAMETERS

3. Rainfall: .35 in

4. Flow: 3.28 cfs

5. Level: 6.54 in

6. Velocity: ∅ ft/sec

O&M PARAMETERS

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

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs 3.28 **cfs**

11. pH 7.8 **su**

12. Temperature 7° **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

EQUIPMENT CLEANING CHECKLIST

Halt for 72 Hrs

Site	Horne & Grandview
Date	1-9-01
Time	1037
Serviced By:	Sutton

Flow - .005 Level - .31 in Rain - .46 in

Yes	Data Downloaded to DTU?

DTU # 1128 Cell #3

5 composites taken to lab

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

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

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Grandview & Horne			DATE	01-15-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Mew
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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	Dead, no tone, checked ?
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	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 Will call telecommunications 1-16-01 Mew

2 Restart program

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Grandview Home			DATE	01-16-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	RWM
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (...)
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Turn Station off, Storm not long enough.

2 72 hour shut down

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Grandview & Horne			DATE	01-18-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Reed
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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	Good, repairs made (Telecommunication)
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	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 Restart program. Phone fixed.

2 Terry - line works 506-7990 = Terry check in Mesa at Grandview/Horne

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	GRANDVIEW & Harne			DATE	1-31-01
ARRIVAL TIME	0815	DEPARTURE TIME	0825	SERVICED BY	NMD
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	vol
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (i
CALIBRATED SAMPLE VOLUME	YES NO	m

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

1 Confirm Program, Shut Down, Pick-up Bottles for Cleaning

2

3

STORM EVENT LOG SHEET

1. Site: Gradview & ~~[illegible]~~ Horne Your Name: Sutton

2. Date: 2-23-01 Time: 2309

SAMPLER PARAMETERS

3. Rainfall: .04 **in**

4. Flow: Ø **cfs**

5. Level: Ø **in**

6. Velocity: _____ **ft/sec**

O&M PARAMETERS

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

_____

_____

_____

8. Battery voltage: _____ **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs _____ **cfs**

11. pH _____ **su**

12. Temperature _____ **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Grandview & Horne			DATE	02-27-01
ARRIVAL TIME	220	DEPARTURE TIME	225	SERVICED BY	Ken
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	vo
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (i
CALIBRATED SAMPLE VOLUME	YES NO	ml

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

1. Replace PT Filter,
2.
3.

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Hoene & Grandview			DATE	03/28/01
ARRIVAL TIME	1015	DEPARTURE TIME	1025	SERVICED BY	Rlew
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 oth

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	de
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Remove bottles, loose equipment. MesA changing stations out.

2

3

Date: 3/

Dobson (Mesa 5)

Dobson Road south of Broadway

STORM EVENT LOG SHEET

1. Site: Dobson Your Name: Sutton

2. Date: 1-8-01 Time: 2125

SAMPLER PARAMETERS

2149 start storm

3. Rainfall: .02 .31 @ 0130 in

4. Flow: .001 cfs

5. Level: .18 in

6. Velocity: Ø ft/sec

O&M PARAMETERS

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

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs .714 **cfs**

11. pH 8.1 **su**

12. Temperature 17° **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

EQUIPMENT CLEANING CHECKLIST

Halt for 72 hrs

Site	DOBSON
Date	1-9-01
Time	1055
Serviced By:	Sutton

Flow - .007 Level - .53 in Rain - .35 in

Yes	Data Downloaded to DTU?

#128 DTU # / Cell

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

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

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Dobson + Broadway			DATE	01-15-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	[illegible]
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	500 900 other

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	Good
RAINGAGE (screen, funnel, tipping bucket)	YES NO	
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	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 Restart sampler

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Dobson + Broadway			DATE	01-16-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	RAW
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Shut off Sampler, Storm not long enough. 72 hour

2 Shut down

3

EQUIPMENT CLEANING CHECKLIST

Site	Dobson x Broadway		
Date	1-16-01	Time	1252
Serviced By:	Sutton		

Halt for 72 hours

No	Data Downloaded to DTU?

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

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

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway & Dobson			DATE	01-18-01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Rew
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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	Good
RAINGAGE (screen, funnel, tipping bucket)	YES NO	Cleaned AerT funnel
SAMPLE TUBING (intake, pump, distributor)	YES NO	
CLEANED SAMPLE TUBING (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Restart program.

2

3

STORM EVENT LOG SHEET

1. Site: Dobson Your Name: Sutton

2. Date: 1-27-01 Time: 5:24

SAMPLER PARAMETERS

3. Rainfall: .28 **in**

4. Flow: 3.11 **cfs**

5. Level: 9.94 **in**

6. Velocity: — **ft/sec**

O&M PARAMETERS

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

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs 3.11 **cfs**

11. pH 7.6 **su**

12. Temperature 12.5 **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

EQUIPMENT CLEANING CHECKLIST

Site	DoBSon
Date	1-29-01
Time	7:40
Serviced By:	JhS, DS

#1128 Cell#1 Samplex Sampled 8 composites

YES	Data Downloaded to DTU?

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

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

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Dobson & Broadway			DATE	1-31-01
ARRIVAL TIME	0730	DEPARTURE TIME	0740	SERVICED BY	NAND
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	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 Restart Program

2

3

STORM EVENT LOG SHEET

1. Site: Dobson / Broadway Your Name: Sutton

2. Date: 2-13-01 Time: 2230

SAMPLER PARAMETERS

3. Rainfall: .03 **in**

4. Flow: .002 **cfs**

5. Level: .28 **in**

6. Velocity: _____ **ft/sec**

O&M PARAMETERS

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

_____

_____

_____

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs _____ **cfs**

11. pH _____ **su**

12. Temperature _____ **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Dobson + Broadway			DATE	02/26/01
ARRIVAL TIME	12:30	DEPARTURE TIME	12 40	SERVICED BY	Allen
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (in)
CALIBRATED SAMPLE VOLUME	YES NO	ml

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

Rain 0.12 Shut down 72 hours.

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Pobson & Broadway			DATE	02-27-01
ARRIVAL TIME	150	DEPARTURE TIME	155	SERVICED BY	[illegible]
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	vo
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	depth (i
CALIBRATED SAMPLE VOLUME	YES NO	ml

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

1. Change out PT Filter
2.
3.

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadways Dobson			DATE	03-06-01
ARRIVAL TIME	7:10	DEPARTURE TIME	7:20	SERVICED BY	Reen
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

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 (tap, liquinox, tap, nitric, DI)	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 Start program, check phone.

2

3

STORM EVENT LOG SHEET

1. Site: Dobson / Broadway Your Name: Sutton

2. Date: 3-7-01 Time: 0300

SAMPLER PARAMETERS

3. Rainfall: .21 **in**

4. Flow: 1.36 **cfs**

5. Level: 6.67 **in**

6. Velocity: Ø **ft/sec**

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
NOT ENOUGH Flow / Rainfall

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs 1.36 **cfs**

11. pH 6 **su**

12. Temperature 16 **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

STORM EVENT LOG SHEET

1. Site: Dobson Your Name: Sutton

2. Date: 3-7-01 Time: 1330

SAMPLER PARAMETERS

3. Rainfall: 1.09 **in**

4. Flow: 1.02 **cfs**

5. Level: 5.65 **in**

6. Velocity: Ø **ft/sec**

O&M PARAMETERS

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

All 8 Jars filled

8. Battery voltage: ? **volts**

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

FIELD PARAMETERS

10. Discharge (flow) at time of grabs N/A **cfs**

11. pH N/A **su**

12. Temperature N/A **deg. C**

GRAB SAMPLES Take grabs from discharge only!

13. Grab samples taken? **Yes or No?**

14. Preservatives added to bottles? **Yes or No?**

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Broadway & Dobson			DATE	03-08-01
ARRIVAL TIME	0835	DEPARTURE TIME	0855	SERVICED BY	Prey SDS
SAMPLER	SIGMA OR ISCO			MODEL NUMBER	800 900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	Clean bottles, Line
CALIBRATED DEPTH SENSOR	YES NO	
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Sampler read 1.09 rain for 03-07-01.

2 Restart program. Grab samples still needed at this site.

3

EQUIPMENT CLEANING CHECKLIST

Site	Broadway & Dobson
Date	03-09-01
Time	0840
Serviced By:	Rene (SRS)

NO	Data Downloaded to DTU?

Rain over Limit. 1.09

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

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

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

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Dobson & Broadway		DATE	03-12-01	
ARRIVAL TIME	0915	DEPARTURE TIME	0920	SERVICED BY	Ken
SAMPLER	SIGMA OR ISCO		MODEL NUMBER	800	900 other

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Re Start Sampler.

2

3

FCD/USGS STORMWATER O&M LOG SHEET

SITE	Dobson + Broadway			DATE	03/28/01
ARRIVAL TIME	930	DEPARTURE TIME	945	SERVICED BY	Pump
SAMPLER		SIGMA OR ISCO		MODEL NUMBER	800 900 oth

EQUIPMENT CHECKED		COMMENTS
BATTERY VOLTAGE OK	YES NO	
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 (tap, liquinox, tap, nitric, DI)	YES NO	
CALIBRATED DEPTH SENSOR	YES NO	de
CALIBRATED SAMPLE VOLUME	YES NO	

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

1 Remove bottles, loose equipment. Mesh changing stations out.

2

3

Date: 5/