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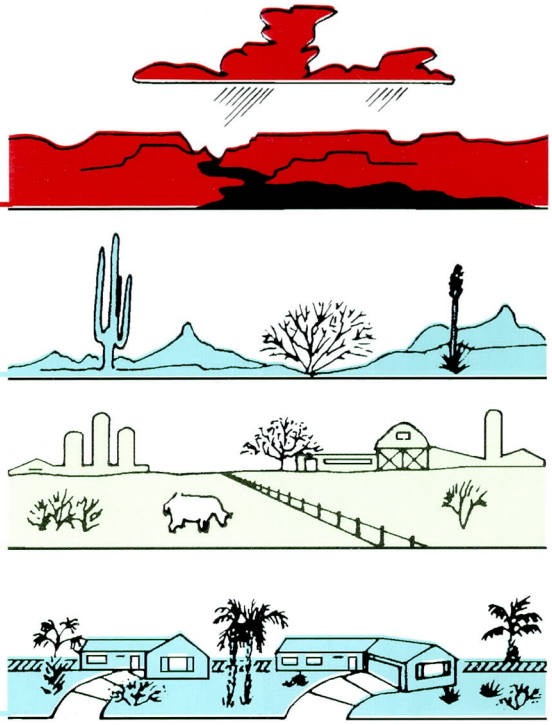

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Stormwater Quality Report
City of Mesa, Arizona

July 1, 2001 - December 31, 2001

March 25, 2002

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Stormwater Quality Report

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For
City of Mesa, Arizona

March 25, 2002

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Water Quality Hydrologist

Reviewed by: Todd G. Williams, M.Sc.
Water Quality Program Coordinator

Stormwater Quality Report
City of Mesa, Arizona

July 1, 2001 - December 31, 2001

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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 July 1, 2001 through December 31, 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 1st and 2nd quarter of the 2002 sample year. One representative storm event occurred during this period and was sampled. The following is a description of the sampled event.

The storm event of December 4, 2001 produced rainfall valley wide. Rainfall totals in Mesa ranged from 0.55 to 0.83 inches. Site specific rainfall amounts for the five Mesa stormwater stations are listed in Table 1 below.

TABLE 1

Storm Event of December 4, 2001

SITE NAME	RAINFALL (inches)	REPRESENTATIVE EVENT	SAMPLES ANALYZED
Mesa 1: SIXTH	0.81	NO	YES (grab)
Mesa 2: LINDSAY	0.75	NO	YES (grab& composite)
Mesa 3: FALCON	0.89	NO	YES (grab& composite)
Mesa 4: GRANDVIEW	0.70	NO	YES (grab)
Mesa 5: DOBSON	0.50	YES	YES (composite)

Grab samples were collected and analyzed for the Sixth, Lindsay, Falcon, and Grandview sites. A composite sample was collected and analyzed for the Lindsay, Falcon and Dobson sites. Composite samples were not collected from Sixth (Site 1) and Grandview (Site 4) due to equipment problems and / or, automated samplers not activating. The cause of the equipment failures were investigated and noted so that completed storm event sampling will result for later storms.

Table 2 on the next page of this report lists storm events with rainfall greater than or equal to 0.22 inches of rain (Mesa minimum rainfall criteria for winter storms and 0.24 inches is the minimum rainfall criteria for summer storms). Table 2 also specifies reasons why samples were not collected and/or analyzed. Note that new sampling equipment at all five Mesa sites was installed and July 2001 was the first month for current sampling equipment ISCO 6712 FR units. The sample sites were tested in a July storm to field check the installation and computer programming of the 5 Mesa stormwater stations. The storm event of August 9th also produced valuable insight on the functioning of the stations; corrections have been made and will result in successful storm event sampling.

TABLE 2: SUMMARY OF MESA STORM EVENTS WITH RAINFALL > 0.22 INCHES

SITE	DATE	RAIN (inches)	COMMENTS
Mesa 1: SIXTH	7/29 – 30/2001	1.05	RAINFALL > 0.72 Non – representative, Grabs & composites submitted to the lab. Problems outlined in the Maintenance Summary of this report
Mesa 2: LINDSAY	7/29 – 30/2001	0.84	RAINFALL > 0.72 Non – representative, Grabs & composites submitted to the lab. Problems outlined in the Maintenance Summary of this report
Mesa 3: FALCON	7/29 – 30/2001	not working	Rain gauge did not work. No grabs & no composites. No samples submitted to the lab. Problems outlined in the Maintenance Summary of this report.
Mesa 4: GRANDVIEW	7/29 – 30/2001	1.11	RAINFALL > 0.72 Non – representative. Grabs submitted to the lab. Problems outlined in the Maintenance Summary of this report.
Mesa 5: DOBSON	7/29 – 30/2001	1.00	RAINFALL > 0.72 Non – representative. Composites submitted to the lab. Problems outlined in the Maintenance Summary of this report
Mesa 1: SIXTH	8/9/2001	0.23	Duration too short Non-representative. Neither grab nor composite samples were submitted to the lab. Problems outlined in the Maintenance Summary of this report.
Mesa 3: FALCON	8/9/2001	0.34	Duration too short Non-representative. Neither grab nor composite samples submitted to the lab. Problems outlined in the Maintenance Summary of this report.
Mesa 4: GRANDVIEW	8/9/2001	0.26	Duration too short Non-representative. Neither grab nor composite samples submitted to the lab. Problems outlined in the Maintenance Summary of this report.
Mesa 5: DOBSON	8/9/2001	0.35	Duration too short Non-representative. Neither grab nor composite samples submitted to the lab. Problems outlined in the Maintenance Summary of this report.

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 July 1 through December 31, 2001. 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 6712 FR refrigerated samplers. The ISCO samplers were installed at the existing station locations.

Site 1: SIXTH

July 9th - Completed ISCO sampler station installation.

July 29th & 30th storm – Problem with flooding at the station. Grab and full composites taken. Sampler was reprogrammed to area velocity in August.

August 9th - All sampler tubing was cleaned.

August 21st - Confined space work for equipment maintenance was completed.

September 3rd – A hardbound-log book to record station maintenance was added.

September 26th - Defrost sample refrigerator due to ice build-up.

Site 2: LINDSAY

June 19th - Completed ISCO sampler station installation.

July 29th & 30th storm – Composite samples taken. No paperwork submitted for field log sheets. No grabs taken. Sampler was later reprogrammed for flow to reduce flooding problems in August.

August 1st, 9th, 31st, and December 12th - All sampler tubing was cleaned.

August 21st - Confined space work for equipment maintenance was completed, a new intake screen was installed and cap removed from depth sensor that was left on from new site instillation.

September 3rd - A hardbound-log book to record station maintenance was added.

September 26th - Defrost sample refrigerator due to ice build-up.

October 4th - Rain gage maintenance.

Site 3: FALCON FIELD

June 19th - Completed ISCO sampler station installation.

July 29th & 30th storm – Rain gage did not appear to work. Potentially was vandalized or wired wrong. No grabs and composites taken, no level fluctuation was seen and actions to correct were taken August 21st (see below).

August 9th - All sampler tubing was cleaned.

August 8th, & 29th - Repaired door to sampler.

August 21st - Confined space work for equipment maintenance was completed, a new intake screen was installed and cap removed from depth sensor that was left on from new site instillation.

September 3rd - A hardbound-log book to record station maintenance was added.

September 26th - Defrost sample refrigerator due to ice build-up.

October 4th - Rain gage maintenance.

Site 4: GRANDVIEW

June 21st - Completed ISCO sampler station installation.

July 29th & 30th storm – Grab samples collected. No composite samples taken due to equipment failure. Problems found and corrected. 1). The sensor that checks level was not installed properly(see below) 2). A new intake screen was also installed in August (see below). 3). September 3rd the station was found on 72 hour shut down within the programming. 4). September 25th the station program was checked and left running. No ice build up in refrigerator also noted.

August 1st, 9th, 31st, and December 10th - All sampler tubing was cleaned.

August 21st - Confined space work for equipment maintenance was completed. A new intake screen was installed and cap removed from depth sensor that was left on from new site instillation.

September 3rd - A hardbound-log book to record station maintenance was added.

September 26th - Defrost sample refrigerator due to ice build-up.

Site 5: DOBSON

July 9th - Completed ISCO sampler station installation.

July 29th & 30th storm – Sampler worked. Full composites collected. No grabs. Not enough flow at first response to site; flow interval was adjusted to collect composites over a longer period of time (composites were collected in 30 minutes, storm duration = 360 minutes for a total of 1.00 inch).

August 9th and December 10th - All sampler tubing was cleaned.

August 21st - Confined space work for equipment maintenance was completed, a new intake screen was installed and cap removed from depth sensor that was left on from new site instillation.

August 29th - Rain gage moved per The City of Mesa's request.

September 3rd - A hardbound-log book to record station maintenance was added.

September 26th - Defrost sample refrigerator due to ice build-up.

October 10th - Power failure Flood Control District staff have observed this in the past at this site.

Data compiled for July through December 2001

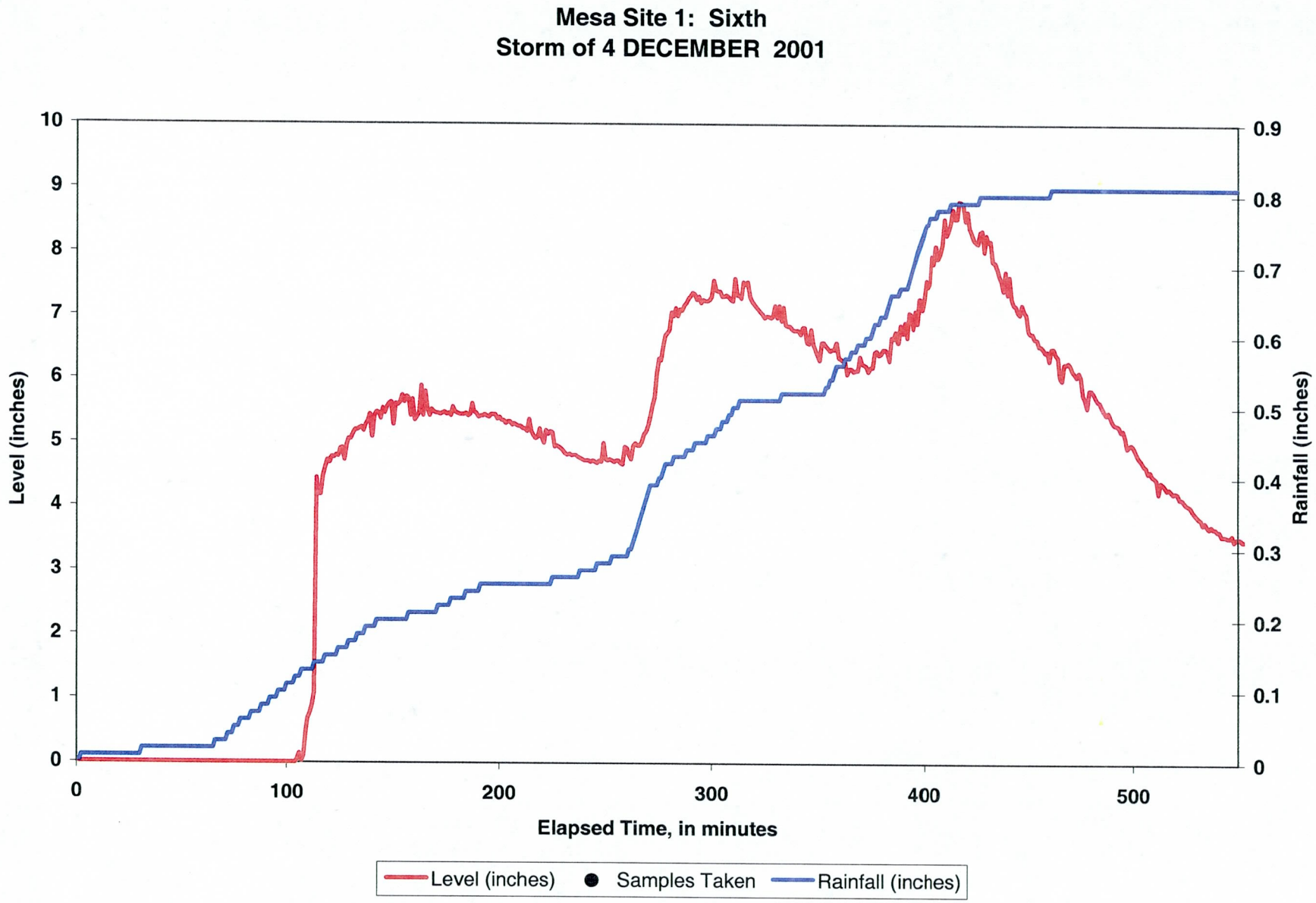
The remainder of this report contains data. The following data are included:

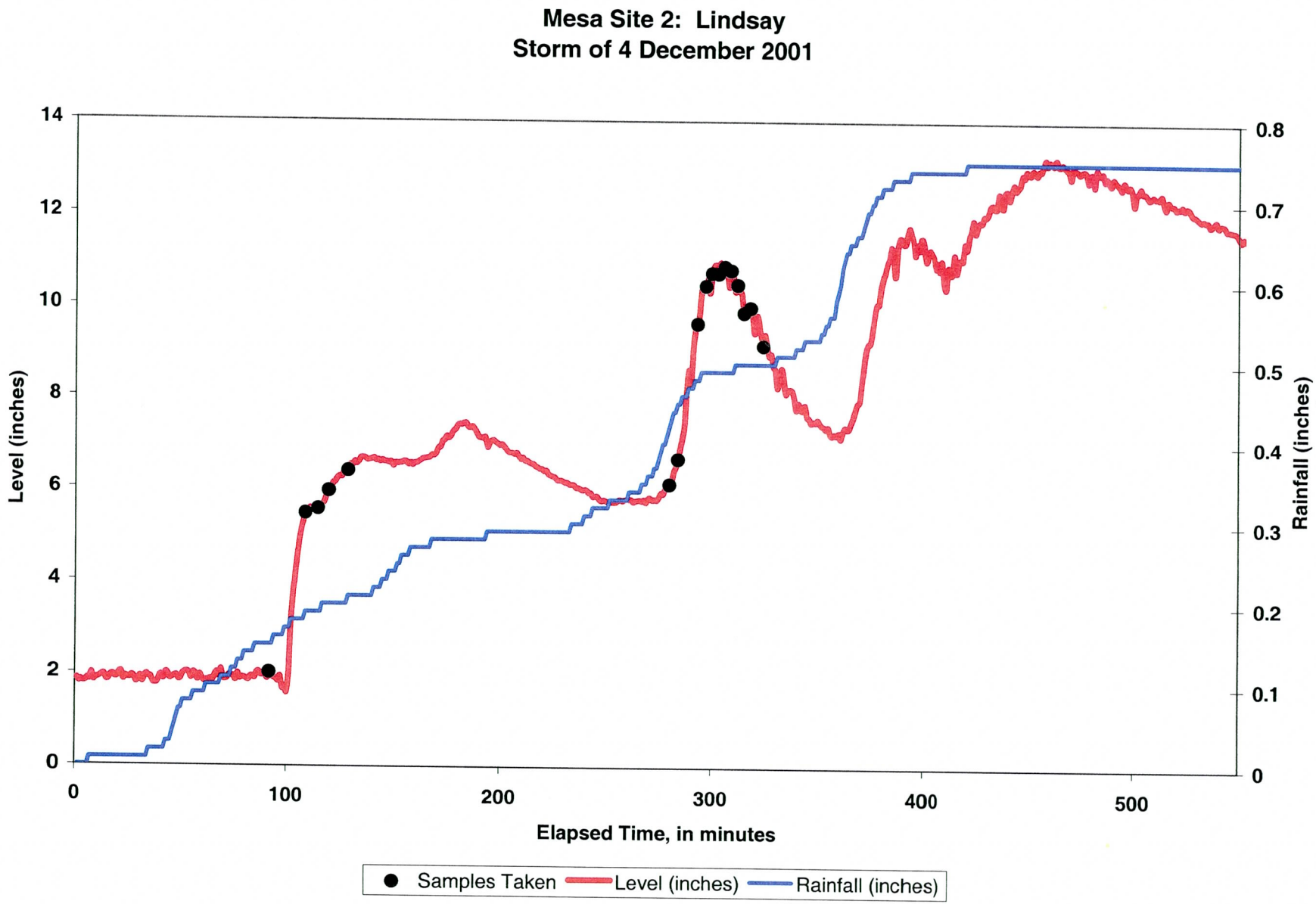
- Storm Hydrographs.
- Rainfall tables for five Mesa NPDES raingages.
- Analytical Data Tables.
- Data Validation Tables.
- Lab Reports.

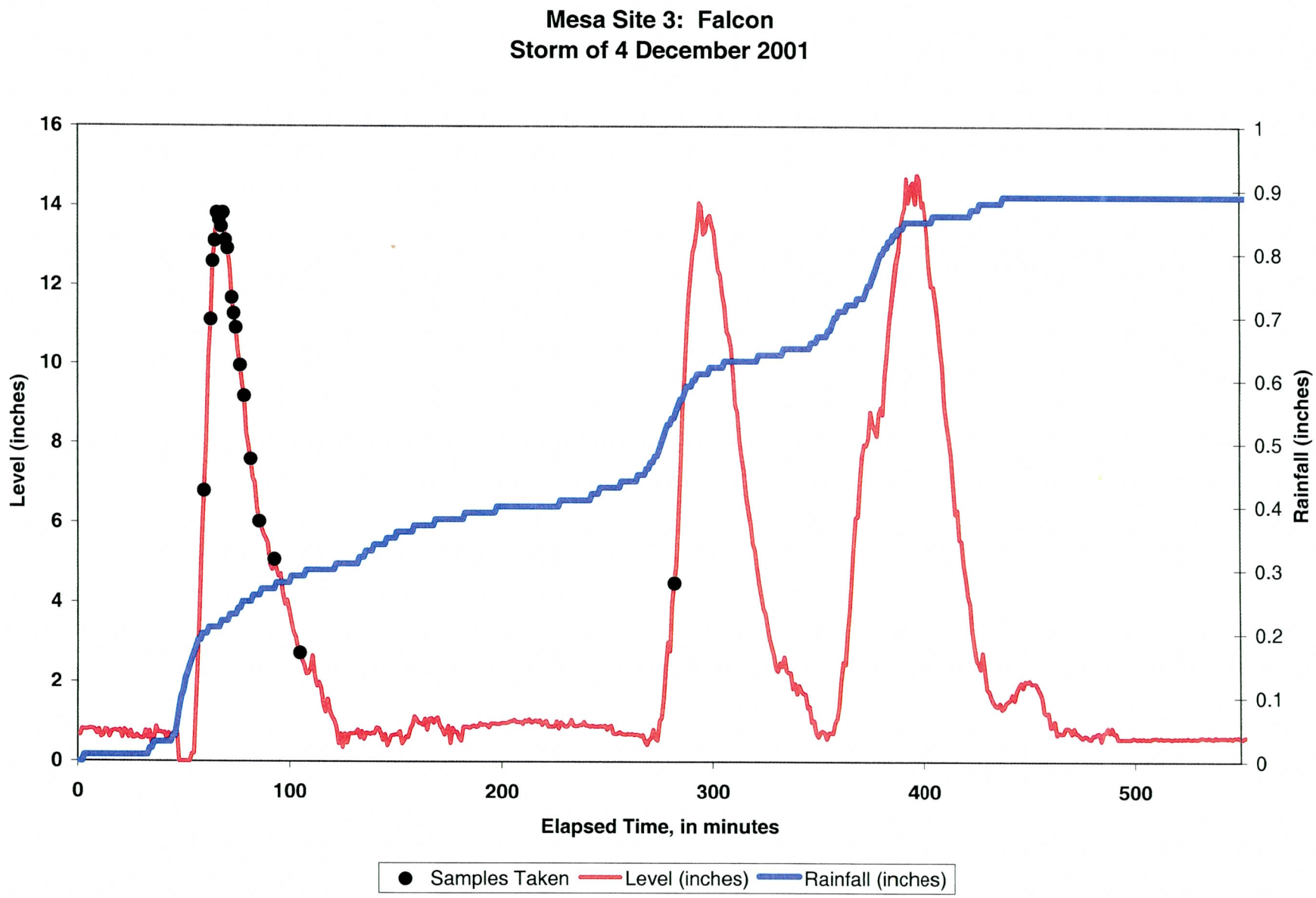
Quality Control Data.

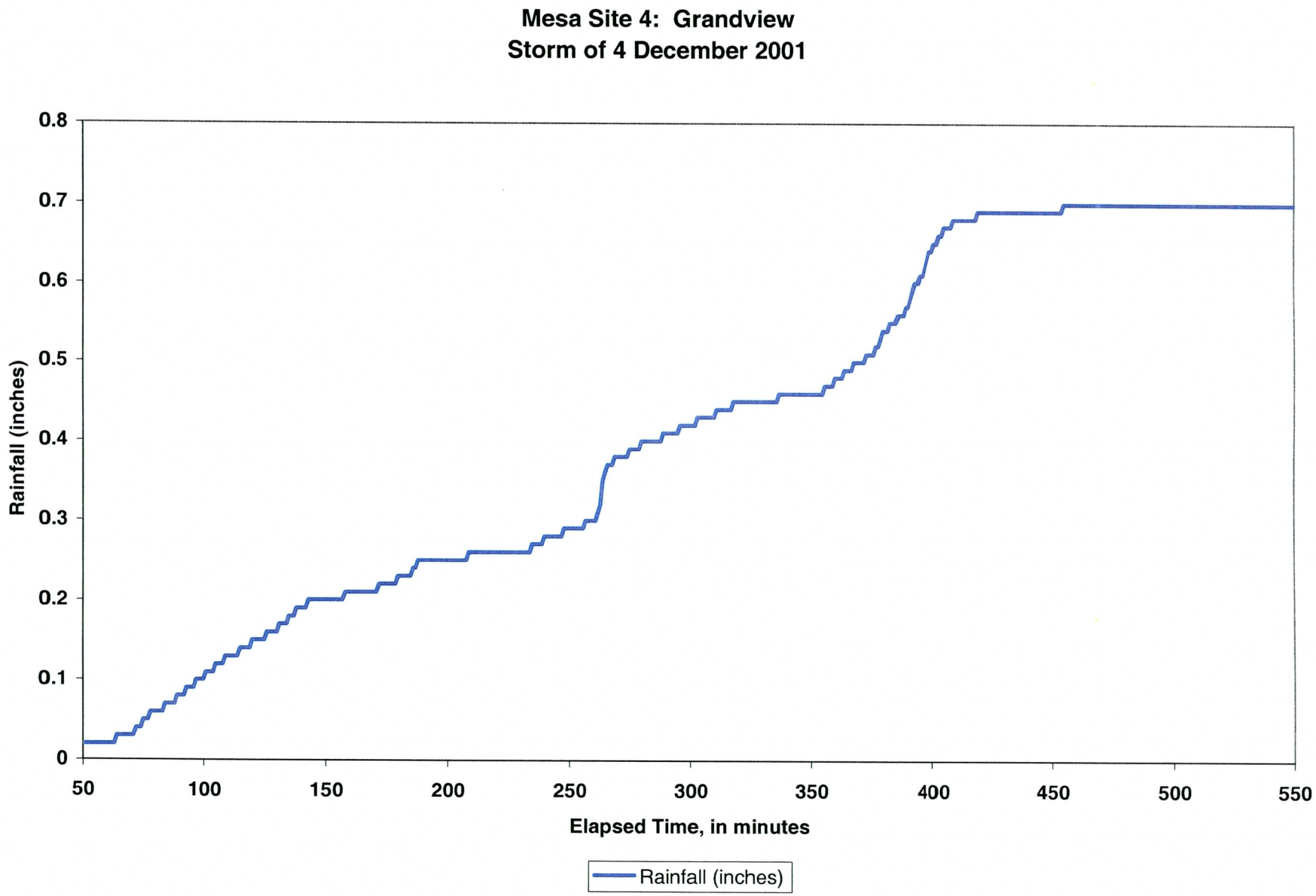
- Chain of Custody Forms.
- Operation and maintenance and storm event log sheets.

Storm Hydrographs

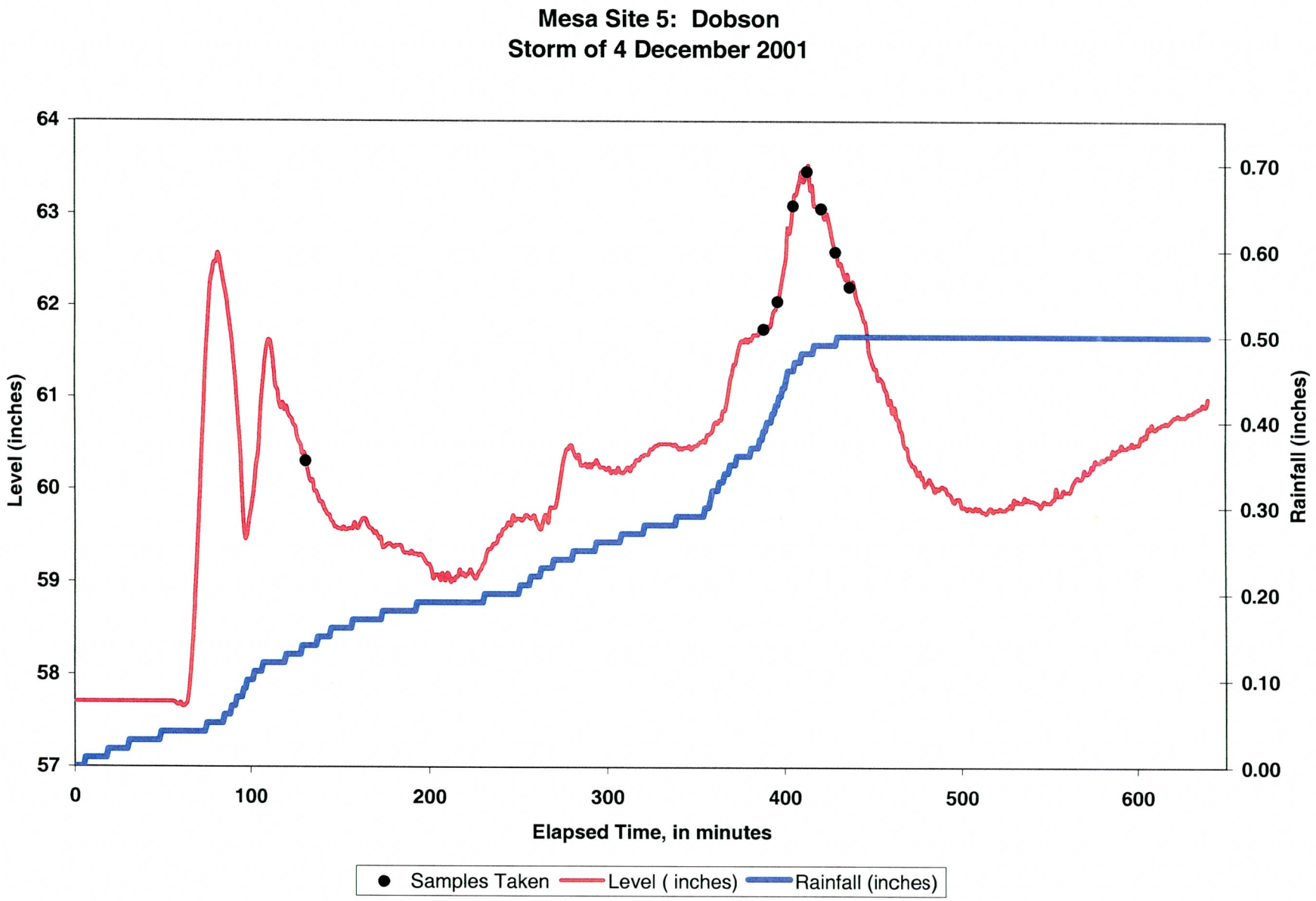

Mesa Site 1: Sixth
Storm of 4 DECEMBER 2001
Level (inches)
Rainfall (inches)
Elapsed Time, in minutes
0
1
2
3
4
5
6
7
8
9
10
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
0
100
200
300
400
500
Level (inches)
Samples Taken
Rainfall (inches)


Mesa Site 2: Lindsay
Storm of 4 December 2001
Level (inches)
Rainfall (inches)
Elapsed Time, in minutes
0
2
4
6
8
10
12
14
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0
100
200
300
400
500
Samples Taken
Level (inches)
Rainfall (inches)


Mesa Site 3: Falcon
Storm of 4 December 2001
Level (inches)
Rainfall (inches)
Elapsed Time, in minutes
0
2
4
6
8
10
12
14
16
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
0
100
200
300
400
500
Samples Taken
Level (inches)
Rainfall (inches)



No Downloaded Level or Samples Taken information available for this site.


Mesa Site 5: Dobson
Storm of 4 December 2001
Level (inches)
64
63
62
61
60
59
58
57
Rainfall (inches)
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
100
200
300
400
500
600
Elapsed Time, in minutes
Samples Taken
Level (inches)
Rainfall (inches)

Rainfall Data

STORM WATER QUALITY RAINFALL GAGES

City of Mesa Gauged Rainfall (In.)

CITY OF MESA
Great People, Quality Services

Mesa Site 1: Water Quality Rain Gage
Location Sixth and Horne

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1												
2												
3												
4						0.84						
5					0.08							
6				0.07								
7				0.07								
8												
9		0.23										
10												
11						0.08						
12												
13												
14	0.01											
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25	0.01											
26												
27												
28												
29	0.93											
30	0.12	0.12										
31												
Month Total	1.07	0.35	0.00	0.14	0.08	0.92	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down

City of Mesa Gauged Rainfall (In.)

CITY OF MESA
Great People, Quality Service!

Mesa Site 2: Water Quality Rain Gage
Location Broadway and Lindsay

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1												
2	0.01											
3												
4				0.01		0.82						
5			0.01		0.04							
6				0.11								
7												
8	0.02											
9		0.20										
10	0.02											
11						0.07						
12												
13												
14			0.01									
15						0.04						
16												
17		0.03										
18												
19												
20												
21		0.01										
22												
23												
24												
25												
26			0.01									
27												
28												
29	0.68											
30	0.16	0.12										
31												
Month Total	0.89	0.36	0.03	0.12	0.04	0.93	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down

City of Mesa Gauged Rainfall (In.)

CITY OF MESA
Great People, Quality Service

Mesa Site 3: Water Quality Rain Gage
Location Falcon Field

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1	xxx											
2	xxx											
3	xxx											
4	xxx					0.90						
5	xxx											
6	xxx			0.09								
7	xxx											
8	xxx											
9	xxx	0.34										
10	xxx											
11	xxx					0.08						
12	xxx	0.01										
13	xxx											
14	xxx		0.01									
15	xxx					0.04						
16	xxx											
17	xxx	0.02										
18	xxx											
19	xxx											
20	xxx											
21	xxx											
22	xxx											
23	xxx											
24	xxx											
25	xxx	0.07										
26	xxx											
27	xxx											
28	xxx											
29	xxx											
30	xxx	0.08										
31	xxx											
Month Total	0.00	0.52	0.01	0.09	0.00	1.02	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down

City of Mesa Gauged Rainfall (In.)

CITY OF MESA
Great People, Quality Services

Mesa Site 4: Water Quality Rain Gage
Location Horne and Grandview

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1				0.01								
2			0.01									
3	0.01											
4				0.01		0.71						
5	0.28*				0.08							
6	0.02*			0.07								
7	0.01*			0.12								
8	0.03*											
9		0.26	0.01									
10		0.03										
11						0.08						
12												
13												
14	0.14											
15												
16												
17												
18												
19												
20												
21												
22												
23		0.01	0.01									
24			0.01									
25		0.03										
26												
27		0.01										
28												
29	0.94											
30	0.17	0.18										
31		0.02										
Month Total	1.26	0.54	0.04	0.21	0.08	0.79	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down
* = Irrigation sprinklers being recored

City of Mesa Gauged Rainfall (in.)

CITY OF MESA
Great People, Quality Services!

Mesa Site 5: Water Quality Rain Gage
Location Broadway and Dobson

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1												
2		0.01										
3		0.02										
4						0.51						
5					0.08							
6				0.05								
7												
8												
9		0.35										
10												
11						0.16						
12												
13	0.02											
14												
15												
16	0.01											
17	0.02											
18	0.01											
19	0.01											
20	0.01											
21												
22												
23												
24												
25		0.02										
26												
27		0.01										
28		0.01										
29	0.03	0.07										
30	0.97	0.01										
31												
Month Total	1.08	0.50	0.00	0.05	0.08	0.67	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down

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

City of Mesa Gauged Rainfall (In.)

CITY OF MESA
Great People, Quality Service

Gage Number	4545
Location	Brown Road and Horne

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1	xxx	xxx										
2	xxx	xxx										
3	xxx	xxx										
4	xxx	xxx				0.63						
5	xxx	xxx			0.08							
6	xxx			0.04								
7	xxx			0.12								
8	xxx											
9	xxx	0.24										
10	xxx											
11	xxx					0.08						
12	xxx											
13	xxx											
14	xxx											
15	xxx											
16	xxx											
17	xxx											
18	xxx											
19	xxx											
20	xxx											
21	xxx											
22	xxx											
23	xxx											
24	xxx											
25	xxx											
26	xxx											
27	xxx											
28	xxx											
29	xxx											
30	xxx	0.16										
31	xxx											
Month Total	0.00	0.40	0.00	0.16	0.08	0.71	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down

City of Mesa Gauged Rainfall (In.)

Gage Number	6545
Location	Broadway and Lindsay

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1	xxx	xxx										
2	xxx	xxx										
3	xxx	xxx										
4	xxx	xxx				0.83						
5	xxx	xxx			0.04							
6	xxx	xxx		0.12								
7	xxx	xxx										
8	xxx	xxx										
9	xxx	xxx										
10	xxx	xxx										
11	xxx	xxx				0.08						
12	xxx											
13	xxx											
14	xxx											
15	xxx					0.04						
16	xxx											
17	xxx											
18	xxx											
19	xxx											
20	xxx											
21	xxx											
22	xxx											
23	xxx											
24	xxx											
25	xxx											
26	xxx											
27	xxx											
28	xxx											
29	xxx											
30	xxx	0.12										
31	xxx											
Month Total	0.00	0.12	0.00	0.12	0.04	0.95	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down

City of Mesa Gauged Rainfall (In.)

CITY OF MESA
Great People, Quality Service!

Gage Number: 4555
Location: Falcon Field

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1	xxx	xxx										
2	xxx	xxx										
3	xxx	xxx										
4	xxx	xxx				0.83						
5	xxx	xxx										
6	xxx	xxx		0.08								
7	xxx	xxx										
8	xxx	xxx										
9	xxx	xxx										
10	xxx	xxx										
11	xxx	xxx				0.08						
12	xxx	xxx										
13	xxx	xxx										
14	xxx	xxx										
15	xxx	xxx				0.04						
16	xxx	xxx										
17	xxx	xxx										
18	xxx	xxx										
19	xxx	xxx										
20	xxx	xxx										
21	xxx	xxx										
22	xxx											
23	xxx											
24	xxx											
25	xxx											
26	xxx											
27	xxx											
28	xxx											
29	xxx											
30	xxx	0.04										
31	xxx											
Month Total	0.00	0.04	0.00	0.08	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down

City of Mesa Gauged Rainfall (In.)

CITY OF MESA
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Gage Number: 4545
Location: Brown Road and Horne

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1	xxx	xxx										
2	xxx	xxx										
3	xxx	xxx										
4	xxx	xxx				0.63						
5	xxx	xxx			0.08							
6	xxx			0.04								
7	xxx			0.12								
8	xxx											
9	xxx	0.24										
10	xxx											
11	xxx					0.08						
12	xxx											
13	xxx											
14	xxx											
15	xxx											
16	xxx											
17	xxx											
18	xxx											
19	xxx											
20	xxx											
21	xxx											
22	xxx											
23	xxx											
24	xxx											
25	xxx											
26	xxx											
27	xxx											
28	xxx											
29	xxx											
30	xxx	0.16										
31	xxx											
Month Total	0.00	0.40	0.00	0.16	0.08	0.71	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down

City of Mesa Gauged Rainfall (in.)

CITY OF MESA
Great People, Quality Service!

Gage Number: 4535

Location: Broadway and Dobson

	July 2001	August 2001	September 2001	October 2001	November 2001	December 2001	January 2002	February 2002	March 2002	April 2002	May 2002	June 2002
1	xxx	xxx										
2	xxx	xxx										
3	xxx	xxx										
4	xxx	xxx				0.55						
5	xxx	xxx			0.08							
6	xxx	xxx		0.04								
7	xxx	xxx										
8	xxx	xxx										
9	xxx	0.31										
10	xxx											
11	xxx					0.16						
12	xxx											
13	xxx											
14	xxx											
15	xxx											
16	xxx											
17	xxx											
18	xxx											
19	xxx											
20	xxx											
21	xxx											
22	xxx											
23	xxx											
24	xxx											
25	xxx											
26	xxx											
27	xxx											
28	xxx											
29	xxx											
30	xxx											
31	xxx											
Month Total	0.00	0.31	0.00	0.04	0.08	0.71	0.00	0.00	0.00	0.00	0.00	0.00

xxx = No data, gage down

Validation Tables

Mesa Site 1: Horne and Sixth Street	Method	Result
Storm of July 29 - 30, 2001		
Representative Storm Event	No	
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	
Sample Temperature (deg. C)	Field	3
Effluent Temperature (deg. C)	Field	26.5
pH, Effluent (standard units)	Field	6.0
BOD5 (mg/l)	405.1	NA
COD High Level (mg/l)	410.4	NA
Fecal Coliform (MPN/100mL)	9221E	16,000
Fecal Streptococci (MPN/100mL)	9230B	30,000
E. coli (MPN/100mL)	9221F	2,200
Total Dissolved Solids (mg/l)	2540C	NA
Total Suspended Solids (mg/l)	160.2	NA
TKN Nitrogen (mg/l as N)	351.3	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
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	NA
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)	200.7	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)	200.9	NA
Zinc, Dissolved, (ug/l as Zn)	200.7	NA
P,P' DDE, Total, (ug/l)	608	NA
Methylene Chloride, Total, (ug/l)	624	NA
Toluene, Total, (ug/l)	624	NA

NA = Not Analyzed (Tests canceled not representative storm event)

Mesa Site 1: Horne and Sixth Street	Method	Result
Storm of July 29 - 30, 2001		
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

NA = Not Analyzed (Tests canceled not representative storm event)

Mesa Site 2: Lindsay	Method	Result
Storm of July 29 - 30, 2001		
Representative Storm Event	No	
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	
Sample Temperature (deg. C)	Field	3
Effluent Temperature (deg. C)	Field	NA
pH, Effluent (standard units)	Field	NA
BOD5 (mg/l)	405.1	NA
COD High Level (mg/l)	410.4	NA
Fecal Coliform (MPN/100mL)	9221E	3,000
Fecal Streptococci (MPN/100mL)	9230B	16,000
E. coli (MPN/100mL)	9221F	140
Total Dissolved Solids (mg/l)	2540C	NA
Total Suspended Solids (mg/l)	160.2	NA
TKN Nitrogen (mg/l as N)	351.3	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
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	NA
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)	200.7	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)	200.9	NA
Zinc, Dissolved, (ug/l as Zn)	200.7	NA
P,P' DDE, Total, (ug/l)	608	NA
Methylene Chloride, Total, (ug/l)	624	NA
Toluene, Total, (ug/l)	624	NA

NA = Not Analyzed (Tests canceled not representative storm event)

Mesa Site 2: Lindsay	Method	Result
Storm of July 29 - 30, 2001		
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

NA = Not Analyzed (Tests canceled not representative storm event)

Mesa Site 4: Grandview	Method	Result
Storm of July 29 - 30, 2001		
Representative Storm Event	No	
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	
Sample Temperature (deg. C)	Field	3
Effluent Temperature (deg. C)	Field	27.5
pH, Effluent (standard units)	Field	6.0
BOD5 (mg/l)	405.1	NA
COD High Level (mg/l)	410.4	NA
Fecal Coliform (MPN/100mL)	9221E	5,000
Fecal Streptococci (MPN/100mL)	9230B	90,000
E. coli (MPN/100mL)	9221F	1,100
Total Dissolved Solids (mg/l)	2540C	NA
Total Suspended Solids (mg/l)	160.2	NA
TKN Nitrogen (mg/l as N)	351.3	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
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	NA
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)	200.7	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)	200.9	NA
Zinc, Dissolved, (ug/l as Zn)	200.7	NA
P,P' DDE, Total, (ug/l)	608	NA
Methylene Chloride, Total, (ug/l)	624	NA
Toluene, Total, (ug/l)	624	NA

NA = Not Analyzed (Tests canceled not representative storm event)

Mesa Site 4: Grandview	Method	Result
Storm of July 29 - 30, 2001		
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

NA = Not Analyzed (Tests canceled not representative storm event)

Mesa Site 1: Horne and Sixth Street	Method	Result
Storm of December 4, 2001		
Representative Storm Event	No	
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	
Sample Temperature (deg. C)	Field	7
Effluent Temperature (deg. C)	Field	13
pH, Effluent (standard units)	Field	9.3
BOD5 (mg/l)	405.1	NA
COD High Level (mg/l)	410.4	NA
Fecal Coliform (MPN/100mL)	9221E	11,000
Fecal Streptococci (MPN/100mL)	9230B	50,000
E. coli (MPN/100mL)	9221F	7,000
Total Dissolved Solids (mg/l)	2540C	NA
Total Suspended Solids (mg/l)	160.2	NA
TKN Nitrogen (mg/l as N)	351.3	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
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	NA
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)	200.7	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)	200.9	NA
Zinc, Dissolved, (ug/l as Zn)	200.7	NA
P,P' DDE, Total, (ug/l)	608	NA
Methylene Chloride, Total, (ug/l)	624	NA
Toluene, Total, (ug/l)	624	NA

NA = Not Analyzed (Tests canceled not representative storm event)

Mesa Site 1: Horne and Sixth Street	Method	Result
Storm of December 4, 2001		
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

NA = Not Analyzed (Tests canceled not representative storm event)

Mesa Site 2: Lindsay	Method	Result
Storm of December 4, 2001		
Representative Storm Event	No	
Agency Collecting Sample	FCD	
Agency Analyzing Sample	Del Mar	
Drainage Area (acres) (DA)	145	
Impervious Area (acres) (IA)	37	
Land Use - Residential	--	
Land Use - Commercial	--	
Land Use - Industrial	--	
Land Use - Undeveloped	--	
Sample Temperature (deg. C)	Field	NA
Effluent Temperature (deg. C)	Field	13
pH, Effluent (standard units)	Field	9.5
BOD5 (mg/l)	405.1	12
COD High Level (mg/l)	410.4	77
Fecal Coliform (MPN/100ml)	9221E	9,000
Fecal Streptococci (MPN/100ml)	9230B	5,000
E. Coli (MPN/100 ml)	9221F	110
Total Dissolved Solids (mg/l)	sm2540c	440
Total Suspended Solids (mg/l)	160.2	33
TKN Nitrogen (mg/l as N)	351.2	4.3
Nitrogen Nitrate Total (mg/l as N)	300	7.6
Nitrogen Ammonia Total (mg/l as N)		
Nitrogen Organic Total (mg/l as N)	calculation	1.1
Phosphorous Total (mg/l as P)	365.3	0.34
Phosphorous Dissolved (mg/l as P)		
Oil and Grease Total Recoverable (mg/l)	413.2	11
Hardness (mg/l)	sm2340b	200
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	4.8
Chromium Dissolved (ug/l as Cr)	200.9	<4.0
Copper, Total Recoverable, (ug/l as Cu)	200.9	29
Copper, Dissolved, (ug/l as Cu)	200.8	19
Lead, Total Recoverable, (ug/l as Pb)	200.9	6
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	87
Zinc, Dissolved, (ug/l as Zn)	200.7	57
EPA Method 608 Extraction		
P,P' DDE, Total, (ug/l)	608	<0.12
EPA Method 624 Extraction		
Methylene Chloride, Total, (ug/l)	624	
Toluene, Total, (ug/l)	624	
EPA Method 625 Extraction		
Benzo (a) Pyrene, Total, (ug/l)	625	<20
Chrysene, Total, (ug/l)	625	<10

Mesa Site 2: Lindsay	Method	Result
Fluoranthene, Total, (ug/l)	625	<10
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<20
Pyrene, Total, (ug/l)	625	<10

Mesa Site 3: Falcon Field	Method	Result
Storm of December 4, 2001		
Representative Storm Event	No	
Agency Collecting Sample	FCD	
Agency Analyzing Sample	Del Mar	
Drainage Area (acres) (DA)	171	
Impervious Area (acres) (IA)	111	
Land Use - Residential	--	
Land Use - Commercial	--	
Land Use - Industrial	--	
Land Use - Undeveloped	--	
Sample Temperature (deg. C)	Field	4
Effluent Temperature (deg. C)	Field	13
pH, Effluent (standard units)	Field	9.2
BOD5 (mg/l)	405.1	7.7
COD High Level (mg/l)	410.4	na
Fecal Coliform (MPN/100ml)	9221E	500
Fecal Streptococci (MPN/100ml)	9230B	6,320
E. Coli (MPN/100 ml)	9221F	70
Total Dissolved Solids (mg/l)	sm2540c	64
Total Suspended Solids (mg/l)	160.2	38
TKN Nitrogen (mg/l as N)	351.2	2.3
Nitrogen Nitrate Total (mg/l as N)	300	0.59
Nitrogen Ammonia Total (mg/l as N)		
Nitrogen Organic Total (mg/l as N)	calculation	1.1
Phosphorous Total (mg/l as P)	365.3	0.34
Phosphorous Dissolved (mg/l as P)		
Oil and Grease Total Recoverable (mg/l)	413.2	na
Hardness (mg/l)	sm2340b	32
Cadmium Total Recoverable (ug/l as Cd)	200.9	0.87
Cadmium Dissolved (ug/l as Cd)	200.9	0.57
Chromium Total Recoverable (ug/l as Cr)	200.9	<0.4
Chromium Dissolved (ug/l as Cr)	200.9	<4.0
Copper, Total Recoverable, (ug/l as Cu)	200.9	17
Copper, Dissolved, (ug/l as Cu)	200.8	7.6
Lead, Total Recoverable, (ug/l as Pb)	200.9	17
Lead, Dissolved, (ug/l as Pb)	200.9	2.2
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	140
Zinc, Dissolved, (ug/l as Zn)	200.7	110
EPA Method 608 Extraction		
P,P' DDE, Total, (ug/l)	608	<0.1
EPA Method 624 Extraction		
Methylene Chloride, Total, (ug/l)	624	
Toluene, Total, (ug/l)	624	
EPA Method 625 Extraction		
Benzo (a) Pyrene, Total, (ug/l)	625	<20
Chrysene, Total, (ug/l)	625	<10

Mesa Site 3: Falcon Field	Method	Result
Fluoranthene, Total, (ug/l)	625	<10
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<20
Pyrene, Total, (ug/l)	625	<10

Mesa Site 4: Grandview	Method	Result
Storm of December 4, 2001		
Representative Storm Event	No	
Agency Collecting Sample	FCD	
Agency Analyzing Sample	Del Mar	
Drainage Area (acres) (DA)	113.1	
Impervious Area (acres) (IA)	58	
Land Use - Residential	--	
Land Use - Commercial	--	
Land Use - Industrial	--	
Land Use - Undeveloped	--	
Sample Temperature (deg. C)	Field	7
Effluent Temperature (deg. C)	Field	13
pH, Effluent (standard units)	Field	9.3
BOD5 (mg/l)	405.1	NA
COD High Level (mg/l)	410.4	NA
Fecal Coliform (MPN/100ml)	9221E	1,600
Fecal Streptococci (MPN/100ml)	9230B	11,426
E. Coli (MPN/100 ml)	9221F	1,600
Total Dissolved Solids (mg/l)	sm2540c	NA
Total Suspended Solids (mg/l)	160.2	NA
TKN Nitrogen (mg/l as N)	351.2	NA
Nitrogen Nitrate Total (mg/l as N)	300	NA
Nitrogen Ammonia Total (mg/l as N)		NA
Nitrogen Organic Total (mg/l as N)	calculation	NA
Phosphorous Total (mg/l as P)	365.3	NA
Phosphorous Dissolved (mg/l as P)		NA
Oil and Grease Total Recoverable (mg/l)	413.2	NA
Hardness (mg/l)	sm2340b	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
EPA Method 608 Extraction		NA
P,P' DDE, Total, (ug/l)	608	NA
EPA Method 624 Extraction		NA
Methylene Chloride, Total, (ug/l)	624	NA
Toluene, Total, (ug/l)	624	NA
EPA Method 625 Extraction		NA
Benzo (a) Pyrene, Total, (ug/l)	625	NA
Chrysene, Total, (ug/l)	625	NA

NA = Not Analyzed (Test canceled not representative storm event)

Mesa Site 4: Grandview	Method	Result
Fluoranthene, Total, (ug/l)	625	NA
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	NA
Pyrene, Total, (ug/l)	625	NA

NA = Not Analyzed (Test canceled not representative storm event)

Mesa Site 5: Dobson	Method	Result
Storm of December 4, 2001		
Representative Storm Event		
Agency Collecting Sample	FCD	
Agency Analyzing Sample	Del Mar	
Drainage Area (acres) (DA)	63	
Impervious Area (acres) (IA)	56	
Land Use - Residential	--	
Land Use - Commercial	--	
Land Use - Industrial	--	
Land Use - Undeveloped	--	
Sample Temperature (deg. C)		NA
Effluent Temperature (deg. C)		NA
pH, Effluent (standard units)		NA
BOD5 (mg/l)	405.1	NA
COD High Level (mg/l)	410.4	77
Fecal Coliform (MPN/100ml)	9221E	NA
Fecal Streptococci (MPN/100ml)	9230B	NA
E. Coli (MPN/100 ml)	9221F	NA
Total Dissolved Solids (mg/l)	sm2540c	40
Total Suspended Solids (mg/l)	160.2	57
TKN Nitrogen (mg/l as N)	351.2	2.1
Nitrogen Nitrate Total (mg/l as N)	300	0.57
Nitrogen Ammonia Total (mg/l as N)		
Nitrogen Organic Total (mg/l as N)	calculation	1.1
Phosphorous Total (mg/l as P)	365.3	0.34
Phosphorous Dissolved (mg/l as P)		
Oil and Grease Total Recoverable (mg/l)	413.2	11
Hardness (mg/l)	sm2340b	33
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	8.2
Chromium Dissolved (ug/l as Cr)	200.9	<4.0
Copper, Total Recoverable, (ug/l as Cu)	200.9	37
Copper, Dissolved, (ug/l as Cu)	200.8	26
Lead, Total Recoverable, (ug/l as Pb)	200.9	20
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	320
Zinc, Dissolved, (ug/l as Zn)	200.7	78
EPA Method 608 Extraction		
P,P' DDE, Total, (ug/l)	608	<0.12
EPA Method 624 Extraction		
Methylene Chloride, Total, (ug/l)	624	
Toluene, Total, (ug/l)	624	
EPA Method 625 Extraction		
Benzo (a) Pyrene, Total, (ug/l)	625	<20
Chrysene, Total, (ug/l)	625	<10

NA = Not Analyzed (No Grabs)

Mesa Site 5: Dobson	Method	Result
Fluoranthene, Total, (ug/l)	625	<10
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<20
Pyrene, Total, (ug/l)	625	<10

NA = Not Analyzed (No Grabs)

Hard Copies of Data

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

Client Project ID: NPDES Mesa Stormwater
Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01
Issued: 1/7/02

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PKL0042-01	Falcon Field	Water
PKL0042-02	Falcon Field	Water
PKL0042-02RE7	Falcon Field	Water
PKL0042-03	Lindsay/Broadway	Water
PKL0042-04	Lindsay/Broadway	Water
PKL0042-04RE7	Lindsay/Broadway	Water
PKL0042-05	Dobson/Broadway	Water
PKL0042-06	Dobson/Broadway	Water
PKL0042-06RE7	Dobson/Broadway	Water

AMPLE RECEIPT: Samples were received intact, on ice, and with chain of custody documentation. Samples were received at 9 degrees C.

HOLDING TIMES: Holding times were met.

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

BSERVATIONS: No significant observations were made.

UBCONTRACTED: Analyses were subcontracted to Transwest Geochem - 3725 E. Atlanta Ave., Suite 2, Phoenix, AZ 85040 (AZ0133). and NEL Laboratories - 3021 S. 35th Street, Suite B-6, Phoenix, AZ. Results are attached.

A/QC CRITERIA: All analyses met method criteria.

EXPLANATION OF DATA QUALIFIERS: The D1 flag on the fluoride indicates that the reporting limit was raised due to high concentrations of non-target analytes.

DEL MAR ANALYTICAL , PHOENIX (AZ0426)

Linda Eshelman
roject 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: Todd Williams

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

TOTAL RECOVERABLE METALS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKL0042-01RE1 (Falcon Field - Water)								
Cadmium	EPA 200.9	P1L0521	0.00050	**0.00087**	1	12/5/01	12/8/01	
Calcium	EPA 200.7	P1L0710	2.0	**10**	1	12/7/01	12/10/01	
Chromium	EPA 200.9	P1L0521	0.0040	ND	1	12/5/01	12/11/01	
Copper	EPA 200.9	P1L0521	0.0040	**0.017**	1	12/5/01	12/7/01	
Lead	EPA 200.9	P1L0521	0.0020	**0.017**	1	12/5/01	12/7/01	
Magnesium	EPA 200.7	P1L0710	0.50	**1.6**	1	12/7/01	12/10/01	
Potassium	EPA 258.1	P1L0710	1.0	**1.3**	1	12/7/01	12/11/01	
Sodium	EPA 273.1	P1L0710	5.0	ND	1	12/7/01	12/11/01	
Sample ID: PKL0042-01RE2 (Falcon Field - Water)								
Zinc	EPA 200.7	P1L1124	0.050	**0.14**	1	12/11/01	12/12/01	
Sample ID: PKL0042-03RE1 (Lindsay/Broadway - Water)								
Cadmium	EPA 200.9	P1L0521	0.00050	ND	1	12/5/01	12/8/01	
Calcium	EPA 200.7	P1L0710	2.0	**69**	1	12/7/01	12/10/01	
Chromium	EPA 200.9	P1L0521	0.0040	**0.0048**	1	12/5/01	12/12/01	
Copper	EPA 200.9	P1L0521	0.0040	**0.029**	1	12/5/01	12/7/01	
Lead	EPA 200.9	P1L0521	0.0020	**0.0060**	1	12/5/01	12/7/01	
Magnesium	EPA 200.7	P1L0710	0.50	**5.6**	1	12/7/01	12/10/01	
Potassium	EPA 258.1	P1L0710	1.0	**15**	1	12/7/01	12/11/01	
Sodium	EPA 273.1	P1L0710	5.0	**46**	1	12/7/01	12/11/01	
Sample ID: PKL0042-03RE2 (Lindsay/Broadway - Water)								
Zinc	EPA 200.7	P1L1124	0.050	**0.087**	1	12/11/01	12/12/01	

Linda Eshelman
Project Manager

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

TOTAL RECOVERABLE METALS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
ample ID: PKL0042-05 (Dobson/Broadway - Water)								
Mercury	EPA 245.1	P1L1222	0.00020	ND	1	12/12/01	12/12/01	
Sample ID: PKL0042-05RE1 (Dobson/Broadway - Water)								
admium	EPA 200.9	P1L0521	0.00050	ND	1	12/5/01	12/8/01	
alcium	EPA 200.7	P1L0710	2.0	**9.9**	1	12/7/01	12/10/01	
Chromium	EPA 200.9	P1L0521	0.0040	**0.0082**	1	12/5/01	12/12/01	
opper	EPA 200.9	P1L0521	0.0040	**0.037**	1	12/5/01	12/7/01	
ead	EPA 200.9	P1L0521	0.0020	**0.020**	1	12/5/01	12/7/01	
agnesium	EPA 200.7	P1L0710	0.50	**2.0**	1	12/7/01	12/10/01	
Potassium	EPA 258.1	P1L0710	1.0	**2.0**	1	12/7/01	12/11/01	
odium	EPA 273.1	P1L0710	5.0	ND	1	12/7/01	12/11/01	
ample ID: PKL0042-05RE2 (Dobson/Broadway - Water)								
Zinc	EPA 200.7	P1L1124	0.050	**0.32**	1	12/11/01	12/12/01	

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

DISSOLVED METALS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKL0042-02 (Falcon Field - Water)								
Cadmium, Dissolved	EPA 200.9	P1L0521	0.00050	**0.00057**	1	12/5/01	12/8/01	
Chromium, Dissolved	EPA 200.9	P1L0521	0.0040	ND	1	12/5/01	12/12/01	
Lead, Dissolved	EPA 200.9	P1L0521	0.0020	**0.0022**	1	12/5/01	12/7/01	
Sample ID: PKL0042-02RE7 (Falcon Field - Water)								
Zinc, Dissolved	EPA 200.7	P2A0409	0.050	**0.11**	1	1/4/02	1/4/02	
Sample ID: PKL0042-04 (Lindsay/Broadway - Water)								
Cadmium, Dissolved	EPA 200.9	P1L0521	0.00050	ND	1	12/5/01	12/8/01	
Chromium, Dissolved	EPA 200.9	P1L0521	0.0040	ND	1	12/5/01	12/12/01	
Lead, Dissolved	EPA 200.9	P1L0521	0.0020	ND	1	12/5/01	12/7/01	
Mercury, Dissolved	EPA 245.1	P1L1222	0.00020	ND	1	12/12/01	12/12/01	
Sample ID: PKL0042-04RE7 (Lindsay/Broadway - Water)								
Zinc, Dissolved	EPA 200.7	P2A0406	0.050	**0.057**	1	1/4/02	1/7/02	
Sample ID: PKL0042-06 (Dobson/Broadway - Water)								
Cadmium, Dissolved	EPA 200.9	P1L0521	0.00050	ND	1	12/5/01	12/8/01	
Chromium, Dissolved	EPA 200.9	P1L0521	0.0040	ND	1	12/5/01	12/12/01	
Lead, Dissolved	EPA 200.9	P1L0521	0.0020	ND	1	12/5/01	12/7/01	
Mercury, Dissolved	EPA 245.1	P1L1222	0.00020	ND	1	12/12/01	12/12/01	
Sample ID: PKL0042-06RE7 (Dobson/Broadway - Water)								
Zinc, Dissolved	EPA 200.7	P2A0406	0.050	**0.078**	1	1/4/02	1/7/02	

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			mg/l	mg/l				
ample ID: PKL0042-01 (Falcon Field - Water)								
Alkalinity as CaCO3	SM2320B	P1L0615	5.0	ND	1	12/6/01	12/6/01	
Chloride	EPA 300.0	P1L0609	0.50	**2.4**	1	12/5/01	12/5/01	
luoride	EPA 300.0	P1L0609	1.0	ND	10	12/5/01	12/5/01	D1
itrate-N	EPA 300.0	P1L0609	0.10	**0.59**	1	12/5/01	12/5/01	
			umhos/cm	umhos/cm				
ample ID: PKL0042-01 (Falcon Field - Water)								
pecific Conductance	SM2510B	P1L0708	2.0	**770**	1	12/7/01	12/7/01	
			mg/l	mg/l				
Sample ID: PKL0042-01 (Falcon Field - Water)								
ulfate	EPA 300.0	P1L0609	0.50	**8.1**	1	12/5/01	12/5/01	
otal Dissolved Solids	SM2540C	P1L0523	20	**64**	1	12/4/01	12/4/01	
Total Suspended Solids	EPA 160.2	P1L1004	10	**38**	1	12/7/01	12/7/01	
Sample ID: PKL0042-01RE1 (Falcon Field - Water)								
ardness (CaCO3)	SM2340B	P1L0710	1.0	**32**	1	12/7/01	12/10/01	
ample ID: PKL0042-03 (Lindsay/Broadway - Water)								
Alkalinity as CaCO3	SM2320B	P1L0615	5.0	**140**	1	12/6/01	12/6/01	
hloride	EPA 300.0	P1L0609	5.0	**50**	10	12/5/01	12/5/01	
luoride	EPA 300.0	P1L0609	0.10	**0.28**	1	12/5/01	12/5/01	
Nitrate-N	EPA 300.0	P1L0609	0.10	**7.6**	1	12/5/01	12/5/01	
			umhos/cm	umhos/cm				
ample ID: PKL0042-03 (Lindsay/Broadway - Water)								
pecific Conductance	SM2510B	P1L0708	2.0	**590**	1	12/7/01	12/7/01	

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			mg/l	mg/l				
Sample ID: PKL0042-03 (Lindsay/Broadway - Water)								
Sulfate	EPA 300.0	P1L0609	5.0	**47**	10	12/5/01	12/5/01	
Total Dissolved Solids	SM2540C	P1L1005	20	**440**	1	12/7/01	12/7/01	
Total Suspended Solids	EPA 160.2	P1L1004	10	**33**	1	12/7/01	12/7/01	
Sample ID: PKL0042-03RE1 (Lindsay/Broadway - Water)								
Hardness (CaCO3)	SM2340B	P1L0710	1.0	**200**	1	12/7/01	12/10/01	
Sample ID: PKL0042-05 (Dobson/Broadway - Water)								
Phosphorous, Dissolved	EPA 365.3	P1L1129	0.050	**0.23**	1	12/11/01	12/11/01	
Alkalinity as CaCO3	SM2320B	P1L0615	5.0	**20**	1	12/6/01	12/6/01	
Ammonia-N	EPA 350.3	P1L1202	0.10	**1.2**	2	12/11/01	12/11/01	
			%	%				
Sample ID: PKL0042-05 (Dobson/Broadway - Water)								
Cation/Anion Balance	Calculation	P1L1415	NA	**14.6**	1	12/14/01	12/14/01	
			mg/l	mg/l				
Sample ID: PKL0042-05 (Dobson/Broadway - Water)								
Chemical Oxygen Demand	EPA 410.4	P1L1307	20	**77**	1	12/12/01	12/12/01	
Chloride	EPA 300.0	P1L0609	0.50	**4.5**	1	12/5/01	12/5/01	
Fluoride	EPA 300.0	P1L0609	0.10	**0.25**	1	12/5/01	12/5/01	
Nitrate-N	EPA 300.0	P1L0609	0.10	**0.57**	1	12/5/01	12/5/01	
Phosphorus	EPA 365.3	P1L1129	0.050	**0.34**	1	12/11/01	12/11/01	
			umhos/cm	umhos/cm				
Sample ID: PKL0042-05 (Dobson/Broadway - Water)								
Specific Conductance	SM2510B	P1L0708	2.0	**760**	1	12/7/01	12/7/01	

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKL0042-05 (Dobson/Broadway - Water)								
Sulfate	EPA 300.0	P1L0609	0.50	**4.4**	1	12/5/01	12/5/01	
Total Dissolved Solids	SM2540C	P1L1005	20	**40**	1	12/7/01	12/7/01	
Total Suspended Solids	EPA 160.2	P1L1004	10	**57**	1	12/7/01	12/7/01	
Sample ID: PKL0042-05RE1 (Dobson/Broadway - Water)								
Hardness (CaCO3)	SM2340B	P1L0710	1.0	**33**	1	12/7/01	12/10/01	

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Maricopa County -Flood Control District 2801 West Durango Street Phoenix, AZ 85009 Attention: Todd Williams	Client Project ID: NPDES Mesa Stormwater Report Number: PKL0042	Sampled: 12/04/01 Received: 12/04/01	

NITROGEN, ORGANIC (Calculation)

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKL0042-05 (Dobson/Broadway - Water)								
Organic Nitrogen	Calculation	P1L2708	0.50	**1.1**	1	12/27/01	12/27/01	

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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
ample ID: PKL0042-05 (Dobson/Broadway - Water)								
enzo(a)pyrene	EPA 625	P1L0613	20	ND	1	12/6/01	12/13/01	
Chrysene	EPA 625	P1L0613	10	ND	1	12/6/01	12/13/01	
uoranthene	EPA 625	P1L0613	10	ND	1	12/6/01	12/13/01	
deno(1,2,3-cd)pyrene	EPA 625	P1L0613	20	ND	1	12/6/01	12/13/01	
Pyrene	EPA 625	P1L0613	10	ND	1	12/6/01	12/13/01	
Surrogate: 2-Fluorophenol (20-120%)				*28 %*				
rrogate: Phenol-d6 (15-115%)				*30 %*				
rrogate: 2,4,6-Tribromophenol (35-135%)				*59 %*				
Surrogate: Nitrobenzene-d5 (25-120%)				*36 %*				
rrogate: 2-Fluorobiphenyl (25-145%)				*37 %*				
rrogate: Terphenyl-d14 (40-130%)				*64 %*				

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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: PKL0042-01 (Falcon Field - Water)								
Benzo(a)pyrene	EPA 625	P1L0613	20	ND	1	12/6/01	12/11/01	
Chrysene	EPA 625	P1L0613	10	ND	1	12/6/01	12/11/01	
Fluoranthene	EPA 625	P1L0613	10	ND	1	12/6/01	12/11/01	
Indeno(1,2,3-cd)pyrene	EPA 625	P1L0613	20	ND	1	12/6/01	12/11/01	
Pyrene	EPA 625	P1L0613	10	ND	1	12/6/01	12/11/01	
Surrogate: 2-Fluorophenol (20-120%)				*50 %*				
Surrogate: Phenol-d6 (15-115%)				*55 %*				
Surrogate: 2,4,6-Tribromophenol (35-135%)				*85 %*				
Surrogate: Nitrobenzene-d5 (25-120%)				*56 %*				
Surrogate: 2-Fluorobiphenyl (25-145%)				*66 %*				
Surrogate: Terphenyl-d14 (40-130%)				*83 %*				
Sample ID: PKL0042-03 (Lindsay/Broadway - Water)								
Benzo(a)pyrene	EPA 625	P1L0613	20	ND	1	12/6/01	12/11/01	
Chrysene	EPA 625	P1L0613	10	ND	1	12/6/01	12/11/01	
Fluoranthene	EPA 625	P1L0613	10	ND	1	12/6/01	12/11/01	
Indeno(1,2,3-cd)pyrene	EPA 625	P1L0613	20	ND	1	12/6/01	12/11/01	
Pyrene	EPA 625	P1L0613	10	ND	1	12/6/01	12/11/01	
Surrogate: 2-Fluorophenol (20-120%)				*45 %*				
Surrogate: Phenol-d6 (15-115%)				*50 %*				
Surrogate: 2,4,6-Tribromophenol (35-135%)				*70 %*				
Surrogate: Nitrobenzene-d5 (25-120%)				*56 %*				
Surrogate: 2-Fluorobiphenyl (25-145%)				*63 %*				
Surrogate: Terphenyl-d14 (40-130%)				*71 %*				

Linda Eshelman
Project Manager

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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: PKL0042-01 (Falcon Field - Water)								
4,4'-DDE	EPA 608	I1L0730	0.10	ND	1.11	12/7/01	12/11/01	
Surrogate: Tetrachloro-m-xylene (30-120%)				*51 %*				
Surrogate: Decachlorobiphenyl (30-120%)				*71 %*				
Sample ID: PKL0042-03 (Lindsay/Broadway - Water)								
4,4'-DDE	EPA 608	I1L0730	0.12	ND	1.18	12/7/01	12/11/01	
Surrogate: Tetrachloro-m-xylene (30-120%)				*61 %*				
Surrogate: Decachlorobiphenyl (30-120%)				*71 %*				
Sample ID: PKL0042-05 (Dobson/Broadway - Water)								
4,4'-DDE	EPA 608	I1L0730	0.12	ND	1.18	12/7/01	12/11/01	
Surrogate: Tetrachloro-m-xylene (30-120%)				*57 %*				
Surrogate: Decachlorobiphenyl (30-120%)				*71 %*				

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

Client Project ID: NPDES Mesa Stormwater
Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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: P1L0613 Extracted: 12/06/01										
Blank Analyzed: 12/11/01 (P1L0613-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	*56.2*		*ug/l*	*100*		*56*	*20-120*			
Surrogate: Phenol-d6	*32.1*		*ug/l*	*100*		*32*	*15-115*			
Surrogate: 2,4,6-Tribromophenol	*73.0*		*ug/l*	*100*		*73*	*35-135*			
Surrogate: Nitrobenzene-d5	*32.4*		*ug/l*	*50.0*		*65*	*25-120*			
Surrogate: 2-Fluorobiphenyl	*30.3*		*ug/l*	*50.0*		*61*	*25-145*			
Surrogate: Terphenyl-d14	*39.6*		*ug/l*	*50.0*		*79*	*40-130*			
LCS Analyzed: 12/11/01 (P1L0613-BS1)										
Benzo(a)pyrene	**50.2**	20	ug/l	50.0		100	17-163			
Chrysene	**49.1**	10	ug/l	50.0		98	17-168			
Fluoranthene	**49.0**	10	ug/l	50.0		98	26-137			
Indeno(1,2,3-cd)pyrene	**51.5**	20	ug/l	50.0		103	5-171			
Pyrene	**55.6**	10	ug/l	50.0		111	52-115			
Surrogate: 2-Fluorophenol	*66.9*		*ug/l*	*100*		*67*	*20-120*			
Surrogate: Phenol-d6	*71.3*		*ug/l*	*100*		*71*	*15-115*			
Surrogate: 2,4,6-Tribromophenol	*93.1*		*ug/l*	*100*		*93*	*35-135*			
Surrogate: Nitrobenzene-d5	*37.0*		*ug/l*	*50.0*		*74*	*25-120*			
Surrogate: 2-Fluorobiphenyl	*38.4*		*ug/l*	*50.0*		*77*	*25-145*			
Surrogate: Terphenyl-d14	*44.4*		*ug/l*	*50.0*		*89*	*40-130*			
LCS Dup Analyzed: 12/11/01 (P1L0613-BSD1)										
Benzo(a)pyrene	**49.4**	20	ug/l	50.0		99	17-163	2	20	
Chrysene	**49.6**	10	ug/l	50.0		99	17-168	1	20	
Fluoranthene	**49.9**	10	ug/l	50.0		100	26-137	2	20	
Indeno(1,2,3-cd)pyrene	**51.7**	20	ug/l	50.0		103	5-171	0.4	20	
Pyrene	**54.9**	10	ug/l	50.0		110	52-115	1	20	
Surrogate: 2-Fluorophenol	*65.9*		*ug/l*	*100*		*66*	*20-120*			
Surrogate: Phenol-d6	*69.4*		*ug/l*	*100*		*69*	*15-115*			
Surrogate: 2,4,6-Tribromophenol	*91.7*		*ug/l*	*100*		*92*	*35-135*			
Surrogate: Nitrobenzene-d5	*36.2*		*ug/l*	*50.0*		*72*	*25-120*			
Surrogate: 2-Fluorobiphenyl	*38.0*		*ug/l*	*50.0*		*76*	*25-145*			
Surrogate: Terphenyl-d14	*44.6*		*ug/l*	*50.0*		*89*	*40-130*			

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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: P1L0613 Extracted: 12/06/01										
Matrix Spike Analyzed: 12/11/01 (P1L0613-MS1)					**Source: PKL0039-02**					
Benzo(a)pyrene	**52.7**	20	ug/l	50.0	ND	105	17-163			
Chrysene	**51.6**	10	ug/l	50.0	ND	103	17-168			
Fluoranthene	**51.7**	10	ug/l	50.0	ND	103	26-137			
Indeno(1,2,3-cd)pyrene	**55.0**	20	ug/l	50.0	ND	110	5-171			
Pyrene	**57.8**	10	ug/l	50.0	ND	116	52-115			M1
Surrogate: 2-Fluorophenol	*73.4*		*ug/l*	*100*		*73*	*20-120*			
Surrogate: Phenol-d6	*76.8*		*ug/l*	*100*		*77*	*15-115*			
Surrogate: 2,4,6-Tribromophenol	*90.2*		*ug/l*	*100*		*90*	*35-135*			
Surrogate: Nitrobenzene-d5	*45.7*		*ug/l*	*50.0*		*91*	*25-120*			
Surrogate: 2-Fluorobiphenyl	*45.2*		*ug/l*	*50.0*		*90*	*25-145*			
Surrogate: Terphenyl-d14	*46.1*		*ug/l*	*50.0*		*92*	*40-130*			
Matrix Spike Dup Analyzed: 12/11/01 (P1L0613-MSD1)					**Source: PKL0039-02**					
Benzo(a)pyrene	**52.6**	20	ug/l	50.0	ND	105	17-163	0.2	20	
Chrysene	**50.6**	10	ug/l	50.0	ND	101	17-168	2	20	
Fluoranthene	**52.2**	10	ug/l	50.0	ND	104	26-137	1	20	
Indeno(1,2,3-cd)pyrene	**54.5**	20	ug/l	50.0	ND	109	5-171	0.9	20	
Pyrene	**57.4**	10	ug/l	50.0	ND	115	52-115	0.7	20	
Surrogate: 2-Fluorophenol	*71.4*		*ug/l*	*100*		*71*	*20-120*			
Surrogate: Phenol-d6	*73.6*		*ug/l*	*100*		*74*	*15-115*			
Surrogate: 2,4,6-Tribromophenol	*88.3*		*ug/l*	*100*		*88*	*35-135*			
Surrogate: Nitrobenzene-d5	*44.4*		*ug/l*	*50.0*		*89*	*25-120*			
Surrogate: 2-Fluorobiphenyl	*44.9*		*ug/l*	*50.0*		*90*	*25-145*			
Surrogate: Terphenyl-d14	*46.4*		*ug/l*	*50.0*		*93*	*40-130*			

Linda Eshelman
Project Manager

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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: P1L0521 Extracted: 12/05/01										
Blank Analyzed: 12/08/01 (P1L0521-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: 12/08/01 (P1L0521-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: 12/08/01 (P1L0521-BS1)										
Cadmium	**0.00178**	0.0010	mg/l	0.00200		89	85-115			
Chromium	**0.0391**	0.0080	mg/l	0.0400		98	85-115			
Copper	**0.0399**	0.0080	mg/l	0.0400		100	85-115			
Lead	**0.0413**	0.0040	mg/l	0.0400		103	85-115			
LCS Dup Analyzed: 12/08/01 (P1L0521-BSD1)										
Cadmium	**0.00183**	0.0010	mg/l	0.00200		91	85-115	3	20	
Chromium	**0.0350**	0.0080	mg/l	0.0400		88	85-115	11	20	
Copper	**0.0408**	0.0080	mg/l	0.0400		102	85-115	2	20	
Lead	**0.0417**	0.0040	mg/l	0.0400		104	85-115	1	20	
Matrix Spike Analyzed: 12/08/01 (P1L0521-MS1)					**Source: PKL0060-01**					
Cadmium	**0.00166**	0.0010	mg/l	0.00200	ND	83	70-130			
Chromium	**0.0320**	0.0080	mg/l	0.0400	ND	72	70-130			
Copper	**0.0561**	0.0080	mg/l	0.0400	0.014	105	70-130			
Lead	**0.0452**	0.0040	mg/l	0.0400	0.0044	102	70-130			

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Project Manager

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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: P1L0521 Extracted: 12/05/01										
Matrix Spike Dup Analyzed: 12/08/01 (P1L0521-MSD1)					**Source: PKL0060-01**					
Cadmium	**0.00165**	0.0010	mg/l	0.00200	ND	82	70-130	0.6	20	
Chromium	**0.0324**	0.0080	mg/l	0.0400	ND	73	70-130	1	20	
Copper	**0.0582**	0.0080	mg/l	0.0400	0.014	110	70-130	4	20	
Lead	**0.0479**	0.0040	mg/l	0.0400	0.0044	109	70-130	6	20	
Batch: P1L0710 Extracted: 12/07/01										
Blank Analyzed: 12/07/01 (P1L0710-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							
LCS Analyzed: 12/07/01 (P1L0710-BS1)										
Calcium	**10.7**	2.0	mg/l	10.0		107	85-115			
Magnesium	**10.1**	0.50	mg/l	10.0		101	85-115			
Potassium	**11.4**	1.0	mg/l	10.0		114	85-115			
Sodium	**52.6**	5.0	mg/l	50.0		105	85-115			
LCS Dup Analyzed: 12/07/01 (P1L0710-BSD1)										
Calcium	**10.6**	2.0	mg/l	10.0		106	85-115	0.9	20	
Magnesium	**10.1**	0.50	mg/l	10.0		101	85-115	0	20	
Potassium	**11.4**	1.0	mg/l	10.0		114	85-115	0	20	
Sodium	**52.4**	5.0	mg/l	50.0		105	85-115	0.4	20	
Matrix Spike Analyzed: 12/07/01 (P1L0710-MS1)					**Source: PKL0061-01**					
Calcium	**55.6**	2.0	mg/l	10.0	46	96	70-130			
Magnesium	**41.7**	0.50	mg/l	10.0	33	87	70-130			
Potassium	**27.5**	1.0	mg/l	10.0	17	105	85-115			
Sodium	**416**	5.0	mg/l	50.0	420	-8	85-115			M3

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control District 2801 West Durango Street Phoenix, AZ 85009 Attention: Todd Williams	Client Project ID: NPDES Mesa Stormwater Report Number: PKL0042	Sampled: 12/04/01 Received: 12/04/01	

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: P1L0710 Extracted: 12/07/01										
Matrix Spike Dup Analyzed: 12/07/01 (P1L0710-MSD1)					**Source: PKL0061-01**					
Calcium	**55.8**	2.0	mg/l	10.0	46	98	70-130	0.4	20	
Magnesium	**42.2**	0.50	mg/l	10.0	33	92	70-130	1	20	
Potassium	**27.5**	1.0	mg/l	10.0	17	105	85-115	0	20	
Sodium	**467**	5.0	mg/l	50.0	420	94	85-115	12	20	
Batch: P1L1124 Extracted: 12/11/01										
Blank Analyzed: 12/12/01 (P1L1124-BLK1)										
Zinc	ND	0.050	mg/l							
LCS Analyzed: 12/12/01 (P1L1124-BS1)										
Zinc	**1.10**	0.050	mg/l	1.00		110	85-115			
LCS Dup Analyzed: 12/12/01 (P1L1124-BSD1)										
Zinc	**1.07**	0.050	mg/l	1.00		107	85-115	3	20	
Matrix Spike Analyzed: 12/12/01 (P1L1124-MS1)					**Source: PKL0168-01**					
Zinc	**1.51**	0.050	mg/l	1.00	0.45	106	70-130			
Matrix Spike Dup Analyzed: 12/12/01 (P1L1124-MSD1)					**Source: PKL0168-01**					
Zinc	**1.49**	0.050	mg/l	1.00	0.45	104	70-130	1	20	
Batch: P1L1222 Extracted: 12/12/01										
Blank Analyzed: 12/12/01 (P1L1222-BLK1)										
Mercury	ND	0.00020	mg/l							

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Project Manager

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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: P1L1222 Extracted: 12/12/01										
Blank Analyzed: 12/12/01 (P1L1222-BLK2)										
Mercury	ND	0.00020	mg/l							
Blank Analyzed: 12/12/01 (P1L1222-BLK3)										
Mercury	ND	0.00020	mg/l							
LCS Analyzed: 12/12/01 (P1L1222-BS1)										
Mercury	**0.00485**	0.00020	mg/l	0.00500		97	85-115			
LCS Dup Analyzed: 12/12/01 (P1L1222-BSD1)										
Mercury	**0.00483**	0.00020	mg/l	0.00500		97	85-115	0.4	20	
Matrix Spike Analyzed: 12/12/01 (P1L1222-MS1)					**Source: PKL0040-01**					
Mercury	**0.00467**	0.00020	mg/l	0.00500	ND	93	85-115			
Matrix Spike Dup Analyzed: 12/12/01 (P1L1222-MSD1)					**Source: PKL0040-01**					
Mercury	**0.00472**	0.00020	mg/l	0.00500	ND	94	85-115	1	20	

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1L0521 Extracted: 12/05/01										
Blank Analyzed: 12/08/01 (P1L0521-BLK1)										
Cadmium, Dissolved	ND	0.00050	mg/l							
Chromium, Dissolved	ND	0.0040	mg/l							
Lead, Dissolved	ND	0.0020	mg/l							
Blank Analyzed: 12/08/01 (P1L0521-BLK2)										
Cadmium, Dissolved	ND	0.00050	mg/l							
Chromium, Dissolved	ND	0.0040	mg/l							
Lead, Dissolved	ND	0.0020	mg/l							
LCS Analyzed: 12/08/01 (P1L0521-BS1)										
Cadmium, Dissolved	**0.00178**	0.0010	mg/l	0.00200		89	85-115			
Chromium, Dissolved	**0.0391**	0.0080	mg/l	0.0400		98	85-115			
Lead, Dissolved	**0.0413**	0.0040	mg/l	0.0400		103	85-115			
LCS Dup Analyzed: 12/08/01 (P1L0521-BSD1)										
Cadmium, Dissolved	**0.00183**	0.0010	mg/l	0.00200		91	85-115	3	20	
Chromium, Dissolved	**0.0350**	0.0080	mg/l	0.0400		88	85-115	11	20	
Lead, Dissolved	**0.0417**	0.0040	mg/l	0.0400		104	85-115	1	20	
Matrix Spike Analyzed: 12/08/01 (P1L0521-MS1)					**Source: PKL0060-01**					
Cadmium, Dissolved	**0.00166**	0.0010	mg/l	0.00200	ND	83	70-130			
Chromium, Dissolved	**0.0320**	0.0080	mg/l	0.0400	ND	72	70-130			
Lead, Dissolved	**0.0452**	0.0040	mg/l	0.0400	0.0044	102	70-130			
Matrix Spike Dup Analyzed: 12/08/01 (P1L0521-MSD1)					**Source: PKL0060-01**					
Cadmium, Dissolved	**0.00165**	0.0010	mg/l	0.00200	ND	82	70-130	0.6	20	
Chromium, Dissolved	**0.0324**	0.0080	mg/l	0.0400	ND	73	70-130	1	20	
Lead, Dissolved	**0.0479**	0.0040	mg/l	0.0400	0.0044	109	70-130	6	20	

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Project Manager

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1L1222 Extracted: 12/12/01										
Blank Analyzed: 12/12/01 (P1L1222-BLK1)										
Mercury, Dissolved	ND	0.00020	mg/l							
Blank Analyzed: 12/12/01 (P1L1222-BLK2)										
Mercury, Dissolved	ND	0.00020	mg/l							
Blank Analyzed: 12/12/01 (P1L1222-BLK3)										
Mercury, Dissolved	ND	0.00020	mg/l							
LCS Analyzed: 12/12/01 (P1L1222-BS1)										
Mercury, Dissolved	**0.00485**	0.00020	mg/l	0.00500		97	85-115			
LCS Dup Analyzed: 12/12/01 (P1L1222-BSD1)										
Mercury, Dissolved	**0.00483**	0.00020	mg/l	0.00500		97	85-115	0.4	20	
Matrix Spike Analyzed: 12/12/01 (P1L1222-MS1)					**Source: PKL0040-01**					
Mercury, Dissolved	**0.00467**	0.00020	mg/l	0.00500	ND	93	85-115			
Matrix Spike Dup Analyzed: 12/12/01 (P1L1222-MSD1)					**Source: PKL0040-01**					
Mercury, Dissolved	**0.00472**	0.00020	mg/l	0.00500	ND	94	85-115	1	20	
Batch: P2A0406 Extracted: 01/04/02										
Blank Analyzed: 01/07/02 (P2A0406-BLK1)										
Zinc, Dissolved	ND	0.050	mg/l							
Blank Analyzed: 01/07/02 (P2A0406-BLK2)										
Zinc, Dissolved	ND	0.050	mg/l							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2A0406 Extracted: 01/04/02										
LCS Analyzed: 01/07/02 (P2A0406-BS1)										
Zinc, Dissolved	**1.04**	0.050	mg/l	1.00		104	85-115			
LCS Dup Analyzed: 01/07/02 (P2A0406-BSD1)										
Zinc, Dissolved	**1.06**	0.050	mg/l	1.00		106	85-115	2	20	
Matrix Spike Analyzed: 01/07/02 (P2A0406-MS1)					**Source: PKL0435-14**					
Zinc, Dissolved	**1.12**	0.050	mg/l	1.00	0.081	104	70-130			
Matrix Spike Dup Analyzed: 01/07/02 (P2A0406-MSD1)					**Source: PKL0435-14**					
Zinc, Dissolved	**1.08**	0.050	mg/l	1.00	0.081	100	70-130	4	20	
Batch: P2A0409 Extracted: 01/04/02										
Blank Analyzed: 01/04/02 (P2A0409-BLK1)										
Zinc, Dissolved	ND	0.050	mg/l							
Blank Analyzed: 01/04/02 (P2A0409-BLK2)										
Zinc, Dissolved	ND	0.050	mg/l							
LCS Analyzed: 01/04/02 (P2A0409-BS1)										
Zinc, Dissolved	**1.02**	0.050	mg/l	1.00		102	85-115			
LCS Dup Analyzed: 01/04/02 (P2A0409-BSD1)										
Zinc, Dissolved	**1.02**	0.050	mg/l	1.00		102	85-115	0	20	
Matrix Spike Analyzed: 01/04/02 (P2A0409-MS1)					**Source: PKL0441-02**					
Zinc, Dissolved	**1.09**	0.050	mg/l	1.00	0.059	103	70-130			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P2A0409 Extracted: 01/04/02										
Matrix Spike Dup Analyzed: 01/04/02 (P2A0409-MSD1)					**Source: PKL0441-02**					
Zinc, Dissolved	**1.06**	0.050	mg/l	1.00	0.059	100	70-130	3	20	

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INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1L0523 Extracted: 12/04/01										
Blank Analyzed: 12/04/01 (P1L0523-BLK1)										
Total Dissolved Solids	ND	20	mg/l							
LCS Analyzed: 12/04/01 (P1L0523-BS1)										
Total Dissolved Solids	**400**	20	mg/l	400		100	80-115			
LCS Dup Analyzed: 12/04/01 (P1L0523-BSD1)										
Total Dissolved Solids	**384**	20	mg/l	400		96	80-115	4	200	
Duplicate Analyzed: 12/04/01 (P1L0523-DUP1)					**Source: PKK0511-01**					
Total Dissolved Solids	**504**	20	mg/l		500			0.8	5	
Batch: P1L0609 Extracted: 12/05/01										
Blank Analyzed: 12/05/01 (P1L0609-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							
LCS Analyzed: 12/05/01 (P1L0609-BS1)										
Chloride	**5.18**	0.50	mg/l	5.00		104	90-110			
Fluoride	**2.52**	0.10	mg/l	2.50		101	90-110			
Nitrate-N	**2.68**	0.10	mg/l	2.50		107	90-110			
Sulfate	**5.30**	0.50	mg/l	5.00		106	90-110			
LCS Dup Analyzed: 12/05/01 (P1L0609-BSD1)										
Chloride	**5.26**	0.50	mg/l	5.00		105	90-110	2	20	
Fluoride	**2.60**	0.10	mg/l	2.50		104	90-110	3	20	
Nitrate-N	**2.76**	0.10	mg/l	2.50		110	90-110	3	20	
Sulfate	**5.42**	0.50	mg/l	5.00		108	90-110	2	20	

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METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1L0609 Extracted: 12/05/01										
Matrix Spike Analyzed: 12/05/01 (P1L0609-MS1)					**Source: PKL0041-01RE1**					
Chloride	388	5.0	mg/l	5.00	380	160	80-120			M1
Fluoride	3.42	1.0	mg/l	2.50	1.0	97	80-120			
Nitrate-N	6.51	1.0	mg/l	2.50	3.8	108	80-120			
Sulfate	160	5.0	mg/l	5.00	160	0	80-120			M2
Matrix Spike Dup Analyzed: 12/05/01 (P1L0609-MSD1)					**Source: PKL0041-01RE1**					
Chloride	386	5.0	mg/l	5.00	380	120	80-120	0.5	15	
Fluoride	3.64	1.0	mg/l	2.50	1.0	106	80-120	6	20	
Nitrate-N	6.47	1.0	mg/l	2.50	3.8	107	80-120	0.6	15	
Sulfate	161	5.0	mg/l	5.00	160	20	80-120	0.6	15	M2
Batch: P1L0615 Extracted: 12/06/01										
Duplicate Analyzed: 12/06/01 (P1L0615-DUP1)					**Source: PKK0511-01**					
Alkalinity as CaCO3	119	5.0	mg/l		120			0.8	20	
Duplicate Analyzed: 12/06/01 (P1L0615-DUP2)					**Source: PKK0493-04**					
Alkalinity as CaCO3	125	5.0	mg/l		120			4	20	
Reference Analyzed: 12/06/01 (P1L0615-SRM1)										
Alkalinity as CaCO3	94.0	5.0	mg/l	92.2		102	90-114			
Batch: P1L0708 Extracted: 12/07/01										
Duplicate Analyzed: 12/07/01 (P1L0708-DUP1)					**Source: PKL0042-01**					
Specific Conductance	783	2.0	umhos/cm		770			2	10	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1L0708 Extracted: 12/07/01										
Duplicate Analyzed: 12/07/01 (P1L0708-DUP2)					**Source: PKL0115-01**					
Specific Conductance	**417**	2.0	umhos/cm		420			0.7	10	
Reference Analyzed: 12/07/01 (P1L0708-SRM1)										
Specific Conductance	**1400**	2.0	umhos/cm	1410		99	90-110			
Batch: P1L1004 Extracted: 12/07/01										
Blank Analyzed: 12/07/01 (P1L1004-BLK1)										
Total Suspended Solids	ND	10	mg/l							
Duplicate Analyzed: 12/07/01 (P1L1004-DUP1)					**Source: PKL0028-01**					
Total Suspended Solids	ND	1000	mg/l		ND				5	
Duplicate Analyzed: 12/07/01 (P1L1004-DUP2)					**Source: PKL0079-01**					
Total Suspended Solids	ND	10	mg/l		ND				5	
Reference Analyzed: 12/07/01 (P1L1004-SRM1)										
Total Suspended Solids	**60.0**	10	mg/l	62.2		96	85-107			
Batch: P1L1005 Extracted: 12/07/01										
Blank Analyzed: 12/07/01 (P1L1005-BLK1)										
Total Dissolved Solids	ND	20	mg/l							
LCS Analyzed: 12/07/01 (P1L1005-BS1)										
Total Dissolved Solids	**388**	20	mg/l	400		97	80-115			

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INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1L1005 Extracted: 12/07/01										
LCS Dup Analyzed: 12/07/01 (P1L1005-BSD1)										
Total Dissolved Solids	**402**	20	mg/l	400		100	80-115	4	200	
Duplicate Analyzed: 12/07/01 (P1L1005-DUP1)					**Source: PKL0126-01**					
Total Dissolved Solids	**646**	20	mg/l		670			4	5	
Duplicate Analyzed: 12/07/01 (P1L1005-DUP2)					**Source: PKL0071-01**					
Total Dissolved Solids	**160**	20	mg/l		160			0	5	
Batch: P1L1129 Extracted: 12/11/01										
Blank Analyzed: 12/11/01 (P1L1129-BLK1)										
Phosphorous, Dissolved	ND	0.050	mg/l							
Phosphorus	ND	0.050	mg/l							
LCS Analyzed: 12/11/01 (P1L1129-BS1)										
Phosphorous, Dissolved	**0.512**	0.050	mg/l	0.500		102	80-120			
Phosphorus	**0.512**	0.050	mg/l	0.500		102	80-120			
LCS Dup Analyzed: 12/11/01 (P1L1129-BSD1)										
Phosphorous, Dissolved	**0.557**	0.050	mg/l	0.500		111	80-120	8	20	
Phosphorus	**0.557**	0.050	mg/l	0.500		111	80-120	8	20	
Matrix Spike Analyzed: 12/11/01 (P1L1129-MS1)					**Source: PKL0115-01**					
Phosphorous, Dissolved	**0.605**	0.050	mg/l	0.500	ND	119	80-120			
Phosphorus	**0.605**	0.050	mg/l	0.500	ND	119	75-125			
Matrix Spike Dup Analyzed: 12/11/01 (P1L1129-MSD1)					**Source: PKL0115-01**					
Phosphorous, Dissolved	**0.599**	0.050	mg/l	0.500	ND	118	80-120	1	20	
Phosphorus	**0.599**	0.050	mg/l	0.500	ND	118	75-125	1	15	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1L1202 Extracted: 12/11/01										
Blank Analyzed: 12/11/01 (P1L1202-BLK1)										
Ammonia-N	ND	0.050	mg/l							
LCS Analyzed: 12/11/01 (P1L1202-BS1)										
Ammonia-N	**0.470**	0.050	mg/l	0.500		94	85-115			
Matrix Spike Analyzed: 12/11/01 (P1L1202-MS1)					**Source: PKL0121-01**					
Ammonia-N	**0.515**	0.050	mg/l	0.500	ND	95	70-130			
Matrix Spike Dup Analyzed: 12/11/01 (P1L1202-MSD1)					**Source: PKL0121-01**					
Ammonia-N	**0.532**	0.050	mg/l	0.500	ND	98	70-130	3	20	
Batch: P1L1307 Extracted: 12/12/01										
Blank Analyzed: 12/12/01 (P1L1307-BLK1)										
Chemical Oxygen Demand	ND	20	mg/l							
LCS Analyzed: 12/12/01 (P1L1307-BS1)										
Chemical Oxygen Demand	**209**	20	mg/l	200		104	90-110			
LCS Dup Analyzed: 12/12/01 (P1L1307-BSD1)										
Chemical Oxygen Demand	**209**	20	mg/l	200		104	90-110	0	20	
Matrix Spike Analyzed: 12/12/01 (P1L1307-MS1)					**Source: PKL0042-05**					
Chemical Oxygen Demand	**272**	20	mg/l	200	77	98	65-130			
Matrix Spike Dup Analyzed: 12/12/01 (P1L1307-MSD1)					**Source: PKL0042-05**					
Chemical Oxygen Demand	**268**	20	mg/l	200	77	96	65-130	1	20	

Linda Eshelman
Project Manager

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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: I1L0730 Extracted: 12/07/01										
Blank Analyzed: 12/10/01 (I1L0730-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	*0.366*		*ug/l*	*0.500*		*73*	*30-120*			
Surrogate: Decachlorobiphenyl	*0.515*		*ug/l*	*0.500*		*103*	*30-120*			
LCS Analyzed: 12/11/01 (I1L0730-BS1)										
Aldrin	**0.382**	0.10	ug/l	0.500		76	42-115			
alpha-BHC	**0.378**	0.10	ug/l	0.500		76	37-115			
beta-BHC	**0.439**	0.10	ug/l	0.500		88	45-115			
delta-BHC	**0.465**	0.20	ug/l	0.500		93	45-130			
gamma-BHC (Lindane)	**0.418**	0.10	ug/l	0.500		84	40-115			
4,4'-DDD	**0.542**	0.10	ug/l	0.500		108	55-120			
4,4'-DDE	**0.487**	0.10	ug/l	0.500		97	50-115			
4,4'-DDT	**0.520**	0.10	ug/l	0.500		104	55-115			
Dieldrin	**0.444**	0.10	ug/l	0.500		89	50-115			
Endosulfan I	**0.410**	0.10	ug/l	0.500		82	45-115			
Endosulfan II	**0.434**	0.10	ug/l	0.500		87	50-115			

Linda Eshelman
Project Manager

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

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

Client Project ID: NPDES Mesa Stormwater

Report Number: PKL0042

Sampled: 12/04/01
Received: 12/04/01

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: I1L0730 Extracted: 12/07/01										
LCS Analyzed: 12/11/01 (I1L0730-BS1)										
Endosulfan sulfate	**0.460**	0.20	ug/l	0.500		92	65-120			
Endrin	**0.452**	0.10	ug/l	0.500		90	45-115			
Endrin aldehyde	**0.496**	0.10	ug/l	0.500		99	45-115			
Endrin ketone	**0.471**	0.10	ug/l	0.500		94	55-140			
Heptachlor	**0.412**	0.10	ug/l	0.500		82	35-115			
Heptachlor epoxide	**0.410**	0.10	ug/l	0.500		82	40-115			
Methoxychlor	**0.528**	0.10	ug/l	0.500		106	55-120			
Surrogate: Tetrachloro-m-xylene	*0.336*		*ug/l*	*0.500*		*67*	*30-120*			
Surrogate: Decachlorobiphenyl	*0.495*		*ug/l*	*0.500*		*99*	*30-120*			
LCS Dup Analyzed: 12/11/01 (I1L0730-BSD1)										
Aldrin	**0.357**	0.10	ug/l	0.500		71	42-115	7	20	Q8
alpha-BHC	**0.330**	0.10	ug/l	0.500		66	37-115	14	20	Q8
beta-BHC	**0.415**	0.10	ug/l	0.500		83	45-115	6	20	Q8
delta-BHC	**0.443**	0.20	ug/l	0.500		89	45-130	5	20	Q8
gamma-BHC (Lindane)	**0.377**	0.10	ug/l	0.500		75	40-115	10	20	Q8
4,4'-DDD	**0.544**	0.10	ug/l	0.500		109	55-120	0.4	20	Q8
4,4'-DDE	**0.482**	0.10	ug/l	0.500		96	50-115	1	20	Q8
4,4'-DDT	**0.513**	0.10	ug/l	0.500		103	55-115	1	20	Q8
Dieldrin	**0.439**	0.10	ug/l	0.500		88	50-115	1	20	Q8
Endosulfan I	**0.402**	0.10	ug/l	0.500		80	45-115	2	20	Q8
Endosulfan II	**0.433**	0.10	ug/l	0.500		87	50-115	0.2	20	Q8
Endosulfan sulfate	**0.461**	0.20	ug/l	0.500		92	65-120	0.2	20	Q8
Endrin	**0.447**	0.10	ug/l	0.500		89	45-115	1	20	Q8
Endrin aldehyde	**0.465**	0.10	ug/l	0.500		93	45-115	6	20	Q8
Endrin ketone	**0.472**	0.10	ug/l	0.500		94	55-140	0.2	20	Q8
Heptachlor	**0.378**	0.10	ug/l	0.500		76	35-115	9	20	Q8
Heptachlor epoxide	**0.396**	0.10	ug/l	0.500		79	40-115	3	20	Q8
Methoxychlor	**0.513**	0.10	ug/l	0.500		103	55-120	3	20	Q8
Surrogate: Tetrachloro-m-xylene	*0.259*		*ug/l*	*0.500*		*52*	*30-120*			*Q8*
Surrogate: Decachlorobiphenyl	*0.491*		*ug/l*	*0.500*		*98*	*30-120*			*Q8*

Linda Eshelman
Project Manager

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Maricopa County -Flood Control District 2801 West Durango Street Phoenix, AZ 85009 Attention: Todd Williams	Client Project ID: NPDES Mesa Stormwater Report Number: PKL0042	Sampled: 12/04/01 Received: 12/04/01

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

D1	Sample required dilution due to matrix interference. See case narrative.
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.
M3	The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to spike level. The method control sample recovery was acceptable.
Q8	Insufficient sample received to meet method QC requirements. QC requirements satisfy ADEQ policies 0154 and 0155.
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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TRANSWEST GEOCHEM

December 19, 2001

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

RE: PKL0042-MCFC
Work Order No.: 0112030

Dear Linda,
Transwest Geochem, Inc. received 3 samples on 12/5/2001 11:30:00 AM for the analyses presented in the following report.

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

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

Sincerely,

Michael Barber for:

Beth Proffitt
Project Manager

ADHS License No. AZM133/AZ0133

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

Date Printed: 19-Dec-01

Client: Del Mar Analytical
Work Order: 0112030
Project Name:
Project Number: PKL0042-MCFC

CASE NARRATIVE

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

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

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

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

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

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

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

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

Metals were analyzed using multi-element ICP instrumentation. Some metals reported in the QC report may not be associated with this Work Order.

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

The sample introduction technique for Method 8015AZ used by this laboratory is direct injection.

All method blanks, laboratory spikes, and/or matrix spikes met quality control objectives for the parameters associated with this Work Order.

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

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TRANSWEST GEOCHEM

Date Printed 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Project Name:
Project Number: PKL0042-MCFC
Work Order: 0112030
Date Received: 05-Dec-01

Work Order Sample Summary

Client Sample ID	Lab Sample ID	Test Code	Collection Date
PKL0042-01	0112030-01A	EPA351.2	12/4/2001 11:30:00 AM
PKL0042-03	0112030-02A	EPA351.2	12/4/2001 11:50:00 AM
PKL0042-05	0112030-03A	EPA351.2	12/4/2001 12:35:00 PM

Date Printed 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Project Name:
Project Number: PKL0042-MCFC
Work Order: 0112030
Date Received: 05-Dec-01

Definitions

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

TRANSWEST GEOCHEM

Date Printed 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0112030
Lab ID: 0112030-01
Project Name:
Project Number: PKL0042-MCFC

Client Sample ID: PKL0042-01 - FALCON
Collection Date: 12/4/2001 11:30:00 AM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Test Code	Date Prepared	Date Analyzed	Analyst	Batch ID
Nitrogen, Kjeldahl, Total	2.3	0.50		mg/L	1	EPA351.2	N/A	12/10/01	TL	TKN_W-12/10/2001

Confidential and Privileged

TRANSWEST GEOCHEM

Date Printed 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical

Work Order: 0112030

Lab ID: 0112030-02

Project Name:

Project Number: PKL0042-MCFC

Client Sample ID: PKL0042-03 - LINDSAY

Collection Date: 12/4/2001 11:50:00 AM

Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Test Code	Date Prepared	Date Analyzed	Analyst	Batch ID
Nitrogen, Kjeldahl, Total	4.3	0.50		mg/L	1	EPA351.2	N/A	12/10/01	TL	TKN_W-12/10/2001

Confidential and Privileged

TRANSWEST GEOCHEM

Date Printed 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0112030
Lab ID: 0112030-03
Project Name:
Project Number: PKL0042-MCFC

Client Sample ID: PKL0042-05 Dodson
Collection Date: 12/4/2001 12:35:00 PM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Test Code	Date Prepared	Date Analyzed	Analyst	Batch ID
Nitrogen, Kjeldahl, Total	2.1	0.50		mg/L	1	EPA351.2	N/A	12/10/01	TL	TKN_W-12/10/2001

Confidential and Privileged

Date: 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0112030
Project: PKL0042-MCFC

QC SUMMARY REPORT

Method Blank

Analyte	Result	PQL	Qual	Units	DF	Test Code	Date Prepared	Date Analyzed	Analyst	Batch ID
Nitrogen, Kjeldahl, Total	<0.50	0.50		mg/L	1	EPA351.2	N/A	12/10/01	TL	TKN_W-12/10/2001

Date: 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0112030
Project: PKL0042-MCFC

QC SUMMARY REPORT

Sample Duplicate

Analyte	Result	PQL	Units	RPD Ref Val	% RPD	RPD Limit	Test Code	Date Prepared	Date Analyzed	Analyst	Qual
Sample ID: **0112081-02AD** Batch ID: TKN_W-12/10/2001											
Client ID:											
Nitrogen, Kjeldahl, Total	0.81	0.50	mg/L	0.8035	1%	20	EPA351.2	N/A	12/10/01	TL	
Sample ID: **0112079-01AD** Batch ID: TKN_W-12/10/2001											
Client ID:											
Nitrogen, Kjeldahl, Total	<0.50	0.50	mg/L	<0.50	0%	20	EPA351.2	N/A	12/10/01	TL	

Date: 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0112030
Project: PKL0042-MCFC

QC SUMMARY REPORT

Sample Matrix Spike

Analyte	Result	PQL	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Limit	Qual
Sample ID: **0112081-02AS**	Batch ID: TKN_W-12/10/2001			Test Code: EPA351.2				Date Analyzed: 12/10/01			
Client ID:				Units: mg/L				Date Prepared: N/A			
Nitrogen, Kjeldahl, Total	3.679	0.50	2.500	0.9797	108%	90	110				
Sample ID: **0112079-01AS**	Batch ID: TKN_W-12/10/2001			Test Code: EPA351.2				Date Analyzed: 12/10/01			
Client ID:				Units: mg/L				Date Prepared: N/A			
Nitrogen, Kjeldahl, Total	2.368	0.50	2.500	<0.50	95%	90	110				

Date: 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0112030
Project: PKL0042-MCFC

QC SUMMARY REPORT

Blank Spike (primary source)

Analyte	Result	PQL	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Limit	Qual
Sample ID: LCS	Batch ID: TKN_W-12/10/2001			Test Code: EPA351.2				Date Analyzed: 12/10/01			
				Units: mg/L				Date Prepared: N/A			
Nitrogen, Kjeldahl, Total	2.379	0.50	2.500	<0.50	95%	90	110				

Date: 19-Dec-01

License No. AZM133/AZ0133

CLIENT: Del Mar Analytical
Work Order: 0112030
Project: PKL0042-MCFC

QC SUMMARY REPORT

Secondary Source Blank Spike

Analyte	Result	PQL	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Limit	Qual
Sample ID: **LCSV**	Batch ID: TKN_W-12/10/2001			Test Code: EPA351.2				Date Analyzed: 12/10/01			
				Units: mg/L				Date Prepared: N/A			
Nitrogen, Kjeldahl, Total	2.454	0.50	2.500	<0.50	98%	90	110				

NEL LABORATORIES
Reno • Las Vegas
Phoenix • Boise

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: PKL0042-MCFC
PROJECT #: NA

NEL ORDER ID: P0112006

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 12/5/01.

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.

Bob George
Lab Manager

12/12/01
Date

CERTIFICATIONS:	Reno	Las Vegas		Reno	Las Vegas
Arizona	AZ0520	AZ0518	Idaho	Certified	Certified
California	1707	2002	Montana	Certified	Certified
US Army Corps of Engineers	Certified	Certified	Nevada	NV033	NV052

NEL LABORATORIES

LIENT: Del Mar Analytical
PROJECT ID: PKL0042-MCFC
PROJECT #: NA

CLIENT ID: **PKL0042-02** - FALCON
DATE SAMPLED: 12/4/01
NEL SAMPLE ID: P0112006-01

EST: **Dissolved Metals**
MATRIX: Aqueous

ANALYST: JY Reno

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
pper, Dissolved	0.0076	0.001 mg/L	1	EPA 200.8	NA	12/11/01

F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT:	Del Mar Analytical	CLIENT ID:	**PKL0042-04** - Lindsay
PROJECT ID:	PKL0042-MCFC	DATE SAMPLED:	12/4/01
PROJECT #:	NA	NEL SAMPLE ID:	P0112006-02
TEST:	**Dissolved Metals**		
MATRIX:	Aqueous	ANALYST:	JY Reno

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Copper, Dissolved	0.019	0.001 mg/L	1	EPA 200.8	NA	12/11/01

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT:	Del Mar Analytical	CLIENT ID:	**PKL0042-06**
PROJECT ID:	PKL0042-MCFC	DATE SAMPLED:	12/4/01
PROJECT #:	NA	NEL SAMPLE ID:	P0112006-03
TEST:	**Dissolved Metals**		
MATRIX:	Aqueous	ANALYST:	JY Reno

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Copper, Dissolved	0.026	0.001 mg/L	1	EPA 200.8	NA	12/11/01

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT:	Del Mar Analytical	CLIENT ID:	**Method Blank**
PROJECT ID:	PKL0042-MCFC	DATE SAMPLED:	NA
PROJECT #:	NA	NEL SAMPLE ID:	1206-6.3-BLK
TEST:	**Dissolved Metals**		

PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Copper, Dissolved	ND	0.001 mg/L	1	EPA 200.8	NA	12/11/01

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: Del Mar Analytical
PROJECT ID: PKL0042-MCFC
PROJECT #: NA
TEST: **Metals**
MATRIX: Aqueous

PARAMETER	NEL Sample ID	Spike Amount	Spike Result	Percent Recovery	Acceptable Range	RPD
Arsenic, Dissolved	1206-6.3-LCS	0.1	0.0899	90	85 - 115	
Arsenic, Dissolved	P0112002-02-MS	0.1	0.12	116	75 - 125	
Arsenic, Dissolved	P0112002-02-MSD	0.01	0.124	120	75 - 125	3.4
Beryllium, Dissolved	1206-6.3-LCS	0.1	0.106	106	85 - 115	
Beryllium, Dissolved	P0112002-02-MS	0.1	0.104	104	75 - 125	
Beryllium, Dissolved	P0112002-02-MSD	0.1	0.0927	93	75 - 125	11.5
Copper, Dissolved	1206-6.3-LCS	0.05	0.0441	88	85 - 115	
Copper, Dissolved	P0112002-02-MS	0.05	0.167	94	75 - 125	
Copper, Dissolved	P0112002-02-MSD	0.5	0.174	108	75 - 125	13.9
Silver, Dissolved	1206-6.3-LCS	0.05	0.0548	110	85 - 115	
Silver, Dissolved	P0112002-02-MS	0.05	0.0592	110	75 - 125	
Silver, Dissolved	P0112002-02-MSD	0.5	0.059	110	75 - 125	0.4

ND - Not Detected

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

Client Project ID: Mesa - Falcon Field
Report Number: PKL0030

Sampled: 12/04/01
Received: 12/04/01
Issued: 12/13/01

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PKL0030-01	FF-12-4-01	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:	The COD, 624 and 413.2 (Oil/Grease) analyses were cancelled per Todd Williams. Did not meet stormwater criteria.
SUBCONTRACTED:	Analysis was subcontracted to ES Environmental Services/Severn Trent - 3333 S. Price Road, Chandler, AZ (AZ0021). Results are attached.
QA/QC CRITERIA:	All analyses met method criteria.
EXPLANATION OF DATA QUALIFIERS:	No further explanation of data qualifiers needed.

DEL MAR ANALYTICAL , PHOENIX (AZ0426)

Linda Eshelman
Project Manager

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

Client Project ID: Mesa - Falcon Field

Report Number: PKL0030

Sampled: 12/04/01
Received: 12/04/01

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKL0030-01 (FF-12-4-01 - Water)								
Biochemical Oxygen Demand	EPA 405.1	P1L1107	2.0	**7.7**	1	12/5/01	12/10/01	

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Linda Eshelman
Project Manager

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

Client Project ID: Mesa - Falcon Field

Report Number: PKL0030

Sampled: 12/04/01
Received: 12/04/01

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1L1107 Extracted: 12/05/01										
Blank Analyzed: 12/10/01 (P1L1107-BLK1)										
Biochemical Oxygen Demand	ND	2.0	mg/l							
LCS Analyzed: 12/10/01 (P1L1107-BS1)										
Biochemical Oxygen Demand	**205**	2.0	mg/l	198		104	85-115			
LCS Dup Analyzed: 12/10/01 (P1L1107-BSD1)										
Biochemical Oxygen Demand	**237**	2.0	mg/l	198		120	85-115	14	20	L3
Duplicate Analyzed: 12/10/01 (P1L1107-DUP1)					**Source: PKL0028-01**					
Biochemical Oxygen Demand	**3430**	100	mg/l		3400			0.9	20	
Duplicate Analyzed: 12/10/01 (P1L1107-DUP2)					**Source: PKL0079-03**					
Biochemical Oxygen Demand	**550**	20	mg/l		520			6	20	

Linda Eshelman
Project Manager

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

Client Project ID: Mesa - Falcon Field

Report Number: PKL0030

Sampled: 12/04/01
Received: 12/04/01

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

L3	The associated blank spike recovery was above method acceptance limits. See case narrative.
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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CORRECTIVE ACTION REPORT

Department: Wet Chemistry Method: 405.1 (BOD)
Date: 12/05/2001 Matrix: Water
Batch: P1L1107
Associated Samples: PKL0069-01, PKL0071-01, PKL0072-01, PKL0079-01, PKL0079-03, PKL0032-01 – PKL0032-03, PKL0039-01 – PKL0039-02, PKL0046-01, PKL0047-01, PKL0048-01, PKL0028-01, PKL0030-01 & PKL0049-01

Identification and Definition of Problem:

The Laboratory Control Sample Duplicate (LCSD) was high (120%) and outside of the acceptance limits of 85% – 115%.

Determination of the Cause of the Problem:

No definite cause has been determined for the high recovery.

Corrective Action:

Re-analysis could not be performed due to the 48 hour holding time. The Laboratory Control Sample was within acceptance limits. Also, both sample / sample duplicate pairs associated with the batch are within acceptance limits. The LCSD has been flagged "L3" to indicate the high recovery. The associated samples may be biased high.

Elizabeth C. Wueschner: Elizabeth C. Wueschner Date: 12/14 /2001
Quality Assurance Manager

SEVERN TRENT SERVICES

Severn Trent Services

3333 S. Old Price Road Chandler, Arizona 85248 Tel: (480) 899-0191 Fax: (480) 899-0349
3788 HWY 87 Pine, Arizona 85544 Tel: (520) 476-4189 Fax: (520) 476-4230

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

Attention: Linda Eshelman

Report Date: December 18, 2001
Date/Time Received: 12/04/01 0955
Project Identification: FCD - City of Mesa
Sample Description: Storm water
Purchase Order Number: N/A

LAB RESULTS

Analytical Method	Parameter Description	Sample Identification	Sample Date / Time	Analysis Date/Time	Lab Identification	Reporting Limit	DF	Analytical Results	Units
SM9221E	Fecal Coliform by MTF	FF-12-4-01	12/04/01 0805	12/04/01 1145	C01-3573	1.1		500	MPN/100ml
SM9230B	Fecal Streptococcus by MTF			12/04/01 1155		1.1		6320	MPN/100ml
SM9221F	E. Coli - MPN			12/04/01 1145		1.1		70	MPN/100ml

Microbiological incubator exceeded temperature control limits during incubation period.
DF = Dilution Factor
Analytes reported as N.D. were not present above the stated limit of detection.
SEVERN TRENT SERVICES, Chandler - ADHS Licensure AZ0613

Tamara M. Bresette
Project Manager

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

Client Project ID: Mesa NPDES Stormwater
Report Number: PKL0032

Sampled: 12/04/01
Received: 12/04/01
Issued: 12/13/01

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PKL0032-01	Broadway + Lindsay	Water
PKL0032-02	Horne +6th	Water
PKL0032-03	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.

OBSERVATIONS: The 624 analysis was cancelled per Todd Williams. Did not meet stormwater criteria.

SUBCONTRACTED: Analysis was subcontracted to ES Environmental Services/Severn Trent - 3333 S. Price Road, Chandler, AZ (AZ0021). Results are attached.

QA/QC CRITERIA: All analyses met method criteria.

EXPLANATION OF DATA QUALIFIERS: The L3 flag on the BOD indicates that the Laboratory Control Sample recovery was above the method control limits. See Corrective Action report.

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: Todd Williams

Client Project ID: Mesa NPDES Stormwater

Report Number: PKL0032

Sampled: 12/04/01
Received: 12/04/01

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: PKL0032-01 (Broadway + Lindsay - Water)								
Oil & Grease	EPA 413.2	P1L0527	1.0	**11**	1	12/5/01	12/6/01	
Sample ID: PKL0032-02 (Horne +6th - Water)								
Oil & Grease	EPA 413.2	P1L0527	1.0	**3.0**	1	12/5/01	12/6/01	
Sample ID: PKL0032-03 (Grandview + Horne - Water)								
Oil & Grease	EPA 413.2	P1L0527	1.0	**5.0**	1	12/5/01	12/6/01	

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: Todd Williams

Client Project ID: Mesa NPDES Stormwater

Report Number: PKL0032

Sampled: 12/04/01
Received: 12/04/01

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: PKL0032-03 (Grandview + Horne - Water)								
Methylene chloride	EPA 624	P1L1207	5.0	ND	1	12/11/01	12/11/01	
Toluene	EPA 624	P1L1207	2.0	ND	1	12/11/01	12/11/01	
Surrogate: Dibromofluoromethane (80-120%)				*88 %*				
Surrogate: Toluene-d8 (80-120%)				*106 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*106 %*				

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: Todd Williams

Client Project ID: Mesa NPDES Stormwater

Report Number: PKL0032

Sampled: 12/04/01
Received: 12/04/01

INORGANICS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKL0032-01 (Broadway + Lindsay - Water)								
Biochemical Oxygen Demand	EPA 405.1	P1L1107	2.0	**12**	1	12/5/01	12/10/01	K2
Sample ID: PKL0032-02 (Horne +6th - Water)								
Biochemical Oxygen Demand	EPA 405.1	P1L1107	2.0	**22**	1	12/5/01	12/10/01	K2
Sample ID: PKL0032-03 (Grandview + Horne - Water)								
Biochemical Oxygen Demand	EPA 405.1	P1L1107	2.0	**12**	1	12/5/01	12/10/01	K2

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: Todd Williams

Client Project ID: Mesa NPDES Stormwater

Report Number: PKL0032

Sampled: 12/04/01
Received: 12/04/01

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: P1L0527 Extracted: 12/05/01										
Blank Analyzed: 12/06/01 (P1L0527-BLK1)										
Oil & Grease	ND	1.0	mg/l							
LCS Analyzed: 12/06/01 (P1L0527-BS1)										
Oil & Grease	**11.0**	1.0	mg/l	10.0		110	90-145			
LCS Dup Analyzed: 12/06/01 (P1L0527-BSD1)										
Oil & Grease	**11.3**	1.0	mg/l	10.0		113	90-145	3	20	

Linda Eshelman
Project Manager

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

Client Project ID: Mesa NPDES Stormwater

Report Number: PKL0032

Sampled: 12/04/01
Received: 12/04/01

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: P1L1207 Extracted: 12/11/01										
Blank Analyzed: 12/11/01 (P1L1207-BLK1)										
Methylene chloride	ND	5.0	ug/l							
Toluene	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*27.0*		*ug/l*	*25.0*		*108*	*80-120*			
Surrogate: Toluene-d8	*26.6*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*27.0*		*ug/l*	*25.0*		*108*	*80-120*			
BS Analyzed: 12/11/01 (P1L1207-BS1)										
Methylene chloride	**23.3**	5.0	ug/l	25.0		93	5-221			
Toluene	**24.0**	2.0	ug/l	25.0		96	47-150			
Surrogate: Dibromofluoromethane	*27.6*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*26.6*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.1*		*ug/l*	*25.0*		*104*	*80-120*			
BS Dup Analyzed: 12/11/01 (P1L1207-BSD1)										
Methylene chloride	**24.0**	5.0	ug/l	25.0		96	5-221	3	20	
Toluene	**25.4**	2.0	ug/l	25.0		102	47-150	6	20	
Surrogate: Dibromofluoromethane	*26.7*		*ug/l*	*25.0*		*107*	*80-120*			
Surrogate: Toluene-d8	*26.7*		*ug/l*	*25.0*		*107*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.6*		*ug/l*	*25.0*		*106*	*80-120*			
Matrix Spike Analyzed: 12/12/01 (P1L1207-MS1)					**Source: PKL0039-02**					
Methylene chloride	**27.9**	5.0	ug/l	25.0	ND	112	5-221			
Toluene	**29.6**	2.0	ug/l	25.0	ND	118	47-150			
Surrogate: Dibromofluoromethane	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: Toluene-d8	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.3*		*ug/l*	*25.0*		*105*	*80-120*			
Matrix Spike Dup Analyzed: 12/12/01 (P1L1207-MSD1)					**Source: PKL0039-02**					
Methylene chloride	**27.4**	5.0	ug/l	25.0	ND	110	5-221	2	20	
Toluene	**29.6**	2.0	ug/l	25.0	ND	118	47-150	0	20	
Surrogate: Dibromofluoromethane	*25.1*		*ug/l*	*25.0*		*100*	*80-120*			
Surrogate: Toluene-d8	*26.5*		*ug/l*	*25.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*26.4*		*ug/l*	*25.0*		*106*	*80-120*			

Linda Eshelman
Project Manager

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

Client Project ID: Mesa NPDES Stormwater

Report Number: PKL0032

Sampled: 12/04/01
Received: 12/04/01

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1L1107 Extracted: 12/05/01										
Blank Analyzed: 12/10/01 (P1L1107-BLK1)										
Biochemical Oxygen Demand	ND	2.0	mg/l							
LCS Analyzed: 12/10/01 (P1L1107-BS1)										
Biochemical Oxygen Demand	**205**	2.0	mg/l	198		104	85-115			
LCS Dup Analyzed: 12/10/01 (P1L1107-BSD1)										
Biochemical Oxygen Demand	**237**	2.0	mg/l	198		120	85-115	14	20	L3
Duplicate Analyzed: 12/10/01 (P1L1107-DUP1)					**Source: PKL0028-01**					
Biochemical Oxygen Demand	**3430**	100	mg/l		3400			0.9	20	
Duplicate Analyzed: 12/10/01 (P1L1107-DUP2)					**Source: PKL0079-03**					
Biochemical Oxygen Demand	**550**	20	mg/l		520			6	20	

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: Todd Williams	Client Project ID: Mesa NPDES Stormwater Report Number: PKL0032	Sampled: 12/04/01 Received: 12/04/01

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

K2	The sample dilutions set-up for the BOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. Any reported result is an estimated value.
L3	The associated blank spike recovery was above method acceptance limits. See case narrative.
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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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-085

CORRECTIVE ACTION REPORT

Department: Wet Chemistry Method: 405.1 (BOD)
Date: 12/05/2001 Matrix: Water
Batch: P1L1107
Associated Samples: PKL0069-01, PKL0071-01, PKL0072-01, PKL0079-01, PKL0079-03, PKL0032-01 – PKL0032-03, PKL0039-01 – PKL0039-02, PKL0046-01, PKL0047-01, PKL0048-01, PKL0028-01, PKL0030-01 & PKL0049-01

Identification and Definition of Problem:

The Laboratory Control Sample Duplicate (LCSD) was high (120%) and outside of the acceptance limits of 85% – 115%.

Determination of the Cause of the Problem:

No definite cause has been determined for the high recovery.

Corrective Action:

Re-analysis could not be performed due to the 48 hour holding time. The Laboratory Control Sample was within acceptance limits. Also, both sample / sample duplicate pairs associated with the batch are within acceptance limits. The LCSD has been flagged "L3" to indicate the high recovery. The associated samples may be biased high.

Elizabeth C. Wueschner: Elizabeth C. Wueschner Date: 12/14/2001
Quality Assurance Manager

SEVERN TRENT SERVICES

Severn Trent Services

3333 S. Old Price Road Chandler, Arizona 85248 Tel: (480) 899-0191 Fax: (480) 899-0349
3788 HWY 87 Pine, Arizona 85544 Tel: (520) 476-4189 Fax: (520) 476-4230

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

Attention: Linda Eshelman

Report Date: December 18, 2001
Date/Time Received: 12/04/01 0955
Project Identification: Mesa NPDES
Sample Description: Storm water
Purchase Order Number: N/A

LAB RESULTS

Analytical Method	Parameter Description	Sample Identification	Sample Date / Time	Analysis Date/Time	Lab Identification	Reporting Limit	DF	Analytical Results	Units
SM9221E	Fecal Coliform by MTF	Broadway & Lindsay	12/04/01 0722	12/04/01 1045	C01-3570	1.1		9000	MPN/100ml
SM9230B	Fecal Streptococcus by MTF			12/04/01 1055		1.1		5000	MPN/100ml
SM9221F	E. Coli - MPN			12/04/01 1045		1.1		110	MPN/100ml
SM9221E	Fecal Coliform by MTF	Horne & 6th	12/04/01 0803	12/04/01 1105	C01-3571	1.1		11000	MPN/100ml
SM9230B	Fecal Streptococcus by MTF			12/04/01 1115		1.1		50000	MPN/100ml
SM9221F	E. Coli - MPN			12/04/01 1105		1.1		7000	MPN/100ml
SM9221E	Fecal Coliform by MTF	Gramdview & Horne	12/04/01 0820	12/04/01 1120	C01-3572	1.1		1600	MPN/100ml
SM9230B	Fecal Streptococcus by MTF			12/04/01 1135		1.1		11426	MPN/100ml
SM9221F	E. Coli - MPN			12/04/01 1120		1.1		1600	MPN/100ml

Microbiological incubator exceeded temperature control limits during incubation period.
DF = Dilution Factor
Analytes reported as N.D. were not present above the stated limit of detection.
SEVERN TRENT SERVICES, Chandler - ADHS Licensure AZ0613

Tamara M. Bresette
Project Manager

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SEVERN TRENT SERVICES

Severn Trent Services

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3788 HWY 87 Pine, Arizona 85544 Tel: (520) 476-4189 Fax (520) 476-4230

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

Attention: Linda Eshelman

Report Date: August 9, 2001
Date/Time Received: 07/30/01 0151
Project Identification: Mesa- FCD
Sample Description: Stormwater
Purchase Order Number:

LAB RESULTS

Analytical Method	Parameter Description	Sample Identification	Sample Date / Time	Analysis Date/Time	Lab Identification	Reporting Limit	Analytical Results	Units
SM9221E	Fecal Coliform by MTF	Grandview/Home	07/29/01 1120	07/30/01 0250	C01-2032	1	5000	MPN/100ml
SM9221F	E. Coli - MPN			07/30/01 0250		1	1100	MPN/100ml
SM9230B	Fecal Streptococcus by MTF	Grandview/Home	07/29/01 1120	07/30/01 0305	C01-2033	1	90000	MPN/100ml
SM9221E	Fecal Coliform by MTF	6th/Home	07/29/01 1050	07/30/01 0325	C01-2034	1	16000	MPN/100ml
SM9221F	E. Coli - MPN			07/30/01 0325		1	2200	MPN/100ml
SM9230B	Fecal Streptococcus by MTF	6th/Home	07/29/01 1050	07/30/01 0335	C01-2035	1	30000	MPN/100ml
SM9221E	Fecal Coliform by MTF	Broadway/Lindsay	07/29/01 1100	07/30/01 0350	C01-2036	1	3000	MPN/100ml
SM9221F	E. Coli - MPN			07/30/01 0350		1	140	MPN/100ml
SM9230B	Fecal Streptococcus by MTF	Broadway/Lindsay	07/29/01 1100	07/30/01 0400	C01-2037	1	16000	MPN/100ml

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

Tamara M. Bresette
Project Manager

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

Attention: Linda Eshelman

Report Date: August 9, 2001
Date/Time Received: 07/30/01 1430
Project Identification: PKG0507-MCFC
Sample Description: Water
Purchase Order Number:

LAB RESULTS

Analytical Method	Parameter Description	Sample Identification	Sample Date / Time	Analysis Date/Time	Lab Identification	Reporting Limit	Analytical Results	Units
405.1	Biochemical Oxygen Demand	PKG0507-01	07/29/01 2220	07/30/01 1830	C01-2065	3	*10	mg/L
405.1	Biochemical Oxygen Demand	PKG0507-02	07/29/01 2150	07/30/01 1830	C01-2066	3	*21	mg/L
405.1	Biochemical Oxygen Demand	PKG0507-03	07/29/01 2200	07/30/01 1830	C01-2067	3	*15	mg/L

*See attached narrative.
* 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

Tamara M. Bresette
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: PKG0507	Sampled: 07/29/01 Received: 07/30/01

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

Client Project ID: Mesa NPDES Stormwater

Report Number: PKG0507

Sampled: 07/29/01
Received: 07/30/01

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: P1H0110 Extracted: 07/31/01										
Matrix Spike Dup Analyzed: 08/01/01 (P1H0110-MSD1)					Source: PKG0542-03					
Benzene	25.7	2.0	ug/l	25.0	ND	103	37-151	1.93	20	
Bromodichloromethane	22.7	2.0	ug/l	25.0	ND	90.8	35-155	1.31	20	
Bromoform	14.7	5.0	ug/l	25.0	ND	58.8	45-169	2.06	20	
Bromomethane	19.2	5.0	ug/l	25.0	ND	76.8	5-242	2.06	20	
Carbon tetrachloride	28.2	2.5	ug/l	25.0	ND	113	70-140	2.45	20	
Chlorobenzene	25.2	2.0	ug/l	25.0	ND	101	37-160	1.18	20	
Dibromochloromethane	18.3	2.0	ug/l	25.0	ND	73.2	53-149	0.00	20	
Chloroethane	20.9	5.0	ug/l	25.0	ND	83.6	14-230	0.477	20	
Chloroform	25.9	2.0	ug/l	25.0	ND	104	51-138	1.91	20	
Chloromethane	13.6	5.0	ug/l	25.0	ND	54.4	5-273	2.18	20	
1,2-Dichlorobenzene	21.9	2.0	ug/l	25.0	ND	87.6	18-190	0.458	20	
1,3-Dichlorobenzene	23.7	2.0	ug/l	25.0	ND	94.8	59-156	0.00	20	
1,4-Dichlorobenzene	23.5	2.0	ug/l	25.0	ND	94.0	18-190	0.426	20	
1,1-Dichloroethane	24.8	2.0	ug/l	25.0	ND	99.2	59-155	1.20	20	
1,2-Dichloroethane	20.4	2.0	ug/l	25.0	ND	81.6	49-155	0.976	20	
1,1-Dichloroethene	22.3	5.0	ug/l	25.0	ND	89.2	5-234	0.901	20	
trans-1,2-Dichloroethene	23.5	2.0	ug/l	25.0	ND	94.0	54-156	1.28	20	
1,2-Dichloropropane	23.0	2.0	ug/l	25.0	ND	92.0	5-210	0.434	20	
cis-1,3-Dichloropropene	19.1	2.0	ug/l	25.0	ND	76.4	5-227	0.525	20	
trans-1,3-Dichloropropene	16.6	2.0	ug/l	25.0	ND	66.4	17-183	2.44	20	
Ethylbenzene	28.0	2.0	ug/l	25.0	ND	112	37-162	0.712	20	
Methylene chloride	21.4	5.0	ug/l	25.0	ND	85.6	5-221	2.31	20	
1,1,2,2-Tetrachloroethane	14.1	2.0	ug/l	25.0	ND	56.4	46-157	2.15	20	
Tetrachloroethene	23.7	2.0	ug/l	25.0	ND	94.8	64-148	1.26	20	
Toluene	38.6	2.0	ug/l	25.0	13	102	47-150	2.81	20	
1,1,1-Trichloroethane	26.4	2.0	ug/l	25.0	ND	106	52-162	2.25	20	
1,1,2-Trichloroethane	18.9	2.0	ug/l	25.0	ND	75.6	52-150	2.14	20	
Trichloroethene	23.5	2.0	ug/l	25.0	ND	94.0	71-157	1.27	20	
Trichlorofluoromethane	27.2	5.0	ug/l	25.0	ND	109	17-181	3.61	20	
Vinyl chloride	18.7	2.0	ug/l	25.0	ND	74.8	5-251	1.59	20	
Surrogate: Dibromofluoromethane	*27.2*		*ug/l*	*25.0*		*109*	*80-120*			
Surrogate: Toluene-d8	*27.3*		*ug/l*	*25.0*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.6*		*ug/l*	*25.0*		*98.4*	*80-120*			

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: PKG0507

Sampled: 07/29/01
Received: 07/30/01

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: P1H0110 Extracted: 07/31/01										
Matrix Spike Analyzed: 08/01/01 (P1H0110-MS1)					Source: PKG0542-03					
Benzene	26.2	2.0	ug/l	25.0	ND	105	37-151			
Bromodichloromethane	23.0	2.0	ug/l	25.0	ND	92.0	35-155			
Bromoform	14.4	5.0	ug/l	25.0	ND	57.6	45-169			
Bromomethane	19.6	5.0	ug/l	25.0	ND	78.4	5-242			
Carbon tetrachloride	28.9	2.5	ug/l	25.0	ND	116	70-140			
Chlorobenzene	25.5	2.0	ug/l	25.0	ND	102	37-160			
Dibromochloromethane	18.3	2.0	ug/l	25.0	ND	73.2	53-149			
Chloroethane	21.0	5.0	ug/l	25.0	ND	84.0	14-230			
Chloroform	26.4	2.0	ug/l	25.0	ND	106	51-138			
Chloromethane	13.9	5.0	ug/l	25.0	ND	55.6	5-273			
1,2-Dichlorobenzene	21.8	2.0	ug/l	25.0	ND	87.2	18-190			
1,3-Dichlorobenzene	23.7	2.0	ug/l	25.0	ND	94.8	59-156			
1,4-Dichlorobenzene	23.4	2.0	ug/l	25.0	ND	93.6	18-190			
1,1-Dichloroethane	25.1	2.0	ug/l	25.0	ND	100	59-155			
1,2-Dichloroethane	20.6	2.0	ug/l	25.0	ND	82.4	49-155			
1,1-Dichloroethene	22.1	5.0	ug/l	25.0	ND	88.4	5-234			
trans-1,2-Dichloroethene	23.2	2.0	ug/l	25.0	ND	92.8	54-156			
1,2-Dichloropropane	23.1	2.0	ug/l	25.0	ND	92.4	5-210			
cis-1,3-Dichloropropene	19.0	2.0	ug/l	25.0	ND	76.0	5-227			
trans-1,3-Dichloropropene	16.2	2.0	ug/l	25.0	ND	64.8	17-183			
Ethylbenzene	28.2	2.0	ug/l	25.0	ND	113	37-162			
Methylene chloride	21.9	5.0	ug/l	25.0	ND	87.6	5-221			
1,1,2,2-Tetrachloroethane	13.8	2.0	ug/l	25.0	ND	55.2	46-157			
Tetrachloroethene	24.0	2.0	ug/l	25.0	ND	96.0	64-148			
Toluene	39.7	2.0	ug/l	25.0	13	107	47-150			
1,1,1-Trichloroethane	27.0	2.0	ug/l	25.0	ND	108	52-162			
1,1,2-Trichloroethane	18.5	2.0	ug/l	25.0	ND	74.0	52-150			
Trichloroethene	23.8	2.0	ug/l	25.0	ND	95.2	71-157			
Trichlorofluoromethane	28.2	5.0	ug/l	25.0	ND	113	17-181			
Vinyl chloride	19.0	2.0	ug/l	25.0	ND	76.0	5-251			
Surrogate: Dibromofluoromethane	*27.9*		*ug/l*	*25.0*		*112*	*80-120*			
Surrogate: Toluene-d8	*27.4*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.0*		*ug/l*	*25.0*		*96.0*	*80-120*			

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: PKG0507

Sampled: 07/29/01
Received: 07/30/01

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: P1H0110 Extracted: 07/31/01										
LCS Dup Analyzed: 07/31/01 (P1H0110-BSD1)										
Benzene	26.7	2.0	ug/l	25.0		107	37-151	1.12	20	
Bromodichloromethane	24.7	2.0	ug/l	25.0		98.8	35-155	0.813	20	
Bromoform	19.7	5.0	ug/l	25.0		78.8	45-169	0.506	20	
Bromomethane	28.8	5.0	ug/l	25.0		115	5-242	0.347	20	
Carbon tetrachloride	28.4	2.5	ug/l	25.0		114	70-140	1.75	20	
Chlorobenzene	26.2	2.0	ug/l	25.0		105	37-160	0.00	20	
Dibromochloromethane	22.0	2.0	ug/l	25.0		88.0	53-149	1.37	20	
Chloroethane	26.3	5.0	ug/l	25.0		105	14-230	0.381	20	
Chloroform	26.2	2.0	ug/l	25.0		105	51-138	1.14	20	
Chloromethane	24.7	5.0	ug/l	25.0		98.8	5-273	1.22	20	
1,2-Dichlorobenzene	24.1	2.0	ug/l	25.0		96.4	18-190	0.416	20	
1,3-Dichlorobenzene	24.9	2.0	ug/l	25.0		99.6	59-156	0.402	20	
1,4-Dichlorobenzene	25.0	2.0	ug/l	25.0		100	18-190	0.401	20	
1,1-Dichloroethane	25.6	2.0	ug/l	25.0		102	59-155	2.32	20	
1,2-Dichloroethane	22.2	2.0	ug/l	25.0		88.8	49-155	0.451	20	
1,1-Dichloroethene	27.6	5.0	ug/l	25.0		110	5-234	0.00	20	
trans-1,2-Dichloroethene	27.4	2.0	ug/l	25.0		110	54-156	0.364	20	
1,2-Dichloropropane	24.7	2.0	ug/l	25.0		98.8	5-210	1.22	20	
cis-1,3-Dichloropropene	23.1	2.0	ug/l	25.0		92.4	5-227	0.432	20	
trans-1,3-Dichloropropene	20.2	2.0	ug/l	25.0		80.8	17-183	2.44	20	
Ethylbenzene	26.4	2.0	ug/l	25.0		106	37-162	0.00	20	
Methylene chloride	24.8	5.0	ug/l	25.0		99.2	5-221	0.803	20	
1,1,2,2-Tetrachloroethane	16.3	2.0	ug/l	25.0		65.2	46-157	0.612	20	
Tetrachloroethene	24.7	2.0	ug/l	25.0		98.8	64-148	1.22	20	
Toluene	25.7	2.0	ug/l	25.0		103	47-150	0.388	20	
1,1,1-Trichloroethane	26.8	2.0	ug/l	25.0		107	52-162	0.743	20	
1,1,2-Trichloroethane	21.3	2.0	ug/l	25.0		85.2	52-150	2.86	20	
Trichloroethene	24.8	2.0	ug/l	25.0		99.2	71-157	2.45	20	
Trichlorofluoromethane	27.1	5.0	ug/l	25.0		108	17-181	7.12	20	
Vinyl chloride	27.6	2.0	ug/l	25.0		110	5-251	1.46	20	
Surrogate: Dibromofluoromethane	*27.4*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*27.2*		*ug/l*	*25.0*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.6*		*ug/l*	*25.0*		*98.4*	*80-120*			

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: PKG0507

Sampled: 07/29/01
Received: 07/30/01

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: P1H0110 Extracted: 07/31/01										
LCS Analyzed: 07/31/01 (P1H0110-BS1)										
Benzene	27.0	2.0	ug/l	25.0		108	37-151			
Bromodichloromethane	24.5	2.0	ug/l	25.0		98.0	35-155			
Bromoform	19.8	5.0	ug/l	25.0		79.2	45-169			
Bromomethane	28.9	5.0	ug/l	25.0		116	S-242			
Carbon tetrachloride	28.9	2.5	ug/l	25.0		116	70-140			
Chlorobenzene	26.2	2.0	ug/l	25.0		105	37-160			
Dibromochloromethane	21.7	2.0	ug/l	25.0		86.8	53-149			
Chloroethane	26.2	5.0	ug/l	25.0		105	14-230			
Chloroform	26.5	2.0	ug/l	25.0		106	51-138			
Chloromethane	24.4	5.0	ug/l	25.0		97.6	S-273			
1,2-Dichlorobenzene	24.0	2.0	ug/l	25.0		96.0	18-190			
1,3-Dichlorobenzene	24.8	2.0	ug/l	25.0		99.2	59-156			
1,4-Dichlorobenzene	24.9	2.0	ug/l	25.0		99.6	18-190			
1,1-Dichloroethane	26.2	2.0	ug/l	25.0		105	59-155			
1,2-Dichloroethane	22.1	2.0	ug/l	25.0		88.4	49-155			
1,1-Dichloroethene	27.6	5.0	ug/l	25.0		110	S-234			
trans-1,2-Dichloroethene	27.5	2.0	ug/l	25.0		110	54-156			
1,2-Dichloropropane	24.4	2.0	ug/l	25.0		97.6	S-210			
cis-1,3-Dichloropropene	23.2	2.0	ug/l	25.0		92.8	S-227			
trans-1,3-Dichloropropene	20.7	2.0	ug/l	25.0		82.8	17-183			
Ethylbenzene	26.4	2.0	ug/l	25.0		106	37-162			
Methylene chloride	25.0	5.0	ug/l	25.0		100	S-221			
1,1,2,2-Tetrachloroethane	16.4	2.0	ug/l	25.0		65.6	46-157			
Tetrachloroethene	24.4	2.0	ug/l	25.0		97.6	64-148			
Toluene	25.8	2.0	ug/l	25.0		103	47-150			
1,1,1-Trichloroethane	27.0	2.0	ug/l	25.0		108	52-162			
1,1,2-Trichloroethane	20.7	2.0	ug/l	25.0		82.8	52-150			
Trichloroethene	24.2	2.0	ug/l	25.0		96.8	71-157			
Trichlorofluoromethane	29.1	5.0	ug/l	25.0		116	17-181			
Vinyl chloride	27.2	2.0	ug/l	25.0		109	S-251			
Surrogate: Dibromofluoromethane	*27.4*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: Toluene-d8	*27.2*		*ug/l*	*25.0*		*109*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.4*		*ug/l*	*25.0*		*97.6*	*80-120*			

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: PKG0507

Sampled: 07/29/01
Received: 07/30/01

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: P1H0110 Extracted: 07/31/01										
Blank Analyzed: 07/31/01 (P1H0110-BLK1)										
Benzene	ND	2.0	ug/l							
Bromodichloromethane	ND	2.0	ug/l							
Bromoform	ND	5.0	ug/l							
Bromomethane	ND	5.0	ug/l							
Carbon tetrachloride	ND	2.5	ug/l							
Chlorobenzene	ND	2.0	ug/l							
Dibromochloromethane	ND	2.0	ug/l							
Chloroethane	ND	5.0	ug/l							
Chloroform	ND	2.0	ug/l							
Chloromethane	ND	5.0	ug/l							
1,2-Dichlorobenzene	ND	2.0	ug/l							
1,3-Dichlorobenzene	ND	2.0	ug/l							
1,4-Dichlorobenzene	ND	2.0	ug/l							
1,1-Dichloroethane	ND	2.0	ug/l							
1,2-Dichloroethane	ND	2.0	ug/l							
1,1-Dichloroethene	ND	5.0	ug/l							
trans-1,2-Dichloroethene	ND	2.0	ug/l							
1,2-Dichloropropane	ND	2.0	ug/l							
cis-1,3-Dichloropropene	ND	2.0	ug/l							
trans-1,3-Dichloropropene	ND	2.0	ug/l							
Ethylbenzene	ND	2.0	ug/l							
Methylene chloride	ND	5.0	ug/l							
1,1,2,2-Tetrachloroethane	ND	2.0	ug/l							
Tetrachloroethene	ND	2.0	ug/l							
Toluene	ND	2.0	ug/l							
1,1,1-Trichloroethane	ND	2.0	ug/l							
1,1,2-Trichloroethane	ND	2.0	ug/l							
Trichloroethene	ND	2.0	ug/l							
Trichlorofluoromethane	ND	5.0	ug/l							
Vinyl chloride	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*27.1*		*ug/l*	*25.0*		*108*	*80-120*			
Surrogate: Toluene-d8	*27.4*		*ug/l*	*25.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*24.2*		*ug/l*	*25.0*		*96.8*	*80-120*			

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: PKG0507

Sampled: 07/29/01
Received: 07/30/01

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: PKG0507-01 (Grandview/Horne - Water)								
Benzene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Bromodichloromethane	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Bromoform	EPA 624	P1H0110	5.0	ND	1	7/31/01	7/31/01	
Bromomethane	EPA 624	P1H0110	5.0	ND	1	7/31/01	7/31/01	
Carbon tetrachloride	EPA 624	P1H0110	2.5	ND	1	7/31/01	7/31/01	
Chlorobenzene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Dibromochloromethane	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Chloroethane	EPA 624	P1H0110	5.0	ND	1	7/31/01	7/31/01	
Chloroform	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Chloromethane	EPA 624	P1H0110	5.0	ND	1	7/31/01	7/31/01	
1,2-Dichlorobenzene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
1,3-Dichlorobenzene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
1,4-Dichlorobenzene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
1,1-Dichloroethane	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
1,2-Dichloroethane	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
1,1-Dichloroethene	EPA 624	P1H0110	5.0	ND	1	7/31/01	7/31/01	
trans-1,2-Dichloroethene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
1,2-Dichloropropane	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
cis-1,3-Dichloropropene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
trans-1,3-Dichloropropene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Ethylbenzene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Methylene chloride	EPA 624	P1H0110	5.0	ND	1	7/31/01	7/31/01	
1,1,2,2-Tetrachloroethane	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Tetrachloroethene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Toluene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
1,1,1-Trichloroethane	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
1,1,2-Trichloroethane	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Trichloroethene	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Trichlorofluoromethane	EPA 624	P1H0110	5.0	ND	1	7/31/01	7/31/01	
Vinyl chloride	EPA 624	P1H0110	2.0	ND	1	7/31/01	7/31/01	
Surrogate: Dibromofluoromethane (80-120%)				*113 %*				
Surrogate: Toluene-d8 (80-120%)				*109 %*				
Surrogate: 4-Bromofluorobenzene (80-120%)				*94.8 %*				

DEL MAR ANALYTICAL, PHOENIX (AZ0426

Linda Eshelman
Project Manager

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9850 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: PKG0507	Sampled: 07/29/01 Received: 07/30/01 Issued: 08/16/01

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PKG0507-01	Grandview/Home	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: Analysis cancelled per Todd Williams at Maricopa County Flood Control. Did not meet Stormwater criteria.

SUBCONTRACTED: Analysis was subcontracted to ES Environmental Services/Severn Trent - 3333 S. Price Road, Chandler, AZ (AZ0021). Results are attached.

QA/QC CRITERIA: All analyses met method criteria.

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

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Eshelman
Project Manager

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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: PKG0510	Sampled: 07/29/01-07/30/01 Received: 07/30/01

METHOD BLANK/QC DATA

DATA QUALIFIERS AND DEFINITIONS

D1	Sample required dilution due to matrix interference. See case narrative.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
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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9890 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: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1G3015 Extracted: 07/30/01										
Matrix Spike Dup Analyzed: 07/30/01 (P1G3015-MSD1)					Source: PKG0500-02					
Chloride	10.4	0.50	mg/l	5.00	5.3	102	80-120	0.966	20	
Fluoride	2.68	0.10	mg/l	2.50	0.31	94.8	80-120	3.03	20	
Nitrate-N	3.53	0.10	mg/l	2.50	1.1	97.2	80-120	0.853	20	
Nitrite-N	2.46	0.10	mg/l	2.50	ND	98.4	80-120	3.73	20	
Sulfate	20.7	0.50	mg/l	5.00	16	94.0	80-120	0.484	20	
Batch: P1G3110 Extracted: 07/31/01										
Duplicate Analyzed: 07/31/01 (P1G3110-DUP1)					Source: PKG0500-03					
Specific Conductance	386	2.0	umhos/cm		390			1.03	10	
Reference Analyzed: 07/31/01 (P1G3110-SRM1)										
Specific Conductance	1410	2.0	umhos/cm	1410		100	90-110			

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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: Mesa-NPDES Stormwater

Report Number: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P1G3015 Extracted: 07/30/01										
Blank Analyzed: 07/30/01 (P1G3015-BLK1)										
Chloride	ND	0.50	mg/l							
Fluoride	ND	0.10	mg/l							
Nitrate-N	ND	0.10	mg/l							
Nitrate/Nitrite-N	ND	0.10	mg/l							
Nitrite-N	ND	0.10	mg/l							
Sulfate	ND	0.50	mg/l							
LCS Analyzed: 07/30/01 (P1G3015-BS1)										
Chloride	4.74	0.50	mg/l	5.00		94.8	90-110			
Fluoride	2.32	0.10	mg/l	2.50		92.8	90-110			
Nitrate-N	2.37	0.10	mg/l	2.50		94.8	90-110			
Nitrite-N	2.44	0.10	mg/l	2.50		97.6	90-110			
Sulfate	4.70	0.50	mg/l	5.00		94.0	90-110			
LCS Dup Analyzed: 07/30/01 (P1G3015-BSD1)										
Chloride	4.70	0.50	mg/l	5.00		94.0	90-110	0.847	20	
Fluoride	2.31	0.10	mg/l	2.50		92.4	90-110	0.432	20	
Nitrate-N	2.34	0.10	mg/l	2.50		93.6	90-110	1.27	20	
Nitrite-N	2.43	0.10	mg/l	2.50		97.2	90-110	0.411	20	
Sulfate	4.64	0.50	mg/l	5.00		92.8	90-110	1.28	20	
Matrix Spike Analyzed: 07/30/01 (P1G3015-MS1)					Source: PKG0500-02					
Chloride	10.3	0.50	mg/l	5.00	5.3	100	80-120			
Fluoride	2.60	0.10	mg/l	2.50	0.31	91.6	80-120			
Nitrate-N	3.50	0.10	mg/l	2.50	1.1	96.0	80-120			
Nitrite-N	2.37	0.10	mg/l	2.50	ND	94.8	80-120			
Sulfate	20.6	0.50	mg/l	5.00	16	92.0	80-120			

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: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01

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: P1G3119 Extracted: 07/31/01										
Blank Analyzed: 08/01/01 (P1G3119-BLK1)										
Calcium	ND	2.0	mg/l							
Magnesium	ND	0.50	mg/l							
Zinc	ND	0.050	mg/l							
LCS Analyzed: 08/01/01 (P1G3119-BS1)										
Calcium	10.2	2.0	mg/l	10.0		102	85-115			
Magnesium	9.80	0.50	mg/l	10.0		98.0	85-115			
Zinc	1.02	0.050	mg/l	1.00		102	85-115			
Matrix Spike Analyzed: 08/01/01 (P1G3119-MS1)					Source: PKG0450-01					
Calcium	247	2.0	mg/l	10.0	240	70.0	70-130			
Magnesium	156	0.50	mg/l	10.0	150	60.0	70-130			M2
Zinc	1.02	0.050	mg/l	1.00	ND	101	70-130			
Matrix Spike Dup Analyzed: 08/01/01 (P1G3119-MSD1)					Source: PKG0450-01					
Calcium	248	2.0	mg/l	10.0	240	80.0	70-130	0.404	20	
Magnesium	154	0.50	mg/l	10.0	150	40.0	70-130	1.29	20	M2
Zinc	1.01	0.050	mg/l	1.00	ND	100	70-130	0.985	20	

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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: PKG0510	Sampled: 07/29/01-07/30/01 Received: 07/30/01

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: P1G3025 Extracted: 07/30/01										
Matrix Spike Dup Analyzed: 08/03/01 (P1G3025-MSD1)					**Source: PKG0480-01**					
Pyrene	**46.0**	10	ug/l	50.0	ND	92.0	52-115	2.58	20	
Surrogate: 2-Fluorophenol	*64.4*		*ug/l*	*100*		*64.4*	*20-120*			
Surrogate: Phenol-d6	*68.6*		*ug/l*	*100*		*68.6*	*15-115*			
Surrogate: 2,4,6-Tribromophenol	*80.9*		*ug/l*	*100*		*80.9*	*35-135*			
Surrogate: Nitrobenzene-d5	*38.8*		*ug/l*	*50.0*		*77.6*	*25-120*			
Surrogate: 2-Fluorobiphenyl	*41.4*		*ug/l*	*50.0*		*82.8*	*25-145*			
Surrogate: Terphenyl-d14	*41.4*		*ug/l*	*50.0*		*82.8*	*40-130*			

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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: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01

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: P1G3025 Extracted: 07/30/01										
Blank Analyzed: 08/01/01 (P1G3025-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	*57.4*		*ug/l*	*100*		*57.4*	*20-120*			
Surrogate: Phenol-d6	*61.1*		*ug/l*	*100*		*61.1*	*15-115*			
Surrogate: 2,4,6-Tribromophenol	*79.7*		*ug/l*	*100*		*79.7*	*35-135*			
Surrogate: Nitrobenzene-d5	*44.0*		*ug/l*	*50.0*		*88.0*	*25-120*			
Surrogate: 2-Fluorobiphenyl	*40.0*		*ug/l*	*50.0*		*80.0*	*25-145*			
Surrogate: Terphenyl-d14	*42.5*		*ug/l*	*50.0*		*85.0*	*40-130*			
LCS Analyzed: 08/01/01 (P1G3025-BS1)										
Pyrene	48.3	10	ug/l	50.0		96.6	52-115			
Surrogate: 2-Fluorophenol	*66.0*		*ug/l*	*100*		*66.0*	*20-120*			
Surrogate: Phenol-d6	*74.8*		*ug/l*	*100*		*74.8*	*15-115*			
Surrogate: 2,4,6-Tribromophenol	*90.6*		*ug/l*	*100*		*90.6*	*35-135*			
Surrogate: Nitrobenzene-d5	*42.4*		*ug/l*	*50.0*		*84.8*	*25-120*			
Surrogate: 2-Fluorobiphenyl	*45.4*		*ug/l*	*50.0*		*90.8*	*25-145*			
Surrogate: Terphenyl-d14	*44.7*		*ug/l*	*50.0*		*89.4*	*40-130*			
Matrix Spike Analyzed: 08/01/01 (P1G3025-MS1)					**Source: PKG0480-01**					
Pyrene	47.2	10	ug/l	50.0	ND	94.4	52-115			
Surrogate: 2-Fluorophenol	*58.4*		*ug/l*	*100*		*58.4*	*20-120*			
Surrogate: Phenol-d6	*68.4*		*ug/l*	*100*		*68.4*	*15-115*			
Surrogate: 2,4,6-Tribromophenol	*82.3*		*ug/l*	*100*		*82.3*	*35-135*			
Surrogate: Nitrobenzene-d5	*36.8*		*ug/l*	*50.0*		*73.6*	*25-120*			
Surrogate: 2-Fluorobiphenyl	*41.4*		*ug/l*	*50.0*		*82.8*	*25-145*			
Surrogate: Terphenyl-d14	*41.4*		*ug/l*	*50.0*		*82.8*	*40-130*			

Linda Eshelman
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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: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			mg/l	mg/l				
Sample ID: PKG0510-05 (Broadway/Dobson - Water)								
Chloride	EPA 300.0	P1G3015	0.50	8.1	1	7/30/01	7/30/01	
Fluoride	EPA 300.0	P1G3015	1.0	ND	10	7/30/01	7/30/01	D1
Nitrate-N	EPA 300.0	P1G3015	0.10	0.52	1	7/30/01	7/30/01	
Nitrate/Nitrite-N	EPA 300.0	P1G3015	0.10	0.52	1	7/30/01	7/30/01	
Nitrite-N	EPA 300.0	P1G3015	0.10	ND	1	7/30/01	7/30/01	
			umhos/cm	umhos/cm				
Sample ID: PKG0510-05 (Broadway/Dobson - Water)								
Specific Conductance	SM2510B	P1G3110	2.0	96	1	7/31/01	7/31/01	
			mg/l	mg/l				
Sample ID: PKG0510-05 (Broadway/Dobson - Water)								
Sulfate	EPA 300.0	P1G3015	0.50	6.1	1	7/30/01	7/30/01	

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Maricopa County -Flood Control District
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Attention: Julie Cox

Client Project ID: Mesa-NPDES Stormwater

Report Number: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01

INORGANICS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
			mg/l	mg/l				
Sample ID: PKG0510-01 (GrandView/6th - Water)								
Chloride	EPA 300.0	P1G3015	0.50	11	1	7/30/01	7/30/01	
Fluoride	EPA 300.0	P1G3015	1.0	ND	10	7/30/01	7/30/01	D1
Hardness (CaCO3)	SM2340B	P1G3119	1.0	46	1	7/31/01	8/1/01	
Nitrate-N	EPA 300.0	P1G3015	0.10	0.91	1	7/30/01	7/30/01	
Nitrate/Nitrite-N	EPA 300.0	P1G3015	0.10	0.91	1	7/30/01	7/30/01	
Nitrite-N	EPA 300.0	P1G3015	0.10	ND	1	7/30/01	7/30/01	
			umhos/cm	umhos/cm				
Sample ID: PKG0510-01 (GrandView/6th - Water)								
Specific Conductance	SM2510B	P1G3110	2.0	130	1	7/31/01	7/31/01	
			mg/l	mg/l				
Sample ID: PKG0510-01 (GrandView/6th - Water)								
Sulfate	EPA 300.0	P1G3015	0.50	7.7	1	7/30/01	7/30/01	
Sample ID: PKG0510-03 (Broadway/Lindsay - Water)								
Chloride	EPA 300.0	P1G3015	5.0	32	10	7/30/01	7/30/01	
Fluoride	EPA 300.0	P1G3015	1.0	ND	10	7/30/01	7/30/01	D1
Hardness (CaCO3)	SM2340B	P1G3119	1.0	140	1	7/31/01	8/1/01	
Nitrate-N	EPA 300.0	P1G3015	0.10	1.7	1	7/30/01	7/30/01	
Nitrate/Nitrite-N	EPA 300.0	P1G3015	0.10	1.7	1	7/30/01	7/30/01	
Nitrite-N	EPA 300.0	P1G3015	0.10	ND	1	7/30/01	7/30/01	
			umhos/cm	umhos/cm				
Sample ID: PKG0510-03 (Broadway/Lindsay - Water)								
Specific Conductance	SM2510B	P1G3110	2.0	360	1	7/31/01	7/31/01	
			mg/l	mg/l				
Sample ID: PKG0510-03 (Broadway/Lindsay - Water)								
Sulfate	EPA 300.0	P1G3015	0.50	20	1	7/30/01	7/30/01	

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Report Number: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01

TOTAL RECOVERABLE METALS

Analyte	Method	Batch	Reporting Limit mg/l	Sample Result mg/l	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PKG0510-01 (GrandView/6th - Water)								
Calcium	EPA 200.7	P1G3119	2.0	13	1	7/31/01	8/1/01	
Magnesium	EPA 200.7	P1G3119	0.50	3.1	1	7/31/01	8/1/01	
Zinc	EPA 200.7	P1G3119	0.050	0.16	1	7/31/01	8/1/01	
Sample ID: PKG0510-03 (Broadway/Lindsay - Water)								
Calcium	EPA 200.7	P1G3119	2.0	44	1	7/31/01	8/1/01	
Magnesium	EPA 200.7	P1G3119	0.50	7.0	1	7/31/01	8/1/01	
Zinc	EPA 200.7	P1G3119	0.050	0.20	1	7/31/01	8/1/01	
Sample ID: PKG0510-05 (Broadway/Dobson - Water)								
Zinc	EPA 200.7	P1G3119	0.050	0.13	1	7/31/01	8/1/01	

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Client Project ID: Mesa-NPDES Stormwater

Report Number: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01

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: PKG0510-05 (Broadway/Dobson - Water)								
Benzo(a)pyrene	EPA 625	P1G3025	20	ND	1	7/30/01	8/4/01	
Chrysene	EPA 625	P1G3025	10	ND	1	7/30/01	8/4/01	
Fluoranthene	EPA 625	P1G3025	10	ND	1	7/30/01	8/4/01	
Indeno(1,2,3-cd)pyrene	EPA 625	P1G3025	20	ND	1	7/30/01	8/4/01	
Pyrene	EPA 625	P1G3025	10	ND	1	7/30/01	8/4/01	
Surrogate: 2-Fluorophenol (20-120%)				*76.0 %*				
Surrogate: Phenol-d6 (15-115%)				*88.1 %*				
Surrogate: 2,4,6-Tribromophenol (35-135%)				*111 %*				
Surrogate: Nitrobenzene-d5 (25-120%)				*81.6 %*				
Surrogate: 2-Fluorobiphenyl (25-145%)				*106 %*				
Surrogate: Terphenyl-d14 (40-130%)				*113 %*				

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Report Number: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01

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: PKG0510-01 (GrandView/6th - Water)								
Benzo(a)pyrene	EPA 625	P1G3025	20	ND	1	7/30/01	8/4/01	
Chrysene	EPA 625	P1G3025	10	ND	1	7/30/01	8/4/01	
Fluoranthene	EPA 625	P1G3025	10	ND	1	7/30/01	8/4/01	
Indeno(1,2,3-cd)pyrene	EPA 625	P1G3025	20	ND	1	7/30/01	8/4/01	
Pyrene	EPA 625	P1G3025	10	ND	1	7/30/01	8/4/01	
Surrogate: 2-Fluorophenol (20-120%)				*56.9 %*				
Surrogate: Phenol-d6 (15-115%)				*63.9 %*				
Surrogate: 2,4,6-Tribromophenol (35-135%)				*78.1 %*				
Surrogate: Nitrobenzene-d5 (25-120%)				*68.6 %*				
Surrogate: 2-Fluorobiphenyl (25-145%)				*76.0 %*				
Surrogate: Terphenyl-d14 (40-130%)				*82.2 %*				
Sample ID: PKG0510-03 (Broadway/Lindsay - Water)								
Benzo(a)pyrene	EPA 625	P1G3025	20	ND	1	7/30/01	8/4/01	
Chrysene	EPA 625	P1G3025	10	ND	1	7/30/01	8/4/01	
Fluoranthene	EPA 625	P1G3025	10	ND	1	7/30/01	8/4/01	
Indeno(1,2,3-cd)pyrene	EPA 625	P1G3025	20	ND	1	7/30/01	8/4/01	
Pyrene	EPA 625	P1G3025	10	ND	1	7/30/01	8/4/01	
Surrogate: 2-Fluorophenol (20-120%)				*55.7 %*				
Surrogate: Phenol-d6 (15-115%)				*63.2 %*				
Surrogate: 2,4,6-Tribromophenol (35-135%)				*78.8 %*				
Surrogate: Nitrobenzene-d5 (25-120%)				*71.6 %*				
Surrogate: 2-Fluorobiphenyl (25-145%)				*75.6 %*				
Surrogate: Terphenyl-d14 (40-130%)				*80.6 %*				

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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: PKG0510

Sampled: 07/29/01-07/30/01
Received: 07/30/01
Issued: 08/06/01

CASE NARRATIVE

LABORATORY NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX
PKG0510-01	GrandView/6th	Water
PKG0510-03	Broadway/Lindsay	Water
PKG0510-05	Broadway/Dobson	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: Analyses cancelled per Todd Williams at Maricopa County Flood Control. Samples did not meet criteria.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

QA/QC CRITERIA: All analyses met method criteria.

EXPLANATION OF DATA QUALIFIERS: For the fluoride analyte flagged D1, the reporting limit was raised due to sample matrix effects.

DEL MAR ANALYTICAL, PHOENIX (AZ0426)

Linda Esholman
Project Manager

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SEVERN TRENT SERVICES

Severn Trent Services

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

Attention: Linda Eshelman

Report Date: Aug 10, 2001

Project Identification: PKG0507-MCFC
Matrix: Water
Anaylsis Date: 07/30/01

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	Sample Duplicates Analytical Result mg/l	Relative Percent Difference		QC Limits
405.1	Laboratory Control Sample (LCS)	0.00	396	447	113%	451	443	1.8%	***	90-110%
405.1	Seeded Control uptake in sample					0.54	0.54	0.0%	**	0.6-1.0
405.1	C01-2065					11	9	20.0%	*	0-10%
405.1	C01-2067					15	15	0.0%		0-10%

** Seeded control exceeded QC limits.
*** Standard recovery exceeded QC limits.
* RPD (Relative Percent Difference) exceeds QC limits.
SEVERN TRENT ENVIRONMENTAL SERVICES, Chandler - ADHS Licensure AZ0613

Tamara M. Bresette
Project Manager

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Data Tables

Mesa Site 1: Horne and 6th Storm of July 29 - 30, 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)	Field	3	deg. C			7/30/2001	Immediate							
Effluent Temperature (deg. C)	Field	26.5	deg. C			7/29/2001	Immediate							
pH, Effluent (standard units)	Field	6.0	std. Units			7/29/2001	Immediate							
BOD5 (mg/l)	405.1		mg/l				48 hours			<20				
COD High Level (mg/l)	410.4		mg/l	20			28 days							
Fecal Coliform (MPN/100ml)	9221E	16,000	MPN/100ml	2		7/30/2001	6 hours							Grabs samples only
Fecal Streptococci (MPN/100ml)	9230B	30,000	MPN/100ml	2		7/30/2001	6 hours							Grabs samples only
E. Coli (MPN/100 ml)	9221F	2,200	MPN/100ml	2		7/30/2001	6 hours							Grabs samples only
Total Dissolved Solids (mg/l)	sm2540c		mg/l	20			7 days							
Total Suspended Solids (mg/l)	160.2		mg/l	10			7 days							
TKN Nitrogen (mg/l as N)	351.2		mg/l	0.5			28 days							
Nitrogen Nitrate Total (mg/l as N)	300		mg/l	0.1			48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)	calculation		mg/l	0.5			calculation							
Phosphorous Total (mg/l as P)	365.3		mg/l	0.05			28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2		mg/l	1			28 days			<20	0			
Hardness (mg/l)	sm2340b		mg/l	1			6 months							
Cadmium Total Recoverable (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Cadmium Dissolved (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Chromium Total Recoverable (ug/l as Cr)	200.9		ug/l	4			6 months							
Chromium Dissolved (ug/l as Cr)	200.9		ug/l	4			6 months							
Copper, Total Recoverable, (ug/l as Cu)	200.9		ug/l	4			6 months							
Copper, Dissolved, (ug/l as Cu)	200.8		ug/l	1			6 months							
Lead, Total Recoverable, (ug/l as Pb)	200.9		ug/l	2			6 months							
Lead, Dissolved, (ug/l as Pb)	200.9		ug/l	2			6 months							
Mercury, Total Recoverable, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Zinc, Total Recoverable, (ug/l as Zn)	200.7		ug/l	50			6 months							
Zinc, Dissolved, (ug/l as Zn)	200.7		ug/l	50			6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)	608		ug/l	0.1			40 days							
EPA Method 624 Extraction							7 days							
Methylene Chloride, Total, (ug/l)	624		ug/l	5			14 days							
Toluene, Total, (ug/l)	624		ug/l	2			14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Chrysene, Total, (ug/l)	625		ug/l	10			40 days							
Fluoranthene, Total, (ug/l)	625		ug/l	10			40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Pyrene, Total, (ug/l)	625		ug/l	10			40 days							

Mesa Site 2: Lindsay and Broadway Storm of July 29 - 30, 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)	Field	3	deg. C			7/30/2001	Immediate							
Effluent Temperature (deg. C)	Field	NA	deg. C			7/29/2001	Immediate							
pH, Effluent (standard units)	Field	NA	std. Units			7/29/2001	Immediate							
BOD5 (mg/l)	405.1		mg/l				48 hours			<20				
COD High Level (mg/l)	410.4		mg/l	20			28 days							
Fecal Coliform (MPN/100ml)	9221E	3,000	MPN/100ml	2		7/30/2001	6 hours							Grabs samples only
Fecal Streptococci (MPN/100ml)	9230B	16,000	MPN/100ml	2		7/30/2001	6 hours							Grabs samples only
E. Coli (MPN/100 ml)	9221F	140	MPN/100ml	2		7/30/2001	6 hours							Grabs samples only
Total Dissolved Solids (mg/l)	sm2540c		mg/l	20			7 days							
Total Suspended Solids (mg/l)	160.2		mg/l	10			7 days							
TKN Nitrogen (mg/l as N)	351.2		mg/l	0.5			28 days							
Nitrogen Nitrate Total (mg/l as N)	300		mg/l	0.1			48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)	calculation		mg/l	0.5			calculation							
Phosphorous Total (mg/l as P)	365.3		mg/l	0.05			28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2		mg/l	1			28 days			<20	0			
Hardness (mg/l)	sm2340b		mg/l	1			6 months							
Cadmium Total Recoverable (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Cadmium Dissolved (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Chromium Total Recoverable (ug/l as Cr)	200.9		ug/l	4			6 months							
Chromium Dissolved (ug/l as Cr)	200.9		ug/l	4			6 months							
Copper, Total Recoverable, (ug/l as Cu)	200.9		ug/l	4			6 months							
Copper, Dissolved, (ug/l as Cu)	200.8		ug/l	1			6 months							
Lead, Total Recoverable, (ug/l as Pb)	200.9		ug/l	2			6 months							
Lead, Dissolved, (ug/l as Pb)	200.9		ug/l	2			6 months							
Mercury, Total Recoverable, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Zinc, Total Recoverable, (ug/l as Zn)	200.7		ug/l	50			6 months							
Zinc, Dissolved, (ug/l as Zn)	200.7		ug/l	50			6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)	608		ug/l	0.1			40 days							
EPA Method 624 Extraction							7 days							
Methylene Chloride, Total, (ug/l)	624		ug/l	5			14 days							
Toluene, Total, (ug/l)	624		ug/l	2			14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Chrysene, Total, (ug/l)	625		ug/l	10			40 days							
Fluoranthene, Total, (ug/l)	625		ug/l	10			40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Pyrene, Total, (ug/l)	625		ug/l	10			40 days							

Mesa Site 4: Grandview and Horne Storm of July 29 - 30, 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)	Field	3	deg. C			7/30/2001	Immediate							
Effluent Temperature (deg. C)	Field	27.5	deg. C			7/29/2001	Immediate							
pH, Effluent (standard units)	Field	6.0	std. Units			7/29/2001	Immediate							
BOD5 (mg/l)	405.1		mg/l				48 hours			<20				
COD High Level (mg/l)	410.4		mg/l	20			28 days							
Fecal Coliform (MPN/100ml)	9221E	5,000	MPN/100ml	2		7/30/2001	6 hours							Grabs samples only
Fecal Streptococci (MPN/100ml)	9230B	90,000	MPN/100ml	2		7/30/2001	6 hours							Grabs samples only
E. Coli (MPN/100 ml)	9221F	1,100	MPN/100ml	2		7/30/2001	6 hours							Grabs samples only
Total Dissolved Solids (mg/l)	sm2540c		mg/l	20			7 days							
Total Suspended Solids (mg/l)	160.2		mg/l	10			7 days							
TKN Nitrogen (mg/l as N)	351.2		mg/l	0.5			28 days							
Nitrogen Nitrate Total (mg/l as N)	300		mg/l	0.1			48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)	calculation		mg/l	0.5			calculation							
Phosphorous Total (mg/l as P)	365.3		mg/l	0.05			28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2		mg/l	1			28 days			<20	0			
Hardness (mg/l)	sm2340b		mg/l	1			6 months							
Cadmium Total Recoverable (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Cadmium Dissolved (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Chromium Total Recoverable (ug/l as Cr)	200.9		ug/l	4			6 months							
Chromium Dissolved (ug/l as Cr)	200.9		ug/l	4			6 months							
Copper, Total Recoverable, (ug/l as Cu)	200.9		ug/l	4			6 months							
Copper, Dissolved, (ug/l as Cu)	200.8		ug/l	1			6 months							
Lead, Total Recoverable, (ug/l as Pb)	200.9		ug/l	2			6 months							
Lead, Dissolved, (ug/l as Pb)	200.9		ug/l	2			6 months							
Mercury, Total Recoverable, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Zinc, Total Recoverable, (ug/l as Zn)	200.7		ug/l	50			6 months							
Zinc, Dissolved, (ug/l as Zn)	200.7		ug/l	50			6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)	608		ug/l	0.1			40 days							
EPA Method 624 Extraction							7 days							
Methylene Chloride, Total, (ug/l)	624		ug/l	5			14 days							
Toluene, Total, (ug/l)	624		ug/l	2			14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Chrysene, Total, (ug/l)	625		ug/l	10			40 days							
Fluoranthene, Total, (ug/l)	625		ug/l	10			40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Pyrene, Total, (ug/l)	625		ug/l	10			40 days							

Mesa Site 1: Horne and 6th Storm of December 4, 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)	Field	7	deg. C				Immediate							
Effluent Temperature (deg. C)	Field	13	deg. C				Immediate							
pH, Effluent (standard units)	Field	9.3	std. Units				Immediate							
BOD5 (mg/l)	405.1		mg/l				48 hours			<20				
COD High Level (mg/l)	410.4		mg/l	20			28 days							
Fecal Coliform (MPN/100ml)	9221E	11,000	MPN/100ml	2		12/4/2001	6 hours							Grabs samples only
Fecal Streptococci (MPN/100ml)	9230B	50,000	MPN/100ml	2		12/4/2001	6 hours							Grabs samples only
E. Coli (MPN/100 ml)	9221F	7,000	MPN/100ml	2		12/4/2001	6 hours							Grabs samples only
Total Dissolved Solids (mg/l)	sm2540c		mg/l	20			7 days							
Total Suspended Solids (mg/l)	160.2		mg/l	10			7 days							
TKN Nitrogen (mg/l as N)	351.2		mg/l	0.5			28 days							
Nitrogen Nitrate Total (mg/l as N)	300		mg/l	0.1			48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)	calculation		mg/l	0.5			calculation							
Phosphorous Total (mg/l as P)	365.3		mg/l	0.05			28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2		mg/l	1			28 days			<20	0			
Hardness (mg/l)	sm2340b		mg/l	1			6 months							
Cadmium Total Recoverable (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Cadmium Dissolved (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Chromium Total Recoverable (ug/l as Cr)	200.9		ug/l	4			6 months							
Chromium Dissolved (ug/l as Cr)	200.9		ug/l	4			6 months							
Copper, Total Recoverable, (ug/l as Cu)	200.9		ug/l	4			6 months							
Copper, Dissolved, (ug/l as Cu)	200.8		ug/l	1			6 months							
Lead, Total Recoverable, (ug/l as Pb)	200.9		ug/l	2			6 months							
Lead, Dissolved, (ug/l as Pb)	200.9		ug/l	2			6 months							
Mercury, Total Recoverable, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Zinc, Total Recoverable, (ug/l as Zn)	200.7		ug/l	50			6 months							
Zinc, Dissolved, (ug/l as Zn)	200.7		ug/l	50			6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)	608		ug/l	0.1			40 days							
EPA Method 624 Extraction							7 days							
Methylene Chloride, Total, (ug/l)	624		ug/l	5			14 days							
Toluene, Total, (ug/l)	624		ug/l	2			14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Chrysene, Total, (ug/l)	625		ug/l	10			40 days							
Fluoranthene, Total, (ug/l)	625		ug/l	10			40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Pyrene, Total, (ug/l)	625		ug/l	10			40 days							

Mesa Site 2: Lindsay and Broadway Storm of December 4, 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)	Field	NA	deg. C				Immediate							
Effluent Temperature (deg. C)	Field	13	deg. C				Immediate							
pH, Effluent (standard units)	Field	9.5	std. Units				Immediate							
BOD5 (mg/l)	405.1	12	mg/l		L3	12/10/2001	48 hours			<20				Correction action taken see lab report.
COD High Level (mg/l)	410.4	77	mg/l	20		12/12/2001	28 days							
Fecal Coliform (MPN/100ml)	9221E	9,000	MPN/100ml	2		12/4/2001	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	5,000	MPN/100ml	2		12/4/2001	6 hours							
E. Coli (MPN/100 ml)	9221F	110	MPN/100ml	2		12/4/2001	6 hours							
Total Dissolved Solids (mg/l)	sm2540c	440	mg/l	20		12/7/2001	7 days							
Total Suspended Solids (mg/l)	160.2	33	mg/l	10		12/7/2001	7 days							
TKN Nitrogen (mg/l as N)	351.2	4.3	mg/l	0.5		12/10/2001	28 days							
Nitrogen Nitrate Total (mg/l as N)	300	7.6	mg/l	0.1		12/5/2001	48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)	calculation	1.1	mg/l	0.5		12/27/2001	calculation							
Phosphorous Total (mg/l as P)	365.3	0.34	mg/l	0.05		12/11/2001	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		12/6/2001	28 days			<20	0			
Hardness (mg/l)	sm2340b	200	mg/l	1		12/10/2001	6 months							
Cadmium Total Recoverable (ug/l as Cd)	200.9	<0.5	ug/l	0.5		12/5/2001	6 months							
Cadmium Dissolved (ug/l as Cd)	200.9	<0.5	ug/l	0.5		12/8/2001	6 months							
Chromium Total Recoverable (ug/l as Cr)	200.9	4.8	ug/l	4		12/5/2001	6 months							
Chromium Dissolved (ug/l as Cr)	200.9	<4.0	ug/l	4		12/12/2001	6 months							
Copper, Total Recoverable, (ug/l as Cu)	200.9	29	ug/l	4		12/7/2001	6 months							
Copper, Dissolved, (ug/l as Cu)	200.8	19	ug/l	1		12/11/2001	6 months							
Lead, Total Recoverable, (ug/l as Pb)	200.9	6	ug/l	2		12/7/2001	6 months							
Lead, Dissolved, (ug/l as Pb)	200.9	<2	ug/l	2		12/7/2001	6 months							
Mercury, Total Recoverable, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		12/12/2001	6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		12/12/2001	6 months							
Zinc, Total Recoverable, (ug/l as Zn)	200.7	87	ug/l	50		12/12/2001	6 months							
Zinc, Dissolved, (ug/l as Zn)	200.7	57	ug/l	50		1/7/2002	6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)	608	<0.12	ug/l	0.12		12/11/2001	40 days							
EPA Method 624 Extraction							7 days							
Methylene Chloride, Total, (ug/l)	624		ug/l	5			14 days							
Toluene, Total, (ug/l)	624		ug/l	2			14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<20	ug/l	20		12/11/2001	40 days							
Chrysene, Total, (ug/l)	625	<10	ug/l	10		12/11/2001	40 days							
Fluoranthene, Total, (ug/l)	625	<10	ug/l	10		12/11/2001	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<20	ug/l	20		12/11/2001	40 days							
Pyrene, Total, (ug/l)	625	<10	ug/l	10		12/11/2001	40 days							

Mesa Site 3: Falcon Field

Storm of December 4, 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)	Field	4	deg. C				Immediate							
Effluent Temperature (deg. C)	Field	13	deg. C				Immediate							
pH, Effluent (standard units)	Field	9.2	std. Units				Immediate							
BOD5 (mg/l)	405.1	7.7	mg/l			12/10/2001	48 hours			<20				
COD High Level (mg/l)	410.4	na	mg/l	20		12/12/2001	28 days							Cancelled per TGW
Fecal Coliform (MPN/100ml)	9221E	500	MPN/100ml	2		12/4/2001	6 hours							
Fecal Streptococci (MPN/100ml)	9230B	6,320	MPN/100ml	2		12/4/2001	6 hours							
E. Coli (MPN/100 ml)	9221F	70	MPN/100ml	2		12/4/2001	6 hours							
Total Dissolved Solids (mg/l)	sm2540c	64	mg/l	20		12/4/2001	7 days							
Total Suspended Solids (mg/l)	160.2	38	mg/l	10		12/7/2001	7 days							
TKN Nitrogen (mg/l as N)	351.2	2.3	mg/l	0.5		12/10/2001	28 days							
Nitrogen Nitrate Total (mg/l as N)	300	0.59	mg/l	0.1		12/5/2001	48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)	calculation	1.1	mg/l	0.5		12/27/2001	calculation							
Phosphorous Total (mg/l as P)	365.3	0.34	mg/l	0.05		12/11/2001	28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2	na	mg/l	1		12/6/2001	28 days			<20	0			Cancelled per TGW
Hardness (mg/l)	sm2340b	32	mg/l	1		12/7/2001	6 months							
Cadmium Total Recoverable (ug/l as Cd)	200.9	0.87	ug/l	0.5		12/8/2001	6 months							
Cadmium Dissolved (ug/l as Cd)	200.9	0.57	ug/l	0.5		12/8/2001	6 months							
Chromium Total Recoverable (ug/l as Cr)	200.9	<0.4	ug/l	4		12/11/2001	6 months							
Chromium Dissolved (ug/l as Cr)	200.9	<4.0	ug/l	4		12/12/2001	6 months							
Copper, Total Recoverable, (ug/l as Cu)	200.9	17	ug/l	4		12/7/2001	6 months							
Copper, Dissolved, (ug/l as Cu)	200.8	7.6	ug/l	1		12/11/2001	6 months							
Lead, Total Recoverable, (ug/l as Pb)	200.9	17	ug/l	2		12/7/2001	6 months							
Lead, Dissolved, (ug/l as Pb)	200.9	2.2	ug/l	2		12/7/2001	6 months							
Mercury, Total Recoverable, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		12/12/2001	6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		12/12/2001	6 months							
Zinc, Total Recoverable, (ug/l as Zn)	200.7	140	ug/l	50		12/12/2001	6 months							
Zinc, Dissolved, (ug/l as Zn)	200.7	110	ug/l	50		1/4/2002	6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)	608	<0.1	ug/l	0.1		12/11/2001	40 days							
EPA Method 624 Extraction							7 days							
Methylene Chloride, Total, (ug/l)	624		ug/l	5			14 days							
Toluene, Total, (ug/l)	624		ug/l	2			14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<20	ug/l	20		12/6/2001	40 days							
Chrysene, Total, (ug/l)	625	<10	ug/l	10		12/6/2001	40 days							
Fluoranthene, Total, (ug/l)	625	<10	ug/l	10		12/6/2001	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<20	ug/l	20		12/6/2001	40 days							
Pyrene, Total, (ug/l)	625	<10	ug/l	10		12/6/2001	40 days							

Mesa Site 4: Grandview and Horne Storm of December 4, 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)	Field	7	deg. C				Immediate							
Effluent Temperature (deg. C)	Field	13	deg. C				Immediate							
pH, Effluent (standard units)	Field	9.3	std. Units				Immediate							
BOD5 (mg/l)	405.1		mg/l				48 hours			<20				
COD High Level (mg/l)	410.4		mg/l	20			28 days							
Fecal Coliform (MPN/100ml)	9221E	1,600	MPN/100ml	2		12/4/2001	6 hours							Grabs samples only
Fecal Streptococci (MPN/100ml)	9230B	11,426	MPN/100ml	2		12/4/2001	6 hours							Grabs samples only
E. Coli (MPN/100 ml)	9221F	1,600	MPN/100ml	2		12/4/2001	6 hours							Grabs samples only
Total Dissolved Solids (mg/l)	sm2540c		mg/l	20			7 days							
Total Suspended Solids (mg/l)	160.2		mg/l	10			7 days							
TKN Nitrogen (mg/l as N)	351.2		mg/l	0.5			28 days							
Nitrogen Nitrate Total (mg/l as N)	300		mg/l	0.1			48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)	calculation		mg/l	0.5			calculation							
Phosphorous Total (mg/l as P)	365.3		mg/l	0.05			28 days							
Phosphorous Dissolved (mg/l as P)			mg/l				28 days							
Oil and Grease Total Recoverable (mg/l)	413.2		mg/l	1			28 days			<20	0			
Hardness (mg/l)	sm2340b		mg/l	1			6 months							
Cadmium Total Recoverable (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Cadmium Dissolved (ug/l as Cd)	200.9		ug/l	0.5			6 months							
Chromium Total Recoverable (ug/l as Cr)	200.9		ug/l	4			6 months							
Chromium Dissolved (ug/l as Cr)	200.9		ug/l	4			6 months							
Copper, Total Recoverable, (ug/l as Cu)	200.9		ug/l	4			6 months							
Copper, Dissolved, (ug/l as Cu)	200.8		ug/l	1			6 months							
Lead, Total Recoverable, (ug/l as Pb)	200.9		ug/l	2			6 months							
Lead, Dissolved, (ug/l as Pb)	200.9		ug/l	2			6 months							
Mercury, Total Recoverable, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1		ug/l	0.2			6 months							
Zinc, Total Recoverable, (ug/l as Zn)	200.7		ug/l	50			6 months							
Zinc, Dissolved, (ug/l as Zn)	200.7		ug/l	50			6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)	608		ug/l	0.1			40 days							
EPA Method 624 Extraction							7 days							
Methylene Chloride, Total, (ug/l)	624		ug/l	5			14 days							
Toluene, Total, (ug/l)	624		ug/l	2			14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Chrysene, Total, (ug/l)	625		ug/l	10			40 days							
Fluoranthene, Total, (ug/l)	625		ug/l	10			40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625		ug/l	20			40 days							
Pyrene, Total, (ug/l)	625		ug/l	10			40 days							

Mesa Site 5: Dobson and Broadway Storm of December 4, 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)			deg. C				Immediate							No grabs taken
Effluent Temperature (deg. C)			deg. C				Immediate							No grabs taken
pH, Effluent (standard units)			std. Units				Immediate							No grabs taken
BOD5 (mg/l)	405.1		mg/l				48 hours			<20				No grabs taken
COD High Level (mg/l)	410.4	77	mg/l	20		12/12/2001	28 days							
Fecal Coliform (MPN/100ml)	9221E		MPN/100ml	2			6 hours							No grabs taken
Fecal Streptococci (MPN/100ml)	9230B		MPN/100ml	2			6 hours							No grabs taken
E. Coli (MPN/100 ml)	9221F		MPN/100ml	2			6 hours							No grabs taken
Total Dissolved Solids (mg/l)	sm2540c	40	mg/l	20		12/7/2001	7 days							
Total Suspended Solids (mg/l)	160.2	57	mg/l	10		12/7/2001	7 days							
TKN Nitrogen (mg/l as N)	351.2	2.1	mg/l	0.5		12/10/2001	28 days							
Nitrogen Nitrate Total (mg/l as N)	300	0.57	mg/l	0.1		12/5/2001	48 hours							
Nitrogen Ammonia Total (mg/l as N)			mg/l				28 days							
Nitrogen Organic Total (mg/l as N)	calculation	1.1	mg/l	0.5		12/27/2001	calculation							
Phosphorous Total (mg/l as P)	365.3	0.34	mg/l	0.05		12/11/2001	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		1/9/2001	28 days			<20	0			
Hardness (mg/l)	sm2340b	33	mg/l	1		12/10/2001	6 months							
Cadmium Total Recoverable (ug/l as Cd)	200.9	<0.5	ug/l	0.5		12/8/2001	6 months							
Cadmium Dissolved (ug/l as Cd)	200.9	<0.5	ug/l	0.5		12/8/2001	6 months							
Chromium Total Recoverable (ug/l as Cr)	200.9	8.2	ug/l	4		12/12/2001	6 months							
Chromium Dissolved (ug/l as Cr)	200.9	<4.0	ug/l	4		12/12/2001	6 months							
Copper, Total Recoverable, (ug/l as Cu)	200.9	37	ug/l	4		12/7/2001	6 months							
Copper, Dissolved, (ug/l as Cu)	200.8	26	ug/l	1		12/11/2001	6 months							
Lead, Total Recoverable, (ug/l as Pb)	200.9	20	ug/l	2		12/7/2001	6 months							
Lead, Dissolved, (ug/l as Pb)	200.9	<2	ug/l	2		12/7/2001	6 months							
Mercury, Total Recoverable, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		12/12/2001	6 months							
Mercury, Dissolved, (ug/l as Hg)	245.1	<0.2	ug/l	0.2		12/12/2001	6 months							
Zinc, Total Recoverable, (ug/l as Zn)	200.7	320	ug/l	50		12/12/2001	6 months							
Zinc, Dissolved, (ug/l as Zn)	200.7	78	ug/l	50		1/7/2002	6 months							
EPA Method 608 Extraction							7 days							
P,P' DDE, Total, (ug/l)	608	<0.12	ug/l	0.12		12/11/2001	40 days							
EPA Method 624 Extraction							7 days							
Methylene Chloride, Total, (ug/l)	624		ug/l	5			14 days							
Toluene, Total, (ug/l)	624		ug/l	2			14 days	<20	0.364	<20	0			
EPA Method 625 Extraction							7 days							
Benzo (a) Pyrene, Total, (ug/l)	625	<20	ug/l	20		12/13/2001	40 days							
Chrysene, Total, (ug/l)	625	<10	ug/l	10		12/13/2001	40 days							
Fluoranthene, Total, (ug/l)	625	<10	ug/l	10		12/13/2001	40 days							
Indeno (1,2,3-CD) Pyrene, Total, (ug/l)	625	<20	ug/l	20		12/13/2001	40 days							
Pyrene, Total, (ug/l)	625	<10	ug/l	10		12/13/2001	40 days							

Chain of Custody Forms

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 91406 (818) 779-1844 FAX (818) 779-1843
9484 Chesapeake Dr., Suite 806, San Diego, CA 92123 (619) 505-9596 FAX (619) 505-9689
8830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

Mesa Grabs

CHAIN OF CUSTODY FORM

Page 1 of 1

Client Name/Address: FCD, 2801 W. Durango, Phx, Az. 85009

Project/PO Number: Mesa NPDES Stormwater

Project Manager: Todd Williams

Phone Number: 602-506-4113

Sampler: J. Sutton

Fax Number:

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	BOD 1	TSS 2	Oil & Grease 2	E. Coli 1	Fecal Strep 1	Fecal Coliform 1				Special Instructions
Grandview/Horne	S	Misc	8	7-29-01 11:20p	Y	X	X	X	X	X	X				(FC, EC) (FS) Col-2032, 2033 PKG0507-0
6th/Horne	S	Misc	8	7-29-01 10:50p	Y	X	X	X	X	X	X				Col-2034, 2035 02
Broadway/Lindsay	S	Misc	8	7-29-01 11:00p	Y	X	X	X	X	X	X				Col-2036, 2037 03
															-04
Temp Blank					N										04
Travel Blank					Y										

Relinquished By:	Date/Time:	Received by:	Date/Time:
James Sutton	12-30-01 0151	Tamara Brown	0151 123001
Tamara Brown	073001 1022	[illegible]	7/30/01 1022
[illegible]	7/30/01 1057	Received in Lab by: Cornelius [illegible]	7/30/01 1057

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

Sample Integrity: (Check)
intact ✓ on ice ✓ Temp 5°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.

P.31 4807850851 DEL MAR ANALYTICAL MAR-22-2002 11:24 TOTAL P.31

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

Client Name/Address: FCD, 2801 W. Durango, Phx, Az 85009

Project/PO Number: Mesa NPDES Stormwater

Project Manager: ~~Sabie Cox~~ Todd Williams

Phone Number: 602-506-4113

Sampler:

Fax Number:

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	BOD 1	TSS 1	Oil & Grease 2	E. Coli 1	Fecal Strep 1	Fecal Coliform 1				Special Instructions
Hudson & Lindsay	S	Misc	10	12/04/01 0732	Y				X	X	X				See Contract
Horne 6th	S	Misc	10	12/04/01 0803	Y				X	X	X				PKL0032-01
O'Neil West Horne	S	Misc	10	12/04/01 0820	Y				X	X	X				-02
~~Extra~~	~~S~~	~~Misc~~	~~10~~	~~08~~	~~Y~~										-03
Temp Blank					N										See other chain of custody sheet
Trip Blank					Y										~~-04~~ WO

Relinquished By:	Date /Time:	Received by:	Date /Time:
James Sutton	12/4/01 1056	Zenaida Ruiz	12/04/01 0955
James Sutton	12/4/01 1024		
		Received in Lab by: Emilia Delgado	12/04/01 1024

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

Sample Integrity: (Check)
intact ✓ on ice ✓ 7°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.

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

Client Name/Address: FCD – CITY OF MESA

Project/PO Number:

Project Manager: Todd Williams

Phone Number: 602-506-4999 4113

Sampler: FALCON FIELD

Fax Number:

Analysis Required: See Contract

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	BOD	COD	FECAL COLI	FECAL STREP	E-COLI	VOCs - 624	OIL & GREASE			Special Instructions
FF-12-4-01		500 ML AMBER	2	12-4-01 0805	HCL										PKL0030-01
FF-12-4-01		40 ML VIALS	2	12-4-01 0805	HCL										
FF-12-4-01		100 ML PLASTIC	3	12-4-01 0805	YES			X	X	X					↓
FF-12-4-01		1 L PLASTIC	1	12-4-01 0805	—										
TRAVEL BLANK			1		HCL										↓ 02
TEMP. BLANK			1		—										

Relinquished By:	Date /Time:	Received by:	Date /Time:
LEE MENDELZON	12/4/01	R. Naud	12/4/01 0855
Sam Sutton	12-4-01 1056	[illegible]	12/04/01 0955
Relinquished By:	Date /Time:	Received in Lab by:	Date /Time:
	Relinquished By:	Rodd Naud	12/4/01 10:20

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

Sample Integrity: (Check)
intact ✓ on ice ✓ 4°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.

RECEIVED BY DEL MAR LAB
Ernesto Delgado 12/04/01 10:20

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

Mesa Composites

CHAIN OF CUSTODY FORM

Quote #: _____ Page 1 of 1

Client Name/Address: FCD
2801 W. Durango St.
Phoenix, Az. 85009

Project/PO Number: NPDES
Mesa Stormwater

Project Manager: Todd Williams

Phone Number: 602-506-4113

Sampler:

Fax Number:

Analysis Required: See Contract for Composite Methods/Analysis

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservatives	Special Instructions
Falcon Field	S	Glass	1	1130 12-4-01	N	Clean Jars when finish.
Lindsay / Broadway	S	Glass	1	1150 12-4-01	N	
Dobson / Broadway	S	Glass	1	1235 12-4-01	N	

Relinquished By:	Date /Time:	Received by:	Date /Time:
Robert E Reed	12/04/01 1 PM		
Relinquished By:	Date /Time:	Received by:	Date /Time: 12/04/01
Relinquished By:	Date /Time:	Received in Lab by: Emilio Nepalo	Date /Time: 12/04/01 1300

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

Sample Integrity: (Check)
intact ____ on ice ✓ 9°C

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

COC-CP

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92626 Ph (949) 261-1022 Fax (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1046
9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-9689
9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851

Due 12/12/01

CHAIN OF CUSTODY FORM
SUBCONTRACT ORDER

P0112006

SENDING LABORATORY:

Del Mar Analytical - Phoenix
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044
Phone: (480) 785-0043
Fax: (480) 785-0851
Project Manager: Linda Eshelman
Project: PKL0042 — MCFC

RECEIVING LABORATORY:

NEL Laboratories
3021 S. 35th St., Bldg. B-Suite 6
Phoenix, AZ 85034
Phone: (602) 437-0099
Fax: (602) 437-2225

SAMPLE INTEGRITY:

Please complete upon receipt

intact: ☒ Y ☐ N — Initials
on ice: ☒ Y ☐ N — Initials
Temp: °C ☒ Y ☐ N — Initials
5°C

Sample Description	Sample Matrix	Sampling Date/Time	Analysis Required	Date Due	Expires	# of Cont.	Sample Bottle Type
PKL0042-02	Water	12/04/01 11:30	ICPMS DisCopper-MCFC by EPA 200.8	Standard TAT	06/02/02 11:30	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other
Special Instructions: NEL - Needs a D.L. of 2ppb.			-01				
PKL0042-04	Water	12/04/01 11:50	ICPMS DisCopper-MCFC by EPA 200.8	Standard TAT	06/02/02 11:50	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other
Special Instructions: NEL - Needs a D.L. of 2ppb.			-02				
PKL0042-06	Water	12/04/01 12:35	ICPMS DisCopper-MCFC by EPA 200.8	Standard TAT	06/02/02 12:35	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other
Special Instructions: NEL - Needs a D.L. of 2ppb.			-03				

Relinquished By: [signature] Date/Time: 12/5/01 1446
Received By: [signature] Date/Time: 12/5/01 1446
Relinquished By: [signature] Date/Time: 12/5/01 1521
Received By: Tonda Thomas Date/Time: 12/5/01 1521
Tonda Thomas 12/5/01 1630
Via Fed exp.
UPS FED EX
Sal Miller 12/6/01 9:15

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92626 Ph (949) 261-1022 Fax (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1046
9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-9689
9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851

CHAIN OF CUSTODY FORM
SUBCONTRACT ORDER

0112030

SENDING LABORATORY:
Del Mar Analytical - Phoenix
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044
Phone: (480) 785-0043
Fax: (480) 785-0851
Project Manager: Linda Eshelman
Project: PKL0042 – MCFC

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

SAMPLE INTEGRITY:
Please complete upon receipt
intact: ☑ Y ☐ N — SH Initials
on ice: wet ☑ Y ☐ N — SH Initials
Temp: °C ☑ Y ☐ N 4.6 — SH Initials

Sample Description	Sample Matrix	Sampling Date/Time	Analysis Required	Date Due	Expires	# of Cont.	Sample Bottle Type
PKL0042-01	Water	12/04/01 11:30	TKN-C	Standard TAT	01/01/02 11:30	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other
-04 Special Instructions: DMAC - Needs a D.L. of 0.05							
PKL0042-03	Water	12/04/01 11:50	TKN-C	Standard TAT	01/01/02 11:50	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleev. ☐ Other
-02 Special Instructions: DMAC - Needs a D.L. of ~~0.05~~ 0.5							
PKL0042-05	Water	12/04/01 12:35	TKN-C	Standard TAT	01/01/02 12:35	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleev. ☐ Other
-03 Special Instructions: DMAC - Needs a D.L. of ~~0.05~~ 0.5							

Relinquished By	Date/Time:	Received By:	Date/Time:
[signature]	1130 12/5/01	[signature]	12/5/01 1130

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92626 Ph (949) 261-1022 Fax (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1048
9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-9689
9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851

CHAIN OF CUSTODY FORM
SUBCONTRACT ORDER

SENDING LABORATORY:
Del Mar Analytical - Phoenix
9830 South 51st Street, Suite B-120
Phoenix, AZ 85044
Phone: (480) 785-0043
Fax: (480) 785-0851
Project Manager: Linda Eshelman
Project: PKG0507 - mcfc

RECEIVING LABORATORY:
ES Environmental Services/Severn
3333 S. Old Price Rd
Chandler, AZ 85248
Phone: 480-899-0191
Fax: 480-899-0349

SAMPLE INTEGRITY:
Please complete upon receipt
intact: ☑ Y ☐ N Initials
on ice: ☑ Y ☐ N Initials
Temp: °C ☑ Y ☐ N Initials
1°C

Sample Description	Sample Matrix	Sampling Date/Time	Analysis Required	Date Due	Expires	# of Cont.	Sample Bottle Type
PKG0507-01	Water	07/29/01 22:20	BOD	Standard TAT	07/31/01 22:20	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other
Special Instructions: None			C01-2065				
PKG0507-01	Water	07/29/01 22:20	EColiform-O	Standard TAT	07/30/01 22:20	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other
Special Instructions: None			Sent				
PKG0507-01	Water	07/29/01 22:20	Fecal Coliform-O	Standard TAT	07/30/01 03:08	1	☐ Voa ☐ Amber Voa ☐ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other
Special Instructions: None			Sent				
PKG0507-01	Water	07/29/01 22:20	Fecal Strep-O	Standard TAT	07/30/01 03:08	1	☐ Voa ☐ Amber Voa ☐ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other
Special Instructions: None			Sent				
PKG0507-02	Water	07/29/01 21:50	BOD	Standard TAT	07/31/01 21:50	1	☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other
Special Instructions: None			C01-2066 Sent				

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9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851

CHAIN OF CUSTODY FORM
SUBCONTRACT ORDER

PKG0507-02 Water 07/29/01 21:50 EColiform-O Standard TAT 07/30/01 21:50
Special Instructions: None
sent
☐ Voa ☐ Amber Voa ☐ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other

PKG0507-02 Water 07/29/01 21:50 Fecal Coliform-O Standard TAT 07/30/01 02:38
Special Instructions: None
sent
☐ Voa ☐ Amber Voa ☐ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other

PKG0507-02 Water 07/29/01 21:50 Fecal Strep-O Standard TAT 07/30/01 02:38
Special Instructions: None
sent
☐ Voa ☐ Amber Voa ☐ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other

PKG0507-03 Water 07/29/01 22:00 BOD Standard TAT 07/31/01 22:00
Special Instructions: None
C01-2067
☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other

PKG0507-03 Water 07/29/01 22:00 EColiform-O Standard TAT 07/30/01 22:00
Special Instructions: None
Sent
☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other

PKG0507-03 Water 07/29/01 22:00 Fecal Coliform-O Standard TAT 07/30/01 02:48
Special Instructions: None
Sent
☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other

PKG0507-03 Water 07/29/01 22:00 Fecal Strep-O Standard TAT 07/30/01 02:48
Special Instructions: None
Sent
☐ Voa ☐ Amber Voa ☑ Poly ☐ Glass Jar ☐ Amber ☐ Brass Sleeve ☐ Other

Del Mar Analytical

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9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851

CHAIN OF CUSTODY FORM

SUBCONTRACT ORDER

Relinquished By: Date/Time:

Received By: 7/30/01 14:10 Date/Time:

Relinquished By: 7/30/01 14:30 Date/Time:

Received By: 073001 1430 Date/Time:

Maintenance & Storm Event Log Sheets

MESA SITE 1: SIXTH

STORMWATER O&M LOG SHEET

SITE	Horner 6th			DATE	8/12/01
ARRIVAL TIME	100	DEPARTURE TIME	110	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 Review program, restart and confirm program running.

2

3

Date: 8/11/00

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	6th & Horne			DATE	8/21/01
ARRIVAL TIME	0730	DEPARTURE TIME	0830	SERVICED BY	(illegible) (illegible)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good,

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station program, did confine space check on intake sensor and area velocity sensor. Install new intake screen

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	6th ST & Horne			DATE	8/28/01
ARRIVAL TIME	1105	DEPARTURE TIME	1145	SERVICED BY	(PMW)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / (N)

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS Reset temperture, turned too high. Defrost ice and clear drain line.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	6th St & Horne			DATE	9/3/01
ARRIVAL TIME	750	DEPARTURE TIME	0805	SERVICED BY	Glen
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS ice problem under control. Put station maintenance book in station.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Hornes 6th			DATE	9/4/01
ARRIVAL TIME	1228	DEPARTURE TIME	1035	SERVICED BY	[illegible] [illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N Computer, Todd

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

NOTES / ACTIONS Restart program

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Horne & 6th ST			DATE	9/25/01
ARRIVAL TIME	0908	DEPARTURE TIME	0915	SERVICED BY	Reen
SAMPLER	SIGMA	900		STATION CONDITION:	Good
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS check Station, Everything working. No ice, leave alone

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	6TH ST & Horne			DATE	10/01/01
ARRIVAL TIME	1048	DEPARTURE TIME	1055	SERVICED BY	Paul SRS
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Re Start program, Stop, Resume. Left. 12:41 at Return Stop to check program

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Horne & 6th ST			DATE	10/15/01
ARRIVAL TIME	0950	DEPARTURE TIME	0957	SERVICED BY	Rem
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, everything Okay, No ice, leave alone.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	6th St & Horne	DATE	10/22/01
ARRIVAL TIME	0951	DEPARTURE TIME	1000	SERVICED BY	Rem
SAMPLER	SIGMA 900	STATION CONDITION:	
SAMPLER	ISCO 6712	STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Stations no ice, temperature good.
Data copied per TGW. ReStart program 0953 10/22/01

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	6th St and Horne			DATE	11/05/01
ARRIVAL TIME	0956	DEPARTURE TIME	1000	SERVICED BY	(Pum) (Sh)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS Check Station Rainfall, 0.03 Station Still active.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Horne & 6th			DATE	11/06/01
ARRIVAL TIME	1054	DEPARTURE TIME	1100	SERVICED BY	Rem
SAMPLER		SIGMA	900	STATION CONDITION:	
SAMPLER		ISCO	6712	STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, 0.00 rain, resume program.
Stop most site visits.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	6th St & Home			DATE	11/21/01
ARRIVAL TIME	0818	DEPARTURE TIME	0821	SERVICED BY	Rev
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, time and temperature. Good

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	6th ST & Horne			DATE	11/29/01
ARRIVAL TIME	0840	DEPARTURE TIME	0845	SERVICED BY	(Nick)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS check Station, Funnel and Screen. check Temperature, Turn temperature down a couple of degrees

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Mesa			DATE	12/20/01
ARRIVAL TIME		DEPARTURE TIME		SERVICED BY	Rew
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check all Stations, raingauges. Dobson & Broadway - Arrive 0934

Station operating, leave alone.

6th & Horne 0951

Horne & Pardee 0958

Falcon Field 1014

Broadway & Lindsay 1030

STORM EVENT LOG SHEET

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

2. Date: 11-29-01 Time: 10:50p

SAMPLER PARAMETERS

3. Rainfall: .71 **in**

4. Flow: _____ **cfs**

5. Level: _____ **in**

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

O&M PARAMETERS

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

Full Composite

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 6 **su**

12. Temperature 26.5 **deg. C**

GRAB SAMPLES Take grabs from discharge only!

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

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

STORM EVENT LOG SHEET

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

2. Date: 8901 Time: 3:05 AM

SAMPLER PARAMETERS

3. Rainfall: .18 in

4. Flow: .609 cfs

5. Level: .573 FT ~~in~~

6. Velocity: _____ ft/sec

O&M PARAMETERS

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

Discharge tubing came out of sample Jar. No Composite taken

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 .609 CFS **cfs**

11. pH 8.6 **su**

12. Temperature 26° **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: SLB Ram

2. Date: 12/4/01 Time: 0803

SAMPLER PARAMETERS

3. Rainfall: _____ in

4. Flow: _____ cfs

5. Level: _____ in

6. Velocity: _____ ft/sec

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
Sampler waiting on flow
Note: at 1210 still no samples unknown why. water running over sidewalk onto school grounds.

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 9.3 su

12. Temperature 13 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	6th St & Horne
Date	8/1/01
Time	1155
Serviced By:	(Pen) (JLS)

Pumped 9623

NO	Data Downloaded to DTU?

1. Halt program — Found Hose pinched inside of house, left inside top ajar to keep off hose. Restart 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.

Go to lab, pick up dirty bottle, clean install

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

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

EQUIPMENT CLEANING CHECKLIST

.18" Rain fall

Site	Home / 6th
Date	8-9-01
Time	13:10
Serviced By:	Sutton, Siegfried, NAUD II

No	**Data Downloaded to DTU?**

Todd downloaded over Phone

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.

Program Stopped, Decon Sampler

EQUIPMENT CLEANING CHECKLIST

Site	Horne & 6th
Date	8-31-01
Time	12:00p
Serviced By:	Sutton

No rainfall, No Composites taken

YES	Data Downloaded to DTU?

Shown on Sampler LED Screen

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.

EQUIPMENT CLEANING CHECKLIST

Site	6th & Horne
Date	12/10/01
Time	0940
Serviced By:	Allen

Data copied telephone: todd, Review program restart program

☐	**Data Downloaded to DTU?**

1. On 900 : Sigma Halt program. On Isco Stop program.
2. Connect extension tubing to the distributor tubing on the underside of the sampler.
3. Isco 6712 models, hit stop key and follow program.
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.

MESA SITE 2: LINDSAY

STORMWATER O&M LOG SHEET

SITE	Broadway & Lindsay			DATE	8/12/01
ARRIVAL TIME	155	DEPARTURE TIME	200	SERVICED BY	RMM
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 Review program, re Start program, confirm program running

2

3

Date: 8/11/00

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broad way & lindsay			DATE	8/21/01
ARRIVAL TIME	1015	DEPARTURE TIME	1100	SERVICED BY	MLW SRS
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Remove cap from depth sensor, cap left on from installation. Install new intake screen

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Lindsay			DATE	8/28/01
ARRIVAL TIME	1255	DEPARTURE TIME	100 pm	SERVICED BY	Pen
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Remove broken beer bottle glass from raingauge, no damage

check station, temperture okay.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Lindsay			DATE	9/3/01
ARRIVAL TIME	0913	DEPARTURE TIME	0925	SERVICED BY	[illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, Halt 72 hours, 0112 8/30/01. leave Station alone. check rain gauge, clear. Put station maintenance book in Station No ice.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Lindsay / Broadway			DATE	9-5-01
ARRIVAL TIME	1105	DEPARTURE TIME	1110	SERVICED BY	RWW SHS
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N Computer / Todd

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

NOTES / ACTIONS Restart Program

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Lindsey & Broadway			DATE	9/25/01
ARRIVAL TIME	0952	DEPARTURE TIME	0955	SERVICED BY	Reen
SAMPLER	SIGMA	900		STATION CONDITION:	Good
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Station okay, ice build up, will defrost Tomorrow.
Leave program alone.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Lindsay			DATE	9/26/01
ARRIVAL TIME	0920	DEPARTURE TIME	0925	SERVICED BY	[illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	iced
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Turn temperture control up on right side. Recheck tomorrow and see if ice melts

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Lindsay & Broadway			DATE	9/27/01
ARRIVAL TIME	0805	DEPARTURE TIME	0815	SERVICED BY	Reen
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good, ice melted

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Remove ice, clean and reset Temp.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Lindsay			DATE	10/01/01
ARRIVAL TIME	1220	DEPARTURE TIME	1230	SERVICED BY	Rem Flp
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Review program, restart program.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Lindsay			DATE	10/4/01
ARRIVAL TIME	0915	DEPARTURE TIME	0930	SERVICED BY	[illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Clean, screen, funnel, bucket. Check level. Put 1 tip on sampler while cleaning, bucket sat level when opened.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadways Lindsay			DATE	10/15/01
ARRIVAL TIME	1039	DEPARTURE TIME	1045	SERVICED BY	Ken
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, No ice, okay. Check tipping bucket. Clear. leave alone.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Lindsay			DATE	10/22/01
ARRIVAL TIME	1040	DEPARTURE TIME	1050	SERVICED BY	RMW
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, check for ice, adjust temperture

Re Start program, 1043, 10/22/01 Data copied per TOW

Check Rain gauge, Clear

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway, Lindsay			DATE	11/05/01
ARRIVAL TIME	0935	DEPARTURE TIME	0940	SERVICED BY	[illegible] [illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS Check Station, Rainfall, 0.02 Station still active
Check funnel and screen, clear.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway Lindsay			DATE	11/21/01
ARRIVAL TIME	sampler 0732	DEPARTURE TIME	0742	SERVICED BY	(RCW)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS Check Station, program running, temperature good. Stop program, reset time by using telephone time, add 7 minutes. Funnel / tipping bucket clear.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Lindsay & Broadway			DATE	11/29/01
ARRIVAL TIME	0927	DEPARTURE TIME	0931	SERVICED BY	(Rum)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y (N)

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

NOTES / ACTIONS check Station, Funnel and Screen. check Temperature. Turn temperature control down a couple of degrees

STORM EVENT LOG SHEET

1. Site: Lindsay / Broadway Your Name: Lee (Mesa)

2. Date: 7-29-07 Time: 11:00p

SAMPLER PARAMETERS

3. Rainfall: .37 **in**

4. Flow: _____ **cfs**

5. Level: _____ **in**

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

O&M PARAMETERS

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

3/4 Composite

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?**

STORM EVENT LOG SHEET

1. Site: Broadway/Lindsay Your Name: Sutton

2. Date: 8-9-01 Time: 3:45A

SAMPLER PARAMETERS

3. Rainfall: .16 **in**

4. Flow: 33.81 **cfs**

5. Level: 2.78 FT ~~in~~

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

O&M PARAMETERS

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

3/4 composite

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?**

City of Mesa

STORM EVENT LOG SHEET

1. Site: Broadway & Lindsay Your Name: [illegible]

2. Date: 12/4/01 Time: 0722

SAMPLER PARAMETERS

3. Rainfall: _____ **in**

4. Flow: _____ **cfs**

5. Level: _____ **in**

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

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
~~[illegible]~~ Half Jar with Sample

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 9.5 **su**

12. Temperature 13 **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: Broadway & Lindsay Your Name: JDP Pass

2. Date: 12/04/01 Time: 1150

SAMPLER PARAMETERS

3. Rainfall: _____ **in**

4. Flow: _____ **cfs**

5. Level: _____ **in**

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

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
pick up composite sample, to take to lab

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?**

EQUIPMENT CLEANING CHECKLIST

Site	Lindsay & Broadway
Date	8/1/01
Time	1140
Serviced By:	Pam Sly

Restart program Pumped 7744

Nd	Data Downloaded to DTU?

Go to Lab pick up Dirty bottle, clean reinstall

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.

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

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

EQUIPMENT CLEANING CHECKLIST

Site	Lindsay / Broadway		
Date	8-9-01	**Time**	14:25
Serviced By:	Sutton, Siegfried, NANDIII		

No	**Data Downloaded to DTU?**

Todd downloaded over Phone

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.

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

Decon, Stop Program

EQUIPMENT CLEANING CHECKLIST

Site	Lindsay & Broadway		
Date	8-31-01	**Time**	1300
Serviced By:	Sutton		

FOR 72 HRS

½ Jar composite, Program Stopped, Download not complete RTD Full

Yes	**Data Downloaded to DTU?**

Decon performed on composite jar only, not on tubing

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.

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

.12 ≈ 6545

EQUIPMENT CLEANING CHECKLIST

Site	Broadway & Lindsay
Date	12/10/01
Time	1035
Serviced By:	Ken

Data copied telephone. Todd clean intake Lines, Restart program, Put in clean bottle

- [ ] **Data Downloaded to DTU?**

1. On 900 : Sigma Halt program. On Isco Stop program.
2. Connect extension tubing to the distributor tubing on the underside of the sampler.
3. Isco 6712 models, hit stop key and follow program.
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.

MESA SITE 3: FALCON FIELD

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	8/21/01
ARRIVAL TIME	1120	DEPARTURE TIME	1200	SERVICED BY	RLM JHS
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Found cap on sonic sensor, also found intake sensor filled solid with pebbles and sediment. Lee took screen. Change to new intake screen

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	8/28/01
ARRIVAL TIME	1220	DEPARTURE TIME	1240	SERVICED BY	Rem
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good, Door lock broken

ENTRY MADE STATION LOG BOOK: Y N

STATION DATA COPIED: Y N

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

NOTES / ACTIONS Door hasp broken off again. Secure door with washer and screw. Will try and repair 8/29/01 when in MESA moving raingauge at Dobson.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon field			DATE	8/29/08
ARRIVAL TIME	1600	DEPARTURE TIME	1020	SERVICED BY	Alan
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS make repair to door latch, some one broke off hasp lock again.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	9/3/01
ARRIVAL TIME	0845	DEPARTURE TIME	0855	SERVICED BY	Rem
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good, No damage

ENTRY MADE STATION LOG BOOK: Y N

STATION DATA COPIED: Y N

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

NOTES / ACTIONS Check Station, 0.04 Rain 8/30/01. Left alone, Put Station maintenance book in Station. Station active, check Door latch & Lock. En good condition, No ice

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	9-5-01
ARRIVAL TIME	1055	DEPARTURE TIME	1100	SERVICED BY	RWN JHS
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N Computer / Todd

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

NOTES / ACTIONS Restart Program

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	9/25/01
ARRIVAL TIME	0935	DEPARTURE TIME	0940	SERVICED BY	(Rem)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: (Y) N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS check program, everything Okay, small amount of ice, setting connect.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	9/26/01
ARRIVAL TIME	0831	DEPARTURE TIME	0910	SERVICED BY	Rew
SAMPLER	SIGMA	900		STATION CONDITION:	iced heavy
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Turn down temperture control. Defrost ice. Reset control. I had to restart program, unable to disconnect power to defrost. Plug connection too low to reach.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	9/27/01
ARRIVAL TIME	0745	DEPARTURE TIME	0750	SERVICED BY	(Pete)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good, ice melting

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS Turn temp controller down, some ice accumulating. Will reset at later date, no rain forecast.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	10/01/01
ARRIVAL TIME	1200	DEPARTURE TIME	1210	SERVICED BY	[illegible] [illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Restart program.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	10/4/01
ARRIVAL TIME	0850	DEPARTURE TIME	0905	SERVICED BY	[illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Clean Screen, Funnel, bucket, check for level.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	10/15/01
ARRIVAL TIME	1022	DEPARTURE TIME	1028	SERVICED BY	RLM
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good, no damage

ENTRY MADE STATION LOG BOOK Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS check Station, everything okay - No rice, leave along. Tipping bucket clear.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	10/22/01
ARRIVAL TIME	1021	DEPARTURE TIME	1030	SERVICED BY	Glen
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, check for ice, none. temperature good

Check rain gauge, clear Restart program 1022 = 10/22/01

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	11/05/01
ARRIVAL TIME	0915	DEPARTURE TIME	0925	SERVICED BY	(Rm) (JLP)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK (Y) N

STATION DATA COPIED: Y (N)

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

NOTES / ACTIONS Check Station, Rainfall 0.03, Station Still active

Raingauge Funnel & screen clear

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	11/21/01
ARRIVAL TIME	0752	DEPARTURE TIME	0800	SERVICED BY	RCW
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check station, time, temperture, Funnel & screen clear.

Reset time using cell phone time, add 7 minutes

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Falcon Field			DATE	11/29/01
ARRIVAL TIME	0904	DEPARTURE TIME	0910	SERVICED BY	(pwd)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) N

STATION DATA COPIED: Y (N)

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

NOTES / ACTIONS Check station, Funnel and Screen. check Temperature, Turn temperature down a couple of Degrees.

STORM EVENT LOG SHEET

1. Site: Falcon Field Your Name: Sutton

2. Date: 8-9-01 Time: 4:20 A

SAMPLER PARAMETERS

3. Rainfall: .15 in

4. Flow: Ø cfs

5. Level: .005 FT 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?**

STORMWATER O&M LOG SHEET

SITE	Falcon Field			DATE	8/12/01
ARRIVAL TIME	135	DEPARTURE TIME	145	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 Review program, restart program, confirm program running.

2

3

STORM EVENT LOG SHEET

1. Site: Falcon Your Name: Mesa Lee

2. Date: 12/4/01 Time: _____

SAMPLER PARAMETERS

3. Rainfall: _____ **in**

4. Flow: _____ **cfs**

5. Level: _____ **in**

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

O&M PARAMETERS

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

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 9.2 **su**

12. Temperature 13 **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: Falcon Field Your Name: Paul SLB

2. Date: 12/4/01 Time: 1130

SAMPLER PARAMETERS

3. Rainfall: _____ **in**

4. Flow: _____ **cfs**

5. Level: _____ **in**

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

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
Pick up composite sample, take to lab

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?**

EQUIPMENT CLEANING CHECKLIST

Site	8/1/01 Falcon Field
Date	8/1/01
Time	1110
Serviced By:	Rem Slg

Found small Blockage in tipping bucket. Removed.

NO

1. Halt progran
2. Connect ext
3. Press the Pu
4. On 900 modi
5. Follow the s

Field Sheet missing
for Falcon Field
7/29/01 – Lee Mendelzon
– Sampler did not work
(No grabs collected)

Pump a large quantity of tap water through tubing.

Pump a small amount of Nitric Acid (pH 3 - 4) through tubing.

Pump approximately 1/2 - 1 gallon deionized water through tubing.

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

EQUIPMENT CLEANING CHECKLIST

Site	Falcon
Date	8-9-01
Time	1410
Serviced By:	Sutton, Siegfried, NAUD III

No	Data Downloaded to DTU?

Todd downloaded over phone

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.

Program Stopped, No Composites

EQUIPMENT CLEANING CHECKLIST

Site	Falcon Field
Date	8-31-01
Time	1330
Serviced By:	Sutton

No Composites, RTD Full didn't download data

No	Data Downloaded to DTU?

Left program running

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.

.04" = 4555

EQUIPMENT CLEANING CHECKLIST

Site	Falcon Field
Date	12/10/01
Time	1012
Serviced By:	[illegible]

Data acquired telephone: Todd, clean intake line, restart program, install clean bottle

[ ]	**Data Downloaded to DTU?**

1. On 900 : Sigma Halt program. On Isco Stop program.
2. Connect extension tubing to the distributor tubing on the underside of the sampler.
3. Isco 6712 models, hit stop key and follow program.
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.

MESA SITE 4: GRANDVIEW

STORMWATER O&M LOG SHEET

SITE	Horne + Grandview			DATE	8/12/01
ARRIVAL TIME	115	DEPARTURE TIME	120	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 Review program, restart program and confirm program running

2

3

Date: 8/11/00

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Grandview & Horne			DATE	8/21/01
ARRIVAL TIME	0845	DEPARTURE TIME	0900	SERVICED BY	(MM) (LLS)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Sonic Sensor not install level. MESA to have contractor return and level. Install new intake screen

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Grandview & Horne			DATE	8/28/01
ARRIVAL TIME	1150	DEPARTURE TIME	1205	SERVICED BY	(Pum)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS check Station, remove some ice from drain, check temperture Setting

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Okandview @ Horne			DATE	9/3/01
ARRIVAL TIME	0810	DEPARTURE TIME	0830	SERVICED BY	Pen
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS No ice, review program, left alone. Put station maintenance book in Station. Book says if I start the program it will erase all data. Station was on 72 hour Shut down. Rain 8/31/01 0.16.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Grandville 2 Home			DATE	9/4/01
ARRIVAL TIME	1040	DEPARTURE TIME	1045	SERVICED BY	[illegible] [illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N Computer, Todd

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

NOTES / ACTIONS Restart program

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Horne & Grandview			DATE	9/25/01
ARRIVAL TIME	0918	DEPARTURE TIME	0922	SERVICED BY	Rem
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS check program, everything okay, leave running. No ice.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Horne & Grandview			DATE	10/01/01
ARRIVAL TIME	1058	DEPARTURE TIME	1105	SERVICED BY	[illegible] SLS
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, Restart program.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Grandvicent Home	DATE	10/4/01
ARRIVAL TIME 0955	DEPARTURE TIME 1010	SERVICED BY	[illegible]
SAMPLER	SIGMA 900	STATION CONDITION:	
SAMPLER	ISCO 6712	STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Remove blockage of bird droppings, Grass etc. clean Funnel, screen, bucket. bucket tipped while cleaning. left alone Bucket level.

Note: Did not go to 6th & Horney bucket on light Pole.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Horner Grandview			DATE	10/15/01
ARRIVAL TIME	1003	DEPARTURE TIME	1010	SERVICED BY	RW
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS check Station, everything good. No ice. Leave alone

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Grandview & Horne			DATE	10/22/01
ARRIVAL TIME	1005	DEPARTURE TIME	1010	SERVICED BY	Chen
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, check for ice, none. Data copied per TGC Restart program. 10/22/01 at 1007.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Horne & Glandriez			DATE	10/24/01
ARRIVAL TIME	0815	DEPARTURE TIME	0905	SERVICED BY	(Rew)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS Check connections, cable, Stop program at 0845 to disconnect and reconnect cable, check by drain to see if sensor can be seen. Disconnect ultrasonic module from sampler, inspect pins and connection. Reconnect, this is all I can do for now. Restart program at 0859 10/24/01. Bottom of screen reads nothing no signal, or power.?

Check 6th/Horne, leave 0915

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Grandview Horne			DATE	11/05/01
ARRIVAL TIME	1003	DEPARTURE TIME	1006	SERVICED BY	Mup SLB
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS check station, Rainfall 0.03 station still active.
No flow data on screen, unable to bring flow data up.
Sensor will need to be serviced.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Horne & Grandview			DATE	11/21/01
ARRIVAL TIME	0808	DEPARTURE TIME	0815	SERVICED BY	[illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station program time. Okay

Temperature good.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Grandview & Horne			DATE	11/29/01
ARRIVAL TIME	0845	DEPARTURE TIME	0850	SERVICED BY	(Rund)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) N

STATION DATA COPIED: Y (N)

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

NOTES / ACTIONS Check Station, Funnel and screen, check Temperature. Turn temperature down a couple of degrees

STORM EVENT LOG SHEET

1. Site: Grandview/Horne Your Name: Sutton

2. Date: 7-29-01 Time: 11:20p

SAMPLER PARAMETERS

3. Rainfall: .71 **in**

4. Flow: _____ **cfs**

5. Level: _____ **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 6 **su**

12. Temperature 27.5 **deg. C**

GRAB SAMPLES Take grabs from discharge only!

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

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

STORM EVENT LOG SHEET

1. Site: Horne/Grandview Your Name: Sutton

2. Date: 8-9-01 Time: 3:25a

SAMPLER PARAMETERS

3. Rainfall: .18 in

4. Flow: .687 cfs

5. Level: .260 FT ~~in~~

6. Velocity: _____ ft/sec

O&M PARAMETERS

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

Not Enough 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 _____ **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?**

STORM EVENT LOG SHEET

1. Site: Grandview & Horne Your Name: [illegible]

2. Date: 12/04/01 Time: 0820

SAMPLER PARAMETERS

3. Rainfall: _____ in

4. Flow: _____ cfs

5. Level: _____ in

6. Velocity: _____ ft/sec

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
No samples in Sampler at this time.
Note: at 1215 still no samples in Sampler, reason unknown.

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 8.3 su

12. Temperature 13 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: Grandview @ Horne Your Name: Tom Siegfried/ Bob NAUD

2. Date: 12/11/01 Time: 1540

SAMPLER PARAMETERS

3. Rainfall: .06 **in**

4. Flow: _____ **cfs**

5. Level: _____ **in**

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

O&M PARAMETERS

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

11. pH 7 **su**

12. Temperature 6 **deg. C**
Samples not turned in

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	Grandview / Horne		
Date	7-18-01	**Time**	1625
Serviced By:	J. Sutton		

[X] **Data Downloaded to DTU?**

Downloaded onto RTD

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.

Composite filled 1/4 Jar, Jar deconed, Exterior door lock to composite was pryed off. Temporarly fixed using a 7/16" Hex Bolt. A 7/16" socket or wrench will be Needed to acess composites

EQUIPMENT CLEANING CHECKLIST

Site	Grandview Home
Date	8/1/01
Time	1205
Serviced By:	[illegible] [illegible]

Restart Program

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.

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

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

EQUIPMENT CLEANING CHECKLIST

Site	Horne / Grandview		
Date	8-9-01	**Time**	13:40
Serviced By:	Sutton, Siegfried, NMD III		

No	**Data Downloaded to DTU?**

Todd downloaded over Phone

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.

Program Stopped, No Composites Taken

EQUIPMENT CLEANING CHECKLIST

Site	Horne & Grandview
Date	8-31-01
Time	1215p
Serviced By:	Sutton

No Composites Taken, .02" max on display Screen, No other rainfall data

YES	Data Downloaded to DTU?

Program stopped 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.

.16" - 4545

EQUIPMENT CLEANING CHECKLIST

Site	Grandview @ Horne
Date	12/10/01
Time	0948
Serviced By:	(Ken)

Data copied telephone i Todd. Check Sampler, restart program 0952 after checking

☐ **Data Downloaded to DTU?**

1. On 900 : Sigma Halt program. On Isco Stop program.
2. Connect extension tubing to the distributor tubing on the underside of the sampler.
3. Isco 6712 models, hit stop key and follow program.
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.

MESA SITE 5: DOBSON

STORMWATER O&M LOG SHEET

SITE	Dobson & Broadway			DATE	8/12/01
ARRIVAL TIME	1230	DEPARTURE TIME	1245	SERVICED BY	RCW
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 Review program and restart sampler. Confirm sampler running.

2

3

Date: 8/11/00

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Dobson			DATE	8/22/01
ARRIVAL TIME	0800	DEPARTURE TIME	0930	SERVICED BY	JLS
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Change intake screen, everything else okay. Lee requested rain gauge be moved from North side of Station house to South side. Will to do next week.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Dobson & Broadway			DATE	8/28/01
ARRIVAL TIME	1040	DEPARTURE TIME	1050	SERVICED BY	Rich
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Raingauge to be moved, Per MCSA Request.
move gauge 8/29/01, pick up Supplies

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway @ Dobson			DATE	8/29/01
ARRIVAL TIME	8:20	DEPARTURE TIME	920	SERVICED BY	[illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N New Books in

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Move Rain gauge from North side of Station to South side, MESA Requests check temperture.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Dobson			DATE	9/3/01
ARRIVAL TIME	0720	DEPARTURE TIME	0735	SERVICED BY	RW
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Put Station maintenance book in Station.

Check raingauge, clear, working, nice

RW

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Dobson			DATE	9/5/01
ARRIVAL TIME	1015	DEPARTURE TIME	1020	SERVICED BY	(Ann) (Ed)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: (Y) / N My computer / Todd

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

NOTES / ACTIONS Restart program

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Dobson Rd			DATE	9/25/01
ARRIVAL TIME	0840	DEPARTURE TIME	0850	SERVICED BY	Ken
SAMPLER	SIGMA	900		STATION CONDITION:	Good
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Sampler, Program Disabled, Errors occurred during program. Will return later. request data be copied. leave program alone.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Dobson + Broadway			DATE	9/26/01
ARRIVAL TIME	0755	DEPARTURE TIME	0800	SERVICED BY	[illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	iced up/defrost
SAMPLER	ISCO	6712		STATION CONDITION:	

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Shut down temperature control, open door, defrost ice. Will return and close door later on run back to office. After checking other stations for ice.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Dobson + Broadway			DATE:	9/27/01
ARRIVAL TIME	0710	DEPARTURE TIME	0720	SERVICED BY	(RCC)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good, ice gone

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS Remove ice left, wipe down and clean. Reset Temps.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadways & Dobson			DATE	10/01/01
ARRIVAL TIME	0955	DEPARTURE TIME	10:30	SERVICED BY	Pierce Tlp
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y N

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

NOTES / ACTIONS Re Start program, Power error had occured. Unable to find or change hours for storm to 16.00 hours. Will call ISCO company. Restart program at 1256, stop back to check program.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Dobson			DATE	10/4/01
ARRIVAL TIME	1022	DEPARTURE TIME	1035	SERVICED BY	Ram
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Clean Screen, funnel and check tipping bucket. Level.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Dobson Road			DATE	10/15/01
ARRIVAL TIME	0935	DEPARTURE TIME	0940	SERVICED BY	(pen)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good,

ENTRY MADE STATION LOG BOOK: (Y) N

STATION DATA COPIED: Y (N)

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

NOTES / ACTIONS Check station, found ERROR message occurred during program. Leave alone until data copied confirmed. Check tipping bucket, clear. No ice

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Dobson + Broadway			DATE	10/22/01
ARRIVAL TIME	0930	DEPARTURE TIME	0940	SERVICED BY	(RCW)
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	(ISCO)	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: (Y) / N

STATION DATA COPIED: Y / (N)

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

NOTES / ACTIONS Check Station, Error recorded on sampler Screen.
check for ice, none. Data copied per TGW.
Restart program 0935, 10/22/01. Check Tipping bucket, Clear.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Dobson			DATE	10/3/01
ARRIVAL TIME	0830	DEPARTURE TIME		SERVICED BY	Ryan
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, no ice, Okay. Found cover on light pole off. check wires, Okay Secure cover back on light pole. Unable to find reason for power failures that occur. Power problems have occurred in past, mostly during Storms.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Dobson			DATE	11/05/01
ARRIVAL TIME	1021	DEPARTURE TIME	1028	SERVICED BY	[illegible]
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check Station, Rainfall 0.02. Station Still active Funnel and Raingauge clear.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Dobson & Broadway			DATE	11/06/01
ARRIVAL TIME	1040	DEPARTURE TIME	1045	SERVICED BY	Pen
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y / N

STATION DATA COPIED: Y / N

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

NOTES / ACTIONS Check data, 0.00 Rain, resume program.

Gauge read 0.02 11/05/01

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway + Dobson			DATE	11/21/01
ARRIVAL TIME	0717	DEPARTURE TIME	0725	SERVICED BY	Ken
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y N

STATION DATA COPIED: Y N

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

NOTES / ACTIONS Check station, Lower temperature, Ready.
Tipping bucket clear, Funnel clear Program running.

* Stop back to confirm time is correct.

WATER QUALITY SAMPLER MAINTENANCE LOG SHEET

SITE	Broadway & Dobson			DATE	11/29/01
ARRIVAL TIME	0820	DEPARTURE TIME	0830	SERVICED BY	Pum
SAMPLER	SIGMA	900		STATION CONDITION:	
SAMPLER	ISCO	6712		STATION CONDITION:	Good

ENTRY MADE STATION LOG BOOK: Y N

STATION DATA COPIED: Y N

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

NOTES / ACTIONS check Station, Funnel and Screen. check Temperature. check Program, found soda cans on Screen of tipping bucket. Found no information in program of any tips. Resume program. Turn temperature down a couple of degrees

STORM EVENT LOG SHEET

1. Site: Dobson / Broadway Your Name: Sutton

2. Date: 7-30-01 Time: 12:25A 0025

SAMPLER PARAMETERS

3. Rainfall: .82 **in**

4. Flow: _____ **cfs**

5. Level: _____ **in**

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

O&M PARAMETERS

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

Full Composite

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?**

STORM EVENT LOG SHEET

1. Site: Broadway & Dobson Your Name: MW FCS

2. Date: 12/04/01 Time: 0710

SAMPLER PARAMETERS

3. Rainfall: _____ **in**

4. Flow: _____ **cfs**

5. Level: _____ **in**

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

O&M PARAMETERS

7. Did sampling equipment operate during event? **Yes or No?** Describe problems.
Found jar ½ full Return later.
Return at 1230, jar full, sampler running, jar over filling.
Shut off program, water running out of unit, intake hose collapsed

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?**

EQUIPMENT CLEANING CHECKLIST

Site	Broadway & Dobson		
Date	8/1/01	**Time**	1225
Serviced By:	Pum (TRS)		

Recon Lines

NO	**Data Downloaded to DTU?**

1. Halt program — Restart, program error, found leak in intake connector line.. connected, pick up bottle from lab
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. Clean and reinstall.
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.

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

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

EQUIPMENT CLEANING CHECKLIST

.19" Rainfall

Site	Dobson
Date	8-9-01
Time	12:35p
Serviced By:	Sutton, Siegfried, NAUS III

No	**Data Downloaded to DTU?**

Todd downloaded over Phone

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.

No Composites Taken, Program Stopped

EQUIPMENT CLEANING CHECKLIST

Site	Dobon / Broadway		
Date	8-31-01	**Time**	1130A
Serviced By:	Sutton		

No Rainfall, No [redacted] Composites Taken

YES	**Data Downloaded to DTU?**

1. Halt program — Power outage occured, Program stopped + Restarted to clear alarm
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.

EQUIPMENT CLEANING CHECKLIST

Site	Broadway & Dobson
Date	12/10/01
Time	0910
Serviced By:	Greg

Data copied, telephone: Todd, clean intake lines, Restart program

☐ **Data Downloaded to DTU?**

Talk with Todd. Shut Sampler off.

1. On 900 : Sigma Halt program. On Isco Stop program.
2. Connect extension tubing to the distributor tubing on the underside of the sampler.
3. Isco 6712 models, hit stop key and follow program.
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.