### NPDES 2007/2008 Water Quality Monitoring

Event #1 (Wet), September 21-23, 2007 Summary

Sampling Duration = 24 Hours, 0.25" rainfall (1.5" forecasted originally) Cutoff low stalled off coast for over 18 hours, rain amounts swung wildly from 1.50 inches to 0.25 inch during storm events forecasts. Monitoring Duration = 09/21/07 @ 17:48 to 09/23/07 @ 19:40

Actual Sampling Duration(s):

ME-CC = 49.0 Hrs. ME-SCR = 24.0 Hrs. ME-VR2 = 24.0 Hrs. A-1 = No Flow W-3 = No Flow W-4 = 24.0 Hrs.

Sampling Crew: David Thomas, Tommy Liddell

Weather Conditions: Raining and cool.

#### NPDES ~ MASS EMISSION

ME-CC Calleguas Creek (CSUCI Bridge) MS/MSD

09/20/07

**4230**: 1.359', 25 cfs, Programmed for flow-paced sampling, trigger = 100,000 cf, calculated for .25 inch dry antecedent conditions. (Ref.: 25 cfs (60 sec) = 1,500 cfm (60 min) = 90,000 cfh) **6712**: Program (#1) flow paced 1 pulses, sample at start, 96 samples

6712: Program (#1) flow paced, 1 pulses, sample at start, 96 samples, 200 mL/sample, start date/time 09/21/07 @ 00:01 Friday.

09/20/07 @ 17:10

6712: Stop program (#1), adjust program (#2) sample start time 09/21/07 @ 03:00 per weather forecasts.

09/21/07 @ 09:15

**4230**: 1.376', 27 cfs @ 09:15

6712: Sample 9 after 1 pulses, stop program (#2) @09:20, pull bottle 1 and dump samples, re-install new clean (9.4 L pickle jar) bottle 1, reset totalizer = 0, re-start program (#3) start immediately @ 09:21.

09/21/07 @ 13:10
 4230: 1.435', 40 cfs

6712: Sample 6 after 1 pulse, stop program (#3) @ 13:10 per weather forecasts, pull bottle 1 and dump samples.

**4230**: 1.405′, 33 cfs @ 18:00

6712: Install new clean (18 L carboy) bottle, start Program (#4) 09/21/07 @ 18:00.

09/22/07 @ 07:50

**4230**: 1.667', 106 cfs

6712: Sample 22 @ 07:56, "Error have occurred" pump latch opened on sample #4 @ 20:42, Bottle = 1 L, zip tie pump latch closed, restart program (#4).

**Grab samples:** Taken at check dam @ 08:15, temperature = 19.2° C, field pH 7.6

09/24/07 @ 10:00

4230: 1.398', 32 cfs, interrogate.

6712: "Program (#4) is done", "Errors have occurred", bottle is full.

Composite samples: Pull composite @ 10:00

Follow-up: 6712 controller (s/n 201A02753) needs ISCO repairs (pump latch).

#### ME-SCR Santa Clara River (Freeman Diversion)

09/20/07 @ 09:15

6712: Programmed (#1) for 36 hour time-paced sampling, 23 min pacing. per sample, 4 bottles, 24 samples per bottle, 200 mL per sample, start date/time 09/21/07 @ 00:01 Friday, Intake line @ wing wall.

09/20/07 @ 16:25

6712: Stop program (#1), adjust program (#2) sample start time 09/21/07 @ 03:00, 24 hour event, 15 min pacing per weather forecasts.

09/21/07

6712: "20, 24 bottle 1 in 11:50", bottle 1 = 4.5 L (1/2 full), stop program (#2), pull bottle 1 and dump samples, re-install new clean (9.4 L pickle jar) bottle 1, re-start program (#3) start immediately @ 10:06.

09/21/07 @ 12:25

4210: -0.034', cfs @ 12:25

6712: "8, 24 bottle 1 in 20:00", stop program (#3), pull bottle 1 and dump samples.

09/21/07 @ 18:50

**4210**: -0.027', 0 cfs

6712: Install new clean (9.4 L pickle jar) bottle 1, start program (#4), 24 hour time paced @ 18:50

09/22/07 @ 08:55

**4210**: -0.026', 0 cfs @ 08:57

6712: "10, 24 bottle 3 in 03:00", bottle #1 = 5 L, #2 = 5 L, #3= 2 L. Grab samples: Taken in canal @ 09:00, temp = 19.6° C, field pH = 7.9 Ref.: VCWPD Hydrology H-350 = 161.958'

09/24/07 @ 11:20

**4210**: 0.019', 0 cfs @ 11:20, dam not spilling, interrogate.

**6712**: "Program ME-SCR is done", bottles #1 - 4 = 5 L each, pump tubing = 1,023,823

Ref.: VCWPD Hydrology H-350 = 161.855'
Composite samples: Pulled 20 L @ 11:30

Follow-up: None

## ME-VR2 Ventura River (Ojai Valley Sanitation District) MB-1 Field Blanks

■ 09/20/07 @ 12:00 noon

**4230**: 1.942', 2 cfs, programmed for flow-paced sampling, trigger = 5,000 cf, calculated = 2 cfs (60 sec.) = 120 cfm (60 min.) = 7,200 cfh.

NOTE: 2006/07 Event 1 trigger was 5,000 cf

6712: Program (#1) sampler, 1 pulse at start, 4 bottles, 24 samples per bottle, 200 mL/sample, start 09/21/07 @ 00:01, max. run time 36 hrs. (NOTE: 200 mL is delivering approx. 300 mL).

09/20/07

6712: Stop program (#1), adjust program (#2) sample start time 09/21/07 @ 03:00 per weather forecasts.

09/21/07 @ 07:45

**4230**: 1.940′, 2 cfs, reset totalizer = 0.

6712: "7, 24 bottle 1 after 1 pulse", stop program (#2), pull bottle 1 and dump samples, install new clean (9.4 L pickle jar) bottle 1, adjust program (#3) start time to 09/21/07 @ 09:00.

#### ME-VR2 Continued

09/21/07

**4230**: 1.937′, 2 cfs

6712: "8, 24 bottle 1 after 1 pulses", stop program (#3) @ 13:58, pull bottle 1 and dump samples.

09/21/07 @ 19:30

**4230**: 1.955', 2 cfs, reset totalizer = 0.

6712: Install 2 clean (9.4 L pickle jars) bottles, start program (#4) @ 19:30.

09/22/07 @ 10:00

**4230**: 1.932', 1 cfs @ 09:50, adjust trigger = 3,000 (1 cfs (60 sec) = 60 cfm (60 min) = 3,600 cfh.

6712: "18, 24 bottle 1 after 1 pulses", bottle #1 = 4 L,

Grab samples: mid stream @ intake line @ 10:00, temp = 17.6° C, field pH = 7.8, air temperature = 61 F.

09/24/07 @ 08:40

4230: 1.909, 1 cfs @ 08:40, interrogate.

6712: "Program: ME-VR2 is done" (due to max run time for a 24 hour event), bottle #1 = 6 L, #2 = 2 L, #3 & 4 = 0.

Composite samples: Pulled @ 08:45, composite bottle #2 into #1= 8.0 L total volume. Composite Field Blanks collected @ 08:45.

Follow-up: none

#### NPDES ~ RECEIVING WATERS & LAND USE

#### A-1 Wood Road

## MD-1 Field Duplicates

09/20/07 @ 11:00

**4250**: 0.043′, 0.02 cfs, 0.92 ft/sec @ 11:00

6712: Programmed (#1) for 36 hour time paced sampling, 23 min pacing, 24 samples per bottle, 200 mL sample, start time 09/21/07 @ 00:01 Friday

09/20/07 @ 17:24

• 6712: Stop program (#1), adjust program (#2) sample start time 09/20/07 @ 03:00, 24 hour event, 15 min pacing per weather forecasts.

09/21/07 @ 08:55

**4250:** 0'.005', 0 cfs, 0.06 ft/sec @ 08:55

6712: "1, 24 bottle 2 in 03:21", "errors have occurred", stop program (#2), pull bottle 1, re-start program (#3) start immediately @ 9:00.

09/21/07 @ 08:55

**4250**: 0'.0075', 0 cfs @ 13:22

**6712**: "19, 24 bottle 1 in 17:00", "errors have occurred", stop program (#2).

09/21/07

**4250:** 0.003', 0 cfs

6712: Program (#3) started @ 17:45

09/22/07 @ 11:35

6712: "1, 24 bottle 1 in xx:xx", no samples in bottles #1 - #4.

**•** 09/24/07

6712: "Program: Wood Road is done".

Composite samples: Bottles #1- #3 = empty, #4 = 1 L

Follow-up: none

#### W-3 La Vista Drain

09/19/07

6712: Re-Program "La Vista", "Pump Jammed" error during station calibration, Removed 6712 controller (s/n 201E02626) for repairs

**•** 09/20/07

6712: Install new 6712 controller (s/n 204K00947), re-program "La Vista": 23' line length, 4 - 9.4 L bottles, 200 mL samples, calibrate volume, programmed (#1) for 36 hour time paced sampling, 23 min pacing, 24 samples per bottle, 200 mL, start time 09/21/07 @ 00:01 Friday.

09/20/07

6712: Stop program (#1), adjust program (#2) sample start time 09/20/07 @ 03:00, 24 hour event, 15 min pacing per weather forecasts.

09/20/07

6712: "4, 24 bottle 2 in xx:xx", Stop program (#2), adjust program (#3) start time 09:30, no volume, no flow.

09/21/07

6712: "13, 24 bottle 1 in 03:00", stop program (#2)

09/21/07

6712: Start program (#4) @ 17:20

09/22/07 @ 11:15

6712: no flow at site

09/24/07

6712: "Program: name is done".

Composite samples: Bottles #1- #4 = empty

Follow-up: Send 6712 controller (s/n 201E02626) to ISCO for repairs.

#### W-4 Revolon Slough

09/20/07 @11:00

6712: Programmed (#1) for 36 hour time paced sampling, 23 min pacing, 36 samples per bottle, 200 mL sample, start date/time 09/21/07 @ 00:01 Friday

09/20/07 @ 16:25

6712: Stop program (#1), adjust Program (#2) sample start time 09/20/07 @ 03:00, 24 hour event, 15 min pacing per weather forecasts.

09/21/07 @ 08:45

**4210**: 0.787', 12 cfs @ 08:56

6712: "25, 36 bottle 1 in 00:45", stop program (#2), pull bottle 1 and dump samples, install new clean (9.4 L pickle jar) bottle 1, change program to 24 samples per bottle, re-start program (#3) start immediately @ 9:00.

09/21/07

**4210**: 0.730′, 9 cfs @ 13:23

6712: "19, 24 bottle 1 in 04:00", bottle 1 = 4L, stop program (#3), pull bottle 1 and dump samples, install new clean (9.4 L pickle jar) bottle 1.

09/21/07

**4210**: 0.867', 16 cfs

6712: Start program (#4) @ 17:48

09/22/07 @ 11:30

4210: 1.244', 65 cfs

6712: "1, 24 bottle 4 in xx:xx", bottle 1 = 5L, #2 = 5 L, #3 = 5L.

Grab samples: On bridge, mid stream @ 11:45, temp = 19.6 C, pH = 8.0

#### W-4 Continued

09/24/07 @ 09:20

**4210**: 0.857′, 16 cfs @ 09:24, interrogate

6712: "Program: Extended 1 is done", bottles #1-#4 = 5 L each (20 L

total volume).

Composite samples: Pulled @ 09:30, composite bottles 1-4 into 20 L

carboy.

Follow-up: None

#### R-1 Swan and I-2 Ortega

Both sites have met current Permit requirements.

#### Sample Tracking

Bacteria samples to VCHCA on 09/22/07 @ 11:00 (ME-CC, ME-SCR, & ME-VR2), and @ 12:15 (W-4).

Toxicity samples to ABC on 09/22/07 @ 10:20 (ME-CC, ME-SCR, & ME-VR2), and @ 12:38 (W-4).

 Grab and composite samples to CRG on 09/24/07 @ 12:15, picked up by CRG staff (Geoff Gossett) at Saticoy Operations Yard. also...

CRG picked up additional dirty sample containers: 23 - 9.4 L glass pickle jars, and 2 - 18L wide mouth glass composite bottles.

#### **Equipment Repairs**

Teledyne ISCO 4700 Superior Street Lincoln, NE 68504

#### <u>RAN 38675R</u>

• **6712 Controller:** ME-CC (Pump Latch) s/n 201A02753

• 6712 Controller: W-3 (Pump Jammed) s/n 201E02626

# NPDES 2007/2008 Water Quality Monitoring

Event #2 (Wet), December 18-20, 2007 Summary

Sampling Duration = 24 Hours for land use, 36 hours for mass emission, ~ 2" rainfall (1.5" forecasted originally)

Monitoring Duration = 12/18/07 @ 06:20 to 12/20/07 @ 19:40

Actual Sampling Duration(s):

ME-CC = 23.5 hrs. ME-SCR = 24.0 hrs. ME-VR2 = 36.0 hrs.

A-1 = 24.0 hrs. W-3 = 21.0 hrs. Sampling Crew: David Thomas, Tommy Liddell

Weather Conditions: Raining and cool.

#### NPDES ~ MASS EMISSION

ME-CC Calleguas Creek (CSUCI Bridge)

#### MB-1 Field Blanks

**12/18/07 @ 07:00** 

**4230**: 1.683', 113 cfs, Programmed for flow-paced sampling, trigger = 450,000, calculated for 1 inch dry antecedent conditions (Ref.: 113 cfs (60 sec) = 6,780 cfm (60 min) = 406,800 cfh).

6712: Program (#1) flow paced, 1 pulses, no delay to start, 96 samples, 200 mL/sample, start date/time 12/18/07 @ 07:06.

Battery: 12.73 V 12/18/07 @ 11:21

**4230**: 1.588', 85 cfs, totalizer = 1,2500,000 cf @ 11:21

6712: Sample 4 after 1 pulses

**0/5**: 1.61'

**12/18/07 @ 18:28** 

**4230**: 1.970′, 239 cfs @ 18:28

6712: Sample 11 after 1 pulses @ 07:56, bottle  $\approx$  2 L, ice volume good. Grab samples: Taken at check dam @ 18:30, temperature = 15.4° C, field pH = 7.3.

**4230**: 2.053', 284 cfs, totalizer = 4,640,000 @ 18:45

12/19/07 @ 12:25.

4230: 2.523', 606 cfs @ 12:25

**0/5**: 2.52'

**6712:** "Program done @ 06:27 on 12/19/07, bottle is full.

Composite samples: Pull composite and composite field blanks @ 12:30

**12/20/07 @ 11:28**.

4230: 1.548', 69 cfs @ 11:28, interrogate.

**6712:** Pump tubing count = 865,604

Follow-up: none.

## ME-SCR Santa Clara River (Freeman Diversion) MS/MSD

**12/18/07 @ 07:40** 

6712: Programmed for 36 hour time-paced sampling, 23 min pacing, per sample, 4 bottles, 24 samples per bottle, 200 mL per sample, no delay to start

Ref.: Diversion flow only, roller gate closed, no spill at dam

**12/18/07 @ 20:20** 

**6712:** "11,24 bottle 2 in 00:19", bottle  $1 \approx 4.5 \, \text{L}$ , bottle  $2 \approx 2 \, \text{L}$ .

**Grab samples:** Taken from wing wall near intake @ 20:30, temp = 14.2° C, field pH = 7.1, samples very sediment-laden.

**Ref.**: Diversion flow only, roller gate closed, no spill at dam.

**12/19/07 @ 11:18** 

**4210**: 0.197", 17 cfs @ 11:18

**6712:** "Errors have occurred during program", bottle 1  $\approx$  4.5 L, bottle 2  $\approx$  4 L, bottle 3  $\approx$  3.5 L, bottle 4  $\approx$  1 L, took composite sample @ 11:20 to check volume (good).

**Ref**.: VCWPD Hydrology H-350 = 163.697' @11:22

**12/20/07 @ 08:24** 

**6712:** "Program ME-SCR is done", "Warning: replace pump tubing", "Errors have occurred during program", bottle 1  $\approx$  4.5 L, bottle 2  $\approx$  4 L, bottle 3  $\approx$  3.5 L, bottle 4  $\approx$  5 L, NOTE: flat worms in bottle 4.

Composite samples: Pulled @ 08:45

12/20/07 @ 12:26
 4231: Interrogate.

**6712:** Pump tubing count = 1,120,165.

Follow-up: None

## ME-VR2 Ventura River (Ojai Valley Sanitation District) MD-1 Field Duplicates

**12/18/07 @ 08:19** 

**4230**: 1.870′, 1 cfs, programmed for flow-paced sampling, trigger = 55,000 cf (Ref.: 1 cfs (60 sec.) = 60 cfm (60 min.) = 3,600 cfh), connected to batteries = 12.57 V, reset totalizer = 0.

6712: Program sampler, 1 pulse at start, 4 bottles, 24 samples per bottle, 200 mL/sample, no delay to start, max. run time 36 hrs., start date/time 12/18/07 @ 08:20, first sample volume looks good. (NOTE: 200 mL is delivering approx. 300 mL).

12/18/07 @ 21:23

**4230**: 2.097′, 5 cfs, totalizer = 147,000 cf @ 21:23 **6712**: Bottle 1 ≈ 2 L, "4, 24 bottle 1 after 1 pulse".

Grab samples: mid stream @ intake line @ 21:30, temp = 13.5° C, field pH = 7.0.

Special grab samples: ME-VR2-TOXICITY taken mid stream @ intake line @ 21:30 => NOTE: samples later dumped due to 100% fertilization in chronic sea urchin fertilization bioassay.

**4230**: 2.180′, 9 cfs, totalizer = 157,000 cf @ 21:47

12/19/07 @ 09:47

**4230**: 1.975′, 2 cfs @ 09:47

**6712**: Bottle 1 ≈ 2.5 L, "10, 24 bottle 1 after 1 pulse".

12/20/07 @ 07:30

**4230**: 1.884′, 1 cfs, totalizer = 544,000 cf @ 07:30

**6712:** "Errors have occurred during program", bottle 1 ≈ 3L.

Composite samples: Pulled @ 07:30

12/20/07 @ 10:05

**4230**: 1.884′, 1 cfs @ 10:05, interrogate.

Follow-up: None

#### NPDES ~ RECEIVING WATERS & LAND USE

#### A-1 Wood Road D-1 Lab Duplicates

**12/18/07 @ 06:45** 

4250: 0.087', 0.19 cfs, 3.05 ft/sec @ 06:45

6712: Programmed for 24 hour time paced sampling, 15 min pacing, 24 samples per bottle, 300 mL sample, no delay to start, first sample start time 12/18/07 @ 06:45, good volume.

**Ref**.: Revolon 4210 = 4.887', 1566 cfs

12/18/07 @ 11:46

**4250:** 0.103', 0.27 cfs, 3.44 ft/sec @ 11:46

**6712:** "22,24 in bottle 1 in 00:13", bottle  $1 \approx 7L$ .

**Ref**.: Revolon 4210 = 2.335′, 378 cfs

**12/18/07 @ 17:55** 

**4250:** 0'.298', 2.99 cfs, 8.07 ft/s @ 17:55

6712: "22,24 in bottle 2 in 03:24", bottle 1 ≈ 8L, bottle 2 ≈ 7L.

**Grab samples:** taken @ 18:00 at drainage ditch u/s intake, temp =  $15.4^{\circ}$  C, field pH = 7.6.

**Ref**.: Revolon 4210 = 4.514', 1341 cfs

12/19/07 @ 12:10

**4250**: 0.163', 0.77 cfs, 5.0 ft/s @ 12:10

6712: "Program: Wood Road is done", bottle 1 ≈ 8 L, bottle 2 ≈ 8 L,

bottle  $3 \approx 8 L$ , bottle  $4 \approx 8 L$ .

Composite samples: Pulled @ 13:00

12/20/07 @ 10:59

**4250**: 0.160′, 0.75 cfs, 5.16 ft/s @ 10:59, interrogate both A-1 & W-4.

Follow-up: None.

#### W-3 La Vista Drain

**12/18/07 @ 06:17** 

6712: Programmed for 24 hour time paced sampling, 15 min pacing, 24 samples per bottle, 300 mL sample, no delay to start, first sample start time 12/18/07 @ 06:20, good volume.

**12/18/07 @ 10:54** 

**4250**: 0.110′, 0.5 cfs, 0.57 ft/s

6712: "20,24 in bottle 1 in 10:00", bottle 1  $\approx$  2L (lots of sediment)

**12/18/07 @ 17:05** 

**4250**: 0.388′, 22.9 cfs, 7.39 ft/s

**6712:** "21,24 in bottle 2 in 12:14", "errors have occurred during program", bottle 1  $\approx$  2L, bottle 2  $\approx$  6L.

**Grab samples:** Taken @ 17:15, temp = 13.7° C, field pH = 7.0.

12/19/07 @ 11:45

**4250**: 0.373′, 21.9 cfs, 7.31 ft/s @ 11:45

**6712**: No power on controller (4250 on 12V battery pack), unknown if refrigerator is functioning, bottle 1  $\approx$  2L, bottle 2  $\approx$  7.5L, bottle 3  $\approx$  9L, bottle 4  $\approx$  3L.

Composite samples: Pulled @ 13:30

**Follow-up:** Resolve power issue with 6712.

#### Sample Tracking

- Bacteria samples to VCHCA on 12/18/07 @ 22:55.
  Toxicity samples to ABC on 12/19/07 @ 09:10.
  Grab and composite samples to CRG on 12/20/07 @ 09:005, picked up by CRG staff (Chuck Vicuna) at Saticoy Operations Yard.

# NPDES 2007/2008 Water Quality Monitoring Event #3 (Wet), January 23-24, 2008 Summary

Sampling Duration = Originally a 96 Hours for mass emission, ~ 3" rainfall moderate antecedent conditions.

Monitoring Duration = 01/23/08 @ 00:01 to 01/24/08 @

Actual Sampling Duration(s):

ME-CC = 38.0 hrs. ME-SCR = 30.0 hrs. ME-VR2 = 24.0 hrs.

Sampling Crew: David Thomas, Tommy Liddell, Kevin Coyne-Purse

Weather Conditions: Raining and cold.

# NPDES ~ MASS EMISSION ME-CC Calleguas Creek (CSUCI Bridge) MS/MSD

01/22/08 @ 12:20

**4230:** 1.323', 19 cfs @ 12:21, Programmed for flow-paced sampling, trigger = 1,800,000 cf, calculated for 3 inch moderate antecedent conditions, 20 L volume.

6712: Program: flow paced, 1 pulses, 96 samples, 200 mL/sample, start date/time 01/23/08 @ 00:01.

01/23/08 @ 12:30

**4230**: 1.744′, 137 cfs @ 12:30

6712: Sample 8 after 1 pulses, bottle  $\approx$  1-2 L (ref. 200 mL  $\times$  8=1.6 L)

**0/S**: 1.75'

Batteries (2-12 volt): 13.08v

**01/23/08 @ 20:00** 

**4230**: 3.785, 2,130 cfs @ 20:03

6712: Sample 17 after 1 pulses, bottle  $\approx$  3-4 L (ref. 200mL x 17 = 3.4 L), ice volume good.

**Grab samples:** Taken at check dam @ 20:15, water temperature = 11.5° C, field pH = 7.7

**4230**: 3.852, 2,221 cfs @ 20:17

01/24/08 @ 09:30

**4230**: 2.312′, 442 cfs @ 09:31

6712: Sample 52 after 1 pulse, bottle  $\approx$  10 L (ref. 200 mL  $\times$  52 = 10.4 L)

01/24/08 @ 13:15

**4230**: 2.485′, 579 cfs

0/S: 2.52'

6712: Sample 56 after 1 pulse, bottle = 13 L (ref. 200 mL x 56 = 11.2 L), Stop Program @ 13:25.

Composite samples: Pull composite @ 13:25, iced bottle in blue cube.

01/25/08

**4230**: Interrogate **Follow-up**: none

#### <u>ME-SCR Santa Clara River (Freeman Diversion)</u> <u>MB-1 (Field Blanks)</u>

01/22/08 @ 11:15

**4210**: -0.052', 0 cfs @ 11:27

6712: Intake line on wing wall is plugged (in sediment), switch to intake line @ trash rack, adjust line length (30 '), re-calibrate for 200 mL. Program: time-paced, 96 hour, 1 hour pacing, 4 bottles, 24 samples per bottle, 200 mL per sample, start time 01/23/08 @ 00:01

01/23/08 @ 09:00

**4210**: 0.029′, 1 cfs @ 09:10

6712: "11,24 bottle 2 in 00:50:00", "Errors have occurred during program", bottle  $\#1 \approx 2 L$ ,

Program stopped @ 09:14

Intake line not pulling sample due to low water level. Wing wall intake still in sediment, modified trash rack intake line, bent end at 90 degrees for low water level sampling, re- calibrate for 200 mL.

Program: time-paced, 87 hour, 1 hour pacing, 4 bottles, 21 samples per bottle, 200 mL per sample, start time 01/23/08 @ 10:00

01/23/08 @ 20:45

**4210**: 0.386', 48 cfs, 0.409, 54 cfs @ 20:57

6712: 12,21 bottle 1 in xx:xx:xx, bottle 1 = 4 L, 2-4 = 0

Grab samples: (TL @ spot light), Taken (DT, KC) below dam from rock riprap below roller gate discharge @ 21:15, temp = 9.7° C, field pH = 6.2.

**Ref.**: Canal not diverting, Roller gates open, Dam spilling.

01/24/08 @ 10:00

**4210**: 0.512", 76 cfs @ 11:18

0/5 = 0.80'

**6712:** 5,24 bottle 2 in 00:43:00, bottle  $1 \approx 5.5$  L, bottle  $2 \approx 0$  L, Stop Program, last sample @ 06:00 = 30 hour event.

Composite samples: Pull composite @ 10:15, 1 - 9.4 L pickle jars into blue cube, iced.

MB-1: Composite field blanks @ 10:30

01/25/08

**4210:** Interrogate **Follow-up:** None

UWCD: Staff closed roller gate (fish ladder) estimated 1,800 cfs

through roller gate (8'x15'x15 cfs surface velocity)

#### ME-VR2 Ventura River (Ojai Valley Sanitation District)

01/22/08 @ 14:30

**4230**: 1.815', 0 cfs, 1.820', 1 cfs @ 14:46

Clean communication channel of sediment and organic debris from Jan 5, 2008 river flows.

Change rating table for high flows (max head = 29.6', 7,367 cfs), Programmed for flow-paced sampling, trigger = 900,000 cf, calculated for 3 inch moderate antecedent conditions, reset totalizer = 0. Batteries (2-12 volt): 12.55v.

6712: Program sampler, 1 pulse at start, 4 bottles, 24 samples per bottle, 200 mL/sample, max. run time 99 hrs., start date/time 01/23/08 @ 00:01, pump tubing only @ 101,381.

(NOTE: 200 mL is delivering approx. 300 mL).

01/23/08 @ 10:30

**4230**: 2.469', 31 cfs @ 10:35.

**6712**: 2, 24 bottle 1 after 1 pulse, Bottle 1 ≈ 0.5 L **Tape down** = 2.50′ @ bubbler, A.A. on site @ 10:45 Batteries (2-12 volt): 12.54v.

01/23/08 @ 18:00

**4230**: 5.094′, 1,817 cfs @ 18:15

6712: 20,24 bottle 1 after 1 pulse, bottle 1 = 3.5 L, bottles 2-4 = 0 L Intake line not pulling sample due to sediment. Installed new temporary intake line (ISCO strainer and pump tubing) connected at 1.5" conduit tee, zip tied to 5.5 intake line and brackets. Re-installed tubing in remote pump due to line/pump tubing kinking. re-calibrate 200 mL = 500 mL delivered, adjust volume.

Re-program sampler, 1 pulse at start, 4 bottles, 15 samples per bottle, 100 mL/sample, max. run time 99 hrs., start date/time 01/23/08 @ 19:30, switched bottles 1 and bottle 4, bottle 1 = 0 L, bottle 2 = 0, bottle 3 = 0, bottle 4 = 3.5 L.

01/23/08 @ 22:00

**4230**: 4.719', 1,491 cfs @ 22:05

6712: 8,15 bottle 2 after 1 pulse, bottle 1 = 9 L, 2 = 4L

**Grab samples:** used grab pole from intake line @ 22:15, temp =  $9.2^{\circ}$  C, field pH = 7.6

Extend intake line for lower flows during flow recession.

01/24/08 @ 08:00

**4230**: 3.084′, 191 cfs @ 08:07, interrogate.

O/S = 1.93'

6712: 12,15 bottle 3 after 1 pulse (per Flowlink data), bottle 1 = 9 L, bottle 2 = 4.5 L, bottle 3 = 0, bottle 4 (previously bottle 1) = 3.5 L.

01/24/08 @ 12:15

**4230**: 2.980′, 155 cfs, @ 12:17

**6712**: Bottle = 9 L, 2 = 4.5

Composite samples: Pulled @ 07:30, composite 3 - 9.4 L pickle jars into 1 - 20 L Carboy ( $\approx 17$  L), iced in blue cube.

01/25/08

**4230**: Interrogate

6712: Re-installed S.S. intake line connection, remove temporary strainer and pump tubing for higher flow predicted on Saturday 01/26/08.

Follow-up: Re-design S.S. intake line, add second higher flow(2) intake line(s).

#### Sample Tracking

- Bacteria samples to VCHCA on 01/23/08 @ 22:55
- Toxicity samples NOT Collected
- Grab and composite samples to CRG on 01/25/08 @ 07:20, picked up by CRG staff (Chuck Vicuna) at Saticoy Operations Yard.