Victor Valley Wastewater Reclamation Authority
A Joint Powers Authority and Public Agency of the State of California
Administrative Offices
20111 Shay Road, Victorville California 92394
Telephone: (760) 246-8638
Fax: (760) 246-2898
e-mail: mail@vvwra.com

1 July 2015

Lahontan Region Water Quality Control Board
Mr. Jay Cass
Victorville Branch Office
14440 Civic Drive, Suite 200
Victorville, CA 92392-2306

Re: VVWRA WDID No. 6B361005756
Storm Water Annual Report

Dear Mr. Cass,

During the storm water monitoring period of July 1, 2014 through June 30, 2015 the Victor Valley Wastewater Reclamation Authority (VVWRA)did not receive sufficient precipitation only one (1) event of storm water discharge occurred during the reporting period. Samples were taken and analyzed as required at the Storm Water South Discharge Point.

The completed Storm Water Annual Report for this monitoring period is enclosed.

If you have questions regarding this report, please contact Logan Olds at (760) 246-8638.

Sincerely,

Gilbert Perez
Director of Operations

To Interested Parties:

2014-2015 ANNUAL REPORT ANNUAL REPORT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES

Attached is the 2014-2015 annual report that must be mailed to your Regional Board office by July 1, 2015. Dischargers within the Los Angeles Regional Board are required to electronically submit their annual reports via the Storm Water Multi-Application Reporting and Tracking System (SMARTS), email with a PDF attachment(s) to losangeles@waterboards.ca.gov, or mail a disk. Although electronic submittals are not mandatory for dischargers in other regions, we encourage all dischargers to register and use SMARTS. We anticipate that a new Industrial General Permit (IGP) will be adopted sometime next year that will mandate electronic reporting for future reporting years.

To register to use SMARTS please fill out the LRP Registration Form and mail it back to: SMARTS Registration, P.O. Box 1977, Sacramento, CA 95812. Once a complete registration form is received, instructions and a Secret Code Number will be emailed. The Secret Code Number is used to link your SMARTS ID to the WDID Number.

For SMARTS registration questions or information please contact the SMARTS help center at 1-866-563-3107 or by email at stormwater@waterboards.ca.gov.

To receive email updates on Storm Water Industrial permitting issues including updates on the IGP reissuance process (hearings, workshops, schedules, etc.), please sign up at http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml The Storm Water program currently maintains five email lists:

- Storm Water Database Issues
- Storm Water Construction Permitting Issues
- Storm Water Industrial Permitting Issues
- Storm Water Municipal Permitting Issues
- Sustainable Development

Sincerely,

Storm Water Section

State of California
STATE WATER RESOURCES CONTROL BOARD

2014-2015

ANNUAL REPORT

FOR
STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2014 through June 30, 2015

An annual report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers and e-mail addresses of the Regional Board contacts, as well as the Regional Board office addresses can be found at http://www.swrcb.ca.gov/stormwtr/contact.html. To find your Regional Board information, match the first digit of your WDID number with the corresponding number that appears in parenthesis on the first line of each Regional Board office.

GENERAL INFORMATION:

A. Facility Information:

Facility WDID No: 6B361005756

Facility Business Name: Victor Valley Wastewater Reclamation
Contact Person: Logan Olds
Physical Address: 20111 Shay Road
e-mail: lolds@vvwra.com
City: Victorville
CA Zip: 92394 Phone: (760) 246-8638
Standard Industrial Classification (SIC) Code(s): 4952

B. Facility Operator Information:

Operator Name: Gilbert Perez
Contact Person: Gilbert Perez
Mailing Address: 20111 Shay Road
e-mail: gperez@vvwra.com
City: Victorville
State: CA Zip: 92394 Phone: (760) 246-8638

C. Facility Billing Information:

Operator Name: Logan Olds
Contact Person: Logan Olds
Mailing Address: 20111 Shay Road
e-mail: lolds@vvwra.com
City: Victorville
State: CA Zip: 92394 Phone: (760) 246-8638

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: _____

   Re-evaluation Date: _____

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: _____

   v. ☐ Received Local Agency Certification Cetification Date: _____

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 0 If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☒ **YES** ☐ **NO, attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? Two (2)

4. For each storm event sampled, did you collect and analyze a sample from each of the facility's storm water discharge locations? ☐ YES, go to Item E.6 ☒ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☐ YES ☒ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated _____

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☐ YES ☒ NO, **attach explanation**

8. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☐ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☐ YES ☒ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☐ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

    _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

    _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

    _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler.
- Parameters tested.
- Name of analytical testing laboratory.
- Discharge location identification.
- Testing results.
- Test methods used.
- Test detection limits.
- Date of testing.
- Copies of the laboratory analytical results.

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**
Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

☐ **YES** ☒ **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers**. Indicate "N/A" for quarters without any authorized non-storm water discharges.

July -September	☐ **YES**	☐ **NO**	☐ **N/A**	October-December	☐ **YES**	☐ **NO**	☐ **N/A**
January-March	☐ **YES**	☐ **NO**	☐ **N/A**	April-June	☐ **YES**	☐ **NO**	☐ **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information.

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**
Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources. **Attach an explanation for any "NO" answers**.

July -September	☒ **YES**	☐ **NO**		October-December	☒ **YES**	☐ **NO**	
January-March	☒ **YES**	☐ **NO**		April-June	☒ **YES**	☐ **NO**	

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☒ **YES** ☐ **NO** Go to item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☒ **YES** ☐ **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information.

i. name of each unauthorized non-storm water discharge.
ii. date and time of observation.
iii. source and location of each unauthorized non-storm water discharge.
iv. characteristics of the discharge at its source and impacted drainage area/discharge location.
v. name, title, and signature of observer.
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers**. Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☒	☐	February	☒	☐
November	☒	☐	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☒	☐

2. Report monthly wet season visual observations using **Form 4** or provide the following information.

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed.
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occured during the last year.
   - outdoor wash and rinse areas.
   - process/manufacturing areas.
   - loading, unloading, and transfer areas.
   - waste storage/disposal areas.
   - dust/particulate generating areas.
   - erosion areas.
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map, is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

   The following records should be reviewed:

   - quarterly authorized non-storm water discharge visual observations
   - monthly storm water discharge visual observation
   - records of spills/leaks and associated clean-up/response activities
   - quarterly unauthorized non-storm water discharge visual observations
   - Sampling and Analysis records
   - preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

   The following SWPPP items should be reviewed:

   - pollution prevention team
   - list of significant materials
   - description of potential pollutant sources
   - assessment of potential pollutant sources
   - identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

   The following BMP categories should be reviewed:

   - good housekeeping practices
   - spill response
   - employee training
   - erosion control
   - quality assurance
   - preventative maintenance
   - material handling and storage practices
   - waste handling/storage
   - structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken.

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1. Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2. If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☐ YES	☒ NO	☐ NA
3. If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☒ NA
4. Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Logan Olds

Signature: [signature] for L.O. Date: 07/01/2015

Title: General Manager

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

The Industrial Activities Storm Water General Permit (General Permit) requires you to analyze storm water samples for at least four parameters. These are pH, Total Suspended Solids (TSS), Specific Conductance (SC),and Total Organic Carbon (TOC). Oil and Grease (O&G) may be substituted for TOC. In addition, you must monitor for any other pollutants which you believe to be present in your storm water discharge as a result of industrial activity and analytical parameters listed in Table D of the General Permit. There are no numeric limitations for the parameters you test for.

The four parameters which the General Permit requires to be tested are considered *indicator* parameters. In other words, regardless of what type of facility you operate, these parameters are nonspecific and general enough to usually provide some indication whether pollutants are present in your storm water discharge. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and a alkaline or basic substance is liquid antacid. Pure rainfall tends to have a pH of a little less than 7. There may be sources of materials or industrial activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure of the undissolved solids that are present in your storm water discharge. Sources of TSS include sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Specific Conductance (SC) is a numerical expression of the ability of the water to carry an electric current. SC can be used to assess the degree of mineralization, salinity, or estimate the total dissolved solids concentration of a water sample. Because of air pollution, most rain water has a SC a little above zero. A high SC could affect the usability of waters for drinking, irrigation, and other commercial or industrial use.

Total Organic Carbon (TOC) is a measure of the total organic matter present in water. (All organic matter contains carbon) This test is sensitive and able to detect small concentrations of organic matter. Organic matter is naturally occurring in animals, plants, and man. Organic matter may also be man made (so called synthetic organics). Synthetic organics include pesticides, fuels, solvents, and paints. Natural organic matter utilizes the oxygen in a receiving water to biodegrade. Too much organic matter could place a significant oxygen demand on the water, and possibly impact its quality. Synthetic organics either do not biodegrade or biodegrade very slowly. Synthetic organics are a source of toxic chemicals that can have adverse affects at very low concentrations. Some of these chemicals bioaccumulate in aquatic life. If your levels of TOC are high, you should evaluate all sources of natural or synthetic organics you may use at your site.

Oil and Grease (O&G) is a measure of the amount of oil and grease present in your storm water discharge. At very low concentrations, O&G can cause a sheen (that floating "rainbow") on the surface of water (1 qt. of oil can pollute 250,000 gallons of water). O&G can adversely affect aquatic life and create unsightly floating material and film on water, thus making it undrinkable. Sources of O&G include maintenance shops, vehicles, machines and roadways.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.swrcb.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

See Storm Water Contacts at

http://www.waterboards.ca.gov/water_issues/programs/stormwater/contact.shtml

2014-2015
ANNUAL REPORT

SIDE A

FORM 1-SAMPLING & ANALYSIS RESULTS

FIRST STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box
- Make additional copies of this form as necessary

NAME OF PERSON COLLECTING SAMPLE(S): Keith Lueken TITLE: Operator SIGNATURE:

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event									
			BASIC PARAMETERS					OTHER PARAMETERS				
			pH	TSS	SC	O&G	TOC					
Stormwater South Discharge Point	01/11/2015 08:07 ☒ AM ☐ PM	0805 ☒ AM ☐ PM	7.75	96	6170	<3.0	7.7	See	Attached	Laboratory	reports	
	☐ AM ☐ PM	☐ AM ☐ PM										
	☐ AM ☐ PM	☐ AM ☐ PM										
	☐ AM ☐ PM	☐ AM ☐ PM										
TEST REPORTING UNITS:			pH Units	mg/l	umho/cm	mg/l	mg/l					
TEST METHOD DETECTION LIMIT:			N/A	1.0	1.0	3.0	1.4					
TEST METHOD USED:			SM4500-H+	SM2540D	SM2510B	EPA1664A	SM5310B					
ANALYZED BY (SELF/LAB):			VVWRA Lab	VVWRA Lab	VVWRA Lab	Babcock Labs	Babcock Labs					

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

2014-2015

ANNUAL REPORT

SIDE B

FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S):_____ **TITLE:** _____ **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	**DATE/TIME OF SAMPLE COLLECTION**	**TIME DISCHARGE STARTED**	**ANALYTICAL RESULTS For First Storm Event**									
			BASIC PARAMETERS					**OTHER PARAMETERS**				
			pH	TSS	SC	O&G	TOC					
	_____ ☐ AM _____ ☐ PM	☐ AM _____ ☐ PM										
	_____ ☐ AM _____ ☐ PM	☐ AM _____ ☐ PM										
	_____ ☐ AM _____ ☐ PM	☐ AM _____ ☐ PM										
	_____ ☐ AM _____ ☐ PM	☐ AM _____ ☐ PM										
TEST REPORTING UNITS:			**pH Units**	**mg/l**	**umho/cm**	**mg/l**	**mg/l**					
TEST METHOD DETECTION LIMIT:												
TEST METHOD USED:												
ANALYZED BY (SELF/LAB):												

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease TOC - Total Organic Carbon

Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

Plant Address: 20111 Shay Road · Victorville, CA 92394 · TEL: (760) 246-8638 FAX: (760) 246-5440

Website: www.vvwra.com E-mail: mail@vvwra.com

California Department of Public Health - Environmental Laboratory Accreditation Program Certificate # 2561

Laboratory Analysis Report

Sample Location: Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab
Laboratory ID #: 150111-11
Discharge Date/Time: 01/11/2015 0805
Collection Date/Time: 01/11/2015 0807
Collection Method: Grab
Sample Collected By: Keith Lueken
Sample Comments: See Attached Inspection and Sampling Report.

Constituent	Result	Units	Method	R.L.	Analyst
pH	7.75	pH Units	SM 4500-H+	N/A	CM
Conductivity	61700	µS/cm	SM 2510-B	1.0 µS/cm	CM
Total Suspended Solids	96	mg/L	SM 2540-D	1.0 mg/L	CM
Total Dissolved Solids	108	mg/L	SM 2540-C	1.0 mg/L	CM

Analyst Comments: Additional analyses conducted by E.S. Babcock & Sons Laboratory. See attached report.

Lorenzo Rodriguez, Laboratory Supervisor

Reviewed By:

BABCOCK Laboratories, Inc.
The Standard of Excellence for Over 100 Years

Client Name:	Victor Valley Reclamation Authority	Analytical Report:	Page 1 of 4
Contact:	Lorenzo Rodriguez	Project Name:	VVWRA-Stormwater PS Dischar
Address:	20111 Shay Road Victorville, CA 92394	Project Number:	[none]
		Work Order Number:	**B5A1158**
Report Date:	30-Jan-2015	Received on Ice (Y/N):	Yes Temp: 10 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

Lab Sample #	Client Sample ID	Matrix	Date Sampled	By	Date Submitted	By
B5A1158-01	150111-11 Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab	Liquid	01/11/15 08:07	Keith Lueken	01/13/15 16:53	Courier (R. Cervantes)

BABCOCK Laboratories, Inc.
The Standard of Excellence for Over 100 Years

Client Name: Victor Valley Reclamation Authority
Contact: Lorenzo Rodriguez
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 30-Jan-2015

Project Name: VVWRA-Stormwater PS Discha
Project Number: [none]

Work Order Number: B5A1158

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number
B5A1158-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
150111-11 Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab	Liquid	01/11/15 08:07	01/13/15 16:53

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Aggregate Organic Compounds							
Total Organic Carbon	7.7	1.4	mg/L	SM 5310B	01/15/15 22:11	mel	
Oil & Grease (HEM)	ND	3.0	mg/L	EPA 1664A	01/28/15 13:10	hgg	
Total Petroleum Hydrocarbons	ND	1.0	mg/L	EPA 418.1	01/23/15 11:10	naa	
Metals and Metalloids							
Antimony	ND	10	ug/L	EPA 200.8	01/16/15 14:37	AP	
Arsenic	ND	5.0	ug/L	EPA 200.8	01/16/15 14:37	AP	
Barium	49	20	ug/L	EPA 200.8	01/16/15 14:37	AP	
Beryllium	ND	10	ug/L	EPA 200.8	01/16/15 14:37	AP	
Cadmium	ND	2.0	ug/L	EPA 200.8	01/16/15 14:37	AP	
Total Chromium	ND	20	ug/L	EPA 200.8	01/16/15 14:37	AP	
Cobalt	ND	10	ug/L	EPA 200.8	01/16/15 14:37	AP	
Copper	29	10	ug/L	EPA 200.8	01/16/15 14:37	AP	
Lead	ND	10	ug/L	EPA 200.8	01/16/15 14:37	AP	
Mercury	ND	0.20	ug/L	EPA 200.8	01/16/15 14:37	AP	
Molybdenum	ND	10	ug/L	EPA 200.8	01/16/15 14:37	AP	
Nickel	ND	20	ug/L	EPA 200.8	01/16/15 14:37	AP	
Selenium	ND	5.0	ug/L	EPA 200.8	01/16/15 14:37	AP	
Silver	ND	10	ug/L	EPA 200.8	01/16/15 14:37	AP	
Thallium	ND	200	ug/L	EPA 200.8	01/16/15 14:37	AP	
Vanadium	11	10	ug/L	EPA 200.8	01/16/15 14:37	AP	
Zinc	130	10	ug/L	EPA 200.8	01/16/15 14:37	AP	
Organochlorine Pesticides and PCBs by EPA 608							
4,4'-DDD	ND	0.13	ug/L	EPA 608	01/20/15 05:45	sbart	
4,4'-DDE	ND	0.047	ug/L	EPA 608	01/20/15 05:45	sbart	
4,4'-DDT	ND	0.14	ug/L	EPA 608	01/20/15 05:45	sbart	
a-BHC	ND	0.035	ug/L	EPA 608	01/20/15 05:45	sbart	
Aldrin	ND	0.047	ug/L	EPA 608	01/20/15 05:45	sbart	
Aroclor 1016	ND	1.2	ug/L	EPA 608	01/20/15 05:45	sbart	
Aroclor 1221	ND	1.2	ug/L	EPA 608	01/20/15 05:45	sbart	
Aroclor 1232	ND	1.2	ug/L	EPA 608	01/20/15 05:45	sbart	
Aroclor 1242	ND	1.2	ug/L	EPA 608	01/20/15 05:45	sbart	

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Client Name: Victor Valley Reclamation Authority
Contact: Lorenzo Rodriguez
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 30-Jan-2015

Project Name: VVWRA-Stormwater PS Discha
Project Number: [none]

Work Order Number: B5A1158

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number
B5A1158-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
150111-11 Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab	Liquid	01/11/15 08:07	01/13/15 16:53

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Organochlorine Pesticides and PCBs by EPA 608							
Aroclor 1248	ND	1.2	ug/L	EPA 608	01/20/15 05:45	sbart	
Aroclor 1254	ND	1.2	ug/L	EPA 608	01/20/15 05:45	sbart	
Aroclor 1260	ND	1.2	ug/L	EPA 608	01/20/15 05:45	sbart	
b-BHC	ND	0.071	ug/L	EPA 608	01/20/15 05:45	sbart	
Chlordane	ND	0.12	ug/L	EPA 608	01/20/15 05:45	sbart	
d-BHC	ND	0.11	ug/L	EPA 608	01/20/15 05:45	sbart	
Dieldrin	ND	0.024	ug/L	EPA 608	01/20/15 05:45	sbart	
Endosulfan I	ND	0.16	ug/L	EPA 608	01/20/15 05:45	sbart	
Endosulfan II	ND	0.047	ug/L	EPA 608	01/20/15 05:45	sbart	
Endosulfan Sulfate	ND	0.78	ug/L	EPA 608	01/20/15 05:45	sbart	
Endrin	ND	0.071	ug/L	EPA 608	01/20/15 05:45	sbart	
Endrin Aldehyde	ND	0.27	ug/L	EPA 608	01/20/15 05:45	sbart	
Heptachlor	ND	0.012	ug/L	EPA 608	01/20/15 05:45	sbart	
Heptachlor Epoxide	ND	0.012	ug/L	EPA 608	01/20/15 05:45	sbart	
Lindane	ND	0.047	ug/L	EPA 608	01/20/15 05:45	sbart	
Methoxychlor	ND	2.1	ug/L	EPA 608	01/20/15 05:45	sbart	
Toxaphene	ND	1.2	ug/L	EPA 608	01/20/15 05:45	sbart	
Surrogate: Decachlorobiphenyl	7.49	% 5-138		EPA 608	01/20/15 05:45	sbart	

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Client Name: Victor Valley Reclamation Authority
Contact: Lorenzo Rodriguez
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 30-Jan-2015

Project Name: VVWRA-Stormwater PS Dischar
Project Number: [none]

Work Order Number: B5A1158

Received on Ice (Y/N): Yes Temp: 10 °C

Notes and Definitions

ND:	Analyte NOT DETECTED at or above the Method Detection Limit **(if MDL is reported)**, otherwise at or above the Reportable Detection Limit (RDL)
NR:	Not Reported
RDL:	Reportable Detection Limit
MDL:	Method Detection Limit
* / '" :	NELAP does not offer accreditation for this analyte/method/matrix combination

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.

Digitally signed by: Cindy Waddell
DN: CN = Cindy Waddell C = US O = Babcock Laboratories OU = Project Manager Assistant
Date: 2015.02.03 11:55:38 -07'00'

cc:

e-Short_No Alias

BABCOCK Laboratories, Inc.
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Client Name: Victor Valley Reclamation Authority
Contact: Lorenzo Rodriguez
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 30-Jan-2015

Analytical Report: Page 1 of 1
Project Name: VVWRA-Stormwater PS Discha
Project Number: [none]

Work Order Number: B5A1158

Received on Ice (Y/N): Yes Temp: 10 °C

B5A1158

SUBCONTRACT LABORATORY CHAIN OF CUSTODY & ANALYSIS REQUEST RECORD

JAN 13 2015

Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

Plant Address: 20111 Shay Road · Victorville, CA 92394 · TEL: (760) 246-8638 FAX: (760) 246-5440
Administration Office Address: 15776 Main Street, Suite 3 · Hesperia, CA 92345 · TEL: (760) 948-9849
Website: www.vvwra.com E-mail: gcloutier@vvwra.com

Project Name: VVWRA Stormwater P.S. Discharge Sampling/Analysis
Project Contact: Gina Cloutier (760) 246-8638 ext. 216
Sampler Name: Keith Lueken
Sampler Signature:

VVWRA ID #	Sample Location/Description	Sample Date	Sample Time	Sample Type: Grab	Sample Type: Composite	Laboratory Analyses Requested: Total organic carbon	Oil and Grease, 1664	Heavy Metals *	Pesticides - EPA 608	Total Petroleum Hydrocarbons, 418.1	Total # of Containers	Sample Preservation Methods: Refrigeration	H_2SO_4 pH<2	HNO_3 pH<2	$ZnC_2H_3O_2$	NaOH pH>12	HCl	Sample Matrix (WW, DW, GW, SG)
5611-11	Stormwater Pump Station Discharge South	1/13/15	0900	X		X	X	X	X	X	5	1	3	1				Misc water
	Discharge Point to Mojave River Grab																	

Relinquished By (Sign): Keith Lueken
Print: Keith Lueken
Company: VVWRA
Date/Time: 1/13/15 0911

Received By (Sign): Cindy Myers
Print: Cindy Myers
Company: VVWRA

Relinquished By (Sign): Cindy Myers
Print: Cindy Myers
Company: VVWRA
Date/Time: 1-13-15 12:15

Received By (Sign): J. Meader
Print: J. Meader
Company: DE

Relinquished By (Sign): J. Meader
Print: J. Meader
Company: DE
Date/Time: 1-13-15 1630

Received By (Sign): Ray Cook
Print: R. CERVANTES
Company: DAILY EAGLES

Relinquished By (Sign): Ray Cook
Print: R. CERVANTES
Company: DAILY EAGLES
Date/Time: 1/13/15 1653

Received By (Sign):
Print:
Company:

Sample Condition Upon Receipt by Laboratory:
Samples Received on Ice? (Yes) No
Samples Received Intact? (Yes) No
Temperature 10 °C

Laboratory Notes
*Metals to include: AG, AS, BA, BE, CD, CO, CR, CU, HG, MO, NI, PB, SB, SE, TL, V, ZN

Samples sent via courier to: E.S. Babcock Laboratories
Lab #

Please Fax a copy of the completed Chain of Custody document to: Gina Cloutier, VVWRA at (760) 246-5440

Stormwater Chain of Custody Template

mailing
P.O. Box 432
Riverside, CA 92502-0432

location
6100 Quail Valley Court
Riverside, CA 92507-0704

P 951 653 3351
F 951 653 1662
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NELAP no. 02101CA
CA Elap no. 2698
EPA no. CA00102

2014-2015

ANNUAL REPORT

SIDE A

FORM 2-QUARTERLY VISUAL OBSERVATIONS OF AUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

- Quarterly dry weather visual observations are required of each authorized NSWD.
- Observe each authorized NSWD source, impacted drainage area, and discharge location.
- Authorized NSWDs must meet the conditions provided in Section D (pages 5-6), of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** DATE: _____	**Observers Name:** _____ **Title:** _____ **Signature:** _____	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☐ **YES** ☒ **NO** If **YES**, complete reverse side of this form.
QUARTER: **OCT.-DEC.** DATE: _____	**Observers Name:** _____ **Title:** _____ **Signature:** _____	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☐ **YES** ☒ **NO** If **YES**, complete reverse side of this form.
QUARTER: **JAN.-MARCH** DATE: _____	**Observers Name:** _____ **Title:** _____ **Signature:** _____	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☐ **YES** ☒ **NO** If **YES**, complete reverse side of this form.
QUARTER: **APRIL-JUNE** DATE: _____	**Observers Name:** _____ **Title:** _____ **Signature:** _____	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?** ☐ **YES** ☒ **NO** **If YES, complete reverse side of this form.**

2014-2015

ANNUAL REPORT

SIDE B

FORM 2-QUARTERLY VISUAL OBSERVATIONS OF AUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

DATE /TIME OF OBSERVATION	SOURCE AND LOCATION OF AUTHORIZED NSWD EXAMPLE: Air conditioner Units on Building C	NAME OF AUTHORIZED NSWD EXAMPLE: Air conditioner condensate	DESCRIBE AUTHORIZED NSWD CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		DESCRIBE ANY REVISED OR NEW BMPs AND PROVIDE THEIR IMPLEMENTATION DATE
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
_____ ____ ☐ AM ☐ PM					
_____ ____ ☐ AM ☐ PM					
_____ ____ ☐ AM ☐ PM					
_____ ____ ☐ AM ☐ PM					
_____ ____ ☐ AM ☐ PM					

2014-2015

ANNUAL REPORT

SIDE A

FORM 3-QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

- Unauthorized NSWDs are discharges (such as wash or rinse waters) that do not meet the conditions provided in Section D (pages 5-6) of the General Permit.
- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that can not be eliminated within 90 days of observation must be reported to the Regional Board in accordance with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** 7/7/14 1058 ☒ AM ☐ PM	**Observers Name:** Bobby Hesse **Title:** Operator **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES ☒ NO **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES ☒ NO	If **YES** to either question, complete reverse side.
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** 10/7/14 1230 ☐ AM ☒ PM	**Observers Name:** Chad Steinwand **Title:** Operator **Signature:** NAFS	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES ☒ NO **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES ☒ NO	If **YES** to either question, complete reverse side.
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** 3/23/15 1232 ☐ AM ☒ PM	**Observers Name:** Brad Adams **Title:** Operator **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☒ YES ☐ NO **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES ☒ NO	If **YES** to either question, complete reverse side.
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** 4/7/15 0958 ☐ AM ☐ PM	**Observers Name:** Salvador Carlos **Title:** Operator **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ☐ YES ☒ NO **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES ☒ NO	If **YES** to either question, complete reverse side.

2014-2015

ANNUAL REPORT

SIDE B

FORM 3 QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

OBSERVATION DATE (FROM REVERSE SIDE)	**NAME OF UNAUTHORIZED NSWD** EXAMPLE: Vehicle Wash Water	**SOURCE AND LOCATION OF UNAUTHORIZED NSWD** EXAMPLE: NW Corner of Parking Lot	**DESCRIBE UNAUTHORIZED NSWD CHARACTERISTICS** Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.		**DESCRIBE CORRECTIVE ACTIONS TO ELIMINATE UNAUTHORIZED NSWD AND TO CLEAN IMPACTED DRAINAGE AREAS. PROVIDE UNAUTHORIZED NSWD ELIMINATION DATE.**
			AT THE UNAUTHORIZED NSWD SOURCE	**AT THE UNAUTHORIZED NSWD AREA AND DISCHARGE LOCATION**	
3/23/15 12:32 ☐ AM ☒ PM	Secondary effluent	Secondary effluent	clear	clear	See attached report: Report of VVWRA Inadvertent Release Incident March 23, 2015
_____ ____ ☐ AM ☐ PM					
_____ ____ ☐ AM ☐ PM					
_____ ____ ☐ AM ☐ PM					

Victor Valley Wastewater Reclamation Authority
A Joint Powers Authority and Public Agency of the State of California
Administrative Offices
20111 Shay Road, Victorville, California 92394
Telephone: (760) 948-9849
Fax: (760) 948-9897
e-mail: mail@vvwra.com

31 March 2015

Mr. John Morales, P.E. Water Resource Control Engineer
Lahontan Regional Water Quality Control Board
14440 Civic Drive, Suite 200
Victorville, CA 92392

RE: Report of VVWRA Inadvertent Release Incident March 23, 2015
Board Order No. R6V-2008-004, RWQCB ID: 6B360109001
NPDES Permit No. CA0102822

On Monday March 23, 2015 the VVWRA Wastewater Reclamation Plant experienced an inadvertent release of 7,080 total gallons of secondary effluent. Of the 7,080 gallons, 53 gallons was released to the receiving waters (Discharge Point 001, Mojave River,34°,37'.1" N. Latitude, 117°,21'.12"W. Longitude). Staff notified John Morales of LRWQCB and the Office of Emergency Services and spoke with Tracy Stocks (Control # 15-1657).

The cause of the inadvertent release was a utility power failure which resulted in a communication failure in our SCADA system. The UV Programmable Logic Controller, (PLC) system did not communicate with the South Percolation Ponds station. The pneumatic gate that controls flow to the river via the UV station closed as it is designed, but due to the communication loss the PLC never delivered the command to increase pumping and increase flow to the South Ponds. Secondary effluent overflowed the flocculator well onto VVWRA grounds. The secondary effluent seeped to the VVWRA facility storm drain located between the UV and Aqua Diamond Filter (ADF). The storm drain is covered with diamond plate and sealed around the edges to prevent any water from reaching the Mojave River. Water was detected at 1230 leaving the storm drain discharge pipe at 3 gallons per minute. Once the inadvertent overflow was vactored the rate decreased to .5 gallons per minute for 30 minutes. This average to 1.75 gallons per minute for 30 minutes or 53 gallons total discharged to the river. The initial report to John Morales and the OES was estimated erroneously at 5376 to 7080 gallons on the ground at VVWRA. The total discharged to the river remains at 53 gallons. After carefully investigating the actual amount was calculated at 7,080 gallons with 53 gallons of the total seeping to the storm drain.

On Monday March 23, 2015 the facility experienced a utility power failure. The cause of the utility power failure is unknown and lasted approximately 10-15 seconds. When there is a power interruption the system is designed to secure flow to the UV station by a spring loaded pneumatic valve which when power is lost releases a solenoid immediately preventing any undisinfected tertiary effluent from reaching the river. The flow that is normally processed through the UV disinfection system is directed to the Percolation Pond Station which allows

tertiary effluent to gravity flow to the North Percolation Ponds until power is restored either by the facility backup generators or utility power. When power is restored the control system sends a command to ramp up the South Percolation Pond Station pumps and immediately operate in level control and divert all the flow to the South Percolation Ponds. The South Percolation Pond Station Pumps on this day was operating at a designated flow to the South Ponds of 4 MGD. When the intermittent utility power loss was experienced and utility power was resumed communication to the Percolation Pond Pump Station was lost. The UV Programmable Logic Controller, (PLC) system did not communicate with the South Percolation Pond Pump Station preventing the station from operating in level control and ramp up the pumps as designed. Due to this failure the flow backed up the Aqua Diamond Tertiary Filters causing the flocculator basins to overflow. The secondary effluent which overflowed the flocculation basins was contained on the west side of the Aqua Diamond Tertiary Filters (See Figure 1), and at the end of the street between the UV Disinfection System and Aqua Diamond Tertiary Filter structures (See Figure 2). A trickle of secondary effluent was discovered at 12:30 leaving the plant via the storm drain discharge leading to the river and ended at 1300 (See Figure 3). It was estimated to be discharging at 3 gpm to start and down to .5 gpm when the area on the street was vactored clean. This averages to 1.75 gpm for 30 minutes or 53 gallons.

Samples were collected at the area of release to the receiving waters into the Mojave River. Staff is currently awaiting results from the contract laboratory.

Staff used the vactor truck to clean the street and the area west of the Aqua Diamond Tertiary filter. Both areas were sanitized with (HTH) at the affected areas within the plant.

Notification:

Staff notified John Morales of LRWQCB at approximately 12:50 and the Office of Emergency Services (OES) San Bernardino County Public Health Duty Officer Mr. Tracy Stocks at approximately 13:05 on March 23, 2015. Staff spoke with John Morales on March 24, 2015 at 13:27 regarding the inadvertent overflow. A written statement was submitted to the Regional Water Quality Control Board via email to spillreportRX@waterboards.ca.gov on Tuesday March 24, 2015 at 12:43 pm.

Cause:

The secondary effluent inadvertent overflow was caused by the communication failure to the South Percolation Pond Station. The communication failure was the result of an intermittent utility power outage. The South Percolation Pond pumps failed to communicate with the PLC to increase in speed diverting the flow to the south ponds. This communication normally remains when a black or brown out occurs. VVWRA experiences many of these power failures and the system has responded correctly in many past occurrences. The inability of the South Percolation Pond pumps to handle the increase of flow backed up the flocculator basins causing the inadvertent overflow.

Action:

The inadvertent overflow was stopped by controlling the South Percolation pumps in hand and increasing the pumping rate to the South Ponds. The scum troughs were also opened at the Aqua Diamond Tertiary Filters to relieve flow to the South Percolation Pond Station. Once the flow was managed and the inadvertent overflow was stopped the cleanup began. Operations took measurements of the inadvertent overflow and estimated the amount. Maintenance was notified and the vactor truck was dispatched to the inadvertent overflow site. At 1230 the discharge to the

river was discovered. The storm water sample kit was used to collect the samples to the Mojave River (lab data attached). Once the inadvertent overflow was cleaned up at the affected area the seepage to the river subsided.

The SCADA system was checked and Operations discovered the South Percolation Pond Station did not receive the signal to operate on level control. After resetting the network communications the system recognized the closed valve condition and the PLC implemented the appropriate control action, ramping up the south percolation pond pumps.

Remediation:

The following were identified:

1. The South Percolation Pond station has been implemented with an additional program to automatically increase the VFD when a predetermined level is reached. This program will act as a backup if communication is ever lost to the South Percolation Pond station.
   a. The South Percolation Pond station currently has a program which automatically shuts off the flow to the UV station and puts the South Percolation Pond pumps in level control and automatically increases the speed of the pumps. The new program will act as a backup if this program fails. This program was completed on Wednesday March 27, 2015 the SCADA control screens where updated on March 27, 2015. Training was conducted for the Operations group March 27, 2015 as well.

2. A redundant float system will be installed which will function as a redundant failsafe to the above program. The float system will be programmed to engage in a "High-High" condition. Once the float indicator is physically tripped by the water level it will engage the South Percolation Pond pumps to increase in speed and lower the level to normal operating levels. This is scheduled for the week of April 6th 2015.

3. Replace the failed switch with a new device and replace the UPS with a new model. Additionally, I have scheduled the UPS and the switch in the Reclaimed PLC changed as well. This equipment did not fail, however in the course of due diligence I have identified these as a potential point of failure in the future. This work is schedule for Tuesday April 21, 2015 during a scheduled plant power outage.

4. Due to the frequency of power outages which occur at the VVWRA facility a complete audit of the SCADA network to assist in identifying the potential points of failure will be used to create a SCADA network and system upgrade plan. This is scheduled for the 2nd quarter of the 2015/2016 fiscal year.

5. Additionally, staff will be implementing a third party service to monitor and maintain all UPS systems currently being utilized for SCADA emergency backup power. This will be scheduled to begin in the 1st quarter of the 2015/2016 fiscal year.

6. The affected storm drain where the seep occurred to the river was excavated and blind flanged. (See Figure 4).

If you should have any questions, please contact me.

Respectfully Submitted
Daniel Villanueva
Daniel Villanueva
Operations Supervisor

Figure 1 West Side of Flocculators

Figure 2 Secondary Effluent Contained

Figure 3

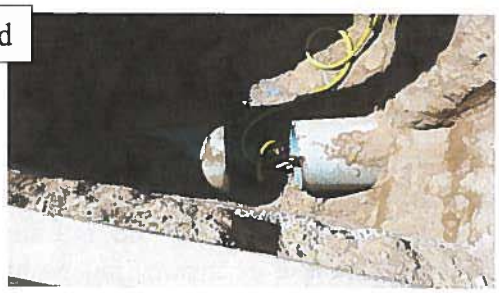

Figure 4 Storm Drained
Cut and Plugged. This will be Blind Flanged.

E.S.BABCOCK&Sons,Inc.
Environmental Laboratories est 1906

6100 Quail Valley Ct.
Riverside, CA 92507
Ph:951.653.3351
Fx:951.653.1662
www.babcocklabs.com

element DATASYSTEM

Results for B5C2434-01

Back To:
Work Order
Sample Analysis
< 01 >

Victor Valley Reclamation Authority
20111 Shay Road
Victorville, CA 92394

Project: VVWRA-Stormwater PS Discharge
Project Number: [none]
Project Manager: Lorenzo Rodriguez

Reported:
3/31/2015 3:14:20 PM

150323-11 Runoff Pump Station Discharge South Discharge Point to Mojave River Grab
B5C2434-01 (Liquid)
Babcock Laboratories, Inc.

Solids

Analyte	Result	Reporting Limit	Units	Batch	Prepared	Analyzed	Analysis	Notes
Total Dissolved Solids	**490**	20	mg/L	5C25087	03/25/15	03/25/15	SM 2540C	

Aggregate Organic Compounds

Analyte	Result	Reporting Limit	Units	Batch	Prepared	Analyzed	Analysis	Notes
Oil & Grease (HEM)	ND	2.8	mg/L	5C24130	03/24/15	03/24/15	EPA 1664A	
Total Organic Carbon	**16**	0.70	"	5C26044	03/26/15	03/26/15	SM 5310B	

Metals and Metalloids

Analyte	Result	Reporting Limit	Units	Batch	Prepared	Analyzed	Analysis	Notes
Silver	ND	10	ug/L	5C26010	03/26/15	03/26/15	EPA 200.8	
Arsenic	ND	5.0	"	"	"	"	"	
Barium	**37**	20	"	"	"	"	"	
Beryllium	ND	10	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	
Cobalt	ND	10	"	"	"	"	"	
Total Chromium	ND	20	"	"	"	"	"	
Copper	**12**	10	"	"	"	"	"	
Mercury	ND	0.20	"	"	"	"	"	
Molybdenum	ND	10	"	"	"	"	"	
Nickel	ND	20	"	"	"	"	"	
Lead	ND	10	"	"	"	"	"	

Antimony	ND	10	"	"	"	"	"
Selenium	ND	5.0	"	"	"	"	"
Thallium	ND	200	"	"	"	"	"
Vanadium	**15**	10	"	"	"	"	"
Zinc	**68**	10	"	"	"	"	"

Organochlorine Pesticides and PCBs by EPA 608

Analyte	Result	Reporting Limit	Units	Batch	Prepared	Analyzed	Analysis	Notes
4,4'-DDD	ND	0.16	ug/L	5C25070	03/25/15	03/26/15	EPA 608	
4,4'-DDE	ND	0.057	"	"	"	"	"	
4,4'-DDT	ND	0.17	"	"	"	"	"	
a-BHC	ND	0.043	"	"	"	"	"	
Aldrin	ND	0.057	"	"	"	"	"	
Aroclor 1016	ND	1.4	"	"	"	"	"	
Aroclor 1221	ND	1.4	"	"	"	"	"	
Aroclor 1232	ND	1.4	"	"	"	"	"	
Aroclor 1242	ND	1.4	"	"	"	"	"	
Aroclor 1248	ND	1.4	"	"	"	"	"	
Aroclor 1254	ND	1.4	"	"	"	"	"	
Aroclor 1260	ND	1.4	"	"	"	"	"	
b-BHC	ND	0.086	"	"	"	"	"	
Chlordane	ND	0.14	"	"	"	"	"	
d-BHC	ND	0.13	"	"	"	"	"	
Dieldrin	ND	0.029	"	"	"	"	"	
Endosulfan I	ND	0.20	"	"	"	"	"	
Endosulfan II	ND	0.057	"	"	"	"	"	
Endosulfan Sulfate	ND	0.94	"	"	"	"	"	
Endrin	ND	0.086	"	"	"	"	"	
Endrin Aldehyde	ND	0.33	"	"	"	"	"	
Heptachlor	ND	0.014	"	"	"	"	"	
Heptachlor Epoxide	ND	0.014	"	"	"	"	"	
Lindane	ND	0.057	"	"	"	"	"	
Methoxychlor	ND	2.6	"	"	"	"	"	
Toxaphene	ND	1.4	"	"	"	"	"	
Decachlorobiphenyl [surr]	*28.0%*	(5 - 138)		"	"	"	"	

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Victor Valley Wastewater Reclamation Authority
River and Stormwater Quarterly Inspection and Sampling Report

Dry Season Inspections: May 1st to September 31st

Wet Season Inspections: October 1st to April 30th

Wet season inspections shall be made during the first hour of one storm event – per month – which occurs during normal business hours and which produces stormwater discharge from the flood gate located at the south discharge point.

Report Date: 7-7-14

Print Name: Bobby Hesse Signature:

Stormwater Monitoring

South Discharge Point

Time of Observation: 1058 ☑ AM ☐ PM

Parameter:	Observation:	
Floating Material:	☐ Present	☑ Not Present
Oils & Grease:	☐ Present	☑ Not Present
Foam:	☐ Present	☑ Not Present
Odor:	☐ Present	☑ Not Present
Color:	☐ Present	☑ Not Present

Other Observations / Comments:

Upstream Sampling Station

Time of Observation: 1458 ☐ AM ☑ PM

Parameter:	Observation / Concentration:	
Floating Material:	☐ Present	☑ Not Present
Oils & Grease:	☐ Present	☑ Not Present
Foam:	☐ Present	☑ Not Present
Odor:	☐ Objectionable	☑ Not Objectionable
Color:	☐ Present	☑ Clear
Dissolved Oxygen:	mg/L: 5.11	Temperature (C): 26.9
pH:	pH Units: 2.78	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

Downstream Sampling Station

Time of Observation: 1330 ☐ AM ☑ PM

Parameter:	Observation / Concentration:	
Floating Material: NO	☐ Present	☑ Not Present
Oils & Grease:	☐ Present	☑ Not Present
Foam:	☐ Present	☑ Not Present
Odor:	☐ Objectionable	☐ Not Objectionable
Color:	☐ Present	☑ Clear
Dissolved Oxygen:	mg/L: 5.73	Temperature (C): 23.9
pH:	pH Units: 7.03	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

Victor Valley Wastewater Reclamation Authority
River and Stormwater Quarterly Inspection and Sampling Report

Dry Season Inspections: May 1st to September 31st

Wet Season Inspections: October 1st to April 30th

Wet season inspections shall be made during the first hour of one storm event – per month – which occurs during normal business hours and which produces stormwater discharge from the flood gate located at the south discharge point.

Report Date: 10/7/14

Print Name: Chad Steinwand / Salvador Cardenas Signature: [signature]

Stormwater Monitoring

South Discharge Point

Time of Observation: 1230 ☐ AM ☑ PM

Parameter:	Observation:	
Floating Material:	☐ Present	☑ Not Present
Oils & Grease:	☐ Present	☑ Not Present
Foam:	☒ Present	☑ Not Present
Odor:	☐ Present	☑ Not Present
Color:	☐ Present	☑ Not Present

Other Observations / Comments:

Upstream Sampling Station

Time of Observation: 1251 ☐ AM ☑ PM

Parameter:	Observation / Concentration:	
Floating Material:	☐ Present	☑ Not Present
Oils & Grease:	☐ Present	☑ Not Present
Foam:	☐ Present	☑ Not Present
Odor:	☐ Objectionable	☑ Not Objectionable
Color:	☐ Present	☑ Clear
Dissolved Oxygen:	mg/L: 6.67	Temperature (C): 20.3
pH:	pH Units: 7.76	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

Downstream Sampling Station

Time of Observation: 1156 ☑ AM ☐ PM

Parameter:	Observation / Concentration:	
Floating Material:	☑ Present	☐ Not Present
Oils & Grease:	☐ Present	☑ Not Present
Foam:	☐ Present	☑ Not Present
Odor:	☐ Objectionable	☑ Not Objectionable
Color:	☐ Present	☑ Clear
Dissolved Oxygen:	mg/L: 5.68	Temperature (C): 19.1
pH:	pH Units: 7.44	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

Victor Valley Wastewater Reclamation Authority
River and Stormwater Quarterly Inspection and Sampling Report

Dry Season Inspections: May 1st to September 31st

Wet Season Inspections: October 1st to April 30th

Wet season inspections shall be made during the first hour of one storm event – per month – which occurs during normal business hours and which produces stormwater discharge from the flood gate located at the south discharge point.

Report Date: 1-13-15

Print Name: Bobby Hasse Salvador Garces Signature: BH

Stormwater Monitoring

South Discharge Point

Time of Observation: 0750 ☑ AM ☐ PM

Parameter:	Observation:	
Floating Material:	☐ Present	☑ Not Present
Oils & Grease:	☐ Present	☑ Not Present
Foam:	☐ Present	☑ Not Present
Odor:	☐ Present	☑ Not Present
Color:	☐ Present	☑ Not Present

Other Observations / Comments:

Upstream Sampling Station (BH)

Time of Observation: ~~1137~~ 1140 ☑ AM ☐ PM

Parameter:	Observation / Concentration:	
Floating Material:	☐ Present	☑ Not Present
Oils & Grease:	☐ Present	☑ Not Present
Foam:	☐ Present	☑ Not Present
Odor:	☐ Objectionable	☑ Not Objectionable
Color:	☐ Present	☑ Clear
Dissolved Oxygen:	mg/L: 9.39	Temperature (C): 10.7
pH:	pH Units: 7.82	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

Downstream Sampling Station

Time of Observation: 1024 ☑ AM ☐ PM

Parameter:	Observation / Concentration:	
Floating Material:	☑ Present	☐ Not Present
Oils & Grease:	☐ Present	☑ Not Present
Foam:	☐ Present	☑ Not Present
Odor:	☐ Objectionable	☑ Not Objectionable
Color:	☐ Present	☑ Clear
Dissolved Oxygen:	mg/L: 7.14	Temperature (C): 13.4
pH:	pH Units: 7.51	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

Victor Valley Wastewater Reclamation Authority
River and Stormwater Quarterly Inspection and Sampling Report

Dry Season Inspections: May 1st to September 31st

Wet Season Inspections: October 1st to April 30th

Wet season inspections shall be made during the first hour of one storm event – per month – which occurs during normal business hours and which produces stormwater discharge from the flood gate located at the south discharge point.

Report Date: 4-7-15

Print Name: Salvador Carles Signature:

Stormwater Monitoring

South Discharge Point

Time of Observation: 0958 [X] AM [ ] PM

Parameter:	Observation:	
Floating Material:	[ ] Present	[X] Not Present
Oils & Grease:	[ ] Present	[X] Not Present
Foam:	[X] Present	[ ] Not Present
Odor:	[ ] Present	[X] Not Present
Color:	[ ] Present	[X] Not Present

Other Observations / Comments:

Upstream Sampling Station

Time of Observation: 1216 [ ] AM [X] PM

Parameter:	Observation / Concentration:	
Floating Material:	[X] Present	[ ] Not Present
Oils & Grease:	[ ] Present	[X] Not Present
Foam:	[ ] Present	[X] Not Present
Odor:	[ ] Objectionable	[X] Not Objectionable
Color:	[ ] Present	[X] Clear
Dissolved Oxygen: ~~8.72~~	mg/L: 8.72	Temperature (C): 14.5 °C
pH:	pH Units: 7.91	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

Downstream Sampling Station

Time of Observation: 1132 [X] AM [ ] PM

Parameter:	Observation / Concentration:	
Floating Material:	[X] Present	[ ] Not Present
Oils & Grease:	[ ] Present	[X] Not Present
Foam:	[ ] Present	[X] Not Present
Odor:	[ ] Objectionable	[X] Not Objectionable
Color:	[ ] Present	[X] Clear
Dissolved Oxygen:	mg/L: 2.48	Temperature (C): 14.5
pH:	pH Units: 7.60	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

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ANNUAL REPORT

FORM 4-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

SIDE A

- Storm water discharge visual observations are required for at least one storm event per month between October 1 and May 31.
- Visual observations must be conducted during the first hour of discharge at all discharge locations.
- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.
- Indicate "None" in the first column of this form if you did not conduct a monthly visual observation.
- Make additional copies of this form as necessary.
- Until a monthly visual observation is made, record any eligible storm events that do not result in a storm water discharge and note the date, time, name, and title of who observed there was no storm water discharge.

Observation Date: October ____ 2014 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1	#2	#3	#4
	Observation Time	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: November____ 2014 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1	#2	#3	#4
	Observation Time	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: December____ 2014 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1	#2	#3	#4
	Observation Time	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: January____ 2015 Observers Name: Keith Lueken Title: Operator Signature: See attached reports	Drainage Location Description	#1 Stormwater South Discharge Point	#2	#3	#4
	Observation Time	08:05 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Time Discharge Began	08:05 ☐ P.M. ☒ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☒	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐

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ANNUAL REPORT

SIDE B

FORM 4-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

DATE/TIME OF OBSERVATION (From Reverse Side)	DRAINAGE AREA DESCRIPTION EXAMPLE: Discharge from material storage Area #2	DESCRIBE STORM WATER DISCHARGE CHARACTERISTICS Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	IDENTIFY AND DESCRIBE SOURCE(S) OF POLLUTANTS EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	DESCRIBE ANY REVISED OR NEW BMPs AND THEIR DATE OF IMPLEMENTATION
1/11/15 08:05 ☒ AM ☐ PM	Stormwater South Discharge Point	Floating material and Color were observed. No oil/grease, foam, and odor present during this discharge.	Not Applicable	Not Applicable
_____ ____ ☐ AM ☐ PM				
_____ ____ ☐ AM ☐ PM				
_____ ____ ☐ AM ☐ PM				
_____ ____ ☐ AM ☐ PM				

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ANNUAL REPORT

FORM 4 (Continued)-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

SIDE A

- Storm water discharge visual observations are required for at least one storm event per month between October 1 and May 31.
- Visual observations must be conducted during the first hour of discharge at all discharge locations.
- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.
- Indicate "None" in the first column of this form if you did not conduct a monthly visual observation.
- Make additional copies of this form as necessary.
- Until a monthly visual observation is made, record any eligible storm events that do not result in a storm water discharge and note the date, time, name, and title of who observed there was no storm water discharge.

Observation Date: February ____ 2015 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1	#2	#3	#4
	Observation Time	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: March ____ 2015 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1	#2	#3	#4
	Observation Time	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: April ____ 2015 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1	#2	#3	#4
	Observation Time	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐
Observation Date: May ____ 2015 Observers Name: _____ Title: _____ Signature: _____	Drainage Location Description	#1	#2	#3	#4
	Observation Time	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Time Discharge Began	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.	☐ P.M. ☐ A.M.
	Were Pollutants Observed (If yes, complete reverse side)	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐

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ANNUAL REPORT

SIDE B

FORM 4 (Continued)-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

DATE/TIME OF OBSERVATION (From Reverse Side)	**DRAINAGE AREA DESCRIPTION** EXAMPLE: Discharge from material storage Area #2	**DESCRIBE STORM WATER DISCHARGE CHARACTERISTICS** Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	**IDENTIFY AND DESCRIBE SOURCE(S) OF POLLUTANTS** EXAMPLE: Oil sheen caused by oil dripped by trucks in vehicle maintenance area.	**DESCRIBE ANY REVISED OR NEW BMPs AND THEIR DATE OF IMPLEMENTATION**
_____ ____☐ AM ☐ PM				
_____ ____☐ AM ☐ PM				
_____ ____☐ AM ☐ PM				
_____ ____☐ AM ☐ PM				
_____ ____☐ AM ☐ PM				

Victor Valley Wastewater Reclamation Authority
River and Stormwater Quarterly Inspection and Sampling Report

Dry Season Inspections: June 1st to September 30th

Wet Season Inspections: October 1st to May 31st

Wet season inspections shall be made during the first hour of one storm event – per month – which occurs during normal business hours and which produces stormwater discharge from the flood gate located at the south discharge point.

Report Date: 11/11/15

Print Name: Keith Lueken Signature:

Stormwater Monitoring

South Discharge Point

Time of Observation: 0805 [X] AM [ ] PM

Parameter:	Observation:	
Floating Material:	[X] Present	[ ] Not Present
Oils & Grease:	[ ] Present	[X] Not Present
Foam:	[ ] Present	[X] Not Present
Odor:	[ ] Present	[X] Not Present
Color:	[X] Present	[ ] Not Present

Other Observations / Comments: very minimal flow

Upstream Sampling Station

Time of Observation: [ ] AM [ ] PM

Parameter:	Observation / Concentration:	
Floating Material:	[ ] Present	[ ] Not Present
Oils & Grease:	[ ] Present	[ ] Not Present
Foam:	[ ] Present	[ ] Not Present
Odor:	[ ] Objectionable	[ ] Not Objectionable
Color:	[ ] Present	[ ] Clear
Dissolved Oxygen:	mg/L:	Temperature (C):
pH:	pH Units:	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

Downstream Sampling Station

Time of Observation: [ ] AM [ ] PM

Parameter:	Observation / Concentration:	
Floating Material:	[ ] Present	[ ] Not Present
Oils & Grease:	[ ] Present	[ ] Not Present
Foam:	[ ] Present	[ ] Not Present
Odor:	[ ] Objectionable	[ ] Not Objectionable
Color:	[ ] Present	[ ] Clear
Dissolved Oxygen:	mg/L:	Temperature (C):
pH:	pH Units:	
Residual Chlorine:	mg/L:	
Turbidity:	NTU:	

Other Observations / Comments:

2014-2015

ANNUAL REPORT

SIDE A

FORM 5-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

EVALUATION DATE: 6/2015 INSPECTOR NAME: Gilbert Perez TITLE: Director of Operations SIGNATURE: [signature]

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Hazardous Material Storage, Engine Lube Maintenance Room Storage	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☒ NO ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☒ NO	If yes, to either question, complete the next two columns of this form		
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation

2014-2015

ANNUAL REPORT

SIDE B

FORM 5 (Continued)-ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

EVALUATION DATE: ____________ **INSPECTOR NAME:** ______________________________ **TITLE:** ______________________________ **SIGNATURE:** ______________________________

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form		
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐YES ☐NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐YES ☐NO			

Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

Plant Address: 20111 Shay Road · Victorville, CA 92394 · TEL: (760) 246-8638 FAX: (760) 246-5440

Website: www.vvwra.com E-mail: mail@vvwra.com

California Department of Public Health - Environmental Laboratory Accreditation Program Certificate # 2561

Laboratory Analysis Report

Sample Location:	Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab
Laboratory ID #:	140907-11
Discharge Date/Time:	09/07/2014 1441
Collection Date/Time:	09/07/2014 1441
Collection Method:	Grab
Sample Collected By:	Bobby Hesse
Sample Comments:	See Attached Inspection and Sampling Report.

Constituent	Result	Units	Method	R.L.	Analyst
pH	7.59	pH Units	SM 4500-H+	N/A	CM
Conductivity	319	µS/cm	SM 2510-B	1.0 µS/cm	CM
Total Suspended Solids	2110	mg/L	SM 2540-D	1.0 mg/L	CW/LR
Total Dissolved Solids	412	mg/L	SM 2540-C	1.0 mg/L	LR

Analyst Comments: Additional analyses conducted by E.S. Babcock & Sons Laboratory. See attached report.

Lorenzo Rodriguez, Laboratory Supervisor

Reviewed By:

BABCOCK Laboratories, Inc.
The Standard of Excellence for Over 100 Years

Client Name:	Victor Valley Reclamation Authority	Analytical Report:	Page 1 of 4
Contact:	Gina Cloutier	Project Name:	VVWRA-Stormwater PS Dischar
Address:	20111 Shay Road Victorville, CA 92394	Project Number:	VVWRA Stormwater P.S. Discharge Sampling/Analysi
		Work Order Number:	**B4I1017**
Report Date:	24-Sep-2014	Received on Ice (Y/N):	Yes Temp: 12 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

Lab Sample #	Client Sample ID	Matrix	Date Sampled	By	Date Submitted	By
B4I1017-01	140907-11 Stormwater Pump Station Discharge South Point to Mojave River Grab	Liquid	09/07/14 14:41	Bobby Hesse	09/09/14 14:45	Courier (J. Mendez)

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Client Name: Victor Valley Reclamation Authority
Contact: Gina Cloutier
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 24-Sep-2014

Project Name: VVWRA-Stormwater PS Discha
Project Number: VVWRA Stormwater P.S. Discharge Sampling/Analysi
Work Order Number: B4I1017
Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B4I1017-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
140907-11 Stormwater Pump Station Discharge South Point to Mojave River Grab	Liquid	09/07/14 14:41	09/09/14 14:45

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Aggregate Organic Compounds							
Total Organic Carbon	110	3.5	mg/L	SM 5310B	09/22/14 23:55	mel	
Oil & Grease (HEM)	2.9	2.6	mg/L	EPA 1664A	09/17/14 12:50	hgg	
Total Petroleum Hydrocarbons	ND	1.0	mg/L	EPA 418.1	09/17/14 16:20	naa	
Metals and Metalloids							
Antimony	ND	10	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Arsenic	9.8	5.0	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Barium	270	40	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Beryllium	ND	10	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Cadmium	ND	2.0	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Total Chromium	29	20	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Cobalt	12	10	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Copper	180	20	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Lead	52	20	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Mercury	0.22	0.20	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Molybdenum	10	10	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Nickel	41	40	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Selenium	ND	5.0	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Silver	ND	10	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Thallium	ND	200	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Vanadium	71	20	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Zinc	860	20	ug/L	EPA 200.8	09/15/14 16:15	ERA	
Organochlorine Pesticides and PCBs by EPA 608							
4,4'-DDD	ND	0.11	ug/L	EPA 608	09/17/14 06:56	sbart	
4,4'-DDE	ND	0.040	ug/L	EPA 608	09/17/14 06:56	sbart	
4,4'-DDT	ND	0.12	ug/L	EPA 608	09/17/14 06:56	sbart	
a-BHC	ND	0.030	ug/L	EPA 608	09/17/14 06:56	sbart	
Aldrin	ND	0.040	ug/L	EPA 608	09/17/14 06:56	sbart	
Aroclor 1016	ND	1.0	ug/L	EPA 608	09/17/14 06:56	sbart	
Aroclor 1221	ND	1.0	ug/L	EPA 608	09/17/14 06:56	sbart	
Aroclor 1232	ND	1.0	ug/L	EPA 608	09/17/14 06:56	sbart	
Aroclor 1242	ND	1.0	ug/L	EPA 608	09/17/14 06:56	sbart	

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Client Name: Victor Valley Reclamation Authority
Contact: Gina Cloutier
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 24-Sep-2014

Project Name: VVWRA-Stormwater PS Discha
Project Number: VVWRA Stormwater P.S. Discharge Sampling/Analysi
Work Order Number: B4I1017
Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B4I1017-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
140907-11 Stormwater Pump Station Discharge South Point to Mojave River Grab	Liquid	09/07/14 14:41	09/09/14 14:45

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Organochlorine Pesticides and PCBs by EPA 608							
Aroclor 1248	ND	1.0	ug/L	EPA 608	09/17/14 06:56	sbart	
Aroclor 1254	ND	1.0	ug/L	EPA 608	09/17/14 06:56	sbart	
Aroclor 1260	ND	1.0	ug/L	EPA 608	09/17/14 06:56	sbart	
b-BHC	ND	0.060	ug/L	EPA 608	09/17/14 06:56	sbart	
Chlordane	ND	0.10	ug/L	EPA 608	09/17/14 06:56	sbart	
d-BHC	ND	0.090	ug/L	EPA 608	09/17/14 06:56	sbart	
Dieldrin	ND	0.020	ug/L	EPA 608	09/17/14 06:56	sbart	
Endosulfan I	ND	0.14	ug/L	EPA 608	09/17/14 06:56	sbart	
Endosulfan II	ND	0.040	ug/L	EPA 608	09/17/14 06:56	sbart	
Endosulfan Sulfate	ND	0.66	ug/L	EPA 608	09/17/14 06:56	sbart	
Endrin	ND	0.060	ug/L	EPA 608	09/17/14 06:56	sbart	
Endrin Aldehyde	ND	0.23	ug/L	EPA 608	09/17/14 06:56	sbart	
Heptachlor	ND	0.010	ug/L	EPA 608	09/17/14 06:56	sbart	
Heptachlor Epoxide	ND	0.010	ug/L	EPA 608	09/17/14 06:56	sbart	
Lindane	ND	0.040	ug/L	EPA 608	09/17/14 06:56	sbart	
Methoxychlor	ND	1.8	ug/L	EPA 608	09/17/14 06:56	sbart	
Toxaphene	ND	1.0	ug/L	EPA 608	09/17/14 06:56	sbart	
Surrogate: Decachlorobiphenyl	54.1	% 5-138		EPA 608	09/17/14 06:56	sbart	

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Client Name: Victor Valley Reclamation Authority
Contact: Gina Cloutier
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 24-Sep-2014

Project Name: VVWRA-Stormwater PS Discha
Project Number: VVWRA Stormwater P.S. Discharge Sampling/Analysi
Work Order Number: B4I1017
Received on Ice (Y/N): Yes Temp: 12 °C

Notes and Definitions

ND:	Analyte NOT DETECTED at or above the Method Detection Limit **(if MDL is reported)**, otherwise at or above the Reportable Detection Limit (RDL)
NR:	Not Reported
RDL:	Reportable Detection Limit
MDL:	Method Detection Limit
* / '" :	NELAP does not offer accreditation for this analyte/method/matrix combination

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.

Digitally signed by: Cindy Waddell
DN: CN = Cindy Waddell C = US O = Babcock Laboratories OU = Project Manager Assistant
Date: 2014.09.24 17:03:27 -07'00'

cc:

e-Short_No Alias

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Client Name: Victor Valley Reclamation Authority
Contact: Gina Cloutier
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 24-Sep-2014

Analytical Report: Page 1 of 1
Project Name: VVWRA-Stormwater PS Discha
Project Number: VVWRA Stormwater P.S. Discharge Sampling/Analysi
Work Order Number: B4I1017
Received on Ice (Y/N): Yes Temp: 12 °C

SUBCONTRACT LABORATORY CHAIN OF CUSTODY & ANALYSIS REQUEST RECORD

Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

Plant Address: 20111 Shay Road · Victorville, CA 92394 · TEL: (760) 246-8638 FAX: (760) 246-5440
Administration Office Address: 15776 Main Street, Suite 3 · Hesperia, CA 92345 · TEL: (760) 948-9849
Website: www.vvwra.com E-mail: gcloutier@vvwra.com

Project Name: VVWRA Stormwater P.S. Discharge Sampling/Analysis
Project Contact: Gina Cloutier (760) 246-8638 ext. 216
Sampler Name: BOBBY HESSE
Sampler Signature:

VVWRA ID #	Sample Location/Description	Sample Date	Sample Time	Sample Type: Grab	Sample Type: Composite	Laboratory Analyses Requested: Total organic carbon	Oil and Grease, 1664	Heavy Metals *	Pesticides - EPA 608	Total Petroleum Hydrocarbons, 418.1	Total # of Containers	Sample Preservation Methods: Refrigeration	H_2SO_4 pH<2	HNO_3 pH<2	$ZnC_2H_3O_2$	NaOH pH>12	HCl	Sample Matrix (WW, DW, GW, SG): Misc water
1409054-11	Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab	9-7-14	1441	X		X	X	X	X	X	5	1	3	1				

Relinquished By (Sign):	Date/Time:	Received By (Sign):	Relinquished By (Sign):	Date/Time:	Received By (Sign):
Print: BOBBY HESSE	9-7-14 1455	Print: Cindy Myers	Print: Cindy Myers	9-9-14 12:20	Print: J. Meader
Company:		Company: VVWRA	Company: VVWRA		Company: DE
Relinquished By (Sign):	Date/Time:	Received By (Sign):	Relinquished By (Sign):	Date/Time:	Received By (Sign):
Print: J. Meader	9-9-14 1445	Print:	Print:		Print:
Company: DE		Company:	Company:		Company:

Sample Condition Upon Receipt by Laboratory:
Samples Received on Ice? (Yes) No Temperature 12°C
Samples Received Intact? (Yes) No

Laboratory Notes
*Metals to include: AG, AS, BA, BE, CD, CO, CR, CU, HG, MO, NI, PB, SB, SE, TL, V, ZN

Samples sent via courier to: E.S. Babcock Laboratories
Lab # B4I1017W

Please Fax a copy of the completed Chain of Custody document to: Gina Cloutier, VVWRA at (760) 246-5440

Stormwater Chain of Custody Template

SEP 10 2014

mailing
P.O. Box 432
Riverside, CA 92502-0432

location
6100 Quail Valley Court
Riverside, CA 92507-0704

P 951 653 3351
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CA ELAP No. 2698
EPA no. CA00102
LACSD No., 10119

Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

Plant Address: 20111 Shay Road · Victorville, CA 92394 · TEL: (760) 246-8638 FAX: (760) 246-5440

Website: www.vvwra.com E-mail: mail@vvwra.com

California Department of Public Health - Environmental Laboratory Accreditation Program Certificate # 2561

Laboratory Analysis Report

Sample Location: Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab
Laboratory ID #: 140916-20
Discharge Date/Time: 09/16/2014 1559
Collection Date/Time: 09/16/2014 1605
Collection Method: Grab
Sample Collected By: Eugene Davis
Sample Comments: See Attached Inspection and Sampling Report.

Constituent	Result	Units	Method	R.L.	Analyst
pH	7.95	pH Units	SM 4500-H+	N/A	CW
Conductivity	131.8	µS/cm	SM 2510-B	1.0 µS/cm	CW
Total Suspended Solids	562	mg/L	SM 2540-D	1.0 mg/L	CM
Total Dissolved Solids	160	mg/L	SM 2540-C	1.0 mg/L	CM

Analyst Comments: Additional analyses conducted by E.S. Babcock & Sons Laboratory. See attached report.

Lorenzo Rodriguez, Laboratory Supervisor

Reviewed By:

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Client Name: Victor Valley Reclamation Authority
Contact: Gina Cloutier
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 14-Oct-2014

Analytical Report: Page 1 of 4
Project Name: VVWRA-Stormwater PS Dischar
Project Number: VVWRA Stormwater P.S. Discharge Sampling/ Analysis
Work Order Number: B4I2086
Received on Ice (Y/N): Yes Temp: 5 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

Lab Sample #	Client Sample ID	Matrix	Date Sampled	By	Date Submitted	By
B4I2086-01	140916-20 Stormwater Pump Station Discharge South Point to Mojave River Grab	Liquid	09/16/14 16:05	Eugene Davis	09/18/14 14:53	Courier (J. Mendez)

BABCOCK Laboratories, Inc.
The Standard of Excellence for Over 100 Years

Client Name: Victor Valley Reclamation Authority
Contact: Gina Cloutier
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 14-Oct-2014

Project Name: VVWRA-Stormwater PS Discha
Project Number: VVWRA Stormwater P.S. Discharge Sampling/ Analysis
Work Order Number: B4I2086
Received on Ice (Y/N): Yes Temp: 5 °C

Laboratory Reference Number
B4I2086-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
140916-20 Stormwater Pump Station Discharge South Point to Mojave River Grab	Liquid	09/16/14 16:05	09/18/14 14:53

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Aggregate Organic Compounds							
Total Organic Carbon	50	3.5	mg/L	SM 5310B	09/23/14 02:13	mel	
Oil & Grease (HEM)	ND	2.6	mg/L	EPA 1664A	09/24/14 14:36	kam	
Total Petroleum Hydrocarbons	ND	1.0	mg/L	EPA 418.1	10/09/14 13:09	naa	
Metals and Metalloids							
Antimony	ND	10	ug/L	EPA 200.8	09/24/14 17:10	ap	
Arsenic	ND	5.0	ug/L	EPA 200.8	09/24/14 17:10	ap	
Barium	150	80	ug/L	EPA 200.8	09/24/14 17:10	ap	
Beryllium	ND	10	ug/L	EPA 200.8	09/24/14 17:10	ap	
Cadmium	ND	2.0	ug/L	EPA 200.8	09/24/14 17:10	ap	
Total Chromium	20	20	ug/L	EPA 200.8	09/24/14 17:10	ap	
Cobalt	ND	10	ug/L	EPA 200.8	09/24/14 17:10	ap	
Copper	84	40	ug/L	EPA 200.8	09/24/14 17:10	ap	
Lead	32	10	ug/L	EPA 200.8	09/24/14 17:10	ap	
Mercury	ND	0.80	ug/L	EPA 200.8	09/24/14 17:10	ap	N_RLm
Molybdenum	ND	10	ug/L	EPA 200.8	09/24/14 17:10	ap	
Nickel	22	20	ug/L	EPA 200.8	09/24/14 17:10	ap	
Selenium	ND	20	ug/L	EPA 200.8	09/24/14 17:10	ap	N_RLm
Silver	ND	10	ug/L	EPA 200.8	09/24/14 17:10	ap	
Thallium	ND	200	ug/L	EPA 200.8	09/24/14 17:10	ap	
Vanadium	35	20	ug/L	EPA 200.8	09/24/14 17:10	ap	
Zinc	360	40	ug/L	EPA 200.8	09/24/14 17:10	ap	
Organochlorine Pesticides and PCBs by EPA 608							
4,4'-DDD	ND	0.11	ug/L	EPA 608	09/22/14 22:36	sbb	
4,4'-DDE	ND	0.040	ug/L	EPA 608	09/22/14 22:36	sbb	
4,4'-DDT	ND	0.12	ug/L	EPA 608	09/22/14 22:36	sbb	
a-BHC	ND	0.030	ug/L	EPA 608	09/22/14 22:36	sbb	
Aldrin	ND	0.040	ug/L	EPA 608	09/22/14 22:36	sbb	
Aroclor 1016	ND	1.0	ug/L	EPA 608	09/22/14 22:36	sbb	
Aroclor 1221	ND	1.0	ug/L	EPA 608	09/22/14 22:36	sbb	
Aroclor 1232	ND	1.0	ug/L	EPA 608	09/22/14 22:36	sbb	
Aroclor 1242	ND	1.0	ug/L	EPA 608	09/22/14 22:36	sbb	

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Client Name: Victor Valley Reclamation Authority
Contact: Gina Cloutier
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 14-Oct-2014

Project Name: VVWRA-Stormwater PS Discha
Project Number: VVWRA Stormwater P.S. Discharge Sampling/ Analysis
Work Order Number: B4I2086
Received on Ice (Y/N): Yes Temp: 5 °C

Laboratory Reference Number
B4I2086-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
140916-20 Stormwater Pump Station Discharge South Point to Mojave River Grab	Liquid	09/16/14 16:05	09/18/14 14:53

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Organochlorine Pesticides and PCBs by EPA 608							
Aroclor 1248	ND	1.0	ug/L	EPA 608	09/22/14 22:36	sbb	
Aroclor 1254	ND	1.0	ug/L	EPA 608	09/22/14 22:36	sbb	
Aroclor 1260	ND	1.0	ug/L	EPA 608	09/22/14 22:36	sbb	
b-BHC	ND	0.060	ug/L	EPA 608	09/22/14 22:36	sbb	
Chlordane	ND	0.10	ug/L	EPA 608	09/22/14 22:36	sbb	
d-BHC	ND	0.090	ug/L	EPA 608	09/22/14 22:36	sbb	
Dieldrin	ND	0.020	ug/L	EPA 608	09/22/14 22:36	sbb	
Endosulfan I	ND	0.14	ug/L	EPA 608	09/22/14 22:36	sbb	
Endosulfan II	ND	0.040	ug/L	EPA 608	09/22/14 22:36	sbb	
Endosulfan Sulfate	ND	0.66	ug/L	EPA 608	09/22/14 22:36	sbb	
Endrin	ND	0.060	ug/L	EPA 608	09/22/14 22:36	sbb	
Endrin Aldehyde	ND	0.23	ug/L	EPA 608	09/22/14 22:36	sbb	
Heptachlor	ND	0.010	ug/L	EPA 608	09/22/14 22:36	sbb	
Heptachlor Epoxide	ND	0.010	ug/L	EPA 608	09/22/14 22:36	sbb	
Lindane	ND	0.040	ug/L	EPA 608	09/22/14 22:36	sbb	
Methoxychlor	ND	1.8	ug/L	EPA 608	09/22/14 22:36	sbb	
Toxaphene	ND	1.0	ug/L	EPA 608	09/22/14 22:36	sbb	
Surrogate: Decachlorobiphenyl	29.5	% 5-138		EPA 608	09/22/14 22:36	sbb	

BABCOCK Laboratories, Inc.
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Client Name: Victor Valley Reclamation Authority
Contact: Gina Cloutier
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 14-Oct-2014

Project Name: VVWRA-Stormwater PS Discha
Project Number: VVWRA Stormwater P.S. Discharge Sampling/ Analysis
Work Order Number: B4I2086
Received on Ice (Y/N): Yes Temp: 5 °C

Notes and Definitions

N_RLm	Due to sample matrix, the reporting limit has been raised.
ND:	Analyte NOT DETECTED at or above the Method Detection Limit **(if MDL is reported)**, otherwise at or above the Reportable Detection Limit (RDL)
NR:	Not Reported
RDL:	Reportable Detection Limit
MDL:	Method Detection Limit
* / '" :	NELAP does not offer accreditation for this analyte/method/matrix combination

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.

Digitally signed by: Cindy Waddell
DN: CN = Cindy Waddell C = US O = Babcock Laboratories OU = Project Manager Assistant
Date: 2014.10.14 14:24:48 -07'00'

cc:

e-Short_No Alias

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Client Name:	Victor Valley Reclamation Authority	Analytical Report:	Page 1 of 1
Contact:	Gina Cloutier	Project Name:	VVWRA-Stormwater PS Dischai
Address:	20111 Shay Road Victorville, CA 92394	Project Number:	VVWRA Stormwater P.S. Discharge Sampling/ Analysis
		Work Order Number:	**B4I2086**
Report Date:	14-Oct-2014	Received on Ice (Y/N):	Yes Temp: 5 °C

B4I2086W SEP 19 2014

VVWRA (logo: Apple Valley • Hesperia • Victorville • SRCSA • Taking the Waste Out of Wastewater)

SUBCONTRACT LABORATORY CHAIN OF CUSTODY & ANALYSIS REQUEST RECORD

Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

Plant Address: 20111 Shay Road · Victorville, CA 92394 · TEL: (760) 246-8638 FAX: (760) 246-5440

Administration Office Address: 15776 Main Street, Suite 3 · Hesperia, CA 92345 · TEL: (760) 948-9849

Website: www.vvwra.com E-mail: gcloutier@vvwra.com

Project Name: VVWRA Stormwater P.S. Discharge Sampling/Analysis

Project Contact: Gina Cloutier (760) 246-8638 ext. 216

Sampler Name: Eugene Davis

Sampler Signature: [signature]

VVWRA ID #	Sample Location/Description	Sample Date	Sample Time	Grab	Composite	Total organic carbon	Oil and Grease, 1664	Heavy Metals *	Pesticides - EPA 608	Total Petroleum Hydrocarbons, 418.1	Total # of Containers	Refrigeration	H_2SO_4 pH<2	HNO_3 pH<2	$ZnC_2H_3O_2$	NaOH pH>12	HCl	Sample Matrix (WW, DW, GW, SG)
140916-20	Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab	9-16-14	1605	X		X	X	X	X	X	5	1	3	1				Misc water

Relinquished By (Sign):	Date/Time:	Received By (Sign):	Relinquished By (Sign):	Date/Time:	Received By (Sign):
[signature] Print: Eugene Davis Company: VVWRA	9-16-14 1616	[signature] Print: Chris Wills Company: VVWRA - Lab	[signature] Print: Chris Wills Company: VVWRA - Lab	9-18-14 1:10	[signature] Print: J. Mendez Company: DE
[signature] Print: J. Mendez Company: DE	9/18/14 1453	[signature] Print: E. Chavez Company: ESB	Print: Company:		Print: Company:

Sample Condition Upon Receipt by Laboratory:
Samples Received on Ice? (Yes) No
Samples Received Intact? (Yes) No
Temperature 5 °C

Laboratory Notes
*Metals to include: AG, AS, BA, BE, CD, CO, CR, CU, HG, MO, NI, PB, SB, SE, TL, V, ZN

Samples sent via courier to:
E.S. Babcock Laboratories
Lab # ________

Please Fax a copy of the completed Chain of Custody document to: Gina Cloutier, VVWRA at (760) 246-5440

Stormwater Chain of Custody Template

Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

Plant Address: 20111 Shay Road · Victorville, CA 92394 · TEL: (760) 246-8638 FAX: (760) 246-5440

Website: www.vvwra.com E-mail: mail@vvwra.com

California Department of Public Health - Environmental Laboratory Accreditation Program Certificate # 2561

Laboratory Analysis Report

Sample Location:	Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab
Laboratory ID #:	150323-11
Discharge Date/Time:	03/23/2015 1232
Collection Date/Time:	03/23/2015 1232
Collection Method:	Grab
Sample Collected By:	Brad Adams
Sample Comments:	See Attached Inspection and Sampling Report.

Constituent	Result	Units	Method	R.L.	Analyst
pH	7.81	pH Units	SM 4500-H+	N/A	LR
Conductivity	808	µS/cm	SM 2510-B	1.0 µS/cm	LR
Total Suspended Solids	68	mg/L	SM 2540-D	1.0 mg/L	LR

Analyst Comments: Additional analyses conducted by E.S. Babcock & Sons Laboratory. See attached report.

Lorenzo Rodriguez

Lorenzo Rodriguez, Laboratory Supervisor

Reviewed By:

BABCOCK Laboratories, Inc.
The Standard of Excellence for Over 100 Years

Client Name: Victor Valley Reclamation Authority
Contact: Lorenzo Rodriguez
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 02-Apr-2015

Project Name: VVWRA-Stormwater PS Discha
Project Number: [none]

Work Order Number: B5C2434

Received on Ice (Y/N): Yes Temp: 5 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

Sample Identification

Lab Sample #	Client Sample ID	Matrix	Date Sampled	By	Date Submitted	By
B5C2434-01	150323-11 Runoff Pump Station Discharge South Discharge Point to Mojave River Grab	Liquid	03/23/15 12:32	Brad Adams	03/24/15 14:25	Courier (J. Mendez)

BABCOCK Laboratories, Inc.
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Victorville, CA 92394

Report Date: 02-Apr-2015

Project Name: VVWRA-Stormwater PS Discha
Project Number: [none]

Work Order Number: B5C2434

Received on Ice (Y/N): Yes Temp: 5 °C

Laboratory Reference Number
B5C2434-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
150323-11 Runoff Pump Station Discharge South Discharge Point to Mojave River Grab	Liquid	03/23/15 12:32	03/24/15 14:25

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Solids							
Total Dissolved Solids	490	20	mg/L	SM 2540C	03/25/15 15:05	cdcs	
Aggregate Organic Compounds							
Total Organic Carbon	16	0.70	mg/L	SM 5310B	03/26/15 17:49	mel	
Oil & Grease (HEM)	ND	2.8	mg/L	EPA 1664A	03/24/15 22:45	mcm	
Total Petroleum Hydrocarbons	ND	1.0	mg/L	EPA 418.1	03/27/15 09:24	adh	
Metals and Metalloids							
Antimony	ND	10	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Arsenic	ND	5.0	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Barium	37	20	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Beryllium	ND	10	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Cadmium	ND	2.0	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Total Chromium	ND	20	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Cobalt	ND	10	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Copper	12	10	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Lead	ND	10	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Mercury	ND	0.20	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Molybdenum	ND	10	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Nickel	ND	20	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Selenium	ND	5.0	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Silver	ND	10	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Thallium	ND	200	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Vanadium	15	10	ug/L	EPA 200.8	03/26/15 15:21	ERA	
Zinc	68	10	ug/L	EPA 200.8	03/26/15 15:21	ERA	

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Client Name: Victor Valley Reclamation Authority
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Victorville, CA 92394

Report Date: 02-Apr-2015

Project Name: VVWRA-Stormwater PS Discha
Project Number: [none]

Work Order Number: B5C2434

Received on Ice (Y/N): Yes Temp: 5 °C

Laboratory Reference Number

B5C2434-01

Sample Description	Matrix	Sampled Date/Time	Received Date/Time
150323-11 Runoff Pump Station Discharge South Discharge Point to Mojave River Grab	Liquid	03/23/15 12:32	03/24/15 14:25

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Organochlorine Pesticides and PCBs by EPA 608							
4,4'-DDD	ND	0.16	ug/L	EPA 608	03/26/15 15:48	sbart	
4,4'-DDE	ND	0.057	ug/L	EPA 608	03/26/15 15:48	sbart	
4,4'-DDT	ND	0.17	ug/L	EPA 608	03/26/15 15:48	sbart	
a-BHC	ND	0.043	ug/L	EPA 608	03/26/15 15:48	sbart	
Aldrin	ND	0.057	ug/L	EPA 608	03/26/15 15:48	sbart	
Aroclor 1016	ND	1.4	ug/L	EPA 608	03/26/15 15:48	sbart	
Aroclor 1221	ND	1.4	ug/L	EPA 608	03/26/15 15:48	sbart	
Aroclor 1232	ND	1.4	ug/L	EPA 608	03/26/15 15:48	sbart	
Aroclor 1242	ND	1.4	ug/L	EPA 608	03/26/15 15:48	sbart	
Aroclor 1248	ND	1.4	ug/L	EPA 608	03/26/15 15:48	sbart	
Aroclor 1254	ND	1.4	ug/L	EPA 608	03/26/15 15:48	sbart	
Aroclor 1260	ND	1.4	ug/L	EPA 608	03/26/15 15:48	sbart	
b-BHC	ND	0.086	ug/L	EPA 608	03/26/15 15:48	sbart	
Chlordane	ND	0.14	ug/L	EPA 608	03/26/15 15:48	sbart	
d-BHC	ND	0.13	ug/L	EPA 608	03/26/15 15:48	sbart	
Dieldrin	ND	0.029	ug/L	EPA 608	03/26/15 15:48	sbart	
Endosulfan I	ND	0.20	ug/L	EPA 608	03/26/15 15:48	sbart	
Endosulfan II	ND	0.057	ug/L	EPA 608	03/26/15 15:48	sbart	
Endosulfan Sulfate	ND	0.94	ug/L	EPA 608	03/26/15 15:48	sbart	
Endrin	ND	0.086	ug/L	EPA 608	03/26/15 15:48	sbart	
Endrin Aldehyde	ND	0.33	ug/L	EPA 608	03/26/15 15:48	sbart	
Heptachlor	ND	0.014	ug/L	EPA 608	03/26/15 15:48	sbart	
Heptachlor Epoxide	ND	0.014	ug/L	EPA 608	03/26/15 15:48	sbart	
Lindane	ND	0.057	ug/L	EPA 608	03/26/15 15:48	sbart	
Methoxychlor	ND	2.6	ug/L	EPA 608	03/26/15 15:48	sbart	
Toxaphene	ND	1.4	ug/L	EPA 608	03/26/15 15:48	sbart	
Surrogate: Decachlorobiphenyl	28.1	% 5-138		EPA 608	03/26/15 15:48	sbart	

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Client Name: Victor Valley Reclamation Authority
Contact: Lorenzo Rodriguez
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 02-Apr-2015

Project Name: VVWRA-Stormwater PS Dischar
Project Number: [none]

Work Order Number: B5C2434

Received on Ice (Y/N): Yes Temp: 5 °C

Notes and Definitions

ND:	Analyte NOT DETECTED at or above the Method Detection Limit **(if MDL is reported)**, otherwise at or above the Reportable Detection Limit (RDL)
NR:	Not Reported
RDL:	Reportable Detection Limit
MDL:	Method Detection Limit
* / ''' :	NELAP does not offer accreditation for this analyte/method/matrix combination

Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.

Digitally signed by: Cindy Waddell
DN: CN = Cindy Waddell C = US O = Babcock Laboratories OU = Project Manager Assistant
Date: 2015.04.08 14:04:19 -07'00'

cc:

e-Short_No Alias

BABCOCK Laboratories, Inc.
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Client Name: Victor Valley Reclamation Authority
Contact: Lorenzo Rodriguez
Address: 20111 Shay Road
Victorville, CA 92394

Report Date: 02-Apr-2015

Analytical Report: Page 1 of 1
Project Name: VVWRA-Stormwater PS Discha
Project Number: [none]

Work Order Number: B5C2434

Received on Ice (Y/N): Yes Temp: 5 °C

SUBCONTRACT LABORATORY CHAIN OF CUSTODY & ANALYSIS REQUEST RECORD

Victor Valley Wastewater Reclamation Authority

A Joint Powers Authority and Public Agency of the State of California

Plant Address: 20111 Shay Road · Victorville, CA 92394 · TEL: (760) 246-8638 FAX: (760) 246-5440
Administration Office Address: 15776 Main Street, Suite 3 · Hesperia, CA 92345 · TEL: (760) 948-9849
Website: www.vvwra.com E-mail: gcloutier@vvwra.com

Project Name: VVWRA Stormwater P.S. Discharge Sampling/Analysis
Project Contact: Gina Cloutier (760) 246-8638 ext. 216
Sampler Name: BRAD ADAMS
Sampler Signature:

VVWRA ID #	Sample Location/Description	Sample Date	Sample Time	Sample Type: Grab	Sample Type: Composite	Total organic carbon	Oil and Grease, 1664	Heavy Metals *	Pesticides - EPA 608	Total Petroleum Hydrocarbons, 418.1	Total # of Containers	Sample Preservation Methods: Refrigeration	H_2SO_4, pH<2	HNO_3, pH<2	$ZnC_2H_3O_2$	NaOH pH>12	HCl	Sample Matrix (WW, DW, GW, SG)
16033-11	Stormwater Pump Station Discharge South Discharge Point to Mojave River Grab	3-23-15	1232	X		X	X	X	X	X	5	1	1					Misc water

Relinquished By (Sign): Print: Brad Adams Company: VVWRA — Date/Time: 3-23-15 1242 — Received By (Sign): Print: Lorenzo Rodriguez Company: VVWRA

Relinquished By (Sign): Print: L. Mendez Company: VVWRA — Date/Time: 3-24-15 1425 — Received By (Sign): Print: Company:

Relinquished By (Sign): Print: L. Mendez Company: DE — Date/Time: 3-24-15 12:10 — Received By (Sign): Print: L. Mendez Company: DE

Relinquished By (Sign): Print: Company: — Date/Time: — Received By (Sign): Print: Company:

Laboratory Analyses Requested

Sample Condition Upon Receipt by Laboratory:
Samples Received on Ice? (Yes) No Temperature 5 °C
Samples Received Intact? (Yes) No

Laboratory Notes
*Metals to include: AG, AS, BA, BE, CD, CO, CR, CU, HG, MO, NI, PB, SB, SE, TL, V, ZN

Samples sent via courier to: E.S. Babcock Laboratories
Lab # B5C2434 AD

MAR 24 2015

Please Fax a copy of the completed Chain of Custody document to: Gina Cloutier, VVWRA at (760) 246-5440

Stormwater Chain of Custody Template