



Victor Valley Wastewater Reclamation Authority
A Joint Powers Authority and Public Agency of the State of California
20111 Shay Road, Victorville, CA 92394
Telephone: (760) 246-8638
Fax: (760) 948-9897
E-mail: mail@vwwra.com

February 17, 2016

Ms. Lauren Fondahl
U. S. EPA – Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

RE: 2015 Annual Biosolids Monitoring Report

Dear Ms. Fondahl:

Enclosed is the annual biosolids monitoring report for calendar year 2015, as required by 40 CFR Part 503. Biosolids generated in 2015 at Victor Valley Wastewater Reclamation Authority (VWVRA) were stored on the plant site. In 2015, 1,029 dry metric tonnes were removed from the storage pad, American Organics, formerly Organic Express, Inc., a subsidiary of California Bio-Mass, Inc. hauled the biosolids to Pettigrew Farms in Lucerne Valley, California for land application.

Although there are currently no reporting requirements for the land application of Class A EQ biosolids, VWVRA does maintain records on the disposal of its Class A EQ biosolids. If Class A requirements are not met on a particular sample, the biosolids are held and retested until Class A requirements are met.

I certify under penalty of law that the vector attraction reduction requirements in 503.33(b)(7) and the pathogen reduction requirements in 503.32(a)(6) were met. These determinations have been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.

Sincerely,

Logan Olds
General Manager

Enclosures

cc: SWRCB Discharge Monitoring Report Processing Center
Patty Z. Kouyoumdjian, Executive Officer, Lahontan Regional Water Quality Control Board



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ANNUAL BIOSOLIDS MONITORING REPORT - 2015

1. GENERAL INFORMATION

Name of Generator: Victor Valley Wastewater Reclamation Authority
 Facility Address: 20151 Shay Road, Victorville, CA 92394

 Contact Person: Logan Olds, General Manager
 Telephone: (760) 246-8638

2. FACILITY INFORMATION

Name: Victor Valley Wastewater Reclamation Authority
 Location: 20151 Shay Road, Victorville, Ca 92394
 Telephone: (760) 246-8638
 NPDES Number: CA 0102822
 Influent Flow: 10.72 MGD (2015 annual average daily flow rate)

3. BIOSOLIDS INFORMATION

Treatment: Biosolids at the Victor Valley Wastewater Reclamation Authority, which are generated as primary, waste activated sludge, trucked in anaerobically digestible materials (ADM), fats, oil and grease (FOG) are thickened by dissolved air flotation, anaerobically digested, conditioned in liquid sludge storage lagoons and/or pumped to dry in soil-cement lined solar drying beds, then removed from the beds and stored on site until they achieve Class A quality. In 2015, 1,029 dry metric tonnes were delivered to Pettigrew and Martinez Farms in Lucerne Valley California for land application.

Quantity Generated: 5,547 dry metric tonnes in 2015. Of the total production 1,685 dry metric tonnes of ADM and 432 dry metric tonnes of FOG were processed.

Quantity in Storage: 12,818 dry metric tonnes as of December 31, 2015, including 172 dry metric tonnes in the storage lagoons, 2,217 dry metric tonnes class A in the solar drying beds, 4,640 dry metric tonnes class A in solar drying bed #4, and 6,818 dry metric tonnes on the dried sludge storage pad.

Monitoring & Frequency: Pathogen reduction is monitored by testing for Fecal Coliform, Helminth Ova and Enteric Virus. Each drying bed is monitored by sampling analysis, confirmed by receipt acceptable results or re-sampling before transferring to storage pad. This ensures biosolids have met 40 CFR 503 regulations before giving clearance to transfer to the facility storage pad where biosolids are clear for disposal. Biosolids that do not meet 40 CFR 503 regulations are stored in drying bed #4 where re-sampling is performed to give final clearance for disposal once regulations are met.

Sampling and testing for 40 CFR 503 Table B pollutant concentrations

was performed to each individual drying bed before relocating to disposal staging area.

Once lab results are confirmed to have met 40 CFR 503 regulations biosolids are then moved to storage pad for disposal.

Annual samples were collected December 30th, 2015. Results are included within the attached laboratory results.

Sample Type Solar drying bed dewatered cake.

Quality Class A EQ in accord with 40 CFR 503.10(c)(1).

4. LAND APPLICATION INFORMATION

Volume Land Applied = 1,029 dry metric tonnes.

VVWRA produces biosolids that generally meet Class A EQ requirements. Currently there are no rules or regulations that require record keeping or monitoring of Class A EQ materials once they leave the site. VVWRA does maintain records of off-site reuse, and VVWRA does conduct field audits of the service provider and disposal site when such reuse occurs.

5. DISPOSAL INFORMATION

Volume Disposed = 1,029 Dry Metric tonnes. All biosolids not disposed of during 2015 were held within the WWTP site on a concrete curbed pad designed for biosolids storage. American Organics, formerly Organic Express, Inc., a subsidiary of California Bio-Mass, Inc. hauled 1,029 metric tonnes to Martinez and Pettigrew Farms in Lucerne Valley, California for land application.

<u>Month</u>	<u>Volume</u>	<u>Hauler</u>	<u>Disposal Site</u>	<u>Purpose</u>
1/2015	79	Guillory Trucking	Martinez Farms Lucerne, CA 92356	Land Application
2/2015	496	Guillory Trucking	Martinez Farms Lucerne, CA 92356	Land Application
7/2015	411	Guillory Trucking	Pettigrew Farms Lucerne, CA 92356	Land Application
8/2015	43	Guillory Trucking	Pettigrew Farms Lucerne, CA 92356	Land Application

6. LABORATORY DATA
See Table B Compliance Summary attached

Table B

	June	June	June	June	June	June	Sept	Sept	Sept	Sept	Sept	Sept				
<i>DB-drying bed STP-Storage Pad</i>	<i>DB</i>	<i>DB</i>	<i>DB</i>	<i>DB</i>	<i>DB</i>	<i>DB</i>	<i>STP</i>	<i>DB</i>	<i>DB</i>	<i>DB</i>	<i>DB</i>	<i>DB</i>		<i>Annual Average</i>	<i>Annual Maximum</i>	<i>Applicable 503 Criteria²</i>
<i>DB#</i>	<i>#5</i>	<i>#6</i>	<i>#7</i>	<i>#8</i>	<i>#10</i>	<i>#11</i>		<i>#11</i>	<i>#5</i>	<i>#3</i>	<i>#2</i>	<i>#1</i>				
1	<u>Biosolids Pollutant Concentrations (mg/kg) ⁽¹⁾</u>															
Arsenic	9.4	8.8	8	8.5	8.1	11	10	10	10	10	10	10	10	9	11	75
Cadmium	2.8	1.5	1.7	1.5	1.4	1.8	5	5	5	5	5	5	5	3.1	5.0	85
Copper	250	280	240	270	240	320	190	260	260	260	190	210	249	320	4,300	
Lead	13	13	24	12	10	15	10	14	10	12	10	10	13	24	840	
Mercury	0.71	0.66	0.88	0.49	1	0.41	0.76	0.92	0.31	0.49	0.2	1	0.7	1.2	57	
Molybdenum	16	15	13	15	13	16	10	12	11	13	10	11	13	16	75	
Nickel	20	20	16	17	16	21	11	13	13	15	10	12	15	21	420	
Selenium	7.2	6.2	5.9	6.5	5.9	7.4	10	10	10	10	10	10	8.0	10.0	100	
Zinc	680	770	660	760	640	880	550	770	700	770	580	610	701	880	7,500	
-1	per 40 CFR 503.13(b)(3), Pollutant Concentrations. If multiple samples were tested in a given month maximum results are reported.															
-2	per 40 CFR 503.13(b)(1), Ceiling Concentrations															
2	<u>Pathogens</u>															
Hel Ova ⁽³⁾	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PFU ⁽⁴⁾	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
MPN ⁽⁵⁾	25	12	52	52	25	180	960	25.6	13.9	25.9	48.8	2.5	96.5	960	<1,000	
-3	Helminth Ova per 4 grams.															
-4	Plaque-forming Unit Enteric Virus per 4 grams.															
-5	Most Probable Number of Fecal Coliform per gram of total solids.															
3	<u>Vector Attraction Reduction</u>															
Solids Concentration	95	95	95	95	95	98	96	94	93	93	93	94	95	98	Solids>=90%	
*Vector Attraction Reduction (VAR) is achieved by drying stabilized solids to 90% or more before mixing with other materials.																



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

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

Biosolids Evaluation Report

Sample Location: Stage From Drying Bed #4-5 (Class A) Biosolids (6 Grab-Comp) Composite
 Sample Date: 6/8/2015 11:22
 Sample ID #: 150608-14
 Sampled By: Bobby Hesse

Pollutant	Requirement/Limit	Units	Sample Results	Result	Comments
Arsenic	41	mg/kg	9.4	PASS	
Cadmium	39	mg/kg	2.8	PASS	
Chromium, Total	1200	mg/kg	45	PASS	
Copper	1500	mg/kg	250	PASS	
Lead	300	mg/kg	13	PASS	
Mercury	17	mg/kg	0.71	PASS	
Molybdenum	18	mg/kg	16	PASS	
Nickel	420	mg/kg	20	PASS	
Selenium	36	mg/kg	7.2	PASS	
Zinc	2800	mg/kg	680	PASS	
Fecal Coliform	1000	MPN/g	25	PASS	
Enteric Viruses	1	PFU/4 g	<1	PASS	Not Detected*
Helminth Ova	1	ova/4 g	<1	PASS	Not Detected*
Salmonella	3	MPN/4 g	<0.3	PASS	Not Detected*
Babcock Labs Total Solids	Average - see below	%	95		
Bio Vir Lab Total Solids	Average - see below	%	94.2		
Average Total Solids	90	%	95	PASS	

*Constituent Not Detected in this sample, value recorded is the detection limit of the test.

Action Recommended: Acceptable for offsite disposal Move to Storage Pad

Lab Review:

Israemp Rodriguez

Operations Review:

[Signature]



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Biosolids Evaluation Report

Sample Location Stage From Drying Bed #4-7 (Class A) Biosolids (6 Grab-Comp) Composite
Sample Date 6/8/2015 11:19
Sample ID # 150608-16
Sampled By: Bobby Hesse

Pollutant	Requirement/Limit	Units	Sample Results	Result	Comments
Arsenic	41	mg/kg	8	PASS	
Cadmium	39	mg/kg	1.7	PASS	
Chromium, Total	1200	mg/kg	42	PASS	
Copper	1500	mg/kg	240	PASS	
Lead	300	mg/kg	24	PASS	
Mercury	17	mg/kg	0.88	PASS	
Molybdenum	18	mg/kg	13	PASS	
Nickel	420	mg/kg	16	PASS	
Selenium	36	mg/kg	5.9	PASS	
Zinc	2800	mg/kg	660	PASS	
Fecal Coliform	1000	MPN/g	52	PASS	
Enteric Viruses	1	PFU/4 g	<1	PASS	Not Detected*
Helminth Ova	1	ova/4 g	<1	PASS	Not Detected*
Salmonella	3	MPN/4 g	<0.3	PASS	Not Detected*
Babcock Labs Total Solids	Average - see below	%	95		
Bio Vir Lab Total Solids	Average - see below	%	94.7		
Average Total Solids	90	%	95	PASS	

*Constituent Not Detected in this sample, value recorded is the detection limit of the test.

Action Recommended:

Acceptable for offsite disposal

Move to Storage Pad

Lab Review:

Operations Review:



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Biosolids Evaluation Report

Sample Location Stage From Drying Bed #4-8 (Class A) Biosolids (6 Grab-Comp) Composite
Sample Date 6/8/2015 11:17
Sample ID # 150608-17
Sampled By: Bobby Hesse

Pollutant	Requirement/Limit	Units	Sample Results	Result	Comments
Arsenic	41	mg/kg	8.5	PASS	
Cadmium	39	mg/kg	1.5	PASS	
Chromium, Total	1200	mg/kg	45	PASS	
Copper	1500	mg/kg	270	PASS	
Lead	300	mg/kg	12	PASS	
Mercury	17	mg/kg	0.49	PASS	
Molybdenum	18	mg/kg	15	PASS	
Nickel	420	mg/kg	17	PASS	
Selenium	36	mg/kg	6.5	PASS	
Zinc	2800	mg/kg	760	PASS	
Fecal Coliform	1000	MPN/g	52	PASS	
Enteric Viruses	1	PFU/4 g	<1	PASS	Not Detected*
Helminth Ova	1	ova/4 g	<1	PASS	Not Detected*
Salmonella	3	MPN/4 g	<0.3	PASS	Not Detected*
Babcock Labs Total Solids	Average - see below	%	95		
Bio Vir Lab Total Solids	Average - see below	%	94.4		
Average Total Solids	90	%	95	PASS	

*Constituent Not Detected in this sample, value recorded is the detection limit of the test.

Action Recommended:

Acceptable for offsite disposal

Move to Storage Pad

Lab Review:

Coacmp Rodriguez

Operations Review:

[Signature]



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

Analytical Report: Page 1 of 8
 Project Name: VVWRA-Biosolids Sample - Ann
 Project Number: Routine

Report Date: 22-Jun-2015

Work Order Number: **B5F1070**
 Received on Ice (Y/N): Yes Temp: 8 °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

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>By</u>	<u>Date Submitted</u>	<u>By</u>
B5F1070-01	150608-14 Staged From Drying Bed #4 - 5 (Class A) Biosolids (6 Grab-Comp) Composite	Sludge	06/08/15 11:22	Bobby Hesse	06/09/15 13:50	Courier (Nick Ottele)
B5F1070-02	150608-15 Staged From Drying Bed #4 - 6 (Class A) Biosolids (6 Grab-Comp) Composite	Sludge	06/08/15 11:25	Bobby Hesse	06/09/15 13:50	Courier (Nick Ottele)
B5F1070-03	150608-16 Staged From Drying Bed #4 - 7 (Class A) Biosolids (6 Grab-Comp) Composite	Sludge	06/08/15 11:19	Bobby Hesse	06/09/15 13:50	Courier (Nick Ottele)
B5F1070-04	150608-17 Staged From Drying Bed #4 - 8 (Class A) Biosolids (6 Grab-Comp) Composite	Sludge	06/08/15 11:17	Bobby Hesse	06/09/15 13:50	Courier (Nick Ottele)
B5F1070-05	150608-18 Staged From Drying Bed #4 - 10 (Class A) Biosolids (6 Grab-Comp) Composite	Sludge	06/08/15 11:28	Bobby Hesse	06/09/15 13:50	Courier (Nick Ottele)
B5F1070-06	150608-19 Staged From Drying Bed #4 - 11 (Class A) Biosolids (6 Grab-Comp) Composite	Sludge	06/08/15 11:30	Bobby Hesse	06/09/15 13:50	Courier (Nick Ottele)

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

location
 6100 Quail Valley Court
 Riverside, CA 92507-0704

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



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

Analytical Report: Page 2 of 8
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: Routine

Report Date: 22-Jun-2015

Work Order Number: **B5F1070**
 Received on Ice (Y/N): Yes Temp: 8 °C

Laboratory Reference Number
B5F1070-01

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150608-14 Staged From Drying Bed #4 - 5 (Class A) Biosolids (6 Grab-Comp)	Sludge	06/08/15 11:22	06/09/15 13:50

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	180	2.1	mg/kg dry	EPA 300.0	06/12/15 01:37	ss	N_WEX
Solids							
Total Solids	95	0.10	%	SM 2540G	06/10/15 11:40	cdcs	
Nutrients							
Nitrite as N	4.0	1.1	mg/kg dry	SM 4500NO2 B	06/11/15 16:35	aam	N_WEX
Ammonia-Nitrogen	3900	530	mg/Kg* dry	SM4500NH3H	06/11/15 15:24	JMA	N_WEX
Kjeldahl Nitrogen	46000	2600	mg/kg dry	EPA 351.2	06/17/15 16:40	JMA	
Total Phosphorus	30000	21	mg/Kg* dry	EPA 6020	06/17/15 17:18	MEL	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	5.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Arsenic	9.4	5.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Barium	270	10	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Beryllium	1.7	1.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Cadmium	2.8	1.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Total Chromium	45	1.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Cobalt	4.6	1.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Copper	250	1.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Lead	13	5.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Mercury	0.71	0.42	mg/kg dry	EPA 7471A	06/16/15 23:00	ERA	
Molybdenum	16	1.0	mg/kg dry	EPA 6020	06/16/15 16:50	ams	
Nickel	20	1.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Selenium	7.2	5.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Silver	4.0	1.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Thallium	ND	25	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Vanadium	93	5.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	
Zinc	680	5.0	mg/kg dry	EPA 6020	06/16/15 23:00	ERA	

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 EPA no. CA00102



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Contact: Lorenzo Rodriguez
Address: 20111 Shay Road
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Analytical Report: Page 3 of 8
Project Name: VVRA-Biosolids Sample - Ann
Project Number: Routine

Report Date: 22-Jun-2015

Work Order Number: B5F1070

Received on Ice (Y/N): Yes Temp: 8 °C

Laboratory Reference Number
B5F1070-02

Sample Description
150608-15 Staged From Drying Bed #4 - 6 (Class A)
Biosolids (6 Grab-Comp)

Matrix
Sludge

Sampled Date/Time
06/08/15 11:25

Received Date/Time
06/09/15 13:50

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	86	2.1	mg/kg dry	EPA 300.0	06/12/15 01:48	ss	N_WEX
Solids							
Total Solids	95	0.10	%	SM 2540G	06/10/15 11:40	cdcs	
Nutrients							
Nitrite as N	ND	1.0	mg/kg dry	SM 4500NO2 B	06/11/15 16:35	aam	N_WEX
Ammonia-Nitrogen	4600	520	mg/Kg* dry	SM4500NH3H	06/11/15 15:26	JMA	N_WEX
Kjeldahl Nitrogen	56000	2600	mg/kg dry	EPA 351.2	06/17/15 16:42	JMA	
Total Phosphorus	33000	21	mg/Kg* dry	EPA 6020	06/17/15 17:21	MEL	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	5.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Arsenic	8.8	5.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Barium	300	10	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Beryllium	ND	1.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Cadmium	1.5	1.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Total Chromium	50	1.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Cobalt	3.4	1.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	NRPDo
Copper	280	1.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Lead	13	5.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Mercury	0.66	0.42	mg/kg dry	EPA 7471A	06/16/15 16:52	ams	
Molybdenum	15	1.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	NRPDo
Nickel	20	1.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Selenium	6.2	5.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Silver	3.8	1.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	NMint
Thallium	ND	25	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	
Vanadium	100	5.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	NRPDo
Zinc	770	5.0	mg/kg dry	EPA 6020	06/16/15 23:02	ERA	

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 Address: 20111 Shay Road
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Analytical Report: Page 4 of 8
 Project Name: VVWRA-Biosolids Sample - Ann
 Project Number: Routine

Report Date: 22-Jun-2015

Work Order Number: **B5F1070**
 Received on Ice (Y/N): Yes Temp: 8 °C

Laboratory Reference Number
B5F1070-03

Sample Description Matrix Sampled Date/Time Received Date/Time
 150608-16 Staged From Drying Bed #4 - 7 (Class A) Sludge 06/08/15 11:19 06/09/15 13:50
 Biosolids (6 Grab-Comp)

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	64	2.1	mg/kg dry	EPA 300.0	06/12/15 01:59	ss	N_WEX
Solids							
Total Solids	95	0.10	%	SM 2540G	06/10/15 11:40	cdcs	
Nutrients							
Nitrite as N	ND	1.1	mg/kg dry	SM 4500NO2 B	06/11/15 16:35	aam	N_WEX
Ammonia-Nitrogen	4400	530	mg/Kg* dry	SM4500NH3H	06/11/15 15:28	JMA	N_WEX
Kjeldahl Nitrogen	45000	2600	mg/kg dry	EPA 351.2	06/17/15 16:43	JMA	
Total Phosphorus	29000	21	mg/Kg* dry	EPA 6020	06/17/15 17:23	MEL	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	5.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Arsenic	8.0	5.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Barium	260	10	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Beryllium	ND	1.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Cadmium	1.7	1.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Total Chromium	42	1.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Cobalt	2.9	1.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Copper	240	1.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Lead	24	5.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Mercury	0.88	0.42	mg/kg dry	EPA 7471A	06/16/15 16:54	ams	
Molybdenum	13	1.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Nickel	16	1.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Selenium	5.9	5.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Silver	4.1	1.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Thallium	ND	25	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Vanadium	87	5.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	
Zinc	660	5.0	mg/kg dry	EPA 6020	06/16/15 23:04	ERA	

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NELAP no. 02101CA
 CA Elap no. 2698
 EPA no. CA00102



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

Analytical Report: Page 5 of 8
 Project Name: VVRA-Biosolids Sample - Ann
 Project Number: Routine

Report Date: 22-Jun-2015

Work Order Number: **B5F1070**
 Received on Ice (Y/N): Yes Temp: 8 °C

Laboratory Reference Number
B5F1070-04

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150608-17 Staged From Drying Bed #4 - 8 (Class A) Biosolids (6 Grab-Comp)	Sludge	06/08/15 11:17	06/09/15 13:50

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	190	2.1	mg/kg dry	EPA 300.0	06/12/15 02:10	ss	N_WEX
Solids							
Total Solids	95	0.10	%	SM 2540G	06/10/15 11:40	cdcs	
Nutrients							
Nitrite as N	ND	1.1	mg/kg dry	SM 4500NO2 B	06/11/15 16:35	aam	N_WEX
Ammonia-Nitrogen	4000	530	mg/Kg* dry	SM4500NH3H	06/11/15 15:29	JMA	N_WEX
Kjeldahl Nitrogen	44000	2600	mg/kg dry	EPA 351.2	06/17/15 16:47	JMA	
Total Phosphorus	26000	21	mg/Kg* dry	EPA 6020	06/17/15 17:25	MEL	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	5.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Arsenic	8.5	5.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Barium	270	10	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Beryllium	ND	1.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Cadmium	1.5	1.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Total Chromium	45	1.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Cobalt	2.7	1.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Copper	270	1.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Lead	12	5.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Mercury	0.49	0.42	mg/kg dry	EPA 7471A	06/16/15 17:07	ams	
Molybdenum	15	1.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Nickel	17	1.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Selenium	6.5	5.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Silver	4.1	1.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Thallium	ND	25	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Vanadium	98	5.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	
Zinc	760	5.0	mg/kg dry	EPA 6020	06/16/15 23:06	ERA	

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 EPA no. CA00102



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

Analytical Report: Page 6 of 8
 Project Name: VVWRA-Biosolids Sample - Ann
 Project Number: Routine

Report Date: 22-Jun-2015

Work Order Number: **B5F1070**
 Received on Ice (Y/N): Yes Temp: 8 °C

Laboratory Reference Number
B5F1070-05

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150608-18 Staged From Drying Bed #4 - 10 (Class A) Biosolids (6 Grab-Comp)	Sludge	06/08/15 11:28	06/09/15 13:50

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	110	2.1	mg/kg dry	EPA 300.0	06/12/15 02:21	ss	N_WEX
Solids							
Total Solids	96	0.10	%	SM 2540G	06/10/15 11:40	cdcs	
Nutrients							
Nitrite as N	ND	1.0	mg/kg dry	SM 4500NO2 B	06/11/15 16:35	aam	N_WEX
Ammonia-Nitrogen	6000	520	mg/Kg* dry	SM4500NH3H	06/11/15 15:31	JMA	N_WEX
Kjeldahl Nitrogen	45000	2600	mg/kg dry	EPA 351.2	06/17/15 16:49	JMA	
Total Phosphorus	31000	21	mg/Kg* dry	EPA 6020	06/17/15 17:28	MEL	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	5.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Arsenic	8.1	5.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Barium	260	10	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Beryllium	ND	1.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Cadmium	1.4	1.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Total Chromium	41	1.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Cobalt	2.8	1.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Copper	240	1.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Lead	10	5.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Mercury	1.0	0.42	mg/kg dry	EPA 7471A	06/16/15 17:09	ams	
Molybdenum	13	1.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Nickel	16	1.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Selenium	5.9	5.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Silver	4.3	1.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Thallium	ND	25	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Vanadium	85	5.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	
Zinc	640	5.0	mg/kg dry	EPA 6020	06/16/15 23:08	ERA	

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 EPA no. CA00102



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

Analytical Report: Page 7 of 8
 Project Name: VVWRA-Biosolids Sample - Ann
 Project Number: Routine

Report Date: 22-Jun-2015

Work Order Number: **B5F1070**

Received on Ice (Y/N): Yes Temp: 8 °C

Laboratory Reference Number

B5F1070-06

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150608-19 Staged From Drying Bed #4 - 11 (Class A) Biosolids (6 Grab-Comp)	Sludge	06/08/15 11:30	06/09/15 13:50

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	45	2.0	mg/kg dry	EPA 300.0	06/12/15 02:32	ss	N_WEX
Solids							
Total Solids	98	0.10	%	SM 2540G	06/10/15 11:40	cdcs	
Nutrients							
Nitrite as N	ND	1.0	mg/kg dry	SM 4500NO2 B	06/11/15 16:35	aam	N_WEX
Ammonia-Nitrogen	2400	500	mg/Kg* dry	SM4500NH3H	06/11/15 15:33	JMA	N_WEX
Kjeldahl Nitrogen	48000	2500	mg/kg dry	EPA 351.2	06/17/15 16:50	JMA	
Total Phosphorus	30000	20	mg/Kg* dry	EPA 6020	06/17/15 17:30	MEL	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	5.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Arsenic	11	5.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Barium	350	10	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Beryllium	ND	1.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Cadmium	1.8	1.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Total Chromium	58	1.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Cobalt	3.8	1.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Copper	320	1.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Lead	15	5.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Mercury	0.41	0.20	mg/kg dry	EPA 7471A	06/16/15 17:11	ams	
Molybdenum	16	1.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Nickel	21	1.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Selenium	7.4	5.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Silver	4.2	1.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Thallium	ND	25	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Vanadium	120	5.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	
Zinc	880	5.0	mg/kg dry	EPA 6020	06/16/15 23:10	ERA	

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

Analytical Report: Page 8 of 8
 Project Name: VVWRA-Biosolids Sample - Ann
 Project Number: Routine

Report Date: 22-Jun-2015

Work Order Number: **B5F1070**
 Received on Ice (Y/N): Yes Temp: 8 °C

Notes and Definitions

- N_WEX Analyte determined on a 1:10 water extract from the sample.
- NMint Due to matrix interference, the matrix spike and/or matrix spike duplicate performed on this sample did not meet laboratory acceptance criteria.
- NRPDo The RPD/precision of replicate analyses performed on this sample did not meet laboratory acceptance criteria.
- 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: 2015.06.22 14:09:58 -07'00'

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

Analytical Report: Page 1 of 1
Project Name: VVWRA-Biosolids Sample - Ann
Project Number: Routine

Report Date: 22-Jun-2015

Work Order Number: B5F1070

Received on Ice (Y/N): Yes Temp: 8 °C

SUBCONTRACT LABORATORY CHAIN OF CUSTODY AND 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
Website: www.vvwra.com E-mail: lrodriguez@vvwra.com



Table with columns: Project Name, Project Contact, Sampler Name, Sampler Signature, Sample ID, Location/Description, Sample Date, Sample Time, Sample Type, Laboratory Analyses Requested, Total # of Containers, Sample Preservation Methods, Relinquished By, Received By, Date/Time, Relinquished By (Sign), Received By (Sign), Date/Time, Relinquished By (Sign), Received By (Sign), Date/Time, Laboratory Notes, Sample Condition Upon Receipt by Laboratory, Samples Received on Ice?, Samples Received Intact?, Temperature.

Please Fax a copy of the completed Chain of Custody document to: Lorenzo Rodriguez, VVWRA at (760) 246-5440 01-02-155-7170 JUN - 9 2015

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NELAP no. 02101CA
CA Elap no. 2698
EPA no. CA00102



BioVir Laboratories

EPA ID# 01401, CA-ELAP #179

685 Stone Road, Unit 6 • Benicia, CA 94510 • (707) 747-5906 • 1-800-GIARDIA • FAX (707) 747-1751 • WEB: www.biovir.com

REPORT NO.: 150968
PAGE NO.: 1 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
Victorville, CA 92394
CLIENT NO: VIC001 CLIENT PO: N/A

ASSAY RESULTS:

Test: 1682 Salmonella MSRV Method: EPA 1682

Table with 6 columns: BioVir #, Sample ID, Site, Analyte, Result, Units. Contains 4 rows of assay data for Salmonella spp. with detailed collector, date, and volume information.

REPORT NO.: 150968
PAGE NO.: 2 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: 1682 Salmonella MSRV Method: EPA 1682

BioVir #	Sample ID	Site	Analyte	Result	Units
150968-005	150608-18	Drying Bed #4-10	Salmonella spp.	<0.3	MPN/4 g TS
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:28:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 418.16 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1250 Analyst: JTruscott Analysis End: 6/12/2015 Comment					

150968-006	150608-19	Drying Bed #4-11	Salmonella spp.	<0.3	MPN/4 g TS
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:30:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 403.99 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1250 Analyst: JTruscott Analysis End: 6/12/2015 Comment					

Test: Coliform, Fecal Method: EPA 1681

BioVir #	Sample ID	Site	Analyte	Result	Units
150968-001	150608-14	Drying Bed #4-5	Coliform, Fecal	25	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:22:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 403.99 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1250 Analyst: JTruscott Analysis End: 6/12/2015 Comment					

150968-002	150608-15	Drying Bed #4-6	Coliform, Fecal	12	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:25:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 411.08 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1250 Analyst: JTruscott Analysis End: 6/12/2015 Comment					

REPORT NO.: 150968
PAGE NO.: 3 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road

CLIENT NO: Victorville, CA 92394
 VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Coliform, Fecal Method: EPA 1681

BioVir #	Sample ID	Site	Analyte	Result	Units
150968-003	150608-16	Drying Bed #4-7	Coliform, Fecal	52	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:19:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 375.64 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1250 Analyst: JTruscott Analysis End: 6/12/2015 Comment					
150968-004	150608-17	Drying Bed #4-8	Coliform, Fecal	52	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:17:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 418.16 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1250 Analyst: JTruscott Analysis End: 6/12/2015 Comment					
150968-005	150608-18	Drying Bed #4-10	Coliform, Fecal	25	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:28:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 418.16 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1250 Analyst: JTruscott Analysis End: 6/12/2015 Comment					
150968-006	150608-19	Drying Bed #4-11	Coliform, Fecal	1.8e2	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:30:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 403.99 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1250 Analyst: JTruscott Analysis End: 6/12/2015 Comment					

Test: Enteric Virus Method: ASTM D 4994-89

BioVir #	Sample ID	Site	Analyte	Result	Units
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REPORT NO.: 150968
PAGE NO.: 4 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS 20111 Shay Road
 Victorville, CA 92394
CLIENT NO VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Enteric Virus **Method:** ASTM D 4994-89

BioVir #	Sample ID	Site	Analyte	Result	Units
150968-001	150608-14	Drying Bed #4-5	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:22:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 403.99 g Analysis Start Date: 6/10/2015 Analysis Start Time: 12:40 Analyst: ValentinaL Analysis End: 6/15/2015 Comment					
150968-002	150608-15	Drying Bed #4-6	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:25:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 411.08 g Analysis Start Date: 6/10/2015 Analysis Start Time: 12:40 Analyst: ValentinaL Analysis End: 6/15/2015 Comment					
150968-003	150608-16	Drying Bed #4-7	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:19:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 375.64 g Analysis Start Date: 6/10/2015 Analysis Start Time: 12:40 Analyst: ValentinaL Analysis End: 6/15/2015 Comment					
150968-004	150608-17	Drying Bed #4-8	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:17:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 418.16 g Analysis Start Date: 6/10/2015 Analysis Start Time: 12:40 Analyst: ValentinaL Analysis End: 6/15/2015 Comment					
150968-005	150608-18	Drying Bed #4-10	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:28:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 418.16 g Analysis Start Date: 6/10/2015 Analysis Start Time: 12:40 Analyst: ValentinaL Analysis End: 6/15/2015 Comment					

REPORT NO.: 150968
PAGE NO.: 5 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS 20111 Shay Road

CLIENT NO Victorville, CA 92394
 VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Enteric Virus Method: ASTM D 4994-89

BioVir #	Sample ID	Site	Analyte	Result	Units
150968-006	150608-19	Drying Bed #4-11	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:30:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 403.99 g Analysis Start Date: 6/10/2015 Analysis Start Time: 12:40 Analyst: ValentinaL Analysis End: 6/15/2015 Comment					

Test: Helminth Ova Method: EPA/625/R-92/013

BioVir #	Sample ID	Site	Analyte	Result	Units
150968-001	150608-14	Drying Bed #4-5	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:22:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 403.99 g Analysis Start Date: Analysis Start Time: Analyst: SMullaney Analysis End: 7/9/2015 Comment					
150968-002	150608-15	Drying Bed #4-6	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:25:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 411.08 g Analysis Start Date: Analysis Start Time: Analyst: SMullaney Analysis End: 7/9/2015 Comment					

REPORT NO.: 150968
PAGE NO.: 6 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO: VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Helminth Ova **Method:** EPA/625/R-92/013

BioVir #	Sample ID	Site	Analyte	Result	Units
150968-003	150608-16	Drying Bed #4-7	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:19:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 375.64 g Analysis Start Date: Analysis Start Time: Analyst: SMullaney Analysis End: 7/9/2015 Comment					
150968-004	150608-17	Drying Bed #4-8	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:17:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 418.16 g Analysis Start Date: Analysis Start Time: Analyst: SMullaney Analysis End: 7/9/2015 Comment					
150968-005	150608-18	Drying Bed #4-10	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:28:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 418.16 g Analysis Start Date: Analysis Start Time: Analyst: SMullaney Analysis End: 7/9/2015 Comment					
150968-006	150608-19	Drying Bed #4-11	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:30:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosoilds Temp 1.4C Volume: 403.99 g Analysis Start Date: Analysis Start Time: Analyst: SMullaney Analysis End: 7/9/2015 Comment					

REPORT NO.: 150968
PAGE NO.: 7 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO: VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Total Solids Method: SM2540B

BioVir #	Sample ID	Site	Analyte	Result	Units
150968-001	150608-14	Drying Bed #4-5	Total Solids (%)	94.2	% Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:22:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 403.99 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1441 Analyst: MPiper Analysis End: 6/10/2015 Comment					
150968-002	150608-15	Drying Bed #4-6	Total Solids (%)	95.8	% Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:25:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 411.08 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1441 Analyst: MPiper Analysis End: 6/10/2015 Comment					
150968-003	150608-16	Drying Bed #4-7	Total Solids (%)	94.7	% Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:19:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 375.64 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1441 Analyst: MPiper Analysis End: 6/10/2015 Comment					
150968-004	150608-17	Drying Bed #4-8	Total Solids (%)	94.4	% Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:17:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 418.16 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1441 Analyst: MPiper Analysis End: 6/10/2015 Comment					
150968-005	150608-18	Drying Bed #4-10	Total Solids (%)	94.7	% Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:28:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 418.16 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1441 Analyst: MPiper Analysis End: 6/10/2015 Comment					

REPORT NO.: 150968
PAGE NO.: 8 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO: VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Total Solids **Method:** SM2540B

BioVir #	Sample ID	Site	Analyte	Result	Units
150968-006	150608-19	Drying Bed #4-11	Total Solids (%)	98.6	% Total Solids
Collector: Bobby Hesse CollectDate: 6/8/2015 CollectTime: 11:30:00 AM ReceiveDate 6/9/2015 9:32:00 AM Matrix: Biosolids Temp 1.4C Volume: 403.99 g Analysis Start Date: 6/9/2015 Analysis Start Time: 1441 Analyst: MPiper Analysis End: 6/10/2015					
Comment					

SAMPLE EVALUATION PERFORMANCE CRITERIA: The precise rates of recovery of organisms from environmental samples cannot be determined. BioVir Laboratories has analyzed your sample(s) in accordance with the method described with each analyte above, however, due to inherent limitations of these methods organisms may avoid detection. For additional information regarding the limitations of the method(s) referred to above please call us at 1-800-GIARDIA.
COMPANY IS NOT AN INSURER: BioVir Laboratories is not an insurer or guarantor of the quality and/or purity of water, wastewater, biosolid or other material from which the sample was taken. BioVir offers no express or implied warranties whatsoever concerning the quality or purity of any water, wastewater, biosolid or other material which is ultimately consumed, distributed, applied or disposed.
MAINTENANCE OF RECORDS: BioVir Laboratories, Inc. shall maintain records pertaining to the historical reconstruction of client's data for a minimum of five years from the date of issuance of the final report. Records may be destroyed after that date unless a written client's request for records transfer is received by BioVir which requests otherwise. Records transfer or storage charges may apply after the 5 year period. **THIS REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF BIOVIR LABORATORIES, INC.**

7/14/2015

 Date:

 Signature Quality
Checked

EMoran



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas, sign and return to BioVir with the sample.)
 Phone: 1-800-GIARDIA Fax: 707-747-1151 WEB: www.biovir.com
 Note: Please print clearly using waterproof ink.

LAB USE ONLY:
 LIMS # 968-1
 Client # VIC001
 Date Rec'd 6/9/15
 Time Rec'd 09:32
 Temp: 14°C

COMPANY NAME & ADDRESS: <u>Victor Valley Wastewater Reclamation Authority</u> <u>2011 Stacy Rd. Victorville, Ca 92399</u> Contact Name <u>Larissa Rodriguez</u> Tel: <u>760 246 8638 x244</u>		DATE OF SAMPLING: <u>6-8-15</u>
NAME OF SAMPLER: <u>Buddy Huse</u>		TIME OF SAMPLING: <u>1122</u>
LOCATION OF SAMPLING: <u>Drying Basin 4-5</u>		SAMPLE ID: <u>150608-14</u>
TREATMENT CHARACTERISTICS: <u>Class A Anaerobic Digested</u>		TYPE OF SAMPLE: <u>(6) GRAB COMPOSITE</u>
SAMPLE VOLUME (WET WEIGHT): <u>~ 300 grams</u>		TOTAL SOLIDS PERCENTAGE: <u>%</u> <small>(MUST BE INCLUDED IN ORDER TO BEGIN ANALYSIS)</small>

HOLD TIMES (Store and ship cold)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours*	8 Hours*

wt: 403.99g

* Fecal Coliform - Language Extracted from EPA Fecal Coliform (Biosolids) Method 1681 (July 2006): For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1680 (LTB-EC) or 1681 (A-1): Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other matrices should be analyzed within 8 hours of sample collection, 6 hour maximum transport and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella - Language Extracted from EPA Salmonella (Biosolids) Method 1682 (July 2008): Analyses should begin immediately, preferably, within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at $\leq 10^{\circ}\text{C}$ until analysis. Samples must not be frozen. Sample analysis must begin within 6 hours unless otherwise specified in the Code of Federal Regulations Part 503. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

A holding time variance is allowed from your Regional Administrator under Section 136.3(e). Please refer to the Final Rule for details.

OK TO RUN PAST HOLD TIME -
(up to 24 hrs from sampling for bacterial analysis)

SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY).

Print Name: Chris Willis Date: 6-8-15

Signature: [Signature]

ASSAY(S) TO BE PERFORMED - (PLEASE CHECK)					
ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4894-89	HELMINTH OVA EPA 625/R-92/013	SALMONELLA EPA 1682	FECAL COLIFORM EPA 1681	TOTAL SOLIDS EPA 1684
CLASS "A"	X	X	X	X	X
CLASS "B"					

COMMENTS: tekmar

RELINQUISHED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME
<u>[Signature]</u>	<u>[Signature]</u>	<u>6/9/15</u>	<u>09:32</u>

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC., 685 STONE ROAD, UNIT 6, BENICIA CALIFORNIA 94510

tekmar



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas, sign and return to BioVir with the sample.)
Phone 1-800-GIARDIA Fax 707-747-1751 WEB: www.biovir.com
Note: Please print clearly using waterproof ink.

LAB USE ONLY:
LIMS # 968-2
Client # VIC001
Date Rec'd 6/9/15
Time Rec'd 09:32
Technician LA

COMPANY NAME & ADDRESS: <u>Victor Valley Wastewater Reclamation Authority</u> <u>2011 Shay Rd. Victorville, Ca 92594</u> Contact Name <u>Lorena Rodriguez</u> Tel: <u>760 276 8686</u> ext: <u>1244</u>		DATE OF SAMPLING: <u>6-8-15</u>
NAME OF SAMPLER: <u>Bobby Hesse</u>		TIME OF SAMPLING: <u>1125</u>
LOCATION OF SAMPLING: <u>Drying Bed #4-6</u>		SAMPLE ID: <u>150608-15</u>
TREATMENT CHARACTERISTICS: <u>Class A - Anaerobic Digested</u>		TYPE OF SAMPLE: <u>(6) GRAE COMPOSITE</u>
SAMPLE VOLUME (WET WEIGHT): <u>~ 300 grams</u>		TOTAL SOLIDS PERCENTAGE: _____ <small>(MUST BE INCLUDED IN ORDER TO BEGIN ANALYSIS)</small>

HOLDING TIMES (Store and ship cold)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours*	8 Hours*

wt:
411.08 g.

* Fecal Coliform - Language Extracted from EPA Fecal Coliform (Biosolids) Method 1681 (July 2006): For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1680 (LTB EC) or 1061 (A 1) Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other materials should be analyzed within 8 hours of sample collection, 6 hour maximum transport and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella - Language Extracted from EPA Salmonella (Biosolids) Method 1682 (July 2006): Analyses should begin immediately, preferably within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at <10°C until analysis. Samples must not be frozen. Sample analysis must begin within 6 hours unless otherwise specified in the Code of Federal Regulations Part 503. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

A holding time variance is allowed from your Regional Administrator under Section 136.3(e). Please refer to the Final Rule for details.

<input checked="" type="checkbox"/> OK TO RUN PAST HOLD TIME - (up to 24 hrs from sampling for bacterial analysis)	Print Name <u>Chris Willis</u>	<u>6-8-15</u>
<input type="checkbox"/> SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY)	Signature 	Title

ASSAY(S) TO BE PERFORMED - (PLEASE CHECK)					
ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4984-09	HELMINTH OVA EPA 625.R-92/013	SALMONELLA EPA 1682	FECAL COLIFORM EPA 1681	TOTAL SOLIDS EPA 1684
CLASS 'A'	X	X	X	X	X
CLASS 'B'					

COMMENTS:

RELINQUISHED BY (SIGNED) 	RECEIVED BY (SIGNED) 	DATE <u>6/9/15</u>	TIME <u>09:32</u>
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SHIPPING ADDRESS: BIOVIR LABORATORIES, INC., 685 STONE ROAD, UNIT 6, BENICIA CALIFORNIA 94510



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas - sign and return to BioVir with the sample.) Phone: 1-800-GIARDIA Fax: 707-747-1751 WEB: www.biovir.com Note: Please print clearly using waterproof ink.

LAB USE ONLY: LIMS # 968-3 Client # VIC001 Date Rec'd 6/9/15 Time Rec'd 09:32

COMPANY NAME & ADDRESS: Victor Valley Wastewater Reclamation Authority, 2011 Shay Rd., Victorville, Ca 92594. DATE OF SAMPLING: 6-8-15. TIME OF SAMPLING: 1119. NAME OF SAMPLER: Bobby Hesse. SAMPLE ID: 150608-16. LOCATION OF SAMPLING: Drying Basin 4-7. TYPE OF SAMPLE: 6 GRAB COMPOSITE. TREATMENT CHARACTERISTICS: Class A - Anaerobically Digested. TOTAL SOLIDS PERCENTAGE: (MUST BE INCLUDED IN ORDER TO BEGIN ANALYSIS)

Table with 5 columns: HOLD TIMES (Store and ship cool), ENTERIC VIRUS (2 Weeks), HELMINTH OVA (1 Month), SALMONELLA (8 Hours*), FECAL COLIFORM (8 Hours*). Includes handwritten weight: 375.64 g.

* Fecal Coliform - Language Extracted from EPA Fecal Coliform (Biosolids) Method 1681 (July 2006): For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1680 (LTP EC) or 1681 (A 1): Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other matrices should be analyzed within 8 hours of sample collection, 8 hour maximum transport and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Signature section: Print Name: Chris Wills, Date: 6-8-15. Signature: [Handwritten Signature]. Includes checkboxes for 'OK TO RUN PAST HOLD TIME' and 'SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY)'.

ASSAY(S) TO BE PERFORMED - (PLEASE CHECK) Table with 6 columns: ANALYTICAL STANDARD, ENTERIC VIRUS ASTM D 4904-09, HELMINTH OVA EPA 625/R-92/013, SALMONELLA EPA 1682, FECAL COLIFORM EPA 1681, TOTAL SOLIDS EPA 1684. Rows for CLASS 'A' and CLASS 'B' with 'X' marks in all columns.

COMMENTS

REMOVED BY (SIGNED) and RECEIVED BY (SIGNED) section with handwritten signatures and date/time: 6/9/15 09:32.

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC 685 S ONE ROAD, UNIT 8, DENICIA CALIFORNIA 94510



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas, sign and return to BioVir with the sample)
Phone: 1-800-GIARDIA Fax: 707-747-1751 WEB: www.biovir.com
Note: Please print clearly using waterproof ink.

LAB USE ONLY:
LIMS # <u>968-4</u>
Client # <u>VIC 001</u>
Date Rec'd <u>6/9/15</u>
Time Rec'd <u>09:32</u>
Barcode <u>1.4</u>

COMPANY NAME & ADDRESS: <u>Victor Valley Wastewater Reclamation Authority</u> <u>2011 Shay Rd. Victorville, Ca 92394</u> Contact Name <u>Laura Rodriguez</u> Tel. <u>760 246 8658</u> Ext. <u>124</u>	DATE OF SAMPLING: <u>6-8-15</u>
NAME OF SAMPLER: <u>Bobby Arde</u>	TIME OF SAMPLING: <u>1117</u>
LOCATION OF SAMPLING: <u>Drying Bed #4-B</u>	SAMPLE ID: <u>150608-17</u>
TREATMENT CHARACTERISTICS: <u>Class A - Anaerobically Digested</u>	TYPE OF SAMPLE: <u>6 GRAB</u> COMPOSITE
SAMPLE VOLUME (NET WEIGHT): <u>~ 300 grams</u>	TOTAL SOLIDS PERCENTAGE: _____ % (JUSTICE INCLUDED IN ORDER TO BEGIN ANALYSIS)

HOLD TIMES (Store and ship cold)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours*	8 Hours*

wt:
418.16 g.

* Fecal Coliform - Language Extracted from EPA Fecal Coliform (Biosolids) Method 1681 (July 2006): For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1680 (LTR-CC) or 1681 (A-1): Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other matrices should be analyzed within 8 hours of sample collection, 8 hour maximum transport and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella - Language Extracted from EPA Salmonella (Biosolids) Method 1682 (July 2006): Analyses should begin immediately, preferably within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at <10°C until analysis. Samples must not be frozen. Sample analysis must begin within 6 hours unless otherwise specified in the Code of Federal Regulations Part 503. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.
A holding time variance is allowed from your Regional Administrator under Section 136.3(a). Please refer to the Final Rule for details.

OK TO RUN PAST HOLD TIME -
(up to 24 hrs from sampling for bacterial analysis)

Print Name

Chris Wilts

6-8-15

SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY)

Signature

Date

ASSAY(S) TO BE PERFORMED - (PLEASE CHECK)

ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4994-09	HELMINTH OVA EPA 625.R-92/013	SALMONELLA EPA 1682	FECAL COLIFORM EPA 1681	TOTAL SOLIDS EPA 1684
CLASS "A"	X	X	X	X	X
CLASS "B"					

COMMENTS

RELINQUISHED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME
<u>[Signature]</u>	<u>[Signature]</u>	<u>6/9/15</u>	<u>09:32</u>

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC., 685 STONE ROAD, UNIT 6, BENICIA CALIFORNIA 94510



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas, sign and return to BioVir with the sample.)
 Phone: 1-800-GIARDIA Fax: 707-747-1761 VUEB: www.biovir.com
 Note: Please print clearly using waterproof ink.

LAB USE ONLY
 LIMS# 968-5
 Client # VIC001
 Date Rec'd 6/9/15
 Time Rec'd 09:32
 Fee: 1.40

COMPANY NAME & ADDRESS: Victor Valley Wastewater Reclamation Authority 2011 Shay Rd. Victorville, Ca 92394 Contact Name: Brenda Rodriguez tel: 760 246 8656 ext 1241	DATE OF SAMPLING: 6-8-15
NAME OF SAMPLER: Bobby Hesse	TIME OF SAMPLING: 1128
LOCATION OF SAMPLING: Drying Basin 10	SAMPLE ID: 150608-18
TREATMENT CHARACTERISTICS: Class A Anaerobic Digester	TYPE OF SAMPLE: <u>6 GRAB</u> COMPOSITE
SAMPLE VOLUME (NET WEIGHT): ~ 300 grams	TOTAL SOLIDS PERCENTAGE: <small>(MUST BE INCLUDED IN ORDER TO BEGIN ANALYSIS)</small>

HOLD TIME(S) (Store and ship cold)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours*	48 Hours*

wt
418.16g

* Fecal Coliform - Language Extracted from EPA Fecal Coliform (Biosolids) Method 1681 (July 2005): For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1681 (LTB EP) or 1681 (A 1): Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other matrices should be analyzed within 8 hours of sample collection, 6 hour maximum transport and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella - Language Extracted from EPA Salmonella (Biosolids) Method 1682 (July 2005): Analyses should begin immediately, preferably, within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at <10°C until analysis. Samples must not be frozen. Sample analysis must begin within 8 hours unless otherwise specified in the Code of Federal Regulations Part 50.3. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.
 A holding time variance is allowed from your Regional Administrator under Section 136.3(e). Please refer to the Final Rule for details.

<input checked="" type="checkbox"/> OK TO RUN PAST HOLD TIME - (up to 74 hrs from sampling for bacterial analysis)	Print Name Chris Mills	Date 6-8-15
<input type="checkbox"/> SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY)	Signature 	Date

ASSAY(S) TO BE PERFORMED - (PLEASE CHECK)					
ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4994-09	HELMINTH OVA EPA 625-R-92/013	SALMONELLA EPA 1682	FECAL COLIFORM EPA 1681	TOTAL SOLIDS EPA 1684
CLASS 'A'	X	X	X	X	X
CLASS 'B'					

COMMENTS

RELINQUISHED BY (SIGNED) 	RECEIVED BY (SIGNED) 	DATE 6/9/15	TIME 09:32
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SHIPPING ADDRESS: BIOVIR LABORATORIES, INC., 685 STONE ROAD, UNIT 6, BENICIA CALIFORNIA 94510



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas, sign and return to BioVir with the sample)
Phone: 1-800-GIARDIA Fax: 707-747-1751 WEB: www.biovir.com
Note: Please print clearly using waterproof ink.

LAB USE ONLY:
LIMS # 968-6
Client # VIC001
Date Rec'd 6/15/15
Time Rec'd 9:32
Series 140

COMPANY NAME & ADDRESS: <u>Victor Valley Wastewater Reclamation Authority</u> <u>2011 Shay Rd. Victorville, Ca 92394</u>	DATE OF SAMPLING <u>6-8-15</u>
Contact Name <u>Brandon Rodriguez Tel: 760 276 8656 ext 2</u>	TIME OF SAMPLING <u>1130</u>
NAME OF SAMPLER <u>Bobby Horne</u>	SAMPLE ID <u>150608-19</u>
LOCATION OF SAMPLING <u>Drying Basin 4-11</u>	TYPE OF SAMPLE <u>6 GRAB</u> COMPOSITE
TREATMENT CHARACTERISTICS <u>Class A-Anaerobic Dewatered</u>	TOTAL SOLIDS PERCENTAGE
SAMPLE VOLUME (V/ET WEIGHT): <u>~ 300 grams</u>	(IF IT BE INCLUDED IN ORDER TO BE IN ANALYSIS)

HOLD TIMES (Store and ship cold)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours*	8 Hours*

wt:
403.99g

* Fecal Coliform - Language Extracted from EPA Fecal Coliform (Biosolids) Method 1681 (July 2006): For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1600 (LTB EC) or 1681 (A-1): Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other matrices should be analyzed within 8 hours of sample collection, 6 hour maximum transport and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella - Language Extracted from EPA Salmonella (Biosolids) Method 1682 (July 2006): Analyses should begin immediately, preferably, within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at +10°C until analysis. Samples must not be frozen. Sample analysis must begin within 6 hours unless otherwise specified in the Code of Federal Regulations Part 503. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

A holding time variance is allowed from your Regional Administrator under Section 136.3(a). Please refer to the Final Rule for details.

OK TO RUN PAST HOLD TIME - (up to 24 hrs from sampling for bacterial analysis)

LI SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY)

Print Name: Chris Wills Date: 6-8-15
Signature: [Signature]

ASSAY(S) TO BE PERFORMED - (PLEASE CHECK)

ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4994-09	HELMINTH OVA EPA 625-R-92/013	SALMONELLA EPA 1682	FECAL COLIFORM EPA 1681	TOTAL SOLIDS EPA 1684
CLASS 'A'	X	X	X	X	X
CLASS 'B'					

COMMENTS

RELINQUISHED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME
<u>[Signature]</u>	<u>[Signature]</u>	<u>6/9/15</u>	<u>09:32</u>

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC, 685 S ONE ROAD, UNIT 6, BENICIA CALIFORNIA 94610



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.vvra.com E-mail: mail@vvra.com

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

Biosolids Evaluation Report

Sample Location Storage Pad (Class A) Biosolids (6 Grab-Comp) Composite
 Sample Date 9/28/2015 7:44
 Sample ID # 150928-11
 Sampled By: Bobby Hesse

Pollutant	Requirement/Limit	Units	Sample Results	Result	Comments
Arsenic	41	mg/kg	<10	PASS	Not Detected*
Cadmium	39	mg/kg	<5	PASS	Not Detected*
Chromium, Total	1200	mg/kg	34	PASS	
Copper	1500	mg/kg	190	PASS	
Lead	300	mg/kg	<10	PASS	Not Detected*
Mercury	17	mg/kg	0.76	PASS	
Molybdenum	18	mg/kg	10	PASS	
Nickel	420	mg/kg	11	PASS	
Selenium	36	mg/kg	10	PASS	
Zinc	2800	mg/kg	550	PASS	
Fecal Coliform	1000	MPN/g	960	PASS	
Enteric Viruses	1	PFU/4 g	<1	PASS	Not Detected*
Helminth Ova	1	ova/4 g	<1	PASS	Not Detected*
Salmonella	3	MPN/4 g	9.7	FAIL	
Bio Vir Lab Total Solids	90	%	96	PASS	

*Constituent Not Detected in this sample, value recorded is the detection limit of the test.

Action Recommended: Not acceptable for offsite disposal

Lab Review: *Joseph Rodriguez*

Operations Review: *[Signature]*



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@vwra.com

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

Biosolids Evaluation Report

Sample Location: Stage From Drying Bed #4-1 (Class A) Biosolids (6 Grab-Comp) Composite
 Sample Date: 9/28/2015 7:16
 Sample ID #: 150928-12
 Sampled By: Bobby Hesse

Pollutant	Requirement/Limit	Units	Sample Results	Result	Comments
Arsenic	41	mg/kg	<10	PASS	Not Detected*
Cadmium	39	mg/kg	<5	PASS	Not Detected*
Chromium, Total	1200	mg/kg	33	PASS	
Copper	1500	mg/kg	210	PASS	
Lead	300	mg/kg	<10	PASS	Not Detected*
Mercury	17	mg/kg	1	PASS	
Molybdenum	18	mg/kg	11	PASS	
Nickel	420	mg/kg	12	PASS	
Selenium	36	mg/kg	<10	PASS	Not Detected*
Zinc	2800	mg/kg	610	PASS	
Fecal Coliform	1000	MPN/g	2.5	PASS	
Enteric Viruses	1	PFU/4 g	<1	PASS	Not Detected*
Helminth Ova	1	ova/4 g	<1	PASS	Not Detected*
Salmonella	3	MPN/4 g	<0.3	PASS	Not Detected*
Bio Vir Lab Total Solids	90	%	94	PASS	

*Constituent Not Detected in this sample, value recorded is the detection limit of the test.

Action Recommended: Acceptable for offsite disposal Move to Storage Pad

Lab Review:

Forney Rodriguez

Operations Review:

[Signature]



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.vvwa.com E-mail: mail@vvwa.com

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

Biosolids Evaluation Report

Sample Location: Stage From Drying Bed #4-3 (Class A) Biosolids (6 Grab-Comp) Composite
Sample Date: 9/28/2015 7:15
Sample ID #: 150928-14
Sampled By: Bobby Hesse

Pollutant	Requirement/Limit	Units	Sample Results	Result	Comments
Arsenic	41	mg/kg	<10	PASS	Not Detected*
Cadmium	39	mg/kg	<5	PASS	Not Detected*
Chromium, Total	1200	mg/kg	45	PASS	
Copper	1500	mg/kg	260	PASS	
Lead	300	mg/kg	12	PASS	
Mercury	17	mg/kg	0.49	PASS	
Molybdenum	18	mg/kg	13	PASS	
Nickel	420	mg/kg	15	PASS	
Selenium	36	mg/kg	<10	PASS	Not Detected*
Zinc	2800	mg/kg	770	PASS	
Fecal Coliform	1000	MPN/g	25.9	PASS	
Enteric Viruses	1	PFU/4 g	<1	PASS	Not Detected*
Helminth Ova	1	ova/4 g	<1	PASS	Not Detected*
Salmonella	3	MPN/4 g	39.6	FAIL	
Bio Vir Lab Total Solids	90	%	93	PASS	

*Constituent Not Detected in this sample, value recorded is the detection limit of the test.

Action Recommended: Not acceptable for offsite disposal

Lab Review:

A handwritten signature in blue ink, likely belonging to a laboratory reviewer.

Operations Review:

A handwritten signature in black ink, likely belonging to an operations reviewer.



Victor Valley Wastewater Reclamation Authority

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

Biosolids Evaluation Report

Sample Location Stage From Drying Bed #4-5 (Class A) Biosolids (6 Grab-Comp) Composite
Sample Date 9/28/2015 7:20
Sample ID # 150928-15
Sampled By: Bobby Hesse

Pollutant	Requirement/Limit	Units	Sample Results	Result	Comments
Arsenic	41	mg/kg	<10	PASS	Not Detected*
Cadmium	39	mg/kg	<5	PASS	Not Detected*
Chromium, Total	1200	mg/kg	32	PASS	
Copper	1500	mg/kg	260	PASS	
Lead	300	mg/kg	10	PASS	
Mercury	17	mg/kg	0.31	PASS	
Molybdenum	18	mg/kg	11	PASS	
Nickel	420	mg/kg	13	PASS	
Selenium	36	mg/kg	<10	PASS	Not Detected*
Zinc	2800	mg/kg	700	PASS	
Fecal Coliform	1000	MPN/g	13.9	PASS	
Enteric Viruses	1	PFU/4 g	<1	PASS	Not Detected*
Helminth Ova	1	ova/4 g	<1	PASS	Not Detected*
Salmonella	3	MPN/4 g	<0.3	PASS	Not Detected*
Bio Vir Lab Total Solids	90	%	93	PASS	

*Constituent Not Detected in this sample, value recorded is the detection limit of the test.

Action Recommended: Acceptable for offsite disposal Move to Storage Pad

Lab Review:

Operations Review:



Victor Valley Wastewater Reclamation Authority

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Biosolids Evaluation Report

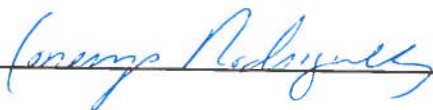
Sample Location: Stage From Drying Bed #4-11 (Class A) Biosolids (6 Grab-Comp) Composite
 Sample Date: 9/28/2015 7:29
 Sample ID #: 150928-16
 Sampled By: Bobby Hesse

Pollutant	Requirement/Limit	Units	Sample Results	Result	Comments
Arsenic	41	mg/kg	<10	PASS	Not Detected*
Cadmium	39	mg/kg	<5	PASS	Not Detected*
Chromium, Total	1200	mg/kg	37	PASS	
Copper	1500	mg/kg	260	PASS	
Lead	300	mg/kg	14	PASS	
Mercury	17	mg/kg	0.92	PASS	
Molybdenum	18	mg/kg	12	PASS	
Nickel	420	mg/kg	13	PASS	
Selenium	36	mg/kg	<10	PASS	Not Detected*
Zinc	2800	mg/kg	770	PASS	
Fecal Coliform	1000	MPN/g	25.6	PASS	
Enteric Viruses	1	PFU/4 g	<1	PASS	Not Detected*
Helminth Ova	1	ova/4 g	<1	PASS	Not Detected*
Salmonella	3	MPN/4 g	3.4	FAIL	
Bio Vir Lab Total Solids	90	%	94	PASS	

*Constituent Not Detected in this sample, value recorded is the detection limit of the test.

Action Recommended: Not acceptable for offsite disposal

Lab Review:



Operations Review:



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

Analytical Report: Page 1 of 10
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: [none]

Work Order Number: B5I2920

Report Date: 05-Nov-2015

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

<u>Lab Sample #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>By</u>	<u>Date Submitted</u>	<u>By</u>
B5I2920-01	150928-11 Storage Pad Biosolids (6 Grab-Composite) Composite	Solid	09/28/15 07:44	Bobby Hesse	09/28/15 13:23	Courier (Hector N.)DE
B5I2920-02	150928-11 Storage Pad Biosolids (6 Grab-Composite) Composite	Solid	09/28/15 07:44	Bobby Hesse	09/28/15 13:23	Courier (Hector N.)DE
B5I2920-03	150928-12 Staged From Drying Bed #4-1 Class 1 Biosolids (6 Grab-Composite) Composite	Solid	09/28/15 07:16	Bobby Hesse	09/28/15 13:23	Courier (Hector N.)DE
B5I2920-04	150928-13 Staged From Drying Bed #4-2 Class 1 Biosolids (6 Grab-Composite) Composite	Solid	09/28/15 07:17	Bobby Hesse	09/28/15 13:23	Courier (Hector N.)DE
B5I2920-05	150928-14 Staged From Drying Bed #4-3 Class 1 Biosolids (6 Grab-Composite) Composite	Solid	09/28/15 07:15	Bobby Hesse	09/28/15 13:23	Courier (Hector N.)DE
B5I2920-06	150928-15 Staged From Drying Bed #4-5 Class 1 Biosolids (6 Grab-Composite) Composite	Solid	09/28/15 07:20	Bobby Hesse	09/28/15 13:23	Courier (Hector N.)DE
B5I2920-07	150928-16 Staged From Drying Bed #4-11 Class 1 Biosolids (6 Grab-Composite) Composite	Solid	09/28/15 07:29	Bobby Hesse	09/28/15 13:23	Courier (Hector N.)DE

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NELAP no. 02101CA
 CA Elap no. 2698
 EPA no. CA00102



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

Analytical Report: Page 2 of 10
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: [none]

Report Date: 05-Nov-2015

Work Order Number: B512920
 Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B512920-01

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150928-11 Storage Pad Biosolids (6 Grab-Composite)	Solid	09/28/15 07:44	09/28/15 13:23

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	140	2.0	mg/kg	EPA 300.0	09/29/15 04:10	ara	N_WEX
Nutrients							
Nitrite as N	10	1.0	mg/kg	SM 4500NO2 B	10/01/15 00:13	jma	N_WEX
Ammonia-Nitrogen	2700	200	mg/Kg*	SM4500NH3H	09/30/15 12:12	sll	N_WEX
Kjeldahl Nitrogen	42000	2000	mg/kg	EPA 351.2	10/05/15 21:46	jma	NRPDo
Total Phosphorus	22000	40	mg/Kg*	EPA 6020	09/30/15 17:32	ap	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Arsenic	ND	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Barium	190	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Beryllium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Cadmium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Total Chromium	34	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Cobalt	ND	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Copper	190	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Lead	ND	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Mercury	0.76	0.50	mg/kg	EPA 7471A	10/01/15 14:15	mel	
Molybdenum	10	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Nickel	11	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Selenium	ND	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Silver	ND	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Thallium	ND	50	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Vanadium	71	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	
Zinc	550	10	mg/kg	EPA 6020	09/29/15 21:32	ERA	



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

Analytical Report: Page 3 of 10
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: [none]

Report Date: 05-Nov-2015

Work Order Number: B512920
 Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B512920-02

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150928-11 Storage Pad Biosolids (6 Grab-Composite)	Solid	09/28/15 07:44	09/28/15 13:23

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
California Waste Extraction Test (Title 22 sec. 66261 Apx II); Inorganics							
Antimony	ND	3.0	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Arsenic	ND	1.0	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Barium	ND	20	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Beryllium	ND	0.15	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Cadmium	ND	0.20	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Total Chromium	ND	1.0	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Hexavalent Chromium	ND	0.25	mg/L	EPA 7196	10/05/15 12:13	mel	N_RLm, NMint
Cobalt	ND	16	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Copper	ND	5.0	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Lead	ND	1.0	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Mercury	ND	0.020	mg/L	EPA 7470A	10/05/15 16:46	mel	
Molybdenum	ND	70	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Nickel	ND	4.0	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Selenium	ND	0.20	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Silver	ND	1.0	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Thallium	ND	1.4	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Vanadium	ND	4.8	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
Zinc	ND	50	mg/L	EPA 6020A/WE	10/05/15 17:30	ERA	
California Waste Extraction Test (Title 22 sec. 66261 Apx II); Pesticides							
4,4'-DDD	ND	0.010	mg/L	EPA 8081A	10/29/15 05:22	acw	
4,4'-DDE	ND	0.010	mg/L	EPA 8081A	10/29/15 05:22	acw	
4,4'-DDT	ND	0.010	mg/L	EPA 8081A	10/29/15 05:22	acw	
Aldrin	ND	0.014	mg/L	EPA 8081A	10/29/15 05:22	acw	
Chlordane	ND	0.025	mg/L	EPA 8081A	10/29/15 05:22	acw	
Dieldrin	ND	0.080	mg/L	EPA 8081A	10/29/15 05:22	acw	
Endrin	ND	0.0020	mg/L	EPA 8081A	10/29/15 05:22	acw	
Heptachlor	ND	0.047	mg/L	EPA 8081A	10/29/15 05:22	acw	
Lindane	ND	0.040	mg/L	EPA 8081A	10/29/15 05:22	acw	
Methoxychlor	ND	1.0	mg/L	EPA 8081A	10/29/15 05:22	acw	
Toxaphene	ND	0.050	mg/L	EPA 8081A	10/29/15 05:22	acw	
Surrogate: Decachlorobiphenyl	64.0	% 34.6-123		EPA 8081A	10/29/15 05:22	acw	

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NELAP no. 02101CA
 CA Elap no. 2698
 EPA no. CA00102



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

Analytical Report: Page 4 of 10
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: [none]

Report Date: 05-Nov-2015

Work Order Number: B5I2920
 Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B5I2920-02

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150928-11 Storage Pad Biosolids (6 Grab-Composite)	Solid	09/28/15 07:44	09/28/15 13:23

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
California Waste Extraction Test (Title 22 sec. 66261 Apx II); PCBs							
Aroclor 1016	ND	0.50	mg/L	EPA 8082	10/29/15 01:04	acw	
Aroclor 1221	ND	0.50	mg/L	EPA 8082	10/29/15 01:04	acw	
Aroclor 1232	ND	0.50	mg/L	EPA 8082	10/29/15 01:04	acw	
Aroclor 1242	ND	0.50	mg/L	EPA 8082	10/29/15 01:04	acw	
Aroclor 1248	ND	0.50	mg/L	EPA 8082	10/29/15 01:04	acw	
Aroclor 1254	ND	0.50	mg/L	EPA 8082	10/29/15 01:04	acw	
Aroclor 1260	ND	0.50	mg/L	EPA 8082	10/29/15 01:04	acw	
Surrogate: Decachlorobiphenyl	102	% 10-158		EPA 8082	10/29/15 01:04	acw	
California Waste Extraction Test (Title 22 sec. 66261 Apx II); Herbicides							
2,4-D	ND	1.0	mg/L	EPA 8151A	10/14/15 01:24	labus	
2,4,5-TP Silvex	ND	0.10	mg/L	EPA 8151A	10/14/15 01:24	labus	
Surrogate: DCAA	103	% 15.2-134		EPA 8151A	10/14/15 01:24	labus	
California Waste Extraction Test (Title 22 sec. 66261 Apx II); Volatiles							
Trichloroethene	ND	20	mg/L	EPA 8260B	10/07/15 05:22	jes	
Surrogate: 1,2-Dichloroethane-d4	86.7	% 75-120		EPA 8260B	10/07/15 05:22	jes	
Surrogate: Bromofluorobenzene	96.6	% 83-120		EPA 8260B	10/07/15 05:22	jes	
Surrogate: Toluene-d8	87.9	% 80-125		EPA 8260B	10/07/15 05:22	jes	
California Waste Extraction Test (Title 22 sec. 66261 Apx II); BNAs							
Kepone	ND	0.21	mg/L	EPA 8270C	10/26/15 01:05	JHR	
Mirex	ND	0.21	mg/L	EPA 8270C	10/26/15 01:05	JHR	
Pentachlorophenol	ND	0.17	mg/L	EPA 8270C	10/26/15 01:05	JHR	
2,3,7,8-TCDD (scan)	ND	0.00010	mg/L	EPA 8270C	10/26/15 01:05	JHR	
Surrogate: 2,4,6-Tribromophenol	72.6	% 32-146		EPA 8270C	10/26/15 01:05	JHR	
Surrogate: 2-Fluorobiphenyl	50.2	% 27-117		EPA 8270C	10/26/15 01:05	JHR	
Surrogate: 2-Fluorophenol	39.6	% 21-96		EPA 8270C	10/26/15 01:05	JHR	
Surrogate: 4-Terphenyl-d14	33.6	% 49-126		EPA 8270C	10/26/15 01:05	JHR	NSIoP
Surrogate: Nitrobenzene-d5	63.4	% 36-110		EPA 8270C	10/26/15 01:05	JHR	
Surrogate: Phenol-d6	29.7	% 28-112		EPA 8270C	10/26/15 01:05	JHR	

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NELAP no. 02101CA
 CA Elap no. 2698
 EPA no. CA00102



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

Analytical Report: Page 5 of 10
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: [none]

Report Date: 05-Nov-2015

Work Order Number: B512920
 Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B512920-03

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150928-12 Staged From Drying Bed #4-1 Class 1 Biosolids (6 Grab-Composite)	Solid	09/28/15 07:16	09/28/15 13:23

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	160	2.0	mg/kg	EPA 300.0	09/29/15 04:49	ara	N_WEX
Nutrients							
Nitrite as N	38	5.0	mg/kg	SM 4500NO2 B	10/01/15 00:13	jma	N_WEX
Ammonia-Nitrogen	2200	200	mg/Kg*	SM4500NH3H	09/30/15 12:12	sll	N_WEX
Kjeldahl Nitrogen	44000	2000	mg/kg	EPA 351.2	10/05/15 21:46	jma	
Total Phosphorus	21000	40	mg/Kg*	EPA 6020	09/30/15 17:34	ap	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Arsenic	ND	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Barium	230	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Beryllium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Cadmium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Total Chromium	33	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Cobalt	ND	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Copper	210	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Lead	ND	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Mercury	1.0	1.0	mg/kg	EPA 7471A	10/01/15 13:55	mel	
Molybdenum	11	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Nickel	12	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Selenium	ND	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Silver	ND	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Thallium	ND	50	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Vanadium	70	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	
Zinc	610	10	mg/kg	EPA 6020	09/29/15 21:34	ERA	



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

Analytical Report: Page 6 of 10
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: [none]

Report Date: 05-Nov-2015

Work Order Number: B512920
 Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B512920-04

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150928-13 Staged From Drying Bed #4-2 Class 1 Biosolids (6 Grab-Composite)	Solid	09/28/15 07:17	09/28/15 13:23

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	74	2.0	mg/kg	EPA 300.0	09/29/15 04:58	ara	N_WEX
Nutrients							
Nitrite as N	44	5.0	mg/kg	SM 4500NO2 B	10/01/15 00:13	jma	N_WEX
Ammonia-Nitrogen	3300	200	mg/Kg*	SM4500NH3H	09/30/15 12:12	sil	N_WEX
Kjeldahl Nitrogen	47000	2000	mg/kg	EPA 351.2	10/05/15 21:46	jma	
Total Phosphorus	20000	40	mg/Kg*	EPA 6020	09/30/15 17:37	ap	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Arsenic	ND	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Barium	190	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Beryllium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Cadmium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Total Chromium	29	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Cobalt	ND	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Copper	190	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Lead	ND	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Mercury	ND	0.20	mg/kg	EPA 7471A	10/01/15 14:05	mel	
Molybdenum	ND	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Nickel	10	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Selenium	ND	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Silver	ND	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Thallium	ND	50	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Vanadium	67	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	
Zinc	580	10	mg/kg	EPA 6020	09/29/15 21:35	ERA	



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

Analytical Report: Page 7 of 10
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: [none]

Report Date: 05-Nov-2015

Work Order Number: B512920
 Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B512920-05

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150928-14 Staged From Drying Bed #4-3 Class 1 Biosolids (6 Grab-Composite)	Solid	09/28/15 07:15	09/28/15 13:23

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	380	4.0	mg/kg	EPA 300.0	09/30/15 02:02	ams	N_WEX
Nutrients							
Nitrite as N	74	5.0	mg/kg	SM 4500NO2 B	10/01/15 00:13	jma	N_WEX
Ammonia-Nitrogen	2500	200	mg/Kg*	SM4500NH3H	09/30/15 12:12	sll	N_WEX
Kjeldahl Nitrogen	32000	2000	mg/kg	EPA 351.2	10/05/15 21:46	jma	
Total Phosphorus	21000	40	mg/Kg*	EPA 6020	09/30/15 17:39	ap	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Arsenic	ND	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Barium	270	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Beryllium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Cadmium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Total Chromium	45	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Cobalt	ND	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Copper	260	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Lead	12	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Mercury	0.49	0.20	mg/kg	EPA 7471A	10/01/15 13:45	mel	
Molybdenum	13	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Nickel	15	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Selenium	ND	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Silver	ND	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Thallium	ND	50	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Vanadium	94	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	
Zinc	770	10	mg/kg	EPA 6020	09/29/15 21:37	ERA	



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

Analytical Report: Page 8 of 10
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: [none]

Report Date: 05-Nov-2015

Work Order Number: B512920
 Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B512920-06

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150928-15 Staged From Drying Bed #4-5 Class 1 Biosolids (6 Grab-Composite)	Solid	09/28/15 07:20	09/28/15 13:23

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	27	2.0	mg/kg	EPA 300.0	09/29/15 05:17	ara	N_WEX
Nutrients							
Nitrite as N	7.3	1.0	mg/kg	SM 4500NO2 B	10/01/15 00:13	jma	N_WEX
Ammonia-Nitrogen	3700	200	mg/Kg*	SM4500NH3H	09/30/15 12:12	sll	N_WEX
Kjeldahl Nitrogen	37000	2000	mg/kg	EPA 351.2	10/05/15 21:46	jma	
Total Phosphorus	24000	40	mg/Kg*	EPA 6020	09/30/15 17:42	ap	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Arsenic	ND	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Barium	250	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Beryllium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Cadmium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Total Chromium	32	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Cobalt	ND	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Copper	260	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Lead	10	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Mercury	0.31	0.20	mg/kg	EPA 7471A	10/01/15 13:47	mel	
Molybdenum	11	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Nickel	13	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Selenium	ND	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Silver	ND	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Thallium	ND	50	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Vanadium	74	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	
Zinc	700	10	mg/kg	EPA 6020	09/29/15 21:39	ERA	



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

Analytical Report: Page 9 of 10
 Project Name: VVWRA-Biosolids Sample - Anr
 Project Number: [none]

Report Date: 05-Nov-2015

Work Order Number: B5I2920
 Received on Ice (Y/N): Yes Temp: 12 °C

Laboratory Reference Number
B5I2920-07

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
150928-16 Staged From Drying Bed #4-11 Class 1 Biosolids (6 Grab-Composite)	Solid	09/28/15 07:29	09/28/15 13:23

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
Anions							
Nitrate as N	54	2.0	mg/kg	EPA 300.0	09/29/15 05:27	ara	N_WEX
Nutrients							
Nitrite as N	8.3	1.0	mg/kg	SM 4500NO2 B	10/01/15 00:13	jma	N_WEX
Ammonia-Nitrogen	3600	200	mg/Kg*	SM4500NH3H	09/30/15 12:12	sll	N_WEX
Kjeldahl Nitrogen	45000	2000	mg/kg	EPA 351.2	10/05/15 21:46	jma	
Total Phosphorus	26000	40	mg/Kg*	EPA 6020	09/30/15 17:44	ap	
Metals and Metalloids; EPA SW846 Series							
Antimony	ND	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Arsenic	ND	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Barium	280	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Beryllium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Cadmium	ND	5.0	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Total Chromium	37	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Cobalt	ND	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Copper	260	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Lead	14	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Mercury	0.92	0.50	mg/kg	EPA 7471A	10/01/15 14:24	mel	
Molybdenum	12	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Nickel	13	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Selenium	ND	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Silver	ND	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Thallium	ND	50	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Vanadium	82	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	
Zinc	770	10	mg/kg	EPA 6020	09/29/15 21:40	ERA	

* NELAP does not offer accreditation for this analyte/method/matrix combination



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

Analytical Report: Page 10 of 10
Project Name: VVWRA-Biosolids Sample - Anr
Project Number: [none]

Report Date: 05-Nov-2015

Work Order Number: B512920
Received on Ice (Y/N): Yes Temp: 12 °C

Notes and Definitions

- N_RLm Due to sample matrix, the reporting limit has been raised.
- N_WEX Analyte determined on a 1:10 water extract from the sample.
- NMint Due to matrix interference, the matrix spike and/or matrix spike duplicate performed on this sample did not meet laboratory acceptance criteria.
- NRPDo The RPD/precision of replicate analyses performed on this sample did not meet laboratory acceptance criteria.
- NSloP The data was accepted based on valid recovery of the remaining surrogate(s). This surrogate recovery was below laboratory acceptance limits.
- 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: 2015.11.05 12:55:36 -07'00'

cc:

e-Short_No Alias

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NELAP no. 02101CA
CA Elap no. 2698
EPA no. CA00102



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

Analytical Report: Page 1 of 1
Project Name: VVWRA-Biosolids Sample - Anr
Project Number: [none]

Work Order Number: **B512920**

Report Date: 05-Nov-2015

Received on Ice (Y/N): Yes Temp: 12 °C

SUBCONTRACT LABORATORY CHAIN OF CUSTODY AND 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
Website: www.vvwr.com E-mail: egilquiter@vvwr.com L.Rodriguez@vvwr.com



Project Name: Biosolids Sample - Annual NPDES	Sample Type		Laboratory Analyses Requested										Sample Preservation Methods					
	Grab	Composite	Ammonia-N	TKN	Nitrite - N	Nitrate - N	Total Phosphate-P	CAM Metals	Total CCR W.E.T.	Asbestos - including Asbestos & Dioxin	Total # of Containers		H ₂ SO ₄ pH=2	Refrigeration	Sample Matrix (WW, DW, GW, SG)			
Project Contact: Lorenzo Rodriguez (760) 246-8638 ext. 216																		
Sampler Name: <i>Bony Hess</i>																		
Sampler Signature: <i>[Signature]</i>																		
VVWRA ID #	Sample Location/Description	Sample Date	Sample Time															
✓ 150928-11	Storage Pad Biosolids (6 Grab-Composite)	09/28/15	0744	X	X	X	X	X	X	X	X			6	6	SG		
✓ 150928-12	Saged From Drying Bed # 4 - 1 (Class 1) Biosolids (6 Grab-Comp)	09/28/15	0714	X	X	X	X	X	X	X	X			1	1	SG		
✓ 150928-13	Saged From Drying Bed # 4 - 2 (Class 1) Biosolids (6 Grab-Comp)	09/28/15	0717	X	X	X	X	X	X	X	X			1	1	SG		
✓ 150928-14	Saged From Drying Bed # 4 - 3 (Class 1) Biosolids (6 Grab-Comp)	09/28/15	0715	X	X	X	X	X	X	X	X			1	1	SG		
150928-15	Saged From Drying Bed # 4 - 5 (Class 1) Biosolids (6 Grab-Comp)	09/28/15	0720	X	X	X	X	X	X	X	X			1	1	SG		
150928-16	Saged From Drying Bed # 4 - 11 (Class 1) Biosolids (6 Grab-Comp)	09/28/15	0729															
150928-17	Saged From Drying Bed # 4 - (Class 1) Biosolids (6 Grab-Comp)	09/28/15	---	X	X	X	X	X	X	X	X			1	1	SG		
Relinquished By (Sign): <i>[Signature]</i>	Date/Time: 9-28-15	Received By (Sign): <i>Cindy Myers</i>	Date/Time: 9-28-15	Relinquished By (Sign): <i>Cindy Myers</i>	Date/Time: 9-28-15	Relinquished By (Sign): <i>Cindy Myers</i>	Date/Time: 9-28-15	Relinquished By (Sign): <i>Cindy Myers</i>	Date/Time: 9-28-15	Relinquished By (Sign): <i>Cindy Myers</i>	Date/Time: 9-28-15	Relinquished By (Sign): <i>Cindy Myers</i>	Date/Time: 9-28-15	Relinquished By (Sign): <i>Cindy Myers</i>	Date/Time: 9-28-15	Relinquished By (Sign): <i>Cindy Myers</i>		
Print: <i>[Signature]</i>	0747	Print: <i>Cindy Myers</i>	0747	Print: <i>Cindy Myers</i>	0747	Print: <i>Cindy Myers</i>	0747	Print: <i>Cindy Myers</i>	0747	Print: <i>Cindy Myers</i>	0747	Print: <i>Cindy Myers</i>	0747	Print: <i>Cindy Myers</i>	0747	Print: <i>Cindy Myers</i>		
Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA	Company: VVWRA		
Relinquished By (Sign): <i>[Signature]</i>	Date/Time: 9/28/15	Received By (Sign): <i>[Signature]</i>	Date/Time: 9/28/15	Relinquished By (Sign): <i>[Signature]</i>	Date/Time: 9/28/15	Relinquished By (Sign): <i>[Signature]</i>	Date/Time: 9/28/15	Relinquished By (Sign): <i>[Signature]</i>	Date/Time: 9/28/15	Relinquished By (Sign): <i>[Signature]</i>	Date/Time: 9/28/15	Relinquished By (Sign): <i>[Signature]</i>	Date/Time: 9/28/15	Relinquished By (Sign): <i>[Signature]</i>	Date/Time: 9/28/15	Relinquished By (Sign): <i>[Signature]</i>		
Print: <i>[Signature]</i>	1323	Print: <i>[Signature]</i>	1323	Print: <i>[Signature]</i>	1323	Print: <i>[Signature]</i>	1323	Print: <i>[Signature]</i>	1323	Print: <i>[Signature]</i>	1323	Print: <i>[Signature]</i>	1323	Print: <i>[Signature]</i>	1323	Print: <i>[Signature]</i>		
Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB	Company: ESB		
Sample Condition Upon Receipt by Laboratory:	Samples Received on Ice? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Temperature 12 °C	Samples Received Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Laboratory Notes: W.E.T. Extraction and EPA 6020, 7471A, 8081, 8082, 8151, 8260, 8270, 7196/719 Asbestos and Dioxin analysis.										Print: _____	Company: _____	Samples sent via courier to: E.S. Babcock Laboratories Lab # 5512920

Please Fax a copy of the completed Chain of Custody document to: *[Signature]* Clearwater: VVWRA at (760) 246-5440; EP 28 2015-02-155-7170 AD
L.Rodriguez 246-8638

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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NELAP no. 02101CA
CA Elap no. 2698
EPA no. CA00102



REPORT NO.: 151753
PAGE NO.: 1 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO: VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: 1682 Salmonella MSRV **Method:** EPA 1682

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-001	150928-11	Storage Pad	Salmonella spp.	9.7	MPN/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:44:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 318.94 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015 Comment: Rec'd. samples #1-6 past 24-hr. hold time. Client notified. Per Lorenzo Rodriguez, OK to run past 24-hr. hold time & BioVir to run T.S%.					
151753-002	150928-12	Drying Bed #4-1	Salmonella spp.	<0.3	MPN/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:16:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 319.94 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015 Comment:					
151753-003	150928-13	Drying Bed #4-2	Salmonella spp.	2.7	MPN/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:17:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 297.68 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015 Comment:					
151753-004	150928-14	Drying Bed #4-3	Salmonella spp.	39.6	MPN/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:15:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 311.85 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015 Comment:					

REPORT NO.: 151753
PAGE NO.: 2 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: 1682 Salmonella MSRV Method: EPA 1682

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-005	150928-15	Drying Bed #4-5	Salmonella spp.	<0.3	MPN/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:20:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 304.76 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015					

Comment:

151753-006	150928-16	Drying Bed #4-11	Salmonella spp.	3.4	MPN/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:29:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 276.41 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015					

Comment:

Test: Coliform, Fecal Method: EPA 1681

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-001	150928-11	Storage Pad	Coliform, Fecal	9.6e2	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:44:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 318.94 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015					

Comment: Rec'd. samples #1-6 past 24-hr. hold time. Client notified. Per Lorenzo Rodriguez, OK to run past 24-hr. hold time & BioVir to run T.S%.

151753-002	150928-12	Drying Bed #4-1	Coliform, Fecal	2.5	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:16:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 319.94 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015					

Comment:

REPORT NO.: 151753
PAGE NO.: 3 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road

CLIENT NO: Victorville, CA 92394
 VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Coliform, Fecal **Method: EPA 1681**

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-003	150928-13	Drying Bed #4-2	Coliform, Fecal	48.8	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:17:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 297.68 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015 Comment:					
151753-004	150928-14	Drying Bed #4-3	Coliform, Fecal	25.9	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:15:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 311.85 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015 Comment:					
151753-005	150928-15	Drying Bed #4-5	Coliform, Fecal	13.9	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:20:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 304.76 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015 Comment:					
151753-006	150928-16	Drying Bed #4-11	Coliform, Fecal	25.6	MPN/1 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:29:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 276.41 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1339 Analyst: KTucker Analysis End: 10/9/2015 Comment:					

Test: Enteric Virus **Method: ASTM D 4994-89**

BioVir #	Sample ID	Site	Analyte	Result	Units
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REPORT NO.: 151753
PAGE NO.: 4 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Enteric Virus **Method:** ASTM D 4994-89

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-001	150928-11	Storage Pad	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:44:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 318.94 g Analysis Start Date: 10/1/2015 Analysis Start Time: 11:45 Analyst: ValentinaL Analysis End: 10/15/2015 Comment: Rec'd. samples #1-6 past 24-hr. hold time. Client notified. Per Lorenzo Rodriguez, OK to run past 24-hr. hold time & BioVir to run T.S%.					
151753-002	150928-12	Drying Bed #4-1	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:16:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 319.94 g Analysis Start Date: 10/1/2015 Analysis Start Time: 11:45 Analyst: ValentinaL Analysis End: 10/15/2015 Comment:					
151753-003	150928-13	Drying Bed #4-2	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:17:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 297.68 g Analysis Start Date: 10/1/2015 Analysis Start Time: 11:45 Analyst: ValentinaL Analysis End: 10/15/2015 Comment:					
151753-004	150928-14	Drying Bed #4-3	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:15:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 311.85 g Analysis Start Date: 10/1/2015 Analysis Start Time: 11:45 Analyst: ValentinaL Analysis End: 10/15/2015 Comment:					
151753-005	150928-15	Drying Bed #4-5	Enteric Virus	<1	pfu/4 g TS
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:20:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 304.76 g Analysis Start Date: 10/1/2015 Analysis Start Time: 11:45 Analyst: ValentinaL Analysis End: 10/15/2015 Comment:					

REPORT NO.: 151753
PAGE NO.: 5 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Enteric Virus Method: ASTM D 4994-89

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-006	150928-16	Drying Bed #4-11	Enteric Virus	<1	pfu/4 g TS

Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:29:00 AM
 ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C
 Volume: 276.41 g Analysis Start Date: 10/1/2015 Analysis Start Time: 11:45
 Analyst: ValentinaL Analysis End: 10/15/2015

Comment:

Test: Helminth Ova Method: EPA/625/R-92/013

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-001	150928-11	Storage Pad	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids

Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:44:00 AM
 ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C
 Volume: 318.94 g Analysis Start Date: 10/1/2015 Analysis Start Time: 0935
 Analyst: SMullaney Analysis End: 11/3/2015

Comment: Rec'd. samples #1-6 past 24-hr. hold time. Client notified. Per Lorenzo Rodriguez, OK to run past 24-hr. hold time & BioVir to run T.S%.

151753-002	150928-12	Drying Bed #4-1	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
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Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:16:00 AM
 ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C
 Volume: 319.94 g Analysis Start Date: 10/1/2015 Analysis Start Time: 0935
 Analyst: SMullaney Analysis End: 11/3/2015

Comment:

REPORT NO.: 151753
PAGE NO.: 6 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Helminth Ova **Method:** EPA/625/R-92/013

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-003	150928-13	Drying Bed #4-2	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:17:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosolids Temp 5.8 C Volume: 297.68 g Analysis Start Date: 10/1/2015 Analysis Start Time: 0935 Analyst: SMullaney Analysis End: 11/3/2015 Comment:					
151753-004	150928-14	Drying Bed #4-3	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:15:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosolids Temp 5.8 C Volume: 311.85 g Analysis Start Date: 10/1/2015 Analysis Start Time: 0935 Analyst: SMullaney Analysis End: 11/3/2015 Comment:					
151753-005	150928-15	Drying Bed #4-5	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:20:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosolids Temp 5.8 C Volume: 304.76 g Analysis Start Date: 10/1/2015 Analysis Start Time: 0935 Analyst: SMullaney Analysis End: 11/3/2015 Comment:					
151753-006	150928-16	Drying Bed #4-11	Helminth Ova	<1	Helminth Ova observed / 4 g Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:29:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosolids Temp 5.8 C Volume: 276.41 g Analysis Start Date: 10/1/2015 Analysis Start Time: 0935 Analyst: SMullaney Analysis End: 11/3/2015 Comment:					

REPORT NO.: 151753
PAGE NO.: 7 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Total Solids Method: SM2540B

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-001	150928-11	Storage Pad	Total Solids (%)	95.5	% Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:44:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 318.94 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1605 Analyst: MPiper Analysis End: 9/30/2015 Comment: Rec'd. samples #1-6 past 24-hr. hold time. Client notified. Per Lorenzo Rodriguez, OK to run past 24-hr. hold time & BioVir to run T.S%.					
151753-002	150928-12	Drying Bed #4-1	Total Solids (%)	94.3	% Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:16:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 319.94 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1605 Analyst: MPiper Analysis End: 9/30/2015 Comment:					
151753-003	150928-13	Drying Bed #4-2	Total Solids (%)	93.3	% Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:17:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 297.68 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1605 Analyst: MPiper Analysis End: 9/30/2015 Comment:					
151753-004	150928-14	Drying Bed #4-3	Total Solids (%)	92.6	% Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:15:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 311.85 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1605 Analyst: MPiper Analysis End: 9/30/2015 Comment:					
151753-005	150928-15	Drying Bed #4-5	Total Solids (%)	93.3	% Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:20:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 304.76 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1605 Analyst: MPiper Analysis End: 9/30/2015 Comment:					

REPORT NO.: 151753
PAGE NO.: 8 of 8
CLIENT: Victor Valley Wastewater Reclamation Authority
ADDRESS: 20111 Shay Road
 Victorville, CA 92394
CLIENT NO: VIC001 **CLIENT PO:** N/A

ASSAY RESULTS:

Test: Total Solids **Method:** SM2540B

BioVir #	Sample ID	Site	Analyte	Result	Units
151753-006	150928-16	Drying Bed #4-11	Total Solids (%)	93.6	% Total Solids
Collector: Bobby Hesse CollectDate: 9/28/2015 CollectTime: 7:29:00 AM ReceiveDate: 9/29/2015 10:40:00 AM Matrix: Biosoilds Temp 5.8 C Volume: 276.41 g Analysis Start Date: 9/29/2015 Analysis Start Time: 1605 Analyst: MPiper Analysis End: 9/30/2015					

Comment:

SAMPLE EVALUATION PERFORMANCE CRITERIA: The precise rates of recovery of organisms from environmental samples cannot be determined. BioVir Laboratories has analyzed your sample(s) in accordance with the method described with each analyte above, however, due to inherent limitations of these methods organisms may avoid detection. For additional information regarding the limitations of the method(s) referred to above please call us at 1-800-GIARDIA.

COMPANY IS NOT AN INSURER: BioVir Laboratories is not an insurer or guarantor of the quality and/or purity of water, wastewater, biosolid or other material from which the sample was taken. BioVir offers no express or implied warranties whatsoever concerning the quality or purity of any water, wastewater, biosolid or other material which is ultimately consumed, distributed, applied or disposed.

MAINTENANCE OF RECORDS: BioVir Laboratories, Inc. shall maintain records pertaining to the historical reconstruction of client's data for a minimum of five years from the date of issuance of the final report. Records may be destroyed after that date unless a written client's request for records transfer is received by BioVir which requests otherwise. Records transfer or storage charges may apply after the 5 year period. THIS REPORT SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF BIOVIR LABORATORIES, INC.

11/10/2015

Date:



Signature

Quality
Checked

EMoran



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out appropriate areas, sign and return to BioVir with this sample.)
 Phone: 1-800-614-0141 Fax: 707-447-1561 Web: www.biovir.com
 Note: Please print clearly using waterproof ink.

LAB USE ONLY	
LRIS #	1753-1
Client #	VI 0201
Date Rec'd	9/29/15
Time Rec'd	10:40
Temp	5.8°C

COMPANY NAME & ADDRESS VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY 2011 SWAY RD. VIC TORVILLE, CA 92394 Contact Name: LORENZO RODRIGUEZ Tel: (760) 246-3036 EXT 316	DATE OF SAMPLING: 9-28-15
NAME OF SAMPLER: BOBBY HESSE	SAMPLE ID: 150928-11
LOCATION OF SAMPLING: STORAGE PAD	TYPE OF SAMPLE: <u>6</u> GRAB COMPOSITE
TREATMENT CHARACTERISTICS: CLASS A ANAEROBIC DIGESTER	TOTAL SOLIDS PERCENTAGE:
SAMPLE VOLUME (NET WEIGHT): ~ 300g	MUST BE INCLUDED IN ORDER TO BEGIN ANALYSIS

HOLD TIMES (Df and ship cold)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours	8 Hours

wts
318.94 g

Fecal Coliform - Language Extracted from EPA Fecal Coliform (Biosolids) Method 1681 (July 2006). For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1681 (LF EC) or 1681 (A-1): Class A composted, Class B aerobically digested, and Class D anaerobically digested. All other materials should be analyzed within 8 hours of sample collection, 6 hour maximum transport and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella - Language Extracted from EPA Salmonella (Biosolids) Method 1682 (July 2006). Analyses should begin immediately, preferably within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at -10°C until analysis. Samples must not be frozen. Sample analysis must begin within 6 hours unless otherwise specified in the Code of Federal Regulations Part 503. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

A holding time variance is allowed from your Regional Administrator under Section 125.3(a). Please refer to the final rule for details.

OK TO RUN PAST HOLD TIME (up to 24 hrs from sampling for bacterial analysis)

SAMPLE COMPRISED OF CLASS A-COMPOSTED, CLASS B-AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY)

Print Name: Cindy Myers Date: 9-28-15

Signature: Cindy Myers

ASSAY(S) TO BE PERFORMED - (PLEASE CHECK)

ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4904-09	HELMINTH OVA EPA 825-R-92/013	SALMONELLA (EPA 1682)	FECAL COLIFORM EPA 1681	TOTAL SOLIDS EPA 1004
CLASS "A"	X	X	X	X	X
CLASS "B"					

COMMENTS: past 24 hr hold time for fecal analysis
Zyloc 800

RELINQUISHED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME
<u>Cindy Myers</u>	<u>JRC</u>	<u>9/29/15</u>	<u>10:40</u>

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC. 885 SIDNEY ROAD, UNIT 6, BENICIA CALIFORNIA 94610

DLX
URS



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas; sign and return to BioVir with the sample.)

Phone: 1-800-GIARDIA Fax: 707-747-1751 WEB: www.biovir.com
Note: Please print clearly using waterproof ink.

LAB USE ONLY	
QMS #	153-2
Client #	VECOOL
Date Rec'd	9/28/15
Time Rec'd	10:40
Temp Rec'd	5.8°C
Temp	5.89

COMPANY NAME & ADDRESS: Ukiah Valley Wastewater Reclamation Authority 2011 Slag Road Ukiah Valley, CA 92394		DATE OF SAMPLING: 9-28-15
Contact Name: Lorena Rodriguez Tel: (760) 246-2638 x.216		TIME OF SAMPLING: 0716
NAME OF SAMPLER: Bobby Hesse	SAMPLE ID: 150908-12	
LOCATION OF SAMPLING: Village Blvd #4-1	TYPE OF SAMPLE: <u>GRAB</u> COMPOSITE	
TREATMENT CHARACTERISTICS: Class A Anaerobic digester	TOTAL SOLIDS PERCENTAGE: * MUST BE EXCLUDED IN ORDER TO BEGIN ANALYSIS	
SAMPLE VOLUME (WET WEIGHT): ~ 300 grams		

HOLD TIMES (Store and ship cold)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours	8 Hours <i>wt. 318.74 g</i>

* Per 40 CFR Parts 136 and 503 (Monday, March 26, 2007) Guidelines Establishing Test Procedures for the Analysis of Pollutants; Analytical Methods for Biological Pollutants in Wastewater and Sewage Sludge; Final Rule Table II (Table 1A) established a holding time of 6 hours for Coliform, total, fecal and E. coli, Fecal Streptococci, Enterococci, and Salmonella. For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for Class A composted, Class B aerobically digested and Class B anaerobically digested biosolids using EPA Method 1600 (LTS-EC) or EPA Method 1681 (A-1).

A holding time variance is allowed from your Regional Administrator under Section 136.3(a). Please refer to the Final Rule for details.

<input checked="" type="checkbox"/> OK TO RUN PAST 6 HOUR HOLD TIME	Print Name: <i>Cindy Myers</i>	Date: 9-28-15
<input type="checkbox"/> SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY).	Signature: <i>Cindy Myers</i>	Date:

ASSAYS(S) TO BE PERFORMED - (PLEASE CHECK)

ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4994-09	HELMINTH OVA EPA 825/R-02/043	SALMONELLA EPA 1602	FECAL COLIFORM EPA 1601	TOTAL SOLIDS EPA 1684
CLASS "A"	X	X	X	X	X
CLASS "B"					

COMMENTS: *held past 24 hr hold time for bacteri analysis*

RELINQUISHED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME
<i>Cindy Myers</i>	<i>[Signature]</i>	9/28/15	10:40

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC., 585 STONE ROAD, UNIT 6, BENICIA, CALIFORNIA 94510



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out appropriate areas, sign and return to BioVir with the sample.)
Phone: 1-800-GIAVIRA Fax: 707-747-1701 Web: www.biovir.com
Note: Please print clearly using waterproof ink.

LAB USE ONLY	
LABS #	753-3
Client #	VI 6001
Field Rec'd	9/29/15
Time Rec'd	10:40
Temp	58 °F

COMPANY NAME & ADDRESS Duck Valley Wastewater Treatment Authority 20th Street and Overville, CA 95977	DATE OF SAMPLING 7-28-15
Contact Name: Corina Rodriguez Tel: (707) 246-3672 x216	TIME OF SAMPLING 08:17
NAME OF SAMPLER Bobby Hesse	SAMPLE ID 5072513
LOCATION OF SAMPLING Drying Bed # 2	TYPE OF SAMPLE 6 GRAB COMPOSITE
TREATMENT CHARACTERISTICS Class A - Aerobic Digester	TOTAL SOLIDS PERCENTAGE
SAMPLE VOLUME (NET WEIGHT) ~ 300 grams	(MUST BE INCLUDED IN ORDER TO BEGIN ANALYSIS)

HOLD TIMES (Shoe and slip on)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	8 Hours	8 Hours

with
297.68%

Fecal Coliform - Language extracted from EPA Fecal Coliform (Biosolids) Method 1681 (July 2006). For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1681 (TFEC) or 1681 (A-1): Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other matrices should be analyzed within 8 hours of sample collection, 6 hour maximum transport and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella - Language extracted from EPA Salmonella (Biosolids) Method 1682 (July 2006). Analysis should begin immediately, preferably, within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at 4°C until analysis. Samples must not be frozen. Sample analysis must begin within 8 hours unless otherwise specified in the Code of Federal Regulations Part 503. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

A holding time variance is allowed from your Regional Administrator under Section 136.3(e). Please refer to the final Rule for details.

<input checked="" type="checkbox"/> OK TO RUN PAST HOLD TIME (up to 24 hrs from sampling for bacterial analysis)	Print Name Cindy Myers	Date 9-28-15
<input type="checkbox"/> SAMPLE COMPRISED OF CLASS A-COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY)	Signature Cindy Myers	Other

ASSAY(S) TO BE PERFORMED - (PLEASE CHECK)

ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4994-09	HELMINTH OVA EPA 825/R-02-011	SALMONELLA EPA 1682	FECAL COLIFORM EPA 1681	TOTAL SOLIDS EPA 1581
CLASS "A"	X	X	X	X	X
CLASS "B"					

COMMENTS: need post 24-hr hold time for bact. analysis w/

RELINQUISHED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME
Cindy Myers	[Signature]	9/29/15	10:40

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC., 885 STONE ROAD, UNIT 5, BENICIA CALIFORNIA 94610



BIO SOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas, sign and return to BioVir with the sample.)
 Phone: 1-800-GIARDIA Fax: 707-747-1741 Web: www.biovir.com
 Note: Please print clearly using waterproof ink.

LAB USE ONLY
 LIMS # 1753-10
 Client # VEC001
 Date Rec'd 9/28/15
 Time Rec'd 10:40
 Temp 58°C

COMPANY NAME & ADDRESS: Victor Valley Waste Water Reclamation 1011 Shay Road Victorville, CA, 92584	DATE OF SAMPLING: 9-28-15
Contact Name: <u>Gerardo Rodriguez</u> (760) 246-7652 ext 216	TIME OF SAMPLING: 0715
NAME OF SAMPLER: <u>Robby Hess</u>	SAMPLE ID: <u>150928-14</u>
LOCATION OF SAMPLING: <u>Drying Bed #7-3</u>	TYPE OF SAMPLE: <input checked="" type="checkbox"/> GRAB <input type="checkbox"/> COMPOSITE
TREATMENT CHARACTERISTICS: <u>Class A - Aerobically digester</u>	TOTAL SOLIDS PERCENTAGE: 9% (MUST BE INCLUDED IN ORDER TO BEGIN ANALYSIS)
SAMPLE VOLUME (WET WEIGHT): <u>~ 300 g/m</u>	

HOLD TIMES (Start and stop cold)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours	8 Hours

Lot: 311.85 9

Fecal Coliform - Language Extracted from EPA Fecal Coliform (Biosolids) Method 1691 (July 2006). For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1691 (LITE) or 1691 (A-1): Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other matrices should be analyzed within 8 hours of sample collection, 6 hour maximum transport and 1 hour for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella - Language Extracted from EPA Salmonella (Biosolids) Method 1682 (July 2006). Analyses should begin immediately, preferably, within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at <10°C until analysis. Samples must not be frozen. Sample analysis must begin within 8 hours unless otherwise specified in the Code of Federal Regulations Part 603. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

A holding time variance is allowed from your Regional Administrator under Section 136.3(f). Please refer to the Final Rule for details.

<input checked="" type="checkbox"/> OK TO RUN PAST HOLD TIME (Up to 24 hrs from sampling for bacterial analysis)	Print Name: <u>Cindy Myers</u>	Date: <u>9-28-15</u>
<input type="checkbox"/> SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY).	Signature: <u>Cindy Myers</u>	Date:

ASSAY(S) TO BE PERFORMED (PLEASE CHECK)

ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4994-00	HELMINTH OVA EPA 825-R-92-013	SALMONELLA EPA 1682	FECAL COLIFORM EPA 1681	TOTAL SOLIDS EPA 1684
CLASS A*	X	X	X	X	X
CLASS B*					

COMMENTS: need past 24-hr hold time for bact. analysis

REQUISISHED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME
<u>Cindy Myers</u>	<u>[Signature]</u>	<u>9/29/15</u>	<u>10:40</u>

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC. 686 STONE ROAD, UNIT 6, BENICIA, CALIFORNIA 94510



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas, sign and return to BioVir with the sample.)
Phone: 1-800-614-0114 Fax: 707-747-1751 WEB: www.biovir.com
Note: Please print clearly using waterproof ink.

LAB USE ONLY:
LMB # 1753-5
Client # VI-1001
Date Rec'd 9/29/15
Time Rec'd 10:40
Temp 5.8 DC

COMPANY NAME & ADDRESS <u>Delos Valley Wastewater Treatment Authority 2011 3rd Ave, Ukiah, CA 92394</u>	DATE OF SAMPLING <u>9-28-15</u>
Contact Name: <u>Laraine Rodriguez</u> tel: <u>(760) 246-2638 x 216</u>	TIME OF SAMPLING <u>5:15</u>
NAME OF SAMPLER <u>Bobby Hesse</u>	SAMPLE ID <u>5072215</u>
LOCATION OF SAMPLING <u>Drying Bed #4-5</u>	TYPE OF SAMPLE: <input checked="" type="checkbox"/> GRAB <input type="checkbox"/> COMPOSITE
TREATMENT CHARACTERISTICS <u>Class A - Anaerobic digester</u>	TOTAL SOLIDS PERCENTAGE
SAMPLE VOLUME (WET WEIGHT) <u>~ 300 gm</u>	MUST BE INCLUDED IN ORDER TO BEGIN ANALYSIS

HOLD TIMES (Spill and ship only)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours	6 Hours

304.76.9

Fecal Coliform - Language Extracted from EPA Fecal Coliform (Biosolids) Method 1081 (July 2006): For fecal coliform samples for sanitary sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1600 (LTC) or 1601 (A-1): Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other materials should be analyzed within 8 hours of sample collection, 6 hour maximum transport and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella - Language Extracted from EPA Salmonella (Biosolids) Method 1602 (July 2006): Analyses should begin immediately, preferably within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at <10°C until analysis. Samples must not be frozen. Sample analysis must begin within 6 hours unless otherwise specified in the Code of Federal Regulations Part 503. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met. A holding time variance is allowed from your Regional Administrator under Section 136.3(e). Please refer to the Final Rule for details.

OK TO RUN PAST HOLD TIME
(up to 24 hrs from sampling for bacterial analysis)

SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY)

Print Name: Uday Myer Date: 9-28-15
Signature: Uday Myer

ASSAY(S) TO BE PERFORMED - (PLEASE CHECK)

ANALYTICAL STANDARD	ENTERIC VIRUS EPA 1600-09	HELMINTH OVA EPA 626R-92/D13	SALMONELLA EPA 1602	FECAL COLIFORM EPA 1601	TOTAL SOLIDS EPA 1604
CLASS A	X	X	X	X	X
CLASS B					

COMMENTS: used past 24 hr hold time for bact. analysis

RELINQUISHED BY (SIGNED) <u>Uday Myer</u>	RECEIVED BY (SIGNED) <u>[Signature]</u>	DATE <u>9-29-15</u>	TIME <u>10:40</u>
----------------------------------------------	--------------------------------------------	------------------------	----------------------

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC. 685 STONE ROAD, UNIT 6, BENICIA CALIFORNIA 94610



BIOSOLIDS SAMPLE DATA SHEET

(Please fill out applicable areas, sign and return to BioVir with the sample.)
Phone: 1-800-GIAVITA Fax: 707-747-7761 Website: www.biovir.com
Note: Please print clearly using waterproof ink.

LAB USE ONLY
LIMS # 1253-6
Client # V.E.001
Date Recd 9/28/15
Time Recd 10:40
Temp: 5.8°C

COMPANY NAME & ADDRESS: Usher Valley Wastewater Reclamation Authority 2011 Gray Road, Ukiah, CA 92392	DATE OF SAMPLING: 9-28-15
Contact Name: Lorraine Rodriguez Tel: (760) 246-8635 x 216	TIME OF SAMPLING: 0729
NAME OF SAMPLER: Bobby Hesse	SAMPLE ID: 15292816
LOCATION OF SAMPLING: Drying Bed # 9-1	TYPE OF SAMPLE: <input checked="" type="radio"/> GRAB <input type="radio"/> COMPOSITE
TREATMENT CHARACTERISTICS: Class A Aerobic Digester	TOTAL SOLIDS PERCENTAGE
SAMPLE VOLUME (WET WEIGHT): ~ 300 g	MUST BE INCLUDED IN ORDER TO BEGIN ANALYSIS

HOLD TIMES (Store and ship in)	ENTERIC VIRUS	HELMINTH OVA	SALMONELLA	FECAL COLIFORM
	2 Weeks	1 Month	6 Hours	8 Hours

2-76-41-9

Fecal Coliform: Language Extracted from EPA Fecal Coliform (Biosolids) Method 1691 (July 2006). For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1690 (LTD-TC) or 1691 (A-1): Class A composted, Class B aerobically digested, and Class B anaerobically digested. All other matrices should be analyzed within 8 hours of sample collection, 6 hour maximum transit and 2 hours for sample processing. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

Salmonella: Language Extracted from EPA Salmonella (Biosolids) Method 1682 (July 2006). Analyses should begin immediately, preferably, within 2 hours of collection. If it is impossible to examine samples within 2 hours, samples must be maintained at <10°C until analysis. Samples must not be frozen. Sample analysis must begin within 6 hours unless otherwise specified in the Code of Federal Regulations Part 503. Note: Adherence to sample handling procedures and holding time limits is critical to the production of valid data. Sample results will be considered invalid if these conditions are not met.

A holding time variance is allowed from your Regional Administrator under Section 136.3(e). Please refer to the Final Rule for details.

OK TO RUN PAST HOLD TIME (up to 24 hrs from sampling for bacterial analysis)

SAMPLE COMPRISED OF CLASS A COMPOSTED, CLASS B AEROBICALLY OR ANAEROBICALLY DIGESTED BIOSOLIDS (FECAL COLIFORM TEST ONLY)

Print Name: Cindy Myers Date: 9-28-15

Signature: Cindy Myers

ASSAY(S) TO BE PERFORMED (PLEASE CHECK)

ANALYTICAL STANDARD	ENTERIC VIRUS ASTM D 4894-R9	HELMINTH OVA EPA 826/R-92/D13	SALMONELLA EPA 1682	FECAL COLIFORM EPA 1681	TOTAL SOLIDS EPA 1684
CLASS 'A'	X	X	X	X	X
CLASS 'B'					

COMMENTS: used past 24 hr hold time for bact analysis

REMOVED BY (SIGNED)	RECEIVED BY (SIGNED)	DATE	TIME
<u>Cindy Myers</u>	<u>[Signature]</u>	<u>9/29/15</u>	<u>10:40</u>

SHIPPING ADDRESS: BIOVIR LABORATORIES, INC. 885 STONE ROAD, UNIT 5, BENICIA CALIFORNIA 94510