

CH2MHILL • BWXT West Valley, LLC

West Valley Demonstration Project

Ms. Jennifer Splitt, Contracting Officer
U. S. Department of Energy
550 Main St., Room 7-010
Cincinnati, OH 45202

AC-PRES
WD:2024:0205
March 19, 2024

ATTENTION: Jennifer Dundas

SUBJECT: Contract No. DE-EM0001529, Section J-3, Item 127, State Pollutant Discharge Elimination System (SPDES) Discharge Monitoring Report (DMR) for the Period February 1 through February 29, 2024

Dear Ms. Splitt

This letter is submitted for Contracting Officer Representative's approval to inform you that the SPDES DMR for the reporting period February 1 through February 29, 2024, has been submitted electronically. A copy of this submittal is attached as well as a copy of the email confirmation from the New York State Department of Environmental Conservation (NYSDEC).

If you have any questions, please contact William Kean at (716) 942-4865 or Elizabeth Lowes at (716) 481-0429.

Sincerely,

Jason Casper Digitally signed by Jason Casper
Date: 2024.03.19 13:26:53 -04'00'

Jason L. Casper
President & General Manager

JLC:WNK:mlv

Attachment: A) SPDES DMR for February 1, 2024 through February 29, 2024
B) Whole Effluent Toxicity (WET) Final Report for the February 2024 Discharge
C) CHBWV Environmental Certification
D) Email Confirmation from NYSDEC

cc: WET@dec.ny.gov
B. C. Bower, DOE-WVDP
S. A. Cherry, CHBWV
C. Chun, CHBWV
L. K. Hollfelder, CHBWV
W. N. Kean, CHBWV
E. A. Lowes, CHBWV
D. M. Martinet, CHBWV
J. K. Mantione, CHBWV
J. T. Pillittere, CHBWV (Public Reading Room)
R. E. Steiner, CHBWV
K. A. Wooley, CHBWV
Letter Log (M. Varner), CHBWV
CHBWV OITS #2330376

Attachment A
SPDES DMR for February 1 – 29, 2024

ATTACHMENT A

SPDES DISCHARGE MONITORING REPORT - FEBRUARY 1 THROUGH FEBRUARY 29, 2024
NET IRON EFFLUENT CONCENTRATION CALCULATION
WEST VALLEY DEMONSTRATION PROJECT, SPDES PERMIT NO. NY-0000973

$$\begin{aligned} \text{OUTFALL 001} &= M1 = \frac{(X1 + X2) V1}{2} = 1436221.34 \text{ mg/month} \\ X1 &= 0.169 \text{ mg/L} \\ X2 &= 0.159 \text{ mg/L} \\ V1 &= 8757447.19 \text{ L/month} \end{aligned}$$

$$\begin{aligned} \text{OUTFALL 007} &= M7 = \frac{(X1 + X2) V7}{2} = 0.00 \text{ mg/month} \\ X1 &= 0.00 \text{ mg/L} \\ X2 &= 0.00 \text{ mg/L} \\ V7 &= 0.00 \text{ L/month} \end{aligned}$$

Note: There was no discharge from outfall 007 during this monitoring period.

$$\begin{aligned} \text{RAW WATER} &= \text{MRW} = \frac{(X1 + X2 + X3 + X4) \text{VRW}}{4} = 0.00 \text{ mg/month} \\ X1 &= 0.00 \text{ mg/L} \\ X2 &= 0.00 \text{ mg/L} \\ X3 &= 0.00 \text{ mg/L} \\ X4 &= 0.00 \text{ mg/L} \\ \text{VRW} &= 0.00 \text{ L/month} \end{aligned}$$

Note: Raw water from the reservoir system is no longer used for process water since the site installed two groundwater wells. This eliminated the need to collect raw water samples on a weekly basis and altered the iron discharge concentration equation as the mass of iron entering the system is no longer necessary.

$$\text{IRON DISCHARGE CONCENTRATION} = \frac{M1 + M7 - \text{MRW}}{V1 + V7} = 0.16 \text{ mg/L}$$

ATTACHMENT A (Cont'd)

SPDES DISCHARGE MONITORING REPORT - FEBRUARY 1 THROUGH FEBRUARY 29, 2024
TOTAL DISSOLVED SOLIDS (TDS) CONCENTRATION CALCULATION - MONITORING POINT 116
WEST VALLEY DEMONSTRATION PROJECT, SPDES PERMIT No. NY-0000973

Date: February 7, 2024

$$\begin{aligned} C4 &= ((Q1)(C1)+(Q2)(C2)+(Q3)(C3))/Q4 \\ &= ((0.232 \text{ MGD})(858 \text{ mg/L})+(0.364 \text{ MGD})(219 \text{ mg/L})+(0.432 \text{ MGD})(69 \text{ mg/L}))/ (1.028 \text{ MGD}) \\ &= 300 \text{ mg/L} \end{aligned}$$

Date: February 15, 2024

$$\begin{aligned} C4 &= ((Q1)(C1)+(Q2)(C2)+(Q3)(C3))/Q4 \\ &= ((0.232 \text{ MGD})(870 \text{ mg/L})+(0.132 \text{ MGD})(144 \text{ mg/L})+(0.432 \text{ MGD})(137 \text{ mg/L}))/ (0.796 \text{ MGD}) \\ &= 352 \text{ mg/L} \end{aligned}$$

- Q1 = Flow at Outfall 001, million gallons per day (MGD).
- C1 = Total Dissolved Solids (TDS) concentration at Outfall 001, mg/L.
- Q2 = Flow in Franks Creek, MGD (without Outfall 001), measured at WNSP006 just prior to, and shortly after the discharge event.
- C2 = TDS concentration in Franks Creek measured at WNSP006 just prior to, and shortly after the discharge event.
- Q3 = Flow of augmentation water, MGD, if required.
- C3 = TDS concentration in augmentation water, MGD.
- Q4 = Q1 + Q2 + Q3, MGD (Flow in Franks Creek, including Outfall 001).
- C4 <= 500 mg/L (calculated TDS concentration at 116 in Franks Creek, which includes Outfall 001).

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------|--|--------------------|---|----|-------------|---|----------------|---|------------------|----------|--|--|--|--|--|--|--|--|---|----------------|----------------|----------------|------------------|-------------------------|-------------------------|-------------------------|-------------|
| 00979 | Cobalt, total recoverable | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | < | 0,0006 | < | 0,0006 | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | Req Mon MO AVG | <= | 0,005 DAILY MX | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 00981 | Selenium, total recoverable | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | < | 0,0004 | < | 0,0004 | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | Req Mon MO AVG | <= | 0,004 DAILY MX | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 01045 | Iron, total [as Fe] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | = | 0,164 | = | 0,169 | 19 - mg/L | 02/BA - Twice Per Batch | 24 - COMP24 | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | Req Mon MO AVG | | Req Mon DAILY MX | 19 - mg/L | 02/BA - Twice Per Batch | 24 - COMP24 | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 01105 | Aluminum, total [as Al] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | < | 0,06 | < | 0,06 | 19 - mg/L | 01/BA - Once Per Batch | 24 - COMP24 | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | <= | 2,0 MO AVG | <= | 4,0 DAILY MX | 19 - mg/L | 01/BA - Once Per Batch | 24 - COMP24 |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 01128 | Vanadium, total recoverable | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | < | 0,0015 | < | 0,0015 | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | Req Mon MO AVG | <= | 0,014 DAILY MX | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 34726 | Nitrogen, ammonia, total [as NH3] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | < | 0,016 | = | 0,022 | 19 - mg/L | 02/BA - Twice Per Batch | 24 - COMP24 | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | <= | 1,5 MO AVG | <= | 2,1 DAILY MX | 19 - mg/L | 02/BA - Twice Per Batch | 24 - COMP24 |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 50050 | Flow, in conduit or thru treatment plant | 1 - Effluent Gross | 0 | -- | Sample | = | 0,232 | = | 0,328 | 03 - MGD | | | | | | | | | | | | | | 02/BA - Twice Per Batch | CN - CONTIN | | |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon DAILY MX | 03 - MGD | | | | | | | | | | | | | | 02/BA - Twice Per Batch | CN - CONTIN | | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 50060 | Chlorine, total residual | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | < | 0,02 | < | 0,02 | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | Req Mon MO AVG | <= | 0,1 DAILY MX | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 70295 | Solids, total dissolved | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | = | 864,0 | = | 870,0 | 19 - mg/L | 02/BA - Twice Per Batch | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | Req Mon MO AVG | | Req Mon DAILY MX | 19 - mg/L | 02/BA - Twice Per Batch | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 71900 | Mercury, total [as Hg] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | = | 1,7 | = | 1,7 | 3M - ng/L | 01/BA - Once Per Batch | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | <= | 50,0 MO AVG | | Req Mon DAILY MX | 3M - ng/L | 01/BA - Once Per Batch | GR - GRAB |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |
| 81646 | Surfactants [linear alkylate sulfonate] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | | | | = | 0,01 | = | 0,01 | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | |
| | | | | | Permit Req. | | | | | | | | | | | | | | | | Req Mon MO AVG | <= | 0,04 DAILY MX | 19 - mg/L | 01/BA - Once Per Batch | GR - GRAB | |
| | | | | | Value NODI | | | | | | | | | | | | | | | | | | | | | | |

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

s required in Title 6 of the New York State Codes, Rules, and Regulations 6NYCRR, Part 750-2(e)(3), the New York Environmental Laboratory Accreditation Program (NYELAP) identification numbers for Laboratories performing analysis for the WWD P DMR's are as follows: 1) Eurofins: NY Lab No. 10026; 2) General Engineering Laboratory: NY Lab No. 11501, and New England Bioassay (NEB): NY Lab No. 12157. Also, NYCRR Part 750-2(e)(3) requires reporting of Method Detection Limits (MDLs) where monitoring is not performed under ELAP. To that end, the MDL for Total Residual Chlorine analysis, performed by CHBWW Environmental Services is 0.02 mg/L.

Attachments

No attachments.

Report Last Saved By

U.S. DEPT OF ENERGY

User: william.kean@chbww.com
Name: William Kean
E-Mail: william.kean@chbww.com
Date/Time: 2024-03-19 08:42 (Time Zone: -04:00)

Report Last Signed By

User: ELIZABETH.LOWES@CHBWW.COM
Name: Elizabeth Lowes
E-Mail: elizabeth.lowes@chbww.com
Date/Time: 2024-03-19 11:02 (Time Zone: -04:00)

DMR Copy of Record

| Permit | | | | | | | | | | | | | | | | | | |
|--|--------------------------------------|---------------------|--|-------------|---------------------|----------------------|--------------------|---|------------------|--------------------------|------------------|-------------|------------------|-------------|----------|-----------------------|-------------------------|-------------|
| Permit #: | NY0000973 | Permittee: | U.S. DEPT OF ENERGY | | | | Facility: | WEST VALLEY DEMONSTRATION PROJ | | | | | | | | | | |
| Major: | Yes | Permittee Address: | 1000 INDEPENDENCE AVE SW WASHINGTON, DC 20585 | | | | Facility Location: | 10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799 | | | | | | | | | | |
| Permitted Feature: | 01B Internal Outfall | Discharge: | 01B-M MERCURY PRETREATMENT | | | | | | | | | | | | | | | |
| Report Dates & Status | | | | | | | | | | | | | | | | | | |
| Monitoring Period: | From 02/01/24 to 02/29/24 | | | | DMR Due Date: | 03/28/24 | | | | Status: | NetDMR Validated | | | | | | | |
| Considerations for Form Completion | | | | | | | | | | | | | | | | | | |
| Principal Executive Officer | | | | | | | | | | | | | | | | | | |
| First Name: | Bryan C. | | | | Title: | Director, USDOE-WWDP | | | | Telephone: | 716-942-4368 | | | | | | | |
| Last Name: | Bower | | | | | | | | | | | | | | | | | |
| No Data Indicator (NODI) | | | | | | | | | | | | | | | | | | |
| Form NODI: | -- | | | | | | | | | | | | | | | | | |
| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | | | # of Ex. | Frequency of Analysis | Sample Type | |
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | | | | Value 3 |
| 00056 | Flow rate | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | 01/07 - Weekly | CN - CONTIN |
| | | | | | Permit Req. | | Req Mon MO AVG | | Req Mon DAILY MX | 07 - gal/d | | | | | | | | |
| | | | | | Value NODI | | C - No Discharge | | C - No Discharge | | | | | | | | | |
| 71900 | Mercury, total [as Hg] | 1 - Effluent Gross | 0 | -- | Sample | | | | | | | | | | | | 02/BA - Twice Per Batch | GR - GRAB |
| | | | | | Permit Req. | | | | | | Req Mon MO AVG | <= | 50.0 DAILY MX | 3M - ng/L | | | | |
| | | | | | Value NODI | | | | | | C - No Discharge | | C - No Discharge | | | | | |
| Submission Note | | | | | | | | | | | | | | | | | | |
| If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type. | | | | | | | | | | | | | | | | | | |
| Edit Check Errors | | | | | | | | | | | | | | | | | | |
| No errors. | | | | | | | | | | | | | | | | | | |
| Comments | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Attachments | | | | | | | | | | | | | | | | | | |
| No attachments. | | | | | | | | | | | | | | | | | | |
| Report Last Saved By | | | | | | | | | | | | | | | | | | |
| U.S. DEPT OF ENERGY | | | | | | | | | | | | | | | | | | |
| User: | william.kean@chbvw.com | | | | | | | | | | | | | | | | | |
| Name: | William Kean | | | | | | | | | | | | | | | | | |
| E-Mail: | william.kean@chbvw.com | | | | | | | | | | | | | | | | | |
| Date/Time: | 2024-03-19 08:43 (Time Zone: -04:00) | | | | | | | | | | | | | | | | | |
| Report Last Signed By | | | | | | | | | | | | | | | | | | |
| User: | ELIZABETH.LOWES@CHBWW.COM | | | | | | | | | | | | | | | | | |
| Name: | Elizabeth Lowes | | | | | | | | | | | | | | | | | |
| E-Mail: | elizabeth.lowes@chbvw.com | | | | | | | | | | | | | | | | | |
| Date/Time: | 2024-03-19 11:02 (Time Zone: -04:00) | | | | | | | | | | | | | | | | | |

DMR Copy of Record

| | | | | | | | | | | | | | | | | | | |
|--|--------------------------------------|-------------------------|--|----------------------|---------|-------------|------------------|-------|--------------------------|---|--------------|----------|-------------|----------|-----------------------|-------------|-----------------------------|-------------|
| Permit | | | | | | | | | | | | | | | | | | |
| Permit #: | NY0000973 | Permittee: | U.S. DEPT OF ENERGY | | | | | | Facility: | WEST VALLEY DEMONSTRATION PROJ | | | | | | | | |
| Major: | Yes | Permittee Address: | 1000 INDEPENDENCE AVE SW WASHINGTON, DC 20585 | | | | | | Facility Location: | 10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799 | | | | | | | | |
| Permitted Feature: | 116 Internal Outfall | Discharge: | 116-M PSEUDO MON. POINT @FRANKS CRK | | | | | | | | | | | | | | | |
| Report Dates & Status | | | | | | | | | | | | | | | | | | |
| Monitoring Period: | From 02/01/24 to 02/29/24 | | DMR Due Date: | 03/28/24 | | Status: | NetDMR Validated | | | | | | | | | | | |
| Considerations for Form Completion | | | | | | | | | | | | | | | | | | |
| IF PSUEDO MONITORING POINT REPORT IS NOT REQUIRED DURING THE MONITORING PERIOD, EITHER CHECK THENO DISCHARGE BOX OR ENTER 'NODI A'IN PLACE OF A MEASUREMENT TO INDICATE A GENERAL PERMIT EXEMPTION. | | | | | | | | | | | | | | | | | | |
| Principal Executive Officer | | | | | | | | | | | | | | | | | | |
| First Name: | Bryan C. | | Title: | Director, USDOE-WWDP | | | | | | Telephone: | 716-942-4368 | | | | | | | |
| Last Name: | Bower | | | | | | | | | | | | | | | | | |
| No Data Indicator (NODI) | | | | | | | | | | | | | | | | | | |
| Form NODI: | -- | | | | | | | | | | | | | | | | | |
| Parameter | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | | | # of Ex. | Frequency of Analysis | Sample Type | | |
| Code | Name | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Qualifier 3 | Value 3 | Units | | | |
| 70295 | Solids, total dissolved | Z - Instream Monitoring | 0 | -- | | | | | | | | | | | 19 - mg/L | 0 | 02/DS - Twice Per Discharge | CA - CALCTD |
| | | | | Sample | | | | | | | | | | | 352.0 | | | |
| | | | | Permit Req. | | | | | | | | | | | Req Mon MO AVG <= | | | |
| | | | | Value NODI | | | | | | | | | | | 500.0 DAILY MX | | | |
| | | | | | | | | | | | | | | | 19 - mg/L | | | |
| Submission Note | | | | | | | | | | | | | | | | | | |
| If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type. | | | | | | | | | | | | | | | | | | |
| Edit Check Errors | | | | | | | | | | | | | | | | | | |
| No errors. | | | | | | | | | | | | | | | | | | |
| Comments | | | | | | | | | | | | | | | | | | |
| s required in Title 6 of the New York State Codes, Rules, and Regulations 6NYCRR, Part 750-2(e)(3), the New York Environmental Laboratory Accreditation Program (NYELAP) identification numbers for Laboratories performing analysis for the WWDP DMR's are as follows: 1) Eurofins: NY Lab No. 10026; 2) General Engineering Laboratory: NY Lab No. 11501, and New England Bioassay (NEB): NY Lab No. 12157. Also, NYCRR Part 750-2(e)(3) requires reporting of Method Detection Limits (MDLs) where monitoring is not performed under ELAP. To that end, the MDL for Total Residual Chlorine analysis, performed by CHBWW Environmental Services is 0.02 mg/L. | | | | | | | | | | | | | | | | | | |
| Attachments | | | | | | | | | | | | | | | | | | |
| Name | | | | | | | | | | Type | | Size | | | | | | |
| WWDP_February_2024_TDS_Calculation.pdf | | | | | | | | | | pdf | | 364351.0 | | | | | | |
| Report Last Saved By | | | | | | | | | | | | | | | | | | |
| U.S. DEPT OF ENERGY | | | | | | | | | | | | | | | | | | |
| User: | william.kean@chbww.com | | | | | | | | | | | | | | | | | |
| Name: | William Kean | | | | | | | | | | | | | | | | | |
| E-Mail: | william.kean@chbww.com | | | | | | | | | | | | | | | | | |
| Date/Time: | 2024-03-19 08:44 (Time Zone: -04:00) | | | | | | | | | | | | | | | | | |
| Report Last Signed By | | | | | | | | | | | | | | | | | | |
| User: | ELIZABETH.LOWES@CHBWW.COM | | | | | | | | | | | | | | | | | |
| Name: | Elizabeth Lowes | | | | | | | | | | | | | | | | | |
| E-Mail: | elizabeth.lowes@chbww.com | | | | | | | | | | | | | | | | | |
| Date/Time: | 2024-03-19 11:02 (Time Zone: -04:00) | | | | | | | | | | | | | | | | | |

DMR Copy of Record

Permit

| | | | | | |
|--------------------|-------------------------|--------------------|--|--------------------|---|
| Permit #: | NY0000973 | Permittee: | U.S. DEPT OF ENERGY | Facility: | WEST VALLEY DEMONSTRATION PROJ |
| Major: | Yes | Permittee Address: | 1000 INDEPENDENCE AVE SW WASHINGTON, DC 20585 | Facility Location: | 10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799 |
| Permitted Feature: | SUM Internal Outfall | Discharge: | SUM-N SUM OF OUTFALLS 1 & 7 | | |

Report Dates & Status

| | | | | | |
|--------------------|---------------------------|---------------|----------|---------|------------------|
| Monitoring Period: | From 02/01/24 to 02/29/24 | DMR Due Date: | 03/28/24 | Status: | NetDMR Validated |
|--------------------|---------------------------|---------------|----------|---------|------------------|

Considerations for Form Completion

Principal Executive Officer

| | | | | | |
|-------------|----------|--------|----------------------|------------|--------------|
| First Name: | Bryan C. | Title: | Director, USDOE-WWDP | Telephone: | 716-942-4368 |
| Last Name: | Bower | | | | |

No Data Indicator (NODI)

Form NODI: -

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | Quality or Concentration | | | | # of Ex. | Frequency of Analysis | Sample Type | | | |
|-------|---------------------|---------------------|----------|-------------|---------------------|---------|-------------|---------|--------------------------|-------------|---------|----------------|----------|-----------------------|-------------|-----------------|-----------------|-------------|
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | | | | Value 2 | Qualifier 3 | Value 3 |
| 01045 | Iron, total [as Fe] | 2 - Effluent Net | 0 | -- | Sample | | | | | | = | 0.16 | = | 0.16 | 19 - mg/L | 01/30 - Monthly | CA - CALCTD | |
| | | | | | Permit Req. | | | | | | | Req Mon MO AVG | <= | 1.0 DAILY MX | 19 - mg/L | 0 | 01/30 - Monthly | CA - CALCTD |
| | | | | | Value NODI | | | | | | | | | | | | | |

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

s required in Title 6 of the New York State Codes, Rules, and Regulations 6NYCRR, Part 750-2(e)(3), the New York Environmental Laboratory Accreditation Program (NYELAP) identification numbers for Laboratories performing analysis for the WWDP DMR's are as follows: 1) Eurofins: NY Lab No. 10026; 2) General Engineering Laboratory: NY Lab No. 11501, and New England Bioassay (NEB): NY Lab No. 12157. Also, NYCRR Part 750-2(e)(3) requires reporting of Method Detection Limits (MDLs) where monitoring is not performed under ELAP. To that end, the MDL for Total Residual Chlorine analysis, performed by CHBWV Environmental Services is 0.02 mg/L.

Attachments

| Name | Type | Size |
|---|------|----------|
| WWDP_February_2024_Net_Iron_Calculation.pdf | pdf | 340018.0 |

Report Last Saved By

U.S. DEPT OF ENERGY

| | |
|------------|--------------------------------------|
| User: | william.kean@chbwv.com |
| Name: | William Kean |
| E-Mail: | william.kean@chbwv.com |
| Date/Time: | 2024-03-19 08:44 (Time Zone: -04:00) |

Report Last Signed By

| | |
|------------|--------------------------------------|
| User: | ELIZABETH.LOWES@CHBWV.COM |
| Name: | Elizabeth Lowes |
| E-Mail: | elizabeth.lowes@chbwv.com |
| Date/Time: | 2024-03-19 11:02 (Time Zone: -04:00) |

DMR Copy of Record

Permit

| | | | | | |
|--------------------|-------------------------|--------------------|--|--------------------|---|
| Permit #: | NY0000973 | Permittee: | U.S. DEPT OF ENERGY | Facility: | WEST VALLEY DEMONSTRATION PROJ |
| Major: | Yes | Permittee Address: | 1000 INDEPENDENCE AVE SW WASHINGTON, DC 20585 | Facility Location: | 10282 ROCK SPRINGS ROAD WEST VALLEY, NY 14171-9799 |
| Permitted Feature: | 001 External Outfall | Discharge: | 001-W OUTFALL 001 WET TESTING QUARTERLY | | |

Report Dates & Status

| | | | | | |
|--------------------|---------------------------|---------------|----------|---------|------------------|
| Monitoring Period: | From 01/01/24 to 03/31/24 | DMR Due Date: | 05/28/24 | Status: | NetDMR Validated |
|--------------------|---------------------------|---------------|----------|---------|------------------|

Considerations for Form Completion

SEE PERMIT FOOTNOTES FOR WET TESTING REQUIREMENTS

Principal Executive Officer

| | | | | | |
|-------------|----------|--------|----------------------|------------|--------------|
| First Name: | Bryan C. | Title: | Director, USDOE-WWDP | Telephone: | 716-942-4368 |
| Last Name: | Bower | | | | |

No Data Indicator (NODI)

Form NODI: --

| Code | Parameter Name | Monitoring Location | Season # | Param. NODI | Quantity or Loading | | | | | Quality or Concentration | | | # of Ex. | Frequency of Analysis | Sample Type | |
|-------|--|---------------------|----------|-------------|---------------------|---------|-------------|---------|-------|--------------------------|---------|---|------------------|-----------------------|-------------------|-------------|
| | | | | | Qualifier 1 | Value 1 | Qualifier 2 | Value 2 | Units | Qualifier 1 | Value 1 | Qualifier 2 | | | | Value 2 |
| 61425 | Toxicity [acute], Ceriodaphnia dubia | V - See Comments | 0 | -- | Sample | | | | | | = | 0,3 | 2F - tox acute | 0 | 01/90 - Quarterly | 24 - COMP24 |
| | | | | | Permit Req. | | | | | | <= | 0,3 MAXIMUM | 2F - tox acute | | | |
| | | | | | Value NODI | | | | | | | | | | | |
| 61426 | Toxicity [chronic], Ceriodaphnia dubia | V - See Comments | 0 | -- | Sample | | | | | | = | 1,0 | 2G - tox chronic | 0 | 01/90 - Quarterly | 24 - COMP24 |
| | | | | | Permit Req. | | | | | | <= | 1,0 MAXIMUM | 2G - tox chronic | | | |
| | | | | | Value NODI | | | | | | | | | | | |
| 61427 | Toxicity [acute], Pimephales promelas [Fathead Minnow] | V - See Comments | 0 | -- | Sample | | | | | | <= | 0,3 MAXIMUM | 2F - tox acute | | 01/90 - Quarterly | 24 - COMP24 |
| | | | | | Permit Req. | | | | | | | 9 - Conditional Monitoring - Not Required This Period | | | | |
| | | | | | Value NODI | | | | | | | | | | | |
| 61428 | Toxicity [chronic], Pimephales promelas [Fathead Minnow] | V - See Comments | 0 | -- | Sample | | | | | | <= | 1,0 MAXIMUM | 2G - tox chronic | | 01/90 - Quarterly | 24 - COMP24 |
| | | | | | Permit Req. | | | | | | | 9 - Conditional Monitoring - Not Required This Period | | | | |
| | | | | | Value NODI | | | | | | | | | | | |

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

As required in Title 6 of the New York State Codes, Rules, and Regulations 6NYCRR, Part 750-2(e)(3), the New York Environmental Laboratory Accreditation Program (NYELAP) identification numbers for Laboratories performing analysis for the WWDP DMR's are as follows: 1) Eurofins: NY Lab No. 10026; 2) General Engineering Laboratory: NY Lab No. 11501, and New England Bioassay (NEB): NY Lab No. 12157. Also, NYCRR Part 750-2(e)(3) requires reporting of Method Detection Limits (MDLs) where monitoring is not performed under ELAP. To that end, the MDL for Total Residual Chlorine analysis, performed by CHBWW Environmental Services is 0.02 mg/L.

Attachments

| Name | Type | Size |
|--|------|-----------|
| WVDP_February_2024_WET_Test_Report.pdf | pdf | 2393424.0 |

Report Last Saved By

U.S. DEPT OF ENERGY

| | |
|------------|--------------------------------------|
| User: | william.kean@chbww.com |
| Name: | William Kean |
| E-Mail: | william.kean@chbww.com |
| Date/Time: | 2024-03-19 08:39 (Time Zone: -04:00) |

Report Last Signed By

| | |
|------------|--------------------------------------|
| User: | ELIZABETH.LOWES@CHBWW.COM |
| Name: | Elizabeth Lowes |
| E-Mail: | elizabeth.lowes@chbww.com |
| Date/Time: | 2024-03-19 11:02 (Time Zone: -04:00) |

Attachment B

**Whole Effluent Toxicity (WET) Final Report for
the February 2024 Discharge**

 **ANALYTICAL REPORT****PREPARED FOR**

Attn: Chester Wrotniak
CH2M Hill BWXT West Valley (CHBWV)
10282 Rock Springs Road
MS-ACC-22
West Valley, New York 14171-9799

Generated 3/8/2024 12:07:01 PM

JOB DESCRIPTION

SPDES
1430

JOB NUMBER

480-216944-1

Eurofins Buffalo

Job Notes

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
3/8/2024 12:07:01 PM

Authorized for release by
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838



Table of Contents

| | |
|-----------------------------|---|
| Cover Page | 1 |
| Table of Contents | 3 |
| Case Narrative | 4 |
| Sample Summary | 5 |
| Subcontract Data | 6 |

Case Narrative

Client: CH2M Hill BWXT West Valley (CHBWV)
Project: SPDES

Job ID: 480-216944-1

Job ID: 480-216944-1

Eurofins Buffalo

Job Narrative
480-216944-1

Subcontract Work

Method Whole Effluent Toxicity (WET) Testing - P. promelas: This method was subcontracted to New England Bioassay a division of GZA. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

1

2

3

4

5

Sample Summary

Client: CH2M Hill BWXT West Valley (CHBWW)
Project/Site: SPDES

Job ID: 480-216944-1
SDG: 1430

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|--------------------|--------|----------------|----------------|
| 480-216944-1 | 2024-00728 WNSP001 | Water | 02/08/24 12:00 | 02/09/24 07:49 |

- 1
- 2
- 3
- 4
- 5



New England Bioassay Inc.

Aquatic Toxicity Testing Services

77 Batson Drive
Manchester, CT 06042
(860)-643-9560
www.nebio.com

CHRONIC AQUATIC TOXICITY TEST REPORT

Permittee: West Valley Demonstration Project NPDES # NY0000973
 Report submitted to: Test America
10 Hazelwood Dr, Amherst NY
 Sample ID: Outfall 001
 Test Month/Year: February 2024
 NEB Proj # 44240

Test Type / Method: *Ceriodaphnia dubia* Modified Chronic Static-Renewal Freshwater
Test Method 1002.0; EPA 821-R-02-013

Effluent Sample Dates: #1 2/7-8/24 #2 2/11-12/24

Test Start Date: 2/9/24

Results Summary

Your results were as follows:

Passed all permit limits

Acute Test Results

| Species | LC50 | TUa | Permit Limit | Pass / Fail |
|---------------------------|-------|-----|--------------|-------------|
| <i>Ceriodaphnia dubia</i> | >100% | 0.3 | TUa ≤ 0.3 | Pass |

Chronic Test Results

| Species | C-NOEC | TUc | IC25 | Permit Limit | Pass/Fail |
|---------------------------|--------|-----|-------|--------------|-----------|
| <i>Ceriodaphnia dubia</i> | 100% | 1.0 | >100% | TUc ≤ 1.0 | Pass |

Data Qualifiers affecting this test:

Certifications & Approvals: NH ELAP (2071), NJ DEP (CT405)

This report shall not be reproduced, except in its entirety, without approval of NEB. NEB is the sole authority for authorizing edits or modifications to the data contained in this report. NEB holds no responsibility for results and/or data that are not consistent with the original. Please contact the Lab Director, Kimberly Wills, at 860-643-9560 or kimberly.wills@nebio.com if you have questions concerning these results.



Test Report Certification

Permittee name: West Valley Demonstration Project Permit number: NY0000973
Client sample ID: Outfall 001 Test Start Date: 2/9/24

Whole Effluent Toxicity Test Report Certification (Permittee)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on: _____
(Date)

Authorized Signature

Print or Type Name and Title

Print or Type the Permittee's Name

NY0000973

Print or Type the NPDES Permit Number

Whole Effluent Toxicity Test Report Certification (Bioassay Laboratory)

The results reported relate only to the samples submitted as received

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on: 3/7/24
(Date)

Kimberly Wills

Kimberly Wills

Laboratory Director

New England Bioassay Inc.

General Test Conditions

Permittee name: West Valley Demonstration Project Permit number: NY0000973
Client sample ID: Outfall 001 Test Start Date: 2/9/24

Sample Collection Information

Effluent #1 Dates/Times: 2/7-8/24 @ 0945-1200 Receiving Water #1 Date/Time: 2/8/24 @ 0730
Effluent #2 Dates/Times: 2/11-12/24 @ 0810-0810 Receiving Water #2 Date/Time: 2/12/24 @ 0730

Were a minimum of three samples collected? Yes No *(see note below)

Were samples used within the first 36 hours of collection? Yes No * (see note below)

* sample collection note: NYSDEC has approved West Valley Demonstration Project to use only two sets of samples for their chronic testing due to the batch nature of their discharge.

Test Conditions

Permittee's Receiving Water: Erdman Brook

- Dilution water: Receiving water collected at a point immediately upstream of or away from the discharge
- Control water: Laboratory synthetic moderately hard water (hardness 80 - 100 mg/L CaCO₃)

Effluent concentrations tested: 0%, 6.25%, 12.5%, 25%, 50%, 100%

Was effluent salinity adjusted? No Yes with Instant Ocean sea salts to N/A ppt

Dechlorination procedures: Chlorine is measured using 4500 CL-G DPD Colorimetric Method

- Dechlorination was not required

TRC results and further information about aeration of samples can be found attached in "sample receipt chemistry"

Reference Toxicant Data

Ceriodaphnia dubia

Date: 2/5/24
Toxicant: Sodium chloride
Dilution Water: NEB CTRMH
Organism Source: NEB
Reproduction IC25: 1.03 g/L
Results within range Yes No

Ceriodaphnia dubia Test Results

Permittee name: West Valley Demonstration Project Permit number: NY0000973
 Client sample ID: Outfall 001 Test Dates: 2/9/24 - 2/16/24

Test Acceptability Criteria

Lab Control Survival: 100 % Mean Lab Control Reproduction: 38.0 young per female
 Diluent Control Survival: 100 % Mean Diluent Control Reproduction: 38.2 young per female
 Thiosulfate Control Survival: N/A % Mean Thiosulfate Control Reproduction: N/A young per female
 Presence of an asterisk (*) indicates EPA criteria was not met, see explanation in the "Results Discussion" section at the bottom of the following page.

Test Results

| | | Permit Limit | Test Result | Pass/Fail Status |
|---------------------|---------------------|--------------|-------------|------------------|
| Acute Data | 48 hr LC50 | | >100% | |
| | 48 hr NOEC | | 100% | |
| | TUa | ≤ 0.3 | 0.3 | Pass |
| Chronic Data | Chronic LC50 | | >100% | |
| | Survival C-NOEC | | 100% | |
| | Survival C-LOEC | | >100% | |
| | Survival IC25 | | >100% | |
| | Reproduction C-NOEC | | 100% | |
| | Reproduction C-LOEC | | >100% | |
| | Reproduction IC25 | | >100% | |
| | Reproduction IC50 | | >100% | |
| | Reportable C-NOEC | | 100% | |
| | Reportable C-LOEC | | >100% | |
| | MATC | | >100% | |
| | TUc | ≤ 1.0 | 1.0 | Pass |

Presence of an asterisk (*) indicates qualified data, see explanation in the "Results Discussion" section at the bottom of the following page.

Test Variability

Reproduction PMSD: 9.30% Upper & Lower EPA bounds: 13 - 47% Low Within bounds High

- PMSD exceeds upper bounds. Test results are highly variable and may not be sensitive enough to determine the presence of toxicity at the permit limit concentration (PLC)
- The PMSD falls within the upper (47%) and lower (13%) bounds. Results are reportable.
- PMSD falls below the lower bound test variability criterion. The test is very sensitive. The relative percent difference (RPD) between the control and each treatment was calculated and compared to the lower bound.
 - The RPD values for all concentrations fall below the lower bound. Any differences observed in this test are considered statistically insignificant.
 - Some of the concentrations that were flagged as statistically significant have RPD values that fall below the lower bound. Any differences observed in these concentrations will not be considered statistically significantly decreased from the control.
 - No statistically significant reductions were observed in this test.

***Ceriodaphnia dubia* Test Results**

Permittee name: West Valley Demonstration Project Permit number: NY0000973
Client sample ID: Outfall 001 Test Dates: 2/9/24 - 2/16/24

| |
|--|
| Concentration - Response Evaluation |
|--|

Survival: #12 No significant effects at any test concentration with a flat concentration-response curve. Test concentrations performed very similarly to dilution control.

Reproduction: #12 No significant effects at any test concentration with a relatively flat concentration-response curve. Test concentrations performed both above and below (but similarly to) the dilution control.

The concentration - response relationship was reviewed and the following determination was made:

| Survival | Reproduction | |
|---------------|---------------|---|
| <u> X </u> | <u> X </u> | Results are reliable and reportable |
| <u> </u> | <u> </u> | Results are anomalous (see explanation below) |
| <u> </u> | <u> </u> | Results are inconclusive - retest (see explanation below) |

| |
|--|
| Results Discussion (if applicable): |
|--|

TEST METHODS

Ceriodaphnia dubia

| | |
|---|---|
| Test type: | Modified Chronic Static Renewal Freshwater Test |
| Test Reference Manual: | EPA-821-R-02-013 "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms" |
| Test Method: | <i>Ceriodaphnia dubia</i> Survival and Reproduction Test - EPA 1002.0 |
| Temperature: | 25 °C ± 1°C (Temperatures should not deviate by more than 3°C during the test) (required) |
| Light Quality: | Ambient Laboratory Illumination (recommended) |
| Light Intensity: | 10-20 µE/m ² /s, or 50-100 ft-c (recommended) |
| Photoperiod: | 16 hours light, 8 hours dark (recommended) |
| Test chamber size: | 30 mL (recommended minimum) |
| Test solution volume: | 15 mL (recommended minimum) |
| Renewal of Test Solutions: | Daily (required) |
| Age of Test Organisms: | Less than 24 hours; and all released within a 8-h period (required) |
| Number of Neonates Per Test Chamber: | 1 Assigned using blocking by known parentage (required) |
| Number of Replicate Test Chambers Per Treatment: | 10 (required minimum) |
| Number of Neonates Per Test Concentration: | 10 (required minimum) |
| Feeding Regime: | Fed 0.1 mL each of YCT and algal suspension per exposure chamber daily. (recommended) |
| Cleaning: | Use new plastic cups daily (recommended) |
| Aeration: | None (recommended) |
| Test Duration: | Until 60% or more of control females have three broods (maximum test duration 8 days) (required) |
| Endpoints: | Survival and reproduction (required) |
| Test Acceptability: | 80% or greater survival of all control organisms and an average of 15 or more young per surviving female in the control solutions. 60% of surviving control females must produce three broods. (required) |
| Sampling Requirements: | See note on General Test Conditions page of report |
| Sample volume required: | 1 L/Day (recommended) |

CERIODAPHNIA DUBIA DATASHEETS & STATISTICAL ANALYSIS

NEW ENGLAND BIOASSAY TOXICITY DATA FORM

CHRONIC COVER SHEET

1
2
3
4
5

CLIENT: Test America
 ADDRESS: 10 Hazelwood Drive
Amherst, NY 14228
 PERMITTEE: West Valley Demonstration Project
 PERMIT NUMBER: NY0000973
 DILUTION WATER: Erdman Brook

C.dubia TEST ID # 24-245
 CHAIN OF CUSTODY # C44-1512/13
 NEB PROJECT # 44240
 SAMPLE ID: Outfall 001

INVERTEBRATES

TEST SET-UP TECHNICIAN: AG
 TEST SPECIES: *Ceriodaphnia dubia*
 NEB LOT # Cd24(RMH 035)
 AGE: < 24 hours
 TEST SOLUTION VOLUME (mls): 15
 ORGANISMS PER TEST CHAMBER: 1
 ORGANISMS PER CONCENTRATION: 10

LABORATORY CONTROL WATER (MHRCF)

| Lot Number | Hardness mg/L CaCO ₃ | Alkalinity mg/L CaCO ₃ |
|------------|------------------------------------|--------------------------------------|
| C44-MH003 | 90 | 60 |

| | DATE | TIME |
|-------------|---------|------|
| TEST START: | 2/9/24 | 1139 |
| TEST END: | 2/16/24 | 1040 |

COMMENTS: _____

FILTRATION: The following were filtered prior to use through a 55 µm mesh filter due to the presence of organisms:

| | | | |
|------------|--|--|--|
| Sample: | | | |
| Date/Tech: | | | |

REVIEWED BY: Kimberly Wills DATE: 3/7/24

NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

| | | | | | |
|--|--|-------------------------|-------------------|---------------------|------------|
| FACILITY NAME & ADDRESS: West Valley Demonstration Project WSNP001, 10282 Rock Springs Rd West Valley NY | | | | | |
| NEB PROJECT NUMBER: 44240 | | NEB TEST NUMBER: 24-245 | | COC # C44-1512/13 | |
| TEST ORGANISM: <i>Ceriodaphnia dubia</i> | | AGE: <24 hours | | Lot # Cd24(RMH 035) | |
| START DATE: 2/9/24 | | TIME: 1139 | END DATE: 2/16/24 | | TIME: 1040 |

| Effluent Concentration | Culture Lot# Cd24(RMH 035) | | | | | | | | | | | Total Live Young | # Live Adults | Analyst-Transfer | Analyst-Counts |
|------------------------|----------------------------|-----------|----|----|----|----|-----|-----|-----|-----|-----|------------------|---------------|------------------|----------------|
| | Cup # | A2 | A3 | A5 | A7 | A8 | A11 | A12 | A13 | A14 | A16 | | | | |
| | Day Number | Replicate | | | | | | | | | | | | | |
| | A | B | C | D | E | F | G | H | I | J | | | | | |
| NEB Lab Control | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | AG | |
| | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | AG | |
| | 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | KO | |
| | 3 | ✓ | 6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 6 | 10 | GP | GP |
| | 4 | 8 | ✓ | 7 | 7 | 8 | 6 | 8 | 8 | 5 | 7 | 64 | 10 | AG | AG |
| | 5 | 14 | 13 | 13 | 13 | 15 | 11 | 13 | 17 | 10 | 17 | 136 | 10 | SM/KO | SM/KO |
| | 6 | 18 | 20 | 16 | 17 | 16 | 15 | 19 | ✓ | 15 | 17 | 153 | 10 | DB | DB |
| | 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 21 | ✓ | ✓ | 21 | 10 | DB | DB |
| | | | | | | | | | | | | | | | |
| | totals | 40 | 39 | 36 | 37 | 39 | 32 | 40 | 46 | 30 | 41 | 380 | 10 | | MC |
| Erdman Brook Diluent | | A | B | C | D | E | F | G | H | I | J | | | | |
| | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 3 | ✓ | 6 | 6 | ✓ | ✓ | ✓ | ✓ | ✓ | 6 | ✓ | 18 | 10 | | |
| | 4 | 6 | ✓ | ✓ | 6 | 8 | 5 | 8 | 6 | ✓ | 7 | 46 | 10 | | |
| | 5 | 12 | 14 | 16 | 16 | 13 | 13 | 12 | 14 | 9 | 13 | 132 | 10 | | |
| | 6 | 1 | 17 | 22 | 18 | 16 | 16 | 23 | ✓ | 15 | 18 | 146 | 10 | | |
| | 7 | 18 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 22 | ✓ | ✓ | 40 | 10 | | |
| | | | | | | | | | | | | | | | |
| | totals | 37 | 37 | 44 | 40 | 37 | 34 | 43 | 42 | 30 | 38 | 382 | 10 | | |
| 6.25% | | A | B | C | D | E | F | G | H | I | J | | | | |
| | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 3 | ✓ | 7 | 4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 11 | 10 | | |
| | 4 | 7 | ✓ | ✓ | 8 | 6 | 7 | 6 | 7 | 4 | 7 | 52 | 10 | | |
| | 5 | 13 | 14 | 11 | 15 | 12 | 15 | 13 | 9 | 13 | 11 | 126 | 10 | | |
| | 6 | 22 | 18 | 21 | 19 | 17 | 18 | 20 | ✓ | 17 | 19 | 171 | 10 | | |
| | 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 20 | ✓ | ✓ | 20 | 10 | | |
| | | | | | | | | | | | | | | | |
| | totals | 42 | 39 | 36 | 42 | 35 | 40 | 39 | 36 | 34 | 37 | 380 | 10 | | |

Notes: _____



NEW ENGLAND BIOASSAY - CHRONIC TOXICITY TEST BROOD DATA SHEET

| | | | |
|-------------------------------------|---|--|---------------------------|
| FACILITY NAME & ADDRESS: | West Valley Demonstration Project WSNP001, 10282 Rock Springs Rd West Valley NY | | |
| NEB PROJECT NUMBER: | 44240 | ORGANISM: <i>Ceriodaphnia dubia</i> | START DATE: 2/9/24 |

| Effluent Concentration | Day Number | Replicate | | | | | | | | | | Total Live Young | # Live Adults | | |
|------------------------|---------------|---------------|-----|----|----|----|----|----|----|----|----|------------------|---------------|----|--|
| | | A | B | C | D | E | F | G | H | I | J | | | | |
| 12.5% | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 3 | ✓ | 6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 3 | ✓ | 9 | 10 | | |
| | 4 | 7 | ✓ | 8 | 6 | 6 | 7 | 6 | 6 | ✓ | 7 | 53 | 10 | | |
| | 5 | 16 | 15 | 12 | 15 | 14 | 12 | 13 | 16 | 13 | 17 | 143 | 10 | | |
| | 6 | 15 | 21 | 18 | 18 | 19 | 17 | 23 | ✓ | 20 | 16 | 167 | 10 | | |
| | 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 22 | ✓ | ✓ | 22 | 10 | | |
| | | | | | | | | | | | | | | | |
| | | totals | 38 | 42 | 38 | 39 | 39 | 36 | 42 | 44 | 36 | 40 | 394 | 10 | |
| 25% | | A | B | C | D | E | F | G | H | I | J | | | | |
| | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 3 | ✓ | 5 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 5 | 10 | | |
| | 4 | 7 | ✓ | 5 | 6 | 7 | 7 | 7 | 8 | 7 | 8 | 62 | 10 | | |
| | 5 | 15 | 13 | 13 | 14 | 12 | 11 | 12 | 11 | 13 | 14 | 128 | 10 | | |
| | 6 | 16 | 16 | 15 | 19 | 19 | 18 | 17 | ✓ | 21 | 20 | 161 | 10 | | |
| | 7 | ✓ | ✓/x | ✓ | ✓ | ✓ | ✓ | ✓ | 17 | ✓ | ✓ | 17 | 9 | | |
| | | | | | | | | | | | | | | | |
| | totals | 38 | 34 | 33 | 39 | 38 | 36 | 36 | 36 | 41 | 42 | 373 | 9 | | |
| 50% | | A | B | C | D | E | F | G | H | I | J | | | | |
| | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 3 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 4 | 7 | 6 | 7 | 5 | 6 | 6 | 5 | 6 | 6 | 8 | 62 | 10 | | |
| | 5 | 12 | 11 | 14 | 16 | 11 | 15 | 11 | 15 | 15 | 15 | 135 | 10 | | |
| | 6 | 20 | 15 | 13 | 21 | 15 | 19 | 18 | ✓ | 16 | 18 | 155 | 10 | | |
| | 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 19 | 3 | ✓ | 22 | 10 | | |
| | | | | | | | | | | | | | | | |
| | totals | 39 | 32 | 34 | 42 | 32 | 40 | 34 | 40 | 40 | 41 | 374 | 10 | | |
| 100% | | A | B | C | D | E | F | G | H | I | J | | | | |
| | 0 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 0 | 10 | | |
| | 3 | ✓ | 5 | 4 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 9 | 10 | | |
| | 4 | 7 | ✓ | ✓ | 6 | 7 | 5 | 7 | 8 | 5 | 6 | 51 | 10 | | |
| | 5 | 11 | 9 | 8 | 13 | 13 | 13 | 10 | 14 | 13 | 14 | 118 | 10 | | |
| | 6 | 21 | 17 | 15 | 17 | 16 | 17 | 19 | 13 | 19 | 20 | 174 | 10 | | |
| | 7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | 4 | ✓ | ✓ | 4 | 10 | | |
| | | | | | | | | | | | | | | | |
| | totals | 39 | 31 | 27 | 36 | 36 | 35 | 36 | 39 | 37 | 40 | 356 | 10 | | |



NEB'S DATA SHEET FOR ROUTINE CHEMICAL AND PHYSICAL DETERMINATIONS

| | | | | | | | | | |
|--------------------------|---------|---|------|------|---------------|------|---------------------------|------------|---------|
| FACILITY NAME & ADDRESS: | | West Valley Demonstration Project WSNP001, 10282 Rock Springs Rd West Valley NY | | | | | | | |
| NEB PROJECT NUMBER: | | 44240 | | | TEST ORGANISM | | <i>Ceriodaphnia dubia</i> | | |
| DILUTION WATER SOURCE: | | Erdman Brook | | | START DATE: | | 2/9/24 | TIME: 1139 | |
| NEB Lab Control | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Remarks |
| Tech Initials | Initial | CG | SM | AG | GP | DB | SM | ET | |
| Temp °C | Initial | 24.9 | 25.3 | 25.3 | 24.6 | 24.0 | 24.8 | 24.8 | |
| D.O. mg/L | Initial | 8.2 | 8.2 | 8.2 | 8.4 | 8.5 | 8.3 | 8.3 | |
| pH s.u. | Initial | 7.9 | 7.6 | 8.1 | 8.1 | 7.8 | 8.0 | 7.7 | |
| Conductivity µS | Initial | 317 | 320 | 318 | 320 | 319 | 326 | 318 | |
| Tech Initials | Final | KO | SM | SD | GP | KO | ET | CG | |
| Temp °C | Final | 24.7 | 24.8 | 24.7 | 24.7 | 24.1 | 24.0 | 24.0 | |
| D.O. mg/L | Final | 8.2 | 8.3 | 8.3 | 7.9 | 8.5 | 8.4 | 8.4 | |
| pH s.u. | Final | 7.9 | 7.7 | 7.7 | 7.9 | 7.8 | 7.8 | 7.7 | |
| Conductivity µS | Final | 350 | 345 | 346 | 361 | 356 | 349 | 346 | |
| Erdman Brook Diluent | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Remarks |
| Tech Initials | Initial | CG | SM | AG | GP | DB | SM | ET | |
| Temp °C | Initial | 25.1 | 25.2 | 24.5 | 24.9 | 24.0 | 24.8 | 24.8 | |
| D.O. mg/L | Initial | 10.5 | 8.2 | 9.3 | 9.4 | 10.5 | 9.5 | 9.0 | |
| pH s.u. | Initial | 7.3 | 7.5 | 7.5 | 7.6 | 7.8 | 7.8 | 7.7 | |
| Conductivity µS | Initial | 281 | 279 | 280 | 282 | 267 | 269 | 268 | |
| Tech Initials | Final | KO | SM | SD | GP | KO | ET | CG | |
| Temp °C | Final | 24.8 | 25.0 | 25.4 | 24.6 | 24.0 | 24.2 | 24.0 | |
| D.O. mg/L | Final | 8.1 | 8.3 | 8.2 | 8.0 | 8.3 | 8.5 | 8.4 | |
| pH s.u. | Final | 8.0 | 7.8 | 7.8 | 7.9 | 7.8 | 7.9 | 8.0 | |
| Conductivity µS | Final | 308 | 297 | 299 | 309 | 296 | 304 | 301 | |
| 6.25% | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Remarks |
| Tech Initials | Initial | CG | SM | AG | GP | DB | SM | ET | |
| Temp °C | Initial | 25.1 | 24.7 | 24.4 | 24.9 | 24.1 | 24.7 | 24.9 | |
| D.O. mg/L | Initial | 10.6 | 9.5 | 9.3 | 9.4 | 10.4 | 9.3 | 9.0 | |
| pH s.u. | Initial | 7.3 | 7.3 | 7.5 | 7.6 | 7.8 | 7.8 | 7.7 | |
| Conductivity µS | Initial | 346 | 350 | 339 | 353 | 360 | 349 | 357 | |
| Tech Initials | Final | KO | SM | SD | GP | KO | ET | CG | |
| Temp °C | Final | 24.8 | 25.0 | 25.4 | 24.6 | 24.0 | 24.2 | 24.0 | |
| D.O. mg/L | Final | 8.1 | 8.4 | 8.1 | 8.1 | 8.5 | 8.5 | 8.4 | |
| pH s.u. | Final | 8.0 | 7.9 | 7.8 | 8.0 | 7.9 | 8.0 | 8.1 | |
| Conductivity µS | Final | 391 | 394 | 388 | 387 | 410 | 454 | 454 | |



CETIS Analytical Report

Report Date: 19 Feb-24 14:40 (p 1 of 8)
 Test Code/ID: 24-245a / 19-7153-3407

| Ceriodaphnia 7-d Survival and Reproduction Test | | | | New England Bioassay | | | |
|---|--|---|-----------------|----------------------|--|--|--|
| Analysis ID: 14-8059-3810 | Endpoint: 2d Survival Rate | CETIS Version: CETISv2.1.4 | | | | | |
| Analyzed: 19 Feb-24 14:36 | Analysis: Linear Interpolation (ICPIN) | Status Level: 1 | | | | | |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: 521A0DF2AE1E59D72392DBABE0C7AEF | Editor ID: 008-848-998-5 | | | | | |
| Batch ID: 02-4807-9744 | Test Type: Reproduction-Survival (7d) | Analyst: | | | | | |
| Start Date: 09 Feb-24 11:39 | Protocol: EPA/821/R-02-013 (2002) | Diluent: Receiving Water | | | | | |
| Ending Date: 16 Feb-24 10:40 | Species: Ceriodaphnia dubia | Brine: Not Applicable | | | | | |
| Test Length: 6d 23h | Taxon: Branchiopoda | Source: In-House Culture | Age: <24 | | | | |
| Sample ID: 11-4061-0895 | Code: 43FC574F | Project: | | | | | |
| Sample Date: 08 Feb-24 12:00 | Material: WWTF Effluent | Source: West Valley Demonstration Project (N | | | | | |
| Receipt Date: 09 Feb-24 07:49 | CAS (PC): | Station: | | | | | |
| Sample Age: 24h | Client: Eurofins | | | | | | |

| Linear Interpolation Options | | | | | |
|------------------------------|-------------|---------|-----------|------------|-------------------------|
| X Transform | Y Transform | Seed | Resamples | Exp 95% CL | Method |
| Log(X) | Linear | 1016463 | 200 | Yes | Two-Point Interpolation |

| Point Estimates | | | | | | |
|-----------------|------|---------|---------|-----------|---------|---------|
| Level | % | 95% LCL | 95% UCL | Tox Units | 95% LCL | 95% UCL |
| LC50 | >100 | --- | --- | <1 | --- | --- |

| 2d Survival Rate Summary | | | Calculated Variate(A/B) | | | | | | | Isotonic Variate | |
|--------------------------|------|-------|-------------------------|--------|--------|--------|-------|---------|-------|------------------|---------|
| Conc-% | Code | Count | Mean | Median | Min | Max | CV% | %Effect | ΣA/ΣB | Mean | %Effect |
| 0 | D | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 6.25 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 12.5 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 25 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 50 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 100 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |

| 2d Survival Rate Detail | | | | | | | | | | | |
|-------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
| 0 | D | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 6.25 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 12.5 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 25 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 50 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 100 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| 2d Survival Rate Binomials | | | | | | | | | | | |
|----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
| 0 | D | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 6.25 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 12.5 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 25 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 50 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 100 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |

CETIS Analytical Report

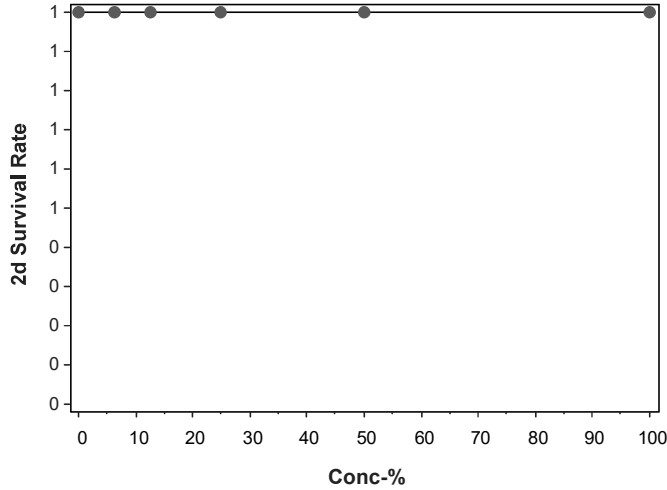
Report Date: 19 Feb-24 14:40 (p 2 of 8)
Test Code/ID: 24-245a / 19-7153-3407

Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

| | | |
|-----------------------------------|--|-----------------------------------|
| Analysis ID: 14-8059-3810 | Endpoint: 2d Survival Rate | CETIS Version: CETISv2.1.4 |
| Analyzed: 19 Feb-24 14:36 | Analysis: Linear Interpolation (ICPIN) | Status Level: 1 |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: 521A0DF2AE1E59D72392DBABE0C7AEF | Editor ID: 008-848-998-5 |

Graphics



CETIS Analytical Report

Report Date: 19 Feb-24 14:41 (p 1 of 4)
Test Code/ID: 24-245a / 19-7153-3407

Ceriodaphnia 7-d Survival and Reproduction Test **New England Bioassay**

| | | |
|--------------------------------------|--|---|
| Analysis ID: 11-8929-2895 | Endpoint: 2d Survival Rate | CETIS Version: CETISv2.1.4 |
| Analyzed: 19 Feb-24 14:36 | Analysis: STP 2xK Contingency Tables | Status Level: 1 |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: 521A0DF2AE1E59D72392DBABE0C7AEF | Editor ID: 008-848-998-5 |
| Batch ID: 02-4807-9744 | Test Type: Reproduction-Survival (7d) | Analyst: |
| Start Date: 09 Feb-24 11:39 | Protocol: EPA/821/R-02-013 (2002) | Diluent: Receiving Water |
| Ending Date: 16 Feb-24 10:40 | Species: Ceriodaphnia dubia | Brine: Not Applicable |
| Test Length: 6d 23h | Taxon: Branchiopoda | Source: In-House Culture Age: <24 |
| Sample ID: 11-4061-0895 | Code: 43FC574F | Project: |
| Sample Date: 08 Feb-24 12:00 | Material: WWTF Effluent | Source: West Valley Demonstration Project (N |
| Receipt Date: 09 Feb-24 07:49 | CAS (PC): | Station: |
| Sample Age: 24h | Client: Eurofins | |

| Data Transform | Alt Hyp | NOEL | LOEL | TOEL | Tox Units |
|----------------|---------|------|------|------|-----------|
| Untransformed | C > T | 100 | >100 | --- | 1 |

Fisher Exact/Bonferroni-Holm Test

| Control | vs | Conc-% | Test Stat | P-Type | P-Value | Decision(α:5%) |
|----------------|----|--------|-----------|--------|---------|------------------------|
| Dilution Water | | 6.25 | 1.0000 | Exact | 1.0000 | Non-Significant Effect |
| | | 12.5 | 1.0000 | Exact | 1.0000 | Non-Significant Effect |
| | | 25 | 1.0000 | Exact | 1.0000 | Non-Significant Effect |
| | | 50 | 1.0000 | Exact | 1.0000 | Non-Significant Effect |
| | | 100 | 1.0000 | Exact | 1.0000 | Non-Significant Effect |

2d Survival Rate Frequencies

| Conc-% | Code | NR | R | NR + R | Prop NR | Prop R | %Effect |
|--------|------|----|---|--------|---------|--------|---------|
| 0 | D | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |
| 6.25 | | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |
| 12.5 | | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |
| 25 | | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |
| 50 | | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |
| 100 | | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |

2d Survival Rate Summary

| Conc-% | Code | Count | Mean | 95% LCL | 95% UCL | Median | Min | Max | Std Err | CV% | %Effect |
|--------|------|-------|--------|---------|---------|--------|--------|--------|---------|-------|---------|
| 0 | D | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |
| 6.25 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |
| 12.5 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |
| 25 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |
| 50 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |
| 100 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |

2d Survival Rate Detail

| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
|--------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0 | D | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 6.25 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 12.5 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 25 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 50 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 100 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |



CETIS Analytical Report

Report Date: 19 Feb-24 14:41 (p 2 of 4)
Test Code/ID: 24-245a / 19-7153-3407

Ceriodaphnia 7-d Survival and Reproduction Test

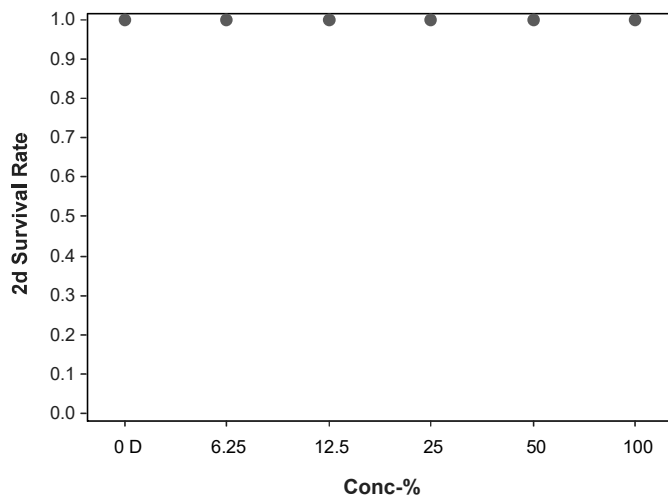
New England Bioassay

Analysis ID: 11-8929-2895 Endpoint: 2d Survival Rate CETIS Version: CETISv2.1.4
Analyzed: 19 Feb-24 14:36 Analysis: STP 2xK Contingency Tables Status Level: 1
Edit Date: 19 Feb-24 14:35 MD5 Hash: 521A0DF2AE1E59D72392DBABE0C7AEF Editor ID: 008-848-998-5

2d Survival Rate Binomials

| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 0 | D | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 6.25 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 12.5 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 25 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 50 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 100 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |

Graphics



CETIS Analytical Report

Report Date: 19 Feb-24 14:40 (p 3 of 8)
Test Code/ID: 24-245a / 19-7153-3407

| Ceriodaphnia 7-d Survival and Reproduction Test | | | | New England Bioassay | | | |
|---|---|---|--|----------------------------------|---|------------------------|--|
| Analysis ID: 08-8144-1568 | Endpoint: 7d Survival Rate | CETIS Version: CETISv2.1.4 | | Analyzed: 19 Feb-24 14:36 | Analysis: Linear Interpolation (ICPIN) | Status Level: 1 | |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: D046493CEAC006E91C9945D8060FBEFD | Editor ID: 008-848-998-5 | | | | | |
| Batch ID: 02-4807-9744 | Test Type: Reproduction-Survival (7d) | Analyst: | | | | | |
| Start Date: 09 Feb-24 11:39 | Protocol: EPA/821/R-02-013 (2002) | Diluent: Receiving Water | | | | | |
| Ending Date: 16 Feb-24 10:40 | Species: Ceriodaphnia dubia | Brine: Not Applicable | | | | | |
| Test Length: 6d 23h | Taxon: Branchiopoda | Source: In-House Culture | | Age: <24 | | | |
| Sample ID: 11-4061-0895 | Code: 43FC574F | Project: | | | | | |
| Sample Date: 08 Feb-24 12:00 | Material: WWTF Effluent | Source: West Valley Demonstration Project (N | | | | | |
| Receipt Date: 09 Feb-24 07:49 | CAS (PC): | Station: | | | | | |
| Sample Age: 24h | Client: Eurofins | | | | | | |

| Linear Interpolation Options | | | | | |
|------------------------------|-------------|--------|-----------|------------|-------------------------|
| X Transform | Y Transform | Seed | Resamples | Exp 95% CL | Method |
| Log(X) | Linear | 402161 | 200 | Yes | Two-Point Interpolation |

| Test Acceptability Criteria | | | | | |
|-----------------------------|-----------|------------|-------|---------|-----------------|
| Attribute | Test Stat | TAC Limits | | Overlap | Decision |
| | | Lower | Upper | | |
| Control Resp | 1 | 0.8 | << | Yes | Passes Criteria |

| Point Estimates | | | | | | |
|-----------------|------|---------|---------|-----------|---------|---------|
| Level | % | 95% LCL | 95% UCL | Tox Units | 95% LCL | 95% UCL |
| LC50 | >100 | --- | --- | <1 | --- | --- |

| 7d Survival Rate Summary | | | Calculated Variate(A/B) | | | | | | | Isotonic Variate | |
|--------------------------|------|-------|-------------------------|--------|--------|--------|--------|---------|-------|------------------|---------|
| Conc-% | Code | Count | Mean | Median | Min | Max | CV% | %Effect | ΣA/ΣB | Mean | %Effect |
| 0 | D | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 6.25 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 12.5 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 25 | | 10 | 0.9000 | 1.0000 | 0.0000 | 1.0000 | 35.14% | 10.00% | 9/10 | 0.9667 | 3.33% |
| 50 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 0.9667 | 3.33% |
| 100 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 0.9667 | 3.33% |

| 7d Survival Rate Detail | | | | | | | | | | | |
|-------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
| 0 | D | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 6.25 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 12.5 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 25 | | 1.0000 | 0.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 50 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 100 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| 7d Survival Rate Binomials | | | | | | | | | | | |
|----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
| 0 | D | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 6.25 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 12.5 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 25 | | 1/1 | 0/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 50 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 100 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |



CETIS Analytical Report

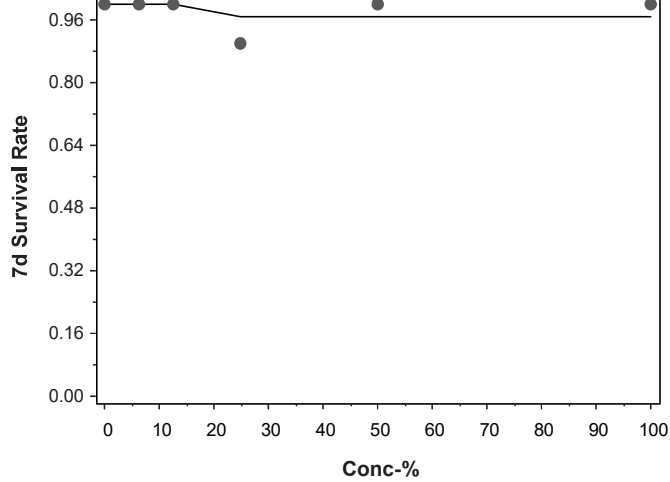
Report Date: 19 Feb-24 14:40 (p 4 of 8)
Test Code/ID: 24-245a / 19-7153-3407

Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

| | | |
|-----------------------------------|---|-----------------------------------|
| Analysis ID: 08-8144-1568 | Endpoint: 7d Survival Rate | CETIS Version: CETISv2.1.4 |
| Analyzed: 19 Feb-24 14:36 | Analysis: Linear Interpolation (ICPIN) | Status Level: 1 |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: D046493CEAC006E91C9945D8060FBEFD | Editor ID: 008-848-998-5 |

Graphics



CETIS Analytical Report

Report Date: 19 Feb-24 14:41 (p 3 of 4)
 Test Code/ID: 24-245a / 19-7153-3407

| Ceriodaphnia 7-d Survival and Reproduction Test | | | | New England Bioassay | |
|---|---|---|-----------------|----------------------|--|
| Analysis ID: 15-8231-3645 | Endpoint: 7d Survival Rate | CETIS Version: CETISv2.1.4 | | | |
| Analyzed: 19 Feb-24 14:36 | Analysis: STP 2xK Contingency Tables | Status Level: 1 | | | |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: D046493CEAC006E91C9945D8060FBEFD | Editor ID: 008-848-998-5 | | | |
| Batch ID: 02-4807-9744 | Test Type: Reproduction-Survival (7d) | Analyst: | | | |
| Start Date: 09 Feb-24 11:39 | Protocol: EPA/821/R-02-013 (2002) | Diluent: Receiving Water | | | |
| Ending Date: 16 Feb-24 10:40 | Species: Ceriodaphnia dubia | Brine: Not Applicable | | | |
| Test Length: 6d 23h | Taxon: Branchiopoda | Source: In-House Culture | Age: <24 | | |
| Sample ID: 11-4061-0895 | Code: 43FC574F | Project: | | | |
| Sample Date: 08 Feb-24 12:00 | Material: WWTF Effluent | Source: West Valley Demonstration Project (N | | | |
| Receipt Date: 09 Feb-24 07:49 | CAS (PC): | Station: | | | |
| Sample Age: 24h | Client: Eurofins | | | | |

| Data Transform | Alt Hyp | NOEL | LOEL | TOEL | Tox Units |
|----------------|---------|------|------|------|-----------|
| Untransformed | C > T | 100 | >100 | --- | 1 |

| Fisher Exact/Bonferroni-Holm Test | | | | | | |
|-----------------------------------|----|--------|-----------|--------|---------|------------------------|
| Control | vs | Conc-% | Test Stat | P-Type | P-Value | Decision(α:5%) |
| Dilution Water | | 6.25 | 1.0000 | Exact | 1.0000 | Non-Significant Effect |
| | | 12.5 | 1.0000 | Exact | 1.0000 | Non-Significant Effect |
| | | 25 | 0.5000 | Exact | 1.0000 | Non-Significant Effect |
| | | 50 | 1.0000 | Exact | 1.0000 | Non-Significant Effect |
| | | 100 | 1.0000 | Exact | 1.0000 | Non-Significant Effect |

| Test Acceptability Criteria | | | | | |
|-----------------------------|-----------|------------|-------|---------|-----------------|
| Attribute | Test Stat | TAC Limits | | Overlap | Decision |
| | | Lower | Upper | | |
| Control Resp | 1 | 0.8 | << | Yes | Passes Criteria |

| 7d Survival Rate Frequencies | | | | | | | |
|------------------------------|------|----|---|--------|---------|--------|---------|
| Conc-% | Code | NR | R | NR + R | Prop NR | Prop R | %Effect |
| 0 | D | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |
| 6.25 | | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |
| 12.5 | | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |
| 25 | | 9 | 1 | 10 | 0.9000 | 0.1000 | 10.00% |
| 50 | | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |
| 100 | | 10 | 0 | 10 | 1.0000 | 0.0000 | 0.00% |

| 7d Survival Rate Summary | | | | | | | | | | | |
|--------------------------|------|-------|--------|---------|---------|--------|--------|--------|---------|--------|---------|
| Conc-% | Code | Count | Mean | 95% LCL | 95% UCL | Median | Min | Max | Std Err | CV% | %Effect |
| 0 | D | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |
| 6.25 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |
| 12.5 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |
| 25 | | 10 | 0.9000 | 0.6738 | 1.0000 | 1.0000 | 0.0000 | 1.0000 | 0.1000 | 35.14% | 10.00% |
| 50 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |
| 100 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.0000 | 0.00% | 0.00% |

| 7d Survival Rate Detail | | | | | | | | | | | |
|-------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
| 0 | D | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 6.25 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 12.5 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 25 | | 1.0000 | 0.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 50 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 100 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |



CETIS Analytical Report

Report Date: 19 Feb-24 14:41 (p 4 of 4)
 Test Code/ID: 24-245a / 19-7153-3407

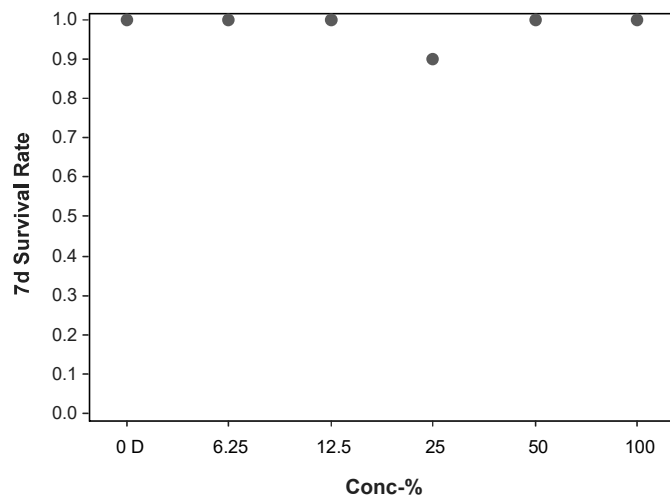
Ceriodaphnia 7-d Survival and Reproduction Test **New England Bioassay**

| | | |
|-----------------------------------|---|-----------------------------------|
| Analysis ID: 15-8231-3645 | Endpoint: 7d Survival Rate | CETIS Version: CETISv2.1.4 |
| Analyzed: 19 Feb-24 14:36 | Analysis: STP 2xK Contingency Tables | Status Level: 1 |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: D046493CEAC006E91C9945D8060FBEFD | Editor ID: 008-848-998-5 |

7d Survival Rate Binomials

| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 0 | D | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 6.25 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 12.5 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 25 | | 1/1 | 0/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 50 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 100 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |

Graphics



CETIS Analytical Report

Report Date: 19 Feb-24 14:40 (p 5 of 8)
Test Code/ID: 24-245a / 19-7153-3407

| Ceriodaphnia 7-d Survival and Reproduction Test | | | | New England Bioassay | | | |
|---|---|---|-----------------|----------------------|--|--|--|
| Analysis ID: 01-0699-7863 | Endpoint: 7d Survival Rate | CETIS Version: CETISv2.1.4 | | | | | |
| Analyzed: 19 Feb-24 14:36 | Analysis: Linear Interpolation (ICPIN) | Status Level: 1 | | | | | |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: D046493CEAC006E91C9945D8060FBEFD | Editor ID: 008-848-998-5 | | | | | |
| Batch ID: 02-4807-9744 | Test Type: Reproduction-Survival (7d) | Analyst: | | | | | |
| Start Date: 09 Feb-24 11:39 | Protocol: EPA/821/R-02-013 (2002) | Diluent: Receiving Water | | | | | |
| Ending Date: 16 Feb-24 10:40 | Species: Ceriodaphnia dubia | Brine: Not Applicable | | | | | |
| Test Length: 6d 23h | Taxon: Branchiopoda | Source: In-House Culture | Age: <24 | | | | |
| Sample ID: 11-4061-0895 | Code: 43FC574F | Project: | | | | | |
| Sample Date: 08 Feb-24 12:00 | Material: WWTF Effluent | Source: West Valley Demonstration Project (N | | | | | |
| Receipt Date: 09 Feb-24 07:49 | CAS (PC): | Station: | | | | | |
| Sample Age: 24h | Client: Eurofins | | | | | | |

| Linear Interpolation Options | | | | | |
|------------------------------|-------------|---------|-----------|------------|-------------------------|
| X Transform | Y Transform | Seed | Resamples | Exp 95% CL | Method |
| Linear | Linear | 1365896 | 200 | Yes | Two-Point Interpolation |

| Test Acceptability Criteria | | | | | |
|-----------------------------|-----------|------------|-------|---------|-----------------|
| Attribute | Test Stat | TAC Limits | | Overlap | Decision |
| | | Lower | Upper | | |
| Control Resp | 1 | 0.8 | << | Yes | Passes Criteria |

| Point Estimates | | | | | | |
|-----------------|------|---------|---------|-----------|---------|---------|
| Level | % | 95% LCL | 95% UCL | Tox Units | 95% LCL | 95% UCL |
| LC25 | >100 | --- | --- | <1 | --- | --- |

| 7d Survival Rate Summary | | | Calculated Variate(A/B) | | | | | | | Isotonic Variate | |
|--------------------------|------|-------|-------------------------|--------|--------|--------|--------|---------|-------|------------------|---------|
| Conc-% | Code | Count | Mean | Median | Min | Max | CV% | %Effect | ΣA/ΣB | Mean | %Effect |
| 0 | D | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 6.25 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 12.5 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 1.0000 | 0.00% |
| 25 | | 10 | 0.9000 | 1.0000 | 0.0000 | 1.0000 | 35.14% | 10.00% | 9/10 | 0.9667 | 3.33% |
| 50 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 0.9667 | 3.33% |
| 100 | | 10 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.00% | 0.00% | 10/10 | 0.9667 | 3.33% |

| 7d Survival Rate Detail | | | | | | | | | | | |
|-------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
| 0 | D | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 6.25 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 12.5 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 25 | | 1.0000 | 0.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 50 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 100 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

| 7d Survival Rate Binomials | | | | | | | | | | | |
|----------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
| 0 | D | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 6.25 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 12.5 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 25 | | 1/1 | 0/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 50 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |
| 100 | | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 | 1/1 |



CETIS Analytical Report

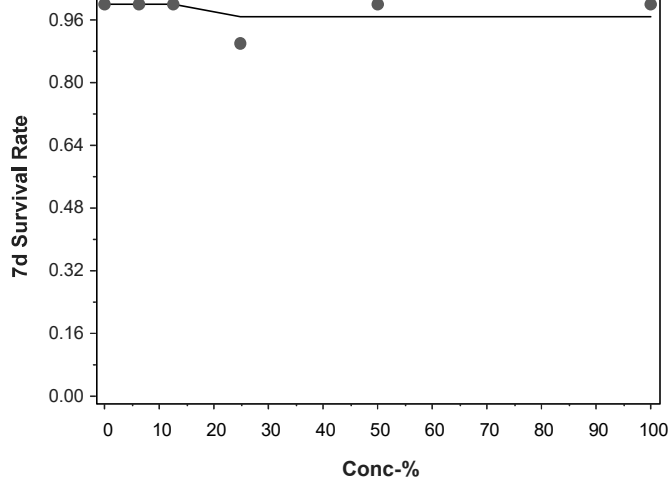
Report Date: 19 Feb-24 14:40 (p 6 of 8)
Test Code/ID: 24-245a / 19-7153-3407

Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

| | | |
|-----------------------------------|---|-----------------------------------|
| Analysis ID: 01-0699-7863 | Endpoint: 7d Survival Rate | CETIS Version: CETISv2.1.4 |
| Analyzed: 19 Feb-24 14:36 | Analysis: Linear Interpolation (ICPIN) | Status Level: 1 |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: D046493CEAC006E91C9945D8060FBEFD | Editor ID: 008-848-998-5 |

Graphics



CETIS Analytical Report

Report Date: 19 Feb-24 14:40 (p 1 of 2)
 Test Code/ID: 24-245a / 19-7153-3407

Ceriodaphnia 7-d Survival and Reproduction Test New England Bioassay

| | | |
|--------------------------------------|---|---|
| Analysis ID: 04-8198-6149 | Endpoint: Reproduction | CETIS Version: CETISv2.1.4 |
| Analyzed: 19 Feb-24 14:38 | Analysis: Parametric-Control vs Treatments | Status Level: 1 |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: 60E3EB82D9B8EB96FEF7E1620363A210 | Editor ID: 008-848-998-5 |
| Batch ID: 02-4807-9744 | Test Type: Reproduction-Survival (7d) | Analyst: |
| Start Date: 09 Feb-24 11:39 | Protocol: EPA/821/R-02-013 (2002) | Diluent: Receiving Water |
| Ending Date: 16 Feb-24 10:40 | Species: Ceriodaphnia dubia | Brine: Not Applicable |
| Test Length: 6d 23h | Taxon: Branchiopoda | Source: In-House Culture Age: <24 |
| Sample ID: 11-4061-0895 | Code: 43FC574F | Project: |
| Sample Date: 08 Feb-24 12:00 | Material: WWTF Effluent | Source: West Valley Demonstration Project (N |
| Receipt Date: 09 Feb-24 07:49 | CAS (PC): | Station: |
| Sample Age: 24h | Client: Eurofins | |

| Data Transform | Alt Hyp | NOEL | LOEL | TOEL | Tox Units | MSDu | PMSD |
|----------------|---------|------|------|------|-----------|-------|-------|
| Untransformed | C > T | 100 | >100 | --- | 1 | 3.554 | 9.30% |

Dunnett Multiple Comparison Test

| Control | vs | Conc-% | df | Test Stat | Critical | MSD | P-Type | P-Value | Decision(α:5%) |
|----------------|----|--------|----|-----------|----------|-------|--------|---------|------------------------|
| Dilution Water | | 6.25 | 18 | 0.1288 | 2.289 | 3.554 | CDF | 0.7922 | Non-Significant Effect |
| | | 12.5 | 18 | -0.7729 | 2.289 | 3.554 | CDF | 0.9703 | Non-Significant Effect |
| | | 25 | 18 | 0.5797 | 2.289 | 3.554 | CDF | 0.6105 | Non-Significant Effect |
| | | 50 | 18 | 0.5152 | 2.289 | 3.554 | CDF | 0.6392 | Non-Significant Effect |
| | | 100 | 18 | 1.675 | 2.289 | 3.554 | CDF | 0.1643 | Non-Significant Effect |

Test Acceptability Criteria

| Attribute | Test Stat | TAC Limits | | Overlap | Decision |
|--------------|-----------|------------|-------|---------|-----------------|
| | | Lower | Upper | | |
| Control Resp | 38.2 | 15 | << | Yes | Passes Criteria |
| PMSD | 0.09305 | 0.13 | 0.47 | Yes | Below Criteria |

ANOVA Table

| Source | Sum Squares | Mean Square | DF | F Stat | P-Value | Decision(α:5%) |
|---------|-------------|-------------|----|--------|---------|------------------------|
| Between | 78.75 | 15.75 | 5 | 1.307 | 0.2750 | Non-Significant Effect |
| Error | 650.9 | 12.0537 | 54 | | | |
| Total | 729.65 | | 59 | | | |

ANOVA Assumptions Tests

| Attribute | Test | Test Stat | Critical | P-Value | Decision(α:1%) |
|--------------|------------------------------------|-----------|----------|---------|---------------------|
| Variance | Bartlett Equality of Variance Test | 3.726 | 15.09 | 0.5895 | Equal Variances |
| Distribution | Shapiro-Wilk W Normality Test | 0.9697 | 0.9459 | 0.1408 | Normal Distribution |

Reproduction Summary

| Conc-% | Code | Count | Mean | 95% LCL | 95% UCL | Median | Min | Max | Std Err | CV% | %Effect |
|--------|------|-------|------|---------|---------|--------|-----|-----|---------|--------|---------|
| 0 | D | 10 | 38.2 | 35.15 | 41.25 | 37.25 | 30 | 44 | 1.348 | 11.16% | 0.00% |
| 6.25 | | 10 | 38 | 35.98 | 40.02 | 38.33 | 34 | 42 | 0.8944 | 7.44% | 0.52% |
| 12.5 | | 10 | 39.4 | 37.52 | 41.28 | 39 | 36 | 44 | 0.8327 | 6.68% | -3.14% |
| 25 | | 10 | 37.3 | 35.25 | 39.35 | 36.8 | 33 | 42 | 0.9074 | 7.69% | 2.36% |
| 50 | | 10 | 37.4 | 34.59 | 40.21 | 39.75 | 32 | 42 | 1.24 | 10.49% | 2.09% |
| 100 | | 10 | 35.6 | 32.77 | 38.43 | 36 | 27 | 40 | 1.249 | 11.09% | 6.81% |

Reproduction Detail

| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 0 | D | 37 | 37 | 44 | 40 | 37 | 34 | 43 | 42 | 30 | 38 |
| 6.25 | | 42 | 39 | 36 | 42 | 35 | 40 | 39 | 36 | 34 | 37 |
| 12.5 | | 38 | 42 | 38 | 39 | 39 | 36 | 42 | 44 | 36 | 40 |
| 25 | | 38 | 34 | 33 | 39 | 38 | 36 | 36 | 36 | 41 | 42 |
| 50 | | 39 | 32 | 34 | 42 | 32 | 40 | 34 | 40 | 40 | 41 |
| 100 | | 39 | 31 | 27 | 36 | 36 | 35 | 36 | 39 | 37 | 40 |

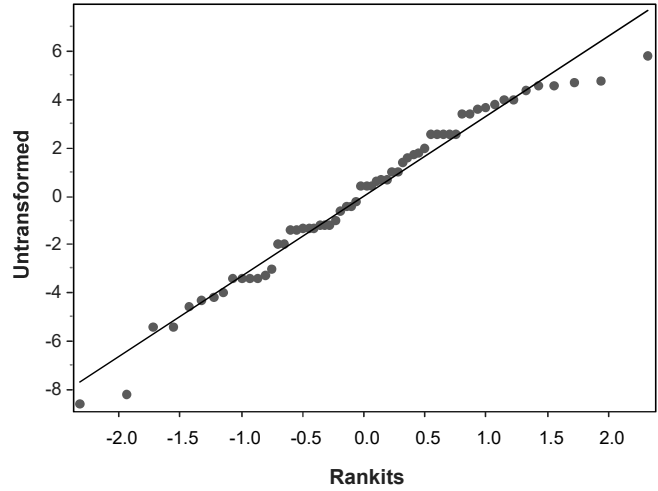
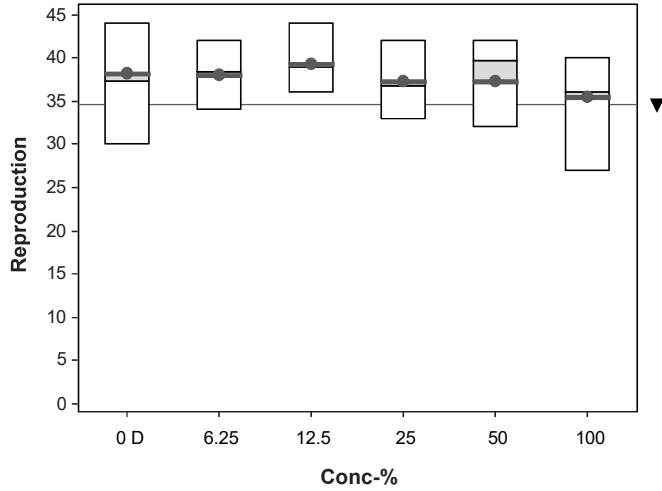


Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

Analysis ID: 04-8198-6149 Endpoint: Reproduction CETIS Version: CETISv2.1.4
Analyzed: 19 Feb-24 14:38 Analysis: Parametric-Control vs Treatments Status Level: 1
Edit Date: 19 Feb-24 14:35 MD5 Hash: 60E3EB82D9B8EB96FEF7E1620363A210 Editor ID: 008-848-998-5

Graphics



CETIS Analytical Report

Report Date: 19 Feb-24 14:40 (p 7 of 8)
 Test Code/ID: 24-245a / 19-7153-3407

| Ceriodaphnia 7-d Survival and Reproduction Test | | | | New England Bioassay | |
|---|---|---|-----------------|----------------------|--|
| Analysis ID: 09-9452-6300 | Endpoint: Reproduction | CETIS Version: CETISv2.1.4 | | | |
| Analyzed: 19 Feb-24 14:39 | Analysis: Linear Interpolation (ICPIN) | Status Level: 1 | | | |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: 60E3EB82D9B8EB96FEF7E1620363A210 | Editor ID: 008-848-998-5 | | | |
| Batch ID: 02-4807-9744 | Test Type: Reproduction-Survival (7d) | Analyst: | | | |
| Start Date: 09 Feb-24 11:39 | Protocol: EPA/821/R-02-013 (2002) | Diluent: Receiving Water | | | |
| Ending Date: 16 Feb-24 10:40 | Species: Ceriodaphnia dubia | Brine: Not Applicable | | | |
| Test Length: 6d 23h | Taxon: Branchiopoda | Source: In-House Culture | Age: <24 | | |
| Sample ID: 11-4061-0895 | Code: 43FC574F | Project: | | | |
| Sample Date: 08 Feb-24 12:00 | Material: WWTF Effluent | Source: West Valley Demonstration Project (N | | | |
| Receipt Date: 09 Feb-24 07:49 | CAS (PC): | Station: | | | |
| Sample Age: 24h | Client: Eurofins | | | | |

| Linear Interpolation Options | | | | | |
|------------------------------|-------------|---------|-----------|------------|-------------------------|
| X Transform | Y Transform | Seed | Resamples | Exp 95% CL | Method |
| Linear | Linear | 1398347 | 200 | Yes | Two-Point Interpolation |

| Test Acceptability Criteria | | TAC Limits | | | |
|-----------------------------|-----------|------------|-------|---------|-----------------|
| Attribute | Test Stat | Lower | Upper | Overlap | Decision |
| Control Resp | 38.2 | 15 | << | Yes | Passes Criteria |

| Point Estimates | | | | | | |
|-----------------|------|---------|---------|-----------|---------|---------|
| Level | % | 95% LCL | 95% UCL | Tox Units | 95% LCL | 95% UCL |
| IC25 | >100 | --- | --- | <1 | --- | --- |
| IC50 | >100 | --- | --- | <1 | --- | --- |

| Reproduction Summary | | | Calculated Variate | | | | | | Isotonic Variate | |
|----------------------|------|-------|--------------------|--------|-----|-----|--------|---------|------------------|---------|
| Conc-% | Code | Count | Mean | Median | Min | Max | CV% | %Effect | Mean | %Effect |
| 0 | D | 10 | 38.2 | 37.25 | 30 | 44 | 11.16% | 0.00% | 38.53 | 0.00% |
| 6.25 | | 10 | 38 | 38.33 | 34 | 42 | 7.44% | 0.52% | 38.53 | 0.00% |
| 12.5 | | 10 | 39.4 | 39 | 36 | 44 | 6.68% | -3.14% | 38.53 | 0.00% |
| 25 | | 10 | 37.3 | 36.8 | 33 | 42 | 7.69% | 2.36% | 37.35 | 3.06% |
| 50 | | 10 | 37.4 | 39.75 | 32 | 42 | 10.49% | 2.09% | 37.35 | 3.06% |
| 100 | | 10 | 35.6 | 36 | 27 | 40 | 11.09% | 6.81% | 35.6 | 7.60% |

| Reproduction Detail | | | | | | | | | | | |
|---------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Conc-% | Code | Rep 1 | Rep 2 | Rep 3 | Rep 4 | Rep 5 | Rep 6 | Rep 7 | Rep 8 | Rep 9 | Rep 10 |
| 0 | D | 37 | 37 | 44 | 40 | 37 | 34 | 43 | 42 | 30 | 38 |
| 6.25 | | 42 | 39 | 36 | 42 | 35 | 40 | 39 | 36 | 34 | 37 |
| 12.5 | | 38 | 42 | 38 | 39 | 39 | 36 | 42 | 44 | 36 | 40 |
| 25 | | 38 | 34 | 33 | 39 | 38 | 36 | 36 | 36 | 41 | 42 |
| 50 | | 39 | 32 | 34 | 42 | 32 | 40 | 34 | 40 | 40 | 41 |
| 100 | | 39 | 31 | 27 | 36 | 36 | 35 | 36 | 39 | 37 | 40 |

CETIS Analytical Report

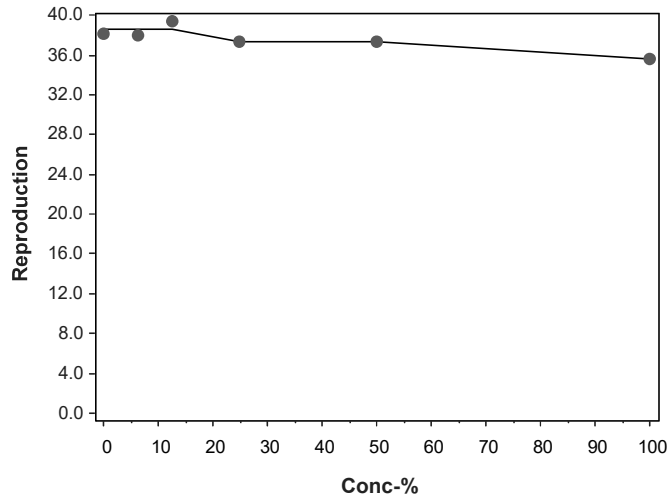
Report Date: 19 Feb-24 14:40 (p 8 of 8)
Test Code/ID: 24-245a / 19-7153-3407

Ceriodaphnia 7-d Survival and Reproduction Test

New England Bioassay

| | | |
|-----------------------------------|---|-----------------------------------|
| Analysis ID: 09-9452-6300 | Endpoint: Reproduction | CETIS Version: CETISv2.1.4 |
| Analyzed: 19 Feb-24 14:39 | Analysis: Linear Interpolation (ICPIN) | Status Level: 1 |
| Edit Date: 19 Feb-24 14:35 | MD5 Hash: 60E3EB82D9B8EB96FEF7E1620363A210 | Editor ID: 008-848-998-5 |

Graphics



NEB'S DATA SHEET FOR ROUTINE CHEMICAL AND PHYSICAL DETERMINATIONS

| | | | | | | | | | |
|--------------------------|---------|---|------|------|---------------|------|-------|---------------------------|------------|
| FACILITY NAME & ADDRESS: | | West Valley Demonstration Project WSNP001, 10282 Rock Springs Rd West Valley NY | | | | | | | |
| NEB PROJECT NUMBER: | | 44240 | | | TEST ORGANISM | | | <i>Ceriodaphnia dubia</i> | |
| DILUTION WATER SOURCE: | | Erdman Brook | | | START DATE: | | | 2/9/24 | TIME: 1139 |
| 12.5% | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Remarks |
| Tech Initials | Initial | CG | SM | AG | GP | DB | SM | ET | |
| Temp °C | Initial | 25.1 | 24.5 | 24.4 | 24.9 | 24.2 | 24.7 | 24.9 | |
| D.O. mg/L | Initial | 10.5 | 9.5 | 9.3 | 9.3 | 10.4 | 9.4 | 8.9 | |
| pH s.u. | Initial | 7.3 | 7.3 | 7.5 | 7.6 | 7.8 | 7.8 | 7.7 | |
| Conductivity µS | Initial | 427 | 423 | 429 | 428 | 416 | 420 | 442 | |
| Tech Initials | Final | KO | SM | SD | GP | KO | ET | CG | |
| Temp °C | Final | 24.8 | 24.9 | 25.3 | 24.5 | 24.4 | 24.5 | 24.0 | |
| D.O. mg/L | Final | 8.2 | 8.4 | 8.1 | 8.1 | 8.4 | 8.5 | 8.4 | |
| pH s.u. | Final | 8.1 | 7.9 | 7.9 | 8.0 | 8.0 | 8.0 | 8.1 | |
| Conductivity µS | Final | 460 | 450 | 462 | 465 | 453 | 476 | 498 | |
| 25% | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Remarks |
| Tech Initials | Initial | CG | SM | AG | GP | DB | SM | ET | |
| Temp °C | Initial | 25.0 | 24.5 | 24.3 | 24.9 | 24.2 | 24.7 | 24.9 | |
| D.O. mg/L | Initial | 10.3 | 9.5 | 9.3 | 9.3 | 10.3 | 9.3 | 8.9 | |
| pH s.u. | Initial | 7.4 | 7.3 | 7.5 | 7.7 | 7.7 | 7.8 | 7.7 | |
| Conductivity µS | Initial | 579 | 575 | 583 | 576 | 572 | 572 | 583 | |
| Tech Initials | Final | KO | SM | SD | GP | KO | ET | CG | |
| Temp °C | Final | 24.9 | 25.0 | 25.2 | 24.4 | 24.3 | 24.4 | 24.1 | |
| D.O. mg/L | Final | 8.2 | 8.4 | 8.1 | 8.1 | 8.4 | 8.6 | 8.4 | |
| pH s.u. | Final | 8.1 | 8.0 | 8.0 | 8.1 | 8.0 | 8.1 | 8.2 | |
| Conductivity µS | Final | 622 | 617 | 631 | 620 | 624 | 662 | 672 | |
| 50% | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Remarks |
| Tech Initials | Initial | CG | SM | AG | GP | DB | SM | ET | |
| Temp °C | Initial | 25.0 | 24.5 | 24.3 | 24.8 | 24.2 | 24.6 | 24.8 | |
| D.O. mg/L | Initial | 10.2 | 9.4 | 9.3 | 9.2 | 10.0 | 9.2 | 8.9 | |
| pH s.u. | Initial | 7.4 | 7.4 | 7.6 | 7.8 | 7.7 | 7.8 | 7.7 | |
| Conductivity µS | Initial | 865 | 866 | 869 | 866 | 888 | 891 | 894 | |
| Tech Initials | Final | KO | SM | SD | GP | KO | ET | CG | |
| Temp °C | Final | 24.9 | 24.9 | 25.2 | 24.6 | 24.2 | 24.6 | 24.0 | |
| D.O. mg/L | Final | 8.2 | 8.5 | 8.1 | 8.1 | 8.5 | 8.6 | 8.4 | |
| pH s.u. | Final | 8.2 | 8.1 | 8.0 | 8.2 | 8.1 | 8.2 | 8.3 | |
| Conductivity µS | Final | 930 | 941 | 952 | 926 | 961 | 1,063 | 1,055 | |

- 1
- 2
- 3
- 4
- 5

1
2
3
4
5

NEB'S DATA SHEET FOR ROUTINE CHEMICAL AND PHYSICAL DETERMINATIONS

| | | | | | | | | | |
|--------------------------|---------|---|-------|-------|---------------|-------|---------------------------|------------|---------|
| FACILITY NAME & ADDRESS: | | West Valley Demonstration Project WSNP001, 10282 Rock Springs Rd West Valley NY | | | | | | | |
| NEB PROJECT NUMBER: | | 44240 | | | TEST ORGANISM | | <i>Ceriodaphnia dubia</i> | | |
| DILUTION WATER SOURCE: | | Erdman Brook | | | START DATE: | | 2/9/24 | TIME: 1139 | |
| 100% | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Remarks |
| Tech Initials | Initial | CG | SM | AG | GP | DB | SM | ET | |
| Temp °C | Initial | 24.9 | 24.4 | 24.3 | 24.7 | 24.3 | 24.6 | 24.8 | |
| D.O. mg/L | Initial | 9.9 | 9.3 | 9.3 | 9.4 | 10.1 | 9.1 | 8.9 | |
| pH s.u. | Initial | 7.6 | 7.5 | 7.7 | 7.8 | 7.6 | 7.7 | 7.7 | |
| Conductivity µS | Initial | 1,452 | 1,450 | 1,441 | 1,442 | 1,499 | 1,516 | 1,513 | |
| Tech Initials | Final | KO | SM | SD | GP | KO | ET | CG | |
| Temp °C | Final | 24.9 | 24.9 | 25.2 | 24.6 | 24.5 | 24.6 | 24.0 | |
| D.O. mg/L | Final | 8.2 | 8.4 | 8.2 | 8.1 | 8.5 | 8.6 | 8.4 | |
| pH s.u. | Final | 8.4 | 8.3 | 8.2 | 8.3 | 8.3 | 8.3 | 8.4 | |
| Conductivity µS | Final | 1,549 | 1,530 | 1,516 | 1,587 | 1,625 | 1,658 | 1,627 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Remarks |
| Tech Initials | Initial | | | | | | | | |
| Temp °C | Initial | | | | | | | | |
| D.O. mg/L | Initial | | | | | | | | |
| pH s.u. | Initial | | | | | | | | |
| Conductivity µS | Initial | | | | | | | | |
| Tech Initials | Final | | | | | | | | |
| Temp °C | Final | | | | | | | | |
| D.O. mg/L | Final | | | | | | | | |
| pH s.u. | Final | | | | | | | | |
| Conductivity µS | Final | | | | | | | | |

Table of Random Permutations of 16

C.dubia Test ID#

24-245

| | | | | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 7 | 12 | 15 | 15 | 1 | 2 | 7 | 16 | 10 | 2 | 14 | 15 | 7 | 13 | 13 | 10 | 6 | 1 | 8 | 10 |
| 13 | 3 | 8 | 16 | 7 | 10 | 11 | 10 | 13 | 5 | 11 | 7 | 13 | 16 | 7 | 7 | 5 | 13 | 2 | 14 |
| 3 | 1 | 4 | 5 | 14 | 13 | 3 | 14 | 9 | 13 | 13 | 2 | 9 | 15 | 6 | 2 | 8 | 4 | 5 | 8 |
| 11 | 8 | 16 | 14 | 15 | 6 | 2 | 6 | 2 | 16 | 8 | 5 | 12 | 3 | 9 | 13 | 4 | 3 | 10 | 4 |
| 14 | 9 | 1 | 6 | 3 | 9 | 14 | 13 | 8 | 6 | 5 | 8 | 14 | 7 | 3 | 15 | 13 | 11 | 4 | 7 |
| 2 | 16 | 10 | 13 | 5 | 5 | 13 | 2 | 11 | 7 | 3 | 12 | 5 | 14 | 12 | 16 | 2 | 2 | 9 | 15 |
| 4 | 6 | 13 | 7 | 2 | 15 | 1 | 9 | 1 | 4 | 7 | 10 | 6 | 9 | 11 | 9 | 7 | 6 | 16 | 11 |
| 6 | 14 | 6 | 10 | 4 | 14 | 4 | 15 | 3 | 3 | 4 | 16 | 2 | 6 | 5 | 1 | 12 | 10 | 6 | 9 |
| 10 | 15 | 2 | 1 | 13 | 12 | 16 | 3 | 4 | 8 | 10 | 1 | 15 | 5 | 14 | 12 | 14 | 12 | 3 | 2 |
| 12 | 10 | 7 | 12 | 9 | 11 | 9 | 8 | 12 | 14 | 15 | 4 | 11 | 8 | 16 | 8 | 9 | 14 | 14 | 1 |
| 15 | 7 | 5 | 2 | 10 | 7 | 8 | 12 | 6 | 15 | 6 | 13 | 16 | 12 | 15 | 4 | 11 | 8 | 12 | 6 |
| 16 | 2 | 11 | 8 | 8 | 8 | 15 | 5 | 16 | 1 | 1 | 9 | 8 | 1 | 8 | 14 | 16 | 5 | 13 | 5 |
| 9 | 13 | 14 | 3 | 6 | 4 | 10 | 11 | 5 | 12 | 9 | 3 | 10 | 4 | 4 | 3 | 10 | 9 | 1 | 3 |
| 8 | 11 | 9 | 4 | 11 | 3 | 12 | 7 | 7 | 10 | 12 | 14 | 3 | 10 | 1 | 6 | 15 | 16 | 15 | 12 |
| 1 | 5 | 12 | 11 | 16 | 16 | 5 | 4 | 14 | 9 | 16 | 11 | 1 | 2 | 10 | 5 | 1 | 15 | 7 | 13 |
| 5 | 4 | 3 | 9 | 12 | 1 | 6 | 1 | 15 | 11 | 2 | 6 | 4 | 11 | 2 | 11 | 3 | 7 | 11 | 16 |
| 11 | 8 | 16 | 5 | 5 | 13 | 1 | 13 | 2 | 16 | 14 | 12 | 9 | 8 | 7 | 5 | 13 | 3 | 13 | 3 |
| 2 | 2 | 8 | 8 | 14 | 16 | 4 | 3 | 8 | 11 | 10 | 14 | 15 | 1 | 2 | 11 | 4 | 5 | 15 | 9 |
| 6 | 13 | 2 | 13 | 6 | 5 | 9 | 15 | 11 | 10 | 12 | 6 | 16 | 15 | 16 | 9 | 10 | 12 | 16 | 15 |
| 14 | 12 | 4 | 16 | 16 | 11 | 14 | 10 | 5 | 12 | 3 | 3 | 12 | 14 | 15 | 13 | 6 | 4 | 1 | 16 |
| 8 | 6 | 3 | 9 | 4 | 10 | 6 | 4 | 16 | 2 | 2 | 9 | 8 | 16 | 4 | 6 | 5 | 15 | 7 | 8 |
| 9 | 15 | 12 | 10 | 3 | 2 | 12 | 6 | 1 | 15 | 4 | 13 | 7 | 7 | 9 | 12 | 14 | 8 | 8 | 11 |
| 3 | 10 | 11 | 12 | 13 | 12 | 5 | 11 | 7 | 8 | 9 | 5 | 14 | 11 | 10 | 1 | 3 | 13 | 3 | 5 |
| 16 | 1 | 13 | 14 | 8 | 14 | 15 | 5 | 3 | 7 | 11 | 15 | 6 | 12 | 5 | 7 | 11 | 1 | 14 | 4 |
| 1 | 14 | 14 | 2 | 9 | 15 | 16 | 14 | 6 | 14 | 7 | 8 | 3 | 13 | 11 | 8 | 7 | 7 | 12 | 7 |
| 4 | 4 | 6 | 4 | 12 | 3 | 11 | 8 | 15 | 9 | 8 | 1 | 13 | 6 | 3 | 3 | 15 | 9 | 9 | 12 |
| 15 | 5 | 1 | 11 | 10 | 6 | 3 | 7 | 10 | 5 | 5 | 11 | 10 | 10 | 12 | 15 | 16 | 14 | 5 | 2 |
| 5 | 3 | 5 | 6 | 7 | 7 | 13 | 2 | 14 | 3 | 16 | 4 | 5 | 5 | 13 | 4 | 9 | 16 | 2 | 6 |
| 12 | 7 | 15 | 15 | 15 | 9 | 8 | 12 | 12 | 13 | 15 | 10 | 1 | 4 | 6 | 16 | 2 | 6 | 11 | 1 |
| 10 | 11 | 10 | 3 | 2 | 4 | 2 | 1 | 4 | 6 | 6 | 7 | 11 | 9 | 14 | 10 | 8 | 11 | 4 | 13 |
| 7 | 9 | 7 | 7 | 11 | 1 | 7 | 16 | 13 | 1 | 13 | 2 | 4 | 2 | 1 | 2 | 12 | 2 | 10 | 14 |
| 13 | 16 | 9 | 1 | 1 | 8 | 10 | 9 | 9 | 4 | 1 | 16 | 2 | 3 | 8 | 14 | 1 | 10 | 6 | 10 |
| 1 | 6 | 7 | 4 | 8 | 6 | 5 | 2 | 8 | 15 | 4 | 6 | 6 | 1 | 4 | 5 | 7 | 13 | 2 | 10 |
| 9 | 15 | 11 | 3 | 11 | 15 | 9 | 10 | 1 | 3 | 8 | 2 | 15 | 7 | 9 | 8 | 16 | 1 | 14 | 3 |
| 10 | 16 | 4 | 5 | 12 | 9 | 16 | 11 | 7 | 1 | 7 | 16 | 11 | 8 | 3 | 3 | 12 | 2 | 3 | 4 |
| 4 | 14 | 1 | 9 | 5 | 5 | 4 | 13 | 6 | 8 | 15 | 5 | 12 | 5 | 7 | 16 | 5 | 11 | 8 | 1 |
| 7 | 3 | 13 | 14 | 15 | 2 | 1 | 14 | 16 | 5 | 14 | 9 | 2 | 16 | 1 | 12 | 6 | 14 | 4 | 13 |
| 16 | 11 | 2 | 1 | 14 | 16 | 6 | 9 | 3 | 4 | 16 | 14 | 3 | 15 | 11 | 11 | 3 | 9 | 12 | 5 |
| 3 | 10 | 16 | 16 | 13 | 7 | 13 | 1 | 11 | 14 | 9 | 10 | 16 | 2 | 10 | 2 | 10 | 7 | 10 | 16 |
| 11 | 13 | 9 | 13 | 4 | 13 | 8 | 3 | 5 | 13 | 10 | 12 | 5 | 12 | 5 | 14 | 13 | 16 | 5 | 6 |
| 15 | 2 | 3 | 12 | 9 | 12 | 2 | 4 | 13 | 10 | 3 | 13 | 14 | 4 | 2 | 1 | 14 | 8 | 6 | 12 |
| 14 | 1 | 14 | 6 | 10 | 1 | 3 | 12 | 4 | 2 | 2 | 4 | 13 | 3 | 16 | 9 | 9 | 3 | 7 | 14 |
| 13 | 12 | 5 | 11 | 3 | 11 | 15 | 8 | 2 | 7 | 11 | 7 | 8 | 14 | 6 | 4 | 4 | 4 | 15 | 11 |
| 12 | 5 | 10 | 7 | 2 | 14 | 7 | 15 | 14 | 16 | 13 | 1 | 9 | 10 | 12 | 10 | 11 | 10 | 9 | 8 |
| 8 | 9 | 8 | 10 | 6 | 4 | 11 | 7 | 10 | 11 | 6 | 8 | 4 | 9 | 8 | 15 | 8 | 6 | 11 | 9 |
| 2 | 7 | 6 | 2 | 1 | 8 | 10 | 6 | 15 | 12 | 1 | 11 | 7 | 11 | 13 | 6 | 1 | 15 | 13 | 15 |
| 6 | 4 | 15 | 8 | 16 | 10 | 14 | 16 | 9 | 6 | 12 | 3 | 10 | 6 | 14 | 7 | 2 | 12 | 16 | 7 |
| 5 | 8 | 12 | 15 | 7 | 3 | 12 | 5 | 12 | 9 | 5 | 15 | 1 | 13 | 15 | 13 | 15 | 5 | 1 | 2 |
| 13 | 4 | 10 | 4 | 16 | 13 | 16 | 13 | 5 | 3 | 6 | 14 | 1 | 16 | 8 | 7 | 2 | 3 | 3 | 12 |
| 5 | 14 | 4 | 6 | 8 | 2 | 15 | 1 | 13 | 14 | 16 | 4 | 15 | 4 | 3 | 12 | 12 | 1 | 4 | 7 |
| 2 | 2 | 2 | 15 | 14 | 16 | 9 | 12 | 16 | 6 | 10 | 15 | 14 | 9 | 10 | 1 | 14 | 8 | 8 | 16 |
| 7 | 12 | 15 | 8 | 12 | 3 | 5 | 14 | 7 | 12 | 5 | 13 | 16 | 1 | 7 | 5 | 11 | 2 | 9 | 3 |
| 6 | 9 | 7 | 14 | 9 | 14 | 10 | 11 | 15 | 11 | 12 | 1 | 12 | 12 | 14 | 16 | 3 | 11 | 11 | 8 |
| 14 | 5 | 16 | 7 | 10 | 8 | 11 | 8 | 14 | 13 | 7 | 11 | 6 | 3 | 11 | 4 | 4 | 6 | 6 | 9 |
| 15 | 11 | 8 | 9 | 7 | 12 | 8 | 7 | 1 | 15 | 9 | 3 | 3 | 7 | 13 | 11 | 10 | 4 | 5 | 1 |
| 11 | 6 | 6 | 1 | 4 | 1 | 3 | 16 | 12 | 5 | 4 | 9 | 13 | 13 | 6 | 8 | 15 | 9 | 1 | 14 |
| 4 | 10 | 3 | 16 | 2 | 11 | 7 | 9 | 6 | 9 | 1 | 8 | 4 | 11 | 5 | 2 | 16 | 10 | 12 | 4 |
| 1 | 8 | 1 | 13 | 1 | 15 | 4 | 4 | 11 | 4 | 2 | 16 | 5 | 8 | 1 | 9 | 5 | 12 | 16 | 6 |
| 9 | 7 | 14 | 2 | 6 | 4 | 14 | 10 | 9 | 8 | 15 | 10 | 7 | 10 | 9 | 10 | 6 | 14 | 10 | 11 |
| 12 | 1 | 9 | 10 | 15 | 5 | 2 | 15 | 10 | 2 | 14 | 2 | 8 | 2 | 4 | 13 | 8 | 5 | 15 | 5 |
| 3 | 3 | 12 | 11 | 5 | 9 | 6 | 6 | 3 | 10 | 13 | 12 | 9 | 6 | 2 | 15 | 7 | 15 | 7 | 13 |
| 10 | 15 | 11 | 5 | 13 | 7 | 12 | 5 | 2 | 7 | 11 | 5 | 10 | 15 | 12 | 3 | 1 | 13 | 13 | 10 |
| 8 | 13 | 13 | 3 | 3 | 10 | 13 | 2 | 4 | 1 | 8 | 6 | 11 | 14 | 15 | 6 | 9 | 16 | 2 | 2 |
| 16 | 16 | 5 | 12 | 11 | 6 | 1 | 3 | 8 | 16 | 3 | 7 | 2 | 5 | 16 | 14 | 13 | 7 | 14 | 15 |

REP

CONC



Ceriodaphnia dubia

Culture Chart

Lot # Cd24 (RMH035) A

Brood mother source: RMH023A.2 Source's brood size: 28 (Qty.)

West Valley 2/9/24

| Tech | IR | IR | SD | TR | | JG | AH | IR | | SD | SD | IR | | | | |
|-------|--------|------|------|-----|---|-----|-----|-----|----|-----|-----|------------------|----|----|----|----|
| Date | 1-30 | 1-31 | 2-1 | 2-2 | | 2-4 | 2-5 | 2-6 | | 2-7 | 2-8 | 2-9 | | | | |
| Day | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Cup # | Beaker | | Tray | | | | | | | | | | | | | |
| 1 | N | N | N | N | | 8 | 17 | y | 1 | N | y | y | | | | |
| 2 | N | N | N | N | | 5 | 16 | y | 2 | N | N | y ^{T1} | | | | |
| 3 | N | N | N | N | | 6 | 13 | y | 3 | y | N | y ^{T2} | | | | |
| 4 | N | N | N | N | | 6 | 15 | y | 4 | y | N | y | | | | |
| 5 | N | N | N | N | | 8 | 13 | y | 5 | y | N | y ^{T3} | | | | |
| 6 | N | N | N | N | | 7 | 15 | y | 6 | y | N | y | | | | |
| 7 | N | N | N | N | | 7 | 14 | y | 7 | y | N | y ^{T4} | | | | |
| 8 | N | N | N | N | | 7 | 11 | y | 8 | y | N | y ^{T5} | | | | |
| 9 | N | N | N | N | | 7 | 14 | y | 9 | y | N | y | | | | |
| 10 | N | N | N | N | | 6 | 15 | y | 10 | y | N | y | | | | |
| 11 | N | N | N | N | | 7 | 14 | y | 11 | y | N | y ^{T6} | | | | |
| 12 | N | N | N | N | | 6 | 11 | y | 12 | y | N | y ^{T7} | | | | |
| 13 | N | N | N | N | | 8 | 14 | y | 13 | N | y | y ^{T8} | | | | |
| 14 | N | N | N | N | | 7 | 12 | y | 14 | y | N | y ^{T9} | | | | |
| 15 | N | N | N | N | | 6 | 13 | y | 15 | y | N | y | | | | |
| 16 | N | N | N | N | | 7 | 15 | y | 16 | y | N | y ^{T10} | | | | |
| 17 | N | N | N | N | | 7 | 14 | y | 17 | y | N | y | | | | |
| 18 | N | N | N | N | | 8 | 14 | y | 18 | y | N | y | | | | |

Y = neonates present, and EPA criterion has been met N = no neonates P = Neonates present in P.M. on previous day
 2B = two broods present. 2Y = two broods and criterion met: ≥ 20 neos. by 3rd brood. T# = neonates used in test replicate, #=neonates in brood.

Test organism collection:

| Project # | Symbol | P | Tray diagram? | Time period, neonates released | Collection date / time |
|-----------|--------|---|---------------|--------------------------------|------------------------|
| 44240 | T | | y | 2-8-24 / 1610 - 2-8-24 / 1730 | 2-9-24 / 1053 |
| | T | | | | |
| | T | | | | |
| | T | | | | |
| | T | | | | |

SAMPLE RECEIPT CHEMISTRY & CHAIN OF CUSTODY DOCUMENTS

NEW ENGLAND BIOASSAY - INITIAL CHEMISTRY DATA

PERMITTEE: West Valley Demonstration Project
 NEB JOB # 44240

| DATE RECEIVED | 2/9/24 | | 2/13/24 | | | |
|---|----------|----------|----------|----------|--|--|
| SAMPLE TYPE: | EFF #1 | BROOK #1 | EFF #2 | BROOK #2 | | |
| COC # | C44-1512 | C44-1513 | C44-1563 | C44-1564 | | |
| pH (SU) | 7.4 | 7.3 | 7.7 | 7.6 | | |
| Temperature (°C) | 1.0 | 0.7 | 0.9 | 0.6 | | |
| Dissolved Oxygen (mg/L) | 10.2 | 11.0 | 9.8 | 10.2 | | |
| Conductivity (µmhos) | 1,471 | 279 | 1,536 | 268 | | |
| Salinity (ppt) | <1 | <1 | <1 | <1 | | |
| TRC - DPD (mg/L) | 0.033 | 0.007 | 0.026 | 0.015 | | |
| TRC - Amperometric (mg/L) | N/A | N/A | N/A | N/A | | |
| Hardness (mg/L as CaCO ₃) | 174 | 96 | 182 | 92 | | |
| Alkalinity (mg/l as CaCO ₃) | 164 | 71 | 182 | 71 | | |
| Tech Initials | GP | GP | DB | DB | | |

NOTE: NA = NOT APPLICABLE

Data Reviewed By: Kimberly Wills Date Reviewed: 3/7/24

NEW ENGLAND BIOASSAY - CHAIN-OF-CUSTODY

Sample set# 1

EFFLUENT

Sampler: C. Boesch
Title: Environmental Scientist
Facility: West Valley

RECEIVING WATER

Sampler: J Zientek
Title: Environmental Scientist
Facility: West Valley

Sampling Method: Composite

Sample ID: Outfall 001

Start Date: 2-8-24 Time: 0945

End Date: 2-8-24 Time: 1200

Sample Type: Prechlorinated
 Dechlorinated
 Unchlorinated
 Chlorinated

Sampling Method: Grab

Sample ID: Erdman Brook

Date Collected: 2-8-24

Time Collected: 0730

← Discharge stopped for awhile

Effluent Sampling Location and Procedures: WNSPOOL EM-2 Composite Sampling

Receiving Water Sampling Location and Procedures: ERB53 EM-2 Grab Sample

Received
ON ICE

Requested Analysis: Chronic and modified acute

Sample Shipment

Method of Shipment: UPS Next Day Air Early

Relinquished By: [Signature] Date: 2-8-24 Time: 1230

Received By: [Signature] Date: 2/9/24 Time: 0749

Relinquished By: _____ Date: _____ Time: _____

Received By: _____ Date: _____ Time: _____

Relinquished By: _____ Date: _____ Time: _____

Received By: _____ Date: _____ Time: _____

FOR NEB USE ONLY

Temperature of Effluent Upon Receipt at Lab: 1.0 °C

Temperature of Receiving Water Upon Receipt at Lab: 0.7 °C

Effluent COC# C44-1512

Receiving Water COC# C44-1513

**IF THIS COOLER IS MISPLACED OR THE LABEL IS LOST, PLEASE SHIP TO:
KIM WILLS, NEW ENGLAND BIOASSAY, 77 BATSON DRIVE, MANCHESTER CT 06042**

CHAIN-OF-CUSTODY / REQUEST-FOR-ANALYSIS / PACKING SHEET


Sample Type: SPDES

Electronic Disk - YES

| | | | | | |
|--|------------------------------------|---|------------------------|--------------------------|---------------------|
| External Lab Destination Test America | Purchase Order Number CH-007532 | Charge Number WV03.IN.01.01.01.02.01 | Release Number 1430 | Report Format Level 1 | Priority 10 Days |
|--|------------------------------------|---|------------------------|--------------------------|---------------------|

OrderID:
240123-03
Work Order:
SP-Discharge


Custodian Signature: 

C-O-C Reviewed By: 

Report Data To: Bob Steiner (716) 481-5793
Chet Wrotniak (716) 982-6403

| Location Code | Sample ID | Date | Time | # Cont | Preservative | Tests | Sample Notes |
|---------------|------------|----------|------|--------|--------------|--------------------|---|
| WNSP001 | 2024-00728 | 02/08/24 | | 1 | Cool | wet_du_a, wet_du_c | Receiving water for dilution for water flea. NEB water for control. |

Project Notes: Erdman Brook receiving water also included in shipment

| | |
|--|---|
| Signature Rel: Date/Time  2/8/24 1230 | Signature Rel: Date/Time |
| Signature Rec: Date/Time | Signature Rec: Date/Time |
| Signature Rel: Date/Time | Signature Rel: Date/Time |
| Signature Rec: Date/Time | Signature Rec: Date/Time |
| Signature Rel: Date/Time | Sample Receipt at Lab: Cool? YES NO Temp: C |
| Signature Rec: Date/Time | Signature Rec: Date/Time YES NO |

NEW ENGLAND BIOASSAY - CHAIN-OF-CUSTODY

Sample set# 2

EFFLUENT

Sampler: C. Zoesch
Title: Environmental Scientist
Facility: West Valley

Sampling Method: Composite
Sample ID: Outfall 001
Start Date: 2-11-24 Time: 0930
End Date: 2-12-24 Time: _____

Sample Type: _____ Prechlorinated
_____ Dechlorinated
 Unchlorinated
_____ Chlorinated

RECEIVING WATER

Sampler: J. Zientek
Title: Environmental Scientist
Facility: West Valley

Sampling Method: Grab
Sample ID: Erdman Brook
Date Collected: 2-12-24
Time Collected: 0730

Effluent Sampling Location and Procedures: WNBP001 Em-2 Composite Sampling

Receiving Water Sampling Location and Procedures: WNERB53 Em-2 Grab Sampling

Requested Analysis: Chronic and modified acute

Received
ON ICE

Sample Shipment

Method of Shipment: UPS next Day Air EARLY
Relinquished By: [Signature] Date: 2/12/24 Time: 0900
Received By: [Signature] Date: 2/13/24 Time: 0900 0740
Relinquished By: _____ Date: _____ Time: _____
Received By: _____ Date: _____ Time: _____
Relinquished By: _____ Date: _____ Time: _____
Received By: _____ Date: _____ Time: _____

FOR NEB USE ONLY

Temperature of Effluent Upon Receipt at Lab: 0.9 °C Temperature of Receiving Water Upon Receipt at Lab: 0.6 °C
Effluent COC# C44-1563 Receiving Water COC# C44-1564

**IF THIS COOLER IS MISPLACED OR THE LABEL IS LOST, PLEASE SHIP TO:
KIM WILLS, NEW ENGLAND BIOASSAY, 77 BATSON DRIVE, MANCHESTER CT 06042**

CHAIN-OF-CUSTODY / REQUEST-FOR-ANALYSIS / PACKING SHEET

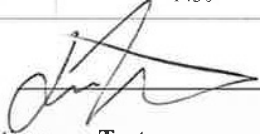
Sample Type: SPDES

Electronic Disk - YES

| | | | | | |
|--|------------------------------------|---|------------------------|--------------------------|---------------------|
| External Lab Destination Test America | Purchase Order Number CH-007532 | Charge Number WV03.IN.01.01.01.02.01 | Release Number 1430 | Report Format Level 1 | Priority 10 Days |
|--|------------------------------------|---|------------------------|--------------------------|---------------------|

OrderID:
240123-03
Work Order:
SP-Discharge


Custodian Signature: 

C-O-C Reviewed By: 

Report Data To: Bob Steiner (716) 481-5793
Chet Wrotniak (716) 982-6403

| Location Code | Sample ID | Date | Time | # Cont | Preservative | Tests | Sample Notes |
|---------------|------------|----------|-------|--------|--------------|--------------------|---|
| WNSP001 | 2024-00729 | 02/12/24 | 08:10 | 1 | Cool | wet_du_a, wet_du_c | Receiving water for dilution for water flea. NEB water for control. |

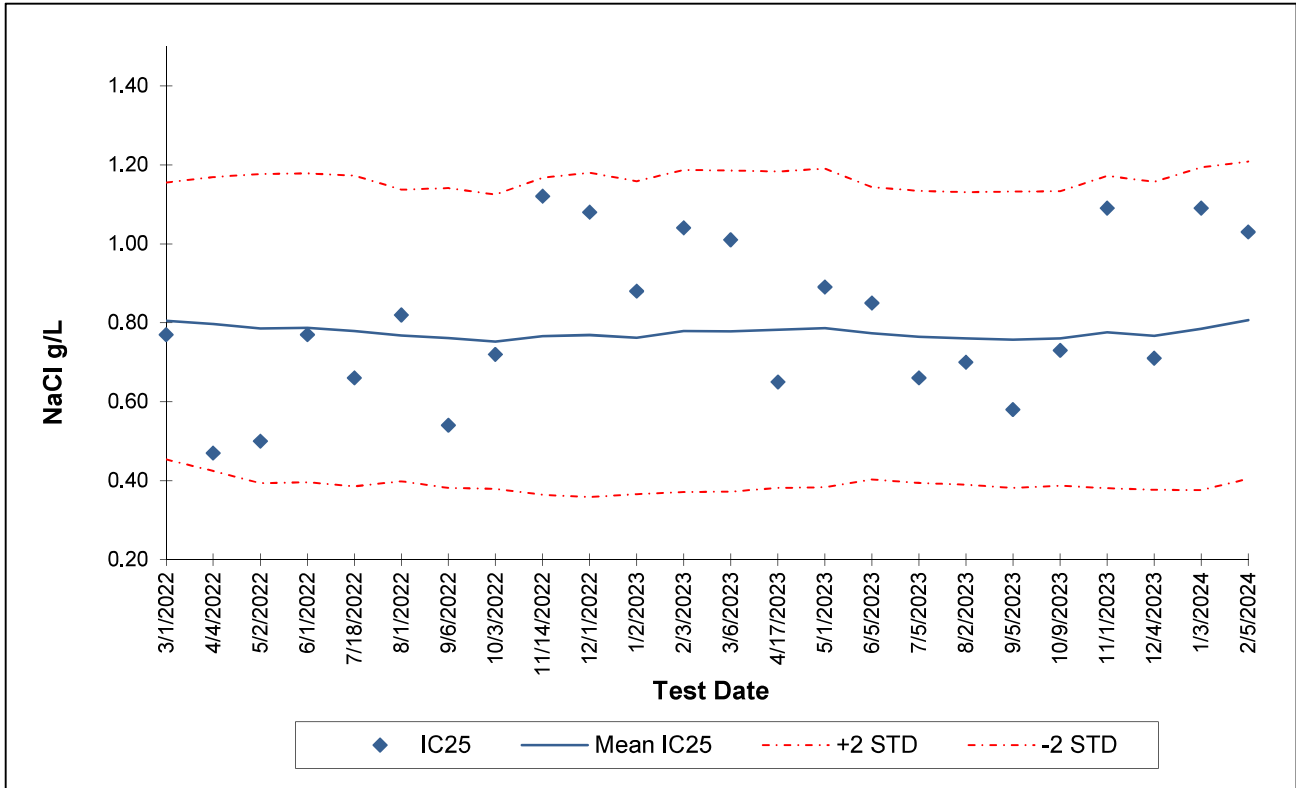
Project Notes: Refrehing samples, Erdman Brook receiving water also included in shipment

| | |
|--|---|
| Signature Rel: Date/Time  02/12/24 0900 | Signature Rel: Date/Time |
| Signature Rec: Date/Time | Signature Rec: Date/Time |
| Signature Rel: Date/Time | Signature Rel: Date/Time |
| Signature Rec: Date/Time | Signature Rec: Date/Time |
| Signature Rel: Date/Time | Sample Receipt at Lab: Cool? YES NO Temp: C |
| Signature Rec: Date/Time | Signature Rec: Date/Time YES NO |

REFERENCE TOXICANT CHARTS

New England Bioassay

Reference Toxicant Data: Sodium chloride (NaCl) *Ceriodaphnia dubia* Chronic Reproduction IC₂₅



| Test ID | Date | IC ₂₅ | Mean IC ₂₅ | STD | -2STD | +2STD | Avg. CV | Repro PMSD (%) | Avg. PMSD (%) |
|---------|------------|------------------|-----------------------|------|-------|-------|---------|----------------|---------------|
| 22-302 | 3/1/2022 | 0.77 | 0.80 | 0.18 | 0.45 | 1.16 | 0.22 | 10.96 | 17.73 |
| 22-496 | 4/4/2022 | 0.47 | 0.80 | 0.19 | 0.42 | 1.17 | 0.23 | 14.23 | 17.58 |
| 22-667 | 5/2/2022 | 0.50 | 0.79 | 0.20 | 0.39 | 1.18 | 0.25 | 22.29 | 17.25 |
| 22-871 | 6/1/2022 | 0.77 | 0.79 | 0.20 | 0.40 | 1.18 | 0.25 | 13.26 | 17.30 |
| 22-1212 | 7/18/2022 | 0.66 | 0.78 | 0.20 | 0.39 | 1.17 | 0.25 | 21.83 | 17.18 |
| 22-1326 | 8/1/2022 | 0.82 | 0.77 | 0.18 | 0.40 | 1.14 | 0.24 | 15.61 | 16.19 |
| 22-1589 | 9/6/2022 | 0.54 | 0.76 | 0.19 | 0.38 | 1.14 | 0.25 | 17.78 | 15.71 |
| 22-1835 | 10/3/2022 | 0.72 | 0.75 | 0.19 | 0.38 | 1.12 | 0.25 | 22.88 | 16.14 |
| 22-2141 | 11/14/2022 | 1.12 | 0.77 | 0.20 | 0.36 | 1.17 | 0.26 | 10.74 | 16.10 |
| 22-2223 | 12/1/2022 | 1.08 | 0.77 | 0.21 | 0.36 | 1.18 | 0.27 | 12.08 | 16.21 |
| 23-2 | 1/2/2023 | 0.88 | 0.76 | 0.20 | 0.37 | 1.16 | 0.26 | 8.95 | 15.97 |
| 23-164 | 2/3/2023 | 1.04 | 0.78 | 0.20 | 0.37 | 1.19 | 0.26 | 8.50 | 15.71 |
| 23-371 | 3/6/2023 | 1.01 | 0.78 | 0.20 | 0.37 | 1.19 | 0.26 | 27.48 | 16.37 |
| 23-655 | 4/17/2023 | 0.65 | 0.78 | 0.20 | 0.38 | 1.18 | 0.26 | 9.74 | 16.37 |
| 23-731 | 5/1/2023 | 0.89 | 0.79 | 0.20 | 0.38 | 1.19 | 0.26 | 21.31 | 16.67 |
| 23-973 | 6/5/2023 | 0.85 | 0.77 | 0.19 | 0.40 | 1.14 | 0.24 | 22.80 | 17.16 |
| 23-1143 | 7/5/2023 | 0.66 | 0.76 | 0.18 | 0.39 | 1.13 | 0.24 | 10.17 | 16.98 |
| 23-1365 | 8/2/2023 | 0.70 | 0.76 | 0.19 | 0.39 | 1.13 | 0.24 | 23.03 | 17.64 |
| 23-1691 | 9/5/2023 | 0.58 | 0.76 | 0.19 | 0.38 | 1.13 | 0.25 | 7.64 | 17.28 |
| 23-2024 | 10/9/2023 | 0.73 | 0.76 | 0.19 | 0.39 | 1.13 | 0.25 | 13.34 | 17.09 |
| 23-2176 | 11/1/2023 | 1.09 | 0.78 | 0.20 | 0.38 | 1.17 | 0.25 | 12.89 | 16.26 |
| 23-2356 | 12/4/2023 | 0.71 | 0.77 | 0.20 | 0.38 | 1.16 | 0.25 | 11.47 | 15.64 |
| 24-10 | 1/3/2024 | 1.09 | 0.78 | 0.20 | 0.38 | 1.19 | 0.26 | 15.69 | 15.70 |
| 24-192 | 2/5/2024 | 1.03 | 0.81 | 0.20 | 0.40 | 1.21 | 0.25 | 16.44 | 15.46 |

National 75th Percentile and 90th Percentile CV Averages for *Ceriodaphnia* Reproduction IC₂₅ (EPA 833-R-00-003): 0.45 - 0.62
 PMSD Upper and Lower Bounds for *Ceriodaphnia* Reproduction (EPA-821-R-02-013): 13% - 47%

NYELAP ACCREDITATION ANALYTE LIST

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER



Expires 12:01 AM April 01, 2024
Issued April 01, 2022
Revised March 30, 2023

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

*MS. KIMBERLY WILLS
NEW ENGLAND BIOASSAY INC.
77 BATSON DRIVE
MANCHESTER, CT 06042*

NY Lab Id No: 12157

*is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards (2016) for the category
ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:*

Aquatic Toxicity

| | |
|--|------------|
| Fathead minnow-Pimephales promelas | EPA 1000.0 |
| | EPA 2000.0 |
| Opossum shrimp-Americamysis bahia | EPA 1007.0 |
| | EPA 2007.0 |
| Sheephead minnow-Cyprinodon variegatus | EPA 1004.0 |
| | EPA 2004.0 |
| Water flea-Ceriodaphnia dubia | EPA 1002.0 |
| | EPA 2002.0 |



Serial No.: 66816

Property of the New York State Department of Health. Certificates are valid only at the address shown and must be conspicuously posted by the laboratory. Continued accreditation depends on the laboratory's successful ongoing participation in the Program. Consumers may verify a laboratory's accreditation status online at <https://apps.health.ny.gov/pubdoh/applinks/wc/elappublicweb/>, by phone (518) 485-5570 or by email to elap@health.ny.gov.



Attachment C

CHBWV Environmental Certification

CHBWV ENVIRONMENTAL CERTIFICATION

1. To be signed by a CHBWV Officer

I certify under penalty of law that I have reviewed the environmental submittal, including all attached documents, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the document has been prepared in accordance with all applicable requirements and the information is, to the best of my knowledge and belief, true, accurate, and complete.

E. A. Lowes/V.P. Regulatory Strategy *Elizabeth James* 3-19-2024
Name/Title (type or print) Signature Date Signed

Attachment D
Email Confirmation from NYSDEC

From: netdmr-notification@epa.gov
To: [Robert Steiner](#); [Matia Varner](#); [William Frederick](#); rwing@cattco.org; [Elizabeth Lowes](#); [Jamie Prowse](#); [Jennifer Dundas](#); [Joshua Desmarais](mailto:Joshua.Desmarais); R9.NetDMR@dec.ny.gov; [William Kean](#); [Bonnie Jeffery](#); [Michael Pendl](#)
Subject: NetDMR DMR(s) Submittal Passed for: NY0000973
Date: Tuesday, March 19, 2024 12:31:07 PM

The following signed 6 DMR(s) were submitted to EPA and were successfully processed:

CDX Transaction ID: _03354f72-d791-4ccc-b276-1091650c64fd
User ID: ELIZABETH.LOWES@CHBWV.COM
Timestamp: 03/19/2024 11:02:23

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: 001
Discharge: M - OUTFALL 001 MONTHLY PROC WW, GW, STORM
Monitoring Period End Date: 02/29/24

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: 007
Discharge: M - SANITARY, NC COOLING WATER, UTILITY WASTEWATER, STORMWATER
Monitoring Period End Date: 02/29/24

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: 01B
Discharge: M - MERCURY PRETREATMENT
Monitoring Period End Date: 02/29/24

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: 116
Discharge: M - PSEUDO MON. POINT @FRANKS CRK
Monitoring Period End Date: 02/29/24

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: SUM
Discharge: N - SUM OF OUTFALLS 1 & 7
Monitoring Period End Date: 02/29/24

Permitted Facility Name: WEST VALLEY DEMONSTRATION PROJ
Permit ID: NY0000973
Permitted Feature: 001
Discharge: W - OUTFALL 001 WET TESTING QUARTERLY
Monitoring Period End Date: 03/31/24

Thank you.

This is a submission from the LIVE (Production) site.