

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 786-5974

<http://www.EMSL.com>[cinnaminsonleadlab@emsl.com](mailto:cinnaminsonleadlab@emsl.com)

EMSL Order: 201812263  
CustomerID: RTES49  
CustomerPO: 70137-18-02  
ProjectID:

Attn: **Craig Herr**  
**RT Environmental Services, Inc.**  
**215 W Church Road**  
**Suite 301**  
**King Of Prussia, PA 19406**

Phone: (610) 265-1510  
Fax: (610) 265-0687  
Received: 10/23/18 9:00 AM  
Collected: 10/22/2018

Project: **Port Richmond DEV / 70137-18****Test Report: Lead in Air by Flame AAS (NIOSH 7082)\***

| <i>Client Sample Description</i> | <i>Lab ID</i>  | <i>Collected</i> | <i>Analyzed</i> | <i>Volume</i> | <i>Lead Concentration</i> |
|----------------------------------|----------------|------------------|-----------------|---------------|---------------------------|
| 2545-UW1-10-22-18                | 201812263-0001 | 10/22/2018       | 10/23/2018      | 960 L         | <4.2 µg/m <sup>3</sup>    |
| 2545-UW2-10-22-18                | 201812263-0002 | 10/22/2018       | 10/23/2018      | 960 L         | <4.2 µg/m <sup>3</sup>    |
| 2545-DW1-10-22-18                | 201812263-0003 | 10/22/2018       | 10/23/2018      | 960 L         | <4.2 µg/m <sup>3</sup>    |
| 2545-DW2-10-22-18                | 201812263-0004 | 10/22/2018       | 10/23/2018      | 960 L         | <4.2 µg/m <sup>3</sup>    |

Phillip Worby, Lead Laboratory Manager  
or other approved signatory

\*Analysis following Lead in Air by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 4 µg/filter. ug/filter = µg/m<sup>3</sup> x volume sampled (m<sup>3</sup>). OSHA PEL - 50 µg/m<sup>3</sup>. OSHA action level - 30 µg/m<sup>3</sup>. Unless otherwise noted, results in this report are not blank corrected. EMSL bears no responsibility for sample collection activities (such as volume sampled) or analytical method limitations. This report may not be reproduced except in full, without written approval by EMSL. This report relates only to those items tested. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NELAP Certifications: NJ 03036, PA 68-00367, AIHA-LAP, LLC ELLAP 100194, A2LA 2845.01

Initial report from 10/23/2018 14:34:30



## EMSL Analytical - Industrial Hygiene

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (800) 220-3675 /

<http://www.EMSL.com>

[IndustrialHygienelab@emsl.com](mailto:IndustrialHygienelab@emsl.com)

EMSL Order: 281804804  
CustomerID: RTES49  
CustomerPO: 70137-18-02  
ProjectID:

Attn: **Craig Herr**  
**RT Environmental Services, Inc.**  
**215 W Church Road**  
**Suite 301**  
**King Of Prussia, PA 19406**

Phone: (610) 265-1510  
Fax: (610) 265-0687  
Received: 10/22/18 3:00 PM  
Analysis Date: 10/23/2018  
Collected: 10/22/2018

Project: **Port Richmond DEV**

### Test Report: Total Dust Analysis (Gravimetric) of Air Samples via NIOSH 0500, Issue 2, 8/15/94

| Sample                              | Location | Volume (L) | Sample Weight (mg) | Concentration (mg/m <sup>3</sup> ) | Reporting Limit (mg/m <sup>3</sup> ) | Notes |
|-------------------------------------|----------|------------|--------------------|------------------------------------|--------------------------------------|-------|
| 2545-UW1-10-22-18<br>281804804-0001 |          | 960        | <0.050             | <0.052                             | 0.052                                |       |
| 2545-UW2-10-22-18<br>281804804-0002 |          | 960        | <0.050             | <0.052                             | 0.052                                |       |
| 2545-DW1-10-22-18<br>281804804-0003 |          | 960        | <0.050             | <0.052                             | 0.052                                |       |
| 2545-DW2-10-22-18<br>281804804-0004 |          | 960        | <0.050             | <0.052                             | 0.052                                |       |

Notes: Discernable field blank not submitted with samples.  
Results are not field blank corrected.

Analyst(s)

Katelynn Sweeney (4)

Scott Van Etten, CIH, Laboratory Manager  
or other approved signatory

The laboratory is not responsible for data reported in mg/m<sup>3</sup>, which is dependent on volume collected by non-laboratory personnel. Reporting limits for samples without volumes, such as Field Blanks, are 0.05 mg. This report relates only to the samples reported above. This report may not be reproduced, except in full, without written approval by EMSL. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical - Industrial Hygiene Cinnaminson, NJ

Initial report from 10/23/2018 14:57:31


 EMSL ANALYTICAL, INC.  
 LABORATORY MONITORING • 71114 • 1.0

## Lead (Pb) Chain of Custody

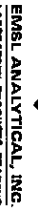
EMSL Order ID (Lab Use Only):

201812263

 EMSL ANALYTICAL, INC. 200  
 ROUTE 130 NORTH  
 CINNAMINSON, NJ 08077  
 PHONE: (800) 220-3675  
 FAX: (856) 786-5974

|  |                             |   |                   |
|--|-----------------------------|---|-------------------|
| Company: RT Environmental Services, Inc.   |                             | EMSL-Bill to: <u>Same</u> Different<br><small>If Bill to is Different note instructions in Comments**</small> |                   |
| Street: 215 W. Church Rd   |                             | Third Party Billing requires written authorization from third party   |                   |
| City: King of Prussia  | State/Province: PA          | Zip/Postal Code: 19406  | Country: USA      |
| Report To (Name): Craig Herr   |                             | Telephone #: 610-265-1510   |                   |
| Email Address: cherr@rtenv.com sbauman@rtenv.com   |                             | Fax #: 610-265-0687   |                   |
| Project Name/Number: Port Richmond DEV / 70137-18  |                             | Purchase Order: 70137-18-02   |                   |
| U.S. State Samples Taken: PA   |                             | Please Provide Results: • Fax • <u>Enr</u> • Residential/Tax Exempt   |                   |
| CT Samples • Commercial/Trade  |                             |   |                   |
| Turnaround Time (TAT) Options* - Please Check  |                             |   |                   |
| • 3 Hour   • <u>6 Hour</u>   • 24 Hour   • 48 Hour   • 72 Hour   • 96 Hour   • 1 Week   • 2 Week             |                             |   |                   |
| <small>*Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide</small> |                             |   |                   |
| Matrix   | Method                      | Instrument  | Reporting Limit   |
| Chips • % by wt. • mg/cm <sup>2</sup> • ppm  | SW846-7000B                 | Flame Atomic Absorption   | 0.01%             |
| Air  | NIOSH 7082                  | Flame Atomic Absorption   | 4 pg/filter       |
|  | NIOSH 7105                  | Graphite Furnace AA   | 0.03 pg/filter    |
|  | NIOSH 7300 modified         | ICP-AES/ICP-MS  | 0.5 pg/filter     |
| Wipe* AS •<br>non ASTM •<br><small>*if no box is checked, non-ASTM Wipe is assumed</small>                   | SW846-7000B                 | Flame Atomic Absorption   | 10 pg/wipe        |
|  | SW846-6010B or C            | ICP-AES   | 1.0 pg/wipe       |
|  | SW846-70006/7010            | Graphite Furnace AA   | 0.075 pg/wipe     |
| TCLP   | SW846-1311/7000B/SM 3111B   | Flame Atomic Absorption   | 0.4 mg/L (ppm)    |
|  | SW846-1131/SW846-6010B or C | ICP-AES   | 0.1 mg/L (ppm)    |
| Soil   | SW846-7000B                 | Flame Atomic Absorption   | 40 mg/kg (ppm)    |
|  | SW846-7010                  | Graphite Furnace AA   | 0.3 mg/kg (ppm)   |
|  | SW846-6010B or C            | ICP-AES   | 2 mg/kg (ppm)     |
| Wastewater Unpreserved •<br>Preserved with HNO <sub>3</sub> pH < 2 •   | SM3111B/SW846-7000B         | Flame Atomic Absorption   | 0.4 mg/L (ppm)    |
|  | EPA 200.9                   | Graphite Furnace AA   | 0.003 mg/L (ppm)  |
|  | 200.7                       | ICP-AES   | 0.020 mg/L (ppm)  |
| Drinking Water Unpreserved •<br>Preserved with HNO <sub>3</sub> pH < 2 •                                     | EPA 200.9                   | Graphite Furnace AA   | 0.003 mg/L (ppm)  |
|  | EPA 200.8                   | ICP-MS  | 0.001 mg/L (ppm)  |
| TSP/SPM Filter   | 40 CFR Part 50              | ICP-AES   | 12 pg/filter      |
|  | CFR Part 50                 | Graphite Furnace AA   | 3.6 pg/filter     |
| Other:   |                             |   |                   |
| Name of Sampler: <u>Scott Bauman</u>   |                             | Signature of Sampler: <u>Scott Bauman</u>   |                   |
| Sample #   | Location                    | Volume/Area   | Date/Time Sampled |
| 1 2545-UW1-10-22-18  |                             | 960 L   | 10/22/18 14:00    |
| 2 2545-UW2-10-22-18  |                             |   |                   |
| 3 2545-DW1-10-22-18  |                             |   |                   |
| 4 2545-DW2-10-22-18  |                             |   |                   |
| Client Sample Ws   |                             | I Total # of Samples: <u>4</u>  |                   |
| Relinquished (Client): <u>Scott Bauman</u>   | Date: <u>10/22/18</u>       | Time: <u>14:55</u>  |                   |
| Received (Lab): <u>[Signature]</u>   | Date: <u>10/22/18</u>       | Time: <u>3:00</u>   |                   |
| Comments: <u>None</u> Client is aware the TAT will begin 10/23/18 by 9 am 10/22/18-CK                        |                             |   |                   |

Controlled Document—Lead (Pb) COC—R6—6/12/2012



EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH

281804804

200 KOOLE 150 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (856) 858-4800  
FAX: (856) 858-3502

| Turnaround Time -- Please Check: Please Note Standard TAT is 2 Week. |                          |                          |                          |                          |                          | Media Type: <u>Agar</u>                        |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| 2 Week   | 1 Week                   | 4 Day                    | 3 Day                    | 2 Day                    | 1 Day                    | Other (Call Lab)                               |
| <input type="checkbox"/>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> <u>6hr</u> |
|  |                          |                          |                          |                          |                          | Lot #:   |
|  |                          |                          |                          |                          |                          | Manufacturer/Part #:                           |

[illegible]

| Released By            | Date            | Received By        | Date                |
|------------------------|-----------------|--------------------|---------------------|
| <i>Shirley Baumann</i> | <i>10/22/18</i> | <i>[Signature]</i> | <i>10/22/18 309</i> |
|                        |                 |                    |                     |
|                        |                 |                    |                     |
| Comments: <i>None</i>  |                 |                    |                     |



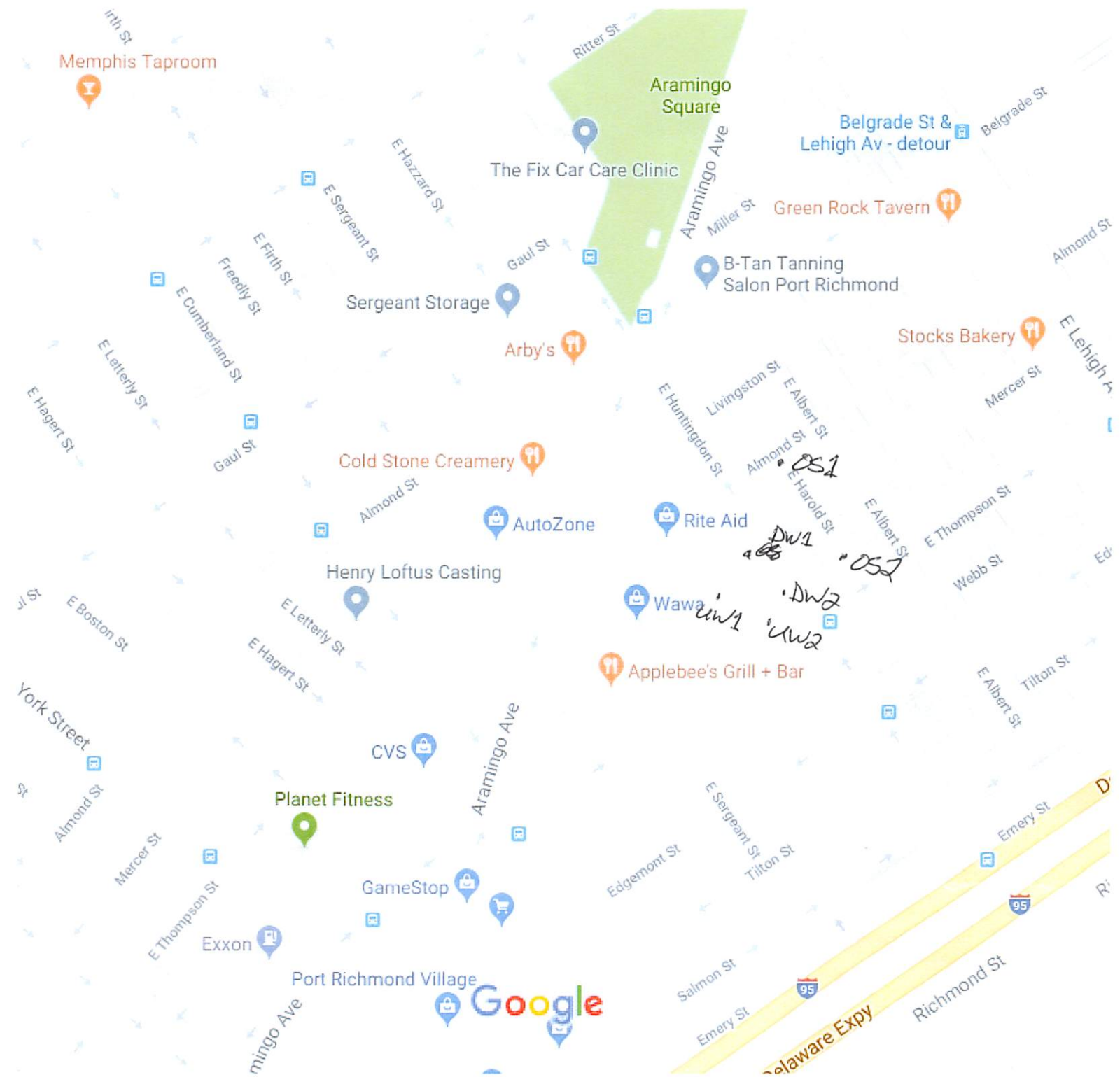
Day\_46

10/22/18

10/22/18

SW  
3-15mph

N



**RT ENVIRONMENTAL SERVICES, INC.**  
**FIELD ACTIVITY LOG**

|  |                    |                 |
|--|--------------------|-----------------|
| Client:  | Project#: 70137-18 | Name: S. Bauman |
| Job Location:  | Date: 10/23/18     | Weather:        |
| Site Address:  |                    |                 |
| Equipment: TSI-Dust TRACK 2 - calibrated at start of day                     |                    |                 |
| FIELD ACTIVITY: <span style="margin-left: 100px;"><math>mg/m^3</math></span> |                    |                 |

| Time  | OS1   | OS2   | Upwind |
|-------|-------|-------|--------|
| 06:00 | 0.014 | 0.014 | 0.013  |
| 07:00 | 0.014 | 0.016 | 0.014  |
| 08:00 | 0.017 | 0.017 | 0.025  |
| 09:00 | 0.016 | 0.025 | 0.014  |
| 10:00 | 0.016 | 0.023 | 0.015  |
| 11:00 | 0.016 | 0.027 | 0.015  |
| 12:00 | 0.016 | 0.031 | 0.014  |
| 13:00 | 0.016 | 0.016 | 0.016  |
| 14:00 | 0.016 | 0.021 | 0.017  |

Comments: None

 Signature: Scott Bauman