



Los Alamos Technical Associates, Inc.

756 Park Meadow Road / Westerville, Ohio 43081 / (614) 508-1200 (phone) / (614) 508-1201 (fax) / [www.lata.com](http://www.lata.com)

---

December 12, 2016

Mr. Matthew Ward  
Project Manager  
US Army Corps of Engineers  
Kansas City District  
601 East 12th Street  
Kansas City, Missouri 64106

SUBJECT: December 2016 Operating Report for the Vestal Well Field 1-1 Superfund Site,  
Area 4, Vestal, New York

Dear Mr. Ward:

Attached is the monthly report for December 2016 on the activities being performed at the Vestal Well field 1-1 Superfund Site, Area 4, Vestal, New York. This report details the activities and data collected at the site over the operating period.

If you have any questions, please feel free call me at (614) 508-1200.

Sincerely,  
LOS ALAMOS TECHNICAL ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read 'Nathan Canaris', is written over a light blue rectangular background.

Nathan Canaris  
Project Manager

Attachments

cc: Damian Duda – USEPA  
Payson Long – NYS DEC  
Tom Cimorelli –USACE-NYD  
Timothy Leonard – USACE-NYD  
Jason Lecuyer – USACE-NWK  
Andrew Smith – USACE-NYD  
File

TO: Matthew Ward, Project Manager  
United States Army Corps of Engineers (USACE)

FROM: Nathan Canaris, Project Manager  
Los Alamos Technical Associates, Inc. (LATA)

SUBJECT: December 2016 Monthly Report on Activities at the Vestal Well field 1-1 Superfund Site, Area 4,  
Vestal, New York

**LATA Project # 11202**  
**Contract # W912DQ-09-D-3003,**  
**Task Order # 008**

DATE: December 12, 2016

---

## **CURRENT ACTIVITIES**

LATA's technician visited the Vestal Area 4 Site for the regularly scheduled monthly O&M visit on December 9, 2016 to perform the routine monthly inspection and testing of the facilities and equipment.

Work performed during the December 9<sup>th</sup> visit was; inspect the main treatment system and cell buildings and surrounding areas for issues, inspect the equipment in the main building and ancillary buildings, re-start the system to verify operation, and collect data and equipment readings in the main building and ancillary buildings. Details and photos of the visit are attached. The site inspection forms detailing the data readings collected and observations during the site visit are attached to this report.

No other operational issues were noted during the inspection. Both the distribution buildings and the adjacent parking lot area were inspected and no issues were noted.

There were no communications or concerns with local municipalities or others during this inspection.

### **Blower Run Hours**

| <b>Date</b>              | <b>Hour Meter Reading</b> |
|--------------------------|---------------------------|
| 11/10/16                 | 18,347.0                  |
| 12/09/16                 | 18,347.8                  |
| <b>0.8 hrs. run time</b> |                           |

## **OUTSTANDING ISSUES/RESOLUTIONS**

NONE

## **PLANS FOR NEXT MONTH**

Plans for the January visit includes inspection and collection of SVE system readings and its components and other maintenance as required.

**TOTAL ELECTRICITY USAGE**  
**DW96941964 Vestal Well Field**

| Year     | 2008     |          |          | 2009     |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Month    | Oct      | Nov      | Dec      | Jan      | Feb      | Mar      | Apr      | May      | June     | July     | Aug      | Sept     | Oct      | Nov      | Dec      |
| kwh used | 1105     | 2417     | 3728     | 4141     | 4004     | 2995     | 1847     | 475      | 350      | 311      | 347      | 552      | 2011     | 1918     | 4134     |
| Cost     | \$389.66 | \$483.00 | \$588.73 | \$716.13 | \$492.59 | \$428.00 | \$331.56 | \$190.91 | \$292.77 | \$282.02 | \$350.19 | \$233.91 | \$382.99 | \$372.20 | \$776.85 |

2009 YTD Total Usage (kwh) = 23,085  
2009 YTD Total Cost = \$4,850.12

**Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas**

| Year     | 2010     |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Month    | Jan      | Feb      | Mar      | Apr      | May      | June     | July     | Aug      | Sept     | Oct      | Nov      | Dec      |
| kwh used | 3360     | 3567     | 2892     | 585      | 1189     | 400      | 303      | 342      | 308      | 1184     | 3113     | 4022     |
| Cost     | \$481.87 | \$569.27 | \$533.39 | \$212.58 | \$227.32 | \$160.27 | \$145.14 | \$136.06 | \$131.83 | \$267.07 | \$459.14 | \$547.56 |

2010 YTD Total Usage (kwh) = 21,265  
2010 YTD Total Cost = \$3,871.50

**Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas**

| Year     | 2011     |          |          |          |           |          |           |        |          |          |          |          |
|----------|----------|----------|----------|----------|-----------|----------|-----------|--------|----------|----------|----------|----------|
| Month    | Jan      | Feb      | Mar      | Apr      | May (1)   | June     | July (1)  | Aug    | Sept (2) | Oct      | Nov      | Dec      |
| kwh used | 4040     | 3667     | 3341     | 2172     | 286       | 319      | 293       | 0      | 678      | 1473     | 3257     | 4579     |
| Cost     | \$460.89 | \$493.33 | \$415.59 | \$338.11 | -\$457.97 | \$144.99 | -\$130.93 | \$0.00 | \$346.60 | \$317.96 | \$487.69 | \$588.15 |

2011 YTD Total Usage (kwh) = 24,105  
2011 YTD Total Cost = \$3,004.41

**Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas**

| Year                  | 2012     |          |          |          |          |          |          |          |          |     |          |          |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|----------|----------|
| Month                 | Jan      | Feb      | Mar      | Apr      | May      | June     | July     | Aug      | Sept     | Oct | Nov      | Dec      |
| kwh used              | 4027     | 4141     | 1516     | 515      | 334      | 344      | 289      | 325      | 303      | 0   | 1065     | 2601     |
| Cost                  | \$523.86 | \$549.93 | \$287.00 | \$155.04 | \$138.66 | \$161.01 | \$134.87 | \$154.12 | \$316.80 |     | \$302.85 | \$520.97 |
| Account Holder - Shaw |          |          |          |          |          |          |          |          | LATA     |     |          |          |

2012 YTD Total Usage (kwh) = 15,460  
2012 YTD Total Cost = \$3,245.11

**Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas**

| Year     | 2013     |          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Month    | Jan      | Feb      | Mar      | Apr      | May      | June     | July     | Aug      | Sept     | Oct      | Nov      | Dec      |
| kwh used | 2594     | 2875     | 2257     | 740      | 377      | 358      | 344      | 354      | 314      | 641      | 2658     | 3161     |
| Cost     | \$316.55 | \$522.94 | \$485.38 | \$394.71 | \$345.18 | \$347.92 | \$351.75 | \$349.49 | \$344.31 | 123.75 * | \$515.42 | \$677.78 |
| LATA     |          |          |          |          |          |          |          |          |          |          |          |          |

\* NYSEG error on October billing. LATA notified NYSEG of error and will get corrected bill

2013 YTD Total Usage (kwh) = 16,673  
2013 YTD Total Cost = \$4,775.18

**Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas**

| Year     | 2014     |          |          |          |          |          |         |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|---------|----------|----------|----------|----------|----------|
| Month    | Jan      | Feb      | Mar      | Apr      | May      | June     | July    | Aug      | Sept     | Oct      | Nov      | Dec      |
| kwh used | 3356     | 3211     | 2684     | 1007     | 373      | 391      | 286     | 350      | 324      | 352      | 1713     | 2204     |
| Cost     | \$793.03 | \$570.31 | \$581.33 | \$359.97 | \$296.86 | \$294.20 | \$44.15 | \$294.56 | \$292.42 | \$295.25 | \$415.87 | \$239.73 |
| LATA     |          |          |          |          |          |          |         |          |          |          |          |          |

2014 YTD Total Usage (kwh) = 16,251  
2014 YTD Total Cost = \$4,477.68

**Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas**

| Year     | 2015     |        |            |         |          |          |          |          |          |          |         |          |
|----------|----------|--------|------------|---------|----------|----------|----------|----------|----------|----------|---------|----------|
| Month    | Jan      | Feb    | Mar (3)    | Apr     | May      | June     | July     | Aug      | Sept     | Oct      | Nov (4) | Dec      |
| kwh used | 2204     | 0 *    | 6735       | 502     | 320      | 400      | 305      | 357      | 324      | 433      | 993     | 1484     |
| Cost     | \$249.30 | \$0.00 | \$1,203.79 | \$93.37 | \$283.90 | \$394.41 | \$295.20 | \$292.74 | \$289.40 | \$296.82 | -\$9.48 | \$392.39 |
| LATA     |          |        |            |         |          |          |          |          |          |          |         |          |

\* NYSEG was not able to perform actual meter reading due to snow.

2015 YTD Total Usage (kwh) = 14,057  
2015 YTD Total Cost = \$3,781.84

**Entire Year Using Renewable Electricity Delivered by New York State Electric & Gas**

| Year     | 2016     |          |          |          |          |          |          |         |          |          |          |     |
|----------|----------|----------|----------|----------|----------|----------|----------|---------|----------|----------|----------|-----|
| Month    | Jan      | Feb      | Mar      | Apr      | May      | June     | July     | Aug     | Sept     | Oct      | Nov      | Dec |
| kwh used | 2534     | 2936     | 1203     | 721      | 327      | 358      | 378      | 297     | 367      | 431      | 1398     |     |
| Cost     | \$198.49 | \$451.34 | \$364.52 | \$317.51 | \$278.90 | \$288.42 | \$310.89 | \$47.40 | \$314.22 | \$100.40 | \$371.72 |     |
| LATA     |          |          |          |          |          |          |          |         |          |          |          |     |

2016 YTD Total Usage (kwh) = 10,950  
2016 YTD Total Cost = \$3,043.81

- (1) = May and July 2011 cost is a previous deposit with interest credited back to account.  
(2) = Usage and costs in September 2011 cover August 2011 as well.  
(3) = Usage and costs in March 2015 cover February 2015 as well.  
(4) = November 2015 cost is a previous deposit with interest credited back to account

## **SITE PHOTO LOG**

**Main Building**



Cell 1



Cell 2



## **SITE VISIT SHEETS**



Los Alamos Technical Associates, Inc.  
756 Park Meadow Road  
Westerville, OH 43081

## Field Data Reading Sheet

Site Name VESTAL Sampled By: S. Samaroo  
Project Number: 60402566.1113064  
Date: 12/9/2016  
Weather: Snow, 30s

## Instrument Identification

| Make/Model | Cal info | PID | Other |
|------------|----------|-----|-------|
|            |          | NA  | NA    |

## Main Equipment Building

Main Control Panel \_\_\_\_\_ Control Box Locked No Lock Control Door Locked No Lock

Hour Meter Reading - SVE Unit 18347.8

## SVE Pumping Unit

|                                 |            |       |
|---------------------------------|------------|-------|
| Injection Blower Temp           | <u>160</u> | °F    |
| Injection Blower Temp Setting   | <u>--</u>  |       |
| Pressure After Injection Blower | <u>6</u>   | " H2O |
| Vacuum Blower Temp              | <u>130</u> | °F    |
| Vacuum Blower Temp Setting      | <u>--</u>  |       |
| Vacuum After Filter             | <u>16</u>  | " H2O |
| Pressure After Vacuum Blower    | <u>6</u>   | " H2O |

|                        |                                         |                             |                                           |
|------------------------|-----------------------------------------|-----------------------------|-------------------------------------------|
| Grease Seals Checked   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Date of last Grease <u>11/15/2011</u>     |
| Oil Levels Checked     | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Date of Last Oil Change <u>11/15/2011</u> |
| Belts Checked for Wear | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | Belt Guard in Place <u>Yes</u>            |

Alarms Present (described below if Yes) ☐ Yes ☒ No

## Comments

## General Site Observations

Check and Note Condition of Site

|                                  |                                        |                                  |
|----------------------------------|----------------------------------------|----------------------------------|
| Grass around Buildings           | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Trimmed |
| Vines and Weeds around Buildings | <input checked="" type="checkbox"/> OK | <input type="checkbox"/> Trimmed |

## Comments

## Field Activity Checklist

|                                                        |                                         |                                        |
|--------------------------------------------------------|-----------------------------------------|----------------------------------------|
| SVE Wellhead air Flows Measured                        | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| SVE Wells Sampled                                      | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| Carbon Changeout Performed                             | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| Water Removal Performed                                | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| Exterior of Main building and Cell Buildings Inspected | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |

## Summary of Process Air Sampling

NA

## Summary of Other Activities

NA



Site Name VESTAL Sampled By: S. Samaroo Date 12/9/2016

**Carbon Bed System**

Check all aboveground piping, valves, fittings and other components for cracks or leaks.  
Check Carbon Beds connections and associated instrumentation

Pressure Before GAC Unit 1 40 " H<sub>2</sub>O  
Temperature Before GAC Unit 1 95 F

Pressure Between GAC Unit 1 and GAC Unit 2 30 "H<sub>2</sub>O

Pressure Before GAC Unit 2 7 " H<sub>2</sub>O  
Temperature Before GAC Unit 2 48 F

**Water Storage Unit**

Check all aboveground piping, valves, fittings and other components for cracks or leaks.  
Check Carbon Beds connections and associated instrumentation

Volume of Water in Storage Tank 0 Gallons  
Water in Containment Vessel ☐ Yes ☒ No Amount 0 Inches

**Cell 1 Distribution Building**

Check all aboveground piping, valves, fittings and other components for cracks or leaks and adequacy of seals

Building Locked ☒ Yes ☐ No  
Control Box Locked ☒ Yes ☐ No  
Control Box Disconnect On ☐ Yes ☐ No 240 V Disconnect On ☐ Yes ☐ No  
Selector Switch ☐ MAN ☐ OFF ☒ AUTO  
Vacuum Status Light ☒ OFF ☐ ON

Electrical Heat Breaker ☒ Yes ☐ No  
Heater Thermostat Setting 38 °F  
Pressure at Injection Manifold 115 "H<sub>2</sub>O  
Temperature at Injection Manifold 44 °F  
Vacuum at Vacuum Manifold 55 "H<sub>2</sub>O  
Temperature at Vacuum Manifold 45 °F  
Vacuum at Knockout Tank 20 "H<sub>2</sub>O  
Water Pump Pressure Relief Settings -- psi

**Cell 2 Distribution Building**

Check all aboveground piping, valves, fittings and other components for cracks or leaks and adequacy of seals

Building Locked ☒ Yes ☐ No  
Control Box Locked ☒ Yes ☐ No  
Control Box Disconnect On ☐ Yes ☐ No 240 V Disconnect On ☐ Yes ☐ No  
Selector Switch ☐ MAN ☐ OFF ☒ AUTO  
Vacuum Status Light ☒ OFF ☐ ON

Electrical Heat Breaker ☒ Yes ☐ No  
Heater Thermostat Setting 40 °F  
Pressure at Injection Manifold 120 "H<sub>2</sub>O  
Temperature at Injection Manifold 42 °F  
Vacuum at Vacuum Manifold 40 "H<sub>2</sub>O  
Temperature at Vacuum Manifold 44 °F  
Vacuum at Knockout Tank 20 "H<sub>2</sub>O  
Water Pimp Pressure Relief Settings -- psi

Comments \_\_\_\_\_  
\_\_\_\_\_

Signature of Operator/Tech Sunil Samaroo Date 12/9/2016

## Daily Quality Control Report

|                                                                                           |                   |                   |           |   |           |    |           |        |
|-------------------------------------------------------------------------------------------|-------------------|-------------------|-----------|---|-----------|----|-----------|--------|
| <b>Date:</b> 12/09/2016                                                                   |                   | <b>Report No.</b> |           |   |           |    |           |        |
| <b>Project:</b> VESTAL                                                                    | <b>Day:</b>       | Su                | M         | T | W         | Th | F         | Sa     |
| <b>Project no.:</b> 60402566.11130644                                                     | <b>Weather:</b>   | Clear             | Cloudy    |   | Overcast  |    | Rain      | Snow   |
| <b>Project Manager:</b> Nathan Canaris                                                    | <b>Temp. (°F)</b> | To 32°            | 32° - 50° |   | 50° - 70° |    | 70° - 85° | 85° up |
| <b>Project QC Officer:</b>                                                                | <b>Wind:</b>      | Still             | Moderate  |   | High      |    |           |        |
|                                                                                           | <b>Humidity:</b>  | Dry               | Moderate  |   | High      |    |           |        |
| <b>Personnel onsite:</b>                                                                  |                   |                   |           |   |           |    |           |        |
| Sunil Samaroo (AECOM)                                                                     |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
| <b>Sampling equipment on site:</b>                                                        |                   |                   |           |   |           |    |           |        |
| N/A                                                                                       |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
| <b>Work performed:</b>                                                                    |                   |                   |           |   |           |    |           |        |
| Performed general site observations, recorded system readings in main equipment building, |                   |                   |           |   |           |    |           |        |
| Cell 1 distribution building, and Cell 2 distribution building.                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |
|                                                                                           |                   |                   |           |   |           |    |           |        |

## Daily Quality Control Report (continued)

Project: VESTAL

Report no.:

Project no.: 60402566.11130644

Date: 12/09/2016

|                                                                   |
|-------------------------------------------------------------------|
| <b>Quality control activities (including field calibrations):</b> |
| N/A                                                               |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
| <b>Health and safety levels and activities:</b>                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
| <b>Problems encountered/corrective actions taken:</b>             |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
| <b>Special notes:</b>                                             |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
|                                                                   |
| <b>Tomorrow's expectations:</b>                                   |
|                                                                   |
|                                                                   |
|                                                                   |

Sheet 2 of 2

By: Sunil Samaroo Title: Environmental Scientist