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## **QUARTERLY GROUNDWATER MONITORING REPORT**

For the Site Located at:

**2145 35<sup>TH</sup> AVENUE**

**OAKLAND, CALIFORNIA 94601**

Prepared for:

Salisbury Avenue Associates LLC

2917 MacArthur Boulevard, #A3F

Oakland, CA 94602

Prepared by:

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January 25, 2013

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## 1.0 Introduction

This quarterly groundwater monitoring report is for the former gasoline service station located at 2145 35<sup>th</sup> Avenue, Oakland, California (Figure 1). This is the second quarterly sampling event since the four monitoring wells were installed in July 2012. The first sampling event was performed on July 9, 2012 and documented in a detailed report titled "Phase II Environmental Investigation Report and Supplemental Investigation Workplan", dated August 2012. The scope of work documented in the August 2012 report included the following:

- Removal of the car maintenance pit;
- Removal of the hydraulic lift;
- Removal of the dispenser island and associated piping;
- Drilling of fifteen soil borings with soil and groundwater sampling and analysis;
- Installation and closing of 4 temporary piezometers; and
- Drilling and sampling of four monitoring wells

This report documents the groundwater sampling event performed on December 6, 2012. For background information about the subject site and an update of the activities performed through July 2012, review the August 2012 report mentioned above.

## 2.0 Groundwater Sampling Activities

The wells were purged and sampled on December 06, 2012. EEC Engineer, Sami Malaeb, performed the well purging and sampling. The well sampling logs are presented in Appendix A. The depth to water in the wells was measured and recorded after removing the well caps and letting the wells stabilize for approximately 15 minutes. Subsequently, each well was purged of at least three casing volumes and until conductivity, temperature, and pH stabilized. The well purge water was transferred to 55-gallon, DOT-approved, steel drums. The drums were temporarily stored onsite pending transport and disposal to a licensed facility.

After purging the wells, groundwater samples were collected. The water samples were discharged directly into laboratory cleaned 40-milliliter volatile organic analysis (VOA) vials with HCL preservative to prevent loss of any volatile constituents. The vials were filled slowly and in such a manner that the meniscus extended above the top of the VOA vial. After the vials were filled and capped, they were inverted to ensure there is no headspace or entrapped air bubbles. The groundwater VOAs were labeled and placed in a cooler chilled to approximately 4°C. Equipment wash and rinse water were transferred to a 55-gallon storage drum. The drum was sealed with a steel lid and labeled. Other containers, amber jars, one liter plastic bottles, were obtained from the laboratory and filled with water from the bailer for the TPH-D, TPH-mo, and LUFT-Five-Metal analysis.

The water samples were placed on ice, in an ice cooler, accompanied by a completed chain of custody. The samples were sent to Curtis & Tompkins Laboratory in Berkeley and analyzed for the following:

- Total Petroleum Hydrocarbons as Gasoline (TPH-G) by EPA Method 8015B;
- Total Petroleum Hydrocarbons as Stoddard Solvent (TPHss) by EPA Method 8015B;
- Total Petroleum Hydrocarbons as Diesel (TPH-D) by EPA Method 8015B;
- Volatile Organics by the GC/MS EPA Method 8260, MTBE, BTEX, and Naphthalene (no other chlorinated organic compounds were considered for analysis because all previous results from sampling the boreholes did not detect chlorinated solvents);
- Total Recoverable Petroleum Hydrocarbons (TRPH) as Motor Oil and Hydraulic Oil, EPA Method 8015; *and*
- LUFT 5 Metals by EPA Method 6010/7471 (with filtering before analysis).

### 3.0 Groundwater Elevations and Flow Direction

The groundwater flow direction and gradient were calculated based on the depth to groundwater from top of casing in each well and the surveyed top of casing elevations. The well data are presented in the attached Table 1. Due to the measurable rainfall in November and early December 2012, the groundwater elevations in the wells increased by an average of 1.22 feet. The calculated groundwater flow direction was to the south at a gradient of 0.024 or 2.4 % (Figure 2).

### 4.0 Groundwater Samples Laboratory Results

The laboratory reports included in Appendix B. Table 2 summarizes the analytical results. Also, Figure 3 depicts the laboratory results from July and December 2012. Laboratory analysis of groundwater samples collected from the monitoring wells indicated the following:

- Floating product was not observed in any of the wells.
- Similar to the first sampling event in July 2012, none of the analyzed petroleum hydrocarbons was detected in monitoring wells MW-1 and MW-4.
- Similar to the first sampling event in July 2012, the most petroleum hydrocarbon impact was detected in monitoring well MW-2, downgradient from the former sources on site; USTs, piping, and fuel dispenser. Groundwater from monitoring well MW-2 exceeded the ESL for drinking water scenario for TPH-G; TPH-D; TPHss; BTEX; and Naphthalene.
- Petroleum hydrocarbon concentrations in groundwater samples collected from monitoring MW-3 were slightly higher than in the previous sampling event. For example

benzene increased from 0.8 µg/l to 36 µg/l (Table 2). This increase may be attributed to the rise in the water table.

## 5.0 Waste Management

A total of two (2) purge water drums were generated from the purging and sampling activities onsite. These drums are stored onsite pending profiling and disposal.

## 6.0 Conclusions and Recommendations

Based on the analytical findings EEC presents the following conclusions and recommendations:

### Conclusions

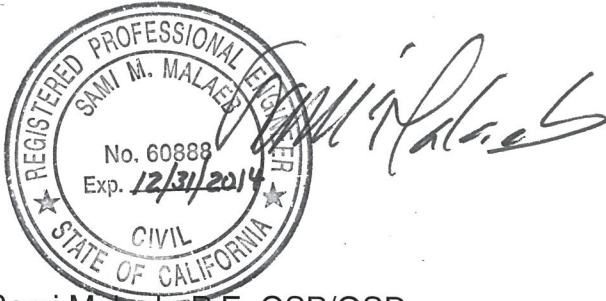
- Similar to the first sampling event in July 2012, none of the analyzed petroleum hydrocarbons was detected in monitoring wells MW-1 and MW-4.
- Groundwater in the remaining monitoring wells MW-2 and MW-3 is impacted with petroleum hydrocarbons above the ESLs for drinking and non-drinking water scenarios.

### Recommendations

- Continue the quarterly sampling of wells until at least four monitoring events are completed.
- As requested in the regulatory letter from Alameda County Environmental Health (ACEH), dated December 18, 2012, Laboratory analysis for Polycyclic Aromatic Hydrocarbons (PAHs) By EPA Method 8270-SIM will be conducted in the upcoming sampling events. Due to the non-detected results for all the analyzed petroleum hydrocarbon compounds in both sampling events (in July and December 2012) in monitoring wells MW-1 and MW-4, analysis for PAHs will be conducted on only the groundwater from monitoring wells MW-2 and MW-3.
- As requested in the regulatory letter from Alameda County Environmental Health (ACEH), dated December 18, 2012, the full laboratory analysis for the LUFT 5 metals will be discontinued in the upcoming events except the analysis for Lead (Pb) and Nickel (Ni) will be continued.

Thank you for your cooperation. If you have any questions, please call at (925) 858-9608 or email Sami Malaeb at [s.malaeb@comcast.net](mailto:s.malaeb@comcast.net).

All engineering information, conclusions, and recommendations contained in this report have been prepared by a California Professional Engineer.



Sami Malaeb, P.E., QSP/QSD  
Project Manager

I declare under penalty of perjury, that the information and/or recommendations contained in this report are true and correct to the best of my knowledge.

A handwritten signature in cursive script that reads "Peter Robertson".

Salisbury Avenue Associates LLC

Peter Robertson

Property Owner

# TABLES

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*TABLE 1* WELL DATA AND GROUNDWATER ELEVATIONS

*TABLE 2* SUMMARY OF CHEMICAL ANALYSIS OF GROUNDWATER SAMPLES  
COLLECTED FROM THE MONITORING WELLS

TABLE 1  
WELL DATA AND GROUNDWATER ELEVATIONS  
2145 35<sup>th</sup> Avenue  
Oakland, California

| DATE       | WELL INFORMATION        | MW-1  | MW-2  | MW-3  | MW-4  |
|------------|-------------------------|-------|-------|-------|-------|
| 07/18/2012 | Casing Diameter (in)    | 2     | 4     | 4     | 2     |
|            | Total Well Depth (ft)   | 18    | 16    | 18    | 18    |
|            | Depth to Water (ft)     | 10.13 | 10.92 | 11.01 | 10.85 |
|            | Top of Casing Elevation | 94.21 | 94.43 | 94.61 | 94.91 |
|            | Top of Water Elevation  | 84.08 | 83.51 | 83.60 | 84.06 |
| 12/06/2012 | Casing Diameter (in)    | 2     | 4     | 4     | 2     |
|            | Total Well Depth (ft)   | 18    | 16    | 18    | 18    |
|            | Depth to Water (ft)     | 7.98  | 10.40 | 10.40 | 9.25  |
|            | Top of Casing Elevation | 94.21 | 94.43 | 94.61 | 94.91 |
|            | Top of Water Elevation  | 86.23 | 84.03 | 84.21 | 85.66 |



TABLE 2  
SUMMARY OF CHEMICAL ANALYSES  
GROUNWATER SAMPLES COLLECTED FROM THE MONITORING WELLS  
2145 35<sup>th</sup> Avenue  
Oakland, California

| Sample ID  | Date Sampled | TPH-G <sup>(1)</sup><br>(µg/l) <sup>(2)</sup> | TPH-ss <sup>(3)</sup><br>(µg/l) | TPH-D <sup>(4)</sup><br>(µg/l) | TPH as Motor Oil<br>(µg/l) | TPH as Hydraulic Oil<br>(µg/l) | Benzene<br>(µg/l) | Toluene<br>(µg/l) | Ethyl benzene<br>(µg/l) | Total Xylenes<br>(µg/l) | Naphthalene<br>(µg/l) | MTBE <sup>(5)</sup><br>(µg/l) | Nickel (Ni)<br>(µg/l) |
|--|--------------|---|---------------------------------|--------------------------------|----------------------------|--------------------------------|-------------------|-------------------|-------------------------|-------------------------|-----------------------|-------------------------------|-----------------------|
| MW-1   | 07/09/2012   | <50   | <50                             | <50                            | <300                       | <300                           | <0.5              | <0.5              | <0.5                    | <1.0                    | <2.0                  | <0.5                          | <5.0                  |
| MW-2   |              | <b>3,800</b>                                  | <b>3,900 (Y)<sup>(6)</sup></b>  | <b>1,200 Y</b>                 | <300                       | <b>660Y</b>                    | <b>82</b>         | <b>42</b>         | <b>350</b>              | <b>189.4</b>            | <b>44</b>             | <0.5                          | <5.0                  |
| MW-3   |              | 85Y   | 86Y                             | <b>180Y</b>                    | <300                       | <300                           | 0.8               | <0.5              | <0.5                    | <1.0                    | <2.0                  | <0.5                          | <5.0                  |
| MW-4   |              | <50   | <50                             | <50                            | <300                       | <300                           | <0.5              | <0.5              | <0.5                    | <1.0                    | <2.0                  | <0.5                          | 6.6                   |
| MW-1   | 12/06/2012   | <50   | <50                             | <50                            | <300                       | <300                           | <0.5              | <0.5              | <0.5                    | <1.0                    | <2.0                  | <0.5                          | 7.6                   |
| MW-2   |              | <b>5,000</b>                                  | <b>3,300 (Y)<sup>(4)</sup></b>  | <b>2,300</b>                   | <300                       | <b>1,500Y</b>                  | <b>92</b>         | <b>42</b>         | <b>460</b>              | <b>179.6</b>            | <b>62</b>             | <0.5                          | <5.0                  |
| MW-3   |              | <b>1,200</b>                                  | <b>800Y</b>                     | <b>2,000</b>                   | <300                       | <b>1,600Y</b>                  | <b>36</b>         | 0.8               | 9.2                     | 1.1                     | <b>120</b>            | <0.5                          | 6.1                   |
| MW-4   |              | <50   | <50                             | <50                            | <300                       | <300                           | <0.5              | <0.5              | <0.5                    | <1.0                    | <2.0                  | <0.5                          | <b>9.7</b>            |
| Groundwater Screening Levels, drinking water <sup>(7)</sup>  |              | 100   | 100                             | 100                            | 100                        | 100                            | 1.0               | 40                | 30                      | 20                      | 17                    | 5.0                           | 8.2                   |
| Groundwater Screening Levels, non-drinking water <sup>(8)</sup>  |              | 210   | 210                             | 210                            | 210                        | 210                            | 46                | 130               | 43                      | 100                     | 24                    | 1,800                         | 8.2                   |
| Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns (Volatile Chemicals Only) <sup>(9)</sup> |              | Use Soil Gas                                  | Use Soil Gas                    | Use Soil Gas                   | Use Soil Gas               | Use Soil Gas                   | 540               | 380,000           | 170,000                 | 160,000                 | 3,200                 | 24,000                        | NA                    |

TPH-G<sup>(1)</sup> = Total petroleum hydrocarbons as gasoline by EPA Method 8015B

(µg/l)<sup>(2)</sup> = Microgram per liter

TPH-ss<sup>(3)</sup> = Total petroleum hydrocarbons as Stoddard solvent by EPA Method 8015B

TPH-D<sup>(4)</sup> = Total petroleum hydrocarbons as diesel by EPA Method 8015B

MTBE<sup>(5)</sup> = Methyl Tertiary Butyl Ether

(Y)<sup>(6)</sup> = Sample exhibits chromatographic pattern which does not resemble standard

<sup>(7)</sup> = Tier 1 Environmental Screening Levels (ESLs), Groundwater Screening Levels, Groundwater is Current or Potential Source of Drinking Water (Table F-1A), Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Prepared by: California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, Interim Final - November 2007, (Revised May 2008).

<sup>(8)</sup> = Tier 1 Environmental Screening Levels (ESLs), Groundwater Screening Levels, Groundwater is not Current or Potential Source of Drinking Water

(Table F-1B), Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Prepared by: California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, Interim Final - November 2007, (Revised May 2008).

<sup>(8)</sup> = Tier 1 Environmental Screening Levels (ESLs), Groundwater Screening Levels, Groundwater is not Current or Potential Source of Drinking Water (Table E-1), Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Prepared by: California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612, Interim Final - November 2007, (Revised May 2008).

**Bold** = Concentration presented in bold where such a value is at or exceeds one of the environmental screening levels (ESLs) listed

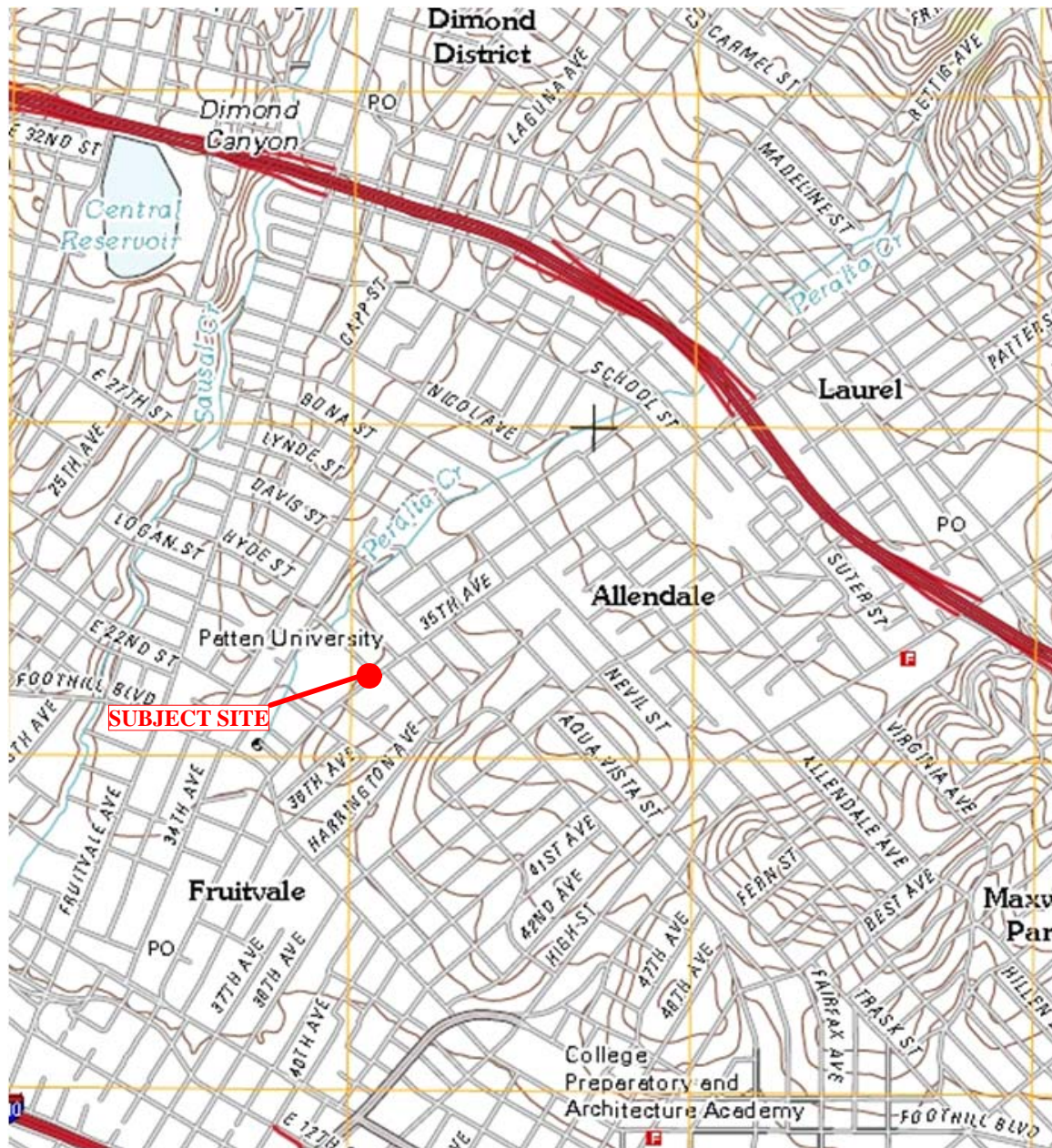
# FIGURES

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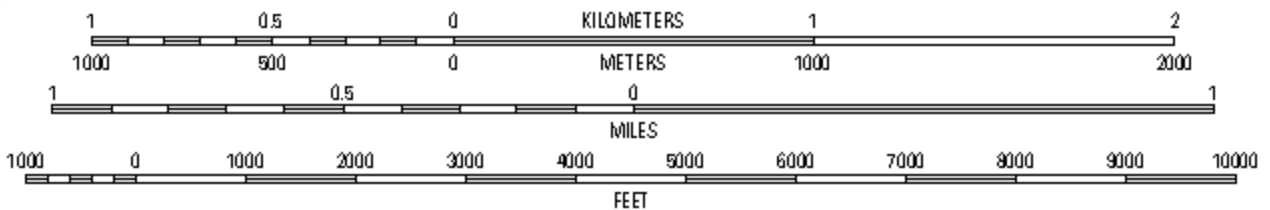
*FIGURE 1* SITE LOCATION

*FIGURE 2* WELL LOCATIONS AND GROUNDWATER FLOW DIRECTIONS AND GRADIENT

*FIGURE 3* GROUNDWATER CONTAMINANT CONCENTRATIONS, JULY AND DECEMBER 2012



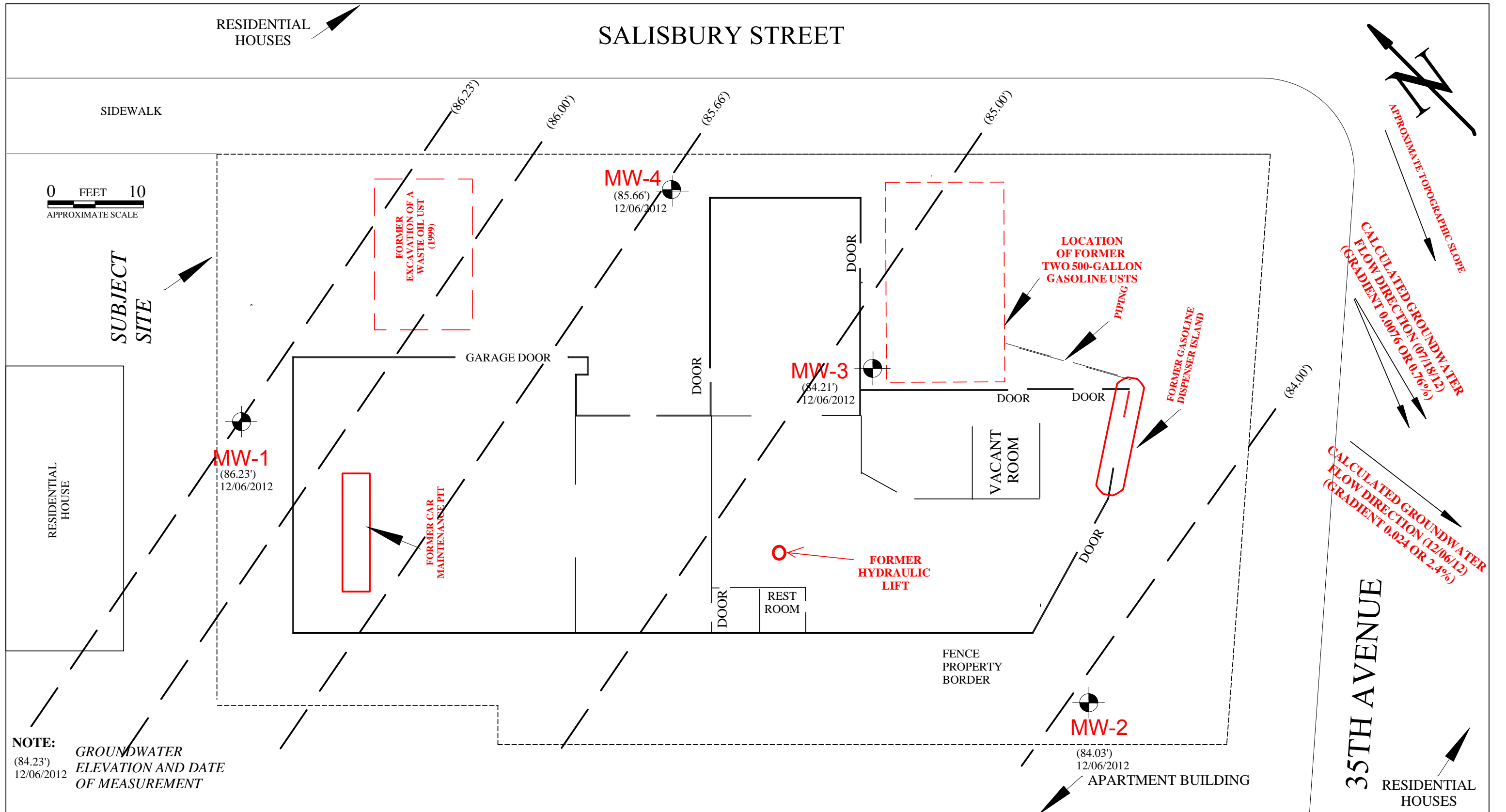
SCALE 1:24 000



1485 BAYSHORE BOULEVARD, SUITE 374  
SAN FRANCISCO, CA 94124

SITE LOCATION  
2145 35TH AVENUE  
OAKLAND, CA 94601

FIGURE 1  
DECEMBER  
2012



**NOTE:**  
(84.23')  
12/06/2012

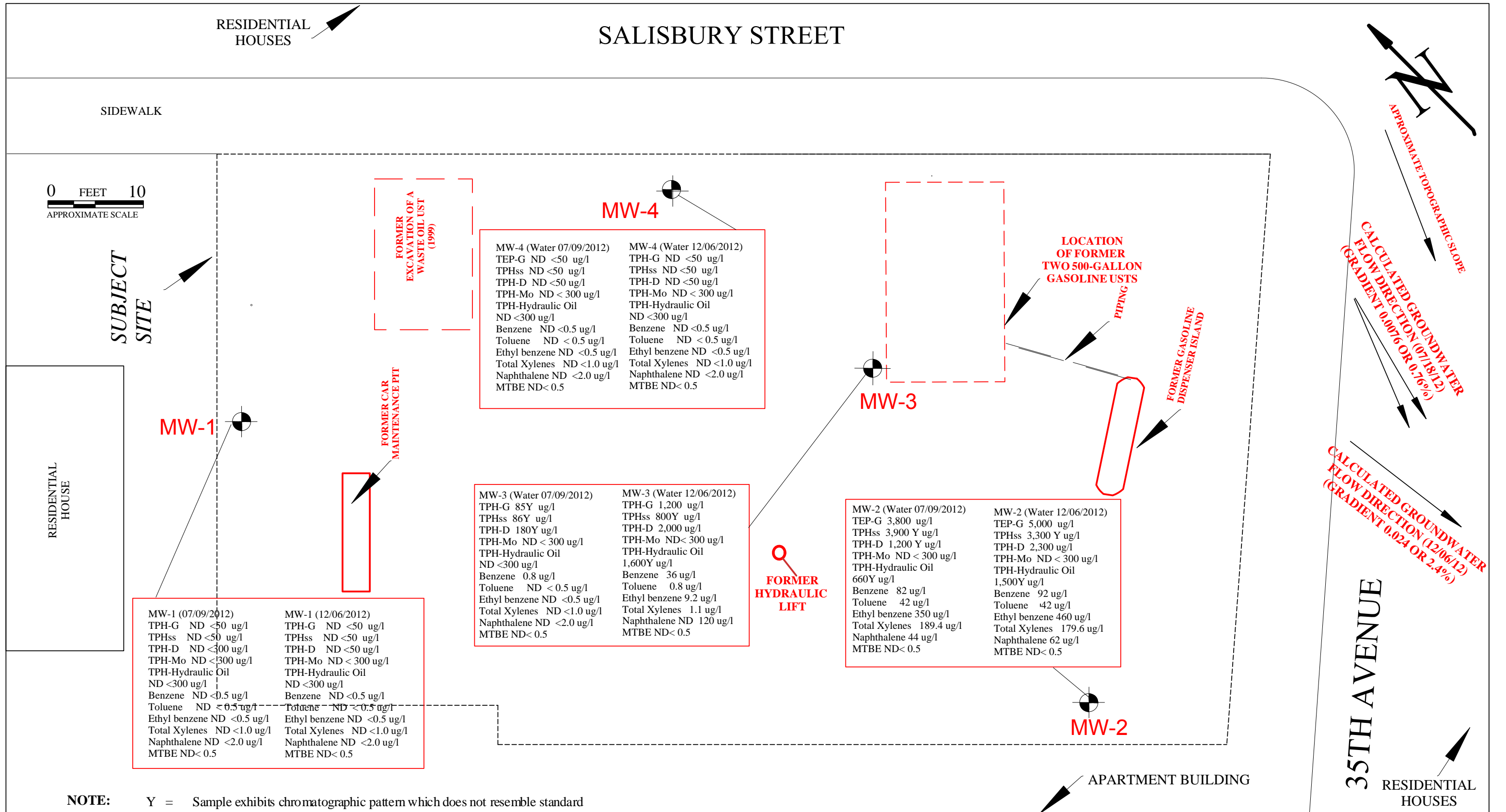
**GROUNDWATER ELEVATION AND DATE OF MEASUREMENT**



1485 BAYSHORE BOULEVARD, SUITE 374  
SAN FRANCISCO, CA 94124

**WELL LOCATIONS AND  
GROUNDWATER FLOW DIRECTION AND GRADIENT  
2145 35TH AVENUE, OAKLAND, CALIFORNIA**

**FIGURE 2  
DECEMBER 2012**



NOTE: Y = Sample exhibits chromatographic pattern which does not resemble standard



1485 BAYSHORE BOULEVARD, SUITE 374  
SAN FRANCISCO, CA 94124

GROUNDWATER CONTAMINANT CONCENTRATIONS  
JULY AND DECEMBER 2012  
2145 35TH AVENUE, OAKLAND, CALIFORNIA

FIGURE 3  
DECEMBER 2012

## APPENDIX A WELL PURGING AND SAMPLING LOGS

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## WELL SAMPLING LOG

Project No. : \_\_\_\_\_  
 Project Name: salisbury  
 Location: 2145 35th Avenue  
 Oakland, CA

Well ID: MW-1  
 Sampled by: EEC sami Malgeel  
 Date: December 6, 2012

|                   |           |
|-------------------|-----------|
| Well Diameter:    | 2"        |
| Total Well Depth: | 17.70'    |
| Depth to Water:   | 7.85'     |
| Water Column:     | 9.85'     |
| Calculated Purge: | 5 gallons |
| Actual Purge:     |           |
| Free Product:     |           |
| Product Sheen:    |           |

| Purge Volume Calculations<br>for Three Casing Volume Purge |                     |
|--|---------------------|
| Volume Per One Foot of Well:                               | 0.1632 gallons      |
| $\pi r^2 \times 1$   |                     |
| Volume of One Casing:                                      | 1.66 gallons        |
| Volume of Three Casings:                                   | 4.98 ~ 5.00 gallons |

Purge Method: using disposable boiler  
 Did Well go dry? \_\_\_\_\_

Sampling Method: 3 volume purge or stabilize 16 parameters  
 Sample Time: 12:00 P.M.

### Post Purge Depth to Water (DTW)

| Time       | DTW     |
|------------|---------|
| 11:58 a.m. | 7.98 ft |
|            |         |
|            |         |
|            |         |
|            |         |

### Analyze for:

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| Time       | Conductivity $\mu S$ | Temperature $^{\circ}C$ | pH   | Salinity | Volume Purged |
|------------|----------------------|-------------------------|------|----------|---------------|
| 10:25      | 734                  | 18.5                    | 7.19 |          | 1 gallon      |
| 11:30 a.m. | 625                  | 18.0                    | 7.23 |          | 1 gallon      |
| 11:35 a.m. | 557                  | 18.0                    | 7.24 |          | 2 gallons     |
| 11:40 a.m. | 580                  | 18.2                    | 7.23 |          | 3 gallons     |
| 11:45 a.m. | 556                  | 18.1                    | 7.19 |          | 4 gallons     |
| 11:50 a.m. | 481                  | 18.0                    | 7.17 |          | 5 gallons     |
| 11:53 a.m. | 484                  | 17.9                    | 7.14 |          | 5.25 gallon   |
| 11:56 a.m. | 496                  | 17.9                    | 7.20 |          | 5.50 gallon   |
|            |                      |                         |      |          | sample        |
|            |                      |                         |      |          |               |
|            |                      |                         |      |          |               |

Comments: \_\_\_\_\_



## WELL SAMPLING LOG

Project No. : \_\_\_\_\_  
 Project Name: SALISBURY  
 Location: 2145 35th Avenue  
 Oakland, CA

Well ID: MW-2  
 Sampled by: FEC Sami Makhel  
 Date: December 6, 2012

|                   |                      |
|-------------------|----------------------|
| Well Diameter:    | <u>4"</u>            |
| Total Well Depth: | <u>15.40'</u>        |
| Depth to Water:   | <u>9.56'</u>         |
| Water Column:     | <u>5.84'</u>         |
| Calculated Purge: | <u>11.50 gallons</u> |
| Actual Purge:     |                      |
| Free Product:     |                      |
| Product Seen:     |                      |

| Purge Volume Calculations     |   |
|-------------------------------|---|
| for Three Casing Volume Purge |   |
| Volume Per One Foot of Well:  | $\pi r^2 \times 1$ <u>0.653 gallons</u> |
| Volume of One Casing:         | <u>3.81</u>                             |
| Volume of Three Casings:      | <u>11.44 gallons ~ 11.5 galls</u>       |

Purge Method: using disposable  
 Did Well go dry? batter

Sampling Method: 3 volume purge on  
 Sample Time: parameter stabilization  
3:00 PM

**Post Purge Depth to Water (DTW)**

| Time             | DTW           |
|------------------|---------------|
| <u>2:26 P.M.</u> | <u>10.40'</u> |
|                  |               |
|                  |               |
|                  |               |
|                  |               |

**Analyze for:**

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| Time             | Conductivity <sup>µS</sup> | Temperature <sup>°C</sup> | pH          | Salinity | Volume Purged     |
|------------------|----------------------------|---------------------------|-------------|----------|-------------------|
| <u>2:20 P.M.</u> | <u>686</u>                 | <u>18.8</u>               | <u>6.84</u> |          | <u>1 Gallon</u>   |
| <u>2:30 P.M.</u> | <u>813</u>                 | <u>18.8</u>               | <u>6.84</u> |          | <u>5 Gallons</u>  |
| <u>2:40 P.M.</u> | <u>754</u>                 | <u>18.8</u>               | <u>6.89</u> |          | <u>8 Gallons</u>  |
| <u>2:45 P.M.</u> | <u>706</u>                 | <u>18.8</u>               | <u>6.93</u> |          | <u>9 Gallons</u>  |
| <u>2:50 P.M.</u> | <u>735</u>                 | <u>18.8</u>               | <u>6.91</u> |          | <u>10 Gallons</u> |
| <u>2:53 P.M.</u> | <u>724</u>                 | <u>18.8</u>               | <u>6.94</u> |          | <u>11 Gallons</u> |
| <u>2:55</u>      | <u>721</u>                 | <u>18.9</u>               | <u>6.92</u> |          | <u>12 Gallons</u> |
|                  |                            |                           |             |          |                   |
|                  |                            |                           |             |          |                   |
|                  |                            |                           |             |          |                   |

Comments: \_\_\_\_\_

## WELL SAMPLING LOG

Project No. : \_\_\_\_\_  
 Project Name: SALISBURY  
 Location: 2145 35th Avenue  
 Oakland, CA

Well ID: MW-3  
 Sampled by: EEC Sami Makreb  
 Date: December 6, 2012

|                   |                    |
|-------------------|--------------------|
| Well Diameter:    | <u>4"</u>          |
| Total Well Depth: | <u>17.68</u>       |
| Depth to Water:   | <u>9.67'</u>       |
| Water Column:     | <u>8.01'</u>       |
| Calculated Purge: | <u>4.0 gallons</u> |
| Actual Purge:     | <u>15.7 16 Gal</u> |
| Free Product:     | <u>NO</u>          |
| Product Sheen:    | <u>NO</u>          |

| Purge Volume Calculations     |                      |
|-------------------------------|----------------------|
| for Three Casing Volume Purge |                      |
| Volume Per One Foot of Well:  | <u>0.653 gallons</u> |
| $\pi r^2 \times 1$            | <u>0.653</u>         |
| Volume of One Casing:         | <u>5.23 gallons</u>  |
| Volume of Three Casings:      | <u>15.70 gallons</u> |

Purge Method: using disposable  
 Did Well go dry? baiter

Sampling Method: 3 volume purge on  
 Sample Time: stabilization of parameters

**Post Purge Depth to Water (DTW)**

| Time           | DTW           |
|----------------|---------------|
| <u>1:40 p-</u> | <u>10.40'</u> |
|                |               |
|                |               |
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|                |               |

**Analyze for:**

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| Time              | Conductivity $\mu S$ | Temperature $^{\circ}C$ | pH          | Salinity | Volume Purged     |
|-------------------|----------------------|-------------------------|-------------|----------|-------------------|
| <u>12:45 P.M.</u> | <u>631</u>           | <u>19.6</u>             | <u>6.93</u> |          | <u>1 GALLON</u>   |
| <u>1:00 P.M.</u>  | <u>815</u>           | <u>19.4</u>             | <u>6.86</u> |          | <u>5 Gallons</u>  |
| <u>1:10 p-</u>    | <u>723</u>           | <u>19.5</u>             | <u>6.88</u> |          | <u>7 Gallons</u>  |
| <u>1:15 p-</u>    | <u>692</u>           | <u>19.5</u>             | <u>6.89</u> |          | <u>10 Gallons</u> |
| <u>1:20 p-</u>    | <u>664</u>           | <u>19.3</u>             | <u>6.90</u> |          | <u>12 Gallons</u> |
| <u>1:25 p-</u>    | <u>676</u>           | <u>19.4</u>             | <u>7.14</u> |          | <u>13 Gallons</u> |
| <u>1:30 p-</u>    | <u>665</u>           | <u>19.4</u>             | <u>6.96</u> |          | <u>14 gallons</u> |
|                   |                      |                         | <u>6.93</u> |          |                   |
| <u>1:35 p-</u>    | <u>643</u>           | <u>19.4</u>             | <u>6.91</u> |          | <u>15 gallons</u> |
| <u>1:40 p-</u>    | <u>651</u>           | <u>19.5</u>             | <u>6.96</u> |          | <u>16 Gall-</u>   |

Comments: \_\_\_\_\_

# WELL SAMPLING LOG

Project No. : \_\_\_\_\_  
 Project Name: SALISBURY  
 Location: 2145 35th Avenue  
 Oakland, CA

Well ID: MW-4  
 Sampled by: FEC Pami MG/GB  
 Date: December 6, 2012

|                   |                     |
|-------------------|---------------------|
| Well Diameter:    | <u>2"</u>           |
| Total Well Depth: | <u>17.72'</u>       |
| Depth to Water:   | <u>9.17'</u>        |
| Water Column:     | <u>8.55'</u>        |
| Calculated Purge: | <u>4.20 gallons</u> |
| Actual Purge:     | <u>5.50 gallons</u> |
| Free Product:     |                     |
| Product Sheen:    |                     |

| Purge Volume Calculations<br>for Three Casing Volume Purge |                      |
|--|----------------------|
| Volume Per One Foot of Well:                               | <u>0.163</u>         |
| $\pi r^2 \times 1$   |                      |
| Volume of One Casing:                                      | <u>0.658 gallons</u> |
|  | <u>1.40 gallons</u>  |
| Volume of Three Casings:                                   | <u>4.20 gallons</u>  |

Purge Method: By disposable bailer  
 Did Well go dry? \_\_\_\_\_

Sampling Method: 3 volumes  
 Sample Time: or parameter stabilization 10:50 a.m.

**Post Purge Depth to Water (DTW)**

| Time              | DTW          |
|-------------------|--------------|
| <u>11:15 a.m.</u> | <u>9.25'</u> |
|                   |              |
|                   |              |
|                   |              |
|                   |              |
|                   |              |

**Analyze for:**

|  |
|--|
|  |
|  |
|  |
|  |
|  |
|  |
|  |

| Time              | Conductivity $\mu S$ | Temperature $^{\circ}C$ | pH          | Salinity | Volume Purged      |
|-------------------|----------------------|-------------------------|-------------|----------|--------------------|
| <u>10:05 a.m.</u> | <u>731</u>           | <u>18.5</u>             | <u>7.19</u> |          | <u>1 gallon</u>    |
| <u>10:25 a.m.</u> | <u>583</u>           | <u>19.0</u>             | <u>7.19</u> |          | <u>2 "</u>         |
| <u>10:30 a.m.</u> | <u>586</u>           | <u>19.1</u>             | <u>7.18</u> |          | <u>3 "</u>         |
| <u>10:35 a.m.</u> | <u>583</u>           | <u>19.3</u>             | <u>7.12</u> |          | <u>4 gallons</u>   |
| <u>10:40 a.m.</u> | <u>564</u>           | <u>19.1</u>             | <u>7.13</u> |          | <u>5 gallons</u>   |
| <u>10:45 a.m.</u> | <u>559</u>           | <u>18.8</u>             | <u>7.05</u> |          | <u>5.5 gallons</u> |
|                   |                      |                         |             |          | <u>sample</u>      |
|                   |                      |                         |             |          |                    |
|                   |                      |                         |             |          |                    |
|                   |                      |                         |             |          |                    |
|                   |                      |                         |             |          |                    |
|                   |                      |                         |             |          |                    |

Comments: \_\_\_\_\_

## APPENDIX B LABORATORY REPORT

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**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 241776  
ANALYTICAL REPORT

Eagle Env. Construction  
3150 Hilltop Road  
Richmond, CA 94806

Project : SALISBURY PROJECT  
Location : Salisbury Project  
Level : II

| <u>Sample ID</u> | <u>Lab ID</u> |
|------------------|---------------|
| MW-1             | 241776-001    |
| MW-2             | 241776-002    |
| MW-3             | 241776-003    |
| MW-4             | 241776-004    |
| TB               | 241776-005    |

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Desiree N. Tetrault  
Project Manager  
(510) 486-0900

Date: 12/20/2012

NELAP # 01107CA

### CASE NARRATIVE

Laboratory number: 241776  
Client: Eagle Env. Construction  
Project: SALISBURY PROJECT  
Location: Salisbury Project  
Request Date: 12/06/12  
Samples Received: 12/06/12

This data package contains sample and QC results for five water samples, requested for the above referenced project on 12/06/12. The samples were received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B):**

No analytical problems were encountered.

**TPH-Extractables by GC (EPA 8015B):**

No analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 8260B):**

No analytical problems were encountered.

**Metals (EPA 6010B):**

No analytical problems were encountered.





# CHAIN OF CUSTODY

**ct** Curtis & Tompkins Laboratories  
**ENVIRONMENTAL ANALYTICAL TESTING LABORATORY**  
 In Business Since 1878

Geotracker GLOBAL ID: 70619778840

Page 2 of 2

Chain of Custody # \_\_\_\_\_

2323 Fifth Street  
 Berkeley, CA 94710

Phone (510) 486-0900  
 Fax (510) 486-0532

C&T LOGIN # 241776

Project No: \_\_\_\_\_ Sampler: EFC 8.u  
 Project Name: SALISBURY PROTECT Report To: SAMI MALAEB  
 Project P. O. No: 2145 35th. AVE., OAKLAND Company: EFC  
 EDD Format: \_\_\_\_\_ Report Level  II  III  IV Telephone: (925) 858-9608  
 Turnaround Time:  RUSH  Standard Email: S.MALAEB@COMCAST.NET

| ANALYTICAL REQUEST |                                       |  |                                |  |  |  |  |  |  |
|--------------------|---------------------------------------|--|--------------------------------|--|--|--|--|--|--|
| TPH-6              | BTEX; Naphthalene; and MTBE by 8260 B | TPH-D; TPH-MO; and TPH-hydraulic oil by 8260 B | LUFT FIVE METALS by EPA 6010 B |  |  |  |  |  |  |
| X                  |                                       |  |                                |  |  |  |  |  |  |
|                    | X                                     |  |                                |  |  |  |  |  |  |
|                    |                                       | X  |                                |  |  |  |  |  |  |
|                    |                                       |  | X                              |  |  |  |  |  |  |
|                    | X                                     |  |                                |  |  |  |  |  |  |

| Lab No. | Sample ID. | SAMPLING       |                | MATRIX |       | # of Containers | CHEMICAL PRESERVATIVE |       |      |      |      |  |  |  |  |  |  |  |
|---------|------------|----------------|----------------|--------|-------|-----------------|-----------------------|-------|------|------|------|--|--|--|--|--|--|--|
|         |            | Date Collected | Time Collected | Water  | Solid |                 | HCl                   | H2SO4 | HNO3 | NaOH | None |  |  |  |  |  |  |  |
| 4       | MW-4       | 12/06/12       | 10:30a         | X      |       | 3               |                       |       |      |      |      |  |  |  |  |  |  |  |
|         | MW-4       | "              | "              | X      |       | 3               |                       |       |      |      |      |  |  |  |  |  |  |  |
|         | MW-4       | "              | "              | X      |       | 2               |                       |       |      |      |      |  |  |  |  |  |  |  |
|         | MW-4       | "              | "              | X      |       | 1               |                       |       |      |      |      |  |  |  |  |  |  |  |
|         | TB         | "              | "              | X      |       | 1               |                       |       |      |      |      |  |  |  |  |  |  |  |

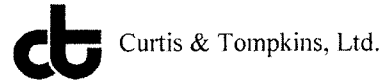
Notes: please filter plastic containers same day for LUFT 5 METAL ANALYSES

SAMPLE RECEIPT  
 Intact  
 Cold  
 On Ice  
 Ambient

RELINQUISHED BY: \_\_\_\_\_  
 DATE: 12/06/12 TIME: 5:15  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

RECEIVED BY: \_\_\_\_\_  
 DATE: 12/6 TIME: 1700  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

COOLER RECEIPT CHECKLIST



Login # 241776 Date Received 12/6/12 Number of coolers 1
Client EEC Project Salisbury Project

Date Opened 12/6/12 By (print) EL (sign) E. Leung
Date Logged in [initials] By (print) [initials] (sign) [initials]

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info

2A. Were custody seals present? ... YES (circle) on cooler on samples NO
How many Name Date

2B. Were custody seals intact upon arrival? YES NO N/A

3. Were custody papers dry and intact when received? YES NO

4. Were custody papers filled out properly (ink, signed, etc)? YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO

6. Indicate the packing in cooler: (if other, describe)

- Bubble Wrap, Cloth material, Foam blocks, Cardboard, Bags, Styrofoam, None, Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: Wet, Blue/Gel, None Temp(°C) 2.0

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?

9. Did all bottles arrive unbroken/unopened? YES NO

10. Are there any missing / extra samples? YES NO

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

15. Are the samples appropriately preserved? YES NO N/A

16. Did you check preservatives for all bottles for each sample? YES NO N/A

17. Did you document your preservative check? YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? YES NO N/A

21. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

Blank lines for handwritten comments.





## Batch QC Report

| Total Volatile Hydrocarbons |                         |           |                   |
|-----------------------------|-------------------------|-----------|-------------------|
| Lab #:                      | 241776                  | Location: | Salisbury Project |
| Client:                     | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#:                   | SALISBURY PROJECT       | Analysis: | EPA 8015B         |
| Type:                       | LCS                     | Diln Fac: | 1.000             |
| Lab ID:                     | QC669173                | Batch#:   | 193613            |
| Matrix:                     | Water                   | Analyzed: | 12/07/12          |
| Units:                      | ug/L                    |           |                   |

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 1,000  | 975.6  | 98   | 80-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Bromofluorobenzene (FID) | 105  | 75-124 |

## Batch QC Report

| Total Volatile Hydrocarbons |                         |           |                   |
|-----------------------------|-------------------------|-----------|-------------------|
| Lab #:                      | 241776                  | Location: | Salisbury Project |
| Client:                     | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#:                   | SALISBURY PROJECT       | Analysis: | EPA 8015B         |
| Field ID:                   | ZZZZZZZZZZ              | Batch#:   | 193613            |
| MSS Lab ID:                 | 241783-001              | Sampled:  | 12/05/12          |
| Matrix:                     | Water                   | Received: | 12/06/12          |
| Units:                      | ug/L                    | Analyzed: | 12/07/12          |
| Diln Fac:                   | 1.000                   |           |                   |

Type: MS Lab ID: QC669175

| Analyte         | MSS Result | Spiked | Result | %REC | Limits |
|-----------------|------------|--------|--------|------|--------|
| Gasoline C7-C12 | 17.88      | 2,000  | 2,060  | 102  | 71-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Bromofluorobenzene (FID) | 119  | 75-124 |

Type: MSD Lab ID: QC669176

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 2,000  | 1,923  | 95   | 71-120 | 7   | 22  |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Bromofluorobenzene (FID) | 117  | 75-124 |

RPD= Relative Percent Difference

## Batch QC Report

| Total Volatile Hydrocarbons |                         |           |                   |
|-----------------------------|-------------------------|-----------|-------------------|
| Lab #:                      | 241776                  | Location: | Salisbury Project |
| Client:                     | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#:                   | SALISBURY PROJECT       | Analysis: | EPA 8015B         |
| Type:                       | LCS                     | Diln Fac: | 1.000             |
| Lab ID:                     | QC669438                | Batch#:   | 193675            |
| Matrix:                     | Water                   | Analyzed: | 12/10/12          |
| Units:                      | ug/L                    |           |                   |

| Analyte         | Spiked | Result | %REC | Limits |
|-----------------|--------|--------|------|--------|
| Gasoline C7-C12 | 1,000  | 1,041  | 104  | 80-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Bromofluorobenzene (FID) | 100  | 75-124 |

## Batch QC Report

| Total Volatile Hydrocarbons |                         |           |                   |
|-----------------------------|-------------------------|-----------|-------------------|
| Lab #:                      | 241776                  | Location: | Salisbury Project |
| Client:                     | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#:                   | SALISBURY PROJECT       | Analysis: | EPA 8015B         |
| Field ID:                   | MW-2                    | Batch#:   | 193675            |
| MSS Lab ID:                 | 241776-002              | Sampled:  | 12/06/12          |
| Matrix:                     | Water                   | Received: | 12/06/12          |
| Units:                      | ug/L                    | Analyzed: | 12/10/12          |
| Diln Fac:                   | 1.000                   |           |                   |

Type: MS Lab ID: QC669440

| Analyte         | MSS Result | Spiked | Result | %REC | Limits |
|-----------------|------------|--------|--------|------|--------|
| Gasoline C7-C12 | 4,979      | 2,000  | 6,417  | 72   | 71-120 |

| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Bromofluorobenzene (FID) | 105  | 75-124 |

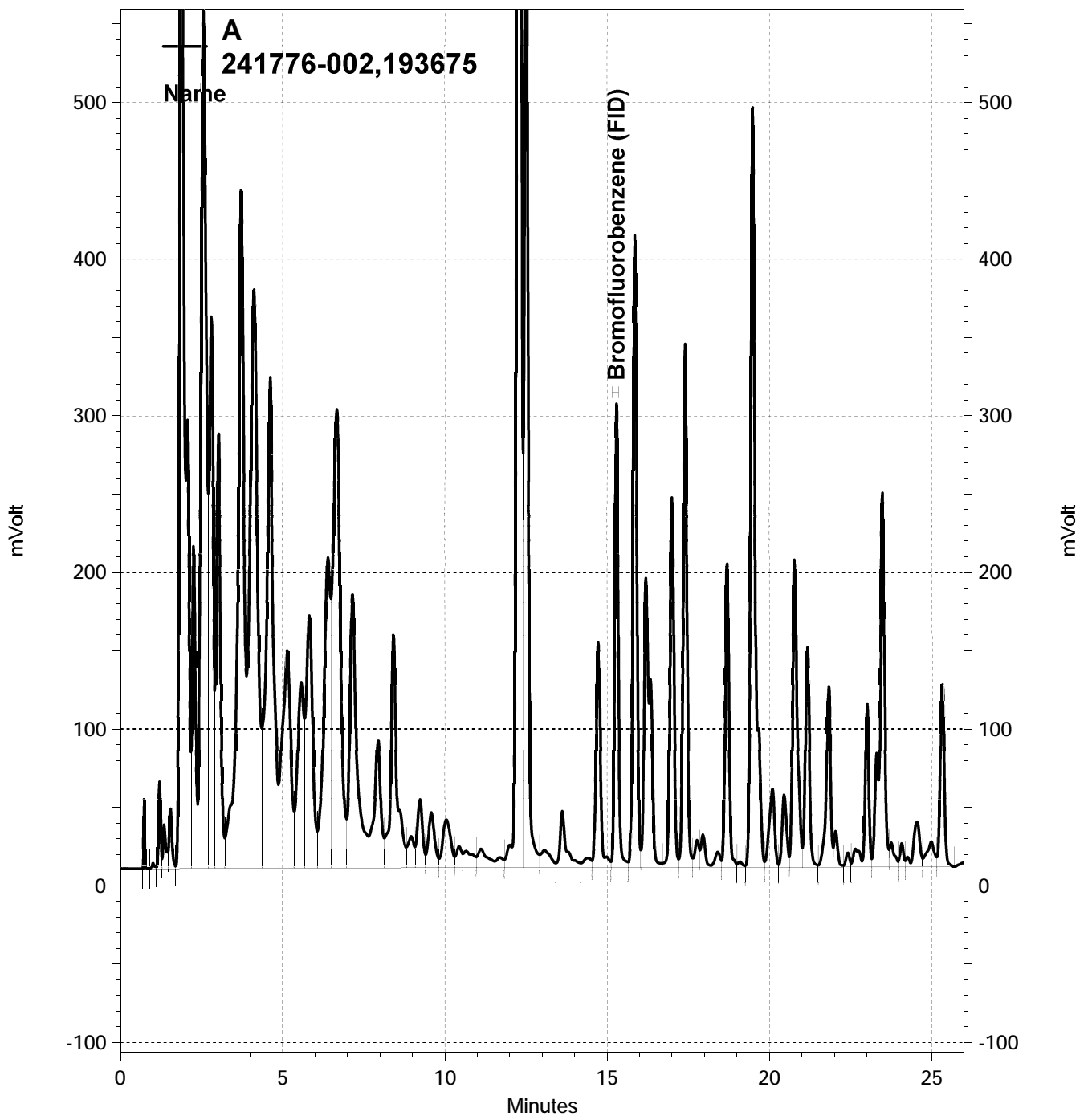
Type: MSD Lab ID: QC669441

| Analyte         | Spiked | Result | %REC | Limits | RPD | Lim |
|-----------------|--------|--------|------|--------|-----|-----|
| Gasoline C7-C12 | 2,000  | 6,492  | 76   | 71-120 | 1   | 22  |

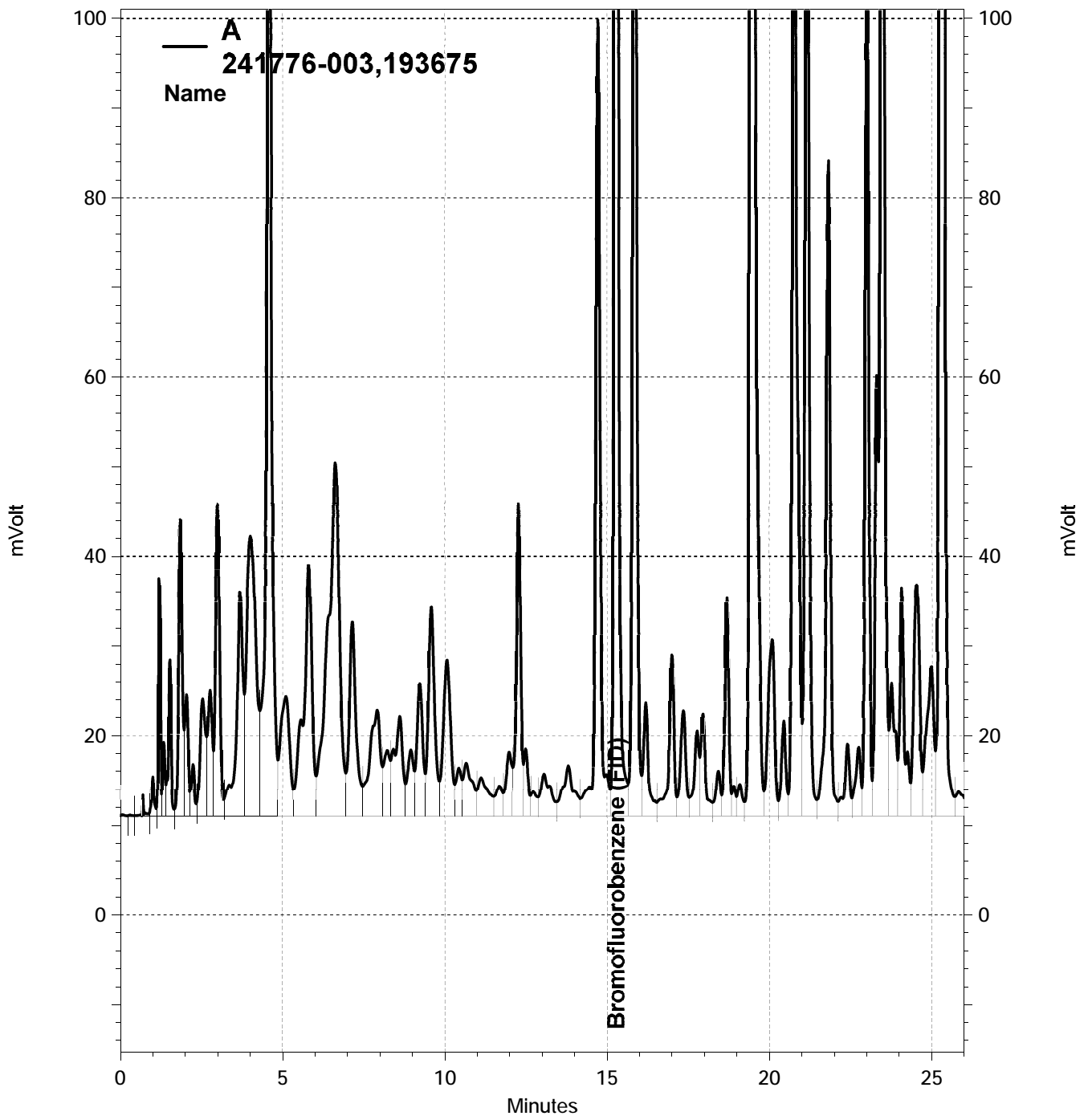
| Surrogate                | %REC | Limits |
|--------------------------|------|--------|
| Bromofluorobenzene (FID) | 106  | 75-124 |

RPD= Relative Percent Difference

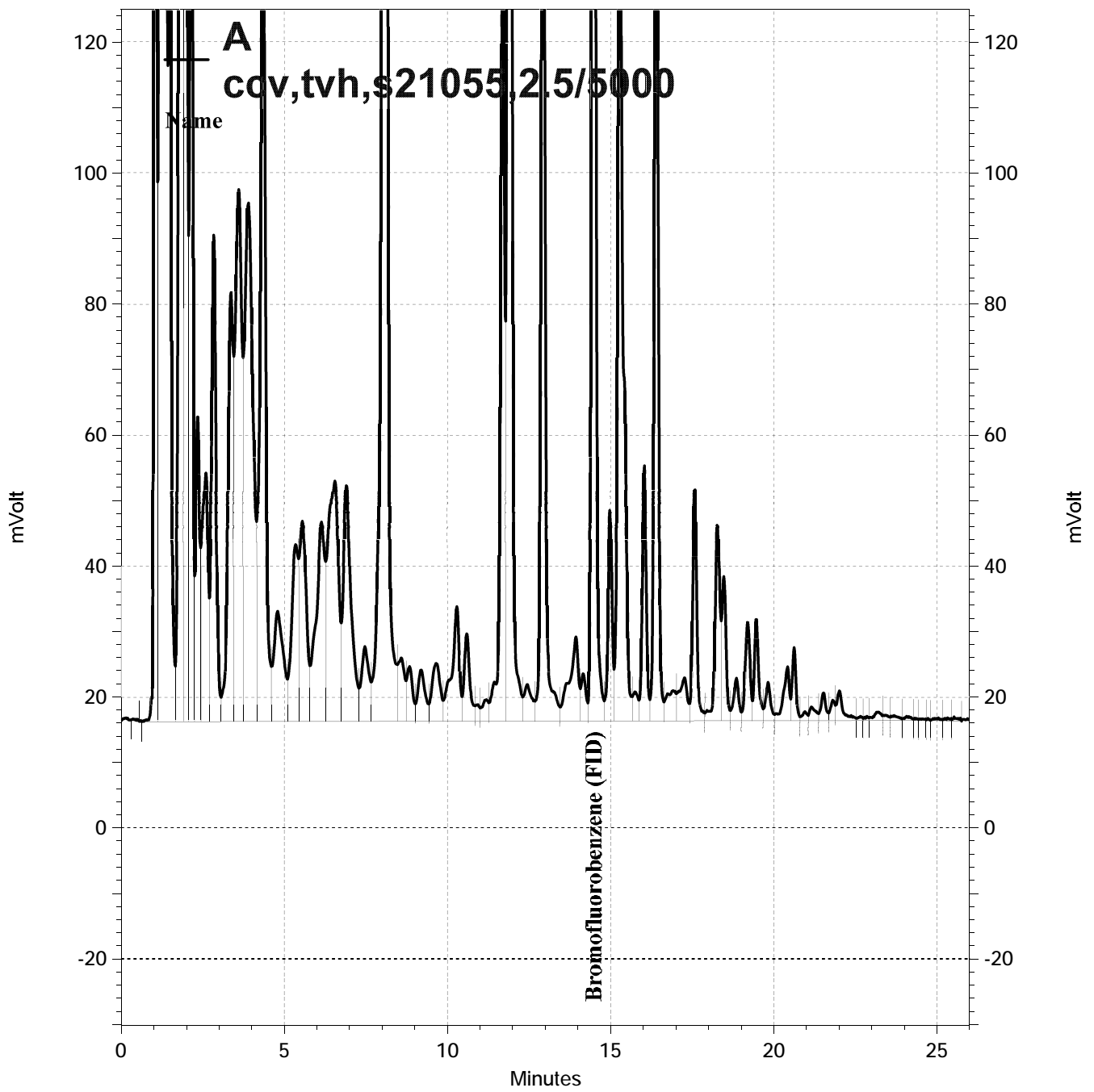




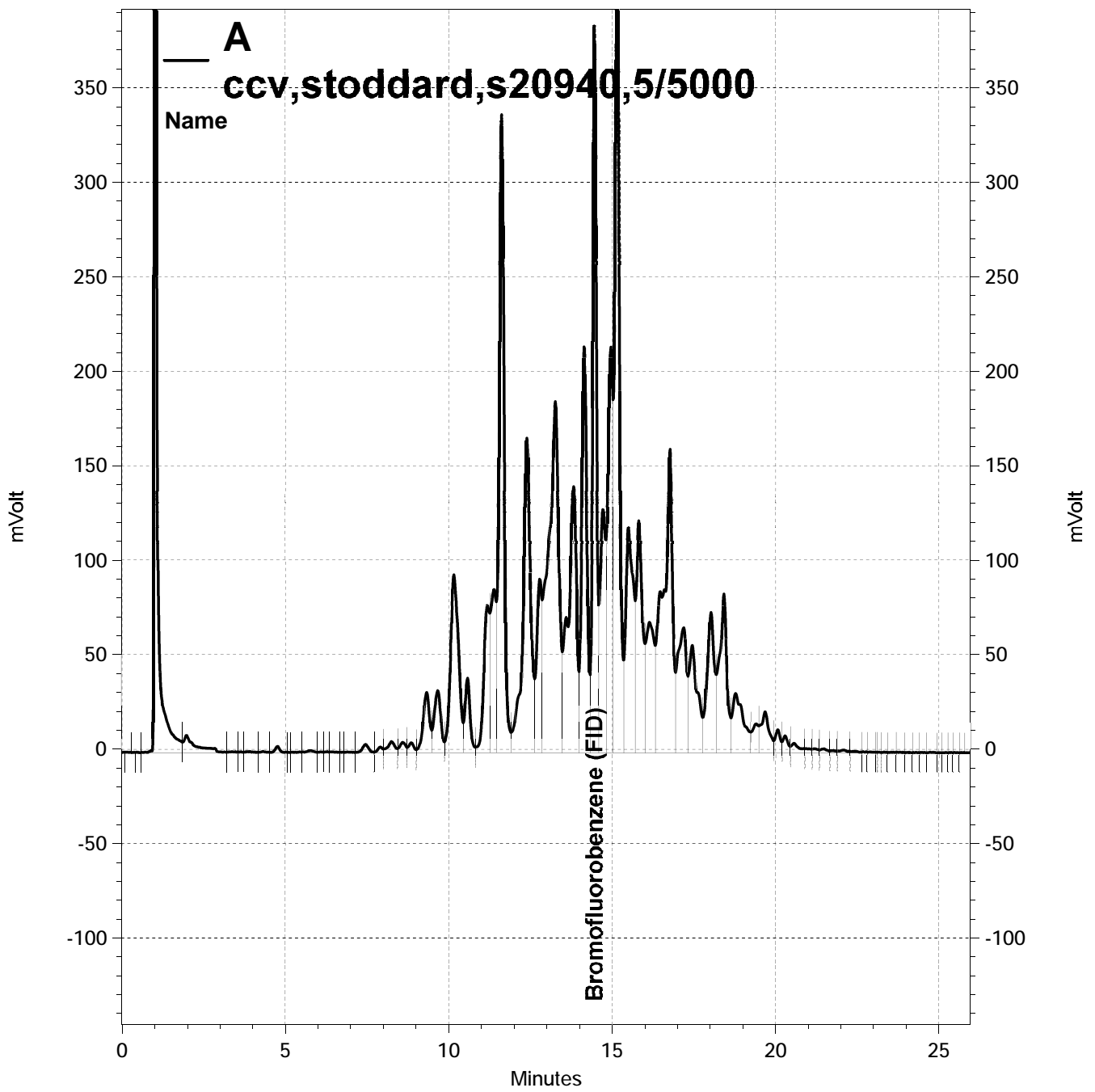
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— \\Lims\gdrive\ezchrom\Projects\GC04\Data\342-001, A



— \\Lims\gdrive\ezchrom\Projects\GC04\Data\342-004, A





## Batch QC Report

| Total Extractable Hydrocarbons |                         |           |                   |
|--------------------------------|-------------------------|-----------|-------------------|
| Lab #:                         | 241776                  | Location: | Salisbury Project |
| Client:                        | Eagle Env. Construction | Prep:     | EPA 3520C         |
| Project#:                      | SALISBURY PROJECT       | Analysis: | EPA 8015B         |
| Type:                          | LCS                     | Diln Fac: | 1.000             |
| Lab ID:                        | QC669592                | Batch#:   | 193711            |
| Matrix:                        | Water                   | Prepared: | 12/11/12          |
| Units:                         | ug/L                    | Analyzed: | 12/12/12          |

Cleanup Method: EPA 3630C

| Analyte        | Spiked | Result | %REC | Limits |
|----------------|--------|--------|------|--------|
| Diesel C10-C24 | 2,500  | 1,899  | 76   | 60-120 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 104  | 61-134 |

Batch QC Report

| Total Extractable Hydrocarbons |                         |           |                   |
|--------------------------------|-------------------------|-----------|-------------------|
| Lab #:                         | 241776                  | Location: | Salisbury Project |
| Client:                        | Eagle Env. Construction | Prep:     | EPA 3520C         |
| Project#:                      | SALISBURY PROJECT       | Analysis: | EPA 8015B         |
| Field ID:                      | ZZZZZZZZZZ              | Batch#:   | 193711            |
| MSS Lab ID:                    | 241722-003              | Sampled:  | 12/03/12          |
| Matrix:                        | Water                   | Received: | 12/05/12          |
| Units:                         | ug/L                    | Prepared: | 12/11/12          |
| Diln Fac:                      | 1.000                   | Analyzed: | 12/12/12          |

Type: MS Lab ID: QC669593

| Analyte        | MSS Result | Spiked | Result | %REC | Limits |
|----------------|------------|--------|--------|------|--------|
| Diesel C10-C24 | 2,365      | 2,500  | 4,840  | 99   | 44-135 |

| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 103  | 61-134 |

Type: MSD Lab ID: QC669594

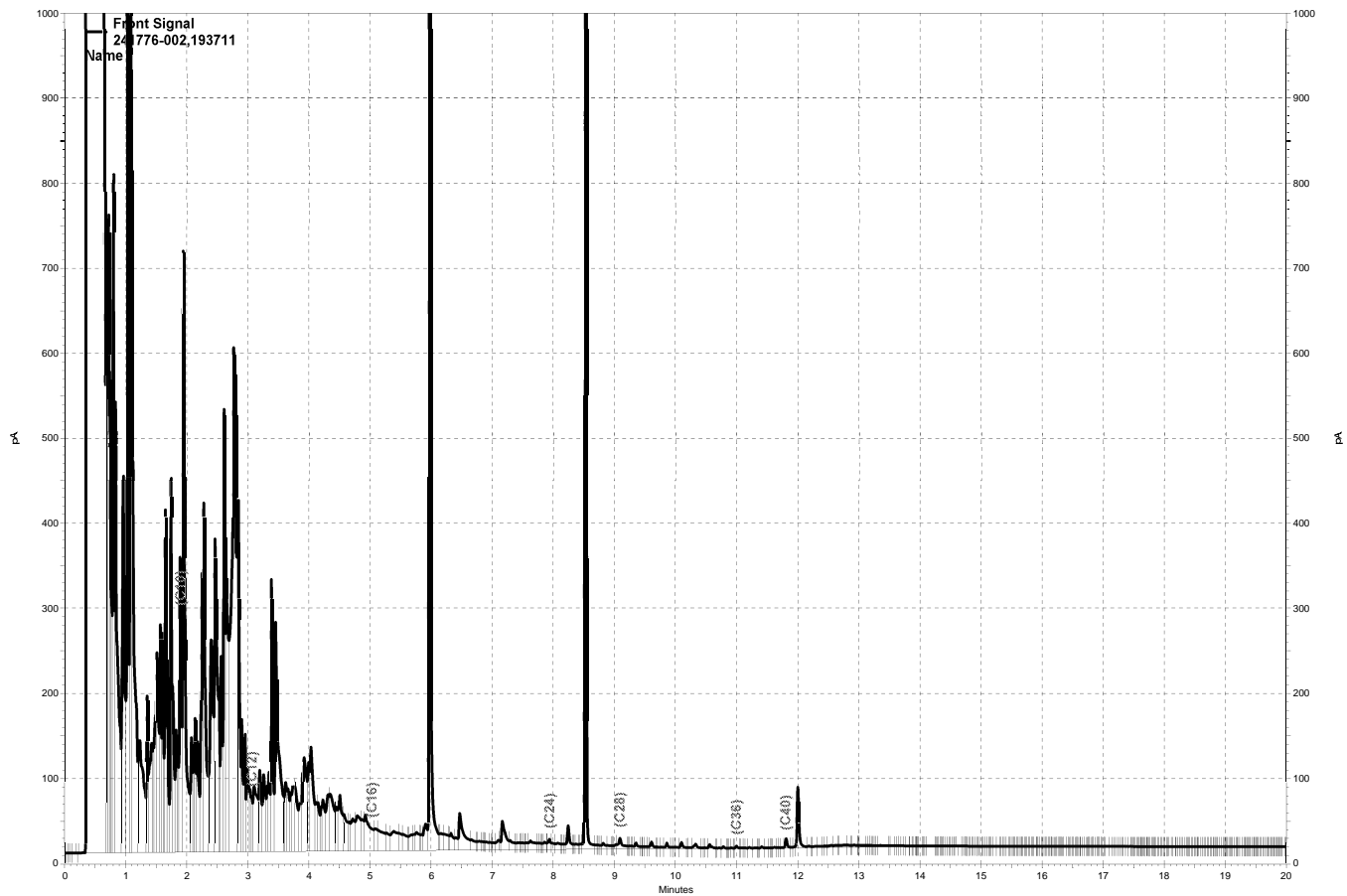
| Analyte        | Spiked | Result | %REC | Limits | RPD | Lim |
|----------------|--------|--------|------|--------|-----|-----|
| Diesel C10-C24 | 5,000  | 7,465  | 102  | 44-135 | 2   | 42  |

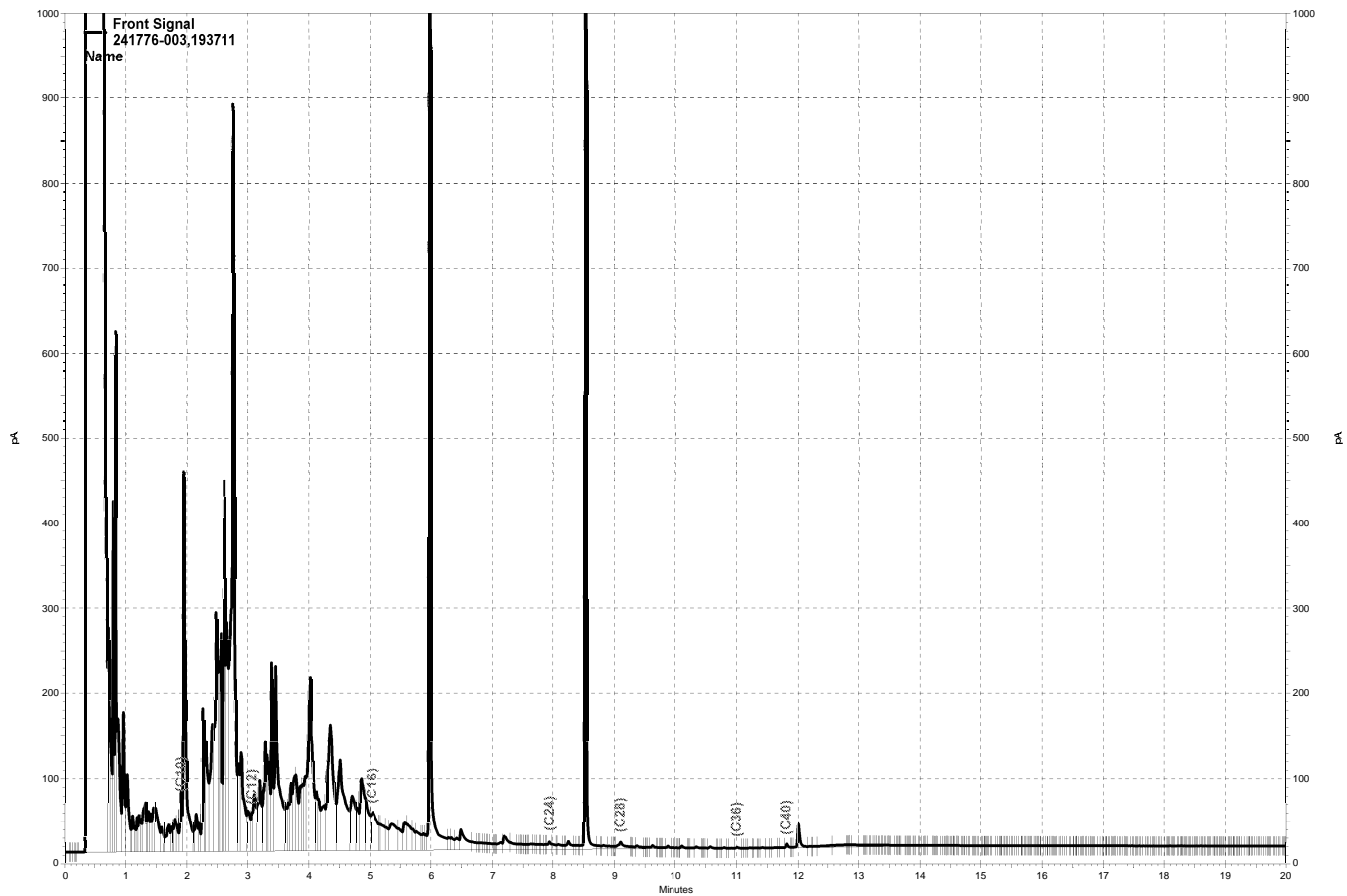
| Surrogate   | %REC | Limits |
|-------------|------|--------|
| o-Terphenyl | 102  | 61-134 |

RPD= Relative Percent Difference

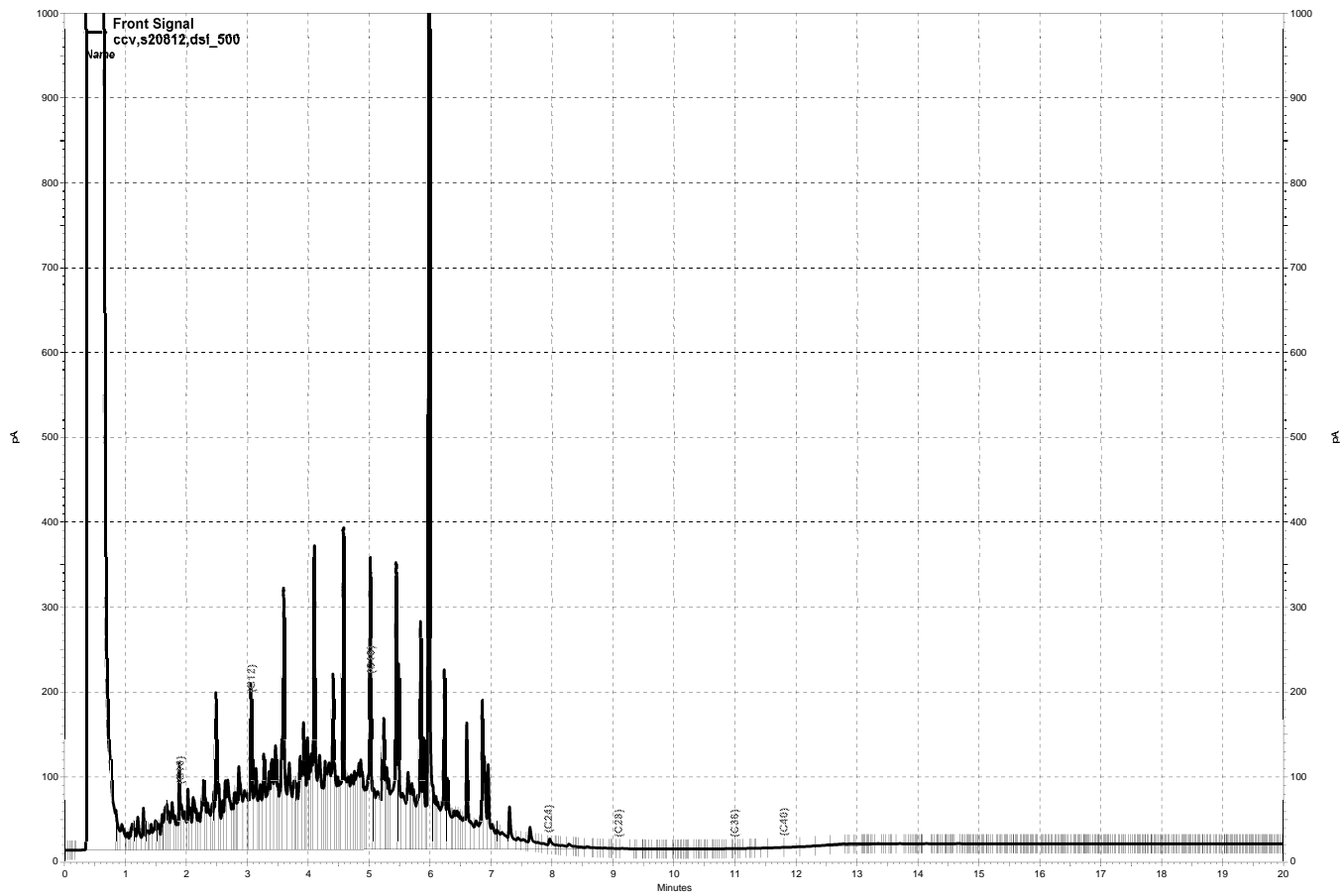




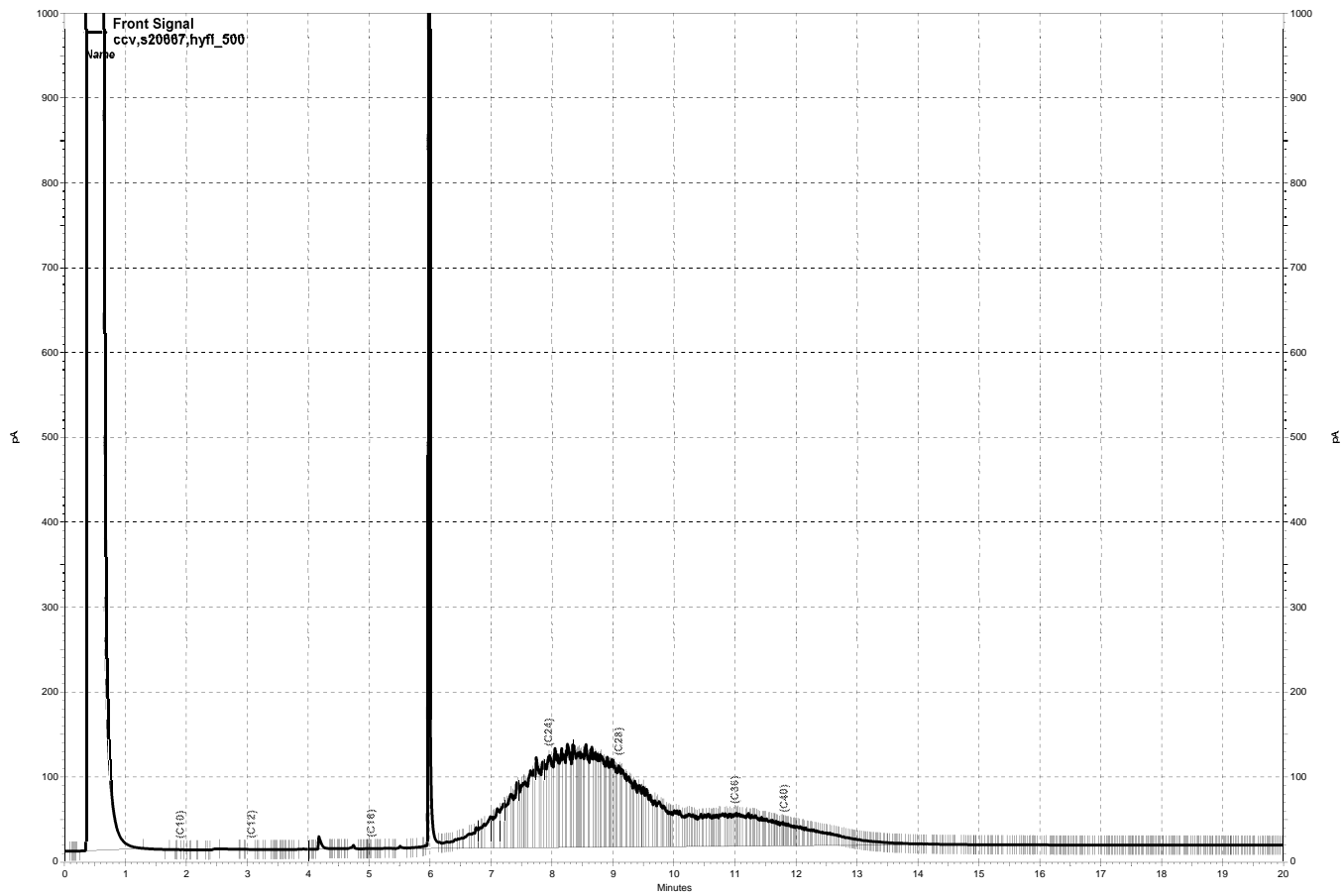
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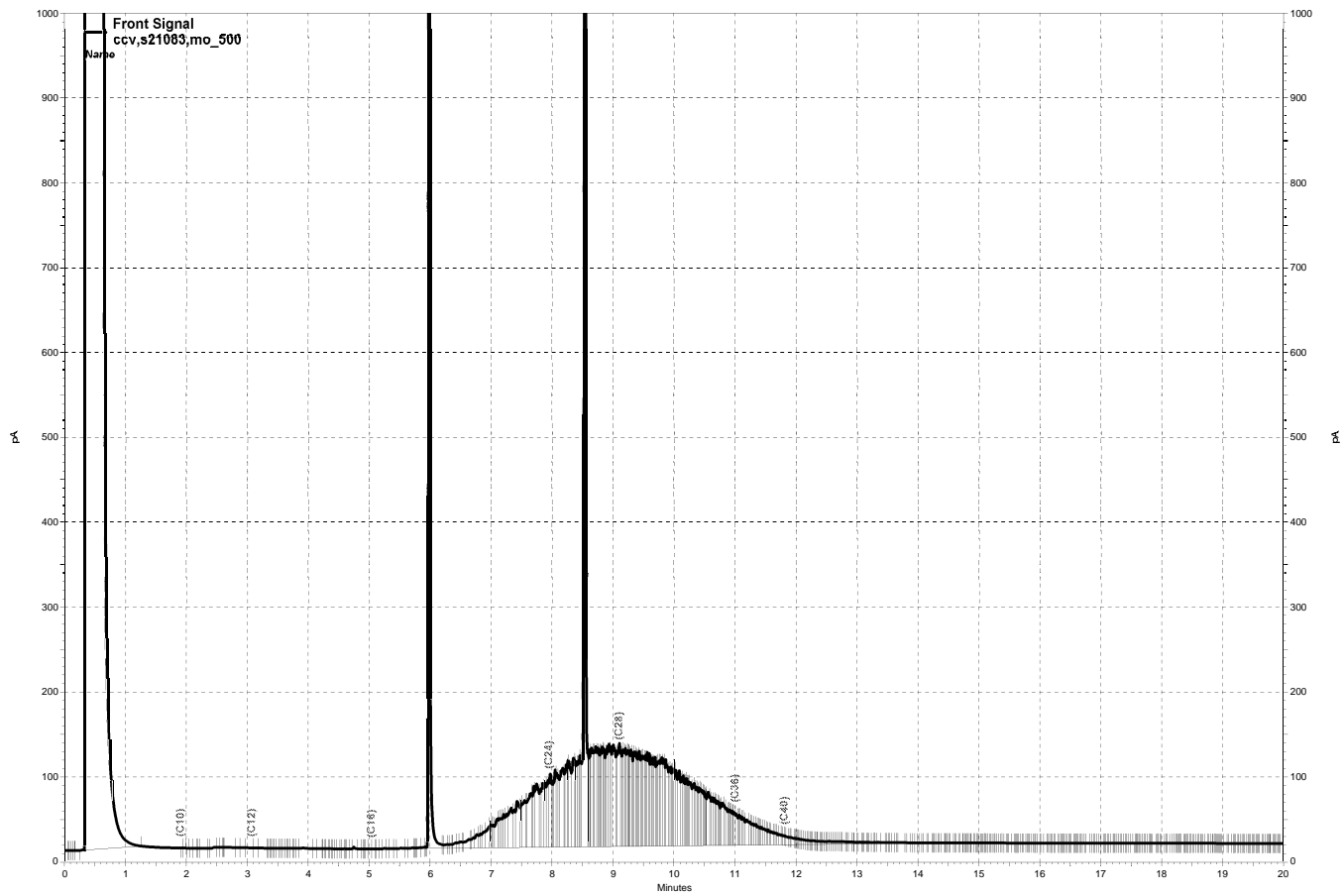
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— \\lms\gdrive\ezchrom\Projects\GC27\Data\347a009.dat, Front Signal

**Purgeable Aromatics by GC/MS**

|           |                         |           |                   |
|-----------|-------------------------|-----------|-------------------|
| Lab #:    | 241776                  | Location: | Salisbury Project |
| Client:   | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#: | SALISBURY PROJECT       | Analysis: | EPA 8260B         |
| Field ID: | MW-1                    | Batch#:   | 193815            |
| Lab ID:   | 241776-001              | Sampled:  | 12/06/12          |
| Matrix:   | Water                   | Received: | 12/06/12          |
| Units:    | ug/L                    | Analyzed: | 12/13/12          |
| Diln Fac: | 1.000                   |           |                   |

| Analyte      | Result | RL  |
|--------------|--------|-----|
| MTBE         | ND     | 0.5 |
| Benzene      | ND     | 0.5 |
| Toluene      | ND     | 0.5 |
| Ethylbenzene | ND     | 0.5 |
| m,p-Xylenes  | ND     | 0.5 |
| o-Xylene     | ND     | 0.5 |
| Naphthalene  | ND     | 2.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 112  | 80-127 |
| 1,2-Dichloroethane-d4 | 115  | 69-148 |
| Toluene-d8            | 100  | 80-120 |
| Bromofluorobenzene    | 113  | 80-121 |

ND= Not Detected  
 RL= Reporting Limit

**Purgeable Aromatics by GC/MS**

|           |                         |           |                   |
|-----------|-------------------------|-----------|-------------------|
| Lab #:    | 241776                  | Location: | Salisbury Project |
| Client:   | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#: | SALISBURY PROJECT       | Analysis: | EPA 8260B         |
| Field ID: | MW-2                    | Units:    | ug/L              |
| Lab ID:   | 241776-002              | Sampled:  | 12/06/12          |
| Matrix:   | Water                   | Received: | 12/06/12          |

| Analyte      | Result | RL  | Diln Fac | Batch# | Analyzed |
|--------------|--------|-----|----------|--------|----------|
| MTBE         | ND     | 0.5 | 1.000    | 193815 | 12/13/12 |
| Benzene      | 92     | 0.5 | 1.000    | 193815 | 12/13/12 |
| Toluene      | 42     | 0.5 | 1.000    | 193815 | 12/13/12 |
| Ethylbenzene | 460    | 4.2 | 8.333    | 193870 | 12/14/12 |
| m,p-Xylenes  | 170    | 4.2 | 8.333    | 193870 | 12/14/12 |
| o-Xylene     | 9.6    | 0.5 | 1.000    | 193815 | 12/13/12 |
| Naphthalene  | 62     | 2.0 | 1.000    | 193815 | 12/13/12 |

| Surrogate             | %REC | Limits | Diln Fac | Batch# | Analyzed |
|-----------------------|------|--------|----------|--------|----------|
| Dibromofluoromethane  | 108  | 80-127 | 1.000    | 193815 | 12/13/12 |
| 1,2-Dichloroethane-d4 | 113  | 69-148 | 1.000    | 193815 | 12/13/12 |
| Toluene-d8            | 100  | 80-120 | 1.000    | 193815 | 12/13/12 |
| Bromofluorobenzene    | 105  | 80-121 | 1.000    | 193815 | 12/13/12 |

ND= Not Detected  
 RL= Reporting Limit

**Purgeable Aromatics by GC/MS**

|           |                         |           |                   |
|-----------|-------------------------|-----------|-------------------|
| Lab #:    | 241776                  | Location: | Salisbury Project |
| Client:   | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#: | SALISBURY PROJECT       | Analysis: | EPA 8260B         |
| Field ID: | MW-3                    | Units:    | ug/L              |
| Lab ID:   | 241776-003              | Sampled:  | 12/06/12          |
| Matrix:   | Water                   | Received: | 12/06/12          |

| Analyte      | Result | RL  | Diln Fac | Batch# | Analyzed |
|--------------|--------|-----|----------|--------|----------|
| MTBE         | ND     | 0.5 | 1.000    | 193870 | 12/14/12 |
| Benzene      | 36     | 0.5 | 1.000    | 193870 | 12/14/12 |
| Toluene      | 0.8    | 0.5 | 1.000    | 193870 | 12/14/12 |
| Ethylbenzene | 9.2    | 0.5 | 1.000    | 193870 | 12/14/12 |
| m,p-Xylenes  | 0.6    | 0.5 | 1.000    | 193870 | 12/14/12 |
| o-Xylene     | ND     | 0.5 | 1.000    | 193870 | 12/14/12 |
| Naphthalene  | 120    | 10  | 5.000    | 194007 | 12/19/12 |

| Surrogate             | %REC | Limits | Diln Fac | Batch# | Analyzed |
|-----------------------|------|--------|----------|--------|----------|
| Dibromofluoromethane  | 99   | 80-127 | 1.000    | 193870 | 12/14/12 |
| 1,2-Dichloroethane-d4 | 96   | 69-148 | 1.000    | 193870 | 12/14/12 |
| Toluene-d8            | 101  | 80-120 | 1.000    | 193870 | 12/14/12 |
| Bromofluorobenzene    | 100  | 80-121 | 1.000    | 193870 | 12/14/12 |

ND= Not Detected  
 RL= Reporting Limit



**Purgeable Aromatics by GC/MS**

|           |                         |           |                   |
|-----------|-------------------------|-----------|-------------------|
| Lab #:    | 241776                  | Location: | Salisbury Project |
| Client:   | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#: | SALISBURY PROJECT       | Analysis: | EPA 8260B         |
| Field ID: | MW-4                    | Batch#:   | 194007            |
| Lab ID:   | 241776-004              | Sampled:  | 12/06/12          |
| Matrix:   | Water                   | Received: | 12/06/12          |
| Units:    | ug/L                    | Analyzed: | 12/19/12          |
| Diln Fac: | 1.000                   |           |                   |

| Analyte      | Result | RL  |
|--------------|--------|-----|
| MTBE         | ND     | 0.5 |
| Benzene      | ND     | 0.5 |
| Toluene      | ND     | 0.5 |
| Ethylbenzene | ND     | 0.5 |
| m,p-Xylenes  | ND     | 0.5 |
| o-Xylene     | ND     | 0.5 |
| Naphthalene  | ND     | 2.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 102  | 80-127 |
| 1,2-Dichloroethane-d4 | 73   | 69-148 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 100  | 80-121 |

ND= Not Detected  
 RL= Reporting Limit

**Purgeable Aromatics by GC/MS**

|           |                         |           |                   |
|-----------|-------------------------|-----------|-------------------|
| Lab #:    | 241776                  | Location: | Salisbury Project |
| Client:   | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#: | SALISBURY PROJECT       | Analysis: | EPA 8260B         |
| Field ID: | TB                      | Batch#:   | 193815            |
| Lab ID:   | 241776-005              | Sampled:  | 12/06/12          |
| Matrix:   | Water                   | Received: | 12/06/12          |
| Units:    | ug/L                    | Analyzed: | 12/13/12          |
| Diln Fac: | 1.000                   |           |                   |

| Analyte      | Result | RL  |
|--------------|--------|-----|
| MTBE         | ND     | 0.5 |
| Benzene      | ND     | 0.5 |
| Toluene      | ND     | 0.5 |
| Ethylbenzene | ND     | 0.5 |
| m,p-Xylenes  | ND     | 0.5 |
| o-Xylene     | ND     | 0.5 |
| Naphthalene  | ND     | 2.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 116  | 80-127 |
| 1,2-Dichloroethane-d4 | 117  | 69-148 |
| Toluene-d8            | 100  | 80-120 |
| Bromofluorobenzene    | 116  | 80-121 |

ND= Not Detected  
 RL= Reporting Limit



## Batch QC Report

| Purgeable Aromatics by GC/MS |                         |           |                   |
|------------------------------|-------------------------|-----------|-------------------|
| Lab #:                       | 241776                  | Location: | Salisbury Project |
| Client:                      | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#:                    | SALISBURY PROJECT       | Analysis: | EPA 8260B         |
| Type:                        | BLANK                   | Diln Fac: | 1.000             |
| Lab ID:                      | QC670031                | Batch#:   | 193815            |
| Matrix:                      | Water                   | Analyzed: | 12/13/12          |
| Units:                       | ug/L                    |           |                   |

| Analyte      | Result | RL  |
|--------------|--------|-----|
| MTBE         | ND     | 0.5 |
| Benzene      | ND     | 0.5 |
| Toluene      | ND     | 0.5 |
| Ethylbenzene | ND     | 0.5 |
| m,p-Xylenes  | ND     | 0.5 |
| o-Xylene     | ND     | 0.5 |
| Naphthalene  | ND     | 2.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 110  | 80-127 |
| 1,2-Dichloroethane-d4 | 116  | 69-148 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 113  | 80-121 |

ND= Not Detected  
 RL= Reporting Limit



## Batch QC Report

| Purgeable Aromatics by GC/MS |                         |           |                   |
|------------------------------|-------------------------|-----------|-------------------|
| Lab #:                       | 241776                  | Location: | Salisbury Project |
| Client:                      | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#:                    | SALISBURY PROJECT       | Analysis: | EPA 8260B         |
| Type:                        | BLANK                   | Diln Fac: | 1.000             |
| Lab ID:                      | QC670248                | Batch#:   | 193870            |
| Matrix:                      | Water                   | Analyzed: | 12/14/12          |
| Units:                       | ug/L                    |           |                   |

| Analyte      | Result | RL  |
|--------------|--------|-----|
| MTBE         | ND     | 0.5 |
| Benzene      | ND     | 0.5 |
| Toluene      | ND     | 0.5 |
| Ethylbenzene | ND     | 0.5 |
| m,p-Xylenes  | ND     | 0.5 |
| o-Xylene     | ND     | 0.5 |
| Naphthalene  | ND     | 2.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 105  | 80-127 |
| 1,2-Dichloroethane-d4 | 103  | 69-148 |
| Toluene-d8            | 103  | 80-120 |
| Bromofluorobenzene    | 102  | 80-121 |

ND= Not Detected

RL= Reporting Limit



## Batch QC Report

| Purgeable Aromatics by GC/MS |                         |           |                   |
|------------------------------|-------------------------|-----------|-------------------|
| Lab #:                       | 241776                  | Location: | Salisbury Project |
| Client:                      | Eagle Env. Construction | Prep:     | EPA 5030B         |
| Project#:                    | SALISBURY PROJECT       | Analysis: | EPA 8260B         |
| Type:                        | BLANK                   | Diln Fac: | 1.000             |
| Lab ID:                      | QC670807                | Batch#:   | 194007            |
| Matrix:                      | Water                   | Analyzed: | 12/19/12          |
| Units:                       | ug/L                    |           |                   |

| Analyte      | Result | RL  |
|--------------|--------|-----|
| MTBE         | ND     | 0.5 |
| Benzene      | ND     | 0.5 |
| Toluene      | ND     | 0.5 |
| Ethylbenzene | ND     | 0.5 |
| m,p-Xylenes  | ND     | 0.5 |
| o-Xylene     | ND     | 0.5 |
| Naphthalene  | ND     | 2.0 |

| Surrogate             | %REC | Limits |
|-----------------------|------|--------|
| Dibromofluoromethane  | 101  | 80-127 |
| 1,2-Dichloroethane-d4 | 72   | 69-148 |
| Toluene-d8            | 99   | 80-120 |
| Bromofluorobenzene    | 99   | 80-121 |

ND= Not Detected

RL= Reporting Limit









