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By Alameda County Environmental Health at 10:16 am, Jul 02, 2013

June 28, 2013

Mr. Jerry Wickham  
Hazardous Materials Specialist  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Re: **Perjury Statement-**  
**2013 Sub-Slab Vapor Depressurization System Performance Report**  
Searway Property (SLIC Case No. RO0002584)  
649 Pacific Avenue  
Alameda, California

Dear Mr. Wickham,

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

Timber Dell Properties, LLC



Donald W. Lindsey, member



June 28, 2013  
Trinity Project: 103.001.001

Mr. Jerry Wickham  
Alameda County Health Care Services Agency  
Environmental Health Services, Environmental Protection  
1131 Harbor Parkway, Suite 250  
Alameda, CA 94502-6577

Re: *2013 Sub-Slab Vapor Depressurization System Performance Report*  
Searway Property  
649 Pacific Avenue  
Alameda, California

Dear Mr. Wickham:

Trinity Source Group, Inc. (Trinity) has prepared this *2013 Sub-Slab Vapor Depressurization System Performance Report (Report)* on behalf of Timber Del Properties, for the referenced site (Figure 1). The operations and maintenance (O&M) activities are described in the following sections.

The sub-slab vapor depressurization (SSVD) system was installed at the existing commercial building at the site in order to prevent volatile organic compounds (VOCs) from migrating from the sub-slab area into indoor air. The SSVD system was installed in 2008, operates continuously, and currently is monitored annually.

#### **SUB-SLAB VAPOR DEPRESSURIZATION SYSTEM DESCRIPTION**

Sub-slab air is withdrawn from the sub-slab material by means of an applied vacuum. The extracted air is routed through piping and discharged to the atmosphere.

The SSVD system includes two horizontal extraction wells located near former extraction points DPT-1 and DPT-2, with extraction well pipe runs trenched to nearby walls. The pipe runs continue up to the first floor ceiling, where they are manifolded together and connected to a suction fan located in the attic. The exhaust air is piped to the southwest corner of the roof and discharged through a 3-foot tall stack. Vacuum is applied to the extraction wells using an electric fan blower equipped with a flow meter. The SSVD system was originally constructed with carbon treatment, but the carbon was removed in May 2009 due to very low VOC influent concentrations. The system layout is presented on Figure 3. The Sub-Slab System Process and Instrumentation Diagram is shown on Figure 4.

Sub-slab extraction system influent and effluent analytical data are summarized in Table 1. Sub-slab extraction system influent throughput and mass removal of VOCs are summarized in Table 2. Sub-slab

extraction system effluent throughput and discharge of VOCs are summarized in Table 3.

The Sub-Slab System Extraction Well Detail is shown on Figure 5. Each extraction well is a 3-foot long, 4-inch diameter, horizontal slotted PVC casing, which is connected to 4-inch diameter PVC blank pipe runs. The slotted pipe is set in the middle of the sub-base material. PVC screen extends across the sub-base material.

The Sub-Slab System Monitoring Point Detail is shown on Figure 6. The monitoring points (VS-1 through VS-22) were constructed in accordance with the design specifications presented in the EPA document, "Assessment of Vapor Intrusion in Homes Near the Raymark Superfund Site using Basement and Sub-Slab Air Samples" (EPA 600 R-05/147, March 2006). These monitoring points have proven to be effective in sample collection and measuring the pressure field established by an applied vacuum.

The Bay Area Air Quality Management District (BAAQMD) application number is 17506 and the plant number is 18970. The Permit to Operate is included in Attachment C. On March 19, 2012 Trinity requested a change in monitoring frequency from quarterly to annually, which was granted by BAAQMD. An approval letter of the monitoring frequency change is included in Attachment D.

#### **SSVD SYSTEM O&M SUMMARY**

|                                 |  |
|---------------------------------|--|
| <b>Date of O&amp;M Event:</b>   | March 25, 2013   |
| <b>Sample Containers:</b>       | 1-Liter Tedlar Bags                                    |
| <b>Sample Collection Point:</b> | Effluent   |
| <b>System Conditions:</b>       | System running and passed smoke pen test for O&M event |

Trinity collected an effluent sample and delivered it to Torrent Laboratory, Inc., a California-certified laboratory (ELAP# 1991). The sample was analyzed for volatile organic compounds (VOCs) according to EPA Method TO-15 and Stoddard solvents according to EPA Method TO-3 during this annual sampling event. The O&M field data sheets are included in Attachment A and the certified analytical report is included in Attachment B.

#### **SSVD SYSTEM PERFORMANCE**

- SSVD has discharged a total of approximately 1.84 pounds of VOCs from March 6, 2012 to March 25, 2013, during approximately 384 days of operation.
- VOC removal rate for the period of March 6, 2012 to March 25, 2013 is 0.00479 pounds per day.
- The system is performing as expected with removal of VOCs and depressurization of the sub-slab area.
- VOC concentrations have generally declined since start-up.
- The low concentrations of VOCs discharged to the atmosphere are well within the permitted discharge allowed for specific compounds and for the total limit of 10 pounds per day. No violations of the BAAQMD permit have occurred.

- All effluent VOC concentrations from March 6, 2012 to March 25, 2013 are less than Commercial Land Use Site-Specific Screening Levels<sup>1</sup> (Table 1). It should be noted that the Site-Specific Screening Levels have been updated to utilize the May 2013 Environmental Screening Levels (ESLs) issued by the San Francisco Bay Regional Water Quality Control Board. For each VOC, the Commercial Indoor Air ESL was selected, and divided by the Site-Specific Attenuation Factor, to derive the Site-Specific Screening Level.

## RECOMMENDATIONS

Because all effluent VOC concentrations are less than the Site-Specific Screening Levels, Trinity recommends intermittent operation of the SSVD, as proposed in the September 20, 2010 *Sub-Slab Attenuation Factor Determination Summary Report*. Trinity proposes the following intermittent operation:

- Deactivate the SSVD for one quarter.
- Re-activate the SSVD, and collect an effluent sample at the time of re-activation.
- If the effluent analytical results exceed the screening levels, then the SSVD should be operated for at least one additional quarter, and re-sampled.
- If the effluent analytical results remain below the Site-Specific Screening Levels, then the site environmental case should be closed.

Should you have any questions regarding this *Report*, please call Trinity at (831) 426-5600.

Sincerely,

### TRINITY SOURCE GROUP, INC. A California Corporation

Information, conclusions, and recommendations made by Trinity in this document regarding this site have been prepared under the supervision of and reviewed by the licensed professional whose signature appears below.

Debra J. Moser, PG, CEG, CHG  
Senior Geologist



Eric Choi  
Staff Scientist

<sup>1</sup> Trinity Source Group, Inc., *Sub-Slab Attenuation Factor Determination Summary Report*, September 20, 2010.

## **DISTRIBUTION**

A copy of this report has been forwarded to:

Mr. Don Lindsey  
Timber Del Properties, LLC  
2424 Central Avenue  
Alameda, CA 94501

Ms. Miranda Vega  
The Mechanics Bank  
1999 Harrison St., Suite 810  
Oakland, CA 94612

## **Attachments:**

Table 1 – Summary of Sub-Slab Extraction System Influent and Effluent Analytical Data

Table 2 – Summary of Sub-Slab Extraction System Influent Throughput and Mass Removal of VOCs

Table 3 – Summary of Sub-Slab Extraction System Effluent Throughput and Mass Removal of VOCs

Figure 1 – Site Location Map

Figure 2 – Monitoring Well and Sub-Slab Vapor Probe Location Map

Figure 3 – Sub-Slab Depressurization System Layout

Figure 4 – Sub-Slab Vapor Depressurization Process and Instrumentation Diagram

Figure 5 – Sub-Slab Depressurization System Extraction Well Detail

Figure 6 – Sub-Slab Depressurization System Monitoring Point Detail

Attachment A – O&M Field Data Sheets

Attachment B – Certified Analytical Report, Chain-of-Custody and GeoTracker Upload Documentation

Attachment C – BAAQMD – Permit to Operate

Attachment D – BAAQMD Correspondence

## TABLES

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Table 1  
**Summary of Sub-Slab Extraction System Influent and Effluent Analytical Data**

Searway Property  
 649 Pacific Avenue  
 Alameda, California

| Sample Date | Sample Location | EPA Method TO-3(MOD)              | EPA Method TO-15                 |   |   |                              |                              |                             |                                     |                                  | Notes |  |
|-------------|-----------------|-----------------------------------|----------------------------------|---|---|------------------------------|------------------------------|-----------------------------|-------------------------------------|----------------------------------|-------|--|
|             |                 | Stoddard $\mu\text{g}/\text{m}^3$ | Benzene $\mu\text{g}/\text{m}^3$ | Chloroform $\mu\text{g}/\text{m}^3$                 | Carbon Tetrachloride $\mu\text{g}/\text{m}^3$ | PCE $\mu\text{g}/\text{m}^3$ | TCE $\mu\text{g}/\text{m}^3$ | VC $\mu\text{g}/\text{m}^3$ | 2-Butanone $\mu\text{g}/\text{m}^3$ | Acetone $\mu\text{g}/\text{m}^3$ |       |  |
| 9/10/2008   | Influent        | 4,900 <sup>c</sup>                | <80                              | 560   | 3,900   | 2,600                        | <130                         | <64                         | 300                                 | <480                             |       |  |
|             | Effluent        | 610 <sup>c, d</sup>               | <1.8                             | <3.9  | 29  | 17                           | <1.1                         | <0.5                        | <0.88                               | 71                               | k     |  |
| 9/11/2008   | Influent        | 2,400 <sup>c</sup>                | <32                              | 480   | 3,200   | 2,500                        | <54                          | <26                         | 260                                 | <190                             | e     |  |
|             | Effluent        | 710 <sup>c</sup>                  | <1.8                             | <3.9  | <1.9  | <2.6                         | <1.1                         | <0.5                        | 14                                  | 180                              | e     |  |
| 10/10/2008  | Influent        | 960 <sup>b</sup>                  | 65                               | 110   | 880   | 880                          | <5.4                         | <2.6                        | 27                                  | 51                               | l     |  |
|             | Effluent        | 740 <sup>b</sup>                  | <3.2                             | 54  | 200   | 13                           | <5.4                         | <2.6                        | <3.0                                | 25                               | m     |  |
| 11/6/2008   | Influent        | 1,700 <sup>a</sup>                | <1.6                             | 58  | 690   | 520                          | <2.7                         | <1.3                        | 23                                  | 62                               | f     |  |
|             | Effluent        | 2,800 <sup>a</sup>                | 1.9                              | 53  | 770   | 14                           | <2.7                         | <1.3                        | 6.5                                 | 37                               | g     |  |
| 12/4/2008   | Influent        | 2,400 <sup>h</sup>                | 20                               | 110   | 780   | 1,100                        | <6.7                         | <3.2                        | 110                                 | <24                              | i     |  |
|             | Effluent        | 2,100 <sup>h</sup>                | 18                               | 120   | 1,100   | 40                           | <5.4                         | <2.6                        | 82                                  | <19                              | j     |  |
| 1/2/2009    | Influent        | <3,500                            | <16                              | 26  | 560   | 800                          | <27                          | <13                         | <15                                 | <95                              | n     |  |
|             | Effluent        | <3,500                            | <8.0                             | 73  | 920   | 220                          | <13                          | <6.4                        | <7.4                                | <48                              | o     |  |
| 2/9/2009    | Influent        | 2,300 <sup>p</sup>                | <3.2                             | 64  | 480   | 680                          | <5.4                         | <2.6                        | 9.6                                 | 29                               | t     |  |
|             | Effluent        | 1,800 <sup>p</sup>                | <3.2                             | <4.9  | 10  | <6.8                         | <5.4                         | <2.6                        | <3.0                                | 20                               | s     |  |
| 5/20/2009   | Influent        |                                   |                                  | Carbon Vessels Removed; Influent no longer sampled. |   |                              |                              |                             |                                     |                                  |       |  |
|             | Effluent        | 1,800 <sup>q</sup>                | <4.5                             | <9.8  | <4.7  | <6.4                         | <2.6                         | <1.2                        | <2.2                                | <2.9                             | r     |  |
| 8/7/2009    | Effluent        | 4,500 <sup>u</sup>                | <1.6                             | <2.4  | <3.2  | <3.4                         | <2.7                         | <1.3                        | 2.0                                 | 24                               | v     |  |
| 11/6/2009   | Effluent        | 2,400 <sup>u</sup>                | 5.4                              | 85  | 670 <sup>x</sup>                              | 1,100 <sup>x</sup>           | <2.7                         | <1.3                        | <1.5                                | 84                               | w     |  |
| 2/2/2010    | Effluent        | 2,000 <sup>y</sup>                | 5.6                              | 40  | 280   | 430                          | <2.7                         | <1.3                        | <1.5                                | 31                               | z     |  |
| 5/5/2010    | Effluent        | <400                              | 2.24                             | 77.4  | 562   | 857                          | <5.4                         | <2.6                        | <1.5                                | 34.9                             | aa    |  |

Table 1  
**Summary of Sub-Slab Extraction System Influent and Effluent Analytical Data**

Searway Property  
 649 Pacific Avenue  
 Alameda, California

| Sample Date | Sample Location | EPA Method TO-3(MOD)              | EPA Method TO-15                 |                                     |   |                              |                              |                             |                                     |                                  | Notes  |
|-------------|-----------------|-----------------------------------|----------------------------------|-------------------------------------|---|------------------------------|------------------------------|-----------------------------|-------------------------------------|----------------------------------|--------|
|             |                 | Stoddard $\mu\text{g}/\text{m}^3$ | Benzene $\mu\text{g}/\text{m}^3$ | Chloroform $\mu\text{g}/\text{m}^3$ | Carbon Tetrachloride $\mu\text{g}/\text{m}^3$ | PCE $\mu\text{g}/\text{m}^3$ | TCE $\mu\text{g}/\text{m}^3$ | VC $\mu\text{g}/\text{m}^3$ | 2-Butanone $\mu\text{g}/\text{m}^3$ | Acetone $\mu\text{g}/\text{m}^3$ |        |
| 8/5/2010    | Effluent        | <400                              | 6.78                             | 75.8                                | <6.3  | 686                          | <11                          | <5.2                        | <3.0                                | 48                               | ab, ac |
| 11/30/2010  | Effluent        | <350                              | <3.2                             | <9.8                                | 259   | 290                          | <11                          | <5.2                        | <3.0                                | <19                              | ad     |
| 2/22/2011   | Effluent        | <350                              | <3.2                             | 26.8                                | 235   | 261                          | <11                          | <5.2                        | <3.0                                | 27.4                             | ae     |
| 6/1/2011    | Effluent        | <350                              | <3.2                             | 25.5                                | 254   | 354                          | <11                          | <5.2                        | <3.0                                | 62.4                             | af     |
| 8/25/2011   | Effluent        | <350                              | <3.2                             | 37.9                                | 287   | 332                          | <11                          | <5.2                        | <3.0                                | <19                              | r, ag  |
| 11/21/2011  | Effluent        | <350                              | <3.2                             | 26.4                                | 355   | 635                          | <11                          | <5.2                        | <3.0                                | <19                              |        |
| 3/6/2012    | Effluent        | <700                              | <3.2                             | 44.3                                | 447   | 626                          | <11                          | <5.2                        | <3.0                                | <19                              | r, ah  |
| 3/25/2013   | Effluent        | <700                              | <3.2                             | 38.5                                | 567   | 578                          | <11                          | <5.2                        | <3.0                                | <38                              | r      |

| Screening Levels for Indoor Air ( $\mu\text{g}/\text{m}^3$ ) - Residential Property Use                    |       |       |       |       |       |       |     |            |  |
|--|-------|-------|-------|-------|-------|-------|-----|------------|--|
| 100  | 0.084 | 0.46  | 0.058 | 0.41  | 0.59  | 0.031 | N/A | 31,000     |  |
| Site-Specific Screening Levels for Sub-Slab Vapor ( $\mu\text{g}/\text{m}^3$ ) - Residential Property Use* |       |       |       |       |       |       |     |            |  |
| 242,718  | 204   | 1,117 | 141   | 995   | 1,432 | 75    | N/A | 75,242,718 |  |
| Screening Levels for Indoor Air ( $\mu\text{g}/\text{m}^3$ ) - Commercial Property Use                     |       |       |       |       |       |       |     |            |  |
| 100  | 0.42  | 2.3   | 0.29  | 2.1   | 3.0   | 0.16  | N/A | 31,000     |  |
| Site-Specific Screening Levels for Sub-Slab Vapor ( $\mu\text{g}/\text{m}^3$ ) - Commercial Property Use*  |       |       |       |       |       |       |     |            |  |
| 242,718  | 1,019 | 5,583 | 704   | 5,097 | 7,282 | 388   | N/A | 75,242,718 |  |

Notes:

|   |
|---|
| Stoddard = Total petroleum hydrocarbons as gasoline.<br>PCE = Tetrachloroethylene or Perchloroethylene<br>TCE = Trichloroethylene<br>VC = Vinyl Chloride<br>VOCs = Volatile Organic Compounds<br>MTBE = Methyl tertiary butyl ether<br>TBA = Tert-Butanol<br>TAME = Tert amyl methyl ether<br>$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter, also equivalent to parts per billion (ppb) |
|---|



Table 1  
**Summary of Sub-Slab Extraction System Influent and Effluent Analytical Data**

Searway Property  
 649 Pacific Avenue  
 Alameda, California

| EPA Method TO-3(MOD)  |                 | EPA Method TO-15                  |                                  |                                     |   |                              |                              |                             |                                     |                                  | Notes |
|---|-----------------|-----------------------------------|----------------------------------|-------------------------------------|---|------------------------------|------------------------------|-----------------------------|-------------------------------------|----------------------------------|-------|
| Sample Date   | Sample Location | Stoddard $\mu\text{g}/\text{m}^3$ | Benzene $\mu\text{g}/\text{m}^3$ | Chloroform $\mu\text{g}/\text{m}^3$ | Carbon Tetrachloride $\mu\text{g}/\text{m}^3$ | PCE $\mu\text{g}/\text{m}^3$ | TCE $\mu\text{g}/\text{m}^3$ | VC $\mu\text{g}/\text{m}^3$ | 2-Butanone $\mu\text{g}/\text{m}^3$ | Acetone $\mu\text{g}/\text{m}^3$ |       |
| <p>&lt; = Less than laboratory analytical method reporting limit.<br/>                     NS = No sample collected<br/>                     a = Result reported as Stoddard Solvent, but sample chromatogram does not resemble Stoddard Solvent standard pattern.<br/>                     b = Sample chromatogram does not resemble Stoddard Solvent standard pattern (possibly aged). Reported value due to presence of non-gasoline compounds within range of C5-C12 quantified as Gasoline.<br/>                     c = Not a typical Stoddard (discrete light end peaks within Stoddard range)<br/>                     d = Reporting limit increased due to low initial pressure in canister. Results reported to the MDL. Reported values between the MDL and RL should be considered as estimated.<br/>                     e = Reporting limit increased due to low initial pressure in canister. Results reported to the MDL.<br/>                     f = Other VOCs detected are: Carbon Disulfide 7.7 <math>\mu\text{g}/\text{m}^3</math>, 1,2,4-trimethylbenzene 2.9 <math>\mu\text{g}/\text{m}^3</math>, m,p-xylene 4.7 <math>\mu\text{g}/\text{m}^3</math>, methylene chloride 4.5 <math>\mu\text{g}/\text{m}^3</math>, and toluene 30 <math>\mu\text{g}/\text{m}^3</math>.<br/>                     g = Other VOCs detected are: Carbon Disulfide 7.5 <math>\mu\text{g}/\text{m}^3</math>, m,p-xylene 3.6 <math>\mu\text{g}/\text{m}^3</math>, and toluene 27 <math>\mu\text{g}/\text{m}^3</math>.<br/>                     h = Sample chromatogram does not resemble Stoddard solvent standard pattern. Reported value due to presence of non-stoddard solvent compounds within range of C7-C12.<br/>                     i = Other VOCs detected are: 1,2,4-trimethylbenzene 66 <math>\mu\text{g}/\text{m}^3</math>, 1,3,5-trimethylbenzene 14 <math>\mu\text{g}/\text{m}^3</math>, 4-ethyl toluene 48 <math>\mu\text{g}/\text{m}^3</math>, ethyl benzene 49 <math>\mu\text{g}/\text{m}^3</math>, m,p-xylene 270 <math>\mu\text{g}/\text{m}^3</math>, o-xylene 54 <math>\mu\text{g}/\text{m}^3</math> and toluene 490 <math>\mu\text{g}/\text{m}^3</math><br/>                     j = Other VOCs detected are: 1,2,4-trimethylbenzene 38 <math>\mu\text{g}/\text{m}^3</math>, 1,3,5-trimethylbenzene 7.6 <math>\mu\text{g}/\text{m}^3</math>, 4-ethyl toluene 35 <math>\mu\text{g}/\text{m}^3</math>, ethyl benzene 45 <math>\mu\text{g}/\text{m}^3</math>, m,p-xylene 240 <math>\mu\text{g}/\text{m}^3</math>, o-xylene 44 <math>\mu\text{g}/\text{m}^3</math>, and toluene 380 <math>\mu\text{g}/\text{m}^3</math><br/>                     k = Other VOC detected is: m,p-xylene 4.1 <math>\mu\text{g}/\text{m}^3</math><br/>                     l = Other VOCs detected are:1,2,4-trimethylbenzene 8.2 <math>\mu\text{g}/\text{m}^3</math>, 4-ethyl toluene 8.8 <math>\mu\text{g}/\text{m}^3</math>, m,p-xylene 53 <math>\mu\text{g}/\text{m}^3</math>, MTBE 220 <math>\mu\text{g}/\text{m}^3</math>, o-xylene 22 <math>\mu\text{g}/\text{m}^3</math>, TBA 55 <math>\mu\text{g}/\text{m}^3</math>, TAME 21 <math>\mu\text{g}/\text{m}^3</math>, and toluene 82<math>\mu\text{g}/\text{m}^3</math><br/>                     m = Other VOCs detected are: MTBE 180 <math>\mu\text{g}/\text{m}^3</math>, TAME 8.4 <math>\mu\text{g}/\text{m}^3</math>, and toluene 7.3 <math>\mu\text{g}/\text{m}^3</math><br/>                     n = Toluene detected at a concentration of 37 <math>\mu\text{g}/\text{m}^3</math><br/>                     o = Toluene detected at a concentration of 29 <math>\mu\text{g}/\text{m}^3</math><br/>                     p = Hydrocarbons responded within range of C5-C12 quantified as Stoddard Solvent but sample chromatogram does not match requested fuel standard pattern. TPH value due to presence of heavy end unidentified hydrocarbon peaks.<br/>                     q = Result reported as a Stoddard solvent but sample chromatogram does not match requested fuel pattern. Reported value due to individual non-target peaks (heavy end) within ranage of C5-C12.<br/>                     r = The reporting limts were raised due to limited sample received (tedlar bag). Results reported to the MDL.<br/>                     s = Toluene was detected at a concentration of 4.5 <math>\mu\text{g}/\text{m}^3</math><br/>                     t = Toluene was detected at a concentration of 5.7 <math>\mu\text{g}/\text{m}^3</math><br/>                     u = Result reported as a Stoddard solvent but sample chromatogram does not match requested fuel standard pattern. Result due to individual peaks of unidentified compounds within C5-C12 range quantified as Stoddard Solvent.<br/>                     v = Other VOCs detected are: 1,2,4-Trimethylbenzene 5.9 <math>\mu\text{g}/\text{m}^3</math>, isopropanol 21 <math>\mu\text{g}/\text{m}^3</math> and toluene 2.3 <math>\mu\text{g}/\text{m}^3</math><br/>                     w = Other VOCs detected are: 1,2,4-Trimethylbenzene 140 <math>\mu\text{g}/\text{m}^3</math>, 1,3,5-Trimethylbenzene 38 <math>\mu\text{g}/\text{m}^3</math>, 4-Ethyl Toluene 130 <math>\mu\text{g}/\text{m}^3</math>, ethylbenzene 83 <math>\mu\text{g}/\text{m}^3</math>, total xylenes 322 <math>\mu\text{g}/\text{m}^3</math>, methylene chloride 8.1 <math>\mu\text{g}/\text{m}^3</math></p> |                 |                                   |                                  |                                     |   |                              |                              |                             |                                     |                                  |       |

Table 1  
**Summary of Sub-Slab Extraction System Influent and Effluent Analytical Data**

Searway Property  
 649 Pacific Avenue  
 Alameda, California

|             |                 | EPA Method<br>TO-3(MOD)   | EPA Method TO-15                    |  |  |                                 |                                 |                                |  |                                     |       |
|-------------|-----------------|---|-------------------------------------|--|--|---------------------------------|---------------------------------|--------------------------------|--|-------------------------------------|-------|
| Sample Date | Sample Location | Stoddard<br>$\mu\text{g}/\text{m}^3$  | Benzene<br>$\mu\text{g}/\text{m}^3$ | Chloroform<br>$\mu\text{g}/\text{m}^3$ | Carbon Tetrachloride<br>$\mu\text{g}/\text{m}^3$ | PCE<br>$\mu\text{g}/\text{m}^3$ | TCE<br>$\mu\text{g}/\text{m}^3$ | VC<br>$\mu\text{g}/\text{m}^3$ | 2-Butanone<br>$\mu\text{g}/\text{m}^3$ | Acetone<br>$\mu\text{g}/\text{m}^3$ | Notes |
|             |                 | t-butyl alcohol 29 $\mu\text{g}/\text{m}^3$ , toluene 35 $\mu\text{g}/\text{m}^3$ .<br>x = Outside of calibration range but within working range of the instrument. Due to hold time restrictions, no diluted analysis was performed.<br>y = TPH as Stoddard Solvent result due to unidentified compounds within range quantified as Stoddard Solvent.<br>z = Other VOCs detected are: 1,2,4-Trimethylbenzene 120 $\mu\text{g}/\text{m}^3$ , 1,3,5-Trimethylbenzene 40 $\mu\text{g}/\text{m}^3$ , 4-Ethyl Toluene 120 $\mu\text{g}/\text{m}^3$ ,<br>Carbon disulfide 4.1 $\mu\text{g}/\text{m}^3$ , Isopropanol 21 $\mu\text{g}/\text{m}^3$ , total-xylene 171 $\mu\text{g}/\text{m}^3$ , Tert-butyl Alcohol 13 $\mu\text{g}/\text{m}^3$ and Toluene 15 $\mu\text{g}/\text{m}^3$<br>aa = Other VOCs detected are: Tert-butanol 63.8 $\mu\text{g}/\text{m}^3$ , Toluene 10.3 $\mu\text{g}/\text{m}^3$ , total-Xylene 30.01 $\mu\text{g}/\text{m}^3$ ,<br>4-ethyl toluene 19.5 $\mu\text{g}/\text{m}^3$ , 1,3,5-Trimethylbenzene 8.18 $\mu\text{g}/\text{m}^3$ , and 1,2,4-Trimethylbenzene 17.2 $\mu\text{g}/\text{m}^3$ .<br>ab = Other VOCs detected are: Carbon Disulfide 12.4 $\mu\text{g}/\text{m}^3$ , tert-Butanol 109 $\mu\text{g}/\text{m}^3$ , Toluene 21.7 $\mu\text{g}/\text{m}^3$ , m,p-Xylene 24.3 $\mu\text{g}/\text{m}^3$ ,<br>o-xylene 10.4 $\mu\text{g}/\text{m}^3$ , 1,3,5-Trimethylbenzene 5.88 $\mu\text{g}/\text{m}^3$ , 1,2,4-Trimethylbenzene 15.5 $\mu\text{g}/\text{m}^3$ .<br>ac = The results for stoddard solvents are reported using their MDL, reporting limit was raised due to insufficient sample volume received<br>(tedlar bag).<br>ad = Other VOCs detected are: Toluene 116 $\mu\text{g}/\text{m}^3$ , m,p-Xylene 13.5 $\mu\text{g}/\text{m}^3$ , and o-Xylene 6.02 $\mu\text{g}/\text{m}^3$ .<br>ae = Toluene only other VOC detected at a concentration of 16.4 $\mu\text{g}/\text{m}^3$ .<br>af = Other VOCs detected are: Carbon Disulfide 6.63 $\mu\text{g}/\text{m}^3$ , and Toluene 96.9 $\mu\text{g}/\text{m}^3$ .<br>* = Trinity Source Group, Inc, <i>Sub-Slab Attenuation Factor Determination Summary Report</i> , September 20, 2010. <span style="float: right;">Note that calculation<br/>                     errors for benzene and vinyl chloride screening levels have been corrected</span><br>ag = Other VOCs detected are: Carbon Disulfide 29.1 $\mu\text{g}/\text{m}^3$ , tert-Butanol 26.1 $\mu\text{g}/\text{m}^3$ , and Toluene 4.41 $\mu\text{g}/\text{m}^3$<br>ah = Other VOCs detected are: Methylene Chloride 23.5 $\mu\text{g}/\text{m}^3$ , and Toluene 75.2 $\mu\text{g}/\text{m}^3$ |                                     |  |  |                                 |                                 |                                |  |                                     |       |

Table 2  
**Summary of Sub-Slab Extraction System Influent  
 Throughput and Mass Removal of VOCs**

Searway Property  
 649 Pacific Avenue  
 Alameda, California

| Date                                 | Average   | Days Operated | Cubic Meters  | Cumulative   | Influent                 | Pounds VOCs   | Pounds       | Cumulative   | Comments              |
|--------------------------------------|-----------|---------------|---------------|--------------|--------------------------|---------------|--------------|--------------|-----------------------|
|                                      | flow rate | Since         | Removed Since | Cubic Meters | Total                    | Removed Since | VOCs Removed | Total Pounds |                       |
|                                      | CFM       | Previous      | Previous      | Removed      | VOCs                     | Last Event    | per Day      | VOCs         |                       |
|                                      |           | Event         | Event         |              | $\mu\text{g}/\text{m}^3$ |               |              | Removed      |                       |
| 9/10/2008                            | 45        | 0.04          | 76.53         | 76.53        | 12,260                   | 0.00207       | 0.04964      | 0.00207      | System sampled 1-hour |
| 9/11/2008                            | 45        | 1.00          | 1,836.73      | 1,913.27     | 8,840                    | 0.03580       | 0.03580      | 0.03786      |                       |
| 10/10/2008                           | 45        | 29.00         | 53,265.31     | 55,178.57    | 3,443                    | 0.40430       | 0.01394      | 0.44217      |                       |
| 11/6/2008                            | 45        | 27.00         | 49,591.84     | 104,770.41   | 3,103                    | 0.33923       | 0.01256      | 0.78140      |                       |
| 12/4/2008                            | 45        | 28.00         | 51,428.57     | 156,198.98   | 5,511                    | 0.62483       | 0.02232      | 1.40623      |                       |
| 1/2/2009                             | 45        | 29.00         | 53,265.31     | 209,464.29   | 1,423                    | 0.16710       | 0.00576      | 1.57333      |                       |
| 2/9/2009                             | 45        | 38.00         | 69,795.92     | 279,260.20   | 3,568                    | 0.54906       | 0.01445      | 2.12238      |                       |
| 5/20/2009                            | 45        | 100.00        | 183,673.47    | 462,933.67   | 1,800                    | 0.72886       | 0.00729      | 2.85125      |                       |
| -----*Treatment System Removed*----- |           |               |               |              |                          |               |              |              |                       |

Notes:

CFM = cubic feet per minute  
 $\mu\text{g}/\text{m}^3$  = micrograms per cubic meters  
 VOCs = volatile organic compounds  
 \* = Treatment system removed on May 20, 2009.

Table 3  
**Summary of Sub-Slab Extraction System Effluent  
Throughput and Mass Removal of VOCs**

Searway Property  
649 Pacific Avenue  
Alameda, California

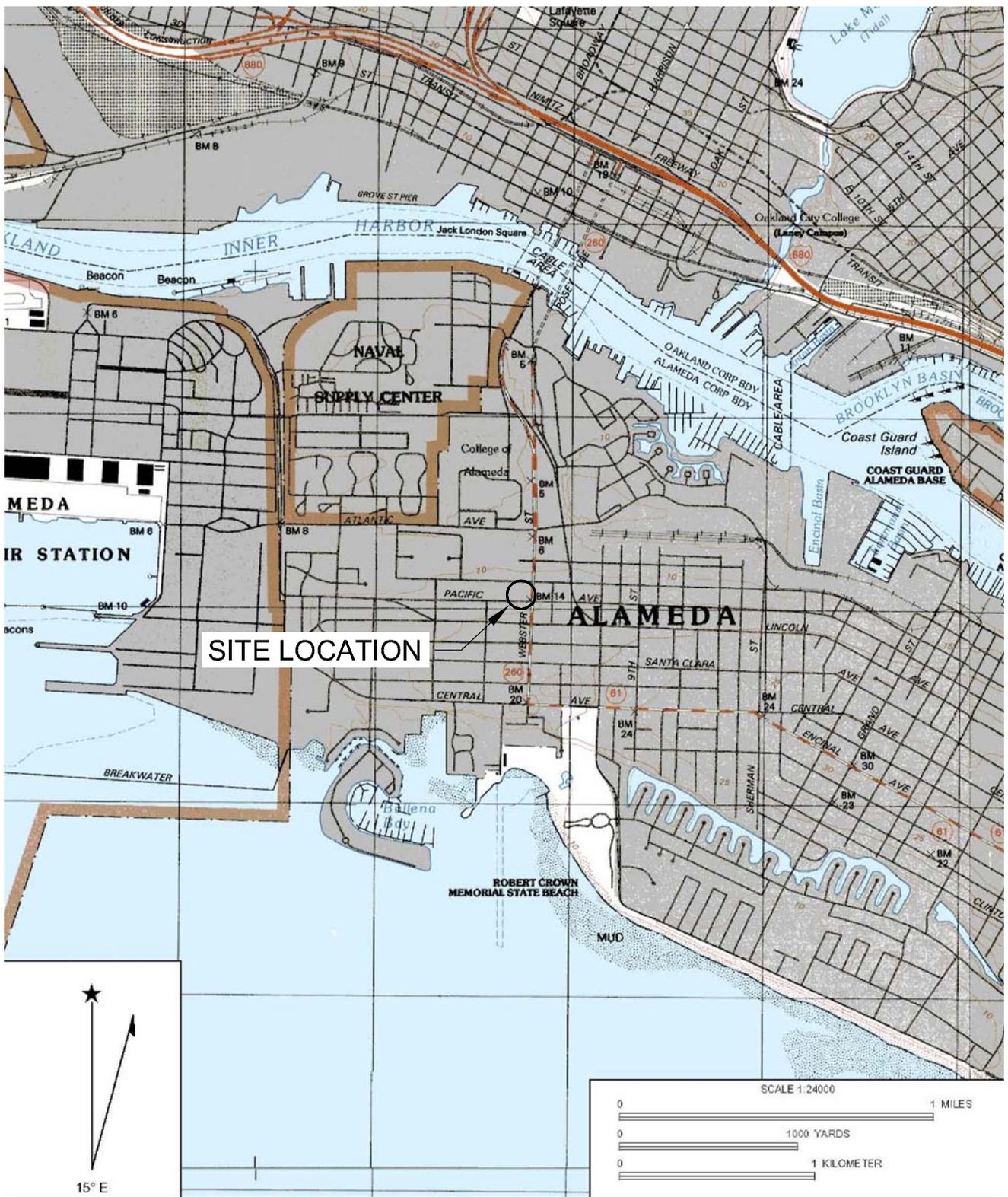
| Date       | Average   | Days Operated | Cubic Meters |              | Effluent                 | Pounds VOCs | Pounds     | Cumulative   | Comments |
|------------|-----------|---------------|--------------|--------------|--------------------------|-------------|------------|--------------|----------|
|            | Flow Rate | Since         | Discharged   | Since        | Total                    | Discharged  | VOCs       | Total Pounds |          |
|            | CFM       | Previous      | Previous     | Cumulative   | VOCs                     | Since       | Discharged | VOCs         |          |
|            |           | Event         | Event        | Discharged   | $\mu\text{g}/\text{m}^3$ | Last Event  | per Day    | Discharged   |          |
| 9/10/2008  | 45        | 0.04          | 76.53        | 76.53        | 731.1                    | 0.00012     | 0.00296    | 0.00012      |          |
| 9/11/2008  | 45        | 1.00          | 1,836.73     | 1,913.27     | 904                      | 0.00366     | 0.00366    | 0.00378      |          |
| 10/10/2008 | 45        | 29.00         | 53,265.31    | 55,178.57    | 1,227.7                  | 0.14417     | 0.00497    | 0.14795      |          |
| 11/6/2008  | 45        | 27.00         | 49,591.84    | 104,770.41   | 3,720.5                  | 0.40676     | 0.01507    | 0.55471      |          |
| 12/4/2008  | 45        | 28.00         | 51,428.57    | 156,198.98   | 4,249.6                  | 0.48181     | 0.01721    | 1.03652      |          |
| 1/2/2009   | 45        | 29.00         | 53,265.31    | 209,464.29   | 1,242.0                  | 0.14585     | 0.00503    | 1.18237      |          |
| 2/9/2009   | 45        | 38.00         | 69,795.92    | 279,260.20   | 1,834.5                  | 0.28228     | 0.00743    | 1.46465      |          |
| 5/20/2009  | 45        | 100.00        | 183,673.47   | 462,933.67   | 1,800.0                  | 0.72886     | 0.00729    | 2.19351      |          |
| 8/7/2009   | 45        | 79.00         | 145,102.04   | 608,035.71   | 4,555.2                  | 1.45716     | 0.01845    | 3.65067      |          |
| 11/6/2009  | 45        | 91.00         | 167,142.86   | 775,178.57   | 5,129.5                  | 1.89012     | 0.02077    | 5.54079      |          |
| 2/2/2010   | 45        | 88.00         | 161,632.65   | 936,811.22   | 3,290.7                  | 1.17259     | 0.01332    | 6.71338      |          |
| 5/5/2010   | 45        | 92.00         | 168,979.59   | 1,105,790.82 | 1,682.5                  | 0.62679     | 0.00681    | 7.34017      |          |
| 8/5/2010   | 45        | 92.00         | 168,979.59   | 1,274,770.41 | 1,015.8                  | 0.37840     | 0.00411    | 7.71857      |          |
| 11/30/2010 | 45        | 117.00        | 214,897.96   | 1,489,668.37 | 684.5                    | 0.32430     | 0.00277    | 8.04287      |          |
| 2/22/2011  | 45        | 84.00         | 154,285.71   | 1,643,954.08 | 566.6                    | 0.19272     | 0.00229    | 8.23559      |          |
| 6/1/2011   | 45        | 99.00         | 181,836.73   | 1,825,790.82 | 799.4                    | 0.32047     | 0.00324    | 8.55606      |          |
| 8/25/2011  | 45        | 85.00         | 156,122.45   | 1,981,913.27 | 716.5                    | 0.24661     | 0.00290    | 8.80268      |          |
| 11/21/2011 | 45        | 88.00         | 161,632.65   | 2,143,545.92 | 1,016.4                  | 0.36218     | 0.00412    | 9.16485      |          |
| 3/6/2012   | 45        | 106.00        | 194,693.88   | 2,338,239.80 | 1,216.0                  | 0.52193     | 0.00492    | 9.68678      |          |
| 3/25/2013  | 45        | 384.00        | 705,306.12   | 3,043,545.92 | 1,183.5                  | 1.84023     | 0.00479    | 11.52702     |          |

Notes:

CFM = cubic feet per minute  
 $\mu\text{g}/\text{m}^3$  = micrograms per cubic meters  
VOCs = volatile organic compounds

## FIGURES

---



Name: OAKLAND WEST  
Date: 5/4/2006

Location: 037° 46' 34.86" N 122° 16' 37.65" W NAD 27  
Caption: San Francisco Bay, Oakland West Quadrangle - 1:24,000

REF. 103\_002\SLM.DWG  
BASEMAP FROM MAPTECH, INC.

PREPARED BY



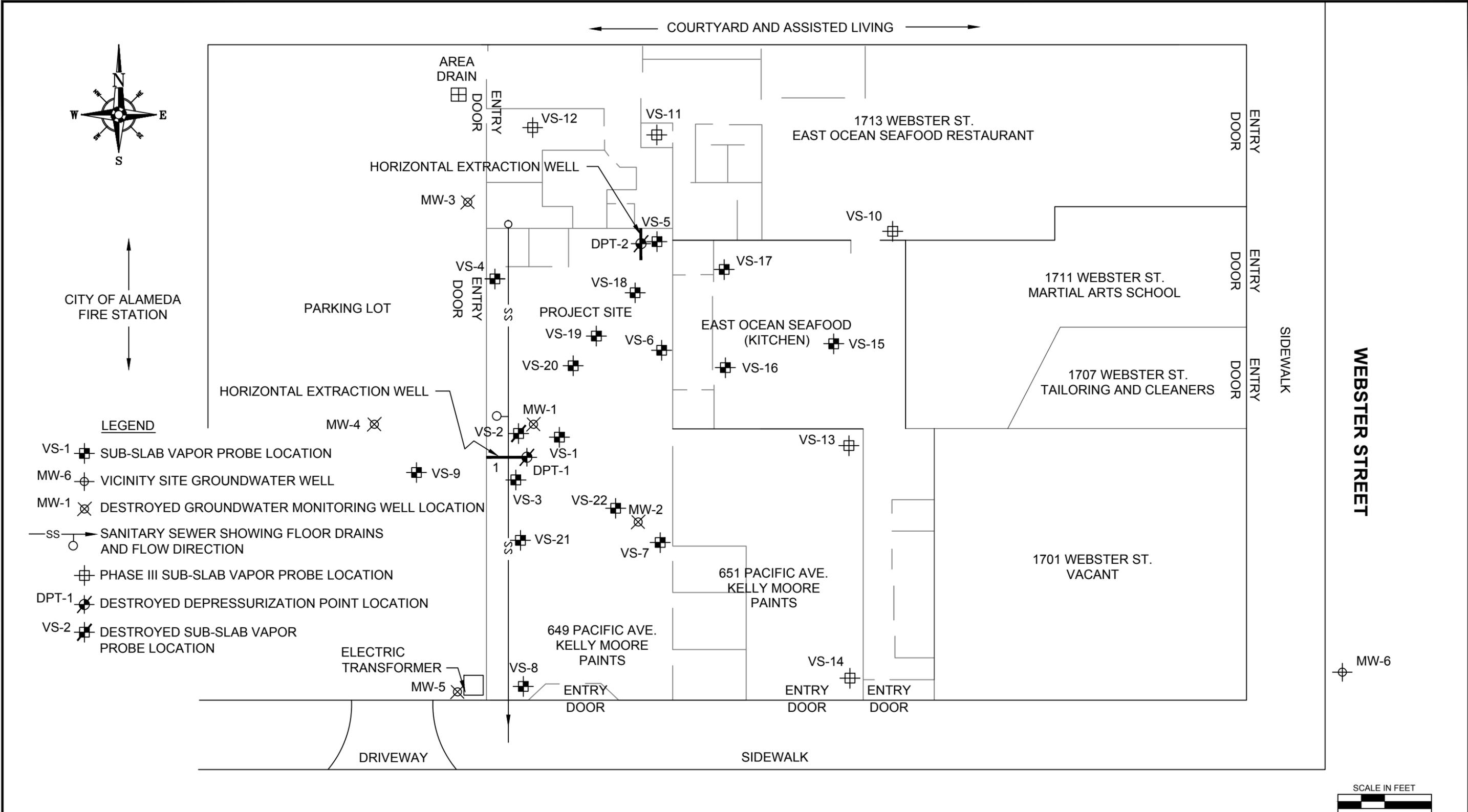
Tel: (831) 426-6600 Fax: (831) 426-6602

### SITE LOCATION MAP

Searway Property  
649 Pacific Avenue  
Alameda, California

PROJECT:  
103.001.001

FIGURE:  
1



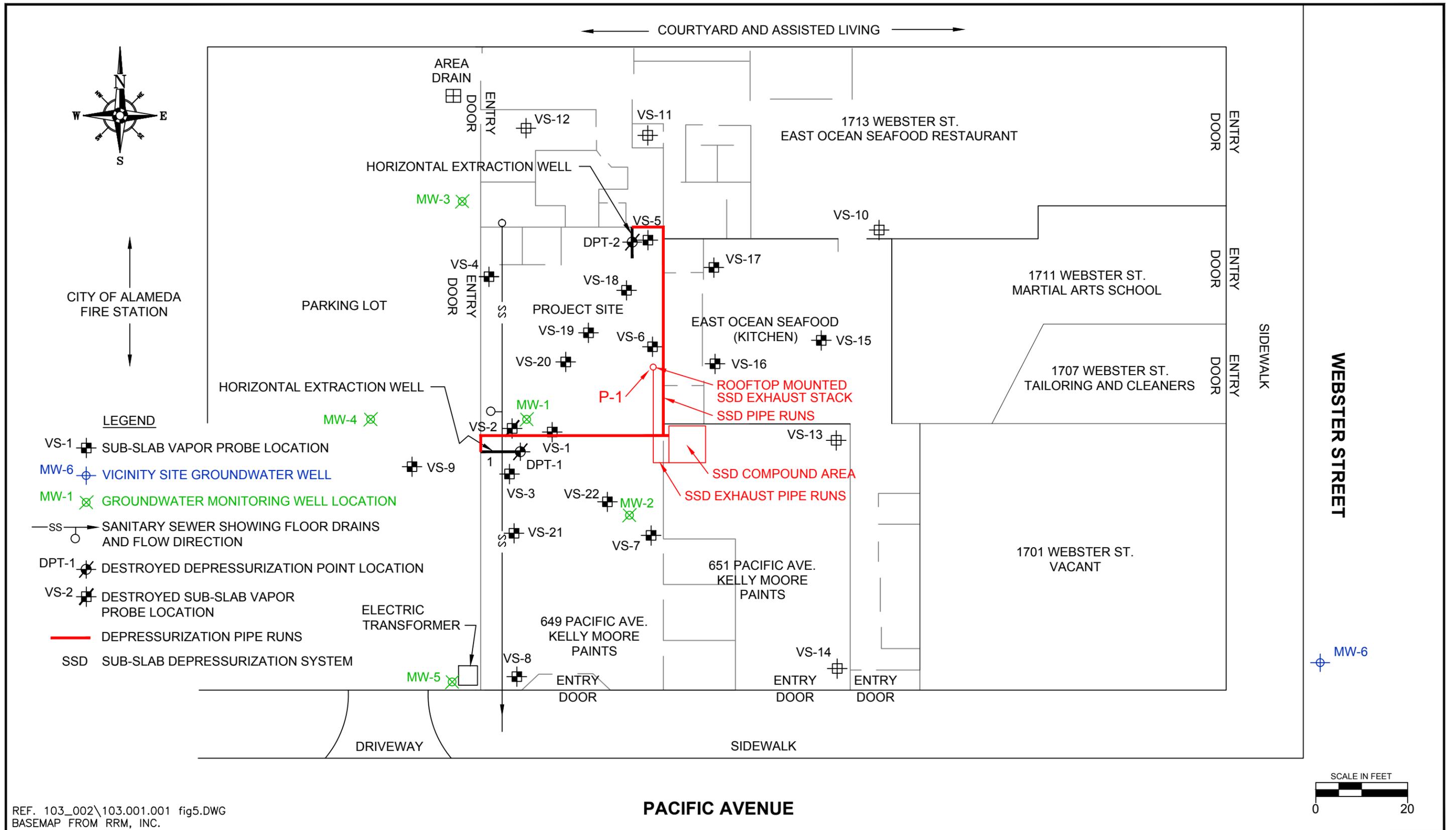
REF. 103\_002\103.001.001 fig2.DWG  
 BASEMAP FROM RRM, INC.

PREPARED BY  
**TRINITY**  
*source group, inc.*  
 Environmental Consultants  
 500 Chestnut Street, Suite 225  
 Santa Cruz, California 95060  
 v: 831.426.5600  
 f: 831.426.5602

**MONITORING WELL AND SUB-SLAB VAPOR PROBE LOCATION MAP**

Searway Property  
 649 Pacific Avenue  
 Alameda, California

PROJECT:  
 103.001.001  
 FIGURE:  
 2



REF. 103\_002\103.001.001 fig5.DWG  
 BASEMAP FROM RRM, INC.

PREPARED BY  
**TRINITY**  
*source group, inc.*  
 Environmental Consultants  
 500 Chestnut Street, Suite 225  
 Santa Cruz, California 95060  
 v: 831.426.5600  
 f: 831.426.5602

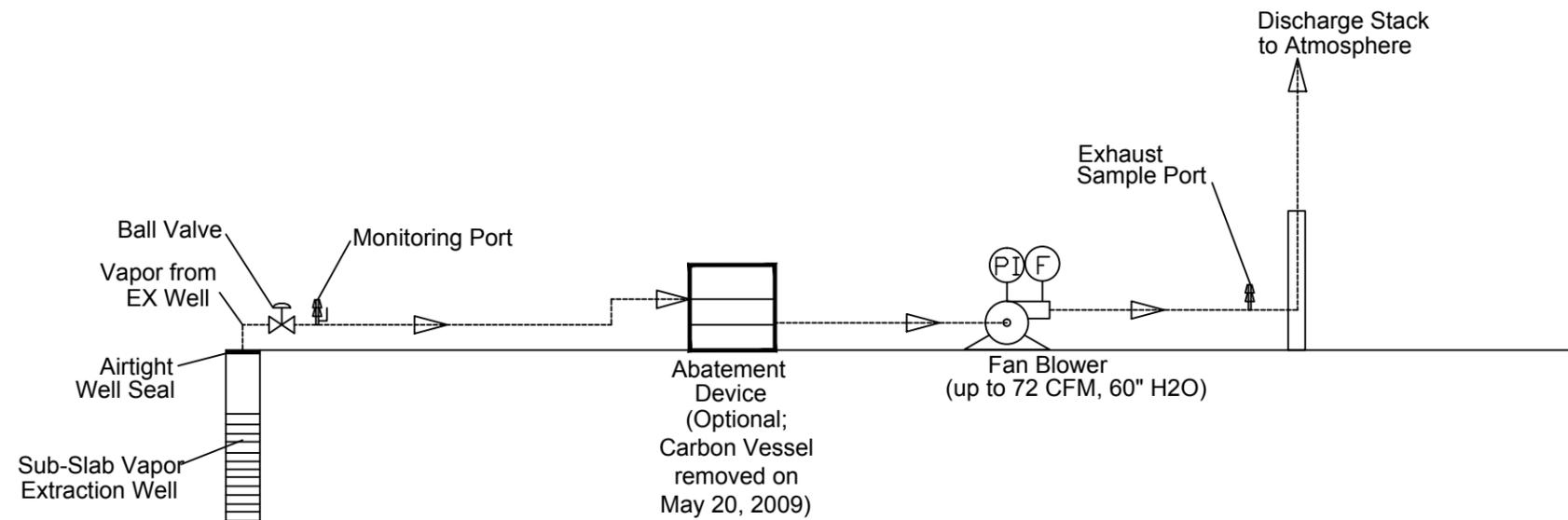
**SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT**

Searway Property  
 649 Pacific Avenue  
 Alameda, California

|                         |
|-------------------------|
| PROJECT:<br>103.001.001 |
| FIGURE:<br>3            |



# SUB-SLAB DEPRESSURIZATION SYSTEM PROCESS AND INSTRUMENTATION DIAGRAM



### LEGEND

-  Process Flow Direction
-  Pressure Indicator
-  Flow Indicator

REF. 103\_002\SS DEPRESS PID.DWG

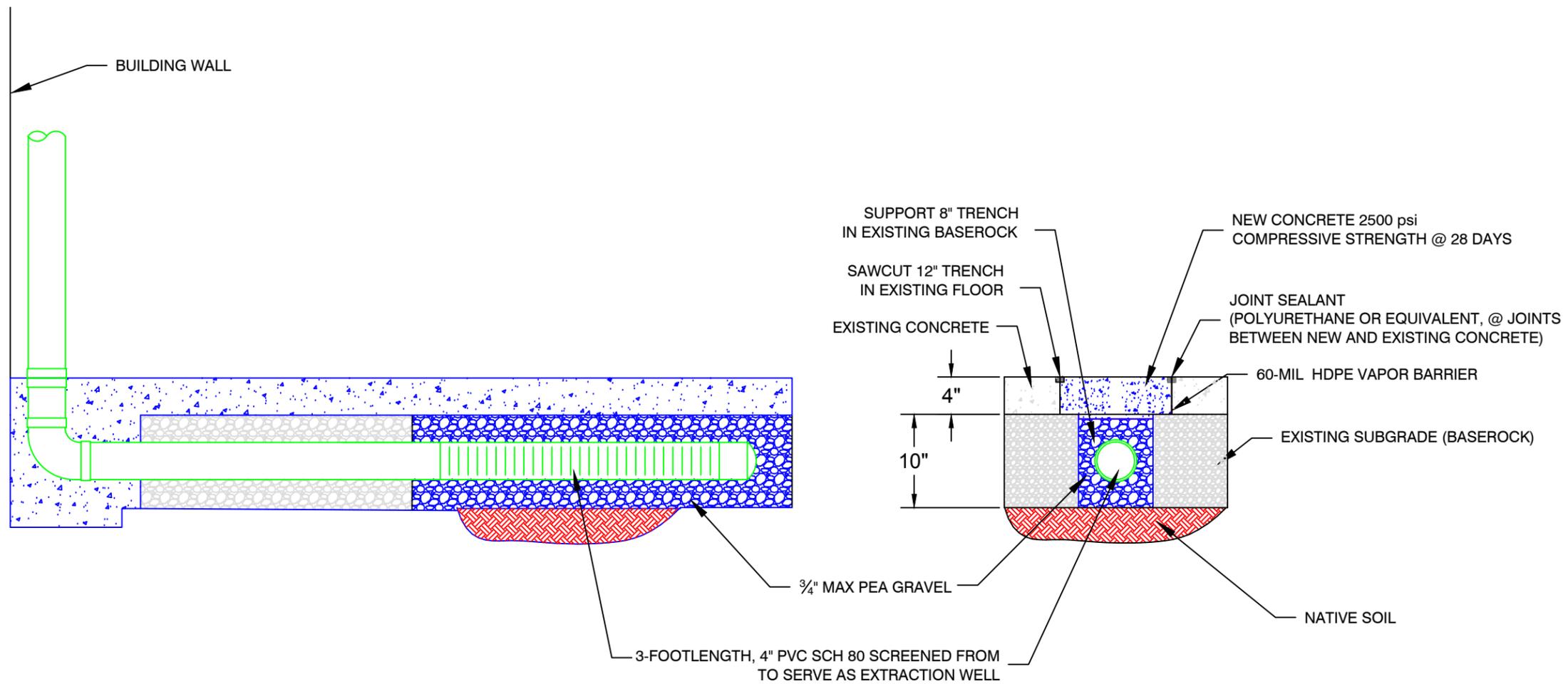
PREPARED BY  
  
**TRINITY**  
*source group, inc.*  
 Environmental Consultants  
 500 Chestnut Street, Suite 225  
 Santa Cruz, California 95060  
 v: 831.426.5600  
 f: 831.426.5602

SUB-SLAB DEPRESSURIZATION SYSTEM - PROCESS AND INSTRUMENTATION DIAGRAM

Searway Property  
 649 Pacific Avenue  
 Alameda, California

PROJECT:  
103.001.001

FIGURE:  
4



PIPE - WELL LATERAL DETAIL (TYPICAL)

TRENCH DETAIL (TYPICAL)

TYPICAL EXTRACTION WELL DETAIL  
BELOW GROUND COMPLETION

REF. 103\_002\EXWELL DTL.DWG

PREPARED BY  
  
**TRINITY**  
*source group, inc.*  
 Environmental Consultants  
 500 Chestnut Street, Suite 225  
 Santa Cruz, California 95060  
 v: 831.426.5600  
 f: 831.426.5602

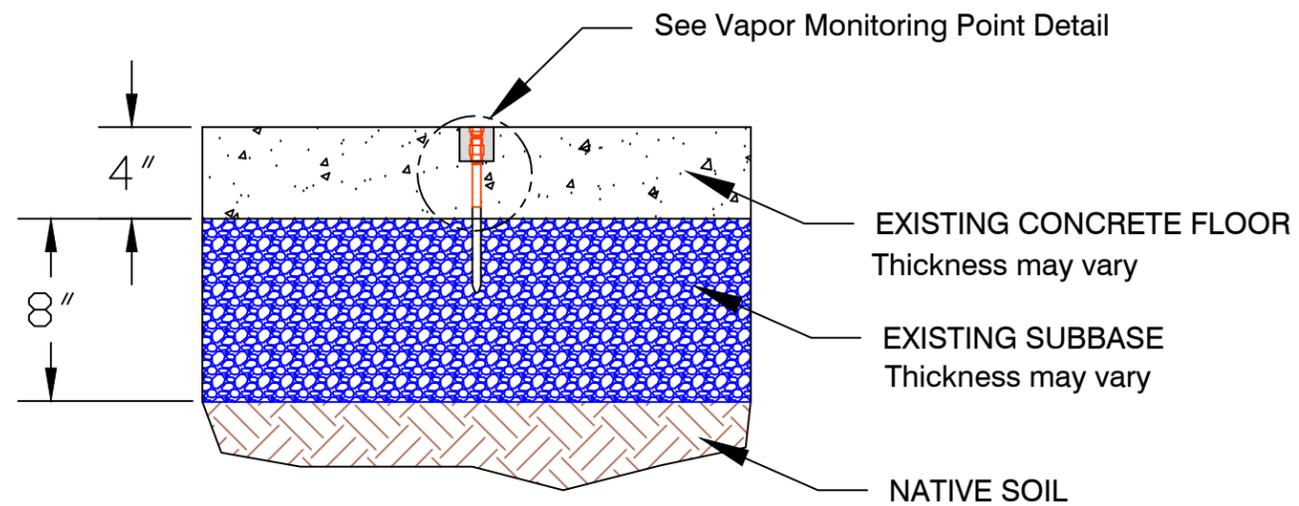
SUB-SLAB DEPRESSURIZATION SYSTEM - EXTRACTION WELL DETAIL

Searway Property  
 649 Pacific Avenue  
 Alameda, California

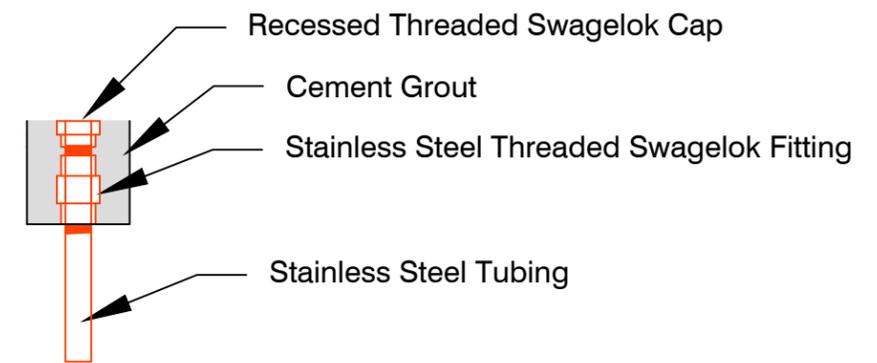
PROJECT:  
103.001.001

FIGURE:

5



EXISTING FLOOR AND SUB-SLAB  
CONSTRUCTION (TYPICAL)



VAPOR MONITORING POINT DETAIL  
Scale 1" = 2"

REF. 103\_002\VPR MON PT.DWG

PREPARED BY  

**TRINITY**  
*source group, inc.*  
 Environmental Consultants  
 500 Chestnut Street, Suite 225  
 Santa Cruz, California 95060  
 v: 831.426.5600  
 f: 831.426.5602

SUB-SLAB VAPOR MONITORING POINT DETAIL

Searway Property  
 649 Pacific Avenue  
 Alameda, California

PROJECT:  
103.001.001

FIGURE:  
6

**ATTACHMENT A**

**O&M FIELD DATA SHEETS**

---



500 Chestnut Street, Suite 225  
Santa Cruz, California 95060  
v: 831.426.5600  
f: 831.426.5602

**Sub-Slab Depressurization System-**  
**----- O&M Data**

Client: **Timber Del Properties, L.L.C.**

Project #: **103.001.001**

Address: **649 Pacific Ave. Alameda CA**

Date: **3/25/13**

Personnel: **SLJ**

|  |   |   |
|--|---|---|
| Arrival System Status:   | <input checked="" type="radio"/> On / <input type="radio"/> Off | If Off Explain Why?   |
| Departure System Status:   | <input checked="" type="radio"/> On / <input type="radio"/> Off | If Off Explain Why?   |
| Vapor Concentration Readings in Parts Per Million Vapor (PPMV) using Photo Ionization Detector (PID) |   |   |
| Tedlar Bag Collected?  | <input checked="" type="radio"/> Yes / <input type="radio"/> No | Summa Vessel Collected? Yes / <input checked="" type="radio"/> No |
| Collected? <del>Yes</del> / No   | Effluent (After Vacuum Unit)                                    | PPMV  |
| Collected? <input checked="" type="radio"/> Yes / <input type="radio"/> No                           | Influent (Before Vacuum Unit) <input checked="" type="radio"/>  | PPMV  |

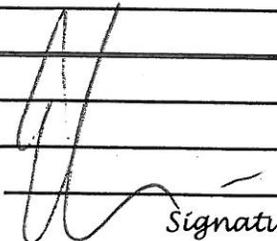
Effluent Flow Rate (read from digital readout on vacuum control) **FPM 45 cfm**

Effluent Flow Rate and Temperature (measured with hand held Anemometer in discharge pipe slot)  
**354 FPM** **61.7 Degrees F**  
*(9" dia pipe)*

Vacuum (measured at influent sample port) **NOT measured** -inches of mercury (-in Hg)

Smoke Pen Leak Test  Pass  Fail

Notes: upon annual the trap not in place, placed in position, no the in system, system set to spd 1 = 45 cfm  
sample collected from effluent sample port  
3/25/13 @ 1030

  
Signature

**ATTACHMENT B**

**CERTIFIED ANALYTICAL REPORT, CHAIN-OF-CUSTODY AND  
GEOTRACKER UPLOAD DOCUMENTATION**

---



David Reinsma  
Trinity Source Group  
500 Chestnut St, Suite 225  
Santa Cruz, California 95060  
Tel: 831-426-5600; Cell 831-227 4724  
Fax: 831-426-5602  
Email: dar@tsgcorp.net  
RE: 649 Pacific Ave, Alameda, CA

Work Order No.: 1303154

Dear David Reinsma:

Torrent Laboratory, Inc. received 1 sample(s) on March 25, 2013 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

---

Patti Sandrock  
QA Officer

April 01, 2013

---

Date



**Date:** 4/1/2013

---

**Client:** Trinity Source Group

**Project:** 649 Pacific Ave, Alameda, CA

**Work Order:** 1303154

### **CASE NARRATIVE**

---

No issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.





## Sample Result Summary

Report prepared for: David Reinsma  
Trinity Source Group

Date Received: 03/25/13

Date Reported: 04/01/13

1303154-001A

### EFFLUENT

| <u>Parameters:</u>   | <u>Analysis Method</u> | <u>DF</u> | <u>MDL</u> | <u>PQL</u> | <u>Results ug/m3</u> |
|----------------------|------------------------|-----------|------------|------------|----------------------|
| Chloroform           | ETO15                  | 2         | 2.5        | 9.8        | 38.5                 |
| Carbon Tetrachloride | ETO15                  | 2         | 1.7        | 6.3        | 567                  |
| Tetrachloroethylene  | ETO15                  | 2         | 1.8        | 6.8        | 578                  |



## SAMPLE RESULTS

**Report prepared for:** David Reinsma  
Trinity Source Group

**Date Received:** 03/25/13  
**Date Reported:** 04/01/13

|                               |                               |                               |              |
|-------------------------------|-------------------------------|-------------------------------|--------------|
| <b>Client Sample ID:</b>      | EFFLUENT                      | <b>Lab Sample ID:</b>         | 1303154-001A |
| <b>Project Name/Location:</b> | 649 Pacific Ave, Alameda, CA  | <b>Sample Matrix:</b>         | Soil Vapor   |
| <b>Project Number:</b>        |                               | <b>Certified Clean WO # :</b> |              |
| <b>Date/Time Sampled:</b>     | 03/25/13 / 10:30              | <b>Received PSI :</b>         | 0.0          |
| <b>Canister/Tube ID:</b>      |                               | <b>Corrected PSI :</b>        | 0.0          |
| <b>Collection Volume (L):</b> | 0.00                          |                               |              |
| <b>Tag Number:</b>            | 649 Pacific Ave., Alameda, CA |                               |              |

| Parameters:                    | Analysis Method | Prep Date | Date Analyzed | DF | MDL ug/m3 | PQL ug/m3 | Results ug/m3 | Results ppbv | Lab Qualifier | Analytical Batch | Prep Batch |
|--------------------------------|-----------------|-----------|---------------|----|-----------|-----------|---------------|--------------|---------------|------------------|------------|
| Dichlorodifluoromethane        | ETO15           | NA        | 03/25/13      | 2  | 3.0       | 10        | ND            | ND           |               | 414735           | NA         |
| 1,1-Difluoroethane             | ETO15           | NA        | 03/25/13      | 2  | 1.0       | 2.7       | ND            | ND           |               | 414735           | NA         |
| 1,2-Dichlorotetrafluoroethane  | ETO15           | NA        | 03/25/13      | 2  | 9.9       | 28        | ND            | ND           |               | 414735           | NA         |
| Chloromethane                  | ETO15           | NA        | 03/25/13      | 2  | 0.64      | 2.1       | ND            | ND           |               | 414735           | NA         |
| Vinyl Chloride                 | ETO15           | NA        | 03/25/13      | 2  | 1.3       | 5.2       | ND            | ND           |               | 414735           | NA         |
| 1,3-Butadiene                  | ETO15           | NA        | 03/25/13      | 2  | 0.89      | 2.2       | ND            | ND           |               | 414735           | NA         |
| Bromomethane                   | ETO15           | NA        | 03/25/13      | 2  | 1.4       | 3.9       | ND            | ND           |               | 414735           | NA         |
| Chloroethane                   | ETO15           | NA        | 03/25/13      | 2  | 1.0       | 2.6       | ND            | ND           |               | 414735           | NA         |
| Trichlorofluoromethane         | ETO15           | NA        | 03/25/13      | 2  | 3.6       | 11        | ND            | ND           |               | 414735           | NA         |
| 1,1-Dichloroethene             | ETO15           | NA        | 03/25/13      | 2  | 1.2       | 4.0       | ND            | ND           |               | 414735           | NA         |
| Freon 113                      | ETO15           | NA        | 03/25/13      | 2  | 1.7       | 7.7       | ND            | ND           |               | 414735           | NA         |
| Carbon Disulfide               | ETO15           | NA        | 03/25/13      | 2  | 1.6       | 6.2       | ND            | ND           |               | 414735           | NA         |
| 2-Propanol (Isopropyl Alcohol) | ETO15           | NA        | 03/25/13      | 2  | 1.9       | 40        | ND            | ND           |               | 414735           | NA         |
| Methylene Chloride             | ETO15           | NA        | 03/25/13      | 2  | 1.2       | 56        | ND            | ND           |               | 414735           | NA         |
| Acetone                        | ETO15           | NA        | 03/25/13      | 2  | 1.8       | 38        | ND            | ND           |               | 414735           | NA         |
| trans-1,2-Dichloroethene       | ETO15           | NA        | 03/25/13      | 2  | 1.3       | 4.0       | ND            | ND           |               | 414735           | NA         |
| Hexane                         | ETO15           | NA        | 03/25/13      | 2  | 1.1       | 3.5       | ND            | ND           |               | 414735           | NA         |
| MTBE                           | ETO15           | NA        | 03/25/13      | 2  | 1.7       | 3.6       | ND            | ND           |               | 414735           | NA         |
| tert-Butanol                   | ETO15           | NA        | 03/25/13      | 2  | 1.8       | 17        | ND            | ND           |               | 414735           | NA         |
| Diisopropyl ether (DIPE)       | ETO15           | NA        | 03/25/13      | 2  | 1.8       | 4.2       | ND            | ND           |               | 414735           | NA         |
| 1,1-Dichloroethane             | ETO15           | NA        | 03/25/13      | 2  | 1.5       | 4.1       | ND            | ND           |               | 414735           | NA         |
| ETBE                           | ETO15           | NA        | 03/25/13      | 2  | 1.4       | 4.2       | ND            | ND           |               | 414735           | NA         |
| cis-1,2-Dichloroethene         | ETO15           | NA        | 03/25/13      | 2  | 1.1       | 4.0       | ND            | ND           |               | 414735           | NA         |
| Chloroform                     | ETO15           | NA        | 03/25/13      | 2  | 2.5       | 9.8       | 38.5          | 7.86         |               | 414735           | NA         |
| Vinyl Acetate                  | ETO15           | NA        | 03/25/13      | 2  | 1.1       | 3.5       | ND            | ND           |               | 414735           | NA         |
| Carbon Tetrachloride           | ETO15           | NA        | 03/25/13      | 2  | 1.7       | 6.3       | 567           | 90.00        |               | 414735           | NA         |
| 1,1,1-Trichloroethane          | ETO15           | NA        | 03/25/13      | 2  | 1.7       | 5.5       | ND            | ND           |               | 414735           | NA         |
| 2-Butanone (MEK)               | ETO15           | NA        | 03/25/13      | 2  | 1.3       | 3.0       | ND            | ND           |               | 414735           | NA         |
| Ethyl Acetate                  | ETO15           | NA        | 03/25/13      | 2  | 1.5       | 3.6       | ND            | ND           |               | 414735           | NA         |
| Tetrahydrofuran                | ETO15           | NA        | 03/25/13      | 2  | 0.60      | 3.0       | ND            | ND           |               | 414735           | NA         |
| Benzene                        | ETO15           | NA        | 03/25/13      | 2  | 1.4       | 3.2       | ND            | ND           |               | 414735           | NA         |
| TAME                           | ETO15           | NA        | 03/25/13      | 2  | 0.72      | 4.2       | ND            | ND           |               | 414735           | NA         |
| 1,2-Dichloroethane (EDC)       | ETO15           | NA        | 03/25/13      | 2  | 2.0       | 4.1       | ND            | ND           |               | 414735           | NA         |
| Trichloroethylene              | ETO15           | NA        | 03/25/13      | 2  | 2.8       | 11        | ND            | ND           |               | 414735           | NA         |
| 1,2-Dichloropropane            | ETO15           | NA        | 03/25/13      | 2  | 2.6       | 9.2       | ND            | ND           |               | 414735           | NA         |



## SAMPLE RESULTS

**Report prepared for:** David Reinsma  
Trinity Source Group

**Date Received:** 03/25/13  
**Date Reported:** 04/01/13

|                               |                               |                               |              |
|-------------------------------|-------------------------------|-------------------------------|--------------|
| <b>Client Sample ID:</b>      | EFFLUENT                      | <b>Lab Sample ID:</b>         | 1303154-001A |
| <b>Project Name/Location:</b> | 649 Pacific Ave, Alameda, CA  | <b>Sample Matrix:</b>         | Soil Vapor   |
| <b>Project Number:</b>        |                               | <b>Certified Clean WO # :</b> |              |
| <b>Date/Time Sampled:</b>     | 03/25/13 / 10:30              | <b>Received PSI :</b>         | 0.0          |
| <b>Canister/Tube ID:</b>      |                               | <b>Corrected PSI :</b>        | 0.0          |
| <b>Collection Volume (L):</b> | 0.00                          |                               |              |
| <b>Tag Number:</b>            | 649 Pacific Ave., Alameda, CA |                               |              |

| Parameters:                 | Analysis Method | Prep Date | Date Analyzed | DF | MDL ug/m3 | PQL ug/m3 | Results ug/m3 | Results ppbv | Lab Qualifier | Analytical Batch | Prep Batch |
|-----------------------------|-----------------|-----------|---------------|----|-----------|-----------|---------------|--------------|---------------|------------------|------------|
| Bromodichloromethane        | ETO15           | NA        | 03/25/13      | 2  | 1.8       | 6.7       | ND            | ND           |               | 414735           | NA         |
| 1,4-Dioxane                 | ETO15           | NA        | 03/25/13      | 2  | 2.5       | 7.2       | ND            | ND           |               | 414735           | NA         |
| trans-1,3-Dichloropropene   | ETO15           | NA        | 03/25/13      | 2  | 1.7       | 4.5       | ND            | ND           |               | 414735           | NA         |
| Toluene                     | ETO15           | NA        | 03/25/13      | 2  | 1.9       | 3.8       | ND            | ND           |               | 414735           | NA         |
| 4-Methyl-2-Pentanone (MIBK) | ETO15           | NA        | 03/25/13      | 2  | 1.7       | 4.1       | ND            | ND           |               | 414735           | NA         |
| cis-1,3-Dichloropropene     | ETO15           | NA        | 03/25/13      | 2  | 2.3       | 4.5       | ND            | ND           |               | 414735           | NA         |
| Tetrachloroethylene         | ETO15           | NA        | 03/25/13      | 2  | 1.8       | 6.8       | 578           | 85.00        |               | 414735           | NA         |
| 1,1,2-Trichloroethane       | ETO15           | NA        | 03/25/13      | 2  | 1.9       | 5.5       | ND            | ND           |               | 414735           | NA         |
| Dibromochloromethane        | ETO15           | NA        | 03/25/13      | 2  | 3.5       | 8.5       | ND            | ND           |               | 414735           | NA         |
| 1,2-Dibromoethane (EDB)     | ETO15           | NA        | 03/25/13      | 2  | 4.1       | 15        | ND            | ND           |               | 414735           | NA         |
| <hr/>                       |                 |           |               |    |           |           |               |              |               |                  |            |
| 2-Hexanone                  | ETO15           | NA        | 03/25/13      | 2  | 2.2       | 8.2       | ND            | ND           |               | 414735           | NA         |
| Ethyl Benzene               | ETO15           | NA        | 03/25/13      | 2  | 2.0       | 4.3       | ND            | ND           |               | 414735           | NA         |
| Chlorobenzene               | ETO15           | NA        | 03/25/13      | 2  | 1.4       | 4.6       | ND            | ND           |               | 414735           | NA         |
| 1,1,1,2-Tetrachloroethane   | ETO15           | NA        | 03/25/13      | 2  | 2.1       | 6.9       | ND            | ND           |               | 414735           | NA         |
| m,p-Xylene                  | ETO15           | NA        | 03/25/13      | 2  | 3.2       | 8.6       | ND            | ND           |               | 414735           | NA         |
| o-Xylene                    | ETO15           | NA        | 03/25/13      | 2  | 1.6       | 4.3       | ND            | ND           |               | 414735           | NA         |
| Styrene                     | ETO15           | NA        | 03/25/13      | 2  | 1.4       | 4.4       | ND            | ND           |               | 414735           | NA         |
| Bromoform                   | ETO15           | NA        | 03/25/13      | 2  | 2.2       | 10        | ND            | ND           |               | 414735           | NA         |
| 1,1,2,2-Tetrachloroethane   | ETO15           | NA        | 03/25/13      | 2  | 1.4       | 6.9       | ND            | ND           |               | 414735           | NA         |
| 4-Ethyl Toluene             | ETO15           | NA        | 03/25/13      | 2  | 1.6       | 4.9       | ND            | ND           |               | 414735           | NA         |
| 1,3,5-Trimethylbenzene      | ETO15           | NA        | 03/25/13      | 2  | 1.5       | 4.9       | ND            | ND           |               | 414735           | NA         |
| 1,2,4-Trimethylbenzene      | ETO15           | NA        | 03/25/13      | 2  | 1.4       | 4.9       | ND            | ND           |               | 414735           | NA         |
| 1,4-Dichlorobenzene         | ETO15           | NA        | 03/25/13      | 2  | 1.3       | 6.0       | ND            | ND           |               | 414735           | NA         |
| 1,3-Dichlorobenzene         | ETO15           | NA        | 03/25/13      | 2  | 1.7       | 6.0       | ND            | ND           |               | 414735           | NA         |
| 1,2-Dichlorobenzene         | ETO15           | NA        | 03/25/13      | 2  | 1.8       | 6.0       | ND            | ND           |               | 414735           | NA         |
| Hexachlorobutadiene         | ETO15           | NA        | 03/25/13      | 2  | 4.8       | 11        | ND            | ND           |               | 414735           | NA         |
| 1,2,4-Trichlorobenzene      | ETO15           | NA        | 03/25/13      | 2  | 6.8       | 15        | ND            | ND           |               | 414735           | NA         |
| Naphthalene                 | ETO15           | NA        | 03/25/13      | 2  | 2.9       | 10        | ND            | ND           |               | 414735           | NA         |
| (S) 4-Bromofluorobenzene    | ETO15           | NA        | 03/25/13      | 2  | 65        | 135       | 89.6 %        |              |               | 414735           | NA         |



## SAMPLE RESULTS

**Report prepared for:** David Reinsma  
Trinity Source Group

**Date Received:** 03/25/13  
**Date Reported:** 04/01/13

|                               |                               |                               |              |
|-------------------------------|-------------------------------|-------------------------------|--------------|
| <b>Client Sample ID:</b>      | EFFLUENT                      | <b>Lab Sample ID:</b>         | 1303154-001A |
| <b>Project Name/Location:</b> | 649 Pacific Ave, Alameda, CA  | <b>Sample Matrix:</b>         | Soil Vapor   |
| <b>Project Number:</b>        |                               | <b>Certified Clean WO # :</b> |              |
| <b>Date/Time Sampled:</b>     | 03/25/13 / 10:30              | <b>Received PSI :</b>         | 0.0          |
| <b>Canister/Tube ID:</b>      |                               | <b>Corrected PSI :</b>        | 0.0          |
| <b>Collection Volume (L):</b> | 0.00                          |                               |              |
| <b>Tag Number:</b>            | 649 Pacific Ave., Alameda, CA |                               |              |

| Parameters: | Analysis Method | Prep Date | Date Analyzed | DF | MDL ug/m3 | PQL ug/m3 | Results ug/m3 | Results ppbv | Lab Qualifier | Analytical Batch | Prep Batch |
|-------------|-----------------|-----------|---------------|----|-----------|-----------|---------------|--------------|---------------|------------------|------------|
|-------------|-----------------|-----------|---------------|----|-----------|-----------|---------------|--------------|---------------|------------------|------------|

*The results shown below are reported using their MDL.*

|               |      |    |          |   |     |     |    |    |  |        |    |
|---------------|------|----|----------|---|-----|-----|----|----|--|--------|----|
| Stoddard Sol. | ETO3 | NA | 03/25/13 | 2 | 350 | 700 | ND | ND |  | 414777 | NA |
|---------------|------|----|----------|---|-----|-----|----|----|--|--------|----|

**NOTE:** Reporting limit elevated due to insufficient sample quantity (tedlar bag).



## MB Summary Report

|                    |         |                           |       |                       |          |                          |        |
|--------------------|---------|---------------------------|-------|-----------------------|----------|--------------------------|--------|
| <b>Work Order:</b> | 1303154 | <b>Prep Method:</b>       | NA    | <b>Prep Date:</b>     | NA       | <b>Prep Batch:</b>       | NA     |
| <b>Matrix:</b>     | Air     | <b>Analytical Method:</b> | ETO15 | <b>Analyzed Date:</b> | 03/25/13 | <b>Analytical Batch:</b> | 414735 |
| <b>Units:</b>      | ppbv    |                           |       |                       |          |                          |        |

| Parameters                     | MDL   | PQL   | Method Blank Conc. | Lab Qualifier |  |
|--------------------------------|-------|-------|--------------------|---------------|--|
| Dichlorodifluoromethane        | 0.30  | 1.00  | ND                 |               |  |
| 1,1-Difluoroethane             | 0.18  | 10.0  | ND                 |               |  |
| 1,2-Dichlorotetrafluoroethane  | 0.70  | 2.00  | ND                 |               |  |
| Chloromethane                  | 0.15  | 0.500 | ND                 |               |  |
| Vinyl Chloride                 | 0.26  | 1.00  | ND                 |               |  |
| 1,3-Butadiene                  | 0.20  | 0.500 | ND                 |               |  |
| Bromomethane                   | 0.18  | 0.500 | ND                 |               |  |
| Chloroethane                   | 0.19  | 0.500 | ND                 |               |  |
| Trichlorofluoromethane         | 0.32  | 1.00  | ND                 |               |  |
| 1,1-Dichloroethene             | 0.15  | 0.500 | ND                 |               |  |
| Freon 113                      | 0.11  | 0.500 | ND                 |               |  |
| Carbon Disulfide               | 0.26  | 1.00  | ND                 |               |  |
| 2-Propanol (Isopropyl Alcohol) | 0.39  | 8.00  | ND                 |               |  |
| Methylene Chloride             | 0.17  | 8.00  | ND                 |               |  |
| Acetone                        | 0.37  | 8.00  | ND                 |               |  |
| trans-1,2-Dichloroethene       | 0.16  | 0.500 | ND                 |               |  |
| Hexane                         | 0.15  | 0.500 | ND                 |               |  |
| MTBE                           | 0.24  | 0.500 | ND                 |               |  |
| tert-Butanol                   | 0.22  | 2.00  | ND                 |               |  |
| Diisopropyl ether (DIPE)       | 0.21  | 0.500 | ND                 |               |  |
| 1,1-Dichloroethane             | 0.18  | 0.500 | ND                 |               |  |
| ETBE                           | 0.16  | 0.500 | ND                 |               |  |
| cis-1,2-Dichloroethene         | 0.13  | 0.500 | ND                 |               |  |
| Chloroform                     | 0.25  | 1.00  | ND                 |               |  |
| Vinyl Acetate                  | 0.16  | 0.500 | ND                 |               |  |
| Carbon Tetrachloride           | 0.14  | 0.500 | ND                 |               |  |
| 1,1,1-Trichloroethane          | 0.15  | 0.500 | ND                 |               |  |
| 2-Butanone (MEK)               | 0.21  | 0.500 | ND                 |               |  |
| Ethyl Acetate                  | 0.21  | 0.500 | ND                 |               |  |
| Tetrahydrofuran                | 0.10  | 0.500 | ND                 |               |  |
| Benzene                        | 0.21  | 0.500 | ND                 |               |  |
| TAME                           | 0.086 | 0.500 | ND                 |               |  |
| 1,2-Dichloroethane (EDC)       | 0.24  | 0.500 | ND                 |               |  |
| Trichloroethylene              | 0.26  | 1.00  | ND                 |               |  |
| 1,2-Dichloropropane            | 0.29  | 1.00  | ND                 |               |  |
| Bromodichloromethane           | 0.13  | 0.500 | ND                 |               |  |
| 1,4-Dioxane                    | 0.35  | 1.00  | ND                 |               |  |
| trans-1,3-Dichloropropene      | 0.19  | 0.500 | ND                 |               |  |
| Toluene                        | 0.25  | 0.500 | ND                 |               |  |
| 4-Methyl-2-Pentanone (MIBK)    | 0.21  | 0.500 | ND                 |               |  |
| cis-1,3-Dichloropropene        | 0.25  | 0.500 | ND                 |               |  |



### MB Summary Report

|                    |         |                           |       |                       |          |                          |        |
|--------------------|---------|---------------------------|-------|-----------------------|----------|--------------------------|--------|
| <b>Work Order:</b> | 1303154 | <b>Prep Method:</b>       | NA    | <b>Prep Date:</b>     | NA       | <b>Prep Batch:</b>       | NA     |
| <b>Matrix:</b>     | Air     | <b>Analytical Method:</b> | ETO15 | <b>Analyzed Date:</b> | 03/25/13 | <b>Analytical Batch:</b> | 414735 |
| <b>Units:</b>      | ppbv    |                           |       |                       |          |                          |        |

| Parameters                | MDL  | PQL   | Method Blank Conc. | Lab Qualifier |
|---------------------------|------|-------|--------------------|---------------|
| Tetrachloroethylene       | 0.13 | 0.500 | ND                 |               |
| 1,1,2-Trichloroethane     | 0.17 | 0.500 | ND                 |               |
| Dibromochloromethane      | 0.20 | 0.500 | ND                 |               |
| 1,2-Dibromoethane (EDB)   | 0.27 | 1.00  | ND                 |               |
| 2-Hexanone                | 0.27 | 1.00  | ND                 |               |
| Ethyl Benzene             | 0.23 | 0.500 | ND                 |               |
| Chlorobenzene             | 0.15 | 0.500 | ND                 |               |
| 1,1,1,2-Tetrachloroethane | 0.15 | 0.500 | ND                 |               |
| m,p-Xylene                | 0.38 | 1.00  | ND                 |               |
| o-Xylene                  | 0.19 | 0.500 | ND                 |               |
| Styrene                   | 0.16 | 0.500 | ND                 |               |
| Bromoform                 | 0.11 | 0.500 | ND                 |               |
| 1,1,2,2-Tetrachloroethane | 0.10 | 0.500 | ND                 |               |
| 4-Ethyl Toluene           | 0.17 | 0.500 | ND                 |               |
| 1,3,5-Trimethylbenzene    | 0.15 | 0.500 | ND                 |               |
| 1,2,4-Trimethylbenzene    | 0.14 | 0.500 | ND                 |               |
| 1,4-Dichlorobenzene       | 0.11 | 0.500 | ND                 |               |
| 1,3-Dichlorobenzene       | 0.14 | 0.500 | ND                 |               |
| 1,2-Dichlorobenzene       | 0.15 | 0.500 | ND                 |               |
| Hexachlorobutadiene       | 0.22 | 0.500 | ND                 |               |
| 1,2,4-Trichlorobenzene    | 0.46 | 1.00  | ND                 |               |
| Naphthalene               | 0.28 | 1.00  | ND                 |               |
| (S) 4-Bromofluorobenzene  |      |       | 86.0               |               |

|                    |         |                           |      |                       |          |                          |        |
|--------------------|---------|---------------------------|------|-----------------------|----------|--------------------------|--------|
| <b>Work Order:</b> | 1303154 | <b>Prep Method:</b>       | NA   | <b>Prep Date:</b>     | NA       | <b>Prep Batch:</b>       | NA     |
| <b>Matrix:</b>     | Air     | <b>Analytical Method:</b> | ETO3 | <b>Analyzed Date:</b> | 03/25/13 | <b>Analytical Batch:</b> | 414777 |
| <b>Units:</b>      | ppbv    |                           |      |                       |          |                          |        |

| Parameters    | MDL | PQL | Method Blank Conc. | Lab Qualifier |
|---------------|-----|-----|--------------------|---------------|
| TPH-Gasoline  | 50  | 100 | ND                 |               |
| Stoddard Sol. | 50  | 100 | ND                 |               |



## LCS/LCSD Summary Report

*Raw values are used in quality control assessment.*

|                    |         |                           |       |                       |          |                          |        |
|--------------------|---------|---------------------------|-------|-----------------------|----------|--------------------------|--------|
| <b>Work Order:</b> | 1303154 | <b>Prep Method:</b>       | NA    | <b>Prep Date:</b>     | NA       | <b>Prep Batch:</b>       | NA     |
| <b>Matrix:</b>     | Air     | <b>Analytical Method:</b> | ETO15 | <b>Analyzed Date:</b> | 03/25/13 | <b>Analytical Batch:</b> | 414735 |
| <b>Units:</b>      | ppbv    |                           |       |                       |          |                          |        |

| Parameters               | MDL  | PQL   | Method Blank Conc. | Spike Conc. | LCS % Recovery | LCSD % Recovery | LCS/LCSD % RPD | % Recovery Limits | % RPD Limits | Lab Qualifier |
|--------------------------|------|-------|--------------------|-------------|----------------|-----------------|----------------|-------------------|--------------|---------------|
| 1,1-Dichloroethene       | 0.15 | 0.500 | ND                 | 20          | 110            | 110             | 0.546          | 65 - 135          | 30           |               |
| Benzene                  | 0.21 | 0.500 | ND                 | 20          | 111            | 108             | 3.02           | 65 - 135          | 30           |               |
| Trichloroethylene        | 0.26 | 1.00  | ND                 | 20          | 100            | 101             | 0.843          | 65 - 135          | 30           |               |
| Toluene                  | 0.25 | 0.500 | ND                 | 20          | 105            | 109             | 3.13           | 65 - 135          | 30           |               |
| Chlorobenzene            | 0.15 | 0.500 | ND                 | 20          | 94.6           | 103             | 8.94           | 65 - 135          | 30           |               |
| (S) 4-Bromofluorobenzene |      |       | ND                 | 20          | 105            | 105             |                | 65 - 135          |              |               |

|                    |         |                           |      |                       |          |                          |        |
|--------------------|---------|---------------------------|------|-----------------------|----------|--------------------------|--------|
| <b>Work Order:</b> | 1303154 | <b>Prep Method:</b>       | NA   | <b>Prep Date:</b>     | NA       | <b>Prep Batch:</b>       | NA     |
| <b>Matrix:</b>     | Air     | <b>Analytical Method:</b> | ETO3 | <b>Analyzed Date:</b> | 03/25/13 | <b>Analytical Batch:</b> | 414777 |
| <b>Units:</b>      | ppbv    |                           |      |                       |          |                          |        |

| Parameters   | MDL | PQL | Method Blank Conc. | Spike Conc. | LCS % Recovery | LCSD % Recovery | LCS/LCSD % RPD | % Recovery Limits | % RPD Limits | Lab Qualifier |
|--------------|-----|-----|--------------------|-------------|----------------|-----------------|----------------|-------------------|--------------|---------------|
| TPH-Gasoline | 50  | 100 | ND                 | 500         | 107            | 112             | 4.63           | 50 - 150          | 30           |               |



## Laboratory Qualifiers and Definitions

### DEFINITIONS:

|   |
|---|
| <b>Accuracy/Bias (% Recovery)</b> - The closeness of agreement between an observed value and an accepted reference value.   |
| <b>Blank (Method/Preparation Blank)</b> -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.   |
| <b>Duplicate</b> - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)  |
| <b>Laboratory Control Sample (LCS ad LCSD)</b> - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.   |
| <b>Matrix</b> - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)  |
| <b>Matrix Spike (MS/MSD)</b> - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.  |
| <b>Method Detection Limit (MDL)</b> - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero  |
| <b>Practical Quantitation Limit (PQL)</b> - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.   |
| <b>Precision (%RPD)</b> - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates   |
| <b>Surrogate (S) or (Surr)</b> - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis  |
| <b>Tentatively Identified Compound (TIC)</b> - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.   |
| <b>Units:</b> the unit of measure used to express the reported result - <b>mg/L</b> and <b>mg/Kg</b> (equivalent to PPM - parts per million in <b>liquid</b> and <b>solid</b> ), <b>ug/L</b> and <b>ug/Kg</b> (equivalent to PPB - parts per billion in <b>liquid</b> and <b>solid</b> ), <b>ug/m3</b> , <b>mg.m3</b> , <b>ppbv</b> and <b>ppmv</b> (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), <b>ug/Wipe</b> ( concentration found on the surface of a single Wipe usually taken over a 100cm <sup>2</sup> surface) |

### LABORATORY QUALIFIERS:

|   |
|---|
| <p><b>B</b> - Indicates when the analyte is found in the associated method or preparation blank</p> <p><b>D</b> - Surrogate is not recoverable due to the necessary dilution of the sample</p> <p><b>E</b> - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.</p> <p><b>H</b>- Indicates that the recommended holding time for the analyte or compound has been exceeded</p> <p><b>J</b>- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative</p> <p><b>NA</b> - Not Analyzed</p> <p><b>N/A</b> - Not Applicable</p> <p><b>NR</b> - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added</p> <p><b>R</b>- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts</p> <p><b>S</b>- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative</p> <p><b>X</b> -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.</p> |
|---|





## Sample Receipt Checklist

Client Name: Trinity Source Group

Project Name: 649 Pacific Ave. Alameda, CA

Work Order No.: 1303154

Date and Time Received: 3/25/2013 11:45

Received By: ng

Physically Logged By: ng

Checklist Completed By: ng

Carrier Name: Client Drop Off

### Chain of Custody (COC) Information

Chain of custody present? Yes  
Chain of custody signed when relinquished and received? Yes  
Chain of custody agrees with sample labels? Yes  
Custody seals intact on sample bottles? Not Present

### Sample Receipt Information

Custody seals intact on shipping container/cooler? Not Present  
Shipping Container/Cooler In Good Condition? Not Present  
Samples in proper container/bottle? Yes  
Samples containers intact? Yes  
Sufficient sample volume for indicated test? Yes

### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes  
Container/Temp Blank temperature in compliance? Yes Temperature: 20 °C  
Water-VOA vials have zero headspace? No VOA vials submitted  
Water-pH acceptable upon receipt? N/A  
pH Checked by: n/a pH Adjusted by: n/a



STATE WATER RESOURCES CONTROL BOARD  
**GEOTRACKER ESI**

UPLOADING A EDF FILE

**SUCCESS**

**Processing is complete. No errors were found!  
Your file has been successfully submitted!**

|                                    |   |
|------------------------------------|---|
| <b><u>Submittal Type:</u></b>      | <b>EDF</b>  |
| <b><u>Report Title:</u></b>        | <b>SUBSLABDEPRESSURIZATIONSYSTEMAIRDATA_1Q2013</b>      |
| <b><u>Report Type:</u></b>         | <b>Operation and Maintenance Plan/Monitoring Report</b> |
| <b><u>Facility Global ID:</u></b>  | <b>SL0600150413</b>                                     |
| <b><u>Facility Name:</u></b>       | <b>SEARWAY PROPERTY</b>                                 |
| <b><u>File Name:</u></b>           | <b>TSG 1303154 649 Pacific Ave EDF.zip</b>              |
| <b><u>Organization Name:</u></b>   | <b>Trinity Source Group, Inc.</b>                       |
| <b><u>Username:</u></b>            | <b>TRINITY SOURCE GROUP</b>                             |
| <b><u>IP Address:</u></b>          | <b>69.198.129.110</b>                                   |
| <b><u>Submittal Date/Time:</u></b> | <b>4/17/2013 3:35:23 PM</b>                             |
| <b><u>Confirmation Number:</u></b> | <b>6124225676</b>                                       |

**[VIEW QC REPORT](#)**

**[VIEW DETECTIONS REPORT](#)**

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**ATTACHMENT C**

**BAAQMD – PERMIT TO OPERATE**

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06/06/13

B8970



**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

939 ELLIS STREET  
SAN FRANCISCO, CALIFORNIA 94109  
(415) 771-6000

**PERMIT  
TO OPERATE**

Plant# 18970

Page: 1

Expires: APR 1, 2014

This document does not permit the holder to violate any District regulation or other law.

Don Lindsey  
Searway Property  
2424 Central Avenue  
Alameda, CA 94501

Location: 649 Pacific Avenue  
Alameda, CA 94501

| S# | DESCRIPTION   | [Schedule] | PAID |
|----|---|------------|------|
| 1  | CHEM> Contaminated soil remediation, Contaminated soil vapor<br>Sub-Slab Venting System | [G1]       | 1292 |

1 Permit Source, 0 Exempt Sources

\*\*\* See attached Permit Conditions \*\*\*

The operating parameters described above are based on information supplied by permit holder and may differ from the limits set forth in the attached conditions of the Permit to Operate. The limits of operation in the permit conditions are not to be exceeded. Exceeding these limits is considered a violation of District regulations subject to enforcement action.



**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

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**PERMIT  
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Plant# 18970

Page: 2

Expires: APR 1, 2014

This document does not permit the holder to violate any District regulation or other law.

\*\*\* PERMIT CONDITIONS \*\*\*

=====

COND# 23992 applies to S# 1

- 1. In no event shall emissions to the atmosphere of the following compounds exceed the corresponding emission limits in pounds per day:

Toxic Compound Emissions in #/day

|                      |        |
|----------------------|--------|
| Benzene              | 1.8E-2 |
| Chloroform           | 9.3E-2 |
| Carbon Tetrachloride | 1.2E-2 |
| Methylene Chloride   | 4.9E-1 |
| Perchloroethylene    | 8.2E-2 |
| Trichloroethylene    | 2.5E-1 |
| Vinyl Chloride       | 6.6E-3 |

In addition, emissions of total volatile organic compounds shall not exceed 10 pounds per day. Soil vapor flow rate shall not exceed 72 scfm. [basis: Reg. 2-1-316, 2-2-301, 8-47-113]

- 2. To determine compliance with Condition 1, the operator of this source shall:
  - a. Analyze exhaust gas to determine the concentration of the compounds listed in Condition 1 and the total volatile organic compounds present for each of the first two days of operation. Thereafter, the exhaust gas shall be analyzed to determine the concentration of the compounds listed in condition 1 and total volatile organic compounds present once every 92 days on a quarterly basis.

Written authorization must be received from the District before any change in sampling frequency.

- b. Emissions in pounds per day shall be calculated for those compounds listed in condition 1 as well as the total volatile organic compounds.
- c. Submit to the District's Engineering Division the test results and emission calculations for the first two days of operation within one month of the testing date. Samples shall be analyzed according to modified EPA test methods TO-15 or equivalent to determine the concentrations those compounds listed



**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

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(415) 771-6000

**PERMIT  
TO OPERATE**

Plant# 18970

Page: 3

Expires: APR 1, 2014

This document does not permit the holder to violate any District regulation or other law.

\*\*\* PERMIT CONDITIONS \*\*\*

=====

in condition 1 as well as the total volatile organic compounds.

- 3. The operator of this source shall maintain the following information in a District-approved log for each month of operation of the source:
  - a. dates of operation;
  - b. exhaust flow rate;
  - c. exhaust sampling date;
  - d. analysis results;
  - e. calculated emissions of POC and listed compounds in pounds per day.

Such records shall be retained and made available for inspection by the District for two years following the date the data is recorded. [basis: Reg. 1-523]

- 4. Any non-compliance with these conditions shall be reported to the Compliance and Enforcement Division at the time that it is first discovered. The submittal shall detail the corrective action taken and shall include the data showing the exceedance as well as the time of occurrence.
- 5. The operator shall maintain a file containing all measurements, records and other data that are required to be collected pursuant to the various provisions of this conditional Authority to Construct/Permit to Operate. All measurements, records and data required to be maintained by the applicant shall be retained for at least two years following the date the data is recorded. [basis: Reg. 1-523]
- 6. Upon final completion of the remediation project, the operator of Source S-1 shall notify the district within two weeks of decommissioning the operation.

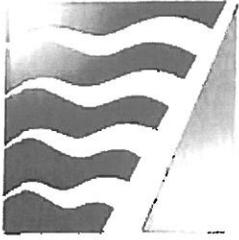
~~~~~ END OF CONDITIONS ~~~~~

**ATTACHMENT D**

**BAAQMD CORRESPONDENCE**

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**BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT**

RECEIVED  
APR 05 2012

BY: .....

March 28, 2012

Trinity Source Group, Inc.  
500 Chestnut Street, Suite 225  
Santa Cruz, CA 95060

Attention: Cora E. Olson

Application No.: 17506  
Plant No. 18970  
Equipment Location:  
*Searway Property*  
*649 Pacific Avenue*  
*Alameda, CA*

Dear Applicant:

The District has reviewed your request, dated March 19, 2012 to change the monitoring frequency from quarterly to annually. Based on the information provided, an annual monitoring schedule is both reasonable from the District's perspective and will also grant your firm the flexibility requested. Be aware that you can monitor your systems more frequently if desired.

Please keep a copy of this letter and the attached revised operating conditions (COND#23992) as verification that a monitoring schedule of annually has been approved by the District for the site subject to P/O (Plant #18970).

Please include your application number with any correspondence with the District. The District's regulations may be viewed online at [www.baaqmd.gov](http://www.baaqmd.gov) If you have any questions on this matter, please call me at (415) 749-4630.

Very truly yours,

Flora W Chan  
Air Quality Engineer II

**ALAMEDA COUNTY**

Tom Bates  
Scott Haggerty  
Jennifer Hosterman  
Nate Miley  
(Secretary)

**CONTRA COSTA COUNTY**

John Gioia  
(Chairperson)  
David Hudson  
Mary Piepho  
Mark Ross

**MARIN COUNTY**

Katie Rice

**NAPA COUNTY**

Brad Wagenknecht

**SAN FRANCISCO COUNTY**

John Avalos  
Edwin M. Lee  
Eric Mar

**SAN MATEO COUNTY**

Carole Groom  
Carol Klatt

**SANTA CLARA COUNTY**

Susan Garner  
Ash Kalra  
(Vice-Chair)  
Liz Kniss  
Ken Yeager

**SOLANO COUNTY**

James Spering

**SONOMA COUNTY**

Susan Gorin  
Shirlee Zane

Jack P. Broadbent

EXECUTIVE OFFICER/APCO

Application No. 17506  
Permit Condition No. 23992  
649 Pacifica Avenue in Alameda

COND# 23992 -----

1. In no event shall emissions to the atmosphere of the following compounds exceed the corresponding emission limits in pounds per day:

Toxic Compound Emissions in #/day

|                      |        |
|----------------------|--------|
| Benzene              | 1.8E-2 |
| Chloroform           | 9.3E-2 |
| Carbon Tetrachloride | 1.2E-2 |
| Methylene Chloride   | 4.9E-1 |
| Perchloroethylene    | 8.2E-2 |
| Trichloroethylene    | 2.5E-1 |
| Vinyl Chloride       | 6.6E-3 |

In addition, emissions of total volatile organic compounds shall not exceed 10 pounds per day. Soil vapor flow rate shall not exceed 72 scfm. [basis: Reg. 2-1-316, 2-2-301, 8-47-113]

2. To determine compliance with Condition 1, the operator of this source shall:
  - a. Analyze exhaust gas to determine the concentration of the compounds listed in Condition 1 and the total volatile organic compounds present for each of the first two days of operation. Thereafter, the exhaust gas shall be analyzed to determine the concentration of the compounds listed in condition 1 and total volatile organic compounds present once every 365 days on an annual basis. Written authorization must be received from the District before any change in sampling frequency.
  - b. Emissions in pounds per day shall be calculated for those compounds listed in condition 1 as well as the total volatile organic compounds.
  - c. Submit to the District's Engineering Division the test results and emission calculations for the first two days of operation within one month of the testing date. Samples shall be analyzed according to modified EPA test methods TO-15 or equivalent to determine the concentrations those compounds listed in condition 1 as well as the total volatile organic compounds.

Application No. 17506  
Permit Condition No. 23992  
649 Pacifica Avenue in Alameda

3. The operator of this source shall maintain the following information in a District-approved log for each year of operation of the source:
  - a. dates of operation;
  - b. exhaust flow rate;
  - c. exhaust sampling date;
  - d. analysis results;
  - e. calculated emissions of POC and listed compounds in pounds per day.

Such records shall be retained and made available for inspection by the District for two years following the date the data is recorded. [basis: Reg. 1-523]

4. Any non-compliance with these conditions shall be reported to the Compliance and Enforcement Division at the time that it is first discovered. The submittal shall detail the corrective action taken and shall include the data showing the exceedance as well as the time of occurrence.
5. The operator shall maintain a file containing all measurements, records and other data that are required to be collected pursuant to the various provisions of this conditional Authority to Construct/Permit to Operate. All measurements, records and data required to be maintained by the applicant shall be retained for at least two years following the date the data is recorded. [basis: Reg. 1-523]
6. Upon final completion of the remediation project, the operator of Source S-1 shall notify the district within two weeks of decommissioning the operation.