

Oregon Portland | Bend | Baker City

> California Oakland | Folsom | Irvine

October 4, 2018

Mr. Ed Jones, Project Manager Washington State Department of Ecology 3190 160th Avenue Southeast Bellevue, Washington 98008-5452

BY EMAIL ONLY

RE: PROGRESS REPORT, JULY THROUGH SEPTEMBER 2018 REMEDIAL INVESTIGATION MONITORING AND FEASIBILITY STUDY CAPITAL INDUSTRIES, INC. 5801 THIRD AVENUE SOUTH, SEATTLE, WASHINGTON AGREED ORDER NO. DE 10402 FARALLON PN: 457-008

Dear Mr. Jones:

Farallon Consulting, L.L.C. (Farallon) has prepared this progress report on behalf of Capital Industries, Inc. (Capital) to summarize the activities conducted during the third quarter of 2018, July through September, as part of the ongoing remedial investigation monitoring and feasibility study being conducted at the Capital facility at 5801 3rd Avenue South in Seattle, Washington (herein referred to as the Capital Site). This progress report has been prepared in accordance with Agreed Order No. DE 10402 dated April 23, 2014, entered into by potentially liable persons that include Capital; Art Brass Plating, Inc.; Blaser Die Casting Co.; and PSC Environmental Services, LLC (Burlington Environmental, LLC is a wholly owned subsidiary of PSC Environmental Services, LLC, which is a wholly owned subsidiary of Stericycle Environmental Solutions, Inc.); and by the Washington State Department of Ecology (Ecology) (Agreed Order). Capital and the other potentially liable persons listed above are collectively referred to as the West of 4th Group. The West of 4th Group site under the Agreed Order consists of Site Unit 1 (SU1) and Site Unit 2 (SU2) as depicted on the figure presented in Attachment A. The Capital Site is located in SU2.

ACTIVITIES DURING REPORTING PERIOD

Activities completed during this progress reporting period included:

• Continuing operation of vapor intrusion mitigation subslab depressurization systems (SSDSs) at the Pacific Foods Systems North Building at 5815 4th Avenue South and the Natus Medical Facility at 5900 First Avenue South in Seattle, Washington.¹

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¹ The Natus Medical Facility at 5900 First Avenue South in Seattle, Washington previously was known as the Olympic Medical Facility.



- Conducting an additional indoor air sampling event in the warehouse at the Natus Medical Facility on August 2, 2018 to resample an area where trichloroethene (TCE) was detected at an anomalously high concentration during the March 2018 indoor air sampling event.
- Submitting the *Final Revised Capital Industries Plant 4 Stage 1 Field Implementation Work Plan, West of 4th Group Site, Capital Industries, Inc., 5801 3rd Avenue South, Seattle, Washington dated July 26, 2018, prepared by Farallon (Revised Stage 1 FIWP). The Revised Stage 1 FIWP was based on Ecology comments provided to Farallon on May 24, 2018. Stage 1 of the proposed interim action includes evaluation of in situ chemical oxidation (ISCO) as a potential cleanup technology for soil and groundwater at Capital Plant 4.*
- Implementing Stage 1 of the interim action at Capital Plant 4. Stage 1 of the interim action included the following elements:
 - Baseline sampling of groundwater from observation wells OBW-1 through OBW-5 and monitoring wells MW-6 and MW-7.
 - Injection of a 3 percent solution of the chemical oxidant potassium permanganate at five injection locations within Capital Plant 4 and associated process monitoring to assess the feasibility of implementing ISCO.
 - Performance soil and groundwater monitoring.
- Conducting a semiannual groundwater monitoring and sampling event in September 2018 at select SU2 monitoring wells.

These activities are summarized in the sections that follow.

VAPOR INTRUSION MITIGATION AND REPORTING

The SSDS at the Pacific Food Systems North Building operated continuously during the third quarter of 2018, with the exception of a 24-hour period from August 22 to 23. The SSDS was turned off during this 24-hour period while potassium permanganate was injected into a boring proximate to the property boundary between Capital Industries and Pacific Food Systems as a part of Stage 1 of the interim action at Capital Plant 4 (Attachment B).

The SSDS at the Natus Medical Facility operated continuously during the third quarter of 2018. TCE was detected at a concentration of 25.3 micrograms per cubic meter in the indoor ambient air sample collected from the warehouse at the Natus Medical Facility in March 2018. In the letter regarding West of 4th Site, Agreed Order #DE 10402, Site Unit 2, Vapor Intrusion Mitigation at the Natus Medical Facility dated July 18, 2018, from Mr. Ed Jones of Ecology to Ms. Dana Cannon of West of Aspect Consulting, Ecology required resampling be conducted at the warehouse to assess whether concentrations of TCE in indoor air had decreased to acceptable levels. Farallon performed the additional air sampling event on August 2, 2018. An indoor ambient air sample was collected from the warehouse and an outdoor ambient air sample was collected from an outdoor location in an upwind direction southwest of the Natus Medical Facility. TCE and other chlorinated volatile organic compounds (CVOCs) were not detected at the laboratory practical quantitation



limits in the indoor and outdoor ambient air samples collected on August 2, 2018. Analytical results for this sampling event are provided in Attachment C. Farallon was not able to ascertain a specific source of the TCE detected in the indoor ambient air sample collected in the warehouse in March 2018. It is possible that the source of TCE was related to a commercial construction project on the east-adjacent parcel that was ongoing in March 2018. Construction of this commercial structure is now complete.

FEASIBILITY STUDY REPORT

A pilot study is being conducted at SU1 and an interim action is being conducted at SU2 at Capital Plant 4 as a part of the feasibility study for the West of 4th Group site. Stage 1 of the interim action at Capital Plant 4 concluded in September 2018. Performance monitoring samples are being analyzed at the analytical laboratory. The interim action at Capital Plant 4 is further discussed in the following section.

INTERIM MEASURES

Capital issued the Revised Stage 1 FIWP to provide Ecology a detailed framework and technical approach to Stage 1 of the interim action. Stage 1 of the interim action comprised a pilot study stage of work to evaluate ISCO as a cleanup technology for soil and groundwater. The Stage 1 work included injecting a 3 percent solution of the chemical oxidant potassium permanganate into subsurface soil and groundwater at five locations at Capital Plant 4 and conducting process and performance monitoring to evaluate whether and, if so, how ISCO can be applied more extensively to eliminate a source of tetrachloroethene and TCE at Capital Plant 4.

Farallon conducted a baseline groundwater monitoring event on July 2, 2018 to evaluate concentrations of CVOCs and metals in groundwater prior to the Stage 1 ISCO injections. The Stage 1 ISCO injections were performed at locations B3, C5, D4, E5, and F5 from August 18 through 22, 2018 (Attachment B). Performance groundwater monitoring was initiated immediately after completion of the Stage 1 ISCO injections, and was completed on September 18, 2018. A series of performance borings were advanced immediately after the completion of the Stage 1 ISCO injections to assess the lateral and vertical distribution of the injected potassium permanganate, concentrations of CVOCs, and permanganate natural oxidant demand in the soil at various depths and distances proximate to the injection locations. A second series of borings were advanced in similar locations on September 19 and 20, 2018 to assess whether the potassium permanganate had been expended and, if so, whether concentrations of CVOCs had been reduced by contact with the oxidant. The Stage 1 interim action work will be discussed with Ecology at an upcoming meeting in October 2018 and summarized in a future report upon concurrence from Ecology. If appropriate, Stage 2 of the interim action would include application of ISCO throughout Capital Plant 4.

GROUNDWATER MONITORING AND SAMPLING

Groundwater monitoring and sampling were performed on September 24 and 25, 2018 in accordance with the technical memorandum regarding FINAL West of 4th Groundwater Monitoring Program Plan, 2017 through Draft Cleanup Action Plan, W4 Joint Deliverable, Agreed



Order No. DE 10402 dated March 21, 2017, from Ms. Janet Knox of Pacific Groundwater Group to Mr. Jones of Ecology. Groundwater elevation data were collected at select SU2 monitoring wells. Groundwater samples were collected from monitoring wells scheduled for sampling and analyzed for CVOCs. Groundwater samples from select monitoring wells also were analyzed for natural attenuation parameters, including nitrate, ferrous iron, sulfate, methane, total organic carbon, and ethane/ethene. Summary figures and tables will be provided to Ecology and will be included in the fourth quarter 2018 progress report.

PUBLIC COMMUNICATIONS

No public communication activities were completed by Capital during this period.

ANTICIPATED WORK IN THE NEXT QUARTER

Work anticipated to be performed during the fourth quarter of 2018, October through December, is summarized below.

MONITORING WELL MAINTENANCE

Evaluation of the condition of the monitoring wells is conducted during each semi-annual groundwater monitoring event. Based on the results of the September 2018 groundwater monitoring event, routine monitoring well maintenance activities, including replacement of monuments at monitoring wells CI-12-WT, CI-12-60, MW-4, and CI-14-70, will be conducted during the fourth quarter of 2018.

FEASIBILITY STUDY WORK

Following completion of the SU1 pilot study and Capital Plant 4 interim action, an addendum to the Feasibility Study Reports may be prepared, and a final remedial alternative will be proposed for Ecology approval. A Draft Cleanup Action Plan will be prepared for SU1 and SU2 upon concurrence of the West of 4th Group and Ecology regarding the selected remedial alternative.

INTERIM MEASURES

A meeting with Ecology will be scheduled in October 2018 following receipt and compilation of the Stage 1 ISCO results. The discussion during this meeting will involve an evaluation of Stage 1 ISCO results and whether ISCO is an appropriate technology to achieve the interim action objectives, or an evaluation of alternative remedial technologies for treating vadose zone soil beneath Capital Plant 4. Future work may include summarizing the Stage 1 ISCO results in a formal report or memorandum, developing a work plan for Stage 2 ISCO work, or developing a work plan for evaluation of an alternative remedial technology.

GROUNDWATER MONITORING AND SAMPLING

Analytical results from the semi-annual groundwater monitoring and sampling event conducted in September 2018 will be summarized in figures and tables and provided to Ecology and included in the fourth quarter 2018 progress report.



PUBLIC COMMUNICATIONS

The project website (<u>http://www.farallonconsulting.com/457-capital-industries</u>) will be updated with an electronic copy of this progress report.

The next progress report will summarize activities completed from October through December 2018, and will be submitted on or before January 7, 2019.

CLOSING

Farallon trusts that this quarterly progress report provides sufficient information for Ecology needs. If you have questions regarding this project, please contact either of the undersigned at (425) 295-0800.

Sincerely,

Farallon Consulting, L.L.C.

h. Moor

Jennifer L. Moore Senior Scientist

Kaspar

Jeffrey Kaspar, L.G., L.H.G. Principal Geologist

Attachments: Attachment A, Site Diagram Attachment B, Interim Action Injection Location Figure Attachment C, Laboratory Analytical Results

cc: Ron Taylor, Capital Industries, Inc. (by email) Donald Verfurth, Gordon and Rees, L.L.P. (by email)

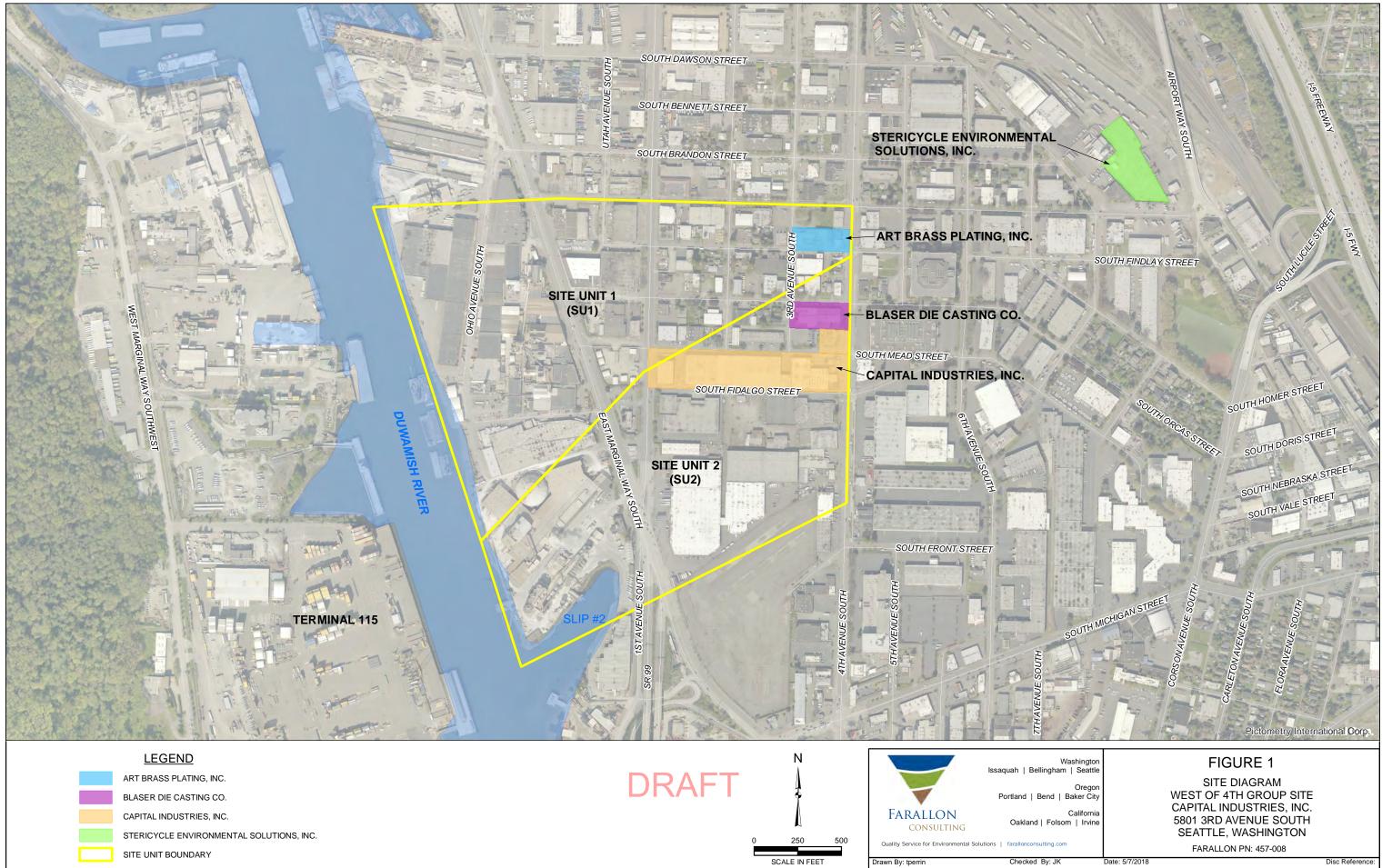
Email with link to electronic copy on project website: Janet Knox, Pacific Groundwater Group Dana Cannon, Aspect Consulting Bill Carroll, Arrow Environmental Bill Beck, PSC Environmental Services, LLC

JM/JK:tlc

ATTACHMENT A NATUS MEDICAL FACILITY LABORATORY DATA

PROGRESS REPORT, JULY THROUGH SEPTEMBER 2018 Capital Industries, Inc. 5801 Third Avenue South Seattle, Washington

Farallon PN: 457-008



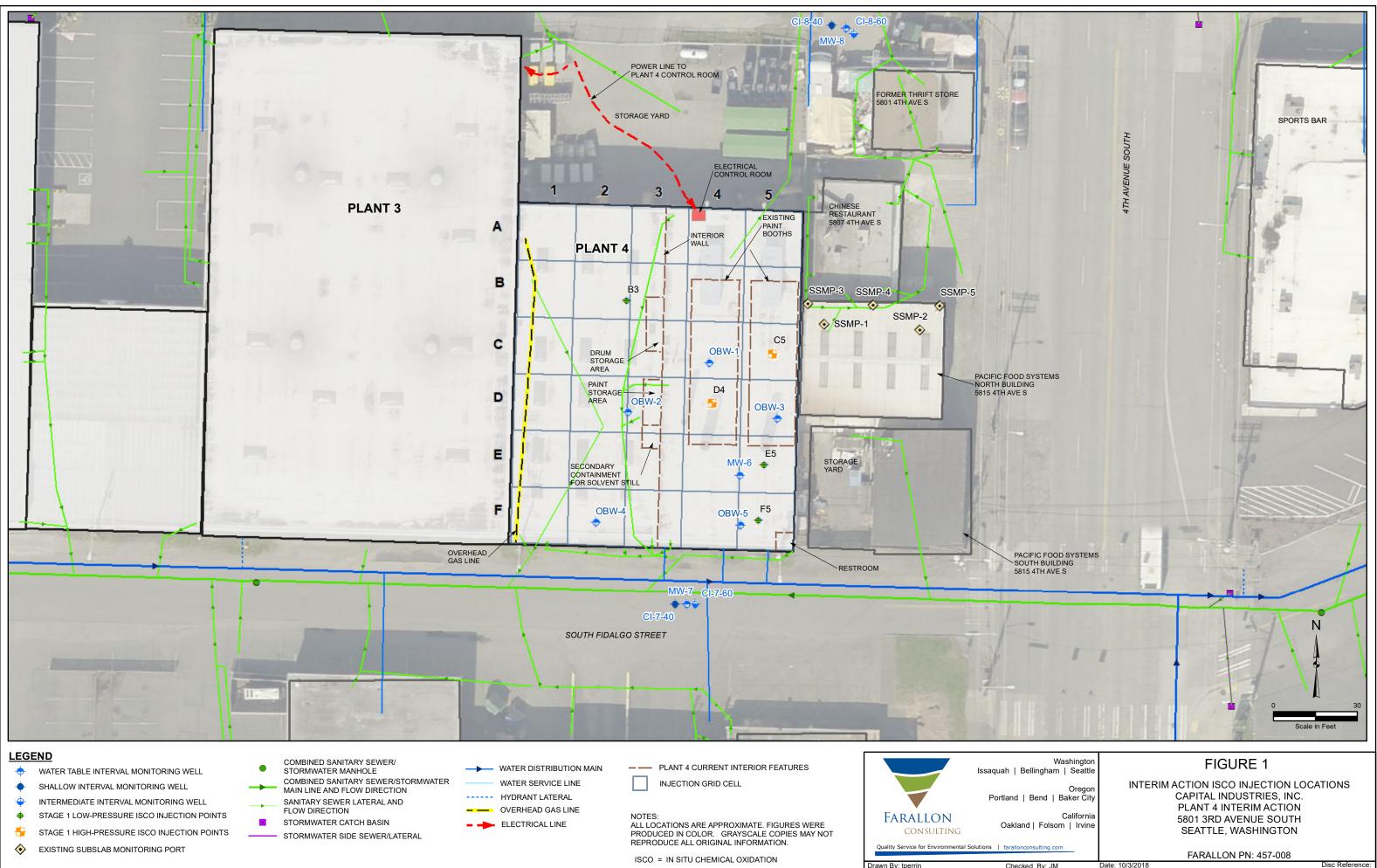


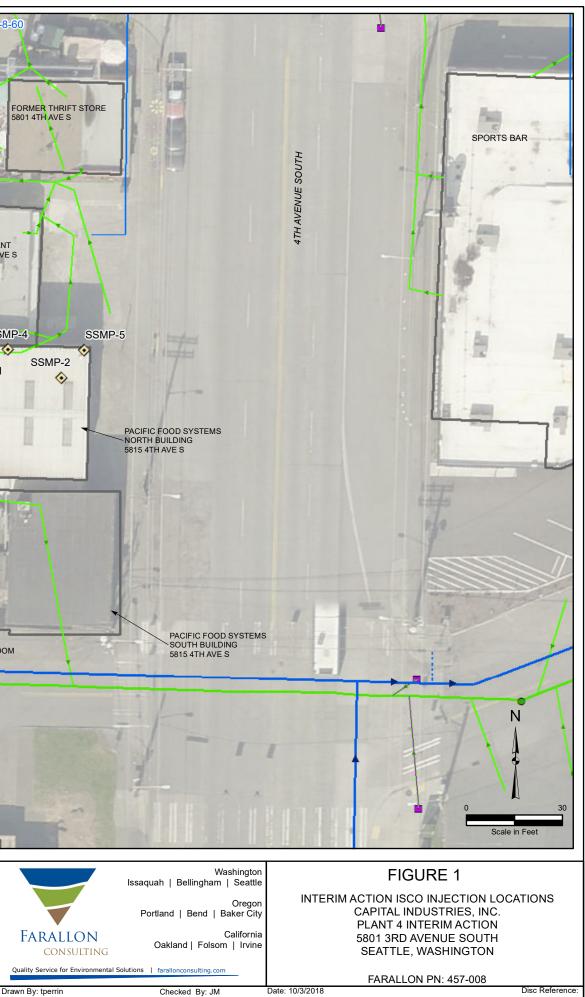


ocument Path: Q:\Projects\457 CapitalIn t\008 PilotStudy\InterimWorkPlan\Revision 20180507\Figure1 Sitemap.

ATTACHMENT B INTERIM ACTION INJECTION LOCATION FIGURE

PROGRESS REPORT, JULY THROUGH SEPTEMBER 2018 Capital Industries, Inc. 5801 Third Avenue South Seattle, Washington Farallon PN: 457-008





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ATTACHMENT C LABORATORY ANALYTICAL RESULTS

PROGRESS REPORT, JULY THROUGH SEPTEMBER 2018 Capital Industries, Inc. 5801 Third Avenue South Seattle, Washington Farallon PN: 457-008



3600 Fremont Ave. N. Seattle, WA 98103 T: (206) 352-3790 F: (206) 352-7178 info@fremontanalytical.com

Farallon Consulting Jen Moore 975 5th Ave NW Issaquah, WA 98027

RE: Natus - Olympic Medical Work Order Number: 1808044

August 10, 2018

Attention Jen Moore:

Fremont Analytical, Inc. received 2 sample(s) on 8/3/2018 for the analyses presented in the following report.

Volatile Organic Compounds-EPA Method TO-15 (SIM)

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Unl c. Redy

Mike Ridgeway Laboratory Director

DoD/ELAP Certification #L17-135, ISO/IEC 17025:2005 ORELAP Certification: WA 100009-007 (NELAP Recognized)



| CLIENT: Project: Work Order: | Farallon Consulting Natus - Olympic Medical 1808044 | Work Order S | Sample Summary |
|------------------------------------|---|--|--|
| Lab Sample ID | Client Sample ID | Date/Time Collected | Date/Time Received |
| 1808044-001 1808044-002 | Natus-5900-OA2-080218 Natus-5900-IA3-080218 | 08/02/2018 9:00 AM 08/02/2018 8:37 AM | 08/03/2018 1:34 PM 08/03/2018 1:34 PM |



Case Narrative

WO#: **1808044** Date: **8/10/2018**

CLIENT:Farallon ConsultingProject:Natus - Olympic Medical

WorkOrder Narrative: I. SAMPLE RECEIPT: Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS: Air samples are reported in ppbv and ug/m3.

The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Standard temperature and pressure assumes 24.45 = (25C and 1 atm).

Qualifiers & Acronyms



WO#: **1808044** Date Reported: **8/10/2018**

Qualifiers:

- * Flagged value is not within established control limits
- B Analyte detected in the associated Method Blank
- D Dilution was required
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- I Analyte with an internal standard that does not meet established acceptance criteria
- J Analyte detected below Reporting Limit
- N Tentatively Identified Compound (TIC)
- Q Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- (<20%RSD, <20% Drift or minimum RRF)
- S Spike recovery outside accepted recovery limits
- ND Not detected at the Reporting Limit
- R High relative percent difference observed

Acronyms:

%Rec - Percent Recovery **CCB** - Continued Calibration Blank CCV - Continued Calibration Verification **DF** - Dilution Factor HEM - Hexane Extractable Material **ICV** - Initial Calibration Verification LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate MB or MBLANK - Method Blank MDL - Method Detection Limit MS/MSD - Matrix Spike / Matrix Spike Duplicate PDS - Post Digestion Spike Ref Val - Reference Value **RL** - Reporting Limit **RPD** - Relative Percent Difference SD - Serial Dilution SGT - Silica Gel Treatment SPK - Spike Surr - Surrogate



Client: Farallon Consulting WorkOrder: 1808044 **Project:** Natus - Olympic Medical **Client Sample ID:** Natus-5900-OA2-080218 Lab ID: 1808044-001A

Date Sampled: 8/2/2018 Date Received 8/3/2018

| Sample Type: | Summa Canister | | | | | | | |
|--------------------------|---------------------|--------------------|-------------|---------------|------|--------------|------------|-----|
| Analyte | Cone | centration | Repo Lii | orting mit | Qual | Method | Date/Analy | vst |
| Volatile Organic Com | pounds-EPA Method T | <u> O-15 (SIM)</u> | | | | | | |
| | (ppbv |) (ug/m³) | (ppbv) | (ug/m³) | | | | |
| 1,1-Dichloroethene (DCE) | <0.0090 | 0 <0.0357 | 0.00900 | 0.0357 | | EPA-TO-15SIM | 08/08/2018 | BC |
| cis-1,2-Dichloroethene | <0.0200 |) <0.0793 | 0.0200 | 0.0793 | | EPA-TO-15SIM | 08/08/2018 | BC |
| Tetrachloroethene (PCE) | <0.0500 |) <0.339 | 0.0500 | 0.339 | | EPA-TO-15SIM | 08/08/2018 | BC |
| trans-1,2-Dichloroethene | <0.0060 | 0 <0.0238 | 0.00600 | 0.0238 | | EPA-TO-15SIM | 08/08/2018 | BC |
| Trichloroethene (TCE) | <0.0170 | < 0.0914 | 0.0170 | 0.0914 | | EPA-TO-15SIM | 08/08/2018 | BC |
| Vinyl chloride | <0.0850 |) <0.217 | 0.0850 | 0.217 | | EPA-TO-15SIM | 08/08/2018 | BC |
| Surr: 4-Bromofluorobenz | ene 83.4 %Re | ec | 70-130 | | | EPA-TO-15SIM | 08/08/2018 | BC |



Client: Farallon Consulting WorkOrder: 1808044 **Project:** Natus - Olympic Medical **Client Sample ID:** Natus-5900-IA3-080218 Lab ID: 1808044-002A

Summa Canister

Sample Type:

Date Sampled: 8/2/2018 Date Received 8/3/2018

| Analyte | Concen | tration | Repo Lir | 0 | Qual | Method | Date/Analy | vst |
|------------------------------|----------------|----------------|-------------|---------|------|--------------|------------|-----|
| Volatile Organic Compounds-E | PA Method TO-1 | <u>5 (SIM)</u> | | | | | | |
| | (ppbv) | (ug/m³) | (ppbv) | (ug/m³) | | | | |
| 1,1-Dichloroethene (DCE) | <0.00900 | <0.0357 | 0.00900 | 0.0357 | | EPA-TO-15SIM | 08/08/2018 | BC |
| cis-1,2-Dichloroethene | <0.0200 | <0.0793 | 0.0200 | 0.0793 | | EPA-TO-15SIM | 08/08/2018 | BC |
| Tetrachloroethene (PCE) | <0.0500 | <0.339 | 0.0500 | 0.339 | | EPA-TO-15SIM | 08/08/2018 | BC |
| trans-1,2-Dichloroethene | <0.00600 | <0.0238 | 0.00600 | 0.0238 | | EPA-TO-15SIM | 08/08/2018 | BC |
| Trichloroethene (TCE) | <0.0170 | <0.0914 | 0.0170 | 0.0914 | | EPA-TO-15SIM | 08/08/2018 | BC |
| Vinyl chloride | <0.0850 | <0.217 | 0.0850 | 0.217 | | EPA-TO-15SIM | 08/08/2018 | BC |
| Surr: 4-Bromofluorobenzene | 93.5 %Rec | | 70-130 | | | EPA-TO-15SIM | 08/08/2018 | BC |

QC SUMMARY REPORT



Work Order: 1808044

| CLIENT: Farallon Con Project: Natus - Olym | • | | | | v | /olatile O | rganic C | ompounds | S-EPA Met | | |
|---|-------------------------|---------|-----------|--------------------|------|-------------------|--------------------|-------------|------------|----------|------|
| Project: Natus - Olym Sample ID LCS-R45290 | SampType: LCS | | | Units: ppbv | | | e: 8/8/201 | • | RunNo: 45 | | • |
| Client ID: LCSW | Batch ID: R45290 | | | pp. | | ' Analysis Dat | | | SeqNo: 876 | | |
| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Vinyl chloride | 2.31 | 0.0850 | 2.000 | 0 | 116 | 70 | 130 | | | | |
| 1,1-Dichloroethene (DCE) | 2.18 | 0.00900 | 2.000 | 0 | 109 | 70 | 130 | | | | |
| trans-1,2-Dichloroethene | 2.23 | 0.00600 | 2.000 | 0 | 112 | 70 | 130 | | | | |
| cis-1,2-Dichloroethene | 2.11 | 0.0200 | 2.000 | 0 | 106 | 70 | 130 | | | | |
| Trichloroethene (TCE) | 2.17 | 0.0170 | 2.000 | 0 | 108 | 70 | 130 | | | | |
| Tetrachloroethene (PCE) | 2.19 | 0.0500 | 2.000 | 0 | 109 | 70 | 130 | | | | |
| Surr: 4-Bromofluorobenzene | 4.03 | | 4.000 | | 101 | 70 | 130 | | | | |
| Sample ID MB-R45290 | SampType: MBLK | | | Units: ppbv | | Prep Dat | ie: 8/8/201 | 8 | RunNo: 452 | 290 | |
| Client ID: MBLKW | Batch ID: R45290 | | | | | Analysis Dat | te: 8/8/201 | 8 | SeqNo: 876 | 6072 | |
| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Vinyl chloride | ND | 0.0850 | | | | | | | | | |
| 1,1-Dichloroethene (DCE) | ND | 0.00900 | | | | | | | | | |
| trans-1,2-Dichloroethene | ND | 0.00600 | | | | | | | | | |
| cis-1,2-Dichloroethene | ND | 0.0200 | | | | | | | | | |
| Trichloroethene (TCE) | ND | 0.0170 | | | | | | | | | |
| Tetrachloroethene (PCE) | ND | 0.0500 | | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 3.32 | | 4.000 | | 82.9 | 70 | 130 | | | | |
| Sample ID 1808044-002AREP | SampType: REP | | | Units: ppbv | | Prep Dat | ie: 8/8/201 | 8 | RunNo: 452 | 290 | |
| Client ID: Natus-5900-IA3-080218 | Batch ID: R45290 | | | | | Analysis Dat | te: 8/8/201 | 8 | SeqNo: 876 | 6075 | |
| Analyte | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Vinyl chloride | ND | 0.0850 | | | | | | 0 | | 30 | |
| 1,1-Dichloroethene (DCE) | ND | 0.00900 | | | | | | 0 | | 30 | |
| | ND | 0.00900 | | | | | | 0 | | 50 | |
| trans-1,2-Dichloroethene | ND ND | 0.00900 | | | | | | 0 | | 30 | |

Trichloroethene (TCE)

Tetrachloroethene (PCE)

ND

ND

0.0170

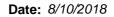
0.0500

30

30

0

0





| Work Order: | 1808044 | | | | | | | | 2.00 | SUMMA | | ORT |
|-------------------|------------------|----------------------|----|-----------|--------------------|------|-------------|--------------------|-------------|------------|----------|---------|
| CLIENT: | Farallon Cons | sulting | | | | | | | - | | | |
| Project: | Natus - Olym | pic Medical | | | | V | olatile O | rganic C | compounds | S-EPA Met | hod TO-1 | 5 (SIM) |
| Sample ID 180804 | 44-002AREP | SampType: REP | | | Units: ppbv | | Prep Da | te: 8/8/201 | 8 | RunNo: 452 | 290 | |
| Client ID: Natus- | -5900-IA3-080218 | Batch ID: R45290 | | | | | Analysis Da | te: 8/8/201 | 8 | SeqNo: 876 | 6075 | |
| Analyte | | Result | RL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Surr: 4-Bromoflu | iorobenzene | 3.77 | | 4.000 | | 94.2 | 70 | 130 | | 0 | | |



Sample Log-In Check List

| CI | ient Name: | FARA | Work Order Numb | per: 1808044 | |
|------------|------------------|--|-----------------|-----------------------|----------------|
| Lo | ogged by: | Clare Griggs | Date Received: | 8/3/2018 ⁻ | 1:34:00 PM |
| Cha | in of Cust | ody | | | |
| 1. | Is Chain of C | sustody complete? | Yes 🖌 | No 🗌 | Not Present |
| 2. | How was the | sample delivered? | <u>Client</u> | | |
| <u>Log</u> | In | | | | |
| - | Coolers are p | present? | Yes | No 🖌 | |
| 0. | | | Air Samples | | |
| 4. | Shipping con | tainer/cooler in good condition? | Yes 🔽 | No 🗌 | |
| 5. | | ls present on shipping container/cooler? nments for Custody Seals not intact) | Yes | No 🗌 | Not Required 🗹 |
| 6. | Was an atter | npt made to cool the samples? | Yes | No 🗌 | NA 🗹 |
| 7. | Were all item | ns received at a temperature of >0°C to 10.0°C* | Yes | No 🗌 | NA 🖌 |
| 8. | Sample(s) in | proper container(s)? | Yes 🗸 | No 🗌 | |
| 9. | Sufficient sar | mple volume for indicated test(s)? | Yes 🖌 | No 🗌 | |
| 10. | Are samples | properly preserved? | Yes 🖌 | No 🗌 | |
| 11. | Was preserv | ative added to bottles? | Yes | No 🗹 | NA 🗌 |
| 12. | Is there head | Ispace in the VOA vials? | Yes | No 🗌 | NA 🔽 |
| 13. | Did all sampl | es containers arrive in good condition(unbroken)? | Yes 🖌 | No 🗌 | |
| 14. | Does paperw | vork match bottle labels? | Yes 🖌 | No 🗌 | |
| 15. | Are matrices | correctly identified on Chain of Custody? | Yes 🖌 | No 🗌 | |
| 16. | Is it clear what | at analyses were requested? | Yes 🖌 | No 🗌 | |
| 17. | Were all hold | ling times able to be met? | Yes 🖌 | No 🗌 | |
| <u>Spe</u> | cial Handl | ing (if applicable) | | | |
| 18. | Was client no | otified of all discrepancies with this order? | Yes | No 🗌 | NA 🗹 |
| | Person | Notified: Date | | | |
| | By Who | om: Via: | 🗌 eMail 🔲 Ph | one 🗌 Fax 🏼 [| In Person |
| | Regardi | ing: | | | |
| | Client Ir | nstructions: | | | |
| 19. | Additional rel | marks: | | | |

Item Information

^{*} Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

| | | | | | | | | | | | | | | | | | ſ |
|----------------------------|---|--|-----------------|------------------|-------------------|----------------------|---|--|--|--|------------------------|---------------------------|-----------------------|---|---|-----------------------------|--------------|
| Same Day | Sai | | | | | | | V | × | | | | | | | | × |
| | | | Date/Time | _ | | | | | Received | | | | Date/Time | Dat | | ď | Relinquished |
| Next Day | 155-4 | 3118 | <i>Q</i> | | | | 1 | B | × | | 1850 | Ø | 08/2/18 | B | 7 | A | × |
| | | ľ | Date/Time | | | | Reli | | Received | | | | Date/Time | Dat | | ָרָ - | Relinquishe |
|] 3 Day | that I have verified Client's agreement to each of the | rified Client's a | ave ve | at 1 h | C. th | 1006 | nt named | of the Clie | on behalf (| nalytical | remont A | nent with I | this Agreen ment. | to enter into of this Agree | I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, terms on the front and backside of this Agreement. | on the front | I repi |
| 🔀 Standard | | Bag | TB = Tedlar Bag | TB | ube | bent | S = Softbent Tube | F = Filter | ire Cylinder | CYL = High Pressure Cylinder | er CYL = | 1L = 1L Canister | 6L = 6L Canister | e Vac 6L = 6I | BV = 1 Liter Bottle Vac | ** Container Codes: | ** Cont |
| Turn-Around Time: | Tu | | | | 1 | 4 | | | | oil Gas | S = Subslab / Soil Gas | | r L = Landfill | IA = Indoor Air | AA = Ambient Air | Matrix Codes: AA | * Matrix |
| | | | | | P | 507 - 1507 - 1507 | Pressure Date | Pressure Dete | Pressure Date | | | - C. | Date | Carlsier Flow Reg | | | U |
| | | | | | | | Dat | Date | Date | | | | Tric | Flow Peg. | | | |
| | | | | | | 1.9 | Pressure | 9115561 _{cl} | anssald | | | | Cate | Carister | | | 4 |
| | | | | - | | 4 | Date | Date | Data | | | | 1993 | Plow Reg | | | |
| | | | | | | 14. | pressure | pressure | Pressure | | | | Cala | Carbster | 1 | | ω |
| 6 | | | | | | | 7.0 | 30 | 10mtorr Pressure 7/26/2018 Date | 8hr | 6L | TA | 08/02/18 | 17234 Carlister FR8-30 Flow Pleg | 143 | Notus - 5900 - | So Natu |
| ~ | | | | | | 0 U | 8-0 1700 | 30 Grocsura | 10mtorr Pressure 7/26/2018 Date | 8hr | 6L | AA | 08/02/18 01 Voie | 17235 Canister FV3 Flow Reg. | 0.42- | Natus-5900-012- 080218 | 1 Natus - 51 |
| Final Pressure ("Hg) | Comments | Sulfur Ext. TO15 APH TO15 Helium Major Gases 3C | Sulfur TO15 | VOCs TO15 SIM | VOCs TO15 SCAN LL | VOCs TO15 SCAN | Field Final Sample Pressure (" Hg) | Field Initial Sample Pressure (" Hg) | Initial Evacuation Pressure (mtorr) | Fill Time / Flow Rate | Container Type ** | Sample Type (Matrix) * | Sample Date & Time | Canister / Flow S Reg Serial # | | Sample Name | × |
| Internal | | sis | Analysis | $\left \right $ | 3 | 6 | rununa | querce | Email (PM): 210001000 rung ush censulting cen | JIMOS | Email (PM): | | | _ | | | Fax: |
| ees may apply) | OK to Dispose Hold (t | otherwise requested. | 0 | | | | | Noore | Jen 1 | PM): | Reports to (PM): | | | 0000 | - 295 - 0800 | : 425- | Telephone: |
| to client unless | Air samples are disposed of one week after report is submitted to client unless | Air samples are dispos | Þ | | | | | | | Neg | Collected by: | | 1 | 12001 | guen 1 an | City, State, Zip: 1550g ueh | City, State |
| | SIM . | 70-15 SIM. | | | | | | la to a | | |) = - | | 7 | | | | |
| | and virigi chilonia | 1,1-100 | | | | | | IA | the u | Seattle | Location: | | | ЪV | Sth AVE | 975 . | Address: |
| e bu | | 100, CD 1/2 - Pur, | | | | | | ~ | 457-008 | HS- | Project No: | | | | on | Farallon | Client: |
| - IXE: | Analyze Samples br | Special Remarks: | 1 | | | ical | Medical | lympic | Project Name: Natas - Olyanpic | ne: Nat | Project Nan | Fax: 206-352-7178 | Fax: 20 | malytica | Am | | |
| | 180804 | Laboratory Project No (Internal): | - | | of: | ~ | Page: | | 81/201 | 05/02 | Date: | | Seattle, Tel: 20 | | eno | | |
| Agreement | Laboratory Services Ag | & Labora | Record | eco | | od | Custody | ain of | Air Chain | | | 3600 Fremont Ave N. | 3600 Frem | | | | A |
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COC Air 1.4 - 4.12.18