



# SAN FRANCISCO PLANNING DEPARTMENT

## ENVIRONMENTAL EVALUATION APPLICATION COVER MEMO - PUBLIC PROJECTS ONLY

In accordance with Chapter 31 of the San Francisco Administrative Code, an appeal of an exemption determination can only be filed within 30 days of the project receiving the first approval action.

Please attach this memo along with all necessary materials to the Environmental Evaluation Application.

|   |  |
|---|--|
| <b>Project Address and/or Title:</b>  |  |
| <b>Project Approval Action:</b>   |  |
| <b>Will the approval action be taken at a noticed public hearing?</b> <input type="checkbox"/> YES* <input type="checkbox"/> NO<br>* If YES is checked, please see below. |  |

### IF APPROVAL ACTION IS TAKEN AT A NOTICED PUBLIC HEARING, INCLUDE THE FOLLOWING CALENDAR LANGUAGE:

**End of Calendar:** CEQA Appeal Rights under Chapter 31 of the San Francisco Administrative Code If the Commission approves an action identified by an exemption or negative declaration as the Approval Action (as defined in S.F. Administrative Code Chapter 31, as amended, Board of Supervisors Ordinance Number 161-13), then the CEQA decision prepared in support of that Approval Action is thereafter subject to appeal within the time frame specified in S.F. Administrative Code Section 31.16. Typically, an appeal must be filed within 30 calendar days of the Approval Action. For information on filing an appeal under Chapter 31, contact the Clerk of the Board of Supervisors at City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102, or call (415) 554-5184. If the Department’s Environmental Review Officer has deemed a project to be exempt from further environmental review, an exemption determination has been prepared and can be obtained on-line at <http://sf-planning.org/index.aspx?page=3447>. Under CEQA, in a later court challenge, a litigant may be limited to raising only those issues previously raised at a hearing on the project or in written correspondence delivered to the Board of Supervisors, Planning Commission, Planning Department or other City board, commission or department at, or prior to, such hearing, or as part of the appeal hearing process on the CEQA decision.

**Individual calendar items:** This proposed action is the Approval Action as defined by S.F. Administrative Code Chapter 31.

### THE FOLLOWING MATERIALS ARE INCLUDED:

- 2 sets of plans (11x17)
- Project description
- Photos of proposed work areas/project site
- Necessary background reports (specified in EEA)
- MTA only: Synchro data for lane reductions and traffic calming projects



June 30, 2014

Ms. Jeanie Poling  
San Francisco Planning Department  
Environmental Planning Division  
1650 Mission Street, Suite 400  
San Francisco, California 94103

**Subject: CEQA Categorical Exemption Request: Plot 700 Project, San Francisco International Airport**

Dear Ms. Poling:

The City and County of San Francisco through the San Francisco Airport Commission (Commission) proposes to consolidate and relocate the Airport’s existing ground transportation support facilities located at mid and southern portions of the Airport to an unused parcel (“Plot 700”) located on the northern edge of San Francisco International Airport (SFO or the Airport). The Commission seeks San Francisco Planning Department – Environmental Planning (SFEP) Division’s concurrence that this Project is categorically exempt under the California Environmental Quality Act (CEQA).

The purpose of this Project is to enhance long-term land use planning at the Airport by relocating nonessential support services away from the airfield by preserving limited Airport land to accommodate forecast aircraft operations and to facilitate safe aircraft movements. The existing facilities that have been identified for demolition under the Project are currently undersized to effectively serve their purpose, unsafe for employees, and nearing the end of their useful life. Instead of demolishing and rebuilding the aging facilities in place, the Commission proposes to demolish the buildings that have been identified as in poor condition and to relocate these Airport buildings to an unused parcel (Plot 700) away from the airfield / aircraft operations. These buildings primarily serve SFO’s ground transportation operations (SFO Shuttle Bus and transportation network companies<sup>1</sup> [TNC] vehicle permitting and inspections). Other facilities proposed for demolition and relocation includes a CCSF-only Fuel Station / Car Wash, which is co-located with the SFO Ground Transportation Unit (GTU) facility. All replacement buildings would be designed and built to LEED Gold standards, consistent with the CCSF Green Building Ordinance.

**PROJECT DESCRIPTION**

The Plot 700 site is an unused paved employee surface parking lot located about 0.6 miles east of U.S. Highway 101 (U.S. 101) and Interstate 380 (I-380), at the intersection of North Access Road and North Field Road (Figure A-1). As shown on **Figure A-1 in Attachment A** of this letter, this 5-acre parcel of Airport property is located immediately south of the San Mateo County Transit (SamTrans) “Island” bus maintenance facility and the Safe Harbor Homeless Shelter. Historical uses of the site have been limited to a surface parking lot (used by United Airlines employees) since the area was filled in the late 1960s. Due to the continued downsizing of aircraft maintenance operations at United’s SFO hub, United Airlines opted to release the site from its leasehold back to the Airport in 2012. The Plot 700 site is currently used by the Airport for temporary contract employee parking and construction staging.

<sup>1</sup> The California Public Utilities Commission defines a transportation network companies as providers of prearranged ground transportation services for compensation, such as limousines, taxi cabs, and shuttle vans.

The Plot 700 Project would include construction of replacement facilities at the Plot 700 site and subsequent demolition of the existing facilities (**Figures A-2 through A-4**), which is described in detail below. **Table 1** quantifies the facility demolition and replacements proposed as part of the Project.

**TABLE 1**

Proposed Project Components (Square Feet)

| Project Components and Associated Features            | Existing Uses  | Existing Uses to be Retained | New Construction and/or Addition | Net Change <sup>1</sup> |
|---|----------------|------------------------------|----------------------------------|-------------------------|
| <b>SFO Shuttle Bus Facility:</b>                      |                |                              |                                  |                         |
| Mobile Trailer Office                                 | 1,500          | 0                            | 6,000                            | 4,500                   |
| Garage  | 5,500          | 0                            | 7,700                            | 2,200                   |
| Subtotal: SFO Shuttle Bus                             | 7,000          | 0                            | 13,700                           | 6,700                   |
| <b>SFO Ground Transportation Unit (GTU) Facility:</b> |                |                              |                                  |                         |
| Office <sup>3</sup>                                   | 6,740          | 0                            | 7,400                            | 3,680                   |
| Garage  | 3,290          | 0                            | 8,960                            | 3,470                   |
| Subtotal: SFO GTU <sup>2</sup>                        | 9,210          | 0                            | 16,360                           | 7,150                   |
| <b>SFO Fueling Facilities:</b>                        |                |                              |                                  |                         |
| CNG Station   | 0 <sup>4</sup> | 0 <sup>4</sup>               | 3,940                            | 3,940                   |
| CNG Tank Storage (Above ground)                       | 0              | 0                            | 3,130                            | 3,130                   |
| CCSF Fuel Station and Car Wash <sup>2</sup>           | 4,900          | 0                            | 5,700                            | 680                     |
| Subtotal: SFO Fueling Facilities                      | 4,900          | 0                            | 12,770                           | 7,750                   |
| <b>PROJECT TOTAL (GSF) <sup>2</sup></b>               | <b>21,930</b>  | <b>0</b>                     | <b>42,830</b>                    | <b>20,900</b>           |

NOTES:

CNG = Compressed natural gas. GSF = Gross square footage. GTU = Ground Transportation Unit.

- <sup>1</sup> Net change is calculated by adding or subtracting retained uses from existing uses, and then adding the area of new construction to get a total net gain or loss, in square feet.
- <sup>2</sup> Subtotals do not include conversion of the existing GTU surface parking lot area to airfield operating area.
- <sup>3</sup> Proposed and existing GTU office area includes the SFO Radio Shop.
- <sup>4</sup> Existing CNG Station located adjacent to existing SFO Shuttle Bus is not included as an existing use in this table as it is not part of the Proposed Project.

SOURCES: HNTB Corporation, GTU Pre-Programming Report, 2013; SFO Asset Management, and SFO Design and Construction, 2014.

**EXISTING FACILITIES (DEMOLITION)**

The following includes a description of the existing facilities that would be demolished upon completion of construction of the replacement facilities at Plot 700.

**SFO Shuttle Bus Facility**

The existing SFO Shuttle Bus facility is a 7,000-square-foot facility located at the intersection of San Bruno Avenue and North McDonnell Road (**Figure A-2**). The SFO Shuttle Bus facility was constructed in 1983 and is no longer suitable for its intended operations; it has been identified by SFO building inspectors as a

building in “fair to poor condition” and is past its serviceable life. In addition, the existing maintenance garage and the associated bus parking stalls are undersized, and the facility is located adjacent to a thoroughfare with relatively high traffic rates. Under the Project, the SFO Shuttle Bus maintenance garage would be demolished and the mobile trailer (used for administrative functions) would be removed from the site. There are currently no plans to redevelop the existing Shuttle Bus facility for other Airport uses at this time.

### **SFO Fueling Facilities**

A compressed natural gas (CNG) station is located on a shared lot adjacent to the SFO Shuttle Bus facility on North McDonnell Road (**Figure A-2**). This CNG station is open to the public and is used by airport ground transportation service providers (e.g., shuttle vans and taxis), SFO Shuttle Bus<sup>2</sup>, CCSF vehicles, and private CNG vehicle owners. The CNG station would not be affected by construction or operation of the Project and would continue operating in its current capacity and location.

A CCSF fuel station and two-car wash rack (**Figure A-3**), totaling about 5,020 square feet, are collocated in the GTU facility lot, and accessible only to CCSF employees with appropriate badging for CCSF vehicles, including the Airport Bureaus of the San Francisco Police Department (SFPD) and San Francisco Fire Department (SFFD). The car wash rack only uses reclaimed water (no suds) from the Airport’s Mel Leong Treatment Plant (MLTP). There are three underground storage tanks associated with the CCSF fuel station, including a 12,000-gallon diesel tank, a 12,000-gallon regular unleaded tank, and a 6,000-gallon super unleaded tank (for use only by SFFD fire engines and SFPD motorcycles). There are no known hazardous materials in the building materials. The existing fuel station and car wash were originally constructed for temporary Airport rental car operations and later converted to Airport use.

### **SFO Ground Transportation Unit (GTU) Facilities**

As detailed on **Table 1** and shown on **Figure A-3**, the GTU facility is located on Airport property at the end of South Area Drive, east of South McDonnell Road and includes a 5,490-square-foot inspection garage and a 3,720-square-foot adjoining office building. The existing GTU facility does not adequately accommodate the functions and requirements for the GTU. Observed and staff-reported deficiencies of the GTU include inadequate storage and operating space, inadequate parking space for staff and TNC operators, and other safety-related concerns.

The purpose of the GTU facility is to process TNC operator permits and conduct vehicle inspections of ground transportation service providers (e.g., taxis, limos, shuttle vans) at the Airport. SFO GTU staff does not conduct any vehicle maintenance at the garage; the facility is only used to inspect TNC vehicles for compliance and permitting per State regulations. Like the CCSF Fuel Station, the GTU office building was originally constructed in 1990 to temporarily house Airport rental car operations while the permanent rental car facility was being constructed. In 1999, the office building was modified, and the four-bay inspection garage was added; and the SFO Radio Shop was provided a designated space within the office building. The facility is currently staffed with 23 full-time SFO GTU and SFO Radio Shop employees.

Servicing of in-situ vehicular radios, transponders and antenna equipment takes place in the SFO Radio Shop, which is co-located in the GTU inspection garage and office building. Observed and staff-reported deficiencies of the Radio Shop include: the secondary bay is too narrow for vehicle entrance, vehicular access for buses is inefficient, and there is inadequate emergency vehicle access.

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<sup>2</sup> The SFO Shuttle Bus fleet runs on CNG.

Lastly, under the Project, the existing perimeter K-rail security fence would be removed and the asphalt surface parking lot would be repaved to airfield operating area.

## **REPLACEMENT FACILITIES (CONSTRUCTION)**

The following replacement facilities would be constructed and occupied by staff prior to demolition of existing facilities. The layout of the Plot 700 and nearby land uses is shown on **Figure A-4**.

Other associated Project components include installation of a picket-style pointed perimeter security fence, restriping of the existing asphalt concrete surface parking lot, and installation of utility connections for potable water, industrial and sanitary sewer service, and an upgrade of existing electrical systems. All utility connections would be made to the nearest utility lines, located along the adjacent North Field Road.

All buildings would be constructed on a slab-on-grade foundation. No pile-driving would be required.

### **SFO Shuttle Bus Facility**

As shown on **Figure A-5**, the replacement SFO Shuttle Bus facility would be located on the northern portion of the Plot 700 site. The SFO Shuttle Bus facility would be appropriately sized to accommodate existing shuttle bus operation and administration activities at the Plot 700 site. The replacement facility would be a one-story (30 feet tall), 13,700-square-foot building that provides for the same functions as the existing facility, including maintenance bays and storage facilities for tools, parts, and heavy equipment (**Figure A-6**). It would also provide some expanded administrative functions, such as a conference/training room, employee locker rooms, a kitchen, and staff offices.

### **SFO Ground Transportation Unit Facilities & CCSF Fuel Station / Car Wash**

As shown on **Figure A-7**, the replacement GTU facility would include the SFO Radio Shop, GTU garage and administrative offices in one two-story building (30 feet above ground level). Consistent with existing GTU operations, the garage (8,960 square feet of the total 16,360 square-foot facility) would be partitioned for use by the SFO Radio Shop and by SFO GTU staff for TNC vehicle inspections. The administrative offices (7,400 square feet) would continue to be shared for use by SFO Radio Shop and GTU staff.

### **SFO Fuel Facilities**

A new public-use 3,940-square-foot CNG station and associated tank storage would be constructed at the northern end of the Plot 700 site (**Figure A-6**). The station would comprise of eight CNG pumps (four on each side of the fueling island under a 16-foot canopy), which would be sized to accommodate the SFO Shuttle buses. Five new above-ground CNG tanks (3,130 square feet) would be stored on-site within an area restricted by an 8-foot-high fence.

A replacement access-restricted CCSF vehicle fuel station and car wash would be constructed at the southern end of the Plot 700 site (**Figure A-7**). One 12,000-gallon tank and one 6,000-gallon<sup>3</sup> underground storage tank would be installed at the vehicle fuel station, which would comprise six bays for refueling under a 16-foot canopy. Similar to the existing car wash, the 2,890-square-foot replacement car wash would be one story (18 feet) tall and comprise two bays: a larger bay for buses and trucks and a smaller bay for cars and light trucks.

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<sup>3</sup> The replacement CCSF vehicle fuel station would have smaller fuel storage capacity than the existing fuel station. Currently, the Airport replenishes the

### Site Access and Parking

The SFO Shuttle Bus is a 24/7 operation where staff work in three shifts (day, swing, and night). For the security and safety of staff working the evening/overnight shifts, there would be no pedestrian access to the Plot 700 site. At the northern end of the site, two-way vehicular ingress and egress would be available via two gates to North Access Road, and at the southern end of the site, two-way vehicular ingress and egress would be provided to both North Field Road and to the United Airlines Employee Parking lot (**Figure A-5**). Striping and signage in the parking lot would be modified to prohibit unauthorized parking at this location to limit non-core access to the site.

A total of 41 bus and 45 car parking spaces on the Plot 700 site would be dedicated to the Shuttle Bus facility; and a total of 11 bus and 118 car parking spaces would be dedicated to the GTU and radio shop. There would be no change to the number of GTU and SFO Shuttle Bus facility employees under the Proposed Project compared to the existing condition.

### OTHER CONSIDERATIONS

- As CCSF-owned facilities, the replacement facilities would be designed and constructed to a minimum of LEED Gold standards, which would be consistent with CCSF's Green Building Ordinance.
- A Phase II Environmental Site Assessment was conducted at the Plot 700 site in May 2014, and no hazards or hazardous materials were identified. This study is provided as **Attachment B** to this letter. In summary, soil and groundwater samples were taken at six locations on the Plot 700 site. All samples were tested for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and leaking underground storage tank metals (cadmium, nickel, lead, chromium, and zinc). One location measured at 740 micrograms per liter, which exceeds the Regional Water Quality Control Board's (RWQCB) Environmental Screening Levels (ESL) action level for TPH (motor oil); however, this tested concentration is well below the SFO Mel Leong Treatment Plant (MLTP) Industrial Wastewater acceptance criteria of 20,000 micrograms per liter.<sup>4</sup> Water generated during dewatering activities would be pumped and delivered to the MLTP for treatment. All VOC samples in soil and groundwater tested below the RWQCB Order 99-045<sup>5</sup>, which specifies cleanup standards to be applied at SFO for TPH (as motor and jet fuel). All metals tested below RWQCB clean up levels and the ESLs.
- The Plot 700 site, existing Shuttle Bus facilities, and existing GTU facilities are all within a fully developed sites, paved with asphalt concrete mixture. These sites do not contain any known rare or endangered plant or animal species, or habitat for such species, and the Project would not affect biological resources.
- The Project site is located outside of the San Francisco Bay Conservation and Development Commission's (BCDC's) 100-foot shoreline jurisdiction band.
- The nearest residential land uses from the Plot 700 site is located about 4,400 feet across U.S. 101, in the City of San Bruno and there are no other sensitive receptors near the Project site. The nearest residential land uses from the Shuttle Bus facility site is located about 2,100 feet across U.S. 101 in the City of San Bruno. Lastly, the nearest residential land uses from the GTU site is located about 1,000

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<sup>4</sup> San Francisco International Airport, Mel Leong Treatment Plants – Sanitary and Industrial, Regional Water Quality Control Board Order No. R2-2013-011, NPDES No. CA0038318.

<sup>5</sup> San Francisco Bay Regional Water Quality Control Board Order No. 99-045. Available online: [http://www.waterboards.ca.gov/sanfranciscobay/board\\_decisions/adopted\\_orders/1999/R2-1999-0045.pdf](http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/1999/R2-1999-0045.pdf)

feet across U.S. 101 in the City of Millbrae. Construction noise would not affect surrounding residences.

- The Project would relocate existing surface traffic from San Bruno Avenue (for the Shuttle Bus facility) and South McDonnell Road/Millbrae Ave (for the GTU and CCSF fueling station and car wash) to the northern edge of the Airport on North Access Road. This road is primarily used by airport users (e.g., cargo operators, SFO Mel Leong Treatment Plant employees, and the U.S. Coast Guard), as the road crosses an active taxiway and terminates at an airfield-access security gate. Therefore, this road has limited public traffic. Relocation of the SFO Shuttle Bus and GTU facilities is not anticipated to reduce level of service on North Access Road.

Further, construction of the new CNG station is not anticipated to generate new traffic to the Airport as the existing CNG (not part of the Project) is centrally located, easily accessible for rental car and private vehicle drivers from U.S. 101, and highly visible compared to the new CNG station proposed at the Plot 700 site, which is located in a remote part of the Airport.

As shown on **Figure A-4**, there are freeway ramps available from Plot 700 via North Access Road, including: (1) two freeway ramps for northbound U.S. 101 traffic; (2) one freeway ramp for southbound U.S. 101 traffic; and (3) one freeway ramp for westbound Interstate 380 (I-380) traffic. All ramps are located less than half a mile from the Plot 700 site. Within the Airport, the Project would not result in increased traffic volumes, although minor changes in traffic flow and pattern could occur. Operation of the Project would not affect roadways and traffic outside of the Airport.

## CONSTRUCTION ACTIVITIES

If approved, construction of the Project is anticipated to commence in December 2014, followed by demolition of the existing facilities, which would commence immediately after the replacement facilities are constructed. Project construction and demolition would be completed within approximately 24 months of notice to proceed.

Due to year the existing facilities were built, it is unlikely that the Shuttle Bus and GTU facilities contain hazardous building materials. Nevertheless, the Airport includes regulatory testing requirements in all construction bid documents pertaining to handling of construction and demolition debris, testing, worker safety, and safe handling and disposal of construction materials. SFO or its construction contractor would conduct testing of all buildings identified for demolition before and during demolition. Demolition would be conducted in accordance with federal and state environmental and hazardous material management regulations, which includes requirements for proper disposal and acceptance thresholds at different classes of landfills (for unrecyclable materials). The Airport consistently recycles more than 90 percent of nonhazardous construction and demolition waste<sup>6</sup> and anticipates similar recovery rates from the SFO Shuttle Bus and GTU facilities.

Removal of the existing CCSF fuel station would require excavation and removal of three existing underground storage tanks, which would be disposed of in accordance with San Francisco Bay Regional Water Quality Control Board (RWQCB) regulations.

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<sup>6</sup> San Francisco International Airport, 2011 Environmental Sustainability Report, p. 98. Available online: [http://flsfo.proofic.net.s3.amazonaws.com/default/download/about/reports/pdf/SFO\\_2011\\_Environmental\\_Sustainability\\_Report.pdf](http://flsfo.proofic.net.s3.amazonaws.com/default/download/about/reports/pdf/SFO_2011_Environmental_Sustainability_Report.pdf)



Demolition and construction activities could temporarily raise dust levels in the project vicinity. SFO would implement construction dust control Best Management Practices (BMPs) during construction. These BMPs would include, but would not be limited to: 1) controlling construction dust as required by the Federal Aviation Administration (FAA) Advisory Circular 150/5370-2F<sup>7</sup>; 2) sprinkling demolition sites with water where dust is created; 3) covering stockpiles of soil, sand, and other fine materials; 4) covering trucks hauling debris, soil, and, and other fine materials; and 5) sweeping all roadways surrounding demolition and construction areas and along haul routes at least once per day.

## APPROVALS AND PERMITS

The following is a list of approvals and permits required for completion of the Project.

- **FAA, Approval of Airport Layout Plan and environmental processing under the National Environmental Policy Act (NEPA).** As a federally obligated public use airport, SFO must obtain approval of the ALP with the Proposed Project and environmental processing under NEPA per FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*. Both the ALP approval and NEPA review would be processed at the local FAA San Francisco Airport District Office.
- **FAA, Air Traffic Division, Form 7460-1 Permit.** Approval of Form 7460-1, Notice of Proposed Construction or Alteration, to construct on airfield. While none of the Project activities would be conducted on active airfield, the FAA nevertheless requires submittal and approval of this form for construction activities occurring in close proximity to active airfields.
- **San Francisco Airport Commission, Approval to issue design and construction bid.**
- **SFO Building Inspection and Code Enforcement (BICE), Building Demolition and Construction Permits.** Issuance of permits. All plans, specifications, calculations, and methods of construction and demolition shall meet the code requirements found in the California Uniform Building Code and SFO standards in accordance with the Tenant Improvement Guide (TIG).<sup>8</sup>
- **San Francisco Arts Commission, Design and art installation program review.** All buildings at the Airport must undergo the Arts Commission review.
- **San Francisco Regional Water Quality Control Board (RWQCB), National Pollutant Discharge Elimination System (NPDES) permit.** Approval of revised NPDES for SFO's industrial and sanitary sewer system to include the Plot 700 site, which was covered under the United Airlines MOC NPDES permit.

## REQUESTED ENVIRONMENTAL DETERMINATION

The Airport Commission seeks SFEP determination that construction of the Project is categorically exempt under CEQA §15332 (Class 32), Infill Development. The additional 20,900 square feet of replacement facilities and demolition of 21,930 square feet of existing facilities would enhance long term land use planning at the Airport by prioritizing limited land for aircraft movement/aeronautical uses. The Project would be developed on Plot 700 (approximately 5-acre site) that can be adequately served by all required utilities and public services. The site is entirely paved and has historically been used as a tenant employee parking lot. The Project would not result in significant effects relating to traffic, noise, air quality, cultural resources, hazards or water quality.

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<sup>7</sup> Federal Aviation Administration, Advisory Circular 150/5370-2F, *Operational Safety on Airports During Construction*, amended on September 29, 2011. Available online at:

[http://www.faa.gov/documentLibrary/media/Advisory\\_Circular/150\\_5370\\_2f.pdf](http://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5370_2f.pdf)

<sup>8</sup> The SFO Tenant Improvement Guide (TIG) is applicable to all tenants and Airport facilities. The TIG follows the California Building Code.



*Ms. Jeanie Poling, SFEP*  
*June 30, 2014*  
*Page 8 of 8*

**APPROVAL ACTION**

Per Chapter 31 Amendments to the CCSF Administrative Code, the Airport Commission's anticipated approval to issue design and construction bid for the Project is the formal Approval Action. The specific date of the Airport Commission meeting in which the Project would be presented to SFEP when it becomes known.

\* \* \*

Please contact me with any questions or concerns at (650) 821-7844 or [audrey.park@flysfso.com](mailto:audrey.park@flysfso.com).

Sincerely,



Audrey Park  
Senior Environmental Planner

Attachments: Environmental Evaluation Application Cover Memo  
Environmental Evaluation Application and Attachment  
Attachment A – Project Figures

cc: L. Wider, SF OCA  
Project File 4020.56.1

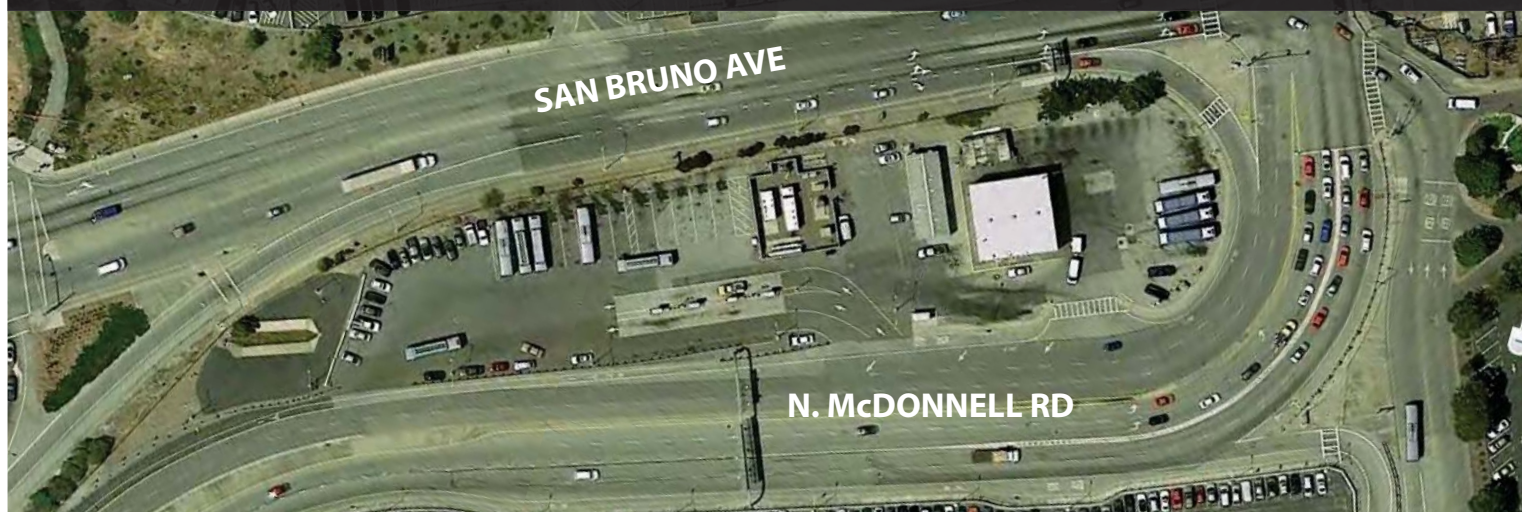
**ATTACHMENT A**

**PROJECT FIGURES**

| Figure Number | Figure Title   |
|---------------|--|
| A-1           | Proposed Project Locations                                     |
| A-2           | Existing SFO Shuttle Bus Facilities                            |
| A-3           | Existing SFO Ground Transportation Unit and CCSF Fuel/Car Wash |
| A-4           | Plot 700 Site – Aerial View                                    |
| A-5           | Proposed Project Site Plan                                     |
| A-6           | Conceptual Plan – SFO Shuttle Bus Facility and CNG Station     |
| A-7           | Conceptual Plan – SFO GTU and CCSF Fuel / Car Wash             |



**EXISTING SFO SHUTTLE BUS FACILITY**



**SAN FRANCISCO INTERNATIONAL AIRPORT**



**EXISTING GTU FACILITY & CCSF GAS / CAR WASH**



**PROPOSED PROJECT SITE ("PLOT 700")**



Notes:  
CCSF = City and County of San Francisco  
GTU = Ground Transportation Unit

Source: Google Earth images, 2014  
Prepared by: SFO Bureau of Planning and Environmental Affairs, 2014

**Figure A-1**  
Proposed Project Locations  
SFO Plot 700 Project  
June 2014



**EXISTING SFO SHUTTLE BUS FACILITY**



**LEGEND**

- A** SFO Shuttle Bus - Garage
- B** SFO Shuttle Bus - Office Trailer
- C** SFO Shuttle Bus Parking
- D** SFO Shuttle Bus Staging (Non-Maintenance)
- E** CNG Gas Station (Not part of Project)
- 1** Photo Number: Location (and Direction of View)

NOTE:  
CNG = Compressed Natural Gas

**PHOTO 1: SFO SHUTTLE BUS - GARAGE (LOOKING WEST)**



**PHOTO 2: SFO SHUTTLE BUS - OFFICE TRAILER (LOOKING NORTH)**



**AREA OF DETAIL**



Sources: Basemap: Google Earth images, 2014; Photos: SFO Bureau of Planning and Environmental Affairs, 2014  
Prepared by: SFO Bureau of Planning and Environmental Affairs, 2014

**Figure A-2**  
Existing SFO Shuttle Bus Facility  
SFO Plot 700 Project  
June 2014



**EXISTING SFO GROUND TRANSPORTATION UNIT & CCSF FUEL / CAR WASH**



**PHOTO 1: SFO GTU OFFICE (LOOKING WEST)**



**PHOTO 2: SFO GTU GARAGE (LOOKING NORTHEAST)**



**PHOTO 3: CCSF FUEL / CAR WASH (LOOKING NORTH)**



**LEGEND**

- A** SFO GTU Vehicle Inspections Garage
- B** SFO GTU Office and SFO Radio Shop
- C** SFO GTU Customer Parking
- D** CCSF Vehicle Gas Station (3 aisles)
- E** CCSF Vehicle Car Wash (2 ports)

**1** Photo Number: Photo Location (and Direction of View)

**NOTES:**  
 CCSF = City and County of San Francisco  
 GTU = Ground Transportation Unit

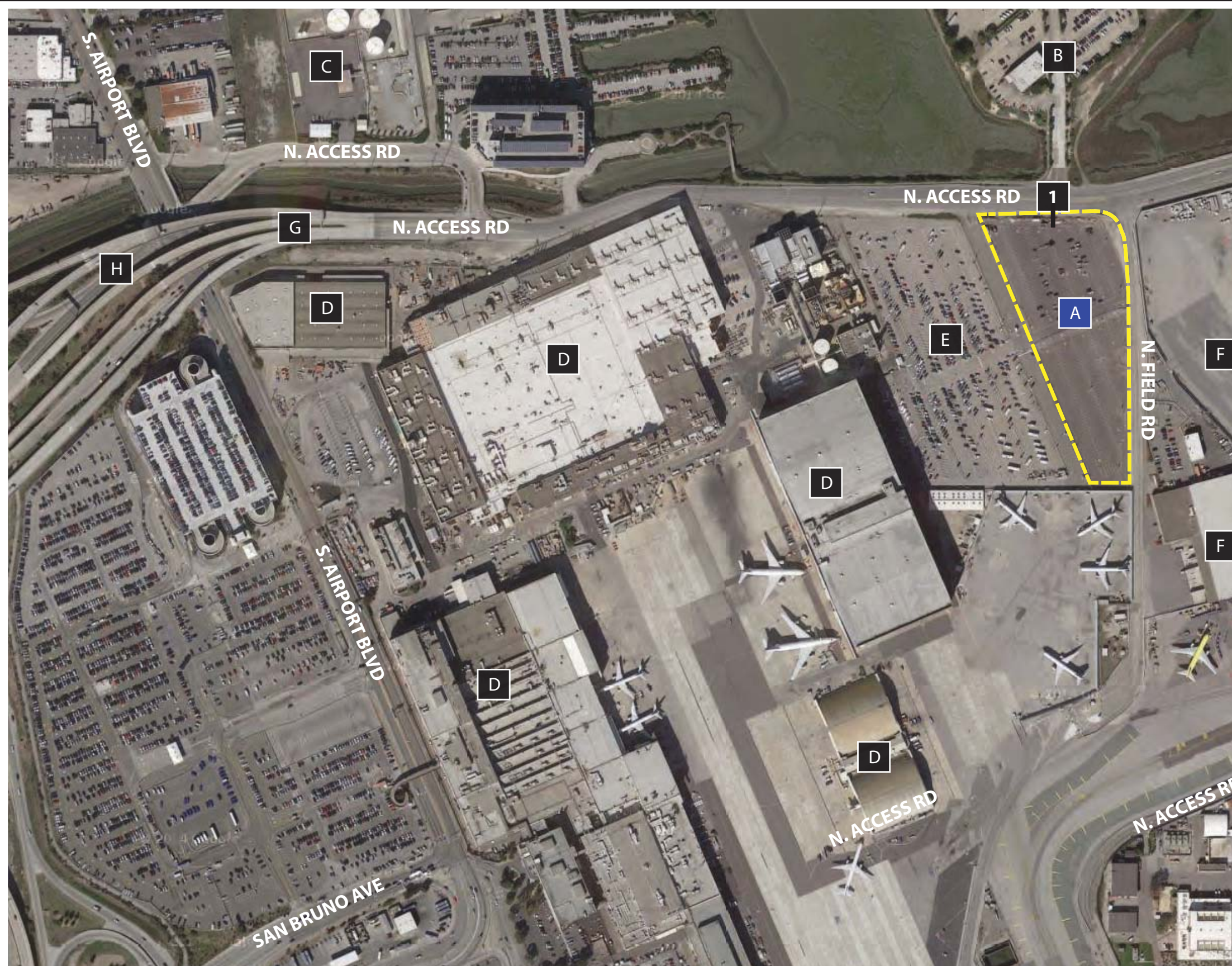
**AREA OF DETAIL**



Sources: Basemap: Google Earth images, 2014; Photos: SFO Bureau of Planning and Environmental Affairs, 2014  
 Prepared by: SFO Bureau of Planning and Environmental Affairs, 2014

**Figure A-3**  
 Existing SFO GTU and CCSF Fuel and Car Wash Station  
 SFO Plot 700 Project  
 June 2014





**LEGEND**

- A** Proposed Project Site (Plot 700)
- B** SamTrans Bus Maintenance Facility ("SamTrans Island")
- C** South San Francisco Wastewater Treatment Plant
- D** United Airlines Maintenance and Operations Center (UA MOC)
- E** United Airlines Employee Surface Parking Lot
- F** North Field Cargo Facilities
- G** U.S. 101 N, U.S. 101S, and I-380W Ramps via North Access Road
- H** U.S. 101 N, I-380E, and I-380W Ramps via North Access Road/South Airport Blvd
- 1** Photo Number: Location (and Direction of View)

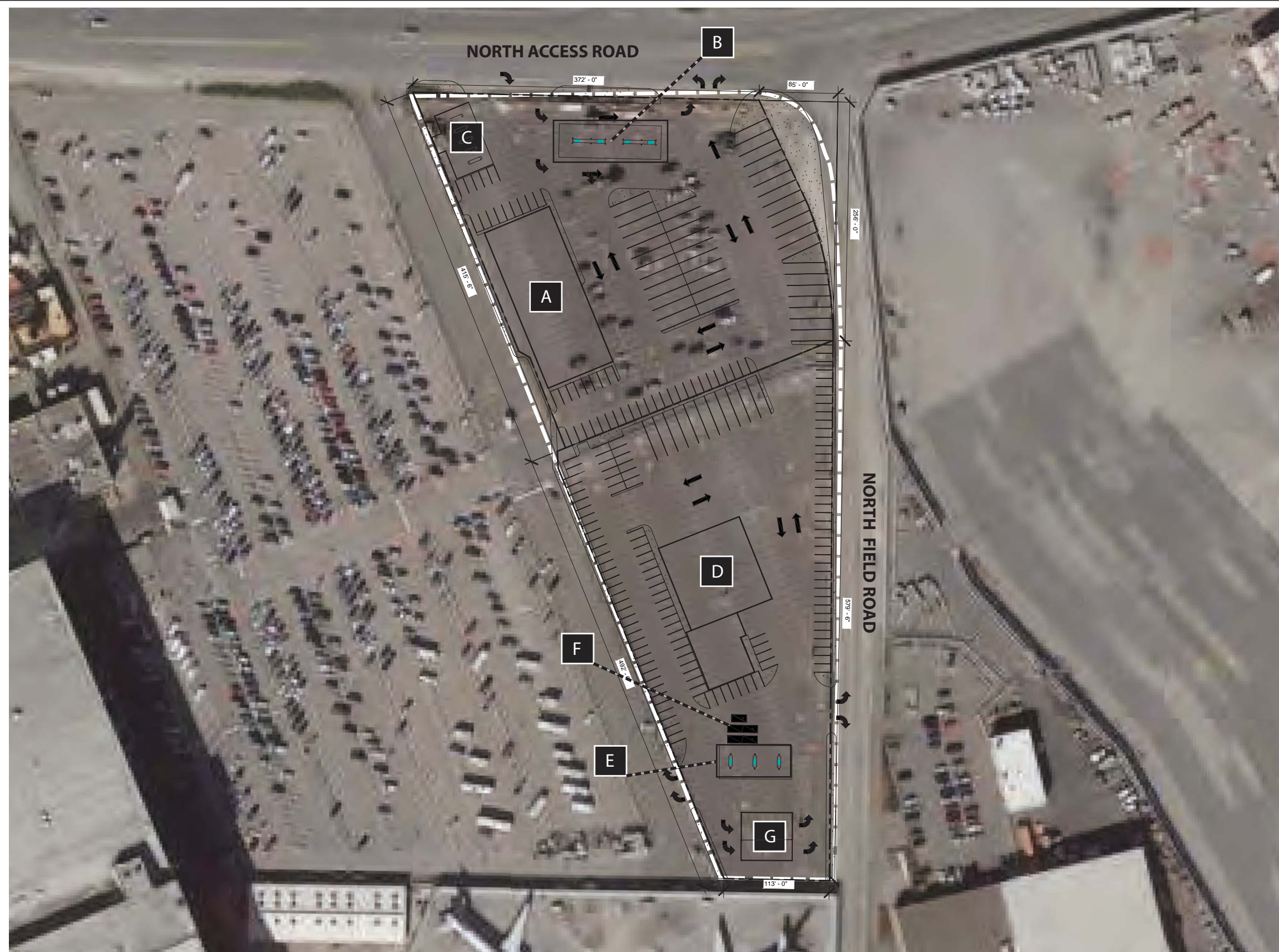
**PHOTO 1: EXISTING PLOT 700 (LOOKING SOUTH)**



Sources: Aerial Image: Google Earth, 2014; site photograph: SFO Bureau of Planning & Environmental Affairs, 2014  
 Prepared by: SFO Bureau of Planning & Environmental Affairs, 2014

**Figure A-4**  
 Plot 700 Site - Aerial View  
 SFO Plot 700 Project  
 June 2014





**LEGEND**

- A** SFO Shuttle Bus Facility  
Offices (6,000 sq. ft.)  
Garage and Bus Maintenance Bays (7,700 sq. ft.)  
Parking Stalls (41 Buses and 45 Cars)
- B** Public Use CNG Station (3,940 sq. ft.)
- C** Above Ground CNG Storage Tanks (3,130 sq. ft.)
- D** SFO Ground Transportation Unit Facility  
Offices (7,400 sq. ft.)  
Garage and Vehicle Inspection Bays (8,960 sq. ft.)  
Parking Stalls (11 Buses and 118 Cars)
- E** CCSF Vehicle Gas Pumps (2,810 sq. ft.)  
(Restricted Access)
- F** Under Ground CCSF Vehicle Gas Tanks  
(Under ground)
- G** CCSF Vehicle Car Wash  
(Restricted Access)

NOTES:  
 Drawing not to scale.  
 CNG = Compressed Natural Gas  
 sq. ft. = Square feet

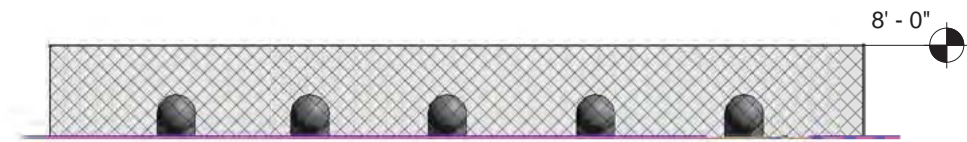




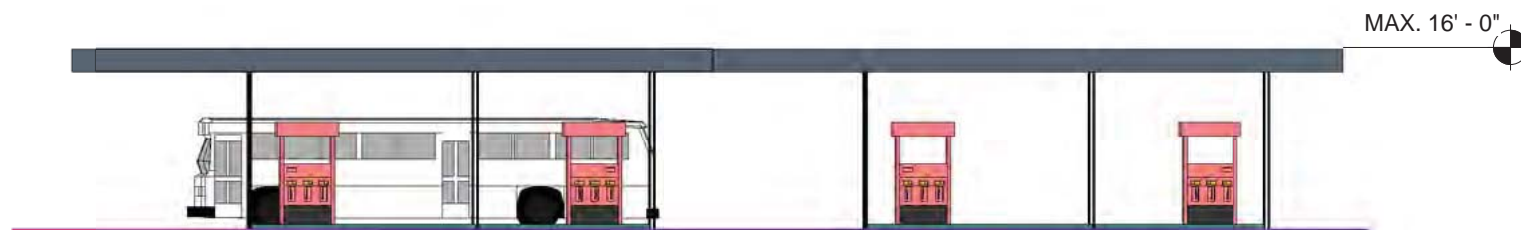
① ELEVATION - SHUTTLE BUS FACILITY FRONT  
1/16" = 1'-0"



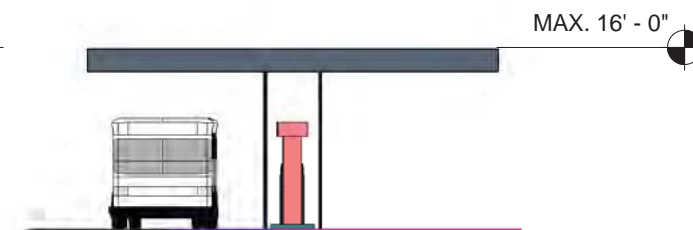
② ELEVATION - SHUTTLE BUS FACILITY SIDE  
1/16" = 1'-0"



③ ELEVATION - CNG TANK STORAGE  
1/16" = 1'-0"

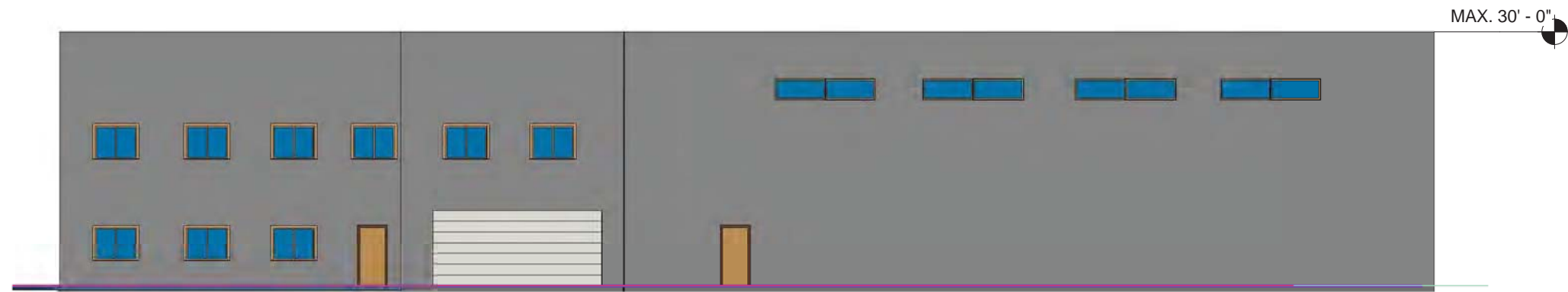


④ ELEVATION - CNG STATION FRONT  
1/16" = 1'-0"



⑤ ELEVATION - CNG STATION SIDE  
1/16" = 1'-0"

Notes:  
CNG = Compressed Natural Gas  
Three CNG tanks to be installed  
above ground.



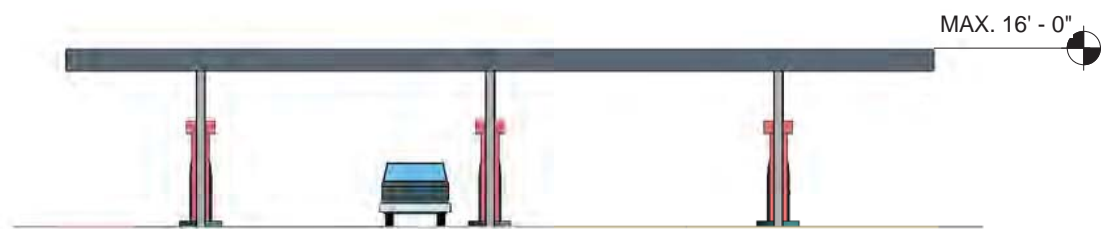
① ELEVATION - GROUND TRANSPORTATION UNIT FRONT  
1/16" = 1'-0"



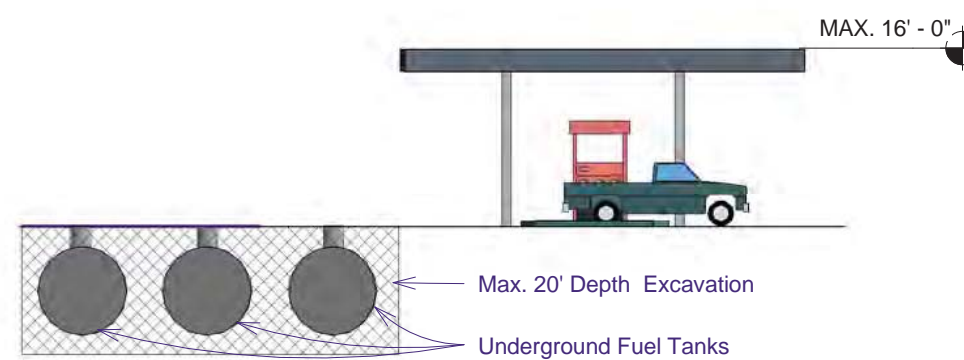
② ELEVATION - GROUND TRANSPORTATION UNIT SIDE  
1/16" = 1'-0"



③ ELEVATION - CCSF CAR WASH  
1/16" = 1'-0"



④ ELEVATION - CCSF FUEL STATION FRONT  
1/16" = 1'-0"



⑤ ELEVATION - CCSF FUEL STATION SIDE  
1/16" = 1'-0"

Notes:  
CCSF = City and County of San Francisco  
GTU = Ground Transportation Unit

**ATTACHMENT B**

**PHASE II  
ENVIRONMENTAL SITE ASSESSMENT**

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1425 N. McDowell Boulevard  
Suite 200  
Petaluma, CA 94954  
707.795.0900 phone  
707.795.0902 fax

[www.esassoc.com](http://www.esassoc.com)

June 3, 2014

Ms. Audrey Park  
Senior Environmental Planner  
Bureau of Planning and Environmental Affairs  
San Francisco International Airport  
P.O. Box 8097  
San Francisco, CA 94128

**SUBJECT: Plot 700 Soil and Groundwater Investigation  
San Francisco International Airport, San Francisco, California**

Dear Ms. Park:

Environmental Science Associates (ESA) is pleased to provide the results of this soil and groundwater investigation conducted at the Plot 700 Site at San Francisco International Airport (SFO). This investigation was conducted as part of the proposed development of the Plot 700 Site. The San Francisco Airport Bureau of Planning and Environmental Affairs (SFBPEA) is considering the proposed construction of several buildings, ancillary structures and three underground storage tanks (USTs) at the Plot 700 Site, which is currently paved and undeveloped. Sites to the southeast and west of the Plot 700 site are known to have soil and groundwater contamination (SFO, *Estimated Plume Boundaries, Total Petroleum Hydrocarbons in Soil, San Francisco International Airport, September 7, 2004*; ENGEO, *Proposal for Soil and Groundwater Sampling, November 20, 2013*). The purpose of this soil and groundwater investigation is to evaluate the current subsurface conditions at the Plot 700 Site and to ascertain whether or not the contamination associated with the adjacent sites has affected conditions at Plot 700.

## **Field Investigation**

Six soil borings (B1 through B-6) were drilled at the locations shown on Figure 1.

## **Permitting and Clearance Activities**

Prior to drilling, the soil boring locations were marked with white spray paint and then cleared by a private utility locator for the presence of subsurface utilities and other obstructions using a ground penetrating radar (GPR), electromagnetic conductivity meter (EM), and a radio frequency pipe and cable locator. ESA also acquired the as-built utility map from SFO (see Figure 1) and notified Underground Service Alert who contacted agencies and utility service providers with underground lines in the area.



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### **Drilling of Borings and Sample Collection**

Borings B-1 through B-6 were drilled on May 19, 2014, using a direct push sampling rig to 15 feet below ground surface (bgs). The borings were lithologically logged by an ESA geologist using guidance from ASTM D2488, which is based on the Unified Soil Classification System, and standard geologic techniques. The exploratory boring logs are in Appendix A.

The first 4 feet of the borings were hand augered to verify that no subsurface utilities were present. The rest of the borings were drilled using the direct push sampler lined with a clear acetate sleeve. Two soil samples were collected from each boring at various depths above groundwater. The site is close to San Francisco Bay and the depth to groundwater was clearly controlled by tidal action. In the morning, it appeared that the boreholes might not produce groundwater for sampling, so all six borings were drilled and left open to see if groundwater would rise. The slough to the north of the site filled with bay water by mid-day as the tide rose. The depth to groundwater in the borings also rose, reaching as shallow as 5 feet bgs by the afternoon.

Soil samples were sealed in tubes with Teflon end sheets and plastic caps, labeled, and placed in a cooler with ice. Grab groundwater samples were collected using a peristaltic pump and Tygon tubing inserted down a temporary slotted PVC well casing placed in the open borehole. Samples were then transported under chain of custody documentation to the analytical laboratory. After collection of the samples, the borings were sealed with a cement grout to near the ground surface, followed by cold patch asphalt to the surface.

Drilling and sampling equipment that came in contact with soil was decontaminated by washing using phosphate-free soap (Alconox) and water solution, followed by two deionized rinses or by steam cleaning. Purge water and decontamination fluids were removed from the Site for disposal.

### **Analytical Testing and Reporting**

All soil and grab groundwater samples were analyzed for the following chemicals using the listed analytical test methods. The analytical reports are provided in Appendix A.

- Total petroleum hydrocarbons (TPH) fuel fingerprint by 8015B with silica gel cleanup
- Volatile Organic Compounds (VOCs) and oxygenates by 8260B
- Leaking Underground Fuel Tank (LUFT) 5 Metals (cadmium, chromium, lead, nickel, and zinc; SW 6020 and E 200.8)

The analytical results were compared to the action levels in the Regional Water Quality Control Board - San Francisco Bay Region (RWQCB) Order No. 99-045, which provides Cleanup Standards to be applied at the SFO for TPH as gasoline, jet fuel, and diesel; and certain VOCs. The Plot 700 site is located within the Human Health Protection Zone (HHPZ) at SFO. For those detected chemicals for which Cleanup Standards have not been established, those detected chemicals were compared to the Environmental Screening Levels (ESLs), also published by the RWQCB (December 2013 version). ESLs are used by the RWQCB to screen analytical results and assess whether further action is needed.



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Under Order 99-045, soil and groundwater with concentrations below the Cleanup Standards and ESLs would be considered by regulatory agencies to not warrant further action. In addition, SFO operates the Mel Leong Treatment Plant, where water from construction dewatering activities could be taken. The water analytical results were also compared to the treatment plant effluent limit of 20 milligrams per liter (mg/L) for oil and grease in water, as listed in RWQCB Order R2-2013-0011.

## **Results**

### **Field Observations**

The soil borings encountered fill from the ground surface to various depths ranging from 5-1/2 to 12 feet bgs. The fill was highly variable consisting of mixtures of mostly sand, silt, and gravel with variable amounts of clay. With increasing depth, the fill included increasing volumes of Bay Mud, a native plastic, organic, black clay common to the margins of San Francisco Bay. Bay Mud was encountered in all borings below the fill to the total depth explored of 15 feet bgs. Bay Mud has a strong rotting vegetation odor that tends to overpower other odors. However, a gasoline odor was noted in Boring B-6 from about 4 to 7 feet bgs.

Initially, the borings drilled in the morning had very little groundwater at the bottom of the borings. However, it was observed that the slough just north of the site was filling in with the tide by later in the morning. The borings were left open all day and began to fill to as shallow as 5 feet below the ground surface in the afternoon enabling the collection of grab groundwater samples from all borings. As noted above, Boring B-1 only produced enough groundwater to analyze for a fuel fingerprint. In addition, the groundwater in all boreholes was very turbid, a common occurrence in water samples collected from Bay Mud. Although all boreholes were all left open for hours after drilling, the water samples collected for metals analyses was still very turbid with mud. Consequently, the water samples could not be filtered and the metals analysis results are for total metals, not dissolved metals.

### **Petroleum Hydrocarbon Results**

The analytical results for all of the soil samples and four of the six groundwater samples reported detections of diesel- and oil-range hydrocarbons.





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**TABLE 1  
PETROLEUM HYDROCARBON RESULTS**

| Boring | Media | Depth in Feet Below Ground Surface | Diesel Range (C10-C23) | Motor Oil Range (C18-C36) | Diesel Cleanup Standards | Motor Oil ESLs | Units |
|--------|-------|------------------------------------|------------------------|---------------------------|--------------------------|----------------|-------|
| B-1    | Soil  | 1                                  | 1.8                    | 10                        | 200                      | 500            | mg/kg |
| B-1    | Soil  | 7                                  | 9.1 (a)                | 6.3                       | 200                      | 500            | mg/kg |
| B-1    | Water | n/a                                | 140                    | 300                       | 600                      | 640            | ug/L  |
| B-2    | Soil  | 2                                  | 27                     | 130                       | 200                      | 500            | mg/kg |
| B-2    | Soil  | 7                                  | 2.7                    | 6.8                       | 200                      | 500            | mg/kg |
| B-2    | Water | n/a                                | nd (50)                | nd (250)                  | 600                      | 640            | ug/L  |
| B-3    | Soil  | 2.5                                | 11                     | 39                        | 200                      | 500            | mg/kg |
| B-3    | Soil  | 10                                 | 1.1                    | 6.3                       | 200                      | 500            | mg/kg |
| B-3    | Water | n/a                                | nd (50)                | nd (250)                  | 600                      | 640            | ug/L  |
| B-4    | Soil  | 2                                  | 35                     | 580                       | 200                      | 500            | mg/kg |
| B-4    | Soil  | 4                                  | 12                     | 100                       | 200                      | 500            | mg/kg |
| B-4    | Water | n/a                                | 86                     | 510                       | 600                      | 640            | ug/L  |
| B-5    | Soil  | 2                                  | 13                     | 53                        | 200                      | 500            | mg/kg |
| B-5    | Soil  | 3.5                                | 32                     | 150                       | 200                      | 500            | mg/kg |
| B-5    | Water | n/a                                | 110                    | nd (250)                  | 600                      | 640            | ug/L  |
| B-6    | Soil  | 2                                  | 3.6                    | 34                        | 200                      | 500            | mg/kg |
| B-6    | Soil  | 4                                  | 52                     | 57                        | 200                      | 500            | mg/kg |
| B-6    | Water | n/a                                | 260 (a)                | <b>740</b>                | 600                      | <b>640</b>     | ug/L  |

Notes:

mg/kg = milligrams per kilogram, approximately equivalent to parts per million

ug/L = micrograms per liter, approximately equivalent to parts per billion

(a) = Many detected peaks are at the lower carbon range end of C9-C12 resembling Stoddard Solvent or more likely the residual heavier end of gasoline (C6-C12)

n/a = not applicable

Cleanup Standards are from RWQCB Order 99-045 - Human Health Protection Zone (HHPZ) – Tier 0

Motor Oil ESLs are from RWQCB Commercial/Industrial ESLs, December 2013 version

SOURCE: McCampbell Analytical, Inc., 2014



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The only exceedance of an action level was for the groundwater sample collected from Boring B-6, located at the far southern end of Plot 700 where the fuel underground storage tanks are proposed to be installed. The TPH-motor oil range of 740 micrograms per liter (ug/L) exceeds the ESL of 640 ug/L. However, there were no petroleum hydrocarbon VOCs (e.g., benzene, toluene, ethylbenzene, or xylenes) detected in the same sample, indicating that the motor oil range hydrocarbons do not include volatile compounds that would pose a respiratory risk to construction workers. SFBPEA have advised that water generated during dewatering activities would be disposed of via the Mel Leong wastewater treatment plant, which is permitted to receive and treat water with low concentrations of organic compounds such as motor oil. The waste water treatment plant effluent limit for oil and grease is 20 mg/L or 20,000 ug/L. No effluent limit is listed for diesel range hydrocarbons, so the oil and grease effluent was applied as a similar surrogate. The maximum reported concentration of 740 ug/L diesel range hydrocarbons in the water sample collected from Boring B-6 is well below the effluent limit. This means that the treatment plant would be able to accept the water for treatment since the water already meets their effluent limit.

### **Volatile Organic Compound Results**

No VOCs were detected in any of the soil samples above reporting limits.

Acetone was detected in groundwater samples at concentrations ranging from 11 to 38 ug/L in Borings B-2, B-4, B-5, and B-6. Order No. 99-045 does not provide Cleanup Standards for acetone. Acetone is a common laboratory cross-contaminant because of its use in analytical testing and the cleaning of equipment, and the source should be considered to be from the laboratory since no site-specific source is known. In any case, the reported acetone concentrations are below the ESL of 1,500 ug/L, indicating that the RWQCB would not require further action for acetone.

Methyl ethyl ketone (MEK or 2-butanone) was detected in groundwater samples at concentrations ranging from 2.3 to 4.5 ug/L in Borings B-2, B-4, and B-6. Order No. 99-045 does not provide Cleanup Standards for MEK. MEK is a common laboratory cross-contaminant because of its use in analytical testing and the cleaning of equipment, and the source should be considered to be from the laboratory since no site-specific source is known. In any case, the reported MEK concentrations are below the ESL of 14,000 ug/L, indicating that the RWQCB would not require further action for MEK.

No other VOCs were detected in the groundwater samples above reporting limits.

### **Metals Results**

Cadmium was detected in soil samples at concentrations ranging from below reporting limits to 0.72 milligrams per kilogram (mg/kg). Order No. 99-045 does not provide Cleanup Standards for cadmium. The reported cadmium concentrations are below the ESL of 12 mg/kg, indicating that the RWQCB would not require further action for cadmium.



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Chromium was detected in soil samples at concentrations ranging from 40 to 100 mg/kg. Order No. 99-045 does not provide Cleanup Standards for chromium. The reported chromium concentrations are below the ESL of 2,500 mg/kg, indicating that the RWQCB would not require further action for chromium.

Lead was detected in soil samples at concentrations ranging from 3.7 to 12 mg/kg. Order No. 99-045 does not provide Cleanup Standards for lead. The reported lead concentrations are below the ESL of 320 mg/kg, indicating that the RWQCB would not require further action for lead.

Nickel was detected in soil samples at concentrations ranging from 22 to 150 mg/kg. Order No. 99-045 does not provide Cleanup Standards for nickel. The reported nickel concentrations are at or below the ESL of 150 mg/kg, indicating that the RWQCB would not require further action for nickel.

Zinc was detected in soil samples at concentrations ranging from 40 to 100 mg/kg. Order No. 99-045 does not provide Cleanup Standards for zinc. The reported zinc concentrations are below the ESL of 600 mg/kg, indicating that the RWQCB would not require further action for zinc.

## **Summary**

The reported chemical concentrations were below action levels for all soil samples. Only the one detection of TPH in the motor oil range in groundwater exceeded the ESL for motor oil in water. However, because no petroleum-based VOCs were detected in groundwater, the residual oil does not include detectable volatile chemicals that would present a respiratory risk to construction workers. In addition, SFBPEA's construction plan is to dispose of water generated during dewatering activities to the SFO wastewater treatment plant, which is permitted to receive and treat water with low concentrations of organic compounds such as motor oil.

## **Limitations**

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of ESA's profession practicing in the same locality, under similar conditions and at the date the services are provided. The work performed was based on project information provided by regulatory agencies and the Client. Our conclusions, opinions and recommendations are based on the limited information provided for our evaluation. It is possible that conditions could vary between or beyond the data evaluated. ESA makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

All information gathered during the study by ESA is considered confidential and will be released only upon written authorization from you, our client, or as required by law. California law requires a person to inform the state if a situation is encountered that can be considered an immediate endangerment to the public's health or welfare and/or to the environment.

If you have any questions or would like additional information, please contact us. We appreciate this opportunity to be of service to you and look forward to moving this project forward.



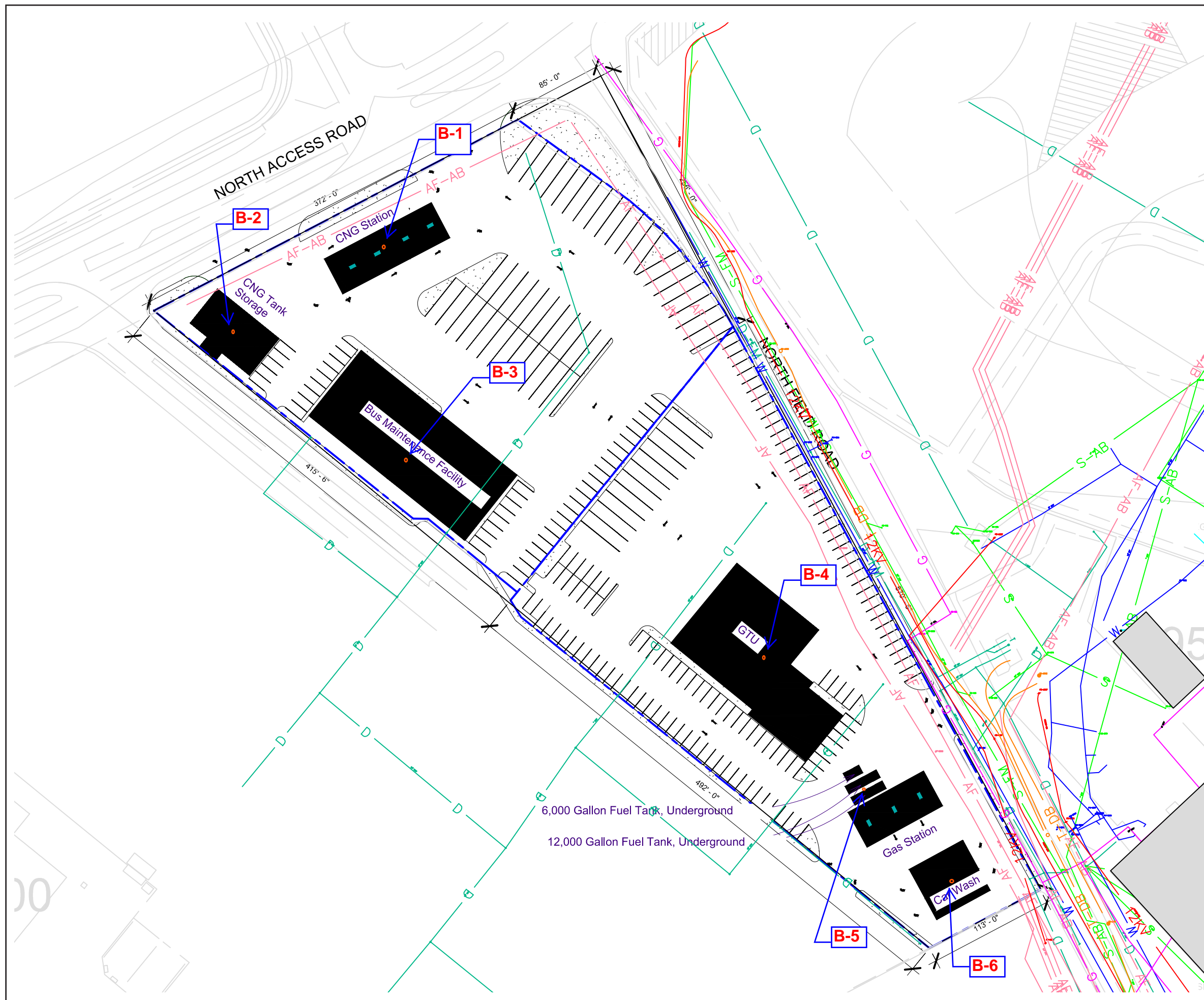
Ms. Audrey Park  
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Sincerely,

A handwritten signature in black ink that reads "Michael Burns". The signature is written in a cursive, flowing style with a horizontal line underneath.

Michael Burns, CHG  
Principal Geologist

cc: Julie Watson, ESA  
Adrian Jones, ESA



| Map Legend |                         |
|------------|-------------------------|
| VA         | E-Elec-Duct-12k         |
| VT         | T-Telcon-Duct           |
| NG         | NGPIPELBL               |
| LA         | LABEL_AF_LINE           |
| UL         | U-Iwst-Mnhl_IV_MH       |
| UC         | U-Iwst-Cout_IV_CD       |
| UE         | U-Iwst-Ats_IV_ET        |
| UJ         | U-Iwst-Junc_IV_JU       |
| UP         | U-Iwst-Psta_IV_PS       |
| UV         | U-Iwst-Valv-Shut_IV_VV  |
| UN         | U-Iwst-End_IV_EN        |
| UR         | U-Iwst-Wash_IV_WR       |
| UA         | U-Iwst-Valv-Air_IV_AV   |
| UCB        | U-Iwst-Cbsn_IV_CB       |
| UPG        | U-Iwst-Plug_IV_PG       |
| ULS        | U-Iwst-Lsta_IV_LS       |
| LI         | LABEL_IV_LINE           |
| VA         | U-Ngas-Line-Activ       |
| VA         | U-Ngas-Line-Aban        |
| VA         | U-Ngas-Line-Unv         |
| UCD        | U-Iwst-Node-Aban_IV_CD  |
| UPG        | U-Iwst-Node-Aban_IV_PG  |
| UMH        | U-Iwst-Node-Aban_IV_MH  |
| VA         | U-Iwst-Force-Activ      |
| VA         | U-Iwst-Force-Aban       |
| VA         | U-Iwst-Gvty-Aban        |
| UNV        | U-Iwst-Line-Unv         |
| VA         | U-Iwst-Gvty-Activ       |
| UJU        | U-Ngas-Junc_NG_JU       |
| UVV        | U-Ngas-Node-Aban_NG_VV  |
| UPG        | U-Ngas-Node-Aban_NG_PG  |
| UPG        | U-Ngas-Plug_NG_PG       |
| UVV        | U-Ngas-Valv-Shut_NG_VV  |
| UJU        | U-Ngas-Node-Aban_NG_JU  |
| ME         | U-Ngas-Mter_NG_ME       |
| VA         | U-Ngas-Node-Aban_NG_VA  |
| HP         | U-Fuel-Hipt_AF_HP       |
| LP         | U-Fuel-Lopt_AF_LP       |
| FH         | U-Fuel-Hydr_AF_FH       |
| VA         | U-Fuel-Vault_AF_VA      |
| ET         | U-Fuel-Ats_AF_ET        |
| VV         | U-Fuel-Valv-Shut_AF_VV  |
| VA         | U-Fuel-Line-Activ       |
| VA         | U-Fuel-Line-Aban        |
| TE         | T-Telcon-Mnhl_TE_NODE   |
| TE         | T-Telcon-Mnhl_TE_CIRCLE |
| PW         | LABEL_PW_LINE           |
| PG         | U-Watr-Plug_PW_PG       |
| VV         | U-Watr-Valv-Shut_PW_VV  |
| SV         | U-Watr-Node-Aban_PW_SV  |
| VV         | U-Watr-Node-Aban_PW_VV  |
| SV         | U-Watr-Srvc_PW_SV       |
| PV         | U-Watr-Valv-Post_PW_PV  |
| RE         | U-Watr-Redu_PW_RE       |
| FH         | U-Watr-Fhyd_PW_FH       |
| EN         | U-Watr-End_PW_EN        |
| AV         | U-Watr-Valv-Air_PW_AV   |
| FH         | U-Watr-Node-Aban_PW_FH  |
| PG         | U-Watr-Node-Aban_PW_PG  |
| CR         | U-Watr-Mnfd_PW_CR       |
| VV         | U-Watr-Redu_PW_VV       |
| BP         | U-Watr-Bkflo_PW_BP      |
| VA         | U-Watr-Line-Activ       |
| VA         | U-Watr-Line-Aban        |
| UNV        | U-Watr-Line-Unv         |
| SS         | LABEL_SS_LINE           |
| PS         | U-Sewr-Psta_SS_PS       |
| VV         | U-Sewr-Valv-Shut_SS_VV  |
| CD         | U-Sewr-Cout_SS_CD       |
| SV         | U-Sewr-Srvc_SS_SV       |
| MH         | U-Sewr-Mnhl_SS_MH       |
| PG         | U-Sewr-Plug_SS_PG       |
| PS         | U-Sewr-Node-Aban_SS_PS  |
| AV         | U-Sewr-Valv-Air_SS_AV   |
| EN         | U-Sewr-End_SS_EN        |
| RE         | U-Sewr-Redu_SS_RE       |
| MH         | U-Sewr-Node-Aban_SS_MH  |
| CD         | U-Sewr-Node-Aban_SS_CD  |
| CB         | U-Sewr-Cbsn_SS_CB       |
| VA         | U-Sewr-Force-Activ      |
| VA         | U-Sewr-Force-Aban       |
| VA         | U-Sewr-Gvty-Activ       |
| VA         | U-Sewr-Gvty-Aban        |
| UNV        | U-Sewr-Line-Unv         |
| SD         | LABEL_SD_LINE           |
| PS         | U-Sdrn-Node-Aban_SD_PS  |
| PS         | U-Sdrn-Psta_SD_PS       |
| MH         | U-Sdrn-Mnhl_SD_MH       |
| CB         | U-Sdrn-Cbsn_SD_CB       |
| PG         | U-Sdrn-Cap_SD_PG        |
| CB         | U-Sdrn-Node-Aban_SD_CB  |
| EN         | U-Sdrn-Empt_SD_EN       |
| VV         | U-Sdrn-Valv-Shut_SD_VV  |
| CD         | U-Sdrn-Cout_SD_CD       |
| PG         | U-Sdrn-Node-Aban_SD_PG  |
| SV         | U-Sdrn-Srvc_SD_SV       |
| MH         | U-Sdrn-Node-Aban_SD_MH  |
| EN         | U-Sdrn-Drtfall_SD_EN    |
| VA         | U-Sdrn-Gvty-Activ       |
| VA         | U-Sdrn-Gvty-Aban        |
| UNV        | U-Sdrn-Line-Unv         |
| UNV        | U-Sdrn-Gvty-Unv         |
| UNV        | U-Sdrn-Force-Activ      |
| EL         | E-Elec-Node-12k_EL_DN   |
| SS         | E-Elec-Node-12k_EL_SS   |
| UN         | E-Elec-Node-12k_EL_UN   |
| DB         | E-Elec-Node-12k_EL_DB   |
| BLDG       | CE-STRC-BLDG            |

DISCLAIMER:  
THIS FIGURE IS NOT REPRESENTATIVE OF ALL THE UTILITIES THAT MAY BE PRESENT IN THE VICINITY OF THE PROPOSED PLOT 700 PROJECT. CONTRACTORS ARE ADVISED TO EXERCISE CAUTION AND NOT TO RELY SOLELY ON THIS REPRESENTATIVE FIGURE FOR UTILITY LOCATIONS.

**Figure 1**  
Project Site Plan and Utilities  
SFO Plot 700 Development  
May 2014

**APPENDIX A**  
**EXPLORATORY BORING LOGS**



Exploratory Boring Log

Project/Task #: D120832      BOREHOLE ID: B-1  
 Logged by: M.Burns, PG

|  |                   |   |
|--|-------------------|---|
| Methods/Equipment:<br>2-inch dia. Direct Push<br>w/acetate tubes | Date: 19-May-2014 | Location/Coordinates: SW corner<br>North Field Road & North Access Road |
|  | Start Time: 830   |   |
|  | End Time:         |   |

| Depth (ft) | Spl | Soil Description  | Notes |
|------------|-----|---|-------|
|            |     | ASPHALT and Baserock  |       |
| 1          |     | FILL: dark olive gray (5Y,3/2) to dark gray (5Y,4/1) clayey silty sand (SM); fine to coarse sand;<br>trace angular fine gravel, loose to medium dense, dry to damp, no odor<br><br>FILL: light yellowish brown (2.5Y,6/3) to olive gray (5Y,4/2), silty, gravelly clay (CL),<br>fine sand to fine gravel, rounded, firm, damp<br><br>@6-1/2 ft: silty clay, Bay Mud odor<br><br>BAY MUD CLAY (CH): black (5Y, 2.5/1) to very dark gray (5Y,3/1), plastic, organics,<br>sandy, silty, firm, moist to wet |       |
| 2          |     |   |       |
| 3          |     |   |       |
| 4          |     |   |       |
| 5          |     |   |       |
| 6          |     |   |       |
| 7          |     |   |       |
| 8          |     |   |       |
| 9          |     |   |       |
| 10         |     |   |       |
| 11         |     |   |       |
| 12         |     |   |       |
| 13         |     |   |       |
| 14         |     |   |       |
| 15         |     |   |       |
| 16         |     | Total depth drilled = 15 feet   |       |
| 17         |     |   |       |
| 18         |     |   |       |
| 19         |     |   |       |
| 20         |     |   |       |

Remarks/Notes: All borings hand augered to 4 feet as per utility requirements





Exploratory Boring Log

| Project/Task #: D120832   |                   | BOREHOLE ID: B-2  |       |
|---|-------------------|---|-------|
| Logged by: M.Burns, PG  |                   |   |       |
| Methods/Equipment:<br>2-inch dia.Direct Push<br>w/acetate tubes               | Date: 19-May-2014 | Location/Coordinates: SW corner   |       |
|   | Start Time: 930   | North Field Road & North Access Road  |       |
|   | End Time:         | Elevation: about 12 msl   |       |
| Depth (ft)  | Spl               | Soil Description  | Notes |
|   |                   | ASPHALT and Baserock  |       |
| 1   |                   | FILL: dark olive gray (5Y,3/2) to dark gray (5Y,4/1) clayey silty sand (SM); fine to coarse sand;<br>trace angular fine gravel, loose to medium dense, dry to damp, no odor<br><br>@2 ft: very silty grading to mixed with Bay Mud, organics, shell fragments |       |
| 2   |                   |   |       |
| 3   |                   |   |       |
| 4   |                   |   |       |
| 5   |                   |   |       |
| 6   |                   |   |       |
| 7   |                   |   |       |
| 8   |                   | BAY MUD CLAY (CH): black (5Y, 2.5/1) to very dark gray (5Y,3/1), plastic, organics,<br>sandy, silty, firm, moist to wet   |       |
| 9   |                   |   |       |
| 10  |                   |   |       |
| 11  |                   |   |       |
| 12  |                   |   |       |
| 13  |                   |   |       |
| 14  |                   |   |       |
| 15  |                   |   |       |
| 16  |                   | Total depth drilled = 15 feet   |       |
| 17  |                   |   |       |
| 18  |                   |   |       |
| 19  |                   |   |       |
| 20  |                   |   |       |
| Remarks/Notes: All borings hand augered to 4 feet as per utility requirements |                   |   |       |



Exploratory Boring Log

| Project/Task #: D120832   |     | BOREHOLE ID: B-3   |  |
|---|-----|--|--|
| Logged by: M.Burns, PG  |     |  |  |
| Methods/Equipment:<br>2-inch dia. Direct Push<br>w/acetate tubes              |     | Date: 19-May-2014<br>Start Time: 1100<br>End Time:   | Location/Coordinates: SW corner<br>North Field Road & North Access Road<br>Elevation: about 12 msl |
| Depth (ft)  | Spl | Soil Description   | Notes  |
| 1   |     | ASPHALT and Baserock   |  |
| 2   |     | FILL: dark olive gray (5Y,3/2) to dark gray (5Y,4/1) clayey silty sand (SM); fine to coarse sand; trace angular fine gravel, loose, dry to damp, no odor |  |
| 3   |     | @2-1/2 ft: clayey sand (SC) fill, light yellowish brown (2.5Y, 5/3) to olive brown (2.5Y4/3), fine to medium sand; clayey, silty, medium dense, damp     |  |
| 4   |     | @3-1/2 ft: chaotic colors, mixed clayey sand with Bay Mud chunks   |  |
| 5   |     |  |  |
| 6   |     |  |  |
| 7   |     |  |  |
| 8   |     | BAY MUD CLAY (CH): black (5Y, 2.5/1) to very dark gray (5Y,3/1), plastic, organics, sandy, silty, firm, moist  |  |
| 9   |     |  |  |
| 10  |     | @10 ft: wet  |  |
| 11  |     |  |  |
| 12  |     |  |  |
| 13  |     |  |  |
| 14  |     |  |  |
| 15  |     |  |  |
| 16  |     | Total depth drilled = 15 feet  |  |
| 17  |     |  |  |
| 18  |     |  |  |
| 19  |     |  |  |
| 20  |     |  |  |
| Remarks/Notes: All borings hand augered to 4 feet as per utility requirements |     |  |  |
|   |     |  | Page 1 of 1  |



Exploratory Boring Log

| Project/Task #: D120832   |     | BOREHOLE ID: B-4   |  |
|---|-----|--|--|
| Logged by: M.Burns, PG  |     |  |  |
| Methods/Equipment:<br>2-inch dia. Direct Push<br>w/acetate tubes              |     | Date: 19-May-2014<br>Start Time: 1330<br>End Time:   | Location/Coordinates: SW corner<br>North Field Road & North Access Road<br>Elevation: about 12 msl |
| Depth (ft)  | Spl | Soil Description   | Notes  |
| 1   |     | ASPHALT and Baserock   |  |
| 2   |     | FILL: light yellowish brown (2.5Y,6/4) to dark gray (5Y,4/1) silty sand (SM); fine to coarse sand; trace fine gravel, loose, dry to damp, no odor                      |  |
| 3   |     | @1ft: Bay Mud chunks   |  |
| 4   |     | @1-1/2 ft: sandy Bay Mud (CH), trace gravel, organics, plastic, damp   |  |
| 5   |     | @2 ft: sandy pockets, decessing sand, angular fine gravel  |  |
| 6   |     | @3 ft: silty sandy clay to clayey silty sand (SM-CL), dark gray (5Y,4/1) to olive gray (5Y,4/2), Bay Mud odor  |  |
| 7   |     | @4 ft: fine sand, trace medium sand to fine gravel   |  |
| 8   |     | SILTY SAND (SM), very dark gray (5Y,3/1), fine to medium sand, trace coarse sand & shell fragments, clayey, medium dense, moist to wet, Bay Mud smell                  |  |
| 9   |     | @8 ft: increasing clay with depth, wet   |  |
| 10  |     |  |  |
| 11  |     |  |  |
| 12  |     |  |  |
| 13  |     | BAY MUD CLAY (CH): black (5Y, 2.5/1) to very dark gray (5Y,3/1), plastic, organics, strong Bay Mud smell, silty occasional shell fragments, soft to firm, moist to wet |  |
| 14  |     |  |  |
| 15  |     |  |  |
| 16  |     | Total depth drilled = 15 feet  |  |
| 17  |     |  |  |
| 18  |     |  |  |
| 19  |     |  |  |
| 20  |     |  |  |
| Remarks/Notes: All borings hand augered to 4 feet as per utility requirements |     |  |  |
|   |     |  | Page 1 of 1  |



Exploratory Boring Log

Project/Task #: D120832      BOREHOLE ID: B-5  
 Logged by: M.Burns, PG

|  |                   |   |
|--|-------------------|---|
| Methods/Equipment:<br>2-inch dia. Direct Push<br>w/acetate tubes | Date: 19-May-2014 | Location/Coordinates: SW corner<br>North Field Road & North Access Road |
|  | Start Time: 1430  |   |
|  | End Time:         |   |

| Depth (ft) | Spl | Soil Description  | Notes |  |  |
|------------|-----|---|-------|--|--|
|            |     | ASPHALT and Baserock  |       |  |  |
| 1          |     | FILL; olive gray (5Y, 4/2); clayey silty sand (SM); fine to coarse sand;<br>loose; dry to damp; no odor<br>@1ft: olive brown (2.5Y,4/4), 5-10% coarse sand to fine gravel, loose to<br>medium dense, damp<br>@2 ft: dark olive gray (5Y,3/2), 20-30% coarse sand to fine gravel, bay mud odor<br>@3 ft: dark gray (5Y,4/1), some clay, medium dense, damp<br><br>@5 ft: mottled olive (5Y,5/3) to very dark gray (5Y,3/1), fine to medium sand,<br>no coarse sand or gravel, increasing clay<br><br>@8 ft: increasing Bay Mud w/strong Bay Mud odor |       |  |  |
| 2          |     |   |       |  |  |
| 3          |     |   |       |  |  |
| 4          |     |   |       |  |  |
| 5          |     |   |       |  |  |
| 6          |     |   |       |  |  |
| 7          |     |   |       |  |  |
| 8          |     |   |       |  |  |
| 9          |     |   |       | BAY MUD CLAY (CH): black (5Y, 2.5/1) to very dark gray (5Y,3/1), plastic, organics,<br>strong Bay Mud smell, silty and sandy; occasional shell fragments, soft to firm,<br>moist to wet @ 9 ft |  |
| 10         |     |   |       |  |  |
| 11         |     |   |       |  |  |
| 12         |     |   |       |  |  |
| 13         |     |   |       | @13 ft: less sand  |  |
| 14         |     |   |       |  |  |
| 15         |     |   |       |  |  |
| 16         |     | Total depth drilled = 15 feet   |       |  |  |
| 17         |     |   |       |  |  |
| 18         |     |   |       |  |  |
| 19         |     |   |       |  |  |
| 20         |     |   |       |  |  |

Remarks/Notes: All borings hand augered to 4 feet as per utility requirements



Exploratory Boring Log

| Project/Task #: D120832  |                   | BOREHOLE ID: B-6   |       |
|--|-------------------|--|-------|
| Logged by: M.Burns, PG   |                   |  |       |
| Methods/Equipment:<br>2-inch dia. Direct Push<br>w/acetate tubes | Date: 19-May-2014 | Location/Coordinates: SW corner  |       |
|  | Start Time: 1530  | North Field Road & North Access Road   |       |
|  | End Time:         | Elevation: about 12 msl  |       |
| Depth (ft)   | Spl               | Soil Description   | Notes |
| 1  |                   | ASPHALT and Baserock   |       |
| 2  |                   | FILL: mottled dark olive gray (5Y, 3/2), clayey silty sand to sandy silty clay (SM-SC), fine to coarse sand, occasional fine gravel, loose, dry to damp, no odor<br>@1ft: chunks of Bay Mud with peat  |       |
| 3  |                   | FILL: mottled olive gray (5Y, 4/2) to dark yellowish brown (10YR, 4/4) clayey silty sand (SM), fine to medium grained, occasional coarse sand to fine gravel, medium dense, damp, trace shell fragments<br>@4 ft: gasoline odor; very dark gray (5Y,3/1) to dak gray (2.5Y, 4.0)<br><br>@5 ft: gasoline odor<br><br>@ 7 ft: faint gasoline odor<br><br>@8 ft: increasing Bay Mud w/strong Bay Mud odor<br>mottled olive (5Y,4/3) to very dark gray (2.5Y, 3/0)<br>@9 ft: wet |       |
| 4  |                   |  |       |
| 5  |                   |  |       |
| 6  |                   |  |       |
| 7  |                   |  |       |
| 8  |                   |  |       |
| 9  |                   |  |       |
| 10   |                   |  |       |
| 11   |                   | BAY MUD CLAY (CH): black (5Y, 2.5/1), plastic, organics, soft, moist to wet, strong Bay Mud smell, occasional shell fragments  |       |
| 12   |                   |  |       |
| 13   |                   |  |       |
| 14   |                   |  |       |
| 15   |                   |  |       |
| 16   |                   | Total depth drilled = 15 feet  |       |
| 17   |                   |  |       |
| 18   |                   |  |       |
| 19   |                   |  |       |
| 20   |                   |  |       |

Remarks/Notes: All borings hand augered to 4 feet as per utility requirements

**APPENDIX B**  
**LABORTATORY ANALYTICAL REPORT**



# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1405744 **Amended:** 05/30/2014

**Report Created for:** ESA  
1425 N. McDowell Blvd. Ste.200  
Petaluma, CA 94954

**Project Contact:** Michael G. Burns  
**Project P.O.:**  
**Project Name:** #120832-4E; SFO Plot 700

**Project Received:** 05/19/2014

Analytical Report reviewed & approved for release on 05/29/2014 by:

Question about  
your data?

[Click here to email  
McC Campbell](#)

Angela Rydelius,  
Laboratory Manager

***The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.***







## Glossary of Terms & Qualifier Definitions

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**WorkOrder:** 1405744

### Glossary Abbreviation

|              |   |
|--------------|---|
| 95% Interval | 95% Confident Interval  |
| DF           | Dilution Factor   |
| DUP          | Duplicate   |
| EDL          | Estimated Detection Limit   |
| ITEF         | International Toxicity Equivalence Factor   |
| LCS          | Laboratory Control Sample   |
| MB           | Method Blank  |
| MB % Rec     | % Recovery of Surrogate in Method Blank, if applicable  |
| MDL          | Method Detection Limit  |
| ML           | Minimum Level of Quantitation   |
| MS           | Matrix Spike  |
| MSD          | Matrix Spike Duplicate  |
| ND           | Not detected at or above the indicated MDL or RL  |
| NR           | Matrix interferences, or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix; or sample diluted due to high matrix or analyte content. |
| RD           | Relative Difference   |
| RL           | Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)  |
| RPD          | Relative Percent Deviation  |
| RRT          | Relative Retention Time   |
| SPK Val      | Spike Value   |
| SPKRef Val   | Spike Reference Value   |
| TEQ          | Toxicity Equivalence  |

### Analytical Qualifiers

|     |   |
|-----|---|
| B   | analyte detected in the associated Method Blank   |
| H   | samples were analyzed out of holding time   |
| a1  | sample diluted due to matrix interference   |
| b1  | aqueous sample that contains greater than ~1 vol. % sediment                                |
| c8  | sample pH is greater than 2   |
| d7  | strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram |
| e2  | diesel range compounds are significant; no recognizable pattern                             |
| e7  | oil range compounds are significant   |
| e11 | stoddard solvent/mineral spirit (?)   |

### Quality Control Qualifiers

|    |  |
|----|--|
| F1 | MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch. |
|----|--|



# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-1-1                         | 1405744-001A  | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 04:14     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 04:14     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 04:14     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 04:14     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 04:14     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 04:14     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 04:14     |

(Cont.)



# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-1-1                         | 1405744-001A   | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 04:14     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 04:14     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 107            |                | 70-130         |            | 05/23/2014 04:14     |
| Toluene-d8                    | 108            |                | 70-130         |            | 05/23/2014 04:14     |
| 4-BFB                         | 93             |                | 70-130         |            | 05/23/2014 04:14     |

(Cont.)



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-1-7                         | 1405744-002A  | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 17:55     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 17:55     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 17:55     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 17:55     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 17:55     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 17:55     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 17:55     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-1-7                         | 1405744-002A   | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 17:55     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 17:55     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 107            |                | 70-130         |            | 05/23/2014 17:55     |
| Toluene-d8                    | 112            |                | 70-130         |            | 05/23/2014 17:55     |
| 4-BFB                         | 99             |                | 70-130         |            | 05/23/2014 17:55     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-2-2                         | 1405744-003A  | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 04:55     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 04:55     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 04:55     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 04:55     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 04:55     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 04:55     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 04:55     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-2-2                         | 1405744-003A   | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 04:55     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 04:55     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 108            |                | 70-130         |            | 05/23/2014 04:55     |
| Toluene-d8                    | 108            |                | 70-130         |            | 05/23/2014 04:55     |
| 4-BFB                         | 91             |                | 70-130         |            | 05/23/2014 04:55     |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-2-7                         | 1405744-004A  | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 05:37     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 05:37     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 05:37     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 05:37     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 05:37     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 05:37     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 05:37     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-2-7                         | 1405744-004A   | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 05:37     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 05:37     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 108            |                | 70-130         |            | 05/23/2014 05:37     |
| Toluene-d8                    | 109            |                | 70-130         |            | 05/23/2014 05:37     |
| 4-BFB                         | 91             |                | 70-130         |            | 05/23/2014 05:37     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-3-2.5                       | 1405744-005A  | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 15:07     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 15:07     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 15:07     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 15:07     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 15:07     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 15:07     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 15:07     |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-3-2.5                       | 1405744-005A   | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 15:07     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 15:07     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 107            |                | 70-130         |            | 05/23/2014 15:07     |
| Toluene-d8                    | 108            |                | 70-130         |            | 05/23/2014 15:07     |
| 4-BFB                         | 94             |                | 70-130         |            | 05/23/2014 15:07     |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-3-10                        | 1405744-006A  | Soil           | 05/19/2014     | GC16       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 05:30     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 05:30     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 05:30     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 05:30     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 05:30     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 05:30     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 05:30     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-3-10                        | 1405744-006A   | Soil           | 05/19/2014     | GC16       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 05:30     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 05:30     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 103            |                | 70-130         |            | 05/23/2014 05:30     |
| Toluene-d8                    | 102            |                | 70-130         |            | 05/23/2014 05:30     |
| 4-BFB                         | 119            |                | 70-130         |            | 05/23/2014 05:30     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-4-2                         | 1405744-007A  | Soil           | 05/19/2014     | GC16       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 06:13     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 06:13     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 06:13     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 06:13     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 06:13     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 06:13     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 06:13     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-4-2                         | 1405744-007A   | Soil           | 05/19/2014     | GC16       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 06:13     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 06:13     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 104            |                | 70-130         |            | 05/23/2014 06:13     |
| Toluene-d8                    | 104            |                | 70-130         |            | 05/23/2014 06:13     |
| 4-BFB                         | 122            |                | 70-130         |            | 05/23/2014 06:13     |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-4-4                         | 1405744-008A  | Soil           | 05/19/2014     | GC16       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 06:56     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 06:56     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 06:56     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 06:56     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 06:56     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 06:56     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 06:56     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-4-4                         | 1405744-008A   | Soil           | 05/19/2014     | GC16       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 06:56     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 06:56     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 104            |                | 70-130         |            | 05/23/2014 06:56     |
| Toluene-d8                    | 102            |                | 70-130         |            | 05/23/2014 06:56     |
| 4-BFB                         | 124            |                | 70-130         |            | 05/23/2014 06:56     |

(Cont.)



# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-5-2                         | 1405744-009A  | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 15:49     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 15:49     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 15:49     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 15:49     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 15:49     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 15:49     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 15:49     |

(Cont.)



# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-5-2                         | 1405744-009A   | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 15:49     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 15:49     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 107            |                | 70-130         |            | 05/23/2014 15:49     |
| Toluene-d8                    | 109            |                | 70-130         |            | 05/23/2014 15:49     |
| 4-BFB                         | 93             |                | 70-130         |            | 05/23/2014 15:49     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-5-3.5                       | 1405744-010A  | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 16:31     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 16:31     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 16:31     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 16:31     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 16:31     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 16:31     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 16:31     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-5-3.5                       | 1405744-010A   | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 16:31     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 16:31     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 108            |                | 70-130         |            | 05/23/2014 16:31     |
| Toluene-d8                    | 110            |                | 70-130         |            | 05/23/2014 16:31     |
| 4-BFB                         | 91             |                | 70-130         |            | 05/23/2014 16:31     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-6-2                         | 1405744-011A  | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 17:13     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 17:13     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 17:13     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 17:13     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 17:13     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 17:13     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 17:13     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-6-2                         | 1405744-011A   | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 17:13     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 17:13     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 107            |                | 70-130         |            | 05/23/2014 17:13     |
| Toluene-d8                    | 107            |                | 70-130         |            | 05/23/2014 17:13     |
| 4-BFB                         | 90             |                | 70-130         |            | 05/23/2014 17:13     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|----------------|----------------|------------|----------------------|
| B-6-4                         | 1405744-012A  | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u> |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                | 0.10           | 1          | 05/23/2014 23:33     |
| tert-Amyl methyl ether (TAME) | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Benzene                       | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Bromobenzene                  | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Bromochloromethane            | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Bromodichloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Bromoform                     | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Bromomethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 2-Butanone (MEK)              | ND            |                | 0.020          | 1          | 05/23/2014 23:33     |
| t-Butyl alcohol (TBA)         | ND            |                | 0.050          | 1          | 05/23/2014 23:33     |
| n-Butyl benzene               | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| sec-Butyl benzene             | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| tert-Butyl benzene            | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Carbon Disulfide              | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Carbon Tetrachloride          | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Chlorobenzene                 | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Chloroethane                  | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Chloroform                    | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Chloromethane                 | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 2-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 4-Chlorotoluene               | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Dibromochloromethane          | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,2-Dibromo-3-chloropropane   | ND            |                | 0.0040         | 1          | 05/23/2014 23:33     |
| 1,2-Dibromoethane (EDB)       | ND            |                | 0.0040         | 1          | 05/23/2014 23:33     |
| Dibromomethane                | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,2-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,3-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,4-Dichlorobenzene           | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Dichlorodifluoromethane       | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,1-Dichloroethane            | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                | 0.0040         | 1          | 05/23/2014 23:33     |
| 1,1-Dichloroethene            | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| cis-1,2-Dichloroethene        | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| trans-1,2-Dichloroethene      | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,3-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 2,2-Dichloropropane           | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,1-Dichloropropene           | ND            |                | 0.0050         | 1          | 05/23/2014 23:33     |

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# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

## Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType | Date Collected | Instrument | Batch ID             |
|-------------------------------|----------------|----------------|----------------|------------|----------------------|
| B-6-4                         | 1405744-012A   | Soil           | 05/19/2014     | GC10       | 90628                |
| <u>Analytes</u>               | <u>Result</u>  |                | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| trans-1,3-Dichloropropene     | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Diisopropyl ether (DIPE)      | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Ethylbenzene                  | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Ethyl tert-butyl ether (ETBE) | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Freon 113                     | ND             |                | 0.10           | 1          | 05/23/2014 23:33     |
| Hexachlorobutadiene           | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Hexachloroethane              | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 2-Hexanone                    | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Isopropylbenzene              | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 4-Isopropyl toluene           | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Methyl-t-butyl ether (MTBE)   | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Methylene chloride            | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Naphthalene                   | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| n-Propyl benzene              | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Styrene                       | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,1,1,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,1,2,2-Tetrachloroethane     | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Tetrachloroethene             | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Toluene                       | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,2,3-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,2,4-Trichlorobenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,1,1-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,1,2-Trichloroethane         | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Trichloroethene               | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Trichlorofluoromethane        | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,2,3-Trichloropropane        | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,2,4-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| 1,3,5-Trimethylbenzene        | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Vinyl Chloride                | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| Xylenes, Total                | ND             |                | 0.0050         | 1          | 05/23/2014 23:33     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                | <u>Limits</u>  |            |                      |
| Dibromofluoromethane          | 106            |                | 70-130         |            | 05/23/2014 23:33     |
| Toluene-d8                    | 111            |                | 70-130         |            | 05/23/2014 23:33     |
| 4-BFB                         | 101            |                | 70-130         |            | 05/23/2014 23:33     |



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType    | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|-------------------|----------------|------------|----------------------|
| B-2                           | 1405744-014A  | Water             | 05/19/2014     | GC28       | 90789                |
| <u>Analytes</u>               | <u>Result</u> | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | 23            |                   | 10             | 1          | 05/24/2014 01:22     |
| tert-Amyl methyl ether (TAME) | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Benzene                       | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Bromobenzene                  | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Bromochloromethane            | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Bromodichloromethane          | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Bromoform                     | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Bromomethane                  | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 2-Butanone (MEK)              | 2.3           |                   | 2.0            | 1          | 05/24/2014 01:22     |
| t-Butyl alcohol (TBA)         | ND            | B                 | 5.0            | 1          | 05/24/2014 01:22     |
| n-Butyl benzene               | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| sec-Butyl benzene             | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| tert-Butyl benzene            | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Carbon Disulfide              | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Carbon Tetrachloride          | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Chlorobenzene                 | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Chloroethane                  | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Chloroform                    | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Chloromethane                 | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 2-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 4-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Dibromochloromethane          | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,2-Dibromo-3-chloropropane   | ND            |                   | 0.20           | 1          | 05/24/2014 01:22     |
| 1,2-Dibromoethane (EDB)       | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Dibromomethane                | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,2-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,3-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,4-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| Dichlorodifluoromethane       | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,1-Dichloroethane            | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,1-Dichloroethene            | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| cis-1,2-Dichloroethene        | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| trans-1,2-Dichloroethene      | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,3-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 2,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |
| 1,1-Dichloropropene           | ND            |                   | 0.50           | 1          | 05/24/2014 01:22     |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType    | Date Collected | Instrument                     | Batch ID             |
|-------------------------------|----------------|-------------------|----------------|--------------------------------|----------------------|
| B-2                           | 1405744-014A   | Water             | 05/19/2014     | GC28                           | 90789                |
| <u>Analytes</u>               | <u>Result</u>  | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>                      | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| trans-1,3-Dichloropropene     | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Diisopropyl ether (DIPE)      | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Ethylbenzene                  | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Ethyl tert-butyl ether (ETBE) | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Freon 113                     | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Hexachlorobutadiene           | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Hexachloroethane              | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 2-Hexanone                    | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Isopropylbenzene              | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 4-Isopropyl toluene           | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Methyl-t-butyl ether (MTBE)   | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Methylene chloride            | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Naphthalene                   | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| n-Propyl benzene              | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Styrene                       | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 1,1,1,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 1,1,2,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Tetrachloroethene             | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Toluene                       | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 1,2,3-Trichlorobenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 1,2,4-Trichlorobenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 1,1,1-Trichloroethane         | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 1,1,2-Trichloroethane         | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Trichloroethene               | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Trichlorofluoromethane        | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 1,2,3-Trichloropropane        | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 1,2,4-Trimethylbenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| 1,3,5-Trimethylbenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Vinyl Chloride                | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| Xylenes, Total                | ND             |                   | 0.50           | 1                              | 05/24/2014 01:22     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                   | <u>Limits</u>  | <u>Analytical Comments:</u> b1 |                      |
| Dibromofluoromethane          | 110            |                   | 70-130         | 05/24/2014 01:22               |                      |
| Toluene-d8                    | 118            |                   | 70-130         | 05/24/2014 01:22               |                      |
| 4-BFB                         | 104            |                   | 70-130         | 05/24/2014 01:22               |                      |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType    | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|-------------------|----------------|------------|----------------------|
| B-3                           | 1405744-015A  | Water             | 05/19/2014     | GC28       | 90789                |
| <u>Analytes</u>               | <u>Result</u> | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | ND            |                   | 10             | 1          | 05/22/2014 13:58     |
| tert-Amyl methyl ether (TAME) | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Benzene                       | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Bromobenzene                  | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Bromochloromethane            | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Bromodichloromethane          | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Bromoform                     | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Bromomethane                  | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 2-Butanone (MEK)              | ND            |                   | 2.0            | 1          | 05/22/2014 13:58     |
| t-Butyl alcohol (TBA)         | ND            | B                 | 5.0            | 1          | 05/22/2014 13:58     |
| n-Butyl benzene               | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| sec-Butyl benzene             | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| tert-Butyl benzene            | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Carbon Disulfide              | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Carbon Tetrachloride          | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Chlorobenzene                 | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Chloroethane                  | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Chloroform                    | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Chloromethane                 | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 2-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 4-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Dibromochloromethane          | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,2-Dibromo-3-chloropropane   | ND            |                   | 0.20           | 1          | 05/22/2014 13:58     |
| 1,2-Dibromoethane (EDB)       | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Dibromomethane                | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,2-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,3-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,4-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| Dichlorodifluoromethane       | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,1-Dichloroethane            | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,1-Dichloroethene            | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| cis-1,2-Dichloroethene        | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| trans-1,2-Dichloroethene      | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,3-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 2,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |
| 1,1-Dichloropropene           | ND            |                   | 0.50           | 1          | 05/22/2014 13:58     |

(Cont.)



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType    | Date Collected | Instrument                        | Batch ID             |
|-------------------------------|----------------|-------------------|----------------|-----------------------------------|----------------------|
| B-3                           | 1405744-015A   | Water             | 05/19/2014     | GC28                              | 90789                |
| <u>Analytes</u>               | <u>Result</u>  | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>                         | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| trans-1,3-Dichloropropene     | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Diisopropyl ether (DIPE)      | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Ethylbenzene                  | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Ethyl tert-butyl ether (ETBE) | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Freon 113                     | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Hexachlorobutadiene           | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Hexachloroethane              | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 2-Hexanone                    | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Isopropylbenzene              | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 4-Isopropyl toluene           | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Methyl-t-butyl ether (MTBE)   | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Methylene chloride            | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Naphthalene                   | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| n-Propyl benzene              | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Styrene                       | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 1,1,1,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 1,1,2,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Tetrachloroethene             | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Toluene                       | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 1,2,3-Trichlorobenzene        | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 1,2,4-Trichlorobenzene        | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 1,1,1-Trichloroethane         | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 1,1,2-Trichloroethane         | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Trichloroethene               | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Trichlorofluoromethane        | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 1,2,3-Trichloropropane        | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 1,2,4-Trimethylbenzene        | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| 1,3,5-Trimethylbenzene        | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Vinyl Chloride                | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| Xylenes, Total                | ND             |                   | 0.50           | 1                                 | 05/22/2014 13:58     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                   | <u>Limits</u>  | <u>Analytical Comments:</u> c8,b1 |                      |
| Dibromofluoromethane          | 110            |                   | 70-130         | 05/22/2014 13:58                  |                      |
| Toluene-d8                    | 115            |                   | 70-130         | 05/22/2014 13:58                  |                      |
| 4-BFB                         | 98             |                   | 70-130         | 05/22/2014 13:58                  |                      |

(Cont.)



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType    | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|-------------------|----------------|------------|----------------------|
| B-4                           | 1405744-016A  | Water             | 05/19/2014     | GC28       | 90789                |
| <u>Analytes</u>               | <u>Result</u> | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | 38            |                   | 10             | 1          | 05/22/2014 15:57     |
| tert-Amyl methyl ether (TAME) | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Benzene                       | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Bromobenzene                  | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Bromochloromethane            | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Bromodichloromethane          | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Bromoform                     | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Bromomethane                  | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 2-Butanone (MEK)              | 4.2           |                   | 2.0            | 1          | 05/22/2014 15:57     |
| t-Butyl alcohol (TBA)         | ND            | B                 | 5.0            | 1          | 05/22/2014 15:57     |
| n-Butyl benzene               | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| sec-Butyl benzene             | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| tert-Butyl benzene            | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Carbon Disulfide              | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Carbon Tetrachloride          | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Chlorobenzene                 | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Chloroethane                  | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Chloroform                    | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Chloromethane                 | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 2-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 4-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Dibromochloromethane          | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,2-Dibromo-3-chloropropane   | ND            |                   | 0.20           | 1          | 05/22/2014 15:57     |
| 1,2-Dibromoethane (EDB)       | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Dibromomethane                | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,2-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,3-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,4-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| Dichlorodifluoromethane       | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,1-Dichloroethane            | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,1-Dichloroethene            | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| cis-1,2-Dichloroethene        | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| trans-1,2-Dichloroethene      | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,3-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 2,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |
| 1,1-Dichloropropene           | ND            |                   | 0.50           | 1          | 05/22/2014 15:57     |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType    | Date Collected | Instrument                     | Batch ID             |
|-------------------------------|----------------|-------------------|----------------|--------------------------------|----------------------|
| B-4                           | 1405744-016A   | Water             | 05/19/2014     | GC28                           | 90789                |
| <u>Analytes</u>               | <u>Result</u>  | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>                      | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| trans-1,3-Dichloropropene     | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Diisopropyl ether (DIPE)      | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Ethylbenzene                  | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Ethyl tert-butyl ether (ETBE) | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Freon 113                     | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Hexachlorobutadiene           | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Hexachloroethane              | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 2-Hexanone                    | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Isopropylbenzene              | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 4-Isopropyl toluene           | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Methyl-t-butyl ether (MTBE)   | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Methylene chloride            | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Naphthalene                   | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| n-Propyl benzene              | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Styrene                       | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 1,1,1,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 1,1,2,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Tetrachloroethene             | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Toluene                       | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 1,2,3-Trichlorobenzene        | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 1,2,4-Trichlorobenzene        | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 1,1,1-Trichloroethane         | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 1,1,2-Trichloroethane         | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Trichloroethene               | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Trichlorofluoromethane        | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 1,2,3-Trichloropropane        | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 1,2,4-Trimethylbenzene        | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| 1,3,5-Trimethylbenzene        | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Vinyl Chloride                | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| Xylenes, Total                | ND             |                   | 0.50           | 1                              | 05/22/2014 15:57     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                   | <u>Limits</u>  | <u>Analytical Comments:</u> b1 |                      |
| Dibromofluoromethane          | 112            |                   | 70-130         | 05/22/2014 15:57               |                      |
| Toluene-d8                    | 113            |                   | 70-130         | 05/22/2014 15:57               |                      |
| 4-BFB                         | 95             |                   | 70-130         | 05/22/2014 15:57               |                      |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType    | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|-------------------|----------------|------------|----------------------|
| B-5                           | 1405744-017A  | Water             | 05/19/2014     | GC28       | 90789                |
| <u>Analytes</u>               | <u>Result</u> | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | 11            |                   | 10             | 1          | 05/24/2014 02:01     |
| tert-Amyl methyl ether (TAME) | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Benzene                       | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Bromobenzene                  | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Bromochloromethane            | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Bromodichloromethane          | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Bromoform                     | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Bromomethane                  | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 2-Butanone (MEK)              | ND            |                   | 2.0            | 1          | 05/24/2014 02:01     |
| t-Butyl alcohol (TBA)         | ND            | B                 | 5.0            | 1          | 05/24/2014 02:01     |
| n-Butyl benzene               | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| sec-Butyl benzene             | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| tert-Butyl benzene            | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Carbon Disulfide              | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Carbon Tetrachloride          | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Chlorobenzene                 | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Chloroethane                  | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Chloroform                    | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Chloromethane                 | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 2-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 4-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Dibromochloromethane          | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,2-Dibromo-3-chloropropane   | ND            |                   | 0.20           | 1          | 05/24/2014 02:01     |
| 1,2-Dibromoethane (EDB)       | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Dibromomethane                | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,2-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,3-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,4-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| Dichlorodifluoromethane       | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,1-Dichloroethane            | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,1-Dichloroethene            | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| cis-1,2-Dichloroethene        | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| trans-1,2-Dichloroethene      | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,3-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 2,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |
| 1,1-Dichloropropene           | ND            |                   | 0.50           | 1          | 05/24/2014 02:01     |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType    | Date Collected | Instrument                     | Batch ID             |
|-------------------------------|----------------|-------------------|----------------|--------------------------------|----------------------|
| B-5                           | 1405744-017A   | Water             | 05/19/2014     | GC28                           | 90789                |
| <u>Analytes</u>               | <u>Result</u>  | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>                      | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| trans-1,3-Dichloropropene     | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Diisopropyl ether (DIPE)      | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Ethylbenzene                  | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Ethyl tert-butyl ether (ETBE) | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Freon 113                     | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Hexachlorobutadiene           | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Hexachloroethane              | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 2-Hexanone                    | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Isopropylbenzene              | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 4-Isopropyl toluene           | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Methyl-t-butyl ether (MTBE)   | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Methylene chloride            | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Naphthalene                   | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| n-Propyl benzene              | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Styrene                       | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 1,1,1,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 1,1,2,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Tetrachloroethene             | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Toluene                       | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 1,2,3-Trichlorobenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 1,2,4-Trichlorobenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 1,1,1-Trichloroethane         | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 1,1,2-Trichloroethane         | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Trichloroethene               | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Trichlorofluoromethane        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 1,2,3-Trichloropropane        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 1,2,4-Trimethylbenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| 1,3,5-Trimethylbenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Vinyl Chloride                | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| Xylenes, Total                | ND             |                   | 0.50           | 1                              | 05/24/2014 02:01     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                   | <u>Limits</u>  | <u>Analytical Comments:</u> b1 |                      |
| Dibromofluoromethane          | 110            |                   | 70-130         | 05/24/2014 02:01               |                      |
| Toluene-d8                    | 117            |                   | 70-130         | 05/24/2014 02:01               |                      |
| 4-BFB                         | 103            |                   | 70-130         | 05/24/2014 02:01               |                      |

(Cont.)



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID        | Matrix/ExtType    | Date Collected | Instrument | Batch ID             |
|-------------------------------|---------------|-------------------|----------------|------------|----------------------|
| B-6                           | 1405744-018A  | Water             | 05/19/2014     | GC28       | 90789                |
| <u>Analytes</u>               | <u>Result</u> | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>  | <u>Date Analyzed</u> |
| Acetone                       | 30            |                   | 10             | 1          | 05/24/2014 02:39     |
| tert-Amyl methyl ether (TAME) | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Benzene                       | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Bromobenzene                  | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Bromochloromethane            | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Bromodichloromethane          | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Bromoform                     | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Bromomethane                  | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 2-Butanone (MEK)              | 4.5           |                   | 2.0            | 1          | 05/24/2014 02:39     |
| t-Butyl alcohol (TBA)         | ND            | B                 | 5.0            | 1          | 05/24/2014 02:39     |
| n-Butyl benzene               | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| sec-Butyl benzene             | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| tert-Butyl benzene            | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Carbon Disulfide              | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Carbon Tetrachloride          | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Chlorobenzene                 | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Chloroethane                  | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Chloroform                    | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Chloromethane                 | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 2-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 4-Chlorotoluene               | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Dibromochloromethane          | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,2-Dibromo-3-chloropropane   | ND            |                   | 0.20           | 1          | 05/24/2014 02:39     |
| 1,2-Dibromoethane (EDB)       | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Dibromomethane                | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,2-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,3-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,4-Dichlorobenzene           | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| Dichlorodifluoromethane       | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,1-Dichloroethane            | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,2-Dichloroethane (1,2-DCA)  | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,1-Dichloroethene            | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| cis-1,2-Dichloroethene        | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| trans-1,2-Dichloroethene      | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,3-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 2,2-Dichloropropane           | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |
| 1,1-Dichloropropene           | ND            |                   | 0.50           | 1          | 05/24/2014 02:39     |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/22/14-5/24/14

**WorkOrder:** 1405744  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L

### Volatile Organics by P&T and GC/MS (Basic Target List)

| Client ID                     | Lab ID         | Matrix/ExtType    | Date Collected | Instrument                     | Batch ID             |
|-------------------------------|----------------|-------------------|----------------|--------------------------------|----------------------|
| B-6                           | 1405744-018A   | Water             | 05/19/2014     | GC28                           | 90789                |
| <u>Analytes</u>               | <u>Result</u>  | <u>Qualifiers</u> | <u>RL</u>      | <u>DF</u>                      | <u>Date Analyzed</u> |
| cis-1,3-Dichloropropene       | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| trans-1,3-Dichloropropene     | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Diisopropyl ether (DIPE)      | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Ethylbenzene                  | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Ethyl tert-butyl ether (ETBE) | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Freon 113                     | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Hexachlorobutadiene           | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Hexachloroethane              | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 2-Hexanone                    | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Isopropylbenzene              | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 4-Isopropyl toluene           | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Methyl-t-butyl ether (MTBE)   | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Methylene chloride            | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 4-Methyl-2-pentanone (MIBK)   | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Naphthalene                   | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| n-Propyl benzene              | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Styrene                       | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 1,1,1,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 1,1,2,2-Tetrachloroethane     | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Tetrachloroethene             | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Toluene                       | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 1,2,3-Trichlorobenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 1,2,4-Trichlorobenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 1,1,1-Trichloroethane         | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 1,1,2-Trichloroethane         | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Trichloroethene               | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Trichlorofluoromethane        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 1,2,3-Trichloropropane        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 1,2,4-Trimethylbenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| 1,3,5-Trimethylbenzene        | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Vinyl Chloride                | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| Xylenes, Total                | ND             |                   | 0.50           | 1                              | 05/24/2014 02:39     |
| <u>Surrogates</u>             | <u>REC (%)</u> |                   | <u>Limits</u>  | <u>Analytical Comments:</u> b1 |                      |
| Dibromofluoromethane          | 112            |                   | 70-130         | 05/24/2014 02:39               |                      |
| Toluene-d8                    | 116            |                   | 70-130         | 05/24/2014 02:39               |                      |
| 4-BFB                         | 102            |                   | 70-130         | 05/24/2014 02:39               |                      |



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/21/14

**WorkOrder:** 1405744  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### LUFT 5 Metals

| Client ID         | Lab ID              | Matrix/ExtType    | Date Collected    | Instrument     | Batch ID             |
|-------------------|---------------------|-------------------|-------------------|----------------|----------------------|
| <b>B-1-1</b>      | <b>1405744-001A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | <b>0.72</b>         |                   | 0.25              | 1              | 05/22/2014 18:59     |
| Chromium          | <b>62</b>           |                   | 0.50              | 1              | 05/22/2014 18:59     |
| Lead              | <b>12</b>           |                   | 0.50              | 1              | 05/22/2014 18:59     |
| Nickel            | <b>67</b>           |                   | 0.50              | 1              | 05/22/2014 18:59     |
| Zinc              | <b>48</b>           |                   | 5.0               | 1              | 05/22/2014 18:59     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 106                 |                   | 70-130            |                | 05/22/2014 18:59     |
| <b>B-1-7</b>      | <b>1405744-002A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | <b>0.37</b>         |                   | 0.25              | 1              | 05/22/2014 19:05     |
| Chromium          | <b>47</b>           |                   | 0.50              | 1              | 05/22/2014 19:05     |
| Lead              | <b>6.5</b>          |                   | 0.50              | 1              | 05/22/2014 19:05     |
| Nickel            | <b>40</b>           |                   | 0.50              | 1              | 05/22/2014 19:05     |
| Zinc              | <b>34</b>           |                   | 5.0               | 1              | 05/22/2014 19:05     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 107                 |                   | 70-130            |                | 05/22/2014 19:05     |
| <b>B-2-2</b>      | <b>1405744-003A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | <b>1.0</b>          |                   | 0.25              | 1              | 05/22/2014 19:12     |
| Chromium          | <b>100</b>          |                   | 5.0               | 10             | 05/22/2014 18:53     |
| Lead              | <b>6.5</b>          |                   | 0.50              | 1              | 05/22/2014 19:12     |
| Nickel            | <b>150</b>          |                   | 5.0               | 10             | 05/22/2014 18:53     |
| Zinc              | <b>33</b>           |                   | 5.0               | 1              | 05/22/2014 19:12     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 107                 |                   | 70-130            |                | 05/22/2014 19:12     |

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## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/21/14

**WorkOrder:** 1405744  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### LUFT 5 Metals

| Client ID         | Lab ID              | Matrix/ExtType    | Date Collected    | Instrument     | Batch ID             |
|-------------------|---------------------|-------------------|-------------------|----------------|----------------------|
| <b>B-2-7</b>      | <b>1405744-004A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | <b>0.58</b>         |                   | 0.25              | 1              | 05/22/2014 19:31     |
| Chromium          | <b>46</b>           |                   | 0.50              | 1              | 05/22/2014 19:31     |
| Lead              | <b>2.9</b>          |                   | 0.50              | 1              | 05/22/2014 19:31     |
| Nickel            | <b>50</b>           |                   | 0.50              | 1              | 05/22/2014 19:31     |
| Zinc              | <b>33</b>           |                   | 5.0               | 1              | 05/22/2014 19:31     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 107                 |                   | 70-130            |                | 05/22/2014 19:31     |
| <b>B-3-2.5</b>    | <b>1405744-005A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | ND                  |                   | 0.25              | 1              | 05/23/2014 01:29     |
| Chromium          | <b>61</b>           |                   | 0.50              | 1              | 05/23/2014 01:29     |
| Lead              | <b>10</b>           |                   | 0.50              | 1              | 05/23/2014 01:29     |
| Nickel            | <b>58</b>           |                   | 0.50              | 1              | 05/23/2014 01:29     |
| Zinc              | <b>48</b>           |                   | 5.0               | 1              | 05/23/2014 01:29     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 111                 |                   | 70-130            |                | 05/23/2014 01:29     |
| <b>B-3-10</b>     | <b>1405744-006A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | ND                  |                   | 0.25              | 1              | 05/22/2014 19:37     |
| Chromium          | <b>40</b>           |                   | 0.50              | 1              | 05/22/2014 19:37     |
| Lead              | <b>2.3</b>          |                   | 0.50              | 1              | 05/22/2014 19:37     |
| Nickel            | <b>28</b>           |                   | 0.50              | 1              | 05/22/2014 19:37     |
| Zinc              | <b>25</b>           |                   | 5.0               | 1              | 05/22/2014 19:37     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 107                 |                   | 70-130            |                | 05/22/2014 19:37     |

(Cont.)



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/21/14

**WorkOrder:** 1405744  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### LUFT 5 Metals

| Client ID         | Lab ID              | Matrix/ExtType    | Date Collected    | Instrument     | Batch ID             |
|-------------------|---------------------|-------------------|-------------------|----------------|----------------------|
| <b>B-4-2</b>      | <b>1405744-007A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | <b>0.45</b>         |                   | 0.25              | 1              | 05/22/2014 19:43     |
| Chromium          | <b>52</b>           |                   | 0.50              | 1              | 05/22/2014 19:43     |
| Lead              | <b>9.0</b>          |                   | 0.50              | 1              | 05/22/2014 19:43     |
| Nickel            | <b>70</b>           |                   | 0.50              | 1              | 05/22/2014 19:43     |
| Zinc              | <b>48</b>           |                   | 5.0               | 1              | 05/22/2014 19:43     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 108                 |                   | 70-130            |                | 05/22/2014 19:43     |
| <b>B-4-4</b>      | <b>1405744-008A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | ND                  |                   | 0.25              | 1              | 05/21/2014 19:03     |
| Chromium          | <b>50</b>           |                   | 0.50              | 1              | 05/21/2014 19:03     |
| Lead              | <b>3.4</b>          |                   | 0.50              | 1              | 05/21/2014 19:03     |
| Nickel            | <b>37</b>           |                   | 0.50              | 1              | 05/21/2014 19:03     |
| Zinc              | <b>30</b>           |                   | 5.0               | 1              | 05/21/2014 19:03     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 126                 |                   | 70-130            |                | 05/21/2014 19:03     |
| <b>B-5-2</b>      | <b>1405744-009A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | <b>0.43</b>         |                   | 0.25              | 1              | 05/21/2014 19:09     |
| Chromium          | <b>78</b>           |                   | 0.50              | 1              | 05/21/2014 19:09     |
| Lead              | <b>12</b>           |                   | 0.50              | 1              | 05/21/2014 19:09     |
| Nickel            | <b>84</b>           |                   | 0.50              | 1              | 05/21/2014 19:09     |
| Zinc              | <b>53</b>           |                   | 5.0               | 1              | 05/21/2014 19:09     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 127                 |                   | 70-130            |                | 05/21/2014 19:09     |

(Cont.)



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/21/14

**WorkOrder:** 1405744  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg

### LUFT 5 Metals

| Client ID         | Lab ID              | Matrix/ExtType    | Date Collected    | Instrument     | Batch ID             |
|-------------------|---------------------|-------------------|-------------------|----------------|----------------------|
| <b>B-5-3.5</b>    | <b>1405744-010A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90711</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | ND                  |                   | 0.25              | 1              | 05/21/2014 19:15     |
| Chromium          | <b>50</b>           |                   | 0.50              | 1              | 05/21/2014 19:15     |
| Lead              | <b>3.7</b>          |                   | 0.50              | 1              | 05/21/2014 19:15     |
| Nickel            | <b>37</b>           |                   | 0.50              | 1              | 05/21/2014 19:15     |
| Zinc              | <b>30</b>           |                   | 5.0               | 1              | 05/21/2014 19:15     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 126                 |                   | 70-130            |                | 05/21/2014 19:15     |
| <b>B-6-2</b>      | <b>1405744-011A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90730</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | ND                  |                   | 0.25              | 1              | 05/21/2014 19:22     |
| Chromium          | <b>43</b>           |                   | 0.50              | 1              | 05/21/2014 19:22     |
| Lead              | <b>4.1</b>          |                   | 0.50              | 1              | 05/21/2014 19:22     |
| Nickel            | <b>22</b>           |                   | 0.50              | 1              | 05/21/2014 19:22     |
| Zinc              | <b>22</b>           |                   | 5.0               | 1              | 05/21/2014 19:22     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 127                 |                   | 70-130            |                | 05/21/2014 19:22     |
| <b>B-6-4</b>      | <b>1405744-012A</b> | <b>Soil/TOTAL</b> | <b>05/19/2014</b> | <b>ICP-MS1</b> | <b>90730</b>         |
| <u>Analytes</u>   | <u>Result</u>       |                   | <u>RL</u>         | <u>DF</u>      | <u>Date Analyzed</u> |
| Cadmium           | <b>0.37</b>         |                   | 0.25              | 1              | 05/21/2014 19:28     |
| Chromium          | <b>49</b>           |                   | 0.50              | 1              | 05/21/2014 19:28     |
| Lead              | <b>5.9</b>          |                   | 0.50              | 1              | 05/21/2014 19:28     |
| Nickel            | <b>34</b>           |                   | 0.50              | 1              | 05/21/2014 19:28     |
| Zinc              | <b>29</b>           |                   | 5.0               | 1              | 05/21/2014 19:28     |
| <u>Surrogates</u> | <u>REC (%)</u>      |                   | <u>Limits</u>     |                |                      |
| Tb 350.917        | 114                 |                   | 70-130            |                | 05/21/2014 19:28     |



# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** E200.8  
**Analytical Method:** E200.8  
**Unit:** µg/L

## LUFT 5 Metals

| Client ID | Lab ID       | Matrix/ExtType | Date Collected | Instrument | Batch ID |
|-----------|--------------|----------------|----------------|------------|----------|
| B-2       | 1405744-014B | Water/TOTAL    | 05/19/2014     | ICP-MS1    | 90624    |

| Analytes          | Result         | RL            | DF                      | Date Analyzed    |
|-------------------|----------------|---------------|-------------------------|------------------|
| Cadmium           | 22             | 5.0           | 20                      | 05/22/2014 20:48 |
| Chromium          | 1400           | 10            | 20                      | 05/22/2014 20:48 |
| Lead              | 180            | 10            | 20                      | 05/22/2014 20:48 |
| Nickel            | 2400           | 50            | 100                     | 05/24/2014 02:49 |
| Zinc              | 1500           | 100           | 20                      | 05/22/2014 20:48 |
| <u>Surrogates</u> | <u>REC (%)</u> | <u>Limits</u> | Analytical Comments: b1 |                  |
| Tb 350.917        | 107            | 70-130        | 05/22/2014 20:48        |                  |

| Client ID | Lab ID       | Matrix/ExtType | Date Collected | Instrument | Batch ID |
|-----------|--------------|----------------|----------------|------------|----------|
| B-3       | 1405744-015B | Water/TOTAL    | 05/19/2014     | ICP-MS1    | 90624    |

| Analytes          | Result         | RL            | DF                         | Date Analyzed    |
|-------------------|----------------|---------------|----------------------------|------------------|
| Cadmium           | 34             | 5.0           | 20                         | 05/21/2014 14:42 |
| Chromium          | 2200           | 50            | 100                        | 05/22/2014 20:55 |
| Lead              | 310            | 10            | 20                         | 05/21/2014 14:42 |
| Nickel            | 3400           | 50            | 100                        | 05/22/2014 20:55 |
| Zinc              | 2700           | 100           | 20                         | 05/21/2014 14:42 |
| <u>Surrogates</u> | <u>REC (%)</u> | <u>Limits</u> | Analytical Comments: a1,b1 |                  |
| Tb 350.917        | 124            | 70-130        | 05/21/2014 14:42           |                  |

| Client ID | Lab ID       | Matrix/ExtType | Date Collected | Instrument | Batch ID |
|-----------|--------------|----------------|----------------|------------|----------|
| B-4       | 1405744-016B | Water/TOTAL    | 05/19/2014     | ICP-MS1    | 90624    |

| Analytes          | Result         | RL            | DF                      | Date Analyzed    |
|-------------------|----------------|---------------|-------------------------|------------------|
| Cadmium           | 5.6            | 5.0           | 20                      | 05/21/2014 14:49 |
| Chromium          | 590            | 10            | 20                      | 05/21/2014 14:49 |
| Lead              | 85             | 10            | 20                      | 05/21/2014 14:49 |
| Nickel            | 620            | 10            | 20                      | 05/21/2014 14:49 |
| Zinc              | 550            | 100           | 20                      | 05/21/2014 14:49 |
| <u>Surrogates</u> | <u>REC (%)</u> | <u>Limits</u> | Analytical Comments: b1 |                  |
| Tb 350.917        | 113            | 70-130        | 05/21/2014 14:49        |                  |

(Cont.)





# Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** E200.8  
**Analytical Method:** E200.8  
**Unit:** µg/L

## LUFT 5 Metals

| Client ID | Lab ID       | Matrix/ExtType | Date Collected | Instrument | Batch ID |
|-----------|--------------|----------------|----------------|------------|----------|
| B-5       | 1405744-017B | Water/TOTAL    | 05/19/2014     | ICP-MS1    | 90624    |

| Analytes          | Result         | RL            | DF                      | Date Analyzed    |
|-------------------|----------------|---------------|-------------------------|------------------|
| Cadmium           | 5.4            | 5.0           | 20                      | 05/21/2014 14:55 |
| Chromium          | 570            | 10            | 20                      | 05/21/2014 14:55 |
| Lead              | 58             | 10            | 20                      | 05/21/2014 14:55 |
| Nickel            | 630            | 10            | 20                      | 05/21/2014 14:55 |
| Zinc              | 480            | 100           | 20                      | 05/21/2014 14:55 |
| <u>Surrogates</u> | <u>REC (%)</u> | <u>Limits</u> | Analytical Comments: b1 |                  |
| Tb 350.917        | 109            | 70-130        | 05/21/2014 14:55        |                  |

| Client ID | Lab ID       | Matrix/ExtType | Date Collected | Instrument | Batch ID |
|-----------|--------------|----------------|----------------|------------|----------|
| B-6       | 1405744-018B | Water/TOTAL    | 05/19/2014     | ICP-MS1    | 90624    |

| Analytes          | Result         | RL            | DF                      | Date Analyzed    |
|-------------------|----------------|---------------|-------------------------|------------------|
| Cadmium           | 14             | 5.0           | 20                      | 05/21/2014 15:14 |
| Chromium          | 940            | 10            | 20                      | 05/21/2014 15:14 |
| Lead              | 160            | 10            | 20                      | 05/21/2014 15:14 |
| Nickel            | 1200           | 10            | 20                      | 05/21/2014 15:14 |
| Zinc              | 890            | 100           | 20                      | 05/21/2014 15:14 |
| <u>Surrogates</u> | <u>REC (%)</u> | <u>Limits</u> | Analytical Comments: b1 |                  |
| Tb 350.917        | 112            | 70-130        | 05/21/2014 15:14        |                  |



|   |   |                                  |
|---|---|----------------------------------|
| ESA<br><br>1425 N. McDowell Blvd. Ste.200<br><br>Petaluma, CA 94954 | Client Project ID: #120832-4E; SFO Plot 700 | Date Sampled: 05/19/14           |
|   | Client Contact: Michael G. Burns            | Date Received: 05/19/14          |
|   | Client P.O.:                                | Date Extracted: 05/20/14         |
|   |   | Date Analyzed: 05/25/14-05/29/14 |

**Fuel FingerPrint \***

Extraction method: SW3550B/3630C

Analytical methods: SW8015B

Work Order: 1405744

| Lab ID       | Client ID | Matrix | Fuel Fingerprint  |
|--------------|-----------|--------|---|
| 1405744-001A | B-1-1     | S      | This sample contains a small pattern in diesel range between C10 and C23, and has a hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed.                  |
| 1405744-002A | B-1-7     | S      | This sample contains a small pattern within the oil range and a hydrocarbon pattern between C9-C12 that resembles stoddard solvent. Chromatogram enclosed.                              |
| 1405744-003A | B-2-2     | S      | This sample contains a small pattern in diesel range between C10 and C23, and has a hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed.                  |
| 1405744-004A | B-2-7     | S      | This sample contains a small pattern in diesel range between C10 and C23, and has a hydrocarbon between C18 and C36 that resembles oil. Chromatogram enclosed.                          |
| 1405744-005A | B-3-2.5   | S      | This sample has a small pattern in diesel range between C10 and C23, and also contains a significant hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed. |



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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269  
http://www.mccampbell.com / E-mail: main@mccampbell.com

|   |  |                                  |
|---|--|----------------------------------|
| ESA<br><br>1425 N. McDowell Blvd. Ste.200<br><br>Petaluma, CA 94954 | Client Project ID: #120832-4E; SFO<br>Plot 700 | Date Sampled: 05/19/14           |
|   | Client Contact: Michael G. Burns               | Date Received: 05/19/14          |
|   | Client P.O.:                                   | Date Extracted: 05/20/14         |
|   |  | Date Analyzed: 05/25/14-05/29/14 |

**Fuel FingerPrint \***

Extraction method: SW3550B/3630C

Analytical methods: SW8015B

Work Order: 1405744

| Lab ID       | Client ID | Matrix | Fuel Fingerprint  |
|--------------|-----------|--------|---|
| 1405744-006A | B-3-10    | S      | This sample contains a small pattern in the diesel range between C10 and C23, and has a significant hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed.  |
| 1405744-007A | B-4-2     | S      | This sample has a small pattern in diesel range between C10 and C23, and also contains a significant hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed. |
| 1405744-008A | B-4-4     | S      | This sample contains a small pattern in diesel range between C10 and C23, and has a hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed.                  |
| 1405744-009A | B-5-2     | S      | This sample contains a pattern in diesel range between C10 and C23, and has a hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed.                        |
| 1405744-010A | B-5-3.5   | S      | This sample contains a small pattern in diesel range between C10 and C23, and has a hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed.                  |



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|   |  |                                  |
|---|--|----------------------------------|
| ESA<br><br>1425 N. McDowell Blvd. Ste.200<br><br>Petaluma, CA 94954 | Client Project ID: #120832-4E; SFO<br>Plot 700 | Date Sampled: 05/19/14           |
|   | Client Contact: Michael G. Burns               | Date Received: 05/19/14          |
|   | Client P.O.:                                   | Date Extracted: 05/20/14         |
|   |  | Date Analyzed: 05/25/14-05/29/14 |

### Fuel FingerPrint \*

Extraction method: SW3550B/3630C

Analytical methods: SW8015B

Work Order: 1405744

| Lab ID       | Client ID | Matrix | Fuel Fingerprint   |
|--------------|-----------|--------|--|
| 1405744-011A | B-6-2     | S      | This sample contains a small pattern in diesel range between C10 and C23, and has a significant hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed. |
| 1405744-012A | B-6-4     | S      | This sample contains a pattern in diesel range between C10 and C23, and has a hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed.                   |



|   |   |                                   |
|---|---|-----------------------------------|
| ESA<br><br>1425 N. McDowell Blvd. Ste.200<br><br>Petaluma, CA 94954 | Client Project ID: #120832-4E; SFO Plot 700 | Date Sampled: 05/19/14            |
|   | Client Contact: Michael G. Burns            | Date Received: 05/19/14           |
|   | Client P.O.:                                | Date Extracted: 05/20/14-05/27/14 |
|   |   | Date Analyzed: 05/25/14-05/28/14  |

**Fuel FingerPrint \***

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1405744

| Lab ID       | Client ID | Matrix | Fuel Fingerprint  |
|--------------|-----------|--------|---|
| 1405744-013A | B-1       | W      | This sample contains a small pattern in the diesel range C10-C23 and a significant hydrocarbon pattern between C18 and C30 that resembles oil. Chromatogram enclosed.                   |
| 1405744-014C | B-2       | W      | No Detectable Pattern.  |
| 1405744-015C | B-3       | W      | No Detectable Pattern.  |
| 1405744-016C | B-4       | W      | This sample contains a small pattern in diesel range between C10 and C23, and a significant hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed.          |
| 1405744-017C | B-5       | W      | This sample contains an unrecognizable pattern in diesel range between C10 and C23 and a significant hydrocarbon pattern between C18 and C36 that resembles oil. Chromatogram enclosed. |



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http://www.mccampbell.com / E-mail: main@mccampbell.com

|   |  |                                   |
|---|--|-----------------------------------|
| ESA<br><br>1425 N. McDowell Blvd. Ste.200<br><br>Petaluma, CA 94954 | Client Project ID: #120832-4E; SFO<br>Plot 700 | Date Sampled: 05/19/14            |
|   | Client Contact: Michael G. Burns               | Date Received: 05/19/14           |
|   | Client P.O.:                                   | Date Extracted: 05/20/14-05/27/14 |
|   |  | Date Analyzed: 05/25/14-05/28/14  |

**Fuel FingerPrint \***

Extraction method: SW3510C/3630C

Analytical methods: SW8015B

Work Order: 1405744

| Lab ID       | Client ID | Matrix | Fuel Fingerprint   |
|--------------|-----------|--------|--|
| 1405744-018C | B-6       | W      | This sample contains a hydrocarbon pattern between C9-C12 that resembles stoddard solvent, and a pattern between C18-C36 that resembles oil . Chromatogram enclosed. |



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean Up

| Client ID               | Lab ID              | Matrix/ExtType | Date Collected    | Instrument                  | Batch ID             |
|-------------------------|---------------------|----------------|-------------------|-----------------------------|----------------------|
| <b>B-1-1</b>            | <b>1405744-001A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC6B</b>                 | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                   | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>1.8</b>          |                | 1.0               | 1                           | 05/26/2014 11:59     |
| TPH-Motor Oil (C18-C36) | <b>10</b>           |                | 5.0               | 1                           | 05/26/2014 11:59     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2  |                      |
| C9                      | 101                 |                | 70-130            |                             | 05/26/2014 11:59     |
| <b>B-1-7</b>            | <b>1405744-002A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC6B</b>                 | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                   | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>9.1</b>          |                | 1.0               | 1                           | 05/25/2014 23:50     |
| TPH-Motor Oil (C18-C36) | <b>6.3</b>          |                | 5.0               | 1                           | 05/25/2014 23:50     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e11,e7 |                      |
| C9                      | 100                 |                | 70-130            |                             | 05/25/2014 23:50     |
| <b>B-2-2</b>            | <b>1405744-003A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC2A</b>                 | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                   | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>27</b>           |                | 5.0               | 5                           | 05/27/2014 18:22     |
| TPH-Motor Oil (C18-C36) | <b>130</b>          |                | 25                | 5                           | 05/27/2014 18:22     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2  |                      |
| C9                      | 116                 |                | 70-130            |                             | 05/27/2014 18:22     |
| <b>B-2-7</b>            | <b>1405744-004A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC6B</b>                 | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                   | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>2.7</b>          |                | 1.0               | 1                           | 05/29/2014 05:01     |
| TPH-Motor Oil (C18-C36) | <b>6.8</b>          |                | 5.0               | 1                           | 05/29/2014 05:01     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2  |                      |
| C9                      | 120                 |                | 70-130            |                             | 05/29/2014 05:01     |

(Cont.)



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean Up

| Client ID               | Lab ID              | Matrix/ExtType | Date Collected    | Instrument                 | Batch ID             |
|-------------------------|---------------------|----------------|-------------------|----------------------------|----------------------|
| <b>B-3-2.5</b>          | <b>1405744-005A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC11B</b>               | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>11</b>           |                | 2.0               | 2                          | 05/26/2014 12:38     |
| TPH-Motor Oil (C18-C36) | <b>39</b>           |                | 10                | 2                          | 05/26/2014 12:38     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 118                 |                | 70-130            |                            | 05/26/2014 12:38     |
| <b>B-3-10</b>           | <b>1405744-006A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC6A</b>                | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>1.1</b>          |                | 1.0               | 1                          | 05/27/2014 19:29     |
| TPH-Motor Oil (C18-C36) | <b>6.3</b>          |                | 5.0               | 1                          | 05/27/2014 19:29     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 125                 |                | 70-130            |                            | 05/27/2014 19:29     |
| <b>B-4-2</b>            | <b>1405744-007A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC11B</b>               | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>35</b>           |                | 20                | 20                         | 05/26/2014 17:19     |
| TPH-Motor Oil (C18-C36) | <b>580</b>          |                | 100               | 20                         | 05/26/2014 17:19     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 121                 |                | 70-130            |                            | 05/26/2014 17:19     |
| <b>B-4-4</b>            | <b>1405744-008A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC9b</b>                | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>12</b>           |                | 10                | 10                         | 05/29/2014 02:52     |
| TPH-Motor Oil (C18-C36) | <b>100</b>          |                | 50                | 10                         | 05/29/2014 02:52     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 110                 |                | 70-130            |                            | 05/29/2014 02:52     |

(Cont.)





## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14

**WorkOrder:** 1405744  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean Up

| Client ID               | Lab ID              | Matrix/ExtType | Date Collected    | Instrument                 | Batch ID             |
|-------------------------|---------------------|----------------|-------------------|----------------------------|----------------------|
| <b>B-5-2</b>            | <b>1405744-009A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC9b</b>                | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>13</b>           |                | 2.0               | 2                          | 05/29/2014 06:17     |
| TPH-Motor Oil (C18-C36) | <b>53</b>           |                | 10                | 2                          | 05/29/2014 06:17     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 109                 |                | 70-130            |                            | 05/29/2014 06:17     |
| <b>B-5-3.5</b>          | <b>1405744-010A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC11B</b>               | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>32</b>           |                | 1.0               | 1                          | 05/27/2014 18:18     |
| TPH-Motor Oil (C18-C36) | <b>150</b>          |                | 5.0               | 1                          | 05/27/2014 18:18     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 126                 |                | 70-130            |                            | 05/27/2014 18:18     |
| <b>B-6-2</b>            | <b>1405744-011A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC9b</b>                | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>3.6</b>          |                | 1.0               | 1                          | 05/29/2014 10:51     |
| TPH-Motor Oil (C18-C36) | <b>34</b>           |                | 5.0               | 1                          | 05/29/2014 10:51     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 119                 |                | 70-130            |                            | 05/29/2014 10:51     |
| <b>B-6-4</b>            | <b>1405744-012A</b> | <b>Soil</b>    | <b>05/19/2014</b> | <b>GC9b</b>                | <b>90633</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>52</b>           |                | 5.0               | 5                          | 05/28/2014 23:26     |
| TPH-Motor Oil (C18-C36) | <b>57</b>           |                | 25                | 5                          | 05/28/2014 23:26     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 111                 |                | 70-130            |                            | 05/28/2014 23:26     |



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14-5/27/14

**WorkOrder:** 1405744  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

| Client ID               | Lab ID              | Matrix/ExtType | Date Collected    | Instrument                 | Batch ID             |
|-------------------------|---------------------|----------------|-------------------|----------------------------|----------------------|
| <b>B-1</b>              | <b>1405744-013A</b> | <b>Water</b>   | <b>05/19/2014</b> | <b>GC6B</b>                | <b>90869</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>140</b>          |                | 50                | 1                          | 05/28/2014 00:23     |
| TPH-Motor Oil (C18-C36) | <b>300</b>          |                | 250               | 1                          | 05/28/2014 00:23     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 96                  |                | 70-130            |                            | 05/28/2014 00:23     |
| <b>B-2</b>              | <b>1405744-014C</b> | <b>Water</b>   | <b>05/19/2014</b> | <b>GC6B</b>                | <b>90644</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | ND                  |                | 50                | 1                          | 05/28/2014 02:47     |
| TPH-Motor Oil (C18-C36) | ND                  |                | 250               | 1                          | 05/28/2014 02:47     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     |                            |                      |
| C9                      | 111                 |                | 70-130            |                            | 05/28/2014 02:47     |
| <b>B-3</b>              | <b>1405744-015C</b> | <b>Water</b>   | <b>05/19/2014</b> | <b>GC6B</b>                | <b>90644</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | ND                  |                | 50                | 1                          | 05/25/2014 16:19     |
| TPH-Motor Oil (C18-C36) | ND                  |                | 250               | 1                          | 05/25/2014 16:19     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     |                            |                      |
| C9                      | 100                 |                | 70-130            |                            | 05/25/2014 16:19     |
| <b>B-4</b>              | <b>1405744-016C</b> | <b>Water</b>   | <b>05/19/2014</b> | <b>GC6B</b>                | <b>90644</b>         |
| <u>Analytes</u>         | <u>Result</u>       |                | <u>RL</u>         | <u>DF</u>                  | <u>Date Analyzed</u> |
| TPH-Diesel (C10-C23)    | <b>86</b>           |                | 50                | 1                          | 05/26/2014 03:29     |
| TPH-Motor Oil (C18-C36) | <b>510</b>          |                | 250               | 1                          | 05/26/2014 03:29     |
| <u>Surrogates</u>       | <u>REC (%)</u>      |                | <u>Limits</u>     | Analytical Comments: e7,e2 |                      |
| C9                      | 102                 |                | 70-130            |                            | 05/26/2014 03:29     |

(Cont.)



## Analytical Report

**Client:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Date Received:** 5/19/14 23:14  
**Date Prepared:** 5/20/14-5/27/14

**WorkOrder:** 1405744  
**Extraction Method:** SW3510C/3630C  
**Analytical Method:** SW8015B  
**Unit:** µg/L

### Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

| Client ID | Lab ID       | Matrix/ExtType | Date Collected | Instrument | Batch ID |
|-----------|--------------|----------------|----------------|------------|----------|
| B-5       | 1405744-017C | Water          | 05/19/2014     | GC6B       | 90644    |

| Analytes                | Result  | RL     | DF                         | Date Analyzed    |
|-------------------------|---------|--------|----------------------------|------------------|
| TPH-Diesel (C10-C23)    | 110     | 50     | 1                          | 05/26/2014 02:16 |
| TPH-Motor Oil (C18-C36) | ND      | 250    | 1                          | 05/26/2014 02:16 |
| Surrogates              | REC (%) | Limits | Analytical Comments: e7,e2 |                  |
| C9                      | 101     | 70-130 |                            | 05/26/2014 02:16 |

| Client ID | Lab ID       | Matrix/ExtType | Date Collected | Instrument | Batch ID |
|-----------|--------------|----------------|----------------|------------|----------|
| B-6       | 1405744-018C | Water          | 05/19/2014     | GC6B       | 90644    |

| Analytes                | Result  | RL     | DF                          | Date Analyzed    |
|-------------------------|---------|--------|-----------------------------|------------------|
| TPH-Diesel (C10-C23)    | 260     | 50     | 1                           | 05/26/2014 04:41 |
| TPH-Motor Oil (C18-C36) | 740     | 250    | 1                           | 05/26/2014 04:41 |
| Surrogates              | REC (%) | Limits | Analytical Comments: e11,e7 |                  |
| C9                      | 103     | 70-130 |                             | 05/26/2014 04:41 |

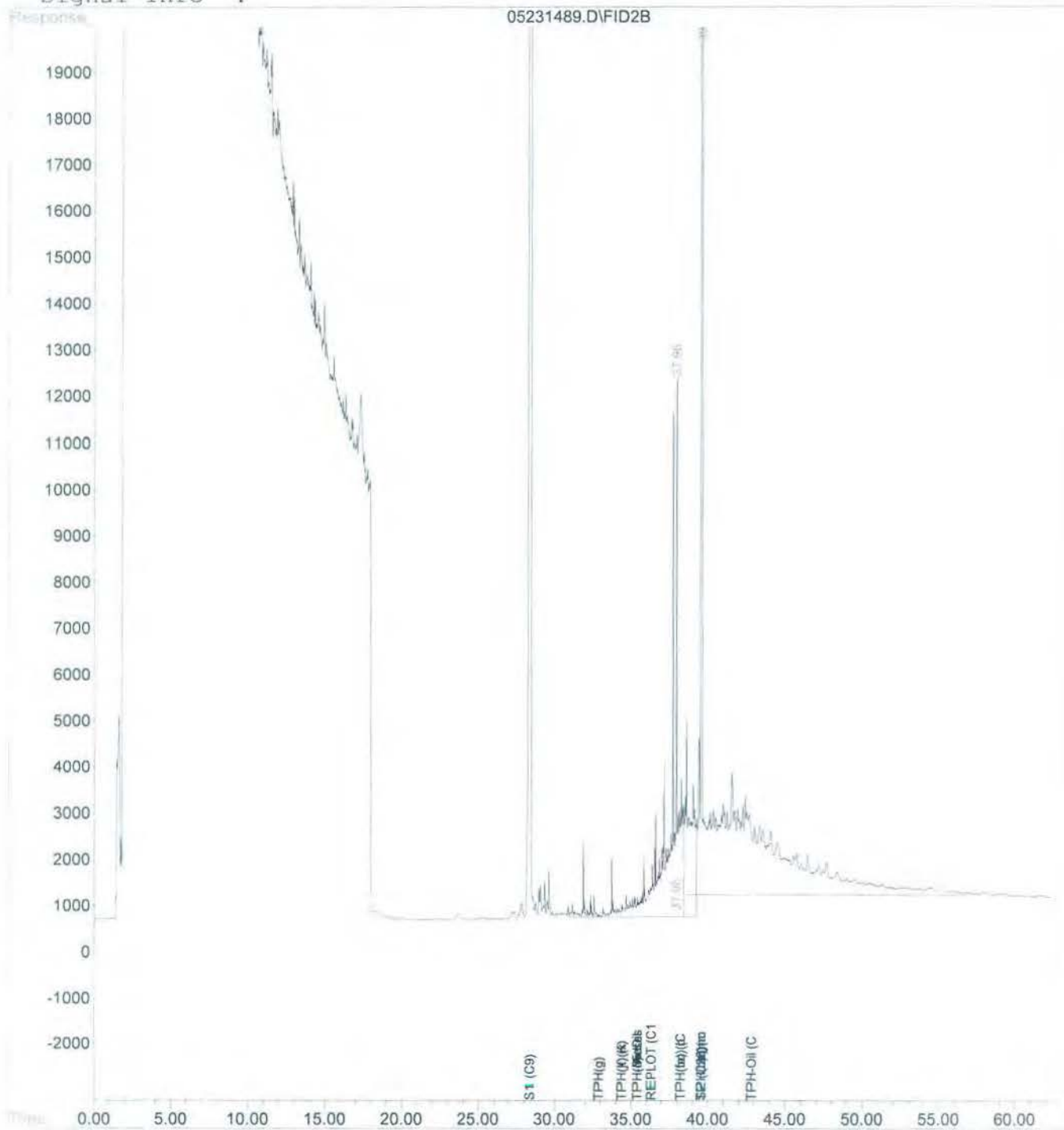
Data File : D:\HPCHEM\GC6\DATAB\05231489.D  
Acq On : 26 May 2014 11:59 am  
Sample : 1405744-001A S FF  
Misc : TPHSG  
IntFile : EVENTS.E  
Quant Time: May 28 9:50 2014

Vial: 95  
Operator: Mariel  
Inst : GC-6  
Multiplr: 1.00

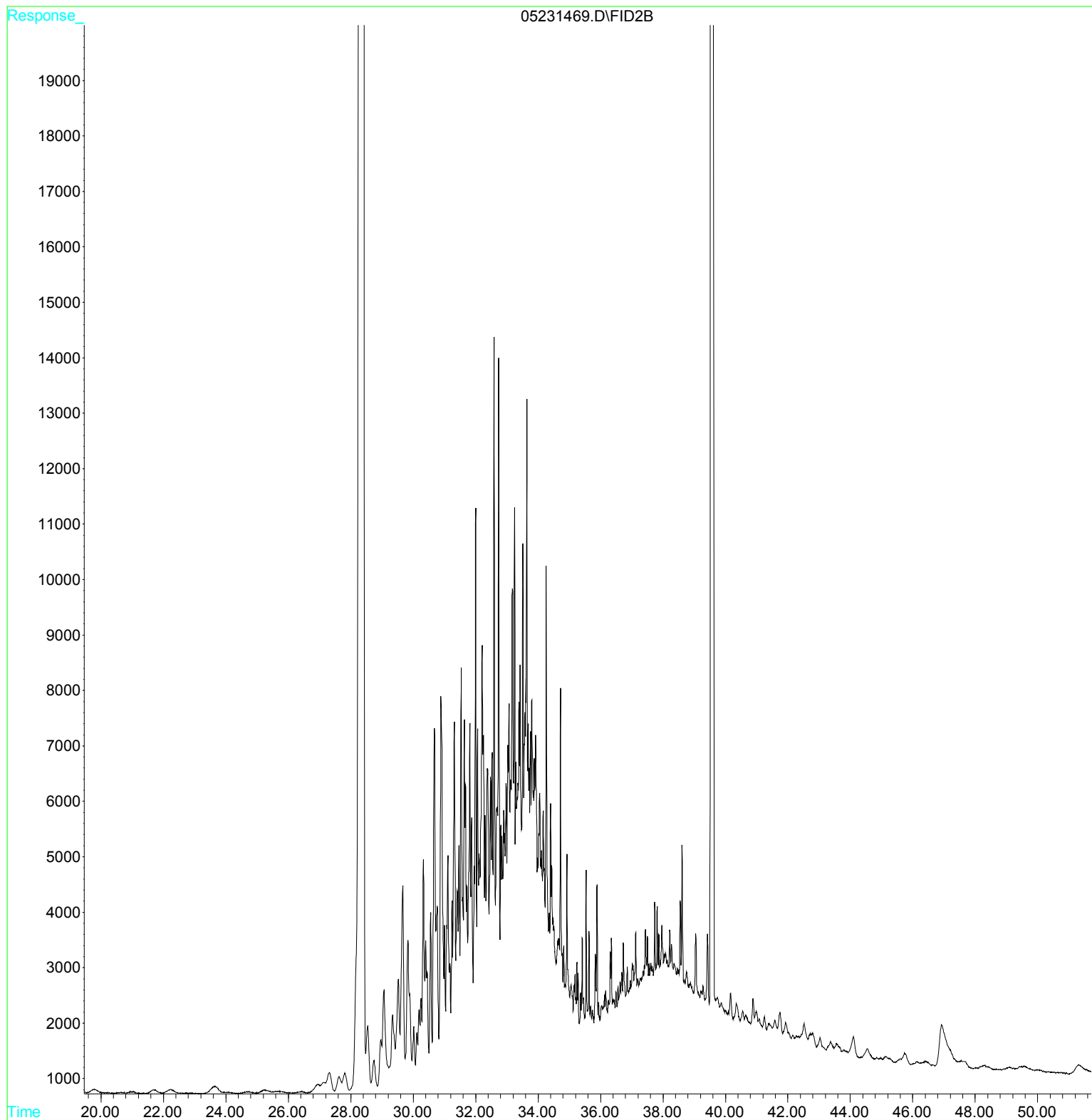
Quant Results File: GC6BE.RES

Quant Method : D:\HPCHEM\GC6\METHODS\GC6BE.M (Chemstation Integrator)  
Title : GC-2B  
Last Update : Sun May 18 13:56:07 2014  
Response via : Multiple Level Calibration  
DataAcq Meth : GC6AF.M

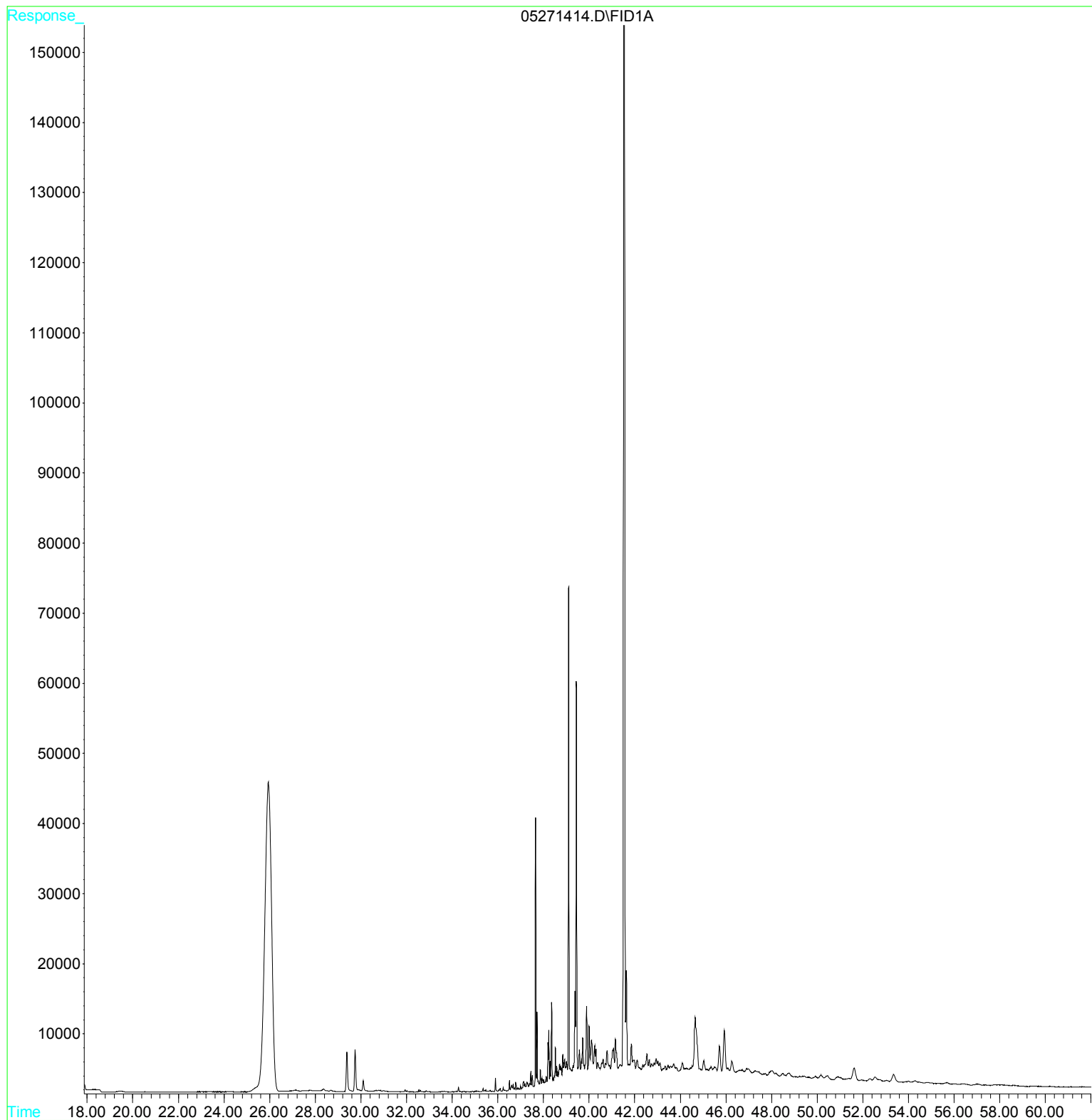
Volume Inj. :  
Signal Phase :  
Signal Info :



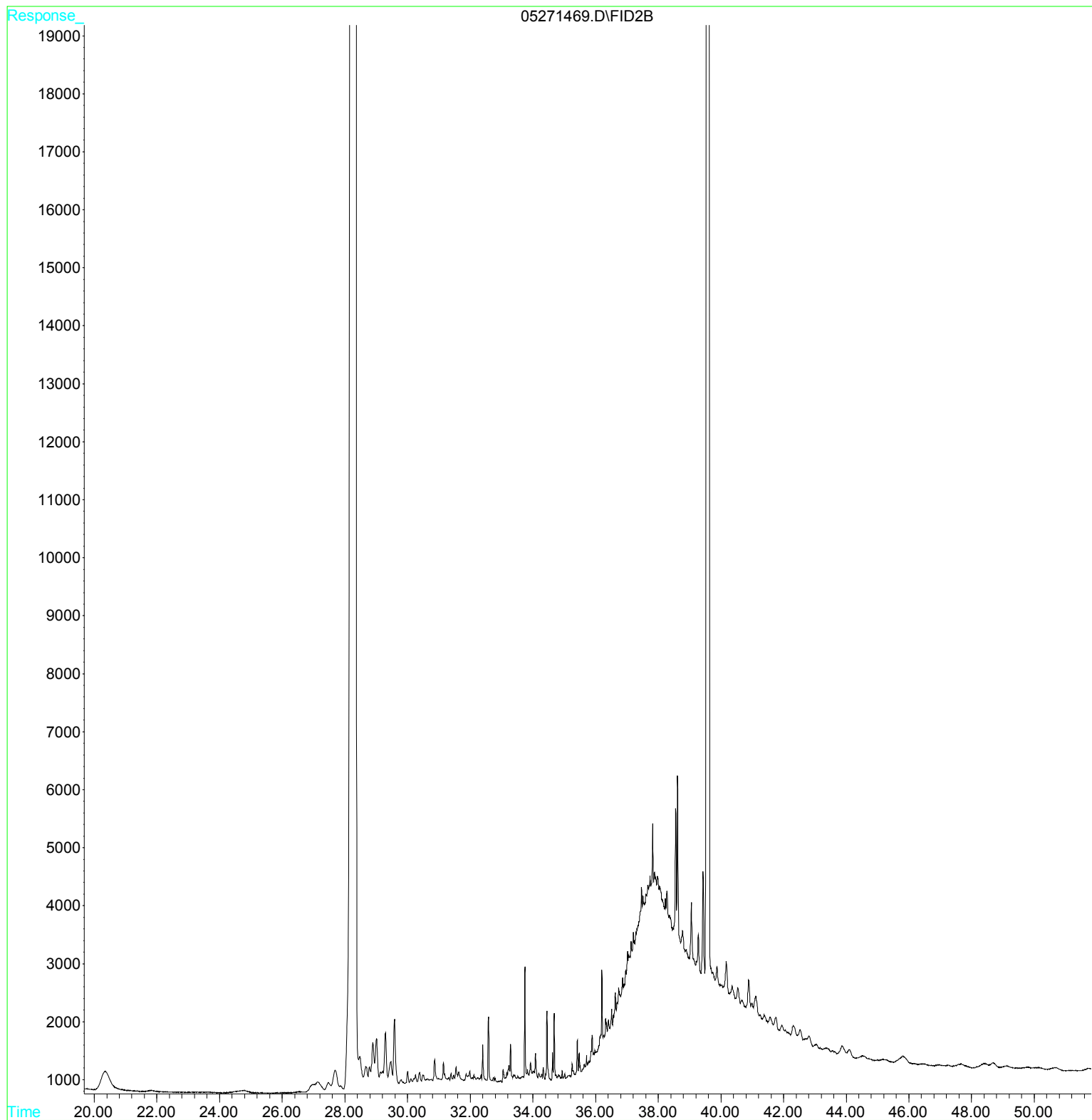
File : D:\HPCHEM\GC6\DATAB\05231469.D  
Operator : Mariel  
Acquired : 25 May 2014 11:50 pm using AcqMethod GC6AF.M  
Instrument : GC-6  
Sample Name: 1405744-002A S FF  
Misc Info : TPHSG  
Vial Number: 85



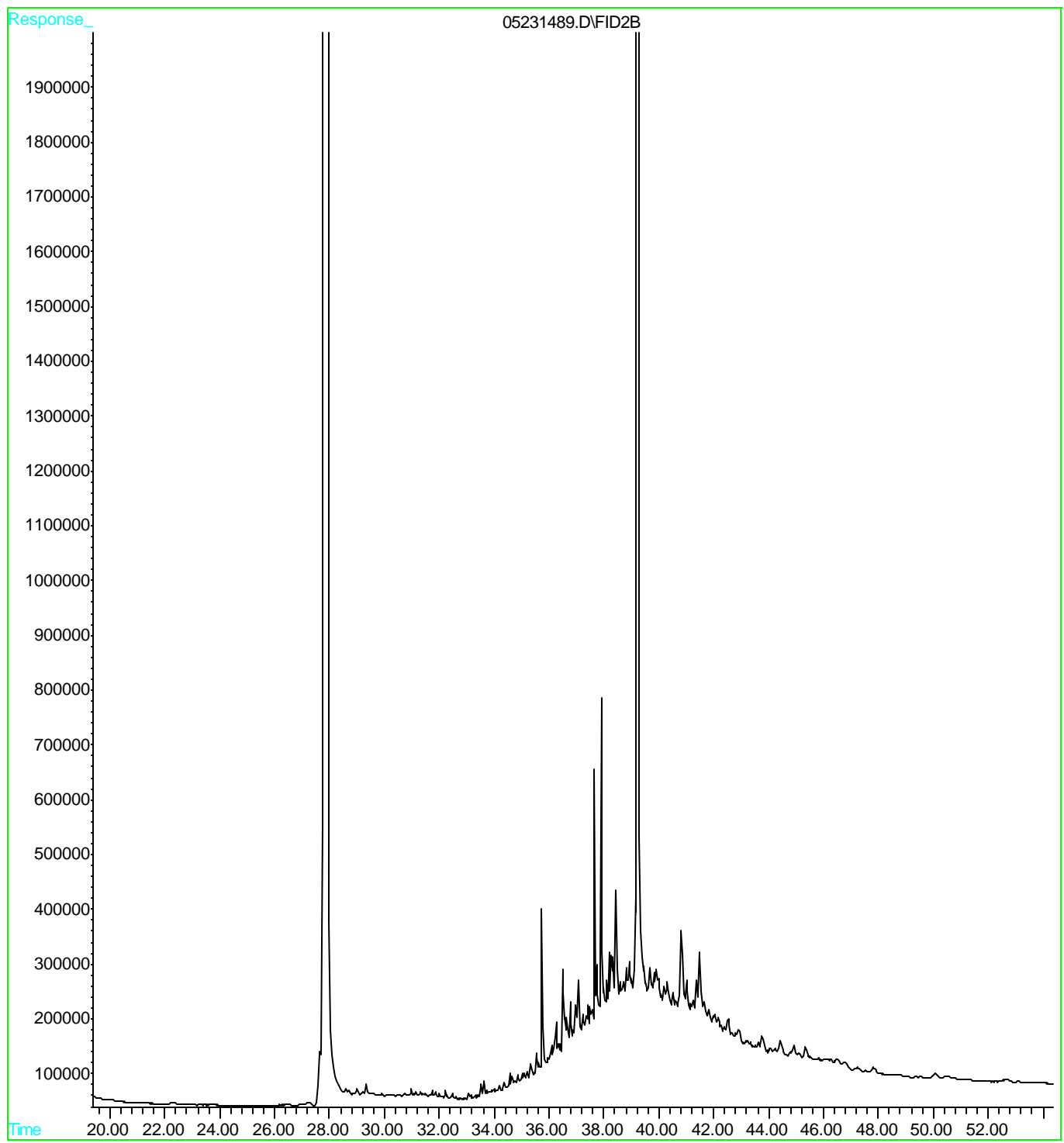
File : D:\HPCHEM\GC2\DATAA\05271414.D  
Operator : Mariel  
Acquired : 27 May 2014 6:22 pm using AcqMethod GC2ALV12.M  
Instrument : GC-2  
Sample Name: 1405744-003A S FF  
Misc Info : TPH  
Vial Number: 7



File : D:\HPCHEM\GC6\DATAB\05271469.D  
Operator : Mariel  
Acquired : 29 May 2014 5:01 am using AcqMethod GC6AF.M  
Instrument : GC-6  
Sample Name: 1405744-004A S  
Misc Info : TPHSG  
Vial Number: 85

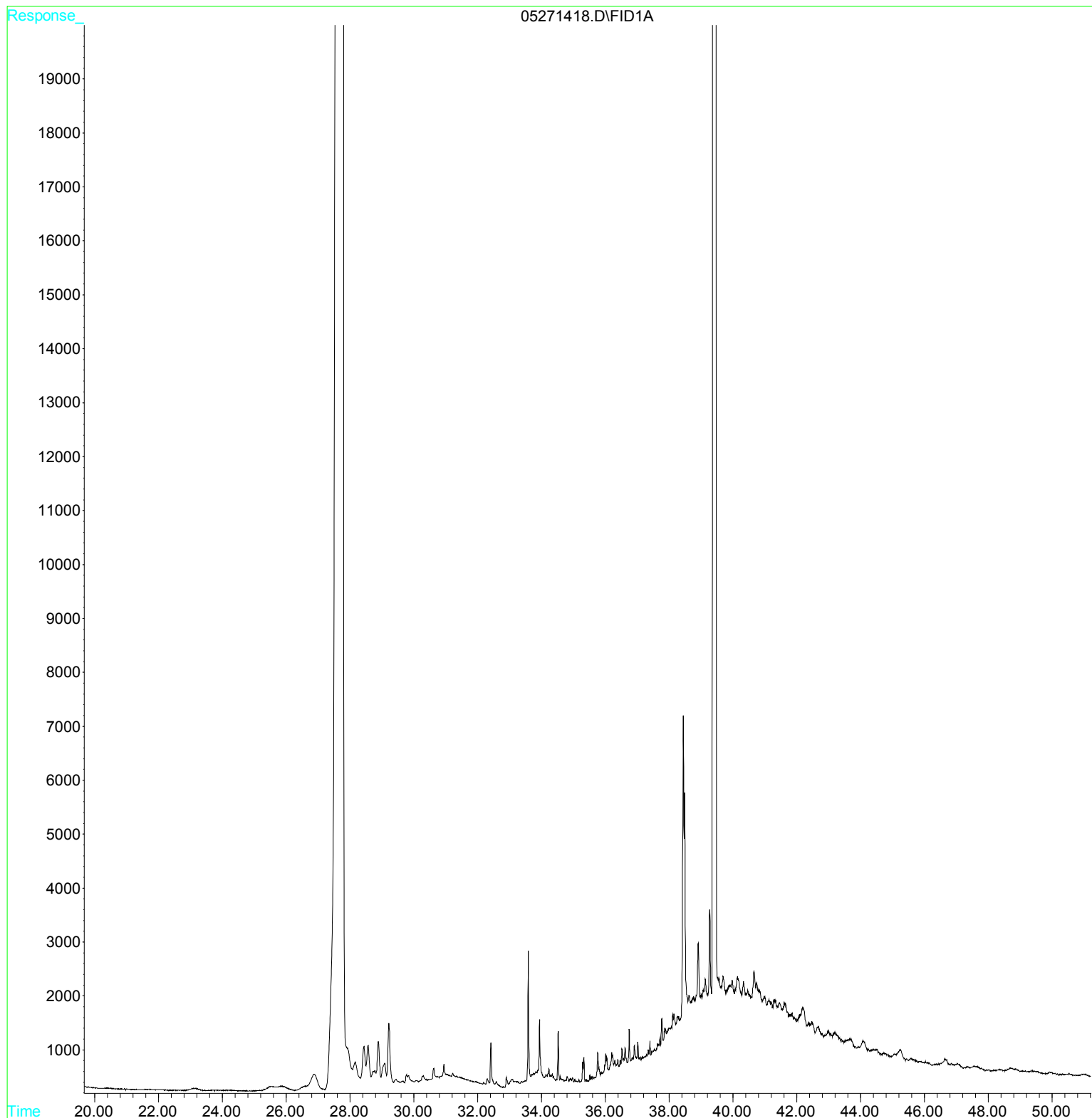


File : D:\HPCHEM\GC11\DATAB\05231489.D  
Operator : Mariel  
Acquired : 26 May 2014 12:38 pm using AcqMethod GC11AC.M  
Instrument : GC-11  
Sample Name: 1405744-005A S FF  
Misc Info : TPHSG  
Vial Number: 95

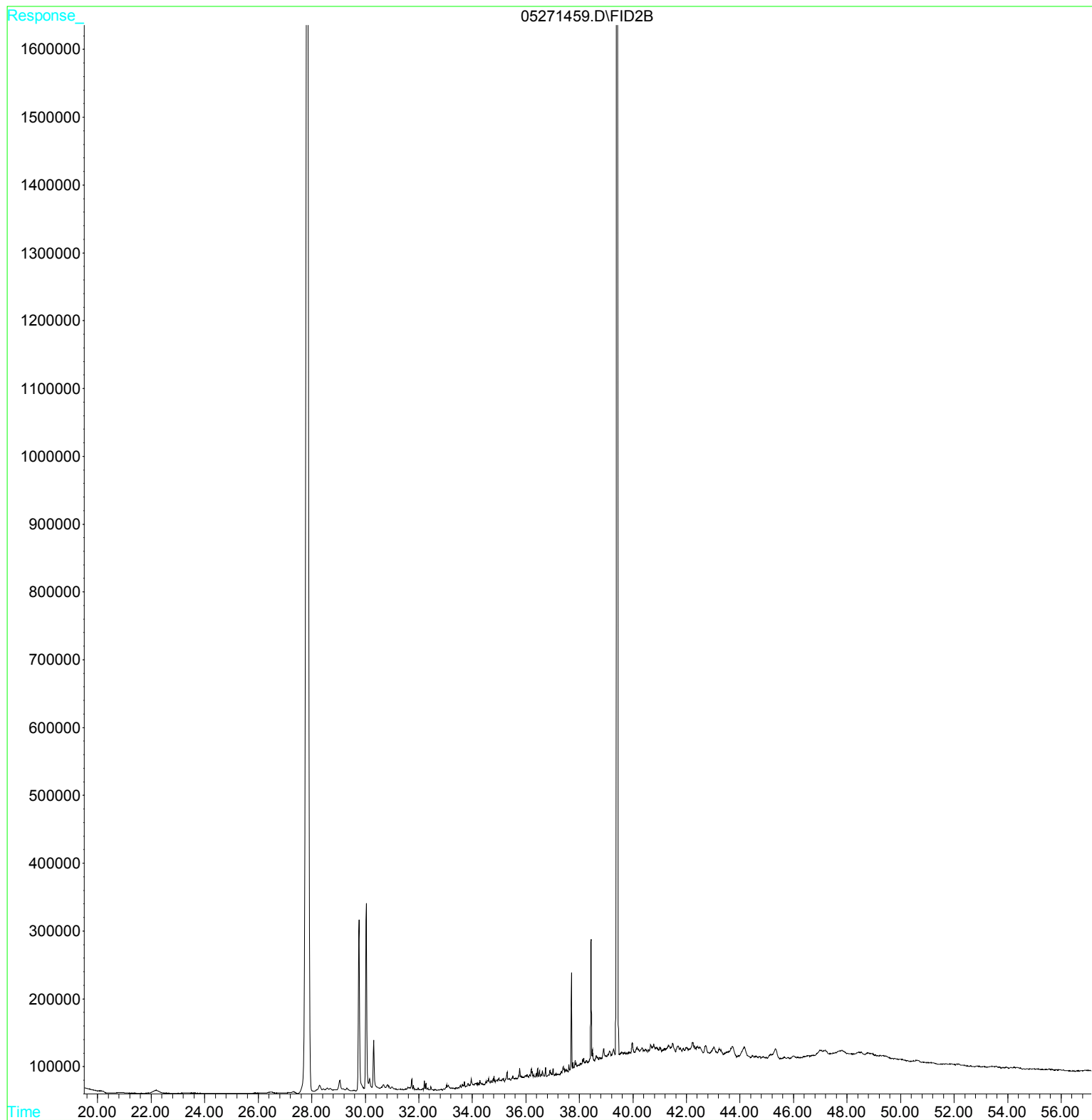




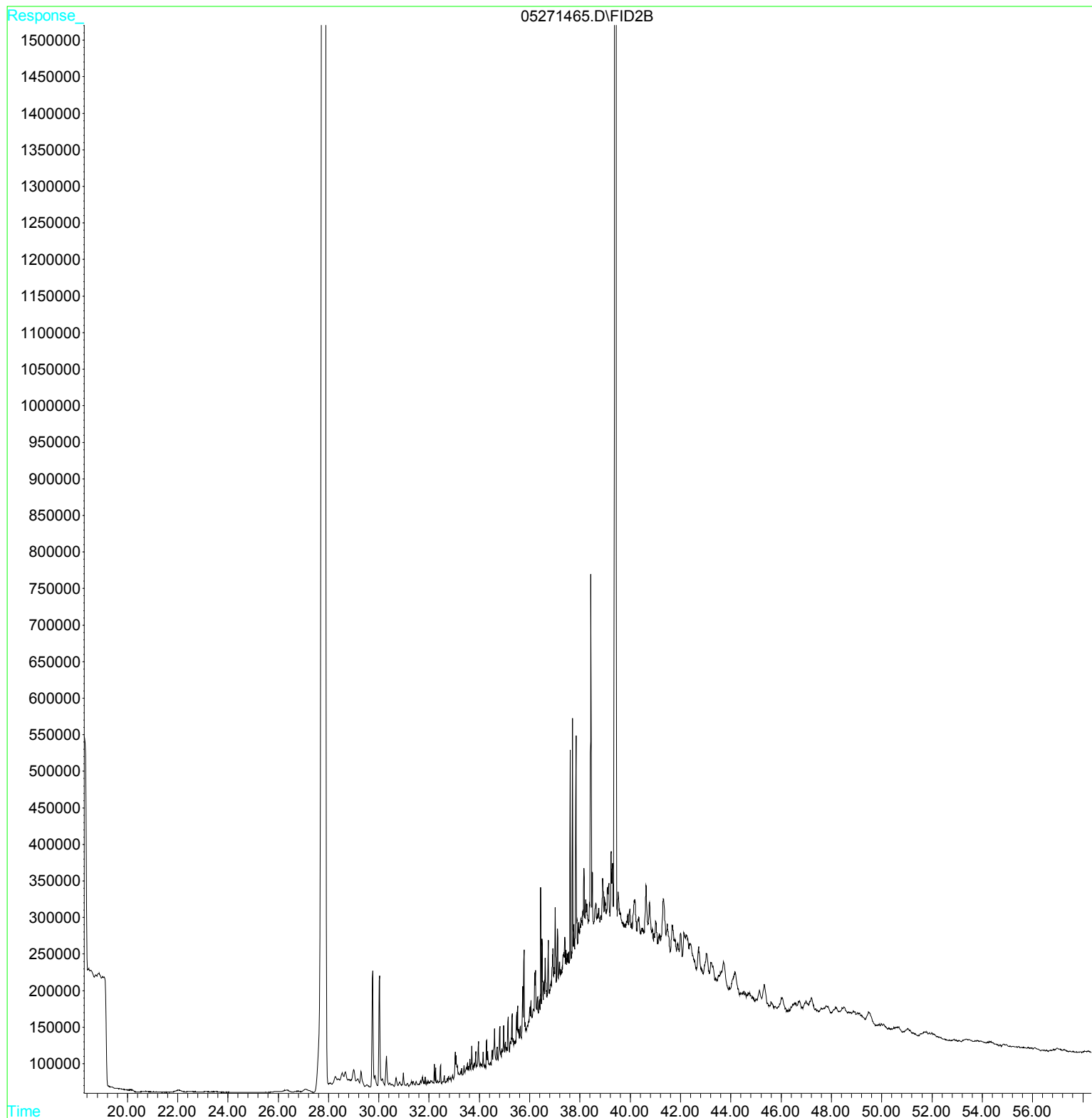
File : D:\HPCHEM\GC6\DATA\05271418.D  
Operator : Mariel  
Acquired : 27 May 2014 7:29 pm using AcqMethod GC6AF.M  
Instrument : GC-6  
Sample Name: 1405744-006A S RR  
Misc Info : TPH  
Vial Number: 9



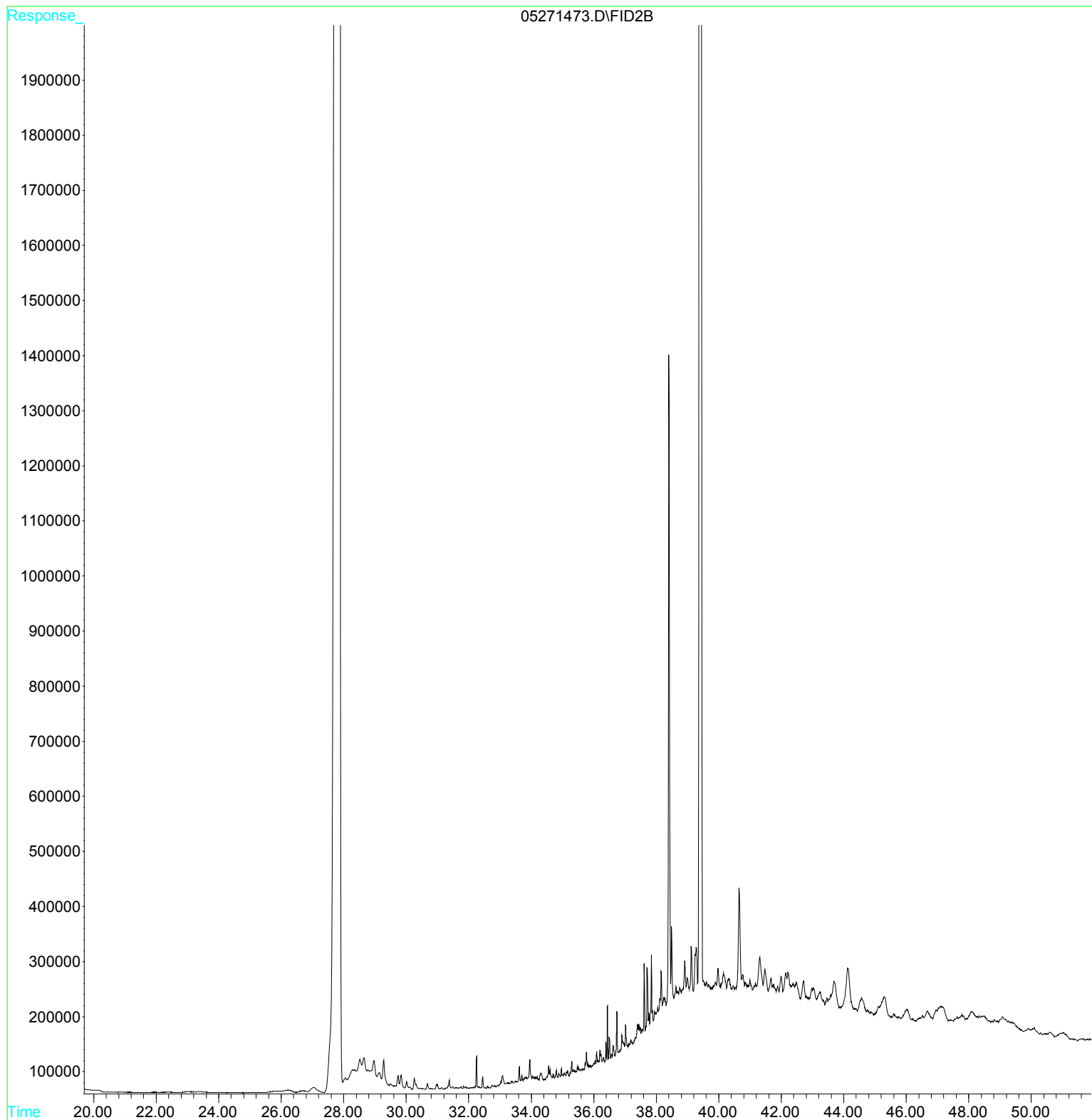
File : D:\HPCHEM\GC9\DATAB\05271459.D  
Operator : Mariel  
Acquired : 29 May 2014 2:52 am using AcqMethod GC9AENT2.M  
Instrument : GC-9  
Sample Name: 1405744-008A S RR  
Misc Info : TPH  
Vial Number: 80



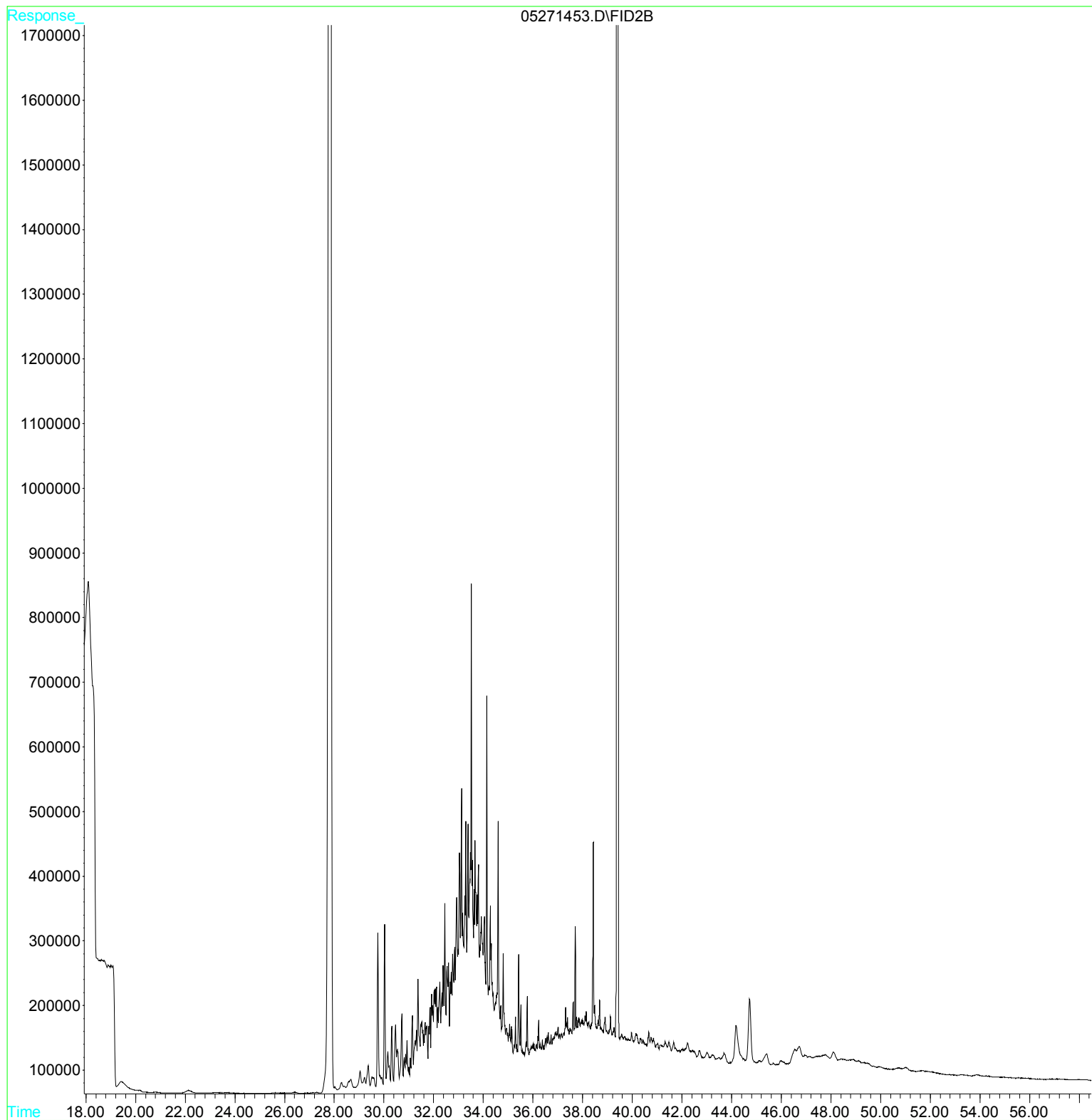
File : D:\HPCHEM\GC9\DATAB\05271465.D  
Operator : Mariel  
Acquired : 29 May 2014 6:17 am using AcqMethod GC9AENT2.M  
Instrument : GC-9  
Sample Name: 1405744-009A S  
Misc Info : TPH  
Vial Number: 83



File : D:\HPCHEM\GC9\DATAB\05271473.D  
Operator : Mariel  
Acquired : 29 May 2014 10:51 am using AcqMethod GC9AENT2.M  
Instrument : GC-9  
Sample Name: 1405744-011A S  
Misc Info : TPH  
Vial Number: 87



File : D:\HPCHEM\GC9\DATAB\05271453.D  
Operator : Mariel  
Acquired : 28 May 2014 11:26 pm using AcqMethod GC9AENT2.M  
Instrument : GC-9  
Sample Name: 1405744-012A S  
Misc Info : TPH  
Vial Number: 77



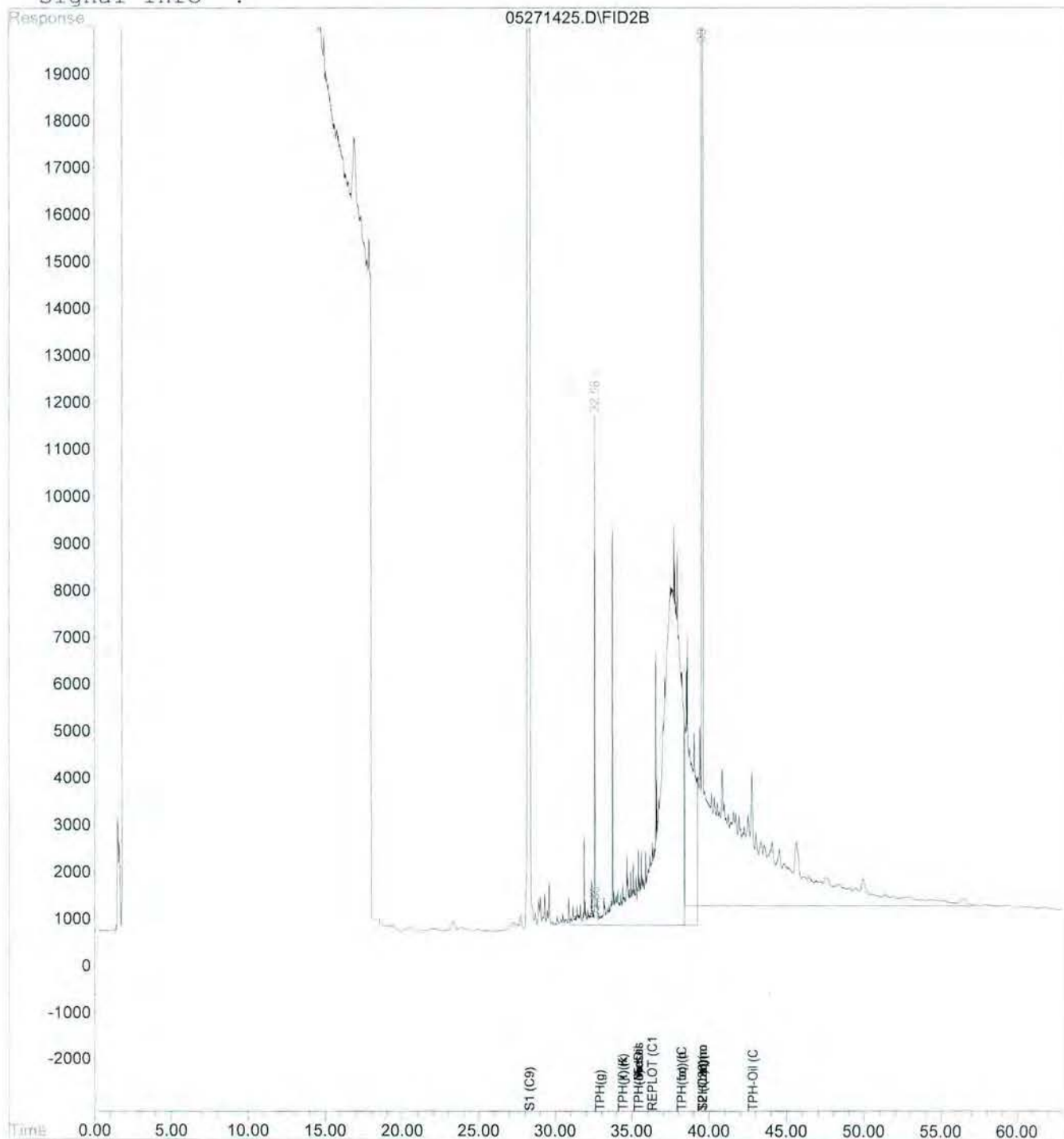
Data File : D:\HPCHEM\GC6\DATAB\05271425.D  
Acq On : 28 May 2014 12:23 am  
Sample : 1405744-013A W RR  
Misc : TPH  
IntFile : EVENTS.E  
Quant Time: May 28 11:09 2014

Vial: 63  
Operator: Mariel  
Inst : GC-6  
Multiplr: 1.00

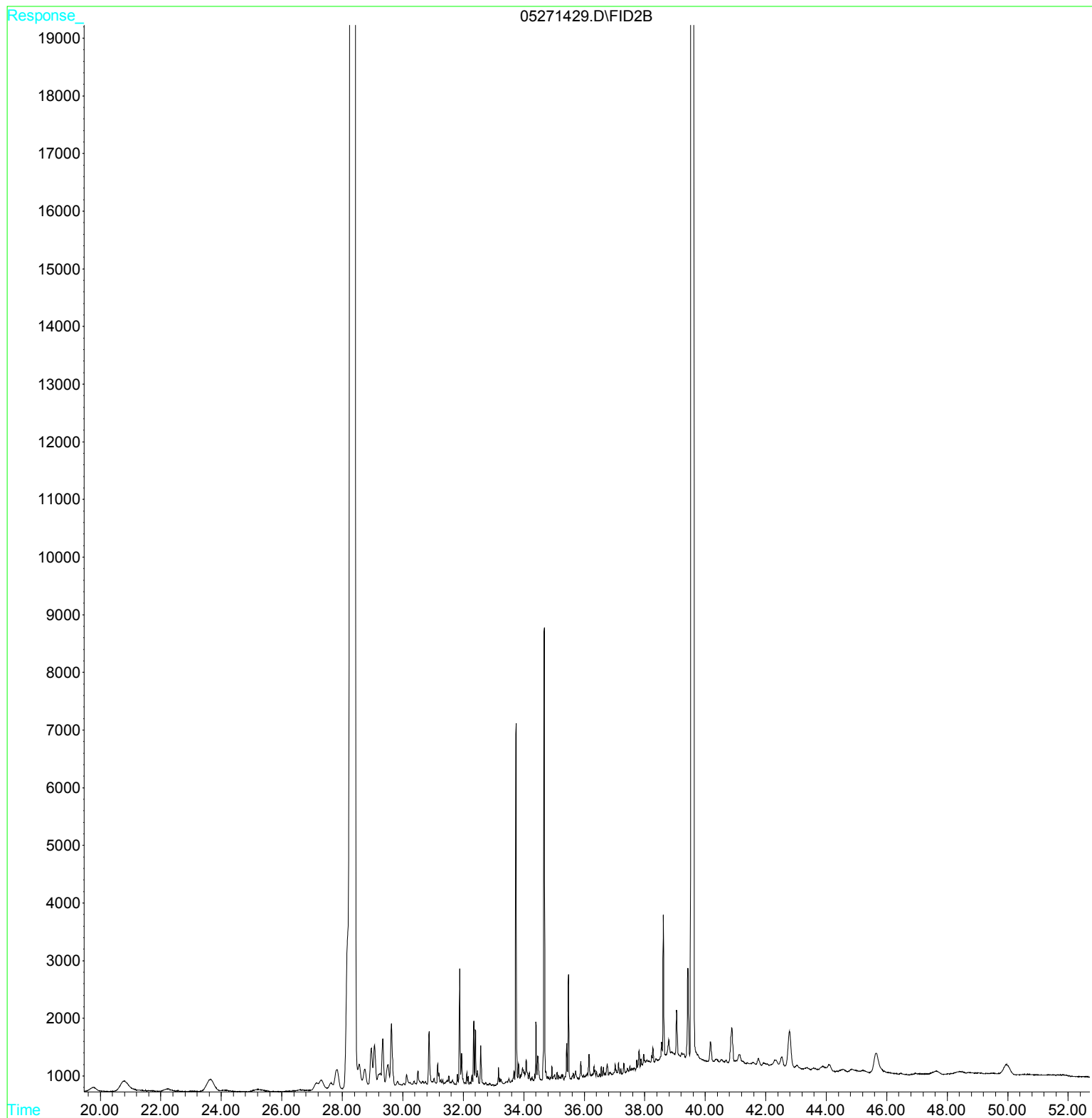
Quant Results File: GC6BE.RES

Quant Method : D:\HPCHEM\GC6\METHODS\GC6BE.M (Chemstation Integrator)  
Title : GC-2B  
Last Update : Sun May 18 13:56:07 2014  
Response via : Multiple Level Calibration  
DataAcq Meth : GC6AF.M

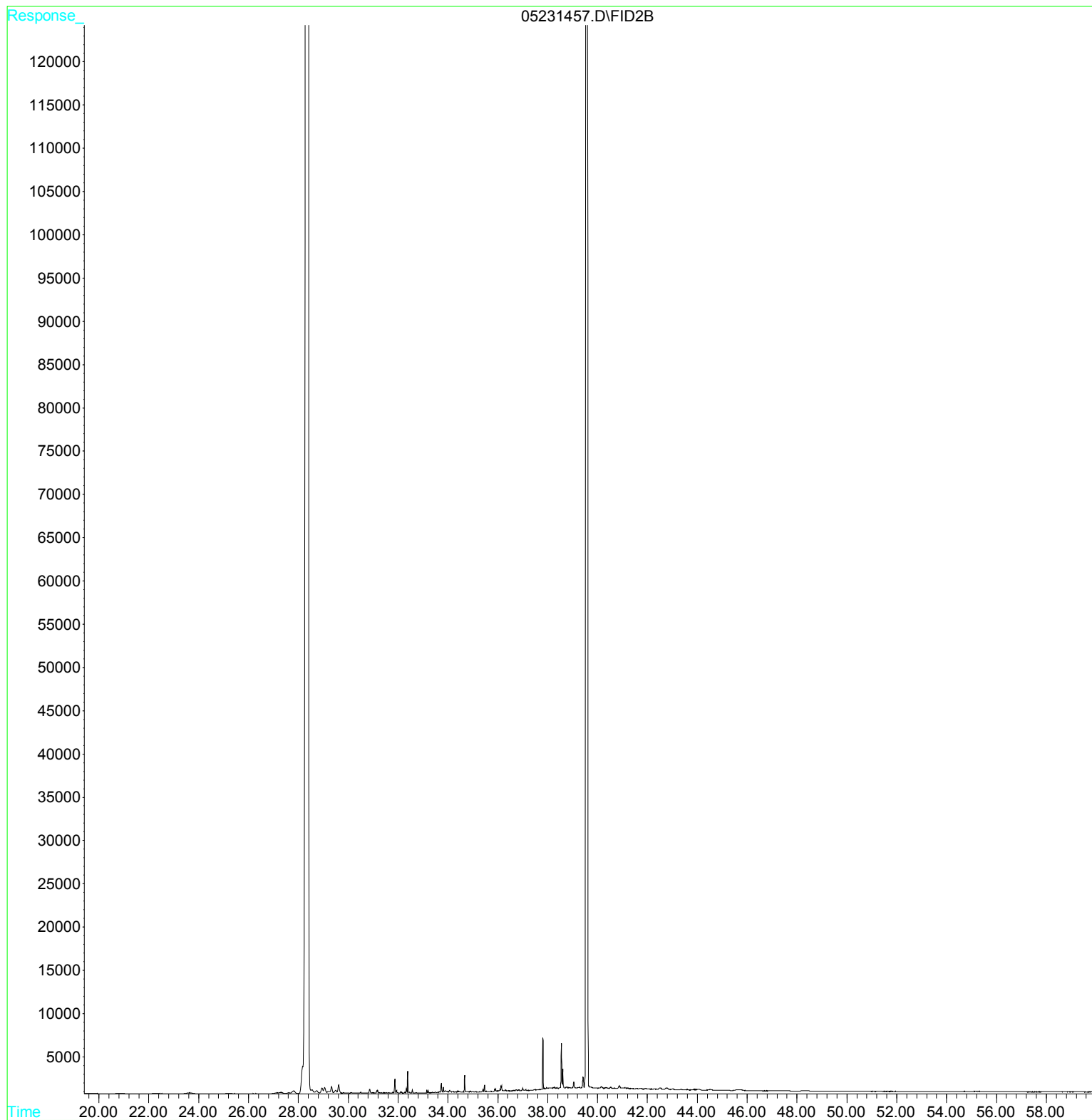
Volume Inj. :  
Signal Phase :  
Signal Info :



File : D:\HPCHEM\GC6\DATAB\05271429.D  
Operator : Mariel  
Acquired : 28 May 2014 2:47 am using AcqMethod GC6AF.M  
Instrument : GC-6  
Sample Name: 1405744-014C W RR  
Misc Info : TPH  
Vial Number: 65

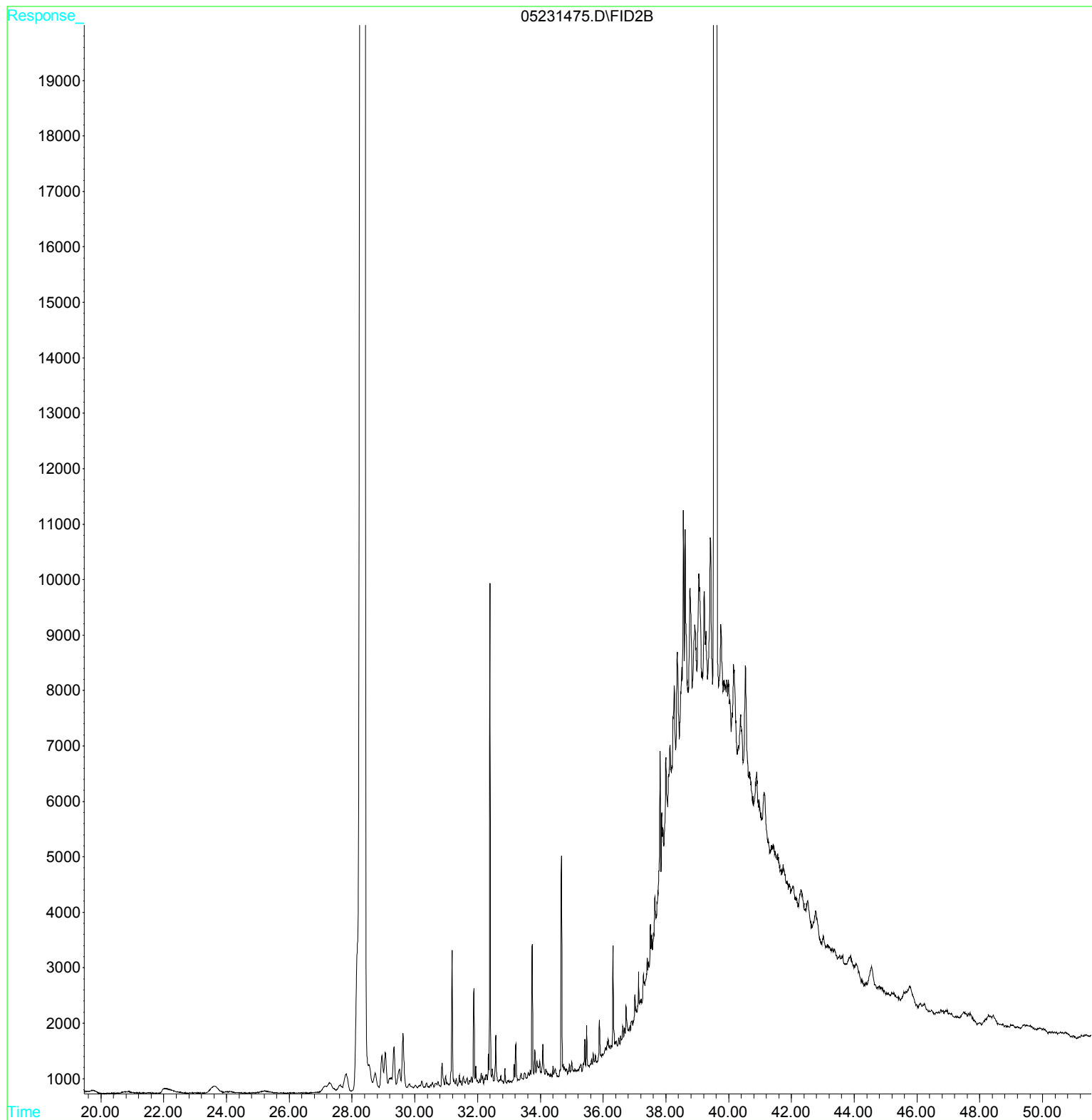


File : D:\HPCHEM\GC6\DATAB\05231457.D  
Operator : Mariel  
Acquired : 25 May 2014 4:19 pm using AcqMethod GC6AF.M  
Instrument : GC-6  
Sample Name: 1405744-015C W FF  
Misc Info : TPHSG  
Vial Number: 79

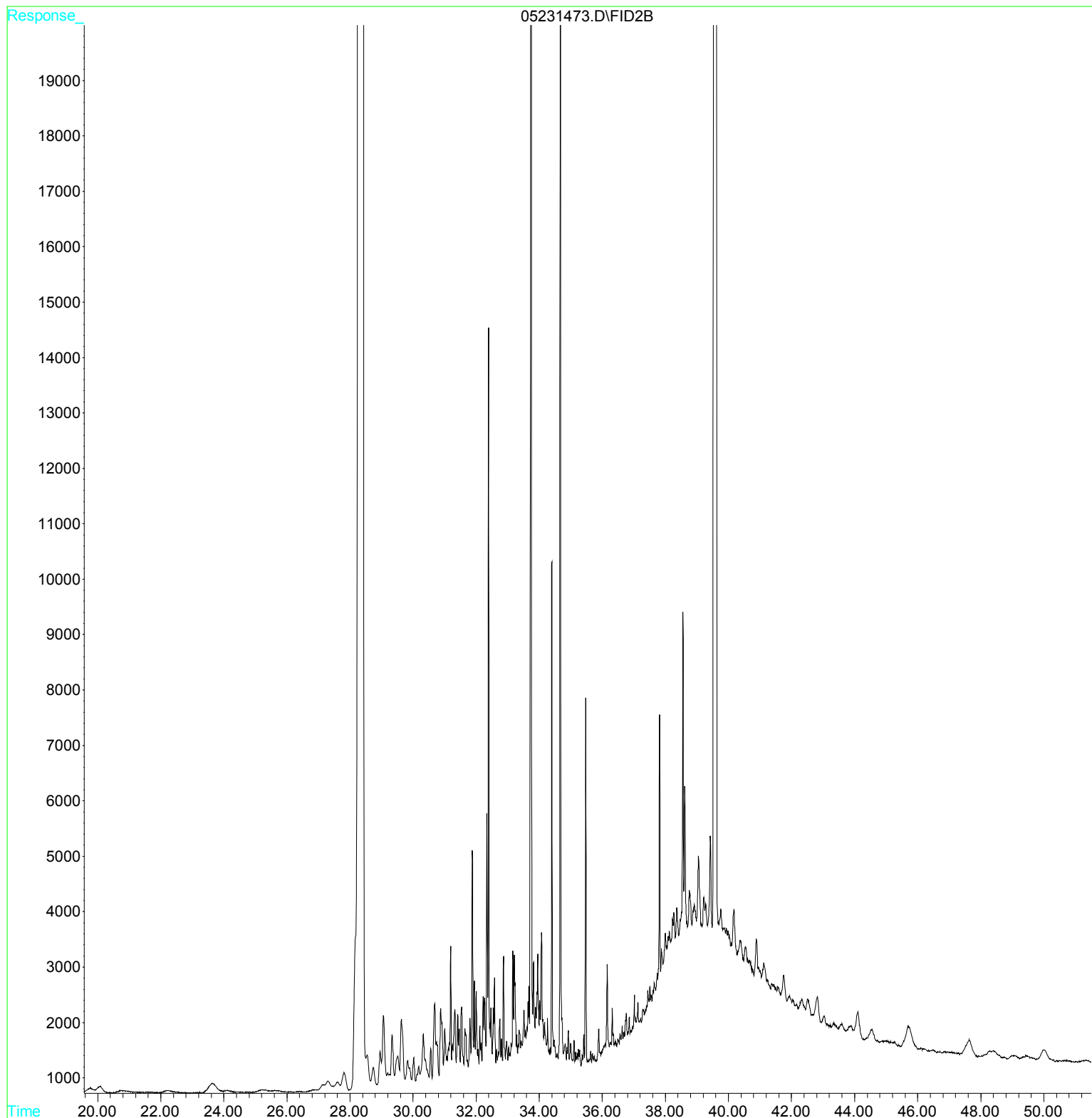




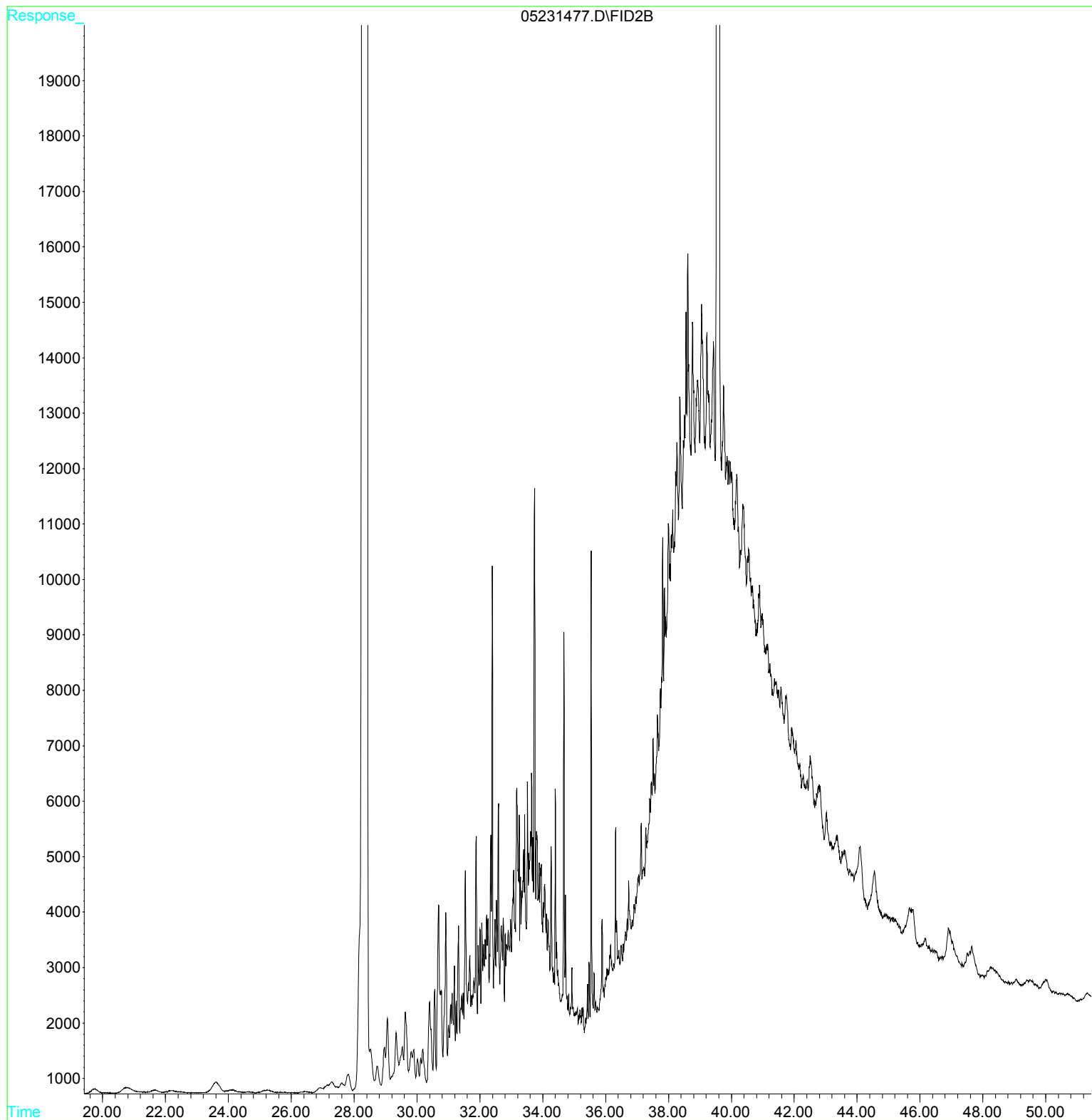
File : D:\HPCHEM\GC6\DATAB\05231475.D  
Operator : Mariel  
Acquired : 26 May 2014 3:29 am using AcqMethod GC6AF.M  
Instrument : GC-6  
Sample Name: 1405744-016C W  
Misc Info : TPHSG  
Vial Number: 88



File : D:\HPCHEM\GC6\DATAB\05231473.D  
Operator : Mariel  
Acquired : 26 May 2014 2:16 am using AcqMethod GC6AF.M  
Instrument : GC-6  
Sample Name: 1405744-017C W FF  
Misc Info : TPHSG  
Vial Number: 87



File : D:\HPCHEM\GC6\DATAB\05231477.D  
Operator : Mariel  
Acquired : 26 May 2014 4:41 am using AcqMethod GC6AF.M  
Instrument : GC-6  
Sample Name: 1405744-018C W FF  
Misc Info : TPHSG  
Vial Number: 89





## Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/20/14  
**Date Analyzed:** 5/20/14  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90628  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90628  
 1405773-001AMS/MSD

### QC Summary Report for SW8260B

| Analyte                       | MB Result | LCS Result | RL     | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|-------------------------------|-----------|------------|--------|---------|------------|----------|------------|
| Acetone                       | ND        | -          | 0.10   | -       | -          | -        | -          |
| tert-Amyl methyl ether (TAME) | ND        | 0.0403     | 0.0050 | 0.050   | -          | 80.6     | 70-130     |
| Benzene                       | ND        | 0.0449     | 0.0050 | 0.050   | -          | 89.8     | 70-130     |
| Bromobenzene                  | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Bromochloromethane            | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Bromodichloromethane          | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Bromoform                     | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Bromomethane                  | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 2-Butanone (MEK)              | ND        | -          | 0.020  | -       | -          | -        | -          |
| t-Butyl alcohol (TBA)         | ND        | 0.175      | 0.050  | 0.20    | -          | 87.6     | 70-130     |
| n-Butyl benzene               | ND        | -          | 0.0050 | -       | -          | -        | -          |
| sec-Butyl benzene             | ND        | -          | 0.0050 | -       | -          | -        | -          |
| tert-Butyl benzene            | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Carbon Disulfide              | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Carbon Tetrachloride          | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Chlorobenzene                 | ND        | 0.0450     | 0.0050 | 0.050   | -          | 90.1     | 70-130     |
| Chloroethane                  | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Chloroform                    | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Chloromethane                 | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 2-Chlorotoluene               | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 4-Chlorotoluene               | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Dibromochloromethane          | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,2-Dibromo-3-chloropropane   | ND        | -          | 0.0040 | -       | -          | -        | -          |
| 1,2-Dibromoethane (EDB)       | ND        | 0.0454     | 0.0040 | 0.050   | -          | 90.8     | 70-130     |
| Dibromomethane                | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,2-Dichlorobenzene           | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,3-Dichlorobenzene           | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,4-Dichlorobenzene           | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Dichlorodifluoromethane       | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,1-Dichloroethane            | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,2-Dichloroethane (1,2-DCA)  | ND        | 0.0550     | 0.0040 | 0.050   | -          | 110      | 70-130     |
| 1,1-Dichloroethene            | ND        | 0.0467     | 0.0050 | 0.050   | -          | 93.4     | 70-130     |
| cis-1,2-Dichloroethene        | ND        | -          | 0.0050 | -       | -          | -        | -          |
| trans-1,2-Dichloroethene      | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,2-Dichloropropane           | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,3-Dichloropropane           | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 2,2-Dichloropropane           | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,1-Dichloropropene           | ND        | -          | 0.0050 | -       | -          | -        | -          |
| cis-1,3-Dichloropropene       | ND        | -          | 0.0050 | -       | -          | -        | -          |
| trans-1,3-Dichloropropene     | ND        | -          | 0.0050 | -       | -          | -        | -          |

(Cont.)



## Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/20/14  
**Date Analyzed:** 5/20/14  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90628  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90628  
 1405773-001AMS/MSD

### QC Summary Report for SW8260B

| Analyte                       | MB Result | LCS Result | RL     | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|-------------------------------|-----------|------------|--------|---------|------------|----------|------------|
| Diisopropyl ether (DIPE)      | ND        | 0.0409     | 0.0050 | 0.050   | -          | 81.8     | 70-130     |
| Ethylbenzene                  | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Ethyl tert-butyl ether (ETBE) | ND        | 0.0427     | 0.0050 | 0.050   | -          | 85.4     | 70-130     |
| Freon 113                     | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Hexachlorobutadiene           | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Hexachloroethane              | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 2-Hexanone                    | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Isopropylbenzene              | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 4-Isopropyl toluene           | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Methyl-t-butyl ether (MTBE)   | ND        | 0.0467     | 0.0050 | 0.050   | -          | 93.4     | 70-130     |
| Methylene chloride            | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 4-Methyl-2-pentanone (MIBK)   | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Naphthalene                   | ND        | -          | 0.0050 | -       | -          | -        | -          |
| n-Propyl benzene              | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Styrene                       | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,1,1,2-Tetrachloroethane     | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,1,2,2-Tetrachloroethane     | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Tetrachloroethene             | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Toluene                       | ND        | 0.0472     | 0.0050 | 0.050   | -          | 94.3     | 70-130     |
| 1,2,3-Trichlorobenzene        | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,2,4-Trichlorobenzene        | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,1,1-Trichloroethane         | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,1,2-Trichloroethane         | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Trichloroethene               | ND        | 0.0474     | 0.0050 | 0.050   | -          | 94.9     | 70-130     |
| Trichlorofluoromethane        | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,2,3-Trichloropropane        | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,2,4-Trimethylbenzene        | ND        | -          | 0.0050 | -       | -          | -        | -          |
| 1,3,5-Trimethylbenzene        | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Vinyl Chloride                | ND        | -          | 0.0050 | -       | -          | -        | -          |
| Xylenes, Total                | ND        | -          | 0.0050 | -       | -          | -        | -          |

#### Surrogate Recovery

|                      |        |        |  |       |     |     |        |
|----------------------|--------|--------|--|-------|-----|-----|--------|
| Dibromofluoromethane | 0.130  | 0.188  |  | 0.18  | 104 | 108 | 70-130 |
| Toluene-d8           | 0.138  | 0.191  |  | 0.18  | 111 | 109 | 70-130 |
| 4-BFB                | 0.0115 | 0.0155 |  | 0.018 | 92  | 88  | 70-130 |

(Cont.)



## Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/20/14  
**Date Analyzed:** 5/20/14  
**Instrument:** GC10  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90628  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90628  
 1405773-001AMS/MSD

### QC Summary Report for SW8260B

| Analyte                       | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD   | RPD Limit |
|-------------------------------|-----------|------------|---------|------------|---------|----------|---------------|-------|-----------|
| tert-Amyl methyl ether (TAME) | 0.0386    | 0.0381     | 0.050   | ND         | 77.2    | 76.2     | 70-130        | 1.30  | 30        |
| Benzene                       | 0.0408    | 0.0406     | 0.050   | ND         | 81.6    | 81.3     | 70-130        | 0.374 | 30        |
| t-Butyl alcohol (TBA)         | 0.173     | 0.168      | 0.20    | ND         | 86.6    | 84.1     | 70-130        | 2.94  | 30        |
| Chlorobenzene                 | 0.0407    | 0.0404     | 0.050   | ND         | 81.4    | 80.9     | 70-130        | 0.644 | 30        |
| 1,2-Dibromoethane (EDB)       | 0.0423    | 0.0401     | 0.050   | ND         | 84.5    | 80.3     | 70-130        | 5.16  | 30        |
| 1,2-Dichloroethane (1,2-DCA)  | 0.0501    | 0.0486     | 0.050   | ND         | 100     | 97.3     | 70-130        | 2.95  | 30        |
| 1,1-Dichloroethene            | 0.0413    | 0.0405     | 0.050   | ND         | 82.7    | 80.9     | 70-130        | 2.14  | 30        |
| Diisopropyl ether (DIPE)      | 0.0379    | 0.0375     | 0.050   | ND         | 75.9    | 74.9     | 70-130        | 1.24  | 30        |
| Ethyl tert-butyl ether (ETBE) | 0.0402    | 0.0397     | 0.050   | ND         | 80.4    | 79.4     | 70-130        | 1.23  | 30        |
| Methyl-t-butyl ether (MTBE)   | 0.0447    | 0.0434     | 0.050   | ND         | 89.4    | 86.9     | 70-130        | 2.83  | 30        |
| Toluene                       | 0.0423    | 0.0421     | 0.050   | ND         | 84.6    | 84.3     | 70-130        | 0.384 | 30        |
| Trichloroethene               | 0.0430    | 0.0417     | 0.050   | ND         | 86.1    | 83.3     | 70-130        | 3.23  | 30        |
| <b>Surrogate Recovery</b>     |           |            |         |            |         |          |               |       |           |
| Dibromofluoromethane          | 0.185     | 0.180      | 0.18    |            | 106     | 103      | 70-130        | 2.64  | 30        |
| Toluene-d8                    | 0.186     | 0.183      | 0.18    |            | 107     | 105      | 70-130        | 1.84  | 30        |
| 4-BFB                         | 0.0154    | 0.0152     | 0.018   |            | 88      | 87       | 70-130        | 1.59  | 30        |

(Cont.)



# Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/23/14  
**Date Analyzed:** 5/22/14  
**Instrument:** GC28  
**Matrix:** Water  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90789  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-90789  
 1405738-001EMS/MSD

## QC Summary Report for SW8260B

| Analyte                       | MB Result | LCS Result | RL   | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|-------------------------------|-----------|------------|------|---------|------------|----------|------------|
| Acetone                       | ND        | -          | 10   | -       | -          | -        | -          |
| tert-Amyl methyl ether (TAME) | ND        | 19.7       | 0.50 | 20      | -          | 98.4     | 70-130     |
| Benzene                       | ND        | 19.7       | 0.50 | 20      | -          | 98.6     | 70-130     |
| Bromobenzene                  | ND        | -          | 0.50 | -       | -          | -        | -          |
| Bromochloromethane            | ND        | -          | 0.50 | -       | -          | -        | -          |
| Bromodichloromethane          | ND        | -          | 0.50 | -       | -          | -        | -          |
| Bromoform                     | ND        | -          | 0.50 | -       | -          | -        | -          |
| Bromomethane                  | ND        | -          | 0.50 | -       | -          | -        | -          |
| 2-Butanone (MEK)              | ND        | -          | 2.0  | -       | -          | -        | -          |
| t-Butyl alcohol (TBA)         | 3.20      | 70.1       | 2.0  | 80      | -          | 87.6     | 70-130     |
| n-Butyl benzene               | ND        | -          | 0.50 | -       | -          | -        | -          |
| sec-Butyl benzene             | ND        | -          | 0.50 | -       | -          | -        | -          |
| tert-Butyl benzene            | ND        | -          | 0.50 | -       | -          | -        | -          |
| Carbon Disulfide              | ND        | -          | 0.50 | -       | -          | -        | -          |
| Carbon Tetrachloride          | ND        | -          | 0.50 | -       | -          | -        | -          |
| Chlorobenzene                 | ND        | 19.6       | 0.50 | 20      | -          | 98.2     | 70-130     |
| Chloroethane                  | ND        | -          | 0.50 | -       | -          | -        | -          |
| Chloroform                    | ND        | -          | 0.50 | -       | -          | -        | -          |
| Chloromethane                 | ND        | -          | 0.50 | -       | -          | -        | -          |
| 2-Chlorotoluene               | ND        | -          | 0.50 | -       | -          | -        | -          |
| 4-Chlorotoluene               | ND        | -          | 0.50 | -       | -          | -        | -          |
| Dibromochloromethane          | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,2-Dibromo-3-chloropropane   | ND        | -          | 0.20 | -       | -          | -        | -          |
| 1,2-Dibromoethane (EDB)       | ND        | 19.9       | 0.50 | 20      | -          | 99.3     | 70-130     |
| Dibromomethane                | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,2-Dichlorobenzene           | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,3-Dichlorobenzene           | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,4-Dichlorobenzene           | ND        | -          | 0.50 | -       | -          | -        | -          |
| Dichlorodifluoromethane       | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,1-Dichloroethane            | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,2-Dichloroethane (1,2-DCA)  | ND        | 18.3       | 0.50 | 20      | -          | 91.5     | 70-130     |
| 1,1-Dichloroethene            | ND        | 18.7       | 0.50 | 20      | -          | 93.4     | 70-130     |
| cis-1,2-Dichloroethene        | ND        | -          | 0.50 | -       | -          | -        | -          |
| trans-1,2-Dichloroethene      | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,2-Dichloropropane           | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,3-Dichloropropane           | ND        | -          | 0.50 | -       | -          | -        | -          |
| 2,2-Dichloropropane           | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,1-Dichloropropene           | ND        | -          | 0.50 | -       | -          | -        | -          |
| cis-1,3-Dichloropropene       | ND        | -          | 0.50 | -       | -          | -        | -          |
| trans-1,3-Dichloropropene     | ND        | -          | 0.50 | -       | -          | -        | -          |

(Cont.)



## Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/23/14  
**Date Analyzed:** 5/22/14  
**Instrument:** GC28  
**Matrix:** Water  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90789  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-90789  
 1405738-001EMS/MSD

### QC Summary Report for SW8260B

| Analyte                       | MB Result | LCS Result | RL   | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|-------------------------------|-----------|------------|------|---------|------------|----------|------------|
| Diisopropyl ether (DIPE)      | ND        | 19.9       | 0.50 | 20      | -          | 99.3     | 70-130     |
| Ethylbenzene                  | ND        | -          | 0.50 | -       | -          | -        | -          |
| Ethyl tert-butyl ether (ETBE) | ND        | 19.5       | 0.50 | 20      | -          | 97.4     | 70-130     |
| Freon 113                     | ND        | -          | 0.50 | -       | -          | -        | -          |
| Hexachlorobutadiene           | ND        | -          | 0.50 | -       | -          | -        | -          |
| Hexachloroethane              | ND        | -          | 0.50 | -       | -          | -        | -          |
| 2-Hexanone                    | ND        | -          | 0.50 | -       | -          | -        | -          |
| Isopropylbenzene              | ND        | -          | 0.50 | -       | -          | -        | -          |
| 4-Isopropyl toluene           | ND        | -          | 0.50 | -       | -          | -        | -          |
| Methyl-t-butyl ether (MTBE)   | ND        | 19.0       | 0.50 | 20      | -          | 95.2     | 70-130     |
| Methylene chloride            | ND        | -          | 0.50 | -       | -          | -        | -          |
| 4-Methyl-2-pentanone (MIBK)   | ND        | -          | 0.50 | -       | -          | -        | -          |
| Naphthalene                   | ND        | -          | 0.50 | -       | -          | -        | -          |
| n-Propyl benzene              | ND        | -          | 0.50 | -       | -          | -        | -          |
| Styrene                       | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,1,1,2-Tetrachloroethane     | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,1,2,2-Tetrachloroethane     | ND        | -          | 0.50 | -       | -          | -        | -          |
| Tetrachloroethene             | ND        | -          | 0.50 | -       | -          | -        | -          |
| Toluene                       | ND        | 20.0       | 0.50 | 20      | -          | 100      | 70-130     |
| 1,2,3-Trichlorobenzene        | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,2,4-Trichlorobenzene        | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,1,1-Trichloroethane         | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,1,2-Trichloroethane         | ND        | -          | 0.50 | -       | -          | -        | -          |
| Trichloroethene               | ND        | 19.2       | 0.50 | 20      | -          | 96       | 70-130     |
| Trichlorofluoromethane        | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,2,3-Trichloropropane        | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,2,4-Trimethylbenzene        | ND        | -          | 0.50 | -       | -          | -        | -          |
| 1,3,5-Trimethylbenzene        | ND        | -          | 0.50 | -       | -          | -        | -          |
| Vinyl Chloride                | ND        | -          | 0.50 | -       | -          | -        | -          |
| Xylenes, Total                | ND        | -          | 0.50 | -       | -          | -        | -          |

#### Surrogate Recovery

|                      |      |      |  |     |     |     |        |
|----------------------|------|------|--|-----|-----|-----|--------|
| Dibromofluoromethane | 27.7 | 48.2 |  | 45  | 111 | 107 | 70-130 |
| Toluene-d8           | 28.3 | 49.4 |  | 45  | 113 | 110 | 70-130 |
| 4-BFB                | 2.45 | 4.60 |  | 4.5 | 98  | 102 | 70-130 |

(Cont.)





## Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/23/14  
**Date Analyzed:** 5/22/14  
**Instrument:** GC28  
**Matrix:** Water  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90789  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** µg/L  
**Sample ID:** MB/LCS-90789  
 1405738-001EMS/MSD

### QC Summary Report for SW8260B

| Analyte                       | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD  | RPD Limit |
|-------------------------------|-----------|------------|---------|------------|---------|----------|---------------|------|-----------|
| tert-Amyl methyl ether (TAME) | 21.6      | 22.2       | 20      | ND         | 108     | 111      | 70-130        | 2.73 | 20        |
| Benzene                       | 20.2      | 20.6       | 20      | ND         | 101     | 103      | 70-130        | 2.03 | 20        |
| t-Butyl alcohol (TBA)         | 79.0      | 86.8       | 80      | ND         | 95.9    | 106      | 70-130        | 9.42 | 20        |
| Chlorobenzene                 | 19.8      | 20.9       | 20      | ND         | 99      | 104      | 70-130        | 5.35 | 20        |
| 1,2-Dibromoethane (EDB)       | 21.3      | 22.4       | 20      | ND         | 107     | 112      | 70-130        | 4.92 | 20        |
| 1,2-Dichloroethane (1,2-DCA)  | 19.6      | 20.1       | 20      | ND         | 98      | 100      | 70-130        | 2.42 | 20        |
| 1,1-Dichloroethene            | 18.2      | 20.1       | 20      | ND         | 90.8    | 100      | 70-130        | 10.1 | 20        |
| Diisopropyl ether (DIPE)      | 21.0      | 21.7       | 20      | ND         | 105     | 109      | 70-130        | 3.17 | 20        |
| Ethyl tert-butyl ether (ETBE) | 20.9      | 21.7       | 20      | ND         | 105     | 108      | 70-130        | 3.58 | 20        |
| Methyl-t-butyl ether (MTBE)   | 20.5      | 21.7       | 20      | ND         | 102     | 109      | 70-130        | 5.89 | 20        |
| Toluene                       | 20.0      | 21.2       | 20      | ND         | 100     | 106      | 70-130        | 5.97 | 20        |
| Trichloroethene               | 19.0      | 20.2       | 20      | ND         | 95.1    | 101      | 70-130        | 6.14 | 20        |
| <b>Surrogate Recovery</b>     |           |            |         |            |         |          |               |      |           |
| Dibromofluoromethane          | 48.9      | 50.5       | 45      |            | 109     | 112      | 70-130        | 3.23 | 20        |
| Toluene-d8                    | 49.9      | 51.2       | 45      |            | 111     | 114      | 70-130        | 2.55 | 20        |
| 4-BFB                         | 4.50      | 4.72       | 4.5     |            | 100     | 105      | 70-130        | 4.88 | 20        |



# Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/19/14  
**Date Analyzed:** 5/21/14  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90605  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90605  
 1405779-002AMS/MSD

## QC Summary Report for SW8021B/8015Bm

| Analyte      | MB Result | LCS Result | RL     | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|--------------|-----------|------------|--------|---------|------------|----------|------------|
| TPH(btex)    | ND        | 0.687      | 0.40   | 0.60    | -          | 114      | 70-130     |
| MTBE         | ND        | 0.0813     | 0.050  | 0.10    | -          | 81.3     | 70-130     |
| Benzene      | ND        | 0.115      | 0.0050 | 0.10    | -          | 115      | 70-130     |
| Toluene      | ND        | 0.112      | 0.0050 | 0.10    | -          | 112      | 70-130     |
| Ethylbenzene | ND        | 0.117      | 0.0050 | 0.10    | -          | 117      | 70-130     |
| Xylenes      | ND        | 0.359      | 0.0050 | 0.30    | -          | 120      | 70-130     |

### Surrogate Recovery

|                 |       |       |  |      |     |     |        |
|-----------------|-------|-------|--|------|-----|-----|--------|
| 2-Fluorotoluene | 0.120 | 0.108 |  | 0.10 | 120 | 108 | 70-130 |
|-----------------|-------|-------|--|------|-----|-----|--------|

| Analyte      | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD Limit |
|--------------|-----------|------------|---------|------------|---------|----------|---------------|-----|-----------|
| TPH(btex)    | NR        | NR         | 0       | ND<4       | NR      | NR       | -             | NR  |           |
| MTBE         | NR        | NR         | 0       | ND<0.5     | NR      | NR       | -             | NR  |           |
| Benzene      | NR        | NR         | 0       | ND<0.05    | NR      | NR       | -             | NR  |           |
| Toluene      | NR        | NR         | 0       | 0.17       | NR      | NR       | -             | NR  |           |
| Ethylbenzene | NR        | NR         | 0       | ND<0.05    | NR      | NR       | -             | NR  |           |
| Xylenes      | NR        | NR         | 0       | ND<0.05    | NR      | NR       | -             | NR  |           |

### Surrogate Recovery

|                 |    |    |   |  |    |    |   |    |  |
|-----------------|----|----|---|--|----|----|---|----|--|
| 2-Fluorotoluene | NR | NR | 0 |  | NR | NR | - | NR |  |
|-----------------|----|----|---|--|----|----|---|----|--|

(Cont.)



# Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/20/14  
**Date Analyzed:** 5/21/14  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90640  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90640  
 1405780-001AMS/MSD

## QC Summary Report for SW8021B/8015Bm

| Analyte      | MB Result | LCS Result | RL     | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|--------------|-----------|------------|--------|---------|------------|----------|------------|
| TPH(btex)    | ND        | 0.590      | 0.40   | 0.60    | -          | 98.4     | 70-130     |
| MTBE         | ND        | 0.0863     | 0.050  | 0.10    | -          | 86.3     | 70-130     |
| Benzene      | ND        | 0.114      | 0.0050 | 0.10    | -          | 114      | 70-130     |
| Toluene      | ND        | 0.110      | 0.0050 | 0.10    | -          | 110      | 70-130     |
| Ethylbenzene | ND        | 0.118      | 0.0050 | 0.10    | -          | 118      | 70-130     |
| Xylenes      | ND        | 0.360      | 0.0050 | 0.30    | -          | 120      | 70-130     |

### Surrogate Recovery

|                 |       |       |  |      |     |     |        |
|-----------------|-------|-------|--|------|-----|-----|--------|
| 2-Fluorotoluene | 0.103 | 0.114 |  | 0.10 | 103 | 113 | 70-130 |
|-----------------|-------|-------|--|------|-----|-----|--------|

| Analyte      | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD Limit |
|--------------|-----------|------------|---------|------------|---------|----------|---------------|-----|-----------|
| TPH(btex)    | NR        | NR         | 0       | ND<4       | NR      | NR       | -             | NR  |           |
| MTBE         | NR        | NR         | 0       | ND<0.5     | NR      | NR       | -             | NR  |           |
| Benzene      | NR        | NR         | 0       | ND<0.05    | NR      | NR       | -             | NR  |           |
| Toluene      | NR        | NR         | 0       | ND<0.05    | NR      | NR       | -             | NR  |           |
| Ethylbenzene | NR        | NR         | 0       | ND<0.05    | NR      | NR       | -             | NR  |           |
| Xylenes      | NR        | NR         | 0       | ND<0.05    | NR      | NR       | -             | NR  |           |

### Surrogate Recovery

|                 |    |    |   |  |    |    |   |    |  |
|-----------------|----|----|---|--|----|----|---|----|--|
| 2-Fluorotoluene | NR | NR | 0 |  | NR | NR | - | NR |  |
|-----------------|----|----|---|--|----|----|---|----|--|

(Cont.)



## Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/22/14  
**Date Analyzed:** 5/21/14  
**Instrument:** GC3  
**Matrix:** Water  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90717  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** µg/L  
**Sample ID:** MB/LCS-90717  
 1405799-001AMS/MSD

### QC Summary Report for SW8021B/8015Bm

| Analyte      | MB Result | LCS Result | RL   | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|--------------|-----------|------------|------|---------|------------|----------|------------|
| TPH(btex)    | ND        | 58.6       | 40   | 60      | -          | 97.7     | 70-130     |
| MTBE         | ND        | 9.76       | 5.0  | 10      | -          | 97.6     | 70-130     |
| Benzene      | ND        | 8.84       | 0.50 | 10      | -          | 88.4     | 70-130     |
| Toluene      | ND        | 8.83       | 0.50 | 10      | -          | 88.3     | 70-130     |
| Ethylbenzene | ND        | 8.86       | 0.50 | 10      | -          | 88.6     | 70-130     |
| Xylenes      | ND        | 26.8       | 0.50 | 30      | -          | 89.5     | 70-130     |

**Surrogate Recovery**

|         |      |      |  |    |    |    |        |
|---------|------|------|--|----|----|----|--------|
| aaa-TFT | 9.78 | 9.38 |  | 10 | 98 | 94 | 70-130 |
|---------|------|------|--|----|----|----|--------|

| Analyte      | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD  | RPD Limit |
|--------------|-----------|------------|---------|------------|---------|----------|---------------|------|-----------|
| TPH(btex)    | 62.9      | 62.2       | 60      | ND         | 105     | 104      | 70-130        | 1.11 | 20        |
| MTBE         | 10.1      | 10.5       | 10      | ND         | 101     | 105      | 70-130        | 3.77 | 20        |
| Benzene      | 9.34      | 9.84       | 10      | ND         | 93.4    | 98.4     | 70-130        | 5.23 | 20        |
| Toluene      | 9.34      | 9.71       | 10      | ND         | 93.4    | 97.1     | 70-130        | 3.91 | 20        |
| Ethylbenzene | 9.45      | 9.77       | 10      | ND         | 94.5    | 97.7     | 70-130        | 3.34 | 20        |
| Xylenes      | 28.6      | 29.6       | 30      | ND         | 95.4    | 98.7     | 70-130        | 3.33 | 20        |

**Surrogate Recovery**

|         |      |      |    |  |    |    |        |       |    |
|---------|------|------|----|--|----|----|--------|-------|----|
| aaa-TFT | 9.59 | 9.68 | 10 |  | 96 | 97 | 70-130 | 0.946 | 20 |
|---------|------|------|----|--|----|----|--------|-------|----|

(Cont.)



# Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/22/14  
**Date Analyzed:** 5/23/14  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90731  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90731  
 1405872-001AMS/MSD

## QC Summary Report for SW8021B/8015Bm

| Analyte      | MB Result | LCS Result | RL     | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|--------------|-----------|------------|--------|---------|------------|----------|------------|
| TPH(btex)    | ND        | 0.609      | 0.40   | 0.60    | -          | 101      | 70-130     |
| MTBE         | ND        | 0.0905     | 0.050  | 0.10    | -          | 90.5     | 70-130     |
| Benzene      | ND        | 0.115      | 0.0050 | 0.10    | -          | 115      | 70-130     |
| Toluene      | ND        | 0.112      | 0.0050 | 0.10    | -          | 112      | 70-130     |
| Ethylbenzene | ND        | 0.118      | 0.0050 | 0.10    | -          | 118      | 70-130     |
| Xylenes      | ND        | 0.360      | 0.0050 | 0.30    | -          | 120      | 70-130     |

### Surrogate Recovery

|                 |       |       |  |      |     |     |        |
|-----------------|-------|-------|--|------|-----|-----|--------|
| 2-Fluorotoluene | 0.107 | 0.113 |  | 0.10 | 107 | 113 | 70-130 |
|-----------------|-------|-------|--|------|-----|-----|--------|

| Analyte      | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD Limit |
|--------------|-----------|------------|---------|------------|---------|----------|---------------|-----|-----------|
| TPH(btex)    | NR        | NR         | 0       | 34         | NR      | NR       | -             | NR  |           |
| MTBE         | NR        | NR         | 0       | ND<0.5     | NR      | NR       | -             | NR  |           |
| Benzene      | NR        | NR         | 0       | ND<0.05    | NR      | NR       | -             | NR  |           |
| Toluene      | NR        | NR         | 0       | 0.17       | NR      | NR       | -             | NR  |           |
| Ethylbenzene | NR        | NR         | 0       | 0.45       | NR      | NR       | -             | NR  |           |
| Xylenes      | NR        | NR         | 0       | ND<0.05    | NR      | NR       | -             | NR  |           |

### Surrogate Recovery

|                 |    |    |   |  |    |    |   |    |  |
|-----------------|----|----|---|--|----|----|---|----|--|
| 2-Fluorotoluene | NR | NR | 0 |  | NR | NR | - | NR |  |
|-----------------|----|----|---|--|----|----|---|----|--|

(Cont.)



# Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/22/14  
**Date Analyzed:** 5/23/14  
**Instrument:** GC7  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90774  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8021B/8015Bm  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90774  
 1405590-002AMS/MSD

## QC Summary Report for SW8021B/8015Bm

| Analyte      | MB Result | LCS Result | RL     | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|--------------|-----------|------------|--------|---------|------------|----------|------------|
| TPH(btex)    | ND        | 0.609      | 0.40   | 0.60    | -          | 102      | 70-130     |
| MTBE         | ND        | 0.0838     | 0.050  | 0.10    | -          | 83.8     | 70-130     |
| Benzene      | ND        | 0.0991     | 0.0050 | 0.10    | -          | 99.1     | 70-130     |
| Toluene      | ND        | 0.0986     | 0.0050 | 0.10    | -          | 98.6     | 70-130     |
| Ethylbenzene | ND        | 0.109      | 0.0050 | 0.10    | -          | 109      | 70-130     |
| Xylenes      | ND        | 0.335      | 0.0050 | 0.30    | -          | 112      | 70-130     |

**Surrogate Recovery**

|                 |        |       |  |      |    |     |        |
|-----------------|--------|-------|--|------|----|-----|--------|
| 2-Fluorotoluene | 0.0970 | 0.106 |  | 0.10 | 97 | 106 | 70-130 |
|-----------------|--------|-------|--|------|----|-----|--------|

| Analyte      | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD  | RPD Limit |
|--------------|-----------|------------|---------|------------|---------|----------|---------------|------|-----------|
| TPH(btex)    | 0.545     | 0.624      | 0.60    | ND         | 90.8    | 104      | 70-130        | 13.6 | 20        |
| MTBE         | 0.0885    | 0.0846     | 0.10    | ND         | 88.5    | 84.6     | 70-130        | 4.43 | 20        |
| Benzene      | 0.101     | 0.0962     | 0.10    | ND         | 101     | 96.2     | 70-130        | 5.04 | 20        |
| Toluene      | 0.103     | 0.0978     | 0.10    | ND         | 103     | 97.8     | 70-130        | 5.01 | 20        |
| Ethylbenzene | 0.103     | 0.0999     | 0.10    | ND         | 103     | 99.9     | 70-130        | 3.39 | 20        |
| Xylenes      | 0.323     | 0.301      | 0.30    | ND         | 108     | 100      | 70-130        | 7.09 | 20        |

**Surrogate Recovery**

|                 |        |        |      |  |    |    |        |      |    |
|-----------------|--------|--------|------|--|----|----|--------|------|----|
| 2-Fluorotoluene | 0.0957 | 0.0917 | 0.10 |  | 96 | 92 | 70-130 | 4.26 | 20 |
|-----------------|--------|--------|------|--|----|----|--------|------|----|





## Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/21/14  
**Date Analyzed:** 5/22/14  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90711  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90711  
 1405729-025AMS/MSD

### QC Summary Report for SW6020

| Analyte  | MB Result | LCS Result | RL   | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|----------|-----------|------------|------|---------|------------|----------|------------|
| Cadmium  | ND        | 57.4       | 0.25 | 50      | -          | 115      | 75-125     |
| Chromium | ND        | 53.2       | 0.50 | 50      | -          | 106      | 75-125     |
| Lead     | ND        | 57.3       | 0.50 | 50      | -          | 115      | 75-125     |
| Nickel   | ND        | 54.0       | 0.50 | 50      | -          | 108      | 75-125     |
| Zinc     | ND        | 554        | 5.0  | 500     | -          | 111      | 75-125     |

**Surrogate Recovery**

|            |     |     |  |     |     |     |        |
|------------|-----|-----|--|-----|-----|-----|--------|
| Tb 350.917 | 569 | 569 |  | 500 | 114 | 114 | 70-130 |
|------------|-----|-----|--|-----|-----|-----|--------|

| Analyte  | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD  | RPD Limit |
|----------|-----------|------------|---------|------------|---------|----------|---------------|------|-----------|
| Cadmium  | 61.8      | 57.8       | 50      | ND         | 124     | 116      | 75-125        | 6.72 | 20        |
| Chromium | NR        | NR         | 50      | 54.00      | NR      | NR       | 75-125        | NR   | 20        |
| Lead     | 68.6      | 63.6       | 50      | 5.815      | 126,F1  | 116      | 75-125        | 7.59 | 20        |
| Nickel   | NR        | NR         | 50      | 51.62      | NR      | NR       | 75-125        | NR   | 20        |
| Zinc     | 652       | 599        | 500     | 52.54      | 120     | 109      | 75-125        | 8.47 | 20        |

**Surrogate Recovery**

|            |     |     |     |  |     |     |        |      |    |
|------------|-----|-----|-----|--|-----|-----|--------|------|----|
| Tb 350.917 | 625 | 583 | 500 |  | 125 | 117 | 70-130 | 6.93 | 20 |
|------------|-----|-----|-----|--|-----|-----|--------|------|----|

(Cont.)



# Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/22/14  
**Date Analyzed:** 5/23/14  
**Instrument:** ICP-MS1  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90730  
**Extraction Method:** SW3050B  
**Analytical Method:** SW6020  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90730  
 1405844-001AMS/MSD

## QC Summary Report for SW6020

| Analyte  | MB Result | LCS Result | RL   | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|----------|-----------|------------|------|---------|------------|----------|------------|
| Cadmium  | ND        | 51.5       | 0.25 | 50      | -          | 103      | 75-125     |
| Chromium | ND        | 48.7       | 0.50 | 50      | -          | 97.4     | 75-125     |
| Lead     | ND        | 50.4       | 0.50 | 50      | -          | 101      | 75-125     |
| Nickel   | ND        | 48.8       | 0.50 | 50      | -          | 97.7     | 75-125     |
| Zinc     | ND        | 510        | 5.0  | 500     | -          | 102      | 75-125     |

### Surrogate Recovery

|            |     |     |  |     |     |     |        |
|------------|-----|-----|--|-----|-----|-----|--------|
| Tb 350.917 | 576 | 547 |  | 500 | 115 | 109 | 70-130 |
|------------|-----|-----|--|-----|-----|-----|--------|

| Analyte  | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD  | RPD Limit |
|----------|-----------|------------|---------|------------|---------|----------|---------------|------|-----------|
| Cadmium  | 58.0      | 55.6       | 50      | ND         | 116     | 111      | 75-125        | 4.17 | 20        |
| Chromium | 82.7      | 81.3       | 50      | 26.86      | 112     | 109      | 75-125        | 1.72 | 20        |
| Lead     | 59.1      | 56.7       | 50      | 2.551      | 113     | 108      | 75-125        | 4.18 | 20        |
| Nickel   | 71.5      | 73.0       | 50      | 18.71      | 106     | 109      | 75-125        | 1.98 | 20        |
| Zinc     | 578       | 560        | 500     | 18.20      | 112     | 108      | 75-125        | 3.13 | 20        |

### Surrogate Recovery

|            |     |     |     |  |     |     |        |      |    |
|------------|-----|-----|-----|--|-----|-----|--------|------|----|
| Tb 350.917 | 595 | 574 | 500 |  | 119 | 115 | 70-130 | 3.51 | 20 |
|------------|-----|-----|-----|--|-----|-----|--------|------|----|



## Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/20/14  
**Date Analyzed:** 5/21/14  
**Instrument:** ICP-MS1  
**Matrix:** Water  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90624  
**Extraction Method:** E200.8  
**Analytical Method:** E200.8  
**Unit:** µg/L  
**Sample ID:** MB/LCS-90624  
 1405782-001AMS/MSD

### QC Summary Report for E200.8

| Analyte  | MB Result | LCS Result | RL   | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|----------|-----------|------------|------|---------|------------|----------|------------|
| Cadmium  | ND        | 50.6       | 0.25 | 50      | -          | 101      | 85-115     |
| Chromium | ND        | 49.1       | 0.50 | 50      | -          | 98.1     | 85-115     |
| Lead     | ND        | 50.8       | 0.50 | 50      | -          | 102      | 85-115     |
| Nickel   | ND        | 47.6       | 0.50 | 50      | -          | 95.3     | 85-115     |
| Zinc     | ND        | 518        | 5.0  | 500     | -          | 104      | 85-115     |

**Surrogate Recovery**

|            |     |     |  |     |     |     |        |
|------------|-----|-----|--|-----|-----|-----|--------|
| Tb 350.917 | 781 | 814 |  | 750 | 104 | 109 | 70-130 |
|------------|-----|-----|--|-----|-----|-----|--------|

| Analyte  | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD Limit |
|----------|-----------|------------|---------|------------|---------|----------|---------------|-----|-----------|
| Cadmium  | NR        | NR         | 0       | ND<5       | NR      | NR       | -             | NR  |           |
| Chromium | NR        | NR         | 0       | ND<10      | NR      | NR       | -             | NR  |           |
| Lead     | NR        | NR         | 0       | ND<10      | NR      | NR       | -             | NR  |           |
| Nickel   | NR        | NR         | 0       | 23         | NR      | NR       | -             | NR  |           |
| Zinc     | NR        | NR         | 0       | 1200       | NR      | NR       | -             | NR  |           |

**Surrogate Recovery**

|            |    |    |   |  |    |    |   |    |  |
|------------|----|----|---|--|----|----|---|----|--|
| Tb 350.917 | NR | NR | 0 |  | NR | NR | - | NR |  |
|------------|----|----|---|--|----|----|---|----|--|

(Cont.)



## Quality Control Report

**Client:** ESA  
**Date Prepared:** 5/20/14  
**Date Analyzed:** 5/21/14  
**Instrument:** GC11A  
**Matrix:** Soil  
**Project:** #120832-4E; SFO Plot 700

**WorkOrder:** 1405744  
**BatchID:** 90633  
**Extraction Method:** SW3550B/3630C  
**Analytical Method:** SW8015B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-90633  
 1405744-012AMS/MSD

### QC Summary Report for SW8015B

| Analyte                   | MB Result | LCS Result | RL  | SPK Val | MB SS %REC | LCS %REC | LCS Limits |
|---------------------------|-----------|------------|-----|---------|------------|----------|------------|
| TPH-Diesel (C10-C23)      | ND        | 44.0       | 1.0 | 40      | -          | 110      | 70-130     |
| <b>Surrogate Recovery</b> |           |            |     |         |            |          |            |
| C9                        | 31.3      | 30.6       |     | 25      | 125        | 123      | 70-130     |

| Analyte                   | MS Result | MSD Result | SPK Val | SPKRef Val | MS %REC | MSD %REC | MS/MSD Limits | RPD  | RPD Limit |
|---------------------------|-----------|------------|---------|------------|---------|----------|---------------|------|-----------|
| TPH-Diesel (C10-C23)      | 102       | 105        | 40      | 52.15      | 126,F1  | 132,F1   | 70-130        | 2.38 | 30        |
| <b>Surrogate Recovery</b> |           |            |         |            |         |          |               |      |           |
| C9                        | 29.4      | 29.8       | 25      |            | 118     | 119      | 70-130        | 1.27 | 30        |

1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

WorkOrder: 1405744

ClientCode: ESAP

WaterTrax    WriteOn    EDF    Excel    EQUIS    Email    HardCopy    ThirdParty    J-flag

**Report to:**

Michael G. Burns  
ESA  
1425 N. McDowell Blvd. Ste.200  
Petaluma, CA 94954  
(707) 795-0900   FAX: (707) 795-0902

Email: MBurns@esassoc.com  
cc/3rd Party:  
PO:  
ProjectNo: #120832-4E; SFO Plot 700

**Bill to:**

Justin Gragg  
ESA  
1425 N. McDowell Blvd. Ste.200  
Petaluma, CA 94954

**Requested TAT:**

**5 days**

**Date Received: 05/19/2014**

**Date Printed: 05/21/2014**

| Lab ID      | Client ID | Matrix | Collection Date | Hold                     | Requested Tests (See legend below) |   |   |   |   |   |   |   |   |    |    |    |
|-------------|-----------|--------|-----------------|--------------------------|------------------------------------|---|---|---|---|---|---|---|---|----|----|----|
|             |           |        |                 |                          | 1                                  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1405744-001 | B-1-1     | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-002 | B-1-7     | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-003 | B-2-2     | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-004 | B-2-7     | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-005 | B-3-2.5   | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-006 | B-3-10    | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-007 | B-4-2     | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-008 | B-4-4     | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-009 | B-5-2     | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-010 | B-5-3.5   | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-011 | B-6-2     | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-012 | B-6-4     | Soil   | 5/19/2014       | <input type="checkbox"/> | A                                  |   | A |   | A |   |   |   |   |    |    |    |
| 1405744-013 | B-1       | Water  | 5/19/2014       | <input type="checkbox"/> |                                    |   |   |   |   | A |   |   |   |    |    |    |
| 1405744-014 | B-2       | Water  | 5/19/2014       | <input type="checkbox"/> |                                    | A |   | B |   | C |   |   |   |    |    |    |
| 1405744-015 | B-3       | Water  | 5/19/2014       | <input type="checkbox"/> |                                    | A |   | B |   | C |   |   |   |    |    |    |
| 1405744-016 | B-4       | Water  | 5/19/2014       | <input type="checkbox"/> |                                    | A |   | B |   | C |   |   |   |    |    |    |

**Test Legend:**

|    |              |    |         |   |          |   |          |    |              |
|----|--------------|----|---------|---|----------|---|----------|----|--------------|
| 1  | 8260B_S      | 2  | 8260B_W | 3 | LUFTMS_S | 4 | LUFTMS_W | 5  | TPH(FF)WSG_S |
| 6  | TPH(FF)WSG_W | 7  |         | 8 |          | 9 |          | 10 |              |
| 11 |              | 12 |         |   |          |   |          |    |              |

The following SamplIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 014C, 015C, 016C, 017C, 018C contain testgroup.

**Prepared by: Shana Carter**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.

1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

**WorkOrder: 1405744**

**ClientCode: ESAP**

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQulS   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**  
 Michael G. Burns  
 ESA  
 1425 N. McDowell Blvd. Ste.200  
 Petaluma, CA 94954  
 (707) 795-0900    FAX: (707) 795-0902

Email: MBurns@esassoc.com  
 cc/3rd Party:  
 PO:  
 ProjectNo: #120832-4E; SFO Plot 700

**Bill to:**  
 Justin Gragg  
 ESA  
 1425 N. McDowell Blvd. Ste.200  
 Petaluma, CA 94954

**Requested TAT: 5 days**  
  
**Date Received: 05/19/2014**  
**Date Printed: 05/21/2014**

| Lab ID      | Client ID | Matrix | Collection Date | Hold                     | Requested Tests (See legend below) |   |   |   |   |   |   |   |   |    |    |    |
|-------------|-----------|--------|-----------------|--------------------------|------------------------------------|---|---|---|---|---|---|---|---|----|----|----|
|             |           |        |                 |                          | 1                                  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1405744-017 | B-5       | Water  | 5/19/2014       | <input type="checkbox"/> |                                    | A |   | B |   | C |   |   |   |    |    |    |
| 1405744-018 | B-6       | Water  | 5/19/2014       | <input type="checkbox"/> |                                    | A |   | B |   | C |   |   |   |    |    |    |

**Test Legend:**

|    |              |    |         |   |          |   |          |    |              |
|----|--------------|----|---------|---|----------|---|----------|----|--------------|
| 1  | 8260B_S      | 2  | 8260B_W | 3 | LUFTMS_S | 4 | LUFTMS_W | 5  | TPH(FF)WSG_S |
| 6  | TPH(FF)WSG_W | 7  |         | 8 |          | 9 |          | 10 |              |
| 11 |              | 12 |         |   |          |   |          |    |              |

The following SamplIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A, 013A, 014C, 015C, 016C, 017C, 018C contain testgroup.

**Prepared by: Shana Carter**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



## WORK ORDER SUMMARY

**Client Name:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Michael G. Burns  
**Contact's Email:** MBurns@esassoc.com

**Work Order:** 1405744  
**Date Received:** 5/19/2014

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  Excel   
  Fax   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

| Lab ID       | Client ID | Matrix | Test Name                               | Number of Containers | Bottle & Preservative | De-chlorinated           | Collection Date & Time | TAT    | Sediment Content | Hold                     | SubOut |                          |
|--------------|-----------|--------|---|----------------------|-----------------------|--------------------------|------------------------|--------|------------------|--------------------------|--------|--------------------------|
| 1405744-001A | B-1-1     | Soil   | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |                          |
|              |           |        | SW6020 (LUFT)                           |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
| 1405744-002A | B-1-7     | Soil   | SW6020 (LUFT)                           | 1                    | Acetate Liner         | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |                          |
|              |           |        | TPH (Fuel Fingerprint) w/ S.G. Clean-Up |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
| 1405744-003A | B-2-2     | Soil   | SW6020 (LUFT)                           | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |                          |
|              |           |        | TPH (Fuel Fingerprint) w/ S.G. Clean-Up |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
| 1405744-004A | B-2-7     | Soil   | SW6020 (LUFT)                           | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |                          |
|              |           |        | TPH (Fuel Fingerprint) w/ S.G. Clean-Up |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
| 1405744-005A | B-3-2.5   | Soil   | SW6020 (LUFT)                           | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |                          |
|              |           |        | TPH (Fuel Fingerprint) w/ S.G. Clean-Up |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |
| 1405744-006A | B-3-10    | Soil   | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |                          |
|              |           |        | SW6020 (LUFT)                           |                      |                       | <input type="checkbox"/> |                        |        |                  | 5 days                   |        | <input type="checkbox"/> |

**\* NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

**Bottle Legend:**

16OZ GJ = 16oz Glass Jar  
 250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3  
 Acetate Liner = Acetate Liner

Stainless Tube =  
 VOA w/ HCl = 43mL VOA w/ HCl





## WORK ORDER SUMMARY

**Client Name:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Michael G. Burns  
**Contact's Email:** MBurns@esassoc.com

**Work Order:** 1405744  
**Date Received:** 5/19/2014

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

| Lab ID       | Client ID | Matrix | Test Name                               | Number of Containers | Bottle & Preservative | De-chlorinated           | Collection Date & Time | TAT    | Sediment Content | Hold                     | SubOut |
|--------------|-----------|--------|---|----------------------|-----------------------|--------------------------|------------------------|--------|------------------|--------------------------|--------|
| 1405744-006A | B-3-10    | Soil   | SW8260B (VOCs)                          | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |
| 1405744-007A | B-4-2     | Soil   | SW6020 (LUFT)                           | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | TPH (Fuel Fingerprint) w/ S.G. Clean-Up |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
| 1405744-008A | B-4-4     | Soil   | SW6020 (LUFT)                           | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | TPH (Fuel Fingerprint) w/ S.G. Clean-Up |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
| 1405744-009A | B-5-2     | Soil   | SW6020 (LUFT)                           | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | TPH (Fuel Fingerprint) w/ S.G. Clean-Up |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
| 1405744-010A | B-5-3.5   | Soil   | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | SW6020 (LUFT)                           |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
| 1405744-011A | B-6-2     | Soil   | SW6020 (LUFT)                           | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | TPH (Fuel Fingerprint) w/ S.G. Clean-Up |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
| 1405744-012A | B-6-4     | Soil   | SW6020 (LUFT)                           | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |

**\* NOTE: STLC and TCLP extractions require 48 hrs to complete; therefore, all TATs begin after the extraction is completed (i.e., 24hr TAT yields results in 72 hrs from sample submission).**

**Bottle Legend:**

16OZ GJ = 16oz Glass Jar  
 250mL HDPE w/ HNO3 = 250mL HDPE Bottle w/ HNO3  
 Acetate Liner = Acetate Liner

Stainless Tube =  
 VOA w/ HCl = 43mL VOA w/ HCl



## WORK ORDER SUMMARY

**Client Name:** ESA  
**Project:** #120832-4E; SFO Plot 700  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Michael G. Burns  
**Contact's Email:** MBurns@esassoc.com

**Work Order:** 1405744  
**Date Received:** 5/19/2014

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

| Lab ID       | Client ID | Matrix | Test Name                               | Number of Containers | Bottle & Preservative | De-chlorinated           | Collection Date & Time | TAT    | Sediment Content | Hold                     | SubOut |
|--------------|-----------|--------|---|----------------------|-----------------------|--------------------------|------------------------|--------|------------------|--------------------------|--------|
| 1405744-012A | B-6-4     | Soil   | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | Stainless Tube        | <input type="checkbox"/> | 5/19/2014              | 5 days |                  | <input type="checkbox"/> |        |
|              |           |        | SW8260B (VOCs)                          |                      |                       | <input type="checkbox"/> |                        | 5 days |                  | <input type="checkbox"/> |        |
| 1405744-013A | B-1       | Water  | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | 16OZ GJ               | <input type="checkbox"/> | 5/19/2014              | 5 days | Present          | <input type="checkbox"/> |        |
| 1405744-014A | B-2       | Water  | SW8260B (VOCs)                          | 2                    | VOA w/ HCl            | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-014B | B-2       | Water  | E200.8 (LUFT)                           | 1                    | 250mL HDPE w/ HNO3    | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-014C | B-2       | Water  | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | 16OZ GJ               | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-015A | B-3       | Water  | SW8260B (VOCs)                          | 2                    | VOA w/ HCl            | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-015B | B-3       | Water  | E200.8 (LUFT)                           | 1                    | 250mL HDPE w/ HNO3    | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-015C | B-3       | Water  | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | 16OZ GJ               | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-016A | B-4       | Water  | SW8260B (VOCs)                          | 2                    | VOA w/ HCl            | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-016B | B-4       | Water  | E200.8 (LUFT)                           | 1                    | 250mL HDPE w/ HNO3    | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-016C | B-4       | Water  | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | 16OZ GJ               | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-017A | B-5       | Water  | SW8260B (VOCs)                          | 2                    | VOA w/ HCl            | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-017B | B-5       | Water  | E200.8 (LUFT)                           | 1                    | 250mL HDPE w/ HNO3    | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-017C | B-5       | Water  | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | 16OZ GJ               | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-018A | B-6       | Water  | SW8260B (VOCs)                          | 1                    | VOA w/ HCl            | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |
| 1405744-018B | B-6       | Water  | E200.8 (LUFT)                           | 1                    | 250mL HDPE w/ HNO3    | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |

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## WORK ORDER SUMMARY

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**Project:** #120832-4E; SFO Plot 700  
**Comments:**

**QC Level:** LEVEL 2  
**Client Contact:** Michael G. Burns  
**Contact's Email:** MBurns@esassoc.com

**Work Order:** 1405744  
**Date Received:** 5/19/2014

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

| Lab ID       | Client ID | Matrix | Test Name                               | Number of Containers | Bottle & Preservative | De-chlorinated           | Collection Date & Time | TAT    | Sediment Content | Hold                     | SubOut |
|--------------|-----------|--------|---|----------------------|-----------------------|--------------------------|------------------------|--------|------------------|--------------------------|--------|
| 1405744-018C | B-6       | Water  | TPH (Fuel Fingerprint) w/ S.G. Clean-Up | 1                    | 16OZ GJ               | <input type="checkbox"/> | 5/19/2014              | 5 days | 1%+              | <input type="checkbox"/> |        |

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**McCAMPBELL ANALYTICAL, INC.**

1534 WILLOW PASS ROAD  
PITTSBURG, CA 94565-1701  
Website: [www.mccampbell.com](http://www.mccampbell.com) Email: [main@mccampbell.com](mailto:main@mccampbell.com)  
Telephone: (877) 252-9262 Fax: (925) 252-9269

1405744

**CHAIN OF CUSTODY RECORD**

**TURN AROUND TIME**

- RUSH
- 24 HR
- 48 HR
- 72 HR
- 5 DAY

GeoTracker EDF  PDF  Excel  Write On (DW)   
Check if sample is effluent and "J" flag is required

Report To: MICHAEL BURNS Bill To: MICHAEL BURNS  
 Company: Environmental Science Associates  
1425 N. McDowell Blvd. Suite 200  
Petaluma, CA 94954 E-Mail: m.burns@esassoc.com  
 Tele: (707) 285-0584 Fax: ( )  
 Project #: 120 832-4E Project Name: SFO Plot 700  
 Project Location: SFO  
 Sampler Signature: [Signature]

Analysis Request Other Comments

| SAMPLE ID | LOCATION/<br>Field Point<br>Name | SAMPLING  |      | # Containers | Type Containers | MATRIX |      |     |        | METHOD PRESERVED |     |     |                  |       |  |  |  |
|-----------|----------------------------------|-----------|------|--------------|-----------------|--------|------|-----|--------|------------------|-----|-----|------------------|-------|--|--|--|
|           |                                  | Date      | Time |              |                 | Water  | Soil | Air | Sludge | Other            | ICE | HCL | HNO <sub>3</sub> | Other |  |  |  |
| B-1-1     | B-1                              | 5/19/2014 |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |
| B-1-7     | B-1                              |           |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |
| B-2-2     | B-2                              |           |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |
| B-2-7     | B-2                              |           |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |
| B-3-2.5   | B-3                              |           |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |
| B-3-10    | B-3                              |           |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |
| B-4-2     | B-4                              |           |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |
| B-4-4     | B-4                              |           |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |
| B-5-2     | B-5                              |           |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |
| B-5-3.5   | B-5                              |           |      |              |                 | X      |      |     |        |                  |     |     |                  |       |  |  |  |

| Analysis Request                                 | Other | Comments |
|--|-------|----------|
| BTX & TPH as Gas (602 / 8021 + 8015) / MTBE      |       |          |
| TPH as Diesel (8015)                             |       |          |
| Total Petroleum Oil & Grease (1664 / 5520 E/B&F) |       |          |
| Total Petroleum Hydrocarbons (418.1)             |       |          |
| EPA 502.2 / 601 / 8010 / 8021 (HVOCS)            |       |          |
| MTBE / BTEX ONLY (EPA 602 / 8021)                |       |          |
| EPA 505 / 608 / 8081 (CI Pesticides)             |       |          |
| EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners  |       |          |
| EPA 507 / 8141 (NP Pesticides)                   |       |          |
| EPA 515 / 8151 (Acidic CI Herbicides)            |       |          |
| EPA 524.2 / 624 / 8260 (VOCs)                    |       |          |
| EPA 525.2 / 625 / 8270 (SVOCs)                   |       |          |
| EPA 8270 SIM / 8310 (PAHs / PNAS)                |       |          |
| CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)      |       |          |
| LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)      |       |          |
| Lead (200.7 / 200.8 / 6010 / 6020)               |       |          |
| Filter sample for DISSOLVED metals analysis      |       |          |
| Fuel Finger print with silica gel cleanup        |       |          |

\*\*Indicate here if these samples are potentially dangerous to handle:

\*\*MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

|                                     |                        |                      |                                 |
|-------------------------------------|------------------------|----------------------|---------------------------------|
| Relinquished By: <u>[Signature]</u> | Date: <u>5-19-2014</u> | Time: <u>7:45 PM</u> | Received By: <u>[Signature]</u> |
| Relinquished By:                    | Date:                  | Time:                | Received By:                    |
| Relinquished By:                    | Date:                  | Time:                | Received By:                    |

ICE/t° B.2 COMMENTS:

GOOD CONDITION \_\_\_\_\_  
 HEAD SPACE ABSENT \_\_\_\_\_  
 DECHLORINATED IN LAB \_\_\_\_\_  
 APPROPRIATE CONTAINERS \_\_\_\_\_  
 PRESERVED IN LAB \_\_\_\_\_

VOAS O&G METALS OTHER  
 PRESERVATION pH<2





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# CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH  
 24 HR  
 48 HR  
 72 HR  
 5 DAY

GeoTracker EDF  PDF  Excel  Write On (DW)

Check if sample is effluent and "J" flag is required

Report To: MICHAEL BURNS Bill To: MICHAEL BURNS  
 Company: Environmental Science Associates  
1425 N. McDowell Blvd, Suite 200  
Petaluma, CA 94954 E-Mail: mburns@esassoc.com  
 Tele: (707) 285-0584 Fax: ( )  
 Project #: 120832-4E Project Name: SFO Plot 700  
 Project Location: SFO  
 Sampler Signature: [Signature]

## Analysis Request

## Other

## Comments

| SAMPLE ID | LOCATION/<br>Field Point<br>Name | SAMPLING  |      | # Containers | Type Containers | MATRIX |      |     |        |       | METHOD PRESERVED |     |                  |       |  |  |  |  |  |
|-----------|----------------------------------|-----------|------|--------------|-----------------|--------|------|-----|--------|-------|------------------|-----|------------------|-------|--|--|--|--|--|
|           |                                  | Date      | Time |              |                 | Water  | Soil | Air | Sludge | Other | ICE              | HCL | HNO <sub>3</sub> | Other |  |  |  |  |  |
| B-6-2     | B-6                              | 5/19/2014 |      |              |                 |        | X    |     |        |       |                  |     |                  |       |  |  |  |  |  |
| B-6-4     | B-6                              |           |      |              |                 |        | X    |     |        |       |                  |     |                  |       |  |  |  |  |  |
| B-1       | B-1                              |           |      |              |                 | X      |      |     |        |       |                  |     |                  |       |  |  |  |  |  |
| B-2       | B-2                              |           |      |              |                 | X      |      |     |        |       | X                | X   | X                |       |  |  |  |  |  |
| B-3       | B-3                              |           |      |              |                 | X      |      |     |        |       | X                | X   | X                |       |  |  |  |  |  |
| B-4       | B-4                              |           |      |              |                 | X      |      |     |        |       | X                | X   | X                |       |  |  |  |  |  |
| B-5       | B-5                              |           |      |              |                 | X      |      |     |        |       | X                | X   | X                |       |  |  |  |  |  |
| B-6       | B-6                              |           |      |              |                 | X      |      |     |        |       | X                | X   | X                |       |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|
| BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE     |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| TPH as Diesel (8015)                             |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| Total Petroleum Oil & Grease (1664 / 5520 E/B&F) |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| Total Petroleum Hydrocarbons (418.1)             |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| EPA 502.2 / 601 / 8010 / 8021 (HVOCs)            |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| MTBE / BTEX ONLY (EPA 602 / 8021)                |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| EPA 505 / 608 / 8081 (CI Pesticides)             |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| EPA 507 / 8141 (NP Pesticides)                   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| EPA 515 / 8151 (Acidic CI Herbicides)            |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| EPA 524.2 / 624 / 8260 (VOCs)                    |  |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  |  |
| EPA 525.2 / 625 / 8270 (SVOCs)                   |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| EPA 8270 SIM / 8310 (PAHs / PNAs)                |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)      |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)      |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| Lead (200.7 / 200.8 / 6010 / 6020)               |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| Filter sample for DISSOLVED metals analysis      |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |
| Fuel Filter piggyback with silica gel cleanup    |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |

\*\*Indicate here if these samples are potentially dangerous to handle:

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| Relinquished By:                    | Date:                  | Time:                | Received By:                    |
| Relinquished By:                    | Date:                  | Time:                | Received By:                    |

ICE/T° \_\_\_\_\_  
 GOOD CONDITION \_\_\_\_\_  
 HEAD SPACE ABSENT \_\_\_\_\_  
 DECHLORINATED IN LAB \_\_\_\_\_  
 APPROPRIATE CONTAINERS \_\_\_\_\_  
 PRESERVED IN LAB \_\_\_\_\_  
 COMMENTS: A Power for TP70 FF  
 VOAS O&G METALS OTHER  
 PRESERVATION pH<2



### Sample Receipt Checklist

Client Name: **ESA** Date and Time Received: **5/19/2014 11:14:56 PM**  
 Project Name: **#120832-4E; SFO Plot 700** Login Reviewed by: **Shana Carter**  
 WorkOrder N°: **1405744** Matrix: Water/Soil/Water Carrier: Client Drop-In

**Chain of Custody (COC) Information**

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

**Sample Receipt Information**

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

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

All samples received within holding time? Yes  No   
 Container/Temp Blank temperature Cooler Temp: 13.2°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: pH<2; 522: pH<4)? Yes  No  NA   
 Samples Received on Ice? Yes  No

\* NOTE: If the "No" box is checked, see comments below.

-----  
 Comments: