THE SALVATION ARMY
ARC Command
180 East Ocean Boulevard 3Rd Floor
Long Beach, CA 90802-4709

FOUNDED IN 1865

February 1, 2017

Re: **Quarterly Groundwater Monitoring and Site Status Report - Fourth Quarter 2016**
The Salvation Army Oakland ARC Building
601 Webster Street
Oakland, California
Fuel Leak Case No. R00003 084,
Geotracker Global ID T10000003428

"I have read and acknowledge the content, recommendations, and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website."

Submitted by:

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ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

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December 23, 2016

Mr. Keith Nowell, PG, CHG
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services, Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: **Quarterly Groundwater Monitoring and Site Status Report**
Fourth Quarter 2016
The Salvation Army Oakland ARC
601 Webster Street,
Oakland, California,
Fuel Leak Case No. R00003084,
Geotracker Global ID T10000003428

Dear Mr. Nowell,

ATC Group Services LLC (ATC) has prepared this Quarterly Groundwater Monitoring and Site Status Report for the fourth quarter of 2016 on behalf of The Salvation Army for their Oakland Adult Rehabilitation Center (ARC) facility located at 601 Webster Street in Oakland, California.

If you have questions or comments regarding this report or our recommendations, please contact us at your convenience.

Sincerely,

ATC Group Services LLC

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1.0 INTRODUCTION

1.1. Site Description

The site is The Salvation Army's (TSA) Adult Rehabilitation Center (ARC) (site) located at 601 Webster Street in Oakland, California, as shown on Figure 1. The site occupies the entire city block between Webster and Franklin Streets; and between Sixth and Seventh Streets. The northeast portion of the site includes the truck enclosure area. This area is where the former underground storage tank (UST) system was located. Fencing or walls enclose the truck enclosure area, which is used for loading/unloading trucks and for overnight truck parking/security. **Figure 2**, Site Plan illustrates the pertinent site features and the surrounding area.

1.2. Site History

According to TSA, the site was purchased by TSA in April of 1920.

In early 2010, TSA made the decision to discontinue onsite fueling of their fleet of commercial trucks and remove the USTs and dispenser equipment from the site. Between November 22, and 23, 2010, a 10,000-gallon UST containing diesel, an 8,000-gallon UST containing gasoline, and the associated fuel dispensers and piping were removed by Terry Hamilton, a California licensed general engineering contractor (CA License 339108). The two USTs were triple rinsed and dry ice was added to render the USTs inert. The USTs were then tested and certified non-hazardous by a Certified Marine Chemist, loaded onto a flatbed truck, and transported to Stanislaus County for use as non-potable water tanks in a fire-suppression system. The USTs appeared to be in good condition, with no visible holes or signs of leakage, however, laboratory analysis of soil samples collected from the base of the UST pit indicated that petroleum hydrocarbons (PHCs) related to gasoline were present. Diesel was not detected in any of the soil samples. This work was described in the report produced by Terry Hamilton named *Underground Storage Tank, Removal Report, Jobsite Address: The Salvation Army, 601 Webster Street, Oakland, CA 94607*, dated August 8, 2011.

In early 2011, TSA retained ATC Associates (now ATC Group Services LLC) to investigate and assist in fulfilling obligations that may have resulted from the uninvestigated release.

After a discussion with the Oakland City Fire Department (OFD), ATC developed a *Subsurface Investigation Workplan, Salvation Army, 601 Webster Street, Oakland, California,* dated March 18, 2011. This was a limited-scope workplan designed to derive preliminary information regarding the relative magnitude and distribution of the release to assist OFD in determining if the case could be closed or should be forwarded to the Local Oversight Program (LOP) Agency of Alameda County. The LOP Agency in Alameda County is Alameda County Environmental Health (ACEH) which is part of the Alameda County, Health Care Services Agency. The workplan included advancing five Geoprobe® direct-push borings to first encountered groundwater, estimated to be at approximately 16 to 25 feet below ground surface (bgs). Two of the borings were proposed for placement in the truck enclosure area, two in Franklin Street west of the truck enclosure area, and one within 6th street south of the ARC building.

In September 2011, the environmental case oversight authority was transferred from OFD to ACEH.

In correspondence dated May 2012 and November 2012, ACEH requested changes to the March 18, 2011 workplan originally submitted to the OFD. Cardno ATC responded by producing the *Subsurface Investigation Workplan Revised* dated March 1, 2013. In a letter dated May 31, 2013, ACEH approved the workplan with an additional directive to develop a site conceptual model.

On July 29 and July 30, 2013, Cardno ATC advanced seven direct-push soil borings at the site. Borings SB1 through SB7 were proposed to be advanced to groundwater but due to soil conditions, refusal was met prior to reaching groundwater in most of the borings. Despite the difficulties, sixteen soil samples, and six groundwater samples were collected and analyzed at an environmental laboratory. The results of laboratory analyses revealed PHCs contamination within the truck enclosure area surrounding the former UST Pit. Cardno ATC reported on this work in the *Site Conceptual Model with Data Gap Identification, and Preliminary Subsurface Investigation Report, The Salvation Army, 601 Webster Street, Oakland, California, Fuel Leak Case No. R00003084*, dated January 13, 2014.

On July 2, 2014, ACEH arranged a meeting to discuss the site at their offices in Oakland. This meeting was attended by Keith Nowell and Dilan Roe of ACEH, Kaye Patterson and Major Jack Phillips of TSA, and Todd Hafner and Mike Sonke of Cardno ATC. In a follow up email on July 2,2014, ACEH directed the development of a workplan that addressed laboratory analysis continuity, lateral and vertical delineation of soil and groundwater contamination, gas intrusion to indoor air, and a sensitive receptor survey. Additionally, ACEH requested a Feasibility Study/ Corrective Action Plan (FS/CAP) submitted by the end of the year, if warranted by the field investigation. In response, Cardno ATC produced and submitted a *Workplan for Continued Subsurface Investigation, The Salvation Army, Adult Rehabilitation Center, 601 Webster Street, Oakland, California*, dated August 14, 2014. This workplan proposed advancing twelve to sixteen membrane interface probe (MIP) borings to screen the soil and water for the presence of contamination followed by the advancement of eight to ten Hollow Stem Auger (HSA) borings and installation of four monitoring wells to confirm the released PHCs concentrations in soil and groundwater.

ACEH responded in correspondence dated December 24, 2014. ACEH evaluated the existing data and the results projected to be derived from implantation of the workplan and determined that the site did not meet several of the criteria for the State of California Water Resources Control Board's (Water Board) Low Threat Closure Policy (LTCP) including the Conceptual Site Model (CSM) portion of the General Criteria section. ACEH indicated that LTCP data gaps couldn't be filled with MIP data. ACEH directed the advancement of additional borings to fill the LTCP data gaps particularly targeting the 0- to 5-foot and 5- to 10-foot zones. ACEH's opinion was that it was premature to collect sub-slab soil gas samples as described in the workplan unless depth to water data indicates the piezometric surface is less than 2 feet below the base of the foundations. ACEH wanted the preliminary data (including laboratory test results, boring logs and well construction details, depth to water data, and cross sections) collected from the soil and groundwater portion of the investigation for consideration prior to conducting the soil gas portion of the investigation. ACEH stated that if a diesel release had occurred, it did not appear to have been significant and total petroleum hydrocarbons as diesel (TPHd) could be eliminated from the

analysis scope. ACEH directed the placement of three onsite monitoring wells but believed it was premature to identify locations of groundwater monitoring wells in offsite locations.

In February 2015, Cardno ATC responded by reissuing the *Workplan for Continued Subsurface Investigation, The Salvation Army, Adult Rehabilitation Center, 601 Webster Street, Oakland, California,* dated February 24, 2015.

In a letter dated June 1, 2015, ACEH directed the inclusion of several supplemental sampling activities to address data needs under the LTCP. These activities included advancing two additional HSA borings within the footprint of the former UST pit, sampling at additional depths within HSA borings J2, J5, M2, and M5, as well as additional soil sample collection from the interval between ten feet bgs and first encountered groundwater in all borings that showed evidence of contamination. ACEH agreed with the installation of three monitoring wells within the truck enclosure area but wanted Cardno ATC to provide the MIP and HSA data, and to confer with ACEH prior to installing additional wells. ACEH also believed it was premature to collect soil gas samples until the depth to groundwater (DTW) had been established through the installation and gauging of monitoring wells.

During the third quarter 2016 sampling on August 16, 2016, ATC detected 2.04 inches/0.17 feet of non-aqueous phase liquid (NAPL) in MW3. Consequently, in accordance with Title 23, California Code of Regulations, Chapter 16, Section 2655. On September 8, 2016, ATC installed a passive skimmer in MW-3. The PHC recovery by the passive skimmer is reported on in **Section 2.1**.

1.3. Geology and Hydrogeology

1.3.1. Regional Geology and Hydrogeology

Soil from borings SB1, SB2, and SB7 advanced at the site in July 2103 consisted of fill material placed in the former tank pit to a depth of approximately 13 to 15 feet bgs. Silty sand and fine sand were encountered from 15 feet to 25 feet in SB1, and from 13 feet to 20 feet in SB2 and SB7, the maximum depths to which these borings were characterized.

Soil from the borings SB3, SB4, and SB5 consisted of sandy clay or clayey sand to a depth of approximately 5 to 7 feet bgs. Silty sand and fine sand were encountered from depths between 5 to 7 feet and 20 feet, the maximum depths to which the borings were characterized, with the exception of SB3 that had sandy clay from 16 to 18 feet bgs.

Soil from the boring SB6 consisted of silty sand to a depth of approximately 5 feet bgs. Fine sand was encountered from 5 feet to 15 feet bgs, and silty sand was encountered between 15 feet and 20 feet, the maximum depth to which the boring was characterized.

The surface topography in the vicinity of the site slopes gently to moderately from the northeast to the southwest consistent with the path of Franklin Street. Without data to the contrary, groundwater flow direction would be predicted to flow parallel the surface topography. However, available data obtained from other nearby leaking underground storage tank (LUST) sites reveals

the direction of regional groundwater flow to be quite variable. **Section 3.1** provides a summary of previous groundwater monitoring and sampling activities.

1.3.2. Site-Specific Geology and Hydrogeology

Soil from borings SB1, SB2, and SB7 advanced at the site in July 2103 consisted of fill material placed in the former tank pit to a depth of approximately 13 to 15 feet bgs. Silty sand and fine sand were encountered from 15 feet to 25 feet in SB1, and from 13 feet to 20 feet in SB2 and SB7, the maximum depths to which these borings were characterized.

Soil from the borings SB3, SB4, and SB5 consisted of sandy clay or clayey sand to a depth of approximately 5 to 7 feet bgs. Silty sand and fine sand were encountered from depths between 5 to 7 feet and 20 feet, the maximum depths to which the borings were characterized, with the exception of SB3 that had sandy clay from 16 to 18 feet bgs.

Soil from the boring SB6 consisted of silty sand to a depth of approximately 5 feet bgs. Fine sand was encountered from 5 feet to 15 feet bgs, and silty sand was encountered between 15 feet and 20 feet, the maximum depth to which the boring was characterized.

The surface topography in the vicinity of the site slopes gently to moderately from the northeast to the southwest which is consistent with the path of Franklin Street. Without data to the contrary, groundwater flow direction would be predicted to flow parallel the surface topography. However, available data obtained from other nearby leaking underground storage tank (LUST) sites reveals the direction of regional groundwater flow to be quite variable. **Section 3.1** provides a summary of previous groundwater monitoring and sampling activities.

1.4. Sensitive Receptors

The site lies within the East Bay Plain Sub-basin 2-9.04. In general, groundwater in this basin has been designated beneficial for municipal and domestic water supply, industrial process and service water supply, and agricultural water supply. Despite this designation, the East Bay Municipal Utility District (EBMUD) indicates that all potable drinking water for the City of Oakland is imported from the Mokelumne River watershed.

The nearest surface water body to the site is Oakland Inner Harbor/Oakland Estuary, located approximately 2,000 feet to the south. Lake Merritt lies approximately 3,250 feet to the east-northeast upgradient of the site.

In the fall of 2015, ATC conducted a desktop survey of potential sensitive wells within a half mile of the site. Of the initial 742 candidate wells identified, ATC was able to eliminate all but four wells as candidate sensitive receptors wells because their purpose is indicated to be for water production.

During a meeting held on May 4, 2016, ATC presented the results of the SRS well survey to the ACEH. Mr. Nowell of the ACEH indicated that cathodic protection wells should be included on the list of potential sensitive receptor wells. ATC again reviewed the original 742 candidate but found no cathodic protection wells located in the defined area of the search.

On November 17, 2016, ATC performed field reconnaissance to obtain more information regarding the four production wells. The additional reconnaissance revealed additional potential receptors offsite including dewatering systems associated with the Bay Area Rapid Transit (BART), building subsurface structure dewatering systems, and subsurface elevator pit dewatering systems.

1.5. Characterization Status

ATC has conducted three investigative mobilizations advancing 14 MIP borings and 15 conventional hollow stem auger soil borings. Additionally, ATC has installed, developed, and sampled four groundwater monitoring wells at the site.

No soil contamination has been detected below 20 feet bgs. HSA Boring P2 in the northwest corner of the truck enclosure area defines both the adsorbed and dissolved phase PHCs in both vadose and saturated zones. Otherwise, the extent of dissolved phase and vapor phase PHCs remains largely undefined.

On November 16, 2016, ATC installed three subslab vapor pins in the basement of the ARC building near the loading dock. The same day ATC sampled these points. The details of the vapor pin installation and sampling work are contained in an ATC document entitled *Sub-Slab Vapor and Risk Assessment Report, The Salvation Army Oakland ARC Building, 601 Webster Street, Oakland, California*, being prepared concurrently with this report.

Beginning in the first quarter of 2017 and every quarter thereafter, ATC will collect additional subslab vapor samples in include the results in this quarterly monitoring report.

2.0 SITE PERFORMANCE SUMMARY - FOURTH QUARTER 2016

2.1. Completed Activities - Fourth Quarter 2016

1. ATC prepared and submitted Quarterly Groundwater Monitoring and Site Status Report, Third Quarter 2016, The Salvation Army Oakland ARC, 601 Webster Street, Oakland, California, dated October 17, 2016 that included a description and summary of the initial quarter groundwater monitoring and sampling event that occurred on August 16, 2016.

2. On November 16, 2016, ATC performed gauged the wells to determine groundwater flow characteristic and collected groundwater samples form the monitoring wells and submitted them for laboratory analysis.

3. On November 16, 2016, ATC recovered 60 ml of free product collected in a passive skimmer installed in MW-3.

4. On August 24, 2016, ATC collected a sample of the water standing in the elevator basement shaft and submitted it for laboratory analysis. Results are reported in **Section 3.2.1.3.**

3.0 QUARTERLY GROUNDWATER MONITORING AND SAMPLING ACTIVITIES & RESULTS

3.1. Summary of Previous Groundwater Monitoring and Sampling Activities

The history of groundwater monitoring at the site is short but ATC will continue to track the following initial observations over time to test their validity.

3.1.1. Summary of Previous Groundwater Elevations and Hydrogeologic Conditions

During the previous three groundwater monitoring events, groundwater follow direction has consistently been to the southwest to west-southwest at an average gradient of 0.0119 feet/foot.

3.1.2. Summary of Analytical Results of Previous Groundwater Sampling

The highest concentrations of dissolved phase PHC including total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), and BTEX (benzene, toluene, ethylbenzene, and total xylenes) have been detected in the groundwater samples collected from MW-3. No fuel oxygenates were detected in any of the samples collected from the site's monitoring wells except for intermittent detections of low concentrations of MTBE in MW-1 and MW-3. When NAPL was present in the second quarter of 2016, the speciated organic lead compounds tetramethyl lead (TML) and tetraethyl lead (TEL) were present. Tetramethyl lead was reported in MW1 at a concentration of 0.023 µg/L and tetraethyl lead was reported in MW3 at a concentration of 0.23 µg/L. Concentrations of the lead scavenger 1,2-DCA have been intermittently reported in samples collected from MW-1 and MW-4.

3.2. Summary of Current Monitoring and Sampling Activities – Fourth Quarter 2016

3.2.1. Groundwater Monitoring

The fourth Quarter 2016 monitoring and sampling was performed on November 16, 2016. Quarterly monitoring and sampling included collecting depth to groundwater measurements and collecting groundwater samples from the site's four monitoring wells (MW-1 through MW-4).

3.2.1.1. Groundwater Elevations and Hydrogeologic Conditions

The fourth quarter 2016 monitoring and sampling event included collecting depth to groundwater measurements from MW-1 through MW-4 that make up the site's monitoring well network. The well construction details for the site's monitoring well network are contained in **Table 1**.

Depth to water measurements in the monitoring well network ranged from 18.50 to 20.09 feet below top of casing and the calculated groundwater elevations ranged from a high of 20.09 feet (MW-1) to a low of 19.87 feet above msl in MW-4. A summary of groundwater elevation data is presented in **Table 2**.

Based on fourth quarter 2016 groundwater elevations observed on November 16, 2016, the groundwater gradient and flow direction was towards the southwest at a gradient of offsite 0.124 feet per foot (**Figure 3**). This is identical to the third quarter of 2016. **Table 3** presents a summary of the calculated groundwater gradient calculations.

3.2.1.2. Groundwater Sample Collection Procedure

Prior to sampling, each well was purged, removing three well casing volumes of purge water using a new disposable polyethylene bailer for each well. While purging, groundwater parameters (pH, conductivity, temperature) were monitored and allowed to stabilize before water samples were collected. Prior to disposal, purged groundwater was contained on site in a 55-gallon drum. Groundwater sampling logs are included in **Appendix A**.

ATC placed the groundwater samples collected in a cooler with ice and transported them under standard chain-of-custody documentation procedures to state-certified laboratory TestAmerica, Inc. in Pleasanton, California for chemical analyses.

3.2.1.3. Analytical Results of Collected Groundwater Samples

Fourth Quarter 2016 groundwater monitoring samples were analyzed utilizing USEPA Method 8260B for TPHg, BTEX, fuel oxygenates, 1, 2 DCA, and EDB and USEPA Method 8015B for total petroleum hydrocarbons in the diesel range (TPHd) and hydraulic oil range (TPH_o). The analytical results were added to **Table 4** – Summary of Groundwater Sample Analytical Results.

During initial groundwater sampling at the site, ATC directed the analysis of all the collected groundwater samples for USEPA Method 8015B for TPHd. When anomalous results were reported, ATC directed the use of silica gel cleanup (SGC) in advance of analysis for TPHd in an attempt to achieve more repeatable results, as it was believed the diesel release occurred long ago and SGC is known to exclude degraded polar nonhydrocarbon fragments resulting from biological and chemical oxidation caused by weathering.

While in its letter dated October 26, 2016, ACEH did not reject this approach, it insisted that all samples be subject to USEPA Method 8015B for TPHd without SGC, and the use of SGC be optional, if desired, as this was consistent with the practice of San Francisco Bay Region, Regional Water Quality Control Board (SFBRRWQCB). Starting this quarter ATC instituted this change, to subject all groundwater samples to USEPA Method 8015B for TPHd without SGC, but then opting to collect duplicate samples from the most contaminated wells (MW-1 and MW-3), and subjecting these samples to both methods.

- TPHg was reported in the groundwater samples collected from all the monitoring wells in the monitoring well network. The highest concentration of TPHg was reported in MW-3 (16,000 µg/L) and the lowest concentration was in MW-2 (3,600 µg/L). These concentrations were slightly lower than last quarter in all the wells except in MW-2. There is no applicable ESL for TPHg established for this case (vapor intrusion from groundwater).

- TPHd without SCG was reported in the groundwater samples collected from all the monitoring wells in the monitoring well network except MW-2. The highest concentration

of TPHg occurred in MW-3 (14,000 µg/L) and the lowest concentrations in MW-1 (210 µg/L). There is no applicable ESL for TPHd established for this case (vapor intrusion from groundwater).

- TPHd w/SCG was reported in the groundwater samples collected from monitoring wells MW-1 and MW-3. The highest concentration of TPHd occurred in MW-3 (9,800 µg/L) and the lowest concentrations in MW-1 (67µg/L). There is no applicable ESL for TPHd established for this case (vapor intrusion from groundwater).

- Benzene was reported in the groundwater samples collected from all the monitoring wells in the monitoring well network. The highest concentration of TPHg occurred in MW-3 (2,500 µg/L) and the lowest concentrations in MW-2 (800 µg/L). All reported concentrations exceed the ESL for benzene of 260 µg/L.

- Ethyl benzene was reported all collected groundwater samples, with one reported concentration, 3,000 µg/L in MW-3. None of the detected concentrations exceeded the ESL of 3,300 µg/L.

- MTBE was reported in one well, MW-3 at a concentration of 72 µg/L and does not exceed the ESL of 130,000 µg/L.

- The ESL for 1,2-DCA is 790 µg/L. None of the groundwater samples collected from the monitoring well network exceeded the laboratory detection limit for 1,2-DCA.

- Organic Lead was not was detected in any of the groundwater samples collected from the monitoring well network this quarter. There is no applicable ESL for TML or TEL established for these analytes.

Figures 4 through **8**, respectively present the isoconcentrations for TPHg, TPHd, benzene, ethylbenzene, and MTBE for the fourth quarter of 2016. All laboratory analytical results reports are included in **Appendix B**.

3.2.2. Water Sample – Elevator Shaft

On November 16, 2016, ATC used a disposable bailer to collect a grab water sample from the base of the elevator shaft of Freight Elevator that is closest to Seventh Street. The shaft for this elevator extends below the basement surface to an unknown depth but a depth likely greater than six (6) and less than twelve (12) feet below the basement surface. While the origin of the water in the base of the elevator shaft is not certain, an earlier ATC investigation did establish that groundwater is likely present within 2-7 feet below the basement floor surface. The water in the shaft may be groundwater and/or stormwater leakage into the basement. The shaft has a dewatering pump; however, it is not currently functioning.

The investigation of the relative elevation of the building's elevator shafts was further detailed in ATC's Report on Survey of Basement Elevation and Elevator Configuration, The Salvation Army ARC Building, 601 Webster Street, Oakland, California, dated May 24, 2016.

The surface of the water in the shaft was obscured by a floating layer of separate phase hydrocarbons. A determination of the depth to bottom of the portion of the shaft below the basement surface was uncertain as conventional measurement is obscured due to the water and oil at the surface and the miscellaneous refuse and debris on the bottom and mixed with the standing water. The estimated sampleable depth of water was less than the length of a disposable bailer. The sample was obtained by threading a disposal bailer in the gap between the parked elevator car and the concrete wall of the elevator shaft. The filling of the bailer started from a vertical position, but due to the limited height of the unobscured water present, transitioned to a horizontal orientation as the bailer filled.

ATC placed the water samples collected in a cooler with ice and transported under standard chain-of-custody documentation procedures to a state-certified laboratory CAEL in Ceres, California for chemical analyses.

The samples were analyzed utilizing USEPA Method 8260B for TPHg, BTEX, fuel oxygenates, 1, 2-DCA, and EDB and USEPA Method 8015B for total petroleum hydrocarbons in the diesel range TPHd and hydraulic oil range TPHo. The laboratory analytical results report is included in **Appendix C**.

Results are summarized in the following table.

Analyte	$TPH_{o\&g}$	TPH_d [1] wo SGC	TPH_d [1] w SGC	TPH_g	Benzene	Naphthalene
units	µg/l					
Detection Limit	20,000	65,000	26,000	50	0.5	1
August 16, 2016	15,000,000	NA	820,000	68	1.4	1
November 16, 2016	3,300,000	1,500,000	1,300,000	>50	>0.5	>1

1 = the mass peak emissions profile is most consistent with the TPHo&g reference spectra, and not with the TPHd reference spectra.
$TPH_{o\&g}$ = Total Petroleum Hydrocarbons as Oil and Grease aka HEM (Hexane Extractable Material).
$TPH_{d\ wo\ SGC}$ = Total Petroleum Hydrocarbons as diesel without Silica Gel Cleanup
$TPH_{d\ w\ SGC}$ = Total Petroleum Hydrocarbons as diesel with Silica Gel Cleanup
TPH_g = Total Petroleum Hydrocarbons as Gasoline
NE = Not established

Preliminary results show that the grab water samples collected from the elevator shaft are consistent with a release of hydraulic oil. However, without more sophisticated laboratory analysis, the TPH_d detection and proof of a source/origin connection to groundwater could not be affirmed or refuted.

On November 17, 2016, a licensed surveyor surveyed the elevation of the threshold plate of the elevator door for future depth to water and depth to bottom measurements. This information will be included an appendix to *Sub-Slab Vapor and Risk Assessment Report, The Salvation Army Oakland ARC Building, 601 Webster Street, Oakland, California*, being completed concurrently.

TSA is currently looking for a qualified elevator service company to perform elevator repairs safely. A safe, properly functioning elevator will allow access to the elevator shaft for the repair of the sump pump and the collection/disposal of the accumulated water.

TSA understands that the water currently in the base of this elevator shaft is to be treated as being contaminated and must be disposed in accordance with appropriate regulations in consideration of the potential petroleum hydrocarbon impacts with the water. This also means the water shall not be disposed via conventional sewer or stormwater systems.

4.0 CONCLUSIONS

ATC concludes the following from results of the fourth quarter 2016 groundwater sampling event:

- A sheen was detected in and recovered from MW-3 this quarter.
- Very little PHC NAPL (free product) was detected/collected this quarter.
- Only benzene was detected in groundwater in concentrations exceeding applicable ESLs.
- The lateral extent benzene exceeding the applicable ESL remains undefined.
- This quarter the concentration of ethylbenzene did not exceed the ESL.
- No organic lead in excess of the laboratory detection limits was detected in any of the groundwater samples.
- The source PHC detected in the water sample collected from the 7th Street Freight Elevator shaft could not be connected to groundwater.
- Impacts to water in the elevator pit appear to be consistent with hydraulic oil impacts and are likely associated with the elevator hydraulic system.

5.0 RECOMMENDATIONS

ATC recommends the following:

- Continue separate-phase PHC recovery in MW-3 using the installed passive skimmer.
- Continue to sample and analyze groundwater samples from the monitoring well network on the existing quarterly groundwater sampling schedule.
- Discontinue analysis of collected groundwater samples for organic lead as this has not shown to be a significant constituent of concern (COC).
- Discontinue collection and analysis of grab water samples from the elevator shaft as an abundance of sampling variables do not allow for reliable results. If the sampling/analyses of the groundwater beneath the TSA ARC Building are desired, install a groundwater monitoring well in the basement where sampling variables can be minimized and reliable results can be obtained.
- Continue to develop the Conceptual Site Model for the site and move the site towards closure by:
  - Expanding the downgradient groundwater investigation of the extent of benzene and possibly ethylbenzene existing in concentrations in excess of their respective ESLs, and
  - Strategically installing additional monitoring wells to establish and monitor the advancement/retraction of the downgradient PHC plume under varying site conditions and the effectiveness of mitigation efforts, if found to be necessary.
- Beginning in the first quarter of 2017, simultaneously perform the collection, analysis, and reporting of subslab soil gas with groundwater during the prescheduled quarterly monitoring events.

6.0 PLANNED ACTIVITIES - FIRST QUARTER 2017

6.1. Complete QMR & Subslab Soil Gas Monitoring, Sampling, and Reporting

The next quarterly collection of groundwater samples and subslab soil gas is scheduled for February 14, 2017. After laboratory analytical results have been completed and received, ATC will prepare and submit a quarterly monitoring report (QMR).

6.2. Development of a Workplan for Expanded Site Investigation

ATC will develop a workplan includes the continuation of the site investigation and includes

- The continued definition and quantification of the PHC mass in the source area,
- Delineation of the dissolved phase PHC downgradient of the site,
- Continued evaluation of the risks represented by the PHC mass in the source area and the dissolved phase PHC downgradient of the site.

7.0 LIMITATIONS

This report was prepared in accordance with the scope of work outlined in ATC's contract and with generally accepted professional engineering and environmental consulting practices existing at the time. This report was prepared and applicable to the location of the site. ATC makes no other warranties, expressed or implied.

TABLES

TABLE 1
Groundwater Monitoring Well
Construction Details
The Salvation Army
Adult Rehabilitation Center
601 Webster Street
Oakland, California
1 of 1

Well ID	Installation Date	Casing Diameter	Total Well Depth	Screen Interval		Screen Length	TOC Elevation
				Upper	Lower		
		(inches)	(feet bgs)	(feet bgs)	(feet bgs)	(feet)	(amsl)
MW-1	10/12/2015 -1015/2015	2	30	15	30	15	32.08
MW-2	10/14/2015	2	30	15	30	15	30.12
MW-3	10/15/2015	2	30	15	30	15	30.45
MW-4	10/15/2015	2	30	15	30	15	30.65

TOC = Top of Casing
amsl = above mean sea level
bgs = below ground surface

Table 2
Summary of
Groundwater Elevation Data
The Salvation Army
Adult Rehabilitation Center (ARC)
601 Webster Street
Oakland, California

Well ID	Screen Interval	Date Gauged	TOC	DTW	Groundwater Elevation
MW-1	(15-30)	10/23/15	32.08	20.50	11.58
		02/24/16	32.08	19.74	12.34
		05/11/16	32.08	19.45	12.63
		08/16/16	32.08	19.96	12.12
		11/16/16	32.08	20.09	11.99
MW-2	(15-30)	10/23/15	30.12	18.91	11.21
		02/24/16	30.12	18.11	12.01
		05/11/16	30.12	17.87	12.25
		08/16/16	30.12	18.34	11.78
		11/16/16	30.12	18.50	11.62
MW-3	(15-30)	10/23/15	30.45	19.08	11.37
		02/24/16	30.45	18.48	11.97
		05/11/16	30.45	18.02	12.43
		08/16/16	30.45	18.65	11.80
		11/16/16	30.45	18.64	11.81
MW-4	(15-30)	10/23/15	30.65	20.23	10.42
		02/24/16	30.65	19.53	11.12
		05/11/16	30.65	19.22	11.43
		08/16/16	30.65	19.77	10.88
		11/16/16	30.65	19.87	10.78

DTW = Depth to Water measured in feet from TOC
TOC = Top of Casing

Table 3
Summary of Calculated
Groundwater Gradient Information
The Salvation Army
Adult Rehabilitation Center (ARC)
601 Webster Street
Oakland, California

Yr	Qtr	Date	Direction	Gradient (ft./ft.)
2015	4	10/23/15	w-sw	0.0104
2016	1	02/24/16	sw	0.0124
2016	2	05/11/16	w-sw	0.0125
2016	3	08/16/16	sw	0.0124
2016	4	11/16/16	sw	0.0124

Average hydraulic gradient is measured in feet/foot
NA = Not Available
NC = Not calculated due to insufficient data
--- = flat

Table 4
Summary of Groundwater Sample Analytical Results
The Salvation Army
Adult Rehabilitation Center (ARC)
601 Webster Street, Oakland, California

Date	Sample ID	Note	Depth to Sample [1]	TPH_g	TPHd		Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	ETBE	DIPE	TBA	TAME	1,2-DCA	EDB	NPHTH	Organic Lead	
					wo/SG	w/SG													TML	TEL
ESLs				NE	NE	NE	260	NE	3,300	NE	130,000	NE	NE	NE	NE	790	73		NE	NE
Water Samples Derived from Monitoring Wells																				
10/23/15	MW-1		20.50	18,000	NA	NA	2,000	2,100	230	1,300	150	<5.0	<5.0	<50	<5.0	7.7	<5.0	NA	NA	NA
02/24/16	MW-1	3	19.74	6,500	1,500	NA	1,600	1,200	110	700	90	<10	<10	<100	<10	<10	<10	NA	NA	NA
05/11/16	MW-1		19.45	28,000	1,200	NA	7,600	5,400	750	2,800	770	<5.0	<5.0	<200	<5.0	NA	NA	NA	0.023	<0.053
08/16/16	MW-1		19.96	6,300	410	NA	2,100	1,200	99	540	130	<50	<50	<2000	<50	NA	NA	NA	<1.2	<1.2
11/16/16	MW-1		20.09	3,600	210	67	1,300	750	70	330	72	<25	<25	<1000	<25	<25	<25	<50	0.022	0.074
10/23/15	MW-2		18.91	5,200	NA	NA	520	870	120	560	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	NA	NA	NA
02/24/16	MW-2	3	18.11	2,300	80	NA	320	310	31	230	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	NA	NA	NA
05/11/16	MW-2		17.87	1,000	<51	NA	170	200	25	150	<0.5	<0.5	<0.5	<20	<0.5	NA	NA	NA	NA	NA
08/16/16	MW-2		18.34	2,400	NA	NA	340	580	71	380	<.50	<0.5	<0.5	<20	<0.5	NA	NA	NA	<1.2	<1.2
11/16/16	MW-2		18.50	5,300	<55	NA	800	1,400	110	780	<5.0	<5.0	<5.0	<200	<5.0	<5.0	<5.0	<10	<0.021	<0.053
10/23/15	MW-3		19.08	7,300	NA	NA	540	610	68	460	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	NA	NA	NA
02/24/16	MW-3	3	18.48	190,000	270,000	NA	1,000	25,000	4,400	23,000	<100	<100	<100	<1,000	<100	<100	<100	NA	NA	NA
05/11/16	MW-3		18.02	67,000	NA	14,000	11,000	14,000	5,600	11,000	77	<50	<50	<2,000	<50	NA	NA	NA	<0.021	0.23
08/16/16	MW-3		18.65	110,000	NA	9,200	9,100	20,000	14,000	23,000	<.50	<250	<250	<10,000	<250	NA	NA	NA	<6.2	<6.2
11/16/16	MW-3		18.64	16,000	14,000	9,800	2,500	2,900	360	3,000	<25	<25	<25	<1,000	<25	<25	<25	140	<0.021	0.24
10/23/15	MW-4		20.23	3,700	NA	NA	440	210	72	160	<0.5	<0.5	<0.5	<5.0	<0.5	15	<0.5	NA	NA	NA
02/24/16	MW-4	3	19.53	<50	820	NA	300	53	31	160	<5.0	<5.0	<5.0	<50	<5.0	7.4	<5.0	NA	NA	NA
05/11/16	MW-4		19.22	45,000	NA	650	17,000	7,900	870	4,000	<250	<250	<250	<10,000	<250	NA	NA	NA	NA	NA
08/16/16	MW-4		19.77	5,900	NA	160	1,200	500	87	350	<10	<10	<10	<400	<10	NA	NA	NA	NA	NA
11/16/16	MW-4		19.87	4,400	480	NA	820	160	25	88	<10	<10	<10	<400	<10	<10	<10	<20	<0.021	<0.053

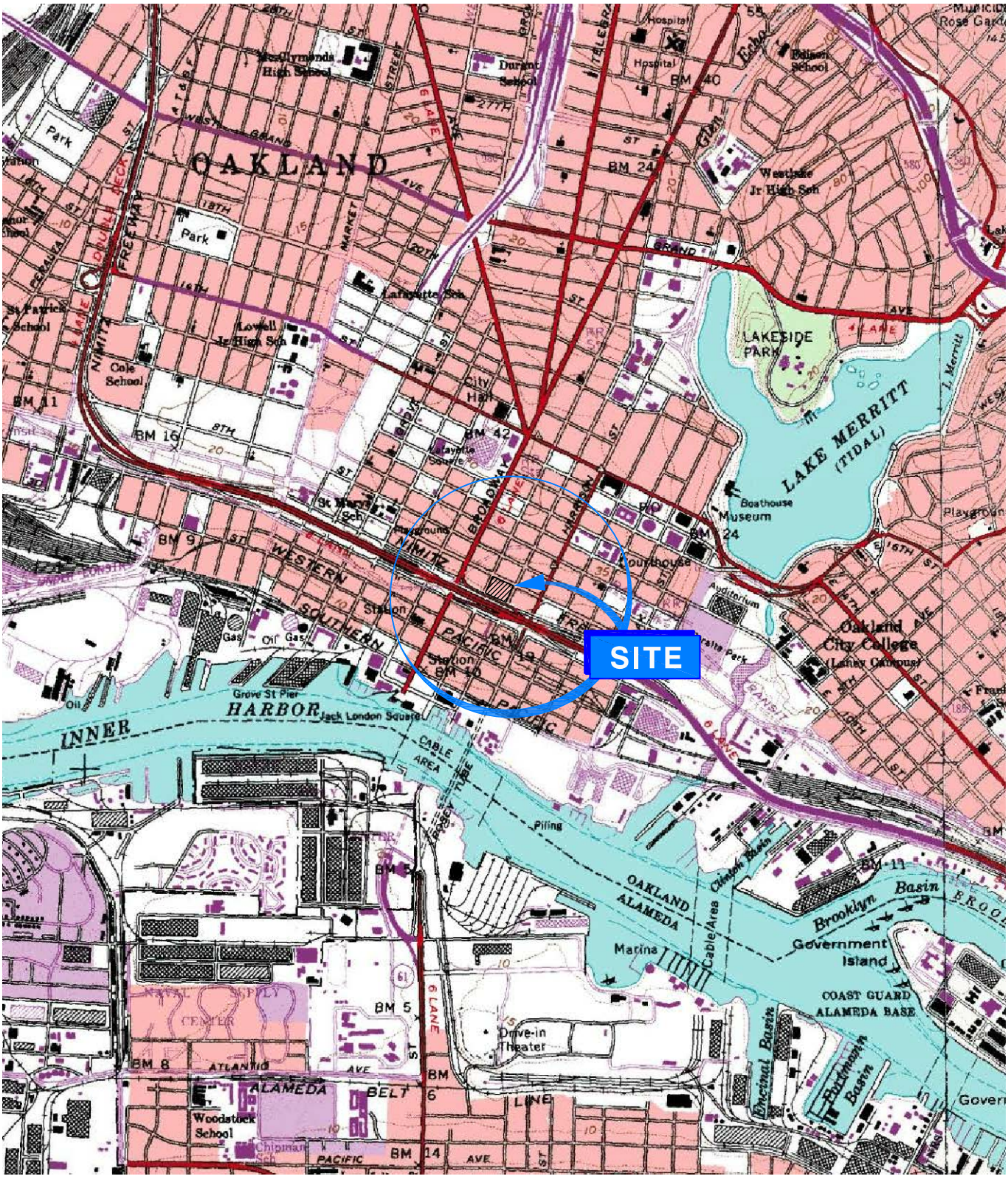
Table 4
Summary of Groundwater Sample Analytical Results
The Salvation Army
Adult Rehabilitation Center (ARC)
601 Webster Street, Oakland, California

Date	Sample ID	Note	Depth to Sample [1]	TPH_g	TPHd		Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	ETBE	DIPE	TBA	TAME	1,2-DCA	EDB	NPHTH	Organic Lead	
					wo/SG	w/SG													TML	TEL
ESLs				NE	NE	NE	260	NE	3,300	NE	130,000	NE	NE	NE	NE	790	73		NE	NE
Water Samples Derived from Investigative Borings																				
07/29/13	SB1-W	2	NC	210,000	NA	NA	35,000	47,000	3,000	16,000	240	<50	<50	<500	<50	<50	<50	NA	NA	NA
07/29/13	SB2-W	2	NC	350	NA	NA	70	26	7.9	15	12	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	NA	NA	NA
07/30/13	SB4-W	2	NC	280,000	NA	NA	35,000	30,000	3,900	20,000	5,300	<50	<50	<500	<50	<50	<50	NA	NA	NA
07/30/13	SB5-W	2	NC	3,200	<50	NA	370	470	42	200	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	NA	NA	NA
07/30/13	SB6-W	2	NC	64,000	45,000	NA	6,000	10,000	1,700	8,600	<20	<20	<20	<200	<20	<20	<20	NA	NA	NA
07/30/13	SB7-W	2	NC	1,100	<50	NA	100	170	22	120	37	<1.0	<1.0	<10	<1.0	<1.0	<1.0	NA	NA	NA
10/12/15	L2-W	2	NC	9,400	NA	NA	1,300	2,100	240	1,200	<10	<10	<10	<100	<10	<10	<10	NA	NA	NA
10/12/15	L3-W	2	NC	19,000	NA	NA	2,200	2,200	470	2,300	<10	<10	<10	<100	<10	<10	<10	NA	NA	NA
10/14/15	L4-W	2	NC	37,000	NA	NA	4,000	6,200	800	4,300	<10	<10	<10	<100	<10	<10	<10	NA	NA	NA
10/14/15	P2-W	2	NC	120	NA	NA	1.9	5.1	0.9	4.7	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5	<0.5	NA	NA	NA

Notes:

1 = Depth to Sample = Depth to Water
2 = sample collected from temporary boring
3 = sample analyzed for TPHd = Total Petroleum Hydrocarbons as Diesel by EPA Method 8015 (interference)
Results in micrograms per liter (µg/L)
NA = Not Analyzed/Not Applicable
ESLs = Environmental Screening Levels for Groundwater Vapor Intrusion - Human Health Risk Levels (Com/Ind: Fine to Coarse Scenario)
NC = Not Collected
NE = None Established
< = Not Detected at or Above Stated Method Detection Limit
TPHd = Total Petroleum Hydrocarbons as Diesel by EPA Method 8015/3630 (Silica Gel Cleanup)
TPHg = Total Petroleum Hydrocarbons as Gasoline by EPA Method 8015
Benzene = Benzene by EPA Method 8260B
Toluene = Toluene by EPA Method 8260B
Ethyl Benzene = Ethylbenzene by EPA Method 8260B
Xylenes = Total Xylenes by EPA Method 8260B
NPHTH = Naphthalene by EPA Method 8260B
TAME = Tertiary Amyl Methyl Ether by EPA Method 8260B
ETBE = Ethyl tert=Butyl Ether by EPA Method 8260B
MTBE = Methyl Tertiary Butyl Ether by EPA Method 8260B
1,2-DCA = 1,2=Dichloroethane (aka EDC) by EPA Method 8260B
DIPE = Diisopropyl Ether by EPA Method 8260B
TBA = tert=Butyl Alcohol by EPA Method 8260B
EDB =1,2=Dibromoethane by EPA Method 8260B
TEL = Tetra ethyl lead by EPA Method 8270 Modified
TML = Tetra methyl lead by EPA Method 8270 Modified

FIGURES



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP
OAKLAND WEST QUADRANGLE, CALIFORNIA, DATE 1959, PHOTO-UPDATED 1980

FIGURE 1
SITE LOCATION MAP
THE SALVATION ARMY
601 WEBSTER STREET
OAKLAND, CALIFORNIA

ATC
ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING
1117 LONE PALM AVE., SUITE 201
MODESTO, CA 95351
Ph: (209) 579-2221

PROJECT NUMBER: Z054000006		
DESIGNED BY: MDS	APPROVED BY: JH	DATE: 1-22-15
REVIEWED BY: MDS	DRAWN BY: DAW	SCALE: 1:24,000

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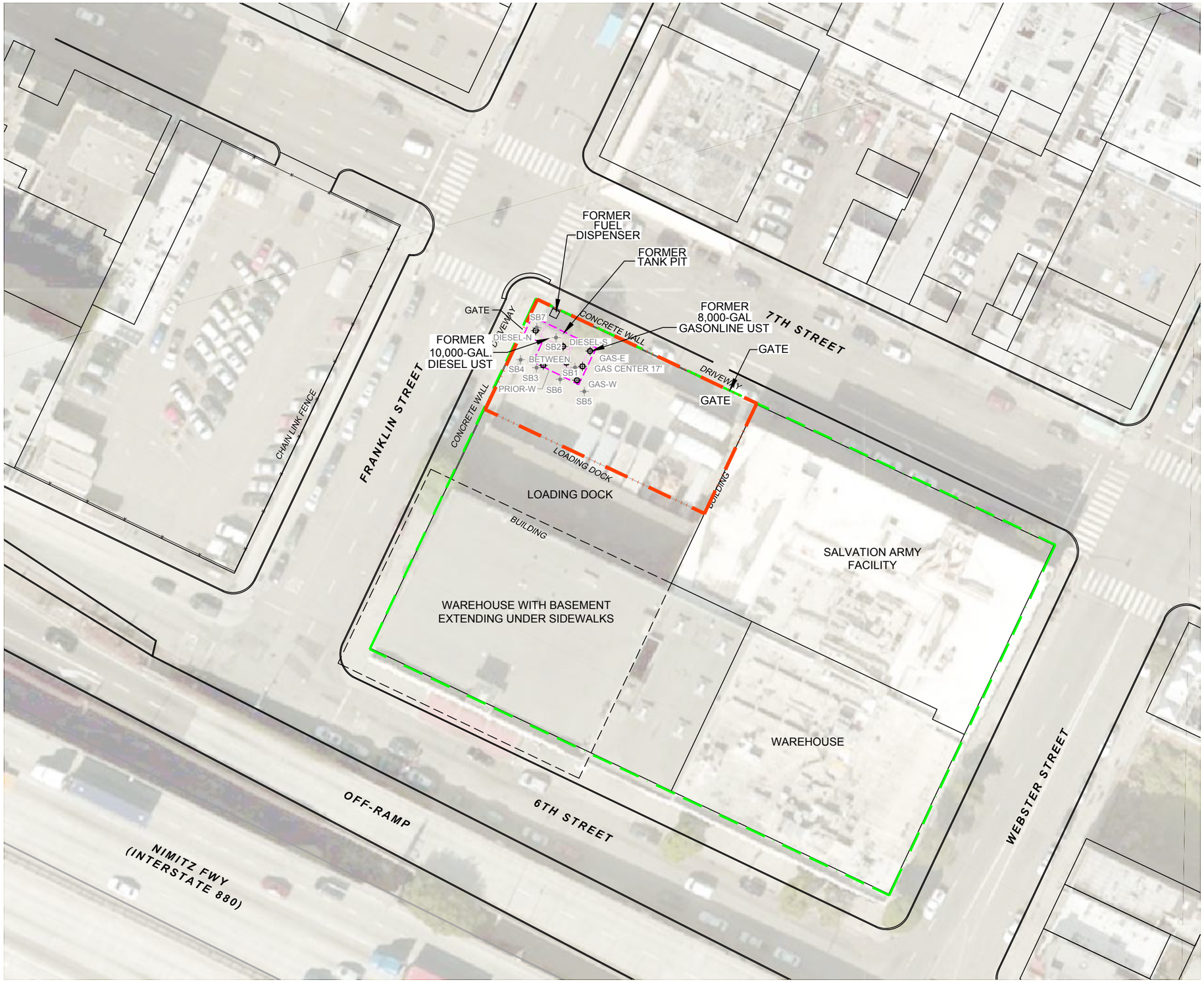

LEGEND

- APPROXIMATE FACILITY BOUNDARY
- FORMER UST
- FORMER EXCAVATION
- TRUCK ENCLOSURE AREA
- FORMER DIRECT PUSH BORING
- SOIL BORING

0 50' 100'

SCALE, FT

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

N

SITE PLAN

THE SALVATION ARMY
601 WEBSTER STREET
OAKLAND, CA

PROJECT NUMBER: Z0540000066
APPROVED BY: M. SONKE
DATE: 12-8-15
DRAWN BY: DAW

FIGURE 2

ATC ENVIRONMENTAL • GEOTECHNICAL BUILDING SCIENCES • MATERIALS TESTING
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Modesto, California 95351
Ph: (209) 579-2221 *** Fax: (209) 579-2225

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FILE:

GROUNDATER CONTOUR MAP - NOVEMBER 16, 2016

THE SALVATION ARMY
601 WEBSTER STREET
OAKLAND, CA

PROJECT NUMBER: Z054000006		DATE: 12-8-16	FIGURE 3
APPROVED BY: M. SONKE		DRAWN BY: TH	

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FILE:

LEGEND

- APPROXIMATE FACILITY BOUNDARY
- FORMER UST
- FORMER EXCAVATION
- TRUCK ENCLOSURE AREA
- MONITORING WELL LOCATION
- 3,600 TPHg ISOCONCENTRATION (ug/L)
- TPHg ISOCONCENTRATION LINE

0 30' 60'

SCALE, FT

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

N

TPHg in GROUNDWATER - NOVEMBER 16, 2016

THE SALVATION ARMY
601 WEBSTER STREET
OAKLAND, CA

PROJECT NUMBER: Z054000006		DATE: 12-8-16	FIGURE 4
APPROVED BY: M. SONKE		DRAWN BY: TH	

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Modesto, California 95351
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FILE:

LEGEND

- APPROXIMATE FACILITY BOUNDARY
- FORMER UST
- FORMER EXCAVATION
- TRUCK ENCLOSURE AREA
- MONITORING WELL LOCATION
- 210 TPHd ISOCONCENTRATION (ug/L)
- TPHd ISOCONCENTRATION LINE

0 30' 60'

SCALE, FT

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

N

TPHd in GROUNDWATER - NOVEMBER 16, 2016

THE SALVATION ARMY
601 WEBSTER STREET
OAKLAND, CA

PROJECT NUMBER: Z054000006		DATE: 12-8-16	FIGURE 5
APPROVED BY: M. SONKE		DRAWN BY: TH	

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FILE:

BENZENE in GROUNDWATER - NOVEMBER 16, 2016

THE SALVATION ARMY
601 WEBSTER STREET
OAKLAND, CA

PROJECT NUMBER: Z054000006		DATE: 12-8-16	FIGURE 6
APPROVED BY: M. SONKE		DRAWN BY: TH	

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LEGEND

- APPROXIMATE FACILITY BOUNDARY
- FORMER UST
- FORMER EXCAVATION
- TRUCK ENCLOSURE AREA
- MONITORING WELL LOCATION
- 70 ETHYLBENZENE ISOCONCENTRATION (*ug*/L)
- ETHYLBENZENE ISOCONCENTRATION LINE

0 30' 60'

SCALE, FT

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

N

ETHYLBENZENE in GROUNDWATER - NOVEMBER 16, 2016

THE SALVATION ARMY
601 WEBSTER STREET
OAKLAND, CA

FIGURE 7

PROJECT NUMBER: Z0540000006
APPROVED BY: M. SONKE
DATE: 12-8-16
DRAWN BY: TH

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Modesto, California 95351
Ph: (209) 579-2221 *** Fax: (209) 579-2225

FILE:

FILE:

LEGEND

- APPROXIMATE FACILITY BOUNDARY
- FORMER UST
- FORMER EXCAVATION
- TRUCK ENCLOSURE AREA
- MONITORING WELL LOCATION
- 72 MTBE ISOCONCENTRATION (ug/L)
- BENZENE ISOCONCENTRATION LINE

0 30' 60'

SCALE, FT

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

N

MTBE in GROUNDWATER - NOVEMBER 16, 2016

THE SALVATION ARMY
601 WEBSTER STREET
OAKLAND, CA

PROJECT NUMBER: Z054000006		DATE: 12-8-16	FIGURE 8
APPROVED BY: M. SONKE		DRAWN BY: TH	

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Modesto, California 95351
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APPENDICES

Appendix A

Groundwater Sampling Logs

Montoring Well Gauging Log

FLD-102
Revision 0.0
Jan-16

ATC Branch: **Modesto, CA**
Date: 11/16/16
Page 1 of 1

ATC Representative(s): Alex Flores
Project: **The Salvation Army ARC**
Location: **601 Webster Street, Oakland, CA**

Contact Information: Mike Sonke
Project No: Z054000006
Task No: 05

Weather: Sunny
Temperature: 56°F

Water Level Meter Model/ID: Solinist 101/ 223605
Interface Probe Model/ID: Keck 100/ KIR 89

Well ID	Casing Diameter (inches) / Type	Time of Well Cap Removal*	Time of Gauging*	Depth To LNAPL (feet)	Depth To Water (feet)	LNAPL Thickness (feet)	Total Well Depth (feet)	Comment
MW-1	2	07/15-0810	0830		20.09		29.72	Slight odor
MW-2	2	↓	0800		18.50		29.82	Slight odor
MW-3	2	↓	0844		18.64		29.75	~~strong~~ gas odor
MW-4	2	↓	0810		19.87		29.73	Slightly odor.

Comments: Monitoring Order: ~~MW-4, 2, 1 & 3~~ 2, 4, 1 & 3

MW-3 Removed hydro-skimmer- 60ml of NAPL recovered in 2-40ml Unpreserved VOAs.

Notes:

* If top of screen is submerged, allow at least 15 minutes for well equilibration following well cap removal.
All measurements to be reported to nearest 0.01 ft.

ID = Identification.
LNAPL = Light Non-Aqueous Phase Liquid.
Sheen = Discontinuous, non-measurable thickness of LNAPL (less than 0.01 ft).
Trace = Continuous, non-measurable thickness of LNAPL.

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Feb-16

ATC Branch: Modesto, Ca | Date: 111616 | Page 1 of 1

ATC Representative(s): Alex Flores | Project: The Salvation Army ARC

Location: 601 Webster Street, Oakland CA

Contact Information: **Mike Sonke** | Project No:Z054000006 | Task No: 01

Well ID: MW-4 | Contractor:

Weather: Sunny | Temperature: 58°F

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Solinist 101/ 212129 | Interface Probe (Model/ID): N/A

Water Quality Meter (Model/ID): YSI 556/ ~~11JZZ~~ 16118 | Decontamination Method: Alconox and risate water

Purging Method: ____ PVC Bailer ✓ Disp. Bailer ____ Submersible Pump ____ Centrifugal Pump Other: ____

3 Well Volumes ✓ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ____

Sampling Method: ____ Teflon Bailer ✓ Disposable Bailer ____ Dedicated Tubing Other: ____

Casing Volume Information

Casing Diameter (Circle): (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): **0.16** **0.65** **1.47**

Purging Calculations

Casing Volumes (CV): WC 9.86 x CM 0.16 = 1.58 (CV)(gal) x 3.0 CV (gal) = 4.74 PV

Monitoring Measurements

Depth to LNAPL (feet): | Total Well Depth (feet): 29.73

Depth to Water (DTW)(feet): 19.87 | Water Column (WC)(feet): 9.86

LNAPL Thickness (ft): | Purging Start Time: 0942

Purging Data

Time (24 Hours)	DTW (Feet)	Cum. Vol. Purged (Gallons)	pH (± 0.1)	Specific Cond. (mS/cm) (± 5%)	Temp (°C) (± 1°)	Dissolved Oxygen (mg/L) (± 10%)	ORP (mV) (± 10 mV)	Comment
0942	19.87	0.5	6.82	1.008	19.76			Begin hand bailing clear H2O!
0945	—	2.1	6.87	1.001	20.31			gas odor
0948	—	3.7	6.89	0.989	20.60			light green cloudy water - stop.
0952	21.51	5.3	6.90	0.982	20.82			
1145	19.87							

Sample Data

Sample ID: MW-4 | Time of Sample: 1145

Container Types, Volumes, & Quantities:	Filtered (yes/no)	Preservatives	Analytical Parameters
Glass, 40mL, 2	No	HCl	TPHg EPA 8260B
Glass, 40mL, 2	No	HCl	BTEX, Oxy's 5
See chain of custody for complete lab analysis			

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): | Approximate Flow Rate (GPM): 0.53

Recovery Type: ✓ Fast ____ Slow | % Recovery = 100 % recharged @ Sample Time

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

collect 12 Containers (3-VOA HCl, 2 amber Voa-unpres, 1 Qt amber w/HCl, 2-Qt plastic unpres.

Comments: 4 Voa w/HCl.

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Feb-16

ATC Branch: Modesto, Ca	Date: 1/16/16	Page 1 of 1
ATC Representative(s): Alex Flores	Project: The Salvation Army ARC	
	Location: 601 Webster Street, Oakland CA	
Contact Information: **Mike Sonke**	Project No:Z054000006	Task No: 01
Well ID: MW- 1	Contractor:	
	Weather: Sunny	Temperature: 59°F

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Solinist 101/ 212129	Interface Probe (Model/ID): N/A
Water Quality Meter (Model/ID): YSI 556/ ~~11377~~ 16H18	Decontamination Method: Alconox and risate water

Purging Method: ____ PVC Bailer ✓ Disp. Bailer ____ Submersible Pump ____ Centrifugal Pump Other: ____

3 Well Volumes ✓ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ____

Sampling Method: ____ Teflon Bailer ✓ Disposable Bailer ____ Dedicated Tubing Other: ____

Casing Volume Information	Purging Calculations
Casing Diameter (Circle): (2") 4" 6" Other	Casing Volumes (CV):
Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47	WC 9.163 x CM 0.16 = 1.54 (CV)(gal) x 3.0 CV (gal) = 4.62 PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 29.72
Depth to Water (DTW)(feet): 20.09	Water Column (WC)(feet): 9.63
LNAPL Thickness (ft):	Purging Start Time: 1010

Purging Data

Time (24 Hours)	DTW (Feet)	Cum. Vol. Purged (Gallons)	pH (± 0.1)	Specific Cond. (mS/cm) (± 5%)	Temp (°C) (± 1°)	Dissolved Oxygen (mg/L) (± 10%)	ORP (mV) (± 10 mV)	Comment
1010	20.09	0.5	6.83	1.058	20.04			Begin hand bailing clear H2O.
1013	—	2.1	6.86	1.041	20.46			grayish H2O
1017	—	3.6	6.88	1.013	20.73			gas odor
1020	20.96	5.1	6.93	0.988	20.81			Stop.
1220	20.08							

Sample Data

Sample ID: MW- 1	Time of Sample: 1220	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
Glass, 40mL, 2		No	HCl	TPHg EPA 8260B
Glass, 40mL, 2		No	HCl	BTEX, Oxy's 5
See chain of custody for complete lab analysis				

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet):	Approximate Flow Rate (GPM): 0.51
Recovery Type: ✓ Fast ____ Slow	% Recovery = 99.9 % @ Sample time.

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Comments:

Monitoring Well Purging and Sampling Log

FLD-103 | Revision 1.0 | Feb-16

ATC Branch: Modesto, Ca	Date: 111616	Page 1 of 1
ATC Representative(s): Alex Flores	Project: The Salvation Army ARC	
	Location: 601 Webster Street, Oakland CA	
Contact Information: **Mike Sonke**	Project No:Z054000006	Task No: 01
Well ID: MW-2	Contractor:	
	Weather: Sunny	Temperature: 58°F

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Solinist 101/ 212129	Interface Probe (Model/ID): N/A
Water Quality Meter (Model/ID): YSI 556/ ~~14377~~ 16H18	Decontamination Method: Alconox and risate water

Purging Method: ____ PVC Bailer ✓ Disp. Bailer ____ Submersible Pump ____ Centrifugal Pump Other: ____

3 Well Volumes ✓ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ____

Sampling Method: ____ Teflon Bailer ✓ Disposable Bailer ____ Dedicated Tubing Other: ____

Casing Volume Information

Casing Diameter **(Circle)**: (2") 4" 6" Other

Casing Multiplier (CM)(gallons/foot): **0.16** **0.65** **1.47**

Purging Calculations

Casing Volumes (CV):

WC 11.32 x CM 0.16 = 1.811 (CV)(gal) x 3.0 CV (gal) = 5.43 PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 29.82
Depth to Water (DTW)(feet): 18.50	Water Column (WC)(feet): 11.32
LNAPL Thickness (ft):	Purging Start Time: 0910

Purging Data

Time (24 Hours)	DTW (Feet)	Cum. Vol. Purged (Gallons)	pH (± 0.1)	Specific Cond. (mS/cm) (± 5%)	Temp (°C) (± 1°)	Dissolved Oxygen (mg/L) (± 10%)	ORP (mV) (± 10 mV)	Comment
								Begin hand bailing
0910	18.50	0.5	6.71	1.216	18.75			clear H2O
0913	—	2.3	6.74	1.235	19.40			Slight gas odor
0917	—	4.1	6.79	1.242	19.46			Small traces of sheen - cloudy
0920	20.33	6.0	6.82	1.245	19.60			stop.
1200	18.51							

Sample Data

Sample ID: MW-2	Time of Sample: 1200	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
Glass, 40mL, 2		No	HCl	TPHg EPA 8260B
Glass, 40mL, 2		No	HCl	BTEX, Oxy's 5
See chain of custody for complete lab analysis				

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet):	Approximate Flow Rate (GPM): 0.60
Recovery Type: ✓ Fast ____ Slow	% Recovery = 99.9 @ Sample time.

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):

Depth to water @ Sample time=

Comments:

Monitoring Well Purging and Sampling Log

FLD-103
Revision 1.0
Feb-16

ATC Branch: Modesto, Ca	Date: 111616	Page 1 of 1
ATC Representative(s): Alex Flores	Project: The Salvation Army ARC	
	Location: 601 Webster Street, Oakland CA	
Contact Information: **Mike Sonke**	Project No:Z054000006	Task No: 01
Well ID: MW-3	Contractor:	
	Weather: Sunny	Temperature: 60°F

Purging & Sampling Instrumentation & Method

Water Level Meter (Model/ID): Solinist 101/ 212129	Interface Probe (Model/ID): N/A
Water Quality Meter (Model/ID): YSI 556/ ~~11J77~~ 16H18	Decontamination Method: Alconox and risate water

Purging Method: ____ PVC Bailer ✓ Disp. Bailer ____ Submersible Pump ____ Centrifugal Pump Other: ____

3 Well Volumes ✓ Low Flow ____ Micro Purge ____ Intake Depth (feet below TOC) ____

Sampling Method: ____ Teflon Bailer ✓ Disposable Bailer ____ Dedicated Tubing Other: ____

Casing Volume Information	Purging Calculations
Casing Diameter (Circle): (2") 4" 6" Other	Casing Volumes (CV):
Casing Multiplier (CM)(gallons/foot): 0.16 0.65 1.47	WC 11.11 x CM 0.16 = 1.78 (CV)(gal) x 3.0 CV (gal) = 5.34 PV

Monitoring Measurements

Depth to LNAPL (feet):	Total Well Depth (feet): 29.75
Depth to Water (DTW)(feet): 18.64	Water Column (WC)(feet): 11.11
LNAPL Thickness (ft):	Purging Start Time: 1035

Purging Data

Time (24 Hours)	DTW (Feet)	Cum. Vol. Purged (Gallons)	pH (± 0.1)	Specific Cond. (mS/cm) (± 5%)	Temp (°C) (± 1°)	Dissolved Oxygen (mg/L) (± 10%)	ORP (mV) (± 10 mV)	Comment
								Begin hand bailing
1035	18.64	0.5	6.87	1.079	20.16			clear H2O
1039	—	2.3	7.05	1.092	20.33			slight grayish H2O
1042	—	4.1	7.09	1.101	20.40			gas odor
1045	22.47	5.9	7.12	1.113	20.46			stop
1245	18.66							

Sample Data

Sample ID: MW-3	Time of Sample:	Filtered (yes/no)	Preservatives	Analytical Parameters
Container Types, Volumes, & Quantities:				
Glass, 40mL, 2		No	HCl	TPHg EPA 8260B
Glass, 40mL, 2		No	HCl	BTEX, Oxy's 5
See chain of custody for complete lab analysis				

Well Recovery Data

Maximum Drawdown (DTW*m*)(feet): 3.83	Approximate Flow Rate (GPM): 0.59
Recovery Type: ✓ Fast ____ Slow	% Recovery = 99.8% @ sample time.

Purge Water Disposition (Attach Drum Inventory Log - FLD 108):
Reinstall Hydroskimmer after Sampling.

Comments: Slightly sheen unmeasurable- free while Sampling

TestAmerica Pleasanton
1220 Quarry Lane

Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTI

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

stAmerica Laboratories, Inc.

Client Contact	Project Manager: Mike Sonke	Site Contact: Alex Flores	Date:	COC No:
ATC Group Services LLC	Tel/Fax: (209) 579-2221	Lab Contact: Dimple Sharma	Carrier:	1 of 1 COCs

Address: 1117 Lone Palm Avenue, Suite 201B
City/State/Zip: Modesto, CA, 95351
Phone: (209) 579-2221 FAX: (209) 579-2225
E-amil:mike.sonke@atcassociates.com
Project Name: The Salvation Army Oakland ARC
Site: Facility Number: Project #: Z0540000006
Geotracker EDF Global ID #: T10000003428.

Analysis Turnaround Time
Calendar (C) or Work Days (W) _____
TAT if different from Below _____
☑ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

Job / SDG No.:

Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	TPH-g, BTEX, 5 Oxy's, Lead Scavengers, Naphthalene By EPA 8260B	TPH-d By EPA 8015M	TPH-d with silica gel clean up By EPA 8015/3630C	Organic Lead Speciation By Epa 8270 GC/ECD	Hydraulic Oil By EPA 8015M	Oil ad nGrease By EPA 1664A
MW-1	11/16/2016	1220	Glass	Water	8	N	G	X	X	X	X		
MW-2	11/16/2016	1200	↓	Water	8			X	X		X		
MW-3	11/16/2016	1245	↓	Water	8			X	X	X	X		
MW-4	11/16/2016	1145	Glass	Water	8			X	X		X		

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Fuel Oxygenates: ETBE, DIPE, MTBE, TBA and TAME, 1,2 DCA and EDB.

3.4°C

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Alex Flores	ATC	111616/1535			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA	Date/Time: 11/16/16 1535

Chain of Custody Record

TestAmerica Pleasanton
1220 Quarry Lane

Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Mike Sonke	Site Contact: Alex Flores	Date:	COC No:
ATC Group Services LLC	Tel/Fax: (209) 579-2221	Lab Contact: Dimple Sharma	Carrier:	1 of 1 COCs

Address: 1117 Lone Palm Avenue, Suite 201B
City/State/Zip: Modesto, CA, 95351
Phone: (209) 579-2221 FAX: (209) 579-2225
E-amil:mike.sonke@atcassociates.com
Project Name: The Salvation Army Oakland ARC
Site: Facility Number: Project #: Z0540000006
Geotracker EDF Global ID #: T10000003428.

Analysis Turnaround Time
Calendar (C) or Work Days (W) _____
TAT if different from Below _____
☑ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:
Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	TPH-g, BTEX, 5 Oxy's, Lead Scavengers, Naphthalene By EPA 8260B	TPH-d By EPA 8015M	TPH-d with silica gel clean up By EPA 8015/3630C	Organic Lead Speciation By Epa 8270 GC/ECD		Hydraulic Oil By EPA 8015M	Oil ad nGrease By EPA 1664A				Sample Specific Notes:
7 th Street Freight Sump (Elevator)	11/16/2016	1328	Glass	Water	10	N	G	X	X	X	X		X	X				Trace amount of oil in Sample

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: Fuel Oxygenates: ETBE, DIPE, MTBE, TBA and TAME, 1,2 DCA and EDB.

4.6

Alex Flores	Company: ATC	Date/Time: 111616 1535	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: TA	Date/Time: 11/16/16 1535

Field Report

FLD-100
Revision 0.0
Feb-16

ATC Branch: Modesto, CA	Date: 1/16/16	Page 1 of 1
ATC Representative(s): Alex Flores	Project: The Salvation Army ARC	
Role: Technician	Location: 601 Webster Street, Oakland, CA	
Contact Information: Mike Sonke	Project No: Z054000006	Task No: 01
Scope of Work:	Weather: Sunny	Temperature: 56°F
X Monitoring ___ Assessment ___ Remediation ___ Closure	Contractor:	

Time:	Comments:
0714	Arrived to site.
	Opened MW-4, MW-2, MW-1, let gw equilibrate.
	Locate 7st Elevator. Setup eq. decon - 2-5gal buckets with Alconox & rinsate water - Removed Skimmer from MW-3
0800	Begin gauging: MW2,4,1,3. Remove skimm @0816
	Drained 60ml in 2- unpreserved 40ml voa's
	Continue gauging - MW-2,4,1&3. Gauge MW-3 with oil/water paste.
0850	Completed well gauging - pH meter cal.
0910	Begin purging: MW-2, MW-4, MW-1 & MW-3
1100	Completed well purging.
	Begin Sampling MW-2,4,1,3 and 7th st Freight Elevator Sump - Samples collected with disposable bailers.
	collect additional gw samples from all MW's
	4-VOA's per well. Contained well purged H2O in 55g drum.
	Reset hydroskimmer in MW-3.
	See Chain of custody for Lab analysis.
	Samples to TAL SFO.
	Closed all wells, clean up - Labeled drum.
	Load up.
1420	left site.

Calibration of:	Dissolved Oxygen	pH	pH	Cond.	ORP	Unit Inspection: Pass / Fail	
meter type: YSI 556	(%)	(7.00)	(4.00)	(1.413) (mS/cm)	(220) (mV)	Battery levels:	100
						Screen / Casing:	Good
Pre / Post		6.89/7.00	3.94/4.00	1401/1413		Comments:	Rental unit - Pine Env

Calibration Solution Expiration Date: 03/2017	Cable Unit Serial No.: 16H18
	Handheld Unit Serial No.: 11L100217
Copies To: M.S.	Project Manager: Mike Sonke
	Reviewed By:

Appendix **B**

Laboratory Analytical Data Report
and Chain of Custody Documents
Monitorining Well
& Elevator Water
Samples

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-75892-1
Client Project/Site: The Salvation Army Oakland ARC

For:
ATC Group Services LLC.
701 University Avenue, Suite 200
Sacramento, California 95825

Attn: Mr. Gabe Stivala

Authorized for release by:
11/30/2016 4:24:45 PM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-75892-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-75892-1

Comments
No additional comments.

Receipt
The samples were received on 11/16/2016 3:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

Receipt Exceptions

Two Trip Blanks received not listed on the COC, logged on HOLD.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8015B: The following sample required a dilution due to the nature of the sample matrix: MW-3 (720-75892-3). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75892-1

Client Sample ID: MW-1 — Lab Sample ID: 720-75892-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	72		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Benzene	1300		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	70		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Toluene	750		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	330		50		ug/L	50		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	3600		2500		ug/L	50		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	210		50		ug/L	1		8015B	Total/NA
Diesel Range Organics [C10-C28]	67		50		ug/L	1		8015B	Silica Gel Cleanup

Client Sample ID: MW-2 — Lab Sample ID: 720-75892-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	800		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	110		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Toluene	1400		5.0		ug/L	10		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	780		10		ug/L	10		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	5300		500		ug/L	10		8260B/CA_LUFT MS	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 720-75892-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2500		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	360		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Toluene	2900		25		ug/L	50		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	3000		50		ug/L	50		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	16000		2500		ug/L	50		8260B/CA_LUFT MS	Total/NA
Naphthalene	140		50		ug/L	50		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	14000		250		ug/L	5		8015B	Total/NA
Diesel Range Organics [C10-C28]	9800		100		ug/L	2		8015B	Silica Gel Cleanup

Client Sample ID: MW-4 — Lab Sample ID: 720-75892-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	820		10		ug/L	20		8260B/CA_LUFT MS	Total/NA
Ethylbenzene	25		10		ug/L	20		8260B/CA_LUFT MS	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4 (Continued)

Lab Sample ID: 720-75892-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	160		10		ug/L	20		8260B/CA_LUFT MS	Total/NA
Xylenes, Total	88		20		ug/L	20		8260B/CA_LUFT MS	Total/NA
Gasoline Range Organics (GRO) -C5-C12	4400		1000		ug/L	20		8260B/CA_LUFT MS	Total/NA
Diesel Range Organics [C10-C28]	480		50		ug/L	1		8015B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-1

Date Collected: 11/16/16 12:20
Date Received: 11/16/16 15:35

Lab Sample ID: 720-75892-1

Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	**72**		25		ug/L			11/23/16 15:28	50
Benzene	**1300**		25		ug/L			11/23/16 15:28	50
Ethylbenzene	**70**		25		ug/L			11/23/16 15:28	50
Toluene	**750**		25		ug/L			11/23/16 15:28	50
Xylenes, Total	**330**		50		ug/L			11/23/16 15:28	50
Gasoline Range Organics (GRO) -C5-C12	**3600**		2500		ug/L			11/23/16 15:28	50
TBA	ND		1000		ug/L			11/23/16 15:28	50
DIPE	ND		25		ug/L			11/23/16 15:28	50
TAME	ND		25		ug/L			11/23/16 15:28	50
Ethyl t-butyl ether	ND		25		ug/L			11/23/16 15:28	50
1,2-DCA	ND		25		ug/L			11/23/16 15:28	50
EDB	ND		25		ug/L			11/23/16 15:28	50
Naphthalene	ND		50		ug/L			11/23/16 15:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*67 - 130*		*11/23/16 15:28*	*50*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 130*		*11/23/16 15:28*	*50*
Toluene-d8 (Surr)	*91*		*70 - 130*		*11/23/16 15:28*	*50*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**210**		50		ug/L		11/22/16 17:20	11/23/16 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*93*		*23 - 156*	*11/22/16 17:20*	*11/23/16 00:00*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**67**		50		ug/L		11/22/16 12:04	11/28/16 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*11/22/16 12:04*	*11/28/16 16:28*	*1*
p-Terphenyl	*87*		*31 - 150*	*11/22/16 12:04*	*11/28/16 16:28*	*1*

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75892-1

Client Sample ID: MW-2
Date Collected: 11/16/16 12:00
Date Received: 11/16/16 15:35

Lab Sample ID: 720-75892-2
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/L			11/23/16 03:55	10
Benzene	**800**		5.0		ug/L			11/23/16 03:55	10
Ethylbenzene	**110**		5.0		ug/L			11/23/16 03:55	10
Toluene	**1400**		5.0		ug/L			11/23/16 03:55	10
Xylenes, Total	**780**		10		ug/L			11/23/16 03:55	10
Gasoline Range Organics (GRO) -C5-C12	**5300**		500		ug/L			11/23/16 03:55	10
TBA	ND		200		ug/L			11/23/16 03:55	10
DIPE	ND		5.0		ug/L			11/23/16 03:55	10
TAME	ND		5.0		ug/L			11/23/16 03:55	10
Ethyl t-butyl ether	ND		5.0		ug/L			11/23/16 03:55	10
1,2-DCA	ND		5.0		ug/L			11/23/16 03:55	10
Naphthalene	ND		10		ug/L			11/23/16 03:55	10
EDB	ND		5.0		ug/L			11/23/16 03:55	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*67 - 130*		*11/23/16 03:55*	*10*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 130*		*11/23/16 03:55*	*10*
Toluene-d8 (Surr)	*91*		*70 - 130*		*11/23/16 03:55*	*10*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		55		ug/L		11/21/16 12:48	11/21/16 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*82*		*23 - 156*	*11/21/16 12:48*	*11/21/16 20:25*	*1*

Client Sample ID: MW-3
Date Collected: 11/16/16 12:45
Date Received: 11/16/16 15:35

Lab Sample ID: 720-75892-3
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		25		ug/L			11/23/16 15:57	50
Benzene	**2500**		25		ug/L			11/23/16 15:57	50
Ethylbenzene	**360**		25		ug/L			11/23/16 15:57	50
Toluene	**2900**		25		ug/L			11/23/16 15:57	50
Xylenes, Total	**3000**		50		ug/L			11/23/16 15:57	50
Gasoline Range Organics (GRO) -C5-C12	**16000**		2500		ug/L			11/23/16 15:57	50
TBA	ND		1000		ug/L			11/23/16 15:57	50
DIPE	ND		25		ug/L			11/23/16 15:57	50
TAME	ND		25		ug/L			11/23/16 15:57	50
Ethyl t-butyl ether	ND		25		ug/L			11/23/16 15:57	50
1,2-DCA	ND		25		ug/L			11/23/16 15:57	50
EDB	ND		25		ug/L			11/23/16 15:57	50
Naphthalene	**140**		50		ug/L			11/23/16 15:57	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*67 - 130*		*11/23/16 15:57*	*50*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*		*11/23/16 15:57*	*50*
Toluene-d8 (Surr)	*92*		*70 - 130*		*11/23/16 15:57*	*50*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**14000**		250		ug/L		11/22/16 17:20	11/23/16 12:52	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*23 - 156*	*11/22/16 17:20*	*11/23/16 12:52*	*5*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**9800**		100		ug/L		11/22/16 12:04	11/29/16 23:31	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*4*		*0 - 5*	*11/22/16 12:04*	*11/29/16 23:31*	*2*
p-Terphenyl	*73*		*31 - 150*	*11/22/16 12:04*	*11/29/16 23:31*	*2*

Client Sample ID: MW-4
Date Collected: 11/16/16 11:45
Date Received: 11/16/16 15:35

Lab Sample ID: 720-75892-4
Matrix: Water

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		10		ug/L			11/23/16 16:26	20
Benzene	**820**		10		ug/L			11/23/16 16:26	20
Ethylbenzene	**25**		10		ug/L			11/23/16 16:26	20
Toluene	**160**		10		ug/L			11/23/16 16:26	20
Xylenes, Total	**88**		20		ug/L			11/23/16 16:26	20
Gasoline Range Organics (GRO) -C5-C12	**4400**		1000		ug/L			11/23/16 16:26	20
TBA	ND		400		ug/L			11/23/16 16:26	20
DIPE	ND		10		ug/L			11/23/16 16:26	20
TAME	ND		10		ug/L			11/23/16 16:26	20
Ethyl t-butyl ether	ND		10		ug/L			11/23/16 16:26	20
1,2-DCA	ND		10		ug/L			11/23/16 16:26	20
Naphthalene	ND		20		ug/L			11/23/16 16:26	20
EDB	ND		10		ug/L			11/23/16 16:26	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*67 - 130*		*11/23/16 16:26*	*20*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 130*		*11/23/16 16:26*	*20*
Toluene-d8 (Surr)	*92*		*70 - 130*		*11/23/16 16:26*	*20*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**480**		50		ug/L		11/21/16 12:48	11/21/16 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*79*		*23 - 156*	*11/21/16 12:48*	*11/21/16 20:50*	*1*

Surrogate Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75892-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB (67-130)	12DCE (72-130)	TOL (70-130)
720-75892-1	MW-1	88	87	91
720-75892-2	MW-2	92	87	91
720-75892-2 MS	MW-2	94	86	92
720-75892-2 MSD	MW-2	92	86	91
720-75892-3	MW-3	89	86	92
720-75892-4	MW-4	91	89	92
LCS 720-213592/5	Lab Control Sample	87	83	92
LCS 720-213592/7	Lab Control Sample	91	85	92
LCS 720-213596/5	Lab Control Sample	91	83	92
LCS 720-213596/7	Lab Control Sample	91	84	92
LCSD 720-213592/6	Lab Control Sample Dup	89	83	92
LCSD 720-213592/8	Lab Control Sample Dup	90	86	93
LCSD 720-213596/6	Lab Control Sample Dup	93	86	93
LCSD 720-213596/8	Lab Control Sample Dup	91	85	92
MB 720-213592/4	Method Blank	89	85	91
MB 720-213596/4	Method Blank	89	86	91

Surrogate Legend

BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	PTP1 (23-156)
720-75892-1	MW-1	93
720-75892-2	MW-2	82
720-75892-3	MW-3	0 X D
720-75892-4	MW-4	79
LCS 720-213451/2-A	Lab Control Sample	92
LCS 720-213574/2-A	Lab Control Sample	101
LCSD 720-213451/3-A	Lab Control Sample Dup	89
LCSD 720-213574/3-A	Lab Control Sample Dup	95
MB 720-213451/1-A	Method Blank	89
MB 720-213574/1-A	Method Blank	87

Surrogate Legend

PTP = p-Terphenyl

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water **Prep Type: Silica Gel Cleanup**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	NDA1 (0-5)	PTP1 (31-150)
720-75892-1	MW-1	0	87
720-75892-3	MW-3	4	73

Surrogate Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75892-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Water

Prep Type: Silica Gel Cleanup

		Percent Surrogate Recovery (Acceptance Limits)									
		NDA1	PTP1								
Lab Sample ID	Client Sample ID	(0-5)	(31-150)								
LCS 720-213524/2-A	Lab Control Sample		106								
LCSD 720-213524/3-A	Lab Control Sample Dup		84								
MB 720-213524/1-A	Method Blank	0.3	72								

Surrogate Legend

NDA = Capric Acid (Surr)
PTP = p-Terphenyl

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-213592/4
Matrix: Water
Analysis Batch: 213592

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/22/16 21:37	1
Benzene	ND		0.50		ug/L			11/22/16 21:37	1
Ethylbenzene	ND		0.50		ug/L			11/22/16 21:37	1
Toluene	ND		0.50		ug/L			11/22/16 21:37	1
Xylenes, Total	ND		1.0		ug/L			11/22/16 21:37	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/22/16 21:37	1
TBA	ND		20		ug/L			11/22/16 21:37	1
DIPE	ND		0.50		ug/L			11/22/16 21:37	1
TAME	ND		0.50		ug/L			11/22/16 21:37	1
Ethyl t-butyl ether	ND		0.50		ug/L			11/22/16 21:37	1
1,2-DCA	ND		0.50		ug/L			11/22/16 21:37	1
EDB	ND		0.50		ug/L			11/22/16 21:37	1
Naphthalene	ND		1.0		ug/L			11/22/16 21:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*67 - 130*		*11/22/16 21:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*72 - 130*		*11/22/16 21:37*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*11/22/16 21:37*	*1*

Lab Sample ID: LCS 720-213592/5
Matrix: Water
Analysis Batch: 213592

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	21.1		ug/L		84	62 - 130
Benzene	25.0	22.6		ug/L		90	79 - 130
Ethylbenzene	25.0	23.7		ug/L		95	80 - 120
Toluene	25.0	23.5		ug/L		94	78 - 120
m-Xylene & p-Xylene	25.0	23.4		ug/L		94	70 - 142
o-Xylene	25.0	23.3		ug/L		93	70 - 130
TBA	250	235		ug/L		94	70 - 130
DIPE	25.0	21.0		ug/L		84	69 - 134
TAME	25.0	23.0		ug/L		92	79 - 130
Ethyl t-butyl ether	25.0	22.0		ug/L		88	70 - 130
1,2-DCA	25.0	21.7		ug/L		87	61 - 132
EDB	25.0	22.8		ug/L		91	70 - 130
Naphthalene	25.0	23.0		ug/L		92	50 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*83*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-213592/7
Matrix: Water
Analysis Batch: 213592

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C5-C12			500	445		ug/L		89	71 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*85*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 720-213592/6
Matrix: Water
Analysis Batch: 213592

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			25.0	21.4		ug/L		86	62 - 130	2	20
Benzene			25.0	22.8		ug/L		91	79 - 130	1	20
Ethylbenzene			25.0	24.7		ug/L		99	80 - 120	4	20
Toluene			25.0	24.7		ug/L		99	78 - 120	5	20
m-Xylene & p-Xylene			25.0	24.2		ug/L		97	70 - 142	3	20
o-Xylene			25.0	24.4		ug/L		97	70 - 130	4	20
TBA			250	235		ug/L		94	70 - 130	0	20
DIPE			25.0	21.0		ug/L		84	69 - 134	0	20
TAME			25.0	23.2		ug/L		93	79 - 130	1	20
Ethyl t-butyl ether			25.0	22.1		ug/L		89	70 - 130	0	20
1,2-DCA			25.0	21.8		ug/L		87	61 - 132	1	20
EDB			25.0	22.8		ug/L		91	70 - 130	0	20
Naphthalene			25.0	24.4		ug/L		98	50 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*83*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 720-213592/8
Matrix: Water
Analysis Batch: 213592

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			500	442		ug/L		88	71 - 125	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-75892-2 MS
Matrix: Water
Analysis Batch: 213592

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		250	215		ug/L		86	60 - 138
Benzene	800		250	1050		ug/L		100	60 - 140
Ethylbenzene	110		250	386		ug/L		110	60 - 140
Toluene	1400		250	1680	4	ug/L		102	60 - 140
m-Xylene & p-Xylene	560		250	828		ug/L		108	60 - 140
o-Xylene	220		250	506		ug/L		115	60 - 140
TBA	ND		2500	2810		ug/L		112	60 - 140
DIPE	ND		250	226		ug/L		90	60 - 140
TAME	ND		250	246		ug/L		98	60 - 140
Ethyl t-butyl ether	ND		250	235		ug/L		94	60 - 140
1,2-DCA	ND		250	231		ug/L		92	60 - 140
EDB	ND		250	253		ug/L		101	60 - 140
Naphthalene	ND		250	265		ug/L		103	56 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Lab Sample ID: 720-75892-2 MSD
Matrix: Water
Analysis Batch: 213592

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		250	217		ug/L		87	60 - 138	1	20
Benzene	800		250	1060		ug/L		103	60 - 140	1	20
Ethylbenzene	110		250	386		ug/L		110	60 - 140	0	20
Toluene	1400		250	1680	4	ug/L		103	60 - 140	0	20
m-Xylene & p-Xylene	560		250	833		ug/L		110	60 - 140	1	20
o-Xylene	220		250	504		ug/L		114	60 - 140	0	20
TBA	ND		2500	2820		ug/L		113	60 - 140	1	20
DIPE	ND		250	226		ug/L		90	60 - 140	0	20
TAME	ND		250	248		ug/L		99	60 - 140	1	20
Ethyl t-butyl ether	ND		250	235		ug/L		94	60 - 140	0	20
1,2-DCA	ND		250	230		ug/L		92	60 - 140	0	20
EDB	ND		250	252		ug/L		101	60 - 140	1	20
Naphthalene	ND		250	278		ug/L		108	56 - 140	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-213596/4
Matrix: Water
Analysis Batch: 213596

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/23/16 08:42	1
Benzene	ND		0.50		ug/L			11/23/16 08:42	1
Ethylbenzene	ND		0.50		ug/L			11/23/16 08:42	1
Toluene	ND		0.50		ug/L			11/23/16 08:42	1
Xylenes, Total	ND		1.0		ug/L			11/23/16 08:42	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/23/16 08:42	1
TBA	ND		20		ug/L			11/23/16 08:42	1
DIPE	ND		0.50		ug/L			11/23/16 08:42	1
TAME	ND		0.50		ug/L			11/23/16 08:42	1
Ethyl t-butyl ether	ND		0.50		ug/L			11/23/16 08:42	1
1,2-DCA	ND		0.50		ug/L			11/23/16 08:42	1
EDB	ND		0.50		ug/L			11/23/16 08:42	1
Naphthalene	ND		1.0		ug/L			11/23/16 08:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*67 - 130*		*11/23/16 08:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*		*11/23/16 08:42*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*11/23/16 08:42*	*1*

Lab Sample ID: LCS 720-213596/5
Matrix: Water
Analysis Batch: 213596

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	20.6		ug/L		82	62 - 130
Benzene	25.0	22.8		ug/L		91	79 - 130
Ethylbenzene	25.0	26.6		ug/L		106	80 - 120
Toluene	25.0	25.3		ug/L		101	78 - 120
m-Xylene & p-Xylene	25.0	26.3		ug/L		105	70 - 142
o-Xylene	25.0	26.5		ug/L		106	70 - 130
TBA	250	287		ug/L		115	70 - 130
DIPE	25.0	21.2		ug/L		85	69 - 134
TAME	25.0	23.4		ug/L		94	79 - 130
Ethyl t-butyl ether	25.0	22.1		ug/L		88	70 - 130
1,2-DCA	25.0	22.0		ug/L		88	61 - 132
EDB	25.0	24.2		ug/L		97	70 - 130
Naphthalene	25.0	25.9		ug/L		103	50 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*83*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-213596/7
Matrix: Water
Analysis Batch: 213596

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C5-C12			500	435		ug/L		87	71 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*84*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 720-213596/6
Matrix: Water
Analysis Batch: 213596

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			25.0	21.7		ug/L		87	62 - 130	5	20
Benzene			25.0	22.7		ug/L		91	79 - 130	0	20
Ethylbenzene			25.0	26.3		ug/L		105	80 - 120	1	20
Toluene			25.0	25.0		ug/L		100	78 - 120	1	20
m-Xylene & p-Xylene			25.0	26.0		ug/L		104	70 - 142	1	20
o-Xylene			25.0	26.3		ug/L		105	70 - 130	1	20
TBA			250	281		ug/L		112	70 - 130	2	20
DIPE			25.0	21.7		ug/L		87	69 - 134	2	20
TAME			25.0	24.5		ug/L		98	79 - 130	5	20
Ethyl t-butyl ether			25.0	22.9		ug/L		91	70 - 130	3	20
1,2-DCA			25.0	22.6		ug/L		90	61 - 132	3	20
EDB			25.0	25.3		ug/L		101	70 - 130	4	20
Naphthalene			25.0	27.6		ug/L		110	50 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 720-213596/8
Matrix: Water
Analysis Batch: 213596

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			500	440		ug/L		88	71 - 125	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*85*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-213451/1-A
Matrix: Water
Analysis Batch: 213428

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 213451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		11/21/16 10:39	11/21/16 19:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*89*		*23 - 156*	*11/21/16 10:39*	*11/21/16 19:37*	*1*

Lab Sample ID: LCS 720-213451/2-A
Matrix: Water
Analysis Batch: 213428

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 213451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	1920		ug/L		77	34 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*92*		*23 - 156*

Lab Sample ID: LCSD 720-213451/3-A
Matrix: Water
Analysis Batch: 213428

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 213451

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	2050		ug/L		82	34 - 115	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*89*		*23 - 156*

Lab Sample ID: MB 720-213574/1-A
Matrix: Water
Analysis Batch: 213510

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 213574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		11/22/16 17:20	11/23/16 04:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*87*		*23 - 156*	*11/22/16 17:20*	*11/23/16 04:22*	*1*

Lab Sample ID: LCS 720-213574/2-A
Matrix: Water
Analysis Batch: 213510

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 213574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	1840		ug/L		74	34 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*101*		*23 - 156*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 720-213574/3-A
Matrix: Water
Analysis Batch: 213510

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 213574

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	1480		ug/L		59	34 - 115	22	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*95*		*23 - 156*

Lab Sample ID: MB 720-213524/1-A
Matrix: Water
Analysis Batch: 213510

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 213524

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		11/22/16 10:41	11/22/16 15:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.3*		*0 - 5*	*11/22/16 10:41*	*11/22/16 15:24*	*1*
p-Terphenyl	*72*		*31 - 150*	*11/22/16 10:41*	*11/22/16 15:24*	*1*

Lab Sample ID: LCS 720-213524/2-A
Matrix: Water
Analysis Batch: 213599

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 213524

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			2500	1680		ug/L		67	32 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*106*		*31 - 150*

Lab Sample ID: LCSD 720-213524/3-A
Matrix: Water
Analysis Batch: 213599

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 213524

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	1410		ug/L		56	32 - 119	18	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*84*		*31 - 150*

QC Association Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75892-1

GC/MS VOA

Analysis Batch: 213592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-2	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-213592/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-213592/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-213592/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-213592/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-213592/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
720-75892-2 MS	MW-2	Total/NA	Water	8260B/CA_LUFT MS	
720-75892-2 MSD	MW-2	Total/NA	Water	8260B/CA_LUFT MS	

Analysis Batch: 213596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-1	MW-1	Total/NA	Water	8260B/CA_LUFT MS	
720-75892-3	MW-3	Total/NA	Water	8260B/CA_LUFT MS	
720-75892-4	MW-4	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-213596/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-213596/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-213596/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-213596/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-213596/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Analysis Batch: 213428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-2	MW-2	Total/NA	Water	8015B	213451
720-75892-4	MW-4	Total/NA	Water	8015B	213451
MB 720-213451/1-A	Method Blank	Total/NA	Water	8015B	213451
LCS 720-213451/2-A	Lab Control Sample	Total/NA	Water	8015B	213451
LCSD 720-213451/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	213451

Prep Batch: 213451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-2	MW-2	Total/NA	Water	3510C	
720-75892-4	MW-4	Total/NA	Water	3510C	
MB 720-213451/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-213451/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-213451/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Analysis Batch: 213510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-1	MW-1	Total/NA	Water	8015B	213574
MB 720-213524/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	213524
MB 720-213574/1-A	Method Blank	Total/NA	Water	8015B	213574
LCS 720-213574/2-A	Lab Control Sample	Total/NA	Water	8015B	213574
LCSD 720-213574/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	213574

Prep Batch: 213524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-1	MW-1	Silica Gel Cleanup	Water	3510C SGC	
720-75892-3	MW-3	Silica Gel Cleanup	Water	3510C SGC	
MB 720-213524/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-213524/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-213524/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

Prep Batch: 213574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-1	MW-1	Total/NA	Water	3510C	
720-75892-3	MW-3	Total/NA	Water	3510C	
MB 720-213574/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-213574/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-213574/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 213599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-213524/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	213524
LCSD 720-213524/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	213524

Analysis Batch: 213602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-3	MW-3	Total/NA	Water	8015B	213574

Analysis Batch: 213775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-1	MW-1	Silica Gel Cleanup	Water	8015B	213524

Analysis Batch: 213850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75892-3	MW-3	Silica Gel Cleanup	Water	8015B	213524

Lab Chronicle

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75892-1

Client Sample ID: MW-1

Lab Sample ID: 720-75892-1
Matrix: Water
Date Collected: 11/16/16 12:20
Date Received: 11/16/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		50	213596	11/23/16 15:28	LPL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			213524	11/22/16 12:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	213775	11/28/16 16:28	JXL	TAL PLS
Total/NA	Prep	3510C			213574	11/22/16 17:20	NDU	TAL PLS
Total/NA	Analysis	8015B		1	213510	11/23/16 00:00	JXL	TAL PLS

Client Sample ID: MW-2

Lab Sample ID: 720-75892-2
Matrix: Water
Date Collected: 11/16/16 12:00
Date Received: 11/16/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	213592	11/23/16 03:55	LPL	TAL PLS
Total/NA	Prep	3510C			213451	11/21/16 12:48	NDU	TAL PLS
Total/NA	Analysis	8015B		1	213428	11/21/16 20:25	JXL	TAL PLS

Client Sample ID: MW-3

Lab Sample ID: 720-75892-3
Matrix: Water
Date Collected: 11/16/16 12:45
Date Received: 11/16/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		50	213596	11/23/16 15:57	LPL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			213524	11/22/16 12:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		2	213850	11/29/16 23:31	JXL	TAL PLS
Total/NA	Prep	3510C			213574	11/22/16 17:20	NDU	TAL PLS
Total/NA	Analysis	8015B		5	213602	11/23/16 12:52	JXL	TAL PLS

Client Sample ID: MW-4

Lab Sample ID: 720-75892-4
Matrix: Water
Date Collected: 11/16/16 11:45
Date Received: 11/16/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		20	213596	11/23/16 16:26	LPL	TAL PLS
Total/NA	Prep	3510C			213451	11/21/16 12:48	NDU	TAL PLS
Total/NA	Analysis	8015B		1	213428	11/21/16 20:50	JXL	TAL PLS

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75892-1

Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

Method Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75892-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTMS	8260B / CA LUFT MS	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
Tetraethyl & Tetramethyl lead by 8270Mod	General Sub Contract Method	NONE	

Protocol References:

NONE = NONE

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75892-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-75892-1	MW-1	Water	11/16/16 12:20	11/16/16 15:35
720-75892-2	MW-2	Water	11/16/16 12:00	11/16/16 15:35
720-75892-3	MW-3	Water	11/16/16 12:45	11/16/16 15:35
720-75892-4	MW-4	Water	11/16/16 11:45	11/16/16 15:35

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1611849

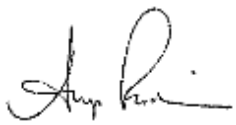
Report Created for: Test America

1220 Quarry Lane
Pleasanton, CA 94566

Project Contact: Dimple Sharma
Project P.O.:
Project Name: 72011870; The Salvation Army Oakland ARC

Project Received: 11/17/2016

Analytical Report reviewed & approved for release on 11/23/2016 by:



Angela Rydelius,
Laboratory Manager

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Glossary of Terms & Qualifier Definitions

Client: Test America
Project: 72011870; The Salvation Army Oakland ARC
WorkOrder: 1611849

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
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
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
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
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

J	result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.

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Analytical Report

Client:	Test America	**WorkOrder:**	1611849
Date Received:	11/17/16 18:05	**Extraction Method:**	SW3510C
Date Prepared:	11/18/16	**Analytical Method:**	SW8270C
Project:	72011870; The Salvation Army Oakland ARC	**Unit:**	µg/L

Organic Lead (speciated) by GC-MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1 (720-75892-1)	1611849-001A	Water	11/16/2016 12:20	GC30	129938

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Tetraethyl Lead	**0.074**	J	0.053	0.12	1	11/21/2016 12:07
Tetramethyl Lead	**0.022**	J	0.021	0.12	1	11/21/2016 12:07

Surrogates	REC (%)	Limits	
2-Fluorobiphenyl	97	50-150	11/21/2016 12:07

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2 (720-75892-2)	1611849-002A	Water	11/16/2016 12:00	GC30	129938

Analytes	Result	MDL	RL	DF	Date Analyzed
Tetraethyl Lead	ND	0.053	0.12	1	11/18/2016 20:57
Tetramethyl Lead	ND	0.021	0.12	1	11/18/2016 20:57

Surrogates	REC (%)	Limits	
2-Fluorobiphenyl	97	50-150	11/18/2016 20:57

Analyst(s): HD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3 (720-75892-3)	1611849-003A	Water	11/16/2016 12:45	GC30	129938

Analytes	Result	MDL	RL	DF	Date Analyzed
Tetraethyl Lead	**0.24**	0.053	0.12	1	11/21/2016 12:33
Tetramethyl Lead	ND	0.021	0.12	1	11/21/2016 12:33

Surrogates	REC (%)	Limits	
2-Fluorobiphenyl	107	50-150	11/21/2016 12:33

Analyst(s): HD

(Cont.)

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Analytical Report

Client:	Test America	**WorkOrder:**	1611849
Date Received:	11/17/16 18:05	**Extraction Method:**	SW3510C
Date Prepared:	11/18/16	**Analytical Method:**	SW8270C
Project:	72011870; The Salvation Army Oakland ARC	**Unit:**	µg/L

Organic Lead (speciated) by GC-MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4 (720-75892-4)	1611849-004A	Water	11/16/2016 11:45	GC30	129938

Analytes	Result	MDL	RL	DF	Date Analyzed
Tetraethyl Lead	ND	0.053	0.12	1	11/18/2016 21:48
Tetramethyl Lead	ND	0.021	0.12	1	11/18/2016 21:48

Surrogates	REC (%)	Limits	
2-Fluorobiphenyl	96	50-150	11/18/2016 21:48

Analyst(s): HD

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Quality Control Report

Client:	Test America	**WorkOrder:**	1611849
Date Prepared:	11/17/16	**BatchID:**	129938
Date Analyzed:	11/17/16	**Extraction Method:**	SW3510C
Instrument:	GC30	**Analytical Method:**	SW8270C
Matrix:	Water	**Unit:**	µg/L
Project:	72011870; The Salvation Army Oakland ARC	**Sample ID:**	MB/LCS-129938 1611732-001AMS/MSD

QC Summary Report for Organic Lead by GC-MS

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Tetraethyl Lead	ND	2.49	0.053	0.12	2.5	-	99	50-150
Tetramethyl Lead	ND	2.43	0.021	0.12	2.5	-	97	50-150
Surrogate Recovery								
2-Fluorobiphenyl	4.85	4.89			5	97	98	50-150

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Tetraethyl Lead	3.79	3.92	2.5	1.181	104	110	50-150	3.46	30
Tetramethyl Lead	2.12	2.10	2.5	ND	85	84	50-150	0.927	30
Surrogate Recovery									
2-Fluorobiphenyl	5.16	5.30	5		103	106	50-150	2.74	30

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1611849 **ClientCode: TAM**

☐ WaterTrax ☐ WriteOn ☐ EDF ☑ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Dimple Sharma
Test America
1220 Quarry Lane
Pleasanton, CA 94566
(925) 484-1919 FAX: (925) 600-3002

Email: dimple.sharma@testamericainc.com
cc/3rd Party:
PO:
ProjectNo: 72011870; The Salvation Army Oakland ARC

Bill to:
Accounts Payable
TestAmerica
4101 Shuffel Street NW
North Canton, OH 44720
AccountsPayable@testamericainc.com

Requested TAT: 3 days;

Date Received: **11/17/2016**
Date Logged: **11/17/2016**

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
1611849-001	MW-1 (720-75892-1)	Water	11/16/2016 12:20	☐	A											
1611849-002	MW-2 (720-75892-2)	Water	11/16/2016 12:00	☐	A											
1611849-003	MW-3 (720-75892-3)	Water	11/16/2016 12:45	☐	A											
1611849-004	MW-4 (720-75892-4)	Water	11/16/2016 11:45	☐	A											

Test Legend:

1	MAI_OPBMS_W (J)	2		3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Alexandra Iniguez

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.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: TEST AMERICA
Client Contact: Dimple Sharma
Contact's Email: dimple.sharma@testamericainc.com

Project: 72011870; The Salvation Army Oakland ARC
Comments:

Work Order: 1611849
QC Level: LEVEL 2
Date Logged: 11/17/2016

☐ WaterTrax ☐ WriteOn ☐ EDF ☑ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1611849-001A	MW-1 (720-75892-1)	Water	Organic Lead (speciated) <Tetraethyl Lead, Tetramethyl Lead>	2	aVOA	☐	11/16/2016 12:20	3 days	Trace	☐	
1611849-002A	MW-2 (720-75892-2)	Water	Organic Lead (speciated) <Tetraethyl Lead, Tetramethyl Lead>	2	aVOA	☐	11/16/2016 12:00	3 days	Trace	☐	
1611849-003A	MW-3 (720-75892-3)	Water	Organic Lead (speciated) <Tetraethyl Lead, Tetramethyl Lead>	2	aVOA	☐	11/16/2016 12:45	3 days	Trace	☐	
1611849-004A	MW-4 (720-75892-4)	Water	Organic Lead (speciated) <Tetraethyl Lead, Tetramethyl Lead>	2	aVOA	☐	11/16/2016 11:45	3 days	Trace	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1611849

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

RUSH **Chain of Custody Record**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sharma, Dimple	Carrier Tracking No(s):	COC No: 720-31368.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: dimple.sharma@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: McCampbell Analytical, Inc.		Accreditations Required (See note):		Job #: 720-75892-1
Address: 1534 Willow Pass Road, ,	Due Date Requested: 11/22/2016			Preservation Codes:
City: Pittsburg	TAT Requested (days):			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:
State, Zip: CA, 94565				
Phone:	PO #:			
Email:	WO #:			
Project Name: The Salvation Army Oakland ARC	Project #: 72011870			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Tetraethyl & Tetramethyl lead by 8270Mod)/ Tetraethyl & Tetramethyl lead by 8270Mod	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-1 (720-75892-1)	11/16/16	12:20 Pacific		Water			X	2	
MW-2 (720-75892-2)	11/16/16	12:00 Pacific		Water			X	2	
MW-3 (720-75892-3)	11/16/16	12:45 Pacific		Water			X	2	
MW-4 (720-75892-4)	11/16/16	11:45 Pacific		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification Unconfirmed	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)* ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	11-17-16/555	Pleas	[signature]	11/17/16 1555	MAI
2	[signature]	11/17/16 1805		[signature]	11/17/16 1805	MAI
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **Test America**
Project Name: **72011870; The Salvation Army Oakland ARC**
WorkOrder №: **1611849** Matrix: Water
Carrier: Benjamin Yslas (MAI Courier)

Date and Time Received: **11/17/2016 18:05**
Date Logged: **11/17/2016**
Received by: Alexandra Iniguez
Logged by: Alexandra Iniguez

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 ☐	NA ☐
Sample/Temp Blank temperature	Temp: 3.8°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: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	
	(Ice Type: WET ICE)		

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

Comments:

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

720-75892

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

172356

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

stAmerica Laboratories, Inc.

11/30/2016

Client Contact	Project Manager: Mike Sonke	Site Contact: Alex Flores	Date:	COC No:
ATC Group Services LLC	Tel/Fax: (209) 579-2221	Lab Contact: Dimple Sharma	Carrier:	____ of ____ COCs
Address: 1117 Lone Palm Avenue, Suite 201B	**Analysis Turnaround Time**			
City/State/Zip: Modesto, CA, 95351	Calendar (C) or Work Days (W) ____			
Phone: (209) 579-2221 FAX: (209) 579-2225	TAT if different from Below ____			
E-amil:mike.sonke@atcassociates.com	☑ 2 weeks			
Project Name: The Salvation Army Oakland ARC	☐ 1 week			Job / SDG No
Site: Facility Number: Project #: Z0540000006	☐ 2 days			
Geotracker EDF Global ID #: T10000003428.	☐ 1 day			Sampler.

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	TPH-g, BTEX, 5 Oxy's, Lead Scavengers, Naphthalene By EPA 8260B	TPH-d By EPA 8015M	TPH-d with silica gel clean up By EPA 8015/3630C	Organic Lead Speciation By Epa 8270 GC/ECD	Hydraulic Oil By EPA 8015M	Oil ad nGrease By EPA 1664A
MW-1	11/16/2016	1220	Glass	Water	8	N	G	X	X	X	X		
MW-2	11/16/2016	1200	↓	Water	8			X	X		X		
MW-3	11/16/2016	124	↓	Water	8			X	X	X	X		
MW-4	11/16/2016	1145	Glass	Water	8			X	X		X		

720-75892 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments: Fuel Oxygenates: ETBE, DIPE, MTBE, TBA and TAME, 1,2 DCA and EDB.

3.4°C

Alex Flores	Company: ATC	Date/Time: 111616/1535	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TA	Date/Time: 11/16/16 1535

Login Sample Receipt Checklist

Client: ATC Group Services LLC.

Job Number: 720-75892-1

Login Number: 75892
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-75891-1
Client Project/Site: The Salvation Army Oakland ARC

For:
ATC Group Services LLC.
701 University Avenue, Suite 200
Sacramento, California 95825

Attn: Mr. Gabe Stivala

Authorized for release by:
11/29/2016 4:21:08 PM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

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Definitions/Glossary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75891-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-75891-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-75891-1

Comments
No additional comments.

Receipt
The sample was received on 11/16/2016 3:35 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6º C.

Receipt Exceptions

The following sample was collected in an improper container: 7th Street Freight Elevator Sump. The client noted on the COC, Please preserve Oil & Grease (Amber 1L) upon lab arrival. The client is aware our O&G sub lab will preserve upon receipt.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 8015B: The following sample required a dilution due to the nature of the sample matrix: 7TH STREET FREIGHT ELEVATOR SUMP (720-75891-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 1664A: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of >2: 7TH STREET FREIGHT ELEVATOR SUMP (720-75891-1). The sample was preserved to the appropriate pH in the laboratory.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75891-1

Client Sample ID: 7TH STREET FREIGHT ELEVATOR SUMP — Lab Sample ID: 720-75891-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1500000		65000		ug/L	250		8015B	Total/NA
TPH-Hydraulic Oil Range (C19-C36)	3300000		130000		ug/L	250		8015B	Total/NA
Diesel Range Organics [C10-C28]	1300000		26000		ug/L	100		8015B	Silica Gel Cleanup
HEM	590		5.0		mg/L	1		1664A	Total/NA

This Detection Summary does not include radiochemical test results.

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75891-1

Client Sample ID: 7TH STREET FREIGHT ELEVATOR SUMP — **Lab Sample ID: 720-75891-1**
Date Collected: 11/16/16 13:28 — **Matrix: Water**
Date Received: 11/16/16 15:35

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/24/16 03:01	1
Benzene	ND		0.50		ug/L			11/24/16 03:01	1
Ethylbenzene	ND		0.50		ug/L			11/24/16 03:01	1
Toluene	ND		0.50		ug/L			11/24/16 03:01	1
Xylenes, Total	ND		1.0		ug/L			11/24/16 03:01	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/24/16 03:01	1
TBA	ND		20		ug/L			11/24/16 03:01	1
DIPE	ND		0.50		ug/L			11/24/16 03:01	1
TAME	ND		0.50		ug/L			11/24/16 03:01	1
Ethyl t-butyl ether	ND		0.50		ug/L			11/24/16 03:01	1
Naphthalene	ND		1.0		ug/L			11/24/16 03:01	1
1,2-DCA	ND		0.50		ug/L			11/24/16 03:01	1
EDB	ND		0.50		ug/L			11/24/16 03:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*67 - 130*		*11/24/16 03:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 130*		*11/24/16 03:01*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*11/24/16 03:01*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1500000**		65000		ug/L		11/22/16 17:20	11/23/16 18:11	250
TPH-Hydraulic Oil Range (C19-C36	**3300000**		130000		ug/L		11/22/16 17:20	11/23/16 18:11	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*0*	*X D*	*23 - 156*	*11/22/16 17:20*	*11/23/16 18:11*	*250*

Method: 8015B - Diesel Range Organics (DRO) (GC) - Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1300000**		26000		ug/L		11/22/16 12:04	11/28/16 20:04	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*11/22/16 12:04*	*11/28/16 20:04*	*100*
p-Terphenyl	*0*	*X D*	*31 - 150*	*11/22/16 12:04*	*11/28/16 20:04*	*100*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	**590**		5.0		mg/L		11/21/16 06:31	11/21/16 23:42	1

Surrogate Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75891-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(67-130)	(72-130)	(70-130)
720-75891-1	7TH STREET FREIGHT ELEVA	85	87	91
LCS 720-213662/5	Lab Control Sample	88	82	92
LCS 720-213662/7	Lab Control Sample	89	86	91
LCSD 720-213662/6	Lab Control Sample Dup	93	83	92
LCSD 720-213662/8	Lab Control Sample Dup	87	87	92
MB 720-213662/4	Method Blank	88	85	90

Surrogate Legend

BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		PTP1
Lab Sample ID	Client Sample ID	(23-156)
720-75891-1	7TH STREET FREIGHT ELEVA	0 X D
LCS 720-213574/2-A	Lab Control Sample	101
LCSD 720-213574/3-A	Lab Control Sample Dup	95
MB 720-213574/1-A	Method Blank	87

Surrogate Legend

PTP = p-Terphenyl

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water — **Prep Type: Silica Gel Cleanup**

		Percent Surrogate Recovery (Acceptance Limits)	
		NDA1	PTP1
Lab Sample ID	Client Sample ID	(0-5)	(31-150)
720-75891-1	7TH STREET FREIGHT ELEVA	0	0 X D
LCS 720-213524/2-A	Lab Control Sample		106
LCSD 720-213524/3-A	Lab Control Sample Dup		84
MB 720-213524/1-A	Method Blank	0.3	72

Surrogate Legend

NDA = Capric Acid (Surr)
PTP = p-Terphenyl

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-213662/4
Matrix: Water
Analysis Batch: 213662

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/23/16 19:45	1
Benzene	ND		0.50		ug/L			11/23/16 19:45	1
Ethylbenzene	ND		0.50		ug/L			11/23/16 19:45	1
Toluene	ND		0.50		ug/L			11/23/16 19:45	1
Xylenes, Total	ND		1.0		ug/L			11/23/16 19:45	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			11/23/16 19:45	1
TBA	ND		20		ug/L			11/23/16 19:45	1
DIPE	ND		0.50		ug/L			11/23/16 19:45	1
TAME	ND		0.50		ug/L			11/23/16 19:45	1
Ethyl t-butyl ether	ND		0.50		ug/L			11/23/16 19:45	1
Naphthalene	ND		1.0		ug/L			11/23/16 19:45	1
1,2-DCA	ND		0.50		ug/L			11/23/16 19:45	1
EDB	ND		0.50		ug/L			11/23/16 19:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*67 - 130*		*11/23/16 19:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*72 - 130*		*11/23/16 19:45*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*11/23/16 19:45*	*1*

Lab Sample ID: LCS 720-213662/5
Matrix: Water
Analysis Batch: 213662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	25.0	21.3		ug/L		85	62 - 130
Benzene	25.0	23.9		ug/L		96	79 - 130
Ethylbenzene	25.0	25.3		ug/L		101	80 - 120
Toluene	25.0	25.4		ug/L		102	78 - 120
m-Xylene & p-Xylene	25.0	24.7		ug/L		99	70 - 142
o-Xylene	25.0	24.6		ug/L		98	70 - 130
TBA	250	249		ug/L		100	70 - 130
DIPE	25.0	21.9		ug/L		88	69 - 134
TAME	25.0	23.0		ug/L		92	79 - 130
Ethyl t-butyl ether	25.0	22.6		ug/L		90	70 - 130
Naphthalene	25.0	22.5		ug/L		90	50 - 130
1,2-DCA	25.0	22.4		ug/L		90	61 - 132
EDB	25.0	22.7		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*82*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-213662/7
Matrix: Water
Analysis Batch: 213662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO) -C5-C12			500	412		ug/L		82	71 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

Lab Sample ID: LCSD 720-213662/6
Matrix: Water
Analysis Batch: 213662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			25.0	22.0		ug/L		88	62 - 130	3	20
Benzene			25.0	24.0		ug/L		96	79 - 130	0	20
Ethylbenzene			25.0	25.7		ug/L		103	80 - 120	2	20
Toluene			25.0	25.6		ug/L		102	78 - 120	1	20
m-Xylene & p-Xylene			25.0	25.4		ug/L		102	70 - 142	3	20
o-Xylene			25.0	25.4		ug/L		102	70 - 130	3	20
TBA			250	248		ug/L		99	70 - 130	1	20
DIPE			25.0	22.2		ug/L		89	69 - 134	2	20
TAME			25.0	23.7		ug/L		95	79 - 130	3	20
Ethyl t-butyl ether			25.0	23.1		ug/L		92	70 - 130	2	20
Naphthalene			25.0	23.9		ug/L		96	50 - 130	6	20
1,2-DCA			25.0	22.8		ug/L		91	61 - 132	2	20
EDB			25.0	23.5		ug/L		94	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*83*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 720-213662/8
Matrix: Water
Analysis Batch: 213662

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12			500	403		ug/L		81	71 - 125	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*72 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 720-213574/1-A
Matrix: Water
Analysis Batch: 213510

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 213574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		11/22/16 17:20	11/23/16 04:22	1
TPH-Hydraulic Oil Range (C19-C36)	ND		99		ug/L		11/22/16 17:20	11/23/16 04:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*87*		*23 - 156*	*11/22/16 17:20*	*11/23/16 04:22*	*1*

Lab Sample ID: LCS 720-213574/2-A
Matrix: Water
Analysis Batch: 213510

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 213574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	1840		ug/L		74	34 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*101*		*23 - 156*

Lab Sample ID: LCSD 720-213574/3-A
Matrix: Water
Analysis Batch: 213510

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 213574

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	1480		ug/L		59	34 - 115	22	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*95*		*23 - 156*

Lab Sample ID: MB 720-213524/1-A
Matrix: Water
Analysis Batch: 213510

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 213524

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		11/22/16 10:41	11/22/16 15:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0.3*		*0 - 5*	*11/22/16 10:41*	*11/22/16 15:24*	*1*
p-Terphenyl	*72*		*31 - 150*	*11/22/16 10:41*	*11/22/16 15:24*	*1*

Lab Sample ID: LCS 720-213524/2-A
Matrix: Water
Analysis Batch: 213599

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 213524

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	1680		ug/L		67	32 - 119

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 720-213524/2-A
Matrix: Water
Analysis Batch: 213599

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 213524

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*106*		*31 - 150*

Lab Sample ID: LCSD 720-213524/3-A
Matrix: Water
Analysis Batch: 213599

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 213524

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			2500	1410		ug/L		56	32 - 119	18	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*84*		*31 - 150*

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 440-370541/1-A
Matrix: Water
Analysis Batch: 370826

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 370541

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM	ND		5.0		mg/L		11/21/16 06:31	11/21/16 23:42	1

Lab Sample ID: LCS 440-370541/2-A
Matrix: Water
Analysis Batch: 370826

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 370541

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
HEM			40.0	36.6		mg/L		92	78 - 114		

Lab Sample ID: LCSD 440-370541/3-A
Matrix: Water
Analysis Batch: 370826

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 370541

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM			40.0	36.4		mg/L		91	78 - 114	1	11

GC/MS VOA

Analysis Batch: 213662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75891-1	7TH STREET FREIGHT ELEVATOR SUMP	Total/NA	Water	8260B/CA_LUFT MS	
MB 720-213662/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-213662/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCS 720-213662/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-213662/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-213662/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

GC Semi VOA

Analysis Batch: 213510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-213524/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	213524
MB 720-213574/1-A	Method Blank	Total/NA	Water	8015B	213574
LCS 720-213574/2-A	Lab Control Sample	Total/NA	Water	8015B	213574
LCSD 720-213574/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	213574

Prep Batch: 213524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75891-1	7TH STREET FREIGHT ELEVATOR SUMP	Silica Gel Cleanup	Water	3510C SGC	
MB 720-213524/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-213524/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-213524/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	

Prep Batch: 213574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75891-1	7TH STREET FREIGHT ELEVATOR SUMP	Total/NA	Water	3510C	
MB 720-213574/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-213574/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-213574/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 213599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-213524/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	213524
LCSD 720-213524/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	213524

Analysis Batch: 213601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75891-1	7TH STREET FREIGHT ELEVATOR SUMP	Total/NA	Water	8015B	213574

Analysis Batch: 213778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75891-1	7TH STREET FREIGHT ELEVATOR SUMP	Silica Gel Cleanup	Water	8015B	213524

QC Association Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75891-1

General Chemistry

Prep Batch: 370541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75891-1	7TH STREET FREIGHT ELEVATOR SUMP	Total/NA	Water	1664A	
MB 440-370541/1-A	Method Blank	Total/NA	Water	1664A	
LCS 440-370541/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 440-370541/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

Analysis Batch: 370826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-75891-1	7TH STREET FREIGHT ELEVATOR SUMP	Total/NA	Water	1664A	370541
MB 440-370541/1-A	Method Blank	Total/NA	Water	1664A	370541
LCS 440-370541/2-A	Lab Control Sample	Total/NA	Water	1664A	370541
LCSD 440-370541/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	370541

Lab Chronicle

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75891-1

Client Sample ID: 7TH STREET FREIGHT ELEVATOR SUMP

Lab Sample ID: 720-75891-1

Date Collected: 11/16/16 13:28

Matrix: Water

Date Received: 11/16/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	213662	11/24/16 03:01	LPL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			213524	11/22/16 12:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		100	213778	11/28/16 20:04	DCH	TAL PLS
Total/NA	Prep	3510C			213574	11/22/16 17:20	NDU	TAL PLS
Total/NA	Analysis	8015B		250	213601	11/23/16 18:11	JXL	TAL PLS
Total/NA	Prep	1664A			370541	11/21/16 06:31	L1A	TAL IRV
Total/NA	Analysis	1664A		1	370826	11/21/16 23:42	BAW	TAL IRV

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Certification Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75891-1

Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-17
Arizona	State Program	9	AZ0671	10-14-17
California	LA Cty Sanitation Districts	9	10256	01-31-17 *
California	State Program	9	CA ELAP 2706	06-30-18
Guam	State Program	9	Cert. No. 16-001r	01-23-17
Hawaii	State Program	9	N/A	01-29-17
Kansas	NELAP Secondary AB	7	E-10420	07-31-17
Nevada	State Program	9	CA015312016-2	07-31-17
New Mexico	State Program	6	N/A	01-29-17
Northern Mariana Islands	State Program	9	MP0002	01-29-17
Oregon	NELAP	10	4028	01-29-17
USDA	Federal		P330-15-00184	07-08-18
Washington	State Program	10	C900	09-03-17

* Certification renewal pending - certification considered valid.

Method Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75891-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTMS	8260B / CA LUFT MS	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
1664A	HEM and SGT-HEM	1664A	TAL IRV
Tetraethyl & Tetramethyl lead by 8270Mod	General Sub Contract Method	NONE	

Protocol References:

1664A = EPA-821-98-002
NONE = NONE
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565
TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022
TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: ATC Group Services LLC.
Project/Site: The Salvation Army Oakland ARC

TestAmerica Job ID: 720-75891-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-75891-1	7TH STREET FREIGHT ELEVATOR SUMP	Water	11/16/16 13:28	11/16/16 15:35

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1611850

Report Created for: Test America

1220 Quarry Lane
Pleasanton, CA 94566

Project Contact: Dimple Sharma
Project P.O.:
Project Name: 72011870; The Salvation Army Oakland ARC

Project Received: 11/17/2016

Analytical Report reviewed & approved for release on 11/23/2016 by:

Angela Rydelius,
Laboratory Manager

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Test America
Project: 72011870; The Salvation Army Oakland ARC
WorkOrder: 1611850

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
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
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
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
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

a3	sample diluted due to high organic content.
b1	aqueous sample that contains greater than ~1 vol. % sediment

McCampbell Analytical, Inc.
"When Quality Counts"

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

Analytical Report

Client:	Test America	**WorkOrder:**	1611850
Date Received:	11/17/16 18:05	**Extraction Method:**	SW3510C
Date Prepared:	11/18/16	**Analytical Method:**	SW8270C
Project:	72011870; The Salvation Army Oakland ARC	**Unit:**	µg/L

Organic Lead (speciated) by GC-MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
7Th Street Freight Elevator Sump (720-75891-1)	1611850-001A	Water	11/16/2016 13:28	GC30	129938

Analytes	Result	MDL	RL	DF	Date Analyzed
Tetraethyl Lead	ND	11	25	200	11/18/2016 22:14
Tetramethyl Lead	ND	4.3	25	200	11/18/2016 22:14

Surrogates	REC (%)	Limits	
2-Fluorobiphenyl	70	50-150	11/18/2016 22:14

Analyst(s): HD Analytical Comments: a3,b1

McCampbell Analytical, Inc.
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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	Test America	**WorkOrder:**	1611850
Date Prepared:	11/17/16	**BatchID:**	129938
Date Analyzed:	11/17/16	**Extraction Method:**	SW3510C
Instrument:	GC30	**Analytical Method:**	SW8270C
Matrix:	Water	**Unit:**	µg/L
Project:	72011870; The Salvation Army Oakland ARC	**Sample ID:**	MB/LCS-129938 1611732-001AMS/MSD

QC Summary Report for Organic Lead by GC-MS

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Tetraethyl Lead	ND	2.49	0.053	0.12	2.5	-	99	50-150
Tetramethyl Lead	ND	2.43	0.021	0.12	2.5	-	97	50-150
Surrogate Recovery								
2-Fluorobiphenyl	4.85	4.89			5	97	98	50-150

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Tetraethyl Lead	3.79	3.92	2.5	1.181	104	110	50-150	3.46	30
Tetramethyl Lead	2.12	2.10	2.5	ND	85	84	50-150	0.927	30
Surrogate Recovery									
2-Fluorobiphenyl	5.16	5.30	5		103	106	50-150	2.74	30

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1611850 **ClientCode: TAM**

☐ WaterTrax ☐ WriteOn ☐ EDF ☑ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Dimple Sharma
Test America
1220 Quarry Lane
Pleasanton, CA 94566
(925) 484-1919 FAX: (925) 600-3002

Email: dimple.sharma@testamericainc.com
cc/3rd Party:
PO:
ProjectNo: 72011870; The Salvation Army Oakland ARC

Bill to:
Accounts Payable
TestAmerica
4101 Shuffel Street NW
North Canton, OH 44720
AccountsPayable@testamericainc.com

Requested TAT: 3 days;

Date Received: **11/17/2016**
Date Logged: **11/17/2016**

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
1611850-001	7Th Street Freight Elevator Sump (720-	Water	11/16/2016 13:28	☐	A											

Test Legend:

1	MAI_OPBMS_W (J)	2		3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Alexandra Iniguez

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.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: TEST AMERICA
Client Contact: Dimple Sharma
Contact's Email: dimple.sharma@testamericainc.com

Project: 72011870; The Salvation Army Oakland ARC
Comments:

Work Order: 1611850
QC Level: LEVEL 2
Date Logged: 11/17/2016

☐ WaterTrax ☐ WriteOn ☐ EDF ☑ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1611850-001A	7Th Street Freight Elevator Sump (720-75891-1)	Water	Organic Lead (speciated)	2	VOA	☐	11/16/2016 13:28	3 days	1%+	☐	

NOTES: **- STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1611850

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

RUSH

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sharma, Dimple	Carrier Tracking No(s):	COC No: 720-31369.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: dimple.sharma@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: McCampbell Analytical, Inc.		Accreditations Required (See note):		Job #: 720-75891-1
Address: 1534 Willow Pass Road, ,	Due Date Requested: 11/22/2016			
City: Pittsburg	TAT Requested (days):			
State, Zip: CA, 94565				
Phone:	PO #:			
Email:	WO #:			
Project Name: The Salvation Army Oakland ARC	Project #: 72011870			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Tetraethyl & Tetramethyl lead by 8270Mod)/ Tetraethyl & Tetramethyl lead by 8270Mod	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
7TH STREET FREIGHT ELEVATOR SUMP (720-75891-1)	11/16/16	13:28 Pacific		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	11-17-16 1555	Pleas	[signature]	11/17/16 1555	MAI
2	[signature]	11/17/16 1805	MAI	[signature]	11/17/16 1805	MAI
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **Test America**
Project Name: **72011870; The Salvation Army Oakland ARC**
WorkOrder №: **1611850** Matrix: Water
Carrier: Benjamin Yslas (MAI Courier)

Date and Time Received: **11/17/2016 18:05**
Date Logged: **11/17/2016**
Received by: Alexandra Iniguez
Logged by: Alexandra Iniguez

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 ☐	NA ☐
Sample/Temp Blank temperature	Temp: 3.8°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: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☑	No ☐	

(Ice Type: WET ICE)

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

Comments:

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

720-75891

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

172357

Regulatory Program: ☐DW ☐NPDES ☐RCRA ☐Other:

TestAmerica Laboratories, Inc.

11/29/2016

Client Contact	Project Manager: Mike Sonke	Site Contact: Alex Flores	Date:	COC No:
ATC Group Services LLC	Tel/Fax: (209) 579-2221	Lab Contact: Dimple Sharma	Carrier:	____ of ____ COCs

Address: 1117 Lone Palm Avenue, Suite 201B
City/State/Zip: Modesto, CA, 95351
Phone: (209) 579-2221 FAX: (209) 579-2225
E-amil:mike.sonke@atcassociates.com
Project Name: The Salvation Army Oakland ARC
Site: Facility Number: Project #: Z0540000006
Geotracker EDF Global ID #: T10000003428.

Analysis Turnaround Time
Calendar (C) or Work Days (W) ____
TAT if different from Below ____
☑ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No..
Sampler:

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample (Y / N)	Composite = C / Grab = G	TPH-g, BTEX, 5 Oxy's, Lead Scavengers, Naphthalene By EPA 8260B	TPH-d By EPA 8016M	TPH-d with silica gel clean up By EPA 8015/3630C	Organic Lead Speciation By Epa 8270 GC/ECD		Hydraulic Oil By EPA 8015M	Oil ad nGrease By EPA 1664A				Sample Specific Notes:
7 th Street Freight Sump	11/16/2016	1328	Glass	Water	10	N	G	X	X	X	X		X	X				Trace amount of oil in Sample
Exterior																		Please preserve O&G upon laboratory.

720-75891 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments: Fuel Oxygenates: ETBE, DIPE, MTBE, TBA and TAME, 1,2 DCA and EDB.

4.6°C

Alex Flores	Company: ATC	Date/Time: 11/16/16 1535	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: TA	Date/Time: 11/16/16 1535

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Phone (925) 484-1919 Fax (925) 600-3002

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sharma, Dimple	Carrier Tracking No(s):	COC No: 720-31370.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: dimple.sharma@testamericainc.com	State of Origin: California	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		Job #: 720-75891-1
Address: 17461 Derian Ave, Suite 100,	Due Date Requested: 11/22/2016			
City: Irvine	TAT Requested (days):			
State, Zip: CA, 92614-5817				
Phone: 949-261-1022(Tel) 949-260-3297(Fax)	PO #:			
Email:	WO #:			
Project Name: The Salvation Army Oakland ARC	Project #: 72011870			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1664A/1664A_P_W HEM Only	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
7TH STREET FREIGHT ELEVATOR SUMP (720-75891-1)	11/16/16	13:28 Pacific		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 11/17/16 1445	Company A	Received by:	Date/Time: 11-18-16 0950	Company VE
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.: 7033-1097 4391	Cooler Temperature(s) °C and Other Remarks: 5.5 | 4.9 IR-74

Login Sample Receipt Checklist

Client: ATC Group Services LLC.

Job Number: 720-75891-1

Login Number: 75891
List Number: 1
Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ATC Group Services LLC.

Job Number: 720-75891-1

Login Number: 75891
List Number: 2
Creator: Ornelas, Olga

List Source: TestAmerica Irvine
List Creation: 11/18/16 12:58 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	