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WELL INSTALLATION AND GROUNDWATER MONITORING REPORT
BILL CHUN SERVICE STATION
2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA
FUEL LEAK CASE # RO0000382
GEOTRACKER GLOBAL ID # T0600100980

PREPARED FOR:
Ms. Carolyn C. Fong
Trustee, Lily A. Chun 1991 Trust
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PREPARED BY:
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August 14, 2014
Project No. 401896004

August 14, 2014
Project No. 401896004

Ms. Carolyn C. Fong
Trustee, Lily A. Chun 1991 Trust
720 East Hermosa Drive
San Gabriel, California 91775

Subject: Well Installation and Groundwater Monitoring Report
2301 Santa Clara Avenue
Alameda, California
Fuel Leak Case # RO0000382
GeoTracker Global ID # T0600100980

Dear Ms. Fong:

Ninyo & Moore is pleased to present this Well Installation and Groundwater Monitoring Report for the above-referenced site. This Report discusses the results, and presents conclusions and recommendations of our well installation and groundwater monitoring activities. We appreciate the opportunity to be of service to you on this project.

Sincerely,
NINYO & MOORE

Peter Sims
Project Environmental Geologist

Professional Geologist
Kristopher M. Larson
No. 8059
State of California

Kris M. Larson, PG
Principal Environmental Geologist

PDS/KML/caa

Distribution: (1) Addressee (via e-mail)

August 14, 2014

To: Mr. Jerry Wickham
Senior Hazardous Materials Specialist
Alameda County Department of Environmental Health
Health Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Perjury Statement
Well Installation and Groundwater Monitoring Report
Bill Chun Service Station
2301 Santa Clara Avenue
Alameda, California 94501
SLIC # RO0000382
Geotracker Global ID # T0600100980

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

Carolyn C Fong, Trustee

Ms. Carolyn Fong
Trustee for Lily A. Chun 1991 Trust
711 E. Hermosa Drive
San Gabriel, California 91775

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1. INTRODUCTION

Ninyo & Moore has conducted well installation and groundwater monitoring activities at the Bill Chun Service Station property located at 2301 Santa Clara Avenue in Alameda, California (site). This report was prepared in general accordance with the proposed well installation and groundwater monitoring methodology presented in the Corrective Action Plan (CAP) dated August 1, 2013. The CAP was approved, and this report documenting implementation of well installation and groundwater monitoring activities was requested in the Alameda County Environmental Health directive letter dated March 17, 2014.

1.1. Purpose

The purpose of the Well Installation and Groundwater Monitoring Report is to document field activities relating to the well installation and soil and groundwater sample collection and analysis of site contaminants of concern (COCs), which include total petroleum hydrocarbons as gasoline (TPHg) and benzene compounds. This report will also discuss COC groundwater plumes and bioattenuation parameters.

1.2. Site Description

The site is located at 2301 Santa Clara Avenue, in the City and County of Alameda, California, as presented on Figure 1. The rectangular lot measures approximately 85 feet long by 40 feet wide. The site is occupied by a small kiosk, a canopy, and a garage. The project site is located in a mostly commercial area with some residential buildings. The site is bordered by Oak Street to the northwest, a meeting hall and residences to the northeast and east, a retail store to the southeast (formerly Towata Flowers) and by Santa Clara Avenue to the southwest. The site vicinity is presented on Figure 2. The site plan and adjacent properties are presented on Figure 3.

1.3. Site Background

The site is a former gasoline service station, and has been the subject of numerous subsurface assessments, remedial action plans, groundwater monitoring and closure petitions since 1993, when three underground storage tanks (USTs) were removed from the site. The site is listed as a Leaking Underground Storage Tank (LUST) facility on the Regional Water Quality Control Board (RWQCB) GeoTracker database and as a Leaking Underground Fuel Tank (LUFT) and Spills, Leaks, Investigation and Cleanup (SLIC) facility on the ACEH database.

2. HISTORICAL CONSTITUENT OF CONCERN CONCENTRATIONS IN GROUNDWATER

In a directive letter dated September 8, 2011, the ACEH requested that historical COC concentrations in each well be presented in a clear and concise manner. As part of the June 2012 Well Installation and Groundwater Sampling Report, Ninyo & Moore obtained historical data from reports found on the online GeoTracker database which is presented in Appendix A. Historical concentrations of COCs are presented in separate tables for each well. An inventory of all wells at the site is presented in Table 1.

3. WELL INSTALLATION

The field work conducted by Ninyo & Moore included extraction well and injection well installation, well development, and a well location and top-of-casing (TOC) survey.

3.1. Pre-field Activities

Pre-field activities included updating our site specific Health and Safety Plan (HASP), and obtaining drilling permits and underground utility clearance.

3.1.1. Health and Safety Plan (HASP)

Ninyo & Moore updated a previously prepared Site Specific HASP with current site information, as required in 29 CFR Part 1910.120. The HASP addressed health and safety

concerns with respect to the activities conducted by Ninyo & Moore and its subcontractors.

3.1.2. Permits

A Water Resources Well Permit was obtained from the Alameda County Public Works Agency for the installation of two injection wells and three extraction wells. A copy of the permit is included in Appendix B. Ninyo & Moore notified the ACPWA prior to drilling activities. On Aril 1, 2014, Mr. Steve Miller, ACPWA Well Inspector, was contacted over the phone for approval to install the wells. Mr. Miller stated that he was unable to visually inspect the well installation and verbally approved the well installation procedures.

3.1.3. Underground Utility Clearance

Within 48 hours of conducting well installation activities, Ninyo & Moore marked the site boundary and well installation drilling locations in white paint. Ninyo & Moore notified Underground Services Alert (USA) of the work to be performed and to request that member utilities mark the locations of subsurface utilities at the site and within the site vicinity.

3.2. Well Installation Activities

On April 1 and 2, 2014, injection wells EW-18 and EW-19 and extraction wells EW-20, EW-21, and EW-22 were installed by Penecore Drilling under the oversight of Ninyo & Moore. Field activities included advancing soil borings in the locations of the proposed wells, installation of wells, well development, and well surveying activities.

3.2.1. Soil Sampling Methodology

Soil borings EW-18 through EW-22 were advanced prior to well installation (Figure 3). The soil borings were advanced using a direct push drill rig from the surface to a depth

of approximately 10 feet below ground surface (bgs). Two soil samples were collected from each of the borings.

Soil cores were inspected for physical signs of impacts, including odors and staining, and were field screened using a hand-held photo ionization detector (PID) to evaluate the presence and relative concentration of organic vapors in the soil. The results of the field screening PID measurements were recorded on the boring logs presented in Appendix C. Soil samples were collected at depths of 5 and 10 feet bgs. A lithologic description of the soils encountered is described on detailed boring logs (Appendix C) in general conformance with the Unified Soil Classification System (USCS).

Soil samples were collected in the appropriate laboratory supplied containers, which were labeled with the project name/location, sample identification, sampling date/time, and sampler's initials. Soil samples collected for analysis of volatile organic compounds (VOCs) and TPHg were collected in Encore containers and/or preserved vials in accordance with EPA Method 5035. The sample containers were placed into an insulated cooler containing ice for storage and transport to the analytical laboratory. Chain-of-custody documentation was completed and accompanied the soil samples to the analytical laboratory.

Upon completion of soil sampling, borings EW-18 through EW-22 were over-drilled for well installation as described below.

3.2.2. Well Installation

Injection wells EW-18 and EW-19 were installed to a depth of 15 feet bgs and the extraction wells EW-20, EW-21, and EW-22 were installed to a depth of 25 feet bgs using an 8.25-inch diameter hollow stem auger. The wells were screened between 5 feet bgs and the completed well depth using 4-inch diameter, 0.01-inch slotted schedule 40 PVC screen. Threaded PVC end caps were attached to the bottom of the screen. The upper 5 feet of the well casing was composed of blank schedule 40 PVC. Well construction

was completed by pouring # 2/12 Monterey Sand into the well annulus to approximately 1 foot above the screened PVC, adding 1 foot of bentonite chips above the sand, and finishing the well within 1-foot of the ground surface with grout (neat cement) for the sanitary seal. Ten-inch diameter traffic rated monitoring well boxes were installed in concrete within the top foot of the subsurface. Monitoring Well Construction Schematics are included in Appendix C.

3.2.3. Well Survey

On April 7, 2014, wells EW-18 through EW-22 were developed by surging, pumping and bailing using a surge block, bailer, and peristaltic pump. Each well was surged approximately 50 strokes with a decontaminated surge block within the screened portion of the well to move fine sediment from the sand pack into the water column in the well casing. A bailer was subsequently lowered to the bottom of the well and removed along with any sediment that had settled to the bottom of the well. Once bailing had removed the majority of sediment, groundwater was purged from the wells using a peristaltic pump with new tubing until groundwater parameters stabilized. Groundwater parameters including turbidity, pH, temperature, and electrical conductivity were measured during well purging and recorded on groundwater sampling field data sheets. Copies of the field data sheets are included in Appendix D.

3.2.4. Well Survey

On April 6, 2014, the newly installed wells were surveyed by Virgil Chavez Land Surveying, a California licensed surveyor, including coordinates for northings, eastings, and elevations. Well elevations were measured at the top of the well casings (at a notch placed by the surveyors on the north edge of the casing). A copy of the survey report is included in Appendix D.

3.2.5. Decontamination Procedures

During soil boring and well installation activities, down-hole equipment was decontaminated using a steam cleaner between boring locations. During monitoring well

development and sampling activities, non-dedicated or disposable equipment which came in contact with groundwater was decontaminated between use at different monitoring wells using a three-bucket wash consisting of an initial rinse and scrubbing in potable water, a second rinse and scrubbing in a non-phosphate based detergent solution, and a final rinse in potable water.

3.2.6. Investigation Derived Waste (IDW) Disposal

IDW generated during soil sampling, well installation, and well development activities included soil cuttings from borings, decontamination rinsate water, and purged groundwater which were stored on-site in properly labeled 55-gallon drums. Twelve drums of soil cuttings and eleven drums of decontamination rinsate and purged groundwater were generated. The drums were transported for disposal by Belshire Environmental Services as non-hazardous waste.

Disposable supplies including bailers and nitrile gloves were disposed of as municipal waste.

3.2.7. Soil Sample Analysis

Soil samples collected from 5 and 10 feet bgs in borings EW-18 through EW-22 were submitted to Advanced Technology Laboratories (ATL), a state-certified analytical laboratory located in Signal Hill, California, for analysis of TPHg using EPA Method 8015M and VOCs using EPA Method 8260B. Results of soil sample analysis are discussed in Section 5.0.

4. GROUNDWATER SAMPLING EVENT

On June 25 and 26, 2014, Ninyo & Moore conducted groundwater monitoring event of monitoring wells MW-4R, MW-5R, MW-6R, MW-7R, MW-8, MW-9, MW-10, MW-11R, MW-12, MW-13, MW-14, MW-15, and MW-16; injection wells EW-14, EW-15, EW-16, EW-17, EW-18, EW-19; and extraction wells EW-20, EW-21, and EW-22. Shallow groundwater elevation contours

are illustrated on Figure 4, and detected concentrations of TPHg and benzene are illustrated on Figures 5 and 6, respectively.

4.1. Depth to Groundwater Measurement

In order to allow the groundwater level to reach equilibrium in each well, the well caps were removed approximately 20 minutes prior to the measurement of the depth to static groundwater from top of casing using a water level meter accurate to 0.01 feet. The water-level meter was decontaminated between wells.

4.2. Groundwater Sampling

Prior to sample collection, a minimum of three casing volumes of groundwater were purged from each monitoring well using a peristaltic pump or disposable bailer and from each extraction well or injection well using a whale pump. Dedicated pump tubing, new disposable bailers, and decontaminated whale pump were used in each well to minimize the likelihood of cross contamination between wells. Groundwater parameters (pH, temperature, electrical conductivity, dissolved oxygen, and oxidation-reduction potential) and physical characteristics were recorded during purging. Copies of the groundwater sampling field data sheets are presented in Appendix E.

Subsequent to purging, groundwater samples were collected from each well using a peristaltic pump or bailer. During sample collection, the pump was run at low speed to minimize disturbance of groundwater. The groundwater samples were collected in the appropriate sample containers, labeled, wrapped in bubble wrap for protection, and placed into a cooler containing ice and transported under chain-of-custody to ATL; a state certified analytical laboratory located in Signal Hill, California.

4.3. Decontamination Procedures

Equipment that came into contact with potentially contaminated water was decontaminated consistently to assure the quality of samples collected and reduce potential cross contamina-

tion. Dedicated pump tubing or new bailers were used at each well during purging to prevent cross contamination. Disposable equipment intended for one-time use was not decontaminated. Decontamination occurred prior to and after each use of a piece of equipment which came in contact with groundwater. Decontamination was performed using a triple rinse consisting of a rinse with a non-phosphate based detergent solution, an initial rinse in potable water, and a final rinse in potable water. Nitrile gloves were changed between each sample collection to minimize the likelihood of cross contamination.

4.4. Investigation Derived Waste

IDW consisting of purged groundwater and decontamination rinsate water was stored in properly labeled 55-gallon steel drums which were left in a secure location on-site. Disposal equipment intended for one time use (nitrile gloves, bailers, etc.) were disposed of as municipal waste. Following waste profiling, the 55-gallon drums of IDW will be transported by a licensed hazardous waste hauler to an appropriate facility for disposal.

4.5. Laboratory Analysis

Groundwater samples from each well were analyzed by ATL for TPHg by EPA Method 8015B; VOCs by EPA Method 8260; iron, manganese, and potassium by EPA Method 200.7; nitrate, nitrite, phosphate, and sulfate by EPA Method 300.0; ferric iron by calculation; ferrous iron by Standard Method (SM) 3500-Fe D; and nitrogen as ammonia by SM 4500-NH3 D.

5. SOIL SAMPLING RESULTS

The following section summarizes the results of the soil sampling conducted on April 1 and 2, 2014. A summary of the soil sample analytical results is presented in Table 2 and a copy of the laboratory analytical report is presented in Appendix C. The laboratory results are compared to Table A of the RWQCB Environmental Screening Levels (ESLs), Residential Land Use and Commercial/Industrial Land Use.

5.1. Total Petroleum Hydrocarbons as Gasoline in Soil

Total petroleum hydrocarbons as gasoline was not detected in the soil samples collected from 5 feet bgs in borings EW-18 through EW-22, nor was it detected in the soil samples collected from 10 feet bgs in borings EW-21 and EW-22. However, TPHg was detected at concentrations of 1,600 and 1,300 mg/kg in the samples collected at 10 feet bgs from borings EW-18 and EW-19, and 370 mg/kg in the 10 ft sample from EW-20. The EW-18 and EW-19 TPHg results exceeded the ESL for Residential Land Use of 100 mg/kg and the ESL for Commercial/Industrial Land Use of 500 mg/kg, and the EW-20 TPHg result exceeded the Residential Land Use ESL of 100 mg/kg.

5.2. VOCs in Soil

Thirteen VOCs were detected in the 10 soil samples analyzed. Seven of the 13 VOCs do not have established ESLs at this time. VOCs with established ESLs are discussed below.

- Benzene was not detected in all 10 soil samples. However, the soil samples collected at 10 feet bgs from borings EW-18, EW-19, and EW-20 were diluted by the laboratory and, as a result, their detection limits exceeded the ESLs for Residential and Industrial/Commercial Land Use of 44 mg/kg.

- Toluene was not detected in 8 of 10 soil samples. Toluene was reported at 24,000 and 12,000 mg/kg in soil samples collected at 10 feet bgs in borings EW-18 and EW-19, respectively, which exceeded the ESLs for Residential and Industrial/Commercial Land Use of 2,900 mg/kg.

- Ethylbenzene was not detected in 8 of 10 soil samples. Ethylbenzene was reported at 33,000 and 27,000 mg/kg in soil samples collected at 10 feet bgs in borings EW-18 and EW-19, respectively, which exceeded the ESLs for Residential and Industrial/Commercial Land Use of 3,300 mg/kg.

- Total xylene was not detected in 8 of 10 soil samples. Total xylenes were reported at 169,000 and 139,000 mg/kg in soil samples collected at 10 feet bgs in borings EW-18 and EW-19, respectively, which exceeded the ESLs for Residential and Industrial/Commercial Land Use of 2,300 mg/kg.

- Naphthalene was not detected in 8 of 10 soil samples. Naphthalene was reported at 8,700 and 7,900 mg/kg in soil samples collected at 10 feet bgs in borings EW-18 and

EW-19, respectively, which exceeded the ESLs for Residential and Industrial/Commercial Land Use of 3,300 mg/kg.

- Bromomethane was not detected in all 10 soil samples. However, the soil samples collected at 10 feet bgs from borings EW-18 and EW-19 were diluted by the laboratory and, as a result, their detection limits exceeded the ESLs for Residential and Industrial/Commercial Land Use of 280 mg/kg.

6. GROUNDWATER SAMPLING RESULTS

The following section summarizes the results of the groundwater sampling event conducted on June 25 and 26, 2014.

6.1. Depth to Groundwater and Groundwater Flow Direction

The depth from TOC to groundwater ranged from 7.78 feet below TOC in MW-9 to 9.87 feet below TOC in MW-13. The groundwater level measurements and the calculated groundwater elevations are presented on Table 3.

Shallow groundwater elevation contours are presented on Figure 4. Based on the contours on Figure 4, the groundwater gradient appears to be relatively flat and highly variable. Based on the site location, it is possible that groundwater in the site vicinity is tidally influenced.

6.2. Groundwater Sample Laboratory Results

A summary of the groundwater sample analytical results are presented in Tables 4 and 5 and a copy of the laboratory analytical report is presented in Appendix F. The laboratory results are compared to Table F-1A of the RWQCB ESLs, Residential Land Use, Groundwater is Current or Potential Source of Drinking Water.

6.2.1. Total Petroleum Hydrocarbons as Gasoline in groundwater

Concentrations of TPHg in groundwater ranged from below the laboratory reporting limit of 50 µg/L in wells MW-9, MW-10, MW-13, MW-14, and EW-16 to 240,000 µg/L in

well MW-7R. The ESL for TPHg is 100 µg/L. Concentrations of TPHg in shallow groundwater are presented on Figure 5.

6.2.2. Benzene in Groundwater

Benzene concentrations in groundwater ranged from below the laboratory reporting limit of 0.5 µg/L in wells MW-9, MW-10, MW-11R, MW-13, MW-14, MW-15, MW-16, and EW-16 to 18,000 µg/L in well MW-7R. The ESL for benzene is 1.0 µg/L. Benzene concentrations in shallow groundwater are presented on Figure 6.

6.2.3. Other VOCs in Groundwater

Other VOC concentrations in groundwater which exceeded their respective ESLs included toluene, ethylbenzene, total xylenes, naphthalene, and 1,2-dichloroethane. The highest concentrations of these COCs included 38,000 µg/L of toluene, 3,900 µg/L of ethylbenzene, and 21,100 µg/L of total xylenes in well MW-7R; 720 ug/l of naphthalene in EW-17; and 2.7 µg/L of 1,2-dichloroethane in EW-20.

6.2.4. Bioattenuation Parameters

Groundwater samples were laboratory analyzed for iron, manganese, potassium, nitrate, nitrite, phosphate, sulfate, ferric iron, ferrous iron, and nitrogen as ammonia. Groundwater was monitored in the field for temperature, conductivity, pH, oxidation-reduction potential, and dissolved oxygen using a hand held YSI Pro Plus Quatro. Within the petroleum hydrocarbon plume, electron acceptors are depleted as evident by the relatively lower or non-detectable concentrations of nitrate and sulfate and the presence of relatively higher concentrations of methane in wells with higher concentrations of COCs in groundwater as compared to wells with lower concentrations of COCs in groundwater. Based on review of the bioattenuation data, groundwater within the plume area appears to be deficient in electron acceptors and nutrients.

7. QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

Upon collection, groundwater samples were immediately placed on ice for storage during field activities, pending transportation to the laboratory. At the conclusion of the sampling event, the samples were transferred to ATL, a California ELAP Certified Laboratory, under the appropriate chain-of-custody documentation.

7.1. Surrogate Recoveries

Notes in the laboratory analytical report include "Surrogate recovery was above laboratory acceptance limit" for soil samples EW-19-10 and EW-20-10 while analyzing for TPHg. According to the laboratory if the surrogate recovery is high it does not affect the sample result. Surrogate recoveries were within the limits established by the laboratory for the remaining sample analyses, therefore the surrogate recovery results are considered satisfactory and acceptable.

7.2. Laboratory QA/QC Samples

The laboratory analyses followed the approved methods. Laboratory QA/QC samples included method blanks, laboratory control samples (LCS), matrix spikes (MS), and matrix spike duplicates (MSD). The percentage recoveries were within the specific acceptance limits for these types of samples with the exception of a soil sample MSD and groundwater sample MS and MSD samples. The soil sample MS and MSD were calculated based on the raw value. Groundwater MS and MSD recoveries were outside of the acceptance limit so the analytical batch was validated by the LCS. Therefore the relevant QA/QC results were satisfactory and acceptable.

7.3. Sample Dilutions

Due to the high concentrations of petroleum constituents and/or possible matrix interference in some of the samples, dilution factors ranging from 50 to 500 were required prior to analysis of some samples. Because of the required sample dilution, detection limits were

increased for soil samples EW-18-10, EW-19-10, and EW-20-10 as well as all groundwater samples.

7.4. "J Flagged" (Estimated) Results

Because higher detection limits were reported for samples requiring dilution, Ninyo & Moore requested that ATL report concentrations detected between the Method Detection Limit (MDL) and Practical Quantitation Limit (PQL). The MDL is lowest detectable concentration for a given analytical method, and only those concentrations which are detected above the PQL (referred to as the detection limit in this report) are considered to be reliable and accurate. Concentrations between the MDL and PQL are considered estimated values and are indicated with "J Flags" in the laboratory analytical report and in Table 2 and Table 4.

7.5. QA/QC Conclusions

No outstanding issues were identified during the course of the QA/QC review. Overall, the presented data are reliable and useable for project decision making.

8. CONCLUSIONS

Based on the soil sampling, well installation, and groundwater sampling activities conducted and the laboratory analytical report, Ninyo & Moore presents the following conclusions:

- Soil samples collected from 5 feet bgs in all five borings as well as soil samples collected from 10 feet bgs in borings EW-21 and EW-22 had TPHg and VOC concentrations below their respective ESLs. Soil samples collected from 10 feet bgs in borings EW-18, EW-19, and EW-20 had TPHg and VOC concentrations greater than the ESLs.

- Based on depth to water measurements collected on June 25 and 26, 2014, and surveyed TOC data, the groundwater flow direction appears to be variable, mostly flat, and may be tidally influenced.

- Dissolved phase TPHg and/or VOC concentrations in groundwater exceed their respective ESLs in several wells, including MW-4R through MW-7R, MW-8, MW-11R, MW-12, MW-

15, MW-16, EW-14, EW-15, and EW-17 through EW-20. Concentrations have decreased from the April 14, 2013 groundwater sampling event with the exception of increases in TPHg and benzene in MW-7R, toluene in MW-12, total xylenes in MW-6R, and naphthalene in MW-5R, MW-6R, MW-7R, and MW-12.

- The TPHg and BTEX dissolved phase groundwater plume appears to have reduced in area compared to the previous groundwater monitoring event of April, 2013. The plume is continuing to migrate off site predominantly toward the west to southwest and east to northeast directions from the former UST locations.

9. RECOMMENDATIONS

Based on the conclusions discussed above, Ninyo & Moore recommends continued implementation of the preferred remedial alternative (groundwater recirculation and enhanced bioremediation) presented in the CAP dated August 1, 2013, including ongoing groundwater monitoring as detailed in the Operations and Maintenance Plan dated December 24, 2013.

10. LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this assessment did not include an evaluation of geotechnical conditions or potential geologic hazards.

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. Further assessment of potential adverse environmental impacts from past on-site and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between sampling locations. Varia-

tions in soil and/or groundwater conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory which is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Ninyo & Moore's conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than those noted is undertaken at said parties' sole risk.

11. REFERENCES

Ninyo & Moore, 2013a, Corrective Action Plan, Bill Chun Service Station, 2301 Santa Clara Avenue, Alameda, California, dated August 1.

Ninyo & Moore, 2013b, Operations and Maintenance Plan, Bill Chun Service Station, 2301 Santa Clara Avenue, Alameda, California, dated December 24.

San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Interim Final, Oakland, California, December 2013.

TABLE 1 - MONITORING WELL INVENTORY

Monitoring Well ID	Date Installed	Total Depth bgs	Riser Interval bgs	Screened Interval bgs[(1)]	Casing Diameter	Notes
MW-1	1/1993	25.0	0-10	10-25	2"	Abandoned 5/2012 because the riser was too deep
MW-2	1/1993	25.0	0-10	10-25	2"	Abandoned 5/2012 because the riser was too deep and an ORC sock was stuck in the well
MW-2R	5/2012	25.0	0-5	5-25	2"	Replaced MW-2
MW-3	1/1993	25.0	0-10	10-25	2"	Abandoned 5/2012 because the riser was too deep
MW-4	9/1993	25.0	0-7	7-25	2"	Abandoned 5/2012 because the riser was too deep
MW-4R	5/2012	25.0	0-5	5-25	2"	Replaced MW-4
MW-5	9/1993	25.0	0-7	7-25	2"	Abandoned 5/2012 because the riser was too deep
MW-5R	5/2012	25.0	0-5	5-25	2"	Replaced MW-5
MW-6	9/1993	25.0	0-7	7-25	2"	Abandoned 5/2012 because the riser was too deep
MW-6R	5/2012	25.0	0-5	5-25	2"	Replaced MW-6
MW-7	9/1993	25.0	0-7	7-25	2"	Abandoned 5/2012 because the casing was damaged and an ORC sock was stuck in the well
MW-7R	5/2012	25.0	0-5	5-25	2"	Replaced MW-7
MW-8	11/1995	14.0	0-5	5-14	2"	Redeveloped in 5/2012
MW-9	11/1995	20.0	0-5	5-20	2"	Redeveloped in 5/2012
MW-10	11/1995	16.5	0-6.5	6.5-16.5	2"	Redeveloped in 5/2012
MW-11	11/1995	20.0	0-5	5-20	2"	Abandoned 5/2012 because the well casing was not schedule 40 PVC (too thin)
MW-11R	5/2012	25.0	0-5	5-25	2"	Replaced MW-11
BJ	5/2005	13.0	0-8	8-13	--	The well could not be located during the May 22, 2012 well survey or any time since
BK	5/2005	11.0	0-6	6-11	--	The well could not be located during the May 22, 2012 well survey or any time since
MW-12 (former BL)	5/2005	24.0	0-14	14-24	2"	Well ID was changed from BL to MW-12 to conform with site well identification scheme
MW-13 (former BG)	5/2005	20.0	0-15	15-20	2"	Well ID was changed from BG to MW-13 to conform with site well identification scheme
MW-14 (former BF)	5/2005	15.0	0-5	5-15	2"	Well ID was changed from BF to MW-14 to conform with site well identification scheme
MW-15 (former BH)	5/2005	30.0	0-20	20-30	2"	Well ID was changed from BH to MW-15 to conform with site well identification scheme
MW-16 (former BM)	5/2005	30.0	0-20	20-30	2"	Well ID was changed from BM to MW-16 to conform with site well identification scheme
EW-12	10/2002	25.0 [(2)]	0-7	7-25	4"	Abandoned 5/2012 because the riser was too deep
EW-13	10/2002	25.0 [(2)]	0-7	7-25	4"	Abandoned 5/2012 because the seal is cracked
EW-14	10/2002	25.0 [(2)]	0-7	7-25	4"	TOC was cut down to fit in well box, redeveloped in 5/2012
EW-15	1/2004	25.0 [(2)]	0-7	7-25	4"	Redeveloped in 5/2012
EW-16	1/2004	25.0 [(2)]	0-7	7-25	4"	Redeveloped in 5/2012
EW-17	1/2004	25.0 [(2)]	0-7	7-25	4"	Redeveloped in 5/2012
EW-18	4/2014	15.0	0-5	5-15	4"	
EW-19	4/2014	15.0	0-5	5-15	4"	
EW-20	4/2014	25.0	0-5	5-25	4"	
EW-21	4/2014	25.0	0-5	5-25	4"	
EW-22	4/2014	25.0	0-5	5-25	4"	

NOTES:

DTW = depth to water measured from TOC on May 10, 2012.
bgs = feet below ground surface
TOC = top of casing
(1) Screened interval data for wells installed prior to May 2012 is based on historical documents in databases
(2) Reported as 22 feet bgs on GeoTracker and 25 feet bgs in historical reports. Field measurements indicate the total well depths are approximately 25 feet from TOC.

TABLE 2 – SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS - TPHg and VOCs

Sample ID	Date Collected	Sample Depth (feet bgs)	TPHg (mg/kg)	VOCs (µg/kg)														
				Benzene[1]	Toluene	Ethylbenzene	Xylenes (total)	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromomethane[1]	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Other VOCs
EW-18-5	4/2/2014	5	ND<1.0	ND<4.7	ND<4.7	ND<4.7	ND<9.3	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND<4.7	ND
EW-18-10	4/2/2014	10	**1,600**	**ND<2,000**	**24,000**	**33,000**	**169,000**	**8,700**	6,600	21,000	2,700	**ND<2,000**	3,500	6,300	12,000	2,000 J	ND
EW-19-5	4/2/2014	5	ND<1.0	ND<4.5	ND<4.5	ND<4.5	ND<8.9	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND
EW-19-10	4/2/2014	10	**1,300**	**ND<2,300**	**12,000**	**27,000**	**139,000**	**7,900**	64,000	20,000	960 J	**ND<2,300**	3,100	6,300	11,000	2,000 J	ND
EW-20-5	4/2/2014	5	ND<1.0	ND<4.2	ND<4.2	ND<4.2	ND<8.4	ND<4.2	ND<4.2	ND<4.2	ND<4.2	ND<4.2	ND<4.2	ND<4.2	ND<4.2	ND<4.2	ND
EW-20-10	4/2/2014	10	**370**	**ND<200**	ND<200	ND<200	ND<200	330	ND<200	ND<200	ND<200	ND<200	460	130 J	630	230	ND
EW-21-5	4/1/2014	5	ND<1.0	ND<3.9	ND<3.9	ND<3.9	ND<7.7	ND<3.9	ND<3.9	ND<3.9	ND<3.9	ND<3.9	ND<3.9	ND<3.9	ND<3.9	ND<3.9	ND
EW-21-10	4/1/2014	10	ND<1.0	ND<3.6	ND<3.6	ND<3.6	ND<7.1	ND<3.6	ND<3.6	ND<3.6	ND<3.6	ND<3.6	ND<3.6	ND<3.6	ND<3.6	ND<3.6	ND
EW-22-5	4/1/2014	5	ND<1.0	ND<4.5	ND<4.5	ND<4.5	ND<9.0	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND<4.5	ND
EW-22-10	4/1/2014	10	ND<1.0	ND<3.7	ND<3.7	ND<3.7	ND<7.4	ND<3.7	ND<3.7	ND<3.7	ND<3.7	ND<3.7	ND<3.7	ND<3.7	ND<3.7	ND<3.7	ND
ESLs for Residential Land Use			100	44	2,900	3,300	2,300	1,200	NE	NE	NE	280	NE	NE	NE	NE	NA
ESLs for Commercial/Industrial Land Use			500	44	2,900	3,300	2,300	1,200	NE	NE	NE	280	NE	NE	NE	NE	NA

Notes:
TPHg - total petroleum hydrocarbons as gasoline analyzed by EPA Method 8015B.
VOCs - Volatile Organic Compounds were analyzed by EPA Method 8260B.
bgs = below ground surface
mg/kg = milligrams per kilogram, µg/kg = micrograms per kilogram
Only VOCs detected above laboratory reporting limits are shown in table.
ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels, Table A, Shallow Soil Screening Levels (December, 2013
ND<x = indicates not detected above laboratory detection limit of x (detection limits vary, see lab report).
J = Analyte detected below the practical qantitation limit but above or equal to the method detection limit. Result is an estimated concentration.
NE = not established
NA = not applicable
Bold indicates concentration or detection limit is above ESL for Residential Land Use
Shaded indicates concentration or detection limit is above the ESL for Commercial/Industrial Land Use
1 = Several samples were diluted and, as a result, their detection limits exceeded ESLs for Residential and Industrial/Commercial Land Use

TABLE 3

SEMI-ANNUAL GROUNDWATER MONITORING DATA

Well No.	Date	TOC Elevation (feet MSL)	Total Well Depth (feet)	Depth to Liquid (feet)	Depth to Water (feet)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)	Change in Groundwater Elevation (feet)		Comments
MW-2R	05/10/12	28.56	25.18	7.81	7.81	0.00	20.75	NA	NA	2" Diameter well
MW-2R	11/14/12	28.56	NM	NM	NM	ND	NA	NA	NA	Not Sampled and only gauged for LPH
MW-2R	04/17/13	29.56	NM	NM	NM	ND	NA	NA	NA	Not gauged nor sampled
MW-2R	06/25/14	29.56	NM	NM	NM	ND	NA	NA	NA	Not gauged nor sampled
MW-4R	05/10/12	28.45	25.13	7.86	7.86	0.00	20.59	NA	NA	2" Diameter well
MW-4R	11/14/12	28.45	25.12	8.58	8.58	0.00	19.87	Decrease	-0.72	
MW-4R	04/17/13	28.45	25.10	8.13	8.13	0.00	20.32	Rise	0.45	
MW-4R	06/25/14	28.45	24.87	8.84	8.84	0.00	19.61	Decrease	-0.71	
MW-5R	05/10/12	28.25	23.79	7.46	7.46	0.00	20.79	NA	NA	2" Diameter well
MW-5R	11/14/12	28.25	23.78	8.41	8.41	0.00	19.84	Decrease	-0.95	
MW-5R	04/17/13	28.25	23.70	7.65	7.65	0.00	20.60	Rise	0.76	
MW-5R	06/25/14	28.25	23.50	8.57	8.57	0.00	19.68	Decrease	-0.92	
MW-6R	05/10/12	28.07	25.22	7.21	7.21	0.00	20.86	NA	NA	2" Diameter well
MW-6R	11/14/12	28.07	25.20	8.31	8.31	0.00	19.76	Decrease	-1.10	
MW-6R	04/17/13	28.07	24.90	7.60	7.60	0.00	20.47	Rise	0.71	
MW-6R	06/25/14	28.07	24.87	8.49	8.49	0.00	19.58	Decrease	-0.89	
MW-7R	05/10/12	28.41	25.33	7.63	7.63	0.00	20.78	NA	NA	4" Diameter well
MW-7R	11/14/12	28.41	25.30	8.68	8.68	0.00	19.73	Decrease	-2.48	
MW-7R	04/17/13	28.41	24.95	7.85	7.85	0.00	20.56	Rise	0.83	
MW-7R	06/25/14	28.41	24.97	8.79	8.79	0.00	19.62	Decrease	-0.94	
MW-8	05/10/12	28.01	14.16	7.74	7.74	0.00	20.27	NA	NA	2" Diameter well
MW-8	11/14/12	28.01	14.15	8.09	8.09	0.00	19.92	Decrease	-0.35	
MW-8	04/17/13	28.01	14.00	7.68	7.68	0.00	20.33	Rise	0.41	
MW-8	06/25/14	28.01	13.84	8.25	8.25	0.00	19.76	Decrease	-0.57	
MW-9	05/10/12	27.23	15.09	6.25	6.25	0.00	20.98	NA	NA	2" Diameter well
MW-9	11/14/12	27.23	NM	NM	NM	NM	NA	NA	NA	Not gauged nor sampled
MW-9	04/17/13	28.23	NM	NM	NM	NM	NA	NA	NA	Not gauged nor sampled
MW-9	06/26/14	28.23	14.82	7.78	7.78	0.00	20.45	NA	NA	
MW-10	05/10/12	27.45	13.12	6.49	6.49	0.00	20.96	NA	NA	2" Diameter well
MW-10	11/14/12	27.45	13.12	7.31	7.31	0.00	20.14	Decrease	-0.82	
MW-10	04/18/13	27.45	12.95	7.04	7.04	0.00	20.41	Rise	0.27	
MW-10	06/26/14	27.45	12.86	7.86	7.86	0.00	19.59	Decrease	-0.82	

MW-11R	05/10/12	28.92	23.87	8.02	8.02	0.00	20.90	NA	NA	2" Diameter well
MW-11R	11/14/12	28.92	23.95	9.18	9.18	0.00	19.74	Decrease	-1.16	
MW-11R	04/17/13	28.92	24.4	8.14	8.14	0.00	20.78	Rise	1.04	
MW-11R	06/26/14	28.92	23.64	9.30	9.30	0.00	19.62	Decrease	-1.16	
MW-12	05/10/12	28.73	24.37	7.96	7.96	0.00	20.77	NA	NA	2" Diameter well
MW-12	11/14/12	28.73	24.35	9.37	9.37	0.00	19.36	Decrease	-1.41	
MW-12	04/17/13	28.73	24.30	9.10	9.10	0.00	19.63	Rise	0.27	
MW-12	06/26/12	28.73	24.33	8.86	8.86	0.00	19.87	Rise	0.24	
MW-13	05/10/12	29.21	20.02	8.57	8.57	0.00	20.64	NA	NA	2" Diameter well
MW-13	11/14/12	29.21	NM	NM	NM	NM	NA	NA	NA	Not gauged nor sampled
MW-13	04/17/13	30.21	NM	NM	NM	NM	NA	NA	NA	Not gauged nor sampled
MW-13	06/26/14	30.21	20.02	9.87	9.87	0.00	20.34	NA	NA	
MW-14	05/10/12	29.02	11.62	8.28	8.28	0.00	20.74	NA	NA	2" Diameter well
MW-14	11/14/12	29.02	11.71	9.20	9.20	0.00	19.82	Decrease	-0.92	
MW-14	04/17/13	29.02	11.60	8.45	8.45	0.00	20.57	Rise	0.75	
MW-14	06/26/14	29.02	11.38	9.34	9.34	0.00	19.68	Decrease	-0.89	
MW-15	05/10/12	28.53	29.70	7.90	7.90	0.00	20.63	NA	NA	2" Diameter well
MW-15	11/14/12	28.53	NM	NM	NM	NM	NA	NA	NA	Not gauged nor sampled
MW-15	04/17/13	29.53	NM	NM	NM	NM	NA	NA	NA	Not gauged nor sampled
MW-15	06/26/14	29.53	29.39	9.85	9.85	0.00	19.68	NA	NA	
MW-16	05/10/12	28.52	29.38	7.86	7.86	0.00	20.66	NA	NA	2" Diameter well
MW-16	11/14/12	28.52	29.37	8.92	8.92	0.00	19.60	Decrease	-1.06	
MW-16	04/17/13	28.52	24.75	7.63	7.63	0.00	20.89	Rise	1.29	
MW-16	06/26/14	28.52	29.37	9.04	9.04	0.00	19.48	Decrease	-1.41	
EW-14	05/10/12	28.89	24.80	8.15	8.15	0.00	20.74	NA	NA	4" Diameter well
EW-14	11/14/12	28.89	NM	NM	NM	ND	NA	NA	NA	Not Sampled and only gauged for LPH
EW-14	04/17/13	29.89	NM	NM	NM	ND	NA	NA	NA	Not gauged nor sampled
EW-14	06/25/14	29.89	24.41	9.24	9.24	0.00	20.65	NA	NA	
EW-15	05/10/12	28.66	24.50	8.06	8.06	0.00	20.60	NA	NA	4" Diameter well
EW-15	11/14/12	28.66	NM	NM	NM	ND	NA	NA	NA	Not Sampled and only gauged for LPH
EW-15	04/17/13	28.66	NM	NM	NM	ND	NA	NA	NA	Not gauged nor sampled
EW-15	06/25/14	28.66	24.14	9.03	9.03	0.00	19.63	NA	NA	
EW-16	05/10/12	28.99	24.80	8.37	8.37	0.00	20.62	NA	NA	4" Diameter well
EW-16	11/14/12	28.99	NM	NM	NM	ND	NA	NA	NA	Not Sampled and only gauged for LPH
EW-16	04/17/13	29.99	NM	NM	NM	ND	NA	NA	NA	Not gauged nor sampled
EW-16	06/26/14	29.99	22.74	9.29	9.29	0.00	20.70	NA	NA	

EW-17	05/10/12	28.89	25.29	8.19	8.19	0.00	20.70	NA	NA	4" Diameter well
EW-17	11/14/12	28.89	NM	NM	NM	ND	NA	NA	NA	Not Sampled and only gauged for LPH
EW-17	04/17/13	29.89	NM	NM	NM	ND	NA	NA	NA	Not gauged nor sampled
EW-17	06/25/14	29.89	24.12	9.27	9.27	0.00	20.62	NA	NA	
EW-18	06/25/14	28.47	14.74	8.91	8.91	0.00	19.56	NA	NA	4" Diameter well
EW-19	06/25/14	28.34	14.56	8.74	8.74	0.00	19.60	NA	NA	4" Diameter well
EW-20	06/25/14	28.52	24.2	8.90	8.90	0.00	19.62	NA	NA	4" Diameter well
EW-21	06/26/14	29.09	24.54	9.75	9.75	0.00	19.34	NA	NA	4" Diameter well
EW-22	06/26/14	28.47	23.86	8.91	8.91	0.00	19.56	NA	NA	4" Diameter well

Date	Gradient and Groundwater Flow Direction		Average Groundwater Elevation (feet MSL)	Change in Average GW Elevation (feet)
05/10/12	0.002	SW	20.72	NA
11/14/12	0.004	NE	19.78	0.94
04/17/13	0.005/ 0.012	WSW/ NE	20.46	-0.68
06/26/14	Varies	Varies	19.83	0.63

Notes:

Top-of-Casing (TOC) elevations were surveyed by Virgil Chavez Land Surveying on May 10, 2012.

MSL=Mean Sea Level

NM = Not Measured

NA = Not Applicable

ND = Not Detected

TABLE 4
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
TPHg and VOCs

Monitoring Well/Sample ID	Sample Date	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene
		Analytical Results (ug/L)																						
MW-2R	5/10/2012	**57,000**	**9,400**	**6,500**	**1,100**	**5,100**	**380**	<25	<25	1,100	310	30	<25	<25	<25	<25	<25	96	51	270	<25	<25	<25	<25
MW-2R	11/14/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2R	4/17/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2R	6/25/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4R	5/10/2012	**3,300**	**3.3**	17	**180**	**824**	**89**	<0.50	<0.50	210	63	2.7	<0.50	<0.50	<0.50	<0.50	<0.50	42	13	91	10	<0.50	<0.50	<0.50
MW-4R	11/14/2012	**420**	**51**	0.66	0.66	2.54	**68**	<0.50	<0.50	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	47	3.9	7.8	9.1	<0.50	<0.50	<0.50
MW-4R	4/17/2013	**2,000**	**190**	**140**	**46**	**155**	**62**	<0.50	**1.0**	28	7.4	<0.50	<0.50	<0.50	<0.50	0.33 J	<0.50	30	4.6	51	7.0	<0.50	<0.50	<0.50
MW-4R	6/25/2014	**740**	**55**	0.37J	1.7	0.59J	**46**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	13	2.3	27	3.0	<0.50	<0.50	<0.50
MW-5R	5/10/2012	**33,000**	**150**	**2,700**	**2,500**	**11,100**	**680**	<25	<25	2,400	620	52	<25	<25	<25	<25	<25	210	99	630	46	<25	<25	<25
MW-5R	11/14/2012	**32,000**	**130**	**2,400**	**2,900**	**15,200**	**620**	<5.0	<5.0	3,600	720	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	180	90	490	33	<5.0	<5.0	<5.0
MW-5R	4/17/2013	**35,000**	**240**	**2,400**	**2,000**	**9,500**	**400**	<5.0	<5.0	2,200	510	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	140	59	390	<5.0	4.7 J	<5.0	<5.0
MW-5R	6/25/2014	**32,000**	**210**	**970**	**1,700**	**7,900**	**470**	<5.0	<5.0	2,200	400	40	<5.0	<5.0	<5.0	<5.0	<5.0	120	55	330	20	<5.0	<5.0	<5.0
MW-6R	5/10/2012	**3,600**	**8.6**	**52**	**120**	**680**	**79**	<0.50	<0.50	210	67	16	<0.50	<0.50	<0.50	<0.50	<0.50	20	25	50	9.9	<0.50	<0.50	<0.50
MW-6R	11/14/2012	**900**	**2.4**	7.1	**83**	**131**	**30**	<0.50	<0.50	61	13	0.61	<0.50	<0.50	<0.50	<0.50	<0.50	12	3.2	28	3.1	<0.50	<0.50	<0.50
MW-6R	4/17/2013	**1,800**	**220**	21	**64**	**157**	**29**	<0.50	<0.50	60	14	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	24	2.1	27	7.6	<0.50	<0.50	<0.50
MW-6R	6/25/2014	**1,700**	**4.3**	9.4	**55**	**181**	**49**	<0.50	<0.50	72	13	2.7	<0.50	<0.50	<0.50	<0.50	<0.50	17	3.4	32	4.5	<0.50	<0.50	<0.50
MW-7R	5/10/2012	**160,000**	**14,000**	**42,000**	**3,900**	**26,700**	**660**	<25	<25	3,300	960	49	<25	<25	<25	<25	<25	120	<25	370	26	<25	<25	<25
MW-7R	11/14/2012	**84,000**	**15,000**	**26,000**	**3,700**	**19,300**	**480**	<100	<100	2,300	610	<100	<100	<100	<100	<100	<100	120	48 J	370	<100	<100	<100	<100
MW-7R	4/17/2013	**160,000**	**17,000**	**45,000**	**4,500**	**22,300**	**350**	<100	<100	2,000	580	<100	<100	<100	<100	<100	<100	98 J	<100	300	<100	<100	<100	<100
MW-7R	6/25/2014	**240,000**	**18,000**	**38,000**	**3,900**	**21,100**	**630**	<50	<50	2,200	560	180	<50	<50	<50	<50	<50	89	<50	270	<50	<50	<50	<50
MW-8	5/10/2012	**2,700**	**15**	20	5.3	**34**	**72**	<1.0	<1.0	<1.0	1.4	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	24	1.7	24	3.8	<1.0	<1.0	<1.0
MW-8	11/14/2012	**790**	**14**	3.0	0.98	5.83	**14**	<0.50	<0.50	0.39 J	0.41 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	13	0.80	13	2.2	<0.50	0.38 J	<0.50
MW-8	4/17/2013	**1,100**	**6.8**	6.4	5.6	16.8	**21**	<0.50	<0.50	1.9	1.6	<0.50	<0.50	2.0	<0.50	<0.50	<0.50	9.9	0.89	11	1.6	<0.50	0.25 J	<0.50
MW-8	6/25/2014	**420**	**2.4**	2.2	0.6	3.64J	**12**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.8	0.26J	3.7	0.67	0.91	<0.50	<0.50
MW-9	5/10/2012	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-9	11/14/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	4/17/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	6/25/2014	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-10	5/10/2012	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-10	11/14/2012	<50	<0.50	<0.50	<0.50	ND<1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-10	4/18/2013	**530**	**20**	**110**	19	**97**	2.6	<0.50	<0.50	12	3.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.65	0.23 J	2.1	<0.50	<0.50	<0.50	<0.50
MW-10	6/25/2014	<50	<0.50	<0.50	<0.50	ND<1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-11R	5/10/2012	**22,000**	<25	**170**	**910**	**6,300**	**440**	<25	<25	2,500	760	58	<25	<25	40	<25	<25	92	<25	240	<25	<25	<25	<25
MW-11R	11/14/2012	**29,000**	**2.6**	**330**	**1,400**	**9,700**	**660**	<5.0	<5.0	4,000	950	<5.0	<5.0	<5.0	36	<5.0	<5.0	170	88	450	27	<5.0	<5.0	<5.0
MW-11R	4/17/2013	**22,000**	<5.0	6.5	**580**	**3,970**	**280**	<5.0	<5.0	2,600	720	<5.0	<5.0	<5.0	25	<5.0	<5.0	110	61	320	<5.0	<5.0	<5.0	<5.0
MW-11R	6/25/2014	**15,000**	<5.0	<5.0	**260**	**1,130**	**280**	<5.0	<5.0	2,100	580	45	<5.0	<5.0	11	<5.0	<5.0	72	<5.0	220	18	<5.0	<5.0	<5.0

TABLE 4
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
TPHg and VOCs

Monitoring Well/Sample ID	Sample Date	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene
		Analytical Results (ug/L)																						
MW-12	5/10/2012	**2,700**	**600**	4.7	**160**	**207**	**26**	<0.50	<0.50	13	23	0.60	<0.50	<0.50	<0.50	<0.50	<0.50	10	2.3	17	2.3	<0.50	<0.50	<0.50
MW-12	11/14/2012	**1,600**	**470**	2.1	**140**	**63.4**	**26**	<1.0	<1.0	2.3	20	0.40 J	<1.0	<1.0	<1.0	<1.0	<1.0	8.5	2.1	14	2.1	<1.0	<1.0	1.2
MW-12	4/17/2013	**5,200**	**760**	3.4	**330**	**409**	**40**	<2.0	**1.2 J**	60	49	1.6 J	<2.0	<2.0	<2.0	<2.0	**1.8 J**	22	3.7	36	7.4	<2.0	<2.0	<2.0
MW-12	6/25/2014	**2,700**	**350**	4.8	**200**	**51**	**93**	<1.0	<1.0	11	28	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	17	3.9	23	3.2	<1.0	<1.0	<1.0
MW-13	5/10/2012	50	<0.50	<0.50	<0.50	<1.5	<0.50	**8.2**	**3.7**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-13	11/14/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	4/17/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-13	6/25/2014	<50	<0.50	<0.50	<0.50	<1.5	<0.50	0.48J	**0.68**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-14	5/10/2012	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-14	11/14/2012	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-14	4/17/2013	60	<0.50	<0.50	2.9	15.7	1.0	<0.50	<0.50	5.6	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.27 J	<0.50	0.60	<0.50	<0.50	<0.50	<0.50
MW-14	6/25/2014	<50	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MW-15	5/10/2012	**1,800**	**1.6**	1.4	**130**	**38**	**14**	4.4	**2.2**	6.2	23	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	22	3.2	28	7.0	<0.50	<0.50	<0.50
MW-15	11/14/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	4/17/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-15	6/25/2014	**140**	<0.50	<0.50	<0.50	<0.50	0.36J	0.72	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.26J	<0.50	<0.50	<0.50
MW-16	5/10/2012	**180**	<0.50	<0.50	<0.50	<1.5	<0.5	2.3	**2.6**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	<0.5	<0.5	5.8	<0.50	<0.50	<0.50
MW-16	11/14/2012	<50	<0.50	<0.50	<0.50	<1.5	<0.5	1.2	**2.0**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	1.5	<0.50	<0.50	<0.50
MW-16	4/17/2013	**2,900**	**3.3**	1.1	**230**	11.3	**59**	0.35 J	<0.50	3.4	26	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	43	12	72	13	<0.50	0.42 J	<0.50
MW-16	6/25/2014	**100**	<0.50	<0.50	<0.50	<0.50	<0.50	0.59	**0.53**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	4.0	<0.50	<0.50	<0.50
EW-14	5/10/2012	**33,000**	**4,200**	**3,300**	**2,200**	**10,100**	**280**	<25	<25	1,200	300	<25	<25	<25	<25	<25	<25	73	<25	190	<25	<25	<25	<25
EW-14	11/14/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-14	4/17/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-14	6/25/2014	**19,000**	**5,200**	**80**	**290**	**558**	**270**	<10	<10	79	26	<10	<10	<10	<10	<10	<10	53	11	100	8.4J	<10	<10	<10
EW-15	5/10/2012	**34,000**	**6,300**	**6,500**	**1,200**	**5,600**	**160**	<25	<25	690	180	<25	<25	<25	<25	<25	<25	41	<25	110	<25	<25	<25	<25
EW-15	11/14/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-15	4/17/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-15	6/25/2014	**35,000**	**8,000**	**850**	**630**	**1,700**	**460**	<25	<25	420	110	<25	<25	<25	<25	<25	<25	63	16J	170	<25	<25	<25	<25
EW-16	5/10/2012	**360**	**40**	1.6	1.3	11.4	**10**	0.86	**0.60**	3.5	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	9.3	<0.5	5.8	1.6	<0.50	<25	<25
EW-16	11/14/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	4/17/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	6/25/2014	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
EW-17	5/10/2012	**11,000**	**2,800**	**1,600**	**240**	**1,280**	**210**	<25	<25	160	50	<25	<25	<25	<25	<25	<25	52	<25	140	<25	<25	<25	<25
EW-17	11/14/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	4/17/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	6/25/2014	**12,000**	**1,900**	**100**	**330**	**500**	**720**	<5.0	<530	200	64	19	<5.0	<5.0	<5.0	<5.0	<5.0	79	23	210	13	<5.0	<5.0	<5.0

TABLE 4
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS
TPHg and VOCs

Monitoring Well/Sample ID	Sample Date	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	MTBE	1,2-Dichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene
		Analytical Results (ug/L)																						
EW-18	6/25/2014	**21,000**	**140**	23	**1,100**	**3,960**	**480**	<2.5	<2.5	730	240	23	<2.5	<2.5	<2.5	<2.5	<2.5	140	58	370	23	<2.5	<2.5	<2.5
EW-19	6/25/2014	**12,000**	**620**	**160**	**460**	**1,770**	**480**	<1.0	<1.0	360	110	9.7	<1.0	<1.0	<1.0	<1.0	<1.0	120	40	310	22	<1.0	<1.0	<1.0
EW-20	6/25/2014	**3,900**	**400**	8.1	24	**79**	**190**	<1.0	**2.7**	12	4.2	3.5	<1.0	<1.0	<1.0	<1.0	<1.0	82	9.6	120	14	<1.0	0.94J	<1.0
EW-21	6/25/2014	60	0.46J	0.25J	0.31J	0.7	0.4J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.53	<0.50	<0.50	<0.50
EW-22	6/25/2014	50	0.59	0.41J	1.1	1.76	0.55	<0.50	<0.50	0.35J	0.29J	<0.50	0.77	<0.50	8.0	<0.50	<0.50	0.31J	0.46J	1.2	0.27J	<0.50	<0.50	<0.50
ESLs		100	1.0	40	30	20	6.1	5.0	0.5	NE	NE	NE	80	100	80	NE	0.86	NE	NE	NE	NE	10	NE	5.0

Notes:
Only constituents with a concentration above laboratory detection limits are presented.
Total Petroleum Hydrocarbons as gasoline was analyzed using EPA Method 8015B.
Volatile Organic Compounds were analyzed using EPA Method 8260B.
µg/L = micrograms per liter
ESL = Regional Water Quality Control Board, Residental Land Use, Environmental Screening Level (groundwater is a current or potential source of drinking water, Table F-1A)
BOLD indicates concentration exceeds the ESL.
NE = ESL not established.
< X = indicates not detected above laboratory detection limit of x (detection limits vary, see lab report).
J = Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.

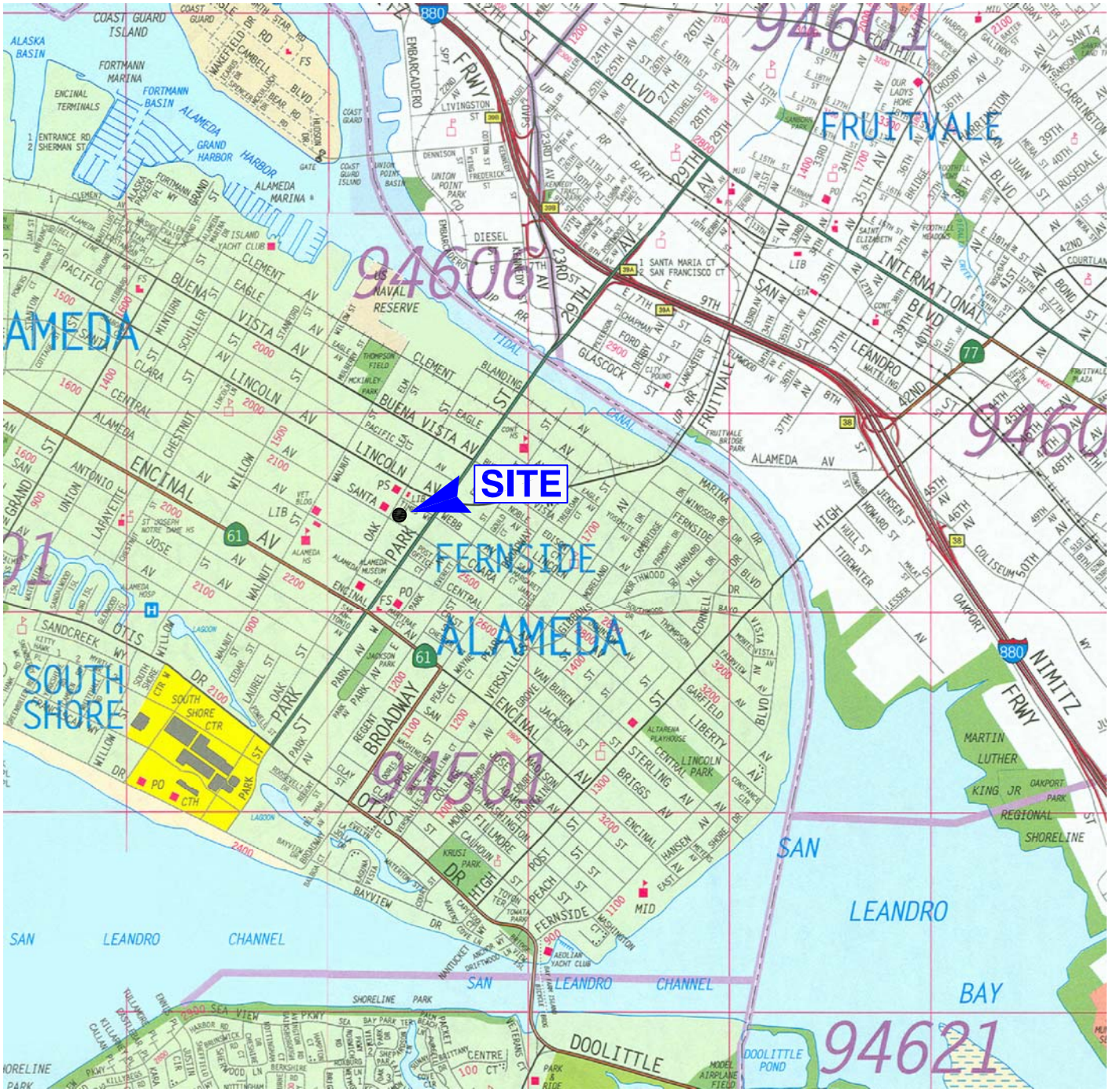
TABLE 5 – BIOATTENUATION MONITORING

Sample ID	Sample Date	EPA 200.7			EPA Method 300.0				Ferric Iron by Calculation	SM 3500-Fe D	SM 4500-NH3 D	Field Instrument					
		(mg/l)															
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate	Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µs/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen (%)
MW-2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4R	6/25/2014	4.90	1.40	0.91	0.50	<0.20	<0.10	9.70	4.90	<0.10	0.22	20.6	603.0	6.72	--	--	--
MW-5R	6/25/2014	<0.50	<0.50	1.50	<0.20	<0.20	<0.10	8.40	<0.50	<0.10	0.17	20.0	434.4	10.62	--	-230.5	41.3
MW-6R	6/25/2014	2.90	1.30	0.71	<0.20	<0.20	<0.10	12.00	2.90	<0.10	0.45	20.2	530.7	6.87	--	-114.1	19.1
MW-7R	6/25/2014	35.00	3.40	2.00	<0.20	<0.20	<0.10	<2.0	35.00	<.010	0.39	19.6	774.0	6.61	--	-87.2	33.0
MW-8	6/25/2014	6.10	1.10	0.71	<0.20	<0.20	<0.10	4.10	6.10	<0.10	0.34	22.6	444.9	6.77	--	-112.0	41.0
MW-9	6/26/2014	44.00	10.00	4.00	0.50	<0.20	<0.10	28.00	44.00	<0.10	0.04	19.6	495.5	6.71	--	142.3	39.0
MW-10	6/26/2014	42.00	0.65	4.50	2.10	<0.20	0.40	11.00	42.00	<0.10	<0.03	20.3	306.7	6.24	--	131.3	56.3
MW-11R	6/26/2014	120.00	2.00	10.00	0.66	<0.20	<0.10	<2.0	120.00	<0.10	0.03	18.7	153.3	7.01	--	-80.3	37.1
MW-12	6/26/2014	15.00	1.70	2.20	2.00	<0.20	<0.10	2.20	15.00	<0.10	<0.03	19.2	544.4	6.39	--	5.4	56.5
MW-13	6/26/2014	3.80	<0.5	1.20	1.20	<0.20	0.14	10.00	3.80	<0.10	0.04	18.5	242.2	6.62	--	124.4	49.0
MW-14	6/26/2014	28.00	1.20	2.30	7.70	<0.20	<0.10	15.00	28.00	<0.10	0.06	17.7	251.6	6.69	--	142.2	67.0
MW-15	6/26/2014	54.00	0.77	5.20	<0.20	<0.20	<0.10	3.90	54.00	<0.10	<0.03	19.0	260.1	6.87	--	-76.1	96.2
MW-16	6/26/2014	<0.5	<0.5	<0.5	<0.20	<0.20	<0.10	3.10	<0.5	<0.10	<0.03	18.3	401.5	6.68	--	-70.7	52.0
EW-14	6/25/2014	6.20	1.00	3.20	<0.20	<0.20	<0.10	4.00	6.20	<0.10	0.54	19.3	1,258.0	6.98	--	-122.8	52.5
EW-15	6/25/2014	21.00	2.90	1.60	<0.20	<0.20	<0.10	<2.0	21.00	<0.10	<0.15	19.3	870.0	6.81	--	-96.1	36.0

TABLE 5 – BIOATTENUATION MONITORING

Sample ID	Sample Date	EPA 200.7			EPA Method 300.0				Ferric Iron by Calculation	SM 3500-Fe D	SM 4500-NH3 D	Field Instrument					
		(mg/l)															
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate	Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µs/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen (%)
EW-16	6/26/2014	3.50	1.40	0.77	<.020	<0.20	15.00	19.00	3.50	<0.10	<0.15	20.1	916.0	6.80	--	-89.3	31.1
EW-17	6/25/2014	31.00	1.60	0.75	<0.20	<0.20	<0.10	3.40	31.00	<0.10	0.34	19.5	1,494.0	7.09	--	-119.0	33.1
EW-18	6/25/2014	73.00	2.90	9.50	<0.20	<0.20	<0.10	<2.0	73.00	<0.10	0.30	21.2	870.0	6.82	--	-101.4	29.1
EW-19	6/25/2014	43.00	3.30	7.10	<0.20	<0.20	0.17	<2.0	43.00	<0.10	0.50	20.5	926.0	6.66	--	-91.1	21.5
EW-20	6/25/2014	110.00	2.60	9.10	0.22	<0.20	0.14	7.00	110.00	<0.10	0.36	21.0	750.0	6.85	--	-107.2	27.9
EW-21	6/26/2014	1.60	<0.5	6.10	6.10	<0.20	<0.10	15.00	1.60	<0.10	<0.03	20.0	422.2	6.90	--	10.0	34.2
EW-22	6/26/2014	23.00	<0.5	3.60	0.47	<0.20	<0.10	8.60	23.00	<0.10	0.03	18.8	173.7	6.63	--	141.3	73.1

Notes:
ID − identification
EPA − United States Environmental Protection Agency
mg/l − milligrams per liter
SM − Standard Method
°C - degrees centigrade
µs/cm − microsiemens
NTU - nephelometric turbidity units
ORP − oxidation-reduction potential
mV − millivolts
% - percent
<X - not detected at or above the laboratory reporting limit of X
-- − Not analyzed or not applicable



REFERENCE: METRO AREAS OF ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO, AND SANTA CLARA COUNTIES, THOMAS GUIDE, 2008.

N

SCALE IN FEET

0 2000 4000

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	SITE LOCATION	FIGURE
PROJECT NO. 401896004 / DATE 8/14	2301 SANTA CLARA AVENUE ALAMEDA, CALIFORNIA	1

401896004-FIG1.dwg, Jul 30, 2014, 3:20pm, snguyen

REFERENCE: GOOGLE EARTH, 2012.

N

SCALE IN FEET

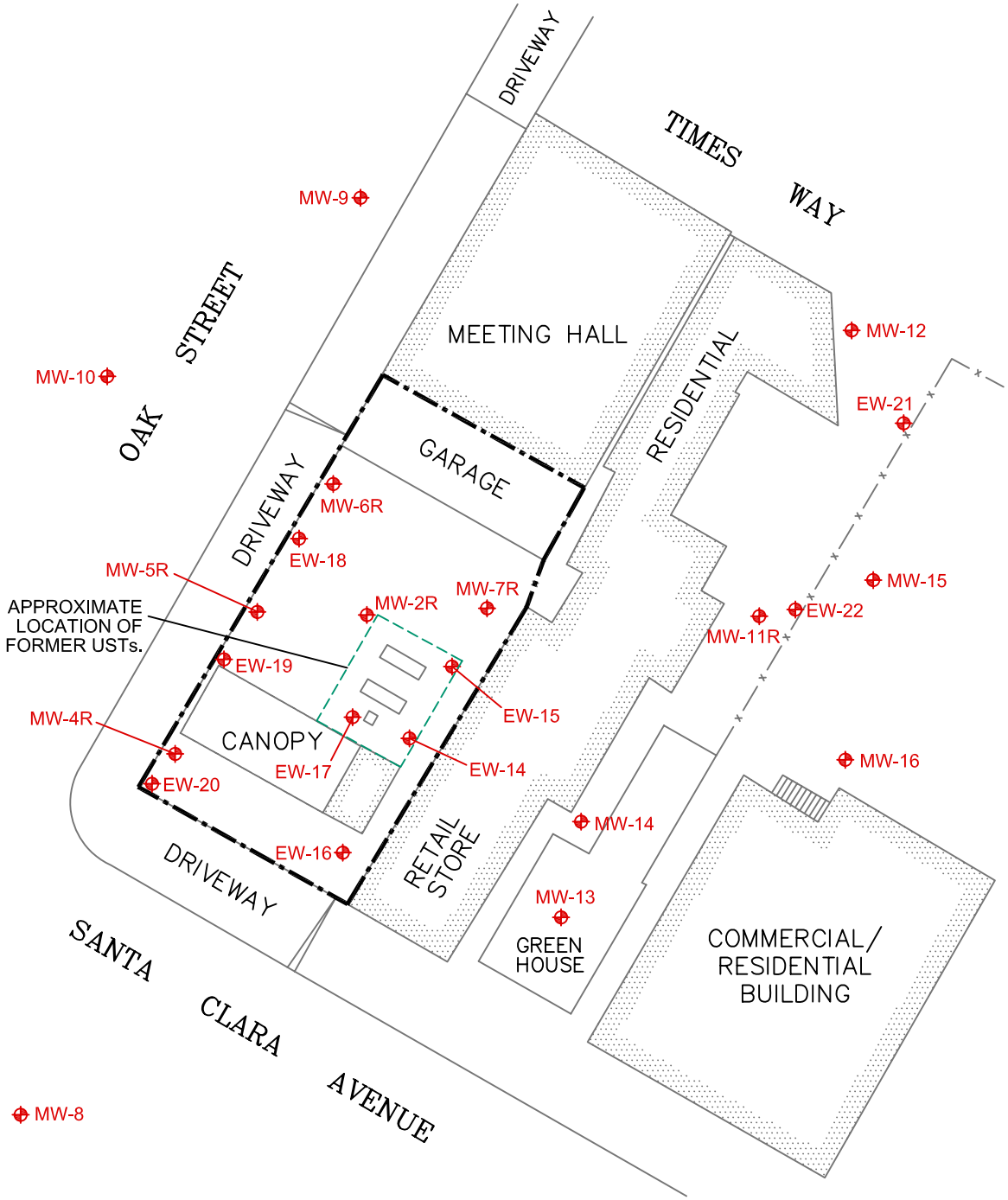
0 40 80

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND
APPROXIMATE SITE BOUNDARY

Ninyo & Moore	SITE VICINITY	FIGURE
PROJECT NO. 401896004 / DATE 8/14	2301 SANTA CLARA AVENUE ALAMEDA, CALIFORNIA	2

401896004-FIG2.dwg, Jul 30, 2014, 3:21pm,snguyen



N

SCALE IN FEET

0 30 60

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

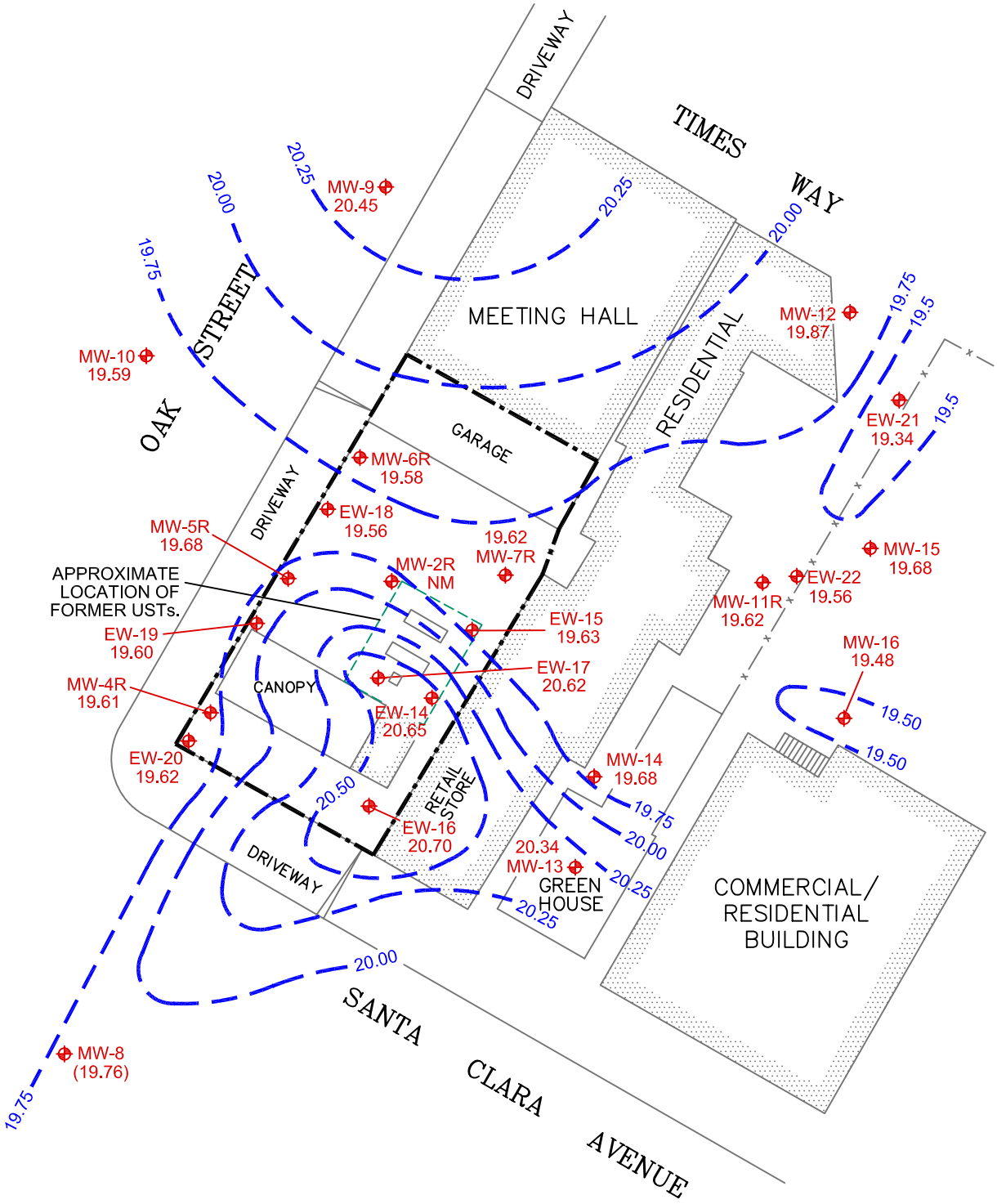
LEGEND

- APPROXIMATE SITE BOUNDARY
- MW-12 MONITORING WELL GROUNDWATER
- FENCE

REFERENCE: VIRGIL CHAVEZ LAND SURVEYING, 2012.

Ninyo & Moore	SITE PLAN	FIGURE
PROJECT NO. 401896004 / DATE 8/14	2301 SANTA CLARA AVENUE ALAMEDA, CALIFORNIA	3

401896004-FIG3.dwg, Jul 30, 2014, 3:22pm, snguyen

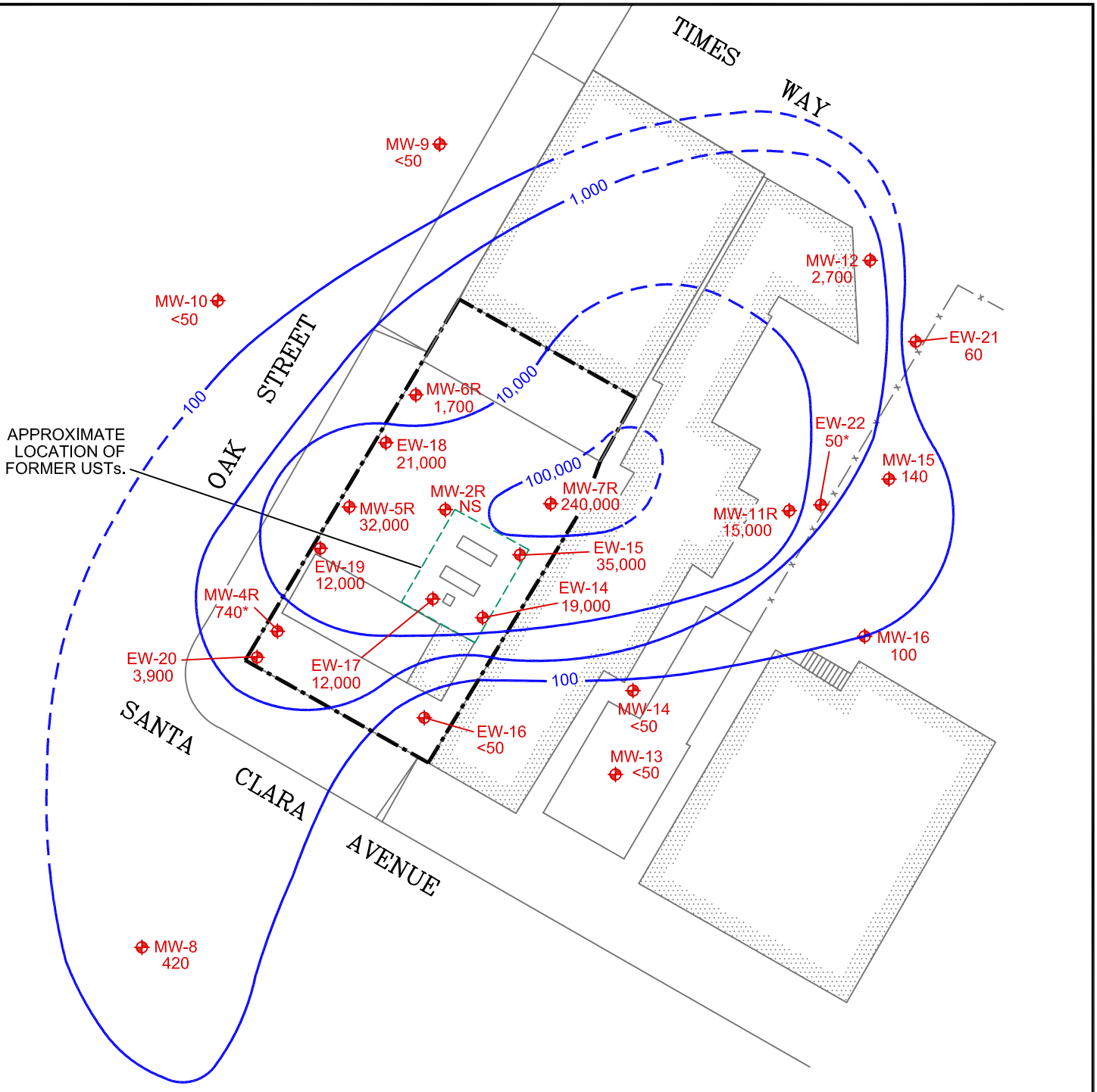


NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCE: VIRGIL CHAVEZ LAND SURVEYING, 2012.

Ninyo & Moore	SITE PLAN	FIGURE
PROJECT NO. 401896004 / DATE 8/14	2301 SANTA CLARA AVENUE ALAMEDA, CALIFORNIA	4

401896004-FIG4.dwg, Jul 30, 2014, 3:32pm,snguyen



N

SCALE IN FEET

0 30 60

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND

	APPROXIMATE SITE BOUNDARY
MW-12 2,700	MONITORING WELL GROUNDWATER CONCENTRATION IN MICROGRAMS PER LITER
NS	NOT SAMPLED
*	EXCLUDED FROM ISCONCENTRATION DATA
	FENCE
	TPHg IN GROUNDWATER ISOCONCENTRATION LINE (DASHED WHERE INFERRED) IN MICROGRAMS PER LITER

REFERENCE: VIRGIL CHAVEZ LAND SURVEYING, 2012.

Ninyo & Moore

PROJECT NO.	DATE
401896004	8/14

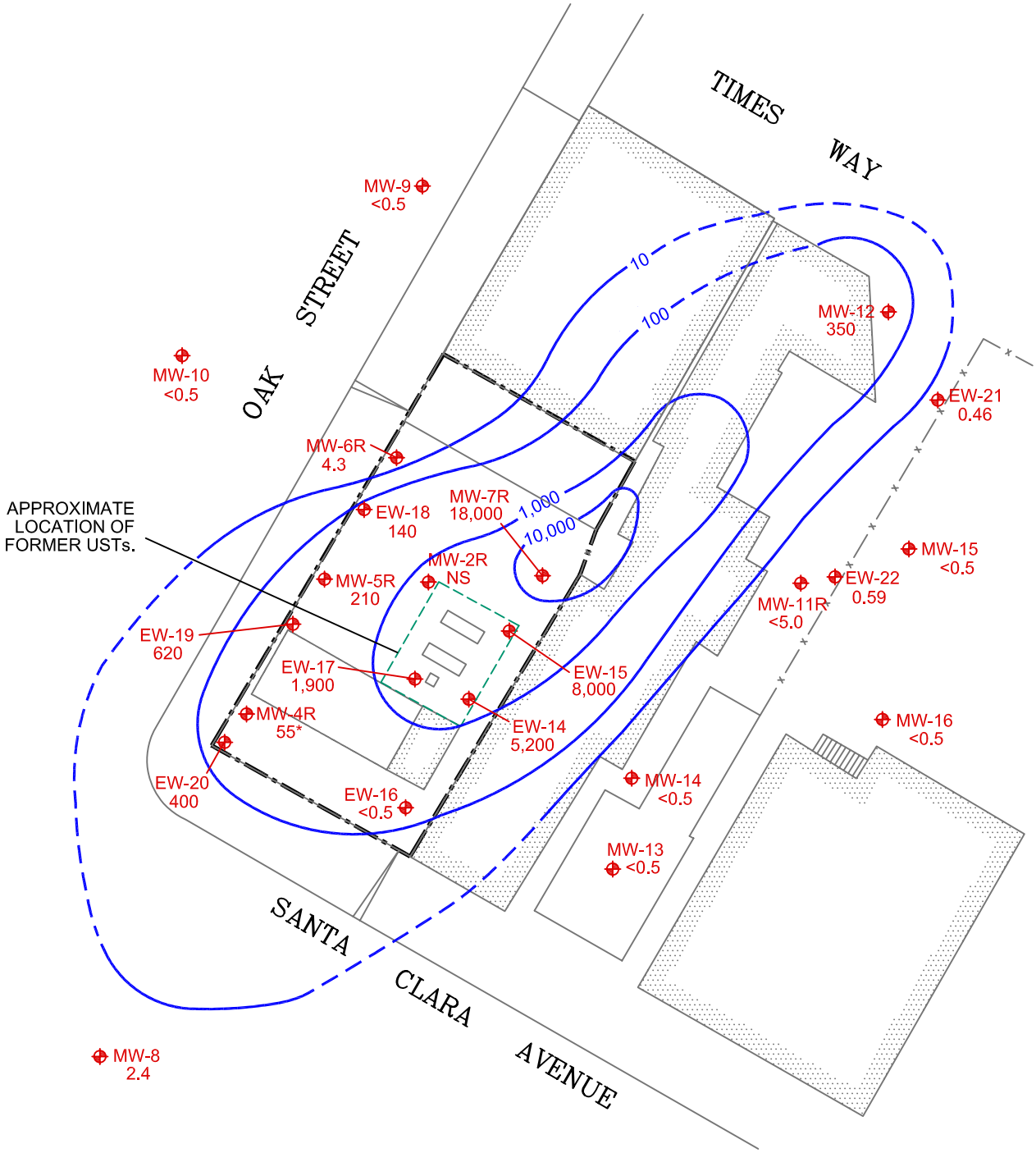
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE CONCENTRATIONS IN SHALLOW GROUNDWATER

2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

FIGURE

5

401896004-FIG5.dwg, Aug 13, 2014, 10:50am,snguyen



LEGEND	
— · —	APPROXIMATE SITE BOUNDARY
MW-12	MONITORING WELL GROUNDWATER
350	CONCENTRATION IN MICROGRAMS PER LITER
ND<X	INDICATES NOT DETECTED ABOVE LABORATORY DETECTION LIMIT OF X
NS	NOT SAMPLED
*	EXCLUDED FROM ISCONCENTRATION DATA
— x —	FENCE
	BENZENE IN GROUNDWATER ISOCONCENTRATION LINE (DASHED WHERE INFERRED) IN MICROGRAMS PER LITER

N

SCALE IN FEET

0 30 60

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCE: VIRGIL CHAVEZ LAND SURVEYING, 2012.

Ninyo & Moore	BENZENE CONCENTRATIONS IN SHALLOW GROUNDWATER	FIGURE
PROJECT NO. 401896004 / DATE 8/14	2301 SANTA CLARA AVENUE ALAMEDA, CALIFORNIA	6

401896004-FIG6.dwg, Aug 13, 2014, 10:52am,snguyen

APPENDIX A

HISTORICAL CONSTITUENTS OF CONCERN CONCENTRATIONS

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-1
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	65,000	15,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/4/2002	43,000	7,200													
9/20/2003	19,000	4,900													
12/25/2003	12,000	3,400													
4/24/2004	33,000	8,000													
8/8/2004	29,000	9,700													
8/20/2005	35,000	14,000	6,500	1,600	5,000	ND	ND	ND	ND	ND	ND	ND			
3/13/2006	72,000	17,000	16,000	3,000	10,400	ND	ND	ND	ND	ND	ND	ND			
6/11/2006	65,000	21,000	16,000	2,900	9,900	ND	ND	ND	ND	ND	ND	ND			
9/5/2006	62,000	17,000	12,000	2,300	8,600	ND	ND	ND	ND	ND	ND	ND			
1/4/2007	46,000	6,500	4,200	980	4,890	ND	ND	ND	ND	ND	ND	ND			
7/8/2007	57,000	11,000	11,000	2,200	9,600	ND	ND	ND	ND	ND	ND	ND	600	340	1,400
9/23/2007	22,000	4,700	4,100	950	4,100	ND	ND	ND	ND	ND	ND	2.7	390	140	640
9/6/2008	8,300	2,300	740	160	700	ND	ND	ND	ND	ND	ND	ND	200	34	130
9/26/2009	4,100	1,600	310	150	610	ND	ND	ND	ND	ND	ND	ND	75	32	120
2/27/2010	1,600	1,200	110	9.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/21/2010	3,100	1,300	54	ND	640	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	12,000	5,200	1,700	270	1,790	ND	ND	ND	ND	ND	ND	ND	230	68	230

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was abandoned in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-2
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	140,000	21,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/4/2002	41,000	5,600													
9/21/2003	27,000	2,400													
12/25/2003	46,000	6,100													
4/24/2004	44,000	8,400													
8/8/2004	21,000	6,800													
8/20/2005	31,000	10,000	5,100	1,400	7,100	ND	ND	ND	ND	ND	ND	ND			
3/13/2006	50,000	15,000	5,200	970	4,400	ND	ND	ND	ND	ND	ND	ND			
6/11/2006	37,000	12,000	8,500	1,700	6,200	ND	ND	ND	ND	ND	ND	ND			
9/5/2006	24,000	8,100	1,400	840	3,090	ND	ND	ND	ND	ND	ND	ND			
1/4/2007	17,000	4,300	2,400	590	2,100	ND	ND	ND	ND	ND	ND	ND			
7/8/2007	ND	5,400	170	320	750	ND	ND	ND	ND	ND	ND	ND	ND	ND	300
9/23/2007	2,500	6,700	540	300	940	ND	ND	ND	3.3	ND	ND	6.6	310	97	260
9/6/2008	6,300	3,000	440	10	290	ND	ND	ND	ND	ND	ND	ND	120	22	12
9/26/2009	5,500	1,800	610	140	680	ND	ND	ND	ND	ND	ND	ND	90	52	180
2/27/2010	3,600	2,500	430	42	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/21/2010	4,700	1,500	550	ND	860	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	11,000	6,300	790	ND	1,230	ND	ND	ND	ND	ND	ND	ND	210	69	170

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was replaced with well MW-2R in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-3
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	9,300	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/4/2002	10,000	2,300													
9/21/2003	2,700	320													
12/25/2003	3,300	290													
4/24/2004	3,100	1,000													
8/8/2004	2,500	400													
8/20/2005	5,500	3,000	27	140	740	ND	ND	ND	ND	ND	ND	ND			
3/13/2006	6,400	2,100	19	150	530	ND	ND	ND	ND	ND	ND	ND			
6/11/2006	7,000	2,000	52	380	940	ND	ND	ND	31	ND	ND	ND			
9/5/2006	6,000	1,500	31	180	720	ND	ND	ND	27	ND	ND	ND			
1/4/2007	5,500	1,400	ND	77	297	ND	ND	ND	ND	ND	ND	ND			
7/8/2007	5,600	1,500	87	180	740	ND	ND	ND	38	ND	ND	ND	180	ND	78
9/22/2007	5,600	1,300	35	57	189	ND	ND	ND	28	ND	ND	ND	120	8.6	30
9/6/2008	2,600	500	13	19	125	ND	ND	ND	20	ND	ND	ND	33	4.1	11
9/26/2009	2,200	240	12	14	104	ND	ND	ND	4.6	ND	ND	ND	69	3.0	11
2/27/2010	7,270	120	5.4	7.9	44	ND	ND	ND	4.6	ND	ND	ND	38	1.3	2.1
8/21/2010	100	ND	ND	ND	4.6	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	1,100	120	2.4	2.4	88	ND	ND	ND	ND	ND	ND	ND	54	7.2	7.2

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was abandoned in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-4
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/4/2002	ND	ND													
9/20/2003	ND	ND													
12/25/2003	ND	ND													
4/24/2004	3,000	1.0													
8/8/2004	ND	ND													
8/20/2005	1,100	1.5	ND	ND	63	ND	ND	ND	ND	ND	ND	ND			
3/13/2006	320	ND	ND	1.4	17	ND	ND	ND	ND	ND	ND	ND			
6/12/2006	1,500	0.9	3.8	78	236	ND	ND	ND	ND	ND	ND	ND			
9/5/2006	760	ND	ND	1.6	60	ND	ND	ND	ND	ND	ND	ND			
1/4/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
7/8/2007	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	13	ND	ND
9/23/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/5/2008	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/26/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7	ND	2.6
2/27/2010	130	ND	0.6	3.6	27	ND	ND	ND	ND	ND	ND	ND	ND	1.8	3.2
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was replaced with well MW-4R in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-5
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	44,000	490	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/4/2002	16,000	89													
9/21/2003	8,700	ND													
12/25/2003	2,300	140													
4/24/2004	13,000	97													
8/8/2004	13,000	82													
8/20/2005	19,000	130	750	1,000	4,400	ND	ND	ND	ND	ND	ND	ND			
3/14/2006	21,000	61	350	700	3,330	ND	ND	ND	ND	ND	ND	ND			
6/12/2006	14,000	91	620	1,000	4,340	ND	ND	ND	ND	ND	ND	ND			
9/5/2006	15,000	56	550	890	3,910	ND	ND	ND	ND	ND	ND	ND			
1/4/2007	20,000	110	680	1,200	4,250	ND	ND	ND	ND	ND	ND	ND			
7/8/2007	23,000	72	1,200	ND	5,300	ND	ND	ND	ND	ND	ND	ND	600	330	1,600
9/24/2007	6,100	490	770	950	4,140	ND	ND	ND	ND	ND	ND	ND	360	250	1,300
9/5/2008	740	ND	1.1	0.8	22	ND	ND	ND	ND	ND	ND	ND	27	22	1.2
9/27/2009	4,000	7.9	47	120	670	ND	ND	ND	ND	ND	ND	ND	86	86	370
2/27/2010	2,100	5.8	34	86	400	ND	ND	ND	ND	ND	ND	ND	92	26	130
8/20/2010	840	0.7	0.5	ND	162	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	2,500	6.8	32	13	431	ND	ND	ND	ND	ND	ND	ND	93	45	69

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was replaced with well MW-5R in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-6
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	10,000	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/4/2002	3,900	29													
9/20/2003	500	15													
12/25/2003	1,200	18													
4/24/2004	110	3.6													
8/8/2004	320	2.7													
8/20/2005	810	ND	ND	ND	180	ND	ND	ND	ND	ND	ND	ND			
3/14/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
6/12/2006	9,140	3.3	13	46	173	ND	ND	ND	ND	ND	ND	ND			
9/5/2006	1,100	4.4	10	50	190	ND	ND	ND	ND	ND	ND	ND			
1/4/2007	390	2.0	14	23	85	ND	ND	ND	ND	ND	ND	ND			
7/8/2007	720	2.8	3.2	33	42	ND	ND	ND	ND	ND	ND	ND	19	3.0	17
9/23/2007	1,200	2.8	7.3	56	142	ND	ND	ND	ND	ND	ND	ND	17	13	60
9/5/2008	730	2.0	4.0	16	116	ND	ND	ND	ND	ND	ND	ND	24	9.4	41
9/26/2009	170	0.7	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	6.4	ND	0.8
2/27/2010	230	1.3	1.0	5.8	18	ND	ND	ND	ND	ND	ND	ND	23	1.9	6.7
8/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	360	1.2	1.6	ND	9.4	ND	ND	ND	ND	ND	ND	ND	29	3.6	16

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was replaced with well MW-6R in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-7
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	220,000	32,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/4/2002	140,000	15,000													
9/21/2003	110,000	4,200													
12/25/2003	110,000	12,000													
4/24/2004	100,000	10,000													
8/8/2004	92,000	9,300													

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was replaced with well MW-7R in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-8
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	ND	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/3/2002	ND	1.1													
9/20/2003	ND	ND													
12/25/2003	ND	ND													
4/24/2004	ND	ND													
8/8/2004	NA	NA													
8/22/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
3/14/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
6/12/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
9/6/2006	ND	1.4	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND			
1/6/2007	390	4.4	4.7	0.9	5.6	ND	ND	ND	ND	ND	ND	ND			
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/21/2007	ND	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/5/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/25/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/26/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-9
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/3/2002	ND	ND													
9/20/2003	ND	ND													
12/25/2003	ND	ND													
4/24/2004	ND	ND													
8/22/2005	ND	ND													
3/14/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
6/13/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
1/6/2007	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND			
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
9/21/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/5/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/25/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/26/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-10
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/17/2000	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7/3/2002	ND	ND													
9/20/2003	ND	ND													
12/25/2003	ND	ND													
4/24/2004	ND	ND													
8/22/2004	ND	ND													
8/22/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
3/14/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
6/13/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
1/6/2007	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND			
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/21/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/5/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/25/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/26/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-11
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
10/24/2002	59,000	5,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/22/2003	46,000	1,700													
12/25/2003	14,000	1,400													
4/24/2004	38,000	5,000													
8/8/2004	29,000	3,100													
8/20/2005	31,000	5,100	1,500	3,400	17,800	ND	ND	ND	ND	ND	ND	ND			
3/14/2006	47,000	5,600	2,400	1,900	10,100	ND	ND	ND	ND	ND	ND	ND			
6/12/2006	44,000	5,900	2,200	3,600	15,700	ND	ND	ND	ND	ND	ND	ND			
9/6/2006	36,000	5,900	2,100	3,000	16,000	ND	ND	ND	ND	ND	ND	ND			
1/5/2007	50,000	2,200	450.0	2,100	13,300	ND	ND	ND	ND	ND	ND	ND			
7/7/2007	54,000	2,800	1,200.0	3,100	16,400	ND	ND	ND	ND	ND	ND	ND	610	750	2900
9/22/2007	21,000	2,000	1,000	3,100	9,700	ND	ND	ND	ND	ND	ND	ND	490	310	2,700
9/5/2008	11,000	770	160	940	3,100	ND	ND	ND	ND	ND	ND	ND	440	160	1,300
9/26/2009	14,000	280	2,900	560	4,800	ND	ND	ND	ND	ND	ND	ND	150	170	690
2/27/2010	13,000	53	860	700	4,900	ND	ND	ND	ND	ND	ND	ND	180	150	670
8/20/2010	57,000	ND	97	190	2,120	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/22/2011	19,000	ND	29	30	6,500	ND	ND	ND	ND	ND	ND	ND	410	380	1,500

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was replaced with well MW-11R in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-12 (formerly BL)
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
8/22/2005	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
3/14/2006	400	110	ND	ND	ND	ND	ND	ND	ND	ND	ND	11			
6/12/2006	ND	6.8	ND	ND	ND	ND	ND	ND	2.2	ND	ND	2.9	NA	NA	NA
9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
1/5/2007	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND			
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	0.92	ND	ND	ND	ND	ND	ND
9/22/2007	ND	8.6	ND	ND	ND	ND	ND	ND	2.8	ND	ND	3.5	ND	ND	ND
9/4/2008	ND	ND	ND	ND	ND	ND	21	ND	3.6	ND	ND	5.0	ND	ND	ND
9/25/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/27/2010	ND	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-13 (formerly BG)
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
8/22/2005	100	5.9	ND	ND	ND	ND	ND	ND	13	ND	ND	39	NA	NA	NA
3/14/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7			
6/12/2006	110	7.6	ND	ND	ND	ND	31	ND	16	ND	ND	48			
9/7/2006	ND	3.3	ND	ND	ND	ND	ND	ND	20	ND	ND	40			
1/5/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	40			
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	ND	30	ND	ND	ND
9/22/2007	ND	ND	ND	ND	ND	ND	ND	ND	21	ND	ND	37	ND	ND	ND
9/5/2008	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	31	ND	ND	ND
9/25/2009	ND	ND	ND	ND	ND	ND	ND	ND	2.2	ND	ND	6.2	ND	ND	ND
2/28/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.5	NA	NA	NA
4/22/2011	ND	ND	ND	ND	ND	ND	ND	ND	2.5	ND	ND	6.8	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-14 (formerly BF)
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
8/20/2005	3,800	89	4.7	150	3.4	ND	80	ND	19	ND	ND	42	NA	NA	NA
3/14/2006	ND	5,300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
6/12/2006	14,000	11,000	ND	600	ND	ND	ND	ND	ND	ND	ND	ND			
9/6/2006	ND	6,500	ND	170	ND	ND	ND	ND	ND	ND	ND	ND			
1/5/2007	13,000	5,200	5.7	190	71	ND	ND	ND	ND	ND	ND	ND			
7/7/2007	6,900	3,700	54	550	582	ND	ND	ND	ND	ND	ND	ND	97	48	73
9/22/2007	3,200	2,600	19	310	160	ND	ND	ND	ND	ND	ND	3.9	49	22	14
9/5/2008	690	280	ND	ND	19	ND	ND	ND	ND	ND	ND	ND	11	ND	3.2
9/25/2009	ND	32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/28/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/22/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-15 (formerly BH)
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
8/20/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	NA	NA	NA
3/14/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	38			
6/12/2006	ND	0.93	ND	ND	ND	ND	130	ND	6.0	ND	ND	55			
9/6/2006	ND	ND	ND	ND	ND	ND	31	ND	3.8	ND	ND	38			
1/5/2007	140	12	44	3.6	19.9	ND	ND	ND	ND	ND	ND	ND			
7/7/2007	ND	ND	ND	ND	ND	ND	90	ND	4.8	ND	ND	60	ND	ND	ND
9/22/2007	ND	ND	ND	ND	ND	ND	29	ND	2.5	ND	ND	27	ND	ND	ND
9/4/2008	ND	1.1	ND	ND	ND	ND	ND	ND	3.0	ND	ND	20	ND	ND	ND
9/25/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/26/2010	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND	3.6	ND	ND	ND
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - MW-16 (formerly BM)
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
8/20/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.0	NA	NA	NA
3/14/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10			
6/12/2006	ND	ND	ND	ND	ND	ND	29	ND	5.0	ND	ND	14			
9/6/2006	ND	ND	ND	ND	ND	ND	12	ND	5.8	ND	ND	4.7			
1/6/2007	ND	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	11			
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	4.5	ND	ND	ND
9/22/2007	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	6.8	ND	ND	ND
9/4/2008	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	9.1	ND	ND	ND
9/25/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/27/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - EW-12
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
10/31/2002	5,840	76	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/21/2003	19,000	590													
12/25/2003	9,900	790													
4/24/2004	12,000	920													

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was abandoned in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - EW-13
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
10/31/2002	109,200	9,120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9/21/2003	71,000	10,000													
12/25/2003	110,000	17,000													
4/24/2004	100,000	19,000													
8/8/2004	NA	NA													
8/22/2005	130,000	27,000	5,500	4,200	21,700	ND	ND	ND	ND	ND	ND	ND			
3/13/2006	140,000	16,000	46,000	3,300	19,300	ND	ND	ND	ND	ND	ND	1,400			
6/11/2006	130,000	23,000	48,000	3,000	18,800	ND	ND	ND	ND	ND	ND	ND			
9/5/2006	120,000	12,000	40,000	3,200	17,800	ND	ND	ND	ND	ND	ND	ND			
1/5/2007	410,000	57,000	43,000	17,000	75,000	ND	ND	ND	ND	ND	ND	ND			
7/9/2007	140,000	10,000	45,000	4,400	22,800	ND	ND	ND	ND	ND	ND	ND	ND	600	2,200
9/24/2007	27,000	5,400	35,000	3,600	18,600	ND	ND	ND	ND	ND	ND	ND	410	280	1,700
9/6/2008	73,000	7,900	21,000	730	11,300	ND	ND	ND	ND	ND	ND	ND	ND	210	860
9/27/2009	12,000	1,200	3,900	440	2,630	ND	ND	ND	ND	ND	ND	ND	74	71	300
2/27/2010	11,000	3,500	4,300	380	730	ND	ND	ND	ND	ND	ND	ND	57	ND	ND
8/22/2010	14,000	2,600	2,400	30	2,180	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	44,000	7,900	13,000	350	9,500	ND	ND	ND	ND	ND	ND	ND	240	210	890

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This well was abandoned in May 2012.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - EW-14
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
9/22/2003	68,000	4,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12/25/2003	26,000	5,300													
4/24/2004	9,400	4,100													
8/8/2004	14,000	6,300													
8/22/2005	26,000	7,100													
3/13/2006	1,300	360	110	35	119	13	ND	ND	ND	ND	ND	ND			
6/11/2006	2,300	1,100	260	45	198	ND	ND	ND	3.3	ND	ND	ND			
9/6/2006	20,000	4,700	4,200	980	3,800	ND	ND	ND	ND	ND	ND	ND			
1/4/2007	30,000	7,000	4,500	1,100	5,000	ND	ND	ND	ND	ND	ND	ND			
7/9/2007	54,000	14,000	8,800	2,400	10,000	ND	ND	ND	ND	ND	ND	ND	410	260	1,300
9/23/2007	19,000	9,900	7,700	2,100	9,300	ND	ND	ND	ND	ND	ND	12	290	220	1,100
9/6/2008	12,000	4,000	900	66	1,980	ND	ND	ND	ND	ND	ND	ND	110	53	220
9/27/2009	1,700	520	49	41	373	ND	ND	ND	ND	ND	ND	ND	19	15	64
2/27/2010	ND	ND	ND	2.2	373	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9
8/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - EW-15
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
1/21/2004	72,000	8,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/8/2004	36,000	3,300													
8/22/2005	670,000	11,000													
3/13/2006	12,000	1,900													
6/11/2006	25,000	2,900													
9/6/2006	51,000	8,200	11,000	2,300	11,200	ND	ND	ND	ND	ND	ND	ND			
1/5/2007	30,000	9,700	1,900	1,400	4,400	ND	ND	ND	ND	ND	ND	ND			
7/9/2007	46,000	5,200	3,800	2,500	11,500	ND	ND	ND	ND	ND	ND	ND	500	630	2,300
9/23/2007	59,000	14,000	5,800	3,600	16,000	ND	ND	ND	4.1	ND	ND	2.5	660	440	2,400
9/6/2008	19,000	7,100	1,000	57	2,730	ND	ND	ND	3.1	ND	ND	4.4	180	130	280
9/26/2009	8,800	1,400	530	280	2,650	ND	ND	ND	ND	ND	ND	ND	96	140	480
2/27/2010	720	250	57	50	113	ND	ND	ND	ND	ND	ND	ND	6.3	1.6	1.5
8/22/2010	1,600	200	4.1	ND	357	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	3,600	680	870	27	780	ND	ND	ND	ND	ND	ND	ND	25	21	31

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - EW-16
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
1/21/2004	1,500	290	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/8/2004	2,500	590													
8/20/2005	1,600	410	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
3/13/2006	900	400	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND			
6/11/2006	1,400	680	4.1	13	23	ND	ND	ND	ND	ND	ND	ND			
9/5/2006	2,100	210	ND	2.6	ND	ND	ND	ND	14	ND	ND	ND			
1/4/2007	370	2.9	ND	ND	ND	ND	ND	ND	6.6	ND	ND	ND			
7/9/2007	2,300	53	ND	ND	ND	ND	ND	ND	2.0	ND	ND	ND	59	ND	ND
9/22/2007	680	4.2	ND	1.1	1.5	ND	ND	ND	ND	ND	ND	ND	29	ND	ND
9/5/2008	310	ND	ND	ND	ND	ND	ND	ND	2.4	ND	ND	ND	7.3	ND	ND
9/26/2009	390	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	ND	ND
2/27/2010	220	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/21/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	190	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - EW-17
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
1/21/2004	18,000	2,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8/8/2004	30,000	6,800													
8/22/2005	42,000	13,000	9,300	1,700	8,100	ND	ND	ND	ND	ND	ND	ND			
3/13/2006	29,000	6,500	6,500	1,100	5,500	ND	ND	ND	ND	ND	ND	ND			
6/11/2006	38,000	9,700	9,500	1,600	7,300	ND	ND	ND	ND	ND	ND	ND			
9/6/2006	26,000	8,900	6,900	1,300	6,200	ND	ND	ND	ND	ND	ND	ND			
1/4/2007	27,000	8,100	3,200	890	3,410	ND	ND	ND	ND	ND	ND	ND			
7/9/2007	40,000	7,600	6,400	1,400	7,000	ND	ND	ND	ND	ND	ND	ND	430	220	940
9/23/2007	6,800	5,300	5,300	1,300	5,700	ND	ND	ND	4.2	ND	ND	2.0	210	180	920
9/6/2008	7,500	3,200	530	18	680	ND	ND	ND	ND	ND	ND	ND	87	26	85
9/27/2009	4,200	1,400	580	110	730	ND	ND	ND	ND	ND	ND	ND	64	26	130
2/27/2010	2,600	1,500	400	56	614	ND	ND	ND	ND	ND	ND	ND	50	ND	ND
8/21/2010	2,900	1,200	110	ND	570	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/21/2011	6,500	3,000	110	ND	1,300	ND	ND	ND	ND	ND	ND	ND	100	51	150

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - Monitoring Well BJ
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
8/22/2005	1500	14	100	38	224	ND	ND	ND	ND	ND	ND	ND			
3/13/2006	790	ND	6.6	6.5	57	ND	ND	ND	ND	ND	ND	ND			
6/11/2006	ND	ND	0.9	0.6	4.5	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
9/7/2006	ND	1.4	3.8	1.5	9.1	ND	ND	ND	ND	ND	ND	ND			
1/6/2007	ND	ND	2.4	1.4	16	ND	ND	ND	ND	ND	ND	ND			
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/22/2007	150	4.0	2.2	0.5	8.9	ND	ND	ND	ND	ND	ND	ND	ND	1.3	4.2
9/5/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/25/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/28/2010	ND	ND	ND	1.1	3.4	ND	ND	ND	ND	ND	ND	ND	3.3	ND	0.9
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/22/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This monitoring well was not located in May 2012

HISTORICAL GROUNDWATER SAMPLE ANALYTICAL RESULTS - Monitoring Well BK
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND VOLATILE ORGANIC COMPOUNDS

Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results (µg/L)														
8/22/2005	3,600	22	61	64	330	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
3/13/2006	1,800	ND	14	41	276	ND	ND	ND	ND	ND	ND	28			
6/11/2006	700	ND	0.91	9.8	59	ND	ND	ND	ND	ND	ND	ND			
9/7/2006	1100	0.54	4.9	8.5	70	ND	ND	ND	ND	ND	ND	ND			
1/6/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/22/2007	ND	ND	ND	ND	7.8	ND	ND	ND	ND	ND	ND	ND	ND	1.8	1.5
9/5/2008	450	18	45	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9/25/2009	ND	0.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2/28/2010	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8/20/2010	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4/22/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
µg/L = micrograms per liter
NA = not analyzed
ND = concentration not detected above laboratory reporting limits
Analytical data was taken from historical monitoring reports in Geotracker.
This monitoring well was not located in May 2012.

APPENDIX B

PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 03/27/2014 By jamesy

Permit Numbers: W2014-0278 to W2014-0279
Permits Valid from 04/01/2014 to 04/02/2014

Application Id: 1395256216529 **City of Project Site:** Alameda
Site Location: 2301 Santa Clara Avenue and 2305 Santa Clara Avenue
Project Start Date: 04/01/2014 **Completion Date:** 04/02/2014
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: Ninyo & Moore - Peter Sims **Phone:** 510-343-3000 x15216
1956 Webster Street, Suite 400, Oakland, CA 94612
Property Owner: Carolyn Fong **Phone:** 626-285-2658
711 E. Hermosa Drive, San Gabriel, CA 91775
Client: ** same as Property Owner **

	Total Due:	$530.00
Receipt Number: WR2014-0111	**Total Amount Paid:**	$530.00
Payer Name : Ninyo & Moore	Paid By: CHECK	**PAID IN FULL**

Works Requesting Permits:

Remediation Well Construction-Extraction - 3 Wells
Driller: Penecore Drilling - Lic #: 906899 - Method: hstem **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2014-0278	03/27/2014	06/30/2014	EW-20	12.00 in.	4.00 in.	4.00 ft	25.00 ft
W2014-0278	03/27/2014	06/30/2014	EW-21	12.00 in.	4.00 in.	4.00 ft	25.00 ft
W2014-0278	03/27/2014	06/30/2014	EW-22	12.00 in.	4.00 in.	4.00 ft	25.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

5. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

7. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).

8. Minimum surface seal thickness is two inches of cement grout placed by tremie.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

10. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

Remediation Well Construction-Injection - 2 Wells
Driller: Penecore Drilling - Lic #: 906899 - Method: hstem **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2014-0279	03/27/2014	06/30/2014	EW-18	12.00 in.	4.00 in.	4.00 ft	15.00 ft
W2014-0279	03/27/2014	06/30/2014	EW-19	12.00 in.	4.00 in.	4.00 ft	15.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

5. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

7. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).

8. Minimum surface seal thickness is two inches of cement grout placed by tremie.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

10. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

APPENDIX C

BORING LOGS AND MONITORING WELL CONTRSTRUCTION SCHEMATICS

DATE DRILLED 4-2-14 BORING NO. EW-18

GROUND ELEVATION 30'± MSL SHEET 1 OF 1

METHOD OF DRILLING DIRECT PUSH/HOLLOW STEM AUGER

DRIVE WEIGHT _____ DROP _____

SAMPLED BY PDS LOGGED BY PDS REVIEWED BY KML

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							SM	ASPHALT: Approximately 3 inches. ALLUVIUM: Moderate yellowish brown, moist, silty SAND.
5	Driven			14.9				Olive gray, petroleum odor.
10	Driven		▽	378			SC	Olive gray, moist, clayey SAND; petroleum odor.
							SM	Olive gray, wet, silty SAND; petroleum odor.
15								Total Depth = 15 feet below ground surface. Groundwater was encountered at 10.5 feet bgs. Well Construction: 0.010" slotted, 4" diameter PVC casing from 15 to 5 feet bgs. Blank, 4" diameter PVC casing from 5 to 0.5 feet bgs. #2/12 sand from 15 to 4 feet bgs. Hydrated bentonite chips from 4 to 3 feet bgs. Cement grout from 3 to 1 feet bgs. Finished with traffic rated well box.
20								

Ninyo & Moore

BORING LOG

2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401896004	5/14	C-1

DATE DRILLED 4-2-14 BORING NO. EW-19

GROUND ELEVATION 30'± MSL SHEET 1 OF 1

METHOD OF DRILLING DIRECT PUSH/HOLLOW STEM AUGER

DRIVE WEIGHT _____ DROP _____

SAMPLED BY PDS LOGGED BY PDS REVIEWED BY KML

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							SM	ASPHALT: Approximately 3 inches. ALLUVIUM: Moderate yellowish brown, moist, silty SAND.
5				57.7				Olive gray, petroleum odor.
10			▽	1271			SC	Olive gray, moist, clayey SAND; petroleum odor.
							SM	Olive gray, wet, silty SAND; petroleum odor.
15								Total Depth = 15 feet below ground surface. Groundwater was encountered at 10.5 feet bgs. Well Construction: 0.010" slotted, 4" diameter PVC casing from 15 to 5 feet bgs. Blank, 4" diameter PVC casing from 5 to 0.5 feet bgs. #2/12 sand from 15 to 4 feet bgs. Hydrated bentonite chips from 4 to 3 feet bgs. Cement grout from 3 to 1 feet bgs. Finished with traffic rated well box.
20								

Ninyo & Moore

BORING LOG

2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401896004	5/14	C-2

DATE DRILLED 4-2-14 BORING NO. EW-20

GROUND ELEVATION 30'± MSL SHEET 1 OF 2

METHOD OF DRILLING DIRECT PUSH/HOLLOW STEM AUGER

DRIVE WEIGHT _____ DROP _____

SAMPLED BY PDS LOGGED BY PDS REVIEWED BY KML

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							SM	ASPHALT: Approximately 3 inches. ALLUVIUM: Moderate yellowish brown, moist, silty SAND.
5	Driven			38.9				Olive gray, petroleum odor.
10	Driven		▽	1834			SC	Olive gray, moist, clayey SAND; petroleum odor.
							SM	Olive gray, wet, silty SAND; petroleum odor.
15								Moderate yellowish brown.
20								

Ninyo & Moore

BORING LOG

2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401896004	5/14	C-3

DATE DRILLED 4-2-14 BORING NO. EW-20

GROUND ELEVATION 30'± MSL SHEET 2 OF 2

METHOD OF DRILLING DIRECT PUSH/HOLLOW STEM AUGER

DRIVE WEIGHT _____ DROP _____

SAMPLED BY PDS LOGGED BY PDS REVIEWED BY KML

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20								SM	ALLUVIUM: (continued) Moderate yellowish brown, wet, silty SAND.
25									Total Depth = 25 feet below ground surface. Groundwater was encountered at 10.5 feet bgs. Well Construction: 0.010" slotted, 4" diameter schedule 40 PVC casing from 25 to 5 feet bgs. Blank, 4" diameter schedule 40 PVC casing from 5 to 0.5 feet bgs. #2/12 sand from 25 to 4 feet bgs. Hydrated bentonite chips from 4 to 3 feet bgs. Cement grout from 3 to 1 feet bgs. Finished with traffic rated well box.
30									
35									
40									

Ninyo & Moore

BORING LOG

2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401896004	5/14	C-4

DATE DRILLED 4-2-14 BORING NO. EW-21

GROUND ELEVATION 30'± MSL SHEET 1 OF 2

METHOD OF DRILLING DIRECT PUSH/HOLLOW STEM AUGER

DRIVE WEIGHT _____ DROP _____

SAMPLED BY PDS LOGGED BY PDS REVIEWED BY KML

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0									ASPHALT: Approximately 6 inches.
								SM	FILL: Moderate olive brown, moist, silty SAND; few gravel; few cobble sized debris (concrete and brick).
								SM	ALLUVIUM: Moderate yellowish brown, moist, silty SAND.
5		■			0.0				
10		■		▽	0.0				Wet.
15									
20									

Ninyo & Moore

BORING LOG

2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401896004	5/14	C-5

DATE DRILLED 4-2-14 BORING NO. EW-21

GROUND ELEVATION 30'± MSL SHEET 2 OF 2

METHOD OF DRILLING DIRECT PUSH/HOLLOW STEM AUGER

DRIVE WEIGHT _____ DROP _____

SAMPLED BY PDS LOGGED BY PDS REVIEWED BY KML

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20								SM	ALLUVIUM: (continued) Moderate yellowish brown, wet, silty SAND.
25									Total Depth = 25 feet below ground surface. Groundwater was encountered at 10.5 feet bgs. Well Construction: 0.010" slotted, 4" diameter schedule 40 PVC casing from 25 to 5 feet bgs. Blank, 4" diameter schedule 40 PVC casing from 5 to 0.5 feet bgs. #2/12 sand from 25 to 4 feet bgs. Hydrated bentonite chips from 4 to 3 feet bgs. Cement grout from 3 to 1 feet bgs. Finished with traffic rated well box.
30									
35									
40									

Ninyo & Moore

BORING LOG

2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401896004	5/14	C-6

DATE DRILLED 4-1-14 BORING NO. EW-22

GROUND ELEVATION 30'± MSL SHEET 1 OF 2

METHOD OF DRILLING DIRECT PUSH/HOLLOW STEM AUGER

DRIVE WEIGHT _____ DROP _____

SAMPLED BY PDS LOGGED BY PDS REVIEWED BY KML

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0									ASPHALT: Approximately 4 inches.
								SM	FILL: Moderate olive brown, moist, silty SAND; few gravel; few cobble sized debris (concrete and brick).
								SM	ALLUVIUM: Moderate yellowish brown, moist, silty SAND.
5		■			0.0				
10		■		▽	0.0				Wet.
15									
20									

Ninyo & Moore

BORING LOG

2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401896004	5/14	C-7

DATE DRILLED 4-1-14 BORING NO. EW-22

GROUND ELEVATION 30'± MSL SHEET 2 OF 2

METHOD OF DRILLING DIRECT PUSH/HOLLOW STEM AUGER

DRIVE WEIGHT _____ DROP _____

SAMPLED BY PDS LOGGED BY PDS REVIEWED BY KML

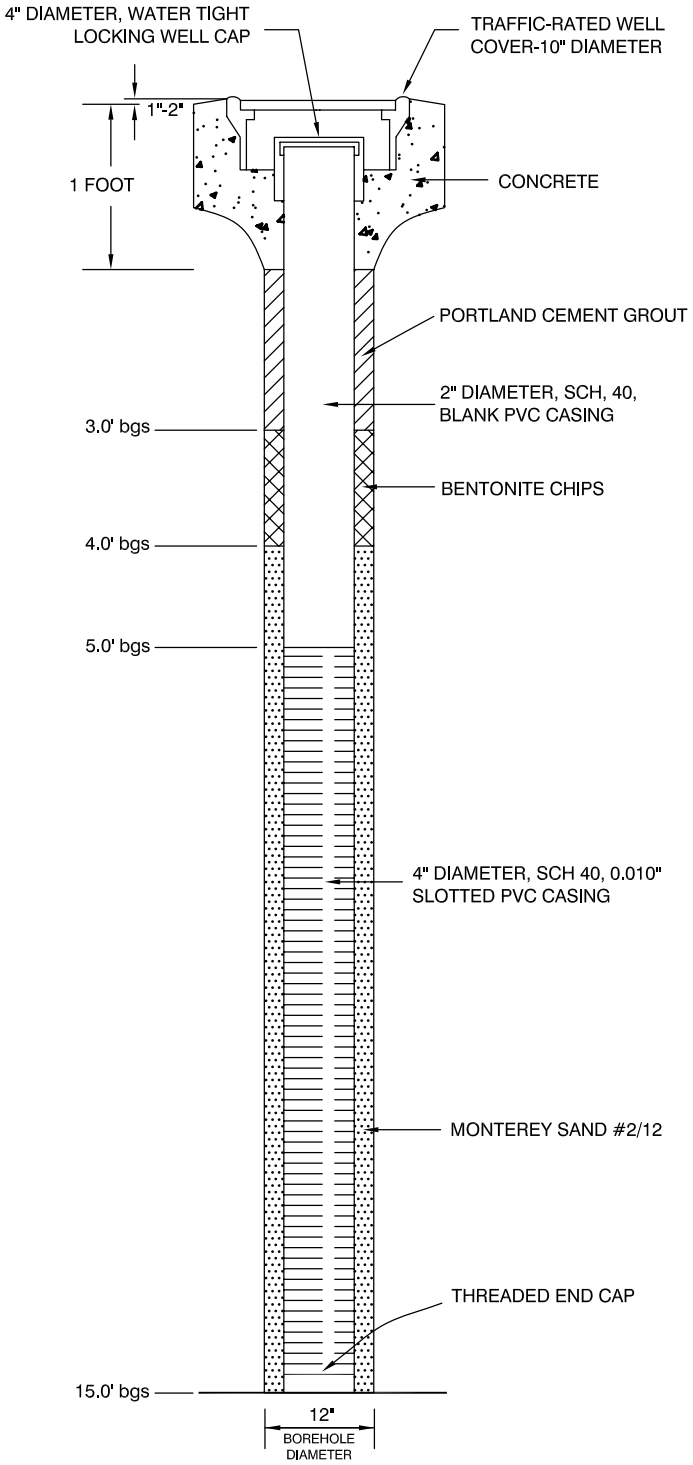
DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	PID READING (PPM)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20								SM	ALLUVIUM: (continued) Moderate yellowish brown, wet, silty SAND.
25									Total Depth = 25 feet below ground surface. Groundwater was encountered at 10.5 feet bgs. Well Construction: 0.010" slotted schedule 40 PVC casing from 25 to 5 feet bgs. Blank, schedule 40 PVC casing from 5 to 0.5 feet bgs. #2/12 sand from 25 to 4 feet bgs. Hydrated bentonite chips from 4 to 3 feet bgs. Cement grout from 3 to 1 feet bgs. Finished with traffic rated well box.
30									
35									
40									

Ninyo & Moore

BORING LOG

2301 SANTA CLARA AVENUE
ALAMEDA, CALIFORNIA

PROJECT NO.	DATE	FIGURE
401896004	5/14	C-8

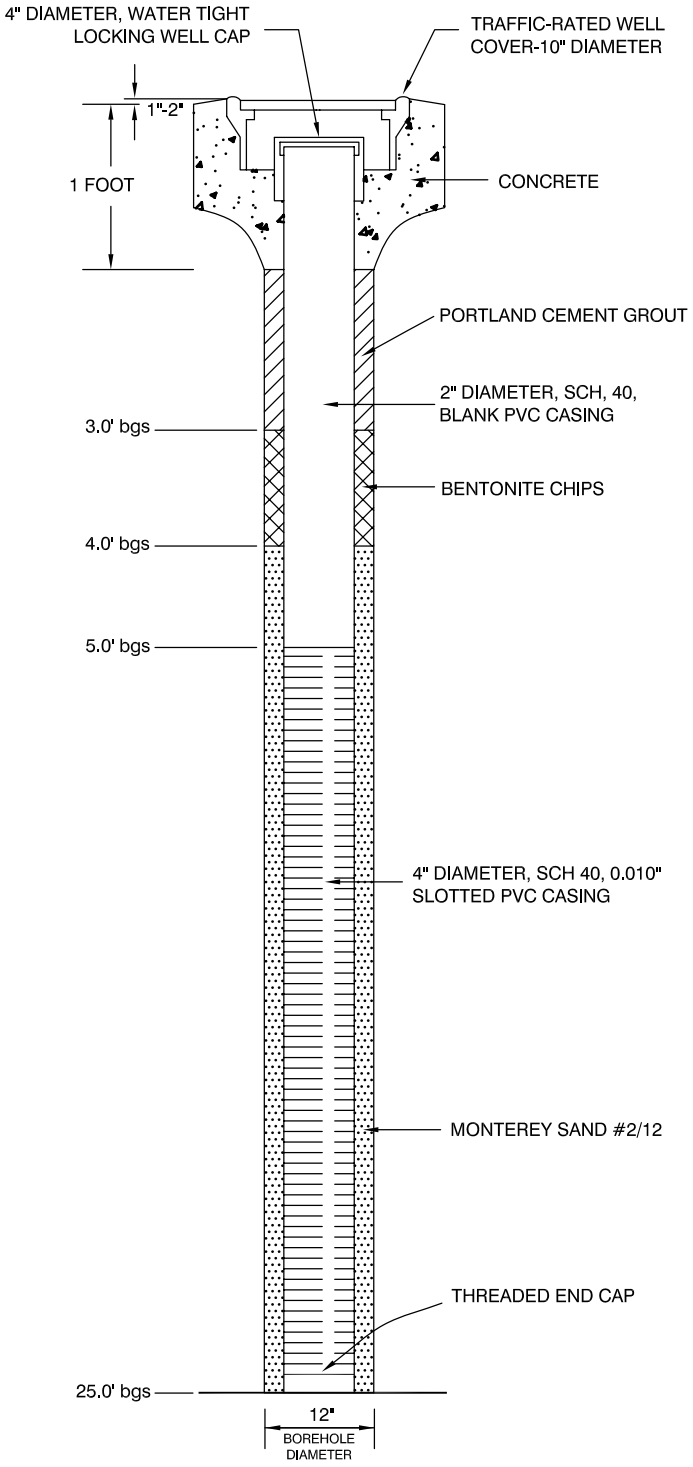


TOTAL DEPTH = 15.0'

NOT TO SCALE

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	MONITORING WELL EW-18 AND EW-19 CONSTRUCTION SCHEMATIC	FIGURE
PROJECT NO. / DATE	2301 SANTA CLARA AVENUE ALAMEDA, CALIFORNIA	C-1
401896001 / 8/14		



TOTAL DEPTH = 25.0'

NOT TO SCALE

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	MONITORING WELL EW-20, EW-21 AND EW-22 CONSTRUCTION SCHEMATIC	FIGURE
PROJECT NO. 401896001 / DATE 8/14	2301 SANTA CLARA AVENUE ALAMEDA, CALIFORNIA	C-2

APPENDIX D

WELL DEVELOPMENT DATA SHEETS AND SURVEY REPORT

Location: Chun Date: 4/7/14

Project / Client: 401896004

Well Development

Well	pH	Cond. µS	Temp. °C	Turb. NTU	Purge Volume Gallons
EW-22	7.9	376	17.8	—	25
EW-22	7.17	306	17.5	~~74~~	40
"	6.97	316	17.4	298	50
"	6.93	292	17.5	613	55
"	6.81	1895	17.4	213	60
"	6.84	177.4	17.3	749	70
"	6.77	183.4	18.2	1136	95
"	6.72	169	17.9	620	~~105~~ 100
"	6.77	162	17.9	603	105
"	6.68	162	18.2	167	110
"	6.55	159.4	17.8	143	115
"	6.53	159.4	17.9	94.4	120
"	6.58	155.7	17.9	88.6	125
"	6.50	155.2	17.8	66.4	130
"	6.51	151.5	17.8	44.6	135
"	6.54	153.0	17.8	38.3	140
"	6.53	152.7	17.8	35.7	145
EW-21	6.55	351	20.2	171	45
"	6.53	349	20.0	155	55
"	6.31	327	19.4	59	65
"	6.41	317	19.4	20.8	~~70~~

Location: Chun Date: 4/7/14

Project / Client: 401896004

Well Development

well	pH	Cond. µS	Temp °C	Turb. NTU	Purge Vol. Gallons
EW-21	6.29	314	19.3	12.9	75
"	6.25	310	19.3	13.6	80
"	6.21	310	19.3	15.0	85
EW-20	6.09	537	20.9	988	20
"	6.32	503	20.9	184	25
"	6.47	490	20.8	112	30
"	6.19	467	20.6	64.2	35
"	6.05	463	20.6	38.6	40
"	6.11	459	20.6	26.1	45
"	6.02	455	20.6	27.6	50
"	5.99	452	21.1	27.4	55
EW-19	6.25	521	19.3	743	10
"	6.37	531	19.5	861	15
"	6.18	466	19.6	207	20
"	6.39	442	19.6	134	25
"	6.41	429	19.7	77.1	30
"	6.10	414	19.7	33.5	35
"	6.02	408	19.7	22.1	40
"	6.00	408	19.7	19.7	45
"	5.98	410	19.8	14.1	50
EW-18	6.19	407	19.9	167	10
"	6.37	386	20.4	161	15

Location: Chun Date: 4/7/14

Project / Client: 401896004

Well Development

Well	pH	Cond. µS	Temp °C	Turb. NTU	Purge Vol. Gallons
EW-18	6.40	371	20.5	10.01	25
EW-18	6.25	367	20.4	3.68	30
"	6.18	364	20.5	2.07	35
"	6.16	363	20.5	1.89	40

Virgil Chavez Land Surveying
721 Tuolumne Street
Vallejo, California 94590
(707) 553-2476 • Fax (707) 553-8698

April 25, 2014
Project No.: 2944-07

Peter Sims
Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612

Subject: Monitoring Well Survey
2301 Santa Clara Ave.
Alameda, CA

Dear Peter:

This is to confirm that we have proceeded at your request to survey the monitoring wells at the above referenced location. The survey was completed on April 6, 2014. The benchmark for this survey was a USC & GS disk in the top of a catch basin at the east side of Park on the north side of Otis Drive. The latitude, longitude and coordinates are for top of casings and are based on the California State Coordinate System, Zone III (NAD83). Benchmark Elevation = 8.14 feet (NGVD 29).

Latitude	Longitude	Northing	Easting	Elev.	Desc.
				28.60	RIM EW-18
37.7661380	-122.2430837	2106122.21	6057847.16	28.47	TOC EW-18
				28.53	RIM EW-19
37.7660941	-122.2431189	2106106.41	6057836.70	28.34	TOC EW-19
				28.81	RIM EW-20
37.7660307	-122.2431516	2106083.53	6057826.81	28.52	TOC EW-20
				29.28	RIM EW-21
37.7662152	-122.2427144	2106148.33	6057954.43	29.09	TOC EW-21
				29.06	RIM EW-22
37.7661320	-122.2427675	2106118.35	6057938.50	28.47	TOC EW-22

Sincerely,

Virgil D. Chavez, PLS 6323

APPENDIX E

GROUNDWATER MONITORING DATA SHEETS

MONITORING WELL SAMPLING FORM	Date: 6-24-14 / 6/25/14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-4R	Depth to Liquid (DL): 8.84
Casing Material: PVC	Depth to Water (DW1): 8.84
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 24.87
Well Box Condition: good	Total head (TH=TD-DW1): 16.03 x .16 = 2.5648 = 7.69
Purge Method: Pump	Casing Volume (TH*Factor): 10.42 x3 = 31.26
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks
0728	1gal	20.0	561	6.63		Silty ; odor
0734	2	20.3	497.8	6.68		
0740	3	20.5	477.1	6.69		Less silty
0747	4	20.5	509.6	6.71		
0754	5	20.6	553	6.68		Clear ; slight odor
0759	6	20.6	566	6.73		
0804	7	20.6	588	6.74		
0810	8	20.6	603	6.72		Clear; slight odor

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
0815	MW-4R										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-25-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-5R	Depth to Liquid (DL): 8.57
Casing Material: PVC	Depth to Water (DW1): 8.57
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 23.50
Well Box Condition: good	Total head (TH=TD-DW1): ~~14.93~~ 14.93
Purge Method: Pump	Casing Volume (TH*Factor): ~~4.70 x 3~~ 2.39x3 = 7.18
Casing Vol. Conv. Factors: 2" = **0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks	DO%	ORP mV
0906	1 gal	19.7	424.5	8.86		Silty; odor		
0913	2	20.0	411.6	8.99		clear; slight odor		
0920	3	20.3	428.9	8.91				
0927	4	20.0	391.0	9.87				
0934	5	20.1	411.3	10.47			23.1	-149.9
0941	6	19.9	414.0	10.51			26.1	-135.5
0947	7	19.9	418.5	10.52			31.2	-183.0
0955	8	20.0	434.4	10.62			41.3	-230.5

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100
0955		

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
0955	MW-5R										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-25-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-6R	Depth to Liquid (DL): 8.49
Casing Material: PVC	Depth to Water (DW1): 8.49
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 24.87
Well Box Condition: good	Total head (TH=TD-DW1): 16.38
Purge Method: Pump	Casing Volume (TH*Factor): 2.62 x 3 = 7.86
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks	DO%	ORP mV
1016	1 gal	19.8	619.3	7.36		Clear; no odor	18.9	-166.3
1021	2	20.0	606.1	6.99			31.7	-151.2
1028	3	20.2	592.0	6.92			17.8	-141.9
1034	4	20.3	573.4	6.90			21.8	-125.8
1041	5	20.3	552.2	6.85			13.3	-118.7
1047	6	20.3	547.1	6.88			15.4	-116.3
1054	7	20.2	544.6	6.93			21.2	-114.5
1100	8	20.2	530.7	6.87			19.1	-114.1

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1100	MW-6R										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-25-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-7R	Depth to Liquid (DL): 8.79
Casing Material: PVC	Depth to Water (DW1): 8.79
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 24.97
Well Box Condition: good	Total head (TH=TD-DW1): 16.18
Purge Method: Pump	Casing Volume (TH*Factor): 2.59 x 3 = 7.77
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks	DO%	ORP mV
1326	1 gal	19.4	481	6.43		Very smelly; sheen	41.3	-100.1
1333	2	19.6	774	6.44		" "	24.2	-82.0
1339	3	19.8	772	6.39		" "	8.7	-81.7
1345	4	19.8	774	6.41		Less smelly; no sheen	22.9	-85.1
1350	5	19.7	765	6.43		" "	25.7	-86.3
1354	6	19.8	760	6.45			14.7	-88.5
1358	7	19.7	765	6.44			25.1	-86.1
1403	8	19.6	774	6.61			33.0	-87.2

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1405	MW-7R										

Additional Comments

MONITORING WELL SAMPLING FORM

Date: ~~6-5~~ 6-24-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-8	Depth to Liquid (DL): 8.25
Casing Material: PVC	Depth to Water (DW1): 8.25
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 13.84
Well Box Condition: good	Total head (TH=TD-DW1): 5.6
Purge Method: ~~Pump~~ bailer	Casing Volume (TH*Factor): 0.896 x3 = 2.7
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	mV ORP	% DO	Remarks
1308	~~1~~	22.6	434.7	7.04		-131.2	37.8	
1310	2	23.2	436.3	6.88		-116.3	34.5	
1313	3	22.6	444.9	6.77		-112.0	41.0	

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1317	MW-8										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-24-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-9	Depth to Liquid (DL): 7.78
Casing Material: PVC	Depth to Water (DW1): 7.78
Diameter: 2"	Product Thickness (PT=DW1-DL):
Well Head Condition: good	Total Well Depth (TD): 14.82
Well Box Condition: good	Total head (TH=TD-DW1): 7.04
Purge Method: Pump	Casing Volume (TH*Factor): 1.13 x3 = 3.38
Casing Vol. Conv. Factors: 2" = **0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks		
0822	1 gal	19.6	496.2	6.70		Silty; no odor	DO%	ORP mV
0825	2	19.6	496.0	6.69			53.2	150.6
0828	3	19.6	495.8	6.71			43.4	145.9
0830	3.5	19.6	495.5	6.71			38.9	143.1
							39.0	142.3

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
0830	MW-9										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: ~~MW-10~~ 6-24-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-10	Depth to Liquid (DL): 7.86
Casing Material: PVC	Depth to Water (DW1): 7.86
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 12.86
Well Box Condition: good	Total head (TH=TD-DW1): 5.00
Purge Method: Pump	Casing Volume (TH*Factor): 0.8 x3= 2.4
Casing Vol. Conv. Factors: 2" = **0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks	DO%	ORP mV
0729	1 gal	20.3	313.4	6.30		Slightly turbid; no odor.	60.0	133.0
0732	2	20.3	309.3	6.25		" "	58.5	131.3
0735	3	20.3	306.7	6.24		" "	56.3	131.3

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
0740	MW-10										

Additional Comments

MONITORING WELL SAMPLING FORM

Date: 6-26-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-11R	Depth to Liquid (DL): 9.30
Casing Material: PVC	Depth to Water (DW1): 9.30
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 23.64
Well Box Condition: good	Total head (TH=TD-DW1): 14.34
Purge Method: Pump	Casing Volume (TH*Factor): 2.29 x3 = 6.88
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks	
1042	1 gal	19.4	166.9	6.78		DO%	ORP mV
1046	2	19.3	162.8	6.74		73.3	-44.4
1049	3	~~193~~ 19.3	157.7	6.85		44.6	-63.1
1053	4	18.9	157.0	7.01		69.5	-64.0
1057	5	18.5	154.4	6.90		46.4	-76.7
1059	6	18.7	154.8	7.04		37.6	-80.2
1101	7	18.7	153.3	7.01		51.5	-79.2
						37.1	-80.3

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1110	MW-11R										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-26-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-12	Depth to Liquid (DL): 8.86
Casing Material: PVC	Depth to Water (DW1): 8.86
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 24.33
Well Box Condition: good	Total head (TH=TD-DW1): 15.47
Purge Method: Pump	Casing Volume (TH*Factor): 2.48 x 3 = 7.43
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks DO%	ORP mV
1224	1 gal	19.5	483.0	6.70		96.9	64.5
1227	2	19.5	485.2	6.42		75.1	60.9
1232	3	19.3	522.5	6.35		60.2	28.9
1235	4	19.4	530.0	6.31		51.9	25.6
1238	5	19.2	549.6	6.36		58.9	12.0
1241	6	19.2	500.5	6.34		58.2	10.4
1244	7	19.1	542.2	6.47		54.1	4.8
1245	7.5	19.2	544.4	6.39		56.5	5.4

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1250	MW-12										

Additional Comments

MONITORING WELL SAMPLING FORM

Date: 6-26-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-13	Depth to Liquid (DL): 9.87
Casing Material: PVC	Depth to Water (DW1): 9.87
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 20.02
Well Box Condition: good	Total head (TH=TD-DW1): 10.15
Purge Method: Pump	Casing Volume (TH*Factor): 1.62 x 3 = 4.87
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	% DO	mV ORP	Remarks
0857	1	18.6	201.0	7.09		80.3	109.5	clear no odor
0900	2	18.6	219.4	6.73		50.1	117.8	" "
0904	3	18.5	238.5	6.64		48.2	121.7	light brown "
0910	4	18.5	247.8	6.61		53.1	125.5	" "
0915	5	18.3	242.2	6.62		49.0	124.4	" "

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
0916	MW-13										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-26-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-14	Depth to Liquid (DL): 9.34
Casing Material: PVC	Depth to Water (DW1): 9.34
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 11.38
Well Box Condition: good	Total head (TH=TD-DW1): 2.04
Purge Method: Pump	Casing Volume (TH*Factor): 0.33 x 3 = 0.98
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks		
0909	0.5g	18.0	252.0	6.69		Clear, no odor	DO%	ORP mV
0910	1.0	17.7	251.6	6.69			84.9	125.0
							67.0	142.2

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
0915	MW-14										

Additional Comments

MONITORING WELL SAMPLING FORM

Date: 6-26-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-15	Depth to Liquid (DL): 9.85
Casing Material: PVC	Depth to Water (DW1): 9.85
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 29.39
Well Box Condition: good	Total head (TH=TD-DW1): 19.54
Purge Method: Pump	Casing Volume (TH*Factor): 3.13 x 3 = 9.38
Casing Vol. Conv. Factors: 2" = **0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks DO%	Remarks ORP mV
1334	1 gal	20.9	191.4	7.45		87.0	-125.8
1337	2	20.2	191.5	7.04		70.6	-99.5
1341	3	19.2	196.6	6.89		68.0	-84.2
1343	4	19.2	201.3	6.80		60.2	-60.7
1349	6	18.9	228.2	6.74		63.0	-51.7
1356	8	19.2	245.1	6.86		83.6	-70.9
1401	10	19.0	260.1	6.87		96.2	-76.1

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1405	MW-15										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-26-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-16	Depth to Liquid (DL): 9.04
Casing Material: PVC	Depth to Water (DW1): 9.04
Diameter: 2"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 29.37
Well Box Condition: good	Total head (TH=TD-DW1): 20.33
Purge Method: Pump	Casing Volume (TH*Factor): 3.25 x 3 = 9.76
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	% DO	mV ORP	Remarks
1346	2	18.6	~~399.1~~	6.73		68.4	-67.5	
1352	4	18.5	390.8	6.57		49.1	-17.9	
1354	6	~~21.4~~ 18.5	399.7	6.76		90.1	-59.4	
1358	8	18.7	399.9	6.81		97.3	-62.0	
1400	10	18.3	401.5	6.68		52.0	-70.7	

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1400	MW-16										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-25-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. EW-14	Depth to Liquid (DL): 9.24
Casing Material: PVC	Depth to Water (DW1): 9.24
Diameter: 4"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 24.41
Well Box Condition: good	Total head (TH=TD-DW1): 15.17
Purge Method: Pump	Casing Volume (TH*Factor): 9.86 x 3 = 29.58
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	% DO / mV ORP	Remarks
1350	5	19.5	960	6.82		36.0 / -110.9	
1354	10	19.5	907	6.80		35.5 / -110.2	
1358	15	19.3	1226	6.90		15.7 / -121.0	
1402	20	19.2	1270	6.92		48.7 / -127.6	
1408	25	19.3	1256	7.00		53.0 / -119.7	
1413	30	19.3	1258	6.98		52.9 / -122.8	

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1432	EW-14										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-25-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. EW-15	Depth to Liquid (DL): 9.03
Casing Material: PVC	Depth to Water (DW1): 9.03
Diameter: 4"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 24.14
Well Box Condition: good	Total head (TH=TD-DW1): 15.11
Purge Method: Pump	Casing Volume (TH*Factor): 9.82 x 3 = 29.46
Casing Vol. Conv. Factors: 2" = **0.16**; 3" = 0.36; 4"=**0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks	DO%	ORP mV
1425	1 gal	19.7	872	6.55		Smelly; clear	9.2	-94.9
1427	2	19.5	878	6.58			21.8	-100.8
1428	3	19.7	872	6.53			10.9	-99.8
1430	5	19.8	875	6.59			39.6	-94.6
1436	10	19.6	878	6.65			14.8	-108.6
1441	15	19.3	906	6.70			14.7	-108.8
1451	20	19.3	887	6.71			18.9	-111.0
1456	25	19.4	895	6.71			29.7	-98.1
1503	30	19.3	870	6.81			36.0	-96.1

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1508	EW-15										

Additional Comments

MONITORING WELL SAMPLING FORM

Date: 6-24-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. EW-16	Depth to Liquid (DL): 9.29
Casing Material: PVC	Depth to Water (DW1): 9.29
Diameter: 4"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 22.74
Well Box Condition: good	Total head (TH=TD-DW1): 13.45
Purge Method: Pump	Casing Volume (TH*Factor): 8.74 x 3 = 26.23
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks DO%	ORP mV
843	0	20.6	301.1	6.80		6.5	-103.8
847	5	20.6	337.6	6.79		9.4	-127
849	10	20.3	511.2	6.83		18.0	-116.1
852	15	20.2	641	6.83		12.4	-110.2
855	20	20.1	856	6.78		21.8	-97.6
858	25	20.1	933	6.78		24.0	-90.8
900	27	20.1	916	6.80		31.1	-89.3

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
EW-16	0900										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-25-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. EW-17	Depth to Liquid (DL): 9.27
Casing Material: PVC	Depth to Water (DW1): 9.27
Diameter: 4"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 24.12
Well Box Condition: good	Total head (TH=TD-DW1): 14.85
Purge Method: Pump	Casing Volume (TH*Factor): 9.65 x 3 = 28.96
Casing Vol. Conv. Factors: 2" = **0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	% DO	mV ORP	Remarks	
1221	5	20.1	1478	7.27		57.0	-166.5	Dark gray	Gas odor
1223	10	19.8	1548	7.05		53.9	-151.1	Medium gray	"
1226	15	19.4	1507	7.08		68.5	-134.6	"	"
1232	20	19.4	1512	6.98		32.6	-139.2	Clear	"
1236	25	19.5	1507	7.03		25.9	-133.8	"	"
1243	30	19.5	1494	7.09		33.1	-119.0	"	"

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1219	EW-17										

Additional Comments

MONITORING WELL SAMPLING FORM

Date: 6-25-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. EW-18	Depth to Liquid (DL): 8.91
Casing Material: PVC	Depth to Water (DW1): 8.91
Diameter: 4"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 14.74
Well Box Condition: good	Total head (TH=TD-DW1): 5.83
Purge Method: Pump	Casing Volume (TH*Factor): 3.79
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

11.37

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	% DO / mV ORP	Remarks
1047	5	21.3	903	6.77		3.5 / -96.2	
1052	10	21.4	894	6.76		17.7 / -98.3	
1054	12	21.2	870	6.82		29.1 / -101.4	

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1106	EW-18										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-25-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. EW-19	Depth to Liquid (DL): 8.74
Casing Material: PVC	Depth to Water (DW1): 8.74
Diameter: 4"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 14.56
Well Box Condition: good	Total head (TH=TD-DW1): 5.87
Purge Method: Pump	Casing Volume (TH*Factor): 3.78 x 3 = 11.35
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	% DO	mV ORP	Remarks
1108	2	20.3	935	6.67		12.0	-82.6	
1110	5	20.7	916	6.66		8.9	-75.5	
1113	7	21.0	921	6.72		16.6	-67.4	
1115	10	20.9	937	6.67		12.9	-69.8	
1116	12	20.5	926	6.66		21.5	-91.1	

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1225	EW-19										

Additional Comments

MONITORING WELL SAMPLING FORM

Date: 5
6-24-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. EW-20	Depth to Liquid (DL): 8.90
Casing Material: PVC	Depth to Water (DW1):
Diameter: 4"	Product Thickness (PT=DW1-DL):
Well Head Condition: good	Total Well Depth (TD): 24.20
Well Box Condition: good	Total head (TH=TD-DW1): 15.3
Purge Method: Pump	Casing Volume (TH*Factor): 9.95 x3 = 30
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	% DO / mV ORP	Remarks
934	5	21.3	729	7.09		10.3 / -101.8	
0940	10	21.2	734	7.78		14.0 / -111.8	
0947	15	21.1	739	7.14		18.3 / -116.5	
0952	20	21.0	754	7.21		18.2 / -122.0	
0957	25	20.9	752	7.70		29.7 / -148.6	
01002	30	21.0	750	6.85		27.9 / ~~-49.4~~ -107.2	

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1010	MW-20R										

Additional Comments

MONITORING WELL SAMPLING FORM	Date: 6-26-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. EW-21	Depth to Liquid (DL): 9.75
Casing Material: PVC	Depth to Water (DW1): 9.75
Diameter: 4"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 24.54
Well Box Condition: good	Total head (TH=TD-DW1): 14.79
Purge Method: Pump	Casing Volume (TH*Factor): 9.61 × 3 = 28.84
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4"=0.65; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	Remarks
1057	5	20.0	494.3	6.77		73.8 -63.5 clear no odor
1102	10	20.4	505.7	6.81		70.3 -68.3 " "
1107	15	19.9	471.2	6.87		60.6 -69.5 cloudy "
1113	20	19.8	450.7	6.93		69.3 -20.3 " "
1125	25	19.8	430.7	6.88		59.7 -48.9
1127	30	20.0	422.2	6.90		54.2 ~~-59.4~~ 10

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1130	EW-21										

Additional Comments

MONITORING WELL SAMPLING FORM

Date: 6-26-14

Project Name: Chun	Client: Carolyn Fong	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. EW-22	Depth to Liquid (DL): 8.91
Casing Material: PVC	Depth to Water (DW1): 8.91
Diameter: 4"	Product Thickness (PT=DW1-DL): 0.00
Well Head Condition: good	Total Well Depth (TD): 23.86
Well Box Condition: good	Total head (TH=TD-DW1): 14.95
Purge Method: Pump	Casing Volume (TH*Factor): 9.72 x3 = 29.15
Casing Vol. Conv. Factors: **2" = 0.16**; 3" = 0.36; **4"=0.65**; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	Turb (NTU)	% DO	mV ORP	Remarks	
1003	5	19.1	181.3	6.55		94.2	138.5	cloudy	no odor
1006	10	19.9	191.0	6.48		92.8	141.3	"	"
1009	15	19.4	181.6	6.59		72.2	139.8	"	"
1015	20	19.1	172.0	6.68		52.4	137.6	"	"
1021	25	18.8	173.5	6.67		78.7	139.8	"	"
1026	30	18.8	173.7	6.63		73.1	141.3	"	"

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery (1-[DW2-DW1]/DW1)*100

Sample Information

Time	Sample ID	Temp (°F)	TPHg EPA 8015	VOCs EPA 8260B	Nitrate, nitrite, sulfate, and orthophosphate EPA 300.00	Potassium and manganese by EPA 200.7	Iron II by SM3500-FE D and Iron III by calculation	Ammonia by SM4500-NH3 D			OTHER
1029	EW-22										

Additional Comments

APPENDIX F

LABORATORY ANALYTICAL REPORTS

ADVANCED TECHNOLOGY LABORATORIES

April 10, 2014

Peter Sims
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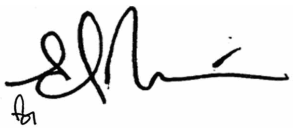
ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1401005
Client Reference : Chun, 401896004

Enclosed are the results for sample(s) received on April 03, 2014 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,



Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Ninyo & Moore		Project Number :	Chun, 401896004
1956 Webster Street, Suite 400		Report To :	Peter Sims
Oakland , CA 94612		Reported :	04/10/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
EW-22-5	1401005-01	Soil	4/01/14 8:56	4/03/14 8:00
EW-22-10	1401005-02	Soil	4/01/14 9:01	4/03/14 8:00
EW-21-5	1401005-03	Soil	4/01/14 12:00	4/03/14 8:00
EW-21-10	1401005-04	Soil	4/01/14 12:04	4/03/14 8:00
EW-18-5	1401005-05	Soil	4/02/14 11:00	4/03/14 8:00
EW-18-10	1401005-06	Soil	4/02/14 11:04	4/03/14 8:00
EW-19-5	1401005-07	Soil	4/02/14 13:01	4/03/14 8:00
EW-19-10	1401005-08	Soil	4/02/14 13:05	4/03/14 8:00
EW-20-5	1401005-09	Soil	4/02/14 14:41	4/03/14 8:00
EW-20-10	1401005-10	Soil	4/02/14 14:46	4/03/14 8:00

CASE NARRATIVE

All volatile analyses were performed using 5035 preservation requirements. Any high level dilutions were performed on a preserved methanol sample unless otherwise noted.

EPA 8260 results were J-flagged. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-22-5

Lab ID: 1401005-01

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4D0071	04/04/2014	04/04/14 13:52	
Surrogate: 4-Bromofluorobenzene	*111 %*		*55 - 131*		B4D0071	04/04/2014	*04/04/14 13:52*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.5	0.91	1	B4D0064	04/01/2014	04/03/14 19:46	
1,1,1-Trichloroethane	ND	4.5	0.80	1	B4D0064	04/01/2014	04/03/14 19:46	
1,1,2,2-Tetrachloroethane	ND	4.5	2.0	1	B4D0064	04/01/2014	04/03/14 19:46	
1,1,2-Trichloroethane	ND	4.5	0.81	1	B4D0064	04/01/2014	04/03/14 19:46	
1,1-Dichloroethane	ND	4.5	1.0	1	B4D0064	04/01/2014	04/03/14 19:46	
1,1-Dichloroethene	ND	4.5	1.3	1	B4D0064	04/01/2014	04/03/14 19:46	
1,1-Dichloropropene	ND	4.5	0.81	1	B4D0064	04/01/2014	04/03/14 19:46	
1,2,3-Trichloropropane	ND	4.5	0.91	1	B4D0064	04/01/2014	04/03/14 19:46	
1,2,3-Trichlorobenzene	ND	4.5	2.1	1	B4D0064	04/01/2014	04/03/14 19:46	
1,2,4-Trichlorobenzene	ND	4.5	1.3	1	B4D0064	04/01/2014	04/03/14 19:46	
1,2,4-Trimethylbenzene	ND	4.5	0.74	1	B4D0064	04/01/2014	04/03/14 19:46	
1,2-Dibromo-3-chloropropane	ND	9.0	3.3	1	B4D0064	04/01/2014	04/03/14 19:46	
1,2-Dibromoethane	ND	4.5	0.53	1	B4D0064	04/01/2014	04/03/14 19:46	
1,2-Dichlorobenzene	ND	4.5	0.90	1	B4D0064	04/01/2014	04/03/14 19:46	
1,2-Dichloroethane	ND	4.5	1.1	1	B4D0064	04/01/2014	04/03/14 19:46	
1,2-Dichloropropane	ND	4.5	1.0	1	B4D0064	04/01/2014	04/03/14 19:46	
1,3,5-Trimethylbenzene	ND	4.5	0.68	1	B4D0064	04/01/2014	04/03/14 19:46	
1,3-Dichlorobenzene	ND	4.5	0.67	1	B4D0064	04/01/2014	04/03/14 19:46	
1,3-Dichloropropane	ND	4.5	0.49	1	B4D0064	04/01/2014	04/03/14 19:46	
1,4-Dichlorobenzene	ND	4.5	0.71	1	B4D0064	04/01/2014	04/03/14 19:46	
2,2-Dichloropropane	ND	4.5	1.2	1	B4D0064	04/01/2014	04/03/14 19:46	
2-Chlorotoluene	ND	4.5	0.82	1	B4D0064	04/01/2014	04/03/14 19:46	
4-Chlorotoluene	ND	4.5	0.83	1	B4D0064	04/01/2014	04/03/14 19:46	
4-Isopropyltoluene	ND	4.5	0.76	1	B4D0064	04/01/2014	04/03/14 19:46	
Benzene	ND	4.5	0.90	1	B4D0064	04/01/2014	04/03/14 19:46	
Bromobenzene	ND	4.5	0.70	1	B4D0064	04/01/2014	04/03/14 19:46	
Bromochloromethane	ND	4.5	1.0	1	B4D0064	04/01/2014	04/03/14 19:46	
Bromodichloromethane	ND	4.5	0.71	1	B4D0064	04/01/2014	04/03/14 19:46	
Bromoform	ND	4.5	0.46	1	B4D0064	04/01/2014	04/03/14 19:46	
Bromomethane	ND	4.5	0.59	1	B4D0064	04/01/2014	04/03/14 19:46	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-22-5

Lab ID: 1401005-01

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	4.5	0.83	1	B4D0064	04/01/2014	04/03/14 19:46	
Carbon tetrachloride	ND	4.5	0.98	1	B4D0064	04/01/2014	04/03/14 19:46	
Chlorobenzene	ND	4.5	0.84	1	B4D0064	04/01/2014	04/03/14 19:46	
Chloroethane	ND	4.5	1.2	1	B4D0064	04/01/2014	04/03/14 19:46	
Chloroform	ND	4.5	0.92	1	B4D0064	04/01/2014	04/03/14 19:46	
Chloromethane	ND	4.5	0.96	1	B4D0064	04/01/2014	04/03/14 19:46	
cis-1,2-Dichloroethene	ND	4.5	0.76	1	B4D0064	04/01/2014	04/03/14 19:46	
cis-1,3-Dichloropropene	ND	4.5	0.69	1	B4D0064	04/01/2014	04/03/14 19:46	
Di-isopropyl ether	ND	4.5	0.96	1	B4D0064	04/01/2014	04/03/14 19:46	
Dibromochloromethane	ND	4.5	0.87	1	B4D0064	04/01/2014	04/03/14 19:46	
Dibromomethane	ND	4.5	0.94	1	B4D0064	04/01/2014	04/03/14 19:46	
Dichlorodifluoromethane	ND	4.5	0.93	1	B4D0064	04/01/2014	04/03/14 19:46	
Ethyl Acetate	ND	45	6.6	1	B4D0064	04/01/2014	04/03/14 19:46	
Ethyl Ether	ND	45	8.3	1	B4D0064	04/01/2014	04/03/14 19:46	
Ethyl tert-butyl ether	ND	4.5	0.77	1	B4D0064	04/01/2014	04/03/14 19:46	
Ethylbenzene	ND	4.5	0.72	1	B4D0064	04/01/2014	04/03/14 19:46	
Freon-113	ND	4.5	1.2	1	B4D0064	04/01/2014	04/03/14 19:46	
Hexachlorobutadiene	ND	4.5	1.2	1	B4D0064	04/01/2014	04/03/14 19:46	
Isopropylbenzene	ND	4.5	1.0	1	B4D0064	04/01/2014	04/03/14 19:46	
m,p-Xylene	ND	9.0	1.5	1	B4D0064	04/01/2014	04/03/14 19:46	
Methylene chloride	ND	4.5	4.5	1	B4D0064	04/01/2014	04/03/14 19:46	
MTBE	ND	4.5	0.88	1	B4D0064	04/01/2014	04/03/14 19:46	
n-Butylbenzene	ND	4.5	0.99	1	B4D0064	04/01/2014	04/03/14 19:46	
n-Propylbenzene	ND	4.5	0.88	1	B4D0064	04/01/2014	04/03/14 19:46	
Naphthalene	ND	4.5	2.4	1	B4D0064	04/01/2014	04/03/14 19:46	
o-Xylene	ND	4.5	0.57	1	B4D0064	04/01/2014	04/03/14 19:46	
sec-Butylbenzene	ND	4.5	0.92	1	B4D0064	04/01/2014	04/03/14 19:46	
Styrene	ND	4.5	0.50	1	B4D0064	04/01/2014	04/03/14 19:46	
tert-Amyl methyl ether	ND	4.5	0.65	1	B4D0064	04/01/2014	04/03/14 19:46	
tert-Butanol	ND	90	16	1	B4D0064	04/01/2014	04/03/14 19:46	
tert-Butylbenzene	ND	4.5	0.80	1	B4D0064	04/01/2014	04/03/14 19:46	
Tetrachloroethene	ND	4.5	0.55	1	B4D0064	04/01/2014	04/03/14 19:46	
Toluene	ND	4.5	0.79	1	B4D0064	04/01/2014	04/03/14 19:46	
trans-1,2-Dichloroethene	ND	4.5	1.1	1	B4D0064	04/01/2014	04/03/14 19:46	
trans-1,3-Dichloropropene	ND	4.5	0.94	1	B4D0064	04/01/2014	04/03/14 19:46	
Trichloroethene	ND	4.5	0.76	1	B4D0064	04/01/2014	04/03/14 19:46	
Trichlorofluoromethane	ND	4.5	0.92	1	B4D0064	04/01/2014	04/03/14 19:46	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-22-5

Lab ID: 1401005-01

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	45	7.4	1	B4D0064	04/01/2014	04/03/14 19:46	
Vinyl chloride	ND	4.5	0.67	1	B4D0064	04/01/2014	04/03/14 19:46	
Surrogate: 1,2-Dichloroethane-d4	*111 %*	*63 - 167*			B4D0064	04/01/2014	*04/03/14 19:46*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*63 - 130*			B4D0064	04/01/2014	*04/03/14 19:46*	
Surrogate: Dibromofluoromethane	*102 %*	*75 - 146*			B4D0064	04/01/2014	*04/03/14 19:46*	
Surrogate: Toluene-d8	*102 %*	*78 - 125*			B4D0064	04/01/2014	*04/03/14 19:46*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-22-10
Lab ID: 1401005-02

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4D0071	04/04/2014	04/04/14 14:09	
Surrogate: 4-Bromofluorobenzene	*111 %*	*55 - 131*			B4D0071	04/04/2014	*04/04/14 14:09*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.7	0.74	1	B4D0064	04/01/2014	04/03/14 20:04	
1,1,1-Trichloroethane	ND	3.7	0.66	1	B4D0064	04/01/2014	04/03/14 20:04	
1,1,2,2-Tetrachloroethane	ND	3.7	1.6	1	B4D0064	04/01/2014	04/03/14 20:04	
1,1,2-Trichloroethane	ND	3.7	0.67	1	B4D0064	04/01/2014	04/03/14 20:04	
1,1-Dichloroethane	ND	3.7	0.84	1	B4D0064	04/01/2014	04/03/14 20:04	
1,1-Dichloroethene	ND	3.7	1.0	1	B4D0064	04/01/2014	04/03/14 20:04	
1,1-Dichloropropene	ND	3.7	0.67	1	B4D0064	04/01/2014	04/03/14 20:04	
1,2,3-Trichloropropane	ND	3.7	0.75	1	B4D0064	04/01/2014	04/03/14 20:04	
1,2,3-Trichlorobenzene	ND	3.7	1.7	1	B4D0064	04/01/2014	04/03/14 20:04	
1,2,4-Trichlorobenzene	ND	3.7	1.0	1	B4D0064	04/01/2014	04/03/14 20:04	
1,2,4-Trimethylbenzene	ND	3.7	0.61	1	B4D0064	04/01/2014	04/03/14 20:04	
1,2-Dibromo-3-chloropropane	ND	7.4	2.7	1	B4D0064	04/01/2014	04/03/14 20:04	
1,2-Dibromoethane	ND	3.7	0.44	1	B4D0064	04/01/2014	04/03/14 20:04	
1,2-Dichlorobenzene	ND	3.7	0.74	1	B4D0064	04/01/2014	04/03/14 20:04	
1,2-Dichloroethane	ND	3.7	0.87	1	B4D0064	04/01/2014	04/03/14 20:04	
1,2-Dichloropropane	ND	3.7	0.84	1	B4D0064	04/01/2014	04/03/14 20:04	
1,3,5-Trimethylbenzene	ND	3.7	0.56	1	B4D0064	04/01/2014	04/03/14 20:04	
1,3-Dichlorobenzene	ND	3.7	0.55	1	B4D0064	04/01/2014	04/03/14 20:04	
1,3-Dichloropropane	ND	3.7	0.41	1	B4D0064	04/01/2014	04/03/14 20:04	
1,4-Dichlorobenzene	ND	3.7	0.59	1	B4D0064	04/01/2014	04/03/14 20:04	
2,2-Dichloropropane	ND	3.7	1.0	1	B4D0064	04/01/2014	04/03/14 20:04	
2-Chlorotoluene	ND	3.7	0.68	1	B4D0064	04/01/2014	04/03/14 20:04	
4-Chlorotoluene	ND	3.7	0.68	1	B4D0064	04/01/2014	04/03/14 20:04	
4-Isopropyltoluene	ND	3.7	0.62	1	B4D0064	04/01/2014	04/03/14 20:04	
Benzene	ND	3.7	0.74	1	B4D0064	04/01/2014	04/03/14 20:04	
Bromobenzene	ND	3.7	0.58	1	B4D0064	04/01/2014	04/03/14 20:04	
Bromochloromethane	ND	3.7	0.83	1	B4D0064	04/01/2014	04/03/14 20:04	
Bromodichloromethane	ND	3.7	0.58	1	B4D0064	04/01/2014	04/03/14 20:04	
Bromoform	ND	3.7	0.38	1	B4D0064	04/01/2014	04/03/14 20:04	
Bromomethane	ND	3.7	0.49	1	B4D0064	04/01/2014	04/03/14 20:04	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-22-10

Lab ID: 1401005-02

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	3.7	0.68	1	B4D0064	04/01/2014	04/03/14 20:04	
Carbon tetrachloride	ND	3.7	0.81	1	B4D0064	04/01/2014	04/03/14 20:04	
Chlorobenzene	ND	3.7	0.69	1	B4D0064	04/01/2014	04/03/14 20:04	
Chloroethane	ND	3.7	0.95	1	B4D0064	04/01/2014	04/03/14 20:04	
Chloroform	ND	3.7	0.76	1	B4D0064	04/01/2014	04/03/14 20:04	
Chloromethane	ND	3.7	0.79	1	B4D0064	04/01/2014	04/03/14 20:04	
cis-1,2-Dichloroethene	ND	3.7	0.62	1	B4D0064	04/01/2014	04/03/14 20:04	
cis-1,3-Dichloropropene	ND	3.7	0.57	1	B4D0064	04/01/2014	04/03/14 20:04	
Di-isopropyl ether	ND	3.7	0.79	1	B4D0064	04/01/2014	04/03/14 20:04	
Dibromochloromethane	ND	3.7	0.72	1	B4D0064	04/01/2014	04/03/14 20:04	
Dibromomethane	ND	3.7	0.78	1	B4D0064	04/01/2014	04/03/14 20:04	
Dichlorodifluoromethane	ND	3.7	0.76	1	B4D0064	04/01/2014	04/03/14 20:04	
Ethyl Acetate	ND	37	5.4	1	B4D0064	04/01/2014	04/03/14 20:04	
Ethyl Ether	ND	37	6.8	1	B4D0064	04/01/2014	04/03/14 20:04	
Ethyl tert-butyl ether	ND	3.7	0.63	1	B4D0064	04/01/2014	04/03/14 20:04	
Ethylbenzene	ND	3.7	0.59	1	B4D0064	04/01/2014	04/03/14 20:04	
Freon-113	ND	3.7	0.98	1	B4D0064	04/01/2014	04/03/14 20:04	
Hexachlorobutadiene	ND	3.7	1.0	1	B4D0064	04/01/2014	04/03/14 20:04	
Isopropylbenzene	ND	3.7	0.85	1	B4D0064	04/01/2014	04/03/14 20:04	
m,p-Xylene	ND	7.4	1.3	1	B4D0064	04/01/2014	04/03/14 20:04	
Methylene chloride	ND	3.7	3.7	1	B4D0064	04/01/2014	04/03/14 20:04	
MTBE	ND	3.7	0.72	1	B4D0064	04/01/2014	04/03/14 20:04	
n-Butylbenzene	ND	3.7	0.81	1	B4D0064	04/01/2014	04/03/14 20:04	
n-Propylbenzene	ND	3.7	0.72	1	B4D0064	04/01/2014	04/03/14 20:04	
Naphthalene	ND	3.7	2.0	1	B4D0064	04/01/2014	04/03/14 20:04	
o-Xylene	ND	3.7	0.47	1	B4D0064	04/01/2014	04/03/14 20:04	
sec-Butylbenzene	ND	3.7	0.75	1	B4D0064	04/01/2014	04/03/14 20:04	
Styrene	ND	3.7	0.41	1	B4D0064	04/01/2014	04/03/14 20:04	
tert-Amyl methyl ether	ND	3.7	0.53	1	B4D0064	04/01/2014	04/03/14 20:04	
tert-Butanol	ND	74	13	1	B4D0064	04/01/2014	04/03/14 20:04	
tert-Butylbenzene	ND	3.7	0.65	1	B4D0064	04/01/2014	04/03/14 20:04	
Tetrachloroethene	ND	3.7	0.45	1	B4D0064	04/01/2014	04/03/14 20:04	
Toluene	ND	3.7	0.65	1	B4D0064	04/01/2014	04/03/14 20:04	
trans-1,2-Dichloroethene	ND	3.7	0.91	1	B4D0064	04/01/2014	04/03/14 20:04	
trans-1,3-Dichloropropene	ND	3.7	0.77	1	B4D0064	04/01/2014	04/03/14 20:04	
Trichloroethene	ND	3.7	0.62	1	B4D0064	04/01/2014	04/03/14 20:04	
Trichlorofluoromethane	ND	3.7	0.75	1	B4D0064	04/01/2014	04/03/14 20:04	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-22-10

Lab ID: 1401005-02

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	37	6.1	1	B4D0064	04/01/2014	04/03/14 20:04	
Vinyl chloride	ND	3.7	0.55	1	B4D0064	04/01/2014	04/03/14 20:04	
Surrogate: 1,2-Dichloroethane-d4	*106 %*		*63 - 167*		B4D0064	04/01/2014	*04/03/14 20:04*	
Surrogate: 4-Bromofluorobenzene	*99.6 %*		*63 - 130*		B4D0064	04/01/2014	*04/03/14 20:04*	
Surrogate: Dibromofluoromethane	*98.2 %*		*75 - 146*		B4D0064	04/01/2014	*04/03/14 20:04*	
Surrogate: Toluene-d8	*102 %*		*78 - 125*		B4D0064	04/01/2014	*04/03/14 20:04*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-21-5

Lab ID: 1401005-03

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4D0071	04/04/2014	04/04/14 14:24	
Surrogate: 4-Bromofluorobenzene	*108 %*		*55 - 131*		B4D0071	04/04/2014	*04/04/14 14:24*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.9	0.78	1	B4D0064	04/01/2014	04/03/14 20:23	
1,1,1-Trichloroethane	ND	3.9	0.69	1	B4D0064	04/01/2014	04/03/14 20:23	
1,1,2,2-Tetrachloroethane	ND	3.9	1.7	1	B4D0064	04/01/2014	04/03/14 20:23	
1,1,2-Trichloroethane	ND	3.9	0.70	1	B4D0064	04/01/2014	04/03/14 20:23	
1,1-Dichloroethane	ND	3.9	0.88	1	B4D0064	04/01/2014	04/03/14 20:23	
1,1-Dichloroethene	ND	3.9	1.1	1	B4D0064	04/01/2014	04/03/14 20:23	
1,1-Dichloropropene	ND	3.9	0.70	1	B4D0064	04/01/2014	04/03/14 20:23	
1,2,3-Trichloropropane	ND	3.9	0.79	1	B4D0064	04/01/2014	04/03/14 20:23	
1,2,3-Trichlorobenzene	ND	3.9	1.8	1	B4D0064	04/01/2014	04/03/14 20:23	
1,2,4-Trichlorobenzene	ND	3.9	1.1	1	B4D0064	04/01/2014	04/03/14 20:23	
1,2,4-Trimethylbenzene	ND	3.9	0.64	1	B4D0064	04/01/2014	04/03/14 20:23	
1,2-Dibromo-3-chloropropane	ND	7.7	2.8	1	B4D0064	04/01/2014	04/03/14 20:23	
1,2-Dibromoethane	ND	3.9	0.46	1	B4D0064	04/01/2014	04/03/14 20:23	
1,2-Dichlorobenzene	ND	3.9	0.77	1	B4D0064	04/01/2014	04/03/14 20:23	
1,2-Dichloroethane	ND	3.9	0.91	1	B4D0064	04/01/2014	04/03/14 20:23	
1,2-Dichloropropane	ND	3.9	0.88	1	B4D0064	04/01/2014	04/03/14 20:23	
1,3,5-Trimethylbenzene	ND	3.9	0.59	1	B4D0064	04/01/2014	04/03/14 20:23	
1,3-Dichlorobenzene	ND	3.9	0.58	1	B4D0064	04/01/2014	04/03/14 20:23	
1,3-Dichloropropane	ND	3.9	0.42	1	B4D0064	04/01/2014	04/03/14 20:23	
1,4-Dichlorobenzene	ND	3.9	0.61	1	B4D0064	04/01/2014	04/03/14 20:23	
2,2-Dichloropropane	ND	3.9	1.0	1	B4D0064	04/01/2014	04/03/14 20:23	
2-Chlorotoluene	ND	3.9	0.71	1	B4D0064	04/01/2014	04/03/14 20:23	
4-Chlorotoluene	ND	3.9	0.71	1	B4D0064	04/01/2014	04/03/14 20:23	
4-Isopropyltoluene	ND	3.9	0.65	1	B4D0064	04/01/2014	04/03/14 20:23	
Benzene	ND	3.9	0.77	1	B4D0064	04/01/2014	04/03/14 20:23	
Bromobenzene	ND	3.9	0.60	1	B4D0064	04/01/2014	04/03/14 20:23	
Bromochloromethane	ND	3.9	0.87	1	B4D0064	04/01/2014	04/03/14 20:23	
Bromodichloromethane	ND	3.9	0.61	1	B4D0064	04/01/2014	04/03/14 20:23	
Bromoform	ND	3.9	0.40	1	B4D0064	04/01/2014	04/03/14 20:23	
Bromomethane	ND	3.9	0.51	1	B4D0064	04/01/2014	04/03/14 20:23	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-21-5

Lab ID: 1401005-03

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	3.9	0.71	1	B4D0064	04/01/2014	04/03/14 20:23	
Carbon tetrachloride	ND	3.9	0.85	1	B4D0064	04/01/2014	04/03/14 20:23	
Chlorobenzene	ND	3.9	0.72	1	B4D0064	04/01/2014	04/03/14 20:23	
Chloroethane	ND	3.9	1.0	1	B4D0064	04/01/2014	04/03/14 20:23	
Chloroform	ND	3.9	0.79	1	B4D0064	04/01/2014	04/03/14 20:23	
Chloromethane	ND	3.9	0.82	1	B4D0064	04/01/2014	04/03/14 20:23	
cis-1,2-Dichloroethene	ND	3.9	0.65	1	B4D0064	04/01/2014	04/03/14 20:23	
cis-1,3-Dichloropropene	ND	3.9	0.60	1	B4D0064	04/01/2014	04/03/14 20:23	
Di-isopropyl ether	ND	3.9	0.83	1	B4D0064	04/01/2014	04/03/14 20:23	
Dibromochloromethane	ND	3.9	0.75	1	B4D0064	04/01/2014	04/03/14 20:23	
Dibromomethane	ND	3.9	0.81	1	B4D0064	04/01/2014	04/03/14 20:23	
Dichlorodifluoromethane	ND	3.9	0.80	1	B4D0064	04/01/2014	04/03/14 20:23	
Ethyl Acetate	ND	39	5.7	1	B4D0064	04/01/2014	04/03/14 20:23	
Ethyl Ether	ND	39	7.2	1	B4D0064	04/01/2014	04/03/14 20:23	
Ethyl tert-butyl ether	ND	3.9	0.66	1	B4D0064	04/01/2014	04/03/14 20:23	
Ethylbenzene	ND	3.9	0.62	1	B4D0064	04/01/2014	04/03/14 20:23	
Freon-113	ND	3.9	1.0	1	B4D0064	04/01/2014	04/03/14 20:23	
Hexachlorobutadiene	ND	3.9	1.1	1	B4D0064	04/01/2014	04/03/14 20:23	
Isopropylbenzene	ND	3.9	0.89	1	B4D0064	04/01/2014	04/03/14 20:23	
m,p-Xylene	ND	7.7	1.3	1	B4D0064	04/01/2014	04/03/14 20:23	
Methylene chloride	ND	3.9	3.9	1	B4D0064	04/01/2014	04/03/14 20:23	
MTBE	ND	3.9	0.75	1	B4D0064	04/01/2014	04/03/14 20:23	
n-Butylbenzene	ND	3.9	0.85	1	B4D0064	04/01/2014	04/03/14 20:23	
n-Propylbenzene	ND	3.9	0.76	1	B4D0064	04/01/2014	04/03/14 20:23	
Naphthalene	ND	3.9	2.1	1	B4D0064	04/01/2014	04/03/14 20:23	
o-Xylene	ND	3.9	0.49	1	B4D0064	04/01/2014	04/03/14 20:23	
sec-Butylbenzene	ND	3.9	0.79	1	B4D0064	04/01/2014	04/03/14 20:23	
Styrene	ND	3.9	0.43	1	B4D0064	04/01/2014	04/03/14 20:23	
tert-Amyl methyl ether	ND	3.9	0.56	1	B4D0064	04/01/2014	04/03/14 20:23	
tert-Butanol	ND	77	14	1	B4D0064	04/01/2014	04/03/14 20:23	
tert-Butylbenzene	ND	3.9	0.68	1	B4D0064	04/01/2014	04/03/14 20:23	
Tetrachloroethene	ND	3.9	0.47	1	B4D0064	04/01/2014	04/03/14 20:23	
Toluene	ND	3.9	0.68	1	B4D0064	04/01/2014	04/03/14 20:23	
trans-1,2-Dichloroethene	ND	3.9	0.95	1	B4D0064	04/01/2014	04/03/14 20:23	
trans-1,3-Dichloropropene	ND	3.9	0.81	1	B4D0064	04/01/2014	04/03/14 20:23	
Trichloroethene	ND	3.9	0.65	1	B4D0064	04/01/2014	04/03/14 20:23	
Trichlorofluoromethane	ND	3.9	0.79	1	B4D0064	04/01/2014	04/03/14 20:23	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-21-5

Lab ID: 1401005-03

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	39	6.3	1	B4D0064	04/01/2014	04/03/14 20:23	
Vinyl chloride	ND	3.9	0.57	1	B4D0064	04/01/2014	04/03/14 20:23	
Surrogate: 1,2-Dichloroethane-d4	*111 %*		*63 - 167*		B4D0064	04/01/2014	*04/03/14 20:23*	
Surrogate: 4-Bromofluorobenzene	*101 %*		*63 - 130*		B4D0064	04/01/2014	*04/03/14 20:23*	
Surrogate: Dibromofluoromethane	*101 %*		*75 - 146*		B4D0064	04/01/2014	*04/03/14 20:23*	
Surrogate: Toluene-d8	*102 %*		*78 - 125*		B4D0064	04/01/2014	*04/03/14 20:23*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-21-10
Lab ID: 1401005-04

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4D0071	04/04/2014	04/04/14 15:19	
Surrogate: 4-Bromofluorobenzene	*107 %*	*55 - 131*			B4D0071	04/04/2014	*04/04/14 15:19*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.6	0.72	1	B4D0064	04/01/2014	04/03/14 20:41	
1,1,1-Trichloroethane	ND	3.6	0.64	1	B4D0064	04/01/2014	04/03/14 20:41	
1,1,2,2-Tetrachloroethane	ND	3.6	1.6	1	B4D0064	04/01/2014	04/03/14 20:41	
1,1,2-Trichloroethane	ND	3.6	0.65	1	B4D0064	04/01/2014	04/03/14 20:41	
1,1-Dichloroethane	ND	3.6	0.82	1	B4D0064	04/01/2014	04/03/14 20:41	
1,1-Dichloroethene	ND	3.6	1.0	1	B4D0064	04/01/2014	04/03/14 20:41	
1,1-Dichloropropene	ND	3.6	0.65	1	B4D0064	04/01/2014	04/03/14 20:41	
1,2,3-Trichloropropane	ND	3.6	0.73	1	B4D0064	04/01/2014	04/03/14 20:41	
1,2,3-Trichlorobenzene	ND	3.6	1.7	1	B4D0064	04/01/2014	04/03/14 20:41	
1,2,4-Trichlorobenzene	ND	3.6	1.0	1	B4D0064	04/01/2014	04/03/14 20:41	
1,2,4-Trimethylbenzene	ND	3.6	0.59	1	B4D0064	04/01/2014	04/03/14 20:41	
1,2-Dibromo-3-chloropropane	ND	7.1	2.6	1	B4D0064	04/01/2014	04/03/14 20:41	
1,2-Dibromoethane	ND	3.6	0.43	1	B4D0064	04/01/2014	04/03/14 20:41	
1,2-Dichlorobenzene	ND	3.6	0.71	1	B4D0064	04/01/2014	04/03/14 20:41	
1,2-Dichloroethane	ND	3.6	0.84	1	B4D0064	04/01/2014	04/03/14 20:41	
1,2-Dichloropropane	ND	3.6	0.81	1	B4D0064	04/01/2014	04/03/14 20:41	
1,3,5-Trimethylbenzene	ND	3.6	0.54	1	B4D0064	04/01/2014	04/03/14 20:41	
1,3-Dichlorobenzene	ND	3.6	0.54	1	B4D0064	04/01/2014	04/03/14 20:41	
1,3-Dichloropropane	ND	3.6	0.39	1	B4D0064	04/01/2014	04/03/14 20:41	
1,4-Dichlorobenzene	ND	3.6	0.57	1	B4D0064	04/01/2014	04/03/14 20:41	
2,2-Dichloropropane	ND	3.6	0.96	1	B4D0064	04/01/2014	04/03/14 20:41	
2-Chlorotoluene	ND	3.6	0.66	1	B4D0064	04/01/2014	04/03/14 20:41	
4-Chlorotoluene	ND	3.6	0.66	1	B4D0064	04/01/2014	04/03/14 20:41	
4-Isopropyltoluene	ND	3.6	0.60	1	B4D0064	04/01/2014	04/03/14 20:41	
Benzene	ND	3.6	0.72	1	B4D0064	04/01/2014	04/03/14 20:41	
Bromobenzene	ND	3.6	0.56	1	B4D0064	04/01/2014	04/03/14 20:41	
Bromochloromethane	ND	3.6	0.81	1	B4D0064	04/01/2014	04/03/14 20:41	
Bromodichloromethane	ND	3.6	0.56	1	B4D0064	04/01/2014	04/03/14 20:41	
Bromoform	ND	3.6	0.37	1	B4D0064	04/01/2014	04/03/14 20:41	
Bromomethane	ND	3.6	0.47	1	B4D0064	04/01/2014	04/03/14 20:41	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-21-10

Lab ID: 1401005-04

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	3.6	0.66	1	B4D0064	04/01/2014	04/03/14 20:41	
Carbon tetrachloride	ND	3.6	0.78	1	B4D0064	04/01/2014	04/03/14 20:41	
Chlorobenzene	ND	3.6	0.67	1	B4D0064	04/01/2014	04/03/14 20:41	
Chloroethane	ND	3.6	0.92	1	B4D0064	04/01/2014	04/03/14 20:41	
Chloroform	ND	3.6	0.73	1	B4D0064	04/01/2014	04/03/14 20:41	
Chloromethane	ND	3.6	0.76	1	B4D0064	04/01/2014	04/03/14 20:41	
cis-1,2-Dichloroethene	ND	3.6	0.60	1	B4D0064	04/01/2014	04/03/14 20:41	
cis-1,3-Dichloropropene	ND	3.6	0.55	1	B4D0064	04/01/2014	04/03/14 20:41	
Di-isopropyl ether	ND	3.6	0.77	1	B4D0064	04/01/2014	04/03/14 20:41	
Dibromochloromethane	ND	3.6	0.69	1	B4D0064	04/01/2014	04/03/14 20:41	
Dibromomethane	ND	3.6	0.75	1	B4D0064	04/01/2014	04/03/14 20:41	
Dichlorodifluoromethane	ND	3.6	0.74	1	B4D0064	04/01/2014	04/03/14 20:41	
Ethyl Acetate	ND	36	5.2	1	B4D0064	04/01/2014	04/03/14 20:41	
Ethyl Ether	ND	36	6.6	1	B4D0064	04/01/2014	04/03/14 20:41	
Ethyl tert-butyl ether	ND	3.6	0.61	1	B4D0064	04/01/2014	04/03/14 20:41	
Ethylbenzene	ND	3.6	0.57	1	B4D0064	04/01/2014	04/03/14 20:41	
Freon-113	ND	3.6	0.95	1	B4D0064	04/01/2014	04/03/14 20:41	
Hexachlorobutadiene	ND	3.6	0.97	1	B4D0064	04/01/2014	04/03/14 20:41	
Isopropylbenzene	ND	3.6	0.82	1	B4D0064	04/01/2014	04/03/14 20:41	
m,p-Xylene	ND	7.1	1.2	1	B4D0064	04/01/2014	04/03/14 20:41	
Methylene chloride	ND	3.6	3.6	1	B4D0064	04/01/2014	04/03/14 20:41	
MTBE	ND	3.6	0.70	1	B4D0064	04/01/2014	04/03/14 20:41	
n-Butylbenzene	ND	3.6	0.79	1	B4D0064	04/01/2014	04/03/14 20:41	
n-Propylbenzene	ND	3.6	0.70	1	B4D0064	04/01/2014	04/03/14 20:41	
Naphthalene	ND	3.6	1.9	1	B4D0064	04/01/2014	04/03/14 20:41	
o-Xylene	ND	3.6	0.45	1	B4D0064	04/01/2014	04/03/14 20:41	
sec-Butylbenzene	ND	3.6	0.73	1	B4D0064	04/01/2014	04/03/14 20:41	
Styrene	ND	3.6	0.40	1	B4D0064	04/01/2014	04/03/14 20:41	
tert-Amyl methyl ether	ND	3.6	0.52	1	B4D0064	04/01/2014	04/03/14 20:41	
tert-Butanol	ND	71	13	1	B4D0064	04/01/2014	04/03/14 20:41	
tert-Butylbenzene	ND	3.6	0.63	1	B4D0064	04/01/2014	04/03/14 20:41	
Tetrachloroethene	ND	3.6	0.44	1	B4D0064	04/01/2014	04/03/14 20:41	
Toluene	ND	3.6	0.63	1	B4D0064	04/01/2014	04/03/14 20:41	
trans-1,2-Dichloroethene	ND	3.6	0.88	1	B4D0064	04/01/2014	04/03/14 20:41	
trans-1,3-Dichloropropene	ND	3.6	0.75	1	B4D0064	04/01/2014	04/03/14 20:41	
Trichloroethene	ND	3.6	0.60	1	B4D0064	04/01/2014	04/03/14 20:41	
Trichlorofluoromethane	ND	3.6	0.73	1	B4D0064	04/01/2014	04/03/14 20:41	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-21-10

Lab ID: 1401005-04

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	36	5.9	1	B4D0064	04/01/2014	04/03/14 20:41	
Vinyl chloride	ND	3.6	0.53	1	B4D0064	04/01/2014	04/03/14 20:41	
Surrogate: 1,2-Dichloroethane-d4	*108 %*	*63 - 167*			B4D0064	04/01/2014	*04/03/14 20:41*	
Surrogate: 4-Bromofluorobenzene	*102 %*	*63 - 130*			B4D0064	04/01/2014	*04/03/14 20:41*	
Surrogate: Dibromofluoromethane	*97.9 %*	*75 - 146*			B4D0064	04/01/2014	*04/03/14 20:41*	
Surrogate: Toluene-d8	*102 %*	*78 - 125*			B4D0064	04/01/2014	*04/03/14 20:41*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-18-5

Lab ID: 1401005-05

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4D0071	04/04/2014	04/04/14 15:51	
Surrogate: 4-Bromofluorobenzene	*106 %*	*55 - 131*			B4D0071	04/04/2014	*04/04/14 15:51*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.7	0.94	1	B4D0064	04/02/2014	04/03/14 21:00	
1,1,1-Trichloroethane	ND	4.7	0.83	1	B4D0064	04/02/2014	04/03/14 21:00	
1,1,2,2-Tetrachloroethane	ND	4.7	2.0	1	B4D0064	04/02/2014	04/03/14 21:00	
1,1,2-Trichloroethane	ND	4.7	0.84	1	B4D0064	04/02/2014	04/03/14 21:00	
1,1-Dichloroethane	ND	4.7	1.1	1	B4D0064	04/02/2014	04/03/14 21:00	
1,1-Dichloroethene	ND	4.7	1.3	1	B4D0064	04/02/2014	04/03/14 21:00	
1,1-Dichloropropene	ND	4.7	0.84	1	B4D0064	04/02/2014	04/03/14 21:00	
1,2,3-Trichloropropane	ND	4.7	0.95	1	B4D0064	04/02/2014	04/03/14 21:00	
1,2,3-Trichlorobenzene	ND	4.7	2.2	1	B4D0064	04/02/2014	04/03/14 21:00	
1,2,4-Trichlorobenzene	ND	4.7	1.3	1	B4D0064	04/02/2014	04/03/14 21:00	
1,2,4-Trimethylbenzene	ND	4.7	0.77	1	B4D0064	04/02/2014	04/03/14 21:00	
1,2-Dibromo-3-chloropropane	ND	9.3	3.4	1	B4D0064	04/02/2014	04/03/14 21:00	
1,2-Dibromoethane	ND	4.7	0.56	1	B4D0064	04/02/2014	04/03/14 21:00	
1,2-Dichlorobenzene	ND	4.7	0.93	1	B4D0064	04/02/2014	04/03/14 21:00	
1,2-Dichloroethane	ND	4.7	1.1	1	B4D0064	04/02/2014	04/03/14 21:00	
1,2-Dichloropropane	ND	4.7	1.1	1	B4D0064	04/02/2014	04/03/14 21:00	
1,3,5-Trimethylbenzene	ND	4.7	0.71	1	B4D0064	04/02/2014	04/03/14 21:00	
1,3-Dichlorobenzene	ND	4.7	0.70	1	B4D0064	04/02/2014	04/03/14 21:00	
1,3-Dichloropropane	ND	4.7	0.51	1	B4D0064	04/02/2014	04/03/14 21:00	
1,4-Dichlorobenzene	ND	4.7	0.74	1	B4D0064	04/02/2014	04/03/14 21:00	
2,2-Dichloropropane	ND	4.7	1.3	1	B4D0064	04/02/2014	04/03/14 21:00	
2-Chlorotoluene	ND	4.7	0.86	1	B4D0064	04/02/2014	04/03/14 21:00	
4-Chlorotoluene	ND	4.7	0.86	1	B4D0064	04/02/2014	04/03/14 21:00	
4-Isopropyltoluene	ND	4.7	0.79	1	B4D0064	04/02/2014	04/03/14 21:00	
Benzene	ND	4.7	0.93	1	B4D0064	04/02/2014	04/03/14 21:00	
Bromobenzene	ND	4.7	0.73	1	B4D0064	04/02/2014	04/03/14 21:00	
Bromochloromethane	ND	4.7	1.1	1	B4D0064	04/02/2014	04/03/14 21:00	
Bromodichloromethane	ND	4.7	0.74	1	B4D0064	04/02/2014	04/03/14 21:00	
Bromoform	ND	4.7	0.48	1	B4D0064	04/02/2014	04/03/14 21:00	
Bromomethane	ND	4.7	0.62	1	B4D0064	04/02/2014	04/03/14 21:00	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-18-5

Lab ID: 1401005-05

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	4.7	0.86	1	B4D0064	04/02/2014	04/03/14 21:00	
Carbon tetrachloride	ND	4.7	1.0	1	B4D0064	04/02/2014	04/03/14 21:00	
Chlorobenzene	ND	4.7	0.87	1	B4D0064	04/02/2014	04/03/14 21:00	
Chloroethane	ND	4.7	1.2	1	B4D0064	04/02/2014	04/03/14 21:00	
Chloroform	ND	4.7	0.96	1	B4D0064	04/02/2014	04/03/14 21:00	
Chloromethane	ND	4.7	1.0	1	B4D0064	04/02/2014	04/03/14 21:00	
cis-1,2-Dichloroethene	ND	4.7	0.79	1	B4D0064	04/02/2014	04/03/14 21:00	
cis-1,3-Dichloropropene	ND	4.7	0.72	1	B4D0064	04/02/2014	04/03/14 21:00	
Di-isopropyl ether	ND	4.7	1.0	1	B4D0064	04/02/2014	04/03/14 21:00	
Dibromochloromethane	ND	4.7	0.91	1	B4D0064	04/02/2014	04/03/14 21:00	
Dibromomethane	ND	4.7	0.98	1	B4D0064	04/02/2014	04/03/14 21:00	
Dichlorodifluoromethane	ND	4.7	0.97	1	B4D0064	04/02/2014	04/03/14 21:00	
Ethyl Acetate	ND	47	6.8	1	B4D0064	04/02/2014	04/03/14 21:00	
Ethyl Ether	ND	47	8.7	1	B4D0064	04/02/2014	04/03/14 21:00	
Ethyl tert-butyl ether	ND	4.7	0.80	1	B4D0064	04/02/2014	04/03/14 21:00	
Ethylbenzene	ND	4.7	0.75	1	B4D0064	04/02/2014	04/03/14 21:00	
Freon-113	ND	4.7	1.2	1	B4D0064	04/02/2014	04/03/14 21:00	
Hexachlorobutadiene	ND	4.7	1.3	1	B4D0064	04/02/2014	04/03/14 21:00	
Isopropylbenzene	ND	4.7	1.1	1	B4D0064	04/02/2014	04/03/14 21:00	
m,p-Xylene	ND	9.3	1.6	1	B4D0064	04/02/2014	04/03/14 21:00	
Methylene chloride	ND	4.7	4.7	1	B4D0064	04/02/2014	04/03/14 21:00	
MTBE	ND	4.7	0.91	1	B4D0064	04/02/2014	04/03/14 21:00	
n-Butylbenzene	ND	4.7	1.0	1	B4D0064	04/02/2014	04/03/14 21:00	
n-Propylbenzene	ND	4.7	0.91	1	B4D0064	04/02/2014	04/03/14 21:00	
Naphthalene	ND	4.7	2.5	1	B4D0064	04/02/2014	04/03/14 21:00	
o-Xylene	ND	4.7	0.59	1	B4D0064	04/02/2014	04/03/14 21:00	
sec-Butylbenzene	ND	4.7	0.95	1	B4D0064	04/02/2014	04/03/14 21:00	
Styrene	ND	4.7	0.52	1	B4D0064	04/02/2014	04/03/14 21:00	
tert-Amyl methyl ether	ND	4.7	0.68	1	B4D0064	04/02/2014	04/03/14 21:00	
tert-Butanol	ND	93	17	1	B4D0064	04/02/2014	04/03/14 21:00	
tert-Butylbenzene	ND	4.7	0.83	1	B4D0064	04/02/2014	04/03/14 21:00	
Tetrachloroethene	ND	4.7	0.57	1	B4D0064	04/02/2014	04/03/14 21:00	
Toluene	ND	4.7	0.82	1	B4D0064	04/02/2014	04/03/14 21:00	
trans-1,2-Dichloroethene	ND	4.7	1.1	1	B4D0064	04/02/2014	04/03/14 21:00	
trans-1,3-Dichloropropene	ND	4.7	0.98	1	B4D0064	04/02/2014	04/03/14 21:00	
Trichloroethene	ND	4.7	0.79	1	B4D0064	04/02/2014	04/03/14 21:00	
Trichlorofluoromethane	ND	4.7	0.95	1	B4D0064	04/02/2014	04/03/14 21:00	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-18-5

Lab ID: 1401005-05

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	47	7.7	1	B4D0064	04/02/2014	04/03/14 21:00	
Vinyl chloride	ND	4.7	0.69	1	B4D0064	04/02/2014	04/03/14 21:00	
Surrogate: 1,2-Dichloroethane-d4	*109 %*	*63 - 167*			B4D0064	04/02/2014	*04/03/14 21:00*	
Surrogate: 4-Bromofluorobenzene	*104 %*	*63 - 130*			B4D0064	04/02/2014	*04/03/14 21:00*	
Surrogate: Dibromofluoromethane	*97.1 %*	*75 - 146*			B4D0064	04/02/2014	*04/03/14 21:00*	
Surrogate: Toluene-d8	*101 %*	*78 - 125*			B4D0064	04/02/2014	*04/03/14 21:00*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-18-10
Lab ID: 1401005-06

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**1600**	500	NA	500	B4D0071	04/04/2014	04/04/14 16:07	
Surrogate: 4-Bromofluorobenzene	*102 %*	*55 - 131*			B4D0071	04/04/2014	*04/04/14 16:07*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	2000	410	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,1,1-Trichloroethane	ND	2000	360	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,1,2,2-Tetrachloroethane	ND	2000	900	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,1,2-Trichloroethane	ND	2000	370	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,1-Dichloroethane	ND	2000	470	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,1-Dichloroethene	ND	2000	570	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,1-Dichloropropene	ND	2000	370	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,2,3-Trichloropropane	ND	2000	420	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,2,3-Trichlorobenzene	ND	2000	950	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,2,4-Trichlorobenzene	ND	2000	580	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,2,4-Trimethylbenzene	**66000**	2000	340	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,2-Dibromo-3-chloropropane	ND	4100	1500	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,2-Dibromoethane	ND	2000	240	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,2-Dichlorobenzene	ND	2000	410	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,2-Dichloroethane	ND	2000	480	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,2-Dichloropropane	ND	2000	460	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,3,5-Trimethylbenzene	**21000**	2000	310	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,3-Dichlorobenzene	ND	2000	310	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,3-Dichloropropane	ND	2000	220	500	B4D0085	04/02/2014	04/04/14 19:57	D2
1,4-Dichlorobenzene	ND	2000	320	500	B4D0085	04/02/2014	04/04/14 19:57	D2
2,2-Dichloropropane	ND	2000	550	500	B4D0085	04/02/2014	04/04/14 19:57	D2
2-Chlorotoluene	ND	2000	380	500	B4D0085	04/02/2014	04/04/14 19:57	D2
4-Chlorotoluene	ND	2000	380	500	B4D0085	04/02/2014	04/04/14 19:57	D2
4-Isopropyltoluene	**2700**	2000	350	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Benzene	ND	2000	410	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Bromobenzene	ND	2000	320	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Bromochloromethane	ND	2000	460	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Bromodichloromethane	ND	2000	320	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Bromoform	ND	2000	210	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Bromomethane	ND	2000	270	500	B4D0085	04/02/2014	04/04/14 19:57	D2

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-18-10
Lab ID: 1401005-06

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	2000	380	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Carbon tetrachloride	ND	2000	450	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Chlorobenzene	ND	2000	380	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Chloroethane	ND	2000	530	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Chloroform	ND	2000	420	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Chloromethane	ND	2000	440	500	B4D0085	04/02/2014	04/04/14 19:57	D2
cis-1,2-Dichloroethene	ND	2000	340	500	B4D0085	04/02/2014	04/04/14 19:57	D2
cis-1,3-Dichloropropene	ND	2000	320	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Di-isopropyl ether	ND	2000	440	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Dibromochloromethane	ND	2000	400	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Dibromomethane	ND	2000	430	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Dichlorodifluoromethane	ND	2000	420	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Ethyl Acetate	ND	20000	3000	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Ethyl Ether	ND	20000	3800	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Ethyl tert-butyl ether	ND	2000	350	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Ethylbenzene	**33000**	2000	330	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Freon-113	ND	2000	540	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Hexachlorobutadiene	ND	2000	560	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Isopropylbenzene	**3500**	2000	470	500	B4D0085	04/02/2014	04/04/14 19:57	D2
m,p-Xylene	**120000**	4100	700	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Methylene chloride	ND	2000	2000	500	B4D0085	04/02/2014	04/04/14 19:57	D2
MTBE	ND	2000	400	500	B4D0085	04/02/2014	04/04/14 19:57	D2
n-Butylbenzene	**6300**	2000	450	500	B4D0085	04/02/2014	04/04/14 19:57	D2
n-Propylbenzene	**12000**	2000	400	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Naphthalene	**8700**	2000	1100	500	B4D0085	04/02/2014	04/04/14 19:57	D2
o-Xylene	**49000**	2000	260	500	B4D0085	04/02/2014	04/04/14 19:57	D2
sec-Butylbenzene	**2000**	2000	420	500	B4D0085	04/02/2014	04/04/14 19:57	J, D2
Styrene	ND	2000	230	500	B4D0085	04/02/2014	04/04/14 19:57	D2
tert-Amyl methyl ether	ND	2000	300	500	B4D0085	04/02/2014	04/04/14 19:57	D2
tert-Butanol	ND	41000	7300	500	B4D0085	04/02/2014	04/04/14 19:57	D2
tert-Butylbenzene	ND	2000	360	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Tetrachloroethene	ND	2000	250	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Toluene	**24000**	2000	360	500	B4D0085	04/02/2014	04/04/14 19:57	D2
trans-1,2-Dichloroethene	ND	2000	500	500	B4D0085	04/02/2014	04/04/14 19:57	D2
trans-1,3-Dichloropropene	ND	2000	430	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Trichloroethene	ND	2000	350	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Trichlorofluoromethane	ND	2000	420	500	B4D0085	04/02/2014	04/04/14 19:57	D2

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-18-10

Lab ID: 1401005-06

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	20000	3400	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Vinyl chloride	ND	2000	300	500	B4D0085	04/02/2014	04/04/14 19:57	D2
Surrogate: 1,2-Dichloroethane-d4	*83.6 %*	*63 - 167*			B4D0085	04/02/2014	*04/04/14 19:57*	
Surrogate: 4-Bromofluorobenzene	*109 %*	*63 - 130*			B4D0085	04/02/2014	*04/04/14 19:57*	
Surrogate: Dibromofluoromethane	*87.8 %*	*75 - 146*			B4D0085	04/02/2014	*04/04/14 19:57*	
Surrogate: Toluene-d8	*105 %*	*78 - 125*			B4D0085	04/02/2014	*04/04/14 19:57*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-19-5

Lab ID: 1401005-07

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4D0071	04/04/2014	04/04/14 16:22	
Surrogate: 4-Bromofluorobenzene	*98.5 %*		*55 - 131*		B4D0071	04/04/2014	*04/04/14 16:22*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.5	0.90	1	B4D0085	04/02/2014	04/04/14 19:20	
1,1,1-Trichloroethane	ND	4.5	0.80	1	B4D0085	04/02/2014	04/04/14 19:20	
1,1,2,2-Tetrachloroethane	ND	4.5	2.0	1	B4D0085	04/02/2014	04/04/14 19:20	
1,1,2-Trichloroethane	ND	4.5	0.81	1	B4D0085	04/02/2014	04/04/14 19:20	
1,1-Dichloroethane	ND	4.5	1.0	1	B4D0085	04/02/2014	04/04/14 19:20	
1,1-Dichloroethene	ND	4.5	1.3	1	B4D0085	04/02/2014	04/04/14 19:20	
1,1-Dichloropropene	ND	4.5	0.81	1	B4D0085	04/02/2014	04/04/14 19:20	
1,2,3-Trichloropropane	ND	4.5	0.91	1	B4D0085	04/02/2014	04/04/14 19:20	
1,2,3-Trichlorobenzene	ND	4.5	2.1	1	B4D0085	04/02/2014	04/04/14 19:20	
1,2,4-Trichlorobenzene	ND	4.5	1.3	1	B4D0085	04/02/2014	04/04/14 19:20	
1,2,4-Trimethylbenzene	ND	4.5	0.74	1	B4D0085	04/02/2014	04/04/14 19:20	
1,2-Dibromo-3-chloropropane	ND	8.9	3.3	1	B4D0085	04/02/2014	04/04/14 19:20	
1,2-Dibromoethane	ND	4.5	0.53	1	B4D0085	04/02/2014	04/04/14 19:20	
1,2-Dichlorobenzene	ND	4.5	0.89	1	B4D0085	04/02/2014	04/04/14 19:20	
1,2-Dichloroethane	ND	4.5	1.1	1	B4D0085	04/02/2014	04/04/14 19:20	
1,2-Dichloropropane	ND	4.5	1.0	1	B4D0085	04/02/2014	04/04/14 19:20	
1,3,5-Trimethylbenzene	ND	4.5	0.68	1	B4D0085	04/02/2014	04/04/14 19:20	
1,3-Dichlorobenzene	ND	4.5	0.67	1	B4D0085	04/02/2014	04/04/14 19:20	
1,3-Dichloropropane	ND	4.5	0.49	1	B4D0085	04/02/2014	04/04/14 19:20	
1,4-Dichlorobenzene	ND	4.5	0.71	1	B4D0085	04/02/2014	04/04/14 19:20	
2,2-Dichloropropane	ND	4.5	1.2	1	B4D0085	04/02/2014	04/04/14 19:20	
2-Chlorotoluene	ND	4.5	0.82	1	B4D0085	04/02/2014	04/04/14 19:20	
4-Chlorotoluene	ND	4.5	0.82	1	B4D0085	04/02/2014	04/04/14 19:20	
4-Isopropyltoluene	ND	4.5	0.75	1	B4D0085	04/02/2014	04/04/14 19:20	
Benzene	ND	4.5	0.89	1	B4D0085	04/02/2014	04/04/14 19:20	
Bromobenzene	ND	4.5	0.70	1	B4D0085	04/02/2014	04/04/14 19:20	
Bromochloromethane	ND	4.5	1.0	1	B4D0085	04/02/2014	04/04/14 19:20	
Bromodichloromethane	ND	4.5	0.70	1	B4D0085	04/02/2014	04/04/14 19:20	
Bromoform	ND	4.5	0.46	1	B4D0085	04/02/2014	04/04/14 19:20	
Bromomethane	ND	4.5	0.59	1	B4D0085	04/02/2014	04/04/14 19:20	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-19-5

Lab ID: 1401005-07

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	4.5	0.82	1	B4D0085	04/02/2014	04/04/14 19:20	
Carbon tetrachloride	ND	4.5	0.98	1	B4D0085	04/02/2014	04/04/14 19:20	
Chlorobenzene	ND	4.5	0.84	1	B4D0085	04/02/2014	04/04/14 19:20	
Chloroethane	ND	4.5	1.2	1	B4D0085	04/02/2014	04/04/14 19:20	
Chloroform	ND	4.5	0.92	1	B4D0085	04/02/2014	04/04/14 19:20	
Chloromethane	ND	4.5	0.95	1	B4D0085	04/02/2014	04/04/14 19:20	
cis-1,2-Dichloroethene	ND	4.5	0.75	1	B4D0085	04/02/2014	04/04/14 19:20	
cis-1,3-Dichloropropene	ND	4.5	0.69	1	B4D0085	04/02/2014	04/04/14 19:20	
Di-isopropyl ether	ND	4.5	0.96	1	B4D0085	04/02/2014	04/04/14 19:20	
Dibromochloromethane	ND	4.5	0.87	1	B4D0085	04/02/2014	04/04/14 19:20	
Dibromomethane	ND	4.5	0.94	1	B4D0085	04/02/2014	04/04/14 19:20	
Dichlorodifluoromethane	ND	4.5	0.92	1	B4D0085	04/02/2014	04/04/14 19:20	
Ethyl Acetate	ND	45	6.5	1	B4D0085	04/02/2014	04/04/14 19:20	
Ethyl Ether	ND	45	8.3	1	B4D0085	04/02/2014	04/04/14 19:20	
Ethyl tert-butyl ether	ND	4.5	0.77	1	B4D0085	04/02/2014	04/04/14 19:20	
Ethylbenzene	ND	4.5	0.71	1	B4D0085	04/02/2014	04/04/14 19:20	
Freon-113	ND	4.5	1.2	1	B4D0085	04/02/2014	04/04/14 19:20	
Hexachlorobutadiene	ND	4.5	1.2	1	B4D0085	04/02/2014	04/04/14 19:20	
Isopropylbenzene	ND	4.5	1.0	1	B4D0085	04/02/2014	04/04/14 19:20	
m,p-Xylene	ND	8.9	1.5	1	B4D0085	04/02/2014	04/04/14 19:20	
Methylene chloride	ND	4.5	4.5	1	B4D0085	04/02/2014	04/04/14 19:20	
MTBE	ND	4.5	0.87	1	B4D0085	04/02/2014	04/04/14 19:20	
n-Butylbenzene	ND	4.5	0.98	1	B4D0085	04/02/2014	04/04/14 19:20	
n-Propylbenzene	ND	4.5	0.87	1	B4D0085	04/02/2014	04/04/14 19:20	
Naphthalene	ND	4.5	2.4	1	B4D0085	04/02/2014	04/04/14 19:20	
o-Xylene	ND	4.5	0.57	1	B4D0085	04/02/2014	04/04/14 19:20	
sec-Butylbenzene	ND	4.5	0.91	1	B4D0085	04/02/2014	04/04/14 19:20	
Styrene	ND	4.5	0.49	1	B4D0085	04/02/2014	04/04/14 19:20	
tert-Amyl methyl ether	ND	4.5	0.65	1	B4D0085	04/02/2014	04/04/14 19:20	
tert-Butanol	ND	89	16	1	B4D0085	04/02/2014	04/04/14 19:20	
tert-Butylbenzene	ND	4.5	0.79	1	B4D0085	04/02/2014	04/04/14 19:20	
Tetrachloroethene	ND	4.5	0.55	1	B4D0085	04/02/2014	04/04/14 19:20	
Toluene	ND	4.5	0.79	1	B4D0085	04/02/2014	04/04/14 19:20	
trans-1,2-Dichloroethene	ND	4.5	1.1	1	B4D0085	04/02/2014	04/04/14 19:20	
trans-1,3-Dichloropropene	ND	4.5	0.94	1	B4D0085	04/02/2014	04/04/14 19:20	
Trichloroethene	ND	4.5	0.75	1	B4D0085	04/02/2014	04/04/14 19:20	
Trichlorofluoromethane	ND	4.5	0.91	1	B4D0085	04/02/2014	04/04/14 19:20	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-19-5

Lab ID: 1401005-07

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	45	7.3	1	B4D0085	04/02/2014	04/04/14 19:20	
Vinyl chloride	ND	4.5	0.66	1	B4D0085	04/02/2014	04/04/14 19:20	
Surrogate: 1,2-Dichloroethane-d4	*92.1 %*	*63 - 167*			B4D0085	04/02/2014	*04/04/14 19:20*	
Surrogate: 4-Bromofluorobenzene	*110 %*	*63 - 130*			B4D0085	04/02/2014	*04/04/14 19:20*	
Surrogate: Dibromofluoromethane	*94.0 %*	*75 - 146*			B4D0085	04/02/2014	*04/04/14 19:20*	
Surrogate: Toluene-d8	*101 %*	*78 - 125*			B4D0085	04/02/2014	*04/04/14 19:20*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-19-10
Lab ID: 1401005-08

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**1300**	50	NA	50	B4D0121	04/08/2014	04/08/14 12:21	
Surrogate: 4-Bromofluorobenzene	*154 %*	*55 - 131*			B4D0121	04/08/2014	*04/08/14 12:21*	S7

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	2300	460	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,1,1-Trichloroethane	ND	2300	410	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,1,2,2-Tetrachloroethane	ND	2300	1000	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,1,2-Trichloroethane	ND	2300	420	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,1-Dichloroethane	ND	2300	520	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,1-Dichloroethene	ND	2300	640	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,1-Dichloropropene	ND	2300	420	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,2,3-Trichloropropane	ND	2300	470	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,2,3-Trichlorobenzene	ND	2300	1100	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,2,4-Trichlorobenzene	ND	2300	650	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,2,4-Trimethylbenzene	**64000**	2300	380	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,2-Dibromo-3-chloropropane	ND	4600	1700	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,2-Dibromoethane	ND	2300	270	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,2-Dichlorobenzene	ND	2300	460	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,2-Dichloroethane	ND	2300	540	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,2-Dichloropropane	ND	2300	520	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,3,5-Trimethylbenzene	**20000**	2300	350	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,3-Dichlorobenzene	ND	2300	340	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,3-Dichloropropane	ND	2300	250	500	B4D0085	04/02/2014	04/04/14 20:16	D2
1,4-Dichlorobenzene	ND	2300	370	500	B4D0085	04/02/2014	04/04/14 20:16	D2
2,2-Dichloropropane	ND	2300	620	500	B4D0085	04/02/2014	04/04/14 20:16	D2
2-Chlorotoluene	ND	2300	420	500	B4D0085	04/02/2014	04/04/14 20:16	D2
4-Chlorotoluene	ND	2300	420	500	B4D0085	04/02/2014	04/04/14 20:16	D2
4-Isopropyltoluene	**960**	2300	390	500	B4D0085	04/02/2014	04/04/14 20:16	J, D2
Benzene	ND	2300	460	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Bromobenzene	ND	2300	360	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Bromochloromethane	ND	2300	520	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Bromodichloromethane	ND	2300	360	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Bromoform	ND	2300	240	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Bromomethane	ND	2300	300	500	B4D0085	04/02/2014	04/04/14 20:16	D2

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-19-10
Lab ID: 1401005-08

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	2300	420	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Carbon tetrachloride	ND	2300	500	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Chlorobenzene	ND	2300	430	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Chloroethane	ND	2300	590	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Chloroform	ND	2300	470	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Chloromethane	ND	2300	490	500	B4D0085	04/02/2014	04/04/14 20:16	D2
cis-1,2-Dichloroethene	ND	2300	390	500	B4D0085	04/02/2014	04/04/14 20:16	D2
cis-1,3-Dichloropropene	ND	2300	360	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Di-isopropyl ether	ND	2300	490	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Dibromochloromethane	ND	2300	450	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Dibromomethane	ND	2300	480	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Dichlorodifluoromethane	ND	2300	480	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Ethyl Acetate	ND	23000	3400	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Ethyl Ether	ND	23000	4300	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Ethyl tert-butyl ether	ND	2300	400	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Ethylbenzene	**27000**	2300	370	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Freon-113	ND	2300	610	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Hexachlorobutadiene	ND	2300	630	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Isopropylbenzene	**3100**	2300	530	500	B4D0085	04/02/2014	04/04/14 20:16	D2
m,p-Xylene	**100000**	4600	780	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Methylene chloride	ND	2300	2300	500	B4D0085	04/02/2014	04/04/14 20:16	D2
MTBE	ND	2300	450	500	B4D0085	04/02/2014	04/04/14 20:16	D2
n-Butylbenzene	**6300**	2300	510	500	B4D0085	04/02/2014	04/04/14 20:16	D2
n-Propylbenzene	**11000**	2300	450	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Naphthalene	**7900**	2300	1200	500	B4D0085	04/02/2014	04/04/14 20:16	D2
o-Xylene	**39000**	2300	290	500	B4D0085	04/02/2014	04/04/14 20:16	D2
sec-Butylbenzene	**2000**	2300	470	500	B4D0085	04/02/2014	04/04/14 20:16	J, D2
Styrene	ND	2300	250	500	B4D0085	04/02/2014	04/04/14 20:16	D2
tert-Amyl methyl ether	ND	2300	330	500	B4D0085	04/02/2014	04/04/14 20:16	D2
tert-Butanol	ND	46000	8200	500	B4D0085	04/02/2014	04/04/14 20:16	D2
tert-Butylbenzene	ND	2300	410	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Tetrachloroethene	ND	2300	280	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Toluene	**12000**	2300	400	500	B4D0085	04/02/2014	04/04/14 20:16	D2
trans-1,2-Dichloroethene	ND	2300	560	500	B4D0085	04/02/2014	04/04/14 20:16	D2
trans-1,3-Dichloropropene	ND	2300	480	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Trichloroethene	ND	2300	390	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Trichlorofluoromethane	ND	2300	470	500	B4D0085	04/02/2014	04/04/14 20:16	D2

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-19-10

Lab ID: 1401005-08

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	23000	3800	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Vinyl chloride	ND	2300	340	500	B4D0085	04/02/2014	04/04/14 20:16	D2
Surrogate: 1,2-Dichloroethane-d4	*82.3 %*	*63 - 167*			B4D0085	04/02/2014	*04/04/14 20:16*	
Surrogate: 4-Bromofluorobenzene	*104 %*	*63 - 130*			B4D0085	04/02/2014	*04/04/14 20:16*	
Surrogate: Dibromofluoromethane	*91.5 %*	*75 - 146*			B4D0085	04/02/2014	*04/04/14 20:16*	
Surrogate: Toluene-d8	*101 %*	*78 - 125*			B4D0085	04/02/2014	*04/04/14 20:16*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-20-5

Lab ID: 1401005-09

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	NA	1	B4D0071	04/04/2014	04/04/14 16:54	
Surrogate: 4-Bromofluorobenzene	*103 %*		*55 - 131*		B4D0071	04/04/2014	*04/04/14 16:54*	

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.2	0.85	1	B4D0085	04/02/2014	04/04/14 19:38	
1,1,1-Trichloroethane	ND	4.2	0.75	1	B4D0085	04/02/2014	04/04/14 19:38	
1,1,2,2-Tetrachloroethane	ND	4.2	1.8	1	B4D0085	04/02/2014	04/04/14 19:38	
1,1,2-Trichloroethane	ND	4.2	0.76	1	B4D0085	04/02/2014	04/04/14 19:38	
1,1-Dichloroethane	ND	4.2	0.96	1	B4D0085	04/02/2014	04/04/14 19:38	
1,1-Dichloroethene	ND	4.2	1.2	1	B4D0085	04/02/2014	04/04/14 19:38	
1,1-Dichloropropene	ND	4.2	0.76	1	B4D0085	04/02/2014	04/04/14 19:38	
1,2,3-Trichloropropane	ND	4.2	0.86	1	B4D0085	04/02/2014	04/04/14 19:38	
1,2,3-Trichlorobenzene	ND	4.2	2.0	1	B4D0085	04/02/2014	04/04/14 19:38	
1,2,4-Trichlorobenzene	ND	4.2	1.2	1	B4D0085	04/02/2014	04/04/14 19:38	
1,2,4-Trimethylbenzene	ND	4.2	0.69	1	B4D0085	04/02/2014	04/04/14 19:38	
1,2-Dibromo-3-chloropropane	ND	8.4	3.1	1	B4D0085	04/02/2014	04/04/14 19:38	
1,2-Dibromoethane	ND	4.2	0.50	1	B4D0085	04/02/2014	04/04/14 19:38	
1,2-Dichlorobenzene	ND	4.2	0.84	1	B4D0085	04/02/2014	04/04/14 19:38	
1,2-Dichloroethane	ND	4.2	0.99	1	B4D0085	04/02/2014	04/04/14 19:38	
1,2-Dichloropropane	ND	4.2	0.95	1	B4D0085	04/02/2014	04/04/14 19:38	
1,3,5-Trimethylbenzene	ND	4.2	0.64	1	B4D0085	04/02/2014	04/04/14 19:38	
1,3-Dichlorobenzene	ND	4.2	0.63	1	B4D0085	04/02/2014	04/04/14 19:38	
1,3-Dichloropropane	ND	4.2	0.46	1	B4D0085	04/02/2014	04/04/14 19:38	
1,4-Dichlorobenzene	ND	4.2	0.67	1	B4D0085	04/02/2014	04/04/14 19:38	
2,2-Dichloropropane	ND	4.2	1.1	1	B4D0085	04/02/2014	04/04/14 19:38	
2-Chlorotoluene	ND	4.2	0.77	1	B4D0085	04/02/2014	04/04/14 19:38	
4-Chlorotoluene	ND	4.2	0.78	1	B4D0085	04/02/2014	04/04/14 19:38	
4-Isopropyltoluene	ND	4.2	0.71	1	B4D0085	04/02/2014	04/04/14 19:38	
Benzene	ND	4.2	0.84	1	B4D0085	04/02/2014	04/04/14 19:38	
Bromobenzene	ND	4.2	0.66	1	B4D0085	04/02/2014	04/04/14 19:38	
Bromochloromethane	ND	4.2	0.95	1	B4D0085	04/02/2014	04/04/14 19:38	
Bromodichloromethane	ND	4.2	0.66	1	B4D0085	04/02/2014	04/04/14 19:38	
Bromoform	ND	4.2	0.43	1	B4D0085	04/02/2014	04/04/14 19:38	
Bromomethane	ND	4.2	0.55	1	B4D0085	04/02/2014	04/04/14 19:38	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-20-5

Lab ID: 1401005-09

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	4.2	0.77	1	B4D0085	04/02/2014	04/04/14 19:38	
Carbon tetrachloride	ND	4.2	0.92	1	B4D0085	04/02/2014	04/04/14 19:38	
Chlorobenzene	ND	4.2	0.79	1	B4D0085	04/02/2014	04/04/14 19:38	
Chloroethane	ND	4.2	1.1	1	B4D0085	04/02/2014	04/04/14 19:38	
Chloroform	ND	4.2	0.86	1	B4D0085	04/02/2014	04/04/14 19:38	
Chloromethane	ND	4.2	0.90	1	B4D0085	04/02/2014	04/04/14 19:38	
cis-1,2-Dichloroethene	ND	4.2	0.71	1	B4D0085	04/02/2014	04/04/14 19:38	
cis-1,3-Dichloropropene	ND	4.2	0.65	1	B4D0085	04/02/2014	04/04/14 19:38	
Di-isopropyl ether	ND	4.2	0.90	1	B4D0085	04/02/2014	04/04/14 19:38	
Dibromochloromethane	ND	4.2	0.82	1	B4D0085	04/02/2014	04/04/14 19:38	
Dibromomethane	ND	4.2	0.88	1	B4D0085	04/02/2014	04/04/14 19:38	
Dichlorodifluoromethane	ND	4.2	0.87	1	B4D0085	04/02/2014	04/04/14 19:38	
Ethyl Acetate	ND	42	6.2	1	B4D0085	04/02/2014	04/04/14 19:38	
Ethyl Ether	ND	42	7.8	1	B4D0085	04/02/2014	04/04/14 19:38	
Ethyl tert-butyl ether	ND	4.2	0.72	1	B4D0085	04/02/2014	04/04/14 19:38	
Ethylbenzene	ND	4.2	0.67	1	B4D0085	04/02/2014	04/04/14 19:38	
Freon-113	ND	4.2	1.1	1	B4D0085	04/02/2014	04/04/14 19:38	
Hexachlorobutadiene	ND	4.2	1.1	1	B4D0085	04/02/2014	04/04/14 19:38	
Isopropylbenzene	ND	4.2	0.96	1	B4D0085	04/02/2014	04/04/14 19:38	
m,p-Xylene	ND	8.4	1.4	1	B4D0085	04/02/2014	04/04/14 19:38	
Methylene chloride	ND	4.2	4.2	1	B4D0085	04/02/2014	04/04/14 19:38	
MTBE	ND	4.2	0.82	1	B4D0085	04/02/2014	04/04/14 19:38	
n-Butylbenzene	ND	4.2	0.93	1	B4D0085	04/02/2014	04/04/14 19:38	
n-Propylbenzene	ND	4.2	0.82	1	B4D0085	04/02/2014	04/04/14 19:38	
Naphthalene	ND	4.2	2.2	1	B4D0085	04/02/2014	04/04/14 19:38	
o-Xylene	ND	4.2	0.53	1	B4D0085	04/02/2014	04/04/14 19:38	
sec-Butylbenzene	ND	4.2	0.86	1	B4D0085	04/02/2014	04/04/14 19:38	
Styrene	ND	4.2	0.46	1	B4D0085	04/02/2014	04/04/14 19:38	
tert-Amyl methyl ether	ND	4.2	0.61	1	B4D0085	04/02/2014	04/04/14 19:38	
tert-Butanol	ND	84	15	1	B4D0085	04/02/2014	04/04/14 19:38	
tert-Butylbenzene	ND	4.2	0.74	1	B4D0085	04/02/2014	04/04/14 19:38	
Tetrachloroethene	ND	4.2	0.52	1	B4D0085	04/02/2014	04/04/14 19:38	
Toluene	ND	4.2	0.74	1	B4D0085	04/02/2014	04/04/14 19:38	
trans-1,2-Dichloroethene	ND	4.2	1.0	1	B4D0085	04/02/2014	04/04/14 19:38	
trans-1,3-Dichloropropene	ND	4.2	0.88	1	B4D0085	04/02/2014	04/04/14 19:38	
Trichloroethene	ND	4.2	0.71	1	B4D0085	04/02/2014	04/04/14 19:38	
Trichlorofluoromethane	ND	4.2	0.86	1	B4D0085	04/02/2014	04/04/14 19:38	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-20-5

Lab ID: 1401005-09

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	42	6.9	1	B4D0085	04/02/2014	04/04/14 19:38	
Vinyl chloride	ND	4.2	0.63	1	B4D0085	04/02/2014	04/04/14 19:38	
Surrogate: 1,2-Dichloroethane-d4	*87.6 %*	*63 - 167*			B4D0085	04/02/2014	*04/04/14 19:38*	
Surrogate: 4-Bromofluorobenzene	*106 %*	*63 - 130*			B4D0085	04/02/2014	*04/04/14 19:38*	
Surrogate: Dibromofluoromethane	*90.8 %*	*75 - 146*			B4D0085	04/02/2014	*04/04/14 19:38*	
Surrogate: Toluene-d8	*102 %*	*78 - 125*			B4D0085	04/02/2014	*04/04/14 19:38*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-20-10
Lab ID: 1401005-10

Gasoline Range Organics by EPA 8015B (Modified) (5035)

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**370**	50	NA	50	B4D0121	04/08/2014	04/08/14 12:37	
Surrogate: 4-Bromofluorobenzene	*34.2 %*	*55 - 131*			B4D0121	04/08/2014	*04/08/14 12:37*	S7

Volatile Organic Compounds by EPA 5035/EPA 8260B

Analyst: BD

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	200	40	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,1,1-Trichloroethane	ND	200	35	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,1,2,2-Tetrachloroethane	ND	200	87	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,1,2-Trichloroethane	ND	200	36	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,1-Dichloroethane	ND	200	45	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,1-Dichloroethene	ND	200	55	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,1-Dichloropropene	ND	200	36	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,2,3-Trichloropropane	ND	200	40	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,2,3-Trichlorobenzene	ND	200	92	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,2,4-Trichlorobenzene	ND	200	56	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,2,4-Trimethylbenzene	ND	200	33	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,2-Dibromo-3-chloropropane	ND	390	140	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,2-Dibromoethane	ND	200	24	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,2-Dichlorobenzene	ND	200	39	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,2-Dichloroethane	ND	200	46	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,2-Dichloropropane	ND	200	45	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,3,5-Trimethylbenzene	ND	200	30	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,3-Dichlorobenzene	ND	200	30	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,3-Dichloropropane	ND	200	22	50	B4D0126	04/02/2014	04/08/14 15:38	D2
1,4-Dichlorobenzene	ND	200	31	50	B4D0126	04/02/2014	04/08/14 15:38	D2
2,2-Dichloropropane	ND	200	53	50	B4D0126	04/02/2014	04/08/14 15:38	D2
2-Chlorotoluene	ND	200	36	50	B4D0126	04/02/2014	04/08/14 15:38	D2
4-Chlorotoluene	ND	200	36	50	B4D0126	04/02/2014	04/08/14 15:38	D2
4-Isopropyltoluene	ND	200	33	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Benzene	ND	200	40	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Bromobenzene	ND	200	31	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Bromochloromethane	ND	200	45	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Bromodichloromethane	ND	200	31	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Bromoform	ND	200	20	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Bromomethane	ND	200	26	50	B4D0126	04/02/2014	04/08/14 15:38	D2

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-20-10

Lab ID: 1401005-10

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Carbon disulfide	ND	200	36	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Carbon tetrachloride	ND	200	43	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Chlorobenzene	ND	200	37	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Chloroethane	ND	200	51	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Chloroform	ND	200	41	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Chloromethane	ND	200	42	50	B4D0126	04/02/2014	04/08/14 15:38	D2
cis-1,2-Dichloroethene	ND	200	33	50	B4D0126	04/02/2014	04/08/14 15:38	D2
cis-1,3-Dichloropropene	ND	200	31	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Di-isopropyl ether	ND	200	42	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Dibromochloromethane	ND	200	38	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Dibromomethane	ND	200	42	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Dichlorodifluoromethane	ND	200	41	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Ethyl Acetate	ND	2000	290	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Ethyl Ether	ND	2000	370	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Ethyl tert-butyl ether	ND	200	34	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Ethylbenzene	ND	200	32	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Freon-113	ND	200	53	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Hexachlorobutadiene	ND	200	54	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Isopropylbenzene	**460**	200	45	50	B4D0126	04/02/2014	04/08/14 15:38	D2
m,p-Xylene	ND	390	67	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Methylene chloride	ND	200	200	50	B4D0126	04/02/2014	04/08/14 15:38	D2
MTBE	ND	200	39	50	B4D0126	04/02/2014	04/08/14 15:38	D2
n-Butylbenzene	**130**	200	44	50	B4D0126	04/02/2014	04/08/14 15:38	J, D2
n-Propylbenzene	**630**	200	39	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Naphthalene	**330**	200	110	50	B4D0126	04/02/2014	04/08/14 15:38	D2
o-Xylene	ND	200	25	50	B4D0126	04/02/2014	04/08/14 15:38	D2
sec-Butylbenzene	**230**	200	40	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Styrene	ND	200	22	50	B4D0126	04/02/2014	04/08/14 15:38	D2
tert-Amyl methyl ether	ND	200	29	50	B4D0126	04/02/2014	04/08/14 15:38	D2
tert-Butanol	ND	3900	700	50	B4D0126	04/02/2014	04/08/14 15:38	D2
tert-Butylbenzene	ND	200	35	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Tetrachloroethene	ND	200	24	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Toluene	ND	200	35	50	B4D0126	04/02/2014	04/08/14 15:38	D2
trans-1,2-Dichloroethene	ND	200	49	50	B4D0126	04/02/2014	04/08/14 15:38	D2
trans-1,3-Dichloropropene	ND	200	41	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Trichloroethene	ND	200	33	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Trichlorofluoromethane	ND	200	40	50	B4D0126	04/02/2014	04/08/14 15:38	D2

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Client Sample ID EW-20-10

Lab ID: 1401005-10

Volatile Organic Compounds by EPA 5035/EPA 8260B **Analyst: BD**

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Vinyl acetate	ND	2000	320	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Vinyl chloride	ND	200	29	50	B4D0126	04/02/2014	04/08/14 15:38	D2
Surrogate: 1,2-Dichloroethane-d4	*101 %*	*63 - 167*			B4D0126	04/02/2014	*04/08/14 15:38*	
Surrogate: 4-Bromofluorobenzene	*126 %*	*63 - 130*			B4D0126	04/02/2014	*04/08/14 15:38*	
Surrogate: Dibromofluoromethane	*105 %*	*75 - 146*			B4D0126	04/02/2014	*04/08/14 15:38*	
Surrogate: Toluene-d8	*120 %*	*78 - 125*			B4D0126	04/02/2014	*04/08/14 15:38*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

QUALITY CONTROL SECTION

Gasoline Range Organics by EPA 8015B (Modified) (5035) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0071 - GCVOAS									
Blank (B4D0071-BLK1)				Prepared: 4/4/2014 Analyzed: 4/4/2014					
Gasoline Range Organics	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1510*		*0.200000*		*75.5*	*55 - 131*			
LCS (B4D0071-BS1)				Prepared: 4/4/2014 Analyzed: 4/4/2014					
Gasoline Range Organics	4.55400	1.0	5.00000		91.1	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1891*		*0.200000*		*94.5*	*55 - 131*			
Matrix Spike (B4D0071-MS1)		**Source: 1401004-01**		Prepared: 4/4/2014 Analyzed: 4/4/2014					
Gasoline Range Organics	3.27300	1.0	5.00000	ND	65.5	46 - 124			
Surrogate: 4-Bromofluorobenzene	*0.1805*		*0.200000*		*90.3*	*55 - 131*			
Matrix Spike Dup (B4D0071-MSD1)		**Source: 1401004-01**		Prepared: 4/4/2014 Analyzed: 4/4/2014					
Gasoline Range Organics	3.70800	1.0	5.00000	ND	74.2	46 - 124	12.5	20	
Surrogate: 4-Bromofluorobenzene	*0.1902*		*0.200000*		*95.1*	*55 - 131*			
Batch B4D0121 - GCVOAS									
Blank (B4D0121-BLK1)				Prepared: 4/8/2014 Analyzed: 4/8/2014					
Gasoline Range Organics	ND	1.0			NR				
Surrogate: 4-Bromofluorobenzene	*0.1897*		*0.200000*		*94.8*	*55 - 131*			
LCS (B4D0121-BS1)				Prepared: 4/8/2014 Analyzed: 4/8/2014					
Gasoline Range Organics	3.72000	1.0	5.00000		74.4	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1929*		*0.200000*		*96.5*	*55 - 131*			
Matrix Spike (B4D0121-MS1)		**Source: 1400943-07**		Prepared: 4/8/2014 Analyzed: 4/8/2014					
Gasoline Range Organics	2.66600	1.0	5.00000	ND	53.3	46 - 124			
Surrogate: 4-Bromofluorobenzene	*0.1955*		*0.200000*		*97.8*	*55 - 131*			
Matrix Spike Dup (B4D0121-MSD1)		**Source: 1400943-07**		Prepared: 4/8/2014 Analyzed: 4/8/2014					
Gasoline Range Organics	2.82500	1.0	5.00000	ND	56.5	46 - 124	5.79	20	
Surrogate: 4-Bromofluorobenzene	*0.1920*		*0.200000*		*96.0*	*55 - 131*			

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0064 - MSVOAS									
Blank (B4D0064-BLK1)				Prepared: 4/3/2014 Analyzed: 4/3/2014					
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 04/10/2014

Volatile Organic Compounds by EPA 5035/EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0064 - MSVOAS (continued)									
Blank (B4D0064-BLK1) - Continued				Prepared: 4/3/2014 Analyzed: 4/3/2014					
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*45.59*		*50.0000*		*91.2*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*49.80*		*50.0000*		*99.6*	*63 - 130*			
Surrogate: Dibromofluoromethane	*45.28*		*50.0000*		*90.6*	*75 - 146*			
Surrogate: Toluene-d8	*50.86*		*50.0000*		*102*	*78 - 125*			
LCS (B4D0064-BS1)				Prepared: 4/3/2014 Analyzed: 4/3/2014					
1,1-Dichloroethene	44.8600	5.0	50.0000		89.7	62 - 129			
Benzene	54.2900	5.0	50.0000		109	82 - 121			
Chlorobenzene	53.5600	5.0	50.0000		107	83 - 132			
MTBE	52.4600	5.0	50.0000		105	55 - 138			
Toluene	56.9600	5.0	50.0000		114	80 - 129			
Trichloroethene	53.9300	5.0	50.0000		108	75 - 133			
Surrogate: 1,2-Dichloroethane-d4	*46.73*		*50.0000*		*93.5*	*63 - 167*			

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Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0064 - MSVOAS (continued)									
LCS (B4D0064-BS1) - Continued				Prepared: 4/3/2014 Analyzed: 4/3/2014					
Surrogate: 4-Bromofluorobenzene	*52.05*		*50.0000*		*104*	*63 - 130*			
Surrogate: Dibromofluoromethane	*47.61*		*50.0000*		*95.2*	*75 - 146*			
Surrogate: Toluene-d8	*52.85*		*50.0000*		*106*	*78 - 125*			
Matrix Spike (B4D0064-MS1)		**Source: 1401004-01**		Prepared: 4/3/2014 Analyzed: 4/3/2014					
1,1-Dichloroethene	56.1600	5.0	50.0000	ND	112	48 - 127			
Benzene	61.5600	5.0	50.0000	ND	123	57 - 125			
Chlorobenzene	59.0700	5.0	50.0000	ND	118	42 - 141			
MTBE	47.0600	5.0	50.0000	ND	94.1	44 - 137			
Toluene	62.8600	5.0	50.0000	ND	126	40 - 143			
Trichloroethene	64.2900	5.0	50.0000	ND	129	47 - 148			
Surrogate: 1,2-Dichloroethane-d4	*48.35*		*50.0000*		*96.7*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*50.68*		*50.0000*		*101*	*63 - 130*			
Surrogate: Dibromofluoromethane	*49.11*		*50.0000*		*98.2*	*75 - 146*			
Surrogate: Toluene-d8	*50.47*		*50.0000*		*101*	*78 - 125*			
Matrix Spike Dup (B4D0064-MSD1)		**Source: 1401004-01**		Prepared: 4/3/2014 Analyzed: 4/3/2014					
1,1-Dichloroethene	39.1300	5.0	50.0000	ND	78.3	48 - 127	35.7	20	R
Benzene	48.2500	5.0	50.0000	ND	96.5	57 - 125	24.2	20	R
Chlorobenzene	48.1300	5.0	50.0000	ND	96.3	42 - 141	20.4	20	R
MTBE	48.0500	5.0	50.0000	ND	96.1	44 - 137	2.08	20	
Toluene	49.5000	5.0	50.0000	ND	99.0	40 - 143	23.8	20	R
Trichloroethene	47.8200	5.0	50.0000	ND	95.6	47 - 148	29.4	20	R
Surrogate: 1,2-Dichloroethane-d4	*50.90*		*50.0000*		*102*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*51.94*		*50.0000*		*104*	*63 - 130*			
Surrogate: Dibromofluoromethane	*51.10*		*50.0000*		*102*	*75 - 146*			
Surrogate: Toluene-d8	*52.51*		*50.0000*		*105*	*78 - 125*			
Batch B4D0085 - MSVOAS									
Blank (B4D0085-BLK1)				Prepared: 4/4/2014 Analyzed: 4/4/2014					
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trichlorobenzene	ND	5.0			NR				

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Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0085 - MSVOAS (continued)									
Blank (B4D0085-BLK1) - Continued				Prepared: 4/4/2014 Analyzed: 4/4/2014					
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				
MTBE	ND	5.0			NR				

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Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0085 - MSVOAS (continued)									
Blank (B4D0085-BLK1) - Continued					Prepared: 4/4/2014 Analyzed: 4/4/2014				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*38.70*		*50.0000*		*77.4*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*53.17*		*50.0000*		*106*	*63 - 130*			
Surrogate: Dibromofluoromethane	*43.99*		*50.0000*		*88.0*	*75 - 146*			
Surrogate: Toluene-d8	*50.41*		*50.0000*		*101*	*78 - 125*			
LCS (B4D0085-BS1)					Prepared: 4/4/2014 Analyzed: 4/4/2014				
1,1-Dichloroethene	31.7200	5.0	50.0000		63.4	62 - 129			
Benzene	48.5600	5.0	50.0000		97.1	82 - 121			
Chlorobenzene	53.6600	5.0	50.0000		107	83 - 132			
MTBE	46.2700	5.0	50.0000		92.5	55 - 138			
Toluene	53.7100	5.0	50.0000		107	80 - 129			
Trichloroethene	54.3700	5.0	50.0000		109	75 - 133			
Surrogate: 1,2-Dichloroethane-d4	*40.28*		*50.0000*		*80.6*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*52.15*		*50.0000*		*104*	*63 - 130*			
Surrogate: Dibromofluoromethane	*45.12*		*50.0000*		*90.2*	*75 - 146*			
Surrogate: Toluene-d8	*52.56*		*50.0000*		*105*	*78 - 125*			
Duplicate (B4D0085-DUP1)			**Source: 1401028-34**		Prepared: 4/4/2014 Analyzed: 4/4/2014				
1,1-Dichloroethene	ND	5.0		ND	NR			20	
Benzene	ND	5.0		ND	NR			20	
Chlorobenzene	ND	5.0		ND	NR			20	
MTBE	ND	5.0		ND	NR			20	
Toluene	ND	5.0		ND	NR			20	
Trichloroethene	ND	5.0		ND	NR			20	

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Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0085 - MSVOAS (continued)									
Duplicate (B4D0085-DUP1) - Continued		**Source: 1401028-34**		Prepared: 4/4/2014 Analyzed: 4/4/2014					
Surrogate: 1,2-Dichloroethane-d4	*41.88*		*50.0000*		*83.8*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*51.61*		*50.0000*		*103*	*63 - 130*			
Surrogate: Dibromofluoromethane	*45.04*		*50.0000*		*90.1*	*75 - 146*			
Surrogate: Toluene-d8	*49.75*		*50.0000*		*99.5*	*78 - 125*			
Matrix Spike (B4D0085-MS1)		**Source: 1401021-01**		Prepared: 4/4/2014 Analyzed: 4/4/2014					
1,1-Dichloroethene	30.1700	5.0	50.0000	ND	60.3	48 - 127			
Benzene	45.8100	5.0	50.0000	ND	91.6	57 - 125			
Chlorobenzene	48.7400	5.0	50.0000	ND	97.5	42 - 141			
MTBE	44.0300	5.0	50.0000	ND	88.1	44 - 137			
Toluene	50.2600	5.0	50.0000	ND	101	40 - 143			
Trichloroethene	53.6400	5.0	50.0000	ND	107	47 - 148			
Surrogate: 1,2-Dichloroethane-d4	*40.79*		*50.0000*		*81.6*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*52.98*		*50.0000*		*106*	*63 - 130*			
Surrogate: Dibromofluoromethane	*44.06*		*50.0000*		*88.1*	*75 - 146*			
Surrogate: Toluene-d8	*51.34*		*50.0000*		*103*	*78 - 125*			
Matrix Spike Dup (B4D0085-MSD1)		**Source: 1401021-01**		Prepared: 4/4/2014 Analyzed: 4/4/2014					
1,1-Dichloroethene	31.9400	5.0	50.0000	ND	63.9	48 - 127	5.70	20	
Benzene	43.8800	5.0	50.0000	ND	87.8	57 - 125	4.30	20	
Chlorobenzene	47.1700	5.0	50.0000	ND	94.3	42 - 141	3.27	20	
MTBE	45.0700	5.0	50.0000	ND	90.1	44 - 137	2.33	20	
Toluene	48.6200	5.0	50.0000	ND	97.2	40 - 143	3.32	20	
Trichloroethene	52.3000	5.0	50.0000	ND	105	47 - 148	2.53	20	
Surrogate: 1,2-Dichloroethane-d4	*42.26*		*50.0000*		*84.5*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*53.34*		*50.0000*		*107*	*63 - 130*			
Surrogate: Dibromofluoromethane	*45.49*		*50.0000*		*91.0*	*75 - 146*			
Surrogate: Toluene-d8	*51.49*		*50.0000*		*103*	*78 - 125*			
Batch B4D0126 - MSVOAS									
Blank (B4D0126-BLK1)				Prepared: 4/8/2014 Analyzed: 4/8/2014					
1,1,1,2-Tetrachloroethane	ND	5.0			NR				
1,1,1-Trichloroethane	ND	5.0			NR				
1,1,2,2-Tetrachloroethane	ND	5.0			NR				
1,1,2-Trichloroethane	ND	5.0			NR				
1,1-Dichloroethane	ND	5.0			NR				
1,1-Dichloroethene	ND	5.0			NR				
1,1-Dichloropropene	ND	5.0			NR				
1,2,3-Trichloropropane	ND	5.0			NR				
1,2,3-Trichlorobenzene	ND	5.0			NR				

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Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0126 - MSVOAS (continued)									
Blank (B4D0126-BLK1) - Continued				Prepared: 4/8/2014 Analyzed: 4/8/2014					
1,2,4-Trichlorobenzene	ND	5.0			NR				
1,2,4-Trimethylbenzene	ND	5.0			NR				
1,2-Dibromo-3-chloropropane	ND	10			NR				
1,2-Dibromoethane	ND	5.0			NR				
1,2-Dichlorobenzene	ND	5.0			NR				
1,2-Dichloroethane	ND	5.0			NR				
1,2-Dichloropropane	ND	5.0			NR				
1,3,5-Trimethylbenzene	ND	5.0			NR				
1,3-Dichlorobenzene	ND	5.0			NR				
1,3-Dichloropropane	ND	5.0			NR				
1,4-Dichlorobenzene	ND	5.0			NR				
2,2-Dichloropropane	ND	5.0			NR				
2-Chlorotoluene	ND	5.0			NR				
4-Chlorotoluene	ND	5.0			NR				
4-Isopropyltoluene	ND	5.0			NR				
Benzene	ND	5.0			NR				
Bromobenzene	ND	5.0			NR				
Bromochloromethane	ND	5.0			NR				
Bromodichloromethane	ND	5.0			NR				
Bromoform	ND	5.0			NR				
Bromomethane	ND	5.0			NR				
Carbon disulfide	ND	5.0			NR				
Carbon tetrachloride	ND	5.0			NR				
Chlorobenzene	ND	5.0			NR				
Chloroethane	ND	5.0			NR				
Chloroform	ND	5.0			NR				
Chloromethane	ND	5.0			NR				
cis-1,2-Dichloroethene	ND	5.0			NR				
cis-1,3-Dichloropropene	ND	5.0			NR				
Di-isopropyl ether	ND	5.0			NR				
Dibromochloromethane	ND	5.0			NR				
Dibromomethane	ND	5.0			NR				
Dichlorodifluoromethane	ND	5.0			NR				
Ethyl Acetate	ND	50			NR				
Ethyl Ether	ND	50			NR				
Ethyl tert-butyl ether	ND	5.0			NR				
Ethylbenzene	ND	5.0			NR				
Freon-113	ND	5.0			NR				
Hexachlorobutadiene	ND	5.0			NR				
Isopropylbenzene	ND	5.0			NR				
m,p-Xylene	ND	10			NR				
Methylene chloride	ND	5.0			NR				

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Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0126 - MSVOAS (continued)									
Blank (B4D0126-BLK1) - Continued					Prepared: 4/8/2014 Analyzed: 4/8/2014				
MTBE	ND	5.0			NR				
n-Butylbenzene	ND	5.0			NR				
n-Propylbenzene	ND	5.0			NR				
Naphthalene	ND	5.0			NR				
o-Xylene	ND	5.0			NR				
sec-Butylbenzene	ND	5.0			NR				
Styrene	ND	5.0			NR				
tert-Amyl methyl ether	ND	5.0			NR				
tert-Butanol	ND	100			NR				
tert-Butylbenzene	ND	5.0			NR				
Tetrachloroethene	ND	5.0			NR				
Toluene	ND	5.0			NR				
trans-1,2-Dichloroethene	ND	5.0			NR				
trans-1,3-Dichloropropene	ND	5.0			NR				
Trichloroethene	ND	5.0			NR				
Trichlorofluoromethane	ND	5.0			NR				
Vinyl acetate	ND	50			NR				
Vinyl chloride	ND	5.0			NR				
Surrogate: 1,2-Dichloroethane-d4	*48.76*		*50.0000*		*97.5*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*49.32*		*50.0000*		*98.6*	*63 - 130*			
Surrogate: Dibromofluoromethane	*52.29*		*50.0000*		*105*	*75 - 146*			
Surrogate: Toluene-d8	*51.20*		*50.0000*		*102*	*78 - 125*			
LCS (B4D0126-BS1)					Prepared: 4/8/2014 Analyzed: 4/8/2014				
1,1-Dichloroethene	44.4400	5.0	50.0000		88.9	62 - 129			
Benzene	50.5600	5.0	50.0000		101	82 - 121			
Chlorobenzene	50.4000	5.0	50.0000		101	83 - 132			
MTBE	51.3600	5.0	50.0000		103	55 - 138			
Toluene	52.2800	5.0	50.0000		105	80 - 129			
Trichloroethene	51.1800	5.0	50.0000		102	75 - 133			
Surrogate: 1,2-Dichloroethane-d4	*51.15*		*50.0000*		*102*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*49.90*		*50.0000*		*99.8*	*63 - 130*			
Surrogate: Dibromofluoromethane	*54.15*		*50.0000*		*108*	*75 - 146*			
Surrogate: Toluene-d8	*52.04*		*50.0000*		*104*	*78 - 125*			
Matrix Spike (B4D0126-MS1)		**Source: 1401052-01**			Prepared: 4/8/2014 Analyzed: 4/8/2014				
1,1-Dichloroethene	48.2600	5.0	50.0000	ND	96.5	48 - 127			
Benzene	45.4000	5.0	50.0000	ND	90.8	57 - 125			
Chlorobenzene	45.7500	5.0	50.0000	ND	91.5	42 - 141			
MTBE	52.0300	5.0	50.0000	ND	104	44 - 137			
Toluene	47.4400	5.0	50.0000	ND	94.9	40 - 143			

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Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4D0126 - MSVOAS (continued)									
Matrix Spike (B4D0126-MS1) - Continued		**Source: 1401052-01**		Prepared: 4/8/2014 Analyzed: 4/8/2014					
Trichloroethene	48.8400	5.0	50.0000	ND	97.7	47 - 148			
Surrogate: 1,2-Dichloroethane-d4	*53.05*		*50.0000*		*106*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*50.61*		*50.0000*		*101*	*63 - 130*			
Surrogate: Dibromofluoromethane	*54.95*		*50.0000*		*110*	*75 - 146*			
Surrogate: Toluene-d8	*51.70*		*50.0000*		*103*	*78 - 125*			
Matrix Spike Dup (B4D0126-MSD1)		**Source: 1401052-01**		Prepared: 4/8/2014 Analyzed: 4/8/2014					
1,1-Dichloroethene	44.5000	5.0	50.0000	ND	89.0	48 - 127	8.11	20	
Benzene	44.9300	5.0	50.0000	ND	89.9	57 - 125	1.04	20	
Chlorobenzene	45.1100	5.0	50.0000	ND	90.2	42 - 141	1.41	20	
MTBE	51.6800	5.0	50.0000	ND	103	44 - 137	0.675	20	
Toluene	46.6200	5.0	50.0000	ND	93.2	40 - 143	1.74	20	
Trichloroethene	49.2900	5.0	50.0000	ND	98.6	47 - 148	0.917	20	
Surrogate: 1,2-Dichloroethane-d4	*54.85*		*50.0000*		*110*	*63 - 167*			
Surrogate: 4-Bromofluorobenzene	*49.99*		*50.0000*		*100*	*63 - 130*			
Surrogate: Dibromofluoromethane	*56.58*		*50.0000*		*113*	*75 - 146*			
Surrogate: Toluene-d8	*51.14*		*50.0000*		*102*	*78 - 125*			

Certificate of Analysis

Ninyo & Moore		Project Number :	Chun, 401896004
1956 Webster Street, Suite 400		Report To :	Peter Sims
Oakland , CA 94612		Reported :	04/10/2014

Notes and Definitions

S7	Surrogate recovery was outside of laboratory acceptance limit. Chromatogram shows high concentration of heavy hydrocarbons.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
D2	Sample required dilution due to high concentration of non-target analyte.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

ADVANCED TECHNOLOGY LABORATORIES

3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of _____

Instruction: Complete all shaded areas.

For Laboratory Use Only — ATLCOC Ver: 20130715

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐ Client ☐ ATL	1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☐	☐
☐ FedEx ☐ OnTrac	2. HEADSPACE (V0A)	☐	☐	6. PRESERVED	☐	☐
☑ GSO	3. CONTAINER INTACT	☐	☐	7. COOLER TEMP, deg C:	4.3	
☐ Other: _____	4. SEALED	☐	☐			

CUSTOMER

Company: Ninyo + Moore
Address: 1956 Webster St
City: Oakland State: CA Zip: 94612
Tel: 510-343-3000 Fax: 510-343-3001

SEND REPORT TO:
Attn: Peter Sims Email: psims@ninyoandmoore.com
Company: Ninyo + Moore
Address: 1956 Webster
City: Oakland State: CA Zip: 94612

SEND INVOICE TO: ☒ same as SEND REPORT TO
Attn: Email:
Company:
Address:
City: State: Zip:

PROJECT SAMPLES

Project Name: Chun
Project No.: 401896004
Sampler: Peter Sims
Quote No:
PO #:
Special Instructions/Comments:

Encircle or Write Requested Analysis

ITEM	Lab No.	Sample Description: Sample ID / Location	Date	Time	8260 / 624 (Volatiles)+oxys	8015(GRO)	8015(DRO)	8270(Semi-volatiles)	8081(Organochlorine Pesticides)	8082(PCBs)	6010 / 7000(Title 22 Metals)	TO-15	Encircle Sample Matrix: SOIL / SEDIMENT / SLUDGE	SOLIDS / WIPE / FILTER	WATER - DRINKING / GROUND	WATER - STORM / WASTE	AQUEOUS / LAYERED - OIL	TAT	Container: #	Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7=Canister	Material: 1=Glass; 2=Plastic; 3=Metal	Preservative: 1=HCl; 2=HNO3; 3=H2SO4; 4=4C; 5=Zn ((Ac)2; 6=NaOH; 7=NA2S2O3	REMARKS
1	1401005 - 1	EW-22-5	4/1/14	0856	X	X							X					5	6	2	1	4	5035
2	- 2	EW-22-10	4/1/14	0904																			
3	- 3	EW-21-5	4/1/14	1200																			
4	- 4	EW-21-10	4/1/14	1204																			
5	- 5	EW-18-5	4/2/14	1100																			
6	- 6	EW-18-10	4/2/14	1104																			
7	- 7	EW-19-5	4/2/14	1301																			
8	- 8	EW-19-10	4/2/14	1305																			
9	- 9	EW-20-5	4/2/14	1441																			
10	- 10	EW-20-10	4/2/14	1446																			

QA/QC: ☐ Routine ☐ Caltrans ☐ Legal ☐ RWQCB ☐ Level IV

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples Submitted AFTER 3:00 PM, are considered received the following Business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : 300% Surcharge SAME BUSINESS DAY if received by 9:00 AM
   - TAT = 1 : 100% Surcharge NEXT BUSINESS DAY (COB 5:00 PM)
   - TAT = 2 : 50% Surcharge 2ND BUSINESS DAY (COB 5:00 PM)
   - TAT = 3 : 30% Surcharge 3RD BUSINESS DAY (COB 5:00 PM)
   - TAT = 4 : 20% Surcharge 4TH BUSINESS DAY (COB 5:00 PM)
   - TAT = 5 : NO SURCHARGE 5th BUSINESS DAY (COB 5:00 PM)
4. Weekend, holiday, after-hours work - ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab --- ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for fi ve (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-fi ve (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20/ sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reforma? ed report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction on procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Peter Sims — Submitter Print Name
Peter Sims — Signature

CUSTODY

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Peter Sims	4-2-14	1550	Jeff Siegfried	4/2/14	350pm
Jeff Siegfried	4/2/14	447pm	GSO	4/2/14	447pm
				4/3/14	800

July 18, 2014

Peter Sims
Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612
Tel: (510) 633-5640
Fax:(510) 633-5646

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1401889

Client Reference : Chun, 401896004

Enclosed are the results for sample(s) received on June 26, 2014 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Ninyo & Moore		Project Number :	Chun, 401896004
1956 Webster Street, Suite 400		Report To :	Peter Sims
Oakland , CA 94612		Reported :	07/18/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-4R	1401889-01	Water	6/25/14 8:15	6/26/14 8:10
EW-16	1401889-02	Water	6/25/14 9:00	6/26/14 8:10
MW-5R	1401889-03	Water	6/25/14 9:55	6/26/14 8:10
EW-20	1401889-04	Water	6/25/14 10:10	6/26/14 8:10
MW-6R	1401889-05	Water	6/25/14 11:00	6/26/14 8:10
EW-18	1401889-06	Water	6/25/14 11:06	6/26/14 8:10
EW-19	1401889-07	Water	6/25/14 12:25	6/26/14 8:10
EW-17	1401889-08	Water	6/25/14 12:49	6/26/14 8:10
MW-8	1401889-09	Water	6/25/14 13:17	6/26/14 8:10
MW-7R	1401889-10	Water	6/25/14 14:05	6/26/14 8:10
EW-14	1401889-11	Water	6/25/14 14:32	6/26/14 8:10
EW-15	1401889-12	Water	6/25/14 15:08	6/26/14 8:10

CASE NARRATIVE

Analytical Comments for EPA 8260

Results were J-flagged. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-4R
Lab ID: 1401889-01

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**4.9**	0.50	1	B4F0490	06/26/2014	06/27/14 11:24	
Manganese	**1.4**	0.50	1	B4F0490	06/26/2014	06/27/14 11:24	
Potassium	**0.91**	0.50	1	B4F0490	06/26/2014	06/27/14 11:24	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**0.50**	0.20	2	B4F0521	06/26/2014	06/26/14 12:42	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 12:42	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0521	06/26/2014	06/26/14 12:42	D1
Sulfate	**9.7**	2.0	2	B4F0521	06/26/2014	06/26/14 12:42	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**4.9**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	H1

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.22**	0.15	1	B4F0527	06/27/2014	06/30/14 16:03	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**0.74**	0.05	1	B4F0479	06/26/2014	06/26/14 10:52	
Surrogate: 4-Bromofluorobenzene	*112 %*	*70 - 130*		B4F0479	06/26/2014	*06/26/14 10:52*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-4R

Lab ID: 1401889-01

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:45	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4F0572	06/30/2014	06/30/14 23:45	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4F0572	06/30/2014	06/30/14 23:45	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4F0572	06/30/2014	06/30/14 23:45	
1,1-Dichloroethane	ND	0.50	0.30	1	B4F0572	06/30/2014	06/30/14 23:45	
1,1-Dichloroethene	ND	0.50	0.33	1	B4F0572	06/30/2014	06/30/14 23:45	
1,1-Dichloropropene	ND	0.50	0.36	1	B4F0572	06/30/2014	06/30/14 23:45	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:45	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4F0572	06/30/2014	06/30/14 23:45	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:45	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4F0572	06/30/2014	06/30/14 23:45	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4F0572	06/30/2014	06/30/14 23:45	
1,2-Dibromoethane	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:45	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4F0572	06/30/2014	06/30/14 23:45	
1,2-Dichloroethane	ND	0.50	0.45	1	B4F0572	06/30/2014	06/30/14 23:45	
1,2-Dichloropropane	ND	0.50	0.25	1	B4F0572	06/30/2014	06/30/14 23:45	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 23:45	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4F0572	06/30/2014	06/30/14 23:45	
1,3-Dichloropropane	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:45	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4F0572	06/30/2014	06/30/14 23:45	
2,2-Dichloropropane	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:45	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4F0572	06/30/2014	06/30/14 23:45	
2-Chlorotoluene	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:45	
4-Chlorotoluene	ND	0.50	0.38	1	B4F0572	06/30/2014	06/30/14 23:45	
4-Isopropyltoluene	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:45	
Benzene	**55**	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:45	
Bromobenzene	ND	0.50	0.42	1	B4F0572	06/30/2014	06/30/14 23:45	
Bromochloromethane	ND	0.50	0.29	1	B4F0572	06/30/2014	06/30/14 23:45	
Bromodichloromethane	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:45	
Bromoform	ND	0.50	0.37	1	B4F0572	06/30/2014	06/30/14 23:45	
Bromomethane	ND	0.50	0.49	1	B4F0572	06/30/2014	06/30/14 23:45	
Carbon disulfide	ND	1.0	0.30	1	B4F0572	06/30/2014	06/30/14 23:45	
Carbon tetrachloride	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:45	
Chlorobenzene	ND	0.50	0.19	1	B4F0572	06/30/2014	06/30/14 23:45	
Chloroethane	ND	0.50	0.44	1	B4F0572	06/30/2014	06/30/14 23:45	
Chloroform	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:45	
Chloromethane	ND	0.50	0.34	1	B4F0572	06/30/2014	06/30/14 23:45	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-4R
Lab ID: 1401889-01

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:45	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4F0572	06/30/2014	06/30/14 23:45	
Di-isopropyl ether	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 23:45	
Dibromochloromethane	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:45	
Dibromomethane	ND	0.50	0.29	1	B4F0572	06/30/2014	06/30/14 23:45	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4F0572	06/30/2014	06/30/14 23:45	
Ethyl Acetate	ND	10	2.0	1	B4F0572	06/30/2014	06/30/14 23:45	
Ethyl Ether	ND	10	2.7	1	B4F0572	06/30/2014	06/30/14 23:45	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4F0572	06/30/2014	06/30/14 23:45	
Ethylbenzene	**1.7**	0.50	0.17	1	B4F0572	06/30/2014	06/30/14 23:45	
Freon-113	ND	0.50	0.39	1	B4F0572	06/30/2014	06/30/14 23:45	
Hexachlorobutadiene	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:45	
Isopropylbenzene	**13**	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:45	
m,p-Xylene	**0.59**	1.0	0.43	1	B4F0572	06/30/2014	06/30/14 23:45	J
Methylene chloride	ND	1.0	1.0	1	B4F0572	06/30/2014	06/30/14 23:45	
MTBE	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 23:45	
n-Butylbenzene	**2.3**	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:45	
n-Propylbenzene	**27**	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:45	
Naphthalene	**46**	0.50	0.35	1	B4F0572	06/30/2014	06/30/14 23:45	
o-Xylene	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:45	
sec-Butylbenzene	**3.0**	0.50	0.21	1	B4F0572	06/30/2014	06/30/14 23:45	
Styrene	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 23:45	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4F0572	06/30/2014	06/30/14 23:45	
tert-Butanol	ND	10	4.6	1	B4F0572	06/30/2014	06/30/14 23:45	
tert-Butylbenzene	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:45	
Tetrachloroethene	ND	0.50	0.27	1	B4F0572	06/30/2014	06/30/14 23:45	
Toluene	**0.37**	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:45	J
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4F0572	06/30/2014	06/30/14 23:45	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4F0572	06/30/2014	06/30/14 23:45	
Trichloroethene	ND	0.50	0.35	1	B4F0572	06/30/2014	06/30/14 23:45	
Trichlorofluoromethane	ND	0.50	0.41	1	B4F0572	06/30/2014	06/30/14 23:45	
Vinyl acetate	ND	10	1.8	1	B4F0572	06/30/2014	06/30/14 23:45	
Vinyl chloride	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:45	
Surrogate: 1,2-Dichloroethane-d4	*82.1 %*		*64 - 146*		B4F0572	06/30/2014	*06/30/14 23:45*	
Surrogate: 4-Bromofluorobenzene	*85.4 %*		*60 - 128*		B4F0572	06/30/2014	*06/30/14 23:45*	
Surrogate: Dibromofluoromethane	*81.7 %*		*72 - 141*		B4F0572	06/30/2014	*06/30/14 23:45*	
Surrogate: Toluene-d8	*81.7 %*		*61 - 124*		B4F0572	06/30/2014	*06/30/14 23:45*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-16
Lab ID: 1401889-02

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**3.5**	0.50	1	B4F0490	06/26/2014	06/27/14 11:30	
Manganese	**1.4**	0.50	1	B4F0490	06/26/2014	06/27/14 11:30	
Potassium	**0.77**	0.50	1	B4F0490	06/26/2014	06/27/14 11:30	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 12:54	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 12:54	D1
ortho-Phosphate (As P)	**15**	0.10	2	B4F0521	06/26/2014	06/26/14 12:54	
Sulfate	**19**	2.0	2	B4F0521	06/26/2014	06/26/14 12:54	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**3.5**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	H1

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	ND	0.15	1	B4F0527	06/27/2014	06/30/14 16:03	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B4F0479	06/26/2014	06/26/14 11:11	
Surrogate: 4-Bromofluorobenzene	*94.2 %*	*70 - 130*		B4F0479	06/26/2014	*06/26/14 11:11*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-16

Lab ID: 1401889-02

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 22:56	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4F0572	06/30/2014	06/30/14 22:56	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4F0572	06/30/2014	06/30/14 22:56	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4F0572	06/30/2014	06/30/14 22:56	
1,1-Dichloroethane	ND	0.50	0.30	1	B4F0572	06/30/2014	06/30/14 22:56	
1,1-Dichloroethene	ND	0.50	0.33	1	B4F0572	06/30/2014	06/30/14 22:56	
1,1-Dichloropropene	ND	0.50	0.36	1	B4F0572	06/30/2014	06/30/14 22:56	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 22:56	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4F0572	06/30/2014	06/30/14 22:56	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 22:56	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4F0572	06/30/2014	06/30/14 22:56	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4F0572	06/30/2014	06/30/14 22:56	
1,2-Dibromoethane	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 22:56	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4F0572	06/30/2014	06/30/14 22:56	
1,2-Dichloroethane	ND	0.50	0.45	1	B4F0572	06/30/2014	06/30/14 22:56	
1,2-Dichloropropane	ND	0.50	0.25	1	B4F0572	06/30/2014	06/30/14 22:56	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 22:56	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4F0572	06/30/2014	06/30/14 22:56	
1,3-Dichloropropane	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 22:56	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4F0572	06/30/2014	06/30/14 22:56	
2,2-Dichloropropane	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 22:56	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4F0572	06/30/2014	06/30/14 22:56	
2-Chlorotoluene	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 22:56	
4-Chlorotoluene	ND	0.50	0.38	1	B4F0572	06/30/2014	06/30/14 22:56	
4-Isopropyltoluene	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 22:56	
Benzene	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 22:56	
Bromobenzene	ND	0.50	0.42	1	B4F0572	06/30/2014	06/30/14 22:56	
Bromochloromethane	ND	0.50	0.29	1	B4F0572	06/30/2014	06/30/14 22:56	
Bromodichloromethane	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 22:56	
Bromoform	ND	0.50	0.37	1	B4F0572	06/30/2014	06/30/14 22:56	
Bromomethane	ND	0.50	0.49	1	B4F0572	06/30/2014	06/30/14 22:56	
Carbon disulfide	ND	1.0	0.30	1	B4F0572	06/30/2014	06/30/14 22:56	
Carbon tetrachloride	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 22:56	
Chlorobenzene	ND	0.50	0.19	1	B4F0572	06/30/2014	06/30/14 22:56	
Chloroethane	ND	0.50	0.44	1	B4F0572	06/30/2014	06/30/14 22:56	
Chloroform	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 22:56	
Chloromethane	ND	0.50	0.34	1	B4F0572	06/30/2014	06/30/14 22:56	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-16

Lab ID: 1401889-02

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 22:56	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4F0572	06/30/2014	06/30/14 22:56	
Di-isopropyl ether	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 22:56	
Dibromochloromethane	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 22:56	
Dibromomethane	ND	0.50	0.29	1	B4F0572	06/30/2014	06/30/14 22:56	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4F0572	06/30/2014	06/30/14 22:56	
Ethyl Acetate	ND	10	2.0	1	B4F0572	06/30/2014	06/30/14 22:56	
Ethyl Ether	ND	10	2.7	1	B4F0572	06/30/2014	06/30/14 22:56	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4F0572	06/30/2014	06/30/14 22:56	
Ethylbenzene	ND	0.50	0.17	1	B4F0572	06/30/2014	06/30/14 22:56	
Freon-113	ND	0.50	0.39	1	B4F0572	06/30/2014	06/30/14 22:56	
Hexachlorobutadiene	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 22:56	
Isopropylbenzene	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 22:56	
m,p-Xylene	ND	1.0	0.43	1	B4F0572	06/30/2014	06/30/14 22:56	
Methylene chloride	ND	1.0	1.0	1	B4F0572	06/30/2014	06/30/14 22:56	
MTBE	**1.5**	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 22:56	
n-Butylbenzene	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 22:56	
n-Propylbenzene	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 22:56	
Naphthalene	ND	0.50	0.35	1	B4F0572	06/30/2014	06/30/14 22:56	
o-Xylene	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 22:56	
sec-Butylbenzene	ND	0.50	0.21	1	B4F0572	06/30/2014	06/30/14 22:56	
Styrene	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 22:56	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4F0572	06/30/2014	06/30/14 22:56	
tert-Butanol	ND	10	4.6	1	B4F0572	06/30/2014	06/30/14 22:56	
tert-Butylbenzene	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 22:56	
Tetrachloroethene	ND	0.50	0.27	1	B4F0572	06/30/2014	06/30/14 22:56	
Toluene	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 22:56	
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4F0572	06/30/2014	06/30/14 22:56	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4F0572	06/30/2014	06/30/14 22:56	
Trichloroethene	ND	0.50	0.35	1	B4F0572	06/30/2014	06/30/14 22:56	
Trichlorofluoromethane	ND	0.50	0.41	1	B4F0572	06/30/2014	06/30/14 22:56	
Vinyl acetate	ND	10	1.8	1	B4F0572	06/30/2014	06/30/14 22:56	
Vinyl chloride	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 22:56	
Surrogate: 1,2-Dichloroethane-d4	*81.2 %*		*64 - 146*		B4F0572	06/30/2014	*06/30/14 22:56*	
Surrogate: 4-Bromofluorobenzene	*84.5 %*		*60 - 128*		B4F0572	06/30/2014	*06/30/14 22:56*	
Surrogate: Dibromofluoromethane	*81.4 %*		*72 - 141*		B4F0572	06/30/2014	*06/30/14 22:56*	
Surrogate: Toluene-d8	*82.6 %*		*61 - 124*		B4F0572	06/30/2014	*06/30/14 22:56*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-5R

Lab ID: 1401889-03

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	ND	0.50	1	B4F0490	06/26/2014	06/27/14 11:32	
Manganese	ND	0.50	1	B4F0490	06/26/2014	06/27/14 11:32	
Potassium	**1.5**	0.50	1	B4F0490	06/26/2014	06/27/14 11:32	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 13:05	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 13:05	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0521	06/26/2014	06/26/14 13:05	D1
Sulfate	**8.4**	2.0	2	B4F0521	06/26/2014	06/26/14 13:05	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	ND	0.50	1	[CALC]	06/26/2014	06/27/14 11:32	

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.17**	0.15	1	B4F0527	06/27/2014	06/30/14 16:03	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**32**	0.50	10	B4F0496	06/26/2014	06/26/14 21:21	
Surrogate: 4-Bromofluorobenzene	*106 %*	*70 - 130*		B4F0496	06/26/2014	*06/26/14 21:21*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-5R

Lab ID: 1401889-03

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	2.8	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,1,1-Trichloroethane	ND	5.0	2.5	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,1,2,2-Tetrachloroethane	ND	5.0	4.3	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,1,2-Trichloroethane	ND	5.0	3.1	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,1-Dichloroethane	ND	5.0	3.0	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,1-Dichloroethene	ND	5.0	3.3	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,1-Dichloropropene	ND	5.0	3.6	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,2,3-Trichloropropane	ND	5.0	2.0	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,2,3-Trichlorobenzene	ND	5.0	4.9	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,2,4-Trichlorobenzene	ND	5.0	3.2	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,2,4-Trimethylbenzene	**2200**	50	30	100	B4F0572	07/01/2014	07/01/14 00:56	
1,2-Dibromo-3-chloropropane	ND	5.0	4.0	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,2-Dibromoethane	ND	5.0	3.2	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,2-Dichlorobenzene	ND	5.0	4.4	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,2-Dichloroethane	ND	5.0	4.5	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,2-Dichloropropane	ND	5.0	2.5	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,3,5-Trimethylbenzene	**400**	5.0	2.6	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,3-Dichlorobenzene	ND	5.0	3.7	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,3-Dichloropropane	ND	5.0	2.8	10	B4F0572	07/01/2014	07/01/14 00:32	D6
1,4-Dichlorobenzene	ND	5.0	3.4	10	B4F0572	07/01/2014	07/01/14 00:32	D6
2,2-Dichloropropane	ND	5.0	2.0	10	B4F0572	07/01/2014	07/01/14 00:32	D6
2-Chloroethyl vinyl ether	ND	5.0	2.7	10	B4F0572	07/01/2014	07/01/14 00:32	D6
2-Chlorotoluene	ND	5.0	3.2	10	B4F0572	07/01/2014	07/01/14 00:32	D6
4-Chlorotoluene	ND	5.0	3.8	10	B4F0572	07/01/2014	07/01/14 00:32	D6
4-Isopropyltoluene	**40**	5.0	2.8	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Benzene	**210**	5.0	2.3	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Bromobenzene	ND	5.0	4.2	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Bromochloromethane	ND	5.0	2.9	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Bromodichloromethane	ND	5.0	2.0	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Bromoform	ND	5.0	3.7	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Bromomethane	ND	5.0	4.9	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Carbon disulfide	ND	10	3.0	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Carbon tetrachloride	ND	5.0	3.2	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Chlorobenzene	ND	5.0	1.9	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Chloroethane	ND	5.0	4.4	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Chloroform	ND	5.0	3.2	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Chloromethane	ND	5.0	3.4	10	B4F0572	07/01/2014	07/01/14 00:32	D6

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-5R
Lab ID: 1401889-03

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	5.0	3.2	10	B4F0572	07/01/2014	07/01/14 00:32	D6
cis-1,3-Dichloropropene	ND	5.0	1.8	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Di-isopropyl ether	ND	5.0	2.6	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Dibromochloromethane	ND	5.0	2.3	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Dibromomethane	ND	5.0	2.9	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Dichlorodifluoromethane	ND	5.0	3.7	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Ethyl Acetate	ND	100	20	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Ethyl Ether	ND	100	27	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Ethyl tert-butyl ether	ND	5.0	2.5	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Ethylbenzene	**1700**	50	17	100	B4F0572	07/01/2014	07/01/14 00:56	
Freon-113	ND	5.0	3.9	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Hexachlorobutadiene	ND	5.0	2.3	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Isopropylbenzene	**120**	5.0	2.0	10	B4F0572	07/01/2014	07/01/14 00:32	D6
m,p-Xylene	**5600**	100	43	100	B4F0572	07/01/2014	07/01/14 00:56	
Methylene chloride	ND	10	10	10	B4F0572	07/01/2014	07/01/14 00:32	D6
MTBE	ND	5.0	2.6	10	B4F0572	07/01/2014	07/01/14 00:32	D6
n-Butylbenzene	**55**	5.0	2.3	10	B4F0572	07/01/2014	07/01/14 00:32	D6
n-Propylbenzene	**330**	5.0	2.3	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Naphthalene	**470**	5.0	3.5	10	B4F0572	07/01/2014	07/01/14 00:32	D6
o-Xylene	**2300**	50	23	100	B4F0572	07/01/2014	07/01/14 00:56	
sec-Butylbenzene	**20**	5.0	2.1	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Styrene	ND	5.0	2.6	10	B4F0572	07/01/2014	07/01/14 00:32	D6
tert-Amyl methyl ether	ND	5.0	1.7	10	B4F0572	07/01/2014	07/01/14 00:32	D6
tert-Butanol	ND	100	46	10	B4F0572	07/01/2014	07/01/14 00:32	D6
tert-Butylbenzene	ND	5.0	2.8	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Tetrachloroethene	ND	5.0	2.7	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Toluene	**970**	5.0	2.0	10	B4F0572	07/01/2014	07/01/14 00:32	D6
trans-1,2-Dichloroethene	ND	5.0	3.1	10	B4F0572	07/01/2014	07/01/14 00:32	D6
trans-1,3-Dichloropropene	ND	5.0	2.1	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Trichloroethene	ND	5.0	3.5	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Trichlorofluoromethane	ND	5.0	4.1	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Vinyl acetate	ND	100	18	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Vinyl chloride	ND	5.0	2.8	10	B4F0572	07/01/2014	07/01/14 00:32	D6
Surrogate: 1,2-Dichloroethane-d4	*77.1 %*		*64 - 146*		B4F0572	07/01/2014	*07/01/14 00:56*	
Surrogate: 1,2-Dichloroethane-d4	*79.6 %*		*64 - 146*		B4F0572	07/01/2014	*07/01/14 00:32*	
Surrogate: 4-Bromofluorobenzene	*87.5 %*		*60 - 128*		B4F0572	07/01/2014	*07/01/14 00:56*	
Surrogate: 4-Bromofluorobenzene	*88.8 %*		*60 - 128*		B4F0572	07/01/2014	*07/01/14 00:32*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-5R

Lab ID: 1401889-03

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*77.2 %*	*72 - 141*		B4F0572	07/01/2014	*07/01/14 00:32*	
Surrogate: Dibromofluoromethane	*79.8 %*	*72 - 141*		B4F0572	07/01/2014	*07/01/14 00:56*	
Surrogate: Toluene-d8	*82.5 %*	*61 - 124*		B4F0572	07/01/2014	*07/01/14 00:56*	
Surrogate: Toluene-d8	*85.0 %*	*61 - 124*		B4F0572	07/01/2014	*07/01/14 00:32*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-20
Lab ID: 1401889-04

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**110**	0.50	1	B4F0490	06/26/2014	06/27/14 11:35	
Manganese	**2.6**	0.50	1	B4F0490	06/26/2014	06/27/14 11:35	
Potassium	**9.1**	0.50	1	B4F0490	06/26/2014	06/27/14 11:35	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**0.22**	0.20	2	B4F0521	06/26/2014	06/26/14 13:16	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 13:16	D1
ortho-Phosphate (As P)	**0.14**	0.10	2	B4F0521	06/26/2014	06/26/14 13:16	D1
Sulfate	**7.0**	2.0	2	B4F0521	06/26/2014	06/26/14 13:16	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**110**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.36**	0.15	1	B4F0537	06/27/2014	06/30/14 16:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**3.9**	0.05	1	B4F0479	06/26/2014	06/26/14 18:21	
Surrogate: 4-Bromofluorobenzene	*153 %*	*70 - 130*		B4F0479	06/26/2014	*06/26/14 18:21*	S7

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-20

Lab ID: 1401889-04

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	1.0	0.56	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,1,1-Trichloroethane	ND	1.0	0.51	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,1,2,2-Tetrachloroethane	ND	1.0	0.86	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,1,2-Trichloroethane	ND	1.0	0.62	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,1-Dichloroethane	ND	1.0	0.61	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,1-Dichloroethene	ND	1.0	0.66	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,1-Dichloropropene	ND	1.0	0.72	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,2,3-Trichloropropane	ND	1.0	0.41	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,2,3-Trichlorobenzene	ND	1.0	0.99	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,2,4-Trichlorobenzene	ND	1.0	0.65	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,2,4-Trimethylbenzene	**12**	1.0	0.59	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,2-Dibromo-3-chloropropane	ND	1.0	0.81	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,2-Dibromoethane	ND	1.0	0.64	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,2-Dichlorobenzene	ND	1.0	0.89	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,2-Dichloroethane	**2.7**	1.0	0.90	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,2-Dichloropropane	ND	1.0	0.51	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,3,5-Trimethylbenzene	**4.2**	1.0	0.53	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,3-Dichlorobenzene	ND	1.0	0.75	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,3-Dichloropropane	ND	1.0	0.57	2	B4G0014	07/01/2014	07/01/14 22:10	D6
1,4-Dichlorobenzene	ND	1.0	0.67	2	B4G0014	07/01/2014	07/01/14 22:10	D6
2,2-Dichloropropane	ND	1.0	0.41	2	B4G0014	07/01/2014	07/01/14 22:10	D6
2-Chloroethyl vinyl ether	ND	1.0	0.54	2	B4G0014	07/01/2014	07/01/14 22:10	D6
2-Chlorotoluene	ND	1.0	0.64	2	B4G0014	07/01/2014	07/01/14 22:10	D6
4-Chlorotoluene	ND	1.0	0.77	2	B4G0014	07/01/2014	07/01/14 22:10	D6
4-Isopropyltoluene	**3.5**	1.0	0.56	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Benzene	**400**	5.0	2.3	10	B4F0572	07/01/2014	07/01/14 02:56	
Bromobenzene	ND	1.0	0.84	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Bromochloromethane	ND	1.0	0.57	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Bromodichloromethane	ND	1.0	0.39	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Bromoform	ND	1.0	0.75	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Bromomethane	ND	1.0	0.98	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Carbon disulfide	ND	2.0	0.59	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Carbon tetrachloride	ND	1.0	0.63	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Chlorobenzene	ND	1.0	0.38	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Chloroethane	ND	1.0	0.88	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Chloroform	ND	1.0	0.64	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Chloromethane	ND	1.0	0.68	2	B4G0014	07/01/2014	07/01/14 22:10	D6

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-20
Lab ID: 1401889-04

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	1.0	0.64	2	B4G0014	07/01/2014	07/01/14 22:10	D6
cis-1,3-Dichloropropene	ND	1.0	0.36	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Di-isopropyl ether	ND	1.0	0.52	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Dibromochloromethane	ND	1.0	0.47	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Dibromomethane	ND	1.0	0.57	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Dichlorodifluoromethane	ND	1.0	0.75	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Ethyl Acetate	ND	20	4.0	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Ethyl Ether	ND	20	5.3	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Ethyl tert-butyl ether	ND	1.0	0.50	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Ethylbenzene	**24**	1.0	0.34	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Freon-113	ND	1.0	0.78	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Hexachlorobutadiene	ND	1.0	0.47	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Isopropylbenzene	**82**	1.0	0.41	2	B4G0014	07/01/2014	07/01/14 22:10	D6
m,p-Xylene	**76**	2.0	0.87	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Methylene chloride	ND	2.0	2.0	2	B4G0014	07/01/2014	07/01/14 22:10	D6
MTBE	ND	1.0	0.52	2	B4G0014	07/01/2014	07/01/14 22:10	D6
n-Butylbenzene	**9.6**	1.0	0.45	2	B4G0014	07/01/2014	07/01/14 22:10	D6
n-Propylbenzene	**120**	1.0	0.46	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Naphthalene	**190**	1.0	0.70	2	B4G0014	07/01/2014	07/01/14 22:10	D6
o-Xylene	**3.1**	1.0	0.47	2	B4G0014	07/01/2014	07/01/14 22:10	D6
sec-Butylbenzene	**14**	1.0	0.41	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Styrene	ND	1.0	0.52	2	B4G0014	07/01/2014	07/01/14 22:10	D6
tert-Amyl methyl ether	ND	1.0	0.34	2	B4G0014	07/01/2014	07/01/14 22:10	D6
tert-Butanol	ND	20	9.3	2	B4G0014	07/01/2014	07/01/14 22:10	D6
tert-Butylbenzene	**0.94**	1.0	0.56	2	B4G0014	07/01/2014	07/01/14 22:10	J, D6
Tetrachloroethene	ND	1.0	0.54	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Toluene	**8.1**	1.0	0.40	2	B4G0014	07/01/2014	07/01/14 22:10	D6
trans-1,2-Dichloroethene	ND	1.0	0.63	2	B4G0014	07/01/2014	07/01/14 22:10	D6
trans-1,3-Dichloropropene	ND	1.0	0.43	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Trichloroethene	ND	1.0	0.69	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Trichlorofluoromethane	ND	1.0	0.82	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Vinyl acetate	ND	20	3.5	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Vinyl chloride	ND	1.0	0.55	2	B4G0014	07/01/2014	07/01/14 22:10	D6
Surrogate: 1,2-Dichloroethane-d4	*80.0 %*	*64 - 146*			B4G0014	07/01/2014	*07/01/14 22:10*	
Surrogate: 1,2-Dichloroethane-d4	*80.2 %*	*64 - 146*			B4F0572	07/01/2014	*07/01/14 02:56*	
Surrogate: 4-Bromofluorobenzene	*88.0 %*	*60 - 128*			B4F0572	07/01/2014	*07/01/14 02:56*	
Surrogate: 4-Bromofluorobenzene	*93.2 %*	*60 - 128*			B4G0014	07/01/2014	*07/01/14 22:10*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-20

Lab ID: 1401889-04

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*77.7 %*	*72 - 141*		B4G0014	07/01/2014	*07/01/14 22:10*	
Surrogate: Dibromofluoromethane	*78.1 %*	*72 - 141*		B4F0572	07/01/2014	*07/01/14 02:56*	
Surrogate: Toluene-d8	*89.9 %*	*61 - 124*		B4G0014	07/01/2014	*07/01/14 22:10*	
Surrogate: Toluene-d8	*84.1 %*	*61 - 124*		B4F0572	07/01/2014	*07/01/14 02:56*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-6R
Lab ID: 1401889-05

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**2.9**	0.50	1	B4F0490	06/26/2014	06/27/14 11:41	
Manganese	**1.3**	0.50	1	B4F0490	06/26/2014	06/27/14 11:41	
Potassium	**0.71**	0.50	1	B4F0490	06/26/2014	06/27/14 11:41	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 13:28	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 13:28	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0521	06/26/2014	06/26/14 13:28	D1
Sulfate	**12**	2.0	2	B4F0521	06/26/2014	06/26/14 13:28	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**2.9**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.45**	0.15	1	B4F0537	06/27/2014	06/30/14 16:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**1.7**	0.05	1	B4F0479	06/26/2014	06/26/14 12:11	
Surrogate: 4-Bromofluorobenzene	*116 %*	*70 - 130*		B4F0479	06/26/2014	*06/26/14 12:11*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-6R

Lab ID: 1401889-05

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4F0572	07/01/2014	07/01/14 01:20	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4F0572	07/01/2014	07/01/14 01:20	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4F0572	07/01/2014	07/01/14 01:20	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4F0572	07/01/2014	07/01/14 01:20	
1,1-Dichloroethane	ND	0.50	0.30	1	B4F0572	07/01/2014	07/01/14 01:20	
1,1-Dichloroethene	ND	0.50	0.33	1	B4F0572	07/01/2014	07/01/14 01:20	
1,1-Dichloropropene	ND	0.50	0.36	1	B4F0572	07/01/2014	07/01/14 01:20	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4F0572	07/01/2014	07/01/14 01:20	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4F0572	07/01/2014	07/01/14 01:20	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4F0572	07/01/2014	07/01/14 01:20	
1,2,4-Trimethylbenzene	**72**	0.50	0.30	1	B4F0572	07/01/2014	07/01/14 01:20	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4F0572	07/01/2014	07/01/14 01:20	
1,2-Dibromoethane	ND	0.50	0.32	1	B4F0572	07/01/2014	07/01/14 01:20	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4F0572	07/01/2014	07/01/14 01:20	
1,2-Dichloroethane	ND	0.50	0.45	1	B4F0572	07/01/2014	07/01/14 01:20	
1,2-Dichloropropane	ND	0.50	0.25	1	B4F0572	07/01/2014	07/01/14 01:20	
1,3,5-Trimethylbenzene	**13**	0.50	0.26	1	B4F0572	07/01/2014	07/01/14 01:20	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4F0572	07/01/2014	07/01/14 01:20	
1,3-Dichloropropane	ND	0.50	0.28	1	B4F0572	07/01/2014	07/01/14 01:20	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4F0572	07/01/2014	07/01/14 01:20	
2,2-Dichloropropane	ND	0.50	0.20	1	B4F0572	07/01/2014	07/01/14 01:20	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4F0572	07/01/2014	07/01/14 01:20	
2-Chlorotoluene	ND	0.50	0.32	1	B4F0572	07/01/2014	07/01/14 01:20	
4-Chlorotoluene	ND	0.50	0.38	1	B4F0572	07/01/2014	07/01/14 01:20	
4-Isopropyltoluene	**2.7**	0.50	0.28	1	B4F0572	07/01/2014	07/01/14 01:20	
Benzene	**4.3**	0.50	0.23	1	B4F0572	07/01/2014	07/01/14 01:20	
Bromobenzene	ND	0.50	0.42	1	B4F0572	07/01/2014	07/01/14 01:20	
Bromochloromethane	ND	0.50	0.29	1	B4F0572	07/01/2014	07/01/14 01:20	
Bromodichloromethane	ND	0.50	0.20	1	B4F0572	07/01/2014	07/01/14 01:20	
Bromoform	ND	0.50	0.37	1	B4F0572	07/01/2014	07/01/14 01:20	
Bromomethane	ND	0.50	0.49	1	B4F0572	07/01/2014	07/01/14 01:20	
Carbon disulfide	ND	1.0	0.30	1	B4F0572	07/01/2014	07/01/14 01:20	
Carbon tetrachloride	ND	0.50	0.32	1	B4F0572	07/01/2014	07/01/14 01:20	
Chlorobenzene	ND	0.50	0.19	1	B4F0572	07/01/2014	07/01/14 01:20	
Chloroethane	ND	0.50	0.44	1	B4F0572	07/01/2014	07/01/14 01:20	
Chloroform	ND	0.50	0.32	1	B4F0572	07/01/2014	07/01/14 01:20	
Chloromethane	ND	0.50	0.34	1	B4F0572	07/01/2014	07/01/14 01:20	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-6R
Lab ID: 1401889-05

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4F0572	07/01/2014	07/01/14 01:20	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4F0572	07/01/2014	07/01/14 01:20	
Di-isopropyl ether	ND	0.50	0.26	1	B4F0572	07/01/2014	07/01/14 01:20	
Dibromochloromethane	ND	0.50	0.23	1	B4F0572	07/01/2014	07/01/14 01:20	
Dibromomethane	ND	0.50	0.29	1	B4F0572	07/01/2014	07/01/14 01:20	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4F0572	07/01/2014	07/01/14 01:20	
Ethyl Acetate	ND	10	2.0	1	B4F0572	07/01/2014	07/01/14 01:20	
Ethyl Ether	ND	10	2.7	1	B4F0572	07/01/2014	07/01/14 01:20	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4F0572	07/01/2014	07/01/14 01:20	
Ethylbenzene	**55**	0.50	0.17	1	B4F0572	07/01/2014	07/01/14 01:20	
Freon-113	ND	0.50	0.39	1	B4F0572	07/01/2014	07/01/14 01:20	
Hexachlorobutadiene	ND	0.50	0.23	1	B4F0572	07/01/2014	07/01/14 01:20	
Isopropylbenzene	**17**	0.50	0.20	1	B4F0572	07/01/2014	07/01/14 01:20	
m,p-Xylene	**150**	1.0	0.43	1	B4F0572	07/01/2014	07/01/14 01:20	
Methylene chloride	ND	1.0	1.0	1	B4F0572	07/01/2014	07/01/14 01:20	
MTBE	ND	0.50	0.26	1	B4F0572	07/01/2014	07/01/14 01:20	
n-Butylbenzene	**3.4**	0.50	0.23	1	B4F0572	07/01/2014	07/01/14 01:20	
n-Propylbenzene	**32**	0.50	0.23	1	B4F0572	07/01/2014	07/01/14 01:20	
Naphthalene	**49**	0.50	0.35	1	B4F0572	07/01/2014	07/01/14 01:20	
o-Xylene	**31**	0.50	0.23	1	B4F0572	07/01/2014	07/01/14 01:20	
sec-Butylbenzene	**4.5**	0.50	0.21	1	B4F0572	07/01/2014	07/01/14 01:20	
Styrene	ND	0.50	0.26	1	B4F0572	07/01/2014	07/01/14 01:20	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4F0572	07/01/2014	07/01/14 01:20	
tert-Butanol	ND	10	4.6	1	B4F0572	07/01/2014	07/01/14 01:20	
tert-Butylbenzene	ND	0.50	0.28	1	B4F0572	07/01/2014	07/01/14 01:20	
Tetrachloroethene	ND	0.50	0.27	1	B4F0572	07/01/2014	07/01/14 01:20	
Toluene	**9.4**	0.50	0.20	1	B4F0572	07/01/2014	07/01/14 01:20	
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4F0572	07/01/2014	07/01/14 01:20	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4F0572	07/01/2014	07/01/14 01:20	
Trichloroethene	ND	0.50	0.35	1	B4F0572	07/01/2014	07/01/14 01:20	
Trichlorofluoromethane	ND	0.50	0.41	1	B4F0572	07/01/2014	07/01/14 01:20	
Vinyl acetate	ND	10	1.8	1	B4F0572	07/01/2014	07/01/14 01:20	
Vinyl chloride	ND	0.50	0.28	1	B4F0572	07/01/2014	07/01/14 01:20	
Surrogate: 1,2-Dichloroethane-d4	*77.2 %*		*64 - 146*		B4F0572	07/01/2014	*07/01/14 01:20*	
Surrogate: 4-Bromofluorobenzene	*87.8 %*		*60 - 128*		B4F0572	07/01/2014	*07/01/14 01:20*	
Surrogate: Dibromofluoromethane	*77.4 %*		*72 - 141*		B4F0572	07/01/2014	*07/01/14 01:20*	
Surrogate: Toluene-d8	*83.2 %*		*61 - 124*		B4F0572	07/01/2014	*07/01/14 01:20*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-18
Lab ID: 1401889-06

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**73**	0.50	1	B4F0490	06/26/2014	06/27/14 11:43	
Manganese	**2.9**	0.50	1	B4F0490	06/26/2014	06/27/14 11:43	
Potassium	**9.5**	0.50	1	B4F0490	06/26/2014	06/27/14 11:43	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 13:39	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 13:39	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0521	06/26/2014	06/26/14 13:39	D1
Sulfate	ND	2.0	2	B4F0521	06/26/2014	06/26/14 13:39	D1

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**73**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.30**	0.15	1	B4F0537	06/27/2014	06/30/14 16:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**21**	0.50	10	B4F0496	06/26/2014	06/26/14 21:41	
Surrogate: 4-Bromofluorobenzene	*104 %*	*70 - 130*		B4F0496	06/26/2014	*06/26/14 21:41*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Lab ID: 1401889-06

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	2.5	1.4	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,1,1-Trichloroethane	ND	2.5	1.3	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,1,2,2-Tetrachloroethane	ND	2.5	2.1	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,1,2-Trichloroethane	ND	2.5	1.5	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,1-Dichloroethane	ND	2.5	1.5	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,1-Dichloroethene	ND	2.5	1.6	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,1-Dichloropropene	ND	2.5	1.8	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,2,3-Trichloropropane	ND	2.5	1.0	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,2,3-Trichlorobenzene	ND	2.5	2.5	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,2,4-Trichlorobenzene	ND	2.5	1.6	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,2,4-Trimethylbenzene	**730**	25	15	50	B4F0572	07/01/2014	07/01/14 03:21	
1,2-Dibromo-3-chloropropane	ND	2.5	2.0	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,2-Dibromoethane	ND	2.5	1.6	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,2-Dichlorobenzene	ND	2.5	2.2	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,2-Dichloroethane	ND	2.5	2.3	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,2-Dichloropropane	ND	2.5	1.3	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,3,5-Trimethylbenzene	**240**	2.5	1.3	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,3-Dichlorobenzene	ND	2.5	1.9	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,3-Dichloropropane	ND	2.5	1.4	5	B4G0014	07/01/2014	07/01/14 22:34	D6
1,4-Dichlorobenzene	ND	2.5	1.7	5	B4G0014	07/01/2014	07/01/14 22:34	D6
2,2-Dichloropropane	ND	2.5	1.0	5	B4G0014	07/01/2014	07/01/14 22:34	D6
2-Chloroethyl vinyl ether	ND	2.5	1.4	5	B4G0014	07/01/2014	07/01/14 22:34	D6
2-Chlorotoluene	ND	2.5	1.6	5	B4G0014	07/01/2014	07/01/14 22:34	D6
4-Chlorotoluene	ND	2.5	1.9	5	B4G0014	07/01/2014	07/01/14 22:34	D6
4-Isopropyltoluene	**23**	2.5	1.4	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Benzene	**140**	2.5	1.1	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Bromobenzene	ND	2.5	2.1	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Bromochloromethane	ND	2.5	1.4	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Bromodichloromethane	ND	2.5	0.98	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Bromoform	ND	2.5	1.9	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Bromomethane	ND	2.5	2.5	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Carbon disulfide	ND	5.0	1.5	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Carbon tetrachloride	ND	2.5	1.6	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Chlorobenzene	ND	2.5	0.94	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Chloroethane	ND	2.5	2.2	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Chloroform	ND	2.5	1.6	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Chloromethane	ND	2.5	1.7	5	B4G0014	07/01/2014	07/01/14 22:34	D6

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-18
Lab ID: 1401889-06

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	2.5	1.6	5	B4G0014	07/01/2014	07/01/14 22:34	D6
cis-1,3-Dichloropropene	ND	2.5	0.90	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Di-isopropyl ether	ND	2.5	1.3	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Dibromochloromethane	ND	2.5	1.2	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Dibromomethane	ND	2.5	1.4	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Dichlorodifluoromethane	ND	2.5	1.9	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Ethyl Acetate	ND	50	10	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Ethyl Ether	ND	50	13	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Ethyl tert-butyl ether	ND	2.5	1.3	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Ethylbenzene	**1100**	25	8.4	50	B4F0572	07/01/2014	07/01/14 03:21	
Freon-113	ND	2.5	2.0	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Hexachlorobutadiene	ND	2.5	1.2	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Isopropylbenzene	**140**	2.5	1.0	5	B4G0014	07/01/2014	07/01/14 22:34	D6
m,p-Xylene	**3000**	50	22	50	B4F0572	07/01/2014	07/01/14 03:21	
Methylene chloride	ND	5.0	5.0	5	B4G0014	07/01/2014	07/01/14 22:34	D6
MTBE	ND	2.5	1.3	5	B4G0014	07/01/2014	07/01/14 22:34	D6
n-Butylbenzene	**58**	2.5	1.1	5	B4G0014	07/01/2014	07/01/14 22:34	D6
n-Propylbenzene	**370**	2.5	1.2	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Naphthalene	**480**	2.5	1.7	5	B4G0014	07/01/2014	07/01/14 22:34	D6
o-Xylene	**960**	25	12	50	B4F0572	07/01/2014	07/01/14 03:21	
sec-Butylbenzene	**23**	2.5	1.0	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Styrene	ND	2.5	1.3	5	B4G0014	07/01/2014	07/01/14 22:34	D6
tert-Amyl methyl ether	ND	2.5	0.86	5	B4G0014	07/01/2014	07/01/14 22:34	D6
tert-Butanol	ND	50	23	5	B4G0014	07/01/2014	07/01/14 22:34	D6
tert-Butylbenzene	ND	2.5	1.4	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Tetrachloroethene	ND	2.5	1.3	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Toluene	**630**	25	10	50	B4F0572	07/01/2014	07/01/14 03:21	
trans-1,2-Dichloroethene	ND	2.5	1.6	5	B4G0014	07/01/2014	07/01/14 22:34	D6
trans-1,3-Dichloropropene	ND	2.5	1.1	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Trichloroethene	ND	2.5	1.7	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Trichlorofluoromethane	ND	2.5	2.0	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Vinyl acetate	ND	50	8.8	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Vinyl chloride	ND	2.5	1.4	5	B4G0014	07/01/2014	07/01/14 22:34	D6
Surrogate: 1,2-Dichloroethane-d4	*79.6 %*		*64 - 146*		B4F0572	07/01/2014	*07/01/14 03:21*	
Surrogate: 1,2-Dichloroethane-d4	*75.2 %*		*64 - 146*		B4G0014	07/01/2014	*07/01/14 22:34*	
Surrogate: 4-Bromofluorobenzene	*88.3 %*		*60 - 128*		B4F0572	07/01/2014	*07/01/14 03:21*	
Surrogate: 4-Bromofluorobenzene	*85.3 %*		*60 - 128*		B4G0014	07/01/2014	*07/01/14 22:34*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-18

Lab ID: 1401889-06

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*76.8 %*	*72 - 141*		B4G0014	07/01/2014	*07/01/14 22:34*	
Surrogate: Dibromofluoromethane	*79.1 %*	*72 - 141*		B4F0572	07/01/2014	*07/01/14 03:21*	
Surrogate: Toluene-d8	*83.8 %*	*61 - 124*		B4G0014	07/01/2014	*07/01/14 22:34*	
Surrogate: Toluene-d8	*83.3 %*	*61 - 124*		B4F0572	07/01/2014	*07/01/14 03:21*	

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Client Sample ID EW-19
Lab ID: 1401889-07

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**43**	0.50	1	B4F0490	06/26/2014	06/27/14 11:46	
Manganese	**3.3**	0.50	1	B4F0490	06/26/2014	06/27/14 11:46	
Potassium	**7.1**	0.50	1	B4F0490	06/26/2014	06/27/14 11:46	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 13:51	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 13:51	D1
ortho-Phosphate (As P)	**0.17**	0.10	2	B4F0521	06/26/2014	06/26/14 13:51	D1
Sulfate	ND	2.0	2	B4F0521	06/26/2014	06/26/14 13:51	D1

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**43**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.50**	0.15	1	B4F0537	06/27/2014	06/30/14 16:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**12**	0.25	5	B4F0496	06/26/2014	06/26/14 22:01	
Surrogate: 4-Bromofluorobenzene	*116 %*	*70 - 130*		B4F0496	06/26/2014	*06/26/14 22:01*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-19

Lab ID: 1401889-07

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	1.0	0.56	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,1,1-Trichloroethane	ND	1.0	0.51	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,1,2,2-Tetrachloroethane	ND	1.0	0.86	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,1,2-Trichloroethane	ND	1.0	0.62	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,1-Dichloroethane	ND	1.0	0.61	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,1-Dichloroethene	ND	1.0	0.66	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,1-Dichloropropene	ND	1.0	0.72	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,2,3-Trichloropropane	ND	1.0	0.41	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,2,3-Trichlorobenzene	ND	1.0	0.99	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,2,4-Trichlorobenzene	ND	1.0	0.65	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,2,4-Trimethylbenzene	**360**	10	5.9	20	B4F0572	07/01/2014	07/01/14 03:44	
1,2-Dibromo-3-chloropropane	ND	1.0	0.81	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,2-Dibromoethane	ND	1.0	0.64	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,2-Dichlorobenzene	ND	1.0	0.89	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,2-Dichloroethane	ND	1.0	0.90	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,2-Dichloropropane	ND	1.0	0.51	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,3,5-Trimethylbenzene	**110**	1.0	0.53	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,3-Dichlorobenzene	ND	1.0	0.75	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,3-Dichloropropane	ND	1.0	0.57	2	B4G0014	07/01/2014	07/01/14 22:58	D6
1,4-Dichlorobenzene	ND	1.0	0.67	2	B4G0014	07/01/2014	07/01/14 22:58	D6
2,2-Dichloropropane	ND	1.0	0.41	2	B4G0014	07/01/2014	07/01/14 22:58	D6
2-Chloroethyl vinyl ether	ND	1.0	0.54	2	B4G0014	07/01/2014	07/01/14 22:58	D6
2-Chlorotoluene	ND	1.0	0.64	2	B4G0014	07/01/2014	07/01/14 22:58	D6
4-Chlorotoluene	ND	1.0	0.77	2	B4G0014	07/01/2014	07/01/14 22:58	D6
4-Isopropyltoluene	**9.7**	1.0	0.56	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Benzene	**620**	10	4.5	20	B4F0572	07/01/2014	07/01/14 03:44	
Bromobenzene	ND	1.0	0.84	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Bromochloromethane	ND	1.0	0.57	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Bromodichloromethane	ND	1.0	0.39	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Bromoform	ND	1.0	0.75	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Bromomethane	ND	1.0	0.98	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Carbon disulfide	ND	2.0	0.59	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Carbon tetrachloride	ND	1.0	0.63	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Chlorobenzene	ND	1.0	0.38	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Chloroethane	ND	1.0	0.88	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Chloroform	ND	1.0	0.64	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Chloromethane	ND	1.0	0.68	2	B4G0014	07/01/2014	07/01/14 22:58	D6

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-19
Lab ID: 1401889-07

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	1.0	0.64	2	B4G0014	07/01/2014	07/01/14 22:58	D6
cis-1,3-Dichloropropene	ND	1.0	0.36	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Di-isopropyl ether	ND	1.0	0.52	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Dibromochloromethane	ND	1.0	0.47	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Dibromomethane	ND	1.0	0.57	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Dichlorodifluoromethane	ND	1.0	0.75	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Ethyl Acetate	ND	20	4.0	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Ethyl Ether	ND	20	5.3	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Ethyl tert-butyl ether	ND	1.0	0.50	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Ethylbenzene	**460**	10	3.4	20	B4F0572	07/01/2014	07/01/14 03:44	
Freon-113	ND	1.0	0.78	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Hexachlorobutadiene	ND	1.0	0.47	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Isopropylbenzene	**120**	1.0	0.41	2	B4G0014	07/01/2014	07/01/14 22:58	D6
m,p-Xylene	**1400**	20	8.7	20	B4F0572	07/01/2014	07/01/14 03:44	
Methylene chloride	ND	2.0	2.0	2	B4G0014	07/01/2014	07/01/14 22:58	D6
MTBE	ND	1.0	0.52	2	B4G0014	07/01/2014	07/01/14 22:58	D6
n-Butylbenzene	**40**	1.0	0.45	2	B4G0014	07/01/2014	07/01/14 22:58	D6
n-Propylbenzene	**310**	10	4.6	20	B4F0572	07/01/2014	07/01/14 03:44	
Naphthalene	**480**	10	7.0	20	B4F0572	07/01/2014	07/01/14 03:44	
o-Xylene	**370**	10	4.7	20	B4F0572	07/01/2014	07/01/14 03:44	
sec-Butylbenzene	**22**	1.0	0.41	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Styrene	ND	1.0	0.52	2	B4G0014	07/01/2014	07/01/14 22:58	D6
tert-Amyl methyl ether	ND	1.0	0.34	2	B4G0014	07/01/2014	07/01/14 22:58	D6
tert-Butanol	ND	20	9.3	2	B4G0014	07/01/2014	07/01/14 22:58	D6
tert-Butylbenzene	ND	1.0	0.56	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Tetrachloroethene	ND	1.0	0.54	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Toluene	**160**	1.0	0.40	2	B4G0014	07/01/2014	07/01/14 22:58	D6
trans-1,2-Dichloroethene	ND	1.0	0.63	2	B4G0014	07/01/2014	07/01/14 22:58	D6
trans-1,3-Dichloropropene	ND	1.0	0.43	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Trichloroethene	ND	1.0	0.69	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Trichlorofluoromethane	ND	1.0	0.82	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Vinyl acetate	ND	20	3.5	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Vinyl chloride	ND	1.0	0.55	2	B4G0014	07/01/2014	07/01/14 22:58	D6
Surrogate: 1,2-Dichloroethane-d4	*74.5 %*		*64 - 146*		B4G0014	07/01/2014	*07/01/14 22:58*	
Surrogate: 1,2-Dichloroethane-d4	*77.3 %*		*64 - 146*		B4F0572	07/01/2014	*07/01/14 03:44*	
Surrogate: 4-Bromofluorobenzene	*88.7 %*		*60 - 128*		B4G0014	07/01/2014	*07/01/14 22:58*	
Surrogate: 4-Bromofluorobenzene	*87.8 %*		*60 - 128*		B4F0572	07/01/2014	*07/01/14 03:44*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-19

Lab ID: 1401889-07

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*78.0 %*	*72 - 141*		B4F0572	07/01/2014	*07/01/14 03:44*	
Surrogate: Dibromofluoromethane	*75.1 %*	*72 - 141*		B4G0014	07/01/2014	*07/01/14 22:58*	
Surrogate: Toluene-d8	*82.0 %*	*61 - 124*		B4F0572	07/01/2014	*07/01/14 03:44*	
Surrogate: Toluene-d8	*84.7 %*	*61 - 124*		B4G0014	07/01/2014	*07/01/14 22:58*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-17
Lab ID: 1401889-08

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**31**	0.50	1	B4F0490	06/26/2014	06/27/14 11:48	
Manganese	**1.6**	0.50	1	B4F0490	06/26/2014	06/27/14 11:48	
Potassium	**0.75**	0.50	1	B4F0490	06/26/2014	06/27/14 11:48	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 14:36	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 14:36	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0521	06/26/2014	06/26/14 14:36	D1
Sulfate	**3.4**	2.0	2	B4F0521	06/26/2014	06/26/14 14:36	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**31**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.34**	0.15	1	B4F0537	06/27/2014	06/30/14 16:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**12**	0.25	5	B4F0496	06/26/2014	06/26/14 22:20	
Surrogate: 4-Bromofluorobenzene	*109 %*	*70 - 130*		B4F0496	06/26/2014	*06/26/14 22:20*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-17

Lab ID: 1401889-08

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	2.8	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,1,1-Trichloroethane	ND	5.0	2.5	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,1,2,2-Tetrachloroethane	ND	5.0	4.3	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,1,2-Trichloroethane	ND	5.0	3.1	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,1-Dichloroethane	ND	5.0	3.0	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,1-Dichloroethene	ND	5.0	3.3	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,1-Dichloropropene	ND	5.0	3.6	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,2,3-Trichloropropane	ND	5.0	2.0	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,2,3-Trichlorobenzene	ND	5.0	4.9	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,2,4-Trichlorobenzene	ND	5.0	3.2	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,2,4-Trimethylbenzene	**200**	5.0	3.0	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,2-Dibromo-3-chloropropane	ND	5.0	4.0	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,2-Dibromoethane	ND	5.0	3.2	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,2-Dichlorobenzene	ND	5.0	4.4	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,2-Dichloroethane	ND	5.0	4.5	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,2-Dichloropropane	ND	5.0	2.5	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,3,5-Trimethylbenzene	**64**	5.0	2.6	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,3-Dichlorobenzene	ND	5.0	3.7	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,3-Dichloropropane	ND	5.0	2.8	10	B4G0014	07/01/2014	07/01/14 23:21	D6
1,4-Dichlorobenzene	ND	5.0	3.4	10	B4G0014	07/01/2014	07/01/14 23:21	D6
2,2-Dichloropropane	ND	5.0	2.0	10	B4G0014	07/01/2014	07/01/14 23:21	D6
2-Chloroethyl vinyl ether	ND	5.0	2.7	10	B4G0014	07/01/2014	07/01/14 23:21	D6
2-Chlorotoluene	ND	5.0	3.2	10	B4G0014	07/01/2014	07/01/14 23:21	D6
4-Chlorotoluene	ND	5.0	3.8	10	B4G0014	07/01/2014	07/01/14 23:21	D6
4-Isopropyltoluene	**19**	5.0	2.8	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Benzene	**1900**	10	4.5	20	B4F0572	07/01/2014	07/01/14 04:56	
Bromobenzene	ND	5.0	4.2	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Bromochloromethane	ND	5.0	2.9	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Bromodichloromethane	ND	5.0	2.0	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Bromoform	ND	5.0	3.7	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Bromomethane	ND	5.0	4.9	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Carbon disulfide	ND	10	3.0	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Carbon tetrachloride	ND	5.0	3.2	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Chlorobenzene	ND	5.0	1.9	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Chloroethane	ND	5.0	4.4	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Chloroform	ND	5.0	3.2	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Chloromethane	ND	5.0	3.4	10	B4G0014	07/01/2014	07/01/14 23:21	D6

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-17
Lab ID: 1401889-08

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	5.0	3.2	10	B4G0014	07/01/2014	07/01/14 23:21	D6
cis-1,3-Dichloropropene	ND	5.0	1.8	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Di-isopropyl ether	ND	5.0	2.6	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Dibromochloromethane	ND	5.0	2.3	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Dibromomethane	ND	5.0	2.9	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Dichlorodifluoromethane	ND	5.0	3.7	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Ethyl Acetate	ND	100	20	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Ethyl Ether	ND	100	27	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Ethyl tert-butyl ether	ND	5.0	2.5	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Ethylbenzene	**330**	5.0	1.7	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Freon-113	ND	5.0	3.9	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Hexachlorobutadiene	ND	5.0	2.3	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Isopropylbenzene	**79**	5.0	2.0	10	B4G0014	07/01/2014	07/01/14 23:21	D6
m,p-Xylene	**400**	10	4.3	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Methylene chloride	ND	10	10	10	B4G0014	07/01/2014	07/01/14 23:21	D6
MTBE	ND	5.0	2.6	10	B4G0014	07/01/2014	07/01/14 23:21	D6
n-Butylbenzene	**23**	5.0	2.3	10	B4G0014	07/01/2014	07/01/14 23:21	D6
n-Propylbenzene	**210**	5.0	2.3	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Naphthalene	**720**	5.0	3.5	10	B4G0014	07/01/2014	07/01/14 23:21	D6
o-Xylene	**100**	5.0	2.3	10	B4G0014	07/01/2014	07/01/14 23:21	D6
sec-Butylbenzene	**13**	5.0	2.1	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Styrene	ND	5.0	2.6	10	B4G0014	07/01/2014	07/01/14 23:21	D6
tert-Amyl methyl ether	ND	5.0	1.7	10	B4G0014	07/01/2014	07/01/14 23:21	D6
tert-Butanol	ND	100	46	10	B4G0014	07/01/2014	07/01/14 23:21	D6
tert-Butylbenzene	ND	5.0	2.8	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Tetrachloroethene	ND	5.0	2.7	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Toluene	**100**	5.0	2.0	10	B4G0014	07/01/2014	07/01/14 23:21	D6
trans-1,2-Dichloroethene	ND	5.0	3.1	10	B4G0014	07/01/2014	07/01/14 23:21	D6
trans-1,3-Dichloropropene	ND	5.0	2.1	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Trichloroethene	ND	5.0	3.5	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Trichlorofluoromethane	ND	5.0	4.1	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Vinyl acetate	ND	100	18	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Vinyl chloride	ND	5.0	2.8	10	B4G0014	07/01/2014	07/01/14 23:21	D6
Surrogate: 1,2-Dichloroethane-d4	*74.2 %*		*64 - 146*		B4G0014	07/01/2014	*07/01/14 23:21*	
Surrogate: 1,2-Dichloroethane-d4	*80.6 %*		*64 - 146*		B4F0572	07/01/2014	*07/01/14 04:56*	
Surrogate: 4-Bromofluorobenzene	*85.6 %*		*60 - 128*		B4G0014	07/01/2014	*07/01/14 23:21*	
Surrogate: 4-Bromofluorobenzene	*89.7 %*		*60 - 128*		B4F0572	07/01/2014	*07/01/14 04:56*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-17

Lab ID: 1401889-08

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*80.9 %*	*72 - 141*		B4F0572	07/01/2014	*07/01/14 04:56*	
Surrogate: Dibromofluoromethane	*73.3 %*	*72 - 141*		B4G0014	07/01/2014	*07/01/14 23:21*	
Surrogate: Toluene-d8	*83.6 %*	*61 - 124*		B4F0572	07/01/2014	*07/01/14 04:56*	
Surrogate: Toluene-d8	*81.0 %*	*61 - 124*		B4G0014	07/01/2014	*07/01/14 23:21*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-8
Lab ID: 1401889-09

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**6.1**	0.50	1	B4F0490	06/26/2014	06/27/14 11:50	
Manganese	**1.1**	0.50	1	B4F0490	06/26/2014	06/27/14 11:50	
Potassium	**0.71**	0.50	1	B4F0490	06/26/2014	06/27/14 11:50	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 14:48	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 14:48	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0521	06/26/2014	06/26/14 14:48	D1
Sulfate	**4.1**	2.0	2	B4F0521	06/26/2014	06/26/14 14:48	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**6.1**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.34**	0.15	1	B4F0537	06/27/2014	06/30/14 16:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**0.42**	0.05	1	B4F0479	06/26/2014	06/26/14 19:00	
Surrogate: 4-Bromofluorobenzene	*101 %*	*70 - 130*		B4F0479	06/26/2014	*06/26/14 19:00*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-8

Lab ID: 1401889-09

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:19	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4F0572	06/30/2014	06/30/14 23:19	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4F0572	06/30/2014	06/30/14 23:19	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4F0572	06/30/2014	06/30/14 23:19	
1,1-Dichloroethane	ND	0.50	0.30	1	B4F0572	06/30/2014	06/30/14 23:19	
1,1-Dichloroethene	ND	0.50	0.33	1	B4F0572	06/30/2014	06/30/14 23:19	
1,1-Dichloropropene	ND	0.50	0.36	1	B4F0572	06/30/2014	06/30/14 23:19	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:19	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4F0572	06/30/2014	06/30/14 23:19	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:19	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4F0572	06/30/2014	06/30/14 23:19	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4F0572	06/30/2014	06/30/14 23:19	
1,2-Dibromoethane	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:19	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4F0572	06/30/2014	06/30/14 23:19	
1,2-Dichloroethane	ND	0.50	0.45	1	B4F0572	06/30/2014	06/30/14 23:19	
1,2-Dichloropropane	ND	0.50	0.25	1	B4F0572	06/30/2014	06/30/14 23:19	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 23:19	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4F0572	06/30/2014	06/30/14 23:19	
1,3-Dichloropropane	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:19	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4F0572	06/30/2014	06/30/14 23:19	
2,2-Dichloropropane	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:19	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4F0572	06/30/2014	06/30/14 23:19	
2-Chlorotoluene	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:19	
4-Chlorotoluene	ND	0.50	0.38	1	B4F0572	06/30/2014	06/30/14 23:19	
4-Isopropyltoluene	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:19	
Benzene	**2.4**	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:19	
Bromobenzene	ND	0.50	0.42	1	B4F0572	06/30/2014	06/30/14 23:19	
Bromochloromethane	ND	0.50	0.29	1	B4F0572	06/30/2014	06/30/14 23:19	
Bromodichloromethane	ND	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:19	
Bromoform	ND	0.50	0.37	1	B4F0572	06/30/2014	06/30/14 23:19	
Bromomethane	ND	0.50	0.49	1	B4F0572	06/30/2014	06/30/14 23:19	
Carbon disulfide	ND	1.0	0.30	1	B4F0572	06/30/2014	06/30/14 23:19	
Carbon tetrachloride	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:19	
Chlorobenzene	ND	0.50	0.19	1	B4F0572	06/30/2014	06/30/14 23:19	
Chloroethane	ND	0.50	0.44	1	B4F0572	06/30/2014	06/30/14 23:19	
Chloroform	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:19	
Chloromethane	ND	0.50	0.34	1	B4F0572	06/30/2014	06/30/14 23:19	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-8
Lab ID: 1401889-09

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4F0572	06/30/2014	06/30/14 23:19	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4F0572	06/30/2014	06/30/14 23:19	
Di-isopropyl ether	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 23:19	
Dibromochloromethane	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:19	
Dibromomethane	ND	0.50	0.29	1	B4F0572	06/30/2014	06/30/14 23:19	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4F0572	06/30/2014	06/30/14 23:19	
Ethyl Acetate	ND	10	2.0	1	B4F0572	06/30/2014	06/30/14 23:19	
Ethyl Ether	ND	10	2.7	1	B4F0572	06/30/2014	06/30/14 23:19	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4F0572	06/30/2014	06/30/14 23:19	
Ethylbenzene	**0.60**	0.50	0.17	1	B4F0572	06/30/2014	06/30/14 23:19	
Freon-113	ND	0.50	0.39	1	B4F0572	06/30/2014	06/30/14 23:19	
Hexachlorobutadiene	ND	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:19	
Isopropylbenzene	**3.8**	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:19	
m,p-Xylene	**3.4**	1.0	0.43	1	B4F0572	06/30/2014	06/30/14 23:19	
Methylene chloride	ND	1.0	1.0	1	B4F0572	06/30/2014	06/30/14 23:19	
MTBE	ND	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 23:19	
n-Butylbenzene	**0.26**	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:19	J
n-Propylbenzene	**3.7**	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:19	
Naphthalene	**12**	0.50	0.35	1	B4F0572	06/30/2014	06/30/14 23:19	
o-Xylene	**0.24**	0.50	0.23	1	B4F0572	06/30/2014	06/30/14 23:19	J
sec-Butylbenzene	**0.67**	0.50	0.21	1	B4F0572	06/30/2014	06/30/14 23:19	
Styrene	**0.91**	0.50	0.26	1	B4F0572	06/30/2014	06/30/14 23:19	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4F0572	06/30/2014	06/30/14 23:19	
tert-Butanol	ND	10	4.6	1	B4F0572	06/30/2014	06/30/14 23:19	
tert-Butylbenzene	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:19	
Tetrachloroethene	ND	0.50	0.27	1	B4F0572	06/30/2014	06/30/14 23:19	
Toluene	**2.2**	0.50	0.20	1	B4F0572	06/30/2014	06/30/14 23:19	
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4F0572	06/30/2014	06/30/14 23:19	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4F0572	06/30/2014	06/30/14 23:19	
Trichloroethene	ND	0.50	0.35	1	B4F0572	06/30/2014	06/30/14 23:19	
Trichlorofluoromethane	ND	0.50	0.41	1	B4F0572	06/30/2014	06/30/14 23:19	
Vinyl acetate	ND	10	1.8	1	B4F0572	06/30/2014	06/30/14 23:19	
Vinyl chloride	ND	0.50	0.28	1	B4F0572	06/30/2014	06/30/14 23:19	
Surrogate: 1,2-Dichloroethane-d4	*84.7 %*	*64 - 146*			B4F0572	06/30/2014	*06/30/14 23:19*	
Surrogate: 4-Bromofluorobenzene	*86.3 %*	*60 - 128*			B4F0572	06/30/2014	*06/30/14 23:19*	
Surrogate: Dibromofluoromethane	*79.9 %*	*72 - 141*			B4F0572	06/30/2014	*06/30/14 23:19*	
Surrogate: Toluene-d8	*81.8 %*	*61 - 124*			B4F0572	06/30/2014	*06/30/14 23:19*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-7R
Lab ID: 1401889-10

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**35**	0.50	1	B4F0490	06/26/2014	06/27/14 11:53	
Manganese	**3.4**	0.50	1	B4F0490	06/26/2014	06/27/14 11:53	
Potassium	**2.0**	0.50	1	B4F0490	06/26/2014	06/27/14 11:53	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 14:59	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 14:59	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0521	06/26/2014	06/26/14 14:59	D1
Sulfate	ND	2.0	2	B4F0521	06/26/2014	06/26/14 14:59	D1

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**35**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.39**	0.15	1	B4F0537	06/27/2014	06/30/14 16:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**240**	2.5	50	B4F0505	06/27/2014	06/27/14 17:46	
Surrogate: 4-Bromofluorobenzene	*101 %*	*70 - 130*		B4F0505	06/27/2014	*06/27/14 17:46*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-7R

Lab ID: 1401889-10

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	50	28	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,1,1-Trichloroethane	ND	50	25	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,1,2,2-Tetrachloroethane	ND	50	43	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,1,2-Trichloroethane	ND	50	31	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,1-Dichloroethane	ND	50	30	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,1-Dichloroethene	ND	50	33	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,1-Dichloropropene	ND	50	36	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,2,3-Trichloropropane	ND	50	20	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,2,3-Trichlorobenzene	ND	50	49	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,2,4-Trichlorobenzene	ND	50	32	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,2,4-Trimethylbenzene	**2200**	50	30	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,2-Dibromo-3-chloropropane	ND	50	40	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,2-Dibromoethane	ND	50	32	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,2-Dichlorobenzene	ND	50	44	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,2-Dichloroethane	ND	50	45	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,2-Dichloropropane	ND	50	25	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,3,5-Trimethylbenzene	**560**	50	26	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,3-Dichlorobenzene	ND	50	37	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,3-Dichloropropane	ND	50	28	100	B4F0572	07/01/2014	07/01/14 02:07	D6
1,4-Dichlorobenzene	ND	50	34	100	B4F0572	07/01/2014	07/01/14 02:07	D6
2,2-Dichloropropane	ND	50	20	100	B4F0572	07/01/2014	07/01/14 02:07	D6
2-Chloroethyl vinyl ether	ND	50	27	100	B4F0572	07/01/2014	07/01/14 02:07	D6
2-Chlorotoluene	ND	50	32	100	B4F0572	07/01/2014	07/01/14 02:07	D6
4-Chlorotoluene	ND	50	38	100	B4F0572	07/01/2014	07/01/14 02:07	D6
4-Isopropyltoluene	**180**	50	28	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Benzene	**18000**	500	230	1000	B4F0572	07/01/2014	07/01/14 02:32	
Bromobenzene	ND	50	42	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Bromochloromethane	ND	50	29	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Bromodichloromethane	ND	50	20	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Bromoform	ND	50	37	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Bromomethane	ND	50	49	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Carbon disulfide	ND	100	30	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Carbon tetrachloride	ND	50	32	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Chlorobenzene	ND	50	19	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Chloroethane	ND	50	44	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Chloroform	ND	50	32	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Chloromethane	ND	50	34	100	B4F0572	07/01/2014	07/01/14 02:07	D6

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-7R
Lab ID: 1401889-10

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	50	32	100	B4F0572	07/01/2014	07/01/14 02:07	D6
cis-1,3-Dichloropropene	ND	50	18	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Di-isopropyl ether	ND	50	26	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Dibromochloromethane	ND	50	23	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Dibromomethane	ND	50	29	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Dichlorodifluoromethane	ND	50	37	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Ethyl Acetate	ND	1000	200	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Ethyl Ether	ND	1000	270	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Ethyl tert-butyl ether	ND	50	25	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Ethylbenzene	**3900**	50	17	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Freon-113	ND	50	39	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Hexachlorobutadiene	ND	50	23	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Isopropylbenzene	**89**	50	20	100	B4F0572	07/01/2014	07/01/14 02:07	D6
m,p-Xylene	**15000**	100	43	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Methylene chloride	ND	100	100	100	B4F0572	07/01/2014	07/01/14 02:07	D6
MTBE	ND	50	26	100	B4F0572	07/01/2014	07/01/14 02:07	D6
n-Butylbenzene	ND	50	23	100	B4F0572	07/01/2014	07/01/14 02:07	D6
n-Propylbenzene	**270**	50	23	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Naphthalene	**630**	50	35	100	B4F0572	07/01/2014	07/01/14 02:07	D6
o-Xylene	**6100**	50	23	100	B4F0572	07/01/2014	07/01/14 02:07	D6
sec-Butylbenzene	ND	50	21	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Styrene	ND	50	26	100	B4F0572	07/01/2014	07/01/14 02:07	D6
tert-Amyl methyl ether	ND	50	17	100	B4F0572	07/01/2014	07/01/14 02:07	D6
tert-Butanol	ND	1000	460	100	B4F0572	07/01/2014	07/01/14 02:07	D6
tert-Butylbenzene	ND	50	28	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Tetrachloroethene	ND	50	27	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Toluene	**38000**	500	200	1000	B4F0572	07/01/2014	07/01/14 02:32	
trans-1,2-Dichloroethene	ND	50	31	100	B4F0572	07/01/2014	07/01/14 02:07	D6
trans-1,3-Dichloropropene	ND	50	21	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Trichloroethene	ND	50	35	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Trichlorofluoromethane	ND	50	41	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Vinyl acetate	ND	1000	180	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Vinyl chloride	ND	50	28	100	B4F0572	07/01/2014	07/01/14 02:07	D6
Surrogate: 1,2-Dichloroethane-d4	*77.2 %*		*64 - 146*		B4F0572	07/01/2014	*07/01/14 02:07*	
Surrogate: 1,2-Dichloroethane-d4	*79.7 %*		*64 - 146*		B4F0572	07/01/2014	*07/01/14 02:32*	
Surrogate: 4-Bromofluorobenzene	*87.7 %*		*60 - 128*		B4F0572	07/01/2014	*07/01/14 02:07*	
Surrogate: 4-Bromofluorobenzene	*88.6 %*		*60 - 128*		B4F0572	07/01/2014	*07/01/14 02:32*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-7R

Lab ID: 1401889-10

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*75.8 %*	*72 - 141*		B4F0572	07/01/2014	*07/01/14 02:07*	
Surrogate: Dibromofluoromethane	*78.5 %*	*72 - 141*		B4F0572	07/01/2014	*07/01/14 02:32*	
Surrogate: Toluene-d8	*81.8 %*	*61 - 124*		B4F0572	07/01/2014	*07/01/14 02:32*	
Surrogate: Toluene-d8	*83.6 %*	*61 - 124*		B4F0572	07/01/2014	*07/01/14 02:07*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-14
Lab ID: 1401889-11

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**6.2**	0.50	1	B4F0491	06/26/2014	06/27/14 11:59	
Manganese	**1.0**	0.50	1	B4F0491	06/26/2014	06/27/14 11:59	
Potassium	**3.2**	0.50	1	B4F0491	06/26/2014	06/27/14 11:59	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 15:10	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 15:10	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0521	06/26/2014	06/26/14 15:10	D1
Sulfate	**4.0**	2.0	2	B4F0521	06/26/2014	06/26/14 15:10	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**6.2**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.54**	0.15	1	B4F0537	06/27/2014	06/30/14 16:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**19**	0.25	5	B4F0496	06/26/2014	06/26/14 23:00	
Surrogate: 4-Bromofluorobenzene	*106 %*	*70 - 130*		B4F0496	06/26/2014	*06/26/14 23:00*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-14

Lab ID: 1401889-11

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	10	5.6	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,1,1-Trichloroethane	ND	10	5.1	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,1,2,2-Tetrachloroethane	ND	10	8.6	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,1,2-Trichloroethane	ND	10	6.2	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,1-Dichloroethane	ND	10	6.1	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,1-Dichloroethene	ND	10	6.6	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,1-Dichloropropene	ND	10	7.2	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,2,3-Trichloropropane	ND	10	4.1	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,2,3-Trichlorobenzene	ND	10	9.9	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,2,4-Trichlorobenzene	ND	10	6.5	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,2,4-Trimethylbenzene	**79**	10	5.9	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,2-Dibromo-3-chloropropane	ND	10	8.1	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,2-Dibromoethane	ND	10	6.4	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,2-Dichlorobenzene	ND	10	8.9	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,2-Dichloroethane	ND	10	9.0	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,2-Dichloropropane	ND	10	5.1	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,3,5-Trimethylbenzene	**26**	10	5.3	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,3-Dichlorobenzene	ND	10	7.5	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,3-Dichloropropane	ND	10	5.7	20	B4G0014	07/01/2014	07/01/14 23:45	D6
1,4-Dichlorobenzene	ND	10	6.7	20	B4G0014	07/01/2014	07/01/14 23:45	D6
2,2-Dichloropropane	ND	10	4.1	20	B4G0014	07/01/2014	07/01/14 23:45	D6
2-Chloroethyl vinyl ether	ND	10	5.4	20	B4G0014	07/01/2014	07/01/14 23:45	D6
2-Chlorotoluene	ND	10	6.4	20	B4G0014	07/01/2014	07/01/14 23:45	D6
4-Chlorotoluene	ND	10	7.7	20	B4G0014	07/01/2014	07/01/14 23:45	D6
4-Isopropyltoluene	ND	10	5.6	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Benzene	**5200**	100	45	200	B4G0014	07/02/2014	07/02/14 00:10	
Bromobenzene	ND	10	8.4	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Bromochloromethane	ND	10	5.7	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Bromodichloromethane	ND	10	3.9	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Bromoform	ND	10	7.5	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Bromomethane	ND	10	9.8	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Carbon disulfide	ND	20	5.9	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Carbon tetrachloride	ND	10	6.3	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Chlorobenzene	ND	10	3.8	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Chloroethane	ND	10	8.8	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Chloroform	ND	10	6.4	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Chloromethane	ND	10	6.8	20	B4G0014	07/01/2014	07/01/14 23:45	D6

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-14
Lab ID: 1401889-11

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	10	6.4	20	B4G0014	07/01/2014	07/01/14 23:45	D6
cis-1,3-Dichloropropene	ND	10	3.6	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Di-isopropyl ether	ND	10	5.2	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Dibromochloromethane	ND	10	4.7	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Dibromomethane	ND	10	5.7	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Dichlorodifluoromethane	ND	10	7.5	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Ethyl Acetate	ND	200	40	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Ethyl Ether	ND	200	53	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Ethyl tert-butyl ether	ND	10	5.0	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Ethylbenzene	**290**	10	3.4	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Freon-113	ND	10	7.8	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Hexachlorobutadiene	ND	10	4.7	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Isopropylbenzene	**53**	10	4.1	20	B4G0014	07/01/2014	07/01/14 23:45	D6
m,p-Xylene	**480**	20	8.7	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Methylene chloride	ND	20	20	20	B4G0014	07/01/2014	07/01/14 23:45	D6
MTBE	ND	10	5.2	20	B4G0014	07/01/2014	07/01/14 23:45	D6
n-Butylbenzene	**11**	10	4.5	20	B4G0014	07/01/2014	07/01/14 23:45	D6
n-Propylbenzene	**100**	10	4.6	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Naphthalene	**270**	10	7.0	20	B4G0014	07/01/2014	07/01/14 23:45	D6
o-Xylene	**78**	10	4.7	20	B4G0014	07/01/2014	07/01/14 23:45	D6
sec-Butylbenzene	**8.4**	10	4.1	20	B4G0014	07/01/2014	07/01/14 23:45	J, D6
Styrene	ND	10	5.2	20	B4G0014	07/01/2014	07/01/14 23:45	D6
tert-Amyl methyl ether	ND	10	3.4	20	B4G0014	07/01/2014	07/01/14 23:45	D6
tert-Butanol	ND	200	93	20	B4G0014	07/01/2014	07/01/14 23:45	D6
tert-Butylbenzene	ND	10	5.6	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Tetrachloroethene	ND	10	5.4	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Toluene	**80**	10	4.0	20	B4G0014	07/01/2014	07/01/14 23:45	D6
trans-1,2-Dichloroethene	ND	10	6.3	20	B4G0014	07/01/2014	07/01/14 23:45	D6
trans-1,3-Dichloropropene	ND	10	4.3	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Trichloroethene	ND	10	6.9	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Trichlorofluoromethane	ND	10	8.2	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Vinyl acetate	ND	200	35	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Vinyl chloride	ND	10	5.5	20	B4G0014	07/01/2014	07/01/14 23:45	D6
Surrogate: 1,2-Dichloroethane-d4	*72.6 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 00:10*	
Surrogate: 1,2-Dichloroethane-d4	*75.8 %*		*64 - 146*		B4G0014	07/01/2014	*07/01/14 23:45*	
Surrogate: 4-Bromofluorobenzene	*83.0 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 00:10*	
Surrogate: 4-Bromofluorobenzene	*85.7 %*		*60 - 128*		B4G0014	07/01/2014	*07/01/14 23:45*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-14

Lab ID: 1401889-11

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*75.4 %*	*72 - 141*		B4G0014	07/01/2014	*07/01/14 23:45*	
Surrogate: Dibromofluoromethane	*75.9 %*	*72 - 141*		B4G0014	07/02/2014	*07/02/14 00:10*	
Surrogate: Toluene-d8	*78.6 %*	*61 - 124*		B4G0014	07/01/2014	*07/01/14 23:45*	
Surrogate: Toluene-d8	*77.2 %*	*61 - 124*		B4G0014	07/02/2014	*07/02/14 00:10*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-15
Lab ID: 1401889-12

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**21**	0.50	1	B4F0491	06/26/2014	06/27/14 12:09	
Manganese	**2.9**	0.50	1	B4F0491	06/26/2014	06/27/14 12:09	
Potassium	**1.6**	0.50	1	B4F0491	06/26/2014	06/27/14 12:09	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 15:22	D1
Nitrite, as N	ND	0.20	2	B4F0521	06/26/2014	06/26/14 15:22	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0521	06/26/2014	06/26/14 15:22	D1
Sulfate	ND	2.0	2	B4F0521	06/26/2014	06/26/14 15:22	D1

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**21**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0516	06/26/2014	06/26/14 09:36	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	ND	0.15	1	B4F0537	06/27/2014	06/30/14 16:11	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**35**	0.50	10	B4F0496	06/26/2014	06/26/14 23:19	
Surrogate: 4-Bromofluorobenzene	*97.5 %*	*70 - 130*		B4F0496	06/26/2014	*06/26/14 23:19*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-15
Lab ID: 1401889-12

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	25	14	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,1,1-Trichloroethane	ND	25	13	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,1,2,2-Tetrachloroethane	ND	25	21	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,1,2-Trichloroethane	ND	25	15	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,1-Dichloroethane	ND	25	15	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,1-Dichloroethene	ND	25	16	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,1-Dichloropropene	ND	25	18	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,2,3-Trichloropropane	ND	25	10	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,2,3-Trichlorobenzene	ND	25	25	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,2,4-Trichlorobenzene	ND	25	16	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,2,4-Trimethylbenzene	**420**	25	15	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,2-Dibromo-3-chloropropane	ND	25	20	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,2-Dibromoethane	ND	25	16	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,2-Dichlorobenzene	ND	25	22	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,2-Dichloroethane	ND	25	23	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,2-Dichloropropane	ND	25	13	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,3,5-Trimethylbenzene	**110**	25	13	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,3-Dichlorobenzene	ND	25	19	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,3-Dichloropropane	ND	25	14	50	B4F0572	07/01/2014	07/01/14 04:32	D6
1,4-Dichlorobenzene	ND	25	17	50	B4F0572	07/01/2014	07/01/14 04:32	D6
2,2-Dichloropropane	ND	25	10	50	B4F0572	07/01/2014	07/01/14 04:32	D6
2-Chloroethyl vinyl ether	ND	25	14	50	B4F0572	07/01/2014	07/01/14 04:32	D6
2-Chlorotoluene	ND	25	16	50	B4F0572	07/01/2014	07/01/14 04:32	D6
4-Chlorotoluene	ND	25	19	50	B4F0572	07/01/2014	07/01/14 04:32	D6
4-Isopropyltoluene	ND	25	14	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Benzene	**8000**	100	45	200	B4G0014	07/02/2014	07/02/14 00:33	
Bromobenzene	ND	25	21	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Bromochloromethane	ND	25	14	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Bromodichloromethane	ND	25	9.8	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Bromoform	ND	25	19	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Bromomethane	ND	25	25	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Carbon disulfide	ND	50	15	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Carbon tetrachloride	ND	25	16	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Chlorobenzene	ND	25	9.4	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Chloroethane	ND	25	22	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Chloroform	ND	25	16	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Chloromethane	ND	25	17	50	B4F0572	07/01/2014	07/01/14 04:32	D6

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-15
Lab ID: 1401889-12

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	25	16	50	B4F0572	07/01/2014	07/01/14 04:32	D6
cis-1,3-Dichloropropene	ND	25	9.0	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Di-isopropyl ether	ND	25	13	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Dibromochloromethane	ND	25	12	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Dibromomethane	ND	25	14	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Dichlorodifluoromethane	ND	25	19	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Ethyl Acetate	ND	500	100	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Ethyl Ether	ND	500	130	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Ethyl tert-butyl ether	ND	25	13	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Ethylbenzene	**630**	25	8.4	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Freon-113	ND	25	20	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Hexachlorobutadiene	ND	25	12	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Isopropylbenzene	**63**	25	10	50	B4F0572	07/01/2014	07/01/14 04:32	D6
m,p-Xylene	**1400**	50	22	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Methylene chloride	ND	50	50	50	B4F0572	07/01/2014	07/01/14 04:32	D6
MTBE	ND	25	13	50	B4F0572	07/01/2014	07/01/14 04:32	D6
n-Butylbenzene	**16**	25	11	50	B4F0572	07/01/2014	07/01/14 04:32	J, D6
n-Propylbenzene	**170**	25	12	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Naphthalene	**460**	25	17	50	B4F0572	07/01/2014	07/01/14 04:32	D6
o-Xylene	**300**	25	12	50	B4F0572	07/01/2014	07/01/14 04:32	D6
sec-Butylbenzene	ND	25	10	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Styrene	ND	25	13	50	B4F0572	07/01/2014	07/01/14 04:32	D6
tert-Amyl methyl ether	ND	25	8.6	50	B4F0572	07/01/2014	07/01/14 04:32	D6
tert-Butanol	ND	500	230	50	B4F0572	07/01/2014	07/01/14 04:32	D6
tert-Butylbenzene	ND	25	14	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Tetrachloroethene	ND	25	13	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Toluene	**850**	25	10	50	B4F0572	07/01/2014	07/01/14 04:32	D6
trans-1,2-Dichloroethene	ND	25	16	50	B4F0572	07/01/2014	07/01/14 04:32	D6
trans-1,3-Dichloropropene	ND	25	11	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Trichloroethene	ND	25	17	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Trichlorofluoromethane	ND	25	20	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Vinyl acetate	ND	500	88	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Vinyl chloride	ND	25	14	50	B4F0572	07/01/2014	07/01/14 04:32	D6
Surrogate: 1,2-Dichloroethane-d4	*76.5 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 00:33*	
Surrogate: 1,2-Dichloroethane-d4	*78.7 %*		*64 - 146*		B4F0572	07/01/2014	*07/01/14 04:32*	
Surrogate: 4-Bromofluorobenzene	*85.2 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 00:33*	
Surrogate: 4-Bromofluorobenzene	*88.8 %*		*60 - 128*		B4F0572	07/01/2014	*07/01/14 04:32*	

Certificate of Analysis

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Client Sample ID EW-15

Lab ID: 1401889-12

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*74.6 %*	*72 - 141*		B4G0014	07/02/2014	*07/02/14 00:33*	
Surrogate: Dibromofluoromethane	*78.2 %*	*72 - 141*		B4F0572	07/01/2014	*07/01/14 04:32*	
Surrogate: Toluene-d8	*79.5 %*	*61 - 124*		B4G0014	07/02/2014	*07/02/14 00:33*	
Surrogate: Toluene-d8	*80.4 %*	*61 - 124*		B4F0572	07/01/2014	*07/01/14 04:32*	

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QUALITY CONTROL SECTION

Total Metals by ICP-AES EPA 200.7 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0490 - EPA 200.7									
Blank (B4F0490-BLK1)				Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	ND	0.50			NR				
Manganese	ND	0.50			NR				
Potassium	ND	0.50			NR				
LCS (B4F0490-BS1)				Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	20.9314	0.50	20.0000		105	85 - 115			
Manganese	10.1668	0.50	10.0000		102	85 - 115			
Potassium	21.0984	0.50	20.0000		105	85 - 115			
Matrix Spike (B4F0490-MS1)		**Source: 1401889-01**		Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	24.9620	0.50	20.0000	4.87145	100	86 - 108			
Manganese	11.2037	0.50	10.0000	1.44159	97.6	81 - 106			
Potassium	21.5277	0.50	20.0000	0.910369	103	37 - 162			
Matrix Spike Dup (B4F0490-MSD1)		**Source: 1401889-01**		Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	24.2773	0.50	20.0000	4.87145	97.0	86 - 108	2.78	20	
Manganese	10.8537	0.50	10.0000	1.44159	94.1	81 - 106	3.17	20	
Potassium	21.0209	0.50	20.0000	0.910369	101	37 - 162	2.38	20	
Batch B4F0491 - EPA 200.7									
Blank (B4F0491-BLK1)				Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	ND	0.50			NR				
Manganese	ND	0.50			NR				
Potassium	ND	0.50			NR				
LCS (B4F0491-BS1)				Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	19.8319	0.50	20.0000		99.2	85 - 115			
Manganese	9.72828	0.50	10.0000		97.3	85 - 115			
Potassium	19.9800	0.50	20.0000		99.9	85 - 115			
Matrix Spike (B4F0491-MS1)		**Source: 1401889-11**		Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	27.9616	0.50	20.0000	6.21578	109	86 - 108			M1
Manganese	11.2432	0.50	10.0000	1.02110	102	81 - 106			
Potassium	24.9996	0.50	20.0000	3.24604	109	37 - 162			
Matrix Spike Dup (B4F0491-MSD1)		**Source: 1401889-11**		Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	26.6165	0.50	20.0000	6.21578	102	86 - 108	4.93	20	
Manganese	10.5323	0.50	10.0000	1.02110	95.1	81 - 106	6.53	20	
Potassium	23.8156	0.50	20.0000	3.24604	103	37 - 162	4.85	20	

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Anions Scan by Ion Chromatography EPA 300.0 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0521 - No_Prep_IC_1									
Blank (B4F0521-BLK1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Nitrate as N	ND	0.10			NR				
Nitrite, as N	ND	0.10			NR				
ortho-Phosphate (As P)	ND	0.05			NR				
Sulfate	ND	1.0			NR				
LCS (B4F0521-BS1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Nitrate as N	0.961600	0.10	1.00000		96.2	90 - 110			
Nitrite, as N	0.969900	0.10	1.00000		97.0	90 - 110			
ortho-Phosphate (As P)	0.938500	0.05	1.00000		93.8	90 - 110			
Sulfate	1.96570	1.0	2.00000		98.3	90 - 110			
Duplicate (B4F0521-DUP1)		**Source: 1401884-04**		Prepared: 6/26/2014 Analyzed: 6/26/2014					
Nitrate as N	48.5300	5.0		37.8445	NR		24.7	20	R
Nitrite, as N	ND	5.0		ND	NR			20	
ortho-Phosphate (As P)	ND	2.5		ND	NR			20	
Sulfate	290.770	50		312.570	NR		7.23	20	
Matrix Spike (B4F0521-MS1)		**Source: 1401884-04**		Prepared: 6/26/2014 Analyzed: 6/26/2014					
Nitrate as N	50.7500	5.0	2.50000	37.8445	516	80 - 120			M1
Nitrite, as N	4.73000	5.0	2.50000	ND	189	80 - 120			M1
ortho-Phosphate (As P)	ND	2.5	2.50000	ND	NR	80 - 120			M1
Sulfate	295.070	50	5.00000	312.570	-350	80 - 120			M1
Matrix Spike (B4F0521-MS2)		**Source: 1401889-01**		Prepared: 6/26/2014 Analyzed: 6/26/2014					
Nitrate as N	2.78280	0.20	2.50000	0.501200	91.3	80 - 120			
Nitrite, as N	2.76620	0.20	2.50000	ND	111	80 - 120			
ortho-Phosphate (As P)	2.59180	0.10	2.50000	ND	104	80 - 120			
Sulfate	15.3554	2.0	5.00000	9.68960	113	80 - 120			
Matrix Spike Dup (B4F0521-MSD1)		**Source: 1401884-04**		Prepared: 6/26/2014 Analyzed: 6/26/2014					
Nitrate as N	51.6950	5.0	2.50000	37.8445	554	80 - 120	1.84	20	M1
Nitrite, as N	3.86000	5.0	2.50000	ND	154	80 - 120	20.3	20	M1, R
ortho-Phosphate (As P)	ND	2.5	2.50000	ND	NR	80 - 120		20	M1
Sulfate	296.820	50	5.00000	312.570	-315	80 - 120	0.591	20	M1

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Ferrous Iron by Phenanthroline Method (SM 3500-Fe D) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0516 - No_Prep_WC_1									
Blank (B4F0516-BLK1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Ferrous Iron	ND	0.10			NR				
LCS (B4F0516-BS1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Ferrous Iron	2.59000	0.10	2.50145		104	80 - 120			
Ferrous Iron	2.59000	0.10	2.50145		104	80 - 120			
Matrix Spike (B4F0516-MS1)		**Source: 1401889-12**		Prepared: 6/26/2014 Analyzed: 6/26/2014					
Ferrous Iron	2.15200	0.10	2.50000	ND	86.1	80 - 120			
Ferrous Iron	2.15200	0.10	2.50000	ND	86.1	80 - 120			
Matrix Spike Dup (B4F0516-MSD1)		**Source: 1401889-12**		Prepared: 6/26/2014 Analyzed: 6/26/2014					
Ferrous Iron	2.15300	0.10	2.50000	ND	86.1	80 - 120	0.0465	20	
Ferrous Iron	2.15300	0.10	2.50000	ND	86.1	80 - 120	0.0465	20	

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Ammonia, as Nitrogen N by SM 4500-NH3 D - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0527 - Prep_WC_3_W									
Blank (B4F0527-BLK1)				Prepared: 6/27/2014 Analyzed: 6/30/2014					
Nitrogen, Ammonia (As N)	ND	0.03			NR				
LCS (B4F0527-BS1)				Prepared: 6/27/2014 Analyzed: 6/30/2014					
Nitrogen, Ammonia (As N)	0.947000	0.03	1.00000		94.7	80 - 120			
Matrix Spike (B4F0527-MS1)		**Source: 1401889-01**		Prepared: 6/27/2014 Analyzed: 6/30/2014					
Nitrogen, Ammonia (As N)	3.99000	0.15	5.00000	0.225000	75.3	80 - 120			M1
Matrix Spike Dup (B4F0527-MSD1)		**Source: 1401889-01**		Prepared: 6/27/2014 Analyzed: 6/30/2014					
Nitrogen, Ammonia (As N)	4.66000	0.15	5.00000	0.225000	88.7	80 - 120	15.5	20	
Batch B4F0537 - Prep_WC_3_W									
Blank (B4F0537-BLK1)				Prepared: 6/27/2014 Analyzed: 6/30/2014					
Nitrogen, Ammonia (As N)	ND	0.03			NR				
LCS (B4F0537-BS1)				Prepared: 6/27/2014 Analyzed: 6/30/2014					
Nitrogen, Ammonia (As N)	0.855000	0.03	1.00000		85.5	80 - 120			
Matrix Spike (B4F0537-MS1)		**Source: 1401889-04**		Prepared: 6/27/2014 Analyzed: 6/30/2014					
Nitrogen, Ammonia (As N)	4.75500	0.15	5.00000	0.360000	87.9	80 - 120			
Matrix Spike Dup (B4F0537-MSD1)		**Source: 1401889-04**		Prepared: 6/27/2014 Analyzed: 6/30/2014					
Nitrogen, Ammonia (As N)	4.97500	0.15	5.00000	0.360000	92.3	80 - 120	4.52	20	

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Total Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0490 - EPA 200.7									
LCS (B4F0490-BS1)				Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	20.9314	0.50	20.0000		105	80 - 120			

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Total Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0490 - EPA 200.7 (continued)									
Matrix Spike (B4F0490-MS1)		**Source: 1401889-01**		Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	24.9620	0.50	20.0000	4.87145	100	59 - 139			

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Total Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0490 - EPA 200.7 (continued)									
Matrix Spike Dup (B4F0490-MSD1)		**Source: 1401889-01**		Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	24.2773	0.50	20.0000	4.87145	97.0	59 - 139	2.78	20	

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Total Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0491 - EPA 200.7									
LCS (B4F0491-BS1)				Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	19.8319	0.50	20.0000		99.2	80 - 120			

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Total Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0491 - EPA 200.7 (continued)									
Matrix Spike (B4F0491-MS1)		**Source: 1401889-11**		Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	27.9616	0.50	20.0000	6.21578	109	59 - 139			

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Total Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0491 - EPA 200.7 (continued)									
Matrix Spike Dup (B4F0491-MSD1)		**Source: 1401889-11**		Prepared: 6/26/2014 Analyzed: 6/27/2014					
Iron	26.6165	0.50	20.0000	6.21578	102	59 - 139	4.93	20	

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0479 - GCVOAW									
Blank (B4F0479-BLK1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Gasoline Range Organics	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.09505*		*0.100000*		*95.0*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0479 - GCVOAW (continued)									
LCS (B4F0479-BS1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Gasoline Range Organics	1.00800	0.05	1.00000		101	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.09544*		*0.100000*		*95.4*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0479 - GCVOAW (continued)									
LCS Dup (B4F0479-BSD1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Gasoline Range Organics	0.994000	0.05	1.00000		99.4	70 - 130	1.40	20	
Surrogate: 4-Bromofluorobenzene	*0.09648*		*0.100000*		*96.5*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0496 - GCVOAW									
Blank (B4F0496-BLK1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Gasoline Range Organics	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.09079*		*0.100000*		*90.8*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0496 - GCVOAW (continued)									
LCS (B4F0496-BS1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Gasoline Range Organics	0.994000	0.05	1.00000		99.4	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.07254*		*0.100000*		*72.5*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0496 - GCVOAW (continued)									
LCS Dup (B4F0496-BSD1)				Prepared: 6/26/2014 Analyzed: 6/26/2014					
Gasoline Range Organics	1.00800	0.05	1.00000		101	70 - 130	1.40	20	
Surrogate: 4-Bromofluorobenzene	*0.09606*		*0.100000*		*96.1*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0505 - GCVOAW									
Blank (B4F0505-BLK1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Gasoline Range Organics	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.08935*		*0.100000*		*89.4*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0505 - GCVOAW (continued)									
LCS (B4F0505-BS1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Gasoline Range Organics	0.992000	0.05	1.00000		99.2	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.08870*		*0.100000*		*88.7*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0505 - GCVOAW (continued)									
LCS Dup (B4F0505-BSD1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Gasoline Range Organics	1.02600	0.05	1.00000		103	70 - 130	3.37	20	
Surrogate: 4-Bromofluorobenzene	*0.09728*		*0.100000*		*97.3*	*70 - 130*			

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0505 - GCVOAW (continued)									
Duplicate (B4F0505-DUP1)		**Source: 1401900-05**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Gasoline Range Organics	0.239000	0.05		0.264000	NR		9.94	20	
Surrogate: 4-Bromofluorobenzene	*0.09635*		*0.100000*		*96.3*	*70 - 130*			

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0572 - MSVOAW_LL									
Blank (B4F0572-BLK1)				Prepared: 6/30/2014 Analyzed: 6/30/2014					
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	0.370000	1.0			NR				J
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				

Certificate of Analysis

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Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0572 - MSVOAW_LL (continued)									
Blank (B4F0572-BLK1) - Continued				Prepared: 6/30/2014 Analyzed: 6/30/2014					
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethyl Acetate	ND	10			NR				
Ethyl Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
tert-Butanol	ND	10			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*20.29*		*25.0000*		*81.2*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*22.54*		*25.0000*		*90.2*	*60 - 128*			
Surrogate: Dibromofluoromethane	*20.90*		*25.0000*		*83.6*	*72 - 141*			
Surrogate: Toluene-d8	*21.04*		*25.0000*		*84.2*	*61 - 124*			

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0572 - MSVOAW_LL (continued)									
LCS (B4F0572-BS1)				Prepared: 6/30/2014 Analyzed: 6/30/2014					
1,1-Dichloroethene	16.5200		20.0000		82.6	56 - 131			
Benzene	18.1200		20.0000		90.6	69 - 139			
Chlorobenzene	19.1500		20.0000		95.8	73 - 127			
MTBE	16.5900		20.0000		83.0	68 - 133			
Toluene	17.8400		20.0000		89.2	62 - 133			
Trichloroethene	17.9900		20.0000		90.0	72 - 139			
Surrogate: 1,2-Dichloroethane-d4	*19.98*		*25.0000*		*79.9*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*22.14*		*25.0000*		*88.6*	*60 - 128*			
Surrogate: Dibromofluoromethane	*19.48*		*25.0000*		*77.9*	*72 - 141*			
Surrogate: Toluene-d8	*21.02*		*25.0000*		*84.1*	*61 - 124*			

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0572 - MSVOAW_LL (continued)									
LCS Dup (B4F0572-BSD1)				Prepared: 6/30/2014 Analyzed: 6/30/2014					
1,1-Dichloroethene	16.8100		20.0000		84.0	56 - 131	1.74	20	
Benzene	18.1500		20.0000		90.8	69 - 139	0.165	20	
Chlorobenzene	18.6600		20.0000		93.3	73 - 127	2.59	20	
MTBE	15.2700		20.0000		76.4	68 - 133	8.29	20	
Toluene	17.4400		20.0000		87.2	62 - 133	2.27	20	
Trichloroethene	17.8800		20.0000		89.4	72 - 139	0.613	20	
Surrogate: 1,2-Dichloroethane-d4	*18.89*		*25.0000*		*75.6*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*21.13*		*25.0000*		*84.5*	*60 - 128*			
Surrogate: Dibromofluoromethane	*18.53*		*25.0000*		*74.1*	*72 - 141*			
Surrogate: Toluene-d8	*20.08*		*25.0000*		*80.3*	*61 - 124*			

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1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0014 - MSVOAW_LL									
Blank (B4G0014-BLK1)				Prepared: 7/1/2014 Analyzed: 7/1/2014					
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				

Certificate of Analysis

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Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0014 - MSVOAW_LL (continued)									
Blank (B4G0014-BLK1) - Continued				Prepared: 7/1/2014 Analyzed: 7/1/2014					
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethyl Acetate	ND	10			NR				
Ethyl Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
tert-Butanol	ND	10			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*20.09*		*25.0000*		*80.4*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*21.41*		*25.0000*		*85.6*	*60 - 128*			
Surrogate: Dibromofluoromethane	*20.70*		*25.0000*		*82.8*	*72 - 141*			
Surrogate: Toluene-d8	*20.72*		*25.0000*		*82.9*	*61 - 124*			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0014 - MSVOAW_LL (continued)									
LCS (B4G0014-BS1)				Prepared: 7/1/2014 Analyzed: 7/1/2014					
1,1-Dichloroethene	18.2800		20.0000		91.4	56 - 131			
Benzene	20.2100		20.0000		101	69 - 139			
Chlorobenzene	20.2300		20.0000		101	73 - 127			
MTBE	16.6000		20.0000		83.0	68 - 133			
Toluene	19.2900		20.0000		96.4	62 - 133			
Trichloroethene	19.1600		20.0000		95.8	72 - 139			
Surrogate: 1,2-Dichloroethane-d4	*19.29*		*25.0000*		*77.2*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*20.90*		*25.0000*		*83.6*	*60 - 128*			
Surrogate: Dibromofluoromethane	*18.94*		*25.0000*		*75.8*	*72 - 141*			
Surrogate: Toluene-d8	*21.06*		*25.0000*		*84.2*	*61 - 124*			

Certificate of Analysis

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Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0014 - MSVOAW_LL (continued)									
LCS Dup (B4G0014-BSD1)				Prepared: 7/1/2014 Analyzed: 7/1/2014					
1,1-Dichloroethene	17.7200		20.0000		88.6	56 - 131	3.11	20	
Benzene	19.6400		20.0000		98.2	69 - 139	2.86	20	
Chlorobenzene	19.3700		20.0000		96.8	73 - 127	4.34	20	
MTBE	16.9500		20.0000		84.8	68 - 133	2.09	20	
Toluene	18.6500		20.0000		93.2	62 - 133	3.37	20	
Trichloroethene	18.9700		20.0000		94.8	72 - 139	0.997	20	
Surrogate: 1,2-Dichloroethane-d4	*19.26*		*25.0000*		*77.0*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*21.10*		*25.0000*		*84.4*	*60 - 128*			
Surrogate: Dibromofluoromethane	*19.31*		*25.0000*		*77.2*	*72 - 141*			
Surrogate: Toluene-d8	*20.66*		*25.0000*		*82.6*	*61 - 124*			

Certificate of Analysis

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Oakland , CA 94612	Reported : 07/18/2014

Notes and Definitions

S7	Surrogate recovery was outside of laboratory acceptance limit. Chromatogram shows high concentration of heavy hydrocarbons.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
H1	Sample was received past holding time.
D6	Sample required dilution due to high concentration of target analyte.
D1	Sample required dilution due to possible matrix interference.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 2

Instruction: Complete all shaded areas.

For Laboratory Use Only — ATLCOC Ver:20130715

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐Client ☐ATL	1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☐	☐
☐FedEx ☐OnTrac	2. HEADSPACE (VOA)	☐	☐	6. PRESERVED	☐	☐
☐GSO	3. CONTAINER INTACT	☐	☐	7. COOLER TEMP, deg C: 3.4, 3.8		
☐Other:	4. SEALED	☐	☐			

CUSTOMER

Company: Ninyo & Moore
Address: 1956 Webster Street, Suite 400
Tel: (510) 343-3000
City: Oakland State: CA Zip: 94612 Fax: (510) 343-3001

SEND REPORT TO:
Attn: Peter Sims Email: psims@ninyoandmoore.com
Company: Ninyo & Moore
Address: 1956 Webster Street
City: Oakland State: CA Zip: 94612

SEND INVOICE TO: ☑same as SEND REPORT TO
Attn: Email:
Company:
Address:
City: State: Zip:

PROJECT SAMPLES

Project Name: Chun
Project No.: 401896004
Sampler: Peter Sims
Quote #:
PO #:
Special Instructions/Comments:
Prepare USTCF EDD
Ninyo & Moore log code: NMI
Site ID: T0600100980

ITEM	Lab No.	Sample ID / Location	Date	Time	8015 (GRO)	8260 / 624 (Volatiles)	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Total Iron and orthophosphate EPA 300.0	nitrate, nitrite, sulfate EPA 300.0	potassium and manganese EPA 200.7	Iron II SM3500-FE D	Iron III by calculation	Ammonia by SM4500-NH3 D	Enter Custom Analysis	Enter Custom Analysis	Enter Custom Analysis	Enter Custom Analysis	Enter Custom Analysis	Select Soil Matrix	Select Solid Matrix	Select Water Matrix	Select Wastewater Matrix	Select Aqueous Matrix	Enter Custom Matrix	TAT	Container #	Container Type	Container Material	Preservative	REMARKS
		Encircle or Write Requested Analysis																						Encircle Sample Matrix							Container				
1	401889-1	MW-4R	6/25/14	0915	X	X							X	X	X	X	X	X								X				5	9	2, 4	1/2	4,	
2	2	EW-16		0900																														
3	3	MW-5R		0955																														
4	4	MW-20		1010																														
5	5	MW-6R		1100																														
6	6	EW-18		1106																														
7	7	EW-19		1225																														
8	8	EW-17		1249																														
9	9	MW-8		1317																														
10	10	MW-7R		1405																														

QA/QC: ☐Routine ☐Caltrans ☐Legal ☐RWQCB ☐Level IV

Container Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7 = Canister
Container Material: 1=Glass; 2=Plastic; 3=Metal
Preservative: 1=HCl; 2=HNO3; 3=H2SO4; 4 = 4C; 5=Zn ((Ac)2; 6=NaOH; 7=NA2S2O3

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples submitted AFTER 3:00 PM are considered received the following business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : 300% Surcharge SAME BUSINESS DAY if received by 9:00 AM
   - TAT = 1 : 100% Surcharge NEXT BUSINESS DAY (COB 5:00 PM)
   - TAT = 2 : 50% Surcharge 2ND BUSINESS DAY (COB 5:00 PM)
   - TAT = 3 : 30% Surcharge 3RD BUSINESS DAY (COB 5:00 PM)
   - TAT = 4 : 20% Surcharge 4TH BUSINESS DAY (COB 5:00 PM)
   - TAT = 5 : NO SURCHARGE 5th BUSINESS DAY (COB 5:00 PM)
4. Weekend, holiday, after-hours work — ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab — ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for five (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-five (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20/ sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reformatted report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Peter Sims — Submitter Print Name
Peter Sims — Signature

CUSTODY

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Peter Sims	6-25-14	1535	Jeff Sieglfried	6/25/14	355p
Jeff Sieglfried	6/25/14	414p	GSO	6/25/14	414p
				6/26/14	810

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 2 of 2

Instruction: Complete all shaded areas.

For Laboratory Use Only — ATLCOC Ver:20130715

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐Client ☐ATL	1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☐	☐
☐FedEx ☐OnTrac	2. HEADSPACE (VOA)	☐	☐	6. PRESERVED	☐	☐
☐GSO	3. CONTAINER INTACT	☐	☐	7. COOLER TEMP, deg C: 3.4, 3.8		
☐Other:	4. SEALED	☐	☐			

CUSTOMER

Company: Ninyo & Moore	Address: 1956 Webster Street, Suite 400		Tel: (510) 343-3000
	City: Oakland	State: CA Zip: 94612	Fax: (510) 343-3001

SEND REPORT TO:	SEND INVOICE TO: ☑same as SEND REPORT TO
Attn: Peter Sims Email: psims@ninyoandmoore.com	Attn: Email:
Company: Ninyo & Moore	Company:
Address: 1956 Webster Street	Address:
City: Oakland State: CA Zip: 94612	City: State: Zip:

PROJECT SAMPLES

Project Name: Chun
Project No.: 401896004
Sampler: Peter Sims
Quote #:
PO #:

Special Instructions/Comments:
Prepare USTCF EDD
Ninyo & Moore log code: NMI
Site ID: T0600100980

ITEM	Lab No.	Sample Description: Sample ID / Location	Date	Time	8015 (GRO)	8260 / 624 (Volatiles)	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Total Iron and orthophosphate EPA 300.0	nitrate, nitrite, sulfate EPA 300.0	potassium and manganese EPA 200.7	Iron II SM3500-FE D	Iron III by calculation	Ammonia by SM4500-NH3 D	Enter Custom Analysis	Enter Custom Analysis	Enter Custom Analysis	Enter Custom Analysis	Select Soil Matrix	Select Solid Matrix	Select Water Matrix	Select Wastewater Matrix	Select Aqueous Matrix	Enter Custom Matrix	TAT	Container #	Container Type	Container Material	Preservative	REMARKS
1	1401884 - 11	EW-14	6/25/14	1432	X	X							X	X	X	X	X	X							X				5	9	2,3,4	1,2	4,1	
2	12	EW-15	6/25/14	1508	X	X							X	X	X	X	X	X							X				5	9	2,3,4	1,2	4,1	
3																																	
4																																	
5																																	
6																																	
7																																	
8																																	
9																																	
10																																	

QA/QC: ☐Routine ☐Caltrans ☐Legal ☐RWQCB ☐Level IV

Preservative: 1=HCl; 2=HNO3; 3=H2SO4; 4 = 4C; 5=Zn ((Ac)2; 6=NaOH; 7=NaO2S2O3
Material: 1=Glass; 2=Plastic; 3=Metal
Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7 = Canister

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples submitted AFTER 3:00 PM are considered received the following business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : 300% Surcharge SAME BUSINESS DAY if received by 9:00 AM
   - TAT = 1 : 100% Surcharge NEXT BUSINESS DAY (COB 5:00 PM)
   - TAT = 2 : 50% Surcharge 2ND BUSINESS DAY (COB 5:00 PM)
   - TAT = 3 : 30% Surcharge 3RD BUSINESS DAY (COB 5:00 PM)
   - TAT = 4 : 20% Surcharge 4TH BUSINESS DAY (COB 5:00 PM)
   - TAT = 5 : NO SURCHARGE 5th BUSINESS DAY (COB 5:00 PM)
4. Weekend, holiday, after-hours work — ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab — ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for five (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-five (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20/ sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reformatted report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Peter Sims — Submitter Print Name
Peter Sims — Signature

CUSTODY

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Peter Sims	6-25-14	1555	Jeff Siegfried	6/25/14	355p
Jeff Siegfried	6/25/14	414		6/25/14	414
				6/26/14	630

July 18, 2014

Peter Sims
Ninyo & Moore
1956 Webster Street, Suite 400
Oakland, CA 94612
Tel: (510) 633-5640
Fax:(510) 633-5646

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1401910

Client Reference : Chun, 401896004

Enclosed are the results for sample(s) received on June 27, 2014 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

Certificate of Analysis

Ninyo & Moore		Project Number :	Chun, 401896004
1956 Webster Street, Suite 400		Report To :	Peter Sims
Oakland , CA 94612		Reported :	07/18/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-10	1401910-01	Water	6/26/14 7:40	6/27/14 7:30
MW-9	1401910-02	Water	6/26/14 8:30	6/27/14 7:30
MW-14	1401910-03	Water	6/26/14 9:15	6/27/14 7:30
MW-13	1401910-04	Water	6/26/14 9:16	6/27/14 7:30
EW-22	1401910-05	Water	6/26/14 10:29	6/27/14 7:30
MW-11R	1401910-06	Water	6/26/14 11:10	6/27/14 7:30
EW-21	1401910-07	Water	6/26/14 11:30	6/27/14 7:30
MW-12	1401910-08	Water	6/26/14 12:50	6/27/14 7:30
MW-16	1401910-09	Water	6/26/14 14:00	6/27/14 7:30
MW-15	1401910-10	Water	6/26/14 14:05	6/27/14 7:30

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-10
Lab ID: 1401910-01

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**42**	0.50	1	B4F0520	06/27/2014	06/27/14 17:52	
Manganese	**0.65**	0.50	1	B4F0520	06/27/2014	06/27/14 17:52	
Potassium	**4.5**	0.50	1	B4F0520	06/27/2014	06/27/14 17:52	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**2.1**	0.20	2	B4F0569	06/27/2014	06/27/14 10:53	
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 10:53	D1
ortho-Phosphate (As P)	**0.40**	0.10	2	B4F0569	06/27/2014	06/27/14 10:53	D1
Sulfate	**11**	2.0	2	B4F0569	06/27/2014	06/27/14 10:53	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**42**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	H1

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	ND	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B4F0540	06/27/2014	06/27/14 20:42	
Surrogate: 4-Bromofluorobenzene	*93.3 %*	*70 - 130*		B4F0540	06/27/2014	*06/27/14 20:42*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-10

Lab ID: 1401910-01

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 03:45	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 03:45	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4G0014	07/02/2014	07/02/14 03:45	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 03:45	
1,1-Dichloroethane	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 03:45	
1,1-Dichloroethene	ND	0.50	0.33	1	B4G0014	07/02/2014	07/02/14 03:45	
1,1-Dichloropropene	ND	0.50	0.36	1	B4G0014	07/02/2014	07/02/14 03:45	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 03:45	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 03:45	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 03:45	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 03:45	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4G0014	07/02/2014	07/02/14 03:45	
1,2-Dibromoethane	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 03:45	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 03:45	
1,2-Dichloroethane	ND	0.50	0.45	1	B4G0014	07/02/2014	07/02/14 03:45	
1,2-Dichloropropane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 03:45	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 03:45	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 03:45	
1,3-Dichloropropane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 03:45	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 03:45	
2,2-Dichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 03:45	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 03:45	
2-Chlorotoluene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 03:45	
4-Chlorotoluene	ND	0.50	0.38	1	B4G0014	07/02/2014	07/02/14 03:45	
4-Isopropyltoluene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 03:45	
Benzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 03:45	
Bromobenzene	ND	0.50	0.42	1	B4G0014	07/02/2014	07/02/14 03:45	
Bromochloromethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 03:45	
Bromodichloromethane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 03:45	
Bromoform	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 03:45	
Bromomethane	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 03:45	
Carbon disulfide	ND	1.0	0.30	1	B4G0014	07/02/2014	07/02/14 03:45	
Carbon tetrachloride	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 03:45	
Chlorobenzene	ND	0.50	0.19	1	B4G0014	07/02/2014	07/02/14 03:45	
Chloroethane	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 03:45	
Chloroform	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 03:45	
Chloromethane	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 03:45	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-10

Lab ID: 1401910-01

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 03:45	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4G0014	07/02/2014	07/02/14 03:45	
Di-isopropyl ether	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 03:45	
Dibromochloromethane	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 03:45	
Dibromomethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 03:45	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 03:45	
Ethyl Acetate	ND	10	2.0	1	B4G0014	07/02/2014	07/02/14 03:45	
Ethyl Ether	ND	10	2.7	1	B4G0014	07/02/2014	07/02/14 03:45	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 03:45	
Ethylbenzene	ND	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 03:45	
Freon-113	ND	0.50	0.39	1	B4G0014	07/02/2014	07/02/14 03:45	
Hexachlorobutadiene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 03:45	
Isopropylbenzene	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 03:45	
m,p-Xylene	ND	1.0	0.43	1	B4G0014	07/02/2014	07/02/14 03:45	
Methylene chloride	ND	1.0	1.0	1	B4G0014	07/02/2014	07/02/14 03:45	
MTBE	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 03:45	
n-Butylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 03:45	
n-Propylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 03:45	
Naphthalene	ND	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 03:45	
o-Xylene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 03:45	
sec-Butylbenzene	ND	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 03:45	
Styrene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 03:45	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 03:45	
tert-Butanol	ND	10	4.6	1	B4G0014	07/02/2014	07/02/14 03:45	
tert-Butylbenzene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 03:45	
Tetrachloroethene	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 03:45	
Toluene	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 03:45	
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 03:45	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 03:45	
Trichloroethene	ND	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 03:45	
Trichlorofluoromethane	ND	0.50	0.41	1	B4G0014	07/02/2014	07/02/14 03:45	
Vinyl acetate	ND	10	1.8	1	B4G0014	07/02/2014	07/02/14 03:45	
Vinyl chloride	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 03:45	
Surrogate: 1,2-Dichloroethane-d4	*77.3 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 03:45*	
Surrogate: 4-Bromofluorobenzene	*84.7 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 03:45*	
Surrogate: Dibromofluoromethane	*79.9 %*		*72 - 141*		B4G0014	07/02/2014	*07/02/14 03:45*	
Surrogate: Toluene-d8	*82.0 %*		*61 - 124*		B4G0014	07/02/2014	*07/02/14 03:45*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-9

Lab ID: 1401910-02

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**44**	0.50	1	B4F0520	06/27/2014	06/27/14 17:58	
Manganese	**10**	0.50	1	B4F0520	06/27/2014	06/27/14 17:58	
Potassium	**4.0**	0.50	1	B4F0520	06/27/2014	06/27/14 17:58	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**0.50**	0.20	2	B4F0569	06/27/2014	06/27/14 11:05	
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 11:05	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0569	06/27/2014	06/27/14 11:05	D1
Sulfate	**28**	2.0	2	B4F0569	06/27/2014	06/27/14 11:05	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**44**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.04**	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B4F0540	06/27/2014	06/27/14 21:02	
Surrogate: 4-Bromofluorobenzene	*93.1 %*	*70 - 130*		B4F0540	06/27/2014	*06/27/14 21:02*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-9

Lab ID: 1401910-02

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 01:46	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 01:46	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4G0014	07/02/2014	07/02/14 01:46	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 01:46	
1,1-Dichloroethane	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 01:46	
1,1-Dichloroethene	ND	0.50	0.33	1	B4G0014	07/02/2014	07/02/14 01:46	
1,1-Dichloropropene	ND	0.50	0.36	1	B4G0014	07/02/2014	07/02/14 01:46	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 01:46	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 01:46	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 01:46	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 01:46	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4G0014	07/02/2014	07/02/14 01:46	
1,2-Dibromoethane	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 01:46	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 01:46	
1,2-Dichloroethane	ND	0.50	0.45	1	B4G0014	07/02/2014	07/02/14 01:46	
1,2-Dichloropropane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 01:46	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 01:46	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 01:46	
1,3-Dichloropropane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 01:46	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 01:46	
2,2-Dichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 01:46	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 01:46	
2-Chlorotoluene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 01:46	
4-Chlorotoluene	ND	0.50	0.38	1	B4G0014	07/02/2014	07/02/14 01:46	
4-Isopropyltoluene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 01:46	
Benzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 01:46	
Bromobenzene	ND	0.50	0.42	1	B4G0014	07/02/2014	07/02/14 01:46	
Bromochloromethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 01:46	
Bromodichloromethane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 01:46	
Bromoform	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 01:46	
Bromomethane	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 01:46	
Carbon disulfide	ND	1.0	0.30	1	B4G0014	07/02/2014	07/02/14 01:46	
Carbon tetrachloride	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 01:46	
Chlorobenzene	ND	0.50	0.19	1	B4G0014	07/02/2014	07/02/14 01:46	
Chloroethane	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 01:46	
Chloroform	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 01:46	
Chloromethane	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 01:46	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-9

Lab ID: 1401910-02

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 01:46	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4G0014	07/02/2014	07/02/14 01:46	
Di-isopropyl ether	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 01:46	
Dibromochloromethane	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 01:46	
Dibromomethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 01:46	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 01:46	
Ethyl Acetate	ND	10	2.0	1	B4G0014	07/02/2014	07/02/14 01:46	
Ethyl Ether	ND	10	2.7	1	B4G0014	07/02/2014	07/02/14 01:46	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 01:46	
Ethylbenzene	ND	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 01:46	
Freon-113	ND	0.50	0.39	1	B4G0014	07/02/2014	07/02/14 01:46	
Hexachlorobutadiene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 01:46	
Isopropylbenzene	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 01:46	
m,p-Xylene	ND	1.0	0.43	1	B4G0014	07/02/2014	07/02/14 01:46	
Methylene chloride	ND	1.0	1.0	1	B4G0014	07/02/2014	07/02/14 01:46	
MTBE	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 01:46	
n-Butylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 01:46	
n-Propylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 01:46	
Naphthalene	ND	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 01:46	
o-Xylene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 01:46	
sec-Butylbenzene	ND	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 01:46	
Styrene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 01:46	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 01:46	
tert-Butanol	ND	10	4.6	1	B4G0014	07/02/2014	07/02/14 01:46	
tert-Butylbenzene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 01:46	
Tetrachloroethene	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 01:46	
Toluene	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 01:46	
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 01:46	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 01:46	
Trichloroethene	ND	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 01:46	
Trichlorofluoromethane	ND	0.50	0.41	1	B4G0014	07/02/2014	07/02/14 01:46	
Vinyl acetate	ND	10	1.8	1	B4G0014	07/02/2014	07/02/14 01:46	
Vinyl chloride	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 01:46	
Surrogate: 1,2-Dichloroethane-d4	*79.3 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 01:46*	
Surrogate: 4-Bromofluorobenzene	*83.3 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 01:46*	
Surrogate: Dibromofluoromethane	*77.9 %*		*72 - 141*		B4G0014	07/02/2014	*07/02/14 01:46*	
Surrogate: Toluene-d8	*81.4 %*		*61 - 124*		B4G0014	07/02/2014	*07/02/14 01:46*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-14
Lab ID: 1401910-03

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**28**	0.50	1	B4F0520	06/27/2014	06/27/14 18:01	
Manganese	**1.2**	0.50	1	B4F0520	06/27/2014	06/27/14 18:01	
Potassium	**2.3**	0.50	1	B4F0520	06/27/2014	06/27/14 18:01	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**7.7**	0.20	2	B4F0569	06/27/2014	06/27/14 11:16	
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 11:16	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0569	06/27/2014	06/27/14 11:16	D1
Sulfate	**15**	2.0	2	B4F0569	06/27/2014	06/27/14 11:16	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**28**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.06**	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B4F0540	06/27/2014	06/27/14 21:21	
Surrogate: 4-Bromofluorobenzene	*94.9 %*	*70 - 130*		B4F0540	06/27/2014	*06/27/14 21:21*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-14

Lab ID: 1401910-03

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:27	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4G0022	07/02/2014	07/02/14 10:27	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4G0022	07/02/2014	07/02/14 10:27	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4G0022	07/02/2014	07/02/14 10:27	
1,1-Dichloroethane	ND	0.50	0.30	1	B4G0022	07/02/2014	07/02/14 10:27	
1,1-Dichloroethene	ND	0.50	0.33	1	B4G0022	07/02/2014	07/02/14 10:27	
1,1-Dichloropropene	ND	0.50	0.36	1	B4G0022	07/02/2014	07/02/14 10:27	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:27	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4G0022	07/02/2014	07/02/14 10:27	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:27	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4G0022	07/02/2014	07/02/14 10:27	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4G0022	07/02/2014	07/02/14 10:27	
1,2-Dibromoethane	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:27	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4G0022	07/02/2014	07/02/14 10:27	
1,2-Dichloroethane	ND	0.50	0.45	1	B4G0022	07/02/2014	07/02/14 10:27	
1,2-Dichloropropane	ND	0.50	0.25	1	B4G0022	07/02/2014	07/02/14 10:27	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 10:27	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4G0022	07/02/2014	07/02/14 10:27	
1,3-Dichloropropane	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:27	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4G0022	07/02/2014	07/02/14 10:27	
2,2-Dichloropropane	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:27	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4G0022	07/02/2014	07/02/14 10:27	
2-Chlorotoluene	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:27	
4-Chlorotoluene	ND	0.50	0.38	1	B4G0022	07/02/2014	07/02/14 10:27	
4-Isopropyltoluene	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:27	
Benzene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:27	
Bromobenzene	ND	0.50	0.42	1	B4G0022	07/02/2014	07/02/14 10:27	
Bromochloromethane	ND	0.50	0.29	1	B4G0022	07/02/2014	07/02/14 10:27	
Bromodichloromethane	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:27	
Bromoform	ND	0.50	0.37	1	B4G0022	07/02/2014	07/02/14 10:27	
Bromomethane	ND	0.50	0.49	1	B4G0022	07/02/2014	07/02/14 10:27	
Carbon disulfide	ND	1.0	0.30	1	B4G0022	07/02/2014	07/02/14 10:27	
Carbon tetrachloride	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:27	
Chlorobenzene	ND	0.50	0.19	1	B4G0022	07/02/2014	07/02/14 10:27	
Chloroethane	ND	0.50	0.44	1	B4G0022	07/02/2014	07/02/14 10:27	
Chloroform	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:27	
Chloromethane	ND	0.50	0.34	1	B4G0022	07/02/2014	07/02/14 10:27	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-14

Lab ID: 1401910-03

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:27	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4G0022	07/02/2014	07/02/14 10:27	
Di-isopropyl ether	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 10:27	
Dibromochloromethane	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:27	
Dibromomethane	ND	0.50	0.29	1	B4G0022	07/02/2014	07/02/14 10:27	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4G0022	07/02/2014	07/02/14 10:27	
Ethyl Acetate	ND	10	2.0	1	B4G0022	07/02/2014	07/02/14 10:27	
Ethyl Ether	ND	10	2.7	1	B4G0022	07/02/2014	07/02/14 10:27	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4G0022	07/02/2014	07/02/14 10:27	
Ethylbenzene	ND	0.50	0.17	1	B4G0022	07/02/2014	07/02/14 10:27	
Freon-113	ND	0.50	0.39	1	B4G0022	07/02/2014	07/02/14 10:27	
Hexachlorobutadiene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:27	
Isopropylbenzene	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:27	
m,p-Xylene	ND	1.0	0.43	1	B4G0022	07/02/2014	07/02/14 10:27	
Methylene chloride	ND	1.0	1.0	1	B4G0022	07/02/2014	07/02/14 10:27	
MTBE	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 10:27	
n-Butylbenzene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:27	
n-Propylbenzene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:27	
Naphthalene	ND	0.50	0.35	1	B4G0022	07/02/2014	07/02/14 10:27	
o-Xylene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:27	
sec-Butylbenzene	ND	0.50	0.21	1	B4G0022	07/02/2014	07/02/14 10:27	
Styrene	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 10:27	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4G0022	07/02/2014	07/02/14 10:27	
tert-Butanol	ND	10	4.6	1	B4G0022	07/02/2014	07/02/14 10:27	
tert-Butylbenzene	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:27	
Tetrachloroethene	ND	0.50	0.27	1	B4G0022	07/02/2014	07/02/14 10:27	
Toluene	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:27	
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4G0022	07/02/2014	07/02/14 10:27	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4G0022	07/02/2014	07/02/14 10:27	
Trichloroethene	ND	0.50	0.35	1	B4G0022	07/02/2014	07/02/14 10:27	
Trichlorofluoromethane	ND	0.50	0.41	1	B4G0022	07/02/2014	07/02/14 10:27	
Vinyl acetate	ND	10	1.8	1	B4G0022	07/02/2014	07/02/14 10:27	
Vinyl chloride	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:27	
Surrogate: 1,2-Dichloroethane-d4	*83.4 %*		*64 - 146*		B4G0022	07/02/2014	*07/02/14 10:27*	
Surrogate: 4-Bromofluorobenzene	*86.4 %*		*60 - 128*		B4G0022	07/02/2014	*07/02/14 10:27*	
Surrogate: Dibromofluoromethane	*81.6 %*		*72 - 141*		B4G0022	07/02/2014	*07/02/14 10:27*	
Surrogate: Toluene-d8	*82.7 %*		*61 - 124*		B4G0022	07/02/2014	*07/02/14 10:27*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-13
Lab ID: 1401910-04

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**3.8**	0.50	1	B4F0520	06/27/2014	06/27/14 18:03	
Manganese	ND	0.50	1	B4F0520	06/27/2014	06/27/14 18:03	
Potassium	**1.2**	0.50	1	B4F0520	06/27/2014	06/27/14 18:03	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**1.2**	0.20	2	B4F0569	06/27/2014	06/27/14 11:28	
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 11:28	D1
ortho-Phosphate (As P)	**0.14**	0.10	2	B4F0569	06/27/2014	06/27/14 11:28	D1
Sulfate	**10**	2.0	2	B4F0569	06/27/2014	06/27/14 11:28	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**3.8**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.04**	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B4F0540	06/27/2014	06/27/14 21:41	
Surrogate: 4-Bromofluorobenzene	*92.8 %*	*70 - 130*		B4F0540	06/27/2014	*06/27/14 21:41*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-13

Lab ID: 1401910-04

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:09	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 02:09	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4G0014	07/02/2014	07/02/14 02:09	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 02:09	
1,1-Dichloroethane	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 02:09	
1,1-Dichloroethene	ND	0.50	0.33	1	B4G0014	07/02/2014	07/02/14 02:09	
1,1-Dichloropropene	ND	0.50	0.36	1	B4G0014	07/02/2014	07/02/14 02:09	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:09	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 02:09	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:09	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 02:09	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4G0014	07/02/2014	07/02/14 02:09	
1,2-Dibromoethane	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:09	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 02:09	
1,2-Dichloroethane	**0.68**	0.50	0.45	1	B4G0014	07/02/2014	07/02/14 02:09	
1,2-Dichloropropane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 02:09	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:09	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 02:09	
1,3-Dichloropropane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:09	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 02:09	
2,2-Dichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:09	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 02:09	
2-Chlorotoluene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:09	
4-Chlorotoluene	ND	0.50	0.38	1	B4G0014	07/02/2014	07/02/14 02:09	
4-Isopropyltoluene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:09	
Benzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:09	
Bromobenzene	ND	0.50	0.42	1	B4G0014	07/02/2014	07/02/14 02:09	
Bromochloromethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 02:09	
Bromodichloromethane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:09	
Bromoform	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 02:09	
Bromomethane	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 02:09	
Carbon disulfide	ND	1.0	0.30	1	B4G0014	07/02/2014	07/02/14 02:09	
Carbon tetrachloride	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:09	
Chlorobenzene	ND	0.50	0.19	1	B4G0014	07/02/2014	07/02/14 02:09	
Chloroethane	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 02:09	
Chloroform	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:09	
Chloromethane	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 02:09	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-13
Lab ID: 1401910-04

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:09	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4G0014	07/02/2014	07/02/14 02:09	
Di-isopropyl ether	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:09	
Dibromochloromethane	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:09	
Dibromomethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 02:09	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 02:09	
Ethyl Acetate	ND	10	2.0	1	B4G0014	07/02/2014	07/02/14 02:09	
Ethyl Ether	ND	10	2.7	1	B4G0014	07/02/2014	07/02/14 02:09	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 02:09	
Ethylbenzene	ND	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 02:09	
Freon-113	ND	0.50	0.39	1	B4G0014	07/02/2014	07/02/14 02:09	
Hexachlorobutadiene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:09	
Isopropylbenzene	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:09	
m,p-Xylene	ND	1.0	0.43	1	B4G0014	07/02/2014	07/02/14 02:09	
Methylene chloride	ND	1.0	1.0	1	B4G0014	07/02/2014	07/02/14 02:09	
MTBE	**0.48**	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:09	J
n-Butylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:09	
n-Propylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:09	
Naphthalene	ND	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 02:09	
o-Xylene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:09	
sec-Butylbenzene	ND	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 02:09	
Styrene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:09	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 02:09	
tert-Butanol	ND	10	4.6	1	B4G0014	07/02/2014	07/02/14 02:09	
tert-Butylbenzene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:09	
Tetrachloroethene	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 02:09	
Toluene	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:09	
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 02:09	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 02:09	
Trichloroethene	ND	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 02:09	
Trichlorofluoromethane	ND	0.50	0.41	1	B4G0014	07/02/2014	07/02/14 02:09	
Vinyl acetate	ND	10	1.8	1	B4G0014	07/02/2014	07/02/14 02:09	
Vinyl chloride	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:09	
Surrogate: 1,2-Dichloroethane-d4	*81.2 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 02:09*	
Surrogate: 4-Bromofluorobenzene	*86.2 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 02:09*	
Surrogate: Dibromofluoromethane	*79.1 %*		*72 - 141*		B4G0014	07/02/2014	*07/02/14 02:09*	
Surrogate: Toluene-d8	*83.0 %*		*61 - 124*		B4G0014	07/02/2014	*07/02/14 02:09*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-22
Lab ID: 1401910-05

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**23**	0.50	1	B4F0520	06/27/2014	06/27/14 18:05	
Manganese	ND	0.50	1	B4F0520	06/27/2014	06/27/14 18:05	
Potassium	**3.6**	0.50	1	B4F0520	06/27/2014	06/27/14 18:05	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**0.47**	0.20	2	B4F0569	06/27/2014	06/27/14 11:39	D1
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 11:39	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0569	06/27/2014	06/27/14 11:39	D1
Sulfate	**8.6**	2.0	2	B4F0569	06/27/2014	06/27/14 11:39	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**23**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.03**	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**0.05**	0.05	1	B4F0540	06/27/2014	06/27/14 22:04	
Surrogate: 4-Bromofluorobenzene	*94.1 %*	*70 - 130*		B4F0540	06/27/2014	*06/27/14 22:04*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-22

Lab ID: 1401910-05

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:52	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4G0022	07/02/2014	07/02/14 10:52	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4G0022	07/02/2014	07/02/14 10:52	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4G0022	07/02/2014	07/02/14 10:52	
1,1-Dichloroethane	ND	0.50	0.30	1	B4G0022	07/02/2014	07/02/14 10:52	
1,1-Dichloroethene	ND	0.50	0.33	1	B4G0022	07/02/2014	07/02/14 10:52	
1,1-Dichloropropene	ND	0.50	0.36	1	B4G0022	07/02/2014	07/02/14 10:52	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:52	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4G0022	07/02/2014	07/02/14 10:52	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:52	
1,2,4-Trimethylbenzene	**0.35**	0.50	0.30	1	B4G0022	07/02/2014	07/02/14 10:52	J
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4G0022	07/02/2014	07/02/14 10:52	
1,2-Dibromoethane	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:52	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4G0022	07/02/2014	07/02/14 10:52	
1,2-Dichloroethane	ND	0.50	0.45	1	B4G0022	07/02/2014	07/02/14 10:52	
1,2-Dichloropropane	ND	0.50	0.25	1	B4G0022	07/02/2014	07/02/14 10:52	
1,3,5-Trimethylbenzene	**0.29**	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 10:52	J
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4G0022	07/02/2014	07/02/14 10:52	
1,3-Dichloropropane	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:52	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4G0022	07/02/2014	07/02/14 10:52	
2,2-Dichloropropane	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:52	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4G0022	07/02/2014	07/02/14 10:52	
2-Chlorotoluene	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:52	
4-Chlorotoluene	ND	0.50	0.38	1	B4G0022	07/02/2014	07/02/14 10:52	
4-Isopropyltoluene	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:52	
Benzene	**0.59**	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:52	
Bromobenzene	ND	0.50	0.42	1	B4G0022	07/02/2014	07/02/14 10:52	
Bromochloromethane	ND	0.50	0.29	1	B4G0022	07/02/2014	07/02/14 10:52	
Bromodichloromethane	**0.77**	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:52	
Bromoform	ND	0.50	0.37	1	B4G0022	07/02/2014	07/02/14 10:52	
Bromomethane	ND	0.50	0.49	1	B4G0022	07/02/2014	07/02/14 10:52	
Carbon disulfide	ND	1.0	0.30	1	B4G0022	07/02/2014	07/02/14 10:52	
Carbon tetrachloride	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:52	
Chlorobenzene	ND	0.50	0.19	1	B4G0022	07/02/2014	07/02/14 10:52	
Chloroethane	ND	0.50	0.44	1	B4G0022	07/02/2014	07/02/14 10:52	
Chloroform	**8.0**	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:52	
Chloromethane	ND	0.50	0.34	1	B4G0022	07/02/2014	07/02/14 10:52	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-22

Lab ID: 1401910-05

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 10:52	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4G0022	07/02/2014	07/02/14 10:52	
Di-isopropyl ether	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 10:52	
Dibromochloromethane	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:52	
Dibromomethane	ND	0.50	0.29	1	B4G0022	07/02/2014	07/02/14 10:52	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4G0022	07/02/2014	07/02/14 10:52	
Ethyl Acetate	ND	10	2.0	1	B4G0022	07/02/2014	07/02/14 10:52	
Ethyl Ether	ND	10	2.7	1	B4G0022	07/02/2014	07/02/14 10:52	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4G0022	07/02/2014	07/02/14 10:52	
Ethylbenzene	**1.1**	0.50	0.17	1	B4G0022	07/02/2014	07/02/14 10:52	
Freon-113	ND	0.50	0.39	1	B4G0022	07/02/2014	07/02/14 10:52	
Hexachlorobutadiene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:52	
Isopropylbenzene	**0.31**	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:52	J
m,p-Xylene	**1.4**	1.0	0.43	1	B4G0022	07/02/2014	07/02/14 10:52	
Methylene chloride	ND	1.0	1.0	1	B4G0022	07/02/2014	07/02/14 10:52	
MTBE	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 10:52	
n-Butylbenzene	**0.46**	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:52	J
n-Propylbenzene	**1.2**	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:52	
Naphthalene	**0.55**	0.50	0.35	1	B4G0022	07/02/2014	07/02/14 10:52	
o-Xylene	**0.36**	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 10:52	J
sec-Butylbenzene	**0.27**	0.50	0.21	1	B4G0022	07/02/2014	07/02/14 10:52	J
Styrene	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 10:52	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4G0022	07/02/2014	07/02/14 10:52	
tert-Butanol	ND	10	4.6	1	B4G0022	07/02/2014	07/02/14 10:52	
tert-Butylbenzene	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:52	
Tetrachloroethene	ND	0.50	0.27	1	B4G0022	07/02/2014	07/02/14 10:52	
Toluene	**0.41**	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 10:52	J
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4G0022	07/02/2014	07/02/14 10:52	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4G0022	07/02/2014	07/02/14 10:52	
Trichloroethene	ND	0.50	0.35	1	B4G0022	07/02/2014	07/02/14 10:52	
Trichlorofluoromethane	ND	0.50	0.41	1	B4G0022	07/02/2014	07/02/14 10:52	
Vinyl acetate	ND	10	1.8	1	B4G0022	07/02/2014	07/02/14 10:52	
Vinyl chloride	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 10:52	
Surrogate: 1,2-Dichloroethane-d4	*77.6 %*		*64 - 146*		B4G0022	07/02/2014	*07/02/14 10:52*	
Surrogate: 4-Bromofluorobenzene	*84.7 %*		*60 - 128*		B4G0022	07/02/2014	*07/02/14 10:52*	
Surrogate: Dibromofluoromethane	*76.9 %*		*72 - 141*		B4G0022	07/02/2014	*07/02/14 10:52*	
Surrogate: Toluene-d8	*81.7 %*		*61 - 124*		B4G0022	07/02/2014	*07/02/14 10:52*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-11R
Lab ID: 1401910-06

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**120**	0.50	1	B4F0520	06/27/2014	06/27/14 18:12	
Manganese	**2.0**	0.50	1	B4F0520	06/27/2014	06/27/14 18:12	
Potassium	**10**	0.50	1	B4F0520	06/27/2014	06/27/14 18:12	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**0.66**	0.20	2	B4F0569	06/27/2014	06/27/14 12:41	D1
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 12:41	D1
ortho-Phosphate (As P)	**0.10**	0.10	2	B4F0569	06/27/2014	06/27/14 12:41	D1
Sulfate	ND	2.0	2	B4F0569	06/27/2014	06/27/14 12:41	D1

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**120**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	**0.03**	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**15**	0.50	10	B4F0570	07/01/2014	07/01/14 13:18	
Surrogate: 4-Bromofluorobenzene	*112 %*	*70 - 130*		B4F0570	07/01/2014	*07/01/14 13:18*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-11R

Lab ID: 1401910-06

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	2.8	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,1,1-Trichloroethane	ND	5.0	2.5	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,1,2,2-Tetrachloroethane	ND	5.0	4.3	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,1,2-Trichloroethane	ND	5.0	3.1	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,1-Dichloroethane	ND	5.0	3.0	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,1-Dichloroethene	ND	5.0	3.3	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,1-Dichloropropene	ND	5.0	3.6	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,2,3-Trichloropropane	ND	5.0	2.0	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,2,3-Trichlorobenzene	ND	5.0	4.9	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,2,4-Trichlorobenzene	ND	5.0	3.2	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,2,4-Trimethylbenzene	**2100**	50	30	100	B4G0014	07/02/2014	07/02/14 05:00	
1,2-Dibromo-3-chloropropane	ND	5.0	4.0	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,2-Dibromoethane	ND	5.0	3.2	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,2-Dichlorobenzene	ND	5.0	4.4	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,2-Dichloroethane	ND	5.0	4.5	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,2-Dichloropropane	ND	5.0	2.5	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,3,5-Trimethylbenzene	**580**	5.0	2.6	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,3-Dichlorobenzene	ND	5.0	3.7	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,3-Dichloropropane	ND	5.0	2.8	10	B4G0014	07/02/2014	07/02/14 04:35	D6
1,4-Dichlorobenzene	ND	5.0	3.4	10	B4G0014	07/02/2014	07/02/14 04:35	D6
2,2-Dichloropropane	ND	5.0	2.0	10	B4G0014	07/02/2014	07/02/14 04:35	D6
2-Chloroethyl vinyl ether	ND	5.0	2.7	10	B4G0014	07/02/2014	07/02/14 04:35	D6
2-Chlorotoluene	ND	5.0	3.2	10	B4G0014	07/02/2014	07/02/14 04:35	D6
4-Chlorotoluene	ND	5.0	3.8	10	B4G0014	07/02/2014	07/02/14 04:35	D6
4-Isopropyltoluene	**45**	5.0	2.8	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Benzene	ND	5.0	2.3	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Bromobenzene	ND	5.0	4.2	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Bromochloromethane	ND	5.0	2.9	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Bromodichloromethane	ND	5.0	2.0	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Bromoform	ND	5.0	3.7	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Bromomethane	ND	5.0	4.9	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Carbon disulfide	ND	10	3.0	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Carbon tetrachloride	ND	5.0	3.2	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Chlorobenzene	ND	5.0	1.9	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Chloroethane	ND	5.0	4.4	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Chloroform	**11**	5.0	3.2	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Chloromethane	ND	5.0	3.4	10	B4G0014	07/02/2014	07/02/14 04:35	D6

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-11R
Lab ID: 1401910-06

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	5.0	3.2	10	B4G0014	07/02/2014	07/02/14 04:35	D6
cis-1,3-Dichloropropene	ND	5.0	1.8	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Di-isopropyl ether	ND	5.0	2.6	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Dibromochloromethane	ND	5.0	2.3	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Dibromomethane	ND	5.0	2.9	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Dichlorodifluoromethane	ND	5.0	3.7	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Ethyl Acetate	ND	100	20	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Ethyl Ether	ND	100	27	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Ethyl tert-butyl ether	ND	5.0	2.5	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Ethylbenzene	**260**	5.0	1.7	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Freon-113	ND	5.0	3.9	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Hexachlorobutadiene	ND	5.0	2.3	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Isopropylbenzene	**72**	5.0	2.0	10	B4G0014	07/02/2014	07/02/14 04:35	D6
m,p-Xylene	**980**	10	4.3	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Methylene chloride	ND	10	10	10	B4G0014	07/02/2014	07/02/14 04:35	D6
MTBE	ND	5.0	2.6	10	B4G0014	07/02/2014	07/02/14 04:35	D6
n-Butylbenzene	ND	5.0	2.3	10	B4G0014	07/02/2014	07/02/14 04:35	D6
n-Propylbenzene	**220**	5.0	2.3	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Naphthalene	**280**	5.0	3.5	10	B4G0014	07/02/2014	07/02/14 04:35	D6
o-Xylene	**150**	5.0	2.3	10	B4G0014	07/02/2014	07/02/14 04:35	D6
sec-Butylbenzene	**18**	5.0	2.1	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Styrene	ND	5.0	2.6	10	B4G0014	07/02/2014	07/02/14 04:35	D6
tert-Amyl methyl ether	ND	5.0	1.7	10	B4G0014	07/02/2014	07/02/14 04:35	D6
tert-Butanol	ND	100	46	10	B4G0014	07/02/2014	07/02/14 04:35	D6
tert-Butylbenzene	ND	5.0	2.8	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Tetrachloroethene	ND	5.0	2.7	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Toluene	ND	5.0	2.0	10	B4G0014	07/02/2014	07/02/14 04:35	D6
trans-1,2-Dichloroethene	ND	5.0	3.1	10	B4G0014	07/02/2014	07/02/14 04:35	D6
trans-1,3-Dichloropropene	ND	5.0	2.1	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Trichloroethene	ND	5.0	3.5	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Trichlorofluoromethane	ND	5.0	4.1	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Vinyl acetate	ND	100	18	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Vinyl chloride	ND	5.0	2.8	10	B4G0014	07/02/2014	07/02/14 04:35	D6
Surrogate: 1,2-Dichloroethane-d4	*77.2 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 04:35*	
Surrogate: 1,2-Dichloroethane-d4	*82.3 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 05:00*	
Surrogate: 4-Bromofluorobenzene	*87.7 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 05:00*	
Surrogate: 4-Bromofluorobenzene	*90.4 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 04:35*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-11R

Lab ID: 1401910-06

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*80.2 %*	*72 - 141*		B4G0014	07/02/2014	*07/02/14 04:35*	
Surrogate: Dibromofluoromethane	*83.2 %*	*72 - 141*		B4G0014	07/02/2014	*07/02/14 05:00*	
Surrogate: Toluene-d8	*83.8 %*	*61 - 124*		B4G0014	07/02/2014	*07/02/14 04:35*	
Surrogate: Toluene-d8	*82.9 %*	*61 - 124*		B4G0014	07/02/2014	*07/02/14 05:00*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-21
Lab ID: 1401910-07

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**1.6**	0.50	1	B4F0520	06/27/2014	06/27/14 18:14	
Manganese	ND	0.50	1	B4F0520	06/27/2014	06/27/14 18:14	
Potassium	**6.1**	0.50	1	B4F0520	06/27/2014	06/27/14 18:14	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**6.1**	0.20	2	B4F0569	06/27/2014	06/27/14 12:52	
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 12:52	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0569	06/27/2014	06/27/14 12:52	D1
Sulfate	**15**	2.0	2	B4F0569	06/27/2014	06/27/14 12:52	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**1.6**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	ND	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**0.06**	0.05	1	B4F0570	07/01/2014	07/01/14 13:38	
Surrogate: 4-Bromofluorobenzene	*101 %*	*70 - 130*		B4F0570	07/01/2014	*07/01/14 13:38*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-21

Lab ID: 1401910-07

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:33	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 02:33	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4G0014	07/02/2014	07/02/14 02:33	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 02:33	
1,1-Dichloroethane	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 02:33	
1,1-Dichloroethene	ND	0.50	0.33	1	B4G0014	07/02/2014	07/02/14 02:33	
1,1-Dichloropropene	ND	0.50	0.36	1	B4G0014	07/02/2014	07/02/14 02:33	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:33	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 02:33	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:33	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 02:33	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4G0014	07/02/2014	07/02/14 02:33	
1,2-Dibromoethane	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:33	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 02:33	
1,2-Dichloroethane	ND	0.50	0.45	1	B4G0014	07/02/2014	07/02/14 02:33	
1,2-Dichloropropane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 02:33	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:33	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 02:33	
1,3-Dichloropropane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:33	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 02:33	
2,2-Dichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:33	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 02:33	
2-Chlorotoluene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:33	
4-Chlorotoluene	ND	0.50	0.38	1	B4G0014	07/02/2014	07/02/14 02:33	
4-Isopropyltoluene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:33	
Benzene	**0.46**	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:33	J
Bromobenzene	ND	0.50	0.42	1	B4G0014	07/02/2014	07/02/14 02:33	
Bromochloromethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 02:33	
Bromodichloromethane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:33	
Bromoform	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 02:33	
Bromomethane	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 02:33	
Carbon disulfide	ND	1.0	0.30	1	B4G0014	07/02/2014	07/02/14 02:33	
Carbon tetrachloride	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:33	
Chlorobenzene	ND	0.50	0.19	1	B4G0014	07/02/2014	07/02/14 02:33	
Chloroethane	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 02:33	
Chloroform	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:33	
Chloromethane	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 02:33	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID EW-21
Lab ID: 1401910-07

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:33	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4G0014	07/02/2014	07/02/14 02:33	
Di-isopropyl ether	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:33	
Dibromochloromethane	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:33	
Dibromomethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 02:33	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 02:33	
Ethyl Acetate	ND	10	2.0	1	B4G0014	07/02/2014	07/02/14 02:33	
Ethyl Ether	ND	10	2.7	1	B4G0014	07/02/2014	07/02/14 02:33	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 02:33	
Ethylbenzene	**0.31**	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 02:33	J
Freon-113	ND	0.50	0.39	1	B4G0014	07/02/2014	07/02/14 02:33	
Hexachlorobutadiene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:33	
Isopropylbenzene	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:33	
m,p-Xylene	**0.70**	1.0	0.43	1	B4G0014	07/02/2014	07/02/14 02:33	J
Methylene chloride	ND	1.0	1.0	1	B4G0014	07/02/2014	07/02/14 02:33	
MTBE	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:33	
n-Butylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:33	
n-Propylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:33	
Naphthalene	**0.40**	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 02:33	J
o-Xylene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:33	
sec-Butylbenzene	**0.53**	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 02:33	
Styrene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:33	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 02:33	
tert-Butanol	ND	10	4.6	1	B4G0014	07/02/2014	07/02/14 02:33	
tert-Butylbenzene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:33	
Tetrachloroethene	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 02:33	
Toluene	**0.25**	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:33	J
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 02:33	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 02:33	
Trichloroethene	ND	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 02:33	
Trichlorofluoromethane	ND	0.50	0.41	1	B4G0014	07/02/2014	07/02/14 02:33	
Vinyl acetate	ND	10	1.8	1	B4G0014	07/02/2014	07/02/14 02:33	
Vinyl chloride	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:33	
Surrogate: 1,2-Dichloroethane-d4	*82.8 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 02:33*	
Surrogate: 4-Bromofluorobenzene	*87.6 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 02:33*	
Surrogate: Dibromofluoromethane	*84.3 %*		*72 - 141*		B4G0014	07/02/2014	*07/02/14 02:33*	
Surrogate: Toluene-d8	*83.4 %*		*61 - 124*		B4G0014	07/02/2014	*07/02/14 02:33*	

Certificate of Analysis

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Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**15**	0.50	1	B4F0520	06/27/2014	06/27/14 18:16	
Manganese	**1.7**	0.50	1	B4F0520	06/27/2014	06/27/14 18:16	
Potassium	**2.2**	0.50	1	B4F0520	06/27/2014	06/27/14 18:16	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	**2.0**	0.20	2	B4F0569	06/27/2014	06/27/14 13:04	
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 13:04	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0569	06/27/2014	06/27/14 13:04	D1
Sulfate	**5.9**	2.0	2	B4F0569	06/27/2014	06/27/14 13:04	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**15**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	ND	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**2.7**	0.05	1	B4F0540	06/27/2014	06/27/14 23:02	
Surrogate: 4-Bromofluorobenzene	*115 %*	*70 - 130*		B4F0540	06/27/2014	*06/27/14 23:02*	

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Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	1.0	0.56	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,1,1-Trichloroethane	ND	1.0	0.51	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,1,2,2-Tetrachloroethane	ND	1.0	0.86	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,1,2-Trichloroethane	ND	1.0	0.62	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,1-Dichloroethane	ND	1.0	0.61	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,1-Dichloroethene	ND	1.0	0.66	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,1-Dichloropropene	ND	1.0	0.72	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,2,3-Trichloropropane	ND	1.0	0.41	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,2,3-Trichlorobenzene	ND	1.0	0.99	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,2,4-Trichlorobenzene	ND	1.0	0.65	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,2,4-Trimethylbenzene	**11**	1.0	0.59	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,2-Dibromo-3-chloropropane	ND	1.0	0.81	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,2-Dibromoethane	ND	1.0	0.64	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,2-Dichlorobenzene	ND	1.0	0.89	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,2-Dichloroethane	ND	1.0	0.90	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,2-Dichloropropane	ND	1.0	0.51	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,3,5-Trimethylbenzene	**28**	1.0	0.53	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,3-Dichlorobenzene	ND	1.0	0.75	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,3-Dichloropropane	ND	1.0	0.57	2	B4G0014	07/02/2014	07/02/14 05:23	D6
1,4-Dichlorobenzene	ND	1.0	0.67	2	B4G0014	07/02/2014	07/02/14 05:23	D6
2,2-Dichloropropane	ND	1.0	0.41	2	B4G0014	07/02/2014	07/02/14 05:23	D6
2-Chloroethyl vinyl ether	ND	1.0	0.54	2	B4G0014	07/02/2014	07/02/14 05:23	D6
2-Chlorotoluene	ND	1.0	0.64	2	B4G0014	07/02/2014	07/02/14 05:23	D6
4-Chlorotoluene	ND	1.0	0.77	2	B4G0014	07/02/2014	07/02/14 05:23	D6
4-Isopropyltoluene	**4.0**	1.0	0.56	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Benzene	**350**	10	4.5	20	B4G0014	07/02/2014	07/02/14 05:47	
Bromobenzene	ND	1.0	0.84	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Bromochloromethane	ND	1.0	0.57	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Bromodichloromethane	ND	1.0	0.39	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Bromoform	ND	1.0	0.75	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Bromomethane	ND	1.0	0.98	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Carbon disulfide	ND	2.0	0.59	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Carbon tetrachloride	ND	1.0	0.63	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Chlorobenzene	ND	1.0	0.38	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Chloroethane	ND	1.0	0.88	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Chloroform	ND	1.0	0.64	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Chloromethane	ND	1.0	0.68	2	B4G0014	07/02/2014	07/02/14 05:23	D6

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Lab ID: 1401910-08

Volatile Organic Compounds by EPA 8260B — **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	1.0	0.64	2	B4G0014	07/02/2014	07/02/14 05:23	D6
cis-1,3-Dichloropropene	ND	1.0	0.36	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Di-isopropyl ether	ND	1.0	0.52	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Dibromochloromethane	ND	1.0	0.47	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Dibromomethane	ND	1.0	0.57	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Dichlorodifluoromethane	ND	1.0	0.75	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Ethyl Acetate	ND	20	4.0	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Ethyl Ether	ND	20	5.3	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Ethyl tert-butyl ether	ND	1.0	0.50	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Ethylbenzene	**200**	1.0	0.34	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Freon-113	ND	1.0	0.78	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Hexachlorobutadiene	ND	1.0	0.47	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Isopropylbenzene	**17**	1.0	0.41	2	B4G0014	07/02/2014	07/02/14 05:23	D6
m,p-Xylene	**37**	2.0	0.87	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Methylene chloride	ND	2.0	2.0	2	B4G0014	07/02/2014	07/02/14 05:23	D6
MTBE	ND	1.0	0.52	2	B4G0014	07/02/2014	07/02/14 05:23	D6
n-Butylbenzene	**3.9**	1.0	0.45	2	B4G0014	07/02/2014	07/02/14 05:23	D6
n-Propylbenzene	**23**	1.0	0.46	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Naphthalene	**93**	1.0	0.70	2	B4G0014	07/02/2014	07/02/14 05:23	D6
o-Xylene	**14**	1.0	0.47	2	B4G0014	07/02/2014	07/02/14 05:23	D6
sec-Butylbenzene	**3.2**	1.0	0.41	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Styrene	ND	1.0	0.52	2	B4G0014	07/02/2014	07/02/14 05:23	D6
tert-Amyl methyl ether	ND	1.0	0.34	2	B4G0014	07/02/2014	07/02/14 05:23	D6
tert-Butanol	ND	20	9.3	2	B4G0014	07/02/2014	07/02/14 05:23	D6
tert-Butylbenzene	ND	1.0	0.56	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Tetrachloroethene	ND	1.0	0.54	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Toluene	**4.8**	1.0	0.40	2	B4G0014	07/02/2014	07/02/14 05:23	D6
trans-1,2-Dichloroethene	ND	1.0	0.63	2	B4G0014	07/02/2014	07/02/14 05:23	D6
trans-1,3-Dichloropropene	ND	1.0	0.43	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Trichloroethene	ND	1.0	0.69	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Trichlorofluoromethane	ND	1.0	0.82	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Vinyl acetate	ND	20	3.5	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Vinyl chloride	ND	1.0	0.55	2	B4G0014	07/02/2014	07/02/14 05:23	D6
Surrogate: 1,2-Dichloroethane-d4	*78.3 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 05:47*	
Surrogate: 1,2-Dichloroethane-d4	*76.1 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 05:23*	
Surrogate: 4-Bromofluorobenzene	*86.4 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 05:47*	
Surrogate: 4-Bromofluorobenzene	*86.7 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 05:23*	

Certificate of Analysis

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Lab ID: 1401910-08

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	*74.0 %*	*72 - 141*		B4G0014	07/02/2014	*07/02/14 05:23*	
Surrogate: Dibromofluoromethane	*77.9 %*	*72 - 141*		B4G0014	07/02/2014	*07/02/14 05:47*	
Surrogate: Toluene-d8	*82.0 %*	*61 - 124*		B4G0014	07/02/2014	*07/02/14 05:47*	
Surrogate: Toluene-d8	*82.5 %*	*61 - 124*		B4G0014	07/02/2014	*07/02/14 05:23*	

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Lab ID: 1401910-09

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	ND	0.50	1	B4F0520	06/27/2014	06/27/14 18:19	
Manganese	ND	0.50	1	B4F0520	06/27/2014	06/27/14 18:19	
Potassium	ND	0.50	1	B4F0520	06/27/2014	06/27/14 18:19	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 13:15	D1
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 13:15	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0569	06/27/2014	06/27/14 13:15	D1
Sulfate	**3.1**	2.0	2	B4F0569	06/27/2014	06/27/14 13:15	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	ND	0.50	1	[CALC]	06/27/2014	06/27/14 18:19	

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	ND	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**0.10**	0.05	1	B4F0540	06/27/2014	06/27/14 23:22	
Surrogate: 4-Bromofluorobenzene	*92.9 %*	*70 - 130*		B4F0540	06/27/2014	*06/27/14 23:22*	

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Lab ID: 1401910-09

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 11:16	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4G0022	07/02/2014	07/02/14 11:16	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4G0022	07/02/2014	07/02/14 11:16	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4G0022	07/02/2014	07/02/14 11:16	
1,1-Dichloroethane	ND	0.50	0.30	1	B4G0022	07/02/2014	07/02/14 11:16	
1,1-Dichloroethene	ND	0.50	0.33	1	B4G0022	07/02/2014	07/02/14 11:16	
1,1-Dichloropropene	ND	0.50	0.36	1	B4G0022	07/02/2014	07/02/14 11:16	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 11:16	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4G0022	07/02/2014	07/02/14 11:16	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 11:16	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4G0022	07/02/2014	07/02/14 11:16	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4G0022	07/02/2014	07/02/14 11:16	
1,2-Dibromoethane	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 11:16	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4G0022	07/02/2014	07/02/14 11:16	
1,2-Dichloroethane	**0.53**	0.50	0.45	1	B4G0022	07/02/2014	07/02/14 11:16	
1,2-Dichloropropane	ND	0.50	0.25	1	B4G0022	07/02/2014	07/02/14 11:16	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 11:16	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4G0022	07/02/2014	07/02/14 11:16	
1,3-Dichloropropane	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 11:16	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4G0022	07/02/2014	07/02/14 11:16	
2,2-Dichloropropane	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 11:16	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4G0022	07/02/2014	07/02/14 11:16	
2-Chlorotoluene	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 11:16	
4-Chlorotoluene	ND	0.50	0.38	1	B4G0022	07/02/2014	07/02/14 11:16	
4-Isopropyltoluene	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 11:16	
Benzene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 11:16	
Bromobenzene	ND	0.50	0.42	1	B4G0022	07/02/2014	07/02/14 11:16	
Bromochloromethane	ND	0.50	0.29	1	B4G0022	07/02/2014	07/02/14 11:16	
Bromodichloromethane	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 11:16	
Bromoform	ND	0.50	0.37	1	B4G0022	07/02/2014	07/02/14 11:16	
Bromomethane	ND	0.50	0.49	1	B4G0022	07/02/2014	07/02/14 11:16	
Carbon disulfide	ND	1.0	0.30	1	B4G0022	07/02/2014	07/02/14 11:16	
Carbon tetrachloride	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 11:16	
Chlorobenzene	ND	0.50	0.19	1	B4G0022	07/02/2014	07/02/14 11:16	
Chloroethane	ND	0.50	0.44	1	B4G0022	07/02/2014	07/02/14 11:16	
Chloroform	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 11:16	
Chloromethane	ND	0.50	0.34	1	B4G0022	07/02/2014	07/02/14 11:16	

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Lab ID: 1401910-09

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4G0022	07/02/2014	07/02/14 11:16	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4G0022	07/02/2014	07/02/14 11:16	
Di-isopropyl ether	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 11:16	
Dibromochloromethane	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 11:16	
Dibromomethane	ND	0.50	0.29	1	B4G0022	07/02/2014	07/02/14 11:16	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4G0022	07/02/2014	07/02/14 11:16	
Ethyl Acetate	ND	10	2.0	1	B4G0022	07/02/2014	07/02/14 11:16	
Ethyl Ether	ND	10	2.7	1	B4G0022	07/02/2014	07/02/14 11:16	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4G0022	07/02/2014	07/02/14 11:16	
Ethylbenzene	ND	0.50	0.17	1	B4G0022	07/02/2014	07/02/14 11:16	
Freon-113	ND	0.50	0.39	1	B4G0022	07/02/2014	07/02/14 11:16	
Hexachlorobutadiene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 11:16	
Isopropylbenzene	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 11:16	
m,p-Xylene	ND	1.0	0.43	1	B4G0022	07/02/2014	07/02/14 11:16	
Methylene chloride	ND	1.0	1.0	1	B4G0022	07/02/2014	07/02/14 11:16	
MTBE	**0.59**	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 11:16	
n-Butylbenzene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 11:16	
n-Propylbenzene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 11:16	
Naphthalene	ND	0.50	0.35	1	B4G0022	07/02/2014	07/02/14 11:16	
o-Xylene	ND	0.50	0.23	1	B4G0022	07/02/2014	07/02/14 11:16	
sec-Butylbenzene	**4.0**	0.50	0.21	1	B4G0022	07/02/2014	07/02/14 11:16	
Styrene	ND	0.50	0.26	1	B4G0022	07/02/2014	07/02/14 11:16	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4G0022	07/02/2014	07/02/14 11:16	
tert-Butanol	ND	10	4.6	1	B4G0022	07/02/2014	07/02/14 11:16	
tert-Butylbenzene	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 11:16	
Tetrachloroethene	ND	0.50	0.27	1	B4G0022	07/02/2014	07/02/14 11:16	
Toluene	ND	0.50	0.20	1	B4G0022	07/02/2014	07/02/14 11:16	
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4G0022	07/02/2014	07/02/14 11:16	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4G0022	07/02/2014	07/02/14 11:16	
Trichloroethene	ND	0.50	0.35	1	B4G0022	07/02/2014	07/02/14 11:16	
Trichlorofluoromethane	ND	0.50	0.41	1	B4G0022	07/02/2014	07/02/14 11:16	
Vinyl acetate	ND	10	1.8	1	B4G0022	07/02/2014	07/02/14 11:16	
Vinyl chloride	ND	0.50	0.28	1	B4G0022	07/02/2014	07/02/14 11:16	
Surrogate: 1,2-Dichloroethane-d4	*80.2 %*		*64 - 146*		B4G0022	07/02/2014	*07/02/14 11:16*	
Surrogate: 4-Bromofluorobenzene	*85.7 %*		*60 - 128*		B4G0022	07/02/2014	*07/02/14 11:16*	
Surrogate: Dibromofluoromethane	*78.9 %*		*72 - 141*		B4G0022	07/02/2014	*07/02/14 11:16*	
Surrogate: Toluene-d8	*83.5 %*		*61 - 124*		B4G0022	07/02/2014	*07/02/14 11:16*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-15
Lab ID: 1401910-10

Total Metals by ICP-AES EPA 200.7

Analyst: CB

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Iron	**54**	0.50	1	B4F0520	06/27/2014	06/27/14 18:21	
Manganese	**0.77**	0.50	1	B4F0520	06/27/2014	06/27/14 18:21	
Potassium	**5.2**	0.50	1	B4F0520	06/27/2014	06/27/14 18:21	

Anions Scan by Ion Chromatography EPA 300.0

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrate as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 13:27	D1
Nitrite, as N	ND	0.20	2	B4F0569	06/27/2014	06/27/14 13:27	D1
ortho-Phosphate (As P)	ND	0.10	2	B4F0569	06/27/2014	06/27/14 13:27	D1
Sulfate	**3.9**	2.0	2	B4F0569	06/27/2014	06/27/14 13:27	

Ferric Iron by Calculation

Analyst: Various

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferric Iron	**54**	0.50		[CALC]			

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D)

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Ferrous Iron	ND	0.10	1	B4F0517	06/27/2014	06/27/14 08:01	

Ammonia, as Nitrogen N by SM 4500-NH3 D

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Nitrogen, Ammonia (As N)	ND	0.03	1	B4G0020	07/02/2014	07/02/14 08:48	

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**0.14**	0.05	1	B4F0540	06/27/2014	06/27/14 23:42	
Surrogate: 4-Bromofluorobenzene	*95.0 %*	*70 - 130*		B4F0540	06/27/2014	*06/27/14 23:42*	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-15

Lab ID: 1401910-10

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:57	
1,1,1-Trichloroethane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 02:57	
1,1,2,2-Tetrachloroethane	ND	0.50	0.43	1	B4G0014	07/02/2014	07/02/14 02:57	
1,1,2-Trichloroethane	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 02:57	
1,1-Dichloroethane	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 02:57	
1,1-Dichloroethene	ND	0.50	0.33	1	B4G0014	07/02/2014	07/02/14 02:57	
1,1-Dichloropropene	ND	0.50	0.36	1	B4G0014	07/02/2014	07/02/14 02:57	
1,2,3-Trichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:57	
1,2,3-Trichlorobenzene	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 02:57	
1,2,4-Trichlorobenzene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:57	
1,2,4-Trimethylbenzene	ND	0.50	0.30	1	B4G0014	07/02/2014	07/02/14 02:57	
1,2-Dibromo-3-chloropropane	ND	0.50	0.40	1	B4G0014	07/02/2014	07/02/14 02:57	
1,2-Dibromoethane	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:57	
1,2-Dichlorobenzene	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 02:57	
1,2-Dichloroethane	ND	0.50	0.45	1	B4G0014	07/02/2014	07/02/14 02:57	
1,2-Dichloropropane	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 02:57	
1,3,5-Trimethylbenzene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:57	
1,3-Dichlorobenzene	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 02:57	
1,3-Dichloropropane	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:57	
1,4-Dichlorobenzene	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 02:57	
2,2-Dichloropropane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:57	
2-Chloroethyl vinyl ether	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 02:57	
2-Chlorotoluene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:57	
4-Chlorotoluene	ND	0.50	0.38	1	B4G0014	07/02/2014	07/02/14 02:57	
4-Isopropyltoluene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:57	
Benzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:57	
Bromobenzene	ND	0.50	0.42	1	B4G0014	07/02/2014	07/02/14 02:57	
Bromochloromethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 02:57	
Bromodichloromethane	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:57	
Bromoform	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 02:57	
Bromomethane	ND	0.50	0.49	1	B4G0014	07/02/2014	07/02/14 02:57	
Carbon disulfide	ND	1.0	0.30	1	B4G0014	07/02/2014	07/02/14 02:57	
Carbon tetrachloride	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:57	
Chlorobenzene	ND	0.50	0.19	1	B4G0014	07/02/2014	07/02/14 02:57	
Chloroethane	ND	0.50	0.44	1	B4G0014	07/02/2014	07/02/14 02:57	
Chloroform	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:57	
Chloromethane	ND	0.50	0.34	1	B4G0014	07/02/2014	07/02/14 02:57	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
1956 Webster Street, Suite 400	Report To : Peter Sims
Oakland , CA 94612	Reported : 07/18/2014

Client Sample ID MW-15
Lab ID: 1401910-10

Volatile Organic Compounds by EPA 8260B **Analyst: SL**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	0.32	1	B4G0014	07/02/2014	07/02/14 02:57	
cis-1,3-Dichloropropene	ND	0.50	0.18	1	B4G0014	07/02/2014	07/02/14 02:57	
Di-isopropyl ether	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:57	
Dibromochloromethane	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:57	
Dibromomethane	ND	0.50	0.29	1	B4G0014	07/02/2014	07/02/14 02:57	
Dichlorodifluoromethane	ND	0.50	0.37	1	B4G0014	07/02/2014	07/02/14 02:57	
Ethyl Acetate	ND	10	2.0	1	B4G0014	07/02/2014	07/02/14 02:57	
Ethyl Ether	ND	10	2.7	1	B4G0014	07/02/2014	07/02/14 02:57	
Ethyl tert-butyl ether	ND	0.50	0.25	1	B4G0014	07/02/2014	07/02/14 02:57	
Ethylbenzene	ND	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 02:57	
Freon-113	ND	0.50	0.39	1	B4G0014	07/02/2014	07/02/14 02:57	
Hexachlorobutadiene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:57	
Isopropylbenzene	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:57	
m,p-Xylene	ND	1.0	0.43	1	B4G0014	07/02/2014	07/02/14 02:57	
Methylene chloride	ND	1.0	1.0	1	B4G0014	07/02/2014	07/02/14 02:57	
MTBE	**0.72**	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:57	
n-Butylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:57	
n-Propylbenzene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:57	
Naphthalene	**0.36**	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 02:57	J
o-Xylene	ND	0.50	0.23	1	B4G0014	07/02/2014	07/02/14 02:57	
sec-Butylbenzene	**0.26**	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 02:57	J
Styrene	ND	0.50	0.26	1	B4G0014	07/02/2014	07/02/14 02:57	
tert-Amyl methyl ether	ND	0.50	0.17	1	B4G0014	07/02/2014	07/02/14 02:57	
tert-Butanol	ND	10	4.6	1	B4G0014	07/02/2014	07/02/14 02:57	
tert-Butylbenzene	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:57	
Tetrachloroethene	ND	0.50	0.27	1	B4G0014	07/02/2014	07/02/14 02:57	
Toluene	ND	0.50	0.20	1	B4G0014	07/02/2014	07/02/14 02:57	
trans-1,2-Dichloroethene	ND	0.50	0.31	1	B4G0014	07/02/2014	07/02/14 02:57	
trans-1,3-Dichloropropene	ND	0.50	0.21	1	B4G0014	07/02/2014	07/02/14 02:57	
Trichloroethene	ND	0.50	0.35	1	B4G0014	07/02/2014	07/02/14 02:57	
Trichlorofluoromethane	ND	0.50	0.41	1	B4G0014	07/02/2014	07/02/14 02:57	
Vinyl acetate	ND	10	1.8	1	B4G0014	07/02/2014	07/02/14 02:57	
Vinyl chloride	ND	0.50	0.28	1	B4G0014	07/02/2014	07/02/14 02:57	
Surrogate: 1,2-Dichloroethane-d4	*78.9 %*		*64 - 146*		B4G0014	07/02/2014	*07/02/14 02:57*	
Surrogate: 4-Bromofluorobenzene	*84.4 %*		*60 - 128*		B4G0014	07/02/2014	*07/02/14 02:57*	
Surrogate: Dibromofluoromethane	*79.0 %*		*72 - 141*		B4G0014	07/02/2014	*07/02/14 02:57*	
Surrogate: Toluene-d8	*84.0 %*		*61 - 124*		B4G0014	07/02/2014	*07/02/14 02:57*	

Certificate of Analysis

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Oakland , CA 94612	Reported : 07/18/2014

QUALITY CONTROL SECTION

Total Metals by ICP-AES EPA 200.7 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0520 - EPA 200.7									
Blank (B4F0520-BLK1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Iron	ND	0.50			NR				
Manganese	ND	0.50			NR				
Potassium	ND	0.50			NR				
LCS (B4F0520-BS1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Iron	21.1290	0.50	20.0000		106	85 - 115			
Manganese	10.2236	0.50	10.0000		102	85 - 115			
Potassium	21.3831	0.50	20.0000		107	85 - 115			
Matrix Spike (B4F0520-MS1)		**Source: 1401910-01**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Iron	61.9840	0.50	20.0000	41.8169	101	86 - 108			
Manganese	10.5451	0.50	10.0000	0.645117	99.0	81 - 106			
Potassium	23.8798	0.50	20.0000	4.48967	97.0	37 - 162			
Matrix Spike Dup (B4F0520-MSD1)		**Source: 1401910-01**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Iron	66.0668	0.50	20.0000	41.8169	121	86 - 108	6.38	20	M1
Manganese	11.1777	0.50	10.0000	0.645117	105	81 - 106	5.82	20	
Potassium	25.4463	0.50	20.0000	4.48967	105	37 - 162	6.35	20	

Certificate of Analysis

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Anions Scan by Ion Chromatography EPA 300.0 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0569 - No_Prep_IC_1									
Blank (B4F0569-BLK1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Nitrate as N	ND	0.10			NR				
Nitrite, as N	ND	0.10			NR				
ortho-Phosphate (As P)	ND	0.05			NR				
Sulfate	ND	1.0			NR				
LCS (B4F0569-BS1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Nitrate as N	0.950100	0.10	1.00000		95.0	90 - 110			
Nitrite, as N	0.978200	0.10	1.00000		97.8	90 - 110			
ortho-Phosphate (As P)	0.950100	0.05	1.00000		95.0	90 - 110			
Sulfate	2.00130	1.0	2.00000		100	90 - 110			
Duplicate (B4F0569-DUP1)		**Source: 1401910-01**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Nitrate as N	2.19320	0.20		2.14860	NR		2.05	20	
Nitrite, as N	ND	0.20		ND	NR			20	
ortho-Phosphate (As P)	ND	0.10		0.395000	NR			20	
Sulfate	11.1732	2.0		11.1158	NR		0.515	20	
Matrix Spike (B4F0569-MS1)		**Source: 1401910-01**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Nitrate as N	4.94220	0.20	2.50000	2.14860	112	80 - 120			
Nitrite, as N	2.69820	0.20	2.50000	ND	108	80 - 120			
ortho-Phosphate (As P)	3.25500	0.10	2.50000	0.395000	114	80 - 120			
Sulfate	16.4208	2.0	5.00000	11.1158	106	80 - 120			
Matrix Spike (B4F0569-MS2)		**Source: 1401914-01**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Nitrate as N	3.37000	1.0	2.50000	0.734800	105	80 - 120			
Nitrite, as N	3.12000	1.0	2.50000	ND	125	80 - 120			M1
ortho-Phosphate (As P)	33.8790	0.50	2.50000	27.5194	254	80 - 120			M1
Sulfate	24.3610	10	5.00000	17.8394	130	80 - 120			M1
Matrix Spike Dup (B4F0569-MSD1)		**Source: 1401910-01**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Nitrate as N	4.97580	0.20	2.50000	2.14860	113	80 - 120	0.678	20	
Nitrite, as N	2.68360	0.20	2.50000	ND	107	80 - 120	0.543	20	
ortho-Phosphate (As P)	3.29780	0.10	2.50000	0.395000	116	80 - 120	1.31	20	
Sulfate	16.3892	2.0	5.00000	11.1158	105	80 - 120	0.193	20	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Oakland , CA 94612	Reported : 07/18/2014

Ferrous Iron by Phenanthroline Method (SM 3500-Fe D) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0517 - No_Prep_WC_1									
Blank (B4F0517-BLK1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Ferrous Iron	ND	0.10			NR				
LCS (B4F0517-BS1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Ferrous Iron	2.52900	0.10	2.50145		101	80 - 120			
Ferrous Iron	2.52900	0.10	2.50145		101	80 - 120			
Matrix Spike (B4F0517-MS1)		**Source: 1401910-10**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Ferrous Iron	2.30700	0.10	2.50000	ND	92.3	80 - 120			
Ferrous Iron	2.30700	0.10	2.50000	ND	92.3	80 - 120			
Matrix Spike Dup (B4F0517-MSD1)		**Source: 1401910-10**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Ferrous Iron	2.32500	0.10	2.50000	ND	93.0	80 - 120	0.777	20	
Ferrous Iron	2.32500	0.10	2.50000	ND	93.0	80 - 120	0.777	20	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Oakland , CA 94612	Reported : 07/18/2014

Ammonia, as Nitrogen N by SM 4500-NH3 D - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0020 - Prep_WC_3_W									
Blank (B4G0020-BLK1)				Prepared: 7/2/2014 Analyzed: 7/2/2014					
Nitrogen, Ammonia (As N)	ND	0.03			NR				
LCS (B4G0020-BS1)				Prepared: 7/2/2014 Analyzed: 7/2/2014					
Nitrogen, Ammonia (As N)	0.596000	0.03	0.500000		119	80 - 120			
Matrix Spike (B4G0020-MS1)		**Source: 1401910-10**		Prepared: 7/2/2014 Analyzed: 7/2/2014					
Nitrogen, Ammonia (As N)	0.631000	0.03	0.500000	0.025	121	80 - 120			M3
Matrix Spike Dup (B4G0020-MSD1)		**Source: 1401910-10**		Prepared: 7/2/2014 Analyzed: 7/2/2014					
Nitrogen, Ammonia (As N)	0.606000	0.03	0.500000	0.025	116	80 - 120	4.04	20	

Certificate of Analysis

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Total Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0520 - EPA 200.7									
LCS (B4F0520-BS1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Iron	21.1290	0.50	20.0000		106	80 - 120			
Matrix Spike (B4F0520-MS1)		**Source: 1401910-01**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Iron	61.9840	0.50	20.0000	41.8169	101	59 - 139			
Matrix Spike Dup (B4F0520-MSD1)		**Source: 1401910-01**		Prepared: 6/27/2014 Analyzed: 6/27/2014					
Iron	66.0668	0.50	20.0000	41.8169	121	59 - 139	6.38	20	

Certificate of Analysis

Ninyo & Moore	Project Number : Chun, 401896004
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Oakland , CA 94612	Reported : 07/18/2014

Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0540 - GCVOAW									
Blank (B4F0540-BLK1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Gasoline Range Organics	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.09230*		*0.100000*		*92.3*	*70 - 130*			
LCS (B4F0540-BS1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Gasoline Range Organics	0.980000	0.05	1.00000		98.0	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.09787*		*0.100000*		*97.9*	*70 - 130*			
LCS Dup (B4F0540-BSD1)				Prepared: 6/27/2014 Analyzed: 6/27/2014					
Gasoline Range Organics	0.957000	0.05	1.00000		95.7	70 - 130	2.37	20	
Surrogate: 4-Bromofluorobenzene	*0.09732*		*0.100000*		*97.3*	*70 - 130*			
Batch B4F0570 - GCVOAW									
Blank (B4F0570-BLK1)				Prepared: 7/1/2014 Analyzed: 7/1/2014					
Gasoline Range Organics	ND	0.05			NR				
Surrogate: 4-Bromofluorobenzene	*0.09561*		*0.100000*		*95.6*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0570 - GCVOAW (continued)									
LCS (B4F0570-BS1)				Prepared: 7/1/2014 Analyzed: 7/1/2014					
Gasoline Range Organics	0.989000	0.05	1.00000		98.9	70 - 130			
Surrogate: 4-Bromofluorobenzene	*0.1085*		*0.100000*		*108*	*70 - 130*			

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Gasoline Range Organics by EPA 8015B (Modified) - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4F0570 - GCVOAW (continued)									
LCS Dup (B4F0570-BSD1)				Prepared: 7/1/2014 Analyzed: 7/1/2014					
Gasoline Range Organics	1.01400	0.05	1.00000		101	70 - 130	2.50	20	
Surrogate: 4-Bromofluorobenzene	*0.1076*		*0.100000*		*108*	*70 - 130*			

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0014 - MSVOAW_LL									
Blank (B4G0014-BLK1)				Prepared: 7/1/2014 Analyzed: 7/1/2014					
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				

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Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0014 - MSVOAW_LL (continued)									
Blank (B4G0014-BLK1) - Continued				Prepared: 7/1/2014 Analyzed: 7/1/2014					
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethyl Acetate	ND	10			NR				
Ethyl Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
tert-Butanol	ND	10			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*20.09*		*25.0000*		*80.4*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*21.41*		*25.0000*		*85.6*	*60 - 128*			
Surrogate: Dibromofluoromethane	*20.70*		*25.0000*		*82.8*	*72 - 141*			
Surrogate: Toluene-d8	*20.72*		*25.0000*		*82.9*	*61 - 124*			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0014 - MSVOAW_LL (continued)									
LCS (B4G0014-BS1)				Prepared: 7/1/2014 Analyzed: 7/1/2014					
1,1-Dichloroethene	18.2800		20.0000		91.4	56 - 131			
Benzene	20.2100		20.0000		101	69 - 139			
Chlorobenzene	20.2300		20.0000		101	73 - 127			
MTBE	16.6000		20.0000		83.0	68 - 133			
Toluene	19.2900		20.0000		96.4	62 - 133			
Trichloroethene	19.1600		20.0000		95.8	72 - 139			
Surrogate: 1,2-Dichloroethane-d4	*19.29*		*25.0000*		*77.2*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*20.90*		*25.0000*		*83.6*	*60 - 128*			
Surrogate: Dibromofluoromethane	*18.94*		*25.0000*		*75.8*	*72 - 141*			
Surrogate: Toluene-d8	*21.06*		*25.0000*		*84.2*	*61 - 124*			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0014 - MSVOAW_LL (continued)									
LCS Dup (B4G0014-BSD1)				Prepared: 7/1/2014 Analyzed: 7/1/2014					
1,1-Dichloroethene	17.7200		20.0000		88.6	56 - 131	3.11	20	
Benzene	19.6400		20.0000		98.2	69 - 139	2.86	20	
Chlorobenzene	19.3700		20.0000		96.8	73 - 127	4.34	20	
MTBE	16.9500		20.0000		84.8	68 - 133	2.09	20	
Toluene	18.6500		20.0000		93.2	62 - 133	3.37	20	
Trichloroethene	18.9700		20.0000		94.8	72 - 139	0.997	20	
Surrogate: 1,2-Dichloroethane-d4	*19.26*		*25.0000*		*77.0*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*21.10*		*25.0000*		*84.4*	*60 - 128*			
Surrogate: Dibromofluoromethane	*19.31*		*25.0000*		*77.2*	*72 - 141*			
Surrogate: Toluene-d8	*20.66*		*25.0000*		*82.6*	*61 - 124*			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0022 - MSVOAW_LL									
Blank (B4G0022-BLK1)				Prepared: 7/2/2014 Analyzed: 7/2/2014					
1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromochloromethane	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon disulfide	ND	1.0			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Di-isopropyl ether	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				

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Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0022 - MSVOAW_LL (continued)									
Blank (B4G0022-BLK1) - Continued				Prepared: 7/2/2014 Analyzed: 7/2/2014					
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethyl Acetate	ND	10			NR				
Ethyl Ether	ND	10			NR				
Ethyl tert-butyl ether	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
Freon-113	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
MTBE	ND	0.50			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Amyl methyl ether	ND	0.50			NR				
tert-Butanol	ND	10			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl acetate	ND	10			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	*20.30*		*25.0000*		*81.2*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*21.98*		*25.0000*		*87.9*	*60 - 128*			
Surrogate: Dibromofluoromethane	*20.88*		*25.0000*		*83.5*	*72 - 141*			
Surrogate: Toluene-d8	*20.54*		*25.0000*		*82.2*	*61 - 124*			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0022 - MSVOAW_LL (continued)									
LCS (B4G0022-BS1)				Prepared: 7/2/2014 Analyzed: 7/2/2014					
1,1-Dichloroethene	19.2000		20.0000		96.0	56 - 131			
Benzene	19.8000		20.0000		99.0	69 - 139			
Chlorobenzene	19.9700		20.0000		99.8	73 - 127			
MTBE	14.4400		20.0000		72.2	68 - 133			
Toluene	18.4000		20.0000		92.0	62 - 133			
Trichloroethene	19.2700		20.0000		96.4	72 - 139			
Surrogate: 1,2-Dichloroethane-d4	*19.27*		*25.0000*		*77.1*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*21.58*		*25.0000*		*86.3*	*60 - 128*			
Surrogate: Dibromofluoromethane	*20.09*		*25.0000*		*80.4*	*72 - 141*			
Surrogate: Toluene-d8	*21.20*		*25.0000*		*84.8*	*61 - 124*			

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Oakland , CA 94612	Reported : 07/18/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4G0022 - MSVOAW_LL (continued)									
LCS Dup (B4G0022-BSD1)				Prepared: 7/2/2014 Analyzed: 7/2/2014					
1,1-Dichloroethene	19.3700		20.0000		96.8	56 - 131	0.882	20	
Benzene	19.2700		20.0000		96.4	69 - 139	2.71	20	
Chlorobenzene	19.5400		20.0000		97.7	73 - 127	2.18	20	
MTBE	14.4400		20.0000		72.2	68 - 133	0.00	20	
Toluene	17.7500		20.0000		88.8	62 - 133	3.60	20	
Trichloroethene	19.2700		20.0000		96.4	72 - 139	0.00	20	
Surrogate: 1,2-Dichloroethane-d4	*18.96*		*25.0000*		*75.8*	*64 - 146*			
Surrogate: 4-Bromofluorobenzene	*20.91*		*25.0000*		*83.6*	*60 - 128*			
Surrogate: Dibromofluoromethane	*19.96*		*25.0000*		*79.8*	*72 - 141*			
Surrogate: Toluene-d8	*19.81*		*25.0000*		*79.2*	*61 - 124*			

Certificate of Analysis

Ninyo & Moore		Project Number :	Chun, 401896004
1956 Webster Street, Suite 400		Report To :	Peter Sims
Oakland , CA 94612		Reported :	07/18/2014

Notes and Definitions

M3	Matrix spike recovery outside of acceptance limit due to disproportionate concentration of the analyte to spike level. The analytical batch was validated by the laboratory control sample.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
J	Analyte detected below the Practical Quantitation Limit but above or equal to the Method Detection Limit. Result is an estimated concentration.
H1	Sample was received past holding time.
D6	Sample required dilution due to high concentration of target analyte.
D1	Sample required dilution due to possible matrix interference.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

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Instruction: Complete all shaded areas.

For Laboratory Use Only — ATLCOC Ver:20130715

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐Client ☐ATL	1. CHILLED	☑	☐	5. # OF SAMPLES MATCH COC	☐	☐
☐FedEx ☐OnTrac	2. HEADSPACE (VOA)	☐	☐	6. PRESERVED	☐	☐
☑GSO	3. CONTAINER INTACT	☐	☐	7. COOLER TEMP, deg C:	5.7	
☐Other:	4. SEALED	☐	☐		4.8	

CUSTOMER

Company: Ninyo & Moore — Address: 1956 Webster Street, Suite 400 — City: Oakland — State: CA — Zip: 94612 — Tel: (510) 343-3000 — Fax: (510) 343-3001

SEND REPORT TO: Attn: Peter Sims — Email: psims@ninyoandmoore.com — Company: Ninyo & Moore — Address: 1956 Webster Street — City: Oakland — State: CA — Zip: 94612

SEND INVOICE TO: ☑same as SEND REPORT TO — Attn: — Email: — Company: — Address: — City: — State: — Zip:

PROJECT SAMPLES

Project Name: Chun — Project No.: 401896004 — Sampler: Peter Sims — Quote #: — PO #:

Special Instructions/Comments:
Prepare USTCF EDD
Ninyo & Moore log code: NMI
Site ID: T0600100980

ITEM	Lab No.	Sample ID / Location	Date	Time	8015 (GRO)	8260 / 624 (Volatiles)	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Select Analysis	Total Iron and orthophosphate EPA 300.0	nitrate, nitrite, sulfate EPA 300.0	potassium and manganese EPA 200.7	Iron II SM3500-FE D	Iron III by calculation	Ammonia by SM4500-NH3 D	Enter Custom Analysis	Enter Custom Analysis	Enter Custom Analysis	Enter Custom Analysis	Select Soil Matrix	Select Solid Matrix	Select Water Matrix	Select Wastewater Matrix	Select Aqueous Matrix	Enter Custom Matrix	TAT	Container #	Container Type	Container Material	Preservative	REMARKS
1	1401960 - 1	MW-10	6/26/14	0740	X	X							X	X	X	X	X	X							X				5	9	2	1	1	
2	2	MW-9		0930																														
3	3	MW-14		0915																														
4	4	MW-13		0916																														
5	5	EW-22		1029																														
6	6	MW-11R		1110																														
7	7	EW-21		1130																														
8	8	MW-12		1250																														
9	9	MW-16		1400																														
10	10	MW-15		1405																														

Encircle or Write Requested Analysis — Encircle Sample Matrix

QA/QC: ☐Routine ☐Caltrans ☐Legal ☐RWQCB ☐Level IV

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples submitted AFTER 3:00 PM are considered received the following business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : 300% Surcharge SAME BUSINESS DAY if received by 9:00 AM
   - TAT = 1 : 100% Surcharge NEXT BUSINESS DAY (COB 5:00 PM)
   - TAT = 2 : 50% Surcharge 2ND BUSINESS DAY (COB 5:00 PM)
   - TAT = 3 : 30% Surcharge 3RD BUSINESS DAY (COB 5:00 PM)
   - TAT = 4 : 20% Surcharge 4TH BUSINESS DAY (COB 5:00 PM)
   - TAT = 5 : NO SURCHARGE 5th BUSINESS DAY (COB 5:00 PM)
4. Weekend, holiday, after-hours work — ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab — ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for five (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-five (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20/ sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reformatted report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Peter Sims — Submitter Print Name — Peter Sims — Signature

CUSTODY

Relinquished by: (Signature and Printed Name) Peter Sims	Date: 6/25/14	Time: 1725	Received by: (Signature and Printed Name) Jeff Siegfried	Date: 6/25/14	Time: 525
Relinquished by: (Signature and Printed Name) Jeff Siegfried	Date: 6/25/14	Time: 545	Received by: (Signature and Printed Name) GSO	Date: 6/25/14	Time: 545
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name) C. Smith	Date: 6/27/14	Time: 730