

**RECEIVED**

By Alameda County Environmental Health 9:39 am, Mar 01, 2017

February 28, 2017

To: Ms. Kit Soo, P.G., Senior Hazardous Materials Specialist  
Alameda County Environmental Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

Re: Acknowledgement Statement  
3<sup>rd</sup> Quarter 2016 Groundwater Monitoring, System Evaluation and Optimization  
Strategy Report  
Bill Chun Service Station  
2301 Santa Clara Avenue  
Alameda, California 94501  
SLIC # RO0382  
Geotracker Global ID # T0600100980

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

*Carolyn C. Fong, Trustee*

Carolyn C. Fong, Trustee  
Claimant: Lily Angela Chun 1991 Living Trust  
711 E. Hermosa Drive  
San Gabriel, California 91775

**3<sup>RD</sup> QUARTER 2016 GROUNDWATER MONITORING,  
SYSTEM EVALUATION AND  
OPTIMIZATION STRATEGY 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  
720 East Hermosa Drive  
San Gabriel, California 91775

**PREPARED BY:**  
Ninjo & Moore  
Geotechnical and Environmental Sciences Consultants  
1956 Webster Street, Suite 400  
Oakland, California 94612

February 28, 2017  
Project No. 401896004

February 28, 2017  
Project No. 401896004

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

Subject: 3<sup>rd</sup> Quarter 2016 Groundwater Monitoring, System  
Evaluation and Optimization Strategy Report  
2301 Santa Clara Avenue  
Alameda, California  
Fuel Leak Case # RO0000382  
GeoTracker Global ID # T0600100980

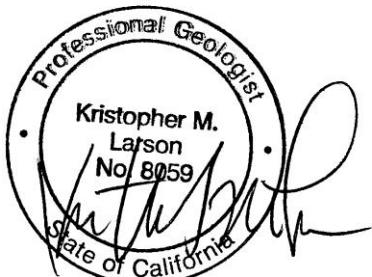
Dear Ms. Fong:

Ninjo & Moore is pleased to present this 3<sup>rd</sup> Quarter 2016 Groundwater Monitoring, System Evaluation, and Optimization Strategy Report for the above-referenced site. This report discusses the results and presents conclusions and recommendations of our groundwater monitoring activities, and provides details of the groundwater remediation system operations and maintenance. We appreciate the opportunity to be of service to you on this project.

Sincerely,  
**NINYO & MOORE**



Asha Turman  
Staff Environmental Scientist



Kristopher M. Larson, PG 8059  
Principal Environmental Geologist



Peter D. Sims  
Project Environmental Geologist

AT/PDS/KML/vmp

Distribution: (1) Addressee (via e-mail)  
(1) Kit Soo, Alameda County Environmental Health (via e-mail)

## **TABLE OF CONTENTS**

	<u>Page</u>
1. INTRODUCTION .....	1
1.1. Purpose .....	1
1.2. Site Description .....	1
1.3. Site Background.....	2
2. HISTORICAL CONSTITUENT OF CONCERN CONCENTRATIONS IN GROUNDWATER .....	2
3. REMEDIATION SYSTEM OPERATIONS AND MAINTENANCE .....	2
3.1. Biweekly O&M .....	3
3.2. Monthly O&M .....	3
3.2.1. Remediation System Sample Collection.....	3
3.2.2. Remediation System Sample Analysis .....	4
3.2.3. Remediation System Sample Analytical Results .....	4
3.3. Bag Filter Change Out and Remediation System Maintenance .....	4
4. GROUNDWATER MONITORING .....	5
4.1. Depth to Groundwater Measurement.....	5
4.2. Groundwater Sampling.....	5
4.3. Decontamination Procedures .....	6
4.4. Investigation Derived Waste.....	6
4.5. Laboratory Analysis.....	7
5. GROUNDWATER SAMPLING RESULTS .....	7
5.1. Depth to Groundwater and Groundwater Flow Direction .....	7
5.2. Groundwater Sample Laboratory Results.....	8
5.2.1. Total Petroleum Hydrocarbons as Gasoline in Groundwater .....	8
5.2.2. Benzene in Groundwater.....	9
5.2.3. Other VOCs in Groundwater .....	9
5.2.4. Bioattenuation Parameters .....	10
5.2.4.1. Oxidation Reduction Potential .....	10
5.2.4.2. Dissolved Oxygen .....	11
5.2.4.3. Nitrate.....	11
5.2.4.4. Ferric Iron.....	12
5.2.4.5. Manganese, Sulfate, and Methane .....	12
5.2.4.6. Bioattenuation Summary.....	12
6. QUALITY ASSURANCE/QUALITY CONTROL .....	13
6.1. Laboratory QA/QC Samples.....	13
6.2. Sample Dilutions .....	13
6.3. QA/QC Conclusions .....	13
7. REMEDIAL ACTION OBJECTIVES .....	14
7.1. Low-Threat Closure.....	14
8. SYSTEM EVALUATION AND OPTIMIZATION STRATEGY .....	15

8.1.	Perimeter Groundwater Monitoring Well Network.....	15
8.2.	Changes to the Contaminated Groundwater Plume.....	17
8.3.	Extraction Well Operation.....	18
8.4.	Extraction and Injection Rates.....	18
8.5.	Extraction Well Biofouling.....	19
8.6.	Extraction Well Sampling Ports .....	19
9.	CONCLUSIONS .....	19
10.	RECOMMENDATIONS.....	21
11.	LIMITATIONS.....	21
12.	REFERENCES .....	23

### **Tables**

- Table 1 – Monitoring Well Inventory  
Table 2 – Remediation System Operations & Maintenance Summary  
Table 3 – Groundwater Elevation Data  
Table 4 – Summary of Groundwater Sample Analytical Results – TPHg and VOCs  
Table 5 – Bioattenuation Monitoring

### **Graphs**

- Graph 1 – TPHg Concentrations in Groundwater  
Graph 2 – Benzene Concentrations in Groundwater

### **Figures**

- Figure 1 – Site Location  
Figure 2 – Site Vicinity  
Figure 3 – Site Plan  
Figure 4 – Remediation System Plan  
Figure 5 – Remediation System Schematic  
Figure 6 – Groundwater Elevation Contour  
Figure 7 – Total Petroleum Hydrocarbons as Gasoline Concentrations in Groundwater  
Figure 8 – Benzene Concentrations in Groundwater  
Figure 9 – Naphthalene Concentrations in Groundwater

### **Appendices**

- Appendix A – Historical Constituents of Concern Concentrations  
Appendix B – Operations & Maintenance Field Forms  
Appendix C – Laboratory Analytical Reports  
Appendix D – Groundwater Monitoring Data Sheets

## **1. INTRODUCTION**

Ninyo & Moore has conducted groundwater monitoring and remediation system operations and maintenance (O&M) activities at the Bill Chun Service Station property located at 2301 Santa Clara Avenue in Alameda, California (site). These activities were performed to address the site's subsurface petroleum hydrocarbon impact. This 3<sup>rd</sup> Quarter 2016 Groundwater Monitoring, System Evaluation and Optimization Strategy Report was prepared in general accordance with the proposed methodology presented in the Corrective Action Plan (CAP) dated August 1, 2013 (Ninyo & Moore, 2013a). The CAP was approved in the Alameda County Environmental Health (ACEH) directive letter dated March 17, 2014. This report also addresses comments presented by ACEH to Ninyo & Moore during a meeting on September 2, 2016, which were summarized in an email sent by ACEH on October 31, 2016.

### **1.1. Purpose**

The purpose of this report is to document the field activities performed during the 3<sup>rd</sup> Quarter 2016 relating to the site's remediation system O&M and groundwater monitoring. This report presents the findings of the groundwater sample analysis for site contaminants of concern (COCs), which primarily include total petroleum hydrocarbons as gasoline (TPHg) and benzene. This report also discusses the COC groundwater plumes and bioattenuation parameter trends. In addition, this report will evaluate the effectiveness of the remediation system and perimeter groundwater monitoring well network.

### **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 vacant kiosk, a canopy, and a garage. The site is located in a mostly commercial area with some residential buildings, and is bordered by Oak Street to the northwest, a meeting hall to the north, a 2<sup>nd</sup> story residence to the east, a retail store to the east and southeast (formerly Towata Flowers), and by Santa Clara Avenue to the southwest. The site vicinity is presented on Figure 2, with the site plan and adjacent properties presented on Figure 3.

### **1.3. Site Background**

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

Several groundwater monitoring wells were installed on the site in separate occasions during 1993 and 2005. All wells installed in 1993 were either properly abandoned or redeveloped in 2012 for monitoring purposes. Injection wells were installed in 2002, 2004, and 2014, with all 2004 and one 2002 well redeveloped in 2014. The remaining 2002 wells were abandoned. Extraction wells were installed in 2014. An inventory of all of the site's wells is presented in Table 1. Between October and November 2014, the remediation system was installed at the site (Figures 3, 4, and 5). The remediation system began operating on November 21, 2014.

## **2. HISTORICAL CONSTITUENT OF CONCERN CONCENTRATIONS IN GROUNDWATER**

In a directive letter dated September 8, 2011, ACEH requested historical groundwater 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 in the online GeoTracker database. Appendix A provides historical groundwater concentrations presented in separate tables for each well through 2011.

## **3. REMEDIATION SYSTEM OPERATIONS AND MAINTENANCE**

O&M activities conducted on the site's remediation system include both biweekly and monthly events, which for the 3<sup>rd</sup> Quarter 2016 were performed by Ninyo & Moore from July 1, 2016 through September 30, 2016. Remediation system O&M field forms are provided in Appendix B. O&M sampling laboratory analytical reports are provided in Appendix C. Remediation system

flow meter readings are presented in Table 2. The analytical laboratory results for the O&M samples collected from the remediation system are presented in Table 4.

### **3.1. Biweekly O&M**

During each biweekly O&M event, the remediation system was checked for proper operation. Pressure gauge and flow meter readings were recorded on field forms. 50 pounds of Custom Blend Nutrient (CBN) nutrient mix were added to the mixing tank during each biweekly O&M event. Ninyo & Moore continues to add CBN nutrient mix to the mixing tank in order to enhance the bioattenuation process.

### **3.2. Monthly O&M**

On July 1, July 28, August 31, and September 30, 2016, monthly O&M activities included collection of water samples from the remediation system in addition to the tasks described in Section 3.1. Influent (INF), GAC vessel (GAC), and effluent (EFF) samples were collected from the remediation system at the sample ports shown on Figure 5. The INF sample was collected from the sample port after the bag filter assembly to determine the cumulative concentrations of COCs in water entering the remediation system. The GAC sample was collected from the sample port between the lead and lag GAC vessels to evaluate whether breakthrough of COCs occurred in the lead GAC vessel. The EFF sample was collected from the sample port after the lag GAC vessel to evaluate breakthrough of COCs in the lag GAC vessel.

#### **3.2.1. Remediation System Sample Collection**

Samples collected from the remediation system sample ports were transferred directly into the appropriate laboratory supplied containers, labeled with the location ID, covered with bubble wrap for protection, placed into a cooler containing ice, and transported under chain-of-custody documentation to TestAmerica, a State of California ELAP certified analytical laboratory located in Pleasanton, California.

### **3.2.2. Remediation System Sample Analysis**

Remediation system samples were analyzed by TestAmerica for TPHg and volatile organic compounds (VOCs), which include benzene, using United States Environmental Protection Agency (USEPA) Method 8260B.

### **3.2.3. Remediation System Sample Analytical Results**

The analytical results for remediation system samples are presented in Table 4. Concentrations of TPHg in samples collected at INF have increased slightly from July to August and then decreased slightly from August to September. Concentrations of benzene in samples collected at INF increased slightly from July to September. Concentrations of toluene increased slightly from July to September. The increasing trends are likely caused by mobilization of the contaminated groundwater plume towards the extraction wells due to ongoing groundwater extraction. The contaminated groundwater moves through the subsurface where it is treated by bioattenuation and is eventually captured by the remediation system through the extraction wells.

The samples collected at GAC and EFF were non-detect for the site COCs analyzed. This indicates the lead GAC vessel is effectively treating the influent water, and the amended water pumped back into the subsurface contains no detectable concentrations of site COCs. In addition, change out of the granulated carbon in the lead GAC vessel is not yet needed.

### **3.3. Bag Filter Change Out and Remediation System Maintenance**

The remediation system's bag filters were changed out on July 1 and 20, August 13 and 23, and September 15 and 27, 2016, due to elevated pressure readings. During these change outs, a reddish-brown bacterial slime was observed in the bag filters, which is evidence of biofouling. The slimy consistency is attributed to bacterial growth and the reddish brown color signifies ferric iron precipitate. Biofouling in the bag filters is expected and indicates the remediation system is operating properly by encouraging bacterial growth. The used bag filters are securely stored in the site's garage pending proper waste characterization and offsite disposal.

On August 23, 2016, it was noted that the totalizer connected to extraction well EW-20 had broken and the reading on the totalizer was no longer increasing even though extraction water continued to flow through it. Therefore, the broken totalizer was replaced on September 15, 2016. The broken totalizer did not have an impact on the extraction of groundwater from extraction well EW-20 or on the overall operation of the remediation system.

#### **4. GROUNDWATER MONITORING**

Ninyo & Moore conducted the 3<sup>rd</sup> Quarter 2016 groundwater monitoring event on August 16 and 17, 2016. The following wells were included in the groundwater monitoring program: 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.

##### **4.1. Depth to Groundwater Measurement**

Prior to groundwater sampling, depth-to-groundwater measurements were obtained from each well. In order to allow the groundwater level to reach equilibrium, the well caps were removed approximately 20 minutes prior to measurement. The depth to static groundwater was measured from the top of casing using a water level meter accurate to 0.01 feet. The water-level meter was decontaminated between wells. The remediation system continued operating during collection of depth to groundwater measurements. Therefore, shallow groundwater elevation contours illustrated on Figure 6 show the influence the remediation system is exerting on groundwater gradients at the site and its surrounding vicinity.

##### **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. Dedicated pump tubing and/or new disposable bailers 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 (odor and color) were recorded during purging. Copies of the groundwater sampling field data sheets are provided in Appendix D.

Subsequent to purging, groundwater samples were collected from each well using a peristaltic pump or disposable bailer. During sample collection, the pump was operated at low speed to minimize disturbance of groundwater. The groundwater samples were collected in the appropriate laboratory-provided sample containers, labeled with the well ID, covered with bubble wrap for protection, placed into a cooler containing ice, and transported under chain-of-custody documentation to TestAmerica.

#### **4.3. Decontamination Procedures**

Reusable equipment that came into contact with groundwater was decontaminated to assure the quality of samples collected and reduce potential cross contamination. Dedicated pump tubing or new disposable bailers were employed at each well during purging to prevent cross contamination. Disposable equipment intended for one-time use and disposal was not decontaminated. Decontamination occurred prior to and after each use of a piece of reusable equipment which came in contact with groundwater. Decontamination was performed using a triple rinse consisting of an initial rinse with a non-phosphate based detergent solution, a secondary rinse in distilled water, and a final rinse in distilled water. Nitrile gloves were changed between each sample collection to minimize the likelihood of cross contamination.

#### **4.4. Investigation Derived Waste**

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 the site. Following waste profiling, the 55-gallon drums of IDW are transported by a California licensed waste hauler to an appropriate facility for disposal as non-hazardous waste. Copies of the waste disposal documentation are maintained in the project files. Disposable equipment intended for one time use (nitrile gloves, bailers, etc.) were disposed of as municipal waste.

#### **4.5. Laboratory Analysis**

The groundwater samples collected from each well were analyzed by TestAmerica for:

- TPHg by USEPA Method 8015B;
- VOCs by USEPA Method 8260B;
- iron by USEPA Method 200.7;
- nitrate and nitrite by USEPA 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. GROUNDWATER SAMPLING RESULTS**

The following section summarizes the results of the 3<sup>rd</sup> Quarter 2016 Groundwater Monitoring event, and presents a discussion of the groundwater monitoring trends. Groundwater elevation contours are illustrated on Figure 6, and detected concentrations of TPHg, benzene, and naphthalene are illustrated on Figures 7, 8, and 9, respectively. Groundwater elevation data is summarized in Table 3, and groundwater sample analytical results are presented in Table 4 and Table 5. Trends in TPHg concentrations in groundwater for select wells are presented on Graph 1. Trends in benzene concentrations in groundwater for select wells are presented on Graph 2.

#### **5.1. Depth to Groundwater and Groundwater Flow Direction**

The groundwater level measurements and the calculated groundwater elevations are presented in Table 3. Groundwater elevation contours are shown on Figure 6. Based on the contours shown on Figure 6, the groundwater gradient appears to be strongly influenced by the operation of the remediation system. Groundwater elevation has been historically highest at MW-7R since the remediation system began operation, and continues to be highest at MW-7R during the 3<sup>rd</sup> Quarter 2016 Groundwater Monitoring event. The high groundwater elevations on the site are caused by the injection of amended water into the subsurface via the horizontal injection piping (injection piping IN-1 through IN-3) and vertical injection wells (injection wells EW-14 through EW-19). The groundwater elevation gradient slopes downward most steeply to the southwest towards extraction well EW-20 and to the east-

northeast towards extraction well EW-22, demonstrating the effect of the remediation system on influencing and controlling groundwater flow beneath the site.

## **5.2. Groundwater Sample Laboratory Results**

A summary of the groundwater sample analytical results are presented in Tables 4 and 5, and a copy of the certified TestAmerica analytical laboratory report is provided in Appendix C. The laboratory results are compared against the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs), Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3), Shallow Groundwater, Residential Scenario, dated February 2016 (Revision 3)<sup>1</sup>. As discussed in Section 7, the remedial action objectives are to meet the criteria established in the SWRCB *Low-Threat Underground Storage Tank Case Closure Policy*, adopted May 1, 2012.

### **5.2.1. Total Petroleum Hydrocarbons as Gasoline in Groundwater**

Concentrations of TPHg in shallow groundwater are presented on Figure 7. TPHg was not detected above the laboratory reporting limit of 50 µg/L in wells MW-10, MW-13, MW-15, and MW-16. TPHg was reported at concentrations ranging from not detected above the laboratory reporting limit to 62,000 µg/L (well MW-5R).

Trends in TPHg concentrations in groundwater samples collected from wells MW-4R, MW-5R, MW-6R, MW-7R, MW-11R, and MW-14 are presented on Graph 1, and are discussed below:

- TPHg concentrations in groundwater samples collected from wells MW-4R, MW-5R, MW-6R, and MW-12 have increased since the 2<sup>nd</sup> Quarter 2016 (previous) monitoring event. Increases in TPHg concentrations in these wells are likely due to mobilization of the contaminated groundwater plume due to operation of the remediation system.

---

<sup>1</sup> Previous groundwater monitoring results were compared against earlier versions of the ESLs. The tables have been updated to reflect the most current screening levels.

- TPHg concentrations in groundwater samples collected from wells MW-7R, MW-11R, and MW-14 have decreased since the previous monitoring event. MW-7R lies in the center of the contaminated groundwater plume; decreases in TPHg concentrations in this well are indicative that progress is being made in reducing the gross contamination of the plume. Additionally, MW-14 lies on the edge of the plume, and a decrease in TPHg concentration in this well indicates that progress is being made in reducing the overall size of the plume.

### **5.2.2. Benzene in Groundwater**

Benzene concentrations in shallow groundwater are presented on Figure 8. The ESL for benzene is 1.0 µg/L. Benzene was not detected above the laboratory reporting limit in wells MW-9, MW-10, MW-13, MW-15, and MW-16. Benzene was reported at concentrations ranging from not detected above the laboratory reporting limit to 2,400 µg/L (well MW-5R).

Trends in benzene concentrations in groundwater samples collected from wells MW-4R, MW-5R, MW-6R, MW-7R, MW-11R, and MW-14 are presented on Graph 2, and are discussed below:

- Benzene concentrations in groundwater samples collected from wells MW-4R, MW-5R, and MW-11R have increased since the previous monitoring event. Increases in benzene concentrations in these wells are likely due to mobilization of the contaminated groundwater plume due to operation of the remediation system.
- Benzene concentrations in groundwater samples collected from wells MW-7R and MW-14 have decreased since the previous monitoring event. The decrease in concentration since the last quarter at these monitoring wells indicates that the remediation system is successfully treating the plume.
- The benzene concentration in MW-6R has remained stable since the previous monitoring event.

### **5.2.3. Other VOCs in Groundwater**

Other VOCs detected in the groundwater samples at concentrations which exceeded their respective ESLs included toluene, ethylbenzene, total xylenes, and naphthalene.

- The concentrations of toluene reported ranged from not detected above the laboratory reporting limit to 14,000 µg/L in MW-5R.

- The concentrations of ethylbenzene reported ranged from not detected above the laboratory reporting limit to 3,800 µg/L in MW-5R.
- The concentrations of total xylenes reported ranged from not detected above the laboratory reporting limit to 20,000 µg/L in MW-5R.
- The concentrations of naphthalene reported ranged from not detected above the laboratory reporting limit to 860 µg/L in MW-7R.

#### **5.2.4. Bioattenuation Parameters**

Groundwater samples were submitted for laboratory analysis of iron, nitrate, nitrite, ferric iron, ferrous iron, and nitrogen as ammonia. Groundwater temperature, conductivity, pH, oxidation-reduction potential (ORP), and dissolved oxygen (DO) were measured in the field using a hand-held Horriba U-53.

The bioattenuation process remediating the site's groundwater plume can occur in either aerobic or anaerobic conditions, which is generally indicated by positive or negative ORP values, respectively. Aerobic bioattenuation takes place as aerobic respiration and is evaluated by DO concentrations. Anaerobic bioattenuation takes place as anaerobic respiration and occurs in five typical stages: denitrification, ferric iron reduction, manganese reduction, sulfate reduction, and methanogenesis.

##### **5.2.4.1. *Oxidation Reduction Potential***

ORP is a measure of electron activity and is an indicator of the relative tendency of a solute species to gain or lose electrons. ORP values in groundwater generally range from -400 millivolts (mV) to 800 mV (USEPA, 2004). Positive ORP values in groundwater are generally indicative of aerobic reducing conditions and negative ORP values are generally indicative of anaerobic reducing conditions. ORP values recorded during the 3<sup>rd</sup> Quarter 2016 monitoring event ranged from -98 mV to 113 mV. Since the remediation system startup, ORP values have overall remained positive or trended toward more positive values. Since the previous quarter ORP values in all monitoring wells have increased with the exception of five (5) of the 13 wells.

#### **5.2.4.2. *Dissolved Oxygen***

DO is the most thermodynamically favored electron acceptor in the bioattenuation of petroleum hydrocarbons. Because water monitored for DO is easily oxygenated, it is difficult to accurately quantify DO. Therefore, individual DO concentrations are evaluated relative to the range of DO concentrations recorded during a groundwater monitoring event (USEPA, 2004). DO concentrations recorded during the 3rd Quarter 2016 monitoring event ranged from 0.0 milligrams per liter (mg/L) to 1.57 mg/L. Levels of DO are relatively lower than previous quarters and are considered less favorable to aerobic respiration and reduction of petroleum hydrocarbons in all wells. The measured levels of DO have decreased from the previous quarter indicating that decreased levels of aerobic respiration have taken place since the previous monitoring event.

#### **5.2.4.3. *Nitrate***

Nitrate can be consumed during the anaerobic biodegradation of petroleum hydrocarbons after DO has been depleted in groundwater. In this process, called denitrification, nitrate is reduced to nitrite and ultimately nitrogen gas (USEPA, 2004). Biweekly addition of the CBN to the amended water injected into the subsurface has increased the concentration of nitrate in groundwater from background levels since the June 25 and 26, 2014 monitoring event conducted prior to remediation system startup.

Nitrite concentrations observed since the previous monitoring event have generally decreased or remained stable. Nitrogen concentrations have increased slightly relative to the previous monitoring event in monitoring wells MW-10, MW-11R, MW-12, MW-15, and MW-16, while nitrogen concentrations in the remaining wells have decreased or remained stable. The increasing nitrate concentrations may be due to the addition of CBN to the groundwater remediation system, while reductions of nitrate concentrations represent microbial utilization.

#### **5.2.4.4. Ferric Iron**

Ferric iron can be reduced to ferrous iron after DO and nitrate are depleted in anaerobic reducing conditions in groundwater. Ferrous iron is soluble in water and its presence in groundwater samples is an indication that reduction of ferric iron has occurred (USEPA, 2004). The concentration of ferrous iron reported in wells ranged from non-detect to concentrations of 18 mg/l in MW-8. Generally, the concentration of ferric iron is higher in relation to the concentrations reported of ferrous iron. The presence of detectable ferrous iron concentrations indicate that ferric iron is being reduced to ferrous iron due to microbial utilization in the subsurface.

#### **5.2.4.5. Manganese, Sulfate, and Methane**

Because neither manganese reduction, sulfate reduction, nor methanogenesis (carbon dioxide reduction) has been demonstrated to be a significant driver of bioattenuation at the site, manganese, sulfate, and methane were not analyzed in the 3<sup>rd</sup> quarter 2016 event.

#### **5.2.4.6. Bioattenuation Summary**

During previous quarters since the remediation system start up, until the 2<sup>nd</sup> Quarter 2016 event, the monitored wells were trending toward ORP values that remain positive or are trending toward more positive values indicating a gradual shift toward stronger aerobic bioattenuation. Since the 2<sup>nd</sup> Quarter 2016 event, ORP values have increased in monitoring wells MW-8, MW-12, MW-15, and MW-16; remained stable in monitoring wells MW-4R, MW-5R, MW-13 and MW-14; and decreased in monitoring wells MW6R, MW7R, MW9, MW10, and MW-11. It is likely that the addition of DO in the amended water supplied to the subsurface by the remediation system will increase ORP values in the future. Wells that had relatively lower recorded DO levels likely represent microbial consumption of DO at a rate exceeding that at which it is replenished by the remediation system. Anaerobic reducing conditions appears to be taking place across the site, and more

strongly in the center of the site than the previous quarter due to a slowdown in aerobic bioattenuation. Continued microbial growth in the subsurface appears to be taking place, as evidenced by biofouling in the bag filters. During future O&M events, Ninyo & Moore will continue to evaluate the oxygen injection rates and injection pressures of the remediation system with the goal of producing positive ORP values and higher concentrations of DO in all wells in future groundwater monitoring events.

## **6. QUALITY ASSURANCE/QUALITY CONTROL**

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 TestAmerica, a California ELAP certified laboratory, in Pleasanton, California, under the appropriate chain-of-custody documentation.

### **6.1. 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. 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.

### **6.2. Sample Dilutions**

Due to the high concentrations of petroleum constituents and/or possible matrix interference in some of the samples, dilution factors ranging from 2 to 200 were required prior to analysis of groundwater samples. Because of the required sample dilution, detection limits were increased.

### **6.3. 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.

## 7. REMEDIAL ACTION OBJECTIVES

The ultimate objectives of remedial activities in the plume area are to reduce the concentrations of COCs in soil, soil vapor, indoor air, and groundwater to less than the RWQCB ESLs, and to ensure that the risk to human health and the environment is less than risk thresholds. The immediate objective of the remedial activities is to reduce the concentrations of COCs in groundwater such that the regulatory limits will be achieved through natural attenuation processes within a reasonable time frame and pose a low threat to human health and the environment as specified in the *Low-Threat Underground Storage Tank Case Closure Policy (Low-Threat Closure Policy)*, adopted May 1, 2012, established by the SWRCB.

### 7.1. Low-Threat Closure

The *Low-Threat Closure Policy* conditions that remain to be met at the time of the preparation of the *CAP*, as well as progress meeting those conditions, are discussed below:

- **Secondary source must be removed to the extent practicable** – Secondary source continues to be removed through operation of the remediation system in order to meet this condition.
- **Groundwater affected by the unauthorized release, defined as the contaminant plume that exceeds water quality objectives, must be stable or decreasing in areal extent** – The areal extent of the contaminated groundwater plume has decreased in size in the east-west direction as evidenced by wells MW-10, MW-13, MW-15, and MW-16 that formerly had detectable concentrations of COCs, which have been non-detect since at least January 2015. Reductions in overall concentrations of COCs in the contaminated groundwater plume are expected to continue to lead to an overall decrease in the area of the plume in the future in order to meet this condition.
- **The contaminant plume that exceeds water quality objectives (RWQCB ESLs) must be less than 100 feet in length** – The contaminated groundwater plume is currently approximately 200 feet long. Reductions in overall concentrations of COCs in the contaminated groundwater plume are expected to lead to overall decreases in the length of the plume in the future in order to meet this condition.
- **Benzene concentrations in groundwater in the remaining contaminant plume will be less than 1,000 µg/L** – The maximum concentration of benzene detected in the contaminated groundwater plume has decreased from 18,000 µg/L in June 2014, to 2,400 µg/L in August 2016. This significant reduction in the maximum concentration of benzene shows significant progress toward meeting this condition.

- **Benzene, ethylbenzene, and naphthalene concentrations in soil 5 to 10 feet below ground surface (bgs) will be less than the concentrations presented in Table 8 of the CAP (Ninyo & Moore, 2013a)** – Continued operation of the remediation system is expected to meet this condition. Confirmation soil samples will be collected following the completion of the remedial action to evaluate this criterion.
- **Benzene, ethylbenzene, and naphthalene concentrations in soil gas 5 feet below ground surface (bgs) will be less than the concentrations presented in Appendix 4, Scenario 4 of the Low-Threat Closure Policy (SWRCB, 2012)** – Continued operation of the remediation system is expected to meet this condition. Confirmation soil gas samples will be collected to evaluate this criterion.

## 8. SYSTEM EVALUATION AND OPTIMIZATION STRATEGY

In an email dated October 31, 2016, ACEH requested that this report provide an assessment of the remediation system and perimeter groundwater monitoring well network and provide a strategy for optimizing remediation of the site. ACEH requested that the evaluation include comparisons of the contaminated groundwater plume before and after the remediation system start up in November 2014, evaluation of the operation of the extraction wells, assessment of the remediation system run times and injection rates, and evaluation of extraction well EW-20 biofouling. ACEH also requested considering addition of discrete sampling ports to the three extraction wells.

### 8.1. Perimeter Groundwater Monitoring Well Network

Perimeter groundwater monitoring wells include MW-8, MW-9, MW-10, MW-12, MW-13, MW-15, and MW-16. The well construction details for each well are presented on Table 1. ACEH requested that the screen intervals of MW-12, MW-13, MW-15, and MW-16 be evaluated because the top of the screen in these wells is below the top of groundwater.

Monitoring wells MW-12, MW-13, MW-15, and MW-16 were installed in May 2005 by Franklin J. Goldman Environmental and Hydrogeological Consulting (Goldman). Prior to selecting the screen intervals for the wells, Goldman performed discrete depth hydropunch sampling at some of the well locations to determine the vertical distribution of site COCs in groundwater. Monitoring well MW-13 only had detectable concentrations of site COCs in the sample collected at 14.5 feet bgs and the well screen interval was set at 15 to 20 feet bgs.

Monitoring well MW-15 had the highest detected concentrations of site COCs in the sample collected at 22 feet bgs and the well screen interval was set at 20 to 30 feet bgs (Goldman, 2005).

Goldman used the discrete depth hydropunch sampling data showing higher concentrations of site COCs at deeper depths to select the screen intervals for MW-12 (14 to 24 feet bgs screen interval) and MW-16 (20 to 30 feet bgs screen interval) as well. Based on the discrete depth hydropunch sampling, it appears that the site COCs are being transported at deeper depths as they move further from the site, likely due to variations in soil permeability. This is supported by the conclusion that the groundwater aquifer is semi-confined by less permeable clayey sand horizons (Ninyo & Moore, 2013a). The operation of the extraction wells also exerts a downward gradient on the contaminated groundwater plume making it more likely that the maximum concentrations will be encountered at deeper depths in the groundwater.

Historical groundwater flow directions were primarily to the east or northeast with occasional flow reversals to the southwest. Accordingly, the majority of off-site wells are located to the east or northeast of the site. Well MW-8 is located southwest of the site and the concentrations of site COCs in that well have been very stable over the four years that Ninyo & Moore has performed groundwater monitoring (as shown on Table 4) which indicates that the contaminated groundwater plume is not migrating in that direction past extraction well EW-20. Similarly, groundwater monitoring wells MW-10 and MW-9 are located to the west and northwest of the site respectively and have been stable at or near non-detect concentrations of site COCs since they were installed in 2000 as shown in Table 4 and Appendix A which indicates that the contaminated groundwater plume is not migrating to the west or northwest.

Therefore, it is Ninyo & Moore's opinion that the perimeter groundwater monitoring well network is sufficient for evaluating the contaminated groundwater plume.

## **8.2. Changes to the Contaminated Groundwater Plume**

Prior to startup of the remediation system, the contaminated groundwater plume was most highly concentrated near well MW-7 and extended northeast-southwest. The overall size of the contaminated groundwater plume was greater before remediation system startup with detectable concentrations of site COCs in all perimeter monitoring wells. Historical groundwater flow directions were primarily to the east or northeast with infrequent flow reversals to the southwest.

Data from monitoring well MW-14 may provide evidence that the contaminated groundwater plume has not been controlled to the southeast. However, a review of historical data (Appendix A and Table 3) indicates that the concentrations of site COCs detected in MW-14 are within the range of concentrations of site COCs currently detected in MW-14. This indicates that the source of high concentrations of site COCs in well MW-14 is likely caused by COC impacted groundwater beneath the retail store southeast and adjacent to the site that has been mobilized by operation of the extraction well EW-22. Mobilization of the COC impacted groundwater beneath the southeast adjacent retail store will lead to reductions in overall concentrations of site COCs and reduction in the overall area of the contaminated groundwater plume by the remediation system. Therefore, recent increases in concentrations of site COCs in monitoring well MW-14 are an indication that the remediation system is operating as intended.

Since remediation system startup, the highest concentrations of the site COCs have been reduced by aerobic/anaerobic reduction and mobilized toward the extraction wells to the northeast and southwest of the plume. The highest concentration of TPHg has most recently been reported in well MW-5, which is located on the western edge of the COC groundwater plume migrating from the area of MW-7 due to the operation of extraction well EW-20. Similar plume migration is evident as contaminated groundwater migrates from MW-7 toward MW-11 and MW-12 due to the operation of extraction wells EW-21 and EW-22. At the same time, perimeter wells MW-9, MW-10, MW-13, MW-15, and MW-16 have all shown decreasing or stable non-detectable concentrations of site COCs. The overall trend is

toward a shrinking plume with lower overall concentrations of site COCs that indicate the highest concentrations are mobilizing toward the extraction wells.

### **8.3. Extraction Well Operation**

The extraction wells run continuously unless one of two conditions is met.

- Extraction wells will switch off if the remediation system detects that the extraction well has been pumped dry. This is determined when a change in the amp draw from the extraction pump is detected by the remediation system. The extraction pumps remain off for approximately 4 minutes to allow the extraction well to recharge and then switch back on.
- Extraction wells will also switch off if the remediation system detects a high float condition because the 1,000-gallon holding tank is full. This happens rarely because the extraction and injection rates are balanced to allow the holding tank to partially empty during the once-hourly injection cycle and then slowly refill in between injection cycles.

Based on the short period of shut downs due to the first condition and the rarity of shut downs due to the second condition, it is unlikely that shut downs of the extraction wells will have a significant negative effect on the hydraulic control exerted by the remediation system.

### **8.4. Extraction and Injection Rates**

The extraction rate during the 3<sup>rd</sup> Quarter 2016 event ranged from 1.2 to 2.8 gallons per minute. The injection rate during the same period ranged from 0.92 to 2.5 gallons per minute. At all times the extraction rate was greater than the injection rate. This causes the extraction wells to exert control over the groundwater plume. Because the extraction rate is higher, the contaminated groundwater plume will flow toward the extraction wells. Because of the operation of the extraction wells, increased gradients exists toward the southwest (extraction well EW-20) and the northeast (extraction wells EW-21 and EW-22). Therefore, it appears that the remediation system is operating as intended and maintaining hydraulic control of the contaminated groundwater plume.

### **8.5. Extraction Well Biofouling**

In the past, biofouling of the extraction pump or totalizer in well EW-20 has caused decreased extraction flow rates. However, biofouling is an indicator that the remediation system is operating properly by enhancing microbial growth that leads to bioattenuation of the site COCs. The biofouling is gradual and becomes apparent during normal O&M activities. Biofouling of the extraction pump or totalizer is remedied by removing the piece of equipment for mechanical cleaning after which it is reinstalled. If damage has occurred to the pump or totalizer, then it is replaced prior to reinstallation which ensures continued proper operation of the remediation system.

### **8.6. Extraction Well Sampling Ports**

Extraction well sampling ports may be added to the extraction manifold in the remediation system enclosure. This would allow collecting discrete extraction well samples in addition to the combined extraction well influent (INF) sample that is currently collected. However, extraction well EW-20 is located 5 feet south of monitoring well MW-4, extraction well EW-22 is located 5 feet northeast of monitoring well MW-11R, and extraction well EW-21 is located 15 feet southeast of monitoring well MW-12. Because the extraction wells are located near monitoring wells, it is Ninyo & Moore's opinion that collection of discrete extraction well sample data would not significantly increase the breadth or quality of data already available relative to the increased cost that would be incurred.

## **9. CONCLUSIONS**

Ninyo & Moore presents the following conclusions:

- Remediation system O&M activities were performed biweekly between July 1 and September 30, 2016. Biweekly and monthly O&M activities included monitoring the remediation system for proper operation and adding biological amendments (CBN nutrient mix and EZT-EA biosurfactant) to the remediation system. Because of elevated pressure readings observed on the bag filter assembly due to biofouling, the bag filters were changed out on July 1 and 20, August 13 and 23, and September 15 and 27, 2016. The EW-20 totalizer was replaced on September 15, 2016, because it had been observed that it was not functioning properly.

- Collection of remediation system samples was performed monthly on July 1, July 28, August 31, and September 30, 2016. Analysis of remediation system samples indicated that the remediation system is operating properly.
- The 3<sup>rd</sup> Quarter 2016 groundwater monitoring and sample collection was performed on August 15 and 16, 2016.
  - Based on depth to water measurements collected during the 3<sup>rd</sup> Quarter 2016 groundwater monitoring event, groundwater appears to be flowing to the east-northeast and southwest due to the influence of groundwater extraction wells EW-20, EW-21, and EW-22. Groundwater elevations indicate that groundwater has mounded at the site due to injection of amended water through the vertical injection wells and horizontal injection piping.
  - Dissolved phase TPHg and/or VOC concentrations in groundwater exceed their respective ESLs in wells MW-4R through MW-7R, MW-8, MW-11R, MW-12, and MW-14.
  - Monitoring wells MW-7R, MW-8, MW-11R, MW-12R, and MW-14 and MW-12 have decreased or stable TPHg concentrations; MW-4R, MW-5R, MW-6R, MW-9 increased TPHg concentrations; and MW-10, MW-13, MW-15, and MW-16 remained non-detect for TPHg.
  - Monitoring wells MW-6R, MW-7R, MW-8, MW-12 have decreased or stable benzene concentrations; MW-4R, MW-5R, MW-11R, and MW-14 have increased benzene concentrations; and MW-9, MW-10, MW-13, MW-15, and MW-16 remained non-detect for benzene.
  - Reductions in the TPHg and benzene concentrations detected in groundwater samples and the reduction in total area of the plume indicate the groundwater plume is undergoing remediation. The area of the TPHg and benzene dissolved phase groundwater plume has been stabilized in the north-south direction and reduced in the east-west direction compared to the groundwater monitoring event performed before remediation system startup in June of 2014. Concentrations of TPHg and benzene in most wells still remain relatively high indicating that operation of the remediation system should continue.
  - Aerobic bioattenuation is the main driver of the remediation process in the groundwater plume. However, a decrease in the strength of aerobic bioattenuation was observed during the 3<sup>rd</sup> quarter 2016. Anaerobic bioattenuation is occurring secondarily. Since the remediation system is supplying DO and nitrate to the subsurface through amended water injection, and DO reduction is thermodynamically preferred followed by nitrate reduction, the remediation system is operating as expected. Continued operation of the remediation system will increase DO in the subsurface and drive bioattenuation through DO reduction.

- Since bioattenuation of the groundwater plume has been demonstrated, Ninyo & Moore discontinued analysis of sulfate, manganese, potassium and phosphate following the 2<sup>nd</sup> quarter 2016 monitoring event which was approved by the ACEH.
- The perimeter groundwater monitoring well network was evaluated and found to be sufficient for evaluating the extent and potential migration of the contaminated groundwater plume.
- Ninyo & Moore reviewed the operation of the remediation system and determined that it was operating as intended. Normal O&M tasks to be performed in the future will ensure that it continues to operate properly to remediate the site.

## 10. 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 O&M activities and groundwater monitoring as detailed in the *O&M Plan*, dated December 24, 2013.

During future O&M events, Ninyo & Moore will continue evaluating the oxygen injection rates and injection pressures of the remediation system with the goal of producing positive ORP values and higher concentrations of DO in all wells.

## 11. 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. Variations 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.

## 12. REFERENCES

- Franklin J. Goldman, CHG, Environmental and Hydrogeological Consulting (Goldman), 2005, Subsurface Hydrogeologic Investigation of Hydrocarbons at the Towata Property Located East of the Former Bill Chun's Service Station, dated July 10.
- 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.
- Ninyo & Moore, 2015, Initial Groundwater Monitoring and System Evaluation Report, 2301 Santa Clara Avenue, Alameda, California, dated June 5.
- San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Interim Final, Oakland, California, December 2013.
- SWRCB, 2012, Low-Threat UST Case Closure Policy, dated May 1.
- USEPA, 2004, How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites, EPA 510-R-04-002, dated May.

**TABLE 1 – MONITORING WELL INVENTORY**

Monitoring Well ID	Date Installed	Total Depth bgs	Riser Interval bgs	Screened Interval bgs <sup>(1)</sup>	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 <sup>(2)</sup>	0-7	7-25	4"	Abandoned 5/2012 because the riser was too deep
EW-13	10/2002	25.0 <sup>(2)</sup>	0-7	7-25	4"	Abandoned 5/2012 because the seal is cracked
EW-14	10/2002	25.0 <sup>(2)</sup>	0-7	7-25	4"	TOC was cut down to fit in well box, redeveloped in 5/2012; converted to injection well in 11/2014
EW-15	1/2004	25.0 <sup>(2)</sup>	0-7	7-25	4"	Redeveloped in 5/2012; converted to injection well in 11/2014
EW-16	1/2004	25.0 <sup>(2)</sup>	0-7	7-25	4"	Redeveloped in 5/2012; converted to injection well in 11/2014
EW-17	1/2004	25.0 <sup>(2)</sup>	0-7	7-25	4"	Redeveloped in 5/2012; converted to injection well in 11/2014
EW-18	4/2014	15.0	0-5	5-15	4"	Converted to injection well in 11/2014

**TABLE 1 – MONITORING WELL INVENTORY**

Monitoring Well ID	Date Installed	Total Depth bgs	Riser Interval bgs	Screened Interval bgs <sup>(1)</sup>	Casing Diameter	Notes
EW-19	4/2014	15.0	0-5	5-15	4"	Converted to injection well in 11/2014
EW-20	4/2014	25.0	0-5	5-25	4"	Converted to extraction well in 11/2014
EW-21	4/2014	25.0	0-5	5-25	4"	Converted to extraction well in 11/2014
EW-22	4/2014	25.0	0-5	5-25	4"	Converted to extraction well in 11/2014

**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 - REMEDIATION SYSTEM OPERATIONS & MAINTENANCE SUMMARY

Date/Time	Elapsed Time	Extraction Flow Rate	Extraction Total	Totalizer	Products Added		Comments
	(min)	(gpm)	(gal)	(gal)	CBN (pounds)	PS (gal)	
11/21/14 14:00	0	--	0	0	0	0	System startup and test for 3 hours/cycles to evaluate leaks, etc.. Shut down system at 5 pm. Will start up 24/7 tomorrow.
11/22/14 8:00	1,080	0.8	870	700	250	0	System startup. BT onsite. Product addition started.
11/23/14 8:50	1,490	1.7	2,480	2,900	250	0	Slight surfacing at IN-18, reduced flow and injection time to 1 min.
11/24/14 7:30	1,360	1.6	2,130	5,010	50	50	950 lbs CBN left onsite, lots of PS remaining.
12/2/14 12:30	11,820	--	--	100	10		Connected 18 and 19 together. 19 was surfacing a little. Flow meter taken out for 18.
12/4/14 9:00	2,670	6.6	17,570	23,110	50	5	
12/10/14 10:50	8,750	1.0	8,370	31,410	50	5	
12/18/14 16:12	11,842	1.0	11,900	42,870	50	5	
1/2/15 11:12	21,300	1.2	24,970	65,390	50	5	
1/6/15 13:07	5,875	1.3	7,410	71,890	100	5	
1/16/15 9:50	14,203	1.2	17,460	87,090	50	5	
1/30/15 17:15	20,605	1.0	21,000	104,720	50	5	Mixing tank pH = 6.90.
2/6/15 15:00	9,945	1.1	10,630	113,350	50	5	Mixing tank pH = 7.30.
2/12/15 7:00	8,160	1.1	8,830	120,440	50	5	Mixing tank pH = 7.51 and holding tank pH = 7.67.
2/19/15 11:16	10,336	1.1	11,440	129,550	50	5	
2/27/15 9:55	11,439	1.1	12,590	139,800	50	5	Mixing tank pH = 7.07 and holding tank pH = 6.99.
3/5/15 15:35	8,980	1.1	9,990	147,850	50	5	Mixing tank pH = 7.10 and holding tank pH = 7.04.
3/13/15 12:00	11,305	1.1	12,580	157,900	50	5	Mixing tank pH = 7.05 and holding tank pH = 7.01.
3/25/15 12:43	17,323	1.1	18,280	172,300	50	5	Mixing tank pH = 7.30 and holding tank pH = 7.17. Dilute hydrogen peroxide injection was performed on March 18 through 21, 2015.
4/9/15 14:20	21,697	1.2	26,140	190,650	0	0	5 gallons of EZT-A2 TPH bacterial consortium added to remediation system. Mixing Tank pH = 7.83.
4/23/15 15:30	20,230	1.5	29,910	208,070	0	0	
5/8/15 9:30	21,240	1.4	29,460	228,260	50	0	
5/21/15 15:40	19,090	1.9	35,680	248,880	50	0	
6/4/15 9:05	19,765	1.8	36,260	270,030	50	0	Bag filters changed out on May 28, 2015.
6/18/15 8:25	20,120	2.1	41,810	294,370	50	0	Bag filters changed out on June 11, 2015
7/1/15 16:15	19,190	2.7	52,130	320,500	50	0	Bag filters changed out on June 25, 2015.
7/16/15 11:32	21,317	2.9	61,830	320,500	50	0	Bag filters changed out on July 8, 2015.
7/29/15 8:24	18,532	2.9	54,610	375,000	50	0	Bag filters changed out on July 30, 2015.
8/11/15 14:00	19,056	2.9	55,210	399,720	50	0	
8/27/15 16:00	23,160	3.0	69,430	429,540	50	0	Bag filters changed out on August 27, 2015
9/10/15 16:00	20,160	3.1	62,370	455,560	50	0	Bag filters changed out on September 11, 2015
9/24/15 15:30	20,130	3.4	68,180	482,680	50	0	
10/8/15 15:45	20,175	2.4	48,260	503,000	50	0	Bag filters changed out on October 8, 2015
10/22/15 15:30	20,145	1.1	22,010	525,970	50	0	
10/27/15 11:53	6,983	1.1	7,870	534,290	0	0	
10/29/15 9:37	2,744	0.7	1,850	536,070	50	5	Bag filters changed out and extraction pump and flow meter EW-20 cleaned of biofouling on October 29, 2015.
10/30/15 11:53	1,576	1.8	2,840	538,360	0	0	
11/5/15 15:45	8,872	1.8	15,850	550,480	50	10	Bag filters changed out on November 8, 2015.
11/19/15 8:52	19,747	1.7	34,380	576,920	50	5	Bag filters changed out on November 24, 2015.
12/3/15 16:30	20,618	1.8	36,640	604,550	50	5	Bag filters changed out on December 8, 2015. Dilute hydrogen peroxide injection was performed on December 12, 2015.
12/17/15 14:20	20,030	1.7	33,510	630,030	50	5	Bag filters changed out on December 21, 2015.
12/31/15 10:08	19,908	0.8	16,370	641,970	50	10	
1/13/16 15:30	19,042	1.9	36,560	667,700	50	5	Bag filters changed out on January 15 and 22, 2016. EW-20 extraction pump and flow meter cleaned of biofouling on January 22, 2016.
1/28/16 9:00	21,210	2.0	43,240	695,990	100	5	Bag filters changed out on February 10, 2016
2/11/16 15:00	20,520	1.4	29,530	714,020	100	5	Bag filters changed out on February 23, 2016
2/25/16 8:30	19,770	1.9	36,950	732,050	100	5	Bag filters changed out on March 7, 2016
3/10/16 9:00	20,190	0.6	12,320	745,710	100	5	
3/24/16 15:00	20,520	2.3	47,980	773,600	50	5	
4/7/16 15:15	20,175	2.5	50,030	801,400	50	5	Bag filters changed out April 13, 2016
4/22/16 7:10	21,115	0.4	8,500	808,440	50	5	
5/5/16 7:20	18,730	2.4	45,140	834,010	50	5	
5/17/16 14:00	17,680	2.4	41,970	856,370	0	0	Bag filters changed out on May 18, 2016
6/3/16 11:40	24,340	1.4	33,650	877,140	50	5	Bag filters changed out on June 9, 2016
6/20/16 16:30	24,770	1.8	43,870	910,240	50	5	
7/1/16 7:20	15,290	2.8	43,170	930,130	50	5	Bag filters changed out on July 1, 2016
7/15/16 16:00	20,680	2.4	50,370	950,420	50	5	Bag filters changed out on July 20, 2016
7/28/16 8:00	18,240	1.6	29,210	974,000	50	5	
8/16/16 15:00	27,780	1.9	52,910	1,006,650	50	0	Bag filters changed out on August 13, 2016
8/31/16 16:00	21,660	1.8	39,890	1,032,370	50	0	Bag Filters changed out on August 23. EW-20 totalizer was noted as broken on August 31, 2016, but groundwater extraction from EW-20 continues.
9/13/16 6:50	18,170	1.2	21,480	1,053,600	50	0	Bag filters changed out on September 15, 2016. EW-20 totalizer replaced on 9/15/16.
9/30/16 13:28	24,878	1.4	35,039	1,076,540	50	0	Bag filters changed out on September 27, 2016.
<b>Totals</b>	<b>952,850</b>		<b>1,707,870</b>	<b>3,400</b>	<b>240</b>		

TABLE 2 - REMEDIATION SYSTEM OPERATIONS & MAINTENANCE SUMMARY

Date/Time	Elapsed Time	INJECTION WELLS																						
		EW-18			EW-19			EW-19/18			EW-16			IN-2/3			IN-1 and EW-17			EW-14/15				
		Reading (min)	Volume (gal)	Rate (gpm)	Reading (gal)	Volume (gal)	Rate (gpm)																	
11/21/14 14:00		0	493,150	--	--	0	--	--	--	0	--	--	0	--	--	0	--	--	0	--	--			
11/22/14 8:00		1,080	493,250	100	0.09	80	80	0.07	--	--	102	102	0.09	90	90	0.08	80	80	0.07	80	80	0.07		
11/23/14 8:50		1,490	493,660	410	0.28	450	370	0.25	--	--	420	318	0.21	620	530	0.36	420	340	0.23	440	360	0.24		
11/24/14 7:30		1,360	493,800	140	0.10	760	310	0.23	--	--	735	315	0.23	1,030	410	0.30	870	450	0.33	900	460	0.34		
12/2/14 12:30		11,820	494,670	870	0.07	2,810	2,050	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--			
12/4/14 9:00		2,670	--	--	--	--	--	--	2,980	2,980	1.12	3,600	2,865	1.07	4,930	3,900	1.46	5,280	4,410	1.65	4,590	3,690	1.38	
12/10/14 10:50		8,750	--	--	--	--	--	--	3,520	540	0.06	5,090	1,490	0.17	6,980	2,050	0.23	7,570	2,290	0.26	6,530	1,940	0.22	
12/18/14 16:12		11,842	--	--	--	--	--	--	--	4,250	730	0.06	7,130	2,040	0.17	9,820	2,840	0.24	10,720	3,150	0.27	9,210	2,680	0.23
1/2/15 11:12		21,300	--	--	--	--	--	--	--	5,700	1,450	0.07	11,000	3,870	0.18	15,100	5,280	0.25	16,870	6,150	0.29	14,410	5,200	0.24
1/6/15 13:07		5,875	--	--	--	--	--	--	--	6,120	420	0.07	12,110	1,110	0.19	16,600	1,500	0.26	18,620	1,750	0.30	15,940	1,530	0.26
1/16/15 9:50		14,203	--	--	--	--	--	--	7,100	980	0.07	14,700	2,590	0.18	20,120	3,520	0.25	22,680	4,060	0.29	19,530	3,590	0.25	
1/30/15 17:15		20,605	--	--	--	--	--	--	8,230	1,130	0.05	17,670	2,970	0.14	24,310	4,190	0.20	27,370	4,690	0.23	23,420	3,890	0.19	
2/6/15 15:00		9,945	--	--	--	--	--	--	--	8,790	560	0.06	18,120	450	0.05	26,170	1,860	0.19	29,660	2,290	0.23	25,250	1,830	0.18
2/12/15 7:00		8,160	--	--	--	--	--	--	--	9,240	450	0.06	20,300	2,180	0.27	28,030	1,860	0.23	31,550	1,890	0.23	26,750	1,500	0.18
2/19/15 11:16		10,336	--	--	--	--	--	--	--	9,820	580	0.06	21,820	1,520	0.15	30,170	2,140	0.21	33,950	2,400	0.23	28,650	1,900	0.18
2/27/15 9:55		11,439	--	--	--	--	--	--	--	10,460	640	0.06	23,520	1,700	0.15	32,560	2,390	0.21	36,670	2,720	0.24	30,760	2,110	0.18
3/5/15 15:35		8,980	--	--	--	--	--	--	--	10,970	510	0.06	24,850	1,330	0.15	34,440	1,880	0.21	38,800	2,130	0.24	32,400	1,640	0.18
3/13/15 12:00		11,305	--	--	--	--	--	--	--	11,600	630	0.06	26,510	1,660	0.15	36,750	2,310	0.20	41,450	2,650	0.23	34,450	2,050	0.18
3/25/15 12:43		17,323	--	--	--	--	--	--	--	12,490	890	0.05	28,510	2,000	0.12	40,670	3,920	0.23	45,350	3,900	0.23	37,390	2,940	0.17
4/9/15 14:20		21,697	--	--	--	--	--	--	13,900	1,410	0.06	31,210	2,700	0.12	46,130	5,460	0.25	49,990	4,640	0.21	41,060	3,670	0.17	
4/23/15 15:30		20,230	--	--	--	--	--	--	--	15,220	1,320	0.07	33,730	2,520	0.12	51,230	5,100	0.25	54,600	4,610	0.23	44,460	3,400	0.17
5/8/15 9:30		21,240	--	--	--	--	--	--	--	16,340	1,120	0.05	35,860	2,130	0.10	55,720	4,490	0.21	63,440	8,840	0.42	47,510	3,050	0.14
5/21/15 15:40		19,090	--	--	--	--	--	--	--	17,430	1,090	0.06	38,040	2,180	0.11	62,420	6,700	0.35	69,260	5,820	0.30	51,770	4,260	0.22
6/4/15 9:05		19,765	--	--	--	--	--	--	--	18,450	1,020	0.05	40,030	1,990	0.10	69,520	7,100	0.36	75,420	6,160	0.31	56,260	4,490	0.23
6/18/15 8:25		20,120	--	--	--	--	--	--	--	19,580	1,130	0.06	42,230	2,200	0.11	77,470	7,950	0.40	82,660	7,240	0.36	61,620	5,360	0.27
7/1/15 16:15		19,190	--	--	--	--	--	--	--	20,870	1,290	0.07	44,810	2,580	0.13	86,070	8,600	0.45	90,270	7,610	0.40	66,960	5,340	0.28
7/16/15 11:32		21,317	--	--	--	--	--	--	--	22,330	1,460	0.07	47,750	2,940	0.14	95,720	9,650	0.45	98,840	8,570	0.40	73,050	6,090	0.29
7/29/15 8:24		18,532	--	--	--	--	--	--	--	23,560	1,230	0.07	50,230	2,480	0.13	104,050	8,330	0.45	106,170	7,330	0.40	78,300	5,250	0.28
8/1/15 14:00		19,056	--	--	--	--	--	--	--	24,770	1,210	0.06	52,640	2,410	0.13	112,230	8,180	0.43	113,340	7,170	0.38	83,500	5,200	0.27

TABLE 2 - REMEDIATION SYSTEM OPERATIONS & MAINTENANCE SUMMARY

8/27/15 16:00	23,160	--	--	--	--	--	--	26,210	1,440	0.06	55,510	2,870	0.12	121,890	9,660	0.42	121,750	8,410	0.36	89,950	6,450	0.28
9/10/15 16:00	20,160	--	--	--	--	--	--	27,040	830	0.04	58,080	2,570	0.13	130,450	8,560	0.42	129,080	7,330	0.36	95,710	5,760	0.29
9/24/15 15:30	20,130	--	--	--	--	--	--	27,630	590	0.03	60,850	2,770	0.14	139,580	9,130	0.45	136,900	7,820	0.39	101,590	5,880	0.29
10/8/15 15:45	20,175	--	--	--	--	--	--	27,970	340	0.02	62,560	1,710	0.08	146,010	6,430	0.32	143,380	6,480	0.32	106,310	4,720	0.23
10/22/15 15:30	20,145	--	--	--	--	--	--	28,190	220	0.01	63,860	1,300	0.06	153,460	7,450	0.37	151,190	7,810	0.39	111,890	5,580	0.28
10/27/15 11:53	6,983	--	--	--	--	--	--	28,300	110	0.02	64,440	580	0.08	156,130	2,670	0.38	153,940	2,750	0.39	113,820	1,930	0.28
10/29/15 9:37	2,744	--	--	--	--	--	--	28,320	20	0.01	64,500	60	0.02	156,710	580	0.21	154,580	640	0.23	114,250	430	0.16
10/30/15 11:53	1,576	494,740	70	0.04	28,410	90	0.06	--	--	--	64,710	210	0.13	157,440	730	0.46	155,210	630	0.40	114,720	470	0.30
11/5/15 15:45	8,872	495,080	340	0.04	28,700	290	0.03	--	--	--	66,040	1,330	0.15	160,920	3,480	0.39	158,260	3,050	0.34	117,910	3,190	0.36
11/19/15 8:52	19,747	495,800	720	0.04	29,180	480	0.02	--	--	--	68,630	2,590	0.13	168,500	7,580	0.38	165,070	6,810	0.34	125,050	7,140	0.36
12/3/15 16:30	20,618	--	--	--	--	--	--	30,000	820	0.04	71,540	2,910	0.14	176,510	8,010	0.39	172,280	7,210	0.35	132,470	7,420	0.36
12/17/15 14:20	20,030	--	--	--	--	--	--	30,850	850	0.04	73,720	2,180	0.11	184,030	7,520	0.38	179,450	7,170	0.36	138,920	6,450	0.32
12/31/15 10:08	19,908	--	--	--	--	--	--	31,200	350	0.02	74,160	440	0.02	187,800	3,770	0.19	183,520	4,070	0.20	146,300	7,380	0.37
1/13/16 15:30	19,042	--	--	--	--	--	--	31,570	370	0.02	75,380	1,220	0.06	196,170	8,370	0.44	191,400	7,880	0.41	148,760	2,460	0.13
1/28/16 9:00	21,210	--	--	--	--	--	--	32,040	470	0.02	76,730	1,350	0.06	205,270	9,100	0.43	200,160	8,760	0.41	156,630	7,870	0.37
2/11/16 15:00	20,520	--	--	--	--	--	--	32,380	340	0.02	77,460	730	0.04	209,910	4,640	0.23	206,520	6,360	0.31	163,030	6,400	0.31
2/25/16 8:30	19,770	--	--	--	--	--	--	32,780	400	0.02	78,460	1,000	0.05	215,820	5,910	0.30	214,250	7,730	0.39	171,160	8,130	0.41
3/10/16 9:00	20,190	--	--	--	--	--	--	32,940	160	0.01	78,850	390	0.02	217,980	2,160	0.11	216,520	2,270	0.11	173,580	2,420	0.12
3/24/16 15:00	20,520	--	--	--	--	--	--	33,630	690	0.03	80,280	1,430	0.07	226,240	8,260	0.40	225,010	8,490	0.41	181,920	8,340	0.41
4/7/16 15:15	20,175	--	--	--	--	--	--	34,230	600	0.03	81,590	1,310	0.06	234,680	8,440	0.42	233,600	8,590	0.43	190,240	8,320	0.41
4/22/16 7:10	21,115	--	--	--	--	--	--	34,290	60	0.00	81,740	150	0.01	236,760	2,080	0.10	236,570	2,970	0.14	192,410	2,170	0.10
5/5/16 7:20	18,730	--	--	--	--	--	--	34,910	620	0.03	83,070	1,330	0.07	244,410	7,650	0.41	243,660	7,090	0.38	200,120	7,710	0.41
5/17/16 14:00	17,680	--	--	--	--	--	--	35,440	530	0.03	84,230	1,160	0.07	251,110	6,700	0.38	250,280	6,620	0.37	206,800	6,680	0.38
6/3/16 11:40	24,340	--	--	--	--	--	--	35,940	500	0.02	85,360	1,130	0.05	257,270	6,160	0.25	256,440	6,160	0.25	213,120	6,320	0.26
6/20/16 16:30	24,770	--	--	--	--	--	--	36,320	380	0.02	86,490	1,130	0.05	266,180	8,910	0.36	267,090	10,650	0.43	223,900	10,780	0.44
7/1/16 7:20	15,290	--	--	--	--	--	--	36,500	180	0.01	87,100	610	0.04	271,310	5,130	0.34	273,720	6,630	0.43	230,400	6,500	0.43
7/15/16 16:00	20,680	--	--	--	--	--	--	36,790	290	0.01	88,060	960	0.05	278,520	7,210	0.35	282,500	8,780	0.42	238,910	8,510	0.41
7/28/16 8:00	18,240	--	--	--	--	--	--	36,970	180	0.01	88,680	620	0.03	283,190	4,670	0.26	288,220	5,720	0.31	244,430	5,520	0.30
8/16/16 15:00	27,780	--	--	--	--	--	--	37,420	450	0.02	90,270	1,590	0.06	294,190	11,000	0.40	299,320	11,100	0.40	251,880	7,450	0.27
8/31/16 16:00	21,660	--	--	--	--	--	--	37,820	400	0.02	91,590	1,320	0.06	302,640	8,450	0.39	307,260	7,940	0.37	257,330	5,450	0.25
9/13/16 6:50	18,170	--	--	--	--	--	--	38,100	280	0.02	92,520	930	0.05	309,410	6,770	0.37	313,790	6,530	0.36	262,040	4,710	0.26
9/30/16 13:28	24,878	--	--	--	--	--	--	38,410	310	0.01	93,620	1,100	0.04	317,700	8,290	0.33	322,310	8,520	0.34	268,080	6,040	0.24

**TABLE 2 - REMEDIATION SYSTEM OPERATIONS & MAINTENANCE SUMMARY**  
**EXTRACTION WELLS**

Date/Time	Elapsed Time (min)	EW-20			EW-22			EW-21		
		Reading	Volume (gal)	Rate (gpm)	Reading	Volume (gal)	Rate (gpm)	Reading	Volume (gal)	Rate (gpm)
		--	--	--	--	--	--	--	--	--
11/21/14 14:00	0	0	--	--	0	--	--	0	--	--
11/22/14 8:00	1,080	420	420	0.39	250	250	0.23	200	200	0.19
11/23/14 8:50	1,490	1,750	1,330	0.89	930	680	0.46	670	470	0.32
11/24/14 7:30	1,360	2,750	1,000	0.74	1,450	520	0.38	1,280	610	0.45
12/2/14 12:30	11,820	--	--	--	--	--	--	--	--	--
12/4/14 9:00	2,670	13,130	10,380	3.89	2,210	760	0.28	7,710	6,430	2.41
12/10/14 10:50	8,750	16,720	3,590	0.41	4,320	2,110	0.24	10,380	2,670	0.31
12/18/14 16:12	11,842	21,310	4,590	0.39	7,540	3,220	0.27	14,470	4,090	0.35
1/2/15 11:12	21,300	32,170	10,860	0.51	13,900	6,360	0.30	22,220	7,750	0.36
1/6/15 13:07	5,875	35,590	3,420	0.58	15,660	1,760	0.30	24,450	2,230	0.38
1/16/15 9:50	14,203	43,480	7,890	0.56	20,010	4,350	0.31	29,670	5,220	0.37
1/30/15 17:15	20,605	53,090	9,610	0.47	24,740	4,730	0.23	36,330	6,660	0.32
2/6/15 15:00	9,945	58,110	5,020	0.50	27,160	2,420	0.24	39,520	3,190	0.32
2/12/15 7:00	8,160	62,180	4,070	0.50	29,170	2,010	0.25	42,270	2,750	0.34
2/19/15 11:16	10,336	67,480	5,300	0.51	31,830	2,660	0.26	45,750	3,480	0.34
2/27/15 9:55	11,439	73,460	5,980	0.52	34,990	3,160	0.28	49,200	3,450	0.30
3/5/15 15:35	8,980	78,160	4,700	0.52	37,610	2,620	0.29	51,870	2,670	0.30
3/13/15 12:00	11,305	84,030	5,870	0.52	40,990	3,380	0.30	55,200	3,330	0.29
3/25/15 12:43	17,323	92,520	8,490	0.49	45,660	4,670	0.27	60,320	5,120	0.30
4/9/15 14:20	21,697	105,020	12,500	0.58	51,780	6,120	0.28	67,840	7,520	0.35
4/23/15 15:30	20,230	118,220	13,200	0.65	58,050	6,270	0.31	78,280	10,440	0.52
5/8/15 9:30	21,240	134,470	16,250	0.77	65,210	7,160	0.34	84,330	6,050	0.28
5/21/15 15:40	19,090	153,100	18,630	0.98	72,510	7,300	0.38	94,080	9,750	0.51
6/4/15 9:05	19,765	171,210	18,110	0.92	79,820	7,310	0.37	104,920	10,840	0.55
6/18/15 8:25	20,120	192,250	21,040	1.05	88,080	8,260	0.41	117,430	12,510	0.62
7/1/15 16:15	19,190	222,140	29,890	1.56	97,150	9,070	0.47	130,600	13,170	0.69
7/16/15 11:32	21,317	259,080	36,940	1.73	107,650	10,500	0.49	144,990	14,390	0.68
7/29/15 8:24	18,532	291,890	32,810	1.77	116,490	8,840	0.48	157,950	12,960	0.70
8/11/15 14:00	19,056	325,290	33,400	1.75	125,280	8,790	0.46	170,970	13,020	0.68
8/27/15 16:00	23,160	368,880	43,590	1.88	135,900	10,620	0.46	186,190	15,220	0.66
9/10/15 16:00	20,160	408,090	39,210	1.94	145,590	9,690	0.48	199,660	13,470	0.67
9/24/15 15:30	20,130	451,090	43,000	2.14	156,180	10,590	0.53	214,250	14,590	0.72
10/8/15 15:45	20,175	480,760	29,670	1.47	163,900	7,720	0.38	225,120	10,870	0.54
10/22/15 15:30	20,145	480,760	0	0.00	173,450	9,550	0.47	237,580	12,460	0.62
10/27/15 11:53	6,983	480,760	0	0.00	176,910	3,460	0.50	241,990	4,410	0.63
10/29/15 9:37	2,744	480,770	10	0.00	177,720	810	0.30	243,020	1,030	0.38
10/30/15 11:53	1,576	481,800	1,030	0.65	178,530	810	0.51	244,020	1,000	0.63
11/5/15 15:45	8,872	487,470	5,670	0.64	183,120	4,590	0.52	249,610	5,590	0.63
11/19/15 8:52	19,747	499,880	12,410	0.63	193,220	10,100	0.51	261,480	11,870	0.60
12/3/15 16:30	20,618	514,040	14,160	0.69	203,800	10,580	0.51	273,380	11,900	0.58
12/17/15 14:20	20,030	528,270	14,230	0.71	212,080	8,280	0.41	284,380	11,000	0.55

**TABLE 2 - REMEDIATION SYSTEM OPERATIONS & MAINTENANCE SUMMARY**

12/31/15 10:08	19,908	534,710	6,440	0.32	216,450	4,370	0.22	289,940	5,560	0.28
1/13/16 15:30	19,042	549,690	14,980	0.79	225,910	9,460	0.50	302,060	12,120	0.64
1/28/16 9:00	21,210	566,690	17,000	0.80	237,340	11,430	0.54	316,870	14,810	0.70
2/11/16 15:00	20,520	578,140	11,450	0.56	245,110	7,770	0.38	327,180	10,310	0.50
2/25/16 8:30	19,770	593,780	15,640	0.79	254,080	8,970	0.45	339,520	12,340	0.62
3/10/16 9:00	20,190	599,210	5,430	0.27	257,020	2,940	0.15	343,470	3,950	0.20
3/24/16 15:00	20,520	618,100	18,890	0.92	268,550	11,530	0.56	361,030	17,560	0.86
4/7/16 15:15	20,175	640,060	21,960	1.09	279,340	10,790	0.53	378,310	17,280	0.86
4/22/16 7:10	21,115	640,610	550	0.03	282,560	3,220	0.15	383,040	4,730	0.22
5/5/16 7:20	18,730	659,590	18,980	1.01	292,920	10,360	0.55	398,840	15,800	0.84
5/17/16 14:00	17,680	679,110	19,520	1.10	301,620	8,700	0.49	412,590	13,750	0.78
6/3/16 11:40	24,340	692,910	13,800	0.57	308,860	7,240	0.30	425,200	12,610	0.52
6/20/16 16:30	24,770	714,950	22,040	0.89	311,160	2,300	0.09	444,730	19,530	0.79
7/1/16 7:20	15,290	728,630	13,680	0.89	328,630	17,470	1.14	456,750	12,020	0.79
7/15/16 16:00	20,680	750,900	22,270	1.08	339,230	10,600	0.51	474,250	17,500	0.85
7/28/16 8:00	18,240	761,680	10,780	0.59	345,880	6,650	0.36	486,030	11,780	0.65
8/16/16 15:00	27,780	779,860	18,180	0.65	358,280	12,400	0.45	508,360	22,330	0.80
8/31/16 16:00	21,660	793,220	13,360	0.62	367,610	9,330	0.43	525,560	17,200	0.79
9/13/16 6:50	18,170	793,220	0.00	0.00	375,080	7,470	0.41	539,570	14,010	0.77
9/15/16 7:00	2,890	495,871	--	--	--	--	--	--	--	--
9/30/16 13:28	21,988	504,900	9,029	0.41	384,380	9,300	0.42	556,280	16,710	0.76

**Notes:**

Remediation system startup: NOV 21, 2014.

Product addition began: NOV 22, 2014 min

= minutes

gpm = gallons per minute

gal = gallons

CBN = Nutrients Added

A2 = bacterial consortium added

PS = Surfactant Added

**TABLE 3 - GROUNDWATER ELEVATION DATA**

Monitoring Well ID	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
MW-2R	11/14/12	28.56	NM	NM	NM	ND	NA	NA	Not Sampled and only gauged for LPH
MW-2R	04/17/13	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	06/25/14	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	12/04/14	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	12/31/14	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	01/22/15	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	02/19/15	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	6/11/15	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	08/11/15	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	11/10/15	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	02/02/16	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	05/16/16	28.56	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
MW-2R	08/16/16	28.56	NM	NM	NM	ND	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
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-4R	12/04/14	28.45	24.90	9.00	9.00	0.00	19.45	Decrease	-0.16
MW-4R	12/31/14	28.45	24.90	7.45	7.45	0.00	21.00	Rise	1.55
MW-4R	01/22/15	28.45	24.90	8.25	8.25	0.00	20.20	Decrease	-0.80
MW-4R	02/19/15	28.45	24.90	8.15	8.15	0.00	20.30	Rise	0.10
MW-4R	06/11/15	28.45	29.18	9.08	9.08	0.00	19.37	Decrease	-0.93
MW-4R	08/11/15	28.45	25.19	9.98	9.98	0.00	18.47	Decrease	-0.90
MW-4R	11/10/15	28.45	25.17	10.24	10.24	0.00	18.21	Decrease	-0.26
MW-4R	02/02/16	28.45	24.89	8.65	8.65	0.00	19.80	Rise	1.59
MW-4R	05/16/16	28.45	25.19	9.05	9.05	0.00	19.40	Decrease	-0.40
MW-4R	08/16/16	28.45	24.88	9.78	9.78	0.00	18.67	Decrease	-0.73
MW-5R	05/10/12	28.25	23.79	7.46	7.46	0.00	20.79	NA	NA
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-5R	12/04/14	28.25	23.50	7.40	7.40	0.00	20.85	Rise	1.17
MW-5R	12/31/14	28.25	23.50	6.20	6.20	0.00	22.05	Rise	1.20
MW-5R	01/22/15	28.25	23.50	7.05	7.05	0.00	21.20	Decrease	-0.85
MW-5R	02/19/15	28.25	23.50	7.10	7.10	0.00	21.15	Decrease	-0.05
MW-5R	06/11/15	28.25	23.79	7.84	7.84	0.00	20.42	Decrease	-0.73
MW-5R	08/11/15	28.25	24.79	8.11	8.11	0.00	20.14	Decrease	-0.27
MW-5R	11/10/15	28.25	23.78	8.58	8.58	0.00	19.67	Decrease	-0.47
MW-5R	02/02/16	28.25	23.50	6.62	6.62	0.00	21.63	Rise	1.96
MW-5R	05/16/16	28.25	23.81	7.19	7.19	0.00	21.06	Decrease	-0.57
MW-5R	08/16/16	28.25	23.49	8.28	8.28	0.00	19.97	Decrease	-1.09
									Black sticky material in purge water

**TABLE 3 - GROUNDWATER ELEVATION DATA**

Monitoring Well ID	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-6R	05/10/12	28.07	25.22	7.21	7.21	0.00	20.86	NA	NA
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-6R	12/04/14	28.07	24.90	7.40	7.40	0.00	20.67	Rise	1.09
MW-6R	12/31/14	28.07	24.90	6.00	6.00	0.00	22.07	Rise	1.40
MW-6R	01/22/15	28.07	24.90	7.00	7.00	0.00	21.07	Decrease	-1.00
MW-6R	02/19/15	28.07	24.90	7.05	7.05	0.00	21.02	Decrease	-0.05
MW-6R	06/11/15	28.07	25.18	7.78	7.78	0.00	20.29	Decrease	-0.73
MW-6R	08/11/15	28.07	25.18	8.20	8.20	0.00	19.87	Decrease	-0.42
MW-6R	11/10/15	28.07	25.13	8.74	8.74	0.00	19.33	Decrease	-0.54
MW-6R	02/02/16	28.07	24.94	6.05	6.05	0.00	22.02	Rise	2.69
MW-6R	05/16/16	28.07	25.23	6.93	6.93	0.00	21.14	Decrease	-0.88
MW-6R	08/16/16	28.07	24.89	8.13	8.13	0.00	19.94	Decrease	-1.20
MW-7R	05/10/12	28.41	25.33	7.63	7.63	0.00	20.78	NA	NA
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-7R	12/04/14	28.41	24.95	7.65	7.65	0.00	20.76	Rise	1.14
MW-7R	12/31/14	28.41	24.95	6.15	6.15	0.00	22.26	Rise	1.50
MW-7R	01/22/15	28.41	24.95	7.05	7.05	0.00	21.36	Decrease	-0.90
MW-7R	02/19/15	28.41	24.95	7.10	7.10	0.00	21.31	Decrease	-0.05
MW-7R	06/11/15	28.41	25.28	7.84	7.84	0.00	20.57	Decrease	-0.74
MW-7R	08/11/15	28.41	25.29	8.25	8.25	0.00	20.16	Decrease	-0.41
MW-7R	11/10/15	28.41	25.22	9.77	9.77	0.00	18.64	Decrease	-1.52
MW-7R	02/02/16	28.41	24.96	6.27	6.27	0.00	22.14	Rise	3.50
MW-7R	05/16/16	28.41	25.23	7.04	7.04	0.00	21.37	Decrease	-0.77
MW-7R	08/16/16	28.41	24.92	8.27	8.27	0.00	20.14	Decrease	-1.23
MW-8	05/10/12	28.01	14.16	7.74	7.74	0.00	20.27	NA	NA
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-8	12/05/14	28.01	13.85	7.45	7.45	0.00	20.56	Rise	0.80
MW-8	12/31/14	28.01	14.00	7.55	7.55	0.00	20.46	Decrease	-0.10
MW-8	01/22/15	28.01	14.00	7.90	7.90	0.00	20.11	Decrease	-0.35
MW-8	02/19/15	28.01	14.00	7.85	7.85	0.00	20.16	Rise	0.05
MW-8	06/11/15	28.01	14.26	8.34	8.34	0.00	19.67	Decrease	-0.49
MW-8	08/11/15	28.01	14.24	8.69	8.69	0.00	19.32	Decrease	-0.35
MW-8	11/10/15	28.01	14.19	9.02	9.02	0.00	18.99	Decrease	-0.33
MW-8	02/02/16	28.01	13.89	7.78	7.78	0.00	20.23	Rise	1.24
MW-8	05/16/16	28.01	14.14	8.11	8.11	0.00	19.90	Decrease	-0.33
MW-8	08/16/16	28.01	13.84	8.56	8.56	0.00	19.45	Decrease	-0.45
									Turbidity reading flashed 1,000; grey, cloudy gw

**TABLE 3 - GROUNDWATER ELEVATION DATA**

Monitoring Well ID	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-9	05/10/12	27.23	15.09	6.25	6.25	0.00	20.98	NA	NA
MW-9	11/14/12	27.23	NM	NM	NM	NM	NA	NA	Not gauged nor sampled
MW-9	04/17/13	27.23	NM	NM	NM	NM	NA	NA	Not gauged nor sampled
MW-9	06/26/14	27.23	14.82	7.78	7.78	0.00	19.45	NA	NA
MW-9	12/05/14	27.23	14.84	7.10	7.10	0.00	20.13	Rise	0.68
MW-9	12/31/14	27.23	14.8	5.80	5.80	0.00	21.43	Rise	1.30
MW-9	01/22/15	27.23	14.8	6.45	6.45	0.00	20.78	Decrease	-0.65
MW-9	02/19/15	27.23	14.75	6.55	6.55	0.00	20.68	Decrease	-0.10
MW-9	06/11/15	27.23	15.06	7.59	7.59	0.00	19.64	Decrease	-1.04
MW-9	08/10/15	27.23	15.03	8.21	8.21	0.00	19.02	Decrease	-0.62
MW-9	11/10/15	27.23	15.03	8.76	8.76	0.00	18.47	Decrease	-0.55
MW-9	02/02/16	27.23	14.66	6.05	6.05	0.00	21.18	Rise	2.71
MW-9	05/16/16	27.23	14.91	6.95	6.95	0.00	20.28	Decrease	-0.90
MW-9	08/16/16	27.23	14.59	8.14	8.14	0.00	19.09	Decrease	-1.19
MW-10	05/10/12	27.45	13.12	6.49	6.49	0.00	20.96	NA	NA
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-10	12/05/14	27.45	12.81	6.89	6.89	0.00	20.56	Rise	0.97
MW-10	12/31/14	27.45	12.95	5.80	5.80	0.00	21.65	Rise	1.09
MW-10	01/22/15	27.45	12.95	6.60	6.60	0.00	20.85	Decrease	-0.80
MW-10	02/19/15	27.45	12.95	6.75	6.75	0.00	20.70	Decrease	-0.15
MW-10	06/11/15	27.45	13.19	7.62	7.62	0.00	19.83	Decrease	-0.87
MW-10	08/10/15	27.45	13.16	8.19	8.19	0.00	19.26	Decrease	-0.57
MW-10	11/10/15	27.45	13.15	8.73	8.73	0.00	18.72	Decrease	-0.54
MW-10	02/02/16	27.45	12.81	6.22	6.22	0.00	21.23	Rise	2.51
MW-10	05/16/16	27.45	13.09	7.05	7.05	0.00	20.40	Decrease	-0.83
MW-10	08/16/16	27.45	12.81	8.09	8.09	0.00	19.36	Decrease	-1.04
MW-11R	05/10/12	28.92	23.87	8.02	8.02	0.00	20.90	NA	NA
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-11R	12/04/14	28.92	23.65	8.90	8.90	0.00	20.02	Rise	0.40
MW-11R	12/31/14	28.92	23.65	8.15	8.15	0.00	20.77	Rise	0.75
MW-11R	01/23/15	28.92	23.65	8.40	8.40	0.00	20.52	Decrease	-0.25
MW-11R	02/20/15	28.92	23.65	8.60	8.60	0.00	20.32	Decrease	-0.20
MW-11R	06/12/15	28.92	23.89	10.06	10.06	0.00	18.86	Decrease	-1.46
MW-11R	08/10/15	28.92	23.91	10.92	10.92	0.00	18.00	Decrease	-0.86
MW-11R	11/11/15	28.92	23.87	11.20	11.20	0.00	17.72	Decrease	-0.28
MW-11R	02/03/16	28.92	23.61	7.95	7.95	0.00	20.97	Rise	3.25
MW-11R	05/16/16	28.92	23.94	9.67	9.67	0.00	19.25	Decrease	-1.72
MW-11R	08/16/16	28.92	23.62	10.58	10.58	0.00	18.34	Decrease	-0.91
Murky purge water									

**TABLE 3 - GROUNDWATER ELEVATION DATA**

Monitoring Well ID	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-12	05/10/12	28.73	24.37	7.96	7.96	0.00	20.77	NA	NA
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-12	12/04/14	28.73	24.35	9.95	9.95	0.00	18.78	Decrease	-1.09
MW-12	12/31/14	28.73	24.35	8.20	8.20	0.00	20.53	Rise	1.75
MW-12	01/23/15	28.73	24.35	8.80	8.80	0.00	19.93	Decrease	-0.60
MW-12	02/16/15	28.73	24.35	9.50	9.50	0.00	19.23	Decrease	-0.70
MW-12	06/12/15	28.73	24.56	10.03	10.03	0.00	18.70	Decrease	-0.53
MW-12	08/10/15	28.73	24.59	10.82	10.82	0.00	17.91	Decrease	-0.79
MW-12	11/11/15	28.73	24.58	11.12	11.12	0.00	17.61	Decrease	-0.30
MW-12	02/03/16	28.73	24.31	8.14	8.14	0.00	20.59	Rise	2.98
MW-12	05/16/16	28.73	24.59	9.51	9.51	0.00	19.22	Decrease	-1.37
MW-12	08/17/16	28.73	24.29	10.58	10.58	0.00	18.15	Decrease	-1.07
MW-13	05/10/12	29.21	20.02	8.57	8.57	0.00	20.64	NA	NA
MW-13	11/14/12	29.21	NM	NM	NM	NA	NA	NA	Not gauged nor sampled
MW-13	04/17/13	29.21	NM	NM	NM	NA	NA	NA	Not gauged nor sampled
MW-13	06/26/14	29.21	20.02	9.87	9.87	0.00	19.34	NA	NA
MW-13	12/04/14	29.21	20.00	9.25	9.25	0.00	19.96	Rise	0.62
MW-13	12/31/14	29.21	NM	NM	NM	NA	NA	NA	Property closed, couldn't access well.
MW-13	01/23/15	29.21	20.00	11.20	11.20	0.00	18.01	Decrease	-1.95
MW-13	02/20/15	29.21	20.00	11.55	11.55	0.00	17.66	Decrease	-0.35
MW-13	06/12/15	29.21	20.28	9.39	9.39	0.00	19.82	Rise	2.16
MW-13	08/10/15	29.21	20.32	9.87	9.87	0.00	19.34	Decrease	-0.48
MW-13	11/11/15	29.21	20.32	10.26	10.26	0.00	18.95	Decrease	-0.39
MW-13	02/03/16	29.21	20.02	9.29	9.29	0.00	19.92	Rise	0.97
MW-13	05/16/16	29.21	20.32	9.04	9.04	0.00	20.17	Rise	0.25
MW-13	08/17/16	29.21	19.98	11.71	11.71	0.00	17.50	Decrease	-2.67
MW-14	05/10/12	29.02	11.62	8.28	8.28	0.00	20.74	NA	NA
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-14	12/04/14	29.02	11.40	8.30	8.30	0.00	20.72	Rise	1.04
MW-14	12/31/14	29.02	NM	NM	NM	NA	NA	NA	Property closed, couldn't access well.
MW-14	01/23/15	29.02	11.50	8.25	8.25	0.00	20.77	Rise	0.05
MW-14	02/20/15	29.02	11.40	8.30	8.30	0.00	20.72	Decrease	-0.05
MW-14	06/12/15	29.02	10.67	9.18	9.18	0.00	19.84	Decrease	-0.88
MW-14	08/10/15	29.02	11.66	9.65	9.65	0.00	19.37	Decrease	-0.47
MW-14	11/11/15	29.02	11.68	10.07	10.07	0.00	18.95	Decrease	-0.42
MW-14	02/03/16	29.02	11.37	7.98	7.98	0.00	21.04	Rise	2.09
MW-14	05/16/16	29.02	11.68	8.61	8.61	0.00	20.41	Decrease	-0.63
MW-14	08/17/16	29.02	11.36	9.62	9.62	0.00	19.40	Decrease	-1.01
									Hydrocarbon odor

**TABLE 3 - GROUNDWATER ELEVATION DATA**

Monitoring Well ID	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-15	05/10/12	28.53	29.70	7.90	7.90	0.00	20.63	NA	NA
MW-15	11/14/12	28.53	NM	NM	NM		NA	NA	Not gauged nor sampled
MW-15	04/17/13	28.53	NM	NM	NM		NA	NA	Not gauged nor sampled
MW-15	06/26/14	28.53	29.39	9.85	9.85	0.00	18.68	NA	NA
MW-15	12/05/14	28.53	29.57	9.39	9.39	0.00	19.14	Rise	0.46
MW-15	12/31/14	28.53	29.4	7.95	7.95	0.00	20.58	Rise	1.44
MW-15	01/23/15	28.53	29.4	8.85	8.85	0.00	19.68	Decrease	-0.90
MW-15	02/20/15	28.53	29.4	9.05	9.05	0.00	19.48	Decrease	-0.20
MW-15	06/12/15	28.53	29.64	9.85	9.85	0.00	18.68	Decrease	-0.80
MW-15	08/10/15	28.53	29.69	10.38	10.38	0.00	18.15	Decrease	-0.53
MW-15	11/11/15	28.53	29.68	11.38	11.38	0.00	17.15	Decrease	-1.00
MW-15	02/03/16	28.53	29.36	8.04	8.04	0.00	20.49	Rise	3.34
MW-15	05/16/16	28.53	29.62	9.31	9.31	0.00	19.22	Decrease	-1.27
MW-15	08/17/16	28.53	29.32	10.98	10.98	0.00	17.55	Decrease	-1.67
MW-16	05/10/12	28.52	29.38	7.86	7.86	0.00	20.66	NA	NA
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
MW-16	12/05/14	28.52	29.4	8.20	8.20	0.00	20.32	Rise	0.84
MW-16	12/31/14	28.52	29.4	7.65	7.65	0.00	20.87	Rise	0.55
MW-16	01/23/15	28.52	29.4	8.45	8.45	0.00	20.07	Decrease	-0.80
MW-16	02/20/15	28.52	29.4	8.50	8.50	0.00	20.02	Decrease	-0.05
MW-16	06/12/15	28.52	29.67	9.33	9.33	0.00	19.19	Decrease	-0.83
MW-16	08/10/15	28.52	26.5	9.88	9.88	0.00	18.64	Decrease	-0.55
MW-16	11/11/15	28.52	29.63	10.34	10.34	0.00	18.18	Decrease	-0.46
MW-16	02/03/16	28.52	29.36	7.91	7.91	0.00	20.61	Rise	2.43
MW-16	05/16/16	28.52	29.61	8.91	8.91	0.00	19.61	Decrease	-1.00
MW-16	08/17/16	28.52	29.35	9.81	9.81	0.00	18.71	Decrease	-0.90
EW-14	05/10/12	28.89	24.80	8.15	8.15	0.00	20.74	NA	NA
EW-14	11/14/12	28.89	NM	NM	ND		NA	NA	Not Sampled and only gauged for LPH
EW-14	04/17/13	28.89	NM	NM	ND		NA	NA	Not gauged nor sampled
EW-14	06/25/14	28.89	24.41	9.24	9.24	0.00	19.65	NA	NA
EW-14	12/05/14	28.89	NM	NM	ND		NA	NA	Converted to an injection well
EW-14	12/31/14	28.89	NM	NM	ND		NA	NA	
EW-14	01/23/15	28.89	NM	NM	ND		NA	NA	
EW-14	02/20/15	28.89	NM	NM	ND		NA	NA	
EW-14	06/11/15	28.89	NM	NM	ND		NA	NA	
EW-14	08/10/15	28.89	NM	NM	ND		NA	NA	
EW-14	11/11/15	28.89	NM	NM	ND		NA	NA	
EW-14	02/03/16	28.89	NM	NM	ND		NA	NA	
EW-14	05/16/16	28.89	NM	NM	ND		NA	NA	Not gauged nor sampled

**TABLE 3 - GROUNDWATER ELEVATION DATA**

Monitoring Well ID	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
EW-15	05/10/12	28.66	24.50	8.06	8.06	0.00	20.60	NA	NA
EW-15	11/14/12	28.66	NM	NM	NM	ND	NA	NA	Not Sampled and only gauged for LPH
EW-15	04/17/13	28.66	NM	NM	NM	ND	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-15	12/05/14	28.66	NM	NM	NM	ND	NA	NA	Converted to an injection well
EW-15	12/31/14	28.66	NM	NM	NM	ND	NA	NA	
EW-15	01/23/15	28.66	NM	NM	NM	ND	NA	NA	
EW-15	02/20/15	28.66	NM	NM	NM	ND	NA	NA	
EW-15	06/11/15	28.66	NM	NM	NM	ND	NA	NA	
EW-15	08/10/15	28.66	NM	NM	NM	ND	NA	NA	
EW-15	11/11/15	28.66	NM	NM	NM	ND	NA	NA	
EW-15	02/03/16	28.66	NM	NM	NM	ND	NA	NA	
EW-15	05/16/16	28.66	NM	NM	NM	ND	NA	NA	
EW-16	05/10/12	28.99	24.80	8.37	8.37	0.00	20.62	NA	NA
EW-16	11/14/12	28.99	NM	NM	NM	ND	NA	NA	Not Sampled and only gauged for LPH
EW-16	04/17/13	28.99	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
EW-16	06/26/14	28.99	22.74	9.29	9.29	0.00	19.70	NA	NA
EW-16	12/05/14	28.99	NM	NM	NM	ND	NA	NA	Converted to an injection well
EW-16	12/31/14	28.99	NM	NM	NM	ND	NA	NA	
EW-16	01/23/15	28.99	NM	NM	NM	ND	NA	NA	
EW-16	02/20/15	28.99	NM	NM	NM	ND	NA	NA	
EW-16	06/11/15	28.99	NM	NM	NM	ND	NA	NA	
EW-16	08/10/15	28.99	NM	NM	NM	ND	NA	NA	
EW-16	11/11/15	28.99	NM	NM	NM	ND	NA	NA	
EW-16	02/03/16	28.99	NM	NM	NM	ND	NA	NA	
EW-16	05/16/16	28.99	NM	NM	NM	ND	NA	NA	
EW-17	05/10/12	28.89	25.29	8.19	8.19	0.00	20.70	NA	NA
EW-17	11/14/12	28.89	NM	NM	NM	ND	NA	NA	Not Sampled and only gauged for LPH
EW-17	04/17/13	28.89	NM	NM	NM	ND	NA	NA	Not gauged nor sampled
EW-17	06/25/14	28.89	24.12	9.27	9.27	0.00	19.62	NA	NA
EW-17	12/05/14	28.89	NM	NM	NM	ND	NA	NA	Converted to an injection well
EW-17	12/31/14	28.89	NM	NM	NM	ND	NA	NA	
EW-17	01/23/15	28.89	NM	NM	NM	ND	NA	NA	
EW-17	02/20/15	28.89	NM	NM	NM	ND	NA	NA	
EW-17	06/11/15	28.89	NM	NM	NM	ND	NA	NA	
EW-17	08/10/15	28.89	NM	NM	NM	ND	NA	NA	
EW-17	11/11/15	28.89	NM	NM	NM	ND	NA	NA	
EW-17	02/03/16	28.89	NM	NM	NM	ND	NA	NA	
EW-17	05/16/16	28.89	NM	NM	NM	ND	NA	NA	

**TABLE 3 - GROUNDWATER ELEVATION DATA**

Monitoring Well ID	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
EW-18	06/25/14	28.47	14.74	8.91	8.91	0.00	19.56	NA	NA
EW-18	12/05/14	28.47	NM	NM	NM	ND	NA	NA	NA
EW-18	12/31/14	28.47	NM	NM	NM	ND	NA	NA	NA
EW-18	01/23/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-18	02/20/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-18	06/11/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-18	08/10/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-18	11/11/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-18	02/03/16	28.47	NM	NM	NM	ND	NA	NA	NA
EW-18	05/16/16	28.47	NM	NM	NM	ND	NA	NA	NA
EW-19	06/25/14	28.34	14.56	8.74	8.74	0.00	19.60	NA	NA
EW-19	12/05/14	28.34	NM	NM	NM	ND	NA	NA	NA
EW-19	12/31/14	28.34	NM	NM	NM	ND	NA	NA	NA
EW-19	01/23/15	28.34	NM	NM	NM	ND	NA	NA	NA
EW-19	02/20/15	28.34	NM	NM	NM	ND	NA	NA	NA
EW-19	06/11/15	28.34	NM	NM	NM	ND	NA	NA	NA
EW-19	08/10/15	28.34	NM	NM	NM	ND	NA	NA	NA
EW-19	11/11/15	28.34	NM	NM	NM	ND	NA	NA	NA
EW-19	02/03/16	28.34	NM	NM	NM	ND	NA	NA	NA
EW-19	05/16/16	28.34	NM	NM	NM	ND	NA	NA	NA
EW-20	06/25/14	28.52	24.2	8.90	8.90	0.00	19.62	NA	NA
EW-20	12/05/14	28.52	NM	NM	NM	ND	NA	NA	NA
EW-20	12/31/14	28.52	NM	NM	NM	ND	NA	NA	NA
EW-20	01/23/15	28.52	NM	NM	NM	ND	NA	NA	NA
EW-20	02/20/15	28.52	NM	NM	NM	ND	NA	NA	NA
EW-20	06/11/15	28.52	NM	NM	NM	ND	NA	NA	NA
EW-20	08/10/15	28.52	NM	NM	NM	ND	NA	NA	NA
EW-20	11/11/15	28.52	NM	NM	NM	ND	NA	NA	NA
EW-20	02/03/16	28.52	NM	NM	NM	ND	NA	NA	NA
EW-20	05/16/16	28.52	NM	NM	NM	ND	NA	NA	NA
EW-21	06/26/14	29.09	24.54	9.75	9.75	0.00	19.34	NA	NA
EW-21	12/05/14	29.09	NM	NM	NM	ND	NA	NA	NA
EW-21	12/31/14	29.09	NM	NM	NM	ND	NA	NA	NA
EW-21	01/23/15	29.09	NM	NM	NM	ND	NA	NA	NA
EW-21	02/20/15	29.09	NM	NM	NM	ND	NA	NA	NA
EW-21	06/11/15	29.09	NM	NM	NM	ND	NA	NA	NA
EW-21	08/10/15	29.09	NM	NM	NM	ND	NA	NA	NA
EW-21	11/11/15	29.09	NM	NM	NM	ND	NA	NA	NA
EW-21	02/03/16	29.09	NM	NM	NM	ND	NA	NA	NA

**TABLE 3 - GROUNDWATER ELEVATION DATA**

Monitoring Well ID	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
EW-21	05/16/16	29.09	NM	NM	NM	ND	NA	NA	NA
EW-22	06/26/14	28.47	23.86	8.91	8.91	0.00	19.56	NA	NA
EW-22	12/05/14	28.47	NM	NM	NM	ND	NA	NA	NA
EW-22	12/31/14	28.47	NM	NM	NM	ND	NA	NA	Converted to an extraction well
EW-22	01/23/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-22	02/20/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-22	06/11/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-22	08/10/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-22	11/11/15	28.47	NM	NM	NM	ND	NA	NA	NA
EW-22	02/03/16	28.47	NM	NM	NM	ND	NA	NA	NA
EW-22	05/16/16	28.47	NM	NM	NM	ND	NA	NA	NA
	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 WSW/ 0.012 NE	20.46	0.68					
	06/26/14	Varies	19.56	-0.90					
	12/05/14	Varies	20.15	0.59					
	12/31/14	Varies	21.24	1.10					
	01/23/15	Varies	20.35	-0.89					
	02/20/15	Varies	20.21	-0.14					
	06/12/15	Varies	19.61	-0.61					
	08/10/15	Varies	19.05	-0.56					
	11/11/15	Varies	18.51	-0.54					
	2/3/2016	Varies	20.91	2.40					
	5/16/2016	Varies	20.11	-0.80					
	8/16/2016	Varies	18.94	-1.17					

**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 <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	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	<25	380	<25	<25	<25	<25	1,100	310	30	<25	<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-2R	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2R	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2R	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2R	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2R	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2R	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2R	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2R	2/2/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2R	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2R	8/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4R	5/10/2012	3,300	3.3	17	180	824	<10	89	<0.50	<0.50	<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	<0.50	
MW-4R	11/14/2012	420	51	0.66	0.66	2.54	<10	68	<0.50	<0.50	<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	<0.50	
MW-4R	4/17/2013	2,000	190	140	46	155	<10	62	<0.50	1.0	<0.50	<0.50	28	7.4	<0.50	<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	<0.50
MW-4R	6/25/2014	740	55	0.37 <sup>j</sup>	1.7	0.59J	<10	46	<0.50	<0.50	<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	<0.50	
MW-4R	12/4/2014	2,000	160	1.3	4.7	12	<10	150	<0.50	<0.50	<0.50	<0.50	4.2	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	--	<0.50	70	18	140	11	<0.50	<0.50	<0.50	<0.50
MW-4R	12/31/2014	1,200	13	21	3.1	340	<50	57	<2.5	<2.5	<2.5	<2.5	130	20	<5.0	<2.5	<5.0	<2.5	<5.0	--	<5.0	12	5.8	5.5	<5.0	<2.5	<5.0	<2.5	<2.5
MW-4R	1/22/2015	1,800	140	87	15	720	<50	96	<2.5	<2.5	<2.5	<2.5	180	11	<5.0	<2.5	<5.0	<2.5	<5.0	--	<5.0	12	<5.0	8	<5.0	<2.5	<5.0	<2.5	<2.5
MW-4R	2/19/2015	4,000	880	130	23	1,300	<50	240	<2.5	<2.5	<2.5	<2.5	270	21	<5.0	<2.5	<5.0	<2.5	<5.0	--	<5.0	27	8.6	16	6	<2.5	<5.0	<2.5	<2.5
MW-4R	6/11/2015	1,600	590	24	6.8	340	<50	280	<2.5	<2.5	<2.5	<2.5	65	6.3	<5.0	<2.5	<5.0	<2.5	<5.0	--	<5.0	70	6.0	<5.0	10	<2.5	<5.0	<2.5	<2.5
MW-4R	8/11/2015	1,200	360	<5.0	<5.0	130	<50	200	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<5.0	<2.5	<5.0	<2.5	<5.0	--	<5.0	62	<5.0	<5.0	<5.0	<2.5	<5.0	<2.5	<2.5
MW-4R	11/10/2015	7,900	1,600	1,900	430	1,300	<100	270	<5.0	<5.0	<5.0	<5.0	360	77	<10	<5.0	<10	<5.0	<10	--	<10	73	20	69	13	<5.0	<10	<5.0	<10
MW-4R	2/2/2016	5,000	720	710	200	1,000	<200	160	<10	<10	<10	<10	210	42	<20	<10	<20	<10	<20	--	<20	32	<20	26	<20	<10	<20	<10	<10
MW-4R	5/16/2016	10,000	1,500	2,500	530	2,500	<200	230	<10	<10	<10	<10	290	63	<20	<10	<20	<10	<20	--	<20	56	<20	47	<20	<10	<20	<10	<10
MW-4R	8/16/2016	18,000	1,900	3,800	980	4,500	<200	230	<10	<10	<10	<10	600	120	<20	<10	<20	<10	<20	--	<20	68	<20	99	<20	<10	<20	<10	<10
MW-5R	5/10/2012	33,000	150	2,700	2,500	11,100	<500	680	<25	<25	<25	<25	2,400	620	52	<25	<25	<25	<25	<25	210	99	630	46	<25	<25	<25	<25	
MW-5R	11/14/2012	32,000	130	2,400	2,900	15,200	<100	620	<5.0	<5.0	<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	<5.0	
MW-5R	4/17/2013	35,000	240	2,400	2,000	9,500	<100	400	<5.0	<5.0	<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	<5.0	
MW-5R	6/25/2014	32,000	210	970	1,700	7,900	<100	470	<5.0	<5.0	<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	<5.0	
MW-5R	12/4/2014	32,000	1,400	3,700	2,100	9,500	<1,000	720	<50	<50	<50	<50	1,700	410	<100	<50	<100	<50	<100	<100	170	<100	470	<100	<50	<100	<50	<50	
MW-5R	12/31/2014	47,000	1,000	5,900	2,100	14,000	<1,000	890	<50	<50	<50	<50	2,900	620	<100	<50	<100	<50	<100	<100	160	<100	380	<100	<50	<100	<50	<50	
MW-5R	1/22/2015	45,000	1,200	8,900	2,300	15,000	<1,000	870	<50	<50	<50	<50	2,500	510	<100	<50	<100	<50	<100	<100	160	<100	340	<100	<50	<100	<50	<50	
MW-5R	2/19/2015	50,000	1,600	11,000	2,600	17,000	<1,000	760	<50	<50	<50	<50	2,600	520	<100	<50	<100	<50	<100	<100	150	<100	300	<100	<50	<100	<50	<50	
MW-5R	6/11/2015	51,000	1,800	7,600	4,200	23,000	<1,000	1,000	<50	<50	<50	<50	3,200	760	<100	<50	<100	<50	<100	<100	220	<100	450	<100	<50	<100	<50	<50	
MW-5R	8/11/2015	39,000	1,200	4,100	2,900	17,000	<1,000	590	<50	<50	<50	<50	1,800	390	<100	<50	<100	<50	<100	<100	100	<100	210	<100	<50	<100	<50	<50	
MW-5R	11/10/2015	48,000	1,800	7,700	3,800	24,000	<1,000	700	<50	<50	<50	<50	2,200	470	<100	<50	<100	<50	<100	<100	110	<100	270	<100	<50	<100	<50	<50	

**TABLE 4 - SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**TPHg and VOCs**

Monitoring Well/Sample ID	Sample Date	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene		
Analytical Results (ug/L)																														
MW-5R	2/2/2016	58,000	1,100	9,300	2,700	18,000	<1,000	640	<50	<50	<50	<50	2,300	510	<100	<50	<100	<50	--	<100	92	<100	230	<100	<50	<100	<50			
MW-5R	5/16/2016	30,000	2,000	7,800	1,300	8,900	<1,000	640	<50	<50	<50	<50	820	190	<100	<50	<100	<50	--	<100	85	<100	110	<100	<50	<100	<50			
MW-5R	8/16/2016	62,000	2,400	14,000	3,800	20,000	<1,000	690	<50	<50	<50	<50	2,300	520	<100	<50	<100	<50	--	<100	120	<100	300	<100	<50	<100	<50			
MW-6R	5/10/2012	3,600	8.6	52	120	680	<10	79	<0.50	<0.50	<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	<0.50		
MW-6R	11/14/2012	900	2.4	7.1	83	131	<10	30	<0.50	<0.50	<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	<0.50		
MW-6R	4/17/2013	1,800	220	21	64	157	<10	29	<0.50	<0.50	<0.50	<0.50	60	14	<0.50	<0.50	<0.50	<0.50	<0.50	24	2.1	27	7.6	<0.50	<0.50	<0.50	<0.50			
MW-6R	6/25/2014	1,700	4.3	9.4	55	181	<10	49	<0.50	<0.50	<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	<0.50		
MW-6R	12/4/2014	3,700	73	38	79	810	<10	160	<0.50	<0.50	<0.50	<0.50	210	74	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	19	--	<1.0	66	16	140	10	<0.50	<1.0	<0.50
MW-6R	12/31/2014	1,800	5.0	22	9.0	250	<50	240	<2.5	<2.5	<2.5	<2.5	90	21	<5.0	<2.5	<5.0	<2.5	<5.0	66	14	42	11	<2.5	<5.0	<2.5	<2.5			
MW-6R	1/22/2015	2,000	110	27	9.7	390	<50	260	<2.5	<2.5	<2.5	<2.5	140	30	<5.0	<2.5	<5.0	<2.5	<5.0	59	13	9.2	13	<2.5	<5.0	<2.5	<2.5			
MW-6R	2/19/2015	2,700	54	53	18	730	<50	230	<2.5	<2.5	<2.5	<2.5	260	55	<5.0	<2.5	<5.0	<2.5	<5.0	47	13	11	12	<2.5	<5.0	<2.5	<2.5			
MW-6R	6/11/2015	1,600	12	46	32	620	<50	120	<2.5	<2.5	<2.5	<2.5	170	29	<5.0	<2.5	<5.0	<2.5	<5.0	30	9.4	17	8.7	<2.5	<5.0	<2.5	<2.5			
MW-6R	8/11/2015	1,700	22	91	60	580	<50	69	<2.5	<2.5	<2.5	<2.5	110	13	<5.0	<2.5	<5.0	<2.5	<5.0	18	<5.0	8.9	<5.0	<2.5	<5.0	<2.5	<2.5			
MW-6R	11/10/2015	1,400	23	140	61	520	<50	100	<2.5	<2.5	<2.5	<2.5	96	5.6	<5.0	<2.5	<5.0	<2.5	<5.0	19	6.2	9.1	6.1	<2.5	<5.0	<2.5	<2.5			
MW-6R	2/2/2016	560	8.7	81	20	160	<50	6.3	<2.5	<2.5	<2.5	<2.5	21	<2.5	<5.0	<2.5	<5.0	<2.5	<5.0	<2.5	<5.0	<5.0	<2.5	<5.0	<2.5	<2.5				
MW-6R	5/16/2016	600	20	99	21	150	<10	18	<0.50	<0.50	<0.50	<0.50	21	2.4	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	3.5	1.6	2.4	1.3	<0.50	<1.0	<0.50		
MW-6R	8/16/2016	970	20	120	32	210	<10	39	<0.50	<0.50	<0.50	<0.50	26	3.1	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	22	5.8	6.2	7.6	<0.50	<1.0	<0.50		
MW-7R	5/10/2012	160,000	14,000	42,000	3,900	26,700	<1,000	660	<25	<25	<25	<25	3,300	960	49	<25	<25	<25	<25	<25	120	<25	370	26	<25	<25	<25	<25		
MW-7R	11/14/2012	84,000	15,000	26,000	3,700	19,300	<1,000	480	<100	<100	<100	<100	2,300	610	<100	<100	<100	<100	<100	120	48 J	370	<100	<100	<100	<100	<100			
MW-7R	4/17/2013	160,000	17,000	45,000	4,500	22,300	<1,000	350	<100	<100	<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	<1,000	630	<50	<50	<50	<50	2,200	560	180	<50	<50	<50	<50	<50	89	<50	270	<50	<50	<50	<50			
MW-7R	12/4/2014	110,000	15,000	36,000	4,000	21,000	<1,000	660	<50	<50	<50	<50	2,400	630	<100	<50	<100	<50	<100	110	<100	320	<100	<50	<100	<50	<50			
MW-7R	12/31/2014	110,000	11,000	38,000	3,800	22,000	<5,000	690	<250	<250	<250	<250	2,100	560	<500	<250	<500	<250	<500	--	<500	<250	<500	<500	<250	<500	<250			
MW-7R	1/22/2015	110,000	11,000	42,000	4,000	23,000	<5,000	720	<250	<250	<250	<250	2,100	520	<500	<250	<500	<250	<500	--	<500	<250	<500	<500	<250	<500	<250			
MW-7R	2/19/2015	92,000	7,000	33,000	3,400	20,000	<5,000	520	<250	<250	<250	<250	1,900	460	<500	<250	<500	<250	<500	--	<500	<250	<500	<500	<250	<500	<250			
MW-7R	6/11/2015	78,000	3,200	29,000	3,800	23,000	<5,000	730	<250	<250	<250	<250	2,100	560	<500	<250	<500	<250	<500	--	<500	<250	<500	<500	<250	<500	<250			
MW-7R	8/11/2015	69,000	1,600	20,000	3,200	22,000	<5,000	520	<250	<250	<250	<250	1,700	400	<500	<250	<500	<250	<500	--	<500	<250	<500	<500	<250	<500	<250			
MW-7R	11/10/2015	55,000	650	11,000	2,500	21,000	<5,000	710	<250	<250	<250	<250	2,100	530	<500	<250	<500	<250	<500	--	<500	<250	<500	<500	<250	<500	<250			
MW-7R	2/2/2016	55,000	1,200	14,000	1,700	14,000	<5,000	<500	<250	<250	<250	<250	1,200	<250	<500	<250	<500	<250	<500	--	<500	<250	<500	<500	<250	<500	<250			
MW-7R	5/16/2016	55,000	1,000	11,000	2,300	18,000	<2,000	700	<100	<100	<100	<100	2,100	550	<200	<100	<200	<100	<200	--	<200	110	<200	230	<200	<100	<200			
MW-7R	8/16/2016	46,000	320	4,900	1,700	17,000	<2,000	860	<100	<100	<100	<100	2,200	550	<200	<100	<200	<100	<200	--	<200	110	<200	230	<200	<100	<200			
MW-8	5/10/2012	2,700	15	20	5.3	34	<10	72	<1.0	<1.0	<1.0	<1.0	1,4	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	24	1.7	24	3.8	<1.0	<1.0	<1.0	<1.0		
MW-8	11/14/2012	790	14	3.0	0.98	5.83	<10	14	<0.50	<0.50	<0.50	<0.50	0.39 J	0.41 J	<0.50	<0.50	<0.50	<0.50	<0.50	13	0.80	13	2.2	<0.50	0.38 J	<0.50	<0.50			
MW-8	4/17/2013	1,100	6.8	6.4	5.6	16.8	<10	21	<0.50	<0.50	<0.50	<0.50	1.9	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	9.9	0.89	11	1.6	<0.50	0.25 J	<0.50	<0.50			
MW-8	6/25/2014	420	2.4	2.2	0.6	3.64J	<10	12	<0.50	<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	<0.50			
MW-8	12/5/2014	1,900	22	52	11	63	<10	46	<0.50	<0.50	<0.50	<0.50	6.30	2.4	<1.0	<0.50	<1.0	<0.50	<1.0	20	2.3	21	4.1	<0.50	<1.0	<0.50	<0.50			
MW-8	12/31/2014	960	9.8	5.9	2.0	12	<10	34	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--	<1.0	12	1.4	13	2.3	<				

**TABLE 4 - SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**

Monitoring Well/Sample ID	Sample Date	Analytical Results (ug/L)																											
		TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Acetate	Naphthalene	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2-Dichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene			
MW-8	2/19/2015	1,600	<b>7.2</b>	7.8	2.8	16	22	<b>50</b>	<0.50	<0.50	<0.50	<0.50	<0.50	0.76	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	15	1.6	16	2.6	<0.50	<1.0	<0.50	
MW-8	6/11/2015	1,400	<b>6.6</b>	9.8	2.9	17	<10	<b>39</b>	<0.50	<0.50	<0.50	<0.50	<0.50	0.81	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	17	1.7	16	3.1	<0.50	<1.0	<0.50	
MW-8	8/11/2015	1,600	<b>15</b>	15	3.7	23	18	<b>83</b>	<0.50	<0.50	<0.50	<0.50	<0.50	1.10	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	22	2.1	23	3.5	<0.50	<1.0	<0.50	
MW-8	11/10/2015	1,600	<b>20</b>	8.1	2.5	14	13	<b>44</b>	<0.50	<0.50	<0.50	<0.50	<0.50	0.78	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	20	1.9	20	3.4	<0.50	<1.0	<0.50	
MW-8	2/2/2016	2,200	<b>15</b>	12.0	3.7	20	<10	<b>74</b>	<0.50	<0.50	<0.50	<0.50	<0.50	0.73	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	18	1.7	19	3.0	<0.50	<1.0	<0.50	
MW-8	5/16/2016	1,300	<b>4.6</b>	6.2	2.8	13	<10	<b>39</b>	<0.50	<0.50	<0.50	<0.50	<0.50	0.67	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	14	1.3	14	2.4	<0.50	<1.0	<0.50	
MW-8	8/16/2016	1,900	<b>13</b>	9.8	3.1	16	<10	<b>47</b>	<0.50	<0.50	<0.50	<0.50	<0.50	0.78	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	21	1.9	20	3.9	<0.50	<1.0	<0.50	
MW-9	5/10/2012	<50	<0.50	<0.50	<0.50	<1.5	<10	<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	<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	<10	<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	<0.50			
MW-9	12/5/2014	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	12/31/2014	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	1/22/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	2/19/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	6/11/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	8/10/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	11/10/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	2/2/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	5/16/2016	58	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	8/16/2016	100	<0.50	<0.50	<0.50	<1.0	<10	1.3	<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	<10	<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	<0.50			
MW-10	11/14/2012	<50	<0.50	<0.50	<0.50	ND<1.5	<10	<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	<0.50			
MW-10	4/18/2013	530	<b>20</b>	110	<b>19</b>	97	<10	2.6	<0.50	<0.50	<0.50	<0.50	<0.50	12	3.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.65	0.23J	2.1	<0.50	<0.50	<0.50
MW-10	6/25/2014	<50	<0.50	<0.50	<0.50	<1.5	<10	<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	<0.50	<0.50		
MW-10	12/5/2014	530	<b>5.4</b>	100	<b>28</b>	170	<10	7.4	<0.50	<0.50	<0.50	<0.50	<0.50	22	6.5	<1.0	<0.50	<1.0	<0.50	<0.50	--	<1.0	1.5	<1.0	3.6	<1.0	<0.50	<1.0	<0.50
MW-10	12/31/2014	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	<0.50		
MW-10	1/22/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	<0.50		
MW-10	2/19/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	<0.50		
MW-10	6/11/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	<0.50		
MW-10	8/10/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	<0.50	<0.50	
MW-10	11/10/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	<0.50	<0.50	
MW-10	2/2/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	<0.50	<0.50	<0.50
MW-10	5/16/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	<0.50	<0.50	<0.50
MW-10	8/16/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<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	<0.50	<0.50	<0.50
MW-11R	5/10/2012	22,000	<25	170	<b>910</b>	<b>6,300</b>	<500	<b>440</b>	<25	<25	<25	<25	2,500	760	58	<25	<b>40</b>	<25	<25	<25	<b>92</b>	<25	240	<25	<25	<25	<25	<25	
MW-11R	11/14/2012	29,000	<b>2.6</b>	330	<b>1,400</b>	<b>9,700</b>	<100	<b>660</b>	<5.0	<5.0	<5.0	<5.0	4,000	950	<5.0	<5.0	<b>36</b>	<5.0	<5.0	<5.0	170	88	450	27	<5.0	<5.0	<5.0	<5.0	<5.0
MW-11R	4/17/2013	22,000	<5.0	6.5	<b>580</b>	<b>3,970</b>	<100	<b>280</b>	<5.0	<5.0	<5.0	<5.0	2,600	720	<5.0	<5.0	<b>25</b>	<5.0	<5.0	<5.0	110	61	320	<5.0	<5.0	<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	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropyl ether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene
Analytical Results (ug/L)																												
MW-11R	6/25/2014	15,000	<5.0	<5.0	260	1,130	<100	280	<5.0	<5.0	<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	
MW-11R	12/4/2014	21,000	<50	340	520	5,100	<1,000	320	<50	<50	<50	<50	2,100	680	<100	<50	<100	<50	--	<100	71	<100	170	<100	<50	<100	<50	
MW-11R	12/31/2014	23,000	<50	240	480	5,400	<1,000	350	<50	<50	<50	<50	2,300	680	<100	<50	<100	<50	--	<100	71	<100	190	<100	<50	<100	<50	
MW-11R	1/22/2015	20,000	<50	330	730	5,100	<1,000	350	<50	<50	<50	<50	2,200	600	<100	<50	<100	<50	--	<100	80	<100	200	<100	<50	<100	<50	
MW-11R	2/20/2015	25,000	<50	580	980	6,700	<1,000	380	<50	<50	<50	<50	2,500	670	<100	<50	<100	<50	--	<100	87	<100	200	<100	<50	<100	<50	
MW-11R	6/12/2015	29,000	180	1,400	1,600	9,900	<1,000	470	<50	<50	<50	<50	2,900	770	<100	<50	<100	<50	--	<100	120	<100	330	<100	<50	<100	<50	
MW-11R	8/10/2015	38,000	660	4,600	2,000	14,000	<1,000	500	<50	<50	<50	<50	2,800	670	<100	<50	<100	<50	--	<100	100	<100	310	<100	<50	<100	<50	
MW-11R	11/11/2015	27,000	1,700	1,500	1,000	6,300	<1,000	420	<50	<50	<50	<50	1,900	460	<100	<50	<100	<50	--	<100	83	<100	220	<100	<50	<100	<50	
MW-11R	2/3/2016	25,000	970	1,600	900	5,800	<1,000	280	<50	<50	<50	<50	1,700	430	<100	<50	<100	<50	--	<100	57	<100	150	<100	<50	<100	<50	
MW-11R	5/17/2016	26,000	1,500	3,700	1,000	7,100	<1,000	400	<50	<50	<50	<50	1,600	440	<100	<50	<100	<50	--	<100	71	<100	180	<100	<50	<100	<50	
MW-11R	8/16/2016	15,000	2,200	1,900	900	2,500	<1,000	250	<50	<50	<50	<50	800	210	<100	<50	<100	<50	--	<100	60	<100	100	<100	<50	<100	<50	
MW-12	5/10/2012	2,700	600	4.7	160	207	<10	26	<0.50	<0.50	<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	<20	26	<1.0	<1.0	<1.0	<1.0	2.3	20	0.40J	<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	40	<2.0	<2.0	<2.0	<2.0	60	49	1.6J	<2.0	<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	<20	93	<1.0	<1.0	<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-12	12/4/2014	1,700	260	150	160	130	<10	66	<0.50	<0.50	<0.50	<0.50	12	21	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	15	<5.0	20	2.3	<0.50	<1.0	<0.50
MW-12	12/31/2014	680	120	<2.5	74	10	<50	34	<2.5	<2.5	<2.5	<2.5	6.7	<5.0	<5.0	<2.5	<5.0	<5.0	<2.5	<5.0	7.6	<5.0	11	<2.5	<5.0	<2.5	<2.5	
MW-12	1/22/2015	950	110	<2.5	110	12	<50	26	<2.5	<2.5	<2.5	<2.5	12	<5.0	<5.0	<2.5	<5.0	<5.0	<2.5	--	<5.0	9.4	<5.0	14	<5.0	<2.5	<5.0	<2.5
MW-12	2/19/2015	410	43	<0.50	30	4.0	<10	7.7	1.4	1.0	<0.50	<0.50	3.4	<1.0	<0.50	<1.0	<0.50	<1.0	<0.50	--	<1.0	3.1	<1.0	4.2	<1.0	<0.5	<1.0	<0.5
MW-12	6/12/2015	470	17	54	19	68	<10	5.2	4.5	2.0	<0.50	<0.50	5.5	1.8	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	1.5	<1.0	2.0	<1.0	<0.5	<1.0	<0.5
MW-12	8/10/2015	350	25	59	18	130	<10	5.0	6.4	2.5	<0.50	<0.50	13	2.9	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	0.71	<1.0	1.0	<1.0	<0.5	<1.0	<0.5
MW-12	11/11/2015	270	8.7	21	8.3	58	<10	4.2	4.0	2.8	<0.50	<0.50	4.7	0.99	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	1.1	<1.0	<1.0	<0.50	<1.0	<0.5	<0.5
MW-12	2/3/2016	1,100	130	26	9.0	74	<10	4.1	3.2	2.8	<0.50	<0.50	9.4	2.2	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	4.2	<1.0	<1.0	1.6	<0.50	<1.0	<0.5
MW-12	5/17/2016	690	120	44	12.0	99	<10	7.9	2.5	2.0	<0.50	<0.50	13	3.4	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	1.9	<1.0	1.2	<1.0	<0.50	<1.0	<0.5
MW-12	8/16/2016	1,100	580	8.5	6.2	39	<10	5.6	2.9	2.2	<0.50	<0.50	3.7	1.5	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	4.9	<1.0	1.8	1.3	<0.50	<1.0	<0.50
MW-13	5/10/2012	50	<0.50	<0.50	<0.50	<1.5	<10	<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	<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	<10	<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	<0.50		
MW-13	12/4/2014	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	1.1	1.1	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<0.50		
MW-13	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-13	1/23/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	2.6	1.6	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<0.50		
MW-13	2/20/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	2.3	1.2	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<0.50		
MW-13	6/12/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	5.5	2.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<0.50		
MW-13	8/10/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	8.2	2.8	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<0.50		
MW-13	11/11/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	7.2	2.9	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<0.50		
MW-13	2/3/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	4.0	2.2	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<0.50		
MW-13	5/17/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	2.9	1.8	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<0.50		
MW-13	8/17/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	3.0	1.6	&																	

**TABLE 4 - SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**

Monitoring Well/Sample ID	Sample Date	Analytical Results (ug/L)																										
		TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	
MW-14	5/10/2012	<50	<0.50	<0.50	<0.50	<1.5	<10	<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	<0.50		
MW-14	11/14/2012	<50	<0.50	<0.50	<0.50	<1.5	<10	<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	<0.50		
MW-14	4/17/2013	60	<0.50	<0.50	2.9	15.7	<10	1.0	<0.50	<0.50	<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	<10	<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	<0.50		
MW-14	12/4/2014	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50		
MW-14	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-14	1/23/2015	4,700	2,300	91	160	560	<500	<50	<25	<25	<25	<25	200	<25	<50	<25	<50	<50	<25	--	<50	<25	<50	<50	<25	<50	<25	
MW-14	2/20/2015	12,000	6,200	230	76	1,500	<500	190	<25	<25	<25	<25	490	75	<50	<25	<50	<50	<25	--	<50	46	<50	<50	<25	<50	<25	
MW-14	6/12/2015	3,800	1,500	31	140	140	<500	160	<25	<25	<25	<25	68	38	<50	<25	<50	<50	<25	--	<50	55	<50	<50	<25	<50	<25	
MW-14	8/10/2015	5,900	2,700	130	600	430	<500	210	<25	<25	<25	<25	400	83	<50	<25	<50	<50	<25	--	<50	47	<50	70	<50	<25	<50	
MW-14	11/11/2015	3,300	920	25	280	360	<500	140	<25	<25	<25	<25	320	28	<50	<25	<50	<50	<25	--	<50	<25	<50	<50	<25	<50	<25	
MW-14	2/3/2016	4,600	930	220	270	780	<100	110	<5.0	<5.0	<5.0	<5.0	280	44	<10	<5.0	<10	<10	<5.0	--	<10	19	<10	33	<10	<5.0	<10	
MW-14	5/17/2016	37,000	3,800	7,000	1,800	7,700	<100	490	<5.0	<5.0	<5.0	<5.0	1,200	250	<10	<5.0	<10	<10	<5.0	--	<10	81	27	150	11	<5.0	<10	<5.0
MW-14	8/17/2016	22,000	2,200	2,900	1,400	6,300	<2000	420	<100	<100	<100	<100	1,200	280	<200	<100	<200	<100	<200	<200	<200	<200	<100	<200	<100	<200	<100	
MW-15	5/10/2012	1,800	1.6	1.4	130	38	<10	14	4.4	2.2	<0.50	<0.50	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	<0.50	<10	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	<0.50	<0.50	<0.50	<0.50		
MW-15	12/5/2014	260	1.6	34	10	57	11	3.7	1.2	<0.50	1.5	3.9	8.0	2.1	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	1.1	<1.0	<1.0	<0.50	
MW-15	12/31/2014	440	9.9	110	17	110	<10	5.3	1.2	<0.50	<0.50	16	3.7	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	0.64	<1.0	1.7	<1.0	<0.50	<1.0	<0.50	
MW-15	1/23/2015	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<1.0	<1.0	<1.0	3.0	0.59	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
MW-15	2/20/2015	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<1.0	<1.0	<1.0	3.2	0.59	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
MW-15	6/12/2015	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<1.0	<1.0	<1.0	4.7	0.97	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
MW-15	8/10/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<1.0	<1.0	<1.0	5.2	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50		
MW-15	11/11/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<1.0	<1.0	<1.0	5.1	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50		
MW-15	2/3/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<1.0	<1.0	<1.0	5.8	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50		
MW-15	5/17/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	5.4	0.97	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
MW-15	8/17/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	6.5	1.3	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
MW-16	5/10/2012	180	<0.50	<0.50	<0.50	<1.5	<10	0.5	2.3	2.6	<0.50	<0.50	<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	<10	<0.5	1.2	2.0	<0.50	<0.50	<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	<10	59	0.35 J	<0.50	<0.50	<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	<1.0	<10	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	40	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-16	12/5/2014	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
MW-16	12/31/2014	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<1.0	0.61	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50		
MW-16	1/23/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	0.61	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
MW-16	2/20/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	0.5	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
MW-16	6/12/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	0.5	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
MW-16	8/10/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	0.56	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	

**TABLE 4 - SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**TPHg and VOCs**

Monitoring Well/Sample ID	Sample Date	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene
Analytical Results (ug/L)																												
MW-16	11/11/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	1.1	0.74	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
MW-16	2/3/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	0.94	0.92	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
MW-16	5/17/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	1.9	1.2	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
MW-16	8/17/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	1.8	1.2	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EW-14	5/10/2012	33,000	<b>4,200</b>	3,300	<b>2,200</b>	<b>10,100</b>	<500	<b>280</b>	<25	<25	<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	<b>5,200</b>	80	<b>290</b>	558	<200	<b>270</b>	<10	<10	<10	<10	79	26	<10	<10	<10	<10	<10	<10	53	11	100	8.4J	<10	<10	<10	
EW-14	12/5/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	1/23/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	2/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	5/10/2012	34,000	<b>6,300</b>	<b>6,500</b>	<b>1,200</b>	<b>5,600</b>	<500	<b>160</b>	<25	<25	<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	<b>8,000</b>	850	<b>630</b>	<b>1,700</b>	<500	<b>460</b>	<25	<25	<25	<25	420	110	<25	<25	<25	<25	<25	<25	63	16J	170	<25	<25	<25	<25	
EW-15	12/5/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	1/23/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	2/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**TABLE 4 - SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**TPHg and VOCs**

Monitoring Well/Sample ID	Sample Date	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene
			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Analytical Results (ug/L)																												
EW-15	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-15	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-15	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-15	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-15	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	5/10/2012	360	<b>40</b>	1.6	1.3	11.4	<10	10	0.86	0.60	<0.50	<0.50	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	<10	<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	<0.50
EW-16	12/5/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	1/23/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	2/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-16	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	5/10/2012	11,000	<b>2,800</b>	1,600	<b>240</b>	1,280	<500	<b>210</b>	<25	<25	<25	<25	<27	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	<b>1,900</b>	100	<b>330</b>	500	<100	<b>720</b>	<5.0	<5.0	<5.0	<5.0	<5.0	200	64	19	<5.0	<5.0	<5.0	<5.0	<5.0	79	23	210	13	<5.0	<5.0	<5.0
EW-17	12/5/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	1/23/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	2/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-17	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**TABLE 4 - SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**TPHg and VOCs**

Monitoring Well/Sample ID	Sample Date	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropyl ether	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	<50	480	<2.5	<2.5	<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-18	12/5/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	1/23/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	2/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	6/25/2014	12,000	620	160	460	1,770	<20	480	<1.0	<1.0	<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-19	12/5/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	1/23/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	2/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	6/25/2014	3,900	400	8.1	24	79	<20	190	<1.0	2.7	<1.0	<1.0	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-20	12/5/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	1/23/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	2/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**TABLE 4 - SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**TPHg and VOCs**

Monitoring Well/Sample ID	Sample Date	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropyl ether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene		
			Analytical Results (ug/L)																											
EW-21	6/25/2014	60	0.46J	0.25J	0.31J	0.7	<10	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	<0.50	<0.50	<0.50	0.53	<0.50	<0.50	<0.50		
EW-21	12/5/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
EW-21	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
EW-21	1/23/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
EW-21	2/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
EW-21	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
EW-21	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
EW-21	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
EW-21	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
EW-21	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
EW-22	6/25/2014	50	0.59	0.41J	1.1	1.76	<10	0.55	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.35J	0.29J	<0.50	0.77	<0.50	8.0	<0.50	<0.50	<0.50	0.31J	0.46J	1.2	0.27J	<0.50	<0.50	<0.50
EW-22	12/5/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-22	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-22	1/23/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-22	2/20/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-22	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-22	8/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-22	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-22	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-22	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
INF	12/4/2014	270	<0.50	<0.50	<0.50	14	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	6.8	<1.0	<0.50	<1.0	2.4	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
INF	1/2/2015	810	<b>58</b>	27	5.4	68	<10	9.4	1.0	1.2	<0.50	<0.50	3.1	18	<1.0	<0.50	<1.0	2.3	<0.50	--	<1.0	0.85	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
INF	1/22/2015	980	<b>97</b>	27	4.2	110	<10	18	0.83	1.5	<0.50	<0.50	1.5	39	<1.0	<0.50	<1.0	<b>2.4</b>	<0.50	--	<1.0	0.75	2.5	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
INF	2/19/2015	750	<b>91</b>	15	7.2	78	<10	1.9	0.71	0.98	<0.50	<0.50	1.5	32	<1.0	<0.50	<1.0	2.0	<0.50	--	<1.0	0.56	1.9	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
INF	3/25/2015	750	<b>20</b>	3.9	1.6	87	<10	3.7	<0.50	<0.50	<0.50	<0.50	0.9	39	<1.0	<0.50	<1.0	2.3	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50		
INF	4/23/2015	760	<b>2.6</b>	1.3	<0.50	100	<10	5.5	<0.50	0.62	<0.50	<0.50	<0.50	<0.50	44	<1.0	<0.50	<1.0	2.0	<0.50	--	<1.0	<0.50	2.2	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50
INF	5/21/2015	370	0.57	<0.50	<0.50	25	<10	1.6	0.67	<0.50	<0.50	<0.50	<0.50	<0.50	17	<1.0	<0.50	<1.0	1.7	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
INF	6/18/2015	630	<b>4.0</b>	2.7	<0.50	100	<10	5.1	0.88	<0.50	<0.50	<0.50	<0.50	2.4	30	<1.0	<0.50	<1.0	2.1	<0.50	--	<1.0	<0.50	1.6	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50
INF	7/16/2015	740	<b>6.0</b>	6.6	<0.50	170	<10	9.1	0.84	<0.50	<0.50	<0.50	<0.50	9.3	39	<1.0	<0.50	<1.0	1.9	<0.50	--	<1.0	<0.50	2	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50
INF	8/27/2015	750	<b>8.0</b>	4.8	<0.50	100	<10	17	1.00	<0.50	<0.50	<0.50	<0.50	<0.50	43	<1.0	<0.50	<1.0	1.6	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
INF	9/24/2015	950	<b>20</b>	8.9	<0.50	190	<10	<b>20</b>	1.00	<0.50	<0.50	<0.50	<0.50	5.4	43	<1.0	<0.50	<1.0	1.7	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
INF	10/22/2015	910	<b>33</b>	13	<0.50	250	<10	<b>27</b>	1.3	0.65	<0.50	<0.50	51	30	<1.0	<0.50	<1.0	1.4	<0.50	--	<1.0	<0.50	1.5	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50	
INF	11/19/2015	650	<b>17</b>	12	<0.50	160	<10	15	0.89	<0.50	<0.50	<0.50	<0.50	20	22	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	1.2	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50
INF	12/17/2015	370	<b>2.5</b>	2.0	<0.50	61	<10	2.2	0.76	0.58	<0.50	<0.50	2.1	21	<1.0	<0.50	<1.0	1.3	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50		
INF	1/28/2016	530	<b>2.6</b>	3.3	<0.50	86	<10	2.9	0.63	<0.50	<0.50	<0.50	<0.50	4.4	20	<1.0	<0.50	<1.0	1.3	<0.50	--	<1.0	<0.50	1.0	<1.0	<1.0	<0.50	<1.0	<0.50	<0.50

TABLE 4 - SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS  
TPHg and VOCs

Monitoring Well/Sample ID	Sample Date	TPHg	Benzene	Toluene	Ethybenzene	Total Xylenes	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene
Analytical Results (ug/L)																												
INF	2/25/2016	750	1.7	1.9	<0.50	95	<10	2.8	0.84	0.57	<0.50	<0.50	9.4	28	<1.0	<0.50	<1.0	1.4	<0.50	--	<1.0	<0.50	1.2	<1.0	<1.0	<0.50	<1.0	<0.50
INF	3/24/2016	600	10	7.4	<0.50	140	<10	9.1	0.74	0.53	<0.50	<0.50	11	23	<1.0	<0.50	<1.0	1.2	<0.50	--	<1.0	<0.50	1.2	<1.0	<1.0	<0.50	<1.0	<0.50
INF	4/22/2016	1,000	21	22	<0.50	230	<10	16	0.61	<0.50	<0.50	<0.50	14	44	<1.0	<0.50	<1.0	1.7	<0.50	--	<1.0	<0.50	2.1	<1.0	<1.0	<0.50	<1.0	<0.50
INF	5/17/2016	390	<0.50	<0.50	<0.50	37	<10	3.4	0.88	0.56	<0.50	<0.50	0.63	18	<1.0	<0.50	<1.0	1.2	<0.50	--	<1.0	<0.50	1.2	<1.0	<1.0	<0.50	<1.0	<0.50
INF	7/1/2016	360	9.9	3.9	<0.50	75	<10	14	0.83	<0.50	<0.50	<0.50	9.7	11	<1.0	<0.50	<1.0	1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
INF	7/28/2016	320	19.0	8.8	<0.50	69	<10	13	0.73	<0.50	<0.50	<0.50	6.2	9.7	<1.0	<0.50	<1.0	1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
INF	8/31/2016	330	30	11	<0.50	79	<10	12	<0.50	<0.50	<0.50	<0.50	5.5	7.2	<1.0	<0.50	<1.0	1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
INF	9/30/2016	310	49	18	<0.50	93	<10	16	0.87	<0.50	<0.50	<0.50	7.6	7.2	<1.0	<0.50	<1.0	1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	12/4/2014	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	1/2/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC <sup>1</sup>	1/22/2015	990	89	24	3.3	110	<10	18	0.84	1.5	<0.50	<0.50	1.4	40	1.0	<0.50	<1.0	2.4	<0.50	--	<1.0	0.63	2.1	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	2/16/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	3/25/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	4/23/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	5/21/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
GAC	6/18/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	7/16/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	8/27/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	9/24/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	10/22/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	11/19/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	12/17/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	1/28/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	2/25/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	3/24/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	4/22/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	5/17/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	7/1/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	8/1/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	8/31/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50
GAC	9/30/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<1.0	<0.50	<1.0	<0.50

**TABLE 4 - SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**TPHg and VOCs**

Monitoring Well/Sample ID	Sample Date	TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	Vinyl Acetate	Naphthalene	MTBE	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,1,1-Trichloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	4-Isopropyltoluene	Bromodichloromethane	Bromoform	Chloroform	2-Chlorotoluene	Di-isopropylether	Hexachlorobutadiene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene
			Analytical Results (ug/L)																									
EFF	12/4/2014	<2500	<25	<25	<25	<50	<500	<50	<25	<25	<25	<25	<25	<25	<50	<25	<50	<25	-	<50	<25	<50	<50	<50	<25	<50	<25	
EFF	1/2/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	1/22/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	2/19/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	3/25/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	4/23/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	5/21/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	6/18/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	7/16/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	8/27/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	9/24/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	10/22/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	11/19/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	12/17/2015	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	1/28/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	2/25/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	3/24/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	4/22/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	5/17/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	7/1/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	7/28/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	8/31/2016	<50	<0.50	<0.50	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
EFF	9/30/2016	<50	<0.50	<1.0	<0.50	<1.0	<10	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	--	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	
ESLs		NE	1.1	3,600	13	1,300	NE	20	1,200	6.1	110	4,900	NE	NE	NE	NE	NE	2.3	NE	NE	NE	NE	NE	NE	NE	30,000	NE	3.0

**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

ESLs = Regional Water Quality Control Board, Groundwater Vapor Intrusion Human Health Risk Levels (Table GW-3), Shallow Groundwater, Residential Scenario, updated February 2016 (Revision 3)

**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.

<sup>1</sup> - The GAC sample collected on 1/22/15 was mistakenly collected from the INF sample port and therefore these results do not represent breakthrough of COCs in the lead GAC vessel.

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)								Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen* mg/L	
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate											
MW-2R	5/10/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	11/14/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	4/17/2013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	6/25/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	2/2/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-2R	8/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-4R	6/25/2014	4.90	1.4	0.91	0.50	<0.20	<0.10	9.70	4.90	<0.10	0.22	20.60	603.0	6.72	--	--	--		
MW-4R	12/4/2014	25.00	7.8	1.10	730	<1.0	0.27	13	1.0	24	<0.20	21.99	1560.0	7.39	--	-71	*		
MW-4R	12/30/2014	1.87	1.6	<1.0	80	<1.0	<0.020	22	1.4	0.47	<0.20	21.02	422.0	4.81	214.0	5	*		
MW-4R	1/22/2015	1.60	1.6	<1.0	82	2.0	<0.020	27	1.6	<0.10	<0.20	20.10	544.0	4.72	32.4	83.0	6.44		
MW-4R	2/19/2015	<0.20	1.7	<1.0	83	2.2	<0.020	32	<0.10	<0.10	<0.20	19.74	639.0	6.79	1.56	15.0	1.18		
MW-4R	6/11/2015	<0.20	1.4	<1.0	64	2.0	0.024	32	<0.10	<0.10	1.5	20.25	639.0	6.90 <sup>1</sup>	0.28	196.0	3.62		
MW-4R	8/11/2015	1.2	1.3	1.00	5.0	<1.0	0.061	33	0.43	0.77	4.5	21.72	570.0	6.58	2.64	-22.0	1.06		
MW-4R	11/10/2015	50	2.0	4.0	6.1	<1.0	0.065	10	23	27	9.5	21.61	697.0	6.19	1,000.0	-58.0	6.97		
MW-4R	2/2/2016	0.80	0.64	<1.0	26	<1.0	0.14	30	0.27	0.53	4.3	18.39	458.0	6.84	3.40	-15.0	4.14		

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)											Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)			
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate								Dissolved Oxygen* mg/L				
MW-4R	5/16/2016	2.84	0.93	1.4	27	<1.0	0.028	21	1.90	0.94	3.9	19.91	468.0	6.84	8.24	-65.0	1.75			
MW-4R	8/16/2016	6.7	--	--	1.2	<1.0	--	--	<0.10	7.2	5.0	20.82	521.0	6.80	5.34	-63.0	0.42			
MW-5R	6/25/2014	<0.50	<0.50	1.5	<0.20	<0.20	<0.10	8.40	<0.50	<0.10	0.17	20.00	434.4	10.62	--	-230.5	*			
MW-5R	12/4/2014	15.6	4.1	1.1	210	5.7	0.51	16	15	0.6	0.24	21.23	1200.0	7.39	--	-118.0	*			
MW-5R	12/30/2014	19.3	4.8	1.3	560	7.5	0.42	55	16	3.3	<0.20	19.82	1540.0	4.54	64.7	-111.0	7.53			
MW-5R	1/22/2015	9.74	2.8	<1.0	310	32	0.28	50	9.5	0.24	<0.20	18.67	1260.0	4.58	28.9	-95.0	5.67			
MW-5R	2/19/2015	11.14	2.8	<1.0	210	17	0.32	47	11	0.14	0.22	18.39	1140.0	6.94	28.2	-109.0	2.91			
MW-5R	6/11/2015	3.79	0.99	<1.0	1.5	18	0.15	35	2.8	0.99	0.28	20.40	460.0	--	49.9	-52.0	48.00			
MW-5R	8/11/2015	3.8	0.88	<1.0	19	1.3	0.35	31	2.6	1.2	<0.20	22.91	739.0	6.92	50.1	-98.0	0.95			
MW-5R	11/10/2015	3.4	0.8	<1.0	4.8	1.3	0.22	23	2.8	0.64	0.33	20.87	712.0	6.63	61.6	-72.0	4.81			
MW-5R	2/2/2016	1.35	0.86	1.1	12	1.8	0.074	48	1.2	0.15	0.44	18.05	764.0	7.12	34.1	57.0	4.91			
MW-5R	5/16/2016	1.40	0.66	1.9	12	1.4	0.210	26	0.88	0.52	1.10	21.05	794.0	7.24	17.8	-93.0	0.58			
MW-5R	8/16/2016	2.0	--	--	<1.0	<1.0	--	--	1.3	0.71	0.45	21.77	728.0	7.08	10.3	-95.0	0.57			
MW-6R	6/25/2014	2.9	1.3	0.71	<0.20	<0.20	<0.10	12	2.9	<0.10	0.45	20.20	530.7	6.87	--	-114.1	*			
MW-6R	12/4/2014	2.84	3.1	<1.0	150	3.4	0.21	26	2.5	0.34	0.24	21.77	909.0	7.24	--	-66.0	*			
MW-6R	12/30/2014	<0.20	1.2	3.7	250	56	4.1	33	<0.10	<0.10	7.2	20.32	971.0	4.80	34.2	47.0	6.99			
MW-6R	1/22/2015	<0.20	2.7	1	200	32	0.93	74	<0.10	<0.10	2.1	19.70	929.0	4.55	0.4	93.0	5.19			
MW-6R	2/19/2015	<0.20	2.2	1.3	270	24	1.4	69	<0.10	<0.10	4.6	19.42	1050.0	6.72	0.15	80.0	2.16			
MW-6R	6/11/2015	0.73	0.93	1.5	350	2.2	1.6	44	0.73	<0.10	1.8	21.56	975.0	7.03 <sup>1</sup>	2.05	121.0	2.98			
MW-6R	8/11/2015	0.91	1.1	1.1	240	1.4	1.7	43	0.91	<0.10	0.69	23.96	678.0	5.89	22.1	101.0	1.04			

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)								Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen* mg/L	
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate											
MW-6R	11/10/2015	<0.50	1.4	<1.0	270	2.8	0.88	39	<0.10	<0.10	0.43	22.77	823.0	5.65	14.6	124.0	0.58		
MW-6R	2/2/2016	<0.20	1.6	4.4	540	<1.0	1.80	36	<0.10	<0.10	6.9	18.16	1180.0	5.31	2.91	195.0	3.44		
MW-6R	5/16/2016	0.52	1.2	3.8	400	<1.0	11	27	0.52	<0.10	14	22.05	822.0	4.82	1.89	194.0	0.0		
MW-6R	8/16/2016	<0.50	--	--	150	<1.0	--	--	<0.10	<0.10	1.6	23.36	485.0	5.72	3.96	113.0	0.83		
<hr/>																			
MW-7R	6/25/2014	35	3.4	2	<0.20	<0.20	<0.10	<2.0	35	<.010	0.39	19.60	774.0	6.61	--	-87.2	*		
MW-7R	12/4/2014	29	3	<1.0	28	<1.0	0.16	<0.1	<0.10	29	0.5	20.62	695.0	7.13	--	-78.0	*		
MW-7R	12/30/2014	15.2	3.3	<1.0	250	<1.0	0.13	28	3.2	12	<0.20	19.56	777.0	5.00	20.9	-41.0	6.65		
MW-7R	1/22/2015	18.56	3.9	<1.0	330	10	0.038	31	18	0.56	0.34	18.69	1050.0	4.62	11.1	-37.0	4.82		
MW-7R	2/19/2015	17	3.5	<1.0	330	10	0.1	27	14	3	<0.20	18.53	986.0	6.54	21.1	-51.0	1.29		
MW-7R	6/11/2015	19.9	2.9	1.7	350	2.7	<0.020	31	15	4.9	1.0	22.96	943.0	6.14 <sup>1</sup>	11.9	-24.0	1.89		
MW-7R	8/11/2015	8.9	2.1	1.7	270	3	0.083	25	4.5	4.4	1.2	22.57	850.0	6.01	8.07	-20.0	0.95		
MW-7R	11/10/2015	24	1.8	2.1	190	3.8	0.025	24	24	0.35	1.5	22.08	716.0	5.87	49.5	1.0	0.34		
MW-7R	2/2/2016	1.9	2.0	1.8	200	13	<0.020	34	1.9	<0.10	1.2	17.96	737.0	6.37	42.9	170.0	3.27		
MW-7R	5/16/2016	3.22	2.7	2.5	340	24	<0.020	23	3.1	0.12	1.3	20.41	947.0	6.54	25.5	-17.0	0.0		
MW-7R	8/16/2016	4.6	--	--	33	4.6	--	--	3.5	1.1	0.94	21.97	499.0	6.60	58.4	-38.0	0.07		
<hr/>																			
MW-8	6/25/2014	6.1	1.1	0.71	<0.20	<0.20	<0.10	4.1	6.1	<0.10	0.34	22.60	444.9	6.77	--	-112.0	*		
MW-8	12/5/2014	5.6	1	<1.0	<1.0	<1.0	0.83	1.7	0.7	4.9	0.24	22.73	321.0	7.20	--	-96.0	*		
MW-8	12/30/2014	8.3	0.89	<1.0	<1.0	<1.0	0.2	12	3.1	5.2	<0.20	19.67	328.0	4.98	334.0	-40.0	6.2		
MW-8	1/22/2015	7.8	0.83	<1.0	<1.0	<1.0	0.18	12	3	4.8	<0.20	19.86	400.0	4.68	259.0	-49.0	4.6		
MW-8	2/19/2015	14	1	1.5	2.1	<1.0	0.14	13	8	6	0.26	19.85	401.0	6.97	366.0	-66.0	4.53		

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)											Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)			
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate								Dissolved Oxygen* mg/L				
MW-8	6/11/2015	21	1.5	1.7	2.4	<1.0	0.032	12	9	12	0.28	0.93	240.0	6.65 <sup>1</sup>	249.0	-88.0	2.35			
MW-8	8/11/2015	29	1.7	3	<1.0	<1.0	0.25	1.2	10	19	0.28	18.82	313.0	8.18	477.0	-150.0	5.93			
MW-8	11/10/2015	81	1.8	6.5	<1.0	<1.0	0.044	2.7	63	18	0.3	21.90	462.0	6.56	805.0	-96.0	7.06			
MW-8	2/2/2016	39	1.6	3.5	<1.0	<1.0	<0.020	8.3	28	11	0.33	18.01	402.0	6.93	453.0	-117.0	5.99			
MW-8	5/16/2016	21	1.3	1.4	<1.0	<1.0	<0.020	9.4	1.0	20	0.35	24.08	261.0	7.00	1000.0	-151.0	2.01			
MW-8	8/16/2016	49	--	--	<1.0	<1.0	--	--	31	18	0.20	24.81	264.0	6.91	990.0	-98	0.0			
MW-9	6/26/2014	44	10	4	0.5	<0.20	<0.10	28	44	<0.10	0.04	19.60	495.5	6.71	--	142.3	*			
MW-9	12/5/2014	51	9.7	4.6	4.1	<1.0	0.075	38	51	<0.10	<0.20	19.91	456.0	6.94	--	43.0	*			
MW-9	12/30/2014	5.20	0.95	1.1	3.2	<1.0	0.06	35	5.2	<0.10	<0.20	18.66	401.0	4.93	557.0	151.0	6.82			
MW-9	1/22/2015	9.40	1.3	1	3	<1.0	0.057	42	9.4	<0.10	<0.20	18.40	478.0	4.67	441.0	132.0	5.55			
MW-9	2/19/2015	66	5.3	5.7	4.1	<1.0	0.088	47	66	<0.10	<0.20	18.67	490.0	7.11	816.0	55.0	4.12			
MW-9	6/11/2015	45.16	4.7	3.6	12	<1.0	<0.020	33	45	0.16	<0.20	25.29	162.0	6.92 <sup>1</sup>	814.0	84.0	5.54			
MW-9	8/10/2015	38	4.1	3.2	3.4	<1.0	0.063	52	37	1.2	<0.20	22.15	365.0	7.23	611.0	111.0	3.89			
MW-9	11/10/2015	23	4	1.8	<1.0	<1.0	0.064	87	22	0.93	<0.20	22.14	138.0	6.82	956.0	71.0	4.75			
MW-9	2/2/2016	22	1.8	2.7	18	<1.0	0.038	63	22	<0.10	<0.20	18.23	364.0	7.08	899.0	135.0	7.37			
MW-9	5/16/2016	8.22	1.4	1.1	25	<1.0	<0.020	36	8.1	0.12	0.20	19.98	402.0	7.19	1000.0	75.0	2.05			
MW-9	8/16/2016	66	--	--	16	<1.0	--	--	65	0.86	<0.20	21.89	387.0	7.15	788.0	57.0	0.0			
MW-10	6/26/2014	42	0.65	4.5	2.1	<0.20	0.4	11	42	<0.10	<0.03	20.30	306.7	6.24	--	131.3	*			
MW-10	12/5/2014	<0.20	<0.020	<1.0	10	<1.0	0.021	14	<0.10	<0.10	<0.20	20.80	271.0	7.35	--	73.0	*			
MW-10	12/30/2014	3.7	0.2	<1.0	12	<1.0	<0.020	13	3.7	<0.10	<0.20	18.90	292.0	4.73	147.0	127.0	8.73			

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)								Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen* mg/L	
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate											
MW-10	1/22/2015	5.3	0.18	<1.0	12	<1.0	0.032	13	5.3	<0.10	<0.20	18.88	306.0	4.74	414.0	192.0	5.11		
MW-10	2/19/2015	35	0.47	3.5	12	<1.0	0.05	13	35	<0.10	<0.20	18.59	303.0	6.80	936.0	133.0	4.72		
MW-10	6/11/2015	67.11	0.82	5.4	11	<1.0	<0.020	19	67	0.11	<0.20	21.99	0.0	6.60 <sup>1</sup>	34.1	115.0	6.23		
MW-10	8/10/2015	40	0.59	4.3	7.6	<1.0	0.035	28	40	<0.10	<0.20	21.72	272.0	6.79	1000.0	129.0	3.92		
MW-10	11/10/2015	43	0.67	4.5	25	<1.0	0.024	32	43	<0.10	<0.20	21.56	242.0	6.77	0.0	133.0	6.00		
MW-10	2/2/2016	21	0.28	2.6	27	<1.0	<0.020	31	21	<0.10	<0.20	17.41	234.0	6.99	622.0	131.0	6.08		
MW-10	5/16/2016	4.2	0.21	1.3	220	<1.0	0.049	27	4.2	<0.10	0.20	21.16	512.0	7.00	809.0	99.0	2.17		
MW-10	8/16/2016	40	--	--	230	<1.0	--	--	40	0.11	<0.20	23.24	623.0	6.89	0.0	63.0	0.0		
MW-11R	6/26/2014	120	2	10	0.66	<0.20	<0.10	<2.0	120	<0.10	0.03	18.70	153.3	7.01	--	-80.3	*		
MW-11R	12/4/2014	0.91	0.78	<1.0	1.4	<1.0	0.14	4.2	<0.1	0.91	<0.20	19.78	185.0	7.14	--	-46.0	*		
MW-11R	12/31/2014	13	1.6	1.3	2.4	<1.0	0.089	6.4	4.4	8.6	<0.20	17.90	288.0	5.27	1000.0	-32.0	9.39		
MW-11R	1/23/2015	20	1.3	1.3	<1.0	<1.0	0.027	2.8	8	12	<0.20	16.10	223.0	5.78	0.0	162.0	10.15		
MW-11R	2/20/2015	3.1	0.55	<1.0	<1.0	<1.0	0.11	2	2	1.1	<0.20	17.63	161.0	6.98	131.0	-35.0	3.18		
MW-11R	6/12/2015	1.4	0.81	<1.0	<1.0	<1.0	0.15	1.2	<0.10	1.4	<0.20	20.51	186.0	6.94 <sup>1</sup>	2.46	-14.0	1.83		
MW-11R	8/10/2015	2.2	1.5	<1.0	1.3	<1.0	0.12	1.1	<0.10	2.2	<0.20	20.17	332.0	5.94	7.25	-45.0	1.53		
MW-11R	11/11/2015	2.9	1.8	<1.0	<1.0	<1.0	0.11	6.6	0.40	2.5	<0.20	20.28	341.0	6.69	45.3	-61.0	4.08		
MW-11R	2/3/2016	4.1	1.6	<1.0	2.1	<1.0	<0.020	5.7	1.3	2.8	0.20	17.62	293.0	6.75	7.88	-58.0	3.67		
MW-11R	5/17/2016	3.9	1.5	<1.0	2.1	<1.0	<0.020	6.6	<0.10	3.9	0.22	19.18	285.0	6.87	9.86	-85.0	1.65		
MW-11R	8/17/2016	4.3	--	--	17	<1.0	--	--	0.40	3.9	<0.20	21.16	430.0	6.62	9.88	-42.0	0.0		
MW-12	6/26/2014	15	1.7	2.2	2	<0.20	<0.10	2.2	15	<0.10	<0.03	19.20	544.4	6.39	--	5.4	*		

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)								Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen* mg/L	
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate											
MW-12	12/4/2014	0.69	1	<1.0	29	<1.0	<0.020	10	0.32	0.37	<0.20	20.13	393.0	7.05	--	26.0	*		
MW-12	12/31/2014	6.21	1.5	<1.0	13	<1.0	0.028	8.6	5.7	0.51	<0.20	18.71	362.0	5.32	136.0	91.0	8.40		
MW-12	1/23/2015	7.3	1.5	<1.0	12	<1.0	<0.020	9.3	6.2	1.1	<0.20	17.75	425.0	4.72	789.0	19.0	6.54		
MW-12	2/19/2015	96.91	3.1	8.0	2.3	<1.0	0.034	7.6	96	0.91	<0.20	19.07	422.0	6.75	567.0	8.0	4.56		
MW-12	6/12/2015	1.1	1.3	<1.0	2.2	<1.0	0.035	9.3	<0.10	1.1	2.20	19.94	522.0	6.75 <sup>1</sup>	271.0	27.0	3.93		
MW-12	8/10/2015	0.85	1.1	<1.0	<1.0	<1.0	0.035	15	<0.10	0.78	<0.20	20.70	536.0	6.03	7.09	-8.0	3.41		
MW-12	11/11/2015	1.0	1.4	<1.0	<1.0	<1.0	0.033	9.8	<0.10	0.91	<0.20	20.35	526.0	6.67	9.82	-7.0	0.43		
MW-12	2/3/2016	1.2	1.4	<1.0	<1.0	<1.0	<0.020	7.4	0.28	0.92	<0.20	18.59	523.0	6.68	0.93	3.0	3.41		
MW-12	5/17/2016	0.98	1.4	<1.0	<1.0	<1.0	<0.020	12.0	<0.10	0.98	<0.20	20.47	512.0	6.71	0.0	-20.0	0.0		
MW-12	8/17/2016	0.87	--	--	<1.0	<1.0	--	--	<0.10	1.1	<0.20	20.64	564.0	6.54	0.0	5.0	0.32		
MW-13	6/26/2014	3.8	<0.5	1.2	1.2	<0.20	0.14	10	3.8	<0.10	0.04	18.50	242.2	6.62	--	124.4	*		
MW-13	12/4/2014	170.19	2.7	11	17	<1.0	0.19	13	170	0.19	0.27	19.85	308.0	6.80	--	55.0	*		
MW-13	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-13	1/23/2015	23	0.71	2.3	6.8	<1.0	0.081	12	23	<0.10	<0.20	17.66	291.0	6.75	808.0	149.0	9.02		
MW-13	2/20/2015	29	1.2	3.1	4.4	<1.0	0.082	12	29	<0.10	<0.20	18.72	366.0	6.84	475.0	181.0	5.41		
MW-13	6/12/2015	53.14	1.8	7.4	<1.0	5.6	<0.020	12	53	0.14	<0.20	21.73	5.0	--	17.5	86.0	6.04		
MW-13	8/10/2015	29	0.95	3.7	38	1.2	0.086	16	29	<0.10	<0.20	20.25	643.0	6.51	0.0	171.0	7.91		
MW-13	11/11/2015	2.7	1.2	21	130	6.0	0.086	24	2.7	<0.10	<0.20	16.61	859.0	6.76	890.0	114.0	9.93		
MW-13	2/3/2016	3.3	0.66	6.1	170	4.8	0.040	26	2.0	1.3	<0.20	18.21	904.0	6.81	0.0	159.0	5.55		

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)											Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)			
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate								Dissolved Oxygen* mg/L				
MW-13	5/17/2016	20	0.59	4.5	190	3.6	0.041	25	20.0	<0.10	<0.20	18.09	794.0	6.93	0.0	68.0	3.17			
MW-13	8/17/2016	78	--	--	210	1.9	--	--	78	0.27	<0.20	23.74	505.0	6.92	325.0	68.0	0.0			
MW-14	6/26/2014	28	1.2	2.3	7.7	<0.20	<0.10	15	28	<0.10	0.06	17.70	251.6	6.69	--	142.2	*			
MW-14	12/4/2014	26.19	1.1	1.8	49	<1.0	0.046	20	26	0.19	<0.20	19.54	187.0	6.70	--	44.5	*			
MW-14	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
MW-14	1/23/2015	29.14	1	2.2	6.2	<1.0	<0.020	13	29	0.14	<0.20	17.58	385.0	6.86	503.0	187.0	10.3			
MW-14	2/20/2015	23.19	1.9	1.9	21	<1.0	<0.020	12	23	0.19	<0.20	17.78	617.0	6.82	246.0	191.0	5.99			
MW-14	6/12/2015	34.1	1.8	2.7	<1.0	<1.0	<0.020	11	28	6.1	<0.20	25.76	0.00	--	9.53	8.0	6.18			
MW-14	8/10/2015	27.3	1.7	2.5	<1.0	<1.0	0.031	11	21	6.3	<0.20	19.15	1.0	7.50	10.7	28.0	8.84			
MW-14	11/11/2015	7.0	1.6	<1.0	<1.0	<1.0	0.035	9.7	3.6	3.4	<0.20	16.33	0.0	7.83	23.3	-32.0	9.70			
MW-14	2/3/2016	28.4	1.3	2.1	8.1	<1.0	<0.020	9.3	26	2.4	<0.20	16.59	17.0	7.82	766.0	92.0	8.79			
MW-14	5/17/2016	11.0	1.5	1.3	4.5	<1.0	<0.020	5.6	4.8	6.2	<0.20	17.50	0.0	7.62	12.5	-93.0	5.42			
MW-14	8/17/2016	28	--	--	<1.0	<1.0	--	--	19	8.9	<0.20	21.45	749.0	7.27	513	-90.0	0.0			
MW-15	6/26/2014	54	0.77	5.2	<0.20	<0.20	<0.10	3.9	54	<0.10	<0.03	19.00	260.1	6.87	--	-76.1	*			
MW-15	12/5/2014	1.3	0.36	<1.0	<1.0	<1.0	0.095	5.5	<0.10	1.3	<0.20	19.95	250.0	7.32	--	-59.0	*			
MW-15	12/31/2014	0.78	0.22	<1.0	<1.0	<1.0	0.082	5.3	<0.10	0.78	<0.20	19.93	208.0	5.38	24.2	-41.0	7.82			
MW-15	1/23/2015	29.8	0.58	3.3	<1.0	<1.0	0.035	16	26	3.8	<0.20	19.89	329.0	7.09	932.0	-3.0	7.65			
MW-15	2/20/2015	28.6	0.6	3.3	<1.0	<1.0	0.029	23	25	3.6	<0.20	19.81	425.0	6.99	551.0	8.0	5.02			
MW-15	6/12/2015	55.4	0.8	5	4.3	4.3	<0.020	42	54	1.4	<0.20	20.88	299.0	--	575.0	119.0	3.12			
MW-15	8/10/2015	46	0.72	5.3	13	1.6	0.036	50	45	0.77	<0.20	21.39	600.0	6.69	0.0	100.0	5.62			

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)								Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen* mg/L	
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate											
MW-15	11/11/2015	10	0.40	1.3	25	1.5	0.059	57	9.5	0.48	<0.20	20.47	638.0	6.97	1000.0	72.0	5.91		
MW-15	2/3/2016	42.26	0.74	4.6	20	<1.0	<0.020	60	42.0	0.26	<0.20	18.42	665.0	7.18	721.0	142.0	8.84		
MW-15	5/17/2016	31	0.98	3.5	23	<1.0	<0.020	62	31.0	<0.10	<0.20	20.00	634.0	7.21	490.0	47.0	4.44		
MW-15	8/17/2016	40	--	--	32	<1.0	--	--	40	0.41	<0.20	19.09	715.0	7.15	808.0	68	1.50		
MW-16	6/26/2014	<0.5	<0.5	<0.5	<0.20	<0.20	<0.10	3.1	<0.5	<0.10	<0.03	18.30	401.5	6.68	--	-70.7	*		
MW-16	12/5/2014	2.64	0.3	<1.0	<1.0	<1.0	0.037	6.5	2.5	0.14	<0.20	19.01	330.0	7.30	--	9.0	*		
MW-16	12/31/2014	2.15	0.29	<1.0	<1.0	<1.0	0.038	8.1	1.6	0.55	<0.20	16.51	272.0	5.06	309	58.0	8.25		
MW-16	1/23/2015	5.49	0.27	<1.0	<1.0	<1.0	<0.020	9.5	5.3	0.19	<0.20	18.11	300.0	6.77	202	133.0	10.10		
MW-16	2/20/2015	4.86	0.31	<1.0	<1.0	<1.0	<0.020	10	4.7	0.16	<0.20	17.77	337.0	6.82	88.9	102.0	3.66		
MW-16	6/12/2015	3.44	0.29	<1.0	<1.0	<1.0	0.040	10	3.3	0.14	<0.20	19.37	312.0	6.84 <sup>1</sup>	90.6	130.0	2.95		
MW-16	8/10/2015	2.5	0.21	<1.0	1.40	<1.0	0.040	9.7	2.5	<0.10	<0.20	19.72	287.0	5.98	68.8	149.0	5.02		
MW-16	11/11/2015	0.74	0.22	<1.0	2.0	<1.0	0.039	8.0	0.74	<0.10	<0.20	18.10	276.0	6.77	142	91.0	6.11		
MW-16	2/3/2016	4.9	0.33	<1.0	7.3	<1.0	0.028	6.9	4.9	<0.10	<0.20	17.86	312.0	6.79	81.5	159.0	8.67		
MW-16	5/17/2016	6.0	0.56	1.1	65.0	<1.0	0.026	5.7	6.0	<0.10	<0.20	19.06	448.0	6.72	84.4	82.0	4.41		
MW-16	8/17/2016	7.2	--	--	88	1.8	--	--	7.0	0.16	<0.20	18.68	534.0	6.58	61.5	96.0	1.57		
EW-14	6/25/2014	6.2	1.0	3.2	<0.20	<0.20	<0.10	4.0	6.2	<0.10	0.54	19.3	1,258.0	6.98	--	-122.8	*		
EW-14	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-14	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-14	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
EW-14	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)										Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen* mg/L
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate												
EW-14	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-14	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	6/25/2014	21	2.9	1.6	<0.20	<0.20	<0.10	<2.0	21	<0.10	<0.15	19.3	870.0	6.81	--	-96.1	*			
EW-15	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-15	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-16	6/26/2014	3.5	1.4	0.77	<.020	<0.20	15	19	3.5	<0.10	<0.15	20.1	916.0	6.80	--	-89.3	*			
EW-16	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-16	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-16	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-16	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)										Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen* mg/L
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate												
EW-16	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-16	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-16	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-16	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-16	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-17	6/25/2014	31	1.6	0.75	<0.20	<0.20	<0.10	3.4	31	<0.10	0.34	19.5	1,494.0	7.09	--	-119.0	*			
EW-17	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-17	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-17	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-17	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-17	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-17	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-17	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-17	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-17	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	6/25/2014	73	2.9	9.5	<0.20	<0.20	<0.10	<2.0	73	<0.10	0.3	21.2	870.0	6.82	--	-101.4	*			
EW-18	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**TABLE 5 – BIOATTENUATION MONITORING**

Monitoring Well/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)										Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen* mg/L
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate												
EW-18	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-18	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	6/25/2014	43	3.3	7.1	<0.20	<0.20	0.17	<2.0	43	<0.10	0.5	20.5	926.0	6.66	--	-91.1	*			
EW-19	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-19	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	6/25/2014	110	2.6	9.1	0.22	<0.20	0.14	7	110	<0.10	0.36	21.0	750.0	6.85	--	-107.2	*			
EW-20	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**TABLE 5 – BIOATTENUATION MONITORING**

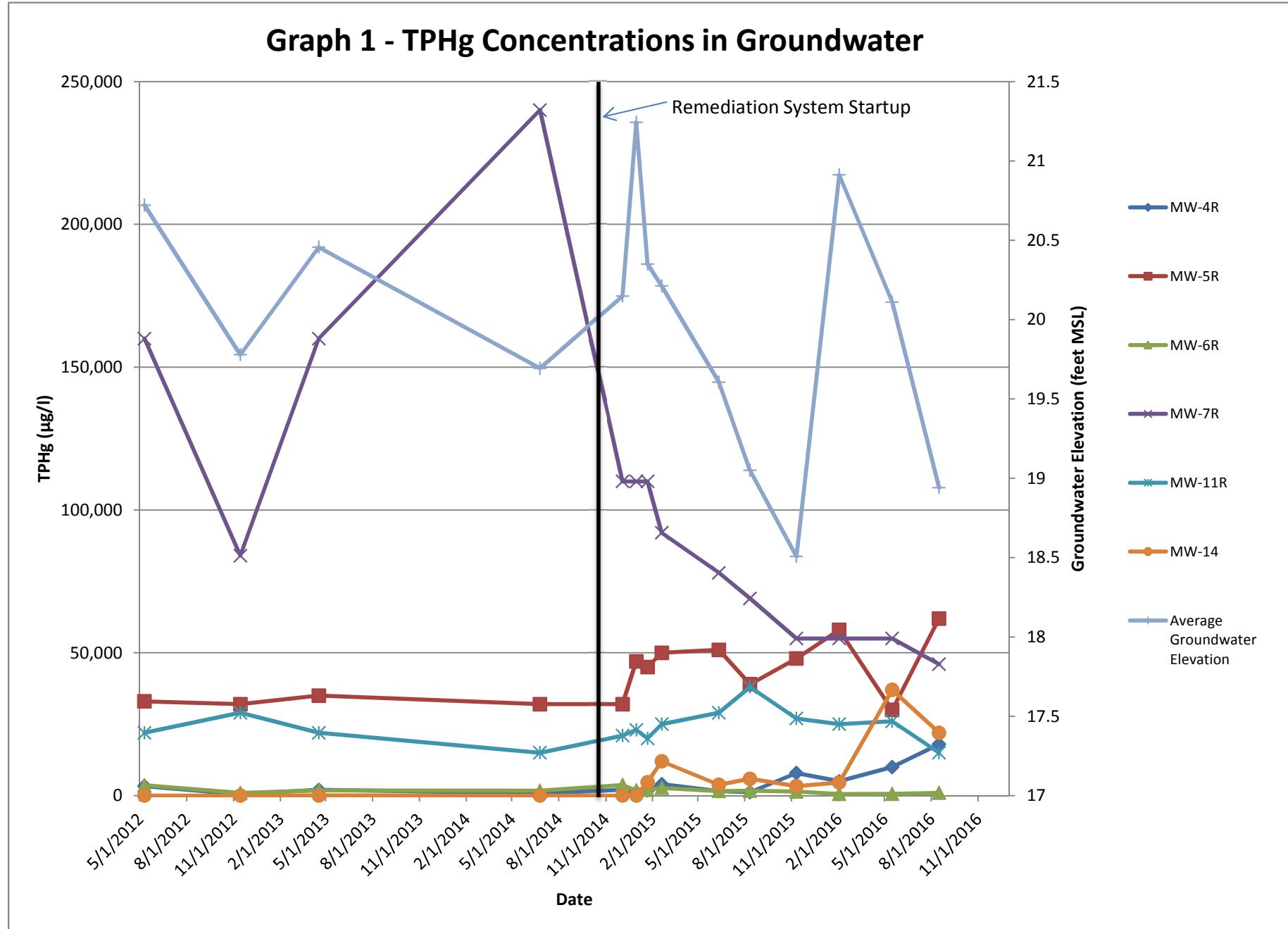
Monitoring Well/Sample ID	Sample Date	EPA 200.7			EPA Method 300.0				Ferric Iron by Calculation	SM 3500-Fe D	SM 4500-NH3 D	Field Instrument								
		(mg/l)										Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)	Dissolved Oxygen* mg/L
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate												
EW-20	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-20	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-21	6/26/2014	1.6	<0.5	6.1	6.1	<0.20	<0.10	15	1.60	<0.10	<0.03	20.0	422.2	6.90	--	10.0	*			
EW-21	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-21	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-21	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-21	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-21	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-21	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-21	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-21	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-21	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-22	6/26/2014	23	<0.5	3.6	0.47	<0.20	<0.10	8.6	23	<0.10	0.03	18.8	173.7	6.63	--	141.3	*			
EW-22	12/4/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-22	12/31/2014	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-22	1/22/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-22	2/19/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**TABLE 5 – BIOATTENUATION MONITORING**

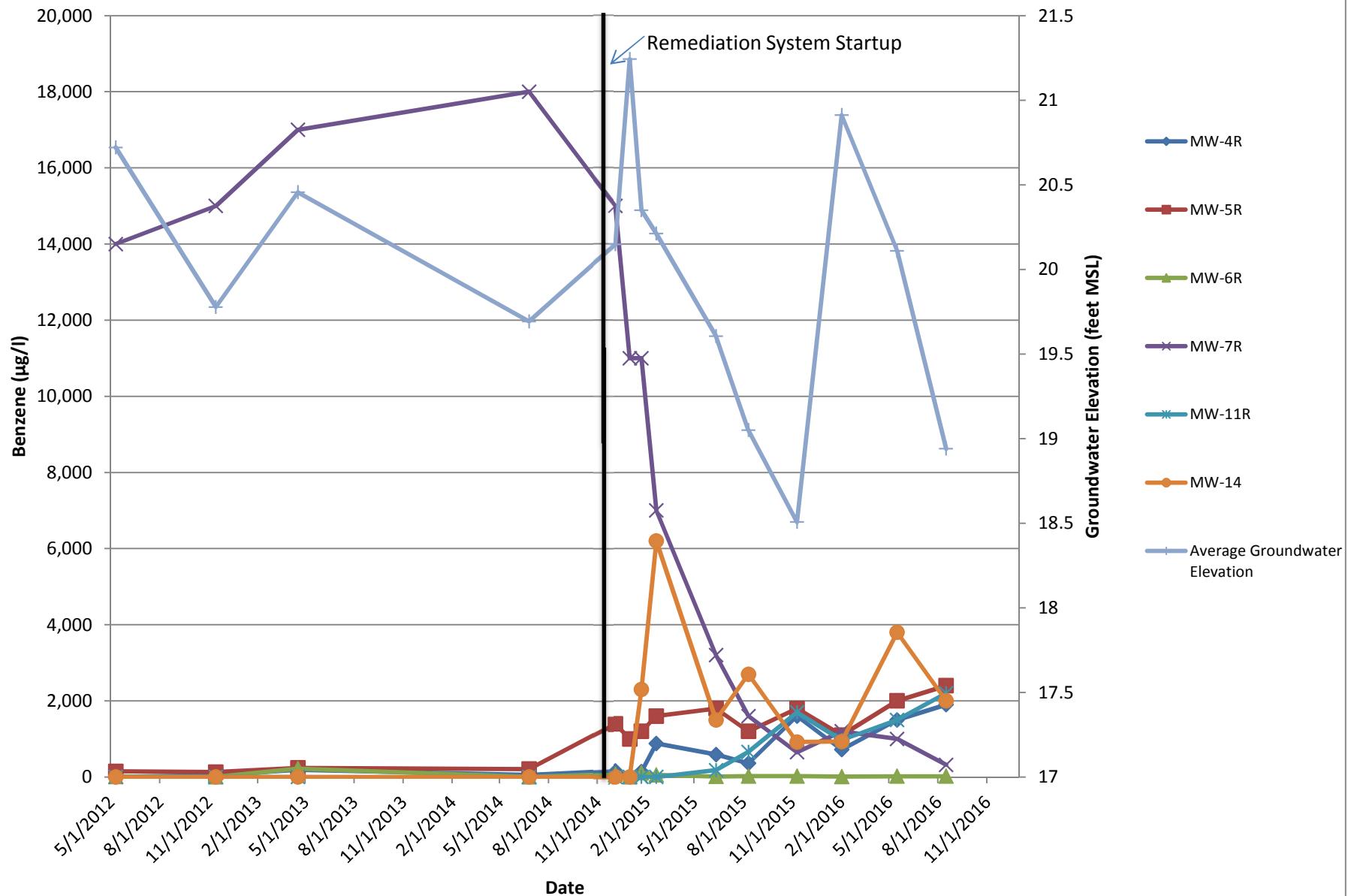
Monitoring Well/Sample ID	Sample Date	EPA 200.7			EPA Method 300.0			Ferric Iron by Calculation	SM 3500-Fe D	SM 4500-NH3 D	Field Instrument					
		(mg/l)														
		Iron	Manganese	Potassium	Nitrate	Nitrite	Phosphate	Sulfate	Ferric Iron	Ferrous Iron	Nitrogen, Ammonia	Temperature (°C)	Conductivity (µS/cm)	pH	Turbidity (NTU)	ORP (mV)
EW-22	6/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-22	8/11/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-22	11/10/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-22	2/3/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-22	5/16/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**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  
 1 - pH readings taken on 6/22/15 and not on sample date.  
 -- - Not analyzed or not applicable  
 \*- Dissolved oxygen content was measured mistakenly measured in percent (%) during the 6/25/14 and 6/26/14 sampling event as well as the 12/4/14 and 12/5/14 sampling event. These results are hidden to avoid confusion. Samples taken on and after 12/30/2014 are measured in mg/L



## Graph 2 - Benzene Concentrations in Groundwater





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



SCALE IN FEET

0 2000 4000

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

**Ninjo & Moore**

### SITE LOCATION

FIGURE

1

PROJECT NO.	DATE	2301 SANTA CLARA AVENUE ALAMEDA, CALIFORNIA
401896004	2/17	



REFERENCE: GOOGLE EARTH, 2012.



SCALE IN FEET

0 40 80

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND

APPROXIMATE SITE BOUNDARY

**Ninjo & Moore**

SITE VICINITY

FIGURE

**2**

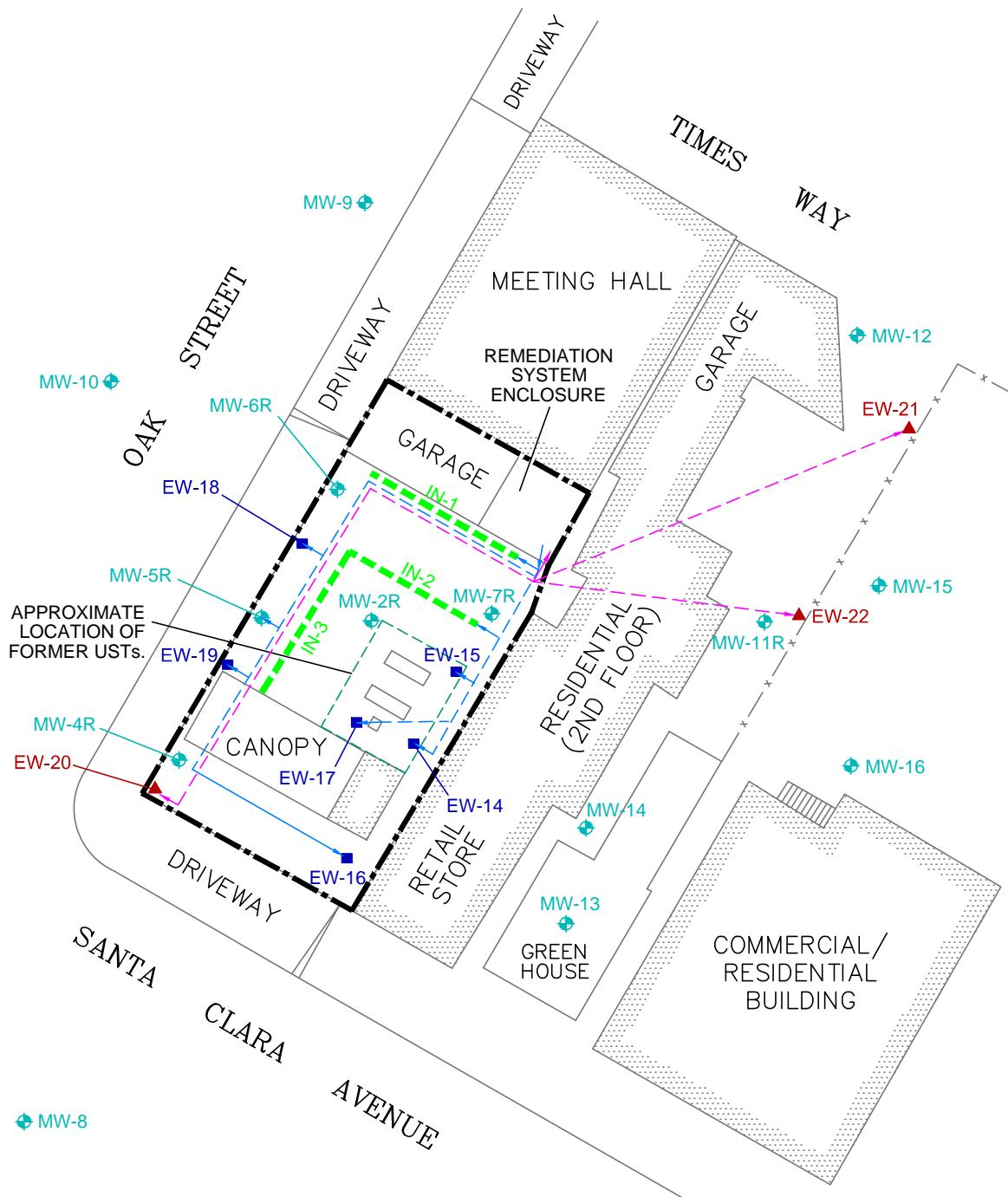
PROJECT NO.

DATE

401896004

2/17

2301 SANTA CLARA AVENUE  
ALAMEDA, CALIFORNIA



SCALE IN FEET  
0 30 60

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

LEGEND	
—	APPROXIMATE SITE BOUNDARY
— X —	FENCE
- - -	EXTRATION WATER SUPPLY LINE AND POWER CONDUIT
- - -	INJECTION WATER SUPPLY LINE
- - -	SLOTTED HORIZONTAL INJECTION PIPING
MW-16 ♦	GROUNDWATER MONITORING WELL
EW-22 ▲	GROUNDWATER EXTRATION WELL
EW-19 ■	GROUNDWATER INJECTION WELL

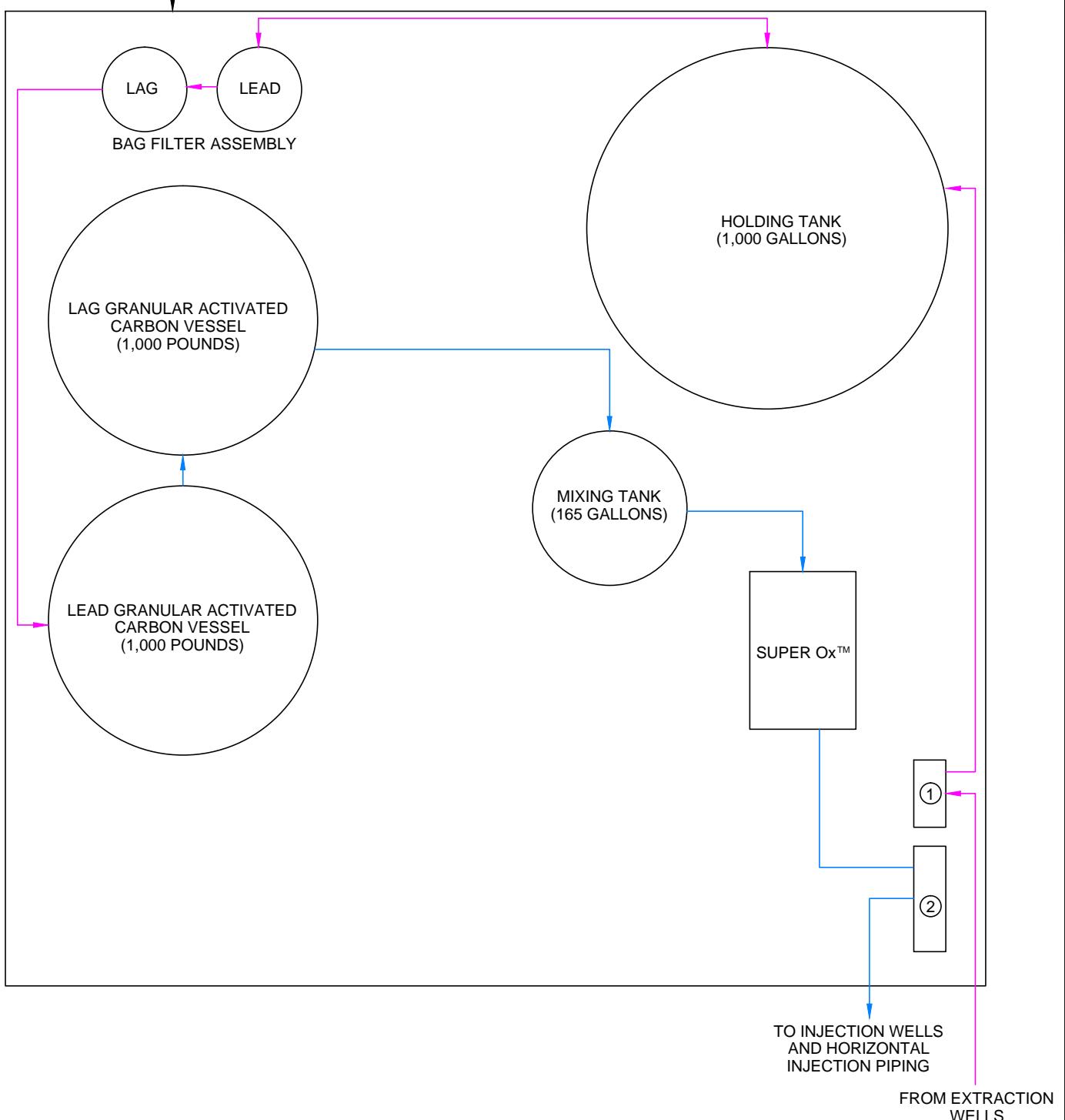
REFERENCE: VIRGIL CHAVEZ LAND SURVEYING, 2012.

**Ninjo & Moore**

## SITE PLAN

FIGURE

**3**

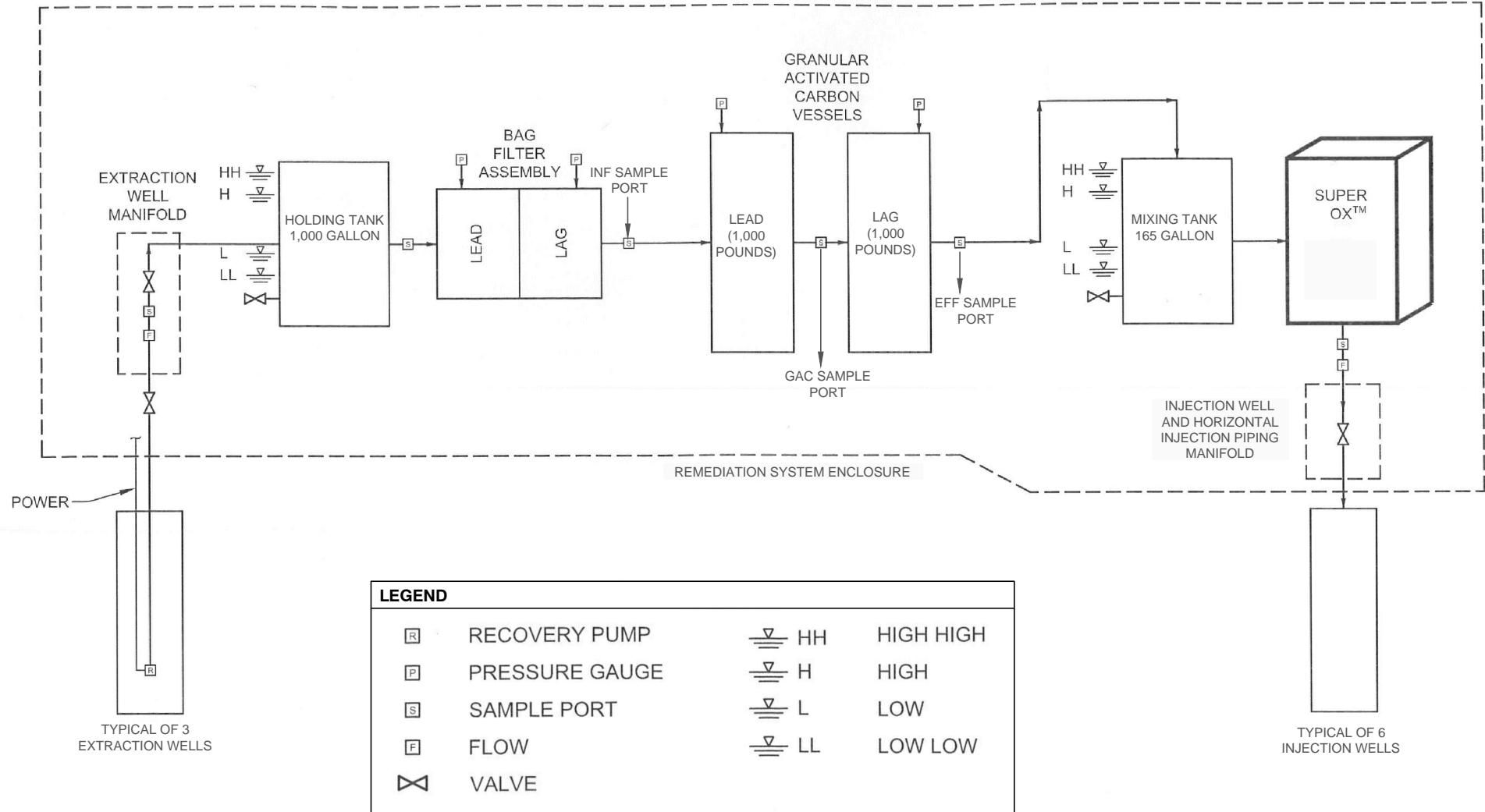


NOT TO SCALE

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

**LEGEND**

- |     |   |
|-----|---|
| (1) | EXTRACTION WELL MANIFOLD                                |
| (2) | INJECTION WELL AND HORIZONTAL INJECTION PIPING MANIFOLD |



REFERENCE: KENNEDY/JENKS CONSULTANTS, FIGURE 12, JANUARY 2010.

**Ninjo & Moore**

## REMEDIATION SYSTEM SCHEMATIC

NOT TO SCALE

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

PROJECT NO.

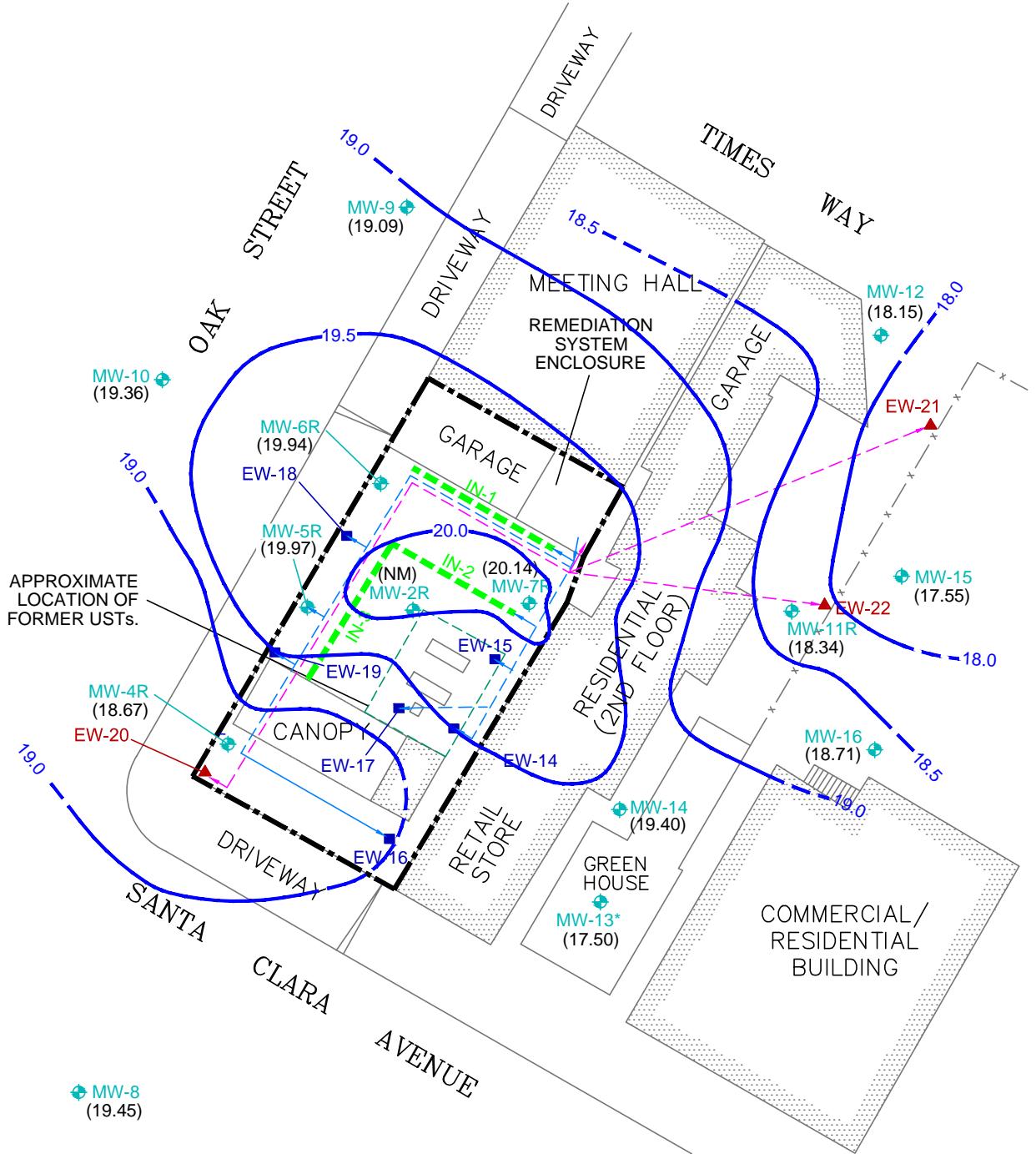
DATE

401896004

2/17

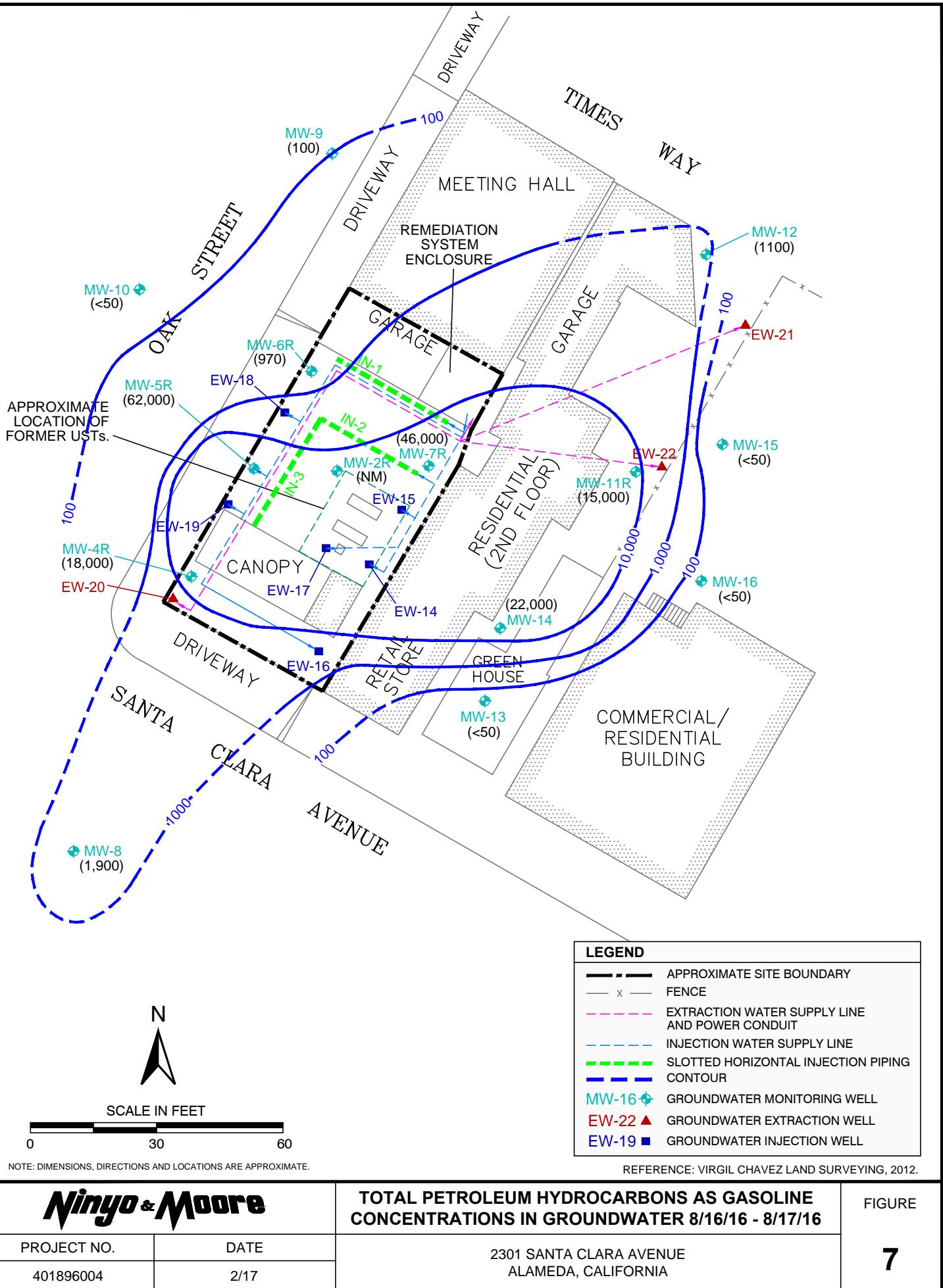
2301 SANTA CLARA AVENUE  
ALAMEDA, CALIFORNIA

FIGURE  
**5**



LEGEND	
—	APPROXIMATE SITE BOUNDARY
— X —	FENCE
- - -	EXTRACTION WATER SUPPLY LINE AND POWER CONDUIT
- - - -	INJECTION WATER SUPPLY LINE
- - - - -	SLOTTED HORIZONTAL INJECTION PIPING
—	CONTOUR
MW-16 ♦	GROUNDWATER MONITORING WELL
EW-22 ▲	GROUNDWATER EXTRACTION WELL
EW-19 ■	GROUNDWATER INJECTION WELL
MW-13* ♦	EXCLUDED FROM GROUNDWATER ELEVATION CONTOURS

REFERENCE: VIRGIL CHAVEZ LAND SURVEYING, 2012.



401896004-F|G7.dwg, Oct 07, 2016, 9:27am AOB

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCE: VIRGIL CHAVEZ LAND SURVEYING, 2012.

**Ninjo & Moore**

## **TOTAL PETROLEUM HYDROCARBONS AS GASOLINE CONCENTRATIONS IN GROUNDWATER 8/16/16 - 8/17/16**

PROJECT NO.

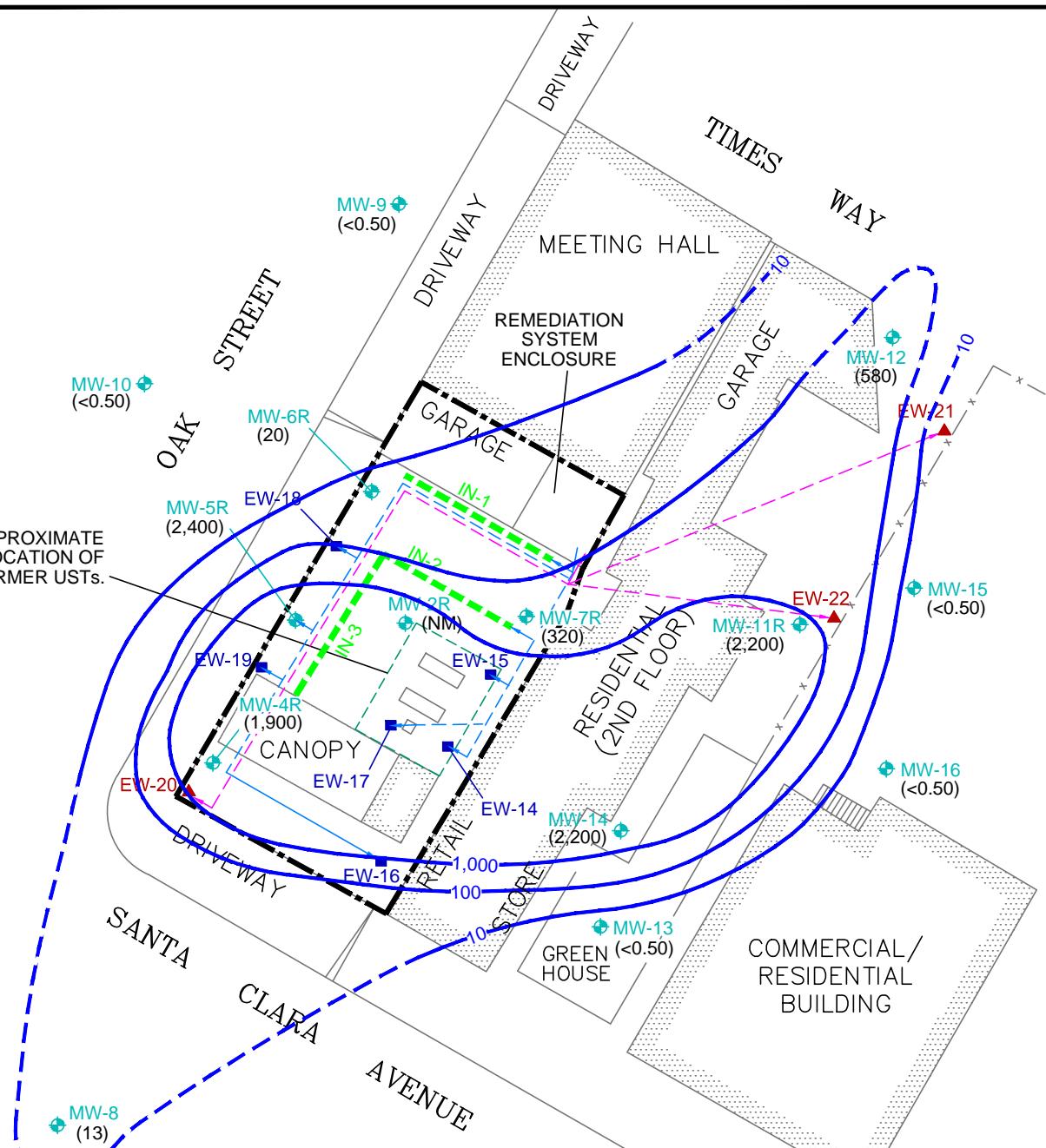
DATE  
2/17

2301 SANTA CLARA AVENUE  
ALAMEDA, CALIFORNIA

## FIGURE

7

APPROXIMATE  
LOCATION OF  
FORMER USTs.



SCALE IN FEET

0 30 60

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCE: VIRGIL CHAVEZ LAND SURVEYING, 2012.

**Ninjo & Moore**

### BENZENE CONCENTRATIONS IN GROUNDWATER 8/16/16 - 8/17/16

FIGURE

8

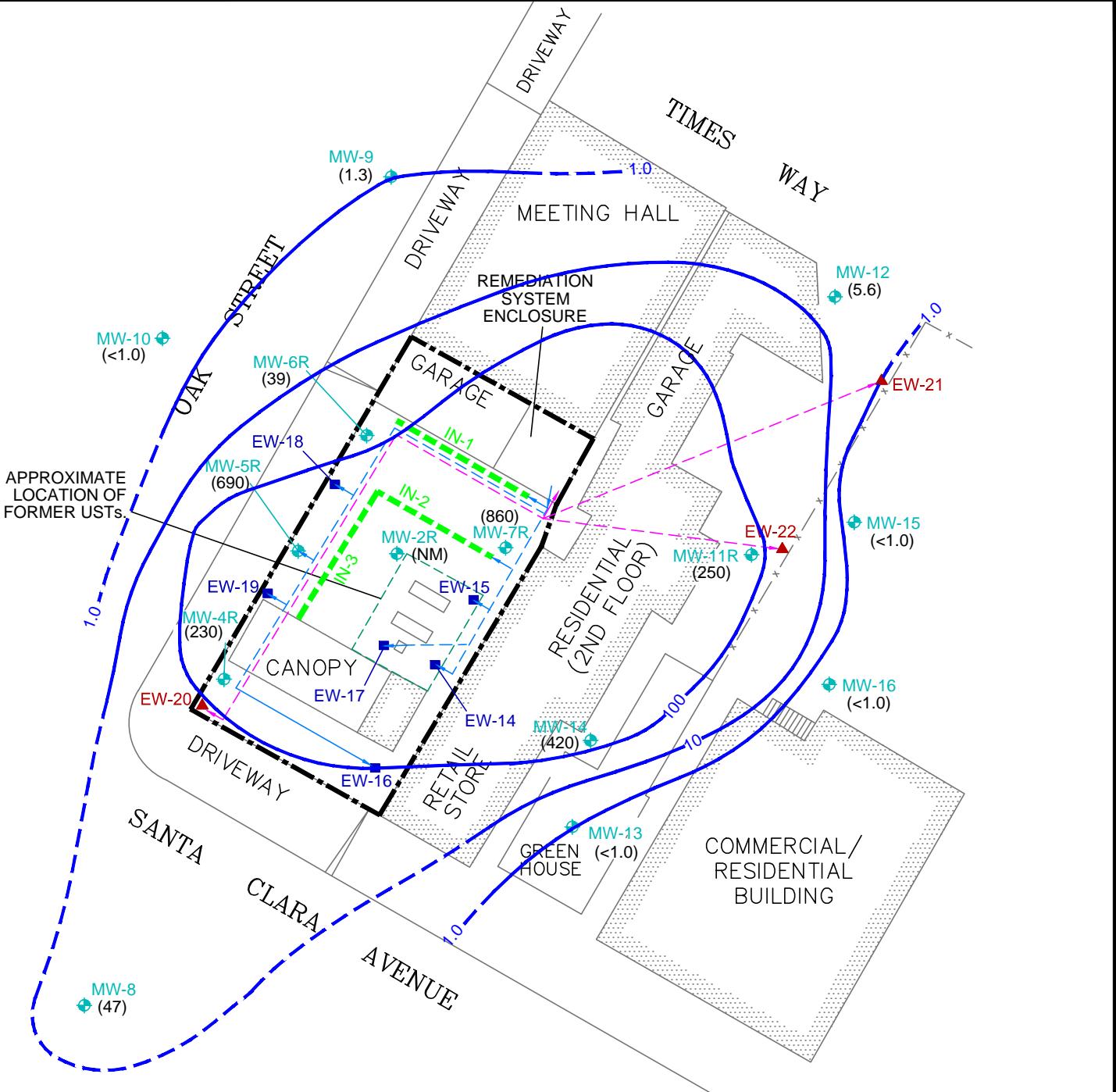
PROJECT NO.

DATE

401896004

2/17

2301 SANTA CLARA AVENUE  
ALAMEDA, CALIFORNIA



SCALE IN FEET

0 30 60

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCE: VIRGIL CHAVEZ LAND SURVEYING, 2012.

**Ninjo & Moore**

### NAPHTHALENE CONCENTRATIONS IN GROUNDWATER 8/16/16 - 8/17/16

FIGURE

**9**

PROJECT NO.

DATE

401896004

2/17

2301 SANTA CLARA AVENUE  
ALAMEDA, CALIFORNIA

2301 Santa Clara Avenue  
Alameda, California

February 28, 2017  
Project No. 401896004

---

## 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 ( $\mu\text{g/L}$ )															
9/17/2000	65,000	15,000													
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
9/17/2000	140,000	21,000													
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
9/17/2000	9,300	3,000													
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:

$\mu\text{g/L}$  = 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 ( $\mu\text{g/L}$ )														
9/17/2000	ND	ND													
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
9/17/2000	44,000	490													
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
9/17/2000	10,000	110													
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:

$\mu\text{g/L}$  = 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.

2301 Santa Clara Avenue  
Alameda, California

May 29, 2013  
Project No. 401896004  
Fuel Leak Case RO0000382

**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 ( $\mu\text{g/L}$ )														
9/17/2000	220,000	32,000													
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:

$\mu\text{g/L}$  = 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 ( $\mu\text{g/L}$ )														
9/17/2000	ND	1.4													
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:

$\mu\text{g/L}$  = micrograms per liter

NA = not analyzed

ND = concentration not detected above laboratory reporting limits

Analytical data was taken from historical monitoring reports in Geotracker.

2301 Santa Clara Avenue  
Alameda, California

May 29, 2013  
Project No. 401896004  
Fuel Leak Case RO0000382

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

Date	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
9/17/2000	ND	ND													
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:

$\mu\text{g/L}$  = micrograms per liter

NA = not analyzed

ND = concentration not detected above laboratory reporting limits

Analytical data was taken from historical monitoring reports in Geotracker.

2301 Santa Clara Avenue  
Alameda, California

May 29, 2013  
Project No. 401896004  
Fuel Leak Case RO0000382

**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 ( $\mu\text{g/L}$ )														
9/17/2000	ND	ND													
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
10/24/2002	59,000	5,100													
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
8/22/2005	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
3/14/2006	400	110	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	NA	NA
6/12/2006	ND	6.8	ND	ND	ND	ND	ND	ND	2.2	ND	ND	ND	2.9	NA	NA
9/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
1/5/2007	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
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	ND	3.5	ND	ND
9/4/2008	ND	ND	ND	ND	ND	ND	21	ND	3.6	ND	ND	ND	5.0	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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
8/22/2005	100	5.9	ND	ND	ND	ND	ND	ND	13	ND	ND	39			
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	ND	2.5	ND	ND	6.8	ND	ND

Notes:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
8/20/2005	3,800	89	4.7	150	3.4	ND	80	ND	19	ND	ND	42			
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
8/20/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31		
3/14/2006	ND	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	ND	55		
9/6/2006	ND	ND	ND	ND	ND	ND	31	ND	3.8	ND	ND	ND	38		
1/5/2007	140	12	44	3.6	19.9	ND	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:

$\mu\text{g/L}$  = micrograms per liter

NA = not analyzed

ND = concentration not detected above laboratory reporting limits

Analytical data was taken from historical monitoring reports in Geotracker.

2301 Santa Clara Avenue  
Alameda, California

May 29, 2013  
Project No. 401896004  
Fuel Leak Case RO0000382

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

Date	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
8/20/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.0		
3/14/2006	ND	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	ND	14		
9/6/2006	ND	ND	ND	ND	ND	ND	12	ND	5.8	ND	ND	ND	4.7		
1/6/2007	ND	ND	ND	ND	ND	ND	ND	ND	4.1	ND	ND	ND	11		
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	4.5	ND	ND
9/22/2007	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	6.8	ND	ND
9/4/2008	ND	ND	ND	ND	ND	ND	ND	ND	3.5	ND	ND	ND	9.1	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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
Analytical Results ( $\mu\text{g/L}$ )															
10/31/2002	5,840	76													
9/21/2003	19,000	590													
12/25/2003	9,900	790													
4/24/2004	12,000	920													

Notes:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
10/31/2002	109,200	9,120													
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	ND	1,400		
6/11/2006	130,000	23,000	48,000	3,000	18,800	ND	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	ND		
1/5/2007	410,000	57,000	43,000	17,000	75,000	ND	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	ND	410	280
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	ND	74	71
2/27/2010	11,000	3,500	4,300	380	730	ND	ND	ND	ND	ND	ND	ND	ND	57	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	ND	240	210
															890

Notes:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
9/22/2003	68,000	4,100													
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
1/21/2004	72,000	8,400													
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
1/21/2004	1,500	290													
8/8/2004	2,500	590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
1/21/2004	18,000	2,600													
8/8/2004	30,000	6,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
	Analytical Results ( $\mu\text{g/L}$ )														
8/22/2005	1500	14	100	38	224	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
3/13/2006	790	ND	6.6	6.5	57	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
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	NA	NA	NA
1/6/2007	ND	ND	2.4	1.4	16	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
7/7/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
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:

$\mu\text{g/L}$  = 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	TPH <sub>g</sub>	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	EDB	EDC	DIPE	EtBE	MtBE	Naphthalene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene
Analytical Results ( $\mu\text{g/L}$ )															
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:

$\mu\text{g/L}$  = 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.

2301 Santa Clara Avenue  
Alameda, California

February 28, 2017  
Project No. 401896004

---

## APPENDIX B

### OPERATIONS AND MAINTENANCE FIELD FORMS

# Field Form for Treatment System Operations and Maintenance

Enhanced Biodegradation and Groundwater Recirculation Project

Former Bill Chun Facility, Alameda, CA

Visit Type:  bi-weekly  monthly  quarterly  unplanned

Date: 7/15/16

Field Tech: CVRD

Time: 16:00

## Wells

Well ID	Meter Reading (gal)	Pressure (psi)	O2 Flow (scfh)	Comments
<b>Extraction</b>				
EX-20	<u>750900</u>	--	--	
EX-22	<u>329130</u>	--	--	
EX-21	<u>474250</u>	--	--	
<b>Injection</b>				
IN-18	—	—	—	
IN-19/18	<u>36390</u>	*	*	
IN-16	<u>88040</u>	*	*	<u>Did not come on</u>
Trenches 2+3	<u>27850</u>	<u>3.18</u>	<u>2.4</u>	
Trench 1 + IN 17	<u>282500</u>	<u>24</u>	<u>2.4</u>	
IN 14 +15	<u>238910</u>	<u>72</u>	<u>2.4</u>	

## Treatment System

Totalizer (digital): 950420 gal  
 DO-IT System Pressure: — psi (analog)  
 O2 Flow: — scfh  
—  
—

GAC Lead Pressure: 6 psi  
 GAC Polish Pressure: 0 psi  
 Bag Filter 1 Pressure : 52 psi  
 Bag Filter 2 Pressure : 14 psi  
 Mixing Tank pH \_\_\_\_\_  
 Holding Tank pH \_\_\_\_\_

## Weekly Maintenance Checklist

- Check O2 Flow
- Check All Flow Meters and Pressure Gauges
- Add Amendment to Holding Tank  
cups soda ash pH buffer

- Add Amendment to Mixing Tank  
50 lbs CBN nutrient mix
- 5 gal EZT-EA biosurfactant
- cups soda ash pH buffer

## Quarterly Maintenance Checklist

- Clean Mixing Tank
- Clean Flow Meters
- Y Strainer
- Bag Filters
- Check GW Extraction Flow Rate
- Check Grundfos Extraction Pumps

# Field Form for Treatment System Operations and Maintenance

Enhanced Biodegradation and Groundwater Recirculation Project

Former Bill Chun Facility, Alameda, CA

**Visit Type:**  bi-weekly  monthly  quarterly  unplanned

**Date:** 5/28/14

**Field Tech:** EWD

**Time:** 08:00

## Wells

Well ID	Meter Reading (gal)	Pressure (psi)	O2 Flow (scfh)	Comments
<b>Extraction</b>				
EX-20	<u>741080</u>	--	--	
EX-22	<u>345880</u>	--	--	
EX-21	<u>486030</u>	--	--	
<b>Injection</b>				
IN-18	-	-	-	
IN-19	<u>300730</u>	<u>50</u>	<u>6</u>	
IN-16	<u>88680</u>	<u>24</u>	<u>3.4</u>	
Trenches 2+3	<u>283190</u>	<u>40</u>	<u>8</u>	<u>sound of rushing water @ manifolds</u>
Trench 1 + IN 17	<u>288220</u>	<u>26</u>	<u>4.2</u>	
IN 14 +15	<u>244430</u>	<u>50</u>	<u>8</u>	<u>DCI: 73 O2: 4.4</u>

## Treatment System

Totalizer (digital): 974000 gal  
 DO-IT System Pressure: \_\_\_\_\_ psi (analog)

O2 Flow: \_\_\_\_\_ scfh

GAC Lead Pressure: 11 psi

GAC Polish Pressure: 5 psi

Bag Filter 1 Pressure: 64 psi

Bag Filter 2 Pressure: 34 psi

Mixing Tank pH: \_\_\_\_\_

Holding Tank pH: \_\_\_\_\_

## Weekly Maintenance Checklist

- Check O2 Flow
- Check All Flow Meters and Pressure Gauges
- Add Amendment to Holding Tank  
\_\_\_\_\_ cups soda ash pH buffer

- Add Amendment to Mixing Tank  
50 lbs CBN nutrient mix  
5 gal EZT-EA biosurfactant  
\_\_\_\_\_ cups soda ash pH buffer

## Quarterly Maintenance Checklist

- Clean Mixing Tank
- Clean Flow Meters
- Y Strainer
- Bag Filters
- Check GW Extraction Flow Rate
- Check Grundfos Extraction Pumps

# Field Form for Treatment System Operations and Maintenance

Enhanced Biodegradation and Groundwater Recirculation Project

Former Bill Chun Facility, Alameda, CA

Visit Type:  bi-weekly  monthly  quarterly  unplanned

Date: 8 / 16 / 16

Field Tech: CURD

Time: 15 :00

## Wells

Well ID	Meter Reading (gal)	Pressure (psi)	O2 Flow (scfh)	Comments
---------	---------------------	----------------	----------------	----------

### Extraction

EX-20	<u>779840</u>	--	--	
EX-22	<u>358280</u>	--	--	
EX-21	<u>5083100</u>	--	--	

### Injection

IN-18	<u>—</u>	<u>—</u>	<u>—</u>	
IN-19/18	<u>37420</u>	<u>52</u>	<u>4</u>	
IN-16	<u>90270</u>	<u>30</u>	<u>3.2</u>	
Trenches 2+3	<u>294190</u>	<u>42</u>	<u>0</u>	
Trench 1 + IN 17	<u>299320</u>	<u>26</u>	<u>2.2</u>	
IN 14 +15	<u>251880</u>	<u>24</u>	<u>2.0</u>	

## Treatment System

Totalizer (digital): 1006450 gal  
 DO-IT System Pressure: \_\_\_\_\_ psi (analog)  
 O2 Flow: \_\_\_\_\_ scfh  
 \_\_\_\_\_  
 \_\_\_\_\_

GAC Lead Pressure: 12 psi  
 GAC Polish Pressure: 0 psi  
 Bag Filter 1 Pressure: 42 psi  
 Bag Filter 2 Pressure: 36 psi  
 Mixing Tank pH \_\_\_\_\_  
 Holding Tank pH \_\_\_\_\_

## Weekly Maintenance Checklist

- Check O2 Flow
- Check All Flow Meters and Pressure Gauges
- Add Amendment to Holding Tank  
\_\_\_\_\_ cups soda ash pH buffer

- Add Amendment to Mixing Tank  
50 lbs CBN nutrient mix  
0 gal EZT-EA biosurfactant  
\_\_\_\_\_ cups soda ash pH buffer

## Quarterly Maintenance Checklist

- Clean Mixing Tank
- Clean Flow Meters
- Y Strainer
- Bag Filters
- Check GW Extraction Flow Rate
- Check Grundfos Extraction Pumps

# Field Form for Treatment System Operations and Maintenance

Enhanced Biodegradation and Groundwater Recirculation Project

Former Bill Chun Facility, Alameda, CA

Visit Type:  bi-weekly  monthly  quarterly  unplanned

Date: 8 / 31 / 16

Field Tech: EWD

Time: 10 : 00

## Wells

Well ID	Meter Reading (gal)	Pressure (psi)	O2 Flow (scfh)	Comments
<b>Extraction</b>				
EX-20	793220	--	--	
EX-22	307410	--	--	
EX-21	525540	--	--	
<b>Injection</b>				
IN-18	-	-	-	
IN-19/18	37820	650	50	
IN-16	91590	20	3.4	
Trenches 2+3	307040	52	0	
Trench 1 + IN 17	307260	24	5.2	
IN 14 +15	257330	24	5.6	

## Treatment System

Totalizer (digital): 1032370 gal  
 DO-IT System Pressure: \_\_\_\_\_ psi (analog)  
 O2 Flow: \_\_\_\_\_ scfh  
 \_\_\_\_\_  
 \_\_\_\_\_

GAC Lead Pressure: 14 psi  
 GAC Polish Pressure: 0 psi  
 Bag Filter 1 Pressure : 52 psi  
 Bag Filter 2 Pressure : 32 psi  
 Mixing Tank pH \_\_\_\_\_  
 Holding Tank pH \_\_\_\_\_

## Weekly Maintenance Checklist

- Check O2 Flow
- Check All Flow Meters and Pressure Gauges
- Add Amendment to Holding Tank  
\_\_\_\_\_ cups soda ash pH buffer

- Add Amendment to Mixing Tank  
50 lbs CBN nutrient mix  
0 gal EZT-EA biosurfactant  
\_\_\_\_\_ cups soda ash pH buffer

## Quarterly Maintenance Checklist

- Clean Mixing Tank
- Clean Flow Meters
- Y Strainer
- Bag Filters
- Check GW Extraction Flow Rate
- Check Grundfos Extraction Pumps

# Field Form for Treatment System Operations and Maintenance

Enhanced Biodegradation and Groundwater Recirculation Project  
Former Bill Chun Facility, Alameda, CA

Visit Type:  bi-weekly  monthly  quarterly  unplanned

Date: 9 / 13 / 16

Field Tech: CRD

Time: 06 : 50

## Wells

Well ID	Meter Reading (gal)	Pressure (psi)	O2 Flow (scfh)	Comments
<b>Extraction</b>				
EX-20	793220	--	--	
EX-22	375080	--	--	
EX-21	539570	--	--	
<b>Injection</b>				
IN-18	—	—	—	
IN-19/18	38100	54	<del>20</del>	
IN-16	92520	32	<del>20</del> 3.0	
Trenches 2+3	309410	310	<del>20</del> 2.2	
Trench 1 + IN 17	313790	28	4.0	
IN 14 +15	262040	28	4.8	

## Treatment System

Totalizer (digital): 105300 gal  
 DO-IT System Pressure: \_\_\_\_\_ psi (analog)  
 O2 Flow: \_\_\_\_\_ scfh  
 \_\_\_\_\_  
 \_\_\_\_\_

GAC Lead Pressure: 12 psi  
 GAC Polish Pressure: 0 psi  
 Bag Filter 1 Pressure : 04 psi  
 Bag Filter 2 Pressure : 44 psi  
 Mixing Tank pH \_\_\_\_\_  
 Holding Tank pH \_\_\_\_\_

## Weekly Maintenance Checklist

- Check O2 Flow
- Check All Flow Meters and Pressure Gauges
- Add Amendment to Holding Tank  
\_\_\_\_\_ cups soda ash pH buffer

- Add Amendment to Mixing Tank  
50 lbs CBN nutrient mix  
0 gal EZT-EA biosurfactant  
\_\_\_\_\_ cups soda ash pH buffer

## Quarterly Maintenance Checklist

- Clean Mixing Tank
- Clean Flow Meters
- Y Strainer
- Bag Filters
- Check GW Extraction Flow Rate
- Check Grundfos Extraction Pumps

# Field Form for Treatment System Operations and Maintenance

Enhanced Biodegradation and Groundwater Recirculation Project

Former Bill Chun Facility, Alameda, CA

Visit Type:  bi-weekly  monthly  quarterly  unplanned

Date: 8 / 31 / 16

Field Tech: EWD

Time: 10 : 00

## Wells

Well ID	Meter Reading (gal)	Pressure (psi)	O2 Flow (scfh)	Comments
<b>Extraction</b>				
EX-20	793220	--	--	
EX-22	307400	--	--	
EX-21	525540	--	--	
<b>Injection</b>				
IN-18	-	-	-	
IN-19	37820	650	550	
IN-16	91590	30	3.4	
Trenches 2+3	302040	52	0	
Trench 1 + IN 17	307240	24	5.2	
IN 14 +15	257330	24	5.6	

## Treatment System

Totalizer (digital): 1032370 gal  
 DO-IT System Pressure: \_\_\_\_\_ psi (analog)  
 O2 Flow: \_\_\_\_\_ scfh  
 \_\_\_\_\_  
 \_\_\_\_\_

GAC Lead Pressure: 14 psi  
 GAC Polish Pressure: 0 psi  
 Bag Filter 1 Pressure : 52 psi  
 Bag Filter 2 Pressure : 32 psi  
 Mixing Tank pH \_\_\_\_\_  
 Holding Tank pH \_\_\_\_\_

## Weekly Maintenance Checklist

- Check O2 Flow
- Check All Flow Meters and Pressure Gauges
- Add Amendment to Holding Tank  
\_\_\_\_\_ cups soda ash pH buffer

- Add Amendment to Mixing Tank  
50 lbs CBN nutrient mix  
0 gal EZT-EA biosurfactant  
\_\_\_\_\_ cups soda ash pH buffer

## Quarterly Maintenance Checklist

- Clean Mixing Tank
- Clean Flow Meters
- Y Strainer
- Bag Filters
- Check GW Extraction Flow Rate
- Check Grundfos Extraction Pumps

## Field Form for Treatment System Operations and Maintenance

Enhanced Biodegradation and Groundwater Recirculation Project

## Former Bill Chun Facility, Alameda, CA

**Visit Type:**  bi-weekly  monthly  quarterly  unplanned

Date: 8 / 16 / 16

Field Tech: CWRD

Time: 15:00

Wells

Well ID	Meter Reading (gal)	Pressure (psi)	O2 Flow (scfh)	Comments
<b>Extraction</b>				
EX-20	779840	--	--	
EX-22	358280	--	--	
EX-21	5083100	--	--	
<b>Injection</b>				
IN-18	—	—	—	
IN-19/R	37420	52	6	
IN-16	90270	30	3.2	
Trenches 2+3	294190	42	0	
Trench 1 + IN 17	299320	26	2.2	
IN 14 +15	251880	24	2.6	

## Treatment System

Totalizer (digital): 1006450 gal  
DO-IT System Pressure: \_\_\_\_\_ psi (analog)  
O2 Flow: \_\_\_\_\_ scfh  
\_\_\_\_\_  
\_\_\_\_\_

GAC Lead Pressure: 12 psi  
GAC Polish Pressure: 0 psi  
Bag Filter 1 Pressure : 42 psi  
Bag Filter 2 Pressure : 36 psi  
Mixing Tank pH \_\_\_\_\_  
Holding Tank pH \_\_\_\_\_

## Weekly Maintenance Checklist

- Check O2 Flow
  - Check All Flow Meters and Pressure Gauges
  - Add Amendment to Holding Tank

- Add Amendment to Mixing Tank  
50 lbs CBN nutrient mix  
0 gal EZT-EA biosurfactant  
cups soda ash pH buffer

## Quarterly Maintenance Checklist

- Clean Mixing Tank
  - Clean Flow Meters
  - Y Strainer

- Bag Filters
  - Check GW Extraction Flow Rate
  - Check Grundfos Extraction Pumps

## Field Form for Treatment System Operations and Maintenance

Enhanced Biodegradation and Groundwater Recirculation Project

## Former Bill Chun Facility, Alameda, CA

**Visit Type:**  bi-weekly  monthly  quarterly  unplanned

Date: 9 / 30 / 14

Field Tech: Asha Turman

Time: 13 : 29

Wells

Well ID	Meter Reading (gal)	Pressure (psi)	O2 Flow (scfh)	Comments
<b>Extraction</b>				
EX-20	504900	--	--	1 x 50 lbs of CBN
EX-22	384380	--	--	1 x 50 lbs of CBN
EX-21	554280	--	--	
<b>Injection</b>				
IN-18 + 19	38410	NA	NA	didn't switch on
IN-16	93620	17	9.8	
Trenches 2+3	31770	20.9	6.9	
Trench 1 + IN 17	222310	23.3	5.1	
IN 14 +15	268080	23	5.9	

## Treatment System

Totalizer (digital): 1076540 gal  
DO-IT System Pressure: \_\_\_\_\_ psi (analog)  
O2 Flow: \_\_\_\_\_ scfh  
\_\_\_\_\_

GAC Lead Pressure: 21 psi  
GAC Polish Pressure: 0 psi  
Bag Filter 1 Pressure : 38.8 psi  
Bag Filter 2 Pressure : 29.2 psi  
Mixing Tank pH \_\_\_\_\_  
Holding Tank pH \_\_\_\_\_

## Weekly Maintenance Checklist

- Check O2 Flow
  - Check All Flow Meters and Pressure Gauges
  - Add Amendment to Holding Tank
    - cups soda ash pH buffer

- Add Amendment to Mixing Tank  
50 lbs CBN nutrient mix  
8 gal EZT-EA biosurfactant  
cups soda ash pH buffer

## Quarterly Maintenance Checklist

- Clean Mixing Tank
  - Clean Flow Meters
  - Y Strainer

- Bag Filters
  - Check GW Extraction Flow Rate
  - Check Grundfos Extraction Pumps

2301 Santa Clara Avenue  
Alameda, California

February 28, 2017  
Project No. 401896004

---

## APPENDIX C

### LABORATORY ANALYTICAL REPORTS

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-73969-1

Client Project/Site: Chun

For:

Ninno & Moore  
1956 Webster Street  
Suite 400  
Oakland, California 94612

Attn: Mr. Peter D. Sims



Authorized for release by:

8/30/2016 4:22:32 PM

Paloma Duong, Project Manager I  
(925)484-1919  
[paloma.duong@testamericainc.com](mailto:paloma.duong@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?

Ask  
The  
Expert

Visit us at:

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	8
QC Sample Results . . . . .	22
QC Association Summary . . . . .	33
Lab Chronicle . . . . .	36
Certification Summary . . . . .	39
Method Summary . . . . .	40
Sample Summary . . . . .	41
Chain of Custody . . . . .	42
Receipt Checklists . . . . .	44

# Definitions/Glossary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

### Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

## Glossary

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

# Case Narrative

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Job ID: 720-73969-1

Laboratory: TestAmerica Pleasanton

### Narrative

#### Job Narrative 720-73969-1

### Comments

No additional comments.

### Receipt

The samples were received on 8/16/2016 6:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 7.5° C.

### GC/MS VOA

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 720-208208 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: Due to the high concentration of Toluene and m-Xylene & p-Xylene, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 720-208208 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

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

### Metals

Method 200.7: The following samples were received unpreserved and were preserved upon receipt to the laboratory: MW-4R (720-73969-1), MW-5R (720-73969-2), MW-6R (720-73969-3), MW-7R (720-73969-4) and MW-8 (720-73969-5). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion. Received unpreserved, added 1 mL HNO<sub>3</sub> 8/17/16 @ 1609, ref# 207799.

Method 200.7: The following samples were received unpreserved and were preserved upon receipt to the laboratory: MW-9 (720-73969-6) and MW-10 (720-73969-7). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion. Received unpreserved, added 1 mL HNO<sub>3</sub> 8/17/16 @ 1609, ref# 207799.

Method 200.7 Rev 4.4: The continuing calibration verification (CCV) associated with batch 720-208086 recovered above the upper control limit for Fe. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: MW-6R (720-73969-3).

Method 200.7 Rev 4.4: The continuing calibration verification (CCV) associated with batch 720-208095 recovered above the upper control limit for Fe. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (MB 720-207919/1-A).

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

### General Chemistry

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

# Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Client Sample ID: MW-4R

## Lab Sample ID: 720-73969-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1900		10		ug/L	20		8260B/CA_LUFT	Total/NA
Ethylbenzene	980		10		ug/L	20		MS	
Isopropylbenzene	68		10		ug/L	20		8260B/CA_LUFT	Total/NA
Naphthalene	230		20		ug/L	20		MS	
N-Propylbenzene	99		20		ug/L	20		8260B/CA_LUFT	Total/NA
Toluene	3800		10		ug/L	20		MS	
1,2,4-Trimethylbenzene	600		10		ug/L	20		8260B/CA_LUFT	Total/NA
1,3,5-Trimethylbenzene	120		10		ug/L	20		MS	
Xylenes, Total	4500		20		ug/L	20		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	18000		1000		ug/L	20		MS	
Nitrate as NO <sub>3</sub>	1.2		1.0		mg/L	1		300.0	Total/NA
Iron	6.7		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Ferrous Iron	7.2 HF		0.20		mg/L	2		SM 3500 Fe B	Total/NA
Ammonia	5.0		0.40		mg/L	2		SM 4500 NH3 G	Total/NA

## Client Sample ID: MW-5R

## Lab Sample ID: 720-73969-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2400		50		ug/L	100		8260B/CA_LUFT	Total/NA
Ethylbenzene	3800		50		ug/L	100		MS	
Isopropylbenzene	120		50		ug/L	100		8260B/CA_LUFT	Total/NA
Naphthalene	690		100		ug/L	100		MS	
N-Propylbenzene	300		100		ug/L	100		8260B/CA_LUFT	Total/NA
Toluene	14000		50		ug/L	100		MS	
1,2,4-Trimethylbenzene	2300		50		ug/L	100		8260B/CA_LUFT	Total/NA
1,3,5-Trimethylbenzene	520		50		ug/L	100		MS	
Xylenes, Total	20000		100		ug/L	100		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	62000		5000		ug/L	100		MS	
Iron	2.0		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Ferric Iron	1.3		0.10		mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.71 HF		0.10		mg/L	1		SM 3500 Fe B	Total/NA
Ammonia	0.45		0.20		mg/L	1		SM 4500 NH3 G	Total/NA

## Client Sample ID: MW-6R

## Lab Sample ID: 720-73969-3

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Client Sample ID: MW-6R (Continued)

## Lab Sample ID: 720-73969-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	20		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
n-Butylbenzene	5.8		1.0		ug/L	1		MS	
sec-Butylbenzene	7.6		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Ethylbenzene	32		0.50		ug/L	1		MS	
Isopropylbenzene	22		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Naphthalene	39		1.0		ug/L	1		MS	
N-Propylbenzene	6.2		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Toluene	120		0.50		ug/L	1		MS	
1,2,4-Trimethylbenzene	26		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,3,5-Trimethylbenzene	3.1		0.50		ug/L	1		MS	
Xylenes, Total	210		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	970		50		ug/L	1		MS	
Nitrate as NO3	150		10		mg/L	10		300.0	Total/NA
Ammonia	1.6		0.20		mg/L	1		SM 4500 NH3 G	Total/NA

## Client Sample ID: MW-7R

## Lab Sample ID: 720-73969-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	320		100		ug/L	200		8260B/CA_LUFT	Total/NA
Ethylbenzene	1700		100		ug/L	200		MS	
Isopropylbenzene	110		100		ug/L	200		8260B/CA_LUFT	Total/NA
Naphthalene	860		200		ug/L	200		MS	
N-Propylbenzene	230		200		ug/L	200		8260B/CA_LUFT	Total/NA
Toluene	4900		100		ug/L	200		MS	
1,2,4-Trimethylbenzene	2200		100		ug/L	200		8260B/CA_LUFT	Total/NA
1,3,5-Trimethylbenzene	550		100		ug/L	200		MS	
Xylenes, Total	17000		200		ug/L	200		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	46000		10000		ug/L	200		MS	
Nitrite as NO2	4.6		1.0		mg/L	1		300.0	Total/NA
Nitrate as NO3	33		10		mg/L	10		300.0	Total/NA
Iron	4.6		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Ferric Iron	3.5		0.10		mg/L	1		SM 3500	Total/NA
Ferrous Iron	1.1 HF		0.10		mg/L	1		SM 3500 Fe B	Total/NA
Ammonia	0.94		0.20		mg/L	1		SM 4500 NH3 G	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Client Sample ID: MW-8

## Lab Sample ID: 720-73969-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	13		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
n-Butylbenzene	1.9		1.0		ug/L	1		MS	
sec-Butylbenzene	3.9		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Ethylbenzene	3.1		0.50		ug/L	1		MS	
Isopropylbenzene	21		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Naphthalene	47		1.0		ug/L	1		MS	
N-Propylbenzene	20		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Toluene	9.8		0.50		ug/L	1		MS	
1,3,5-Trimethylbenzene	0.78		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Xylenes, Total	16		1.0		ug/L	1		MS	
Gasoline Range Organics (GRO) -C5-C12	1900		50		ug/L	1		8260B/CA_LUFT	Total/NA
Iron	49		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Ferric Iron	31		0.10		mg/L	1		SM 3500	Total/NA
Ferrous Iron	18	HF	0.50		mg/L	5		SM 3500 Fe B	Total/NA
Ammonia	0.20		0.20		mg/L	1		SM 4500 NH3 G	Total/NA

## Client Sample ID: MW-9

## Lab Sample ID: 720-73969-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
sec-Butylbenzene	3.9		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Isopropylbenzene	3.2		0.50		ug/L	1		MS	
Naphthalene	1.3		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	100		50		ug/L	1		MS	
Nitrate as NO <sub>3</sub>	16		1.0		mg/L	1		300.0	Total/NA
Iron	66		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Ferric Iron	65		0.10		mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.86	HF	0.10		mg/L	1		SM 3500 Fe B	Total/NA

## Client Sample ID: MW-10

## Lab Sample ID: 720-73969-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as NO <sub>3</sub>	230		100		mg/L	100		300.0	Total/NA
Iron	40		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Ferric Iron	40		0.10		mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.11	HF	0.10		mg/L	1		SM 3500 Fe B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-4R**  
**Date Collected: 08/16/16 10:05**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-1**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		10		ug/L			08/24/16 22:09	20
Acetone	ND		1000		ug/L			08/24/16 22:09	20
<b>Benzene</b>	<b>1900</b>		10		ug/L			08/24/16 22:09	20
Dichlorobromomethane	ND		10		ug/L			08/24/16 22:09	20
Bromobenzene	ND		20		ug/L			08/24/16 22:09	20
Chlorobromomethane	ND		20		ug/L			08/24/16 22:09	20
Bromoform	ND		20		ug/L			08/24/16 22:09	20
Bromomethane	ND		20		ug/L			08/24/16 22:09	20
2-Butanone (MEK)	ND		1000		ug/L			08/24/16 22:09	20
n-Butylbenzene	ND		20		ug/L			08/24/16 22:09	20
sec-Butylbenzene	ND		20		ug/L			08/24/16 22:09	20
tert-Butylbenzene	ND		20		ug/L			08/24/16 22:09	20
Carbon disulfide	ND		100		ug/L			08/24/16 22:09	20
Carbon tetrachloride	ND		10		ug/L			08/24/16 22:09	20
Chlorobenzene	ND		10		ug/L			08/24/16 22:09	20
Chloroethane	ND		20		ug/L			08/24/16 22:09	20
Chloroform	ND		20		ug/L			08/24/16 22:09	20
Chloromethane	ND		20		ug/L			08/24/16 22:09	20
2-Chlorotoluene	ND		10		ug/L			08/24/16 22:09	20
4-Chlorotoluene	ND		10		ug/L			08/24/16 22:09	20
Chlorodibromomethane	ND		10		ug/L			08/24/16 22:09	20
1,2-Dichlorobenzene	ND		10		ug/L			08/24/16 22:09	20
1,3-Dichlorobenzene	ND		10		ug/L			08/24/16 22:09	20
1,4-Dichlorobenzene	ND		10		ug/L			08/24/16 22:09	20
1,3-Dichloropropane	ND		20		ug/L			08/24/16 22:09	20
1,1-Dichloropropene	ND		10		ug/L			08/24/16 22:09	20
1,2-Dibromo-3-Chloropropane	ND		20		ug/L			08/24/16 22:09	20
Ethylene Dibromide	ND		10		ug/L			08/24/16 22:09	20
Dibromomethane	ND		10		ug/L			08/24/16 22:09	20
Dichlorodifluoromethane	ND		10		ug/L			08/24/16 22:09	20
1,1-Dichloroethane	ND		10		ug/L			08/24/16 22:09	20
1,2-Dichloroethane	ND		10		ug/L			08/24/16 22:09	20
1,1-Dichloroethene	ND		10		ug/L			08/24/16 22:09	20
cis-1,2-Dichloroethene	ND		10		ug/L			08/24/16 22:09	20
trans-1,2-Dichloroethene	ND		10		ug/L			08/24/16 22:09	20
1,2-Dichloropropane	ND		10		ug/L			08/24/16 22:09	20
cis-1,3-Dichloropropene	ND		10		ug/L			08/24/16 22:09	20
trans-1,3-Dichloropropene	ND		10		ug/L			08/24/16 22:09	20
<b>Ethylbenzene</b>	<b>980</b>		10		ug/L			08/24/16 22:09	20
Hexachlorobutadiene	ND		20		ug/L			08/24/16 22:09	20
2-Hexanone	ND		1000		ug/L			08/24/16 22:09	20
<b>Isopropylbenzene</b>	<b>68</b>		10		ug/L			08/24/16 22:09	20
4-Isopropyltoluene	ND		20		ug/L			08/24/16 22:09	20
Methylene Chloride	ND		100		ug/L			08/24/16 22:09	20
4-Methyl-2-pentanone (MIBK)	ND		1000		ug/L			08/24/16 22:09	20
<b>Naphthalene</b>	<b>230</b>		20		ug/L			08/24/16 22:09	20
<b>N-Propylbenzene</b>	<b>99</b>		20		ug/L			08/24/16 22:09	20
Styrene	ND		10		ug/L			08/24/16 22:09	20
1,1,1,2-Tetrachloroethane	ND		10		ug/L			08/24/16 22:09	20

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-4R**  
**Date Collected: 08/16/16 10:05**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-1**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		10		ug/L			08/24/16 22:09	20
Tetrachloroethene	ND		10		ug/L			08/24/16 22:09	20
<b>Toluene</b>	<b>3800</b>		10		ug/L			08/24/16 22:09	20
1,2,3-Trichlorobenzene	ND		20		ug/L			08/24/16 22:09	20
1,2,4-Trichlorobenzene	ND		20		ug/L			08/24/16 22:09	20
1,1,1-Trichloroethane	ND		10		ug/L			08/24/16 22:09	20
1,1,2-Trichloroethane	ND		10		ug/L			08/24/16 22:09	20
Trichloroethene	ND		10		ug/L			08/24/16 22:09	20
Trichlorofluoromethane	ND		20		ug/L			08/24/16 22:09	20
1,2,3-Trichloropropane	ND		10		ug/L			08/24/16 22:09	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10		ug/L			08/24/16 22:09	20
<b>1,2,4-Trimethylbenzene</b>	<b>600</b>		10		ug/L			08/24/16 22:09	20
<b>1,3,5-Trimethylbenzene</b>	<b>120</b>		10		ug/L			08/24/16 22:09	20
Vinyl acetate	ND		200		ug/L			08/24/16 22:09	20
Vinyl chloride	ND		10		ug/L			08/24/16 22:09	20
<b>Xylenes, Total</b>	<b>4500</b>		20		ug/L			08/24/16 22:09	20
2,2-Dichloropropane	ND		10		ug/L			08/24/16 22:09	20
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>18000</b>		1000		ug/L			08/24/16 22:09	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	97			67 - 130				08/24/16 22:09	20
1,2-Dichloroethane-d4 (Surr)	105			72 - 130				08/24/16 22:09	20
Toluene-d8 (Surr)	97			70 - 130				08/24/16 22:09	20

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/16/16 17:29	1
<b>Nitrate as NO3</b>	<b>1.2</b>		1.0		mg/L			08/16/16 17:29	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>6.7</b>		0.50		mg/L		08/19/16 09:16	08/23/16 13:57	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	ND		0.10		mg/L			08/29/16 13:15	1
<b>Ferrous Iron</b>	<b>7.2 HF</b>		0.20		mg/L			08/17/16 10:03	2
Ammonia	<b>5.0</b>		0.40		mg/L		08/29/16 20:20	08/30/16 00:38	2

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-5R**  
**Date Collected: 08/16/16 10:55**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-2**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		50		ug/L			08/24/16 22:38	100
Acetone	ND		5000		ug/L			08/24/16 22:38	100
<b>Benzene</b>	<b>2400</b>		50		ug/L			08/24/16 22:38	100
Dichlorobromomethane	ND		50		ug/L			08/24/16 22:38	100
Bromobenzene	ND		100		ug/L			08/24/16 22:38	100
Chlorobromomethane	ND		100		ug/L			08/24/16 22:38	100
Bromoform	ND		100		ug/L			08/24/16 22:38	100
Bromomethane	ND		100		ug/L			08/24/16 22:38	100
2-Butanone (MEK)	ND		5000		ug/L			08/24/16 22:38	100
n-Butylbenzene	ND		100		ug/L			08/24/16 22:38	100
sec-Butylbenzene	ND		100		ug/L			08/24/16 22:38	100
tert-Butylbenzene	ND		100		ug/L			08/24/16 22:38	100
Carbon disulfide	ND		500		ug/L			08/24/16 22:38	100
Carbon tetrachloride	ND		50		ug/L			08/24/16 22:38	100
Chlorobenzene	ND		50		ug/L			08/24/16 22:38	100
Chloroethane	ND		100		ug/L			08/24/16 22:38	100
Chloroform	ND		100		ug/L			08/24/16 22:38	100
Chloromethane	ND		100		ug/L			08/24/16 22:38	100
2-Chlorotoluene	ND		50		ug/L			08/24/16 22:38	100
4-Chlorotoluene	ND		50		ug/L			08/24/16 22:38	100
Chlorodibromomethane	ND		50		ug/L			08/24/16 22:38	100
1,2-Dichlorobenzene	ND		50		ug/L			08/24/16 22:38	100
1,3-Dichlorobenzene	ND		50		ug/L			08/24/16 22:38	100
1,4-Dichlorobenzene	ND		50		ug/L			08/24/16 22:38	100
1,3-Dichloropropane	ND		100		ug/L			08/24/16 22:38	100
1,1-Dichloropropene	ND		50		ug/L			08/24/16 22:38	100
1,2-Dibromo-3-Chloropropane	ND		100		ug/L			08/24/16 22:38	100
Ethylene Dibromide	ND		50		ug/L			08/24/16 22:38	100
Dibromomethane	ND		50		ug/L			08/24/16 22:38	100
Dichlorodifluoromethane	ND		50		ug/L			08/24/16 22:38	100
1,1-Dichloroethane	ND		50		ug/L			08/24/16 22:38	100
1,2-Dichloroethane	ND		50		ug/L			08/24/16 22:38	100
1,1-Dichloroethene	ND		50		ug/L			08/24/16 22:38	100
cis-1,2-Dichloroethene	ND		50		ug/L			08/24/16 22:38	100
trans-1,2-Dichloroethene	ND		50		ug/L			08/24/16 22:38	100
1,2-Dichloropropane	ND		50		ug/L			08/24/16 22:38	100
cis-1,3-Dichloropropene	ND		50		ug/L			08/24/16 22:38	100
trans-1,3-Dichloropropene	ND		50		ug/L			08/24/16 22:38	100
<b>Ethylbenzene</b>	<b>3800</b>		50		ug/L			08/24/16 22:38	100
Hexachlorobutadiene	ND		100		ug/L			08/24/16 22:38	100
2-Hexanone	ND		5000		ug/L			08/24/16 22:38	100
<b>Isopropylbenzene</b>	<b>120</b>		50		ug/L			08/24/16 22:38	100
4-Isopropyltoluene	ND		100		ug/L			08/24/16 22:38	100
Methylene Chloride	ND		500		ug/L			08/24/16 22:38	100
4-Methyl-2-pentanone (MIBK)	ND		5000		ug/L			08/24/16 22:38	100
<b>Naphthalene</b>	<b>690</b>		100		ug/L			08/24/16 22:38	100
<b>N-Propylbenzene</b>	<b>300</b>		100		ug/L			08/24/16 22:38	100
Styrene	ND		50		ug/L			08/24/16 22:38	100
1,1,1,2-Tetrachloroethane	ND		50		ug/L			08/24/16 22:38	100

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-5R**  
**Date Collected: 08/16/16 10:55**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-2**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		50		ug/L			08/24/16 22:38	100
Tetrachloroethene	ND		50		ug/L			08/24/16 22:38	100
<b>Toluene</b>	<b>14000</b>		50		ug/L			08/24/16 22:38	100
1,2,3-Trichlorobenzene	ND		100		ug/L			08/24/16 22:38	100
1,2,4-Trichlorobenzene	ND		100		ug/L			08/24/16 22:38	100
1,1,1-Trichloroethane	ND		50		ug/L			08/24/16 22:38	100
1,1,2-Trichloroethane	ND		50		ug/L			08/24/16 22:38	100
Trichloroethene	ND		50		ug/L			08/24/16 22:38	100
Trichlorofluoromethane	ND		100		ug/L			08/24/16 22:38	100
1,2,3-Trichloropropane	ND		50		ug/L			08/24/16 22:38	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50		ug/L			08/24/16 22:38	100
<b>1,2,4-Trimethylbenzene</b>	<b>2300</b>		50		ug/L			08/24/16 22:38	100
<b>1,3,5-Trimethylbenzene</b>	<b>520</b>		50		ug/L			08/24/16 22:38	100
Vinyl acetate	ND		1000		ug/L			08/24/16 22:38	100
Vinyl chloride	ND		50		ug/L			08/24/16 22:38	100
<b>Xylenes, Total</b>	<b>20000</b>		100		ug/L			08/24/16 22:38	100
2,2-Dichloropropane	ND		50		ug/L			08/24/16 22:38	100
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>62000</b>		5000		ug/L			08/24/16 22:38	100
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	94		67 - 130						100
1,2-Dichloroethane-d4 (Surr)	103		72 - 130						100
Toluene-d8 (Surr)	98		70 - 130						100

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/16/16 18:37	1
Nitrate as NO3	ND		1.0		mg/L			08/16/16 18:37	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.0		0.50		mg/L		08/19/16 09:16	08/23/16 14:02	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	1.3		0.10		mg/L			08/29/16 13:15	1
Ferrous Iron	0.71	HF	0.10		mg/L			08/17/16 10:03	1
Ammonia	0.45		0.20		mg/L		08/29/16 20:20	08/30/16 00:41	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-6R**  
**Date Collected: 08/16/16 11:55**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-3**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			08/25/16 00:06	1
Acetone	ND		50		ug/L			08/25/16 00:06	1
<b>Benzene</b>	<b>20</b>		0.50		ug/L			08/25/16 00:06	1
Dichlorobromomethane	ND		0.50		ug/L			08/25/16 00:06	1
Bromobenzene	ND		1.0		ug/L			08/25/16 00:06	1
Chlorobromomethane	ND		1.0		ug/L			08/25/16 00:06	1
Bromoform	ND		1.0		ug/L			08/25/16 00:06	1
Bromomethane	ND		1.0		ug/L			08/25/16 00:06	1
2-Butanone (MEK)	ND		50		ug/L			08/25/16 00:06	1
<b>n-Butylbenzene</b>	<b>5.8</b>		1.0		ug/L			08/25/16 00:06	1
<b>sec-Butylbenzene</b>	<b>7.6</b>		1.0		ug/L			08/25/16 00:06	1
tert-Butylbenzene	ND		1.0		ug/L			08/25/16 00:06	1
Carbon disulfide	ND		5.0		ug/L			08/25/16 00:06	1
Carbon tetrachloride	ND		0.50		ug/L			08/25/16 00:06	1
Chlorobenzene	ND		0.50		ug/L			08/25/16 00:06	1
Chloroethane	ND		1.0		ug/L			08/25/16 00:06	1
Chloroform	ND		1.0		ug/L			08/25/16 00:06	1
Chloromethane	ND		1.0		ug/L			08/25/16 00:06	1
2-Chlorotoluene	ND		0.50		ug/L			08/25/16 00:06	1
4-Chlorotoluene	ND		0.50		ug/L			08/25/16 00:06	1
Chlorodibromomethane	ND		0.50		ug/L			08/25/16 00:06	1
1,2-Dichlorobenzene	ND		0.50		ug/L			08/25/16 00:06	1
1,3-Dichlorobenzene	ND		0.50		ug/L			08/25/16 00:06	1
1,4-Dichlorobenzene	ND		0.50		ug/L			08/25/16 00:06	1
1,3-Dichloropropane	ND		1.0		ug/L			08/25/16 00:06	1
1,1-Dichloropropene	ND		0.50		ug/L			08/25/16 00:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			08/25/16 00:06	1
Ethylene Dibromide	ND		0.50		ug/L			08/25/16 00:06	1
Dibromomethane	ND		0.50		ug/L			08/25/16 00:06	1
Dichlorodifluoromethane	ND		0.50		ug/L			08/25/16 00:06	1
1,1-Dichloroethane	ND		0.50		ug/L			08/25/16 00:06	1
1,2-Dichloroethane	ND		0.50		ug/L			08/25/16 00:06	1
1,1-Dichloroethene	ND		0.50		ug/L			08/25/16 00:06	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			08/25/16 00:06	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			08/25/16 00:06	1
1,2-Dichloropropane	ND		0.50		ug/L			08/25/16 00:06	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/25/16 00:06	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			08/25/16 00:06	1
<b>Ethylbenzene</b>	<b>32</b>		0.50		ug/L			08/25/16 00:06	1
Hexachlorobutadiene	ND		1.0		ug/L			08/25/16 00:06	1
2-Hexanone	ND		50		ug/L			08/25/16 00:06	1
<b>Isopropylbenzene</b>	<b>22</b>		0.50		ug/L			08/25/16 00:06	1
4-Isopropyltoluene	ND		1.0		ug/L			08/25/16 00:06	1
Methylene Chloride	ND		5.0		ug/L			08/25/16 00:06	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/25/16 00:06	1
<b>Naphthalene</b>	<b>39</b>		1.0		ug/L			08/25/16 00:06	1
<b>N-Propylbenzene</b>	<b>6.2</b>		1.0		ug/L			08/25/16 00:06	1
Styrene	ND		0.50		ug/L			08/25/16 00:06	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 00:06	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-6R**  
**Date Collected: 08/16/16 11:55**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-3**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 00:06	1
Tetrachloroethene	ND		0.50		ug/L			08/25/16 00:06	1
<b>Toluene</b>	<b>120</b>		0.50		ug/L			08/25/16 00:06	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 00:06	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 00:06	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/25/16 00:06	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/25/16 00:06	1
Trichloroethene	ND		0.50		ug/L			08/25/16 00:06	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 00:06	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/25/16 00:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/25/16 00:06	1
<b>1,2,4-Trimethylbenzene</b>	<b>26</b>		0.50		ug/L			08/25/16 00:06	1
<b>1,3,5-Trimethylbenzene</b>	<b>3.1</b>		0.50		ug/L			08/25/16 00:06	1
Vinyl acetate	ND	F1	10		ug/L			08/25/16 00:06	1
Vinyl chloride	ND		0.50		ug/L			08/25/16 00:06	1
<b>Xylenes, Total</b>	<b>210</b>		1.0		ug/L			08/25/16 00:06	1
2,2-Dichloropropane	ND		0.50		ug/L			08/25/16 00:06	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>970</b>		50		ug/L			08/25/16 00:06	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	95			67 - 130				08/25/16 00:06	1
1,2-Dichloroethane-d4 (Surr)	104			72 - 130				08/25/16 00:06	1
Toluene-d8 (Surr)	99			70 - 130				08/25/16 00:06	1

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/16/16 18:54	1
<b>Nitrate as NO3</b>	<b>150</b>		10		mg/L			08/16/16 22:14	10

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.50		mg/L		08/19/16 09:16	08/23/16 14:07	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	ND		0.10		mg/L			08/29/16 13:15	1
Ferrous Iron	ND	HF	0.10		mg/L			08/17/16 10:03	1
<b>Ammonia</b>	<b>1.6</b>		0.20		mg/L		08/29/16 20:20	08/30/16 00:44	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-7R**  
**Date Collected: 08/16/16 12:35**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-4**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		100		ug/L			08/25/16 00:36	200
Acetone	ND		10000		ug/L			08/25/16 00:36	200
<b>Benzene</b>	<b>320</b>		100		ug/L			08/25/16 00:36	200
Dichlorobromomethane	ND		100		ug/L			08/25/16 00:36	200
Bromobenzene	ND		200		ug/L			08/25/16 00:36	200
Chlorobromomethane	ND		200		ug/L			08/25/16 00:36	200
Bromoform	ND		200		ug/L			08/25/16 00:36	200
Bromomethane	ND		200		ug/L			08/25/16 00:36	200
2-Butanone (MEK)	ND		10000		ug/L			08/25/16 00:36	200
n-Butylbenzene	ND		200		ug/L			08/25/16 00:36	200
sec-Butylbenzene	ND		200		ug/L			08/25/16 00:36	200
tert-Butylbenzene	ND		200		ug/L			08/25/16 00:36	200
Carbon disulfide	ND		1000		ug/L			08/25/16 00:36	200
Carbon tetrachloride	ND		100		ug/L			08/25/16 00:36	200
Chlorobenzene	ND		100		ug/L			08/25/16 00:36	200
Chloroethane	ND		200		ug/L			08/25/16 00:36	200
Chloroform	ND		200		ug/L			08/25/16 00:36	200
Chloromethane	ND		200		ug/L			08/25/16 00:36	200
2-Chlorotoluene	ND		100		ug/L			08/25/16 00:36	200
4-Chlorotoluene	ND		100		ug/L			08/25/16 00:36	200
Chlorodibromomethane	ND		100		ug/L			08/25/16 00:36	200
1,2-Dichlorobenzene	ND		100		ug/L			08/25/16 00:36	200
1,3-Dichlorobenzene	ND		100		ug/L			08/25/16 00:36	200
1,4-Dichlorobenzene	ND		100		ug/L			08/25/16 00:36	200
1,3-Dichloropropane	ND		200		ug/L			08/25/16 00:36	200
1,1-Dichloropropene	ND		100		ug/L			08/25/16 00:36	200
1,2-Dibromo-3-Chloropropane	ND		200		ug/L			08/25/16 00:36	200
Ethylene Dibromide	ND		100		ug/L			08/25/16 00:36	200
Dibromomethane	ND		100		ug/L			08/25/16 00:36	200
Dichlorodifluoromethane	ND		100		ug/L			08/25/16 00:36	200
1,1-Dichloroethane	ND		100		ug/L			08/25/16 00:36	200
1,2-Dichloroethane	ND		100		ug/L			08/25/16 00:36	200
1,1-Dichloroethene	ND		100		ug/L			08/25/16 00:36	200
cis-1,2-Dichloroethene	ND		100		ug/L			08/25/16 00:36	200
trans-1,2-Dichloroethene	ND		100		ug/L			08/25/16 00:36	200
1,2-Dichloropropane	ND		100		ug/L			08/25/16 00:36	200
cis-1,3-Dichloropropene	ND		100		ug/L			08/25/16 00:36	200
trans-1,3-Dichloropropene	ND		100		ug/L			08/25/16 00:36	200
<b>Ethylbenzene</b>	<b>1700</b>		100		ug/L			08/25/16 00:36	200
Hexachlorobutadiene	ND		200		ug/L			08/25/16 00:36	200
2-Hexanone	ND		10000		ug/L			08/25/16 00:36	200
<b>Isopropylbenzene</b>	<b>110</b>		100		ug/L			08/25/16 00:36	200
4-Isopropyltoluene	ND		200		ug/L			08/25/16 00:36	200
Methylene Chloride	ND		1000		ug/L			08/25/16 00:36	200
4-Methyl-2-pentanone (MIBK)	ND		10000		ug/L			08/25/16 00:36	200
<b>Naphthalene</b>	<b>860</b>		200		ug/L			08/25/16 00:36	200
<b>N-Propylbenzene</b>	<b>230</b>		200		ug/L			08/25/16 00:36	200
Styrene	ND		100		ug/L			08/25/16 00:36	200
1,1,1,2-Tetrachloroethane	ND		100		ug/L			08/25/16 00:36	200

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-7R**  
**Date Collected: 08/16/16 12:35**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-4**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		100		ug/L			08/25/16 00:36	200
Tetrachloroethene	ND		100		ug/L			08/25/16 00:36	200
<b>Toluene</b>	<b>4900</b>		100		ug/L			08/25/16 00:36	200
1,2,3-Trichlorobenzene	ND		200		ug/L			08/25/16 00:36	200
1,2,4-Trichlorobenzene	ND		200		ug/L			08/25/16 00:36	200
1,1,1-Trichloroethane	ND		100		ug/L			08/25/16 00:36	200
1,1,2-Trichloroethane	ND		100		ug/L			08/25/16 00:36	200
Trichloroethene	ND		100		ug/L			08/25/16 00:36	200
Trichlorofluoromethane	ND		200		ug/L			08/25/16 00:36	200
1,2,3-Trichloropropane	ND		100		ug/L			08/25/16 00:36	200
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100		ug/L			08/25/16 00:36	200
<b>1,2,4-Trimethylbenzene</b>	<b>2200</b>		100		ug/L			08/25/16 00:36	200
<b>1,3,5-Trimethylbenzene</b>	<b>550</b>		100		ug/L			08/25/16 00:36	200
Vinyl acetate	ND		2000		ug/L			08/25/16 00:36	200
Vinyl chloride	ND		100		ug/L			08/25/16 00:36	200
<b>Xylenes, Total</b>	<b>17000</b>		200		ug/L			08/25/16 00:36	200
2,2-Dichloropropane	ND		100		ug/L			08/25/16 00:36	200
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>46000</b>		10000		ug/L			08/25/16 00:36	200
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	95		67 - 130					08/25/16 00:36	200
1,2-Dichloroethane-d4 (Surr)	103		72 - 130					08/25/16 00:36	200
Toluene-d8 (Surr)	99		70 - 130					08/25/16 00:36	200

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	4.6		1.0		mg/L			08/16/16 19:11	1
Nitrate as NO3	33		10		mg/L			08/16/16 21:18	10

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.6		0.50		mg/L		08/19/16 09:16	08/23/16 14:12	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	3.5		0.10		mg/L			08/29/16 13:15	1
Ferrous Iron	1.1	HF	0.10		mg/L			08/17/16 10:03	1
Ammonia	0.94		0.20		mg/L		08/29/16 20:20	08/30/16 00:47	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-8**

Date Collected: 08/16/16 14:50

Date Received: 08/16/16 18:30

**Lab Sample ID: 720-73969-5**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			08/25/16 01:04	1
Acetone	ND		50		ug/L			08/25/16 01:04	1
<b>Benzene</b>	<b>13</b>		0.50		ug/L			08/25/16 01:04	1
Dichlorobromomethane	ND		0.50		ug/L			08/25/16 01:04	1
Bromobenzene	ND		1.0		ug/L			08/25/16 01:04	1
Chlorobromomethane	ND		1.0		ug/L			08/25/16 01:04	1
Bromoform	ND		1.0		ug/L			08/25/16 01:04	1
Bromomethane	ND		1.0		ug/L			08/25/16 01:04	1
2-Butanone (MEK)	ND		50		ug/L			08/25/16 01:04	1
<b>n-Butylbenzene</b>	<b>1.9</b>		1.0		ug/L			08/25/16 01:04	1
<b>sec-Butylbenzene</b>	<b>3.9</b>		1.0		ug/L			08/25/16 01:04	1
tert-Butylbenzene	ND		1.0		ug/L			08/25/16 01:04	1
Carbon disulfide	ND		5.0		ug/L			08/25/16 01:04	1
Carbon tetrachloride	ND		0.50		ug/L			08/25/16 01:04	1
Chlorobenzene	ND		0.50		ug/L			08/25/16 01:04	1
Chloroethane	ND		1.0		ug/L			08/25/16 01:04	1
Chloroform	ND		1.0		ug/L			08/25/16 01:04	1
Chloromethane	ND		1.0		ug/L			08/25/16 01:04	1
2-Chlorotoluene	ND		0.50		ug/L			08/25/16 01:04	1
4-Chlorotoluene	ND		0.50		ug/L			08/25/16 01:04	1
Chlorodibromomethane	ND		0.50		ug/L			08/25/16 01:04	1
1,2-Dichlorobenzene	ND		0.50		ug/L			08/25/16 01:04	1
1,3-Dichlorobenzene	ND		0.50		ug/L			08/25/16 01:04	1
1,4-Dichlorobenzene	ND		0.50		ug/L			08/25/16 01:04	1
1,3-Dichloropropane	ND		1.0		ug/L			08/25/16 01:04	1
1,1-Dichloropropene	ND		0.50		ug/L			08/25/16 01:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			08/25/16 01:04	1
Ethylene Dibromide	ND		0.50		ug/L			08/25/16 01:04	1
Dibromomethane	ND		0.50		ug/L			08/25/16 01:04	1
Dichlorodifluoromethane	ND		0.50		ug/L			08/25/16 01:04	1
1,1-Dichloroethane	ND		0.50		ug/L			08/25/16 01:04	1
1,2-Dichloroethane	ND		0.50		ug/L			08/25/16 01:04	1
1,1-Dichloroethene	ND		0.50		ug/L			08/25/16 01:04	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			08/25/16 01:04	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			08/25/16 01:04	1
1,2-Dichloropropane	ND		0.50		ug/L			08/25/16 01:04	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/25/16 01:04	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			08/25/16 01:04	1
<b>Ethylbenzene</b>	<b>3.1</b>		0.50		ug/L			08/25/16 01:04	1
Hexachlorobutadiene	ND		1.0		ug/L			08/25/16 01:04	1
2-Hexanone	ND		50		ug/L			08/25/16 01:04	1
<b>Isopropylbenzene</b>	<b>21</b>		0.50		ug/L			08/25/16 01:04	1
4-Isopropyltoluene	ND		1.0		ug/L			08/25/16 01:04	1
Methylene Chloride	ND		5.0		ug/L			08/25/16 01:04	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/25/16 01:04	1
<b>Naphthalene</b>	<b>47</b>		1.0		ug/L			08/25/16 01:04	1
<b>N-Propylbenzene</b>	<b>20</b>		1.0		ug/L			08/25/16 01:04	1
Styrene	ND		0.50		ug/L			08/25/16 01:04	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 01:04	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-8**

Date Collected: 08/16/16 14:50

Date Received: 08/16/16 18:30

**Lab Sample ID: 720-73969-5**

Matrix: Water

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 01:04	1
Tetrachloroethene	ND		0.50		ug/L			08/25/16 01:04	1
<b>Toluene</b>	<b>9.8</b>		0.50		ug/L			08/25/16 01:04	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 01:04	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 01:04	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/25/16 01:04	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/25/16 01:04	1
Trichloroethene	ND		0.50		ug/L			08/25/16 01:04	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 01:04	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/25/16 01:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/25/16 01:04	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			08/25/16 01:04	1
<b>1,3,5-Trimethylbenzene</b>	<b>0.78</b>		0.50		ug/L			08/25/16 01:04	1
Vinyl acetate	ND		10		ug/L			08/25/16 01:04	1
Vinyl chloride	ND		0.50		ug/L			08/25/16 01:04	1
<b>Xylenes, Total</b>	<b>16</b>		1.0		ug/L			08/25/16 01:04	1
2,2-Dichloropropane	ND		0.50		ug/L			08/25/16 01:04	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>1900</b>		50		ug/L			08/25/16 01:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	102		67 - 130					08/25/16 01:04	1
1,2-Dichloroethane-d4 (Surr)	107		72 - 130					08/25/16 01:04	1
Toluene-d8 (Surr)	98		70 - 130					08/25/16 01:04	1

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/16/16 19:29	1
Nitrate as NO3	ND		1.0		mg/L			08/16/16 19:29	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	49		0.50		mg/L		08/19/16 09:16	08/23/16 14:17	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	31		0.10		mg/L			08/29/16 13:15	1
Ferrous Iron	18	HF	0.50		mg/L			08/17/16 10:03	5
Ammonia	0.20		0.20		mg/L		08/29/16 20:20	08/30/16 00:49	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-9**

Date Collected: 08/16/16 14:10

Date Received: 08/16/16 18:30

**Lab Sample ID: 720-73969-6**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			08/25/16 01:33	1
Acetone	ND		50		ug/L			08/25/16 01:33	1
Benzene	ND		0.50		ug/L			08/25/16 01:33	1
Dichlorobromomethane	ND		0.50		ug/L			08/25/16 01:33	1
Bromobenzene	ND		1.0		ug/L			08/25/16 01:33	1
Chlorobromomethane	ND		1.0		ug/L			08/25/16 01:33	1
Bromoform	ND		1.0		ug/L			08/25/16 01:33	1
Bromomethane	ND		1.0		ug/L			08/25/16 01:33	1
2-Butanone (MEK)	ND		50		ug/L			08/25/16 01:33	1
n-Butylbenzene	ND		1.0		ug/L			08/25/16 01:33	1
<b>sec-Butylbenzene</b>	<b>3.9</b>		1.0		ug/L			08/25/16 01:33	1
tert-Butylbenzene	ND		1.0		ug/L			08/25/16 01:33	1
Carbon disulfide	ND		5.0		ug/L			08/25/16 01:33	1
Carbon tetrachloride	ND		0.50		ug/L			08/25/16 01:33	1
Chlorobenzene	ND		0.50		ug/L			08/25/16 01:33	1
Chloroethane	ND		1.0		ug/L			08/25/16 01:33	1
Chloroform	ND		1.0		ug/L			08/25/16 01:33	1
Chloromethane	ND		1.0		ug/L			08/25/16 01:33	1
2-Chlorotoluene	ND		0.50		ug/L			08/25/16 01:33	1
4-Chlorotoluene	ND		0.50		ug/L			08/25/16 01:33	1
Chlorodibromomethane	ND		0.50		ug/L			08/25/16 01:33	1
1,2-Dichlorobenzene	ND		0.50		ug/L			08/25/16 01:33	1
1,3-Dichlorobenzene	ND		0.50		ug/L			08/25/16 01:33	1
1,4-Dichlorobenzene	ND		0.50		ug/L			08/25/16 01:33	1
1,3-Dichloropropane	ND		1.0		ug/L			08/25/16 01:33	1
1,1-Dichloropropene	ND		0.50		ug/L			08/25/16 01:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			08/25/16 01:33	1
Ethylene Dibromide	ND		0.50		ug/L			08/25/16 01:33	1
Dibromomethane	ND		0.50		ug/L			08/25/16 01:33	1
Dichlorodifluoromethane	ND		0.50		ug/L			08/25/16 01:33	1
1,1-Dichloroethane	ND		0.50		ug/L			08/25/16 01:33	1
1,2-Dichloroethane	ND		0.50		ug/L			08/25/16 01:33	1
1,1-Dichloroethene	ND		0.50		ug/L			08/25/16 01:33	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			08/25/16 01:33	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			08/25/16 01:33	1
1,2-Dichloropropane	ND		0.50		ug/L			08/25/16 01:33	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/25/16 01:33	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			08/25/16 01:33	1
Ethylbenzene	ND		0.50		ug/L			08/25/16 01:33	1
Hexachlorobutadiene	ND		1.0		ug/L			08/25/16 01:33	1
2-Hexanone	ND		50		ug/L			08/25/16 01:33	1
<b>Isopropylbenzene</b>	<b>3.2</b>		0.50		ug/L			08/25/16 01:33	1
4-Isopropyltoluene	ND		1.0		ug/L			08/25/16 01:33	1
Methylene Chloride	ND		5.0		ug/L			08/25/16 01:33	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/25/16 01:33	1
<b>Naphthalene</b>	<b>1.3</b>		1.0		ug/L			08/25/16 01:33	1
N-Propylbenzene	ND		1.0		ug/L			08/25/16 01:33	1
Styrene	ND		0.50		ug/L			08/25/16 01:33	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 01:33	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-9**

Date Collected: 08/16/16 14:10

Date Received: 08/16/16 18:30

**Lab Sample ID: 720-73969-6**

Matrix: Water

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 01:33	1
Tetrachloroethene	ND		0.50		ug/L			08/25/16 01:33	1
Toluene	ND		0.50		ug/L			08/25/16 01:33	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 01:33	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 01:33	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/25/16 01:33	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/25/16 01:33	1
Trichloroethene	ND		0.50		ug/L			08/25/16 01:33	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 01:33	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/25/16 01:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/25/16 01:33	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			08/25/16 01:33	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			08/25/16 01:33	1
Vinyl acetate	ND		10		ug/L			08/25/16 01:33	1
Vinyl chloride	ND		0.50		ug/L			08/25/16 01:33	1
Xylenes, Total	ND		1.0		ug/L			08/25/16 01:33	1
2,2-Dichloropropane	ND		0.50		ug/L			08/25/16 01:33	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>100</b>		50		ug/L			08/25/16 01:33	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		67 - 130		08/25/16 01:33	1
1,2-Dichloroethane-d4 (Surr)	105		72 - 130		08/25/16 01:33	1
Toluene-d8 (Surr)	98		70 - 130		08/25/16 01:33	1

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/16/16 20:20	1
<b>Nitrate as NO3</b>	<b>16</b>		1.0		mg/L			08/16/16 20:20	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>66</b>		0.50		mg/L		08/19/16 09:41	08/29/16 16:50	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Ferric Iron</b>	<b>65</b>		0.10		mg/L			08/29/16 13:15	1
<b>Ferrous Iron</b>	<b>0.86</b>	HF	0.10		mg/L			08/17/16 10:03	1
Ammonia	ND		0.20		mg/L		08/29/16 20:20	08/30/16 00:58	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-10**  
**Date Collected: 08/16/16 13:45**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-7**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			08/25/16 02:02	1
Acetone	ND		50		ug/L			08/25/16 02:02	1
Benzene	ND		0.50		ug/L			08/25/16 02:02	1
Dichlorobromomethane	ND		0.50		ug/L			08/25/16 02:02	1
Bromobenzene	ND		1.0		ug/L			08/25/16 02:02	1
Chlorobromomethane	ND		1.0		ug/L			08/25/16 02:02	1
Bromoform	ND		1.0		ug/L			08/25/16 02:02	1
Bromomethane	ND		1.0		ug/L			08/25/16 02:02	1
2-Butanone (MEK)	ND		50		ug/L			08/25/16 02:02	1
n-Butylbenzene	ND		1.0		ug/L			08/25/16 02:02	1
sec-Butylbenzene	ND		1.0		ug/L			08/25/16 02:02	1
tert-Butylbenzene	ND		1.0		ug/L			08/25/16 02:02	1
Carbon disulfide	ND		5.0		ug/L			08/25/16 02:02	1
Carbon tetrachloride	ND		0.50		ug/L			08/25/16 02:02	1
Chlorobenzene	ND		0.50		ug/L			08/25/16 02:02	1
Chloroethane	ND		1.0		ug/L			08/25/16 02:02	1
Chloroform	ND		1.0		ug/L			08/25/16 02:02	1
Chloromethane	ND		1.0		ug/L			08/25/16 02:02	1
2-Chlorotoluene	ND		0.50		ug/L			08/25/16 02:02	1
4-Chlorotoluene	ND		0.50		ug/L			08/25/16 02:02	1
Chlorodibromomethane	ND		0.50		ug/L			08/25/16 02:02	1
1,2-Dichlorobenzene	ND		0.50		ug/L			08/25/16 02:02	1
1,3-Dichlorobenzene	ND		0.50		ug/L			08/25/16 02:02	1
1,4-Dichlorobenzene	ND		0.50		ug/L			08/25/16 02:02	1
1,3-Dichloropropane	ND		1.0		ug/L			08/25/16 02:02	1
1,1-Dichloropropene	ND		0.50		ug/L			08/25/16 02:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			08/25/16 02:02	1
Ethylene Dibromide	ND		0.50		ug/L			08/25/16 02:02	1
Dibromomethane	ND		0.50		ug/L			08/25/16 02:02	1
Dichlorodifluoromethane	ND		0.50		ug/L			08/25/16 02:02	1
1,1-Dichloroethane	ND		0.50		ug/L			08/25/16 02:02	1
1,2-Dichloroethane	ND		0.50		ug/L			08/25/16 02:02	1
1,1-Dichloroethene	ND		0.50		ug/L			08/25/16 02:02	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			08/25/16 02:02	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			08/25/16 02:02	1
1,2-Dichloropropane	ND		0.50		ug/L			08/25/16 02:02	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/25/16 02:02	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			08/25/16 02:02	1
Ethylbenzene	ND		0.50		ug/L			08/25/16 02:02	1
Hexachlorobutadiene	ND		1.0		ug/L			08/25/16 02:02	1
2-Hexanone	ND		50		ug/L			08/25/16 02:02	1
Isopropylbenzene	ND		0.50		ug/L			08/25/16 02:02	1
4-Isopropyltoluene	ND		1.0		ug/L			08/25/16 02:02	1
Methylene Chloride	ND		5.0		ug/L			08/25/16 02:02	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/25/16 02:02	1
Naphthalene	ND		1.0		ug/L			08/25/16 02:02	1
N-Propylbenzene	ND		1.0		ug/L			08/25/16 02:02	1
Styrene	ND		0.50		ug/L			08/25/16 02:02	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 02:02	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-10**  
**Date Collected: 08/16/16 13:45**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-7**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 02:02	1
Tetrachloroethene	ND		0.50		ug/L			08/25/16 02:02	1
Toluene	ND		0.50		ug/L			08/25/16 02:02	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 02:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 02:02	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/25/16 02:02	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/25/16 02:02	1
Trichloroethene	ND		0.50		ug/L			08/25/16 02:02	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 02:02	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/25/16 02:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/25/16 02:02	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			08/25/16 02:02	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			08/25/16 02:02	1
Vinyl acetate	ND		10		ug/L			08/25/16 02:02	1
Vinyl chloride	ND		0.50		ug/L			08/25/16 02:02	1
Xylenes, Total	ND		1.0		ug/L			08/25/16 02:02	1
2,2-Dichloropropane	ND		0.50		ug/L			08/25/16 02:02	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/25/16 02:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	94		67 - 130						1
1,2-Dichloroethane-d4 (Surr)	104		72 - 130						1
Toluene-d8 (Surr)	97		70 - 130						1

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/16/16 20:37	1
Nitrate as NO3	230		100		mg/L			08/16/16 21:57	100

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	40		0.50		mg/L		08/19/16 09:41	08/29/16 16:55	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	40		0.10		mg/L			08/29/16 13:15	1
Ferrous Iron	0.11	HF	0.10		mg/L			08/17/16 10:03	1
Ammonia	ND		0.20		mg/L		08/29/16 20:20	08/30/16 01:01	1

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID: MB 720-208208/4**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L		08/24/16 19:13		1
Acetone	ND		50		ug/L		08/24/16 19:13		1
Benzene	ND		0.50		ug/L		08/24/16 19:13		1
Dichlorobromomethane	ND		0.50		ug/L		08/24/16 19:13		1
Bromobenzene	ND		1.0		ug/L		08/24/16 19:13		1
Chlorobromomethane	ND		1.0		ug/L		08/24/16 19:13		1
Bromoform	ND		1.0		ug/L		08/24/16 19:13		1
Bromomethane	ND		1.0		ug/L		08/24/16 19:13		1
2-Butanone (MEK)	ND		50		ug/L		08/24/16 19:13		1
n-Butylbenzene	ND		1.0		ug/L		08/24/16 19:13		1
sec-Butylbenzene	ND		1.0		ug/L		08/24/16 19:13		1
tert-Butylbenzene	ND		1.0		ug/L		08/24/16 19:13		1
Carbon disulfide	ND		5.0		ug/L		08/24/16 19:13		1
Carbon tetrachloride	ND		0.50		ug/L		08/24/16 19:13		1
Chlorobenzene	ND		0.50		ug/L		08/24/16 19:13		1
Chloroethane	ND		1.0		ug/L		08/24/16 19:13		1
Chloroform	ND		1.0		ug/L		08/24/16 19:13		1
Chloromethane	ND		1.0		ug/L		08/24/16 19:13		1
2-Chlorotoluene	ND		0.50		ug/L		08/24/16 19:13		1
4-Chlorotoluene	ND		0.50		ug/L		08/24/16 19:13		1
Chlorodibromomethane	ND		0.50		ug/L		08/24/16 19:13		1
1,2-Dichlorobenzene	ND		0.50		ug/L		08/24/16 19:13		1
1,3-Dichlorobenzene	ND		0.50		ug/L		08/24/16 19:13		1
1,4-Dichlorobenzene	ND		0.50		ug/L		08/24/16 19:13		1
1,3-Dichloropropane	ND		1.0		ug/L		08/24/16 19:13		1
1,1-Dichloropropene	ND		0.50		ug/L		08/24/16 19:13		1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L		08/24/16 19:13		1
Ethylene Dibromide	ND		0.50		ug/L		08/24/16 19:13		1
Dibromomethane	ND		0.50		ug/L		08/24/16 19:13		1
Dichlorodifluoromethane	ND		0.50		ug/L		08/24/16 19:13		1
1,1-Dichloroethane	ND		0.50		ug/L		08/24/16 19:13		1
1,2-Dichloroethane	ND		0.50		ug/L		08/24/16 19:13		1
1,1-Dichloroethene	ND		0.50		ug/L		08/24/16 19:13		1
cis-1,2-Dichloroethene	ND		0.50		ug/L		08/24/16 19:13		1
trans-1,2-Dichloroethene	ND		0.50		ug/L		08/24/16 19:13		1
1,2-Dichloropropane	ND		0.50		ug/L		08/24/16 19:13		1
cis-1,3-Dichloropropene	ND		0.50		ug/L		08/24/16 19:13		1
trans-1,3-Dichloropropene	ND		0.50		ug/L		08/24/16 19:13		1
Ethylbenzene	ND		0.50		ug/L		08/24/16 19:13		1
Hexachlorobutadiene	ND		1.0		ug/L		08/24/16 19:13		1
2-Hexanone	ND		50		ug/L		08/24/16 19:13		1
Isopropylbenzene	ND		0.50		ug/L		08/24/16 19:13		1
4-Isopropyltoluene	ND		1.0		ug/L		08/24/16 19:13		1
Methylene Chloride	ND		5.0		ug/L		08/24/16 19:13		1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L		08/24/16 19:13		1
Naphthalene	ND		1.0		ug/L		08/24/16 19:13		1
N-Propylbenzene	ND		1.0		ug/L		08/24/16 19:13		1
Styrene	ND		0.50		ug/L		08/24/16 19:13		1

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-208208/4**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			08/24/16 19:13	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/24/16 19:13	1
Tetrachloroethene	ND		0.50		ug/L			08/24/16 19:13	1
Toluene	ND		0.50		ug/L			08/24/16 19:13	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/24/16 19:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/24/16 19:13	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/24/16 19:13	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/24/16 19:13	1
Trichloroethene	ND		0.50		ug/L			08/24/16 19:13	1
Trichlorofluoromethane	ND		1.0		ug/L			08/24/16 19:13	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/24/16 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/24/16 19:13	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			08/24/16 19:13	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			08/24/16 19:13	1
Vinyl acetate	ND		10		ug/L			08/24/16 19:13	1
Vinyl chloride	ND		0.50		ug/L			08/24/16 19:13	1
Xylenes, Total	ND		1.0		ug/L			08/24/16 19:13	1
2,2-Dichloropropane	ND		0.50		ug/L			08/24/16 19:13	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/24/16 19:13	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	93		67 - 130		08/24/16 19:13	1
1,2-Dichloroethane-d4 (Surr)	106		72 - 130		08/24/16 19:13	1
Toluene-d8 (Surr)	97		70 - 130		08/24/16 19:13	1

**Lab Sample ID: LCS 720-208208/5**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Methyl tert-butyl ether	25.0	28.0		ug/L		112	62 - 130
Acetone	125	112		ug/L		90	26 - 180
Benzene	25.0	26.8		ug/L		107	79 - 130
Dichlorobromomethane	25.0	27.9		ug/L		112	70 - 130
Bromobenzene	25.0	25.0		ug/L		100	70 - 130
Chlorobromomethane	25.0	25.1		ug/L		100	70 - 130
Bromoform	25.0	25.1		ug/L		101	68 - 136
Bromomethane	25.0	23.5		ug/L		94	43 - 151
2-Butanone (MEK)	125	108		ug/L		86	54 - 130
n-Butylbenzene	25.0	27.2		ug/L		109	70 - 142
sec-Butylbenzene	25.0	26.9		ug/L		108	70 - 134
tert-Butylbenzene	25.0	25.9		ug/L		104	70 - 135
Carbon disulfide	25.0	26.0		ug/L		104	58 - 130
Carbon tetrachloride	25.0	30.2		ug/L		121	70 - 146
Chlorobenzene	25.0	25.1		ug/L		101	70 - 130
Chloroethane	25.0	24.7		ug/L		99	62 - 138
Chloroform	25.0	26.3		ug/L		105	70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-208208/5**  
**Matrix: Water**  
**Analysis Batch: 208208**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Chloromethane	25.0	27.8		ug/L		111	52 - 175		
2-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130		
4-Chlorotoluene	25.0	27.0		ug/L		108	70 - 130		
Chlorodibromomethane	25.0	25.8		ug/L		103	70 - 145		
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130		
1,3-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130		
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130		
1,3-Dichloropropane	25.0	26.0		ug/L		104	70 - 130		
1,1-Dichloropropene	25.0	26.8		ug/L		107	70 - 130		
1,2-Dibromo-3-Chloropropane	25.0	22.8		ug/L		91	70 - 136		
Ethylene Dibromide	25.0	26.2		ug/L		105	70 - 130		
Dibromomethane	25.0	26.3		ug/L		105	70 - 130		
Dichlorodifluoromethane	25.0	26.0		ug/L		104	32 - 158		
1,1-Dichloroethane	25.0	27.2		ug/L		109	70 - 130		
1,2-Dichloroethane	25.0	27.8		ug/L		111	61 - 132		
1,1-Dichloroethene	25.0	23.6		ug/L		94	64 - 128		
cis-1,2-Dichloroethene	25.0	27.8		ug/L		111	70 - 130		
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	68 - 130		
1,2-Dichloropropane	25.0	28.4		ug/L		114	70 - 130		
cis-1,3-Dichloropropene	25.0	28.2		ug/L		113	70 - 130		
trans-1,3-Dichloropropene	25.0	27.1		ug/L		108	70 - 140		
Ethylbenzene	25.0	26.1		ug/L		104	80 - 120		
Hexachlorobutadiene	25.0	23.5		ug/L		94	70 - 130		
2-Hexanone	125	125		ug/L		100	60 - 164		
Isopropylbenzene	25.0	26.4		ug/L		106	70 - 130		
4-Isopropyltoluene	25.0	25.9		ug/L		104	70 - 130		
Methylene Chloride	25.0	26.8		ug/L		107	70 - 147		
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	58 - 130		
Naphthalene	25.0	24.1		ug/L		96	50 - 130		
N-Propylbenzene	25.0	27.8		ug/L		111	70 - 130		
Styrene	25.0	25.9		ug/L		103	70 - 130		
1,1,1,2-Tetrachloroethane	25.0	25.4		ug/L		102	70 - 130		
1,1,2,2-Tetrachloroethane	25.0	26.2		ug/L		105	70 - 130		
Tetrachloroethene	25.0	24.6		ug/L		98	70 - 130		
Toluene	25.0	25.6		ug/L		102	78 - 120		
1,2,3-Trichlorobenzene	25.0	23.7		ug/L		95	70 - 130		
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		98	70 - 130		
1,1,1-Trichloroethane	25.0	29.1		ug/L		116	70 - 130		
1,1,2-Trichloroethane	25.0	26.8		ug/L		107	70 - 130		
Trichloroethene	25.0	24.9		ug/L		100	70 - 130		
Trichlorofluoromethane	25.0	26.9		ug/L		108	66 - 132		
1,2,3-Trichloropropane	25.0	25.6		ug/L		102	70 - 130		
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.8		ug/L		95	42 - 162		
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	70 - 132		
1,3,5-Trimethylbenzene	25.0	26.9		ug/L		107	70 - 130		
Vinyl acetate	25.0	35.7		ug/L		143	43 - 163		
Vinyl chloride	25.0	23.2		ug/L		93	54 - 135		

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-208208/5**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
m-Xylene & p-Xylene	25.0	26.1		ug/L		105	70 - 142
o-Xylene	25.0	26.0		ug/L		104	70 - 130
2,2-Dichloropropane	25.0	33.6		ug/L		135	70 - 140

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCS 720-208208/7**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Gasoline Range Organics (GRO) -C5-C12	500	539		ug/L		108	71 - 125

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		72 - 130
Toluene-d8 (Surr)	99		70 - 130

**Lab Sample ID: LCSD 720-208208/6**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	27.9		ug/L		112	62 - 130	0	20
Acetone	125	111		ug/L		89	26 - 180	0	30
Benzene	25.0	26.8		ug/L		107	79 - 130	0	20
Dichlorobromomethane	25.0	27.6		ug/L		110	70 - 130	1	20
Bromobenzene	25.0	25.3		ug/L		101	70 - 130	1	20
Chlorobromomethane	25.0	24.6		ug/L		99	70 - 130	2	20
Bromoform	25.0	24.8		ug/L		99	68 - 136	1	20
Bromomethane	25.0	23.1		ug/L		92	43 - 151	1	20
2-Butanone (MEK)	125	105		ug/L		84	54 - 130	2	20
n-Butylbenzene	25.0	27.4		ug/L		109	70 - 142	1	20
sec-Butylbenzene	25.0	27.2		ug/L		109	70 - 134	1	20
tert-Butylbenzene	25.0	26.3		ug/L		105	70 - 135	2	20
Carbon disulfide	25.0	25.9		ug/L		104	58 - 130	0	20
Carbon tetrachloride	25.0	30.4		ug/L		122	70 - 146	1	20
Chlorobenzene	25.0	24.7		ug/L		99	70 - 130	2	20
Chloroethane	25.0	24.6		ug/L		98	62 - 138	0	20
Chloroform	25.0	26.3		ug/L		105	70 - 130	0	20
Chloromethane	25.0	27.6		ug/L		110	52 - 175	1	20
2-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130	0	20
4-Chlorotoluene	25.0	27.4		ug/L		110	70 - 130	1	20
Chlorodibromomethane	25.0	25.7		ug/L		103	70 - 145	0	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-208208/6**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier				Limits		
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130	2	20
1,3-Dichlorobenzene	25.0	25.1		ug/L		101	70 - 130	0	20
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130	0	20
1,3-Dichloropropane	25.0	25.7		ug/L		103	70 - 130	1	20
1,1-Dichloropropene	25.0	26.8		ug/L		107	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	25.0	23.6		ug/L		94	70 - 136	3	20
Ethylene Dibromide	25.0	25.8		ug/L		103	70 - 130	1	20
Dibromomethane	25.0	26.5		ug/L		106	70 - 130	1	20
Dichlorodifluoromethane	25.0	25.3		ug/L		101	32 - 158	3	20
1,1-Dichloroethane	25.0	27.1		ug/L		109	70 - 130	0	20
1,2-Dichloroethane	25.0	27.5		ug/L		110	61 - 132	1	20
1,1-Dichloroethene	25.0	23.8		ug/L		95	64 - 128	1	20
cis-1,2-Dichloroethene	25.0	27.7		ug/L		111	70 - 130	0	20
trans-1,2-Dichloroethene	25.0	25.8		ug/L		103	68 - 130	2	20
1,2-Dichloropropane	25.0	28.3		ug/L		113	70 - 130	0	20
cis-1,3-Dichloropropene	25.0	28.0		ug/L		112	70 - 130	1	20
trans-1,3-Dichloropropene	25.0	27.2		ug/L		109	70 - 140	0	20
Ethylbenzene	25.0	25.8		ug/L		103	80 - 120	1	20
Hexachlorobutadiene	25.0	24.0		ug/L		96	70 - 130	2	20
2-Hexanone	125	123		ug/L		98	60 - 164	1	20
Isopropylbenzene	25.0	26.1		ug/L		105	70 - 130	1	20
4-Isopropyltoluene	25.0	26.1		ug/L		104	70 - 130	1	20
Methylene Chloride	25.0	26.7		ug/L		107	70 - 147	0	20
4-Methyl-2-pentanone (MIBK)	125	126		ug/L		101	58 - 130	1	20
Naphthalene	25.0	24.8		ug/L		99	50 - 130	3	20
N-Propylbenzene	25.0	28.3		ug/L		113	70 - 130	2	20
Styrene	25.0	25.5		ug/L		102	70 - 130	2	20
1,1,1,2-Tetrachloroethane	25.0	25.2		ug/L		101	70 - 130	1	20
1,1,2,2-Tetrachloroethane	25.0	26.0		ug/L		104	70 - 130	1	20
Tetrachloroethene	25.0	24.3		ug/L		97	70 - 130	1	20
Toluene	25.0	25.3		ug/L		101	78 - 120	1	20
1,2,3-Trichlorobenzene	25.0	24.2		ug/L		97	70 - 130	2	20
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	70 - 130	2	20
1,1,1-Trichloroethane	25.0	28.6		ug/L		115	70 - 130	2	20
1,1,2-Trichloroethane	25.0	26.3		ug/L		105	70 - 130	2	20
Trichloroethene	25.0	24.7		ug/L		99	70 - 130	1	20
Trichlorofluoromethane	25.0	26.9		ug/L		107	66 - 132	0	20
1,2,3-Trichloropropane	25.0	25.7		ug/L		103	70 - 130	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.8		ug/L		95	42 - 162	0	20
1,2,4-Trimethylbenzene	25.0	27.0		ug/L		108	70 - 132	1	20
1,3,5-Trimethylbenzene	25.0	27.2		ug/L		109	70 - 130	1	20
Vinyl acetate	25.0	35.7		ug/L		143	43 - 163	0	20
Vinyl chloride	25.0	23.2		ug/L		93	54 - 135	0	20
m-Xylene & p-Xylene	25.0	25.7		ug/L		103	70 - 142	2	20
o-Xylene	25.0	25.5		ug/L		102	70 - 130	2	20
2,2-Dichloropropane	25.0	33.2		ug/L		133	70 - 140	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-208208/6**

**Matrix: Water**

**Analysis Batch: 208208**

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCSD 720-208208/8**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
Gasoline Range Organics (GRO) -C5-C12	500	557		ug/L	111	71 - 125	3

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: 720-73969-3 MS**

**Matrix: Water**

**Analysis Batch: 208208**

**Client Sample ID: MW-6R**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.
								Limits
Methyl tert-butyl ether	ND		25.0	28.3		ug/L	113	60 - 138
Acetone	ND		125	112		ug/L	90	60 - 140
Benzene	20		25.0	45.8		ug/L	105	60 - 140
Dichlorobromomethane	ND		25.0	28.0		ug/L	112	60 - 140
Bromobenzene	ND		25.0	25.3		ug/L	101	60 - 140
Chlorobromomethane	ND		25.0	24.7		ug/L	99	60 - 140
Bromoform	ND		25.0	25.6		ug/L	102	56 - 140
Bromomethane	ND		25.0	22.0		ug/L	88	23 - 140
2-Butanone (MEK)	ND		125	112		ug/L	89	60 - 140
n-Butylbenzene	5.8		25.0	32.3		ug/L	106	60 - 140
sec-Butylbenzene	7.6		25.0	33.8		ug/L	104	60 - 140
tert-Butylbenzene	ND		25.0	26.2		ug/L	105	60 - 140
Carbon disulfide	ND		25.0	25.6		ug/L	102	38 - 140
Carbon tetrachloride	ND		25.0	30.0		ug/L	120	60 - 140
Chlorobenzene	ND		25.0	24.7		ug/L	99	60 - 140
Chloroethane	ND		25.0	24.6		ug/L	98	51 - 140
Chloroform	ND		25.0	26.4		ug/L	106	60 - 140
Chloromethane	ND		25.0	27.8		ug/L	111	52 - 140
2-Chlorotoluene	ND		25.0	28.2		ug/L	113	60 - 140
4-Chlorotoluene	ND		25.0	27.8		ug/L	111	60 - 140
Chlorodibromomethane	ND		25.0	26.1		ug/L	105	60 - 140
1,2-Dichlorobenzene	ND		25.0	25.3		ug/L	101	60 - 140
1,3-Dichlorobenzene	ND		25.0	24.9		ug/L	100	60 - 140
1,4-Dichlorobenzene	ND		25.0	24.9		ug/L	99	60 - 140
1,3-Dichloropropane	ND		25.0	25.9		ug/L	104	60 - 140
1,1-Dichloropropene	ND		25.0	26.4		ug/L	106	60 - 140

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-73969-3 MS**

**Matrix: Water**

**Analysis Batch: 208208**

**Client Sample ID: MW-6R**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits	
	Result	Qualifier	Added	Result	Qualifier						
1,2-Dibromo-3-Chloropropane	ND		25.0	24.6		ug/L		98	60 - 140		
Ethylene Dibromide	ND		25.0	26.3		ug/L		105	60 - 140		
Dibromomethane	ND		25.0	26.7		ug/L		107	60 - 140		
Dichlorodifluoromethane	ND		25.0	25.0		ug/L		100	38 - 140		
1,1-Dichloroethane	ND		25.0	26.9		ug/L		108	60 - 140		
1,2-Dichloroethane	ND		25.0	27.6		ug/L		110	60 - 140		
1,1-Dichloroethene	ND		25.0	22.8		ug/L		91	60 - 140		
cis-1,2-Dichloroethene	ND		25.0	27.8		ug/L		111	60 - 140		
trans-1,2-Dichloroethene	ND		25.0	26.0		ug/L		104	60 - 140		
1,2-Dichloropropane	ND		25.0	28.5		ug/L		114	60 - 140		
cis-1,3-Dichloropropene	ND		25.0	28.1		ug/L		112	60 - 140		
trans-1,3-Dichloropropene	ND		25.0	27.2		ug/L		109	60 - 140		
Ethylbenzene	32		25.0	55.8		ug/L		94	60 - 140		
Hexachlorobutadiene	ND		25.0	24.5		ug/L		98	60 - 140		
2-Hexanone	ND		125	124		ug/L		100	60 - 140		
Isopropylbenzene	22		25.0	46.0		ug/L		97	60 - 140		
4-Isopropyltoluene	ND		25.0	26.0		ug/L		103	60 - 140		
Methylene Chloride	ND		25.0	25.7		ug/L		103	40 - 140		
4-Methyl-2-pentanone (MIBK)	ND		125	128		ug/L		103	58 - 130		
Naphthalene	39		25.0	61.6		ug/L		91	56 - 140		
N-Propylbenzene	6.2		25.0	33.5		ug/L		109	60 - 140		
Styrene	ND		25.0	25.4		ug/L		101	60 - 140		
1,1,1,2-Tetrachloroethane	ND		25.0	25.1		ug/L		100	60 - 140		
1,1,2,2-Tetrachloroethane	ND		25.0	26.0		ug/L		104	60 - 140		
Tetrachloroethene	ND		25.0	23.9		ug/L		96	60 - 140		
Toluene	120		25.0	139 4		ug/L		70	60 - 140		
1,2,3-Trichlorobenzene	ND		25.0	24.2		ug/L		94	60 - 140		
1,2,4-Trichlorobenzene	ND		25.0	25.0		ug/L		98	60 - 140		
1,1,1-Trichloroethane	ND		25.0	29.7		ug/L		119	60 - 140		
1,1,2-Trichloroethane	ND		25.0	27.5		ug/L		110	60 - 140		
Trichloroethene	ND		25.0	24.6		ug/L		98	60 - 140		
Trichlorofluoromethane	ND		25.0	26.8		ug/L		107	60 - 140		
1,2,3-Trichloropropane	ND		25.0	25.7		ug/L		103	60 - 140		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	23.4		ug/L		93	60 - 140		
1,2,4-Trimethylbenzene	26		25.0	52.1		ug/L		103	60 - 140		
1,3,5-Trimethylbenzene	3.1		25.0	29.7		ug/L		107	60 - 140		
Vinyl acetate	ND	F1	25.0	36.2		ug/L		140	40 - 140		
Vinyl chloride	ND		25.0	22.4		ug/L		90	58 - 140		
m-Xylene & p-Xylene	110		25.0	134 4		ug/L		77	60 - 140		
o-Xylene	93		25.0	113		ug/L		80	60 - 140		
2,2-Dichloropropane	ND		25.0	29.7		ug/L		119	60 - 140		
<b>Surrogate</b>		<b>MS</b>	<b>MS</b>								
		<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>					
4-Bromofluorobenzene		92		67 - 130							
1,2-Dichloroethane-d4 (Surr)		103		72 - 130							
Toluene-d8 (Surr)		100		70 - 130							

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-73969-3 MSD**

**Matrix: Water**

**Analysis Batch: 208208**

**Client Sample ID: MW-6R**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		25.0	29.7		ug/L	119	60 - 138	5	20	
Acetone	ND		125	118		ug/L	94	60 - 140	5	20	
Benzene	20		25.0	46.0		ug/L	106	60 - 140	0	20	
Dichlorobromomethane	ND		25.0	28.4		ug/L	114	60 - 140	2	20	
Bromobenzene	ND		25.0	25.6		ug/L	102	60 - 140	1	20	
Chlorobromomethane	ND		25.0	25.3		ug/L	101	60 - 140	3	20	
Bromoform	ND		25.0	26.5		ug/L	106	56 - 140	4	20	
Bromomethane	ND		25.0	22.0		ug/L	88	23 - 140	0	20	
2-Butanone (MEK)	ND		125	117		ug/L	94	60 - 140	5	20	
n-Butylbenzene	5.8		25.0	32.3		ug/L	106	60 - 140	0	20	
sec-Butylbenzene	7.6		25.0	34.1		ug/L	106	60 - 140	1	20	
tert-Butylbenzene	ND		25.0	26.5		ug/L	106	60 - 140	1	20	
Carbon disulfide	ND		25.0	25.8		ug/L	103	38 - 140	1	20	
Carbon tetrachloride	ND		25.0	30.3		ug/L	121	60 - 140	1	20	
Chlorobenzene	ND		25.0	24.7		ug/L	99	60 - 140	0	20	
Chloroethane	ND		25.0	24.5		ug/L	98	51 - 140	0	20	
Chloroform	ND		25.0	26.4		ug/L	106	60 - 140	0	20	
Chloromethane	ND		25.0	27.0		ug/L	108	52 - 140	3	20	
2-Chlorotoluene	ND		25.0	28.5		ug/L	114	60 - 140	1	20	
4-Chlorotoluene	ND		25.0	27.9		ug/L	112	60 - 140	1	20	
Chlorodibromomethane	ND		25.0	27.2		ug/L	109	60 - 140	4	20	
1,2-Dichlorobenzene	ND		25.0	25.6		ug/L	103	60 - 140	1	20	
1,3-Dichlorobenzene	ND		25.0	25.1		ug/L	100	60 - 140	1	20	
1,4-Dichlorobenzene	ND		25.0	25.1		ug/L	100	60 - 140	1	20	
1,3-Dichloropropane	ND		25.0	26.5		ug/L	106	60 - 140	2	20	
1,1-Dichloropropene	ND		25.0	26.6		ug/L	107	60 - 140	1	20	
1,2-Dibromo-3-Chloropropane	ND		25.0	26.3		ug/L	105	60 - 140	7	20	
Ethylene Dibromide	ND		25.0	26.9		ug/L	108	60 - 140	2	20	
Dibromomethane	ND		25.0	27.1		ug/L	108	60 - 140	2	20	
Dichlorodifluoromethane	ND		25.0	24.6		ug/L	98	38 - 140	1	20	
1,1-Dichloroethane	ND		25.0	27.2		ug/L	109	60 - 140	1	20	
1,2-Dichloroethane	ND		25.0	28.1		ug/L	113	60 - 140	2	20	
1,1-Dichloroethene	ND		25.0	22.9		ug/L	92	60 - 140	0	20	
cis-1,2-Dichloroethene	ND		25.0	27.9		ug/L	112	60 - 140	1	20	
trans-1,2-Dichloroethene	ND		25.0	26.0		ug/L	104	60 - 140	0	20	
1,2-Dichloropropane	ND		25.0	29.0		ug/L	116	60 - 140	2	20	
cis-1,3-Dichloropropene	ND		25.0	28.5		ug/L	114	60 - 140	1	20	
trans-1,3-Dichloropropene	ND		25.0	28.3		ug/L	113	60 - 140	4	20	
Ethylbenzene	32		25.0	55.5		ug/L	93	60 - 140	1	20	
Hexachlorobutadiene	ND		25.0	24.9		ug/L	100	60 - 140	1	20	
2-Hexanone	ND		125	134		ug/L	107	60 - 140	7	20	
Isopropylbenzene	22		25.0	45.9		ug/L	97	60 - 140	0	20	
4-Isopropyltoluene	ND		25.0	26.1		ug/L	103	60 - 140	0	20	
Methylene Chloride	ND		25.0	26.2		ug/L	105	40 - 140	2	20	
4-Methyl-2-pentanone (MIBK)	ND		125	137		ug/L	110	58 - 130	7	20	
Naphthalene	39		25.0	65.7		ug/L	107	56 - 140	6	20	
N-Propylbenzene	6.2		25.0	34.0		ug/L	111	60 - 140	1	20	
Styrene	ND		25.0	25.5		ug/L	101	60 - 140	0	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-73969-3 MSD**

**Matrix: Water**

**Analysis Batch: 208208**

**Client Sample ID: MW-6R**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	ND		25.0	25.5		ug/L		102	60 - 140	2	20
1,1,2,2-Tetrachloroethane	ND		25.0	27.6		ug/L		110	60 - 140	6	20
Tetrachloroethene	ND		25.0	24.2		ug/L		97	60 - 140	1	20
Toluene	120		25.0	138 4		ug/L		64	60 - 140	1	20
1,2,3-Trichlorobenzene	ND		25.0	25.2		ug/L		98	60 - 140	4	20
1,2,4-Trichlorobenzene	ND		25.0	25.6		ug/L		101	60 - 140	2	20
1,1,1-Trichloroethane	ND		25.0	29.7		ug/L		119	60 - 140	0	20
1,1,2-Trichloroethane	ND		25.0	28.7		ug/L		115	60 - 140	4	20
Trichloroethene	ND		25.0	24.4		ug/L		97	60 - 140	1	20
Trichlorofluoromethane	ND		25.0	26.5		ug/L		106	60 - 140	1	20
1,2,3-Trichloropropane	ND		25.0	27.6		ug/L		110	60 - 140	7	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	23.6		ug/L		94	60 - 140	1	20
Vinyl acetate	26		25.0	52.2		ug/L		104	60 - 140	0	20
1,3,5-Trimethylbenzene	3.1		25.0	30.0		ug/L		108	60 - 140	1	20
Vinyl chloride	ND	F1	25.0	37.6 F1		ug/L		146	40 - 140	4	20
m-Xylene & p-Xylene	110		25.0	133 4		ug/L		73	60 - 140	1	20
o-Xylene	93		25.0	112		ug/L		78	60 - 140	0	20
2,2-Dichloropropane	ND		25.0	29.8		ug/L		119	60 - 140	0	20
<b>Surrogate</b>											
		<b>MSD</b>	<b>MSD</b>								
		<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>					
4-Bromofluorobenzene		94				67 - 130					
1,2-Dichloroethane-d4 (Surr)		103				72 - 130					
Toluene-d8 (Surr)		100				70 - 130					

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 720-207691/5**

**Matrix: Water**

**Analysis Batch: 207691**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Nitrite as NO2	ND		1.0		mg/L			08/16/16 11:15	1
Nitrate as NO3	ND		1.0		mg/L			08/16/16 11:15	1

**Lab Sample ID: LCS 720-207691/6**

**Matrix: Water**

**Analysis Batch: 207691**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Nitrite as NO2	10.0	10.0		mg/L		100	90 - 110
Nitrate as NO3	10.0	9.75		mg/L		98	90 - 110

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 720-73969-1 MS** **Client Sample ID: MW-4R**  
**Prep Type: Total/NA**

**Matrix: Water**

**Analysis Batch: 207691**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as NO2	ND		100	95.4		mg/L		95	80 - 120
Nitrate as NO3	ND		100	96.5		mg/L		97	80 - 120

**Lab Sample ID: 720-73969-1 MSD** **Client Sample ID: MW-4R**  
**Prep Type: Total/NA**

**Matrix: Water**

**Analysis Batch: 207691**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as NO2	ND		100	97.0		mg/L		97	80 - 120	2	20
Nitrate as NO3	ND		100	97.7		mg/L		98	80 - 120	1	20

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID: MB 720-207919/1-A** **Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 207919**

**Matrix: Water**

**Analysis Batch: 208095**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND	^	0.50		mg/L		08/19/16 09:16	08/23/16 11:35	1

**Lab Sample ID: LCS 720-207919/2-A** **Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 207919**

**Matrix: Water**

**Analysis Batch: 208096**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron		10.0	10.2	mg/L		102	85 - 115

**Lab Sample ID: MB 720-207920/1-A** **Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 207920**

**Matrix: Water**

**Analysis Batch: 208440**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.50		mg/L		08/19/16 09:41	08/29/16 16:12	1

**Lab Sample ID: LCS 720-207920/2-A** **Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 207920**

**Matrix: Water**

**Analysis Batch: 208440**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron		10.0	9.40	mg/L		94	85 - 115

## Method: SM 3500 Fe B - Iron, Ferrous

**Lab Sample ID: MB 720-207769/10** **Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

**Matrix: Water**

**Analysis Batch: 207769**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10		mg/L		08/17/16 10:03		1

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Lab Sample ID: LCS 720-207769/11**  
**Matrix: Water**  
**Analysis Batch: 207769**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	1.00	1.01		mg/L	101		85 - 115

**Lab Sample ID: 720-73969-5 MS**  
**Matrix: Water**  
**Analysis Batch: 207769**

**Client Sample ID: MW-8**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	18	HF	5.00	22.8		mg/L	97		75 - 125

**Lab Sample ID: 720-73969-5 MSD**  
**Matrix: Water**  
**Analysis Batch: 207769**

**Client Sample ID: MW-8**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ferrous Iron	18	HF	5.00	22.8		mg/L	96		75 - 125	0	20

## Method: SM 4500 NH3 G - Ammonia

**Lab Sample ID: MB 500-349737/1-A**  
**Matrix: Water**  
**Analysis Batch: 349897**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 349737**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		08/29/16 20:20	08/29/16 23:50	1

**Lab Sample ID: LCS 500-349737/2-A**  
**Matrix: Water**  
**Analysis Batch: 349897**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 349737**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	2.50	2.41		mg/L	96		80 - 120

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## GC/MS VOA

### Analysis Batch: 208208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-1	MW-4R	Total/NA	Water	8260B/CA_LUFT	1
720-73969-2	MW-5R	Total/NA	Water	MS	2
720-73969-3	MW-6R	Total/NA	Water	8260B/CA_LUFT	3
720-73969-4	MW-7R	Total/NA	Water	MS	4
720-73969-5	MW-8	Total/NA	Water	8260B/CA_LUFT	5
720-73969-6	MW-9	Total/NA	Water	MS	6
720-73969-7	MW-10	Total/NA	Water	8260B/CA_LUFT	7
MB 720-208208/4	Method Blank	Total/NA	Water	MS	8
LCS 720-208208/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	9
LCS 720-208208/7	Lab Control Sample	Total/NA	Water	MS	10
LCSD 720-208208/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	11
LCSD 720-208208/8	Lab Control Sample Dup	Total/NA	Water	MS	12
720-73969-3 MS	MW-6R	Total/NA	Water	8260B/CA_LUFT	13
720-73969-3 MSD	MW-6R	Total/NA	Water	MS	14

## HPLC/IC

### Analysis Batch: 207691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-1	MW-4R	Total/NA	Water	300.0	1
720-73969-1	MW-4R	Total/NA	Water	300.0	2
720-73969-2	MW-5R	Total/NA	Water	300.0	3
720-73969-3	MW-6R	Total/NA	Water	300.0	4
720-73969-3	MW-6R	Total/NA	Water	300.0	5
720-73969-4	MW-7R	Total/NA	Water	300.0	6
720-73969-4	MW-7R	Total/NA	Water	300.0	7
720-73969-5	MW-8	Total/NA	Water	300.0	8
720-73969-6	MW-9	Total/NA	Water	300.0	9
720-73969-7	MW-10	Total/NA	Water	300.0	10
720-73969-7	MW-10	Total/NA	Water	300.0	11
MB 720-207691/5	Method Blank	Total/NA	Water	300.0	12
LCS 720-207691/6	Lab Control Sample	Total/NA	Water	300.0	13
720-73969-1 MS	MW-4R	Total/NA	Water	300.0	14
720-73969-1 MSD	MW-4R	Total/NA	Water	300.0	

## Metals

### Prep Batch: 207919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-1	MW-4R	Total/NA	Water	200.7	

TestAmerica Pleasanton

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Metals (Continued)

### Prep Batch: 207919 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-2	MW-5R	Total/NA	Water	200.7	
720-73969-3	MW-6R	Total/NA	Water	200.7	
720-73969-4	MW-7R	Total/NA	Water	200.7	
720-73969-5	MW-8	Total/NA	Water	200.7	
MB 720-207919/1-A	Method Blank	Total/NA	Water	200.7	
LCS 720-207919/2-A	Lab Control Sample	Total/NA	Water	200.7	

### Prep Batch: 207920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-6	MW-9	Total/NA	Water	200.7	
720-73969-7	MW-10	Total/NA	Water	200.7	
MB 720-207920/1-A	Method Blank	Total/NA	Water	200.7	
LCS 720-207920/2-A	Lab Control Sample	Total/NA	Water	200.7	

### Analysis Batch: 208095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-207919/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	207919

### Analysis Batch: 208096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-1	MW-4R	Total/NA	Water	200.7 Rev 4.4	207919
720-73969-2	MW-5R	Total/NA	Water	200.7 Rev 4.4	207919
720-73969-3	MW-6R	Total/NA	Water	200.7 Rev 4.4	207919
720-73969-4	MW-7R	Total/NA	Water	200.7 Rev 4.4	207919
720-73969-5	MW-8	Total/NA	Water	200.7 Rev 4.4	207919
LCS 720-207919/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	207919

### Analysis Batch: 208440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-6	MW-9	Total/NA	Water	200.7 Rev 4.4	207920
720-73969-7	MW-10	Total/NA	Water	200.7 Rev 4.4	207920
MB 720-207920/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	207920
LCS 720-207920/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	207920

## General Chemistry

### Analysis Batch: 207769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-1	MW-4R	Total/NA	Water	SM 3500 Fe B	
720-73969-2	MW-5R	Total/NA	Water	SM 3500 Fe B	
720-73969-3	MW-6R	Total/NA	Water	SM 3500 Fe B	
720-73969-4	MW-7R	Total/NA	Water	SM 3500 Fe B	
720-73969-5	MW-8	Total/NA	Water	SM 3500 Fe B	
720-73969-6	MW-9	Total/NA	Water	SM 3500 Fe B	
720-73969-7	MW-10	Total/NA	Water	SM 3500 Fe B	
MB 720-207769/10	Method Blank	Total/NA	Water	SM 3500 Fe B	
LCS 720-207769/11	Lab Control Sample	Total/NA	Water	SM 3500 Fe B	
720-73969-5 MS	MW-8	Total/NA	Water	SM 3500 Fe B	
720-73969-5 MSD	MW-8	Total/NA	Water	SM 3500 Fe B	

TestAmerica Pleasanton

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## General Chemistry (Continued)

### Analysis Batch: 208410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-1	MW-4R	Total/NA	Water	SM 3500	
720-73969-2	MW-5R	Total/NA	Water	SM 3500	
720-73969-3	MW-6R	Total/NA	Water	SM 3500	
720-73969-4	MW-7R	Total/NA	Water	SM 3500	
720-73969-5	MW-8	Total/NA	Water	SM 3500	
720-73969-6	MW-9	Total/NA	Water	SM 3500	
720-73969-7	MW-10	Total/NA	Water	SM 3500	

### Prep Batch: 349737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-1	MW-4R	Total/NA	Water	SM 4500 NH3 B	
720-73969-2	MW-5R	Total/NA	Water	SM 4500 NH3 B	
720-73969-3	MW-6R	Total/NA	Water	SM 4500 NH3 B	
720-73969-4	MW-7R	Total/NA	Water	SM 4500 NH3 B	
720-73969-5	MW-8	Total/NA	Water	SM 4500 NH3 B	
720-73969-6	MW-9	Total/NA	Water	SM 4500 NH3 B	
720-73969-7	MW-10	Total/NA	Water	SM 4500 NH3 B	
MB 500-349737/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	
LCS 500-349737/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	

### Analysis Batch: 349897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73969-1	MW-4R	Total/NA	Water	SM 4500 NH3 G	349737
720-73969-2	MW-5R	Total/NA	Water	SM 4500 NH3 G	349737
720-73969-3	MW-6R	Total/NA	Water	SM 4500 NH3 G	349737
720-73969-4	MW-7R	Total/NA	Water	SM 4500 NH3 G	349737
720-73969-5	MW-8	Total/NA	Water	SM 4500 NH3 G	349737
720-73969-6	MW-9	Total/NA	Water	SM 4500 NH3 G	349737
720-73969-7	MW-10	Total/NA	Water	SM 4500 NH3 G	349737
MB 500-349737/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	349737
LCS 500-349737/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	349737

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-4R**  
**Date Collected: 08/16/16 10:05**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		20	208208	08/24/16 22:09	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207691	08/16/16 17:29	MEV	TAL PLS
Total/NA	Analysis	300.0		10	207691	08/16/16 17:46	MEV	TAL PLS
Total/NA	Prep	200.7			207919	08/19/16 09:16	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208096	08/23/16 13:57	SLK	TAL PLS
Total/NA	Analysis	SM 3500		1	208410	08/29/16 13:15	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		2	207769	08/17/16 10:03	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349737	08/29/16 20:20	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		2	349897	08/30/16 00:38	HMW	TAL CHI

**Client Sample ID: MW-5R**  
**Date Collected: 08/16/16 10:55**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		100	208208	08/24/16 22:38	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207691	08/16/16 18:37	MEV	TAL PLS
Total/NA	Prep	200.7			207919	08/19/16 09:16	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208096	08/23/16 14:02	SLK	TAL PLS
Total/NA	Analysis	SM 3500		1	208410	08/29/16 13:15	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207769	08/17/16 10:03	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349737	08/29/16 20:20	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349897	08/30/16 00:41	HMW	TAL CHI

**Client Sample ID: MW-6R**  
**Date Collected: 08/16/16 11:55**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208208	08/25/16 00:06	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207691	08/16/16 18:54	MEV	TAL PLS
Total/NA	Analysis	300.0		10	207691	08/16/16 22:14	MEV	TAL PLS
Total/NA	Prep	200.7			207919	08/19/16 09:16	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208096	08/23/16 14:07	SLK	TAL PLS
Total/NA	Analysis	SM 3500		1	208410	08/29/16 13:15	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207769	08/17/16 10:03	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349737	08/29/16 20:20	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349897	08/30/16 00:44	HMW	TAL CHI

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-7R**  
**Date Collected: 08/16/16 12:35**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		200	208208	08/25/16 00:36	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207691	08/16/16 19:11	MEV	TAL PLS
Total/NA	Analysis	300.0		10	207691	08/16/16 21:18	MEV	TAL PLS
Total/NA	Prep	200.7			207919	08/19/16 09:16	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208096	08/23/16 14:12	SLK	TAL PLS
Total/NA	Analysis	SM 3500		1	208410	08/29/16 13:15	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207769	08/17/16 10:03	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349737	08/29/16 20:20	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349897	08/30/16 00:47	HMW	TAL CHI

**Client Sample ID: MW-8**  
**Date Collected: 08/16/16 14:50**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208208	08/25/16 01:04	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207691	08/16/16 19:29	MEV	TAL PLS
Total/NA	Prep	200.7			207919	08/19/16 09:16	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208096	08/23/16 14:17	SLK	TAL PLS
Total/NA	Analysis	SM 3500		1	208410	08/29/16 13:15	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		5	207769	08/17/16 10:03	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349737	08/29/16 20:20	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349897	08/30/16 00:49	HMW	TAL CHI

**Client Sample ID: MW-9**  
**Date Collected: 08/16/16 14:10**  
**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208208	08/25/16 01:33	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207691	08/16/16 20:20	MEV	TAL PLS
Total/NA	Prep	200.7			207920	08/19/16 09:41	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208440	08/29/16 16:50	ASB	TAL PLS
Total/NA	Analysis	SM 3500		1	208410	08/29/16 13:15	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207769	08/17/16 10:03	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349737	08/29/16 20:20	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349897	08/30/16 00:58	HMW	TAL CHI

TestAmerica Pleasanton

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

**Client Sample ID: MW-10**

**Date Collected: 08/16/16 13:45**

**Date Received: 08/16/16 18:30**

**Lab Sample ID: 720-73969-7**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208208	08/25/16 02:02	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207691	08/16/16 20:37	MEV	TAL PLS
Total/NA	Analysis	300.0		100	207691	08/16/16 21:57	MEV	TAL PLS
Total/NA	Prep	200.7			207920	08/19/16 09:41	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208440	08/29/16 16:55	ASB	TAL PLS
Total/NA	Analysis	SM 3500		1	208410	08/29/16 13:15	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207769	08/17/16 10:03	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349737	08/29/16 20:20	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349897	08/30/16 01:01	HMW	TAL CHI

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

# Certification Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

## Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18
Analysis Method	Prep Method	Matrix	Analyte	

## Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2903	04-30-18
Georgia	State Program	4	N/A	04-30-17
Georgia	State Program	4	939	04-30-17
Hawaii	State Program	9	N/A	04-30-17
Illinois	NELAP	5	100201	04-30-17
Indiana	State Program	5	C-IL-02	04-30-17
Iowa	State Program	7	82	05-01-18
Kansas	NELAP	7	E-10161	10-31-16 *
Kentucky (UST)	State Program	4	66	04-30-17
Kentucky (WW)	State Program	4	KY90023	12-31-16 *
Mississippi	State Program	4	N/A	04-30-17
New York	NELAP	2	12019	04-01-17
North Carolina (WW/SW)	State Program	4	291	12-31-16 *
North Dakota	State Program	8	R-194	04-30-17
Oklahoma	State Program	6	8908	08-31-17 *
South Carolina	State Program	4	77001	04-30-16 *
USDA	Federal		P330-15-00038	02-11-18
Wisconsin	State Program	5	999580010	08-31-16 *
Wyoming	State Program	8	8TMS-Q	04-30-17

\* Certification renewal pending - certification considered valid.

TestAmerica Pleasanton

# Method Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL PLS
S			
300.0	Anions, Ion Chromatography	MCAWW	TAL PLS
200.7 Rev 4.4	Metals (ICP)	EPA	TAL PLS
SM 3500	Iron, Ferric	SM	TAL PLS
SM 3500 Fe B	Iron, Ferrous	SM	TAL PLS
SM 4500 NH3 G	Ammonia	SM	TAL CHI

## Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

## Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

## Sample Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73969-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-73969-1	MW-4R	Water	08/16/16 10:05	08/16/16 18:30
720-73969-2	MW-5R	Water	08/16/16 10:55	08/16/16 18:30
720-73969-3	MW-6R	Water	08/16/16 11:55	08/16/16 18:30
720-73969-4	MW-7R	Water	08/16/16 12:35	08/16/16 18:30
720-73969-5	MW-8	Water	08/16/16 14:50	08/16/16 18:30
720-73969-6	MW-9	Water	08/16/16 14:10	08/16/16 18:30
720-73969-7	MW-10	Water	08/16/16 13:45	08/16/16 18:30

TestAmerica Pleasanton

1 2 3 4 5 6 7 8 9 10 11 12

13

14

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody  
1220 Quarry Lane • Pleasanton CA 94566-4756  
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 720-73969  
Date 8/10/10 Page 1 of 1

8/30/2016

Report To:

ttm: Peter Sims  
Company: Nego & moore

Address: 1950 weber st. se 400  
mail: PSims@negoandmoore.com

bill To: P. Sims  
ttm: P. Sims  
Phone: 509 342 3000

Sampled By: Candy Dawson

Date: 8/10/10 Time: 15:40 Present: Present

Volatile Organics GC/MS (VOCS)  
 EPA 8260B

HVOCs by  EPA 8260B

EPA 8260B:  Gas  BTEX  
 5 Oxygenates  DCA, EDBD Ethanol

TEPH EPA 8015B  Silica Gel  
 Diesel  Motor Oil  Other

SemiVolatile Organics GC/MS  
 EPA 8270C

PNA/PAH's by  8270C  
 8270C SIM

Oil and Grease  Petroleum  
(EPA 1664/9071)  Total

Pesticides  EPA 8081  
PCBs  EPA 8082

CAM17 Metals  
(EPA 6010/7470/7471)

Metals  6010B  200 7  
 Lead  LUFT  RCRA  
 Other:

Metals:  6020  200 8  
(ICP-MS).

W.E.T (STLC)  
 W.E.T (DI)  TCLP

Hex. Chrom by  EPA 7196  
 or EPA 7199

pH  9040  
 SM4500

Spec. Cond.  Alkalinity  
 TSS  SS  TDS

Anions  Cl  SO<sub>4</sub>  NO<sub>3</sub>  F  
 Br  NO<sub>2</sub>  PO<sub>4</sub>

Perchlorate by EPA 314.0

COD  EPA 410 4  SM6220D  
 Turbidity

iron, Ferric + Ferrous  
SM3500 FE

ammonia SM4500

Number of Containers

Analysis Request:



720-73969 Chain of Custody

1) Relinquished by:

Rgo

Signature

Time

15:40

2) Relinquished by:

l.b.41

Signature

Time

16:41

3) Relinquished by:

l.b.41

Signature

Time

16:41

Project Info: Sample Receipt  
Project Name #: 408946004  
Churn

# of Containers:  
Head Space:  
Temp: 7.5°

credit Card Y/N:  
If yes, please call with payment information ASAP

(10) Day 5 Day 4 Day 3 Day 2 Day 1 Day Other:

Report:  Routine  Level 3  Level 4  EDD  EDF  
Special Instructions / Comments:  Global ID \_\_\_\_\_

## Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information (Sub Contract Lab)</b>		Sampler:	Lab PM: Duong, Paloma R	Carrier Tracking No(s):	COC No: 720-30000.1
Client Contact: Shipping/Receiving		Phone:	E-Mail: paloma.duong@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.					Job #: 720-73969-1
Address: 2417 Bond Street, City: University Park		Due Date Requested: 8/30/2016	Analysis Requested		
State, Zip: IL, 60484		TAT Requested (days): 720-73969 COC			Preservation Codes:
Phone: 708-534-5200(Tel) 708-534-5211(Fax)		PO #:			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:
Email:		WO #:			
Project Name: Chun		Project #: 72010606			
Site:		SSOW#:			
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab) <small>B=BTissue, A=Air</small>	Matrix (W=water, S=solid, O=waste/oil, F=Filtered Sample (Yes or No))
					Total Number of containers
MW-4R (720-73969-1)		8/16/16	10:05 Pacific	Water	X
MW-5R (720-73969-2)		8/16/16	10:55 Pacific	Water	X
MW-6R (720-73969-3)		8/16/16	11:55 Pacific	Water	X
MW-7R (720-73969-4)		8/16/16	12:35 Pacific	Water	X
MW-8 (720-73969-5)		8/16/16	14:50 Pacific	Water	X
MW-9 (720-73969-6)		8/16/16	14:10 Pacific	Water	X
MW-10 (720-73969-7)		8/16/16	13:45 Pacific	Water	X
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
Unconfirmed		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2			
Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by: <i>Jm</i>		Date/Time: <i>8/17/16 1500</i>	Company: <i>ST</i>	Received by: <i>Shaw Scott</i>	Date/Time: <i>8/18/16 1030</i>
Relinquished by:		Date/Time:	Company:	Received by:	Date/Time:
Relinquished by:		Date/Time:	Company:	Received by:	Date/Time:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.: <i>0,9,0,7</i>			
		Cooler Temperature(s) °C and Other Remarks:			

## Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-73969-1

**Login Number:** 73969

**List Source:** TestAmerica Pleasanton

**List Number:** 1

**Creator:** Arauz, Dennis

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

## Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-73969-1

**Login Number:** 73969

**List Source:** TestAmerica Chicago

**List Number:** 2

**List Creation:** 08/18/16 12:01 PM

**Creator:** Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9,0.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-73989-1

Client Project/Site: Chun

For:

Ninno & Moore

1956 Webster Street

Suite 400

Oakland, California 94612

Attn: Mr. Peter D. Sims



Authorized for release by:

8/31/2016 10:36:07 AM

Paloma Duong, Project Manager I

(925)484-1919

[paloma.duong@testamericainc.com](mailto:paloma.duong@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?

Ask  
The  
Expert

Visit us at:

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	8
QC Sample Results . . . . .	20
QC Association Summary . . . . .	29
Lab Chronicle . . . . .	32
Certification Summary . . . . .	34
Method Summary . . . . .	35
Sample Summary . . . . .	36
Chain of Custody . . . . .	37
Receipt Checklists . . . . .	39

# Definitions/Glossary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Qualifiers

### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

## Glossary

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

# Case Narrative

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Job ID: 720-73989-1

Laboratory: TestAmerica Pleasanton

### Narrative

#### Job Narrative 720-73989-1

### Comments

No additional comments.

### Receipt

The samples were received on 8/17/2016 5:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0° C.

### Receipt Exceptions

We did not receive a poly bottle preserved with HNO<sub>3</sub> to perform the Total Fe to calculate the Ferric Iron results. Sample was split off into a 125 ml with HNO<sub>3</sub> to perform the Total Fe analysis.

### GC/MS VOA

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

### Metals

Method 200.7: The following samples were received unpreserved and were preserved upon receipt to the laboratory: MW-11R (720-73989-1), MW-12 (720-73989-2), MW-13 (720-73989-3), MW-14 (720-73989-4), MW-15 (720-73989-5) and MW-16 (720-73989-6). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion. Received unpreserved, added 1 mL HNO<sub>3</sub> 8/17/16 @ 1944, ref# 207813.

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

### General Chemistry

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

# Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Client Sample ID: MW-11R

## Lab Sample ID: 720-73989-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2200		50		ug/L	100		8260B/CA_LUFT	Total/NA
Ethylbenzene	900		50		ug/L	100		MS	
Isopropylbenzene	60		50		ug/L	100		8260B/CA_LUFT	Total/NA
Naphthalene	250		100		ug/L	100		MS	
N-Propylbenzene	100		100		ug/L	100		8260B/CA_LUFT	Total/NA
Toluene	1900		50		ug/L	100		MS	
1,2,4-Trimethylbenzene	800		50		ug/L	100		8260B/CA_LUFT	Total/NA
1,3,5-Trimethylbenzene	210		50		ug/L	100		MS	
Xylenes, Total	2500		100		ug/L	100		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	15000		5000		ug/L	100		MS	
Nitrate as NO <sub>3</sub>	17		1.0		mg/L	1		300.0	Total/NA
Iron	4.3		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Ferric Iron	0.40		0.10		mg/L	1		SM 3500	Total/NA
Ferrous Iron	3.9 HF		0.10		mg/L	1		SM 3500 Fe B	Total/NA

## Client Sample ID: MW-12

## Lab Sample ID: 720-73989-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.9		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Benzene	580		5.0		ug/L	10		MS	
sec-Butylbenzene	1.3		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
1,2-Dichloroethane	2.2		0.50		ug/L	1		MS	
Ethylbenzene	6.2		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Isopropylbenzene	4.9		0.50		ug/L	1		MS	
Naphthalene	5.6		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
N-Propylbenzene	1.8		1.0		ug/L	1		MS	
Toluene	8.5		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,2,4-Trimethylbenzene	3.7		0.50		ug/L	1		MS	
1,3,5-Trimethylbenzene	1.5		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Xylenes, Total	39		1.0		ug/L	1		MS	
Gasoline Range Organics (GRO) -C5-C12	1100		50		ug/L	1		8260B/CA_LUFT	Total/NA
Iron	0.87		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Ferrous Iron	1.1 HF		0.10		mg/L	1		SM 3500 Fe B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Client Sample ID: MW-13

## Lab Sample ID: 720-73989-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	3.0		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,2-Dichloroethane	1.6		0.50		ug/L	1		MS	
Nitrite as NO2	1.9		1.0		mg/L	1		8260B/CA_LUFT	Total/NA
Nitrate as NO3	210		100		mg/L	100		MS	Total/NA
Iron	78		0.50		mg/L	1		300.0	Total/NA
Ferric Iron	78		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Ferrous Iron	0.27	HF	0.10		mg/L	1		SM 3500	Total/NA
								SM 3500 Fe B	Total/NA

## Client Sample ID: MW-14

## Lab Sample ID: 720-73989-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2200		100		ug/L	200		8260B/CA_LUFT	Total/NA
Ethylbenzene	1400		100		ug/L	200		MS	
Naphthalene	420		200		ug/L	200		8260B/CA_LUFT	Total/NA
Toluene	2900		100		ug/L	200		MS	
1,2,4-Trimethylbenzene	1200		100		ug/L	200		8260B/CA_LUFT	Total/NA
1,3,5-Trimethylbenzene	280		100		ug/L	200		MS	
Xylenes, Total	6300		200		ug/L	200		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	22000		10000		ug/L	200		MS	
Iron	28		0.50		mg/L	1		8260B/CA_LUFT	Total/NA
Ferric Iron	19		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Ferrous Iron	8.9	HF	0.20		mg/L	2		SM 3500	Total/NA
								SM 3500 Fe B	Total/NA

## Client Sample ID: MW-15

## Lab Sample ID: 720-73989-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	6.5		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,2-Dichloroethane	1.3		0.50		ug/L	1		MS	
Nitrate as NO3	32		10		mg/L	10		8260B/CA_LUFT	Total/NA
Iron	40		0.50		mg/L	1		300.0	Total/NA
Ferric Iron	40		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Ferrous Iron	0.41	HF	0.10		mg/L	1		SM 3500	Total/NA
								SM 3500 Fe B	Total/NA

## Client Sample ID: MW-16

## Lab Sample ID: 720-73989-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.8		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,2-Dichloroethane	1.2		0.50		ug/L	1		MS	
Nitrite as NO2	1.8		1.0		mg/L	1		8260B/CA_LUFT	Total/NA
Nitrate as NO3	88		10		mg/L	10		300.0	Total/NA
								300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

## Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

### Client Sample ID: MW-16 (Continued)

### Lab Sample ID: 720-73989-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	7.2		0.50		mg/L	1		200.7 Rev 4.4	Total/NA
Ferric Iron	7.0		0.10		mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.16	HF	0.10		mg/L	1		SM 3500 Fe B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-11R**  
**Date Collected: 08/17/16 11:45**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-1**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		50		ug/L			08/25/16 02:31	100
Acetone	ND		5000		ug/L			08/25/16 02:31	100
<b>Benzene</b>	<b>2200</b>		50		ug/L			08/25/16 02:31	100
Dichlorobromomethane	ND		50		ug/L			08/25/16 02:31	100
Bromobenzene	ND		100		ug/L			08/25/16 02:31	100
Chlorobromomethane	ND		100		ug/L			08/25/16 02:31	100
Bromoform	ND		100		ug/L			08/25/16 02:31	100
Bromomethane	ND		100		ug/L			08/25/16 02:31	100
2-Butanone (MEK)	ND		5000		ug/L			08/25/16 02:31	100
n-Butylbenzene	ND		100		ug/L			08/25/16 02:31	100
sec-Butylbenzene	ND		100		ug/L			08/25/16 02:31	100
tert-Butylbenzene	ND		100		ug/L			08/25/16 02:31	100
Carbon disulfide	ND		500		ug/L			08/25/16 02:31	100
Carbon tetrachloride	ND		50		ug/L			08/25/16 02:31	100
Chlorobenzene	ND		50		ug/L			08/25/16 02:31	100
Chloroethane	ND		100		ug/L			08/25/16 02:31	100
Chloroform	ND		100		ug/L			08/25/16 02:31	100
Chloromethane	ND		100		ug/L			08/25/16 02:31	100
2-Chlorotoluene	ND		50		ug/L			08/25/16 02:31	100
4-Chlorotoluene	ND		50		ug/L			08/25/16 02:31	100
Chlorodibromomethane	ND		50		ug/L			08/25/16 02:31	100
1,2-Dichlorobenzene	ND		50		ug/L			08/25/16 02:31	100
1,3-Dichlorobenzene	ND		50		ug/L			08/25/16 02:31	100
1,4-Dichlorobenzene	ND		50		ug/L			08/25/16 02:31	100
1,3-Dichloropropane	ND		100		ug/L			08/25/16 02:31	100
1,1-Dichloropropene	ND		50		ug/L			08/25/16 02:31	100
1,2-Dibromo-3-Chloropropane	ND		100		ug/L			08/25/16 02:31	100
Ethylene Dibromide	ND		50		ug/L			08/25/16 02:31	100
Dibromomethane	ND		50		ug/L			08/25/16 02:31	100
Dichlorodifluoromethane	ND		50		ug/L			08/25/16 02:31	100
1,1-Dichloroethane	ND		50		ug/L			08/25/16 02:31	100
1,2-Dichloroethane	ND		50		ug/L			08/25/16 02:31	100
1,1-Dichloroethene	ND		50		ug/L			08/25/16 02:31	100
cis-1,2-Dichloroethene	ND		50		ug/L			08/25/16 02:31	100
trans-1,2-Dichloroethene	ND		50		ug/L			08/25/16 02:31	100
1,2-Dichloropropane	ND		50		ug/L			08/25/16 02:31	100
cis-1,3-Dichloropropene	ND		50		ug/L			08/25/16 02:31	100
trans-1,3-Dichloropropene	ND		50		ug/L			08/25/16 02:31	100
<b>Ethylbenzene</b>	<b>900</b>		50		ug/L			08/25/16 02:31	100
Hexachlorobutadiene	ND		100		ug/L			08/25/16 02:31	100
2-Hexanone	ND		5000		ug/L			08/25/16 02:31	100
<b>Isopropylbenzene</b>	<b>60</b>		50		ug/L			08/25/16 02:31	100
4-Isopropyltoluene	ND		100		ug/L			08/25/16 02:31	100
Methylene Chloride	ND		500		ug/L			08/25/16 02:31	100
4-Methyl-2-pentanone (MIBK)	ND		5000		ug/L			08/25/16 02:31	100
<b>Naphthalene</b>	<b>250</b>		100		ug/L			08/25/16 02:31	100
<b>N-Propylbenzene</b>	<b>100</b>		100		ug/L			08/25/16 02:31	100
Styrene	ND		50		ug/L			08/25/16 02:31	100
1,1,1,2-Tetrachloroethane	ND		50		ug/L			08/25/16 02:31	100

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-11R**  
**Date Collected: 08/17/16 11:45**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-1**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		50		ug/L			08/25/16 02:31	100
Tetrachloroethene	ND		50		ug/L			08/25/16 02:31	100
<b>Toluene</b>	<b>1900</b>		50		ug/L			08/25/16 02:31	100
1,2,3-Trichlorobenzene	ND		100		ug/L			08/25/16 02:31	100
1,2,4-Trichlorobenzene	ND		100		ug/L			08/25/16 02:31	100
1,1,1-Trichloroethane	ND		50		ug/L			08/25/16 02:31	100
1,1,2-Trichloroethane	ND		50		ug/L			08/25/16 02:31	100
Trichloroethene	ND		50		ug/L			08/25/16 02:31	100
Trichlorofluoromethane	ND		100		ug/L			08/25/16 02:31	100
1,2,3-Trichloropropane	ND		50		ug/L			08/25/16 02:31	100
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50		ug/L			08/25/16 02:31	100
<b>1,2,4-Trimethylbenzene</b>	<b>800</b>		50		ug/L			08/25/16 02:31	100
<b>1,3,5-Trimethylbenzene</b>	<b>210</b>		50		ug/L			08/25/16 02:31	100
Vinyl acetate	ND		1000		ug/L			08/25/16 02:31	100
Vinyl chloride	ND		50		ug/L			08/25/16 02:31	100
<b>Xylenes, Total</b>	<b>2500</b>		100		ug/L			08/25/16 02:31	100
2,2-Dichloropropane	ND		50		ug/L			08/25/16 02:31	100
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>15000</b>		5000		ug/L			08/25/16 02:31	100
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	96		67 - 130					08/25/16 02:31	100
1,2-Dichloroethane-d4 (Surr)	102		72 - 130					08/25/16 02:31	100
Toluene-d8 (Surr)	98		70 - 130					08/25/16 02:31	100

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/18/16 05:13	1
<b>Nitrate as NO3</b>	<b>17</b>		1.0		mg/L			08/18/16 05:13	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>4.3</b>		0.50		mg/L		08/19/16 09:41	08/29/16 17:01	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Ferric Iron</b>	<b>0.40</b>		0.10		mg/L			08/30/16 09:23	1
<b>Ferrous Iron</b>	<b>3.9</b>	HF	0.10		mg/L			08/18/16 09:13	1
Ammonia	ND		0.20		mg/L		08/26/16 13:30	08/28/16 18:03	1

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-12**  
**Date Collected: 08/17/16 10:50**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-2**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	2.9		0.50		ug/L		08/25/16 03:01		1
Acetone	ND		50		ug/L		08/25/16 03:01		1
Benzene	580		5.0		ug/L		08/27/16 11:23		10
Dichlorobromomethane	ND		0.50		ug/L		08/25/16 03:01		1
Bromobenzene	ND		1.0		ug/L		08/25/16 03:01		1
Chlorobromomethane	ND		1.0		ug/L		08/25/16 03:01		1
Bromoform	ND		1.0		ug/L		08/25/16 03:01		1
Bromomethane	ND		1.0		ug/L		08/25/16 03:01		1
2-Butanone (MEK)	ND		50		ug/L		08/25/16 03:01		1
n-Butylbenzene	ND		1.0		ug/L		08/25/16 03:01		1
<b>sec-Butylbenzene</b>	<b>1.3</b>		1.0		ug/L		08/25/16 03:01		1
tert-Butylbenzene	ND		1.0		ug/L		08/25/16 03:01		1
Carbon disulfide	ND		5.0		ug/L		08/25/16 03:01		1
Carbon tetrachloride	ND		0.50		ug/L		08/25/16 03:01		1
Chlorobenzene	ND		0.50		ug/L		08/25/16 03:01		1
Chloroethane	ND		1.0		ug/L		08/25/16 03:01		1
Chloroform	ND		1.0		ug/L		08/25/16 03:01		1
Chloromethane	ND		1.0		ug/L		08/25/16 03:01		1
2-Chlorotoluene	ND		0.50		ug/L		08/25/16 03:01		1
4-Chlorotoluene	ND		0.50		ug/L		08/25/16 03:01		1
Chlorodibromomethane	ND		0.50		ug/L		08/25/16 03:01		1
1,2-Dichlorobenzene	ND		0.50		ug/L		08/25/16 03:01		1
1,3-Dichlorobenzene	ND		0.50		ug/L		08/25/16 03:01		1
1,4-Dichlorobenzene	ND		0.50		ug/L		08/25/16 03:01		1
1,3-Dichloropropane	ND		1.0		ug/L		08/25/16 03:01		1
1,1-Dichloropropene	ND		0.50		ug/L		08/25/16 03:01		1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L		08/25/16 03:01		1
Ethylene Dibromide	ND		0.50		ug/L		08/25/16 03:01		1
Dibromomethane	ND		0.50		ug/L		08/25/16 03:01		1
Dichlorodifluoromethane	ND		0.50		ug/L		08/25/16 03:01		1
1,1-Dichloroethane	ND		0.50		ug/L		08/25/16 03:01		1
<b>1,2-Dichloroethane</b>	<b>2.2</b>		0.50		ug/L		08/25/16 03:01		1
1,1-Dichloroethene	ND		0.50		ug/L		08/25/16 03:01		1
cis-1,2-Dichloroethene	ND		0.50		ug/L		08/25/16 03:01		1
trans-1,2-Dichloroethene	ND		0.50		ug/L		08/25/16 03:01		1
1,2-Dichloropropane	ND		0.50		ug/L		08/25/16 03:01		1
cis-1,3-Dichloropropene	ND		0.50		ug/L		08/25/16 03:01		1
trans-1,3-Dichloropropene	ND		0.50		ug/L		08/25/16 03:01		1
<b>Ethylbenzene</b>	<b>6.2</b>		0.50		ug/L		08/25/16 03:01		1
Hexachlorobutadiene	ND		1.0		ug/L		08/25/16 03:01		1
2-Hexanone	ND		50		ug/L		08/25/16 03:01		1
<b>Isopropylbenzene</b>	<b>4.9</b>		0.50		ug/L		08/25/16 03:01		1
4-Isopropyltoluene	ND		1.0		ug/L		08/25/16 03:01		1
Methylene Chloride	ND		5.0		ug/L		08/25/16 03:01		1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L		08/25/16 03:01		1
<b>Naphthalene</b>	<b>5.6</b>		1.0		ug/L		08/25/16 03:01		1
<b>N-Propylbenzene</b>	<b>1.8</b>		1.0		ug/L		08/25/16 03:01		1
Styrene	ND		0.50		ug/L		08/25/16 03:01		1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L		08/25/16 03:01		1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-12**  
**Date Collected: 08/17/16 10:50**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-2**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 03:01	1
Tetrachloroethene	ND		0.50		ug/L			08/25/16 03:01	1
<b>Toluene</b>	<b>8.5</b>		0.50		ug/L			08/25/16 03:01	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 03:01	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 03:01	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/25/16 03:01	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/25/16 03:01	1
Trichloroethene	ND		0.50		ug/L			08/25/16 03:01	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 03:01	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/25/16 03:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/25/16 03:01	1
<b>1,2,4-Trimethylbenzene</b>	<b>3.7</b>		0.50		ug/L			08/25/16 03:01	1
<b>1,3,5-Trimethylbenzene</b>	<b>1.5</b>		0.50		ug/L			08/25/16 03:01	1
Vinyl acetate	ND		10		ug/L			08/25/16 03:01	1
Vinyl chloride	ND		0.50		ug/L			08/25/16 03:01	1
<b>Xylenes, Total</b>	<b>39</b>		1.0		ug/L			08/25/16 03:01	1
2,2-Dichloropropane	ND		0.50		ug/L			08/25/16 03:01	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>1100</b>		50		ug/L			08/25/16 03:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		67 - 130		08/25/16 03:01	1
4-Bromofluorobenzene	97		67 - 130		08/27/16 11:23	10
1,2-Dichloroethane-d4 (Surr)	107		72 - 130		08/25/16 03:01	1
1,2-Dichloroethane-d4 (Surr)	100		72 - 130		08/27/16 11:23	10
Toluene-d8 (Surr)	99		70 - 130		08/25/16 03:01	1
Toluene-d8 (Surr)	101		70 - 130		08/27/16 11:23	10

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/18/16 05:47	1
Nitrate as NO3	ND		1.0		mg/L			08/18/16 05:47	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<b>0.87</b>		0.50		mg/L		08/19/16 09:41	08/29/16 17:17	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	ND		0.10		mg/L			08/30/16 09:23	1
<b>Ferrous Iron</b>	<b>1.1 HF</b>		0.10		mg/L			08/18/16 09:13	1
Ammonia	ND		0.20		mg/L		08/26/16 13:30	08/28/16 18:06	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-13**  
**Date Collected: 08/17/16 13:40**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-3**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	3.0		0.50		ug/L		08/25/16 03:30		1
Acetone	ND		50		ug/L		08/25/16 03:30		1
Benzene	ND		0.50		ug/L		08/25/16 03:30		1
Dichlorobromomethane	ND		0.50		ug/L		08/25/16 03:30		1
Bromobenzene	ND		1.0		ug/L		08/25/16 03:30		1
Chlorobromomethane	ND		1.0		ug/L		08/25/16 03:30		1
Bromoform	ND		1.0		ug/L		08/25/16 03:30		1
Bromomethane	ND		1.0		ug/L		08/25/16 03:30		1
2-Butanone (MEK)	ND		50		ug/L		08/25/16 03:30		1
n-Butylbenzene	ND		1.0		ug/L		08/25/16 03:30		1
sec-Butylbenzene	ND		1.0		ug/L		08/25/16 03:30		1
tert-Butylbenzene	ND		1.0		ug/L		08/25/16 03:30		1
Carbon disulfide	ND		5.0		ug/L		08/25/16 03:30		1
Carbon tetrachloride	ND		0.50		ug/L		08/25/16 03:30		1
Chlorobenzene	ND		0.50		ug/L		08/25/16 03:30		1
Chloroethane	ND		1.0		ug/L		08/25/16 03:30		1
Chloroform	ND		1.0		ug/L		08/25/16 03:30		1
Chloromethane	ND		1.0		ug/L		08/25/16 03:30		1
2-Chlorotoluene	ND		0.50		ug/L		08/25/16 03:30		1
4-Chlorotoluene	ND		0.50		ug/L		08/25/16 03:30		1
Chlorodibromomethane	ND		0.50		ug/L		08/25/16 03:30		1
1,2-Dichlorobenzene	ND		0.50		ug/L		08/25/16 03:30		1
1,3-Dichlorobenzene	ND		0.50		ug/L		08/25/16 03:30		1
1,4-Dichlorobenzene	ND		0.50		ug/L		08/25/16 03:30		1
1,3-Dichloropropane	ND		1.0		ug/L		08/25/16 03:30		1
1,1-Dichloropropene	ND		0.50		ug/L		08/25/16 03:30		1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L		08/25/16 03:30		1
Ethylene Dibromide	ND		0.50		ug/L		08/25/16 03:30		1
Dibromomethane	ND		0.50		ug/L		08/25/16 03:30		1
Dichlorodifluoromethane	ND		0.50		ug/L		08/25/16 03:30		1
1,1-Dichloroethane	ND		0.50		ug/L		08/25/16 03:30		1
<b>1,2-Dichloroethane</b>	<b>1.6</b>		0.50		ug/L		08/25/16 03:30		1
1,1-Dichloroethene	ND		0.50		ug/L		08/25/16 03:30		1
cis-1,2-Dichloroethene	ND		0.50		ug/L		08/25/16 03:30		1
trans-1,2-Dichloroethene	ND		0.50		ug/L		08/25/16 03:30		1
1,2-Dichloropropane	ND		0.50		ug/L		08/25/16 03:30		1
cis-1,3-Dichloropropene	ND		0.50		ug/L		08/25/16 03:30		1
trans-1,3-Dichloropropene	ND		0.50		ug/L		08/25/16 03:30		1
Ethylbenzene	ND		0.50		ug/L		08/25/16 03:30		1
Hexachlorobutadiene	ND		1.0		ug/L		08/25/16 03:30		1
2-Hexanone	ND		50		ug/L		08/25/16 03:30		1
Isopropylbenzene	ND		0.50		ug/L		08/25/16 03:30		1
4-Isopropyltoluene	ND		1.0		ug/L		08/25/16 03:30		1
Methylene Chloride	ND		5.0		ug/L		08/25/16 03:30		1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L		08/25/16 03:30		1
Naphthalene	ND		1.0		ug/L		08/25/16 03:30		1
N-Propylbenzene	ND		1.0		ug/L		08/25/16 03:30		1
Styrene	ND		0.50		ug/L		08/25/16 03:30		1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L		08/25/16 03:30		1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-13**  
**Date Collected: 08/17/16 13:40**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-3**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 03:30	1
Tetrachloroethene	ND		0.50		ug/L			08/25/16 03:30	1
Toluene	ND		0.50		ug/L			08/25/16 03:30	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 03:30	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 03:30	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/25/16 03:30	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/25/16 03:30	1
Trichloroethene	ND		0.50		ug/L			08/25/16 03:30	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 03:30	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/25/16 03:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/25/16 03:30	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			08/25/16 03:30	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			08/25/16 03:30	1
Vinyl acetate	ND		10		ug/L			08/25/16 03:30	1
Vinyl chloride	ND		0.50		ug/L			08/25/16 03:30	1
Xylenes, Total	ND		1.0		ug/L			08/25/16 03:30	1
2,2-Dichloropropane	ND		0.50		ug/L			08/25/16 03:30	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/25/16 03:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	95		67 - 130						1
1,2-Dichloroethane-d4 (Surr)	107		72 - 130						1
Toluene-d8 (Surr)	96		70 - 130						1

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	1.9		1.0		mg/L			08/18/16 06:22	1
Nitrate as NO3	210		100		mg/L			08/18/16 16:13	100

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	78		0.50		mg/L		08/19/16 09:41	08/29/16 17:23	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	78		0.10		mg/L			08/30/16 09:23	1
Ferrous Iron	0.27	HF	0.10		mg/L			08/18/16 09:13	1
Ammonia	ND		0.20		mg/L		08/26/16 13:30	08/28/16 18:20	1

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-14**  
**Date Collected: 08/17/16 14:05**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-4**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		100		ug/L			08/25/16 03:59	200
Acetone	ND		10000		ug/L			08/25/16 03:59	200
<b>Benzene</b>	<b>2200</b>		100		ug/L			08/25/16 03:59	200
Dichlorobromomethane	ND		100		ug/L			08/25/16 03:59	200
Bromobenzene	ND		200		ug/L			08/25/16 03:59	200
Chlorobromomethane	ND		200		ug/L			08/25/16 03:59	200
Bromoform	ND		200		ug/L			08/25/16 03:59	200
Bromomethane	ND		200		ug/L			08/25/16 03:59	200
2-Butanone (MEK)	ND		10000		ug/L			08/25/16 03:59	200
n-Butylbenzene	ND		200		ug/L			08/25/16 03:59	200
sec-Butylbenzene	ND		200		ug/L			08/25/16 03:59	200
tert-Butylbenzene	ND		200		ug/L			08/25/16 03:59	200
Carbon disulfide	ND		1000		ug/L			08/25/16 03:59	200
Carbon tetrachloride	ND		100		ug/L			08/25/16 03:59	200
Chlorobenzene	ND		100		ug/L			08/25/16 03:59	200
Chloroethane	ND		200		ug/L			08/25/16 03:59	200
Chloroform	ND		200		ug/L			08/25/16 03:59	200
Chloromethane	ND		200		ug/L			08/25/16 03:59	200
2-Chlorotoluene	ND		100		ug/L			08/25/16 03:59	200
4-Chlorotoluene	ND		100		ug/L			08/25/16 03:59	200
Chlorodibromomethane	ND		100		ug/L			08/25/16 03:59	200
1,2-Dichlorobenzene	ND		100		ug/L			08/25/16 03:59	200
1,3-Dichlorobenzene	ND		100		ug/L			08/25/16 03:59	200
1,4-Dichlorobenzene	ND		100		ug/L			08/25/16 03:59	200
1,3-Dichloropropane	ND		200		ug/L			08/25/16 03:59	200
1,1-Dichloropropene	ND		100		ug/L			08/25/16 03:59	200
1,2-Dibromo-3-Chloropropane	ND		200		ug/L			08/25/16 03:59	200
Ethylene Dibromide	ND		100		ug/L			08/25/16 03:59	200
Dibromomethane	ND		100		ug/L			08/25/16 03:59	200
Dichlorodifluoromethane	ND		100		ug/L			08/25/16 03:59	200
1,1-Dichloroethane	ND		100		ug/L			08/25/16 03:59	200
1,2-Dichloroethane	ND		100		ug/L			08/25/16 03:59	200
1,1-Dichloroethene	ND		100		ug/L			08/25/16 03:59	200
cis-1,2-Dichloroethene	ND		100		ug/L			08/25/16 03:59	200
trans-1,2-Dichloroethene	ND		100		ug/L			08/25/16 03:59	200
1,2-Dichloropropane	ND		100		ug/L			08/25/16 03:59	200
cis-1,3-Dichloropropene	ND		100		ug/L			08/25/16 03:59	200
trans-1,3-Dichloropropene	ND		100		ug/L			08/25/16 03:59	200
<b>Ethylbenzene</b>	<b>1400</b>		100		ug/L			08/25/16 03:59	200
Hexachlorobutadiene	ND		200		ug/L			08/25/16 03:59	200
2-Hexanone	ND		10000		ug/L			08/25/16 03:59	200
Isopropylbenzene	ND		100		ug/L			08/25/16 03:59	200
4-Isopropyltoluene	ND		200		ug/L			08/25/16 03:59	200
Methylene Chloride	ND		1000		ug/L			08/25/16 03:59	200
4-Methyl-2-pentanone (MIBK)	ND		10000		ug/L			08/25/16 03:59	200
<b>Naphthalene</b>	<b>420</b>		200		ug/L			08/25/16 03:59	200
N-Propylbenzene	ND		200		ug/L			08/25/16 03:59	200
Styrene	ND		100		ug/L			08/25/16 03:59	200
1,1,1,2-Tetrachloroethane	ND		100		ug/L			08/25/16 03:59	200

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-14**  
**Date Collected: 08/17/16 14:05**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-4**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		100		ug/L			08/25/16 03:59	200
Tetrachloroethene	ND		100		ug/L			08/25/16 03:59	200
<b>Toluene</b>	<b>2900</b>		100		ug/L			08/25/16 03:59	200
1,2,3-Trichlorobenzene	ND		200		ug/L			08/25/16 03:59	200
1,2,4-Trichlorobenzene	ND		200		ug/L			08/25/16 03:59	200
1,1,1-Trichloroethane	ND		100		ug/L			08/25/16 03:59	200
1,1,2-Trichloroethane	ND		100		ug/L			08/25/16 03:59	200
Trichloroethene	ND		100		ug/L			08/25/16 03:59	200
Trichlorofluoromethane	ND		200		ug/L			08/25/16 03:59	200
1,2,3-Trichloropropane	ND		100		ug/L			08/25/16 03:59	200
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100		ug/L			08/25/16 03:59	200
<b>1,2,4-Trimethylbenzene</b>	<b>1200</b>		100		ug/L			08/25/16 03:59	200
<b>1,3,5-Trimethylbenzene</b>	<b>280</b>		100		ug/L			08/25/16 03:59	200
Vinyl acetate	ND		2000		ug/L			08/25/16 03:59	200
Vinyl chloride	ND		100		ug/L			08/25/16 03:59	200
<b>Xylenes, Total</b>	<b>6300</b>		200		ug/L			08/25/16 03:59	200
2,2-Dichloropropane	ND		100		ug/L			08/25/16 03:59	200
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>22000</b>		10000		ug/L			08/25/16 03:59	200
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	95		67 - 130					08/25/16 03:59	200
1,2-Dichloroethane-d4 (Surr)	102		72 - 130					08/25/16 03:59	200
Toluene-d8 (Surr)	96		70 - 130					08/25/16 03:59	200

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/18/16 06:56	1
Nitrate as NO3	ND		1.0		mg/L			08/18/16 06:56	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	28		0.50		mg/L		08/19/16 09:41	08/29/16 17:28	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	19		0.10		mg/L			08/30/16 09:23	1
Ferrous Iron	8.9	HF	0.20		mg/L			08/18/16 09:13	2
Ammonia	ND		0.20		mg/L		08/26/16 13:30	08/28/16 18:23	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-15**  
**Date Collected: 08/17/16 08:30**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-5**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	6.5		0.50		ug/L		08/25/16 04:28		1
Acetone	ND		50		ug/L		08/25/16 04:28		1
Benzene	ND		0.50		ug/L		08/25/16 04:28		1
Dichlorobromomethane	ND		0.50		ug/L		08/25/16 04:28		1
Bromobenzene	ND		1.0		ug/L		08/25/16 04:28		1
Chlorobromomethane	ND		1.0		ug/L		08/25/16 04:28		1
Bromoform	ND		1.0		ug/L		08/25/16 04:28		1
Bromomethane	ND		1.0		ug/L		08/25/16 04:28		1
2-Butanone (MEK)	ND		50		ug/L		08/25/16 04:28		1
n-Butylbenzene	ND		1.0		ug/L		08/25/16 04:28		1
sec-Butylbenzene	ND		1.0		ug/L		08/25/16 04:28		1
tert-Butylbenzene	ND		1.0		ug/L		08/25/16 04:28		1
Carbon disulfide	ND		5.0		ug/L		08/25/16 04:28		1
Carbon tetrachloride	ND		0.50		ug/L		08/25/16 04:28		1
Chlorobenzene	ND		0.50		ug/L		08/25/16 04:28		1
Chloroethane	ND		1.0		ug/L		08/25/16 04:28		1
Chloroform	ND		1.0		ug/L		08/25/16 04:28		1
Chloromethane	ND		1.0		ug/L		08/25/16 04:28		1
2-Chlorotoluene	ND		0.50		ug/L		08/25/16 04:28		1
4-Chlorotoluene	ND		0.50		ug/L		08/25/16 04:28		1
Chlorodibromomethane	ND		0.50		ug/L		08/25/16 04:28		1
1,2-Dichlorobenzene	ND		0.50		ug/L		08/25/16 04:28		1
1,3-Dichlorobenzene	ND		0.50		ug/L		08/25/16 04:28		1
1,4-Dichlorobenzene	ND		0.50		ug/L		08/25/16 04:28		1
1,3-Dichloropropane	ND		1.0		ug/L		08/25/16 04:28		1
1,1-Dichloropropene	ND		0.50		ug/L		08/25/16 04:28		1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L		08/25/16 04:28		1
Ethylene Dibromide	ND		0.50		ug/L		08/25/16 04:28		1
Dibromomethane	ND		0.50		ug/L		08/25/16 04:28		1
Dichlorodifluoromethane	ND		0.50		ug/L		08/25/16 04:28		1
1,1-Dichloroethane	ND		0.50		ug/L		08/25/16 04:28		1
<b>1,2-Dichloroethane</b>	<b>1.3</b>		0.50		ug/L		08/25/16 04:28		1
1,1-Dichloroethene	ND		0.50		ug/L		08/25/16 04:28		1
cis-1,2-Dichloroethene	ND		0.50		ug/L		08/25/16 04:28		1
trans-1,2-Dichloroethene	ND		0.50		ug/L		08/25/16 04:28		1
1,2-Dichloropropane	ND		0.50		ug/L		08/25/16 04:28		1
cis-1,3-Dichloropropene	ND		0.50		ug/L		08/25/16 04:28		1
trans-1,3-Dichloropropene	ND		0.50		ug/L		08/25/16 04:28		1
Ethylbenzene	ND		0.50		ug/L		08/25/16 04:28		1
Hexachlorobutadiene	ND		1.0		ug/L		08/25/16 04:28		1
2-Hexanone	ND		50		ug/L		08/25/16 04:28		1
Isopropylbenzene	ND		0.50		ug/L		08/25/16 04:28		1
4-Isopropyltoluene	ND		1.0		ug/L		08/25/16 04:28		1
Methylene Chloride	ND		5.0		ug/L		08/25/16 04:28		1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L		08/25/16 04:28		1
Naphthalene	ND		1.0		ug/L		08/25/16 04:28		1
N-Propylbenzene	ND		1.0		ug/L		08/25/16 04:28		1
Styrene	ND		0.50		ug/L		08/25/16 04:28		1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L		08/25/16 04:28		1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-15**  
**Date Collected: 08/17/16 08:30**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-5**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 04:28	1
Tetrachloroethene	ND		0.50		ug/L			08/25/16 04:28	1
Toluene	ND		0.50		ug/L			08/25/16 04:28	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 04:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 04:28	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/25/16 04:28	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/25/16 04:28	1
Trichloroethene	ND		0.50		ug/L			08/25/16 04:28	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 04:28	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/25/16 04:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/25/16 04:28	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			08/25/16 04:28	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			08/25/16 04:28	1
Vinyl acetate	ND		10		ug/L			08/25/16 04:28	1
Vinyl chloride	ND		0.50		ug/L			08/25/16 04:28	1
Xylenes, Total	ND		1.0		ug/L			08/25/16 04:28	1
2,2-Dichloropropane	ND		0.50		ug/L			08/25/16 04:28	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/25/16 04:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	92		67 - 130						1
1,2-Dichloroethane-d4 (Surr)	105		72 - 130						1
Toluene-d8 (Surr)	96		70 - 130						1

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/18/16 07:30	1
Nitrate as NO3	32		10		mg/L			08/18/16 07:47	10

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	40		0.50		mg/L		08/19/16 09:41	08/29/16 17:33	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	40		0.10		mg/L			08/30/16 09:23	1
Ferrous Iron	0.41	HF	0.10		mg/L			08/18/16 09:13	1
Ammonia	ND		0.20		mg/L		08/26/16 13:30	08/28/16 18:26	1

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-16**  
**Date Collected: 08/17/16 09:15**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-6**  
**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	1.8		0.50		ug/L		08/25/16 04:57		1
Acetone	ND		50		ug/L		08/25/16 04:57		1
Benzene	ND		0.50		ug/L		08/25/16 04:57		1
Dichlorobromomethane	ND		0.50		ug/L		08/25/16 04:57		1
Bromobenzene	ND		1.0		ug/L		08/25/16 04:57		1
Chlorobromomethane	ND		1.0		ug/L		08/25/16 04:57		1
Bromoform	ND		1.0		ug/L		08/25/16 04:57		1
Bromomethane	ND		1.0		ug/L		08/25/16 04:57		1
2-Butanone (MEK)	ND		50		ug/L		08/25/16 04:57		1
n-Butylbenzene	ND		1.0		ug/L		08/25/16 04:57		1
sec-Butylbenzene	ND		1.0		ug/L		08/25/16 04:57		1
tert-Butylbenzene	ND		1.0		ug/L		08/25/16 04:57		1
Carbon disulfide	ND		5.0		ug/L		08/25/16 04:57		1
Carbon tetrachloride	ND		0.50		ug/L		08/25/16 04:57		1
Chlorobenzene	ND		0.50		ug/L		08/25/16 04:57		1
Chloroethane	ND		1.0		ug/L		08/25/16 04:57		1
Chloroform	ND		1.0		ug/L		08/25/16 04:57		1
Chloromethane	ND		1.0		ug/L		08/25/16 04:57		1
2-Chlorotoluene	ND		0.50		ug/L		08/25/16 04:57		1
4-Chlorotoluene	ND		0.50		ug/L		08/25/16 04:57		1
Chlorodibromomethane	ND		0.50		ug/L		08/25/16 04:57		1
1,2-Dichlorobenzene	ND		0.50		ug/L		08/25/16 04:57		1
1,3-Dichlorobenzene	ND		0.50		ug/L		08/25/16 04:57		1
1,4-Dichlorobenzene	ND		0.50		ug/L		08/25/16 04:57		1
1,3-Dichloropropane	ND		1.0		ug/L		08/25/16 04:57		1
1,1-Dichloropropene	ND		0.50		ug/L		08/25/16 04:57		1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L		08/25/16 04:57		1
Ethylene Dibromide	ND		0.50		ug/L		08/25/16 04:57		1
Dibromomethane	ND		0.50		ug/L		08/25/16 04:57		1
Dichlorodifluoromethane	ND		0.50		ug/L		08/25/16 04:57		1
1,1-Dichloroethane	ND		0.50		ug/L		08/25/16 04:57		1
<b>1,2-Dichloroethane</b>	<b>1.2</b>		0.50		ug/L		08/25/16 04:57		1
1,1-Dichloroethene	ND		0.50		ug/L		08/25/16 04:57		1
cis-1,2-Dichloroethene	ND		0.50		ug/L		08/25/16 04:57		1
trans-1,2-Dichloroethene	ND		0.50		ug/L		08/25/16 04:57		1
1,2-Dichloropropane	ND		0.50		ug/L		08/25/16 04:57		1
cis-1,3-Dichloropropene	ND		0.50		ug/L		08/25/16 04:57		1
trans-1,3-Dichloropropene	ND		0.50		ug/L		08/25/16 04:57		1
Ethylbenzene	ND		0.50		ug/L		08/25/16 04:57		1
Hexachlorobutadiene	ND		1.0		ug/L		08/25/16 04:57		1
2-Hexanone	ND		50		ug/L		08/25/16 04:57		1
Isopropylbenzene	ND		0.50		ug/L		08/25/16 04:57		1
4-Isopropyltoluene	ND		1.0		ug/L		08/25/16 04:57		1
Methylene Chloride	ND		5.0		ug/L		08/25/16 04:57		1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L		08/25/16 04:57		1
Naphthalene	ND		1.0		ug/L		08/25/16 04:57		1
N-Propylbenzene	ND		1.0		ug/L		08/25/16 04:57		1
Styrene	ND		0.50		ug/L		08/25/16 04:57		1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L		08/25/16 04:57		1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-16**  
**Date Collected: 08/17/16 09:15**  
**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-6**  
**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/25/16 04:57	1
Tetrachloroethene	ND		0.50		ug/L			08/25/16 04:57	1
Toluene	ND		0.50		ug/L			08/25/16 04:57	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/25/16 04:57	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/25/16 04:57	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/25/16 04:57	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/25/16 04:57	1
Trichloroethene	ND		0.50		ug/L			08/25/16 04:57	1
Trichlorofluoromethane	ND		1.0		ug/L			08/25/16 04:57	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/25/16 04:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/25/16 04:57	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			08/25/16 04:57	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			08/25/16 04:57	1
Vinyl acetate	ND		10		ug/L			08/25/16 04:57	1
Vinyl chloride	ND		0.50		ug/L			08/25/16 04:57	1
Xylenes, Total	ND		1.0		ug/L			08/25/16 04:57	1
2,2-Dichloropropane	ND		0.50		ug/L			08/25/16 04:57	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/25/16 04:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	92		67 - 130						1
1,2-Dichloroethane-d4 (Surr)	107		72 - 130						1
Toluene-d8 (Surr)	97		70 - 130						1

## Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	1.8		1.0		mg/L			08/18/16 08:39	1
Nitrate as NO3	88		10		mg/L			08/18/16 08:56	10

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	7.2		0.50		mg/L		08/19/16 09:41	08/29/16 17:39	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferric Iron	7.0		0.10		mg/L			08/30/16 09:23	1
Ferrous Iron	0.16	HF	0.10		mg/L			08/18/16 09:13	1
Ammonia	ND		0.20		mg/L		08/26/16 13:30	08/28/16 18:29	1

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID: MB 720-208208/4**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			08/24/16 19:13	1
Acetone	ND		50		ug/L			08/24/16 19:13	1
Benzene	ND		0.50		ug/L			08/24/16 19:13	1
Dichlorobromomethane	ND		0.50		ug/L			08/24/16 19:13	1
Bromobenzene	ND		1.0		ug/L			08/24/16 19:13	1
Chlorobromomethane	ND		1.0		ug/L			08/24/16 19:13	1
Bromoform	ND		1.0		ug/L			08/24/16 19:13	1
Bromomethane	ND		1.0		ug/L			08/24/16 19:13	1
2-Butanone (MEK)	ND		50		ug/L			08/24/16 19:13	1
n-Butylbenzene	ND		1.0		ug/L			08/24/16 19:13	1
sec-Butylbenzene	ND		1.0		ug/L			08/24/16 19:13	1
tert-Butylbenzene	ND		1.0		ug/L			08/24/16 19:13	1
Carbon disulfide	ND		5.0		ug/L			08/24/16 19:13	1
Carbon tetrachloride	ND		0.50		ug/L			08/24/16 19:13	1
Chlorobenzene	ND		0.50		ug/L			08/24/16 19:13	1
Chloroethane	ND		1.0		ug/L			08/24/16 19:13	1
Chloroform	ND		1.0		ug/L			08/24/16 19:13	1
Chloromethane	ND		1.0		ug/L			08/24/16 19:13	1
2-Chlorotoluene	ND		0.50		ug/L			08/24/16 19:13	1
4-Chlorotoluene	ND		0.50		ug/L			08/24/16 19:13	1
Chlorodibromomethane	ND		0.50		ug/L			08/24/16 19:13	1
1,2-Dichlorobenzene	ND		0.50		ug/L			08/24/16 19:13	1
1,3-Dichlorobenzene	ND		0.50		ug/L			08/24/16 19:13	1
1,4-Dichlorobenzene	ND		0.50		ug/L			08/24/16 19:13	1
1,3-Dichloropropane	ND		1.0		ug/L			08/24/16 19:13	1
1,1-Dichloropropene	ND		0.50		ug/L			08/24/16 19:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			08/24/16 19:13	1
Ethylene Dibromide	ND		0.50		ug/L			08/24/16 19:13	1
Dibromomethane	ND		0.50		ug/L			08/24/16 19:13	1
Dichlorodifluoromethane	ND		0.50		ug/L			08/24/16 19:13	1
1,1-Dichloroethane	ND		0.50		ug/L			08/24/16 19:13	1
1,2-Dichloroethane	ND		0.50		ug/L			08/24/16 19:13	1
1,1-Dichloroethene	ND		0.50		ug/L			08/24/16 19:13	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			08/24/16 19:13	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			08/24/16 19:13	1
1,2-Dichloropropane	ND		0.50		ug/L			08/24/16 19:13	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/24/16 19:13	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			08/24/16 19:13	1
Ethylbenzene	ND		0.50		ug/L			08/24/16 19:13	1
Hexachlorobutadiene	ND		1.0		ug/L			08/24/16 19:13	1
2-Hexanone	ND		50		ug/L			08/24/16 19:13	1
Isopropylbenzene	ND		0.50		ug/L			08/24/16 19:13	1
4-Isopropyltoluene	ND		1.0		ug/L			08/24/16 19:13	1
Methylene Chloride	ND		5.0		ug/L			08/24/16 19:13	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/24/16 19:13	1
Naphthalene	ND		1.0		ug/L			08/24/16 19:13	1
N-Propylbenzene	ND		1.0		ug/L			08/24/16 19:13	1
Styrene	ND		0.50		ug/L			08/24/16 19:13	1

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-208208/4**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,1,1,2-Tetrachloroethane	ND				0.50		ug/L			08/24/16 19:13	1
1,1,2,2-Tetrachloroethane	ND				0.50		ug/L			08/24/16 19:13	1
Tetrachloroethene	ND				0.50		ug/L			08/24/16 19:13	1
Toluene	ND				0.50		ug/L			08/24/16 19:13	1
1,2,3-Trichlorobenzene	ND				1.0		ug/L			08/24/16 19:13	1
1,2,4-Trichlorobenzene	ND				1.0		ug/L			08/24/16 19:13	1
1,1,1-Trichloroethane	ND				0.50		ug/L			08/24/16 19:13	1
1,1,2-Trichloroethane	ND				0.50		ug/L			08/24/16 19:13	1
Trichloroethene	ND				0.50		ug/L			08/24/16 19:13	1
Trichlorofluoromethane	ND				1.0		ug/L			08/24/16 19:13	1
1,2,3-Trichloropropane	ND				0.50		ug/L			08/24/16 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND				0.50		ug/L			08/24/16 19:13	1
1,2,4-Trimethylbenzene	ND				0.50		ug/L			08/24/16 19:13	1
1,3,5-Trimethylbenzene	ND				0.50		ug/L			08/24/16 19:13	1
Vinyl acetate	ND				10		ug/L			08/24/16 19:13	1
Vinyl chloride	ND				0.50		ug/L			08/24/16 19:13	1
Xylenes, Total	ND				1.0		ug/L			08/24/16 19:13	1
2,2-Dichloropropane	ND				0.50		ug/L			08/24/16 19:13	1
Gasoline Range Organics (GRO) -C5-C12	ND				50		ug/L			08/24/16 19:13	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene	93		67 - 130				08/24/16 19:13	1
1,2-Dichloroethane-d4 (Surr)	106		72 - 130				08/24/16 19:13	1
Toluene-d8 (Surr)	97		70 - 130				08/24/16 19:13	1

**Lab Sample ID: LCS 720-208208/5**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike Added	Spiked	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier	Unit				
Methyl tert-butyl ether	25.0	28.0		ug/L		112	62 - 130	
Acetone	125	112		ug/L		90	26 - 180	
Benzene	25.0	26.8		ug/L		107	79 - 130	
Dichlorobromomethane	25.0	27.9		ug/L		112	70 - 130	
Bromobenzene	25.0	25.0		ug/L		100	70 - 130	
Chlorobromomethane	25.0	25.1		ug/L		100	70 - 130	
Bromoform	25.0	25.1		ug/L		101	68 - 136	
Bromomethane	25.0	23.5		ug/L		94	43 - 151	
2-Butanone (MEK)	125	108		ug/L		86	54 - 130	
n-Butylbenzene	25.0	27.2		ug/L		109	70 - 142	
sec-Butylbenzene	25.0	26.9		ug/L		108	70 - 134	
tert-Butylbenzene	25.0	25.9		ug/L		104	70 - 135	
Carbon disulfide	25.0	26.0		ug/L		104	58 - 130	
Carbon tetrachloride	25.0	30.2		ug/L		121	70 - 146	
Chlorobenzene	25.0	25.1		ug/L		101	70 - 130	
Chloroethane	25.0	24.7		ug/L		99	62 - 138	
Chloroform	25.0	26.3		ug/L		105	70 - 130	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-208208/5**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Chloromethane	25.0	27.8		ug/L		111	52 - 175		
2-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130		
4-Chlorotoluene	25.0	27.0		ug/L		108	70 - 130		
Chlorodibromomethane	25.0	25.8		ug/L		103	70 - 145		
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130		
1,3-Dichlorobenzene	25.0	25.1		ug/L		100	70 - 130		
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130		
1,3-Dichloropropane	25.0	26.0		ug/L		104	70 - 130		
1,1-Dichloropropene	25.0	26.8		ug/L		107	70 - 130		
1,2-Dibromo-3-Chloropropane	25.0	22.8		ug/L		91	70 - 136		
Ethylene Dibromide	25.0	26.2		ug/L		105	70 - 130		
Dibromomethane	25.0	26.3		ug/L		105	70 - 130		
Dichlorodifluoromethane	25.0	26.0		ug/L		104	32 - 158		
1,1-Dichloroethane	25.0	27.2		ug/L		109	70 - 130		
1,2-Dichloroethane	25.0	27.8		ug/L		111	61 - 132		
1,1-Dichloroethene	25.0	23.6		ug/L		94	64 - 128		
cis-1,2-Dichloroethene	25.0	27.8		ug/L		111	70 - 130		
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	68 - 130		
1,2-Dichloropropane	25.0	28.4		ug/L		114	70 - 130		
cis-1,3-Dichloropropene	25.0	28.2		ug/L		113	70 - 130		
trans-1,3-Dichloropropene	25.0	27.1		ug/L		108	70 - 140		
Ethylbenzene	25.0	26.1		ug/L		104	80 - 120		
Hexachlorobutadiene	25.0	23.5		ug/L		94	70 - 130		
2-Hexanone	125	125		ug/L		100	60 - 164		
Isopropylbenzene	25.0	26.4		ug/L		106	70 - 130		
4-Isopropyltoluene	25.0	25.9		ug/L		104	70 - 130		
Methylene Chloride	25.0	26.8		ug/L		107	70 - 147		
4-Methyl-2-pentanone (MIBK)	125	128		ug/L		102	58 - 130		
Naphthalene	25.0	24.1		ug/L		96	50 - 130		
N-Propylbenzene	25.0	27.8		ug/L		111	70 - 130		
Styrene	25.0	25.9		ug/L		103	70 - 130		
1,1,1,2-Tetrachloroethane	25.0	25.4		ug/L		102	70 - 130		
1,1,2,2-Tetrachloroethane	25.0	26.2		ug/L		105	70 - 130		
Tetrachloroethene	25.0	24.6		ug/L		98	70 - 130		
Toluene	25.0	25.6		ug/L		102	78 - 120		
1,2,3-Trichlorobenzene	25.0	23.7		ug/L		95	70 - 130		
1,2,4-Trichlorobenzene	25.0	24.4		ug/L		98	70 - 130		
1,1,1-Trichloroethane	25.0	29.1		ug/L		116	70 - 130		
1,1,2-Trichloroethane	25.0	26.8		ug/L		107	70 - 130		
Trichloroethene	25.0	24.9		ug/L		100	70 - 130		
Trichlorofluoromethane	25.0	26.9		ug/L		108	66 - 132		
1,2,3-Trichloropropane	25.0	25.6		ug/L		102	70 - 130		
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.8		ug/L		95	42 - 162		
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	70 - 132		
1,3,5-Trimethylbenzene	25.0	26.9		ug/L		107	70 - 130		
Vinyl acetate	25.0	35.7		ug/L		143	43 - 163		
Vinyl chloride	25.0	23.2		ug/L		93	54 - 135		

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-208208/5**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
m-Xylene & p-Xylene	25.0	26.1		ug/L		105	70 - 142
o-Xylene	25.0	26.0		ug/L		104	70 - 130
2,2-Dichloropropane	25.0	33.6		ug/L		135	70 - 140

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	94		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCS 720-208208/7**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Gasoline Range Organics (GRO) -C5-C12	500	539		ug/L		108	71 - 125

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		72 - 130
Toluene-d8 (Surr)	99		70 - 130

**Lab Sample ID: LCSD 720-208208/6**

**Matrix: Water**

**Analysis Batch: 208208**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	27.9		ug/L		112	62 - 130	0	20
Acetone	125	111		ug/L		89	26 - 180	0	30
Benzene	25.0	26.8		ug/L		107	79 - 130	0	20
Dichlorobromomethane	25.0	27.6		ug/L		110	70 - 130	1	20
Bromobenzene	25.0	25.3		ug/L		101	70 - 130	1	20
Chlorobromomethane	25.0	24.6		ug/L		99	70 - 130	2	20
Bromoform	25.0	24.8		ug/L		99	68 - 136	1	20
Bromomethane	25.0	23.1		ug/L		92	43 - 151	1	20
2-Butanone (MEK)	125	105		ug/L		84	54 - 130	2	20
n-Butylbenzene	25.0	27.4		ug/L		109	70 - 142	1	20
sec-Butylbenzene	25.0	27.2		ug/L		109	70 - 134	1	20
tert-Butylbenzene	25.0	26.3		ug/L		105	70 - 135	2	20
Carbon disulfide	25.0	25.9		ug/L		104	58 - 130	0	20
Carbon tetrachloride	25.0	30.4		ug/L		122	70 - 146	1	20
Chlorobenzene	25.0	24.7		ug/L		99	70 - 130	2	20
Chloroethane	25.0	24.6		ug/L		98	62 - 138	0	20
Chloroform	25.0	26.3		ug/L		105	70 - 130	0	20
Chloromethane	25.0	27.6		ug/L		110	52 - 175	1	20
2-Chlorotoluene	25.0	27.2		ug/L		109	70 - 130	0	20
4-Chlorotoluene	25.0	27.4		ug/L		110	70 - 130	1	20
Chlorodibromomethane	25.0	25.7		ug/L		103	70 - 145	0	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-208208/6

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

Analysis Batch: 208208

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier				Limits		
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130	2	20
1,3-Dichlorobenzene	25.0	25.1		ug/L		101	70 - 130	0	20
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130	0	20
1,3-Dichloropropane	25.0	25.7		ug/L		103	70 - 130	1	20
1,1-Dichloropropene	25.0	26.8		ug/L		107	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	25.0	23.6		ug/L		94	70 - 136	3	20
Ethylene Dibromide	25.0	25.8		ug/L		103	70 - 130	1	20
Dibromomethane	25.0	26.5		ug/L		106	70 - 130	1	20
Dichlorodifluoromethane	25.0	25.3		ug/L		101	32 - 158	3	20
1,1-Dichloroethane	25.0	27.1		ug/L		109	70 - 130	0	20
1,2-Dichloroethane	25.0	27.5		ug/L		110	61 - 132	1	20
1,1-Dichloroethene	25.0	23.8		ug/L		95	64 - 128	1	20
cis-1,2-Dichloroethene	25.0	27.7		ug/L		111	70 - 130	0	20
trans-1,2-Dichloroethene	25.0	25.8		ug/L		103	68 - 130	2	20
1,2-Dichloropropane	25.0	28.3		ug/L		113	70 - 130	0	20
cis-1,3-Dichloropropene	25.0	28.0		ug/L		112	70 - 130	1	20
trans-1,3-Dichloropropene	25.0	27.2		ug/L		109	70 - 140	0	20
Ethylbenzene	25.0	25.8		ug/L		103	80 - 120	1	20
Hexachlorobutadiene	25.0	24.0		ug/L		96	70 - 130	2	20
2-Hexanone	125	123		ug/L		98	60 - 164	1	20
Isopropylbenzene	25.0	26.1		ug/L		105	70 - 130	1	20
4-Isopropyltoluene	25.0	26.1		ug/L		104	70 - 130	1	20
Methylene Chloride	25.0	26.7		ug/L		107	70 - 147	0	20
4-Methyl-2-pentanone (MIBK)	125	126		ug/L		101	58 - 130	1	20
Naphthalene	25.0	24.8		ug/L		99	50 - 130	3	20
N-Propylbenzene	25.0	28.3		ug/L		113	70 - 130	2	20
Styrene	25.0	25.5		ug/L		102	70 - 130	2	20
1,1,1,2-Tetrachloroethane	25.0	25.2		ug/L		101	70 - 130	1	20
1,1,2,2-Tetrachloroethane	25.0	26.0		ug/L		104	70 - 130	1	20
Tetrachloroethene	25.0	24.3		ug/L		97	70 - 130	1	20
Toluene	25.0	25.3		ug/L		101	78 - 120	1	20
1,2,3-Trichlorobenzene	25.0	24.2		ug/L		97	70 - 130	2	20
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	70 - 130	2	20
1,1,1-Trichloroethane	25.0	28.6		ug/L		115	70 - 130	2	20
1,1,2-Trichloroethane	25.0	26.3		ug/L		105	70 - 130	2	20
Trichloroethene	25.0	24.7		ug/L		99	70 - 130	1	20
Trichlorofluoromethane	25.0	26.9		ug/L		107	66 - 132	0	20
1,2,3-Trichloropropane	25.0	25.7		ug/L		103	70 - 130	0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.8		ug/L		95	42 - 162	0	20
1,2,4-Trimethylbenzene	25.0	27.0		ug/L		108	70 - 132	1	20
1,3,5-Trimethylbenzene	25.0	27.2		ug/L		109	70 - 130	1	20
Vinyl acetate	25.0	35.7		ug/L		143	43 - 163	0	20
Vinyl chloride	25.0	23.2		ug/L		93	54 - 135	0	20
m-Xylene & p-Xylene	25.0	25.7		ug/L		103	70 - 142	2	20
o-Xylene	25.0	25.5		ug/L		102	70 - 130	2	20
2,2-Dichloropropane	25.0	33.2		ug/L		133	70 - 140	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID:** LCSD 720-208208/6

**Matrix:** Water

**Analysis Batch:** 208208

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID:** LCSD 720-208208/8

**Matrix:** Water

**Analysis Batch:** 208208

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
				ug/L		Limits	Limit
Gasoline Range Organics (GRO) -C5-C12	500	557		ug/L	111	71 - 125	3 20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID:** MB 720-208363/4

**Matrix:** Water

**Analysis Batch:** 208363

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	ND				ug/L			08/27/16 09:56	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	93		67 - 130				08/27/16 09:56	1	
1,2-Dichloroethane-d4 (Surr)	97		72 - 130				08/27/16 09:56	1	
Toluene-d8 (Surr)	102		70 - 130				08/27/16 09:56	1	

**Lab Sample ID:** LCS 720-208363/5

**Matrix:** Water

**Analysis Batch:** 208363

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
				ug/L		Limits	Limit
<b>Surrogate</b>							
4-Bromofluorobenzene							
1,2-Dichloroethane-d4 (Surr)							
Toluene-d8 (Surr)							

**Lab Sample ID:** LCSD 720-208363/6

**Matrix:** Water

**Analysis Batch:** 208363

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
				ug/L		Limits	Limit
<b>Surrogate</b>							
4-Bromofluorobenzene							
1,2-Dichloroethane-d4 (Surr)							
Toluene-d8 (Surr)							

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID:** LCSD 720-208363/6

**Matrix:** Water

**Analysis Batch:** 208363

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		72 - 130
Toluene-d8 (Surr)	102		70 - 130

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID:** MB 720-207833/6

**Matrix:** Water

**Analysis Batch:** 207833

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/18/16 12:45	1
Nitrate as NO3	ND		1.0		mg/L			08/18/16 12:45	1

**Lab Sample ID:** LCS 720-207833/9

**Matrix:** Water

**Analysis Batch:** 207833

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Nitrite as NO2	10.0	10.3		mg/L		103	90 - 110
Nitrate as NO3	10.0	9.35		mg/L		94	90 - 110
					D	%Rec	Limits

**Lab Sample ID:** MB 720-207881/45

**Matrix:** Water

**Analysis Batch:** 207881

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as NO2	ND		1.0		mg/L			08/18/16 00:22	1
Nitrate as NO3	ND		1.0		mg/L			08/18/16 00:22	1

**Lab Sample ID:** LCS 720-207881/46

**Matrix:** Water

**Analysis Batch:** 207881

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Nitrite as NO2	10.0	9.91		mg/L		99	90 - 110
Nitrate as NO3	10.0	9.78		mg/L		98	90 - 110
					D	%Rec	Limits

**Lab Sample ID:** LCSD 720-207881/47

**Matrix:** Water

**Analysis Batch:** 207881

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
Nitrite as NO2	10.0	10.1		mg/L		101	90 - 110	2	20
Nitrate as NO3	10.0	9.87		mg/L		99	90 - 110	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID:** MB 720-207920/1-A

**Matrix:** Water

**Analysis Batch:** 208440

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 207920

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.50		mg/L		08/19/16 09:41	08/29/16 16:12	1

## Method: SM 3500 Fe B - Iron, Ferrous

**Lab Sample ID:** MB 720-207834/10

**Matrix:** Water

**Analysis Batch:** 207834

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	ND		0.10		mg/L			08/18/16 09:13	1

**Lab Sample ID:** LCS 720-207834/11

**Matrix:** Water

**Analysis Batch:** 207834

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec. Limits
Ferrous Iron	1.00	0.991		mg/L		99	85 - 115

**Lab Sample ID:** 720-73989-1 MS

**Matrix:** Water

**Analysis Batch:** 207834

**Client Sample ID:** MW-11R

**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	%Rec. Limits
Ferrous Iron	3.9	HF	1.00	4.75		mg/L		88	75 - 125

**Lab Sample ID:** 720-73989-1 MSD

**Matrix:** Water

**Analysis Batch:** 207834

**Client Sample ID:** MW-11R

**Prep Type:** Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit	
Ferrous Iron	3.9	HF	1.00	4.83		mg/L		97	75 - 125	2	20

## Method: SM 4500 NH3 G - Ammonia

**Lab Sample ID:** MB 500-349450/1-A

**Matrix:** Water

**Analysis Batch:** 349535

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 349450

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.20		mg/L		08/26/16 13:30	08/28/16 17:12	1

**Lab Sample ID:** LCS 500-349450/2-A

**Matrix:** Water

**Analysis Batch:** 349535

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 349450

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec. Limits
Ammonia		2.51		mg/L		100	80 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Method: SM 4500 NH3 G - Ammonia (Continued)

Lab Sample ID: 720-73989-2 MS

Matrix: Water

Analysis Batch: 349535

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Client Sample ID: MW-12	
	Result	Qualifier	Added	Result	Qualifier				%Rec.	Limits
Ammonia	ND		2.50	2.48		mg/L		98	75 - 125	

Lab Sample ID: 720-73989-2 MSD

Matrix: Water

Analysis Batch: 349535

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Client Sample ID: MW-12	
	Result	Qualifier	Added	Result	Qualifier				%Rec.	RPD
Ammonia	ND		2.50	2.46		mg/L		97	75 - 125	1 20

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## GC/MS VOA

### Analysis Batch: 208208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-1	MW-11R	Total/NA	Water	8260B/CA_LUFT	1
720-73989-2	MW-12	Total/NA	Water	MS	2
720-73989-3	MW-13	Total/NA	Water	8260B/CA_LUFT	3
720-73989-4	MW-14	Total/NA	Water	MS	4
720-73989-5	MW-15	Total/NA	Water	8260B/CA_LUFT	5
720-73989-6	MW-16	Total/NA	Water	MS	6
MB 720-208208/4	Method Blank	Total/NA	Water	8260B/CA_LUFT	7
LCS 720-208208/5	Lab Control Sample	Total/NA	Water	MS	8
LCS 720-208208/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	9
LCSD 720-208208/6	Lab Control Sample Dup	Total/NA	Water	MS	10
LCSD 720-208208/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	11
				MS	12
				8260B/CA_LUFT	13
				MS	14

### Analysis Batch: 208363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-2	MW-12	Total/NA	Water	8260B/CA_LUFT	1
MB 720-208363/4	Method Blank	Total/NA	Water	MS	2
LCS 720-208363/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	3
LCSD 720-208363/6	Lab Control Sample Dup	Total/NA	Water	MS	4
				8260B/CA_LUFT	5
				MS	6

## HPLC/IC

### Analysis Batch: 207833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-3	MW-13	Total/NA	Water	300.0	1
MB 720-207833/6	Method Blank	Total/NA	Water	300.0	2
LCS 720-207833/9	Lab Control Sample	Total/NA	Water	300.0	3

### Analysis Batch: 207881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-1	MW-11R	Total/NA	Water	300.0	1
720-73989-2	MW-12	Total/NA	Water	300.0	2
720-73989-3	MW-13	Total/NA	Water	300.0	3
720-73989-4	MW-14	Total/NA	Water	300.0	4
720-73989-5	MW-15	Total/NA	Water	300.0	5
720-73989-5	MW-15	Total/NA	Water	300.0	6
720-73989-6	MW-16	Total/NA	Water	300.0	7
720-73989-6	MW-16	Total/NA	Water	300.0	8
MB 720-207881/45	Method Blank	Total/NA	Water	300.0	9
LCS 720-207881/46	Lab Control Sample	Total/NA	Water	300.0	10

TestAmerica Pleasanton

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## HPLC/IC (Continued)

### Analysis Batch: 207881 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 720-207881/47	Lab Control Sample Dup	Total/NA	Water	300.0	

## Metals

### Prep Batch: 207920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-1	MW-11R	Total/NA	Water	200.7	
720-73989-2	MW-12	Total/NA	Water	200.7	
720-73989-3	MW-13	Total/NA	Water	200.7	
720-73989-4	MW-14	Total/NA	Water	200.7	
720-73989-5	MW-15	Total/NA	Water	200.7	
720-73989-6	MW-16	Total/NA	Water	200.7	
MB 720-207920/1-A	Method Blank	Total/NA	Water	200.7	
LCS 720-207920/2-A	Lab Control Sample	Total/NA	Water	200.7	

### Analysis Batch: 208440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-1	MW-11R	Total/NA	Water	200.7 Rev 4.4	207920
720-73989-2	MW-12	Total/NA	Water	200.7 Rev 4.4	207920
720-73989-3	MW-13	Total/NA	Water	200.7 Rev 4.4	207920
720-73989-4	MW-14	Total/NA	Water	200.7 Rev 4.4	207920
720-73989-5	MW-15	Total/NA	Water	200.7 Rev 4.4	207920
720-73989-6	MW-16	Total/NA	Water	200.7 Rev 4.4	207920
MB 720-207920/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	207920
LCS 720-207920/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	207920

## General Chemistry

### Analysis Batch: 207834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-1	MW-11R	Total/NA	Water	SM 3500 Fe B	
720-73989-2	MW-12	Total/NA	Water	SM 3500 Fe B	
720-73989-3	MW-13	Total/NA	Water	SM 3500 Fe B	
720-73989-4	MW-14	Total/NA	Water	SM 3500 Fe B	
720-73989-5	MW-15	Total/NA	Water	SM 3500 Fe B	
720-73989-6	MW-16	Total/NA	Water	SM 3500 Fe B	
MB 720-207834/10	Method Blank	Total/NA	Water	SM 3500 Fe B	
LCS 720-207834/11	Lab Control Sample	Total/NA	Water	SM 3500 Fe B	
720-73989-1 MS	MW-11R	Total/NA	Water	SM 3500 Fe B	
720-73989-1 MSD	MW-11R	Total/NA	Water	SM 3500 Fe B	

### Analysis Batch: 208465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-1	MW-11R	Total/NA	Water	SM 3500	
720-73989-2	MW-12	Total/NA	Water	SM 3500	
720-73989-3	MW-13	Total/NA	Water	SM 3500	
720-73989-4	MW-14	Total/NA	Water	SM 3500	
720-73989-5	MW-15	Total/NA	Water	SM 3500	
720-73989-6	MW-16	Total/NA	Water	SM 3500	

TestAmerica Pleasanton

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## General Chemistry (Continued)

### Prep Batch: 349450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-1	MW-11R	Total/NA	Water	SM 4500 NH3 B	5
720-73989-2	MW-12	Total/NA	Water	SM 4500 NH3 B	6
720-73989-3	MW-13	Total/NA	Water	SM 4500 NH3 B	7
720-73989-4	MW-14	Total/NA	Water	SM 4500 NH3 B	8
720-73989-5	MW-15	Total/NA	Water	SM 4500 NH3 B	9
720-73989-6	MW-16	Total/NA	Water	SM 4500 NH3 B	10
MB 500-349450/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	11
LCS 500-349450/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	12
720-73989-2 MS	MW-12	Total/NA	Water	SM 4500 NH3 B	13
720-73989-2 MSD	MW-12	Total/NA	Water	SM 4500 NH3 B	14

### Analysis Batch: 349535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73989-1	MW-11R	Total/NA	Water	SM 4500 NH3 G	349450
720-73989-2	MW-12	Total/NA	Water	SM 4500 NH3 G	349450
720-73989-3	MW-13	Total/NA	Water	SM 4500 NH3 G	349450
720-73989-4	MW-14	Total/NA	Water	SM 4500 NH3 G	349450
720-73989-5	MW-15	Total/NA	Water	SM 4500 NH3 G	349450
720-73989-6	MW-16	Total/NA	Water	SM 4500 NH3 G	349450
MB 500-349450/1-A	Method Blank	Total/NA	Water	SM 4500 NH3 G	349450
LCS 500-349450/2-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 G	349450
720-73989-2 MS	MW-12	Total/NA	Water	SM 4500 NH3 G	349450
720-73989-2 MSD	MW-12	Total/NA	Water	SM 4500 NH3 G	349450

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-11R**

**Date Collected: 08/17/16 11:45**

**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		100	208208	08/25/16 02:31	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207881	08/18/16 05:13	MEV	TAL PLS
Total/NA	Prep	200.7			207920	08/19/16 09:41	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208440	08/29/16 17:01	ASB	TAL PLS
Total/NA	Analysis	SM 3500		1	208465	08/30/16 09:23	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207834	08/18/16 09:13	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349450	08/26/16 13:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349535	08/28/16 18:03	HMW	TAL CHI

**Client Sample ID: MW-12**

**Date Collected: 08/17/16 10:50**

**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		10	208363	08/27/16 11:23	LPL	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	208208	08/25/16 03:01	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207881	08/18/16 05:47	MEV	TAL PLS
Total/NA	Prep	200.7			207920	08/19/16 09:41	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208440	08/29/16 17:17	ASB	TAL PLS
Total/NA	Analysis	SM 3500		1	208465	08/30/16 09:23	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207834	08/18/16 09:13	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349450	08/26/16 13:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349535	08/28/16 18:06	HMW	TAL CHI

**Client Sample ID: MW-13**

**Date Collected: 08/17/16 13:40**

**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208208	08/25/16 03:30	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207881	08/18/16 06:22	MEV	TAL PLS
Total/NA	Analysis	300.0		100	207833	08/18/16 16:13	MEV	TAL PLS
Total/NA	Prep	200.7			207920	08/19/16 09:41	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208440	08/29/16 17:23	ASB	TAL PLS
Total/NA	Analysis	SM 3500		1	208465	08/30/16 09:23	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207834	08/18/16 09:13	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349450	08/26/16 13:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349535	08/28/16 18:20	HMW	TAL CHI

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

**Client Sample ID: MW-14**

**Date Collected: 08/17/16 14:05**

**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		200	208208	08/25/16 03:59	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207881	08/18/16 06:56	MEV	TAL PLS
Total/NA	Prep	200.7			207920	08/19/16 09:41	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208440	08/29/16 17:28	ASB	TAL PLS
Total/NA	Analysis	SM 3500		1	208465	08/30/16 09:23	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		2	207834	08/18/16 09:13	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349450	08/26/16 13:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349535	08/28/16 18:23	HMW	TAL CHI

**Client Sample ID: MW-15**

**Date Collected: 08/17/16 08:30**

**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-5**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208208	08/25/16 04:28	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207881	08/18/16 07:30	MEV	TAL PLS
Total/NA	Analysis	300.0		10	207881	08/18/16 07:47	MEV	TAL PLS
Total/NA	Prep	200.7			207920	08/19/16 09:41	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208440	08/29/16 17:33	ASB	TAL PLS
Total/NA	Analysis	SM 3500		1	208465	08/30/16 09:23	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207834	08/18/16 09:13	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349450	08/26/16 13:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349535	08/28/16 18:26	HMW	TAL CHI

**Client Sample ID: MW-16**

**Date Collected: 08/17/16 09:15**

**Date Received: 08/17/16 17:40**

**Lab Sample ID: 720-73989-6**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208208	08/25/16 04:57	LPL	TAL PLS
Total/NA	Analysis	300.0		1	207881	08/18/16 08:39	MEV	TAL PLS
Total/NA	Analysis	300.0		10	207881	08/18/16 08:56	MEV	TAL PLS
Total/NA	Prep	200.7			207920	08/19/16 09:41	JNG	TAL PLS
Total/NA	Analysis	200.7 Rev 4.4		1	208440	08/29/16 17:39	ASB	TAL PLS
Total/NA	Analysis	SM 3500		1	208465	08/30/16 09:23	MEV	TAL PLS
Total/NA	Analysis	SM 3500 Fe B		1	207834	08/18/16 09:13	NVP	TAL PLS
Total/NA	Prep	SM 4500 NH3 B			349450	08/26/16 13:30	HMW	TAL CHI
Total/NA	Analysis	SM 4500 NH3 G		1	349535	08/28/16 18:29	HMW	TAL CHI

## Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

TestAmerica Pleasanton

# Certification Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

## Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18
Analysis Method	Prep Method	Matrix	Analyte	

## Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2903	04-30-18
Georgia	State Program	4	N/A	04-30-17
Georgia	State Program	4	939	04-30-17
Hawaii	State Program	9	N/A	04-30-17
Illinois	NELAP	5	100201	04-30-17
Indiana	State Program	5	C-IL-02	04-30-17
Iowa	State Program	7	82	05-01-18
Kansas	NELAP	7	E-10161	10-31-16 *
Kentucky (UST)	State Program	4	66	04-30-17
Kentucky (WW)	State Program	4	KY90023	12-31-16 *
Mississippi	State Program	4	N/A	04-30-17
New York	NELAP	2	12019	04-01-17
North Carolina (WW/SW)	State Program	4	291	12-31-16 *
North Dakota	State Program	8	R-194	04-30-17
Oklahoma	State Program	6	8908	08-31-17 *
South Carolina	State Program	4	77001	04-30-16 *
USDA	Federal		P330-15-00038	02-11-18
Wisconsin	State Program	5	999580010	08-31-16 *
Wyoming	State Program	8	8TMS-Q	04-30-17

\* Certification renewal pending - certification considered valid.

# Method Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL PLS
S			
300.0	Anions, Ion Chromatography	MCAWW	TAL PLS
200.7 Rev 4.4	Metals (ICP)	EPA	TAL PLS
SM 3500	Iron, Ferric	SM	TAL PLS
SM 3500 Fe B	Iron, Ferrous	SM	TAL PLS
SM 4500 NH3 G	Ammonia	SM	TAL CHI

## Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

## Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

## Sample Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73989-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-73989-1	MW-11R	Water	08/17/16 11:45	08/17/16 17:40
720-73989-2	MW-12	Water	08/17/16 10:50	08/17/16 17:40
720-73989-3	MW-13	Water	08/17/16 13:40	08/17/16 17:40
720-73989-4	MW-14	Water	08/17/16 14:05	08/17/16 17:40
720-73989-5	MW-15	Water	08/17/16 08:30	08/17/16 17:40
720-73989-6	MW-16	Water	08/17/16 09:15	08/17/16 17:40

TestAmerica Pleasanton

1 2 3 4 5 6 7 8 9 10 11 12 13 14

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING SINCE 1972

TESTAMERICA Pleasanton Chain of Custody  
1220 Quarry Lane • Pleasanton CA 94566-4756  
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 170463  
Date: 17-Aug-2015 Page: 1 of 1

## Report To:

Mr. Peter Sims

Attn:

Company: Nelson and Moore

Address: 1950 Webster St, San Jose, CA

Email: psims@nsmoore.com

To:

P. Sims

From:

P. Sims

Date:

Phone:

Sample ID:

Date:

Time:

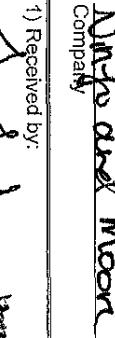
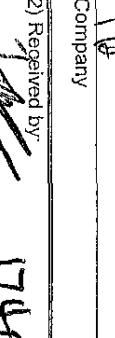
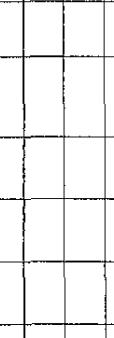
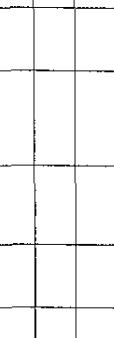
Lab:

Project:

Method:

Presrv:

Specimen:

Analysis Request													
Volatile Organics GC/MS (VOCS) EPA 8260B + TPH													
HVOCs by <input type="checkbox"/> EPA 8260B													
EPA 8260B: <input type="checkbox"/> Gas <input type="checkbox"/> BTEX <input type="checkbox"/> 5 Oxygenates <input type="checkbox"/> DCA, EDBD Ethanol													
TEPH EPA 8015B <input type="checkbox"/> Silica Gel <input type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other													
SemiVolatile Organics GC/MS EPA 8270C													
PNA/PAH's by <input type="checkbox"/> 8270C <input type="checkbox"/> 8270C SIM													
Oil and Grease <input type="checkbox"/> Petroleum (EPA 1664/9071) <input type="checkbox"/> Total													
Pesticides <input type="checkbox"/> EPA 8081 PCBs <input type="checkbox"/> EPA 8082													
CAM17 Metals (EPA 6010/7470/7471)													
Metals: <input type="checkbox"/> 6010B <input type="checkbox"/> 200.7 <input type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other													
Metals: <input type="checkbox"/> 6020 <input type="checkbox"/> 200.8 (ICP-MS)													
<input type="checkbox"/> W.E.T (STLC) <input type="checkbox"/> W.E.T (DI) <input type="checkbox"/> TCLP													
Hex. Chrom by <input type="checkbox"/> EPA 7196 <input type="checkbox"/> or EPA 7199													
pH <input type="checkbox"/> 9040 <input type="checkbox"/> SM4500													
<input type="checkbox"/> Spec. Cond. <input type="checkbox"/> Alkalinity <input type="checkbox"/> TSS <input type="checkbox"/> SS <input type="checkbox"/> TDS													
Anions: <input type="checkbox"/> Cl <input type="checkbox"/> SO <sub>4</sub> <input type="checkbox"/> NO <sub>3</sub> <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO <sub>2</sub> <input type="checkbox"/> PO <sub>4</sub>													
<input type="checkbox"/> Perchlorate by EPA 314.0													
COD <input type="checkbox"/> EPA 410.4 <input type="checkbox"/> SM5220D <input type="checkbox"/> Turbidity													
Iron, Ferric + Ferrous SM3500 FE D													
Ammonia SM4500													
Number of Containers													
720-73989 Chain of Custody													
<p>1) Received by:    <input type="checkbox"/> Lamar Johnson 8/17/16            Printed Name Date    <input type="checkbox"/> Lamar Johnson 8/17/16            Printed Name Date         </p>													
<p>2) Received by:    <input type="checkbox"/> Lamar Johnson 8/17/16            Printed Name Date    <input type="checkbox"/> Lamar Johnson 8/17/16            Printed Name Date         </p>													
<p>3) Received by:    <input type="checkbox"/> Lamar Johnson 8/17/16            Printed Name Date    <input type="checkbox"/> Lamar Johnson 8/17/16            Printed Name Date         </p>													

## **Chain of Custody Record**



**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

## Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-73989-1

**Login Number:** 73989

**List Source:** TestAmerica Pleasanton

**List Number:** 1

**Creator:** Bullock, Tracy

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

## Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-73989-1

**Login Number:** 73989

**List Source:** TestAmerica Chicago

**List Number:** 2

**List Creation:** 08/19/16 11:27 AM

**Creator:** Kelsey, Shawn M

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-73652-1

Client Project/Site: Chun

For:

Ninno & Moore  
1956 Webster Street  
Suite 400  
Oakland, California 94612

Attn: Mr. Peter D. Sims

*Paloma Duong*

Authorized for release by:

8/5/2016 11:10:54 AM

Paloma Duong, Project Manager I  
(925)484-1919  
[paloma.duong@testamericainc.com](mailto:paloma.duong@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?

Ask  
The  
Expert

Visit us at:

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	10
QC Association Summary . . . . .	19
Lab Chronicle . . . . .	20
Certification Summary . . . . .	21
Method Summary . . . . .	22
Sample Summary . . . . .	23
Chain of Custody . . . . .	24
Receipt Checklists . . . . .	25

# Definitions/Glossary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

## Glossary

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

# Case Narrative

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Job ID: 720-73652-1

Laboratory: TestAmerica Pleasanton

### Narrative

#### Job Narrative 720-73652-1

### Comments

No additional comments.

### Receipt

The samples were received on 7/28/2016 5:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5° C.

### GC/MS VOA

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 720-207009 recovered outside control limits for the following analytes: 2,2-Dichloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch 720-207009 recovered above the upper control limit for 2,2-Dichloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: EFF (720-73652-1) and INF (720-73652-2).

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

# Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Client Sample ID: EFF

## Lab Sample ID: 720-73652-1

No Detections.

## Client Sample ID: INF

## Lab Sample ID: 720-73652-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.73		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Benzene	19		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Naphthalene	13		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Toluene	8.8		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,2,4-Trimethylbenzene	6.2		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,3,5-Trimethylbenzene	9.7		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Xylenes, Total	69		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	320		50		ug/L	1		8260B/CA_LUFT	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

**Client Sample ID: EFF**

Date Collected: 07/28/16 08:20  
Date Received: 07/28/16 17:00

**Lab Sample ID: 720-73652-1**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			08/02/16 23:52	1
Acetone	ND		50		ug/L			08/02/16 23:52	1
Benzene	ND		0.50		ug/L			08/02/16 23:52	1
Dichlorobromomethane	ND		0.50		ug/L			08/02/16 23:52	1
Bromobenzene	ND		1.0		ug/L			08/02/16 23:52	1
Chlorobromomethane	ND		1.0		ug/L			08/02/16 23:52	1
Bromoform	ND		1.0		ug/L			08/02/16 23:52	1
Bromomethane	ND		1.0		ug/L			08/02/16 23:52	1
2-Butanone (MEK)	ND		50		ug/L			08/02/16 23:52	1
n-Butylbenzene	ND		1.0		ug/L			08/02/16 23:52	1
sec-Butylbenzene	ND		1.0		ug/L			08/02/16 23:52	1
tert-Butylbenzene	ND		1.0		ug/L			08/02/16 23:52	1
Carbon disulfide	ND		5.0		ug/L			08/02/16 23:52	1
Carbon tetrachloride	ND		0.50		ug/L			08/02/16 23:52	1
Chlorobenzene	ND		0.50		ug/L			08/02/16 23:52	1
Chloroethane	ND		1.0		ug/L			08/02/16 23:52	1
Chloroform	ND		1.0		ug/L			08/02/16 23:52	1
Chloromethane	ND		1.0		ug/L			08/02/16 23:52	1
2-Chlorotoluene	ND		0.50		ug/L			08/02/16 23:52	1
4-Chlorotoluene	ND		0.50		ug/L			08/02/16 23:52	1
Chlorodibromomethane	ND		0.50		ug/L			08/02/16 23:52	1
1,2-Dichlorobenzene	ND		0.50		ug/L			08/02/16 23:52	1
1,3-Dichlorobenzene	ND		0.50		ug/L			08/02/16 23:52	1
1,4-Dichlorobenzene	ND		0.50		ug/L			08/02/16 23:52	1
1,3-Dichloropropane	ND		1.0		ug/L			08/02/16 23:52	1
1,1-Dichloropropene	ND		0.50		ug/L			08/02/16 23:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			08/02/16 23:52	1
Ethylene Dibromide	ND		0.50		ug/L			08/02/16 23:52	1
Dibromomethane	ND		0.50		ug/L			08/02/16 23:52	1
Dichlorodifluoromethane	ND		0.50		ug/L			08/02/16 23:52	1
1,1-Dichloroethane	ND		0.50		ug/L			08/02/16 23:52	1
1,2-Dichloroethane	ND		0.50		ug/L			08/02/16 23:52	1
1,1-Dichloroethene	ND		0.50		ug/L			08/02/16 23:52	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			08/02/16 23:52	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			08/02/16 23:52	1
1,2-Dichloropropane	ND		0.50		ug/L			08/02/16 23:52	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/02/16 23:52	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			08/02/16 23:52	1
Ethylbenzene	ND		0.50		ug/L			08/02/16 23:52	1
Hexachlorobutadiene	ND		1.0		ug/L			08/02/16 23:52	1
2-Hexanone	ND		50		ug/L			08/02/16 23:52	1
Isopropylbenzene	ND		0.50		ug/L			08/02/16 23:52	1
4-Isopropyltoluene	ND		1.0		ug/L			08/02/16 23:52	1
Methylene Chloride	ND		5.0		ug/L			08/02/16 23:52	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/02/16 23:52	1
Naphthalene	ND		1.0		ug/L			08/02/16 23:52	1
N-Propylbenzene	ND		1.0		ug/L			08/02/16 23:52	1
Styrene	ND		0.50		ug/L			08/02/16 23:52	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			08/02/16 23:52	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

**Client Sample ID: EFF**

**Lab Sample ID: 720-73652-1**

**Date Collected: 07/28/16 08:20**

**Matrix: Water**

**Date Received: 07/28/16 17:00**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L		08/02/16 23:52		1
Tetrachloroethene	ND		0.50		ug/L		08/02/16 23:52		1
Toluene	ND		0.50		ug/L		08/02/16 23:52		1
1,2,3-Trichlorobenzene	ND		1.0		ug/L		08/02/16 23:52		1
1,2,4-Trichlorobenzene	ND		1.0		ug/L		08/02/16 23:52		1
1,1,1-Trichloroethane	ND		0.50		ug/L		08/02/16 23:52		1
1,1,2-Trichloroethane	ND		0.50		ug/L		08/02/16 23:52		1
Trichloroethene	ND		0.50		ug/L		08/02/16 23:52		1
Trichlorofluoromethane	ND		1.0		ug/L		08/02/16 23:52		1
1,2,3-Trichloropropane	ND		0.50		ug/L		08/02/16 23:52		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L		08/02/16 23:52		1
1,2,4-Trimethylbenzene	ND		0.50		ug/L		08/02/16 23:52		1
1,3,5-Trimethylbenzene	ND		0.50		ug/L		08/02/16 23:52		1
Vinyl acetate	ND		10		ug/L		08/02/16 23:52		1
Vinyl chloride	ND		0.50		ug/L		08/02/16 23:52		1
Xylenes, Total	ND		1.0		ug/L		08/02/16 23:52		1
2,2-Dichloropropane	ND *		0.50		ug/L		08/02/16 23:52		1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L		08/02/16 23:52		1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		67 - 130		08/02/16 23:52	1
1,2-Dichloroethane-d4 (Surr)	100		72 - 130		08/02/16 23:52	1
Toluene-d8 (Surr)	99		70 - 130		08/02/16 23:52	1

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Client Sample ID: INF

Date Collected: 07/28/16 08:20  
Date Received: 07/28/16 17:00

## Lab Sample ID: 720-73652-2

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.73		0.50		ug/L		08/03/16 01:59		1
Acetone	ND		50		ug/L		08/03/16 01:59		1
Benzene	19		0.50		ug/L		08/03/16 01:59		1
Dichlorobromomethane	ND		0.50		ug/L		08/03/16 01:59		1
Bromobenzene	ND		1.0		ug/L		08/03/16 01:59		1
Chlorobromomethane	ND		1.0		ug/L		08/03/16 01:59		1
Bromoform	ND		1.0		ug/L		08/03/16 01:59		1
Bromomethane	ND		1.0		ug/L		08/03/16 01:59		1
2-Butanone (MEK)	ND		50		ug/L		08/03/16 01:59		1
n-Butylbenzene	ND		1.0		ug/L		08/03/16 01:59		1
sec-Butylbenzene	ND		1.0		ug/L		08/03/16 01:59		1
tert-Butylbenzene	ND		1.0		ug/L		08/03/16 01:59		1
Carbon disulfide	ND		5.0		ug/L		08/03/16 01:59		1
Carbon tetrachloride	ND		0.50		ug/L		08/03/16 01:59		1
Chlorobenzene	ND		0.50		ug/L		08/03/16 01:59		1
Chloroethane	ND		1.0		ug/L		08/03/16 01:59		1
Chloroform	ND		1.0		ug/L		08/03/16 01:59		1
Chloromethane	ND		1.0		ug/L		08/03/16 01:59		1
2-Chlorotoluene	ND		0.50		ug/L		08/03/16 01:59		1
4-Chlorotoluene	ND		0.50		ug/L		08/03/16 01:59		1
Chlorodibromomethane	ND		0.50		ug/L		08/03/16 01:59		1
1,2-Dichlorobenzene	ND		0.50		ug/L		08/03/16 01:59		1
1,3-Dichlorobenzene	ND		0.50		ug/L		08/03/16 01:59		1
1,4-Dichlorobenzene	ND		0.50		ug/L		08/03/16 01:59		1
1,3-Dichloropropane	ND		1.0		ug/L		08/03/16 01:59		1
1,1-Dichloropropene	ND		0.50		ug/L		08/03/16 01:59		1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L		08/03/16 01:59		1
Ethylene Dibromide	ND		0.50		ug/L		08/03/16 01:59		1
Dibromomethane	ND		0.50		ug/L		08/03/16 01:59		1
Dichlorodifluoromethane	ND		0.50		ug/L		08/03/16 01:59		1
1,1-Dichloroethane	ND		0.50		ug/L		08/03/16 01:59		1
1,2-Dichloroethane	ND		0.50		ug/L		08/03/16 01:59		1
1,1-Dichloroethene	ND		0.50		ug/L		08/03/16 01:59		1
cis-1,2-Dichloroethene	ND		0.50		ug/L		08/03/16 01:59		1
trans-1,2-Dichloroethene	ND		0.50		ug/L		08/03/16 01:59		1
1,2-Dichloropropane	ND		0.50		ug/L		08/03/16 01:59		1
cis-1,3-Dichloropropene	ND		0.50		ug/L		08/03/16 01:59		1
trans-1,3-Dichloropropene	ND		0.50		ug/L		08/03/16 01:59		1
Ethylbenzene	ND		0.50		ug/L		08/03/16 01:59		1
Hexachlorobutadiene	ND		1.0		ug/L		08/03/16 01:59		1
2-Hexanone	ND		50		ug/L		08/03/16 01:59		1
Isopropylbenzene	ND		0.50		ug/L		08/03/16 01:59		1
4-Isopropyltoluene	ND		1.0		ug/L		08/03/16 01:59		1
Methylene Chloride	ND		5.0		ug/L		08/03/16 01:59		1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L		08/03/16 01:59		1
<b>Naphthalene</b>	<b>13</b>		1.0		ug/L		08/03/16 01:59		1
N-Propylbenzene	ND		1.0		ug/L		08/03/16 01:59		1
Styrene	ND		0.50		ug/L		08/03/16 01:59		1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L		08/03/16 01:59		1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Client Sample ID: INF

Date Collected: 07/28/16 08:20  
Date Received: 07/28/16 17:00

## Lab Sample ID: 720-73652-2

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L		08/03/16 01:59		1
Tetrachloroethene	ND		0.50		ug/L		08/03/16 01:59		1
<b>Toluene</b>	<b>8.8</b>		0.50		ug/L		08/03/16 01:59		1
1,2,3-Trichlorobenzene	ND		1.0		ug/L		08/03/16 01:59		1
1,2,4-Trichlorobenzene	ND		1.0		ug/L		08/03/16 01:59		1
1,1,1-Trichloroethane	ND		0.50		ug/L		08/03/16 01:59		1
1,1,2-Trichloroethane	ND		0.50		ug/L		08/03/16 01:59		1
Trichloroethene	ND		0.50		ug/L		08/03/16 01:59		1
Trichlorofluoromethane	ND		1.0		ug/L		08/03/16 01:59		1
1,2,3-Trichloropropane	ND		0.50		ug/L		08/03/16 01:59		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L		08/03/16 01:59		1
<b>1,2,4-Trimethylbenzene</b>	<b>6.2</b>		0.50		ug/L		08/03/16 01:59		1
<b>1,3,5-Trimethylbenzene</b>	<b>9.7</b>		0.50		ug/L		08/03/16 01:59		1
Vinyl acetate	ND		10		ug/L		08/03/16 01:59		1
Vinyl chloride	ND		0.50		ug/L		08/03/16 01:59		1
<b>Xylenes, Total</b>	<b>69</b>		1.0		ug/L		08/03/16 01:59		1
2,2-Dichloropropane	ND *		0.50		ug/L		08/03/16 01:59		1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>320</b>		50		ug/L		08/03/16 01:59		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	100		67 - 130				08/03/16 01:59		1
1,2-Dichloroethane-d4 (Surr)	100		72 - 130				08/03/16 01:59		1
Toluene-d8 (Surr)	100		70 - 130				08/03/16 01:59		1

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID: MB 720-207009/4**

**Matrix: Water**

**Analysis Batch: 207009**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			08/02/16 18:57	1
Acetone	ND		50		ug/L			08/02/16 18:57	1
Benzene	ND		0.50		ug/L			08/02/16 18:57	1
Dichlorobromomethane	ND		0.50		ug/L			08/02/16 18:57	1
Bromobenzene	ND		1.0		ug/L			08/02/16 18:57	1
Chlorobromomethane	ND		1.0		ug/L			08/02/16 18:57	1
Bromoform	ND		1.0		ug/L			08/02/16 18:57	1
Bromomethane	ND		1.0		ug/L			08/02/16 18:57	1
2-Butanone (MEK)	ND		50		ug/L			08/02/16 18:57	1
n-Butylbenzene	ND		1.0		ug/L			08/02/16 18:57	1
sec-Butylbenzene	ND		1.0		ug/L			08/02/16 18:57	1
tert-Butylbenzene	ND		1.0		ug/L			08/02/16 18:57	1
Carbon disulfide	ND		5.0		ug/L			08/02/16 18:57	1
Carbon tetrachloride	ND		0.50		ug/L			08/02/16 18:57	1
Chlorobenzene	ND		0.50		ug/L			08/02/16 18:57	1
Chloroethane	ND		1.0		ug/L			08/02/16 18:57	1
Chloroform	ND		1.0		ug/L			08/02/16 18:57	1
Chloromethane	ND		1.0		ug/L			08/02/16 18:57	1
2-Chlorotoluene	ND		0.50		ug/L			08/02/16 18:57	1
4-Chlorotoluene	ND		0.50		ug/L			08/02/16 18:57	1
Chlorodibromomethane	ND		0.50		ug/L			08/02/16 18:57	1
1,2-Dichlorobenzene	ND		0.50		ug/L			08/02/16 18:57	1
1,3-Dichlorobenzene	ND		0.50		ug/L			08/02/16 18:57	1
1,4-Dichlorobenzene	ND		0.50		ug/L			08/02/16 18:57	1
1,3-Dichloropropane	ND		1.0		ug/L			08/02/16 18:57	1
1,1-Dichloropropene	ND		0.50		ug/L			08/02/16 18:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			08/02/16 18:57	1
Ethylene Dibromide	ND		0.50		ug/L			08/02/16 18:57	1
Dibromomethane	ND		0.50		ug/L			08/02/16 18:57	1
Dichlorodifluoromethane	ND		0.50		ug/L			08/02/16 18:57	1
1,1-Dichloroethane	ND		0.50		ug/L			08/02/16 18:57	1
1,2-Dichloroethane	ND		0.50		ug/L			08/02/16 18:57	1
1,1-Dichloroethene	ND		0.50		ug/L			08/02/16 18:57	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			08/02/16 18:57	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			08/02/16 18:57	1
1,2-Dichloropropane	ND		0.50		ug/L			08/02/16 18:57	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/02/16 18:57	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			08/02/16 18:57	1
Ethylbenzene	ND		0.50		ug/L			08/02/16 18:57	1
Hexachlorobutadiene	ND		1.0		ug/L			08/02/16 18:57	1
2-Hexanone	ND		50		ug/L			08/02/16 18:57	1
Isopropylbenzene	ND		0.50		ug/L			08/02/16 18:57	1
4-Isopropyltoluene	ND		1.0		ug/L			08/02/16 18:57	1
Methylene Chloride	ND		5.0		ug/L			08/02/16 18:57	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/02/16 18:57	1
Naphthalene	ND		1.0		ug/L			08/02/16 18:57	1
N-Propylbenzene	ND		1.0		ug/L			08/02/16 18:57	1
Styrene	ND		0.50		ug/L			08/02/16 18:57	1

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-207009/4**

**Matrix: Water**

**Analysis Batch: 207009**

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			08/02/16 18:57	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/02/16 18:57	1
Tetrachloroethene	ND		0.50		ug/L			08/02/16 18:57	1
Toluene	ND		0.50		ug/L			08/02/16 18:57	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/02/16 18:57	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/02/16 18:57	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/02/16 18:57	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/02/16 18:57	1
Trichloroethene	ND		0.50		ug/L			08/02/16 18:57	1
Trichlorofluoromethane	ND		1.0		ug/L			08/02/16 18:57	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/02/16 18:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/02/16 18:57	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			08/02/16 18:57	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			08/02/16 18:57	1
Vinyl acetate	ND		10		ug/L			08/02/16 18:57	1
Vinyl chloride	ND		0.50		ug/L			08/02/16 18:57	1
Xylenes, Total	ND		1.0		ug/L			08/02/16 18:57	1
2,2-Dichloropropane	ND		0.50		ug/L			08/02/16 18:57	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/02/16 18:57	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	103		67 - 130		08/02/16 18:57	1
1,2-Dichloroethane-d4 (Surr)	99		72 - 130		08/02/16 18:57	1
Toluene-d8 (Surr)	98		70 - 130		08/02/16 18:57	1

**Lab Sample ID: LCS 720-207009/5**

**Matrix: Water**

**Analysis Batch: 207009**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Methyl tert-butyl ether	25.0	25.8		ug/L		103	62 - 130
Acetone	125	116		ug/L		93	26 - 180
Benzene	25.0	25.1		ug/L		100	79 - 130
Dichlorobromomethane	25.0	27.6		ug/L		111	70 - 130
Bromobenzene	25.0	25.9		ug/L		104	70 - 130
Chlorobromomethane	25.0	26.8		ug/L		107	70 - 130
Bromoform	25.0	27.8		ug/L		111	68 - 136
Bromomethane	25.0	25.4		ug/L		101	43 - 151
2-Butanone (MEK)	125	115		ug/L		92	54 - 130
n-Butylbenzene	25.0	26.8		ug/L		107	70 - 142
sec-Butylbenzene	25.0	25.8		ug/L		103	70 - 134
tert-Butylbenzene	25.0	25.3		ug/L		101	70 - 135
Carbon disulfide	25.0	23.3		ug/L		93	58 - 130
Carbon tetrachloride	25.0	28.4		ug/L		114	70 - 146
Chlorobenzene	25.0	25.8		ug/L		103	70 - 130
Chloroethane	25.0	23.8		ug/L		95	62 - 138
Chloroform	25.0	26.7		ug/L		107	70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-207009/5**

**Matrix: Water**

**Analysis Batch: 207009**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Chloromethane	25.0	21.9		ug/L		88	52 - 175		
2-Chlorotoluene	25.0	25.4		ug/L		102	70 - 130		
4-Chlorotoluene	25.0	25.5		ug/L		102	70 - 130		
Chlorodibromomethane	25.0	26.5		ug/L		106	70 - 145		
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	70 - 130		
1,3-Dichlorobenzene	25.0	25.4		ug/L		102	70 - 130		
1,4-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130		
1,3-Dichloropropane	25.0	26.1		ug/L		104	70 - 130		
1,1-Dichloropropene	25.0	25.5		ug/L		102	70 - 130		
1,2-Dibromo-3-Chloropropane	25.0	27.3		ug/L		109	70 - 136		
Ethylene Dibromide	25.0	27.3		ug/L		109	70 - 130		
Dibromomethane	25.0	27.3		ug/L		109	70 - 130		
Dichlorodifluoromethane	25.0	25.9		ug/L		103	32 - 158		
1,1-Dichloroethane	25.0	24.3		ug/L		97	70 - 130		
1,2-Dichloroethane	25.0	27.2		ug/L		109	61 - 132		
1,1-Dichloroethene	25.0	22.5		ug/L		90	64 - 128		
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	70 - 130		
trans-1,2-Dichloroethene	25.0	27.4		ug/L		110	68 - 130		
1,2-Dichloropropane	25.0	25.2		ug/L		101	70 - 130		
cis-1,3-Dichloropropene	25.0	27.1		ug/L		108	70 - 130		
trans-1,3-Dichloropropene	25.0	25.4		ug/L		102	70 - 140		
Ethylbenzene	25.0	26.3		ug/L		105	80 - 120		
Hexachlorobutadiene	25.0	26.9		ug/L		107	70 - 130		
2-Hexanone	125	104		ug/L		83	60 - 164		
Isopropylbenzene	25.0	26.0		ug/L		104	70 - 130		
4-Isopropyltoluene	25.0	25.8		ug/L		103	70 - 130		
Methylene Chloride	25.0	23.9		ug/L		96	70 - 147		
4-Methyl-2-pentanone (MIBK)	125	103		ug/L		82	58 - 130		
Naphthalene	25.0	25.8		ug/L		103	50 - 130		
N-Propylbenzene	25.0	26.6		ug/L		106	70 - 130		
Styrene	25.0	25.6		ug/L		102	70 - 130		
1,1,1,2-Tetrachloroethane	25.0	25.9		ug/L		104	70 - 130		
1,1,2,2-Tetrachloroethane	25.0	24.5		ug/L		98	70 - 130		
Tetrachloroethene	25.0	27.4		ug/L		110	70 - 130		
Toluene	25.0	24.8		ug/L		99	78 - 120		
1,2,3-Trichlorobenzene	25.0	25.8		ug/L		103	70 - 130		
1,2,4-Trichlorobenzene	25.0	27.1		ug/L		108	70 - 130		
1,1,1-Trichloroethane	25.0	30.5		ug/L		122	70 - 130		
1,1,2-Trichloroethane	25.0	27.4		ug/L		110	70 - 130		
Trichloroethene	25.0	27.6		ug/L		110	70 - 130		
Trichlorofluoromethane	25.0	28.1		ug/L		112	66 - 132		
1,2,3-Trichloropropane	25.0	25.3		ug/L		101	70 - 130		
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.6		ug/L		102	42 - 162		
1,2,4-Trimethylbenzene	25.0	26.0		ug/L		104	70 - 132		
1,3,5-Trimethylbenzene	25.0	25.8		ug/L		103	70 - 130		
Vinyl acetate	25.0	31.6		ug/L		127	43 - 163		
Vinyl chloride	25.0	23.7		ug/L		95	54 - 135		

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-207009/5**

**Matrix: Water**

**Analysis Batch: 207009**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
m-Xylene & p-Xylene	25.0	26.1		ug/L		104	70 - 142
o-Xylene	25.0	25.5		ug/L		102	70 - 130
2,2-Dichloropropane	25.0	35.2	*	ug/L		141	70 - 140

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		72 - 130
Toluene-d8 (Surr)	99		70 - 130

**Lab Sample ID: LCS 720-207009/7**

**Matrix: Water**

**Analysis Batch: 207009**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Gasoline Range Organics (GRO) -C5-C12	500	518		ug/L		104	71 - 125

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	98		72 - 130
Toluene-d8 (Surr)	102		70 - 130

**Lab Sample ID: LCSD 720-207009/6**

**Matrix: Water**

**Analysis Batch: 207009**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	26.0		ug/L		104	62 - 130	1	20
Acetone	125	102		ug/L		82	26 - 180	13	30
Benzene	25.0	25.2		ug/L		101	79 - 130	0	20
Dichlorobromomethane	25.0	27.9		ug/L		112	70 - 130	1	20
Bromobenzene	25.0	25.5		ug/L		102	70 - 130	2	20
Chlorobromomethane	25.0	26.8		ug/L		107	70 - 130	0	20
Bromoform	25.0	27.8		ug/L		111	68 - 136	0	20
Bromomethane	25.0	25.7		ug/L		103	43 - 151	1	20
2-Butanone (MEK)	125	118		ug/L		94	54 - 130	2	20
n-Butylbenzene	25.0	26.0		ug/L		104	70 - 142	3	20
sec-Butylbenzene	25.0	25.3		ug/L		101	70 - 134	2	20
tert-Butylbenzene	25.0	25.2		ug/L		101	70 - 135	0	20
Carbon disulfide	25.0	23.3		ug/L		93	58 - 130	0	20
Carbon tetrachloride	25.0	28.6		ug/L		114	70 - 146	1	20
Chlorobenzene	25.0	25.6		ug/L		102	70 - 130	1	20
Chloroethane	25.0	24.4		ug/L		98	62 - 138	3	20
Chloroform	25.0	26.7		ug/L		107	70 - 130	0	20
Chloromethane	25.0	22.9		ug/L		91	52 - 175	4	20
2-Chlorotoluene	25.0	25.1		ug/L		101	70 - 130	1	20
4-Chlorotoluene	25.0	25.3		ug/L		101	70 - 130	1	20
Chlorodibromomethane	25.0	26.9		ug/L		107	70 - 145	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-207009/6

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

Analysis Batch: 207009

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier				Limits		
1,2-Dichlorobenzene	25.0	25.3		ug/L	101	70 - 130	0	20	
1,3-Dichlorobenzene	25.0	25.0		ug/L	100	70 - 130	2	20	
1,4-Dichlorobenzene	25.0	25.7		ug/L	103	70 - 130	0	20	
1,3-Dichloropropane	25.0	26.2		ug/L	105	70 - 130	0	20	
1,1-Dichloropropene	25.0	25.6		ug/L	102	70 - 130	0	20	
1,2-Dibromo-3-Chloropropane	25.0	28.4		ug/L	114	70 - 136	4	20	
Ethylene Dibromide	25.0	28.2		ug/L	113	70 - 130	3	20	
Dibromomethane	25.0	27.3		ug/L	109	70 - 130	0	20	
Dichlorodifluoromethane	25.0	26.0		ug/L	104	32 - 158	1	20	
1,1-Dichloroethane	25.0	24.3		ug/L	97	70 - 130	0	20	
1,2-Dichloroethane	25.0	27.4		ug/L	110	61 - 132	1	20	
1,1-Dichloroethene	25.0	22.7		ug/L	91	64 - 128	1	20	
cis-1,2-Dichloroethene	25.0	25.2		ug/L	101	70 - 130	0	20	
trans-1,2-Dichloroethene	25.0	26.8		ug/L	107	68 - 130	2	20	
1,2-Dichloropropane	25.0	25.7		ug/L	103	70 - 130	2	20	
cis-1,3-Dichloropropene	25.0	27.0		ug/L	108	70 - 130	0	20	
trans-1,3-Dichloropropene	25.0	25.4		ug/L	102	70 - 140	0	20	
Ethylbenzene	25.0	25.7		ug/L	103	80 - 120	2	20	
Hexachlorobutadiene	25.0	26.2		ug/L	105	70 - 130	3	20	
2-Hexanone	125	106		ug/L	84	60 - 164	2	20	
Isopropylbenzene	25.0	25.3		ug/L	101	70 - 130	3	20	
4-Isopropyltoluene	25.0	25.4		ug/L	102	70 - 130	2	20	
Methylene Chloride	25.0	24.0		ug/L	96	70 - 147	0	20	
4-Methyl-2-pentanone (MIBK)	125	103		ug/L	83	58 - 130	0	20	
Naphthalene	25.0	25.4		ug/L	102	50 - 130	2	20	
N-Propylbenzene	25.0	26.3		ug/L	105	70 - 130	1	20	
Styrene	25.0	25.1		ug/L	100	70 - 130	2	20	
1,1,1,2-Tetrachloroethane	25.0	25.9		ug/L	104	70 - 130	0	20	
1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L	99	70 - 130	1	20	
Tetrachloroethene	25.0	27.1		ug/L	108	70 - 130	1	20	
Toluene	25.0	24.3		ug/L	97	78 - 120	2	20	
1,2,3-Trichlorobenzene	25.0	25.2		ug/L	101	70 - 130	2	20	
1,2,4-Trichlorobenzene	25.0	26.6		ug/L	106	70 - 130	2	20	
1,1,1-Trichloroethane	25.0	30.2		ug/L	121	70 - 130	1	20	
1,1,2-Trichloroethane	25.0	27.5		ug/L	110	70 - 130	0	20	
Trichloroethene	25.0	27.0		ug/L	108	70 - 130	2	20	
Trichlorofluoromethane	25.0	28.1		ug/L	112	66 - 132	0	20	
1,2,3-Trichloropropane	25.0	25.3		ug/L	101	70 - 130	0	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.3		ug/L	101	42 - 162	1	20	
1,2,4-Trimethylbenzene	25.0	25.8		ug/L	103	70 - 132	0	20	
1,3,5-Trimethylbenzene	25.0	25.7		ug/L	103	70 - 130	1	20	
Vinyl acetate	25.0	31.3		ug/L	125	43 - 163	1	20	
Vinyl chloride	25.0	24.1		ug/L	96	54 - 135	2	20	
m-Xylene & p-Xylene	25.0	26.0		ug/L	104	70 - 142	1	20	
o-Xylene	25.0	24.8		ug/L	99	70 - 130	3	20	
2,2-Dichloropropane	25.0	35.1		ug/L	140	70 - 140	0	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-207009/6**

**Matrix: Water**

**Analysis Batch: 207009**

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	97		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		72 - 130
Toluene-d8 (Surr)	101		70 - 130

**Lab Sample ID: LCSD 720-207009/8**

**Matrix: Water**

**Analysis Batch: 207009**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	
				ug/L		Limits	Limit	
Gasoline Range Organics (GRO) -C5-C12	500	507		ug/L	101	71 - 125	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		72 - 130
Toluene-d8 (Surr)	101		70 - 130

**Lab Sample ID: 720-73652-1 MS**

**Matrix: Water**

**Analysis Batch: 207009**

**Client Sample ID: EFF**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
						ug/L		Limits	
Methyl tert-butyl ether	ND		25.0	25.2		ug/L	101	60 - 138	
Acetone	ND		125	94.2		ug/L	75	60 - 140	
Benzene	ND		25.0	25.5		ug/L	102	60 - 140	
Dichlorobromomethane	ND		25.0	27.7		ug/L	111	60 - 140	
Bromobenzene	ND		25.0	26.0		ug/L	104	60 - 140	
Chlorobromomethane	ND		25.0	27.2		ug/L	109	60 - 140	
Bromoform	ND		25.0	27.1		ug/L	109	56 - 140	
Bromomethane	ND		25.0	25.5		ug/L	102	23 - 140	
2-Butanone (MEK)	ND		125	104		ug/L	84	60 - 140	
n-Butylbenzene	ND		25.0	26.3		ug/L	105	60 - 140	
sec-Butylbenzene	ND		25.0	25.5		ug/L	102	60 - 140	
tert-Butylbenzene	ND		25.0	25.0		ug/L	100	60 - 140	
Carbon disulfide	ND		25.0	23.6		ug/L	95	38 - 140	
Carbon tetrachloride	ND		25.0	28.4		ug/L	114	60 - 140	
Chlorobenzene	ND		25.0	25.8		ug/L	103	60 - 140	
Chloroethane	ND		25.0	24.6		ug/L	98	51 - 140	
Chloroform	ND		25.0	26.8		ug/L	107	60 - 140	
Chloromethane	ND		25.0	22.0		ug/L	88	52 - 140	
2-Chlorotoluene	ND		25.0	25.3		ug/L	101	60 - 140	
4-Chlorotoluene	ND		25.0	25.3		ug/L	101	60 - 140	
Chlorodibromomethane	ND		25.0	26.2		ug/L	105	60 - 140	
1,2-Dichlorobenzene	ND		25.0	24.8		ug/L	99	60 - 140	
1,3-Dichlorobenzene	ND		25.0	25.1		ug/L	101	60 - 140	
1,4-Dichlorobenzene	ND		25.0	25.5		ug/L	102	60 - 140	
1,3-Dichloropropane	ND		25.0	26.1		ug/L	105	60 - 140	
1,1-Dichloropropene	ND		25.0	25.5		ug/L	102	60 - 140	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-73652-1 MS**

**Matrix: Water**

**Analysis Batch: 207009**

**Client Sample ID: EFF  
Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits	
	Result	Qualifier	Added	Result	Qualifier						
1,2-Dibromo-3-Chloropropane	ND		25.0	25.2		ug/L		101	60 - 140		
Ethylene Dibromide	ND		25.0	27.3		ug/L		109	60 - 140		
Dibromomethane	ND		25.0	26.6		ug/L		106	60 - 140		
Dichlorodifluoromethane	ND		25.0	25.4		ug/L		102	38 - 140		
1,1-Dichloroethane	ND		25.0	24.5		ug/L		98	60 - 140		
1,2-Dichloroethane	ND		25.0	26.8		ug/L		107	60 - 140		
1,1-Dichloroethene	ND		25.0	23.1		ug/L		92	60 - 140		
cis-1,2-Dichloroethene	ND		25.0	25.5		ug/L		102	60 - 140		
trans-1,2-Dichloroethene	ND		25.0	27.7		ug/L		111	60 - 140		
1,2-Dichloropropane	ND		25.0	25.8		ug/L		103	60 - 140		
cis-1,3-Dichloropropene	ND		25.0	27.2		ug/L		109	60 - 140		
trans-1,3-Dichloropropene	ND		25.0	25.4		ug/L		102	60 - 140		
Ethylbenzene	ND		25.0	25.9		ug/L		104	60 - 140		
Hexachlorobutadiene	ND		25.0	26.3		ug/L		105	60 - 140		
2-Hexanone	ND		125	93.3		ug/L		75	60 - 140		
Isopropylbenzene	ND		25.0	25.9		ug/L		104	60 - 140		
4-Isopropyltoluene	ND		25.0	25.5		ug/L		102	60 - 140		
Methylene Chloride	ND		25.0	23.9		ug/L		95	40 - 140		
4-Methyl-2-pentanone (MIBK)	ND		125	95.0		ug/L		76	58 - 130		
Naphthalene	ND		25.0	24.5		ug/L		98	56 - 140		
N-Propylbenzene	ND		25.0	26.4		ug/L		106	60 - 140		
Styrene	ND		25.0	25.4		ug/L		101	60 - 140		
1,1,1,2-Tetrachloroethane	ND		25.0	26.5		ug/L		106	60 - 140		
1,1,2,2-Tetrachloroethane	ND		25.0	23.9		ug/L		96	60 - 140		
Tetrachloroethene	ND		25.0	27.3		ug/L		109	60 - 140		
Toluene	ND		25.0	24.8		ug/L		99	60 - 140		
1,2,3-Trichlorobenzene	ND		25.0	24.8		ug/L		99	60 - 140		
1,2,4-Trichlorobenzene	ND		25.0	26.3		ug/L		105	60 - 140		
1,1,1-Trichloroethane	ND		25.0	30.9		ug/L		123	60 - 140		
1,1,2-Trichloroethane	ND		25.0	26.7		ug/L		107	60 - 140		
Trichloroethene	ND		25.0	27.3		ug/L		109	60 - 140		
Trichlorofluoromethane	ND		25.0	28.1		ug/L		112	60 - 140		
1,2,3-Trichloropropane	ND		25.0	24.3		ug/L		97	60 - 140		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	26.1		ug/L		104	60 - 140		
1,2,4-Trimethylbenzene	ND		25.0	25.5		ug/L		102	60 - 140		
1,3,5-Trimethylbenzene	ND		25.0	25.4		ug/L		102	60 - 140		
Vinyl acetate	ND		25.0	32.9		ug/L		132	40 - 140		
Vinyl chloride	ND		25.0	23.6		ug/L		94	58 - 140		
m-Xylene & p-Xylene	ND		25.0	26.1		ug/L		104	60 - 140		
o-Xylene	ND		25.0	24.9		ug/L		100	60 - 140		
2,2-Dichloropropane	ND *		25.0	34.9		ug/L		140	60 - 140		
<b>Surrogate</b>		<b>MS</b>	<b>MS</b>								
		<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>					
4-Bromofluorobenzene		98				67 - 130					
1,2-Dichloroethane-d4 (Surr)		96				72 - 130					
Toluene-d8 (Surr)		100				70 - 130					

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-73652-1 MSD**

**Matrix: Water**

**Analysis Batch: 207009**

**Client Sample ID: EFF  
Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		25.0	26.7		ug/L	107	60 - 138	6	20	
Acetone	ND		125	103		ug/L	82	60 - 140	9	20	
Benzene	ND		25.0	25.5		ug/L	102	60 - 140	0	20	
Dichlorobromomethane	ND		25.0	28.1		ug/L	113	60 - 140	2	20	
Bromobenzene	ND		25.0	25.6		ug/L	102	60 - 140	2	20	
Chlorobromomethane	ND		25.0	27.8		ug/L	111	60 - 140	2	20	
Bromoform	ND		25.0	29.6		ug/L	118	56 - 140	9	20	
Bromomethane	ND		25.0	25.1		ug/L	101	23 - 140	1	20	
2-Butanone (MEK)	ND		125	114		ug/L	92	60 - 140	9	20	
n-Butylbenzene	ND		25.0	25.5		ug/L	102	60 - 140	3	20	
sec-Butylbenzene	ND		25.0	25.1		ug/L	100	60 - 140	2	20	
tert-Butylbenzene	ND		25.0	24.8		ug/L	99	60 - 140	1	20	
Carbon disulfide	ND		25.0	23.3		ug/L	93	38 - 140	2	20	
Carbon tetrachloride	ND		25.0	28.0		ug/L	112	60 - 140	2	20	
Chlorobenzene	ND		25.0	25.9		ug/L	103	60 - 140	0	20	
Chloroethane	ND		25.0	24.1		ug/L	96	51 - 140	2	20	
Chloroform	ND		25.0	26.8		ug/L	107	60 - 140	0	20	
Chloromethane	ND		25.0	22.2		ug/L	89	52 - 140	1	20	
2-Chlorotoluene	ND		25.0	25.1		ug/L	100	60 - 140	1	20	
4-Chlorotoluene	ND		25.0	25.1		ug/L	101	60 - 140	1	20	
Chlorodibromomethane	ND		25.0	27.3		ug/L	109	60 - 140	4	20	
1,2-Dichlorobenzene	ND		25.0	25.3		ug/L	101	60 - 140	2	20	
1,3-Dichlorobenzene	ND		25.0	25.3		ug/L	101	60 - 140	1	20	
1,4-Dichlorobenzene	ND		25.0	25.8		ug/L	103	60 - 140	1	20	
1,3-Dichloropropane	ND		25.0	27.0		ug/L	108	60 - 140	3	20	
1,1-Dichloropropene	ND		25.0	25.4		ug/L	102	60 - 140	0	20	
1,2-Dibromo-3-Chloropropane	ND		25.0	27.3		ug/L	109	60 - 140	8	20	
Ethylene Dibromide	ND		25.0	28.2		ug/L	113	60 - 140	3	20	
Dibromomethane	ND		25.0	28.1		ug/L	112	60 - 140	5	20	
Dichlorodifluoromethane	ND		25.0	25.0		ug/L	100	38 - 140	2	20	
1,1-Dichloroethane	ND		25.0	24.3		ug/L	97	60 - 140	1	20	
1,2-Dichloroethane	ND		25.0	27.7		ug/L	111	60 - 140	3	20	
1,1-Dichloroethene	ND		25.0	21.7		ug/L	87	60 - 140	6	20	
cis-1,2-Dichloroethene	ND		25.0	25.4		ug/L	102	60 - 140	0	20	
trans-1,2-Dichloroethene	ND		25.0	27.0		ug/L	108	60 - 140	2	20	
1,2-Dichloropropane	ND		25.0	26.0		ug/L	104	60 - 140	1	20	
cis-1,3-Dichloropropene	ND		25.0	27.8		ug/L	111	60 - 140	2	20	
trans-1,3-Dichloropropene	ND		25.0	26.1		ug/L	105	60 - 140	3	20	
Ethylbenzene	ND		25.0	26.0		ug/L	104	60 - 140	1	20	
Hexachlorobutadiene	ND		25.0	25.9		ug/L	104	60 - 140	1	20	
2-Hexanone	ND		125	104		ug/L	83	60 - 140	11	20	
Isopropylbenzene	ND		25.0	26.0		ug/L	104	60 - 140	0	20	
4-Isopropyltoluene	ND		25.0	25.0		ug/L	100	60 - 140	2	20	
Methylene Chloride	ND		25.0	24.2		ug/L	97	40 - 140	2	20	
4-Methyl-2-pentanone (MIBK)	ND		125	105		ug/L	84	58 - 130	10	20	
Naphthalene	ND		25.0	26.3		ug/L	105	56 - 140	7	20	
N-Propylbenzene	ND		25.0	25.9		ug/L	104	60 - 140	2	20	
Styrene	ND		25.0	25.7		ug/L	103	60 - 140	1	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-73652-1 MSD

Matrix: Water

Analysis Batch: 207009

Client Sample ID: EFF  
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier			%Rec	Limits		
1,1,1,2-Tetrachloroethane	ND		25.0	26.2		ug/L	105	60 - 140		1	20
1,1,2,2-Tetrachloroethane	ND		25.0	25.6		ug/L	102	60 - 140		7	20
Tetrachloroethene	ND		25.0	26.8		ug/L	107	60 - 140		2	20
Toluene	ND		25.0	24.8		ug/L	99	60 - 140		0	20
1,2,3-Trichlorobenzene	ND		25.0	25.4		ug/L	102	60 - 140		2	20
1,2,4-Trichlorobenzene	ND		25.0	26.9		ug/L	108	60 - 140		2	20
1,1,1-Trichloroethane	ND		25.0	30.8		ug/L	123	60 - 140		0	20
1,1,2-Trichloroethane	ND		25.0	28.1		ug/L	112	60 - 140		5	20
Trichloroethene	ND		25.0	27.1		ug/L	109	60 - 140		1	20
Trichlorofluoromethane	ND		25.0	27.5		ug/L	110	60 - 140		2	20
1,2,3-Trichloropropane	ND		25.0	25.6		ug/L	103	60 - 140		5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	26.0		ug/L	104	60 - 140		0	20
ne											
1,2,4-Trimethylbenzene	ND		25.0	25.7		ug/L	103	60 - 140		1	20
1,3,5-Trimethylbenzene	ND		25.0	25.5		ug/L	102	60 - 140		0	20
Vinyl acetate	ND		25.0	34.5		ug/L	138	40 - 140		5	20
Vinyl chloride	ND		25.0	24.0		ug/L	96	58 - 140		2	20
m-Xylene & p-Xylene	ND		25.0	25.9		ug/L	104	60 - 140		1	20
o-Xylene	ND		25.0	25.2		ug/L	101	60 - 140		1	20
2,2-Dichloropropane	ND	*	25.0	34.2		ug/L	137	60 - 140		2	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		72 - 130
Toluene-d8 (Surr)	101		70 - 130

TestAmerica Pleasanton

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## GC/MS VOA

### Analysis Batch: 207009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73652-1	EFF	Total/NA	Water	8260B/CA_LUFT MS	5
720-73652-2	INF	Total/NA	Water	8260B/CA_LUFT MS	6
MB 720-207009/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	7
LCS 720-207009/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	8
LCS 720-207009/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	9
LCSD 720-207009/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	10
LCSD 720-207009/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	11
720-73652-1 MS	EFF	Total/NA	Water	8260B/CA_LUFT MS	12
720-73652-1 MSD	EFF	Total/NA	Water	8260B/CA_LUFT MS	13

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

**Client Sample ID: EFF**

**Date Collected: 07/28/16 08:20**

**Date Received: 07/28/16 17:00**

**Lab Sample ID: 720-73652-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	207009	08/02/16 23:52	JRM	TAL PLS

**Client Sample ID: INF**

**Date Collected: 07/28/16 08:20**

**Date Received: 07/28/16 17:00**

**Lab Sample ID: 720-73652-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	207009	08/03/16 01:59	JRM	TAL PLS

## Laboratory References:

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

# Certification Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

## Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18
Analysis Method	Prep Method	Matrix	Analyte	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

TestAmerica Pleasanton

## Method Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL PLS

**Protocol References:**

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

**Laboratory References:**

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

## Sample Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73652-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-73652-1	EFF	Water	07/28/16 08:20	07/28/16 17:00
720-73652-2	INF	Water	07/28/16 08:20	07/28/16 17:00

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14

TestAmerica Pleasanton



## Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-73652-1

**Login Number:** 73652

**List Source:** TestAmerica Pleasanton

**List Number:** 1

**Creator:** Arauz, Dennis

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-73698-1

Client Project/Site: Chun

For:

Ninno & Moore  
1956 Webster Street  
Suite 400  
Oakland, California 94612

Attn: Mr. Peter D. Sims



Authorized for release by:

8/4/2016 9:23:06 AM

Paloma Duong, Project Manager I  
(925)484-1919  
[paloma.duong@testamericainc.com](mailto:paloma.duong@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Ask  
The  
Expert

Visit us at:

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Definitions/Glossary .....	3
Case Narrative .....	4
Detection Summary .....	5
Client Sample Results .....	6
QC Sample Results .....	8
QC Association Summary .....	17
Lab Chronicle .....	18
Certification Summary .....	19
Method Summary .....	20
Sample Summary .....	21
Chain of Custody .....	22
Receipt Checklists .....	23

## Definitions/Glossary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	1
%	Listed under the "D" column to designate that the result is reported on a dry weight basis	2
%R	Percent Recovery	3
CFL	Contains Free Liquid	4
CNF	Contains no Free Liquid	5
DER	Duplicate error ratio (normalized absolute difference)	6
Dil Fac	Dilution Factor	7
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	8
DLC	Decision level concentration	9
MDA	Minimum detectable activity	10
EDL	Estimated Detection Limit	11
MDC	Minimum detectable concentration	12
MDL	Method Detection Limit	13
ML	Minimum Level (Dioxin)	14
NC	Not Calculated	
ND	Not detected at the reporting limit (or MDL or EDL if shown)	
PQL	Practical Quantitation Limit	
QC	Quality Control	
RER	Relative error ratio	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

# Case Narrative

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Job ID: 720-73698-1

Laboratory: TestAmerica Pleasanton

### Narrative

#### Job Narrative 720-73698-1

### Comments

No additional comments.

### Receipt

The sample was received on 8/1/2016 4:42 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

### GC/MS VOA

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

## Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

**Client Sample ID: GAC**

**Lab Sample ID: 720-73698-1**

No Detections.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

**Client Sample ID: GAC**

Date Collected: 08/01/16 08:20  
Date Received: 08/01/16 16:42

**Lab Sample ID: 720-73698-1**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			08/03/16 02:00	1
Acetone	ND		50		ug/L			08/03/16 02:00	1
Benzene	ND		0.50		ug/L			08/03/16 02:00	1
Dichlorobromomethane	ND		0.50		ug/L			08/03/16 02:00	1
Bromobenzene	ND		1.0		ug/L			08/03/16 02:00	1
Chlorobromomethane	ND		1.0		ug/L			08/03/16 02:00	1
Bromoform	ND		1.0		ug/L			08/03/16 02:00	1
Bromomethane	ND		1.0		ug/L			08/03/16 02:00	1
2-Butanone (MEK)	ND		50		ug/L			08/03/16 02:00	1
n-Butylbenzene	ND		1.0		ug/L			08/03/16 02:00	1
sec-Butylbenzene	ND		1.0		ug/L			08/03/16 02:00	1
tert-Butylbenzene	ND		1.0		ug/L			08/03/16 02:00	1
Carbon disulfide	ND		5.0		ug/L			08/03/16 02:00	1
Carbon tetrachloride	ND		0.50		ug/L			08/03/16 02:00	1
Chlorobenzene	ND		0.50		ug/L			08/03/16 02:00	1
Chloroethane	ND		1.0		ug/L			08/03/16 02:00	1
Chloroform	ND		1.0		ug/L			08/03/16 02:00	1
Chloromethane	ND		1.0		ug/L			08/03/16 02:00	1
2-Chlorotoluene	ND		0.50		ug/L			08/03/16 02:00	1
4-Chlorotoluene	ND		0.50		ug/L			08/03/16 02:00	1
Chlorodibromomethane	ND		0.50		ug/L			08/03/16 02:00	1
1,2-Dichlorobenzene	ND		0.50		ug/L			08/03/16 02:00	1
1,3-Dichlorobenzene	ND		0.50		ug/L			08/03/16 02:00	1
1,4-Dichlorobenzene	ND		0.50		ug/L			08/03/16 02:00	1
1,3-Dichloropropane	ND		1.0		ug/L			08/03/16 02:00	1
1,1-Dichloropropene	ND		0.50		ug/L			08/03/16 02:00	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			08/03/16 02:00	1
Ethylene Dibromide	ND		0.50		ug/L			08/03/16 02:00	1
Dibromomethane	ND		0.50		ug/L			08/03/16 02:00	1
Dichlorodifluoromethane	ND		0.50		ug/L			08/03/16 02:00	1
1,1-Dichloroethane	ND		0.50		ug/L			08/03/16 02:00	1
1,2-Dichloroethane	ND		0.50		ug/L			08/03/16 02:00	1
1,1-Dichloroethene	ND		0.50		ug/L			08/03/16 02:00	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			08/03/16 02:00	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			08/03/16 02:00	1
1,2-Dichloropropane	ND		0.50		ug/L			08/03/16 02:00	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/03/16 02:00	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			08/03/16 02:00	1
Ethylbenzene	ND		0.50		ug/L			08/03/16 02:00	1
Hexachlorobutadiene	ND		1.0		ug/L			08/03/16 02:00	1
2-Hexanone	ND		50		ug/L			08/03/16 02:00	1
Isopropylbenzene	ND		0.50		ug/L			08/03/16 02:00	1
4-Isopropyltoluene	ND		1.0		ug/L			08/03/16 02:00	1
Methylene Chloride	ND		5.0		ug/L			08/03/16 02:00	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/03/16 02:00	1
Naphthalene	ND		1.0		ug/L			08/03/16 02:00	1
N-Propylbenzene	ND		1.0		ug/L			08/03/16 02:00	1
Styrene	ND		0.50		ug/L			08/03/16 02:00	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			08/03/16 02:00	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

**Client Sample ID: GAC**

**Lab Sample ID: 720-73698-1**

Date Collected: 08/01/16 08:20

Matrix: Water

Date Received: 08/01/16 16:42

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L		08/03/16 02:00		1
Tetrachloroethene	ND		0.50		ug/L		08/03/16 02:00		1
Toluene	ND		0.50		ug/L		08/03/16 02:00		1
1,2,3-Trichlorobenzene	ND		1.0		ug/L		08/03/16 02:00		1
1,2,4-Trichlorobenzene	ND		1.0		ug/L		08/03/16 02:00		1
1,1,1-Trichloroethane	ND		0.50		ug/L		08/03/16 02:00		1
1,1,2-Trichloroethane	ND		0.50		ug/L		08/03/16 02:00		1
Trichloroethene	ND		0.50		ug/L		08/03/16 02:00		1
Trichlorofluoromethane	ND		1.0		ug/L		08/03/16 02:00		1
1,2,3-Trichloropropane	ND		0.50		ug/L		08/03/16 02:00		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L		08/03/16 02:00		1
1,2,4-Trimethylbenzene	ND		0.50		ug/L		08/03/16 02:00		1
1,3,5-Trimethylbenzene	ND		0.50		ug/L		08/03/16 02:00		1
Vinyl acetate	ND		10		ug/L		08/03/16 02:00		1
Vinyl chloride	ND		0.50		ug/L		08/03/16 02:00		1
Xylenes, Total	ND		1.0		ug/L		08/03/16 02:00		1
2,2-Dichloropropane	ND		0.50		ug/L		08/03/16 02:00		1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L		08/03/16 02:00		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		67 - 130				08/03/16 02:00		1
1,2-Dichloroethane-d4 (Surr)	105		72 - 130				08/03/16 02:00		1
Toluene-d8 (Surr)	96		70 - 130				08/03/16 02:00		1

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID: MB 720-207010/4**

**Matrix: Water**

**Analysis Batch: 207010**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			08/02/16 19:09	1
Acetone	ND		50		ug/L			08/02/16 19:09	1
Benzene	ND		0.50		ug/L			08/02/16 19:09	1
Dichlorobromomethane	ND		0.50		ug/L			08/02/16 19:09	1
Bromobenzene	ND		1.0		ug/L			08/02/16 19:09	1
Chlorobromomethane	ND		1.0		ug/L			08/02/16 19:09	1
Bromoform	ND		1.0		ug/L			08/02/16 19:09	1
Bromomethane	ND		1.0		ug/L			08/02/16 19:09	1
2-Butanone (MEK)	ND		50		ug/L			08/02/16 19:09	1
n-Butylbenzene	ND		1.0		ug/L			08/02/16 19:09	1
sec-Butylbenzene	ND		1.0		ug/L			08/02/16 19:09	1
tert-Butylbenzene	ND		1.0		ug/L			08/02/16 19:09	1
Carbon disulfide	ND		5.0		ug/L			08/02/16 19:09	1
Carbon tetrachloride	ND		0.50		ug/L			08/02/16 19:09	1
Chlorobenzene	ND		0.50		ug/L			08/02/16 19:09	1
Chloroethane	ND		1.0		ug/L			08/02/16 19:09	1
Chloroform	ND		1.0		ug/L			08/02/16 19:09	1
Chloromethane	ND		1.0		ug/L			08/02/16 19:09	1
2-Chlorotoluene	ND		0.50		ug/L			08/02/16 19:09	1
4-Chlorotoluene	ND		0.50		ug/L			08/02/16 19:09	1
Chlorodibromomethane	ND		0.50		ug/L			08/02/16 19:09	1
1,2-Dichlorobenzene	ND		0.50		ug/L			08/02/16 19:09	1
1,3-Dichlorobenzene	ND		0.50		ug/L			08/02/16 19:09	1
1,4-Dichlorobenzene	ND		0.50		ug/L			08/02/16 19:09	1
1,3-Dichloropropane	ND		1.0		ug/L			08/02/16 19:09	1
1,1-Dichloropropene	ND		0.50		ug/L			08/02/16 19:09	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			08/02/16 19:09	1
Ethylene Dibromide	ND		0.50		ug/L			08/02/16 19:09	1
Dibromomethane	ND		0.50		ug/L			08/02/16 19:09	1
Dichlorodifluoromethane	ND		0.50		ug/L			08/02/16 19:09	1
1,1-Dichloroethane	ND		0.50		ug/L			08/02/16 19:09	1
1,2-Dichloroethane	ND		0.50		ug/L			08/02/16 19:09	1
1,1-Dichloroethene	ND		0.50		ug/L			08/02/16 19:09	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			08/02/16 19:09	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			08/02/16 19:09	1
1,2-Dichloropropane	ND		0.50		ug/L			08/02/16 19:09	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			08/02/16 19:09	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			08/02/16 19:09	1
Ethylbenzene	ND		0.50		ug/L			08/02/16 19:09	1
Hexachlorobutadiene	ND		1.0		ug/L			08/02/16 19:09	1
2-Hexanone	ND		50		ug/L			08/02/16 19:09	1
Isopropylbenzene	ND		0.50		ug/L			08/02/16 19:09	1
4-Isopropyltoluene	ND		1.0		ug/L			08/02/16 19:09	1
Methylene Chloride	ND		5.0		ug/L			08/02/16 19:09	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			08/02/16 19:09	1
Naphthalene	ND		1.0		ug/L			08/02/16 19:09	1
N-Propylbenzene	ND		1.0		ug/L			08/02/16 19:09	1
Styrene	ND		0.50		ug/L			08/02/16 19:09	1

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-207010/4**

**Matrix: Water**

**Analysis Batch: 207010**

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			08/02/16 19:09	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			08/02/16 19:09	1
Tetrachloroethene	ND		0.50		ug/L			08/02/16 19:09	1
Toluene	ND		0.50		ug/L			08/02/16 19:09	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			08/02/16 19:09	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			08/02/16 19:09	1
1,1,1-Trichloroethane	ND		0.50		ug/L			08/02/16 19:09	1
1,1,2-Trichloroethane	ND		0.50		ug/L			08/02/16 19:09	1
Trichloroethene	ND		0.50		ug/L			08/02/16 19:09	1
Trichlorofluoromethane	ND		1.0		ug/L			08/02/16 19:09	1
1,2,3-Trichloropropane	ND		0.50		ug/L			08/02/16 19:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			08/02/16 19:09	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			08/02/16 19:09	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			08/02/16 19:09	1
Vinyl acetate	ND		10		ug/L			08/02/16 19:09	1
Vinyl chloride	ND		0.50		ug/L			08/02/16 19:09	1
Xylenes, Total	ND		1.0		ug/L			08/02/16 19:09	1
2,2-Dichloropropane	ND		0.50		ug/L			08/02/16 19:09	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			08/02/16 19:09	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	94		67 - 130		08/02/16 19:09	1
1,2-Dichloroethane-d4 (Surr)	105		72 - 130		08/02/16 19:09	1
Toluene-d8 (Surr)	97		70 - 130		08/02/16 19:09	1

**Lab Sample ID: LCS 720-207010/5**

**Matrix: Water**

**Analysis Batch: 207010**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Methyl tert-butyl ether	25.0	26.5		ug/L		106	62 - 130
Acetone	125	121		ug/L		97	26 - 180
Benzene	25.0	24.7		ug/L		99	79 - 130
Dichlorobromomethane	25.0	26.3		ug/L		105	70 - 130
Bromobenzene	25.0	24.2		ug/L		97	70 - 130
Chlorobromomethane	25.0	23.7		ug/L		95	70 - 130
Bromoform	25.0	25.1		ug/L		100	68 - 136
Bromomethane	25.0	24.6		ug/L		98	43 - 151
2-Butanone (MEK)	125	109		ug/L		87	54 - 130
n-Butylbenzene	25.0	26.1		ug/L		104	70 - 142
sec-Butylbenzene	25.0	26.1		ug/L		104	70 - 134
tert-Butylbenzene	25.0	25.3		ug/L		101	70 - 135
Carbon disulfide	25.0	20.9		ug/L		83	58 - 130
Carbon tetrachloride	25.0	28.2		ug/L		113	70 - 146
Chlorobenzene	25.0	24.1		ug/L		96	70 - 130
Chloroethane	25.0	25.6		ug/L		103	62 - 138
Chloroform	25.0	24.9		ug/L		100	70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-207010/5**  
**Matrix: Water**  
**Analysis Batch: 207010**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits
	Added	Result	Qualifier					
Chloromethane	25.0	25.1		ug/L		101	52 - 175	
2-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	
4-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	
Chlorodibromomethane	25.0	25.3		ug/L		101	70 - 145	
1,2-Dichlorobenzene	25.0	24.4		ug/L		97	70 - 130	
1,3-Dichlorobenzene	25.0	24.3		ug/L		97	70 - 130	
1,4-Dichlorobenzene	25.0	24.1		ug/L		97	70 - 130	
1,3-Dichloropropane	25.0	25.0		ug/L		100	70 - 130	
1,1-Dichloropropene	25.0	24.7		ug/L		99	70 - 130	
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		90	70 - 136	
Ethylene Dibromide	25.0	25.7		ug/L		103	70 - 130	
Dibromomethane	25.0	25.4		ug/L		101	70 - 130	
Dichlorodifluoromethane	25.0	23.2		ug/L		93	32 - 158	
1,1-Dichloroethane	25.0	24.6		ug/L		98	70 - 130	
1,2-Dichloroethane	25.0	25.8		ug/L		103	61 - 132	
1,1-Dichloroethene	25.0	20.9		ug/L		84	64 - 128	
cis-1,2-Dichloroethene	25.0	25.6		ug/L		103	70 - 130	
trans-1,2-Dichloroethene	25.0	24.0		ug/L		96	68 - 130	
1,2-Dichloropropane	25.0	26.5		ug/L		106	70 - 130	
cis-1,3-Dichloropropene	25.0	26.5		ug/L		106	70 - 130	
trans-1,3-Dichloropropene	25.0	25.9		ug/L		104	70 - 140	
Ethylbenzene	25.0	25.1		ug/L		100	80 - 120	
Hexachlorobutadiene	25.0	22.8		ug/L		91	70 - 130	
2-Hexanone	125	121		ug/L		97	60 - 164	
Isopropylbenzene	25.0	25.6		ug/L		103	70 - 130	
4-Isopropyltoluene	25.0	25.3		ug/L		101	70 - 130	
Methylene Chloride	25.0	23.9		ug/L		96	70 - 147	
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		97	58 - 130	
Naphthalene	25.0	22.3		ug/L		89	50 - 130	
N-Propylbenzene	25.0	26.6		ug/L		107	70 - 130	
Styrene	25.0	25.2		ug/L		101	70 - 130	
1,1,1,2-Tetrachloroethane	25.0	24.8		ug/L		99	70 - 130	
1,1,2,2-Tetrachloroethane	25.0	25.2		ug/L		101	70 - 130	
Tetrachloroethene	25.0	23.1		ug/L		92	70 - 130	
Toluene	25.0	24.4		ug/L		98	78 - 120	
1,2,3-Trichlorobenzene	25.0	21.1		ug/L		84	70 - 130	
1,2,4-Trichlorobenzene	25.0	22.8		ug/L		91	70 - 130	
1,1,1-Trichloroethane	25.0	26.6		ug/L		106	70 - 130	
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	70 - 130	
Trichloroethene	25.0	23.4		ug/L		93	70 - 130	
Trichlorofluoromethane	25.0	25.8		ug/L		103	66 - 132	
1,2,3-Trichloropropane	25.0	25.4		ug/L		101	70 - 130	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	20.8		ug/L		83	42 - 162	
1,2,4-Trimethylbenzene	25.0	25.7		ug/L		103	70 - 132	
1,3,5-Trimethylbenzene	25.0	25.9		ug/L		104	70 - 130	
Vinyl acetate	25.0	33.4		ug/L		133	43 - 163	
Vinyl chloride	25.0	24.5		ug/L		98	54 - 135	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-207010/5**

**Matrix: Water**

**Analysis Batch: 207010**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
m-Xylene & p-Xylene	25.0	24.8		ug/L		99	70 - 142		
o-Xylene	25.0	25.2		ug/L		101	70 - 130		
2,2-Dichloropropane	25.0	25.6		ug/L		103	70 - 140		

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCS 720-207010/7**

**Matrix: Water**

**Analysis Batch: 207010**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Gasoline Range Organics (GRO) -C5-C12	500	517		ug/L		103	71 - 125		

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCSD 720-207010/6**

**Matrix: Water**

**Analysis Batch: 207010**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	26.6		ug/L		107	62 - 130	1	20
Acetone	125	116		ug/L		93	26 - 180	4	30
Benzene	25.0	24.5		ug/L		98	79 - 130	0	20
Dichlorobromomethane	25.0	26.0		ug/L		104	70 - 130	1	20
Bromobenzene	25.0	24.2		ug/L		97	70 - 130	0	20
Chlorobromomethane	25.0	23.7		ug/L		95	70 - 130	0	20
Bromoform	25.0	24.7		ug/L		99	68 - 136	2	20
Bromomethane	25.0	24.7		ug/L		99	43 - 151	1	20
2-Butanone (MEK)	125	110		ug/L		88	54 - 130	1	20
n-Butylbenzene	25.0	26.2		ug/L		105	70 - 142	0	20
sec-Butylbenzene	25.0	26.2		ug/L		105	70 - 134	0	20
tert-Butylbenzene	25.0	25.1		ug/L		101	70 - 135	1	20
Carbon disulfide	25.0	21.0		ug/L		84	58 - 130	1	20
Carbon tetrachloride	25.0	27.9		ug/L		111	70 - 146	1	20
Chlorobenzene	25.0	23.4		ug/L		94	70 - 130	3	20
Chloroethane	25.0	25.8		ug/L		103	62 - 138	1	20
Chloroform	25.0	24.7		ug/L		99	70 - 130	1	20
Chloromethane	25.0	25.3		ug/L		101	52 - 175	1	20
2-Chlorotoluene	25.0	26.0		ug/L		104	70 - 130	0	20
4-Chlorotoluene	25.0	26.2		ug/L		105	70 - 130	1	20
Chlorodibromomethane	25.0	25.1		ug/L		100	70 - 145	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-207010/6

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

Analysis Batch: 207010

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	RPD Limit
	Added	Result	Qualifier				Limits	RPD		
1,2-Dichlorobenzene	25.0	24.4		ug/L	98	70 - 130		0	20	
1,3-Dichlorobenzene	25.0	24.4		ug/L	97	70 - 130		0	20	
1,4-Dichlorobenzene	25.0	24.2		ug/L	97	70 - 130		0	20	
1,3-Dichloropropane	25.0	25.1		ug/L	100	70 - 130		0	20	
1,1-Dichloropropene	25.0	24.3		ug/L	97	70 - 130		2	20	
1,2-Dibromo-3-Chloropropane	25.0	23.5		ug/L	94	70 - 136		4	20	
Ethylene Dibromide	25.0	25.6		ug/L	102	70 - 130		0	20	
Dibromomethane	25.0	25.3		ug/L	101	70 - 130		0	20	
Dichlorodifluoromethane	25.0	22.8		ug/L	91	32 - 158		2	20	
1,1-Dichloroethane	25.0	24.6		ug/L	98	70 - 130		0	20	
1,2-Dichloroethane	25.0	25.7		ug/L	103	61 - 132		0	20	
1,1-Dichloroethene	25.0	20.5		ug/L	82	64 - 128		2	20	
cis-1,2-Dichloroethene	25.0	25.7		ug/L	103	70 - 130		0	20	
trans-1,2-Dichloroethene	25.0	23.6		ug/L	95	68 - 130		1	20	
1,2-Dichloropropane	25.0	26.1		ug/L	105	70 - 130		1	20	
cis-1,3-Dichloropropene	25.0	26.3		ug/L	105	70 - 130		1	20	
trans-1,3-Dichloropropene	25.0	25.9		ug/L	104	70 - 140		0	20	
Ethylbenzene	25.0	24.4		ug/L	97	80 - 120		3	20	
Hexachlorobutadiene	25.0	22.5		ug/L	90	70 - 130		1	20	
2-Hexanone	125	123		ug/L	98	60 - 164		2	20	
Isopropylbenzene	25.0	24.9		ug/L	100	70 - 130		3	20	
4-Isopropyltoluene	25.0	25.3		ug/L	101	70 - 130		0	20	
Methylene Chloride	25.0	24.1		ug/L	96	70 - 147		1	20	
4-Methyl-2-pentanone (MIBK)	125	125		ug/L	100	58 - 130		3	20	
Naphthalene	25.0	22.9		ug/L	92	50 - 130		3	20	
N-Propylbenzene	25.0	26.7		ug/L	107	70 - 130		0	20	
Styrene	25.0	24.7		ug/L	99	70 - 130		2	20	
1,1,1,2-Tetrachloroethane	25.0	23.9		ug/L	96	70 - 130		4	20	
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L	104	70 - 130		3	20	
Tetrachloroethene	25.0	22.8		ug/L	91	70 - 130		1	20	
Toluene	25.0	23.6		ug/L	94	78 - 120		3	20	
1,2,3-Trichlorobenzene	25.0	21.1		ug/L	85	70 - 130		0	20	
1,2,4-Trichlorobenzene	25.0	22.8		ug/L	91	70 - 130		0	20	
1,1,1-Trichloroethane	25.0	26.6		ug/L	106	70 - 130		0	20	
1,1,2-Trichloroethane	25.0	25.5		ug/L	102	70 - 130		0	20	
Trichloroethene	25.0	23.0		ug/L	92	70 - 130		2	20	
Trichlorofluoromethane	25.0	25.9		ug/L	103	66 - 132		0	20	
1,2,3-Trichloropropane	25.0	25.6		ug/L	102	70 - 130		1	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	20.9		ug/L	83	42 - 162		0	20	
1,2,4-Trimethylbenzene	25.0	25.9		ug/L	104	70 - 132		1	20	
1,3,5-Trimethylbenzene	25.0	26.1		ug/L	104	70 - 130		1	20	
Vinyl acetate	25.0	34.1		ug/L	136	43 - 163		2	20	
Vinyl chloride	25.0	24.4		ug/L	98	54 - 135		0	20	
m-Xylene & p-Xylene	25.0	24.2		ug/L	97	70 - 142		2	20	
o-Xylene	25.0	24.6		ug/L	98	70 - 130		2	20	
2,2-Dichloropropane	25.0	25.6		ug/L	102	70 - 140		0	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-207010/6**

**Matrix: Water**

**Analysis Batch: 207010**

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	102		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: LCSD 720-207010/8**

**Matrix: Water**

**Analysis Batch: 207010**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
Gasoline Range Organics (GRO) -C5-C12	500	505		ug/L	101	71 - 125	2

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		72 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: 720-73698-1 MS**

**Matrix: Water**

**Analysis Batch: 207010**

**Client Sample ID: GAC**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.
								Limits
Methyl tert-butyl ether	ND		25.0	27.2		ug/L	109	60 - 138
Acetone	ND		125	109		ug/L	87	60 - 140
Benzene	ND		25.0	25.0		ug/L	100	60 - 140
Dichlorobromomethane	ND		25.0	26.8		ug/L	107	60 - 140
Bromobenzene	ND		25.0	24.5		ug/L	98	60 - 140
Chlorobromomethane	ND		25.0	24.3		ug/L	97	60 - 140
Bromoform	ND		25.0	26.5		ug/L	106	56 - 140
Bromomethane	ND		25.0	24.5		ug/L	98	23 - 140
2-Butanone (MEK)	ND		125	114		ug/L	91	60 - 140
n-Butylbenzene	ND		25.0	25.7		ug/L	103	60 - 140
sec-Butylbenzene	ND		25.0	26.2		ug/L	105	60 - 140
tert-Butylbenzene	ND		25.0	25.4		ug/L	102	60 - 140
Carbon disulfide	ND		25.0	21.4		ug/L	85	38 - 140
Carbon tetrachloride	ND		25.0	28.6		ug/L	114	60 - 140
Chlorobenzene	ND		25.0	24.3		ug/L	97	60 - 140
Chloroethane	ND		25.0	26.3		ug/L	105	51 - 140
Chloroform	ND		25.0	25.1		ug/L	100	60 - 140
Chloromethane	ND		25.0	26.2		ug/L	105	52 - 140
2-Chlorotoluene	ND		25.0	26.0		ug/L	104	60 - 140
4-Chlorotoluene	ND		25.0	26.0		ug/L	104	60 - 140
Chlorodibromomethane	ND		25.0	25.9		ug/L	104	60 - 140
1,2-Dichlorobenzene	ND		25.0	25.2		ug/L	101	60 - 140
1,3-Dichlorobenzene	ND		25.0	24.5		ug/L	98	60 - 140
1,4-Dichlorobenzene	ND		25.0	24.4		ug/L	97	60 - 140
1,3-Dichloropropane	ND		25.0	25.9		ug/L	103	60 - 140
1,1-Dichloropropene	ND		25.0	24.5		ug/L	98	60 - 140

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-73698-1 MS**

**Matrix: Water**

**Analysis Batch: 207010**

**Client Sample ID: GAC**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits	
	Result	Qualifier	Added	Result	Qualifier						
1,2-Dibromo-3-Chloropropane	ND		25.0	24.3		ug/L		97	60 - 140		
Ethylene Dibromide	ND		25.0	26.3		ug/L		105	60 - 140		
Dibromomethane	ND		25.0	26.1		ug/L		104	60 - 140		
Dichlorodifluoromethane	ND		25.0	23.7		ug/L		95	38 - 140		
1,1-Dichloroethane	ND		25.0	25.1		ug/L		100	60 - 140		
1,2-Dichloroethane	ND		25.0	26.5		ug/L		106	60 - 140		
1,1-Dichloroethene	ND		25.0	20.7		ug/L		83	60 - 140		
cis-1,2-Dichloroethene	ND		25.0	26.3		ug/L		105	60 - 140		
trans-1,2-Dichloroethene	ND		25.0	24.0		ug/L		96	60 - 140		
1,2-Dichloropropane	ND		25.0	26.9		ug/L		108	60 - 140		
cis-1,3-Dichloropropene	ND		25.0	26.9		ug/L		108	60 - 140		
trans-1,3-Dichloropropene	ND		25.0	26.2		ug/L		105	60 - 140		
Ethylbenzene	ND		25.0	25.2		ug/L		101	60 - 140		
Hexachlorobutadiene	ND		25.0	22.6		ug/L		90	60 - 140		
2-Hexanone	ND		125	126		ug/L		101	60 - 140		
Isopropylbenzene	ND		25.0	25.7		ug/L		103	60 - 140		
4-Isopropyltoluene	ND		25.0	25.0		ug/L		100	60 - 140		
Methylene Chloride	ND		25.0	24.2		ug/L		97	40 - 140		
4-Methyl-2-pentanone (MIBK)	ND		125	128		ug/L		102	58 - 130		
Naphthalene	ND		25.0	23.3		ug/L		92	56 - 140		
N-Propylbenzene	ND		25.0	26.6		ug/L		107	60 - 140		
Styrene	ND		25.0	25.5		ug/L		102	60 - 140		
1,1,1,2-Tetrachloroethane	ND		25.0	25.5		ug/L		102	60 - 140		
1,1,2,2-Tetrachloroethane	ND		25.0	26.7		ug/L		107	60 - 140		
Tetrachloroethene	ND		25.0	22.5		ug/L		90	60 - 140		
Toluene	ND		25.0	24.7		ug/L		99	60 - 140		
1,2,3-Trichlorobenzene	ND		25.0	21.2		ug/L		85	60 - 140		
1,2,4-Trichlorobenzene	ND		25.0	22.6		ug/L		90	60 - 140		
1,1,1-Trichloroethane	ND		25.0	27.8		ug/L		111	60 - 140		
1,1,2-Trichloroethane	ND		25.0	26.3		ug/L		105	60 - 140		
Trichloroethene	ND		25.0	23.4		ug/L		94	60 - 140		
Trichlorofluoromethane	ND		25.0	26.3		ug/L		105	60 - 140		
1,2,3-Trichloropropane	ND		25.0	26.6		ug/L		106	60 - 140		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	21.5		ug/L		86	60 - 140		
1,2,4-Trimethylbenzene	ND		25.0	25.7		ug/L		103	60 - 140		
1,3,5-Trimethylbenzene	ND		25.0	25.8		ug/L		103	60 - 140		
Vinyl acetate	ND		25.0	34.8		ug/L		139	40 - 140		
Vinyl chloride	ND		25.0	24.9		ug/L		100	58 - 140		
m-Xylene & p-Xylene	ND		25.0	25.1		ug/L		100	60 - 140		
o-Xylene	ND		25.0	25.5		ug/L		102	60 - 140		
2,2-Dichloropropane	ND		25.0	25.1		ug/L		100	60 - 140		
<i>Surrogate</i>		<i>MS</i>	<i>MS</i>								
		%Recovery	Qualifier								
4-Bromofluorobenzene		96		67 - 130							
1,2-Dichloroethane-d4 (Surr)		104		72 - 130							
Toluene-d8 (Surr)		98		70 - 130							

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-73698-1 MSD**

**Matrix: Water**

**Analysis Batch: 207010**

**Client Sample ID: GAC**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		25.0	26.9		ug/L		108	60 - 138	1	20
Acetone	ND		125	106		ug/L		85	60 - 140	3	20
Benzene	ND		25.0	24.8		ug/L		99	60 - 140	1	20
Dichlorobromomethane	ND		25.0	26.6		ug/L		106	60 - 140	1	20
Bromobenzene	ND		25.0	25.0		ug/L		100	60 - 140	2	20
Chlorobromomethane	ND		25.0	23.7		ug/L		95	60 - 140	2	20
Bromoform	ND		25.0	25.1		ug/L		100	56 - 140	5	20
Bromomethane	ND		25.0	24.4		ug/L		98	23 - 140	0	20
2-Butanone (MEK)	ND		125	109		ug/L		87	60 - 140	4	20
n-Butylbenzene	ND		25.0	25.6		ug/L		102	60 - 140	1	20
sec-Butylbenzene	ND		25.0	26.5		ug/L		106	60 - 140	1	20
tert-Butylbenzene	ND		25.0	25.6		ug/L		103	60 - 140	1	20
Carbon disulfide	ND		25.0	21.3		ug/L		85	38 - 140	1	20
Carbon tetrachloride	ND		25.0	28.4		ug/L		114	60 - 140	1	20
Chlorobenzene	ND		25.0	23.5		ug/L		94	60 - 140	4	20
Chloroethane	ND		25.0	26.0		ug/L		104	51 - 140	1	20
Chloroform	ND		25.0	25.0		ug/L		100	60 - 140	0	20
Chloromethane	ND		25.0	25.9		ug/L		104	52 - 140	1	20
2-Chlorotoluene	ND		25.0	26.2		ug/L		105	60 - 140	1	20
4-Chlorotoluene	ND		25.0	26.1		ug/L		104	60 - 140	0	20
Chlorodibromomethane	ND		25.0	25.5		ug/L		102	60 - 140	2	20
1,2-Dichlorobenzene	ND		25.0	24.9		ug/L		100	60 - 140	1	20
1,3-Dichlorobenzene	ND		25.0	24.4		ug/L		98	60 - 140	1	20
1,4-Dichlorobenzene	ND		25.0	24.3		ug/L		97	60 - 140	0	20
1,3-Dichloropropane	ND		25.0	25.4		ug/L		101	60 - 140	2	20
1,1-Dichloropropene	ND		25.0	24.6		ug/L		99	60 - 140	0	20
1,2-Dibromo-3-Chloropropane	ND		25.0	23.8		ug/L		95	60 - 140	2	20
Ethylene Dibromide	ND		25.0	25.7		ug/L		103	60 - 140	2	20
Dibromomethane	ND		25.0	25.7		ug/L		103	60 - 140	1	20
Dichlorodifluoromethane	ND		25.0	23.6		ug/L		94	38 - 140	0	20
1,1-Dichloroethane	ND		25.0	25.1		ug/L		101	60 - 140	0	20
1,2-Dichloroethane	ND		25.0	26.2		ug/L		105	60 - 140	1	20
1,1-Dichloroethene	ND		25.0	20.5		ug/L		82	60 - 140	1	20
cis-1,2-Dichloroethene	ND		25.0	25.8		ug/L		103	60 - 140	2	20
trans-1,2-Dichloroethene	ND		25.0	23.8		ug/L		95	60 - 140	1	20
1,2-Dichloropropane	ND		25.0	26.5		ug/L		106	60 - 140	2	20
cis-1,3-Dichloropropene	ND		25.0	26.4		ug/L		105	60 - 140	2	20
trans-1,3-Dichloropropene	ND		25.0	26.0		ug/L		104	60 - 140	1	20
Ethylbenzene	ND		25.0	24.4		ug/L		97	60 - 140	4	20
Hexachlorobutadiene	ND		25.0	22.5		ug/L		90	60 - 140	0	20
2-Hexanone	ND		125	122		ug/L		98	60 - 140	3	20
Isopropylbenzene	ND		25.0	24.8		ug/L		99	60 - 140	4	20
4-Isopropyltoluene	ND		25.0	25.3		ug/L		101	60 - 140	1	20
Methylene Chloride	ND		25.0	24.0		ug/L		96	40 - 140	1	20
4-Methyl-2-pentanone (MIBK)	ND		125	123		ug/L		99	58 - 130	4	20
Naphthalene	ND		25.0	23.4		ug/L		93	56 - 140	0	20
N-Propylbenzene	ND		25.0	26.8		ug/L		107	60 - 140	1	20
Styrene	ND		25.0	24.3		ug/L		97	60 - 140	5	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-73698-1 MSD

Matrix: Water

Analysis Batch: 207010

Client Sample ID: GAC  
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
1,1,1,2-Tetrachloroethane	ND		25.0	24.3		ug/L		97	60 - 140	5	20	
1,1,2,2-Tetrachloroethane	ND		25.0	26.4		ug/L		106	60 - 140	1	20	
Tetrachloroethene	ND		25.0	22.0		ug/L		88	60 - 140	2	20	
Toluene	ND		25.0	23.8		ug/L		95	60 - 140	4	20	
1,2,3-Trichlorobenzene	ND		25.0	21.2		ug/L		85	60 - 140	0	20	
1,2,4-Trichlorobenzene	ND		25.0	22.4		ug/L		90	60 - 140	1	20	
1,1,1-Trichloroethane	ND		25.0	27.6		ug/L		111	60 - 140	1	20	
1,1,2-Trichloroethane	ND		25.0	25.7		ug/L		103	60 - 140	2	20	
Trichloroethene	ND		25.0	23.0		ug/L		92	60 - 140	2	20	
Trichlorofluoromethane	ND		25.0	26.0		ug/L		104	60 - 140	1	20	
1,2,3-Trichloropropane	ND		25.0	26.2		ug/L		105	60 - 140	1	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	20.9		ug/L		84	60 - 140	3	20	
ne												
1,2,4-Trimethylbenzene	ND		25.0	25.9		ug/L		104	60 - 140	1	20	
1,3,5-Trimethylbenzene	ND		25.0	26.1		ug/L		104	60 - 140	1	20	
Vinyl acetate	ND		25.0	34.2		ug/L		137	40 - 140	2	20	
Vinyl chloride	ND		25.0	24.5		ug/L		98	58 - 140	1	20	
m-Xylene & p-Xylene	ND		25.0	24.0		ug/L		96	60 - 140	4	20	
o-Xylene	ND		25.0	24.5		ug/L		98	60 - 140	4	20	
2,2-Dichloropropane	ND		25.0	25.7		ug/L		103	60 - 140	2	20	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	93		67 - 130
1,2-Dichloroethane-d4 (Surr)	104		72 - 130
Toluene-d8 (Surr)	98		70 - 130

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## GC/MS VOA

### Analysis Batch: 207010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-73698-1	GAC	Total/NA	Water	8260B/CA_LUFT MS	5
MB 720-207010/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	6
LCS 720-207010/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	7
LCS 720-207010/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	8
LCSD 720-207010/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	9
LCSD 720-207010/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	10
720-73698-1 MS	GAC	Total/NA	Water	8260B/CA_LUFT MS	11
720-73698-1 MSD	GAC	Total/NA	Water	8260B/CA_LUFT MS	12

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

**Client Sample ID: GAC**

**Date Collected: 08/01/16 08:20**

**Date Received: 08/01/16 16:42**

**Lab Sample ID: 720-73698-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	207010	08/03/16 02:00	JRM	TAL PLS

**Laboratory References:**

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

TestAmerica Pleasanton

# Certification Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

## Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18
Analysis Method	Prep Method	Matrix	Analyte	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

## Method Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL PLS

**Protocol References:**

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

**Laboratory References:**

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

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14

## Sample Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-73698-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-73698-1	GAC	Water	08/01/16 08:20	08/01/16 16:42

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-73698

Reference #: 170149

TESTAMERICA Pleasanton Chain of Custody  
1220 Quarry Lane • Pleasanton CA 94566-4756  
Phone: (925) 484-1919 • Fax: (925) 600-3002

Date 05/01/14 Page 1 of 1

8/4/2016

Report To:

Attn: Peter Sims

Company: Nine & Moore

Address: 1950 Webster St, Ste 400

Email: PSims@NineandMoore.com

Bill To:

P.Sims

Sampled By:

AOB

Attr: P.Sims

Phone: 925-433-0000

Sample ID:

Date:

Time:

Mat:

Preserv:

CASE

1001

0000

HCL

X



720-73698 Chain of Custody

Volatile Organics GC/MS (VOCs)  
EPA 8260B + TEPH<sup>+</sup>  
HVOCS by □ EPA 8260B

EPA 8260B: □ Gas □ BTEX  
□ 5 Oxygenates □ DCA, EDB □ Ethanol

TEPH EPA 8015B □ Silica Gel  
□ Diesel □ Motor Oil □ Other

SemiVolatile Organics GC/MS  
□ EPA 8270C

PNA/PAH's by □ 8270C  
□ 8270C SIM

Oil and Grease □ Petroleum  
(EPA 1664/9071) □ Total

Pesticides □ EPA 8081  
PCBs □ EPA 8082

CAM17 Metals  
(EPA 6010/7470/7471)

Metals: □ 6010B □ 2007  
□ Lead □ LUFT □ RCRA □ Other  
+ potassium, manganese

Metals: □ 6020 □ 200.8  
(ICP-MS):

□ W.E.T (STLC)  
□ W.E.T (DI) □ TCLP

Hex. Chrom by □ EPA 7196  
□ or EPA 7199

pH □ 9040  
□ SM4500

□ Spec. Cond. □ Alkalinity  
□ TSS □ SS □ TDS

Anions : □ Cl □ SO<sub>4</sub><sup>2-</sup> □ NO<sub>3</sub><sup>-</sup> □ F  
□ Br □ NO<sub>2</sub><sup>-</sup> □ PO<sub>4</sub><sup>3-</sup>  
3000 ppm NaCl

□ Perchlorate by EPA 314.0

COD □ EPA 410.4 □ SM5220D  
□ Turbidity

Iron  
Iron by calc

Number of Containers

Project Info. Sample Receipt

# of Containers:

1

Relinquished by:

Peter Sims

Signature

Time

Printed Name

Date

Company

Nine & Moore

Printed Name

Date

Company

Nine & Moore

Printed Name

Date

Company

Project Name#: 1001-0001

Churn

PO#:

Temp: 50°C

Credit Card Y/N:

If yes, please call with payment information ASAP

T 10 Day 5 Day 4 Day 3 Day 2 Day 1 Day Other:

Printed Name

Date

Company

Printed Name

Date

Report:  Routine  Level 3  Level 4  FEDD  EDF

Special Instructions / Comments:

Global ID

See Terms and Conditions on reverse

## Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-73698-1

**Login Number:** 73698

**List Source:** TestAmerica Pleasanton

**List Number:** 1

**Creator:** Arauz, Dennis

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

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-74257-1

Client Project/Site: Chun

For:

Ninno & Moore

1956 Webster Street

Suite 400

Oakland, California 94612

Attn: Mr. Peter D. Sims



Authorized for release by:

9/6/2016 3:53:51 PM

Paloma Duong, Project Manager I

(925)484-1919

[paloma.duong@testamericainc.com](mailto:paloma.duong@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?

Ask  
The  
Expert

Visit us at:

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Definitions/Glossary .....	3
Case Narrative .....	4
Detection Summary .....	5
Client Sample Results .....	6
QC Sample Results .....	12
QC Association Summary .....	21
Lab Chronicle .....	22
Certification Summary .....	23
Method Summary .....	24
Sample Summary .....	25
Chain of Custody .....	26
Receipt Checklists .....	27

## Definitions/Glossary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# Case Narrative

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

**Job ID: 720-74257-1**

**Laboratory: TestAmerica Pleasanton**

## Narrative

### Job Narrative 720-74257-1

## Comments

No additional comments.

## Receipt

The samples were received on 9/1/2016 12:22 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

## GC/MS VOA

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

## Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

### Client Sample ID: GAC

### Lab Sample ID: 720-74257-1

No Detections.

### Client Sample ID: INF

### Lab Sample ID: 720-74257-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	30		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Naphthalene	12		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Toluene	11		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,2,4-Trimethylbenzene	5.5		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,3,5-Trimethylbenzene	7.2		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Xylenes, Total	79		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	330		50		ug/L	1		8260B/CA_LUFT	Total/NA

### Client Sample ID: EFF

### Lab Sample ID: 720-74257-3

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

**Client Sample ID: GAC**

Date Collected: 08/31/16 16:45  
Date Received: 09/01/16 12:22

**Lab Sample ID: 720-74257-1**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/02/16 17:44	1
Acetone	ND		50		ug/L			09/02/16 17:44	1
Benzene	ND		0.50		ug/L			09/02/16 17:44	1
Dichlorobromomethane	ND		0.50		ug/L			09/02/16 17:44	1
Bromobenzene	ND		1.0		ug/L			09/02/16 17:44	1
Chlorobromomethane	ND		1.0		ug/L			09/02/16 17:44	1
Bromoform	ND		1.0		ug/L			09/02/16 17:44	1
Bromomethane	ND		1.0		ug/L			09/02/16 17:44	1
2-Butanone (MEK)	ND		50		ug/L			09/02/16 17:44	1
n-Butylbenzene	ND		1.0		ug/L			09/02/16 17:44	1
sec-Butylbenzene	ND		1.0		ug/L			09/02/16 17:44	1
tert-Butylbenzene	ND		1.0		ug/L			09/02/16 17:44	1
Carbon disulfide	ND		5.0		ug/L			09/02/16 17:44	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 17:44	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 17:44	1
Chloroethane	ND		1.0		ug/L			09/02/16 17:44	1
Chloroform	ND		1.0		ug/L			09/02/16 17:44	1
Chloromethane	ND		1.0		ug/L			09/02/16 17:44	1
2-Chlorotoluene	ND		0.50		ug/L			09/02/16 17:44	1
4-Chlorotoluene	ND		0.50		ug/L			09/02/16 17:44	1
Chlorodibromomethane	ND		0.50		ug/L			09/02/16 17:44	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 17:44	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 17:44	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 17:44	1
1,3-Dichloropropane	ND		1.0		ug/L			09/02/16 17:44	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 17:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/02/16 17:44	1
Ethylene Dibromide	ND		0.50		ug/L			09/02/16 17:44	1
Dibromomethane	ND		0.50		ug/L			09/02/16 17:44	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 17:44	1
1,1-Dichloroethane	ND		0.50		ug/L			09/02/16 17:44	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 17:44	1
1,1-Dichloroethene	ND		0.50		ug/L			09/02/16 17:44	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 17:44	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 17:44	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 17:44	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 17:44	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 17:44	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 17:44	1
Hexachlorobutadiene	ND		1.0		ug/L			09/02/16 17:44	1
2-Hexanone	ND		50		ug/L			09/02/16 17:44	1
Isopropylbenzene	ND		0.50		ug/L			09/02/16 17:44	1
4-Isopropyltoluene	ND		1.0		ug/L			09/02/16 17:44	1
Methylene Chloride	ND		5.0		ug/L			09/02/16 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			09/02/16 17:44	1
Naphthalene	ND		1.0		ug/L			09/02/16 17:44	1
N-Propylbenzene	ND		1.0		ug/L			09/02/16 17:44	1
Styrene	ND		0.50		ug/L			09/02/16 17:44	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 17:44	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Client Sample ID: GAC

Date Collected: 08/31/16 16:45  
Date Received: 09/01/16 12:22

**Lab Sample ID: 720-74257-1**

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L		09/02/16 17:44		1
Tetrachloroethene	ND		0.50		ug/L		09/02/16 17:44		1
Toluene	ND		0.50		ug/L		09/02/16 17:44		1
1,2,3-Trichlorobenzene	ND		1.0		ug/L		09/02/16 17:44		1
1,2,4-Trichlorobenzene	ND		1.0		ug/L		09/02/16 17:44		1
1,1,1-Trichloroethane	ND		0.50		ug/L		09/02/16 17:44		1
1,1,2-Trichloroethane	ND		0.50		ug/L		09/02/16 17:44		1
Trichloroethene	ND		0.50		ug/L		09/02/16 17:44		1
Trichlorofluoromethane	ND		1.0		ug/L		09/02/16 17:44		1
1,2,3-Trichloropropane	ND		0.50		ug/L		09/02/16 17:44		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L		09/02/16 17:44		1
1,2,4-Trimethylbenzene	ND		0.50		ug/L		09/02/16 17:44		1
1,3,5-Trimethylbenzene	ND		0.50		ug/L		09/02/16 17:44		1
Vinyl acetate	ND		10		ug/L		09/02/16 17:44		1
Vinyl chloride	ND		0.50		ug/L		09/02/16 17:44		1
Xylenes, Total	ND		1.0		ug/L		09/02/16 17:44		1
2,2-Dichloropropane	ND		0.50		ug/L		09/02/16 17:44		1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L		09/02/16 17:44		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		67 - 130				09/02/16 17:44		1
1,2-Dichloroethane-d4 (Surr)	102		72 - 130				09/02/16 17:44		1
Toluene-d8 (Surr)	102		70 - 130				09/02/16 17:44		1

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Client Sample ID: INF

Date Collected: 08/31/16 16:45  
Date Received: 09/01/16 12:22

## Lab Sample ID: 720-74257-2

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/02/16 17:15	1
Acetone	ND		50		ug/L			09/02/16 17:15	1
<b>Benzene</b>	<b>30</b>		0.50		ug/L			09/02/16 17:15	1
Dichlorobromomethane	ND		0.50		ug/L			09/02/16 17:15	1
Bromobenzene	ND		1.0		ug/L			09/02/16 17:15	1
Chlorobromomethane	ND		1.0		ug/L			09/02/16 17:15	1
Bromoform	ND		1.0		ug/L			09/02/16 17:15	1
Bromomethane	ND		1.0		ug/L			09/02/16 17:15	1
2-Butanone (MEK)	ND		50		ug/L			09/02/16 17:15	1
n-Butylbenzene	ND		1.0		ug/L			09/02/16 17:15	1
sec-Butylbenzene	ND		1.0		ug/L			09/02/16 17:15	1
tert-Butylbenzene	ND		1.0		ug/L			09/02/16 17:15	1
Carbon disulfide	ND		5.0		ug/L			09/02/16 17:15	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 17:15	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 17:15	1
Chloroethane	ND		1.0		ug/L			09/02/16 17:15	1
Chloroform	ND		1.0		ug/L			09/02/16 17:15	1
Chloromethane	ND		1.0		ug/L			09/02/16 17:15	1
2-Chlorotoluene	ND		0.50		ug/L			09/02/16 17:15	1
4-Chlorotoluene	ND		0.50		ug/L			09/02/16 17:15	1
Chlorodibromomethane	ND		0.50		ug/L			09/02/16 17:15	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 17:15	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 17:15	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 17:15	1
1,3-Dichloropropane	ND		1.0		ug/L			09/02/16 17:15	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 17:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/02/16 17:15	1
Ethylene Dibromide	ND		0.50		ug/L			09/02/16 17:15	1
Dibromomethane	ND		0.50		ug/L			09/02/16 17:15	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 17:15	1
1,1-Dichloroethane	ND		0.50		ug/L			09/02/16 17:15	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 17:15	1
1,1-Dichloroethene	ND		0.50		ug/L			09/02/16 17:15	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 17:15	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 17:15	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 17:15	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 17:15	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 17:15	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 17:15	1
Hexachlorobutadiene	ND		1.0		ug/L			09/02/16 17:15	1
2-Hexanone	ND		50		ug/L			09/02/16 17:15	1
Isopropylbenzene	ND		0.50		ug/L			09/02/16 17:15	1
4-Isopropyltoluene	ND		1.0		ug/L			09/02/16 17:15	1
Methylene Chloride	ND		5.0		ug/L			09/02/16 17:15	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			09/02/16 17:15	1
<b>Naphthalene</b>	<b>12</b>		1.0		ug/L			09/02/16 17:15	1
N-Propylbenzene	ND		1.0		ug/L			09/02/16 17:15	1
Styrene	ND		0.50		ug/L			09/02/16 17:15	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 17:15	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

**Client Sample ID: INF**

**Date Collected: 08/31/16 16:45**

**Date Received: 09/01/16 12:22**

**Lab Sample ID: 720-74257-2**

**Matrix: Water**

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L		09/02/16 17:15		1
Tetrachloroethene	ND		0.50		ug/L		09/02/16 17:15		1
<b>Toluene</b>	<b>11</b>		0.50		ug/L		09/02/16 17:15		1
1,2,3-Trichlorobenzene	ND		1.0		ug/L		09/02/16 17:15		1
1,2,4-Trichlorobenzene	ND		1.0		ug/L		09/02/16 17:15		1
1,1,1-Trichloroethane	ND		0.50		ug/L		09/02/16 17:15		1
1,1,2-Trichloroethane	ND		0.50		ug/L		09/02/16 17:15		1
Trichloroethene	ND		0.50		ug/L		09/02/16 17:15		1
Trichlorofluoromethane	ND		1.0		ug/L		09/02/16 17:15		1
1,2,3-Trichloropropane	ND		0.50		ug/L		09/02/16 17:15		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L		09/02/16 17:15		1
<b>1,2,4-Trimethylbenzene</b>	<b>5.5</b>		0.50		ug/L		09/02/16 17:15		1
<b>1,3,5-Trimethylbenzene</b>	<b>7.2</b>		0.50		ug/L		09/02/16 17:15		1
Vinyl acetate	ND		10		ug/L		09/02/16 17:15		1
Vinyl chloride	ND		0.50		ug/L		09/02/16 17:15		1
<b>Xylenes, Total</b>	<b>79</b>		1.0		ug/L		09/02/16 17:15		1
2,2-Dichloropropane	ND		0.50		ug/L		09/02/16 17:15		1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>330</b>		50		ug/L		09/02/16 17:15		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	101		67 - 130				09/02/16 17:15		1
1,2-Dichloroethane-d4 (Surr)	101		72 - 130				09/02/16 17:15		1
Toluene-d8 (Surr)	103		70 - 130				09/02/16 17:15		1

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

**Client Sample ID: EFF**

Date Collected: 08/31/16 16:45

Date Received: 09/01/16 12:22

**Lab Sample ID: 720-74257-3**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/02/16 16:47	1
Acetone	ND		50		ug/L			09/02/16 16:47	1
Benzene	ND		0.50		ug/L			09/02/16 16:47	1
Dichlorobromomethane	ND		0.50		ug/L			09/02/16 16:47	1
Bromobenzene	ND		1.0		ug/L			09/02/16 16:47	1
Chlorobromomethane	ND		1.0		ug/L			09/02/16 16:47	1
Bromoform	ND		1.0		ug/L			09/02/16 16:47	1
Bromomethane	ND		1.0		ug/L			09/02/16 16:47	1
2-Butanone (MEK)	ND		50		ug/L			09/02/16 16:47	1
n-Butylbenzene	ND		1.0		ug/L			09/02/16 16:47	1
sec-Butylbenzene	ND		1.0		ug/L			09/02/16 16:47	1
tert-Butylbenzene	ND		1.0		ug/L			09/02/16 16:47	1
Carbon disulfide	ND		5.0		ug/L			09/02/16 16:47	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 16:47	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 16:47	1
Chloroethane	ND		1.0		ug/L			09/02/16 16:47	1
Chloroform	ND		1.0		ug/L			09/02/16 16:47	1
Chloromethane	ND		1.0		ug/L			09/02/16 16:47	1
2-Chlorotoluene	ND		0.50		ug/L			09/02/16 16:47	1
4-Chlorotoluene	ND		0.50		ug/L			09/02/16 16:47	1
Chlorodibromomethane	ND		0.50		ug/L			09/02/16 16:47	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 16:47	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 16:47	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 16:47	1
1,3-Dichloropropane	ND		1.0		ug/L			09/02/16 16:47	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 16:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/02/16 16:47	1
Ethylene Dibromide	ND		0.50		ug/L			09/02/16 16:47	1
Dibromomethane	ND		0.50		ug/L			09/02/16 16:47	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 16:47	1
1,1-Dichloroethane	ND		0.50		ug/L			09/02/16 16:47	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 16:47	1
1,1-Dichloroethene	ND		0.50		ug/L			09/02/16 16:47	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 16:47	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 16:47	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 16:47	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 16:47	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 16:47	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 16:47	1
Hexachlorobutadiene	ND		1.0		ug/L			09/02/16 16:47	1
2-Hexanone	ND		50		ug/L			09/02/16 16:47	1
Isopropylbenzene	ND		0.50		ug/L			09/02/16 16:47	1
4-Isopropyltoluene	ND		1.0		ug/L			09/02/16 16:47	1
Methylene Chloride	ND		5.0		ug/L			09/02/16 16:47	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			09/02/16 16:47	1
Naphthalene	ND		1.0		ug/L			09/02/16 16:47	1
N-Propylbenzene	ND		1.0		ug/L			09/02/16 16:47	1
Styrene	ND		0.50		ug/L			09/02/16 16:47	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			09/02/16 16:47	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

**Client Sample ID: EFF**

**Date Collected: 08/31/16 16:45**

**Date Received: 09/01/16 12:22**

**Lab Sample ID: 720-74257-3**

**Matrix: Water**

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L		09/02/16 16:47		1
Tetrachloroethene	ND		0.50		ug/L		09/02/16 16:47		1
Toluene	ND		0.50		ug/L		09/02/16 16:47		1
1,2,3-Trichlorobenzene	ND		1.0		ug/L		09/02/16 16:47		1
1,2,4-Trichlorobenzene	ND		1.0		ug/L		09/02/16 16:47		1
1,1,1-Trichloroethane	ND		0.50		ug/L		09/02/16 16:47		1
1,1,2-Trichloroethane	ND		0.50		ug/L		09/02/16 16:47		1
Trichloroethene	ND		0.50		ug/L		09/02/16 16:47		1
Trichlorofluoromethane	ND		1.0		ug/L		09/02/16 16:47		1
1,2,3-Trichloropropane	ND		0.50		ug/L		09/02/16 16:47		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L		09/02/16 16:47		1
1,2,4-Trimethylbenzene	ND		0.50		ug/L		09/02/16 16:47		1
1,3,5-Trimethylbenzene	ND		0.50		ug/L		09/02/16 16:47		1
Vinyl acetate	ND		10		ug/L		09/02/16 16:47		1
Vinyl chloride	ND		0.50		ug/L		09/02/16 16:47		1
Xylenes, Total	ND		1.0		ug/L		09/02/16 16:47		1
2,2-Dichloropropane	ND		0.50		ug/L		09/02/16 16:47		1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L		09/02/16 16:47		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		67 - 130				09/02/16 16:47		1
1,2-Dichloroethane-d4 (Surr)	102		72 - 130				09/02/16 16:47		1
Toluene-d8 (Surr)	101		70 - 130				09/02/16 16:47		1

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID: MB 720-208689/4**

**Matrix: Water**

**Analysis Batch: 208689**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			09/02/16 09:04	1
Acetone	ND		50		ug/L			09/02/16 09:04	1
Benzene	ND		0.50		ug/L			09/02/16 09:04	1
Dichlorobromomethane	ND		0.50		ug/L			09/02/16 09:04	1
Bromobenzene	ND		1.0		ug/L			09/02/16 09:04	1
Chlorobromomethane	ND		1.0		ug/L			09/02/16 09:04	1
Bromoform	ND		1.0		ug/L			09/02/16 09:04	1
Bromomethane	ND		1.0		ug/L			09/02/16 09:04	1
2-Butanone (MEK)	ND		50		ug/L			09/02/16 09:04	1
n-Butylbenzene	ND		1.0		ug/L			09/02/16 09:04	1
sec-Butylbenzene	ND		1.0		ug/L			09/02/16 09:04	1
tert-Butylbenzene	ND		1.0		ug/L			09/02/16 09:04	1
Carbon disulfide	ND		5.0		ug/L			09/02/16 09:04	1
Carbon tetrachloride	ND		0.50		ug/L			09/02/16 09:04	1
Chlorobenzene	ND		0.50		ug/L			09/02/16 09:04	1
Chloroethane	ND		1.0		ug/L			09/02/16 09:04	1
Chloroform	ND		1.0		ug/L			09/02/16 09:04	1
Chloromethane	ND		1.0		ug/L			09/02/16 09:04	1
2-Chlorotoluene	ND		0.50		ug/L			09/02/16 09:04	1
4-Chlorotoluene	ND		0.50		ug/L			09/02/16 09:04	1
Chlorodibromomethane	ND		0.50		ug/L			09/02/16 09:04	1
1,2-Dichlorobenzene	ND		0.50		ug/L			09/02/16 09:04	1
1,3-Dichlorobenzene	ND		0.50		ug/L			09/02/16 09:04	1
1,4-Dichlorobenzene	ND		0.50		ug/L			09/02/16 09:04	1
1,3-Dichloropropane	ND		1.0		ug/L			09/02/16 09:04	1
1,1-Dichloropropene	ND		0.50		ug/L			09/02/16 09:04	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			09/02/16 09:04	1
Ethylene Dibromide	ND		0.50		ug/L			09/02/16 09:04	1
Dibromomethane	ND		0.50		ug/L			09/02/16 09:04	1
Dichlorodifluoromethane	ND		0.50		ug/L			09/02/16 09:04	1
1,1-Dichloroethane	ND		0.50		ug/L			09/02/16 09:04	1
1,2-Dichloroethane	ND		0.50		ug/L			09/02/16 09:04	1
1,1-Dichloroethene	ND		0.50		ug/L			09/02/16 09:04	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 09:04	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			09/02/16 09:04	1
1,2-Dichloropropane	ND		0.50		ug/L			09/02/16 09:04	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 09:04	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			09/02/16 09:04	1
Ethylbenzene	ND		0.50		ug/L			09/02/16 09:04	1
Hexachlorobutadiene	ND		1.0		ug/L			09/02/16 09:04	1
2-Hexanone	ND		50		ug/L			09/02/16 09:04	1
Isopropylbenzene	ND		0.50		ug/L			09/02/16 09:04	1
4-Isopropyltoluene	ND		1.0		ug/L			09/02/16 09:04	1
Methylene Chloride	ND		5.0		ug/L			09/02/16 09:04	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			09/02/16 09:04	1
Naphthalene	ND		1.0		ug/L			09/02/16 09:04	1
N-Propylbenzene	ND		1.0		ug/L			09/02/16 09:04	1
Styrene	ND		0.50		ug/L			09/02/16 09:04	1

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-208689/4**

**Matrix: Water**

**Analysis Batch: 208689**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
1,1,1,2-Tetrachloroethane	ND				0.50		ug/L			09/02/16 09:04	1
1,1,2,2-Tetrachloroethane	ND				0.50		ug/L			09/02/16 09:04	1
Tetrachloroethene	ND				0.50		ug/L			09/02/16 09:04	1
Toluene	ND				0.50		ug/L			09/02/16 09:04	1
1,2,3-Trichlorobenzene	ND				1.0		ug/L			09/02/16 09:04	1
1,2,4-Trichlorobenzene	ND				1.0		ug/L			09/02/16 09:04	1
1,1,1-Trichloroethane	ND				0.50		ug/L			09/02/16 09:04	1
1,1,2-Trichloroethane	ND				0.50		ug/L			09/02/16 09:04	1
Trichloroethene	ND				0.50		ug/L			09/02/16 09:04	1
Trichlorofluoromethane	ND				1.0		ug/L			09/02/16 09:04	1
1,2,3-Trichloropropane	ND				0.50		ug/L			09/02/16 09:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND				0.50		ug/L			09/02/16 09:04	1
1,2,4-Trimethylbenzene	ND				0.50		ug/L			09/02/16 09:04	1
1,3,5-Trimethylbenzene	ND				0.50		ug/L			09/02/16 09:04	1
Vinyl acetate	ND				10		ug/L			09/02/16 09:04	1
Vinyl chloride	ND				0.50		ug/L			09/02/16 09:04	1
Xylenes, Total	ND				1.0		ug/L			09/02/16 09:04	1
2,2-Dichloropropane	ND				0.50		ug/L			09/02/16 09:04	1
Gasoline Range Organics (GRO) -C5-C12	ND				50		ug/L			09/02/16 09:04	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene	95		67 - 130				09/02/16 09:04	1
1,2-Dichloroethane-d4 (Surr)	99		72 - 130				09/02/16 09:04	1
Toluene-d8 (Surr)	102		70 - 130				09/02/16 09:04	1

**Lab Sample ID: LCS 720-208689/5**

**Matrix: Water**

**Analysis Batch: 208689**

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

Analyte	Spike Added	Spiked	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier	Unit				
Methyl tert-butyl ether	25.0	28.3		ug/L		113	62 - 130	
Acetone	125	113		ug/L		90	26 - 180	
Benzene	25.0	28.0		ug/L		112	79 - 130	
Dichlorobromomethane	25.0	27.8		ug/L		111	70 - 130	
Bromobenzene	25.0	26.8		ug/L		107	70 - 130	
Chlorobromomethane	25.0	28.3		ug/L		113	70 - 130	
Bromoform	25.0	26.7		ug/L		107	68 - 136	
Bromomethane	25.0	25.4		ug/L		102	43 - 151	
2-Butanone (MEK)	125	105		ug/L		84	54 - 130	
n-Butylbenzene	25.0	27.2		ug/L		109	70 - 142	
sec-Butylbenzene	25.0	27.5		ug/L		110	70 - 134	
tert-Butylbenzene	25.0	26.7		ug/L		107	70 - 135	
Carbon disulfide	25.0	29.2		ug/L		117	58 - 130	
Carbon tetrachloride	25.0	28.7		ug/L		115	70 - 146	
Chlorobenzene	25.0	27.0		ug/L		108	70 - 130	
Chloroethane	25.0	24.7		ug/L		99	62 - 138	
Chloroform	25.0	27.7		ug/L		111	70 - 130	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-208689/5**

**Matrix: Water**

**Analysis Batch: 208689**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Chloromethane	25.0	24.3		ug/L		97	52 - 175		
2-Chlorotoluene	25.0	26.8		ug/L		107	70 - 130		
4-Chlorotoluene	25.0	26.9		ug/L		108	70 - 130		
Chlorodibromomethane	25.0	26.5		ug/L		106	70 - 145		
1,2-Dichlorobenzene	25.0	27.1		ug/L		109	70 - 130		
1,3-Dichlorobenzene	25.0	27.3		ug/L		109	70 - 130		
1,4-Dichlorobenzene	25.0	27.5		ug/L		110	70 - 130		
1,3-Dichloropropane	25.0	27.8		ug/L		111	70 - 130		
1,1-Dichloropropene	25.0	28.2		ug/L		113	70 - 130		
1,2-Dibromo-3-Chloropropane	25.0	26.3		ug/L		105	70 - 136		
Ethylene Dibromide	25.0	30.5		ug/L		122	70 - 130		
Dibromomethane	25.0	27.9		ug/L		111	70 - 130		
Dichlorodifluoromethane	25.0	24.8		ug/L		99	32 - 158		
1,1-Dichloroethane	25.0	27.3		ug/L		109	70 - 130		
1,2-Dichloroethane	25.0	27.1		ug/L		108	61 - 132		
1,1-Dichloroethene	25.0	28.5		ug/L		114	64 - 128		
cis-1,2-Dichloroethene	25.0	27.9		ug/L		111	70 - 130		
trans-1,2-Dichloroethene	25.0	29.2		ug/L		117	68 - 130		
1,2-Dichloropropane	25.0	28.1		ug/L		112	70 - 130		
cis-1,3-Dichloropropene	25.0	29.2		ug/L		117	70 - 130		
trans-1,3-Dichloropropene	25.0	28.4		ug/L		114	70 - 140		
Ethylbenzene	25.0	27.3		ug/L		109	80 - 120		
Hexachlorobutadiene	25.0	28.3		ug/L		113	70 - 130		
2-Hexanone	125	102		ug/L		82	60 - 164		
Isopropylbenzene	25.0	28.3		ug/L		113	70 - 130		
4-Isopropyltoluene	25.0	27.8		ug/L		111	70 - 130		
Methylene Chloride	25.0	27.5		ug/L		110	70 - 147		
4-Methyl-2-pentanone (MIBK)	125	104		ug/L		83	58 - 130		
Naphthalene	25.0	27.0		ug/L		108	50 - 130		
N-Propylbenzene	25.0	26.7		ug/L		107	70 - 130		
Styrene	25.0	27.5		ug/L		110	70 - 130		
1,1,1,2-Tetrachloroethane	25.0	26.4		ug/L		105	70 - 130		
1,1,2,2-Tetrachloroethane	25.0	26.1		ug/L		104	70 - 130		
Tetrachloroethene	25.0	30.3		ug/L		121	70 - 130		
Toluene	25.0	27.1		ug/L		108	78 - 120		
1,2,3-Trichlorobenzene	25.0	28.5		ug/L		114	70 - 130		
1,2,4-Trichlorobenzene	25.0	28.1		ug/L		113	70 - 130		
1,1,1-Trichloroethane	25.0	28.6		ug/L		114	70 - 130		
1,1,2-Trichloroethane	25.0	28.3		ug/L		113	70 - 130		
Trichloroethene	25.0	29.3		ug/L		117	70 - 130		
Trichlorofluoromethane	25.0	26.7		ug/L		107	66 - 132		
1,2,3-Trichloropropane	25.0	28.0		ug/L		112	70 - 130		
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	31.3		ug/L		125	42 - 162		
1,2,4-Trimethylbenzene	25.0	26.8		ug/L		107	70 - 132		
1,3,5-Trimethylbenzene	25.0	27.2		ug/L		109	70 - 130		
Vinyl acetate	25.0	26.5		ug/L		106	43 - 163		
Vinyl chloride	25.0	23.7		ug/L		95	54 - 135		

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-208689/5**

**Matrix: Water**

**Analysis Batch: 208689**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
m-Xylene & p-Xylene	25.0	27.3		ug/L		109	70 - 142
o-Xylene	25.0	27.1		ug/L		109	70 - 130
2,2-Dichloropropane	25.0	30.4		ug/L		122	70 - 140

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	96		72 - 130
Toluene-d8 (Surr)	103		70 - 130

**Lab Sample ID: LCS 720-208689/7**

**Matrix: Water**

**Analysis Batch: 208689**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Gasoline Range Organics (GRO) -C5-C12	500	516		ug/L		103	71 - 125

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		72 - 130
Toluene-d8 (Surr)	104		70 - 130

**Lab Sample ID: LCSD 720-208689/6**

**Matrix: Water**

**Analysis Batch: 208689**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	29.0		ug/L		116	62 - 130	2	20
Acetone	125	113		ug/L		91	26 - 180	1	30
Benzene	25.0	28.0		ug/L		112	79 - 130	0	20
Dichlorobromomethane	25.0	28.1		ug/L		112	70 - 130	1	20
Bromobenzene	25.0	26.6		ug/L		107	70 - 130	1	20
Chlorobromomethane	25.0	28.8		ug/L		115	70 - 130	2	20
Bromoform	25.0	27.0		ug/L		108	68 - 136	1	20
Bromomethane	25.0	25.1		ug/L		100	43 - 151	1	20
2-Butanone (MEK)	125	107		ug/L		86	54 - 130	2	20
n-Butylbenzene	25.0	26.9		ug/L		108	70 - 142	1	20
sec-Butylbenzene	25.0	27.3		ug/L		109	70 - 134	1	20
tert-Butylbenzene	25.0	26.5		ug/L		106	70 - 135	1	20
Carbon disulfide	25.0	29.3		ug/L		117	58 - 130	0	20
Carbon tetrachloride	25.0	28.6		ug/L		115	70 - 146	0	20
Chlorobenzene	25.0	27.2		ug/L		109	70 - 130	0	20
Chloroethane	25.0	24.5		ug/L		98	62 - 138	1	20
Chloroform	25.0	28.0		ug/L		112	70 - 130	1	20
Chloromethane	25.0	24.1		ug/L		96	52 - 175	1	20
2-Chlorotoluene	25.0	26.6		ug/L		107	70 - 130	1	20
4-Chlorotoluene	25.0	26.7		ug/L		107	70 - 130	1	20
Chlorodibromomethane	25.0	26.8		ug/L		107	70 - 145	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-208689/6

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

Analysis Batch: 208689

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	RPD Limit
	Added	Result	Qualifier				Limits	RPD		
1,2-Dichlorobenzene	25.0	27.0		ug/L		108	70 - 130	1	20	
1,3-Dichlorobenzene	25.0	27.2		ug/L		109	70 - 130	0	20	
1,4-Dichlorobenzene	25.0	27.5		ug/L		110	70 - 130	0	20	
1,3-Dichloropropane	25.0	28.1		ug/L		112	70 - 130	1	20	
1,1-Dichloropropene	25.0	28.2		ug/L		113	70 - 130	0	20	
1,2-Dibromo-3-Chloropropane	25.0	26.8		ug/L		107	70 - 136	2	20	
Ethylene Dibromide	25.0	30.8		ug/L		123	70 - 130	1	20	
Dibromomethane	25.0	28.3		ug/L		113	70 - 130	2	20	
Dichlorodifluoromethane	25.0	24.8		ug/L		99	32 - 158	0	20	
1,1-Dichloroethane	25.0	27.6		ug/L		110	70 - 130	1	20	
1,2-Dichloroethane	25.0	27.5		ug/L		110	61 - 132	1	20	
1,1-Dichloroethene	25.0	28.5		ug/L		114	64 - 128	0	20	
cis-1,2-Dichloroethene	25.0	28.1		ug/L		112	70 - 130	1	20	
trans-1,2-Dichloroethene	25.0	29.2		ug/L		117	68 - 130	0	20	
1,2-Dichloropropane	25.0	28.2		ug/L		113	70 - 130	1	20	
cis-1,3-Dichloropropene	25.0	29.3		ug/L		117	70 - 130	0	20	
trans-1,3-Dichloropropene	25.0	28.9		ug/L		116	70 - 140	2	20	
Ethylbenzene	25.0	27.4		ug/L		109	80 - 120	0	20	
Hexachlorobutadiene	25.0	27.8		ug/L		111	70 - 130	2	20	
2-Hexanone	125	103		ug/L		82	60 - 164	0	20	
Isopropylbenzene	25.0	28.2		ug/L		113	70 - 130	1	20	
4-Isopropyltoluene	25.0	27.3		ug/L		109	70 - 130	2	20	
Methylene Chloride	25.0	27.8		ug/L		111	70 - 147	1	20	
4-Methyl-2-pentanone (MIBK)	125	105		ug/L		84	58 - 130	2	20	
Naphthalene	25.0	27.0		ug/L		108	50 - 130	0	20	
N-Propylbenzene	25.0	26.4		ug/L		106	70 - 130	1	20	
Styrene	25.0	27.5		ug/L		110	70 - 130	0	20	
1,1,1,2-Tetrachloroethane	25.0	26.4		ug/L		106	70 - 130	0	20	
1,1,2,2-Tetrachloroethane	25.0	26.5		ug/L		106	70 - 130	2	20	
Tetrachloroethene	25.0	30.0		ug/L		120	70 - 130	1	20	
Toluene	25.0	27.2		ug/L		109	78 - 120	1	20	
1,2,3-Trichlorobenzene	25.0	28.3		ug/L		113	70 - 130	1	20	
1,2,4-Trichlorobenzene	25.0	27.5		ug/L		110	70 - 130	2	20	
1,1,1-Trichloroethane	25.0	28.7		ug/L		115	70 - 130	0	20	
1,1,2-Trichloroethane	25.0	28.7		ug/L		115	70 - 130	1	20	
Trichloroethene	25.0	29.3		ug/L		117	70 - 130	0	20	
Trichlorofluoromethane	25.0	26.8		ug/L		107	66 - 132	1	20	
1,2,3-Trichloropropane	25.0	28.3		ug/L		113	70 - 130	1	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.9		ug/L		123	42 - 162	2	20	
1,2,4-Trimethylbenzene	25.0	26.7		ug/L		107	70 - 132	1	20	
1,3,5-Trimethylbenzene	25.0	27.1		ug/L		108	70 - 130	1	20	
Vinyl acetate	25.0	26.9		ug/L		108	43 - 163	2	20	
Vinyl chloride	25.0	23.8		ug/L		95	54 - 135	0	20	
m-Xylene & p-Xylene	25.0	27.3		ug/L		109	70 - 142	0	20	
o-Xylene	25.0	27.1		ug/L		108	70 - 130	0	20	
2,2-Dichloropropane	25.0	30.3		ug/L		121	70 - 140	0	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-208689/6**

**Matrix: Water**

**Analysis Batch: 208689**

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	96		72 - 130
Toluene-d8 (Surr)	103		70 - 130

**Lab Sample ID: LCSD 720-208689/8**

**Matrix: Water**

**Analysis Batch: 208689**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
Gasoline Range Organics (GRO) -C5-C12	500	493		ug/L	99	71 - 125	5 20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	100		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		72 - 130
Toluene-d8 (Surr)	103		70 - 130

**Lab Sample ID: 720-74257-3 MS**

**Matrix: Water**

**Analysis Batch: 208689**

**Client Sample ID: EFF**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Methyl tert-butyl ether	ND		25.0	26.9		ug/L		108	60 - 138
Acetone	ND		125	90.9		ug/L		73	60 - 140
Benzene	ND		25.0	26.9		ug/L		108	60 - 140
Dichlorobromomethane	ND		25.0	27.1		ug/L		108	60 - 140
Bromobenzene	ND		25.0	25.5		ug/L		102	60 - 140
Chlorobromomethane	ND		25.0	27.4		ug/L		110	60 - 140
Bromoform	ND		25.0	26.3		ug/L		105	56 - 140
Bromomethane	ND		25.0	23.3		ug/L		93	23 - 140
2-Butanone (MEK)	ND		125	93.8		ug/L		75	60 - 140
n-Butylbenzene	ND		25.0	24.5		ug/L		98	60 - 140
sec-Butylbenzene	ND		25.0	25.9		ug/L		104	60 - 140
tert-Butylbenzene	ND		25.0	25.3		ug/L		101	60 - 140
Carbon disulfide	ND		25.0	27.0		ug/L		108	38 - 140
Carbon tetrachloride	ND		25.0	26.6		ug/L		106	60 - 140
Chlorobenzene	ND		25.0	25.5		ug/L		102	60 - 140
Chloroethane	ND		25.0	23.5		ug/L		94	51 - 140
Chloroform	ND		25.0	26.6		ug/L		106	60 - 140
Chloromethane	ND		25.0	22.6		ug/L		91	52 - 140
2-Chlorotoluene	ND		25.0	25.5		ug/L		102	60 - 140
4-Chlorotoluene	ND		25.0	25.3		ug/L		101	60 - 140
Chlorodibromomethane	ND		25.0	25.6		ug/L		102	60 - 140
1,2-Dichlorobenzene	ND		25.0	25.9		ug/L		104	60 - 140
1,3-Dichlorobenzene	ND		25.0	25.7		ug/L		103	60 - 140
1,4-Dichlorobenzene	ND		25.0	25.9		ug/L		104	60 - 140
1,3-Dichloropropane	ND		25.0	27.0		ug/L		108	60 - 140
1,1-Dichloropropene	ND		25.0	26.2		ug/L		105	60 - 140

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-74257-3 MS**

**Matrix: Water**

**Analysis Batch: 208689**

**Client Sample ID: EFF  
Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits	
	Result	Qualifier	Added	Result	Qualifier						
1,2-Dibromo-3-Chloropropane	ND		25.0	23.9		ug/L		96	60 - 140		
Ethylene Dibromide	ND		25.0	28.8		ug/L		115	60 - 140		
Dibromomethane	ND		25.0	27.0		ug/L		108	60 - 140		
Dichlorodifluoromethane	ND		25.0	23.3		ug/L		93	38 - 140		
1,1-Dichloroethane	ND		25.0	26.2		ug/L		105	60 - 140		
1,2-Dichloroethane	ND		25.0	26.3		ug/L		105	60 - 140		
1,1-Dichloroethene	ND		25.0	25.2		ug/L		101	60 - 140		
cis-1,2-Dichloroethene	ND		25.0	27.2		ug/L		109	60 - 140		
trans-1,2-Dichloroethene	ND		25.0	26.8		ug/L		107	60 - 140		
1,2-Dichloropropane	ND		25.0	27.3		ug/L		109	60 - 140		
cis-1,3-Dichloropropene	ND		25.0	27.9		ug/L		111	60 - 140		
trans-1,3-Dichloropropene	ND		25.0	27.0		ug/L		108	60 - 140		
Ethylbenzene	ND		25.0	25.4		ug/L		102	60 - 140		
Hexachlorobutadiene	ND		25.0	24.9		ug/L		100	60 - 140		
2-Hexanone	ND		125	90.7		ug/L		73	60 - 140		
Isopropylbenzene	ND		25.0	26.4		ug/L		106	60 - 140		
4-Isopropyltoluene	ND		25.0	25.6		ug/L		103	60 - 140		
Methylene Chloride	ND		25.0	26.5		ug/L		106	40 - 140		
4-Methyl-2-pentanone (MIBK)	ND		125	95.3		ug/L		76	58 - 130		
Naphthalene	ND		25.0	25.0		ug/L		100	56 - 140		
N-Propylbenzene	ND		25.0	25.0		ug/L		100	60 - 140		
Styrene	ND		25.0	25.5		ug/L		102	60 - 140		
1,1,1,2-Tetrachloroethane	ND		25.0	24.9		ug/L		100	60 - 140		
1,1,2,2-Tetrachloroethane	ND		25.0	25.7		ug/L		103	60 - 140		
Tetrachloroethene	ND		25.0	27.2		ug/L		109	60 - 140		
Toluene	ND		25.0	25.8		ug/L		103	60 - 140		
1,2,3-Trichlorobenzene	ND		25.0	25.8		ug/L		103	60 - 140		
1,2,4-Trichlorobenzene	ND		25.0	24.5		ug/L		98	60 - 140		
1,1,1-Trichloroethane	ND		25.0	27.5		ug/L		110	60 - 140		
1,1,2-Trichloroethane	ND		25.0	27.4		ug/L		109	60 - 140		
Trichloroethene	ND		25.0	27.0		ug/L		108	60 - 140		
Trichlorofluoromethane	ND		25.0	24.4		ug/L		97	60 - 140		
1,2,3-Trichloropropane	ND		25.0	26.7		ug/L		107	60 - 140		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	27.4		ug/L		110	60 - 140		
1,2,4-Trimethylbenzene	ND		25.0	25.4		ug/L		101	60 - 140		
1,3,5-Trimethylbenzene	ND		25.0	25.7		ug/L		103	60 - 140		
Vinyl acetate	ND		25.0	25.0		ug/L		100	40 - 140		
Vinyl chloride	ND		25.0	22.9		ug/L		92	58 - 140		
m-Xylene & p-Xylene	ND		25.0	25.3		ug/L		101	60 - 140		
o-Xylene	ND		25.0	25.6		ug/L		103	60 - 140		
2,2-Dichloropropane	ND		25.0	26.9		ug/L		108	60 - 140		
<i>Surrogate</i>		<i>MS</i>	<i>MS</i>								
		%Recovery	Qualifier								
4-Bromofluorobenzene		101		67 - 130							
1,2-Dichloroethane-d4 (Surr)		97		72 - 130							
Toluene-d8 (Surr)		103		70 - 130							

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-74257-3 MSD**

**Matrix: Water**

**Analysis Batch: 208689**

**Client Sample ID: EFF  
Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		25.0	28.7		ug/L	115	60 - 138	6	20	
Acetone	ND		125	101		ug/L	81	60 - 140	11	20	
Benzene	ND		25.0	27.4		ug/L	110	60 - 140	2	20	
Dichlorobromomethane	ND		25.0	27.9		ug/L	112	60 - 140	3	20	
Bromobenzene	ND		25.0	25.5		ug/L	102	60 - 140	0	20	
Chlorobromomethane	ND		25.0	28.3		ug/L	113	60 - 140	3	20	
Bromoform	ND		25.0	27.4		ug/L	110	56 - 140	4	20	
Bromomethane	ND		25.0	24.5		ug/L	98	23 - 140	5	20	
2-Butanone (MEK)	ND		125	103		ug/L	83	60 - 140	10	20	
n-Butylbenzene	ND		25.0	24.4		ug/L	98	60 - 140	0	20	
sec-Butylbenzene	ND		25.0	25.6		ug/L	102	60 - 140	1	20	
tert-Butylbenzene	ND		25.0	25.0		ug/L	100	60 - 140	1	20	
Carbon disulfide	ND		25.0	28.1		ug/L	113	38 - 140	4	20	
Carbon tetrachloride	ND		25.0	27.0		ug/L	108	60 - 140	2	20	
Chlorobenzene	ND		25.0	25.8		ug/L	103	60 - 140	1	20	
Chloroethane	ND		25.0	24.6		ug/L	98	51 - 140	5	20	
Chloroform	ND		25.0	27.3		ug/L	109	60 - 140	3	20	
Chloromethane	ND		25.0	23.7		ug/L	95	52 - 140	5	20	
2-Chlorotoluene	ND		25.0	25.4		ug/L	102	60 - 140	0	20	
4-Chlorotoluene	ND		25.0	25.2		ug/L	101	60 - 140	0	20	
Chlorodibromomethane	ND		25.0	27.1		ug/L	109	60 - 140	6	20	
1,2-Dichlorobenzene	ND		25.0	26.1		ug/L	104	60 - 140	1	20	
1,3-Dichlorobenzene	ND		25.0	25.5		ug/L	102	60 - 140	0	20	
1,4-Dichlorobenzene	ND		25.0	25.8		ug/L	103	60 - 140	0	20	
1,3-Dichloropropane	ND		25.0	27.9		ug/L	112	60 - 140	4	20	
1,1-Dichloropropene	ND		25.0	26.7		ug/L	107	60 - 140	2	20	
1,2-Dibromo-3-Chloropropane	ND		25.0	25.4		ug/L	102	60 - 140	6	20	
Ethylene Dibromide	ND		25.0	30.8		ug/L	123	60 - 140	7	20	
Dibromomethane	ND		25.0	28.1		ug/L	112	60 - 140	4	20	
Dichlorodifluoromethane	ND		25.0	23.6		ug/L	94	38 - 140	1	20	
1,1-Dichloroethane	ND		25.0	26.8		ug/L	107	60 - 140	2	20	
1,2-Dichloroethane	ND		25.0	27.5		ug/L	110	60 - 140	4	20	
1,1-Dichloroethene	ND		25.0	26.3		ug/L	105	60 - 140	4	20	
cis-1,2-Dichloroethene	ND		25.0	27.9		ug/L	112	60 - 140	3	20	
trans-1,2-Dichloroethene	ND		25.0	27.6		ug/L	110	60 - 140	3	20	
1,2-Dichloropropane	ND		25.0	28.0		ug/L	112	60 - 140	2	20	
cis-1,3-Dichloropropene	ND		25.0	28.8		ug/L	115	60 - 140	3	20	
trans-1,3-Dichloropropene	ND		25.0	28.5		ug/L	114	60 - 140	5	20	
Ethylbenzene	ND		25.0	25.7		ug/L	103	60 - 140	1	20	
Hexachlorobutadiene	ND		25.0	25.0		ug/L	100	60 - 140	0	20	
2-Hexanone	ND		125	102		ug/L	81	60 - 140	11	20	
Isopropylbenzene	ND		25.0	26.5		ug/L	106	60 - 140	0	20	
4-Isopropyltoluene	ND		25.0	25.4		ug/L	102	60 - 140	1	20	
Methylene Chloride	ND		25.0	27.7		ug/L	111	40 - 140	4	20	
4-Methyl-2-pentanone (MIBK)	ND		125	105		ug/L	84	58 - 130	10	20	
Naphthalene	ND		25.0	26.4		ug/L	106	56 - 140	6	20	
N-Propylbenzene	ND		25.0	24.8		ug/L	99	60 - 140	1	20	
Styrene	ND		25.0	26.0		ug/L	104	60 - 140	2	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: 720-74257-3 MSD**

**Matrix: Water**

**Analysis Batch: 208689**

**Client Sample ID: EFF  
Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
1,1,1,2-Tetrachloroethane	ND		25.0	25.2		ug/L		101	60 - 140	1	20	
1,1,2,2-Tetrachloroethane	ND		25.0	26.4		ug/L		106	60 - 140	3	20	
Tetrachloroethene	ND		25.0	27.7		ug/L		111	60 - 140	2	20	
Toluene	ND		25.0	25.6		ug/L		102	60 - 140	1	20	
1,2,3-Trichlorobenzene	ND		25.0	27.0		ug/L		108	60 - 140	4	20	
1,2,4-Trichlorobenzene	ND		25.0	25.5		ug/L		102	60 - 140	4	20	
1,1,1-Trichloroethane	ND		25.0	28.0		ug/L		112	60 - 140	2	20	
1,1,2-Trichloroethane	ND		25.0	28.8		ug/L		115	60 - 140	5	20	
Trichloroethene	ND		25.0	27.4		ug/L		110	60 - 140	1	20	
Trichlorofluoromethane	ND		25.0	25.3		ug/L		101	60 - 140	4	20	
1,2,3-Trichloropropane	ND		25.0	27.5		ug/L		110	60 - 140	3	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	28.3		ug/L		113	60 - 140	3	20	
ne												
1,2,4-Trimethylbenzene	ND		25.0	25.2		ug/L		101	60 - 140	1	20	
1,3,5-Trimethylbenzene	ND		25.0	25.5		ug/L		102	60 - 140	1	20	
Vinyl acetate	ND		25.0	26.5		ug/L		106	40 - 140	6	20	
Vinyl chloride	ND		25.0	23.5		ug/L		94	58 - 140	3	20	
m-Xylene & p-Xylene	ND		25.0	25.7		ug/L		103	60 - 140	1	20	
o-Xylene	ND		25.0	25.9		ug/L		104	60 - 140	1	20	
2,2-Dichloropropane	ND		25.0	27.9		ug/L		111	60 - 140	3	20	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	101		67 - 130
1,2-Dichloroethane-d4 (Surr)	100		72 - 130
Toluene-d8 (Surr)	103		70 - 130

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## GC/MS VOA

### Analysis Batch: 208689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74257-1	GAC	Total/NA	Water	8260B/CA_LUFT MS	5
720-74257-2	INF	Total/NA	Water	8260B/CA_LUFT MS	6
720-74257-3	EFF	Total/NA	Water	8260B/CA_LUFT MS	7
MB 720-208689/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	8
LCS 720-208689/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	9
LCS 720-208689/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	10
LCSD 720-208689/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	11
LCSD 720-208689/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	12
720-74257-3 MS	EFF	Total/NA	Water	8260B/CA_LUFT MS	13
720-74257-3 MSD	EFF	Total/NA	Water	8260B/CA_LUFT MS	14

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Client Sample ID: GAC

Date Collected: 08/31/16 16:45  
Date Received: 09/01/16 12:22

## Lab Sample ID: 720-74257-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208689	09/02/16 17:44	LPL	TAL PLS

## Client Sample ID: INF

Date Collected: 08/31/16 16:45  
Date Received: 09/01/16 12:22

## Lab Sample ID: 720-74257-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208689	09/02/16 17:15	LPL	TAL PLS

## Client Sample ID: EFF

Date Collected: 08/31/16 16:45  
Date Received: 09/01/16 12:22

## Lab Sample ID: 720-74257-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	208689	09/02/16 16:47	LPL	TAL PLS

### Laboratory References:

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

# Certification Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

## Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18
Analysis Method	Prep Method	Matrix	Analyte	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

TestAmerica Pleasanton

## Method Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL PLS

**Protocol References:**

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

**Laboratory References:**

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

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14

## Sample Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74257-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-74257-1	GAC	Water	08/31/16 16:45	09/01/16 12:22
720-74257-2	INF	Water	08/31/16 16:45	09/01/16 12:22
720-74257-3	EFF	Water	08/31/16 16:45	09/01/16 12:22

1

2

3

4

5

6

7

8

9

10

11

12

13

14

TestAmerica Pleasanton

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-74257

TESTAMERICA Pleasanton Chain of Custody  
 1220 Quarry Lane • Pleasanton CA 94566-4756  
 Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 170748

Date 8/31/16 Page 1 of 1

## Report To

Attn: Peter Sims  
 Company: Ninja and Moore  
 Address: 1950 Webster St. Oakland, CA  
 Email: psims@ninjaandmoore.com  
 Bill To: p.sims  
 Sampled By: Emily Dinsen

Attn: p.sims  
 Phone:

Sample ID	Date	Time	Matrix	Preserv.
E1AC	8/31/16	1645	Gr	X
INF		1645		X
9CFP		1645		X

Volatile Organics GC/MS (VOCS)  
 EPA 8260B + TPA49  
 EPA 8260B

EPA 8260B:  Gas  BTEX  
 5 Oxygenates  DCA, EDB  Ethanol  
 Diesel  Motor Oil  Other

TEPH EPA 8015B  Silica Gel  
 EPA 8270C Semivolatile Organics GC/MS

PNA/PAH by  8270C SIM  
 8270C

Oil and Grease  Petroleum  
 (EPA 1664/9071)  Total

Pesticides  EPA 8081  
 PCBs  EPA 8082

CAM17 Metals  
 (EPA 6010/747/07471)

Metals,  6010B  600.7  
 Lead  LUFT  RCRA  
 Other

+  ~~Perchlorate, manganese~~  
 Metals:  6020  200.8  
 (ICP-MS):

Hex Chrom by  EPA 7196  
 or EPA 7199

pH  9040  
 SM4500

W.E.T.(STC)   
 W.E.T.(D)  TCLP

Spec. Cond.  Alkalinity  
 TSS  SS-  TDS

Anions:  Cl  SO<sub>4</sub>  NO<sub>3</sub>  F  
 Br  NO<sub>2</sub>  PO<sub>4</sub>  
 3000  amine  Sulfur

COD  EPA 410.4  SM5220D  
 Turbidity

Ivan

Wendy calc



720-74257 Chain of Custody

## Project Info.

## Sample Receipt

Project Name #:

Chun  
 401896004

# of Containers:

Head Space:

PO#:

Temp:

3.9°

Credit Card

Y/N:

If yes, please call with payment information ASAP

T	10 Day	5 Day	4 Day	3 Day	2 Day	1 Day	Other:
---	--------	-------	-------	-------	-------	-------	--------

Report:  Routine  Level 3  Level 4  EDD  EDF  
 Special Instructions / Comments:  Global ID \_\_\_\_\_

See Terms and Conditions on reverse

## 1) Relinquished by:

Signature

Time

Emily Dinsen 09/1/16

Printed Name

Date

Company

## 2) Relinquished by:

Signature

Time

Laurie Johnson 09/1/16

Printed Name

Date

Company

## 3) Relinquished by:

Signature

Time

Printed Name

Date

Company

## 1) Received by:

Signature

Time

Laurie Johnson 9/1/16

Printed Name

Date

Company

## 2) Received by:

Signature

Time

John Miller 1/22

Printed Name

Date

Company

## 3) Received by:

Signature

Time

Printed Name

Date

Company

## Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-74257-1

**Login Number:** 74257

**List Source:** TestAmerica Pleasanton

**List Number:** 1

**Creator:** Arauz, Dennis

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-74851-1

Client Project/Site: Chun

For:

Ninno & Moore

1956 Webster Street

Suite 400

Oakland, California 94612

Attn: Mr. Peter D. Sims



Authorized for release by:

10/11/2016 3:57:00 PM

Paloma Duong, Project Manager I

(925)484-1919

[paloma.duong@testamericainc.com](mailto:paloma.duong@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

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

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	12
QC Association Summary . . . . .	23
Lab Chronicle . . . . .	24
Certification Summary . . . . .	25
Method Summary . . . . .	26
Sample Summary . . . . .	27
Chain of Custody . . . . .	28
Receipt Checklists . . . . .	29

## Definitions/Glossary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# Case Narrative

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Job ID: 720-74851-1

Laboratory: TestAmerica Pleasanton

### Narrative

#### Job Narrative 720-74851-1

### Comments

No additional comments.

### Receipt

The samples were received on 10/3/2016 12:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.1° C.

### GC/MS VOA

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

## Detection Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

### Client Sample ID: INF

### Lab Sample ID: 720-74851-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.87		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Benzene	49		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Naphthalene	16		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Toluene	18		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,2,4-Trimethylbenzene	7.6		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
1,3,5-Trimethylbenzene	7.2		0.50		ug/L	1		8260B/CA_LUFT	Total/NA
Xylenes, Total	93		1.0		ug/L	1		8260B/CA_LUFT	Total/NA
Gasoline Range Organics (GRO) -C5-C12	310		50		ug/L	1		8260B/CA_LUFT	Total/NA
									MS

### Client Sample ID: EFF

### Lab Sample ID: 720-74851-2

No Detections.

### Client Sample ID: GAC

### Lab Sample ID: 720-74851-3

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Client Sample ID: INF

Date Collected: 09/30/16 15:22  
Date Received: 10/03/16 12:55

## Lab Sample ID: 720-74851-1

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	0.87		0.50		ug/L		10/08/16 05:31		1
Acetone	ND		50		ug/L		10/08/16 05:31		1
Benzene	49		0.50		ug/L		10/08/16 05:31		1
Dichlorobromomethane	ND		0.50		ug/L		10/08/16 05:31		1
Bromobenzene	ND		1.0		ug/L		10/08/16 05:31		1
Chlorobromomethane	ND		1.0		ug/L		10/08/16 05:31		1
Bromoform	ND		1.0		ug/L		10/08/16 05:31		1
Bromomethane	ND		1.0		ug/L		10/08/16 05:31		1
2-Butanone (MEK)	ND		50		ug/L		10/08/16 05:31		1
n-Butylbenzene	ND		1.0		ug/L		10/08/16 05:31		1
sec-Butylbenzene	ND		1.0		ug/L		10/08/16 05:31		1
tert-Butylbenzene	ND		1.0		ug/L		10/08/16 05:31		1
Carbon disulfide	ND		5.0		ug/L		10/08/16 05:31		1
Carbon tetrachloride	ND		0.50		ug/L		10/08/16 05:31		1
Chlorobenzene	ND		0.50		ug/L		10/08/16 05:31		1
Chloroethane	ND		1.0		ug/L		10/08/16 05:31		1
Chloroform	ND		1.0		ug/L		10/08/16 05:31		1
Chloromethane	ND		1.0		ug/L		10/08/16 05:31		1
2-Chlorotoluene	ND		0.50		ug/L		10/08/16 05:31		1
4-Chlorotoluene	ND		0.50		ug/L		10/08/16 05:31		1
Chlorodibromomethane	ND		0.50		ug/L		10/08/16 05:31		1
1,2-Dichlorobenzene	ND		0.50		ug/L		10/08/16 05:31		1
1,3-Dichlorobenzene	ND		0.50		ug/L		10/08/16 05:31		1
1,4-Dichlorobenzene	ND		0.50		ug/L		10/08/16 05:31		1
1,3-Dichloropropane	ND		1.0		ug/L		10/08/16 05:31		1
1,1-Dichloropropene	ND		0.50		ug/L		10/08/16 05:31		1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L		10/08/16 05:31		1
Ethylene Dibromide	ND		0.50		ug/L		10/08/16 05:31		1
Dibromomethane	ND		0.50		ug/L		10/08/16 05:31		1
Dichlorodifluoromethane	ND		0.50		ug/L		10/08/16 05:31		1
1,1-Dichloroethane	ND		0.50		ug/L		10/08/16 05:31		1
1,2-Dichloroethane	ND		0.50		ug/L		10/08/16 05:31		1
1,1-Dichloroethene	ND		0.50		ug/L		10/08/16 05:31		1
cis-1,2-Dichloroethene	ND		0.50		ug/L		10/08/16 05:31		1
trans-1,2-Dichloroethene	ND		0.50		ug/L		10/08/16 05:31		1
1,2-Dichloropropane	ND		0.50		ug/L		10/08/16 05:31		1
cis-1,3-Dichloropropene	ND		0.50		ug/L		10/08/16 05:31		1
trans-1,3-Dichloropropene	ND		0.50		ug/L		10/08/16 05:31		1
Ethylbenzene	ND		0.50		ug/L		10/08/16 05:31		1
Hexachlorobutadiene	ND		1.0		ug/L		10/08/16 05:31		1
2-Hexanone	ND		50		ug/L		10/08/16 05:31		1
Isopropylbenzene	ND		0.50		ug/L		10/08/16 05:31		1
4-Isopropyltoluene	ND		1.0		ug/L		10/08/16 05:31		1
Methylene Chloride	ND		5.0		ug/L		10/08/16 05:31		1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L		10/08/16 05:31		1
<b>Naphthalene</b>	<b>16</b>		1.0		ug/L		10/08/16 05:31		1
N-Propylbenzene	ND		1.0		ug/L		10/08/16 05:31		1
Styrene	ND		0.50		ug/L		10/08/16 05:31		1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L		10/08/16 05:31		1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

**Client Sample ID: INF**

Date Collected: 09/30/16 15:22

Date Received: 10/03/16 12:55

**Lab Sample ID: 720-74851-1**

Matrix: Water

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/08/16 05:31	1
Tetrachloroethene	ND		0.50		ug/L			10/08/16 05:31	1
<b>Toluene</b>	<b>18</b>		0.50		ug/L			10/08/16 05:31	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/08/16 05:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/08/16 05:31	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/08/16 05:31	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/08/16 05:31	1
Trichloroethene	ND		0.50		ug/L			10/08/16 05:31	1
Trichlorofluoromethane	ND		1.0		ug/L			10/08/16 05:31	1
1,2,3-Trichloropropane	ND		0.50		ug/L			10/08/16 05:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			10/08/16 05:31	1
<b>1,2,4-Trimethylbenzene</b>	<b>7.6</b>		0.50		ug/L			10/08/16 05:31	1
<b>1,3,5-Trimethylbenzene</b>	<b>7.2</b>		0.50		ug/L			10/08/16 05:31	1
Vinyl acetate	ND		10		ug/L			10/08/16 05:31	1
Vinyl chloride	ND		0.50		ug/L			10/08/16 05:31	1
<b>Xylenes, Total</b>	<b>93</b>		1.0		ug/L			10/08/16 05:31	1
2,2-Dichloropropane	ND		0.50		ug/L			10/08/16 05:31	1
<b>Gasoline Range Organics (GRO) -C5-C12</b>	<b>310</b>		50		ug/L			10/08/16 05:31	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	94		67 - 130					10/08/16 05:31	1
1,2-Dichloroethane-d4 (Surr)	101		72 - 130					10/08/16 05:31	1
Toluene-d8 (Surr)	95		70 - 130					10/08/16 05:31	1

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

**Client Sample ID: EFF**

Date Collected: 09/30/16 15:23

Date Received: 10/03/16 12:55

**Lab Sample ID: 720-74851-2**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			10/07/16 16:22	1
Acetone	ND		50		ug/L			10/07/16 16:22	1
Benzene	ND		0.50		ug/L			10/07/16 16:22	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 16:22	1
Bromobenzene	ND		1.0		ug/L			10/07/16 16:22	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 16:22	1
Bromoform	ND		1.0		ug/L			10/07/16 16:22	1
Bromomethane	ND		1.0		ug/L			10/07/16 16:22	1
2-Butanone (MEK)	ND		50		ug/L			10/07/16 16:22	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 16:22	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 16:22	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 16:22	1
Carbon disulfide	ND		5.0		ug/L			10/07/16 16:22	1
Carbon tetrachloride	ND		0.50		ug/L			10/07/16 16:22	1
Chlorobenzene	ND		0.50		ug/L			10/07/16 16:22	1
Chloroethane	ND		1.0		ug/L			10/07/16 16:22	1
Chloroform	ND		1.0		ug/L			10/07/16 16:22	1
Chloromethane	ND		1.0		ug/L			10/07/16 16:22	1
2-Chlorotoluene	ND		0.50		ug/L			10/07/16 16:22	1
4-Chlorotoluene	ND		0.50		ug/L			10/07/16 16:22	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 16:22	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/07/16 16:22	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/07/16 16:22	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/07/16 16:22	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 16:22	1
1,1-Dichloropropene	ND		0.50		ug/L			10/07/16 16:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			10/07/16 16:22	1
Ethylene Dibromide	ND		0.50		ug/L			10/07/16 16:22	1
Dibromomethane	ND		0.50		ug/L			10/07/16 16:22	1
Dichlorodifluoromethane	ND		0.50		ug/L			10/07/16 16:22	1
1,1-Dichloroethane	ND		0.50		ug/L			10/07/16 16:22	1
1,2-Dichloroethane	ND		0.50		ug/L			10/07/16 16:22	1
1,1-Dichloroethene	ND		0.50		ug/L			10/07/16 16:22	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/07/16 16:22	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/07/16 16:22	1
1,2-Dichloropropane	ND		0.50		ug/L			10/07/16 16:22	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/07/16 16:22	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			10/07/16 16:22	1
Ethylbenzene	ND		0.50		ug/L			10/07/16 16:22	1
Hexachlorobutadiene	ND		1.0		ug/L			10/07/16 16:22	1
2-Hexanone	ND		50		ug/L			10/07/16 16:22	1
Isopropylbenzene	ND		0.50		ug/L			10/07/16 16:22	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 16:22	1
Methylene Chloride	ND		5.0		ug/L			10/07/16 16:22	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			10/07/16 16:22	1
Naphthalene	ND		1.0		ug/L			10/07/16 16:22	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 16:22	1
Styrene	ND		0.50		ug/L			10/07/16 16:22	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 16:22	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

**Client Sample ID: EFF**

Date Collected: 09/30/16 15:23

Date Received: 10/03/16 12:55

**Lab Sample ID: 720-74851-2**

Matrix: Water

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L		10/07/16 16:22		1
Tetrachloroethene	ND		0.50		ug/L		10/07/16 16:22		1
Toluene	ND		0.50		ug/L		10/07/16 16:22		1
1,2,3-Trichlorobenzene	ND		1.0		ug/L		10/07/16 16:22		1
1,2,4-Trichlorobenzene	ND		1.0		ug/L		10/07/16 16:22		1
1,1,1-Trichloroethane	ND		0.50		ug/L		10/07/16 16:22		1
1,1,2-Trichloroethane	ND		0.50		ug/L		10/07/16 16:22		1
Trichloroethene	ND		0.50		ug/L		10/07/16 16:22		1
Trichlorofluoromethane	ND		1.0		ug/L		10/07/16 16:22		1
1,2,3-Trichloropropane	ND		0.50		ug/L		10/07/16 16:22		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L		10/07/16 16:22		1
1,2,4-Trimethylbenzene	ND		0.50		ug/L		10/07/16 16:22		1
1,3,5-Trimethylbenzene	ND		0.50		ug/L		10/07/16 16:22		1
Vinyl acetate	ND		10		ug/L		10/07/16 16:22		1
Vinyl chloride	ND		0.50		ug/L		10/07/16 16:22		1
Xylenes, Total	ND		1.0		ug/L		10/07/16 16:22		1
2,2-Dichloropropane	ND		0.50		ug/L		10/07/16 16:22		1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L		10/07/16 16:22		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	90		67 - 130				10/07/16 16:22		1
1,2-Dichloroethane-d4 (Surr)	98		72 - 130				10/07/16 16:22		1
Toluene-d8 (Surr)	93		70 - 130				10/07/16 16:22		1

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

**Client Sample ID: GAC**

Date Collected: 09/30/16 15:24  
Date Received: 10/03/16 12:55

**Lab Sample ID: 720-74851-3**

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			10/07/16 16:51	1
Acetone	ND		50		ug/L			10/07/16 16:51	1
Benzene	ND		0.50		ug/L			10/07/16 16:51	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 16:51	1
Bromobenzene	ND		1.0		ug/L			10/07/16 16:51	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 16:51	1
Bromoform	ND		1.0		ug/L			10/07/16 16:51	1
Bromomethane	ND		1.0		ug/L			10/07/16 16:51	1
2-Butanone (MEK)	ND		50		ug/L			10/07/16 16:51	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 16:51	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 16:51	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 16:51	1
Carbon disulfide	ND		5.0		ug/L			10/07/16 16:51	1
Carbon tetrachloride	ND		0.50		ug/L			10/07/16 16:51	1
Chlorobenzene	ND		0.50		ug/L			10/07/16 16:51	1
Chloroethane	ND		1.0		ug/L			10/07/16 16:51	1
Chloroform	ND		1.0		ug/L			10/07/16 16:51	1
Chloromethane	ND		1.0		ug/L			10/07/16 16:51	1
2-Chlorotoluene	ND		0.50		ug/L			10/07/16 16:51	1
4-Chlorotoluene	ND		0.50		ug/L			10/07/16 16:51	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 16:51	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/07/16 16:51	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/07/16 16:51	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/07/16 16:51	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 16:51	1
1,1-Dichloropropene	ND		0.50		ug/L			10/07/16 16:51	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			10/07/16 16:51	1
Ethylene Dibromide	ND		0.50		ug/L			10/07/16 16:51	1
Dibromomethane	ND		0.50		ug/L			10/07/16 16:51	1
Dichlorodifluoromethane	ND		0.50		ug/L			10/07/16 16:51	1
1,1-Dichloroethane	ND		0.50		ug/L			10/07/16 16:51	1
1,2-Dichloroethane	ND		0.50		ug/L			10/07/16 16:51	1
1,1-Dichloroethene	ND		0.50		ug/L			10/07/16 16:51	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/07/16 16:51	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/07/16 16:51	1
1,2-Dichloropropane	ND		0.50		ug/L			10/07/16 16:51	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/07/16 16:51	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			10/07/16 16:51	1
Ethylbenzene	ND		0.50		ug/L			10/07/16 16:51	1
Hexachlorobutadiene	ND		1.0		ug/L			10/07/16 16:51	1
2-Hexanone	ND		50		ug/L			10/07/16 16:51	1
Isopropylbenzene	ND		0.50		ug/L			10/07/16 16:51	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 16:51	1
Methylene Chloride	ND		5.0		ug/L			10/07/16 16:51	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			10/07/16 16:51	1
Naphthalene	ND		1.0		ug/L			10/07/16 16:51	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 16:51	1
Styrene	ND		0.50		ug/L			10/07/16 16:51	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 16:51	1

TestAmerica Pleasanton

# Client Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Client Sample ID: GAC

Date Collected: 09/30/16 15:24  
Date Received: 10/03/16 12:55

**Lab Sample ID: 720-74851-3**

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L		10/07/16 16:51		1
Tetrachloroethene	ND		0.50		ug/L		10/07/16 16:51		1
Toluene	ND		0.50		ug/L		10/07/16 16:51		1
1,2,3-Trichlorobenzene	ND		1.0		ug/L		10/07/16 16:51		1
1,2,4-Trichlorobenzene	ND		1.0		ug/L		10/07/16 16:51		1
1,1,1-Trichloroethane	ND		0.50		ug/L		10/07/16 16:51		1
1,1,2-Trichloroethane	ND		0.50		ug/L		10/07/16 16:51		1
Trichloroethene	ND		0.50		ug/L		10/07/16 16:51		1
Trichlorofluoromethane	ND		1.0		ug/L		10/07/16 16:51		1
1,2,3-Trichloropropane	ND		0.50		ug/L		10/07/16 16:51		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L		10/07/16 16:51		1
1,2,4-Trimethylbenzene	ND		0.50		ug/L		10/07/16 16:51		1
1,3,5-Trimethylbenzene	ND		0.50		ug/L		10/07/16 16:51		1
Vinyl acetate	ND		10		ug/L		10/07/16 16:51		1
Vinyl chloride	ND		0.50		ug/L		10/07/16 16:51		1
Xylenes, Total	ND		1.0		ug/L		10/07/16 16:51		1
2,2-Dichloropropane	ND		0.50		ug/L		10/07/16 16:51		1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L		10/07/16 16:51		1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	86		67 - 130				10/07/16 16:51		1
1,2-Dichloroethane-d4 (Surr)	99		72 - 130				10/07/16 16:51		1
Toluene-d8 (Surr)	89		70 - 130				10/07/16 16:51		1

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

**Lab Sample ID: MB 720-210791/4**

**Matrix: Water**

**Analysis Batch: 210791**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			10/07/16 08:38	1
Acetone	ND		50		ug/L			10/07/16 08:38	1
Benzene	ND		0.50		ug/L			10/07/16 08:38	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 08:38	1
Bromobenzene	ND		1.0		ug/L			10/07/16 08:38	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 08:38	1
Bromoform	ND		1.0		ug/L			10/07/16 08:38	1
Bromomethane	ND		1.0		ug/L			10/07/16 08:38	1
2-Butanone (MEK)	ND		50		ug/L			10/07/16 08:38	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 08:38	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 08:38	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 08:38	1
Carbon disulfide	ND		5.0		ug/L			10/07/16 08:38	1
Carbon tetrachloride	ND		0.50		ug/L			10/07/16 08:38	1
Chlorobenzene	ND		0.50		ug/L			10/07/16 08:38	1
Chloroethane	ND		1.0		ug/L			10/07/16 08:38	1
Chloroform	ND		1.0		ug/L			10/07/16 08:38	1
Chloromethane	ND		1.0		ug/L			10/07/16 08:38	1
2-Chlorotoluene	ND		0.50		ug/L			10/07/16 08:38	1
4-Chlorotoluene	ND		0.50		ug/L			10/07/16 08:38	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 08:38	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/07/16 08:38	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/07/16 08:38	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/07/16 08:38	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 08:38	1
1,1-Dichloropropene	ND		0.50		ug/L			10/07/16 08:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			10/07/16 08:38	1
Ethylene Dibromide	ND		0.50		ug/L			10/07/16 08:38	1
Dibromomethane	ND		0.50		ug/L			10/07/16 08:38	1
Dichlorodifluoromethane	ND		0.50		ug/L			10/07/16 08:38	1
1,1-Dichloroethane	ND		0.50		ug/L			10/07/16 08:38	1
1,2-Dichloroethane	ND		0.50		ug/L			10/07/16 08:38	1
1,1-Dichloroethene	ND		0.50		ug/L			10/07/16 08:38	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			10/07/16 08:38	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			10/07/16 08:38	1
1,2-Dichloropropane	ND		0.50		ug/L			10/07/16 08:38	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			10/07/16 08:38	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			10/07/16 08:38	1
Ethylbenzene	ND		0.50		ug/L			10/07/16 08:38	1
Hexachlorobutadiene	ND		1.0		ug/L			10/07/16 08:38	1
2-Hexanone	ND		50		ug/L			10/07/16 08:38	1
Isopropylbenzene	ND		0.50		ug/L			10/07/16 08:38	1
4-Isopropyltoluene	ND		1.0		ug/L			10/07/16 08:38	1
Methylene Chloride	ND		5.0		ug/L			10/07/16 08:38	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			10/07/16 08:38	1
Naphthalene	ND		1.0		ug/L			10/07/16 08:38	1
N-Propylbenzene	ND		1.0		ug/L			10/07/16 08:38	1
Styrene	ND		0.50		ug/L			10/07/16 08:38	1

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-210791/4**

**Matrix: Water**

**Analysis Batch: 210791**

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 08:38	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			10/07/16 08:38	1
Tetrachloroethene	ND		0.50		ug/L			10/07/16 08:38	1
Toluene	ND		0.50		ug/L			10/07/16 08:38	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			10/07/16 08:38	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			10/07/16 08:38	1
1,1,1-Trichloroethane	ND		0.50		ug/L			10/07/16 08:38	1
1,1,2-Trichloroethane	ND		0.50		ug/L			10/07/16 08:38	1
Trichloroethene	ND		0.50		ug/L			10/07/16 08:38	1
Trichlorofluoromethane	ND		1.0		ug/L			10/07/16 08:38	1
1,2,3-Trichloropropane	ND		0.50		ug/L			10/07/16 08:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			10/07/16 08:38	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			10/07/16 08:38	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			10/07/16 08:38	1
Vinyl acetate	ND		10		ug/L			10/07/16 08:38	1
Vinyl chloride	ND		0.50		ug/L			10/07/16 08:38	1
Xylenes, Total	ND		1.0		ug/L			10/07/16 08:38	1
2,2-Dichloropropane	ND		0.50		ug/L			10/07/16 08:38	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			10/07/16 08:38	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	94		67 - 130		10/07/16 08:38	1
1,2-Dichloroethane-d4 (Surr)	96		72 - 130		10/07/16 08:38	1
Toluene-d8 (Surr)	95		70 - 130		10/07/16 08:38	1

**Lab Sample ID: LCS 720-210791/5**

**Matrix: Water**

**Analysis Batch: 210791**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Methyl tert-butyl ether	25.0	28.7		ug/L		115	62 - 130
Acetone	125	148		ug/L		118	26 - 180
Benzene	25.0	28.5		ug/L		114	79 - 130
Dichlorobromomethane	25.0	28.8		ug/L		115	70 - 130
Bromobenzene	25.0	25.4		ug/L		102	70 - 130
Chlorobromomethane	25.0	26.7		ug/L		107	70 - 130
Bromoform	25.0	27.4		ug/L		110	68 - 136
Bromomethane	25.0	24.0		ug/L		96	43 - 151
2-Butanone (MEK)	125	134		ug/L		107	54 - 130
n-Butylbenzene	25.0	27.4		ug/L		110	70 - 142
sec-Butylbenzene	25.0	26.9		ug/L		107	70 - 134
tert-Butylbenzene	25.0	26.3		ug/L		105	70 - 135
Carbon disulfide	25.0	31.7		ug/L		127	68 - 146
Carbon tetrachloride	25.0	27.8		ug/L		111	70 - 146
Chlorobenzene	25.0	25.9		ug/L		104	70 - 130
Chloroethane	25.0	25.3		ug/L		101	62 - 138
Chloroform	25.0	27.9		ug/L		112	70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-210791/5**  
**Matrix: Water**  
**Analysis Batch: 210791**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier						
Chloromethane	25.0	25.4		ug/L		101	52 - 175		
2-Chlorotoluene	25.0	26.9		ug/L		108	70 - 130		
4-Chlorotoluene	25.0	27.8		ug/L		111	70 - 130		
Chlorodibromomethane	25.0	26.2		ug/L		105	70 - 145		
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130		
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	70 - 130		
1,4-Dichlorobenzene	25.0	25.8		ug/L		103	70 - 130		
1,3-Dichloropropane	25.0	28.2		ug/L		113	70 - 130		
1,1-Dichloropropene	25.0	27.9		ug/L		111	70 - 130		
1,2-Dibromo-3-Chloropropane	25.0	23.7		ug/L		95	70 - 136		
Ethylene Dibromide	25.0	28.7		ug/L		115	70 - 130		
Dibromomethane	25.0	27.7		ug/L		111	70 - 130		
Dichlorodifluoromethane	25.0	20.9		ug/L		83	32 - 158		
1,1-Dichloroethane	25.0	28.5		ug/L		114	70 - 130		
1,2-Dichloroethane	25.0	27.5		ug/L		110	61 - 132		
1,1-Dichloroethene	25.0	26.9		ug/L		108	64 - 128		
cis-1,2-Dichloroethene	25.0	28.0		ug/L		112	70 - 130		
trans-1,2-Dichloroethene	25.0	28.3		ug/L		113	68 - 130		
1,2-Dichloropropane	25.0	29.8		ug/L		119	70 - 130		
cis-1,3-Dichloropropene	25.0	28.1		ug/L		113	70 - 130		
trans-1,3-Dichloropropene	25.0	27.1		ug/L		108	70 - 140		
Ethylbenzene	25.0	27.3		ug/L		109	80 - 120		
Hexachlorobutadiene	25.0	24.3		ug/L		97	70 - 130		
2-Hexanone	125	142		ug/L		113	60 - 164		
Isopropylbenzene	25.0	27.2		ug/L		109	70 - 130		
4-Isopropyltoluene	25.0	26.6		ug/L		106	70 - 130		
Methylene Chloride	25.0	26.8		ug/L		107	70 - 147		
4-Methyl-2-pentanone (MIBK)	125	144		ug/L		115	58 - 130		
Naphthalene	25.0	25.4		ug/L		102	50 - 130		
N-Propylbenzene	25.0	27.3		ug/L		109	70 - 130		
Styrene	25.0	25.0		ug/L		100	70 - 130		
1,1,1,2-Tetrachloroethane	25.0	25.8		ug/L		103	70 - 130		
1,1,2,2-Tetrachloroethane	25.0	27.4		ug/L		110	70 - 130		
Tetrachloroethene	25.0	26.5		ug/L		106	70 - 130		
Toluene	25.0	27.3		ug/L		109	78 - 120		
1,2,3-Trichlorobenzene	25.0	25.5		ug/L		102	70 - 130		
1,2,4-Trichlorobenzene	25.0	26.8		ug/L		107	70 - 130		
1,1,1-Trichloroethane	25.0	27.8		ug/L		111	70 - 130		
1,1,2-Trichloroethane	25.0	28.4		ug/L		114	70 - 130		
Trichloroethene	25.0	26.8		ug/L		107	70 - 130		
Trichlorofluoromethane	25.0	26.1		ug/L		104	66 - 132		
1,2,3-Trichloropropane	25.0	27.3		ug/L		109	70 - 130		
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.2		ug/L		109	42 - 162		
1,2,4-Trimethylbenzene	25.0	27.1		ug/L		109	70 - 132		
1,3,5-Trimethylbenzene	25.0	27.0		ug/L		108	70 - 130		
Vinyl acetate	25.0	30.8		ug/L		123	43 - 163		
Vinyl chloride	25.0	24.9		ug/L		100	54 - 135		

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-210791/5**

**Matrix: Water**

**Analysis Batch: 210791**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
m-Xylene & p-Xylene	25.0	27.0		ug/L		108	70 - 142
o-Xylene	25.0	27.2		ug/L		109	70 - 130
2,2-Dichloropropane	25.0	29.0		ug/L		116	70 - 140

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	93		72 - 130
Toluene-d8 (Surr)	97		70 - 130

**Lab Sample ID: LCS 720-210791/7**

**Matrix: Water**

**Analysis Batch: 210791**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Gasoline Range Organics (GRO) -C5-C12	500	508		ug/L		102	71 - 125

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	97		67 - 130
1,2-Dichloroethane-d4 (Surr)	95		72 - 130
Toluene-d8 (Surr)	97		70 - 130

**Lab Sample ID: LCSD 720-210791/6**

**Matrix: Water**

**Analysis Batch: 210791**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	25.0	27.0		ug/L		108	62 - 130	6	20
Acetone	125	139		ug/L		111	26 - 180	6	30
Benzene	25.0	27.9		ug/L		112	79 - 130	2	20
Dichlorobromomethane	25.0	27.8		ug/L		111	70 - 130	3	20
Bromobenzene	25.0	25.3		ug/L		101	70 - 130	1	20
Chlorobromomethane	25.0	25.8		ug/L		103	70 - 130	4	20
Bromoform	25.0	26.4		ug/L		105	68 - 136	4	20
Bromomethane	25.0	24.0		ug/L		96	43 - 151	0	20
2-Butanone (MEK)	125	125		ug/L		100	54 - 130	7	20
n-Butylbenzene	25.0	27.6		ug/L		111	70 - 142	1	20
sec-Butylbenzene	25.0	27.2		ug/L		109	70 - 134	1	20
tert-Butylbenzene	25.0	26.5		ug/L		106	70 - 135	1	20
Carbon disulfide	25.0	32.0		ug/L		128	68 - 146	1	20
Carbon tetrachloride	25.0	27.6		ug/L		111	70 - 146	1	20
Chlorobenzene	25.0	25.7		ug/L		103	70 - 130	1	20
Chloroethane	25.0	25.4		ug/L		102	62 - 138	0	20
Chloroform	25.0	27.2		ug/L		109	70 - 130	3	20
Chloromethane	25.0	25.6		ug/L		102	52 - 175	1	20
2-Chlorotoluene	25.0	27.3		ug/L		109	70 - 130	1	20
4-Chlorotoluene	25.0	28.1		ug/L		112	70 - 130	1	20
Chlorodibromomethane	25.0	25.3		ug/L		101	70 - 145	3	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-210791/6

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

Analysis Batch: 210791

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	RPD Limit
	Added	Result	Qualifier				Limits	RPD		
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	70 - 130	1	20	
1,3-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130	0	20	
1,4-Dichlorobenzene	25.0	25.5		ug/L		102	70 - 130	1	20	
1,3-Dichloropropane	25.0	27.1		ug/L		108	70 - 130	4	20	
1,1-Dichloropropene	25.0	27.6		ug/L		111	70 - 130	1	20	
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		90	70 - 136	5	20	
Ethylene Dibromide	25.0	27.5		ug/L		110	70 - 130	4	20	
Dibromomethane	25.0	26.5		ug/L		106	70 - 130	4	20	
Dichlorodifluoromethane	25.0	20.6		ug/L		82	32 - 158	1	20	
1,1-Dichloroethane	25.0	27.9		ug/L		112	70 - 130	2	20	
1,2-Dichloroethane	25.0	26.6		ug/L		106	61 - 132	3	20	
1,1-Dichloroethene	25.0	27.0		ug/L		108	64 - 128	0	20	
cis-1,2-Dichloroethene	25.0	27.5		ug/L		110	70 - 130	2	20	
trans-1,2-Dichloroethene	25.0	27.9		ug/L		112	68 - 130	1	20	
1,2-Dichloropropane	25.0	29.0		ug/L		116	70 - 130	2	20	
cis-1,3-Dichloropropene	25.0	27.3		ug/L		109	70 - 130	3	20	
trans-1,3-Dichloropropene	25.0	26.0		ug/L		104	70 - 140	4	20	
Ethylbenzene	25.0	27.4		ug/L		110	80 - 120	1	20	
Hexachlorobutadiene	25.0	24.3		ug/L		97	70 - 130	0	20	
2-Hexanone	125	130		ug/L		104	60 - 164	9	20	
Isopropylbenzene	25.0	27.2		ug/L		109	70 - 130	0	20	
4-Isopropyltoluene	25.0	26.6		ug/L		106	70 - 130	0	20	
Methylene Chloride	25.0	26.3		ug/L		105	70 - 147	2	20	
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		107	58 - 130	8	20	
Naphthalene	25.0	25.2		ug/L		101	50 - 130	1	20	
N-Propylbenzene	25.0	27.7		ug/L		111	70 - 130	1	20	
Styrene	25.0	24.9		ug/L		100	70 - 130	1	20	
1,1,1,2-Tetrachloroethane	25.0	25.5		ug/L		102	70 - 130	1	20	
1,1,2,2-Tetrachloroethane	25.0	26.4		ug/L		106	70 - 130	4	20	
Tetrachloroethene	25.0	26.2		ug/L		105	70 - 130	1	20	
Toluene	25.0	27.3		ug/L		109	78 - 120	0	20	
1,2,3-Trichlorobenzene	25.0	25.1		ug/L		100	70 - 130	2	20	
1,2,4-Trichlorobenzene	25.0	26.3		ug/L		105	70 - 130	2	20	
1,1,1-Trichloroethane	25.0	27.7		ug/L		111	70 - 130	1	20	
1,1,2-Trichloroethane	25.0	27.3		ug/L		109	70 - 130	4	20	
Trichloroethene	25.0	26.2		ug/L		105	70 - 130	2	20	
Trichlorofluoromethane	25.0	26.2		ug/L		105	66 - 132	0	20	
1,2,3-Trichloropropane	25.0	26.7		ug/L		107	70 - 130	2	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.9		ug/L		108	42 - 162	1	20	
1,2,4-Trimethylbenzene	25.0	27.2		ug/L		109	70 - 132	0	20	
1,3,5-Trimethylbenzene	25.0	27.2		ug/L		109	70 - 130	1	20	
Vinyl acetate	25.0	29.1		ug/L		116	43 - 163	6	20	
Vinyl chloride	25.0	25.1		ug/L		100	54 - 135	1	20	
m-Xylene & p-Xylene	25.0	26.9		ug/L		107	70 - 142	1	20	
o-Xylene	25.0	27.0		ug/L		108	70 - 130	1	20	
2,2-Dichloropropane	25.0	29.5		ug/L		118	70 - 140	2	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-210791/6**

**Matrix: Water**

**Analysis Batch: 210791**

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	91		72 - 130
Toluene-d8 (Surr)	96		70 - 130

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Lab Sample ID: LCSD 720-210791/8**

**Matrix: Water**

**Analysis Batch: 210791**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD
Gasoline Range Organics (GRO) -C5-C12	500	508		ug/L	102	71 - 125	0    20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	96		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		72 - 130
Toluene-d8 (Surr)	97		70 - 130

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Lab Sample ID: MB 720-210843/4**

**Matrix: Water**

**Analysis Batch: 210843**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			10/07/16 19:19	1
Acetone	ND		50		ug/L			10/07/16 19:19	1
Benzene	ND		0.50		ug/L			10/07/16 19:19	1
Dichlorobromomethane	ND		0.50		ug/L			10/07/16 19:19	1
Bromobenzene	ND		1.0		ug/L			10/07/16 19:19	1
Chlorobromomethane	ND		1.0		ug/L			10/07/16 19:19	1
Bromoform	ND		1.0		ug/L			10/07/16 19:19	1
Bromomethane	ND		1.0		ug/L			10/07/16 19:19	1
2-Butanone (MEK)	ND		50		ug/L			10/07/16 19:19	1
n-Butylbenzene	ND		1.0		ug/L			10/07/16 19:19	1
sec-Butylbenzene	ND		1.0		ug/L			10/07/16 19:19	1
tert-Butylbenzene	ND		1.0		ug/L			10/07/16 19:19	1
Carbon disulfide	ND		5.0		ug/L			10/07/16 19:19	1
Carbon tetrachloride	ND		0.50		ug/L			10/07/16 19:19	1
Chlorobenzene	ND		0.50		ug/L			10/07/16 19:19	1
Chloroethane	ND		1.0		ug/L			10/07/16 19:19	1
Chloroform	ND		1.0		ug/L			10/07/16 19:19	1
Chloromethane	ND		1.0		ug/L			10/07/16 19:19	1
2-Chlorotoluene	ND		0.50		ug/L			10/07/16 19:19	1
4-Chlorotoluene	ND		0.50		ug/L			10/07/16 19:19	1
Chlorodibromomethane	ND		0.50		ug/L			10/07/16 19:19	1
1,2-Dichlorobenzene	ND		0.50		ug/L			10/07/16 19:19	1
1,3-Dichlorobenzene	ND		0.50		ug/L			10/07/16 19:19	1
1,4-Dichlorobenzene	ND		0.50		ug/L			10/07/16 19:19	1
1,3-Dichloropropane	ND		1.0		ug/L			10/07/16 19:19	1
1,1-Dichloropropene	ND		0.50		ug/L			10/07/16 19:19	1

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-210843/4**

**Matrix: Water**

**Analysis Batch: 210843**

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

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifer									
1,2-Dibromo-3-Chloropropane	ND				1.0		ug/L			10/07/16 19:19	1
Ethylene Dibromide	ND				0.50		ug/L			10/07/16 19:19	1
Dibromomethane	ND				0.50		ug/L			10/07/16 19:19	1
Dichlorodifluoromethane	ND				0.50		ug/L			10/07/16 19:19	1
1,1-Dichloroethane	ND				0.50		ug/L			10/07/16 19:19	1
1,2-Dichloroethane	ND				0.50		ug/L			10/07/16 19:19	1
1,1-Dichloroethene	ND				0.50		ug/L			10/07/16 19:19	1
cis-1,2-Dichloroethene	ND				0.50		ug/L			10/07/16 19:19	1
trans-1,2-Dichloroethene	ND				0.50		ug/L			10/07/16 19:19	1
1,2-Dichloropropane	ND				0.50		ug/L			10/07/16 19:19	1
cis-1,3-Dichloropropene	ND				0.50		ug/L			10/07/16 19:19	1
trans-1,3-Dichloropropene	ND				0.50		ug/L			10/07/16 19:19	1
Ethylbenzene	ND				0.50		ug/L			10/07/16 19:19	1
Hexachlorobutadiene	ND				1.0		ug/L			10/07/16 19:19	1
2-Hexanone	ND				50		ug/L			10/07/16 19:19	1
Isopropylbenzene	ND				0.50		ug/L			10/07/16 19:19	1
4-Isopropyltoluene	ND				1.0		ug/L			10/07/16 19:19	1
Methylene Chloride	ND				5.0		ug/L			10/07/16 19:19	1
4-Methyl-2-pentanone (MIBK)	ND				50		ug/L			10/07/16 19:19	1
Naphthalene	ND				1.0		ug/L			10/07/16 19:19	1
N-Propylbenzene	ND				1.0		ug/L			10/07/16 19:19	1
Styrene	ND				0.50		ug/L			10/07/16 19:19	1
1,1,1,2-Tetrachloroethane	ND				0.50		ug/L			10/07/16 19:19	1
1,1,2,2-Tetrachloroethane	ND				0.50		ug/L			10/07/16 19:19	1
Tetrachloroethene	ND				0.50		ug/L			10/07/16 19:19	1
Toluene	ND				0.50		ug/L			10/07/16 19:19	1
1,2,3-Trichlorobenzene	ND				1.0		ug/L			10/07/16 19:19	1
1,2,4-Trichlorobenzene	ND				1.0		ug/L			10/07/16 19:19	1
1,1,1-Trichloroethane	ND				0.50		ug/L			10/07/16 19:19	1
1,1,2-Trichloroethane	ND				0.50		ug/L			10/07/16 19:19	1
Trichloroethene	ND				0.50		ug/L			10/07/16 19:19	1
Trichlorofluoromethane	ND				1.0		ug/L			10/07/16 19:19	1
1,2,3-Trichloropropane	ND				0.50		ug/L			10/07/16 19:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND				0.50		ug/L			10/07/16 19:19	1
1,2,4-Trimethylbenzene	ND				0.50		ug/L			10/07/16 19:19	1
1,3,5-Trimethylbenzene	ND				0.50		ug/L			10/07/16 19:19	1
Vinyl acetate	ND				10		ug/L			10/07/16 19:19	1
Vinyl chloride	ND				0.50		ug/L			10/07/16 19:19	1
Xylenes, Total	ND				1.0		ug/L			10/07/16 19:19	1
2,2-Dichloropropane	ND				0.50		ug/L			10/07/16 19:19	1
Gasoline Range Organics (GRO) -C5-C12	ND				50		ug/L			10/07/16 19:19	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifer						
4-Bromofluorobenzene	81		81		67 - 130			1
1,2-Dichloroethane-d4 (Surr)	103		103		72 - 130			1
Toluene-d8 (Surr)	94		94		70 - 130			1

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-210843/5**

**Matrix: Water**

**Analysis Batch: 210843**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Methyl tert-butyl ether	25.0	21.0		ug/L		84	62 - 130	
Acetone	125	129		ug/L		103	26 - 180	
Benzene	25.0	27.2		ug/L		109	79 - 130	
Dichlorobromomethane	25.0	26.3		ug/L		105	70 - 130	
Bromobenzene	25.0	24.3		ug/L		97	70 - 130	
Chlorobromomethane	25.0	24.2		ug/L		97	70 - 130	
Bromoform	25.0	25.7		ug/L		103	68 - 136	
Bromomethane	25.0	25.3		ug/L		101	43 - 151	
2-Butanone (MEK)	125	125		ug/L		100	54 - 130	
n-Butylbenzene	25.0	27.6		ug/L		110	70 - 142	
sec-Butylbenzene	25.0	26.1		ug/L		104	70 - 134	
tert-Butylbenzene	25.0	25.1		ug/L		100	70 - 135	
Carbon disulfide	25.0	26.9		ug/L		108	68 - 146	
Carbon tetrachloride	25.0	24.7		ug/L		99	70 - 146	
Chlorobenzene	25.0	26.9		ug/L		108	70 - 130	
Chloroethane	25.0	24.2		ug/L		97	62 - 138	
Chloroform	25.0	26.6		ug/L		107	70 - 130	
Chloromethane	25.0	22.8		ug/L		91	52 - 175	
2-Chlorotoluene	25.0	26.3		ug/L		105	70 - 130	
4-Chlorotoluene	25.0	26.6		ug/L		106	70 - 130	
Chlorodibromomethane	25.0	23.7		ug/L		95	70 - 145	
1,2-Dichlorobenzene	25.0	26.3		ug/L		105	70 - 130	
1,3-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130	
1,4-Dichlorobenzene	25.0	25.6		ug/L		103	70 - 130	
1,3-Dichloropropane	25.0	26.1		ug/L		105	70 - 130	
1,1-Dichloropropene	25.0	25.1		ug/L		100	70 - 130	
1,2-Dibromo-3-Chloropropane	25.0	21.4		ug/L		85	70 - 136	
Ethylene Dibromide	25.0	25.4		ug/L		102	70 - 130	
Dibromomethane	25.0	25.7		ug/L		103	70 - 130	
Dichlorodifluoromethane	25.0	24.9		ug/L		100	32 - 158	
1,1-Dichloroethane	25.0	24.3		ug/L		97	70 - 130	
1,2-Dichloroethane	25.0	24.7		ug/L		99	61 - 132	
1,1-Dichloroethene	25.0	23.9		ug/L		95	64 - 128	
cis-1,2-Dichloroethene	25.0	25.6		ug/L		102	70 - 130	
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	68 - 130	
1,2-Dichloropropane	25.0	26.1		ug/L		104	70 - 130	
cis-1,3-Dichloropropene	25.0	26.2		ug/L		105	70 - 130	
trans-1,3-Dichloropropene	25.0	23.3		ug/L		93	70 - 140	
Ethylbenzene	25.0	27.2		ug/L		109	80 - 120	
Hexachlorobutadiene	25.0	25.3		ug/L		101	70 - 130	
2-Hexanone	125	121		ug/L		97	60 - 164	
Isopropylbenzene	25.0	26.4		ug/L		106	70 - 130	
4-Isopropyltoluene	25.0	25.8		ug/L		103	70 - 130	
Methylene Chloride	25.0	26.9		ug/L		107	70 - 147	
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		97	58 - 130	
Naphthalene	25.0	23.7		ug/L		95	50 - 130	
N-Propylbenzene	25.0	26.9		ug/L		108	70 - 130	
Styrene	25.0	24.4		ug/L		98	70 - 130	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID:** LCS 720-210843/5  
**Matrix:** Water  
**Analysis Batch:** 210843

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
1,1,1,2-Tetrachloroethane	25.0	25.5		ug/L		102	70 - 130	
1,1,2,2-Tetrachloroethane	25.0	27.4		ug/L		109	70 - 130	
Tetrachloroethene	25.0	24.8		ug/L		99	70 - 130	
Toluene	25.0	27.0		ug/L		108	78 - 120	
1,2,3-Trichlorobenzene	25.0	24.4		ug/L		98	70 - 130	
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	70 - 130	
1,1,1-Trichloroethane	25.0	25.4		ug/L		102	70 - 130	
1,1,2-Trichloroethane	25.0	26.8		ug/L		107	70 - 130	
Trichloroethene	25.0	24.9		ug/L		99	70 - 130	
Trichlorofluoromethane	25.0	23.1		ug/L		92	66 - 132	
1,2,3-Trichloropropane	25.0	24.9		ug/L		100	70 - 130	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.1		ug/L		100	42 - 162	
ne								
1,2,4-Trimethylbenzene	25.0	26.3		ug/L		105	70 - 132	
1,3,5-Trimethylbenzene	25.0	26.1		ug/L		104	70 - 130	
Vinyl acetate	25.0	22.7		ug/L		91	43 - 163	
Vinyl chloride	25.0	24.3		ug/L		97	54 - 135	
m-Xylene & p-Xylene	25.0	26.3		ug/L		105	70 - 142	
o-Xylene	25.0	27.7		ug/L		111	70 - 130	
2,2-Dichloropropane	25.0	24.9		ug/L		100	70 - 140	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	91		72 - 130
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID:** LCS 720-210843/7  
**Matrix:** Water  
**Analysis Batch:** 210843

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Gasoline Range Organics (GRO) -C5-C12	500	477		ug/L		95	71 - 125	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	91		67 - 130
1,2-Dichloroethane-d4 (Surr)	96		72 - 130
Toluene-d8 (Surr)	101		70 - 130

**Lab Sample ID:** LCSD 720-210843/6  
**Matrix:** Water  
**Analysis Batch:** 210843

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
Methyl tert-butyl ether	25.0	23.4		ug/L		94	62 - 130	11	20
Acetone	125	140		ug/L		112	26 - 180	8	30
Benzene	25.0	26.7		ug/L		107	79 - 130	2	20
Dichlorobromomethane	25.0	27.3		ug/L		109	70 - 130	4	20

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-210843/6

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

Analysis Batch: 210843

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	RPD Limit
	Added	Result	Qualifier				Limits	RPD		
Bromobenzene	25.0	25.2		ug/L	101	70 - 130		4	20	
Chlorobromomethane	25.0	24.9		ug/L	100	70 - 130		3	20	
Bromoform	25.0	27.1		ug/L	108	68 - 136		5	20	
Bromomethane	25.0	25.7		ug/L	103	43 - 151		2	20	
2-Butanone (MEK)	125	137		ug/L	110	54 - 130		9	20	
n-Butylbenzene	25.0	27.1		ug/L	109	70 - 142		2	20	
sec-Butylbenzene	25.0	25.6		ug/L	102	70 - 134		2	20	
tert-Butylbenzene	25.0	24.9		ug/L	100	70 - 135		1	20	
Carbon disulfide	25.0	26.8		ug/L	107	68 - 146		0	20	
Carbon tetrachloride	25.0	25.1		ug/L	100	70 - 146		1	20	
Chlorobenzene	25.0	26.9		ug/L	107	70 - 130		0	20	
Chloroethane	25.0	23.8		ug/L	95	62 - 138		2	20	
Chloroform	25.0	26.6		ug/L	106	70 - 130		0	20	
Chloromethane	25.0	22.7		ug/L	91	52 - 175		0	20	
2-Chlorotoluene	25.0	25.8		ug/L	103	70 - 130		2	20	
4-Chlorotoluene	25.0	26.4		ug/L	106	70 - 130		1	20	
Chlorodibromomethane	25.0	23.8		ug/L	95	70 - 145		1	20	
1,2-Dichlorobenzene	25.0	26.0		ug/L	104	70 - 130		1	20	
1,3-Dichlorobenzene	25.0	25.4		ug/L	102	70 - 130		1	20	
1,4-Dichlorobenzene	25.0	25.7		ug/L	103	70 - 130		0	20	
1,3-Dichloropropane	25.0	26.8		ug/L	107	70 - 130		2	20	
1,1-Dichloropropene	25.0	25.1		ug/L	100	70 - 130		0	20	
1,2-Dibromo-3-Chloropropane	25.0	22.0		ug/L	88	70 - 136		3	20	
Ethylene Dibromide	25.0	26.4		ug/L	106	70 - 130		4	20	
Dibromomethane	25.0	26.7		ug/L	107	70 - 130		4	20	
Dichlorodifluoromethane	25.0	24.4		ug/L	98	32 - 158		2	20	
1,1-Dichloroethane	25.0	24.3		ug/L	97	70 - 130		0	20	
1,2-Dichloroethane	25.0	25.0		ug/L	100	61 - 132		1	20	
1,1-Dichloroethene	25.0	24.4		ug/L	98	64 - 128		2	20	
cis-1,2-Dichloroethene	25.0	25.3		ug/L	101	70 - 130		1	20	
trans-1,2-Dichloroethene	25.0	25.3		ug/L	101	68 - 130		1	20	
1,2-Dichloropropane	25.0	26.3		ug/L	105	70 - 130		1	20	
cis-1,3-Dichloropropene	25.0	27.5		ug/L	110	70 - 130		5	20	
trans-1,3-Dichloropropene	25.0	24.4		ug/L	98	70 - 140		5	20	
Ethylbenzene	25.0	26.9		ug/L	108	80 - 120		1	20	
Hexachlorobutadiene	25.0	24.8		ug/L	99	70 - 130		2	20	
2-Hexanone	125	135		ug/L	108	60 - 164		11	20	
Isopropylbenzene	25.0	25.9		ug/L	104	70 - 130		2	20	
4-Isopropyltoluene	25.0	25.3		ug/L	101	70 - 130		2	20	
Methylene Chloride	25.0	27.1		ug/L	108	70 - 147		1	20	
4-Methyl-2-pentanone (MIBK)	125	135		ug/L	108	58 - 130		10	20	
Naphthalene	25.0	25.1		ug/L	100	50 - 130		6	20	
N-Propylbenzene	25.0	26.7		ug/L	107	70 - 130		1	20	
Styrene	25.0	24.7		ug/L	99	70 - 130		1	20	
1,1,1,2-Tetrachloroethane	25.0	25.8		ug/L	103	70 - 130		1	20	
1,1,2,2-Tetrachloroethane	25.0	28.9		ug/L	116	70 - 130		6	20	
Tetrachloroethene	25.0	24.8		ug/L	99	70 - 130		0	20	
Toluene	25.0	27.1		ug/L	108	78 - 120		0	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-210843/6**

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

**Analysis Batch: 210843**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
1,2,3-Trichlorobenzene	25.0	25.0		ug/L		100	70 - 130	3	20
1,2,4-Trichlorobenzene	25.0	24.8		ug/L		99	70 - 130	1	20
1,1,1-Trichloroethane	25.0	26.1		ug/L		104	70 - 130	3	20
1,1,2-Trichloroethane	25.0	27.8		ug/L		111	70 - 130	4	20
Trichloroethene	25.0	25.1		ug/L		100	70 - 130	1	20
Trichlorofluoromethane	25.0	22.6		ug/L		90	66 - 132	2	20
1,2,3-Trichloropropane	25.0	25.8		ug/L		103	70 - 130	4	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.4		ug/L		101	42 - 162	1	20
1,2,4-Trimethylbenzene	25.0	26.2		ug/L		105	70 - 132	0	20
1,3,5-Trimethylbenzene	25.0	25.9		ug/L		103	70 - 130	1	20
Vinyl acetate	25.0	24.1		ug/L		96	43 - 163	6	20
Vinyl chloride	25.0	23.8		ug/L		95	54 - 135	2	20
m-Xylene & p-Xylene	25.0	26.1		ug/L		104	70 - 142	1	20
o-Xylene	25.0	27.2		ug/L		109	70 - 130	2	20
2,2-Dichloropropane	25.0	27.9		ug/L		112	70 - 140	12	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	97		72 - 130
Toluene-d8 (Surr)	101		70 - 130

**Lab Sample ID: LCSD 720-210843/8**

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

**Analysis Batch: 210843**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Gasoline Range Organics (GRO) -C5-C12	500	475		ug/L		95	71 - 125	1	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	92		67 - 130
1,2-Dichloroethane-d4 (Surr)	95		72 - 130
Toluene-d8 (Surr)	101		70 - 130

TestAmerica Pleasanton

# QC Association Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## GC/MS VOA

### Analysis Batch: 210791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74851-2	EFF	Total/NA	Water	8260B/CA_LUFT MS	5
720-74851-3	GAC	Total/NA	Water	8260B/CA_LUFT MS	6
MB 720-210791/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	7
LCS 720-210791/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	8
LCS 720-210791/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	9
LCSD 720-210791/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	10
LCSD 720-210791/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	11

### Analysis Batch: 210843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-74851-1	INF	Total/NA	Water	8260B/CA_LUFT MS	12
MB 720-210843/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	13
LCS 720-210843/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	14
LCS 720-210843/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-210843/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	
LCSD 720-210843/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	

# Lab Chronicle

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Client Sample ID: INF

Date Collected: 09/30/16 15:22

Date Received: 10/03/16 12:55

## Lab Sample ID: 720-74851-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	210843	10/08/16 05:31	LPL	TAL PLS

## Client Sample ID: EFF

Date Collected: 09/30/16 15:23

Date Received: 10/03/16 12:55

## Lab Sample ID: 720-74851-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	210791	10/07/16 16:22	LPL	TAL PLS

## Client Sample ID: GAC

Date Collected: 09/30/16 15:24

Date Received: 10/03/16 12:55

## Lab Sample ID: 720-74851-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	210791	10/07/16 16:51	LPL	TAL PLS

### Laboratory References:

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

TestAmerica Pleasanton

# Certification Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

## Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18
Analysis Method	Prep Method	Matrix	Analyte	

1

2

3

4

5

6

7

8

9

10

11

12

13

14

TestAmerica Pleasanton

## Method Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM	8260B / CA LUFT MS	SW846	TAL PLS

**Protocol References:**

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

**Laboratory References:**

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

## Sample Summary

Client: Ninyo & Moore  
Project/Site: Chun

TestAmerica Job ID: 720-74851-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-74851-1	INF	Water	09/30/16 15:22	10/03/16 12:55
720-74851-2	EFF	Water	09/30/16 15:23	10/03/16 12:55
720-74851-3	GAC	Water	09/30/16 15:24	10/03/16 12:55

1

2

3

4

5

6

7

8

9

10

11

12

13

14

TestAmerica Pleasanton

TestAmerica Pleasanton

1220 Quarry Lane

## Chain of Custody Record

171333

TestAmerica

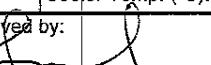
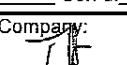
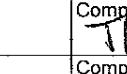
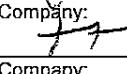
THE LEADER IN ENVIRONMENTAL TESTING

720-74851

Pleasanton, CA 94566  
phone 925.484.1919 faxRegulatory Program:  DW  NPDES  RCRA  Other:

TestAmerica Laboratories, Inc.

10/11/2016

Client Contact		Project Manager: Peter Sims		Site Contact: Peter Sims		Date: 9/30/16	COC No:
Ninno & Moore 1956 Webster Street, Ste. 400 Oakland, CA 946501 510-343-3000 Phone 510-343-3001 FAX Project Name: Chun Site: P O # 401896004		Tel/Fax: 510-343-3000 Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below <input type="checkbox"/> 2 weeks <input checked="" type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Lab Contact:		Carrier:	<input type="checkbox"/> of COCs
							Sampler:
							For Lab Use Only: Walk-in Client: <input type="checkbox"/> Lab Sampling: <input type="checkbox"/>
							Job / SDG No.: <input type="checkbox"/>
							Sample Specific Notes:
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N) Perform MS / MSD (Y/N) Title 22 Metals by EPA 6010/7471 TPHd and TPPhm by EPA 8016B VOGs and TPPhg by EPA 8260B OCPS by EPA 8081
INF		9/30/16	1522	G	W	3	X
EFF			1523	G	W	3	X
GAC		↓	1524	G	W	3	X
							
720-74851 Chain of Custody							
Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other: <input type="checkbox"/> 7=Zinc							
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months							
Special Instructions/QC Requirements & Comments: GeoTracker EDD							
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____	
Relinquished by: 		Company: N+M	Date/Time: 10/3/16 10:05	Received by: 	Company: 	Date/Time: 10/3/16 1005	
Relinquished by: 		Company: 	Date/Time: 10/3/16 1255	Received by: 	Company: 	Date/Time: 10/3/16 1255	
Relinquished by: 		Company: _____	Date/Time: _____	Received in Laboratory by: _____	Company: _____	Date/Time: _____	

## Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-74851-1

**Login Number:** 74851

**List Source:** TestAmerica Pleasanton

**List Number:** 1

**Creator:** Arauz, Dennis

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

2301 Santa Clara Avenue  
Alameda, California

February 28, 2017  
Project No. 401896004

---

## **APPENDIX D**

### **GROUNDWATER MONITORING DATA SHEETS**

MONITORING WELLS SURVEY INC.  
TURB

Date:

08 / 16 / 10

Project Name: Chun	Client: Lily A. Chun Trust 1991	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	ERD

Note: All measurements from top of casing.

WELL NO. MW-4R	Depth to Liquid (DL): 9.78	Well Location:  Corner of Oak + Santa Clara, near canopy
Casing Material: PVC	Depth to Water (DW1): 9.78	
Diameter: 2"	Product Thickness (PT=DW1-DL): 0	
Well Head Condition:	Total Well Depth (TD): 24.88	
Well Box Condition:	Total head (TH=TD-DW1): 15.1	
Purge Method:	Casing Volume (TH*Factor): 2.4	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4" = 0.65; 6" = 1.5 gal/ft.	$\frac{1}{2}$ " = 0.01; $\frac{3}{4}$ " = 0.023	7.2 gal purge

Time	Vol Purged	Temp (°F/°C)	Cond (uS/cm)	pH	DO (mg/l)	ORP (mV)	Turb (NTU)	Remarks
0832	2.5	18.15	321	7.70	7.31	15	52.5	
0914	5	18.02	350	6.84	0.30	-41	34.2	
1002	7.5	18.82	321	6.80	0.42	-13	5.31	

Well Recovery Data

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

Sample Information

Time	Sample ID	Temp (°F)	PH	Cond (uS/cm)	Turb (NTU)	PH-S	PH-d	BTX MTBE	260	310	OTHER
1005											

Additional Comments




Date:

11 August 2010

Project Name: Chun	Client: Lily A. Chun Trust 1991	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone: 510 343 3600	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-SR	Depth to Liquid (DL): 8.28	
Casing Material: PVC	Depth to Water (DW1): 8.28	
Diameter: 2"	Product Thickness (PT=DW1-DL): 0	
Well Head Condition:	Total Well Depth (TD): 23.40	
Well Box Condition:	Total head (TH=TD-DW1): 15.21	
Purge Method: P. Purge	Casing Volume (TH*Factor): 2.4	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4" = 0.65; 6" = 1.5 gal/ft. 1/2" = 0.01; 3/4" = 0.023	7.3	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	DO (mg/l)	ORP (mV)	Turb (NTU)	Remarks
1025	2.3	71.04	4446	6.94	0.62	-88	24.4	Black gunk seen in purge water
1036	5.0	71.36	4460	6.95	0.43	-10	14.8	
	7.5	71.77	728	7.08	0.57	-95	10.3	

## Well Recovery Data

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

## Sample Information

Time	Sample ID	Temp (°F)	pH	Cond (uS/cm)	Turb (NTU)	TPH <sub>50</sub>	TPH-d	BTEX/NITBB	8260	8010	OTHER

## Additional Comments


# MONITORING AND SAMPLING FORM

Date:

16 Aug 2016

Project Name: Chun	Client: Lily A. Chun Trust 1991	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone: 510 3433000	
City/State: Alameda, CA	Technician Gauging/Sampling: CCRD	

Note: All measurements from top of casing.

### Well Location:

WELL NO. MW-4R	Depth to Liquid (DL): 8' 13"
Casing Material: PVC	Depth to Water (DW1): 8' 13"
Diameter: 2"	Product Thickness (PT=DW1-DL): 0"
Well Head Condition:	Total Well Depth (TD): 24.69'
Well Box Condition:	Total head (TH=TD-DW1): 16.76'
Purge Method:	Casing Volume (TH*Factor): 2.1 gal
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4" = 0.65; 6" = 1.5 gal/ft.	
$\frac{1}{2}$ " = 0.01; $\frac{3}{4}$ " = 0.023      8.1 gal	

## Well Recovery Data

Time	Depth to Water (DW)	% Recovery ( $(1 - [DW_2 - DW_1]/DW_1) * 100$ )

## Sample Information

#### Additional Comments

MONITORING WELL SAMPLING INC.  
RECEIVED

Date:

16 August 2014

Project Name: Chun	Client: Lily A. Chua Trust 1991	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	S10 343 3000
City/State: Alameda, CA	Technician Gauging/Sampling:	CVRD

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-7R	Depth to Liquid (DL): 8.27	Well Location:
Casing Material: PVC	Depth to Water (DW1): 8.27	
Diameter: 2"	Product Thickness (PT=DW1-DL): 0	
Well Head Condition:	Total Well Depth (TD): 24.92	
Well Box Condition:	Total head (TH=TD-DW1): 16.48	
Purge Method:	Casing Volume (TH*Factor): 2.67	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4" = 0.65; 6" = 1.5 gal/ft.	8.0	
1/2" = 0.01; 3/4" = 0.023		

Time	Vol Purged	Temp (°F/°C)	Cond (uS/cm)	pH	DO (mg/l)	ORP (mV)	Turb (NTU)	Remarks
1211	2.75	72.30	510	6.44	0.37	19	298	
1210	5.5	71.65	490	6.63	0.03	-37	32.7	
1232	8.25	71.97	499	6.60	0.07	-38	58.4	

Well Recovery Data

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

Sample Information

Time	Sample ID	Temp (°F)	pH	Cond (uS/cm)	Turb (NTU)	FPH-s	FPH-d	BTEX-NITBE	8260	9010	OTHER
	1235										

Additional Comments


MONITORING WELL SAMPLING  
FORM

Date:

Project Name: Chun	Client: Lily A. Chun Trust 1991	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 NO. MW-8	Depth to Liquid (DL):	8.50	Well Location:
Casing Material: PVC	Depth to Water (DW1):	8.54	on Santa Clara, near CVS
Diameter: 2"	Product Thickness (PT=DW1-DL):	6	
Well Head Condition:	Total Well Depth (TD):	13.84	
Well Box Condition:	Total head (TH=TD-DW1):	5.26	
Purge Method: Bavor	Casing Volume (TH*Factor):	0.35	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4"=0.65; 6" = 1.5 gal/ft. 1/2" = 0.01; 3/4" = 0.023		2.5	

Time	Vol. Purged	Temp (°F/°C)	Cond (uS/cm)	pH	DO (mg/l)	ORP (mV)	Turb (NTU)	Remarks
1441	1 1 g	27.48	330	7.24	0	-55	551	
1442	2 1	24.89	133	6.88	0	-100	1000	slashed
1445	3 5	24.81	764	6.91	6	-98	990	grey cloudy

Well Recovery Data

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

Sample Information

Time	Sample ID	Temp (°F)	pH	Cond (uS/cm)	Turb (NTU)	TPH-g	TPH-d	BTEX NDBE	S260	S310	OTHER
1450											

Additional Comments


**MONITORING WELL SAMPLING**  
**FORM**

Date:

Project Name: Chun	Client: Lily A. Chun Trust 1991	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. MU-9	Depth to Liquid (DL): 8.14	adj. to meeting hall, in street
Casing Material: PVC	Depth to Water (DW1): 8.14	
Diameter: 2"	Product Thickness (PT=DW1-DL): 0	
Well Head Condition:	Total Well Depth (TD): 14.50	
Well Box Condition:	Total head (TH=TD-DW1): 6.45	
Purge Method:	Casing Volume (TH*Factor): 1.03	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4"=0.65; 6" = 1.5 gal/ft. ½" = 0.01; ¾" = 0.023	3.1	

Time	Vol Purged	Temp (°F/°C)	Cond (uS/cm)	pH	DO (mg/l)	ORP (mV)	Turb (NTU)	Remarks
1405	1g	21.51	403	7.10	0.44	57	394	
1406	2g	21.92	340	7.05	0	63	905	
1409	3g	21.89	387	7.15	0	57	788	

Well Recovery Data

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

Sample Information

Time	Sample ID	Temp (°F)	pH	Cond (uS/cm)	Turb (NTU)	TRH-g	TRH-d	BTEX	NTUBE	8260	8010	OTHER
1410												

Additional Comments


**MONITORING WELL SAMPLING**

Date:

8/14/16

Project Name: Chun	Client: Lily A. Chun Trust 1991	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): 8.09	in street, near city wall
Casing Material: PVC	Depth to Water (DW1): 8.09	
Diameter: 2"	Product Thickness (PT=DW1-DL): 0	
Well Head Condition:	Total Well Depth (TD): 17.81	
Well Box Condition:	Total head (TH=TD-DW1): 4.72	
Purge Method:	Casing Volume (TH*Factor): 0.75	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4" = 0.65; 6" = 1.5 gal/ft.		
1/2" = 0.01; 3/4" = 0.023	2.25	

Time	Vol Purged	Temp (°F/°C)	Cond (µS/cm)	pH	DO (mg/l)	ORP (mV)	Turb (NTU)	Remarks
1337	0.75	22.70	553	6.94	0	-7	598	
1338	1.5	23.58	615	7.16	0	39	1000	
1341	2.25	23.24	623	6.89	0	63	0	

Well Recovery Data

Time	Depth to Water (DW2)	% Recovery ((DW2-DW1)/DW1)*100
1341		

Sample Information

Time	Sample ID	Temp (°F)	pH	Cond (µS/cm)	Turb (NTU)	TPH <sub>g</sub>	TPH <sub>d</sub>	BTEX MTBE	260	8010	OTHER

Additional Comments


MONITORING WELL SAMPLING  
RECORD

Date:

17 August 2010

Project Name: Chun	Client: Lily A. Chun Trust 1991	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone: 510 343 3000	
City/State: Alameda, CA	Technician Gauging/Sampling:	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-1R	Depth to Liquid (DL): 10.58	Adjacent to res. building, in driveway
Casing Material: PVC	Depth to Water (DW1): 10.58	
Diameter: 2"	Product Thickness (PT=DW1-DL): 0	
Well Head Condition:	Total Well Depth (TD): 23.02	
Well Box Condition:	Total head (TH=TD-DW1): 13.04	
Purge Method: P, pump	Casing Volume (TH*Factor): 2.1	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4" = 0.65; 6" = 1.5 gal/ft.	$\frac{1}{2}'' = 0.01; \frac{3}{4}'' = 0.023$	
	6.2 gal	

Time	Vol Purged	Temp (°F/°C)	Cond (uS/cm)	pH	DO (mg/l)	ORP (mV)	Turb (NTU)	Remarks
1119	2 3	20.87	504	6.58	0.08	-8	147	many purge water
1131	4 9	21.08	421	6.43	0	-35	21.2	
1141	6 3	21.16	430	6.62	0	-42	9.88	

Well Recovery Data

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

Sample Information

Time	Sample ID	Temp (°F)	pH	Cond (uS/cm)	Turb (NTU)	TPH-SO	TPH-D	BTEX/MTBE	3260	3010	OTHER
	1145										

Additional Comments


MONITORING WELL SAMPLING  
RECORD

Date:

17 August 1991

Project Name: Chun	Client: Lily A. Chun Trust 1991	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact Phone: S 10 343 3000	
City/State: Alameda, CA	Technician Gauging/Sampling: Emily Durksen	

Note: All measurements from top of casing.

Well Location:

WELL NO. MU-12	Depth to Liquid (DL): 10.58	near times way
Casing Material: PVC	Depth to Water (DW1): 10.58	
Diameter: 2"	Product Thickness (PT=DW1-DL): 0	
Well Head Condition:	Total Well Depth (TD): 24.29	
Well Box Condition:	Total head (TH=TD-DW1): 13.71	
Purge Method: P. pump	Casing Volume (TH*Factor): 2.2	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4" = 0.65; 6" = 1.5 gal/ft. 1/2" = 0.01; 3/4" = 0.023	6.4 gal	

Time	Vol Purged	Temp (°F/C)	Cond (uS/cm)	pH	DO (mg/l)	ORP (mV)	Turb (NTU)	Remarks
1020	2.2 g	19.53	588	6.57	1.22	+0	4.77	
1033	4.4 g	20.47	613	6.50	0.70	-22	4.43	
1045	6.6 g	20.04	504	6.54	0.32	-5	0	

Well Recovery Data

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

Sample Information

Time	Sample ID	Temp (°F)	pH	Cond (uS/cm)	Turb (NTU)	TPH SD	TPH P	BTEX MCBE	8260	8310	OTHER
	1050										

Additional Comments


**MONITORING WELL SAMPLING  
REPORT**

Date:

17 August 1994

Project Name: Chun	Client: Lily A. Chun Trust 1991	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-3	Depth to Liquid (DL): 11.71	interior of greenhouse
Casing Material: PVC	Depth to Water (DW1): 11.71	
Diameter: 2"	Product Thickness (PT=DW1-DL): 0	
Well Head Condition:	Total Well Depth (TD): 19.98	
Well Box Condition:	Total head (TH=TD-DW1): 8.22	
Purge Method:	Casing Volume (TH*Factor): 1.3	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4"=0.65; 6" = 1.5 gal/ft.		
$\frac{1}{2}$ " = 0.01; $\frac{3}{4}$ " = 0.023	3.9 gal	

Time	Vol. Purged	Temp: (°F/°C)	Cond: (uS/cm)	pH	DO: (mg/l)	ORP: (mV)	Turb: (NTU)	Remarks
1324	1.5	23.41	412	6.61	0	-14	21.4	
1329	3	25.21	569	6.79	0	54	77.1	ORP = 54 cloudy purge water
1332	4.5	23.74	505	4.92	0	68	32.5	

Well Recovery Data

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

Sample Information

Time	Sample ID	Temp (°F)	pH	Cond (uS/cm)	Turb (NTU)	TPH-g	TPH-d	BTEX AMB	3260	SO10	OTHER
	1340										

Additional Comments


# MONITORING WHETHER A VIRUS IS IN THE BODY

Date:

17 Aug 2016

Project Name: Chun	Client: Lily A. Chun Trust 1991	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone:	
City/State: Alameda, CA	Technician Gauging/Sampling:	CAD

Note: All measurements from top of casing.

**Well Location:**

WELL NO. MW-14	Depth to Liquid (DL): 9.62	Adjacent to greenhouse
Casing Material: PVC	Depth to Water (DW1): 7.66	
Diameter: 2"	Product Thickness (PT=DW1-DL): 6	
Well Head Condition:	Total Well Depth (TD): 11.36	
Well Box Condition:	Total head (TH=TD-DW1): 1.74	
Purge Method:	Casing Volume (TH*Factor): 0.3	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4" = 0.65; 6" = 1.5 gal/ft.		
$\frac{1}{2}$ " = 0.01; $\frac{3}{4}$ " = 0.023		0.9 gal

## Well Recovery Data

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

## Sample Information

#### **Additional Comments**

**MONITORING WELL SAMPLING**  
**IRONY**

Date:

8/17/10

Project Name: Chun	Client: Lily A. Chun Trust 1991	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone: 510 343 3006	
City/State: Alameda, CA	Technician Gauging/Sampling: ERD	

Note: All measurements from top of casing.

Well Location:

WELL NO. MW-15	Depth to Liquid (DL): 10.98	in parking lot, off-site
Casing Material: PVC	Depth to Water (DW1): 10.98	
Diameter: 2"	Product Thickness (PT=DW1-DL): 0	
Well Head Condition:	Total Well Depth (TD): 29.32	
Well Box Condition:	Total head (TH=TD-DW1): 18.34	
Purge Method: Bailer	Casing Volume (TH*Factor): 29	
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4"=0.65; 6" = 1.5 gal/ft. 1/2" = 0.01; 3/4" = 0.023	n/a gal	

Time	Vol. Purged	Temp (°F/°C)	Cond (µS/cm)	pH	DO (mg/l)	ORP (mV)	Turb (NTU)	Remarks
0813	3	19.73	684	7.18	3.98	58	15.1	
0818	4	19.51	699	7.17	2.68	62	176	
0828	9	19.69	715	7.15	1.50	68	808	

Well Recovery Data

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

Sample Information

Time	Sample ID	Temp (°F)	pH	Cond (µS/cm)	Turb (NTU)	TPH- soil	TPH- oil	BTEX MTBE	BTEX MTBE	OTHER
	0830									

Additional Comments


# MONITORING WILDLIFE SAVING BIRDS

Date:

16 August 2016

Project Name: Chun	Client: Lily A. Chun Trust 1991	Job No: 401896004
Address: 2301 Santa Clara Avenue	Contact/Phone: Sto 343 3000	
City/State: Alameda, CA	Technician Gauging/Sampling:	CW

Note: All measurements from top of casing.

### Well Location:

WELL INFORMATION		WELL LOCATION
WELL NO. MW-ke	Depth to Liquid (DL):	9.8
Casing Material: PVC	Depth to Water (DW1):	9.81
Diameter: 2"	Product Thickness (PT=DW1-DL):	0.8
Well Head Condition:	Total Well Depth (TD):	29.35
Well Box Condition:	Total head (TH=TD-DW1):	19.54
Purge Method:	Casing Volume (TH*Factor):	31
Casing Vol. Conv. Factors: 2" = 0.16; 3" = 0.36; 4" = 0.65; 6" = 1.5 gal/ft.		
$\frac{1}{2}$ " = 0.01; $\frac{3}{4}$ " = 0.023		9 gal

## Well Recovery Data

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

## Sample Information

#### **Additional Comments**

\_\_\_\_\_