RECEIVED
By Alameda County Environmental Health 11:28 am, Jan 12, 2018

December 27, 2017

Mr. Keith Nowell, PG, CHG
Alameda County Department of Environmental Health
Local Oversight Program for Hazardous Materials Releases
1131 Harbor Bay Parkway
Alameda, CA 94502

Subject: Well Redevelopment, Sampling, and Conceptual Site Model Update
Dreyer's Grand Ice Cream
5929 College Avenue
Oakland, California

Dear Mr. Nowell:

Under my authorization, Haley & Aldrich, Inc. (Haley & Aldrich) has prepared the attached *Well Redevelopment, Sampling, and Conceptual Site Model Update* on behalf of Nestlé USA, Inc. (Nestlé), describing monitoring well maintenance, surveying, and groundwater sampling conducted at the request of Alameda County Department of Environmental Health (ACDEH) at the subject property. Please contact me (information is below) or Michael Calhoun at Haley & Aldrich at 510-879-4554 if you have any questions.

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.

Sincerely,

Sven Vetter
Corporate Environmental Sustainability Manager
Nestlé USA, Inc.
585-330-3110

HALEY ALDRICH

www.haleyaldrich.com

WELL REDEVELOPMENT, SAMPLING, AND CONCEPTUAL SITE MODEL UPDATE DREYER'S GRAND ICE CREAM 5929 COLLEGE AVENUE OAKLAND, CALIFORNIA

by Haley & Aldrich, Inc.
Oakland, California

for Nestlé USA, Inc.
Glendale, California

File No. 130654-003
December 2017

HALEY & ALDRICH, INC.
1956 Webster Street
Suite 300
Oakland, CA 94612
510.879.4544

27 December 2017
File No. 130654-003

Alameda County Health Care Services
Department of Environmental Health
Local Oversight Program for Hazardous Materials Releases
1131 Harbor Bay Parkway
Alameda, California 94502

Attention: Mr. Keith Nowell, PG, CHG

Subject: Well Redevelopment, Sampling, and Conceptual Site Model Update
Dreyer's Grand Ice Cream
5929 College Avenue
Oakland, California 9461

Dear Mr. Nowell:

Haley & Aldrich, Inc., prepared this Well Redevelopment, Sampling, and Conceptual Site Model Update (Report) on behalf of Nestlé USA, Inc., for the Dreyer's Grand Ice Cream Site located at 5929 College Avenue, in Oakland, California. This Report was prepared to document the monitoring well maintenance, surveying, and groundwater sampling tasks described in the Work Plan submitted to Alameda County Health Care Services, Department of Environmental Health (ACDEH) on 24 August 2017. Upon approval by ACDEH, this report and all associated water level, analytical laboratory, and survey data will be uploaded to the State's GeoTracker database and the ACDEH FTP site.

Please contact the undersigned if you have any questions regarding this Report or need additional information.

Sincerely yours,
HALEY & ALDRICH, INC.

Cheyenne Waldman, PG
Assistant Project Manager
CA PG #9182

Peter Bennett, PG, CHG
Principal Hydrogeologist
CA PG #7902, CA CHG #921

Michael Calhoun, PG, CHG
Associate Hydrogeologist
CA PG #8525, CA CHG #976

Exp. 5/31/17

cc: Nestlé USA, Inc.; Attn: Sven Vetter
Alameda County Department of Environmental Health; Attn: Dilan Roe

Table of Contents
(continued) **Page**

Table of Contents (continued)

List of Tables

List of Figures

1. Introduction

Haley & Aldrich, Inc., (Haley & Aldrich) prepared this Well Redevelopment, Sampling, and Conceptual Site Model Update (Report) on behalf of Nestlé USA, Inc., for the Dreyer's Grand Ice Cream facility located at 5929 College Avenue in Oakland, California ([Site]; Figure 1). The work described in this Report was performed in accordance with the "Work Plan for Well Redevelopment and Sampling" ([Work Plan]; Haley & Aldrich, 2017) submitted to Alameda County Health Care Services, Department of Environmental Health (ACDEH) on 24 August 2017. The Work Plan was submitted to ACDEH in response to its 26 May 2016 letter, which requested that Site monitoring wells be redeveloped and sampled.

This Report includes a Conceptual Site Model (CSM) that summarizes Site conditions in context of the State Water Resources Control Board's Low-Threat Underground Storage Tank (UST) Case Closure Policy (Low-Threat Closure Policy).

1.1 SITE SETTING AND HISTORY

The Site is located at 5929 College Avenue in Oakland, California, approximately 0.25 mile north of California Highway 24 and approximately 0.25 mile south of the Berkeley City limits (Figure 1). The property is occupied by a large building (the Dreyer's facility), two large asphalt-covered parking areas, and small landscaping areas near the perimeter of the property. The two-acre property is bounded by Claremont Avenue to the northwest, College Avenue to the east, and Chabot Road to the south. Ground surface slopes gently to the southwest with an elevation of approximately 192 feet relative to the North American Vertical Datum of 1988 (NAVD88). The land use in the area is residential and commercial; the commercial properties are concentrated along College Avenue.

The property was developed as a commercial building and parking lot and serves as the headquarters of Dreyer's Grand Ice Cream. Between December 1989 and February 1990, seven underground fuel and waste oil storage tanks[1] and approximately 500 to 550 cubic yards of impacted soil were removed from the Site (CET Environmental Services [CET], 1995); the locations and former contents of each tank are shown on Figure 2.

Since source removal, multiple soil and groundwater investigations have been conducted (e.g., Aqua Terra Technologies [ATT], 1992 and 1993; CET 1999). Groundwater monitoring wells MW1, MW2, and MW3 were installed in July 1991 as part of these investigations (ATT, 1992). Three additional wells—MW4, MW5, and MW6—were installed in August 1993 (CET, 1995). Site monitoring well locations are shown on Figure 2; well construction information is provided in Table 1. All wells were routinely monitored either monthly or quarterly from their installation up until the last recorded sampling event in June 1999 (CET, 1999).

When ATT installed groundwater monitoring wells MW1, MW2, and MW3 in July 1991, soil samples were collected from the borings at depths of 10 to 15 feet below ground surface (bgs) and analyzed for total petroleum hydrocarbons quantified as gasoline (TPHg) and diesel (TPHd), benzene, toluene, ethylbenzene, and xylenes, collectively referred to as BTEX (ATT, 1992). No detections of these compounds were reported for samples collected from MW1. The soil sample collected from MW2

[1] One 1,000-gallon and one 8,000-gallon gasoline tank; one 2,000-gallon and two 4,000-gallon diesel tanks; and two 1,000-gallon waste oil tanks.

contained 25 milligrams per kilogram (mg/kg) of TPHg, 23 mg/kg TPHd, 0.083 mg/kg benzene, 0.280 mg/kg toluene, 0.320 mg/kg ethyl benzene, and 1.7 mg/kg xylenes. The soil sample collected from MW3 contained 490 mg/kg TPHg, 110 mg/kg TPHd, 0.390 mg/kg benzene, <0.0025 mg/kg toluene, 2.1 mg/kg ethyl benzene, and 2.2 mg/kg xylenes. The boring log for MW3 indicated that the well may have been drilled within the limits of the former excavation, which was reported to have been potentially backfilled with excavated material (ATT, 1992) and may not be indicative of undisturbed soil conditions beneath the majority of the Site.

1.2 SITE GEOLOGY AND HYDROLOGY

The Site geologic and hydrogeologic conditions are described in the conceptual site model (CSM) presented in Section 4 of this Report.

2. Investigation Methods

Six on-Site monitoring wells were redeveloped, sampled, and surveyed in October 2017; the sections below describe the methods used to complete the scope of work.

2.1 FIELD PREPARATION

Haley & Aldrich coordinated Site access with Nestlé and contracted with the field sampling, laboratory, and waste disposal subcontractors prior to the field work. On 18 July 2017, Haley & Aldrich performed an initial Site visit to locate the existing monitoring wells, assess their present condition, including well box integrity, and measure total depth inside the casing.

2.2 WELL REDEVELOPMENT

Haley & Aldrich subcontracted with Field Solutions, Inc. (FSI) to perform the well redevelopment, and each well was redeveloped on 23 October 2017. The screen interval of each well was surged with a surge block, and the suspended sediment was removed with a bailer. Each well was then purged using a bailer or submersible pump while measuring and recording water quality parameters (temperature, pH, specific conductivity, oxidation-reduction potential [ORP], and dissolved oxygen [DO]).

Three of the wells (MW1, MW4, and MW5) were constructed with 2-inch diameter well casing and purged a minimum of 10 casing volumes as per the Work Plan. The other three wells (MW2, MW3, and MW6) were constructed with 4-inch well casing and initially purged dry but water levels did not recover in time to allow for purging 10 casing volumes. This apparently slow water level recovery is attributed in part to the much larger storage volume of the 4-inch diameter well casing and filter pack compared to the 2-inch wells. Given that the primary objective of this well redevelopment is to clear potential scale from the screen and remove any sediment buildup in the well, the groundwater volumes purged from the 4-inch wells (28 to 63 gallons) were deemed adequate to provide representative groundwater samples. Field records are provided in Appendix A.

2.3 WELL SAMPLING

Haley & Aldrich subcontracted with FSI to collect depth to water measurements and groundwater samples from each monitoring well on 31 October 2017. Prior to sampling, the wells were purged using low-flow methods with a peristaltic pump and new, disposable low-density polyethylene tubing while monitoring water quality parameters with a YSI water quality probe. The wells were purged until water quality parameters stabilized. After purging, groundwater samples were collected from the pump effluent into laboratory-provided sample containers. Samples were then labeled, sealed in plastic bags, placed in an ice-cooled chest and shipped to the analytical laboratory under standard chain of custody procedures.

Quality assurance/quality control (QA/QC) samples were collected and included one blind field duplicate and one equipment blank. A laboratory-provided trip blank sample was also submitted with the sample shipment. The field duplicate sample was collected using the same methods described above. The equipment blank sample was collected by pumping laboratory-prepared deionized water into laboratory-provided sample containers using the same groundwater sampling pump and new disposable tubing.

2.4 LABORATORY ANALYSIS

Groundwater samples were analyzed by Test America Inc., a California-certified analytical laboratory, for the following:

- TPHg and the full list of volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) Method 8260B;
- TPHd and TPH as motor oil (TPHmo) using EPA Method 8015M; and
- Priority pollutant polycyclic aromatic hydrocarbons (PAHs) using EPA Method 8270C.

The samples were also analyzed for the following geochemical parameters to aid in assessing natural attenuation processes to develop the CSM:

- Nitrate and sulfate using EPA Method 300.0;
- Dissolved iron and manganese using EPA Method 6010B; and
- Alkalinity using Standard Method 2320B.

The laboratory analytical report is provided in Appendix B.

2.5 WELL SURVEYING

The groundwater monitoring well locations were previously surveyed to a local datum, and the top of casing elevations were measured relative to mean sea level. Current State of California requirements specify that locations and elevations be surveyed relative to the North American Datum of 1983 and NAVD88, respectively. Haley & Aldrich subcontracted with Kister, Savio, and Rei, a California-licensed land surveying company, to survey the location and elevation of each well on 23 October 2017. The survey data are included as Appendix C.

2.6 DECONTAMINATION AND WASTE MANAGEMENT

Reused downhole equipment (such as the electric sounder and submersible pump) were decontaminated using a wash of Liquinox® detergent and distilled water, followed by a distilled water rinse. Decontamination water and purged groundwater were contained in Department of Transportation-rated 55-gallon drums and temporarily stored on-Site pending profiling and disposal at an appropriate facility.

3. Results

The sections below discuss the results of the groundwater monitoring event conducted on 31 October 2017.

3.1 GROUNDWATER ELEVATIONS

The depth to water measured in Site monitoring wells ranged from 9.58 to 13.12 feet below top of casing, corresponding to groundwater elevations between 179.43 and 183.02 feet NAVD88, as shown on Table 2 and Figure 3. The horizontal hydraulic gradient is to the southwest, with a magnitude ranging from approximately 0.02 to 0.04. A rose diagram indicating historical directions of hydraulic gradient was prepared using the EPA's online hydraulic gradient calculating tool[2], and is provided on Figure 3. Groundwater elevations and the inferred direction of the hydraulic gradient are generally consistent with reported historical results (e.g., CET, 1995 and 1999) and is consistent with the regional groundwater flow direction (San Francisco Bay Regional Water Quality Control Board [RWQCB], 1999); historical groundwater elevation data are provided in Appendix D.

3.2 GROUNDWATER ANALYTICAL RESULTS

The sections below describe the analytical results for groundwater samples collected on 31 October 2017. The results for organic compounds in groundwater are summarized in Table 3 and Figure 4; the results for natural attenuation parameters are summarized in Table 4. Historical analytical data are presented in Appendix E.

3.2.1 Quality Assurance/Quality Control

Haley & Aldrich performed a QA/QC evaluation on the laboratory analytical data in accordance with the National Functional Guidelines for Inorganic Superfund Methods Data Review (EPA, 2017a) and the National Functional Guidelines for Organic Superfund Methods Data Review (EPA, 2017b). The QA/QC results are summarized in Appendix F.

Overall, the laboratory quality control sample analyses indicate that the test results in this report are of sufficient quality to support the presented conclusions and the results are valid and usable.

3.2.2 Total Petroleum Hydrocarbons

TPHg and TPHd were detected in three of the six Site monitoring wells (MW2, MW3, and MW5). Where detected, TPHg concentrations ranged from 3,400 micrograms per liter (µg/L; in MW3) to 4,500 µg/L (in MW2); TPHd concentrations ranged from 930 µg/L (in MW3) to 1,300 µg/L (in MW2). TPHmo was not detected above the laboratory reporting limits in any sample collected during this sampling event. Petroleum hydrocarbons were not detected at well MW4, located the farthest downgradient from the southern cluster of former USTs.

In general, TPHg and TPHd concentrations were consistent with, or lower than, historical concentrations (Figures 5 through 10, and Appendix E). Concentrations in some wells have decreased by one to two

[2] https://www3.epa.gov/ceampubl/learn2model/part-two/onsite/gradient4plus-ns.html

orders of magnitude from historical high concentrations. For example, MW4 historically contained TPHg concentrations in excess of 10,000 µg/L, but no TPHg was detected in the most recent sampling event.

3.2.3 Volatile Organic Compounds

Aromatic hydrocarbons commonly associated with gasoline and diesel (BTEX compounds, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, sec-butylbenzene, p-isopropyltoluene, isopropylbenzene, naphthalene, n-butylbenzene, n-propylbenzene, and tert-butylbenzene) were detected above the laboratory reporting limit in samples collected from Site monitoring wells (Table 3). Chloroform is widely recognized as a disinfectant byproduct present in municipal water supply. Its detection at MW1 may be related to leaks from water distribution lines and/or landscape irrigation.

BTEX compounds are commonly detected in groundwater at fuel release sites. The analytical results for BTEX compounds are summarized below.

- Benzene concentrations ranged from 3.3 µg/L in MW2 to 130 µg/L in MW3. Benzene was not detected above the laboratory reporting limit in wells MW1, MW4, and MW6.
- Toluene concentrations ranged from 1.1 µg/L in MW2 to 5.0 µg/L in MW3. Toluene was not detected above the laboratory reporting limit in wells MW1, MW4, and MW6.
- Ethylbenzene concentrations ranged from 2.9 µg/L in MW3 to 42 µg/L in MW5. Ethylbenzene was not detected above the laboratory reporting limit in wells MW1, MW4, and MW6.
- Total xylene concentrations ranged from 6.3 µg/L in MW2 to 13 µg/L in MW3. Total xylene was not detected above the laboratory reporting limit in wells MW1, MW4, and MW6.

Similar to TPH, the BTEX compound concentrations reported in Table 3 were generally much lower than historical concentrations (Figures 5 through 10, and Appendix E). Concentrations of certain constituents in wells MW2 and MW5 decreased by three orders of magnitude from historical high concentrations.

Naphthalene analysis is included in both the volatile (8260) and semi-volatile (8270) analytical lists. The naphthalene concentration analyzed using EPA Method 8260 were consistently higher than the concentrations using EPA Method 8270. Low naphthalene concentrations (up to 4.4 µg/L; analyzed by EPA Method 8260) were reported in the groundwater samples collected from MW2, MW3, and MW5.

3.2.4 Polycyclic Aromatic Hydrocarbons

Low acenaphthene concentrations (up to 0.31 µg/L) and fluorene concentrations (up to 0.24 µg/L) were detected in wells MW2 and MW5. Low naphthalene concentrations (up to 2.7 µg/L) analyzed by EPA Method 8270) were detected in wells MW2, MW3, and MW5.

4. Conceptual Site Model

In accordance with the Low-Threat Closure Policy, a CSM was developed for the Site to describe the Site's hydrogeologic and environmental conditions and the nature and extent of impacts.

4.1 REGIONAL GEOLOGY AND HYDROGEOLOGY

The Site is within an upland portion of the Oakland sub-area in the East Bay Plain, a northwest trending alluvial plane bounded by San Pablo Bay to the north, the Franciscan bedrock of the Oakland hills to the east, the Niles Cone Groundwater Basin to the south, and San Francisco Bay to the west (Figuers, 1998). The Oakland sub-area contains a sequence of alluvial fans up to 700 feet thick that overlies the Franciscan bedrock (Figuers, 1998). Groundwater yields are low in this upland area because of the low recharge potential (RWQCB, 1999). Harwood Creek runs in an engineered drainage beneath College Avenue east of the Site and south of the Site along Chabot Road (Sowers, 2000). The closest, downgradient major surface water body is the San Francisco Bay, located approximately 2.5 miles to the west.

Site groundwater is unlikely to be used as drinking water since the Site lies in the service area of the East Bay Municipal Utility District, which sources water from the Mokelumne River Watershed, located in the Sierra Nevada and approximately 90 miles east of the Site.

4.2 LOCAL GEOLOGY AND HYDROGEOLOGY

The native alluvial soils underlying the Site are generally composed of silty to sandy clay to an average depth of 30 feet bgs with occasional saturated lenses of sand and/or gravel present at depths below 10 feet bgs. These lenses do not appear to be laterally continuous across the Site. The depth to water measured in wells ranged between approximately 9 and 13 feet bgs in the most recent monitoring event; the direction of the horizontal hydraulic gradient is generally to the south or southwest (Figure 3). Based on the fine-grained nature of the shallow subsurface, groundwater velocities are expected to be low.

4.3 SITE CHEMICALS OF CONCERN

The chemicals of concern (COCs) at the Site are fuel-related compounds such as TPHg, TPHd, and BTEX compounds. Other fuel-related VOCs, including naphthalene, have also been detected, but generally at lower concentrations than TPH and benzene. Potential sources for these COCs in groundwater include leaks from the seven former USTs (gasoline, diesel, and waste oil) shown on Figure 2 and upgradient fuel releases. The seven former USTs, along with up to 550 cubic yards of impacted soils, were removed between December 1989 and February 1990. The excavation of the tanks and impacted soils are believed to have removed the primary source of impacts to the subsurface; there has been no documented residual non-aqueous phase liquid to act as an ongoing source of COCs to groundwater.

4.3.1 Soil

Limited post-excavation soil analytical data are available; however, soil samples collected between 10 and 15 feet bgs when installing wells MW1, MW2, and MW3 (ATT, 1992) indicated TPHg and TPHd concentrations up to 490 and 110 mg/kg, respectively, in areas near the former USTs. Benzene was

detected at concentrations up to 0.39 mg/kg. No COCs were detected in soil at upgradient well MW1. The boring log for MW3 indicated the well may have been drilled within the limits of the former excavation (potentially backfilled with previously excavated materials), and the concentrations detected in soil at MW3 may therefore not be representative of undisturbed soil at the Site. TPHd and TPHg concentrations in the other locations sampled in 1991 were at or below 25 mg/kg. The detected concentrations at all soil sampling locations are below the Environmental Screening Levels ([ESLs]; RWQCB, 2016) for direct contact (commercial) and leaching to groundwater. Since these soil data were collected in 1991 it is likely that the concentrations are now lower because of the natural attenuation processes.

4.3.2 Groundwater

Groundwater COCs were detected during the most recent monitoring event in wells located downgradient of the two clusters of former USTs (MW2, MW3, and MW5); COCs were not detected in wells located upgradient, cross-gradient, or farther downgradient of the former USTs (MW1, MW4, and MW6; Figure 3). For the most recent (October 2017) monitoring event, the highest TPHg and TPHd concentrations (4,500 J and 1,300 µg/L) were reported in the samples from MW2, located downgradient of the former waste oil USTs; the highest benzene concentration (130 µg/L) was detected at MW3, located approximately 10 feet downgradient of the former UST excavation limits. Where detected, other benzene concentrations ranged from 3.0 µg/L (MW2) to 7.4 (MW5). No COCs were detected at MW4, located farther downgradient of MW3. This is an indication that the COCs related to the former UST excavation area attenuate rapidly in short distance from this area because of a combination of successful source removal and natural attenuation. As shown on Figures 5 through 10 and in Appendix E, COC concentrations in groundwater have generally decreased from historical maximum values, in some cases by several orders of magnitude. This is an indication that natural attenuation processes are degrading COCs in situ, as described further below.

4.4 NATURAL ATTENUATION

TPHg, TPHd, and BTEX concentrations have greatly decreased since the previous sampling event conducted at the Site in 1999 (Appendix E). For example, TPHg concentrations in well MW2 ranged from 91,000 µg/L in 1991 to 21,000 µg/L in 1999 and have now decreased to 4,500 µg/L in 2017. TPHg concentrations in well MW-5 ranged from 31,000 µg/L in 1993 to 23,000 µg/L in 1999 and have now decreased to 3,500 µg/L in 2017. Similarly, benzene was detected at a concentration of 8,300 µg/L in well MW2 in 1991; the concentration detected in 2017 was 3.3 µg/L. TPH and BTEX concentration plots in monitoring wells versus time display an overall decreasing trend in COC concentrations following source removal (Figures 5 through 10). The decreasing concentrations in these wells since the last sampling event is an indicator that natural attenuation of COCs is occurring at the Site.

Petroleum hydrocarbon COCs are readily degraded aerobically and anaerobically through microbial processes. Indigenous microbes present in groundwater consume petroleum hydrocarbons as a “food source” and consume oxygen, if present in groundwater, as part of an aerobic respirative process. The consumption of oxygen creates an anaerobic environment in the subsurface characterized by low DO values. Indigenous microbes continue to consume petroleum hydrocarbons after DO is depleted. As anaerobic conditions prevail, COCs are destroyed by anaerobic microbes that reduce nitrate, sulfate, iron, and manganese in place of oxygen to facilitate metabolism. This results in a decrease in nitrate and sulfate concentrations and an increase in dissolved iron and manganese concentrations in groundwater. As shown in Table 4, monitoring well samples located upgradient, cross-gradient, or farther

downgradient of the former USTs where TPH concentrations were non-detected (MW1, MW4, and MW6) contained relatively higher DO concentration, ORP values, and somewhat higher nitrate and sulfate concentrations compared to MW2, MW3 and MW5. This indicates that Site COCs are biodegraded through aerobic and anaerobic microbially-mediated processes.

Based on current concentration trends in Site wells, the Tier 1 ESL of 100 µg/L for both TPHg and TPHd is expected to be achieved through natural attenuation within the near future. Tier 1 ESLs for benzene and ethylbenzene (1 µg/L and 40 µg/L, respectively) could also feasibly be achieved in most wells through natural attenuation in the near future (toluene and xylenes already meet Tier 1 ESLs).

Because of the relatively low permeability Site soils and generally low groundwater flow gradient, the natural attenuation process has proven to be sufficient to break down residual petroleum hydrocarbon COCs at the Site to levels close to or below the Water Board's Tier 1 ESLs for most COCs near former source areas and to non-detect at the downgradient Site boundary (MW4). While certain COCs (such as benzene, ethylbenzene, and naphthalene) exceeded the Tier 1 ESL during the last sampling event at locations very close to the former source areas, benzene and naphthalene will continue to degrade over time. The decreasing trend of COCs at MW4 from concentrations greater than 1,000 µg/L in 1994 to non-detect levels in 2017 is an indication that the extent of COCs in groundwater has receded over this time frame, and the COCs are therefore not moving downgradient.

4.5 RECEPTORS

As previously discussed, the groundwater beneath the Site is not likely to be used as a drinking water source in the near or distant future. There are also no surface water bodies located within one mile downgradient of the Site. Based on a review of the State's GeoTracker GAMA database, there are no public water supply wells within one mile of the Site. A 2015 report for the Sheaffs Garage site located across the Street from the Site (Golden Gate Environmental, 2015) indicated that there is one domestic supply well located downgradient of the Site, at 5629 Vincent Street (approximately 0.5 mile away). Haley & Aldrich has not confirmed the existence or status of this well given its distance from the Site.

Another potential exposure pathway for Site COCs is via vapor intrusion. Except for benzene at well MW3 (which may have been installed within the former excavation backfill), all COC concentrations in groundwater are below their respective Groundwater Vapor Intrusion Human Health Risk ESLs for commercial/industrial properties (Table 3). COCs in Site groundwater are therefore not expected to be a vapor intrusion concern.

4.6 LOW-THREAT CASE CLOSURE EVALUATION

Haley & Aldrich evaluated the Site conditions relative to the general and specific criteria for low-threat closure described in the Low-Threat Closure Policy. That evaluation is presented in tabular form in Appendix G.

Based on the evaluation, although data gaps have been identified, Haley & Aldrich believes there are sufficient lines of evidence to determine that the Site meets the criteria for low-threat case closure. These lines of evidence are summarized below.

4.6.1 General Criteria

As shown in Appendix G, the general criteria of the Low Threat Closure Policy have all been met.

4.6.2 Groundwater-Specific Criteria

As shown in Appendix G, the groundwater criteria of the Low Threat Closure Policy have been met with the assumption that MW4 is representative of the downgradient monitoring wells. Monitoring well MW5 reported TPHg, TPHd, benzene, ethyl benzene and naphthalene concentrations above Tier 1 ESLs and is cross-gradient of MW4. Although MW5 has no monitoring well farther downgradient of its location, the rapid attenuation with distance observed between MW3 and MW4 provides empirical evidence that dissolved COCs are not likely to extend far beyond MW5. The current and historical data clearly indicate decreasing concentration trends of TPH and BTEX in groundwater over time. Based on the trends, water quality objectives can likely be achieved in most wells within a reasonable time frame. Geochemical conditions and analytical results presented in this report indicate that natural attenuation of petroleum hydrocarbons is occurring at the Site. The generally fine-grained nature of the subsurface and low yields of monitoring wells suggests that groundwater velocities (and mass flux of COCs) is likely to be low. Finally, there is little risk to human health (via direct contact or vapor intrusion, as discussed in greater detail below), or to the environment (as there are no surface water bodies near the Site). Haley & Aldrich therefore believes that the groundwater-specific criteria of the Low Threat Closure Policy are satisfied; however, the determination for whether the Site meets these criteria is reserved for ACDEH.

4.6.3 Vapor Intrusion to Indoor Air Criteria

As shown in Appendix G, Haley & Aldrich believes that Scenario 3a of the Low Threat Closure Policy is satisfied for the vapor intrusion criteria. The average depth to water for current and historical groundwater monitoring events is greater than 10 feet bgs across the Site, as shown in Appendix D. Except for MW3, benzene concentrations in groundwater are below 100 µg/L, and TPH concentrations in soil are below 100 mg/kg.

Haley & Aldrich acknowledges that post-remediation soil samples are only available from the installation of MW1, MW2, and MW3 in 1991. It is also noted that benzene in groundwater at MW3 slightly exceeds 100 µg/L (130 µg/L in the October 2017 monitoring event), and soil at this location contained greater than 100 mg/kg in the sample collected in 1991. However, as previously discussed, this well was potentially drilled within the limits of the former excavation (potentially backfilled with excavated soil), and may not represent subsurface conditions present across the Site. Moreover, soil concentrations have likely decreased since 1991, and benzene concentrations in groundwater have continued to decrease, because of natural attenuation. It is likely that groundwater concentrations in MW3 will soon meet the criteria set forth in the Low Threat Closure Policy.

Lastly, while a Site-specific risk assessment has not been completed for the Site, an initial screening of groundwater concentrations against Groundwater Vapor Intrusion Human Health Risk ESLs (Table 3) indicates that concentrations in all wells are below the applicable ESLs, except for MW3 as noted above.

4.6.4 Direct Contact / Outdoor Air Criteria

As shown in Appendix G, although data gaps in soil data exist, Haley & Aldrich believes that the Site potentially meets Criteria A of the Low Threat Closure Policy for direct contact and outdoor air exposure.

As described above, the only soil analytical data available for the Site are limited to the samples collected in 1991 from MW1, MW2, and MW3 up to depths of 10 feet bgs . However, the available data indicate that benzene and ethylbenzene concentrations are below the criteria in Table 1 of the of the Low Threat Closure Policy, even for the sample collected from well MW3. Post-remediation analytical results for naphthalene and other PAHs are not available; however, based on the low PAH concentrations detected in groundwater (less than 5 µg/L; Table 3), significant PAH impacts are not likely to be present at the Site.

5. Summary and Recommendations

In October 2017, Haley & Aldrich completed additional well redevelopment, well gauging, sampling, and well surveying at the Site at the request of ACDEH. The results of the groundwater monitoring event indicated that in general, COC concentrations in groundwater have decreased significantly (by several orders of magnitude in some wells) from historical high concentrations. The results also indicate that natural attenuation of petroleum hydrocarbons is occurring at the Site and concentrations are likely to continue to decrease over time. Water quality objectives (results were initially compared to Tier 1 ESLs) can likely be met in a reasonable time frame via natural attenuation.

Although data gaps may exist (for example, the soil data is from 1991), multiple lines of evidence indicate that the Site likely meets the closure criteria specified in the Low-Threat Closure Policy and does not pose an unacceptable risk to human health and the environment. Haley & Aldrich therefore requests that the Site be considered for closure, and welcomes the opportunity to discuss the findings and conclusions of this report with ACDEH at their earliest convenience.

References

1. Aqua Terra Technologies (ATT), 1992. Groundwater Investigation, 5929 College Avenue, Oakland, California (ATT Project No. 9126), February.

2. ATT, 1993. First Quarter 1993 Groundwater Monitoring Report and Subsurface Investigation, Dreyer's Grand Ice Cream, 5929 College Avenue, Oakland, California (Project No. 919313), April.

3. CET Environmental Services (CET), 1995. Second Quarter 1995 Groundwater Monitoring Report, Dreyer's Grand Ice Cream, 5929 College Avenue, Oakland, California (CET Project Number 3534-001), August.

4. CET, 1999. Second Quarter 1999 Groundwater Monitoring, Geoprobe Investigation Results and Work Plan for Bioindicator Sampling, November.

5. Figuers, S., 1998. Groundwater Study and Water Supply History of the East Bay Plain, Alameda and Contra Costa Counties, CA, June.

6. Golden Gate Environmental, 2015. Data Gap Investigation Work Plan, Sheaffs Service garage, 5930 College Avenue, Oakland, California, January.

7. GGTR, 2016. Data Gap Investigation Report, Alameda County LOP Case # RO0000377, March.

8. Haley & Aldrich, 2017. Work Plan for Well Redevelopment and Sampling Dreyer's Grand Ice Cream, 5929 College Avenue, Oakland, California. August.

9. San Francisco Bay Regional Water Quality Control Board, 1999. East Bay Plain Groundwater Basin Beneficial Use Evaluation Report, Alameda and Contra Costa Counties, CA., California Regional Water Quality Control Board, San Francisco Bay Region Groundwater Committee, June.

10. San Francisco Bay Regional Water Quality Control Board, 2016. Environmental Screening Levels, Rev. 3, February.

11. Sowers, 2000. Creek & Watershed Map of Oakland & Berkeley, Oakland Museum of California, ISBN: 1-882140-11-7

12. U.S. Environmental Protection Agency, 2017a. National Functional Guidelines for Inorganic Superfund Methods Data Review. April.

13. U.S. Environmental Protection Agency, 2017b. National Functional Guidelines for Organic Superfund Methods Data Review. April.

TABLES

TABLE 1
WELL CONSTRUCTION DETAILS
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well ID	Installation Date	Well Diameter (inches)	Well Material	Top of Casing Elevation (feet NAVD88)	Screen Interval (feet bgs)	Reported Total Well Depth (feet bgs)
MW1	7/16/1991	2	PVC	194.49	10 - 30	30
MW2	7/17/1991	4	PVC	191.15	8 - 28	28
MW3	7/18/1991	4	PVC	190.57	7 - 27	27
MW4	8/20/1993	2	PVC	190.13	7 - 27	27
MW5	8/20/1993	2	PVC	190.14	9 - 29	29
MW6	8/20/1993	4	PVC	192.60	9 - 29	29

Abbreviations:
bgs = below ground surface
PVC = polyvinyl chloride
NAVD88 = North American Vertical Datum of 1988

TABLE 2
GROUNDWATER ELEVATION DATA - 31 OCTOBER 2017
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well Name	Date	Top of Casing Elevation (feet NAVD88)	Depth to Water (feet BTOC)	Groundwater Elevation (feet NAVD88)
MW1	10/31/2017	194.49	13.12	181.37
MW2	10/31/2017	191.15	11.03	180.12
MW3	10/31/2017	190.57	10.56	180.01
MW4	10/31/2017	190.13	10.70	179.43
MW5	10/31/2017	190.14	10.27	179.87
MW6	10/31/2017	192.60	9.58	183.02

Abbreviations:
NAVD88 = North American Vertical Datum of 1988
BTOC = below top of casing

TABLE 3

GROUNDWATER ANALYTICAL RESULTS FOR ORGANIC COMPOUNDS - 31 OCTOBER 2017

DREYER'S GRAND ICE CREAM

5929 COLLEGE AVENUE

OAKLAND, CALIFORNIA

Location	2016 Tier 1 ESL	2016 Vapor Intrusion ESL	MW1	MW2	MW2	MW3	MW4	MW5	MW6
Sample Date			10/31/2017	10/31/2017	10/31/2017	10/31/2017	10/31/2017	10/31/2017	10/31/2017
Sample Type			Primary	Primary	Duplicate	Primary	Primary	Primary	Primary
Total Petroleum Hydrocarbons (µg/L)									
Total Petroleum Hydrocarbons (C4-C12) Gasoline	100	-	< 50	**4,500 J**	**2,600 J**	**3,400 J**	< 50	**3,500 J**	< 50
Total Petroleum Hydrocarbons (C10-C28) DRO	100	-	< 51	**1,100**	**1,300**	**930**	< 50	**1,200**	< 50
Volatile Organic Compounds (µg/L)									
Benzene	1.0	9.7	< 0.50	**3.3**	**3.0**	**130**	< 0.50	**7.4**	< 0.50
Toluene	40	30,000	< 0.50	**1.1**	**1.0**	**5.0**	< 0.50	**1.4**	< 0.50
Ethylbenzene	13	110	< 0.50	**9.6**	**8.9**	**2.9**	< 0.50	**42**	< 0.50
Xylene (total)	20	11,000	< 1.0	**6.3**	**6.1**	**13**	< 1.0	**5.7**	< 1.0
Naphthalene	0.17	170	< 1.0	**1.2**	**1.3**	**1.6**	< 1.0	**4.4**	< 1.0
1,2,4-Trimethylbenzene	-	-	< 0.50	**0.75**	**0.78**	**0.52**	< 0.50	**0.75**	< 0.50
1,3,5-Trimethylbenzene	-	-	< 0.50	**2.5**	**2.5**	**0.98**	< 0.50	**2.5**	< 0.50
2-Phenylbutane (sec-Butylbenzene)	-	-	< 1.0	< 1.0	**9.2 J**	**9.7 J**	< 1.0	**16 J**	< 1.0
Chloroform (Trichloromethane)	2.3	20	**3.6**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cymene (p-Isopropyltoluene)	-	-	< 1.0	< 1.0	< 1.0	**1.1**	< 1.0	< 1.0	< 1.0
Isopropylbenzene (Cumene)	-	-	< 0.50	**26**	**25**	**58**	< 0.50	**78**	< 0.50
n-Butylbenzene	-	-	< 1.0	**18**	**19**	**9.8**	< 1.0	**29**	< 1.0
n-Propylbenzene	-	-	< 1.0	**49**	**47**	**74**	< 1.0	**150**	< 1.0
tert-Butylbenzene	-	-	< 1.0	**43**	**45**	**2.0**	< 1.0	**44**	< 1.0
Polycyclic Aromatic Hydrocarbons (µg/L)									
Acenaphthene	20	-	< 0.10	**0.26**	**0.31**	< 0.10	< 0.10	**0.28**	< 0.10
Fluorene	3.9	-	< 0.10	**0.21**	**0.24**	< 0.10	< 0.10	**0.23**	< 0.10
Naphthalene	0.12	170	< 0.10	**1.0**	**1.2**	**1.3**	< 0.10	**2.7**	< 0.10

Notes:

Only those compounds detected in one or more samples are shown; for a complete list of analytes, see the laboratory report (Appendix B)

"<" indicates the compound was not detected in the sample above the laboratory reporting limit shown.

"J" indicates the result is approximate; see the QA/QC results presented in Appendix F.

Results in **bold** indicate the compound was detected in the sample.

Total Petroleum Hydrocarbons Gasoline Range Organic (GRO) and Volatile Organic Compounds (VOCs) analyzed uisng USEPA Method 8260E

Total Petroleum Hydrocarbons Diesel Range Organic (DRO) and Motor Oil analyzed uisng USEPA Method 8015D

Polycyclic Aronmatic Hydrocarbons (PAHs) analyzed using USEPA Method SW8270SIM

Abbreviations:

µg/L = micrograms per liter

ESL = Environmental Screening Levels (Water Board, 2016).

TABLE 4
GROUNDWATER ANALYTICAL RESULTS FOR NATURAL ATTENUATION PARAMETERS - 31 OCTOBER 2017
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Location	MW1	MW2	MW2	MW3	MW4	MW5	MW6
Sample Date	10/31/2017	10/31/2017	10/31/2017	10/31/2017	10/31/2017	10/31/2017	10/31/2017
Sample Type	Primary	Primary	Duplicate	Primary	Primary	Primary	Primary
Anions (mg/L)							
Nitrate (as N)	**5.2**	< 0.23	< 0.23	< 0.23	**0.53**	< 0.23	< 0.23
Nitrite (as N)	**0.36**	**0.89**	**0.91**	**0.35**	< 0.30	**0.96**	< 0.30
Sulfate	**19**	< 1.0	< 1.0	**5.0**	**11**	< 1.0	**6.5**
Alkalinity (mg/L)							
Alkalinity, Hydroxide	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Alkalinity, Bicarbonate (as CaCO3)	**160**	**370**	**370**	**550**	**430**	**380**	**320**
Alkalinity, Carbonate	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Alkalinity, Total (as CaCO3)	**160**	**370**	**370**	**550**	**430**	**380**	**320**
Dissolved Metals (mg/L)							
Iron	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Manganese	< 0.020	**6.4**	**6.2**	**4.4**	**0.92**	**7.1**	**0.99**
Dissolved Oxygen (mg/L) - measured in the field							
Dissolved Oxygen	**2.27**	**0.58**	-	**0.16**	**0.24**	**0.14**	**2.27**

Notes:

"<" indicates the compound was not detected in the sample above the laboratory reporting limit shown.

Results in **bold** indicate the compound was detected in the sample.

Anions (Nitrate, Nitrite, and Sulfate) analyzed using USEPA Method E300.0

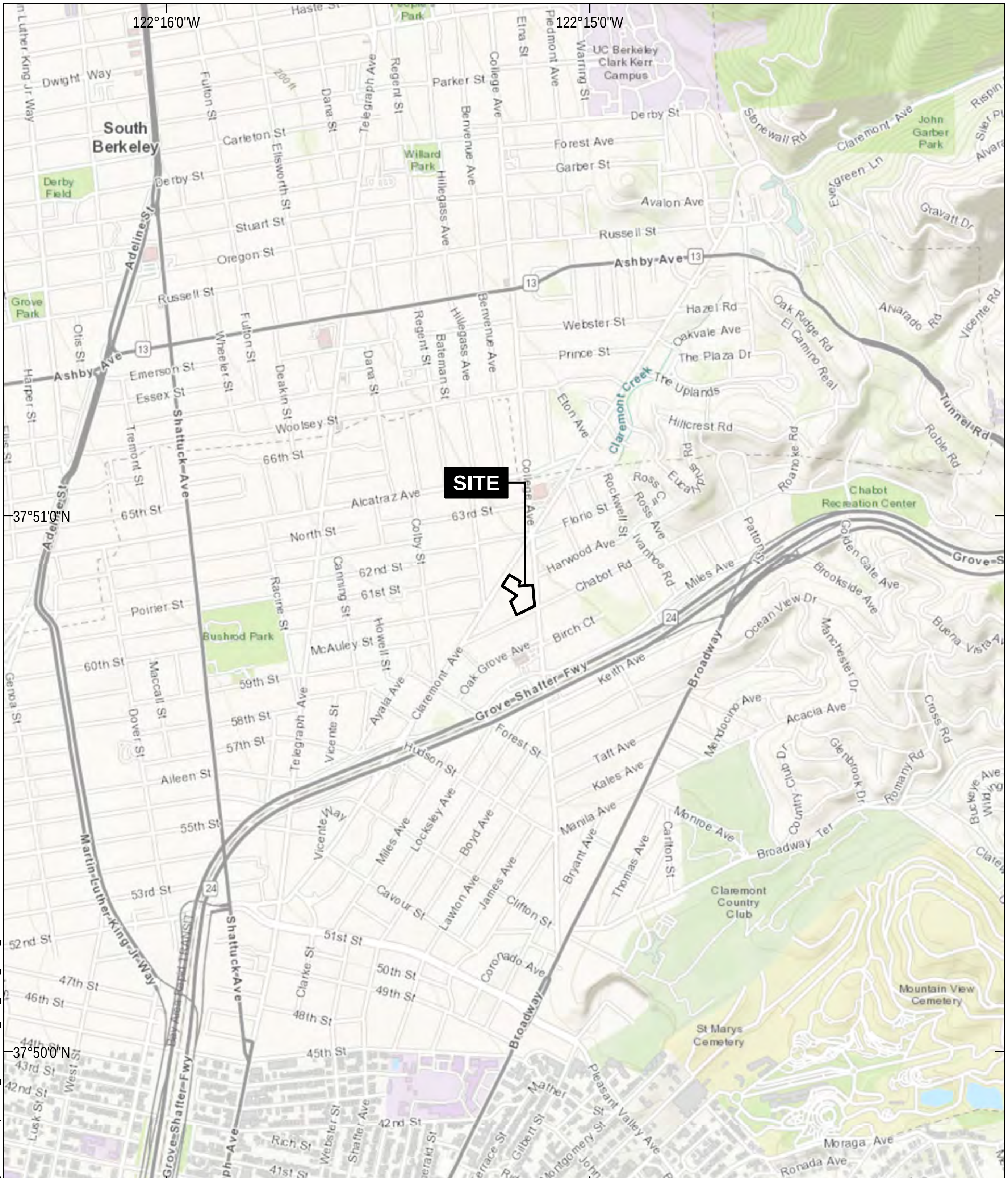
Alkalinity analyzed using Standard Method 2320B

Dissolved Metals (Iron and Manganese) analyzed using USEPA Method SW6010B

Abbreviations:

mg/L = milligrams per liter

FIGURES



N

0 1,000 2,000
SCALE IN FEET

MAP SOURCE: ESRI
SITE COORDINATES: 37°50'51"N, 122°15'10"W

HALEY ALDRICH

NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

SITE LOCATION MAP

DECEMBER 2017

FIGURE 1

GIS FILE PATH: G:\Nestle\Nestle Dreyer's project\GIS\Maps\2017_07\130654_002_0001_SITE_LOCATION.mxd — USER: ibruce — LAST SAVED: 12/8/2017 10:18:23 AM

LEGEND

- GROUNDWATER MONITORING WELL
- FORMER TANK LOCATION
- FORMER EXCAVATION LIMITS
- PARCEL BOUNDARY
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. TANK DATA SOURCE: CET ENVIRONMENTAL SERVICES, PROPOSED WELL AND BORING LOCATIONS MAP, PLATE 3, JULY 1993; AQUA TERRA TECHNOLOGIES CONSULTING ENGINEERS & SCIENTISTS, FACILITY AND FORMER TANK LOCATIONS, PLATE 2, FEBRUARY 1990

3. ASSESSOR PARCEL DATA SOURCE: ALAMEDA COUNTY

4. AERIAL IMAGERY SOURCE: ESRI

N

0 50 100

SCALE IN FEET

HALEY ALDRICH

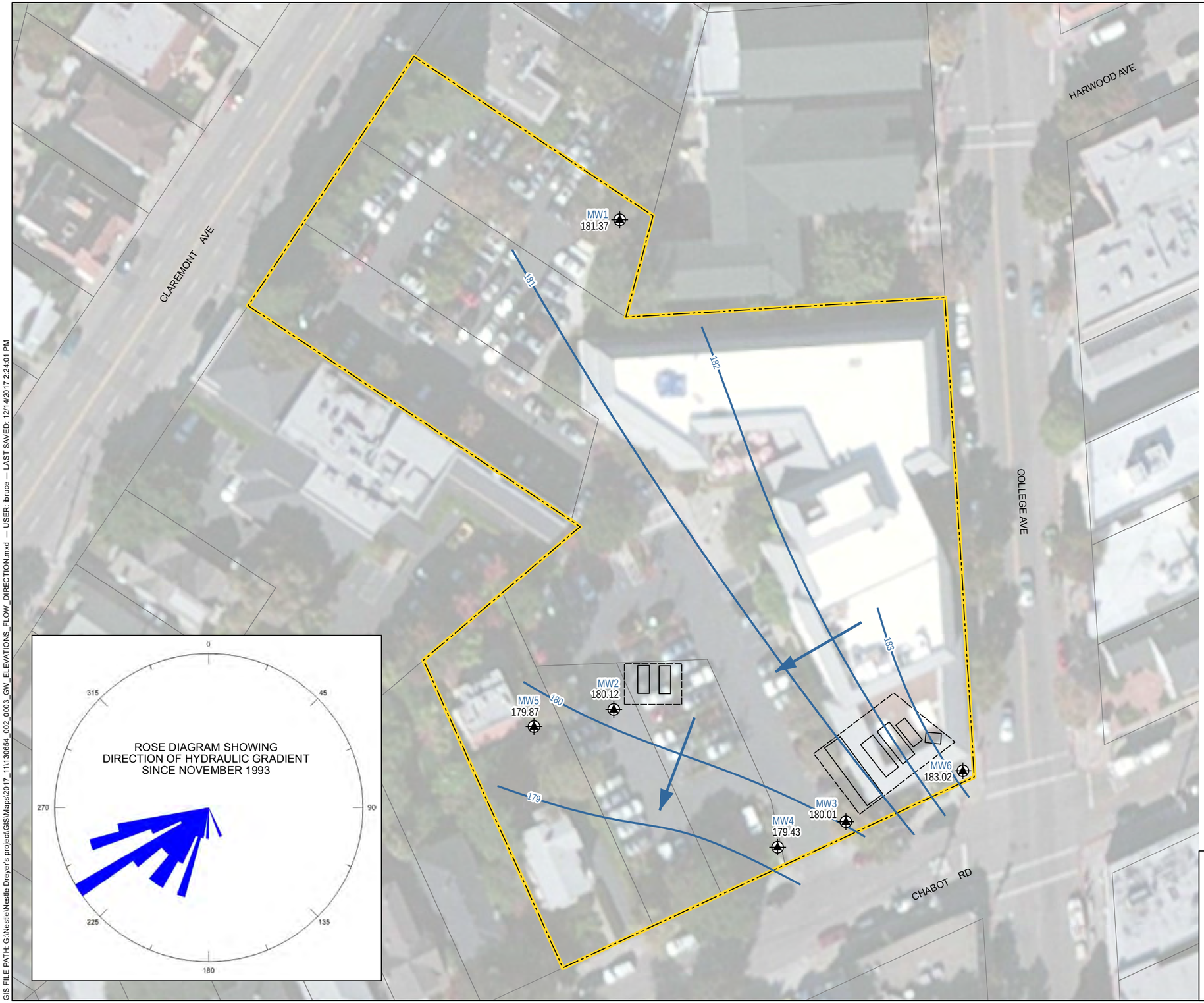
NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

SITE LAYOUT AND MONITORING WELL LOCATIONS

DECEMBER 2017

FIGURE 2

GIS FILE PATH: G:\Nestle\Nestle Dreyer's project\GIS\Maps\2017_07\130654_002_0002_SITE_LAYOUT.mxd — USER: ibruce — LAST SAVED: 12/8/2017 10:15:58 AM



LEGEND

- MONITORING WELL WITH ID AND GROUNDWATER ELEVATION INDICATED IN FEET (NAVD88)
- GROUNDWATER ELEVATION CONTOUR, IN FEET
- APPROXIMATE DIRECTION OF HYDRAULIC GRADIENT
- FORMER TANK LOCATION
- FORMER EXCAVATION LIMITS
- PARCEL BOUNDARY
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. GROUNDWATER ELEVATIONS ARE FROM 31 OCTOBER 2017. GROUNDWATER ELEVATIONS ARE REPORTED IN FEET, BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

3. TANK DATA SOURCE: CET ENVIRONMENTAL SERVICES, PROPOSED WELL AND BORING LOCATIONS MAP, PLATE 3, JULY 1993; AQUA TERRA TECHNOLOGIES CONSULTING ENGINEERS & SCIENTISTS, FACILITY AND FORMER TANK LOCATIONS, PLATE 2, FEBRUARY 1990

4. ASSESSOR PARCEL DATA SOURCE: ALAMEDA COUNTY

5. AERIAL IMAGERY SOURCE: ESRI

N

0 50 100

SCALE IN FEET

HALEY ALDRICH

NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATIONS AND HYDRAULIC GRADIENT, OCTOBER 2017

DECEMBER 2017

FIGURE 3

GIS FILE PATH: G:\Nestle\Nestle Dreyer's project\GIS\Maps\2017_11\130654_002_0003_GW_ELEVATIONS_FLOW_DIRECTION.mxd — USER: ibruce — LAST SAVED: 12/14/2017 2:24:01 PM

LEGEND

- GROUNDWATER MONITORING WELL
- FORMER TANK LOCATION
- FORMER EXCAVATION LIMITS
- PARCEL BOUNDARY
- SITE BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. ABBREVIATIONS:
   TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
   TPHd = TOTAL PETROLEUM HYDROCARBONS AS DIESEL
   µg/L = MICROGRAMS PER LITER

3. TANK DATA SOURCE: CET ENVIRONMENTAL SERVICES, PROPOSED WELL AND BORING LOCATIONS MAP, PLATE 3, JULY 1993; AQUA TERRA TECHNOLOGIES CONSULTING ENGINEERS & SCIENTISTS, FACILITY AND FORMER TANK LOCATIONS, PLATE 2, FEBRUARY 1990

4. ASSESSOR PARCEL DATA SOURCE: ALAMEDA COUNTY

5. AERIAL IMAGERY SOURCE: ESRI

N

0 50 100
SCALE IN FEET

HALEY ALDRICH

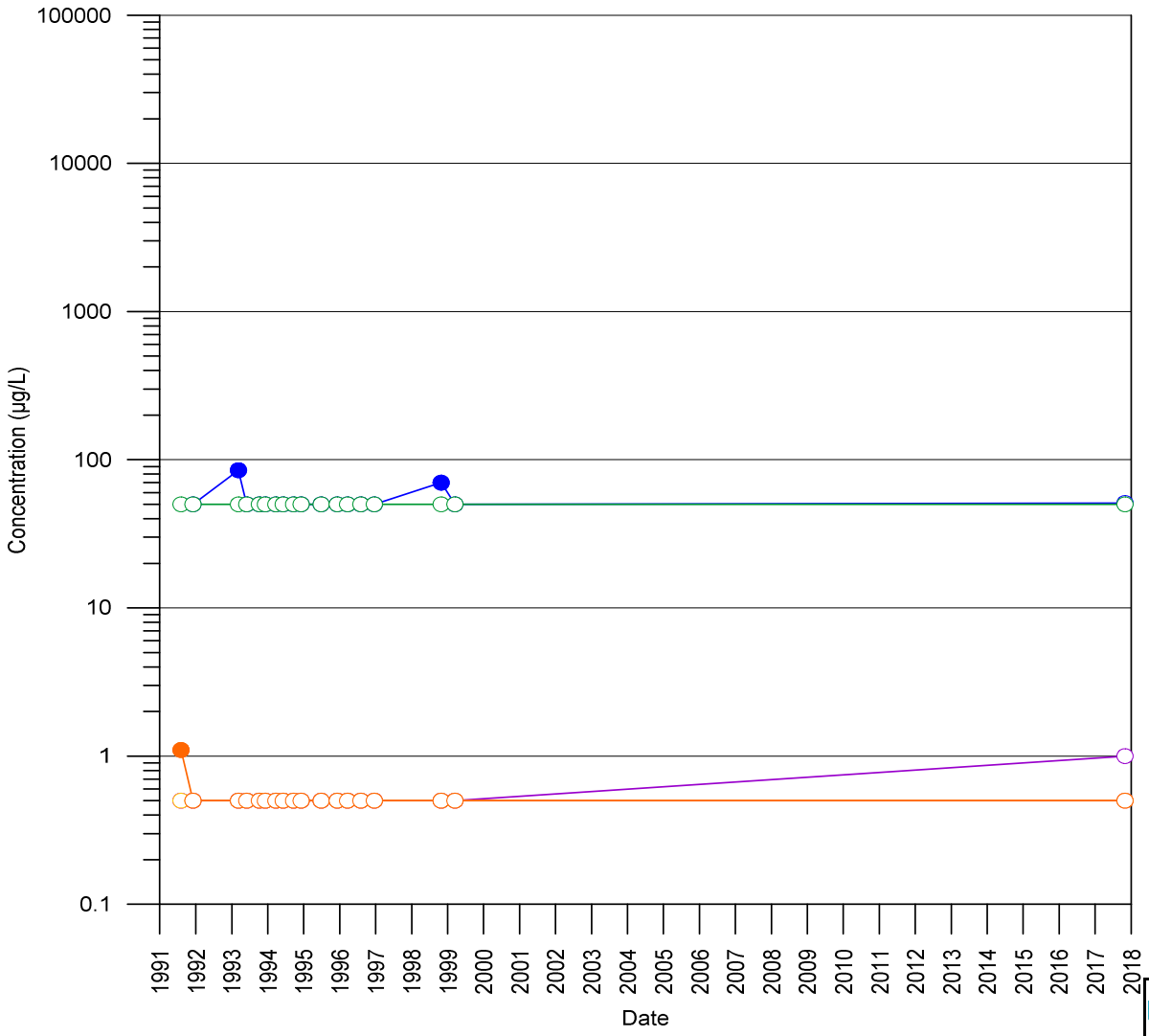
NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

ANALYTICAL RESULTS FOR SELECT COMPOUNDS, 31 OCTOBER 2017

DECEMBER 2017

FIGURE 4

GIS FILE PATH: G:\Nestle\Nestle Dreyer's project\GIS\Maps\2017_12\130654_002_0004_ANALYTICAL_RESULTS.mxd — USER: ibruce — LAST SAVED: 12/14/2017 3:39:40 PM



Notes:

1. Open circles indicate the compound was not detected; value shown is the associated reporting limit.

Abbreviations:

TPHd = Total Petroleum Hydrocarbons as diesel

TPHg = Total Petroleum Hydrocarbons as gasoline

µg/L = micrograms per liter

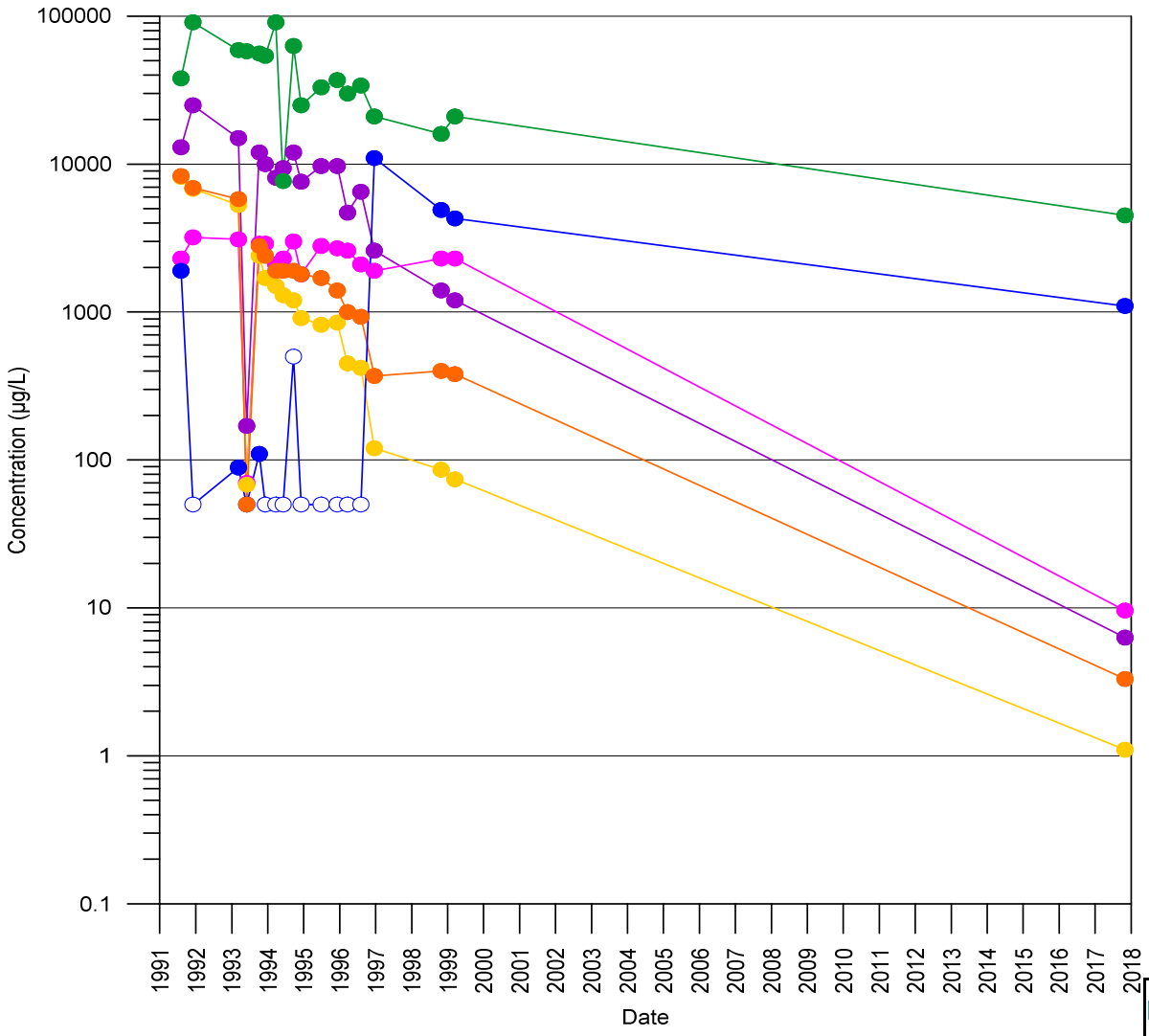
HALEY ALDRICH

NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

CONCENTRATION TRENDS FOR MW-1

DECEMBER 2017

FIGURE 5



Notes:

1. Open circles indicate the compound was not detected; value shown is the associated reporting limit.

Abbreviations:

TPHd = Total Petroleum Hydrocarbons as diesel

TPHg = Total Petroleum Hydrocarbons as gasoline

µg/L = micrograms per liter

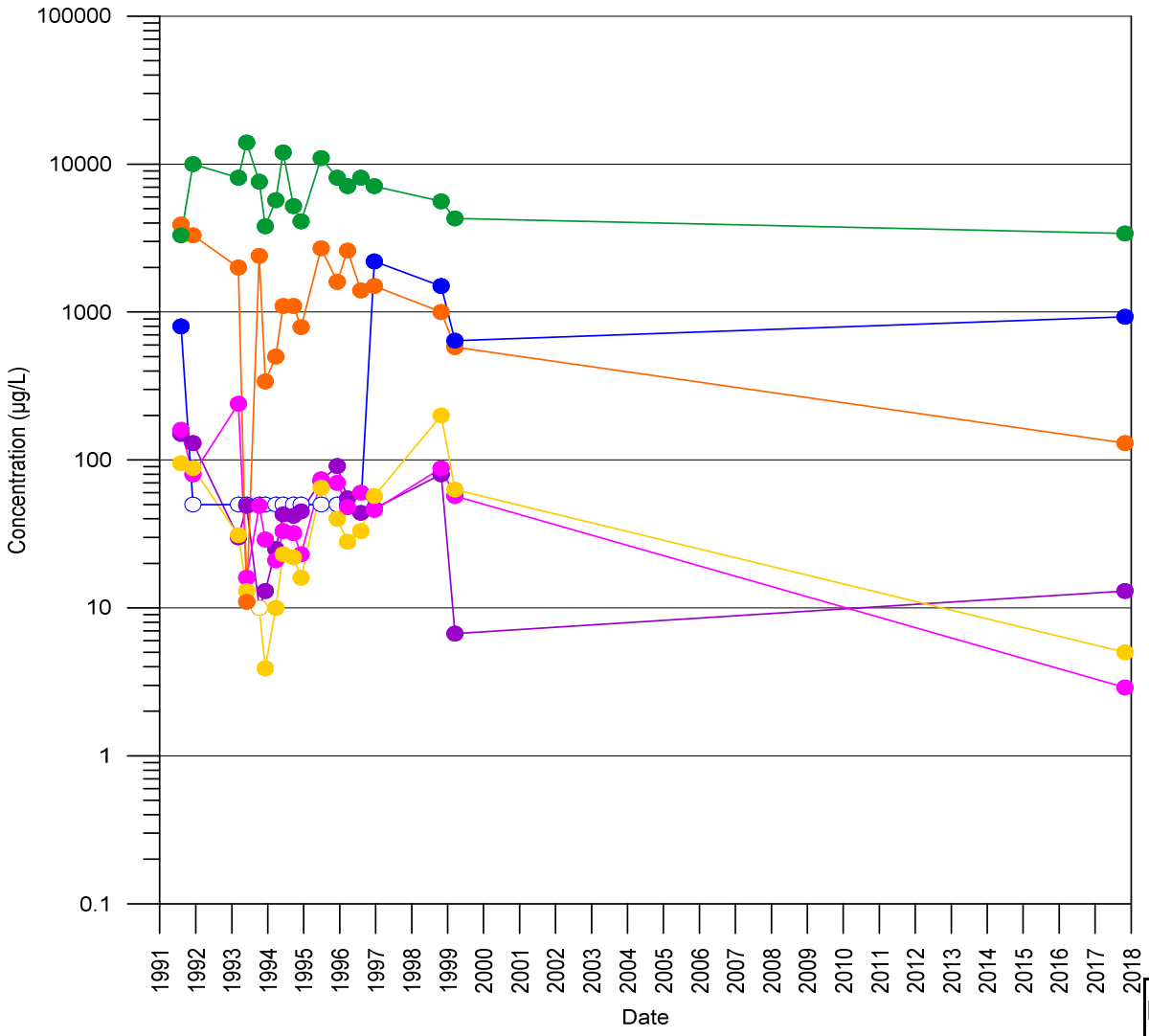
HALEY ALDRICH

NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

CONCENTRATION TRENDS FOR MW-2

DECEMBER 2017

FIGURE 6



Notes:

1. Open circles indicate the compound was not detected; value shown is the associated reporting limit.

Abbreviations:

TPHd = Total Petroleum Hydrocarbons as diesel

TPHg = Total Petroleum Hydrocarbons as gasoline

µg/L = micrograms per liter

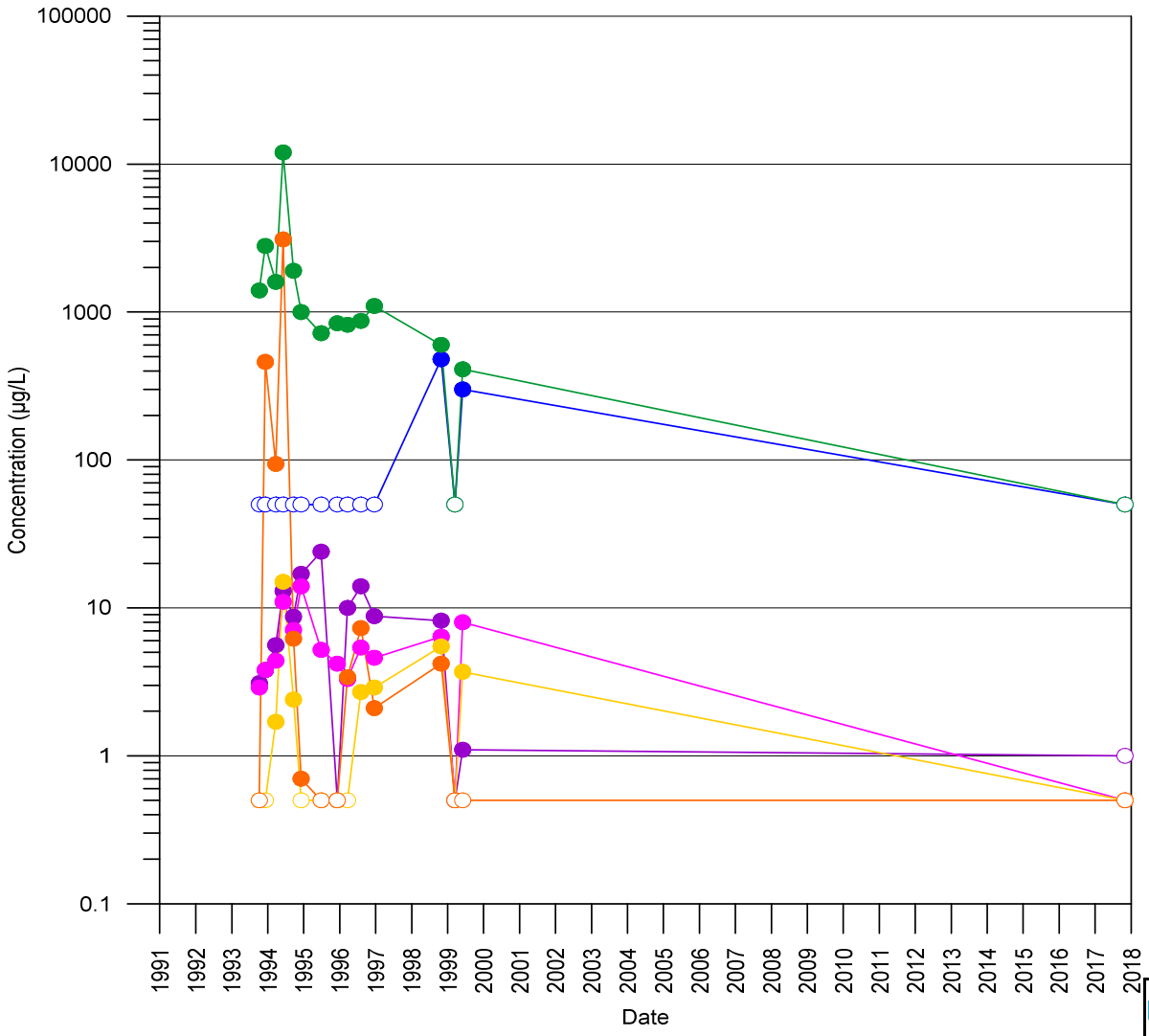
HALEY ALDRICH

NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

CONCENTRATION TRENDS FOR MW-3

DECEMBER 2017

FIGURE 7



Notes:

1. Open circles indicate the compound was not detected; value shown is the associated reporting limit.

Abbreviations:

TPHd = Total Petroleum Hydrocarbons as diesel

TPHg = Total Petroleum Hydrocarbons as gasoline

µg/L = micrograms per liter

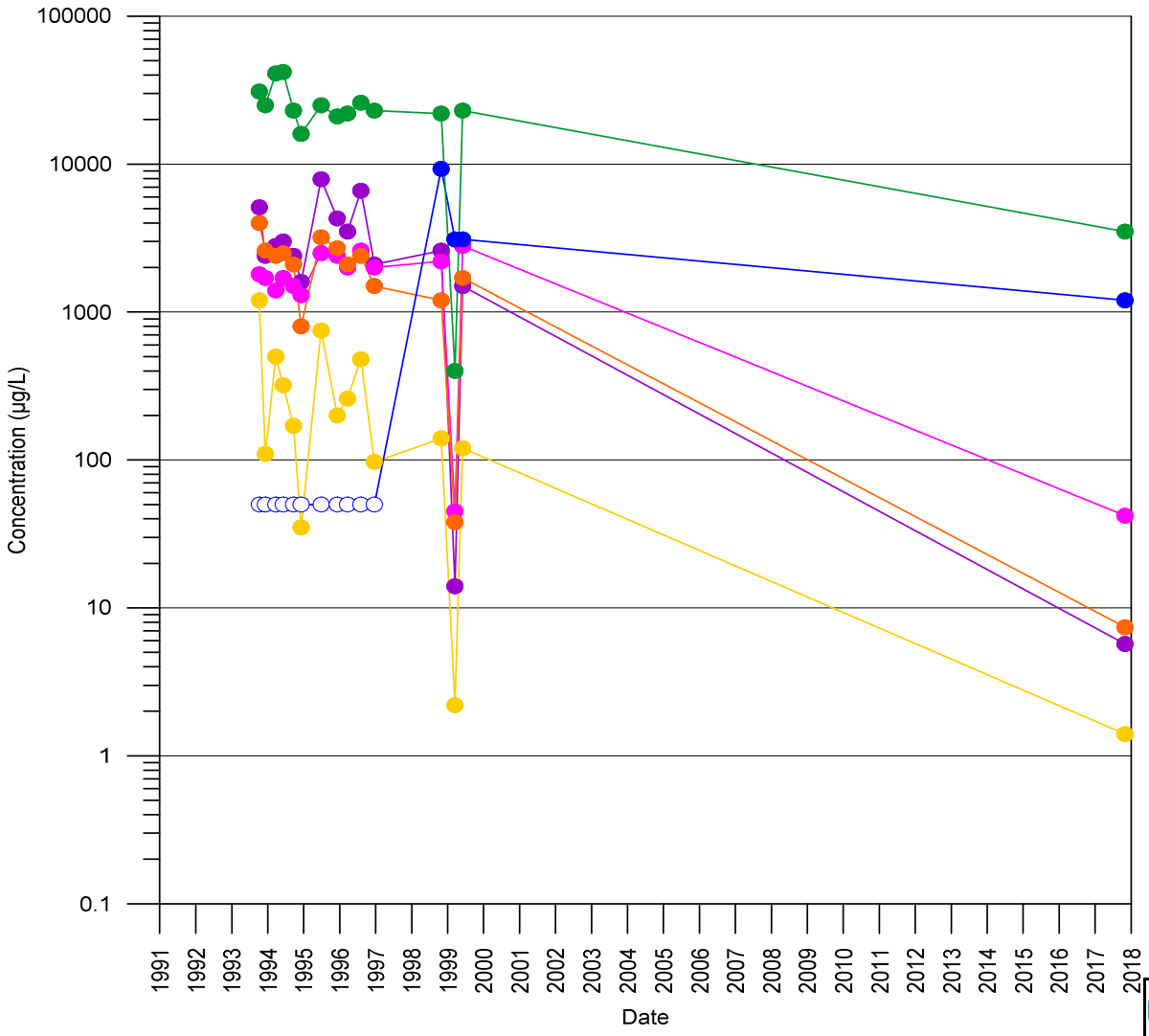
HALEY ALDRICH

NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

CONCENTRATION TRENDS FOR MW-4

DECEMBER 2017

FIGURE 8



Notes:

1. Open circles indicate the compound was not detected; value shown is the associated reporting limit.

Abbreviations:

TPHd = Total Petroleum Hydrocarbons as diesel

TPHg = Total Petroleum Hydrocarbons as gasoline

µg/L = micrograms per liter

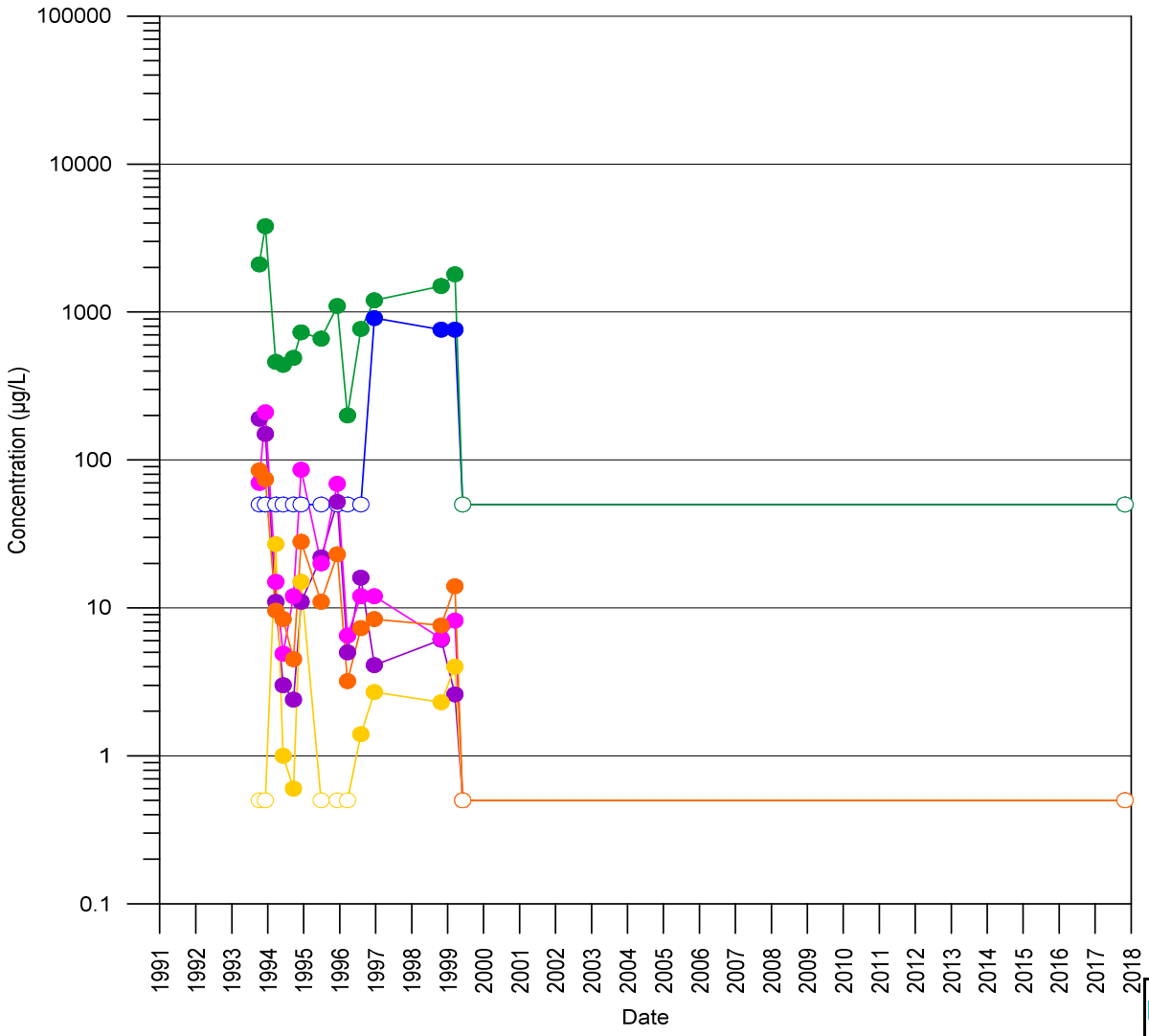
HALEY ALDRICH

NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

CONCENTRATION TRENDS FOR MW-5

DECEMBER 2017

FIGURE 9



Notes:

1. Open circles indicate the compound was not detected; value shown is the associated reporting limit.

Abbreviations:

TPHd = Total Petroleum Hydrocarbons as diesel

TPHg = Total Petroleum Hydrocarbons as gasoline

µg/L = micrograms per liter

HALEY ALDRICH

NESTLÉ USA, INC.
DREYER'S GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

CONCENTRATION TRENDS FOR MW-6

DECEMBER 2017

FIGURE 10

APPENDIX A

Field Forms

field solutions, inc

WELL DEVELOPMENT FIELD DATA

PROJECT NO.:
PROJECT NAME: Westk
LOCATION: Oakland

WELL ID: MW-1
SAMPLE ID: NA
DATE DEVELOPED: 10-23-17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 2" = 0.163 4" = 0.653 4.5" = 0.83 6" = 1.5 8" = 2.6*

Casing diameter (in): 2.0 Depth to liquid (ft): 12.90 Well depth (ft): 20.4 One casing volume (gal) 1.25

Screened interval (ft): ~~NA~~ 10-30 Wetted screen length (ft): ~~NA~~ 7.2

REMOVING SOLIDS/WATER Start Time (2400 Hr): 1318 End time (2400 Hr): 1338

ES-submersible X Grundfos-submersible ___ Centrifugal X PVC bailer ___ Stainless bailer ___ Hand auger ___

Well depth following solids/water removal (ft): 28.6 Hard bottom reached (Y/N): Y Pump Rate (gpm) 1.9

Volume purged: 38.0 (gal) Solids/water disposal: Drums on site

Time (2400 Hr)	Volume (gal/~~liters~~)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Turbidity (NTU)	Settable Solids (%)	Comments (i.e. color/odor)
1322	2.0	NA	24.9	6.69	502	688.2	5	Brown, none
1330	8.0	NA	20.7	6.40	404	298.4	1	Brown, none
1335	23.0	NA	20.7	6.18	410	305.1	<1%	Brown none
1338	38.0	NA	20.0	6.33	414	90.3	0	Clear, none

REMARKS: Tree roots inside well

Developed by (print): M Gallegos / R Guevara

Signature: [signature]

Reviewed by:

Page ___ of ___

WELL DEVELOPMENT FIELD DATA

PROJECT NO.: _____ WELL ID: MW-2

PROJECT NAME: Nestle SAMPLE ID: NA

LOCATION: Oakland DATE DEVELOPED: 10-23-17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 2" = 0.163 4" = 0.653 4.5" = 0.83 6" = 1.5 8" = 2.6*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.97 Well depth (ft): 26.9 One casing volume (gal) 10.40

Screened interval (ft): 8-28 Wetted screen length (ft): NA

REMOVING SOLIDS/WATER Start Time (2400 Hr): 1405 End time (2400 Hr): 1436

ES-submersible X Grundfos-submersible ___ Centrifugal ___ PVC bailer ___ Stainless bailer ___ Hand auger ___

Well depth following solids/water removal (ft): 26.9 Hard bottom reached (Y)N) Pump Rate (gpm) 2.0

Volume purged: 63.0 (gal) Solids/water disposal: Drums on site

Time (2400 Hr)	Volume (gal)liters)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Turbidity (NTU)	Settable Solids (%)	Comments (i.e. color/odor)
1409	10.5	13.80	22.6	6.39	803	29.5	0	Clear, strong
1412	21.0	14.17	22.4	6.31	800	21.5	0	Clear, strong
1431 1433	42.0	16.10	22.3	6.12	798	4.6	0	Clear, strong
1436	51.0	26.10	21.4	6.27	815	73.7	1	Black, strong
1450	63.0	26.19	21.2	6.37	823	14.6	0	Clear. Strong

REMARKS: Well dewatered @ 51 gallons. Let well recharge then continued to purge

Developed by (print): M. Gallegos Jr. Guevara

Signature: _____

Reviewed by: _____

Page ____ of ____

field solutions inc

WELL DEVELOPMENT FIELD DATA

PROJECT NO.:
PROJECT NAME: Nestle
LOCATION: Oakland.

WELL ID: MW-3
SAMPLE ID: NA
DATE DEVELOPED: 10-23-17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 2" = 0.163 4" = 0.653 4.5" = 0.83 6" = 1.5 8" = 2.6*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.53 Well depth (ft): 26.4 One casing volume (gal) 10.36
Screened interval (ft): 7.0-27.0 Wetted screen length (ft): 16.47

REMOVING SOLIDS/WATER Start Time (2400 Hr): 1151 1458 End time (2400 Hr): 1226 1509
ES-submersible ____ Grundfos-submersible ____ Centrifugal X PVC bailer ____ Stainless bailer ____ Hand auger ____

Well depth following solids/water removal (ft): 26.5 26.5 Hard bottom reached (Y/N) Y Pump Rate (gpm) 0.6

Volume purged: 46.0 (gal) Solids/water disposal: Drums on site

Time (2400 Hr)	Volume (gal/liters)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Turbidity (NTU)	Settable Solids (%)	Comments (i.e. color/odor)
1212	11.0	NA	22.6	6.40	988	820	0	Cloudy, strong
1224	22.0	NA	24.1	6.34	972	168.8	0	cloudy, strong
1503	33.0	NA	21.7	6.24	952	23.1	0	clear, strong
1508	44.0	NA	21.1	6.41	965	24.1	0	clear, strong

REMARKS: Well dewatered during purging let well recharge then continue to purge. Tree roots in well. Returned to continue purging Well 10.23 14:57.

Developed by (print): M. Gallegos / R. Guevara
Signature: [signature]

Reviewed by: ____
Page ____ of ____

WELL DEVELOPMENT FIELD DATA

PROJECT NO.: _____ WELL ID: MW-4

PROJECT NAME: Nisth SAMPLE ID: NP

LOCATION: Oakland DATE DEVELOPED: 10-23-17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 2" = 0.163 4" = 0.653 4.5" = 0.83 6" = 1.5 8" = 2.6*

Casing diameter (in): 2.0 Depth to liquid (ft): ~~19.67~~ 10.62 Well depth (ft): 20.3 One casing volume (gal) 1.57

Screened interval (ft): ~~7.0-27.0~~ Wetted screen length (ft): ~~16.38~~ 16.38

REMOVING SOLIDS/WATER Start Time (2400 Hr): 1054 End time (2400 Hr): 1137

ES-submersible X Grundfos-submersible ___ Centrifugal ___ PVC bailer ___ Stainless bailer ___ Hand auger ___

Well depth following solids/water removal (ft): 26.9 Hard bottom reached (Y / N) Pump Rate (gpm) 0.46

Volume purged: 20.0 (gal) Solids/water disposal: Drums on Site

Time (2400 Hr)	Volume (gal / liters)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Turbidity (NTU)	Settable Solids (%)	Comments (i.e. color/odor)
1057	2.0	NS	21.8	6.44	821	814.6	40	Brown, non
1133	10.0	NS	27.5	6.78	782	>1000	30	Brown - non
1137	20.0	NM	22.8	6.64	821	>1000	10	Brown non

REMARKS: Significant silt in purge water throughout purging

Developed by (print): M. Galkos / R. Guevara Reviewed by: _____

Signature: _____ Page _____ of _____

WELL DEVELOPMENT FIELD DATA

PROJECT NO.: _____ WELL ID: MW-5

PROJECT NAME: Nestle SAMPLE ID: NA

LOCATION: OAKLAND DATE DEVELOPED: 10-23-17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 2" = 0.163 4" = 0.653 4.5" = 0.83 6" = 1.5 8" = 2.6*

Casing diameter (in): 2.0 Depth to liquid (ft): 10.14 Well depth (ft): 26.1 One casing volume (gal) 2.9260

Screened interval (ft): ~~NA~~ 9-29 Wetted screen length (ft): ~~N/A~~ 24.1 15.96

REMOVING SOLIDS/WATER Start Time (2400 Hr): 0818 End time (2400 Hr): 0904

ES-submersible X Grundfos-submersible ___ Centrifugal ___ PVC bailer ___ Stainless bailer ___ Hand auger ___

Well depth following solids/water removal (ft): 24.1 Hard bottom reached (Y) N) Pump Rate (gpm) 0.6

Volume purged: 30.0 (gal) Solids/water disposal: Drums on site

Time (2400 Hr)	Volume (gal-liters)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Turbidity (NTU)	Settable Solids (%)	Comments (i.e. color/odor)
0820	3.0	22.30	18.3	5.93	847	27.3	0.0	Clear, strong odor
0828	13.0	NA	17.9	6.16	937	380.9	2+%	cloudy, strong odor
0845	15.0	NA	18.3	6.22	827	87.4	0%	cloudy, strong odor
0847	20.0	NA	18.5	6.23	831	479.3	0	cloudy, strong odor
0856	25.0	NA	18.5	6.25	827	429.1	0	cloudy, strong odor
0904	30.0	NA	18.5	6.26	817	392.4	0	cloudy, strong odor

REMARKS: Significant draw down during purging. Shut off pump to let well recharge. Continued to purge. Broken bolts in the holes of well box.

Developed by (print): M. Gallegos / R Guevara

Signature: _____

Reviewed by: _____

Page ___ of ___

WELL DEVELOPMENT FIELD DATA

PROJECT NO.: _____ WELL ID: MW-6

PROJECT NAME: Nusth SAMPLE ID: MW

LOCATION: Oakland DATE DEVELOPED: 10-23-17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 2" = 0.163 4" = 0.653 4.5" = 0.83 6" = 1.5 8" = 2.6*

Casing diameter (in): 4.0 Depth to liquid (ft): 9.52 Well depth (ft): 29.3 One casing volume (gal) 12.91

Screened interval (ft): 9-29 bgs Wetted screen length (ft): MW 19.46

REMOVING SOLIDS/WATER Start Time (2400 Hr): 0945 End time (2400 Hr): 1010

ES-submersible ____ Grundfos-submersible ____ Centrifugal X PVC bailer ____ Stainless bailer ____ Hand auger ____

Well depth following solids/water removal (ft): 29.3 Hard bottom reached (Y/N) Pump Rate (gpm) 29.3

Volume purged: 28 (gal) Solids/water disposal: Drums on Site

Time (2400 Hr)	Volume (gal-liters)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	Turbidity (NTU)	Settable Solids (%)	Comments (i.e. color/odor)
0949	13.0	17.30	20.5	6.56	587	203.5	0	Brown, no odor
1002	28.0	28.61	20.3	6.46	607	8.2	0	Clear, no odor

REMARKS: MW-6 dewatered during purging. Slow recharge. Returned late in the day to continue purging. (Y)

DTW @ 15:15 26.54

Developed by (print): M. Gallegos / R. Guevara Reviewed by: _____

Signature: _____ Page _____ of _____

DRUM INVENTORY FORM

Drum ID	Source	Amount generated this event	Amount in drum	Drum Size
A	Purge water	55	55 gals	55
B	Purge water	55	55 gals	55
C	Purge water	55	55 gals	55
D	Purge water	55	55 gals	55
E	Purge water	40	40 gals	55

Sketch locations of drums, include SITE ADDRESS

Stored at location designated by Tyco at H&A, near MW-5. Drums need to be labeled.

Condition of drums: NEW / USED (circle one)

Number of drums onsite generated by FSI 13 on site
5 FSI.

Dreyers Grand Ice Cream

October 2017 Sampling Request

START DATE: 10-31-17

END DATE: 10-31-17

Well ID	Diameter (inches)	Total Depth (ft BTOC)	Screen Interval (ft BTOC)	Tubing Intake (ft below TOC)	Comments
Micropurge and sample the two wells listed below after dedicating peristaltic tubing systems in each well. After liquid level stabilization, record temperature, pH, specific conductance, DO, and ORP at regular intervals until stability has be achieved for three consecutive measurements. Contain the purge water in a 55-gallon drum (Drum E). Deliver the remaining samples to Test America in Pleasanton the same day they are collected.					
Micropurge the wells at a rate of 100-500 ml/min. Collect all VOA samples at a rate of 100 ml per minute or less.					
MW-1	2.0	30.0	10-30	20.0	
MW-2	4.0	28.0	8-28	20.0	Collect duplicate at this well (ID = MW-10)
MW-3	4.0	27.0	7-27	20.0	
MW-4	2.0	27.0	7-27	20.0	
MW-5	2.0	29.0	9-29	20.0	
MW-6	4.0	29.0	9-29	20.0	

DUP	Collect a blind duplicate at well MW-2 label it MW-10 and add 5 minutes to sample time
FB-1	Pour a field blank at any well using water provided by laboratory
TB-1	Relinquish trip blank with samples submitted to to Test America

Test America - Deliver to Pleasanton
TPHg (EPA 8260B)
3-VOAs w/HCL
TPHd/MO (EPA 8015M)
2 - Liter Amber NP
PAHs (EPA 8270C)
2 - Liter Amber NP
Sulfate/Nitrate (EPA 300.0); Alkalinity (SM2320B)
1 - 500 poly NP
Iron and Manganese (EPA 6010B Filtered in Lab)
1 - 250 ml poly NP

fier solutions, inc
ENVIRONMENTAL FIELD SERVICES

DRUM INVENTORY FORM

Drum ID	Source	Amount generated this event	Amount in drum	Drum Size
A	Purge water	55	55 gals	55
B	Purge water	55	55 gals	55
C	Purge water	55	55 gals	55
D	Purge water	55	55 gals	55
F	Purge water	40	40 gals	55
E	10/31/17 GW wells purge water	8	48 gals	55
Combined				

Same drum

Sketch locations of drums, include SITE ADDRESS

Stored at location designated by Tyler of H&A, near MW-5. Drums need to be labeled.

Condition of drums: NEW / USED (circle one)

Number of drums onsite generated by FSI 13 on site

5 ~~used~~ used for Development water + purge water from sampling event

EI *Environmental Instruments*

CERTIFICATE OF CALIBRATION

CUSTOMER NAME: FIELD SOLUTIONS

YSI Model 556 SERIAL#: 14J102256

SOLUTION	METER RESPONSE
Ph 4	4.02
PH 7	7.01
PH 10	9.92
1413 Us/cm	1413
ORP @ 25 C	240
D.O.	9.80
Temp.	16.3
Barometer Pressure	763

SERVICE TECH	SIGNATURE	DATE
Miguel Mata		10/26/2017

EI *Environmental Instruments*

CERTIFICATE OF CALIBRATION

CUSTOMER NAME: FIELD SOLUTIONS

YSI Model 556 SERIAL#: 05F1981

SOLUTION	METER RESPONSE
Ph 4	4.01
PH 7	7.01
PH 10	9.98
1413 Us/cm	1413
ORP @ 25 C	240
D.O.	9.50
Temp.	17.5
Barometer Pressure	763

SERVICE TECH	SIGNATURE	DATE
Miguel Mata		10/26/2017

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: _____ WELL ID: MW-1

PROJECT NAME: Dryers SAMPLE ID: MW-1

CLIENT: Haley & Aldrich DATE PURGED: 10/31/17

SITE LOCATION: Oakland, California DATE SAMPLED: 10/31/17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 2.0 Depth to liquid (ft): 13.12 Well depth (ft): 30.0 Screened interval (ft): 10-30

Wetted screened length (ft): 16.83 Dedicated tubing intake from TOC (ft): 20.0

WELL PURGING: Peristaltic Pump Start Time (2400 Hr): 0857 End Time (2400 Hr): 0918

Stabilized liquid level (ft): 13.17 Volume purged: 4,450 (ml) Pump Rate 212 (ml/min)

Purge water disposal: Contained in 55-gallon drum onsite

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Color (Visual)
0909	2,450	13.17	16.5	6.82	414	2.35	244	clear
0912	3,050	13.17	16.5	6.81	413	2.41	241	clear
0915	3,750	13.17	16.6	6.81	412	2.31	238	clear
0918	4,450	13.17	16.6	6.81	412	2.27	236	clear
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 0919 End Time (2400 Hr): 0940 Sample reacts with acids (Y / (N))

Equipment used: Peristaltic pump with dedicated Teflon tubing

QC samples collected at well: NONE Samples filtered through 0.45µm filter: NONE

REMARKS: Left Dedicated Tubing in well Replaced Broken Bolt Lid

All Samples collected

Meter Calibration: Date:_____ Time: _____ Location of calibration: _____ YSI 556 # _____

pH 4: (_____ / _____ @ _____ °C) pH 7: (_____ / _____ @ _____ °C) pH 10: (_____ / _____ @ _____ °C)

D.O. (_____ / _____ %) D.O. (_____ ppm) (EC (_____ / _____ µS@25°C)

ORP (_____ / _____ mV @ _____ °C

Purged and sampled by (print): R. Gutierrez Reviewed by: _____

Signature: _____ Page _____ of 6

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: _____ WELL ID: MW-2

PROJECT NAME: Dryers SAMPLE ID: MW-2

CLIENT: Haley & Aldrich DATE PURGED: 10/31/17

SITE LOCATION: Oakland, California DATE SAMPLED: 10/31/17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 11.03 Well depth (ft): 28.0 Screened interval (ft): 8-28

Wetted screened length (ft): 16.87 Dedicated tubing intake from TOC (ft): 20.0

WELL PURGING: Peristaltic Pump Start Time (2400 Hr): 1001 End Time (2400 Hr): 1021

Stabilized liquid level (ft): 11.13 Volume purged: 5,150 (ml) Pump Rate 258 (ml/min)

Purge water disposal: Contained in 55-gallon drum onsite

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Color (Visual)
1009	2,150	11.13	20.2	6.88	783	0.46	140	clear
1012	3,850	11.13	20.3	6.88	782	0.45	133	clear
1015	3,750	11.13	20.3	6.87	783	0.59	118	clear
1018	4,450	11.13	20.3	6.87	783	0.58	115	clear
1021	5,150	11.13	20.4	6.87	782	0.58	110	clear
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1022 End Time (2400 Hr): 1100 Sample reacts with acids (Y (N)

Equipment used: Peristaltic pump with dedicated Teflon tubing

QC samples collected at well: MW-10, 1027 Samples filtered through 0.45µm filter: None

REMARKS: Left Dedicated Tubing in well

All Samples collected

Meter Calibration: Date:_____ Time: _____ Location of calibration: _____ YSI 556 # _____

pH 4: (_____ / _____ @ _____ °C) pH 7: (_____ / _____ @ _____ °C) pH 10: (_____ / _____ @ _____ °C)

D.O. (_____ / _____ %) D.O. (_____ ppm) (EC (_____ / _____ µS@25°C)

ORP (_____ / _____ mV @ _____ °C

Purged and sampled by (print): R. Gullaro Reviewed by: _____

Signature: _____ Page 2 of 6

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.:
PROJECT NAME: Dryers
CLIENT: Haley & Aldrich
SITE LOCATION: Oakland, California

WELL ID: MW-3
SAMPLE ID: MW-3
DATE PURGED: 10-31-17
DATE SAMPLED: 10-31-17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 10.56 Well depth (ft): 26.4 Screened interval (ft): 7-27
Wetted screened length (ft): 15.8 Dedicated tubing intake from TOC (ft): 20

WELL PURGING: Peristaltic Pump Start Time (2400 Hr): 0849 End Time (2400 Hr): 0907
Stabilized liquid level (ft): 10.67 Volume purged: 3,250 (ml) Pump Rate 0.18 (ml/min)

Purge water disposal: Contained in 55-gallon drum onsite

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Color (Visual)
0859	2,000	10.67	20.0	6.68	995	0.18	13	Clear
0903	2,650	10.67	20.0	6.68	994	0.16	12	Clear
0907	3,250	10.67	20.0	6.67	994	0.16	8	Clear
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 0908 End Time (2400 Hr): 0933 Sample reacts with acids (Y/N): N
Equipment used: Peristaltic pump with dedicated Teflon tubing
QC samples collected at well: None Samples filtered through 0.45µm filter: None

REMARKS: All Samples Collected

Meter Calibration: Date: 10/30/17 Time: —— Location of calibration: Factory YSI 556 # 05F1980
pH 4: (____ / ____ @ ____ °C) pH 7: (____ / ____ @ ____ °C) pH 10: (____ / ____ @ ____ °C)
D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ µS@25°C)
ORP (____ / ____ mV @ ____ °C

Purged and sampled by (print): Manuel Gallegos
Signature: [signature]

Reviewed by: [signature]

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: ____

PROJECT NAME: Dryers

CLIENT: Haley & Aldrich

SITE LOCATION: Oakland, California

WELL ID: MW-4

SAMPLE ID: MW-4

DATE PURGED: 10-31-17

DATE SAMPLED: 10-31-17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 2.0 Depth to liquid (ft): 10.90 Well depth (ft): 20.3 Screened interval (ft): 7-27

Wetted screened length (ft): 9.6 Dedicated tubing intake from TOC (ft): 25'

WELL PURGING: Peristaltic Pump Start Time (2400 Hr): 0755 End Time (2400 Hr): 0808

Stabilized liquid level (ft): 10.78 Volume purged: 2,800 (ml) Pump Rate 0.21 (ml/min)

Purge water disposal: Contained in 55-gallon drum onsite

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (μS@25°C)	DO (mg/l)	ORP (mV)	Color (Visual)
0802	1,600	10.78	17.6	6.54	860	0.27	51	Clear
0805	2,200	10.78	17.7	6.55	853	0.29	48	Clear
0808	2,800	10.78	17.8	6.54	841	0.24	45	Clear
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 0756 End Time (2400 Hr): 0832 Sample reacts with acids (Y / (N))

Equipment used: Peristaltic pump with dedicated Teflon tubing

QC samples collected at well: None Samples filtered through 0.45μm filter: None

REMARKS: All Samples taken

* All three eye bolts are broken off from well box.

Meter Calibration: Date: 10/30/17 Time: — Location of calibration: Factory YSI 556 # 05F1981

pH 4: (____ / ____ @ ____°C) pH 7: (____ / ____ @ ____°C) pH 10: (____ / ____ @ ____°C)

D.O. (____ / ____ %) D.O. (____ ppm) (EC (____ / ____ μS@25°C)

ORP (____/____ mV @ ____ °C

Purged and sampled by (print): Manuel Gallegos

Signature: [signature]

Reviewed by: [initials]

Page 4 of 6

field solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: ______
PROJECT NAME: Dryers
CLIENT: Haley & Aldrich
SITE LOCATION: Oakland, California

WELL ID: MW-5
SAMPLE ID: MW-5
DATE PURGED: 10-31-17
DATE SAMPLED: 10-31-17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*
Casing diameter (in): 2.0 Depth to liquid (ft): 10.27 Well depth (ft): 26.1 Screened interval (ft): 9-29
Wetted screened length (ft): 18.73 Dedicated tubing intake from TOC (ft): 20

WELL PURGING: Peristaltic Pump Start Time (2400 Hr): 1003 End Time (2400 Hr): 1023
Stabilized liquid level (ft): 10.42 Volume purged: 3,200 (ml) Pump Rate 0.16 (ml/min)

Purge water disposal: Contained in 55-gallon drum onsite

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Color (Visual)
1011	1,700	10.42	18.3	6.64	831	0.18	73	Clear
1015	2,200	10.42	18.3	6.63	826	0.20	60	Clear
1019	2,700	10.42	18.3	6.63	824	0.18	55	Clear
1023	3,200	10.42	18.3	6.63	824	0.14	51	Clear
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 1024 End Time (2400 Hr): 1054 Sample reacts with acids (Y (N))
Equipment used: Peristaltic pump with dedicated Teflon tubing
QC samples collected at well: FB-1 (1005) Samples filtered through 0.45µm filter: None

REMARKS:
All Samples taken
All Three bolts broken off on well box

Meter Calibration: Date: 10/31/17 Time: — Location of calibration: factory YSI 556 # 05F1781
pH 4: (____/____ @ ____°C) pH 7: (____/____ @ ____°C) pH 10: (____/____ @ ____°C)
D.O. (____/____ %) D.O. (____ ppm) (EC (____/____ µS@25°C)
ORP (____/____ mV @ ____ °C

Purged and sampled by (print): Manuel Gallegos
Signature: [signature]

Reviewed by: [signature]
Page 5 of 6

solutions, inc
ENVIRONMENTAL FIELD SERVICES

WATER SAMPLE FIELD DATA

PROJECT NO.: ______________________ WELL ID: MW-6

PROJECT NAME: Dryers SAMPLE ID: MW-6

CLIENT: Haley & Aldrich DATE PURGED: 10/31/17

SITE LOCATION: Oakland, California DATE SAMPLED: 10/31/17

WELL INFORMATION – *Gallons per linear ft for casing diameter of: 0.75" = 0.023 2" = 0.163 4.0" = 0.653 6" = 1.5*

Casing diameter (in): 4.0 Depth to liquid (ft): 9.58 Well depth (ft): 29.0 Screened interval (ft): 9-29

Wetted screened length (ft): 18.85 Dedicated tubing intake from TOC (ft): 20.0

WELL PURGING: Peristaltic Pump Start Time (2400 Hr): 0745 End Time (2400 Hr): 0813

Stabilized liquid level (ft): ~~18.85~~ ~~[illegible]~~ 10.15 Volume purged: 5,050 (ml) Pump Rate 180 (ml/min)

Purge water disposal: Contained in 55-gallon drum onsite

Time (2400 Hr)	Volume (ml)	DTW (ft)	Temp (°C)	pH (std. units)	EC (µS@25°C)	DO (mg/l)	ORP (mV)	Color (Visual)
0803	3,450	10.15	16.8	6.98	574	2.34	201	clear
0808	4250	10.15	16.7	6.99	571	2.30	202	clear
0813	5,050	10.15	16.3	6.97	572	2.27	204	clear
				± 1.0	± 3%	± 10%	± 10 mV	

WELL SAMPLING: Start Time (2400 Hr): 0814 End Time (2400 Hr): 0836 Sample reacts with acids (Y / [✓ N])

Equipment used: Peristaltic pump with dedicated Teflon tubing

QC samples collected at well: NONE Samples filtered through 0.45µm filter: NONE

REMARKS: NO Bolts ON LID, 6FT TUBING in well
All samples collected

Meter Calibration: Date:__________ Time: __________ Location of calibration: __________ YSI 556 # __________

pH 4: (______ / ______ @ ______°C) pH 7: (______ / ______ @ ______°C) pH 10: (______ / ______ @ ______°C)

D.O. (______ / ______ %) D.O. (______ ppm) (EC (______ / ______ µS@25°C)

ORP (______ / ______ mV @ ______ °C

Purged and sampled by (print): R. Guevara

Signature: [illegible]

Reviewed by: [illegible]

Page 6 of 9

APPENDIX B

Analytical Laboratory Report

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: 720-82853-1
Client Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale
Revision: 1

For:
Haley & Aldrich, Inc.
1956 Webster Street
Suite 300
Oakland, California 94612

Attn: Michael Calhoun

Authorized for release by:
11/7/2017 6:06:19 PM

Sarah Arney, Project Manager I
(602)659-7664
sarah.arney@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-82853-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-82853-1

Comments
Report revised 11/7/2017 to include corrected list of metals (Fe and Mn only).

No additional comments.

Receipt
The samples were received on 10/31/2017 12:17 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.6º C.

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

GC/MS Semi VOA
Method(s) 8270C SIM: Surrogate recovery for the following sample was outside control limits: MW-10 (720-82853-9). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

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

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

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

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Client Sample ID: TB-1 — Lab Sample ID: 720-82853-1

No Detections.

Client Sample ID: FB-1 — Lab Sample ID: 720-82853-2

No Detections.

Client Sample ID: MW-1 — Lab Sample ID: 720-82853-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.6		1.0		ug/L	1		8260B	Total/NA
Nitrate as N	5.2		2.3		mg/L	10		300.0	Total/NA
Sulfate	19		10		mg/L	10		300.0	Total/NA
Nitrate Nitrite as N	5.7		0.23		mg/L	1		300.0	Total/NA
Nitrite as N	0.36		0.30		mg/L	1		300.0	Total/NA
Alkalinity	160		5.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 720-82853-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.3		0.50		ug/L	1		8260B	Total/NA
n-Butylbenzene	18		1.0		ug/L	1		8260B	Total/NA
tert-Butylbenzene	43		1.0		ug/L	1		8260B	Total/NA
Ethylbenzene	9.6		0.50		ug/L	1		8260B	Total/NA
Isopropylbenzene	26		0.50		ug/L	1		8260B	Total/NA
Naphthalene	1.2		1.0		ug/L	1		8260B	Total/NA
N-Propylbenzene	49		1.0		ug/L	1		8260B	Total/NA
Toluene	1.1		0.50		ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	0.75		0.50		ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	2.5		0.50		ug/L	1		8260B	Total/NA
Xylenes, Total	6.3		1.0		ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	4500		250		ug/L	5		8260B	Total/NA
Acenaphthene	0.26		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.21		0.10		ug/L	1		8270C SIM	Total/NA
Naphthalene	1.0		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	1100		53		ug/L	1		8015B	Total/NA
Nitrate Nitrite as N	0.89		0.23		mg/L	1		300.0	Total/NA
Nitrite as N	0.89		0.30		mg/L	1		300.0	Total/NA
Manganese	6.4		0.020		mg/L	1		6010B	Dissolved
Alkalinity	370		5.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	370		5.0		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 720-82853-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	130		0.50		ug/L	1		8260B	Total/NA
n-Butylbenzene	9.8		1.0		ug/L	1		8260B	Total/NA
sec-Butylbenzene	9.7		1.0		ug/L	1		8260B	Total/NA
tert-Butylbenzene	2.0		1.0		ug/L	1		8260B	Total/NA
Ethylbenzene	2.9		0.50		ug/L	1		8260B	Total/NA
Isopropylbenzene	58		0.50		ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-3 (Continued) — Lab Sample ID: 720-82853-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Isopropyltoluene	1.1		1.0		ug/L	1		8260B	Total/NA
Naphthalene	1.6		1.0		ug/L	1		8260B	Total/NA
N-Propylbenzene	74		1.0		ug/L	1		8260B	Total/NA
Toluene	5.0		0.50		ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	0.52		0.50		ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	0.98		0.50		ug/L	1		8260B	Total/NA
Xylenes, Total	13		1.0		ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	3400		250		ug/L	5		8260B	Total/NA
Naphthalene	1.3		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	930		50		ug/L	1		8015B	Total/NA
Sulfate	5.0		1.0		mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.35		0.23		mg/L	1		300.0	Total/NA
Nitrite as N	0.35		0.30		mg/L	1		300.0	Total/NA
Manganese	4.4		0.020		mg/L	1		6010B	Dissolved
Alkalinity	550		5.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	550		5.0		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-4 — Lab Sample ID: 720-82853-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	0.53		0.23		mg/L	1		300.0	Total/NA
Sulfate	11		1.0		mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.78		0.23		mg/L	1		300.0	Total/NA
Manganese	0.92		0.020		mg/L	1		6010B	Dissolved
Alkalinity	430		5.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	430		5.0		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-5 — Lab Sample ID: 720-82853-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	7.4		0.50		ug/L	1		8260B	Total/NA
n-Butylbenzene	29		1.0		ug/L	1		8260B	Total/NA
sec-Butylbenzene	16		1.0		ug/L	1		8260B	Total/NA
tert-Butylbenzene	44		1.0		ug/L	1		8260B	Total/NA
Ethylbenzene	42		0.50		ug/L	1		8260B	Total/NA
Isopropylbenzene	78		0.50		ug/L	1		8260B	Total/NA
Naphthalene	4.4		1.0		ug/L	1		8260B	Total/NA
N-Propylbenzene	150		1.0		ug/L	1		8260B	Total/NA
Toluene	1.4		0.50		ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	0.75		0.50		ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	2.5		0.50		ug/L	1		8260B	Total/NA
Xylenes, Total	5.7		1.0		ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	3500		250		ug/L	5		8260B	Total/NA
Acenaphthene	0.28		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.23		0.10		ug/L	1		8270C SIM	Total/NA
Naphthalene	2.7		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	1200		52		ug/L	1		8015B	Total/NA
Nitrate Nitrite as N	0.96		0.23		mg/L	1		300.0	Total/NA
Nitrite as N	0.96		0.30		mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-5 (Continued)

Lab Sample ID: 720-82853-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	7.1		0.020		mg/L	1		6010B	Dissolved
Alkalinity	380		5.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	380		5.0		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 720-82853-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	6.5		1.0		mg/L	1		300.0	Total/NA
Manganese	0.99		0.020		mg/L	1		6010B	Dissolved
Alkalinity	320		5.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	320		5.0		mg/L	1		SM 2320B	Total/NA

Client Sample ID: MW-10

Lab Sample ID: 720-82853-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.0		0.50		ug/L	1		8260B	Total/NA
n-Butylbenzene	19		1.0		ug/L	1		8260B	Total/NA
sec-Butylbenzene	9.2		1.0		ug/L	1		8260B	Total/NA
tert-Butylbenzene	45		1.0		ug/L	1		8260B	Total/NA
Ethylbenzene	8.9		0.50		ug/L	1		8260B	Total/NA
Isopropylbenzene	25		0.50		ug/L	1		8260B	Total/NA
Naphthalene	1.3		1.0		ug/L	1		8260B	Total/NA
N-Propylbenzene	47		1.0		ug/L	1		8260B	Total/NA
Toluene	1.0		0.50		ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	0.78		0.50		ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	2.5		0.50		ug/L	1		8260B	Total/NA
Xylenes, Total	6.1		1.0		ug/L	1		8260B	Total/NA
Gasoline Range Organics (GRO) -C4-C12	2600		250		ug/L	5		8260B	Total/NA
Acenaphthene	0.31		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.24		0.10		ug/L	1		8270C SIM	Total/NA
Naphthalene	1.2		0.10		ug/L	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	1300		51		ug/L	1		8015B	Total/NA
Nitrate Nitrite as N	0.91		0.23		mg/L	1		300.0	Total/NA
Nitrite as N	0.91		0.30		mg/L	1		300.0	Total/NA
Manganese	6.2		0.020		mg/L	1		6010B	Dissolved
Alkalinity	370		5.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	370		5.0		mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-1
Date Collected: 10/31/17 00:00
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/06/17 15:15	1
Acetone	ND		50		ug/L			11/06/17 15:15	1
Benzene	ND		0.50		ug/L			11/06/17 15:15	1
Dichlorobromomethane	ND		0.50		ug/L			11/06/17 15:15	1
Bromobenzene	ND		1.0		ug/L			11/06/17 15:15	1
Chlorobromomethane	ND		1.0		ug/L			11/06/17 15:15	1
Bromoform	ND		1.0		ug/L			11/06/17 15:15	1
Bromomethane	ND		1.0		ug/L			11/06/17 15:15	1
2-Butanone (MEK)	ND		50		ug/L			11/06/17 15:15	1
n-Butylbenzene	ND		1.0		ug/L			11/06/17 15:15	1
sec-Butylbenzene	ND		1.0		ug/L			11/06/17 15:15	1
tert-Butylbenzene	ND		1.0		ug/L			11/06/17 15:15	1
Carbon disulfide	ND		5.0		ug/L			11/06/17 15:15	1
Carbon tetrachloride	ND		0.50		ug/L			11/06/17 15:15	1
Chlorobenzene	ND		0.50		ug/L			11/06/17 15:15	1
Chloroethane	ND		1.0		ug/L			11/06/17 15:15	1
Chloroform	ND		1.0		ug/L			11/06/17 15:15	1
Chloromethane	ND		1.0		ug/L			11/06/17 15:15	1
2-Chlorotoluene	ND		0.50		ug/L			11/06/17 15:15	1
4-Chlorotoluene	ND		0.50		ug/L			11/06/17 15:15	1
Chlorodibromomethane	ND		0.50		ug/L			11/06/17 15:15	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/06/17 15:15	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/06/17 15:15	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/06/17 15:15	1
1,3-Dichloropropane	ND		1.0		ug/L			11/06/17 15:15	1
1,1-Dichloropropene	ND		0.50		ug/L			11/06/17 15:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/06/17 15:15	1
Ethylene Dibromide	ND		0.50		ug/L			11/06/17 15:15	1
Dibromomethane	ND		0.50		ug/L			11/06/17 15:15	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/06/17 15:15	1
1,1-Dichloroethane	ND		0.50		ug/L			11/06/17 15:15	1
1,2-Dichloroethane	ND		0.50		ug/L			11/06/17 15:15	1
1,1-Dichloroethene	ND		0.50		ug/L			11/06/17 15:15	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 15:15	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 15:15	1
1,2-Dichloropropane	ND		0.50		ug/L			11/06/17 15:15	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 15:15	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 15:15	1
Ethylbenzene	ND		0.50		ug/L			11/06/17 15:15	1
Hexachlorobutadiene	ND		1.0		ug/L			11/06/17 15:15	1
2-Hexanone	ND		50		ug/L			11/06/17 15:15	1
Isopropylbenzene	ND		0.50		ug/L			11/06/17 15:15	1
4-Isopropyltoluene	ND		1.0		ug/L			11/06/17 15:15	1
Methylene Chloride	ND		5.0		ug/L			11/06/17 15:15	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/06/17 15:15	1
Naphthalene	ND		1.0		ug/L			11/06/17 15:15	1
N-Propylbenzene	ND		1.0		ug/L			11/06/17 15:15	1
Styrene	ND		0.50		ug/L			11/06/17 15:15	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 15:15	1

Client Sample ID: TB-1
Date Collected: 10/31/17 00:00
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 15:15	1
Tetrachloroethene	ND		0.50		ug/L			11/06/17 15:15	1
Toluene	ND		0.50		ug/L			11/06/17 15:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/06/17 15:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/06/17 15:15	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/06/17 15:15	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/06/17 15:15	1
Trichloroethene	ND		0.50		ug/L			11/06/17 15:15	1
Trichlorofluoromethane	ND		1.0		ug/L			11/06/17 15:15	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/06/17 15:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/06/17 15:15	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/06/17 15:15	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/06/17 15:15	1
Vinyl acetate	ND		10		ug/L			11/06/17 15:15	1
Vinyl chloride	ND		0.50		ug/L			11/06/17 15:15	1
Xylenes, Total	ND		1.0		ug/L			11/06/17 15:15	1
2,2-Dichloropropane	ND		0.50		ug/L			11/06/17 15:15	1
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/06/17 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*67 - 130*		*11/06/17 15:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*72 - 130*		*11/06/17 15:15*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*11/06/17 15:15*	*1*

Client Sample ID: FB-1
Date Collected: 10/31/17 10:05
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/06/17 15:45	1
Acetone	ND		50		ug/L			11/06/17 15:45	1
Benzene	ND		0.50		ug/L			11/06/17 15:45	1
Dichlorobromomethane	ND		0.50		ug/L			11/06/17 15:45	1
Bromobenzene	ND		1.0		ug/L			11/06/17 15:45	1
Chlorobromomethane	ND		1.0		ug/L			11/06/17 15:45	1
Bromoform	ND		1.0		ug/L			11/06/17 15:45	1
Bromomethane	ND		1.0		ug/L			11/06/17 15:45	1
2-Butanone (MEK)	ND		50		ug/L			11/06/17 15:45	1
n-Butylbenzene	ND		1.0		ug/L			11/06/17 15:45	1
sec-Butylbenzene	ND		1.0		ug/L			11/06/17 15:45	1
tert-Butylbenzene	ND		1.0		ug/L			11/06/17 15:45	1
Carbon disulfide	ND		5.0		ug/L			11/06/17 15:45	1
Carbon tetrachloride	ND		0.50		ug/L			11/06/17 15:45	1
Chlorobenzene	ND		0.50		ug/L			11/06/17 15:45	1
Chloroethane	ND		1.0		ug/L			11/06/17 15:45	1
Chloroform	ND		1.0		ug/L			11/06/17 15:45	1
Chloromethane	ND		1.0		ug/L			11/06/17 15:45	1
2-Chlorotoluene	ND		0.50		ug/L			11/06/17 15:45	1
4-Chlorotoluene	ND		0.50		ug/L			11/06/17 15:45	1
Chlorodibromomethane	ND		0.50		ug/L			11/06/17 15:45	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/06/17 15:45	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/06/17 15:45	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/06/17 15:45	1
1,3-Dichloropropane	ND		1.0		ug/L			11/06/17 15:45	1
1,1-Dichloropropene	ND		0.50		ug/L			11/06/17 15:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/06/17 15:45	1
Ethylene Dibromide	ND		0.50		ug/L			11/06/17 15:45	1
Dibromomethane	ND		0.50		ug/L			11/06/17 15:45	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/06/17 15:45	1
1,1-Dichloroethane	ND		0.50		ug/L			11/06/17 15:45	1
1,2-Dichloroethane	ND		0.50		ug/L			11/06/17 15:45	1
1,1-Dichloroethene	ND		0.50		ug/L			11/06/17 15:45	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 15:45	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 15:45	1
1,2-Dichloropropane	ND		0.50		ug/L			11/06/17 15:45	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 15:45	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 15:45	1
Ethylbenzene	ND		0.50		ug/L			11/06/17 15:45	1
Hexachlorobutadiene	ND		1.0		ug/L			11/06/17 15:45	1
2-Hexanone	ND		50		ug/L			11/06/17 15:45	1
Isopropylbenzene	ND		0.50		ug/L			11/06/17 15:45	1
4-Isopropyltoluene	ND		1.0		ug/L			11/06/17 15:45	1
Methylene Chloride	ND		5.0		ug/L			11/06/17 15:45	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/06/17 15:45	1
Naphthalene	ND		1.0		ug/L			11/06/17 15:45	1
N-Propylbenzene	ND		1.0		ug/L			11/06/17 15:45	1
Styrene	ND		0.50		ug/L			11/06/17 15:45	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 15:45	1

Client Sample ID: FB-1
Date Collected: 10/31/17 10:05
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 15:45	1
Tetrachloroethene	ND		0.50		ug/L			11/06/17 15:45	1
Toluene	ND		0.50		ug/L			11/06/17 15:45	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/06/17 15:45	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/06/17 15:45	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/06/17 15:45	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/06/17 15:45	1
Trichloroethene	ND		0.50		ug/L			11/06/17 15:45	1
Trichlorofluoromethane	ND		1.0		ug/L			11/06/17 15:45	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/06/17 15:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/06/17 15:45	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/06/17 15:45	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/06/17 15:45	1
Vinyl acetate	ND		10		ug/L			11/06/17 15:45	1
Vinyl chloride	ND		0.50		ug/L			11/06/17 15:45	1
Xylenes, Total	ND		1.0		ug/L			11/06/17 15:45	1
2,2-Dichloropropane	ND		0.50		ug/L			11/06/17 15:45	1
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/06/17 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*67 - 130*		*11/06/17 15:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*72 - 130*		*11/06/17 15:45*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/06/17 15:45*	*1*

Client Sample ID: MW-1
Date Collected: 10/31/17 09:19
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/06/17 16:15	1
Acetone	ND		50		ug/L			11/06/17 16:15	1
Benzene	ND		0.50		ug/L			11/06/17 16:15	1
Dichlorobromomethane	ND		0.50		ug/L			11/06/17 16:15	1
Bromobenzene	ND		1.0		ug/L			11/06/17 16:15	1
Chlorobromomethane	ND		1.0		ug/L			11/06/17 16:15	1
Bromoform	ND		1.0		ug/L			11/06/17 16:15	1
Bromomethane	ND		1.0		ug/L			11/06/17 16:15	1
2-Butanone (MEK)	ND		50		ug/L			11/06/17 16:15	1
n-Butylbenzene	ND		1.0		ug/L			11/06/17 16:15	1
sec-Butylbenzene	ND		1.0		ug/L			11/06/17 16:15	1
tert-Butylbenzene	ND		1.0		ug/L			11/06/17 16:15	1
Carbon disulfide	ND		5.0		ug/L			11/06/17 16:15	1
Carbon tetrachloride	ND		0.50		ug/L			11/06/17 16:15	1
Chlorobenzene	ND		0.50		ug/L			11/06/17 16:15	1
Chloroethane	ND		1.0		ug/L			11/06/17 16:15	1
Chloroform	**3.6**		1.0		ug/L			11/06/17 16:15	1
Chloromethane	ND		1.0		ug/L			11/06/17 16:15	1
2-Chlorotoluene	ND		0.50		ug/L			11/06/17 16:15	1
4-Chlorotoluene	ND		0.50		ug/L			11/06/17 16:15	1
Chlorodibromomethane	ND		0.50		ug/L			11/06/17 16:15	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/06/17 16:15	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/06/17 16:15	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/06/17 16:15	1
1,3-Dichloropropane	ND		1.0		ug/L			11/06/17 16:15	1
1,1-Dichloropropene	ND		0.50		ug/L			11/06/17 16:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/06/17 16:15	1
Ethylene Dibromide	ND		0.50		ug/L			11/06/17 16:15	1
Dibromomethane	ND		0.50		ug/L			11/06/17 16:15	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/06/17 16:15	1
1,1-Dichloroethane	ND		0.50		ug/L			11/06/17 16:15	1
1,2-Dichloroethane	ND		0.50		ug/L			11/06/17 16:15	1
1,1-Dichloroethene	ND		0.50		ug/L			11/06/17 16:15	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 16:15	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 16:15	1
1,2-Dichloropropane	ND		0.50		ug/L			11/06/17 16:15	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 16:15	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 16:15	1
Ethylbenzene	ND		0.50		ug/L			11/06/17 16:15	1
Hexachlorobutadiene	ND		1.0		ug/L			11/06/17 16:15	1
2-Hexanone	ND		50		ug/L			11/06/17 16:15	1
Isopropylbenzene	ND		0.50		ug/L			11/06/17 16:15	1
4-Isopropyltoluene	ND		1.0		ug/L			11/06/17 16:15	1
Methylene Chloride	ND		5.0		ug/L			11/06/17 16:15	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/06/17 16:15	1
Naphthalene	ND		1.0		ug/L			11/06/17 16:15	1
N-Propylbenzene	ND		1.0		ug/L			11/06/17 16:15	1
Styrene	ND		0.50		ug/L			11/06/17 16:15	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 16:15	1

Client Sample ID: MW-1
Date Collected: 10/31/17 09:19
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 16:15	1
Tetrachloroethene	ND		0.50		ug/L			11/06/17 16:15	1
Toluene	ND		0.50		ug/L			11/06/17 16:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/06/17 16:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/06/17 16:15	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/06/17 16:15	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/06/17 16:15	1
Trichloroethene	ND		0.50		ug/L			11/06/17 16:15	1
Trichlorofluoromethane	ND		1.0		ug/L			11/06/17 16:15	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/06/17 16:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/06/17 16:15	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/06/17 16:15	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/06/17 16:15	1
Vinyl acetate	ND		10		ug/L			11/06/17 16:15	1
Vinyl chloride	ND		0.50		ug/L			11/06/17 16:15	1
Xylenes, Total	ND		1.0		ug/L			11/06/17 16:15	1
2,2-Dichloropropane	ND		0.50		ug/L			11/06/17 16:15	1
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/06/17 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*67 - 130*		*11/06/17 16:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*72 - 130*		*11/06/17 16:15*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/06/17 16:15*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Acenaphthylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Benzo[a]anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Benzo[a]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Benzo[b]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Benzo[k]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Chrysene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Fluorene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Naphthalene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Phenanthrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1
Pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*29 - 120*	*11/06/17 14:25*	*11/07/17 00:27*	*1*
Terphenyl-d14	*62*		*45 - 120*	*11/06/17 14:25*	*11/07/17 00:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		51		ug/L		11/01/17 15:51	11/01/17 21:28	1

Client Sample ID: MW-1
Date Collected: 10/31/17 09:19
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		11/01/17 15:51	11/01/17 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*87*		*23 - 156*	*11/01/17 15:51*	*11/01/17 21:28*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**5.2**		2.3		mg/L			10/31/17 21:52	10
Sulfate	**19**		10		mg/L			10/31/17 21:52	10
Nitrate Nitrite as N	**5.7**		0.23		mg/L			10/31/17 21:34	1
Nitrite as N	**0.36**		0.30		mg/L			10/31/17 21:34	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		1.0		mg/L		11/03/17 09:16	11/06/17 11:49	1
Manganese	ND		0.020		mg/L		11/03/17 09:16	11/06/17 11:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**160**		5.0		mg/L			10/31/17 16:04	1
Bicarbonate Alkalinity as CaCO3	**160**		5.0		mg/L			10/31/17 16:04	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/31/17 16:04	1
Hydroxide Alkalinity	ND		5.0		mg/L			10/31/17 16:04	1

Client Sample ID: MW-2
Date Collected: 10/31/17 10:22
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/06/17 16:45	1
Acetone	ND		50		ug/L			11/06/17 16:45	1
Benzene	**3.3**		0.50		ug/L			11/06/17 16:45	1
Dichlorobromomethane	ND		0.50		ug/L			11/06/17 16:45	1
Bromobenzene	ND		1.0		ug/L			11/06/17 16:45	1
Chlorobromomethane	ND		1.0		ug/L			11/06/17 16:45	1
Bromoform	ND		1.0		ug/L			11/06/17 16:45	1
Bromomethane	ND		1.0		ug/L			11/06/17 16:45	1
2-Butanone (MEK)	ND		50		ug/L			11/06/17 16:45	1
n-Butylbenzene	**18**		1.0		ug/L			11/06/17 16:45	1
sec-Butylbenzene	ND		1.0		ug/L			11/06/17 16:45	1
tert-Butylbenzene	**43**		1.0		ug/L			11/06/17 16:45	1
Carbon disulfide	ND		5.0		ug/L			11/06/17 16:45	1
Carbon tetrachloride	ND		0.50		ug/L			11/06/17 16:45	1
Chlorobenzene	ND		0.50		ug/L			11/06/17 16:45	1
Chloroethane	ND		1.0		ug/L			11/06/17 16:45	1
Chloroform	ND		1.0		ug/L			11/06/17 16:45	1
Chloromethane	ND		1.0		ug/L			11/06/17 16:45	1
2-Chlorotoluene	ND		0.50		ug/L			11/06/17 16:45	1
4-Chlorotoluene	ND		0.50		ug/L			11/06/17 16:45	1
Chlorodibromomethane	ND		0.50		ug/L			11/06/17 16:45	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/06/17 16:45	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/06/17 16:45	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/06/17 16:45	1
1,3-Dichloropropane	ND		1.0		ug/L			11/06/17 16:45	1
1,1-Dichloropropene	ND		0.50		ug/L			11/06/17 16:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/06/17 16:45	1
Ethylene Dibromide	ND		0.50		ug/L			11/06/17 16:45	1
Dibromomethane	ND		0.50		ug/L			11/06/17 16:45	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/06/17 16:45	1
1,1-Dichloroethane	ND		0.50		ug/L			11/06/17 16:45	1
1,2-Dichloroethane	ND		0.50		ug/L			11/06/17 16:45	1
1,1-Dichloroethene	ND		0.50		ug/L			11/06/17 16:45	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 16:45	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 16:45	1
1,2-Dichloropropane	ND		0.50		ug/L			11/06/17 16:45	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 16:45	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 16:45	1
Ethylbenzene	**9.6**		0.50		ug/L			11/06/17 16:45	1
Hexachlorobutadiene	ND		1.0		ug/L			11/06/17 16:45	1
2-Hexanone	ND		50		ug/L			11/06/17 16:45	1
Isopropylbenzene	**26**		0.50		ug/L			11/06/17 16:45	1
4-Isopropyltoluene	ND		1.0		ug/L			11/06/17 16:45	1
Methylene Chloride	ND		5.0		ug/L			11/06/17 16:45	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/06/17 16:45	1
Naphthalene	**1.2**		1.0		ug/L			11/06/17 16:45	1
N-Propylbenzene	**49**		1.0		ug/L			11/06/17 16:45	1
Styrene	ND		0.50		ug/L			11/06/17 16:45	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 16:45	1

Client Sample ID: MW-2
Date Collected: 10/31/17 10:22
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 16:45	1
Tetrachloroethene	ND		0.50		ug/L			11/06/17 16:45	1
Toluene	**1.1**		0.50		ug/L			11/06/17 16:45	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/06/17 16:45	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/06/17 16:45	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/06/17 16:45	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/06/17 16:45	1
Trichloroethene	ND		0.50		ug/L			11/06/17 16:45	1
Trichlorofluoromethane	ND		1.0		ug/L			11/06/17 16:45	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/06/17 16:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/06/17 16:45	1
1,2,4-Trimethylbenzene	**0.75**		0.50		ug/L			11/06/17 16:45	1
1,3,5-Trimethylbenzene	**2.5**		0.50		ug/L			11/06/17 16:45	1
Vinyl acetate	ND		10		ug/L			11/06/17 16:45	1
Vinyl chloride	ND		0.50		ug/L			11/06/17 16:45	1
Xylenes, Total	**6.3**		1.0		ug/L			11/06/17 16:45	1
2,2-Dichloropropane	ND		0.50		ug/L			11/06/17 16:45	1
Gasoline Range Organics (GRO) -C4-C12	**4500**		250		ug/L			11/07/17 12:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*67 - 130*		*11/06/17 16:45*	*1*
4-Bromofluorobenzene	*112*		*67 - 130*		*11/07/17 12:45*	*5*
1,2-Dichloroethane-d4 (Surr)	*110*		*72 - 130*		*11/06/17 16:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 130*		*11/07/17 12:45*	*5*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/06/17 16:45*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/07/17 12:45*	*5*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.26**		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Acenaphthylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Benzo[a]anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Benzo[a]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Benzo[b]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Benzo[k]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Chrysene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Fluorene	**0.21**		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Naphthalene	**1.0**		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Phenanthrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1
Pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*29 - 120*	*11/06/17 14:25*	*11/07/17 00:50*	*1*
Terphenyl-d14	*46*		*45 - 120*	*11/06/17 14:25*	*11/07/17 00:50*	*1*

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Client Sample ID: MW-2
Date Collected: 10/31/17 10:22
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1100**		53		ug/L		11/01/17 15:51	11/01/17 21:53	1
Motor Oil Range Organics [C24-C36]	ND		110		ug/L		11/01/17 15:51	11/01/17 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*98*		*23 - 156*	*11/01/17 15:51*	*11/01/17 21:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			10/31/17 22:43	1
Sulfate	ND		1.0		mg/L			10/31/17 22:43	1
Nitrate Nitrite as N	**0.89**		0.23		mg/L			10/31/17 22:43	1
Nitrite as N	**0.89**		0.30		mg/L			10/31/17 22:43	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		1.0		mg/L		11/03/17 09:16	11/06/17 11:53	1
Manganese	**6.4**		0.020		mg/L		11/03/17 09:16	11/06/17 11:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**370**		5.0		mg/L			10/31/17 16:16	1
Bicarbonate Alkalinity as CaCO3	**370**		5.0		mg/L			10/31/17 16:16	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/31/17 16:16	1
Hydroxide Alkalinity	ND		5.0		mg/L			10/31/17 16:16	1

Client Sample ID: MW-3
Date Collected: 10/31/17 09:08
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/06/17 17:15	1
Acetone	ND		50		ug/L			11/06/17 17:15	1
Benzene	**130**		0.50		ug/L			11/06/17 17:15	1
Dichlorobromomethane	ND		0.50		ug/L			11/06/17 17:15	1
Bromobenzene	ND		1.0		ug/L			11/06/17 17:15	1
Chlorobromomethane	ND		1.0		ug/L			11/06/17 17:15	1
Bromoform	ND		1.0		ug/L			11/06/17 17:15	1
Bromomethane	ND		1.0		ug/L			11/06/17 17:15	1
2-Butanone (MEK)	ND		50		ug/L			11/06/17 17:15	1
n-Butylbenzene	**9.8**		1.0		ug/L			11/06/17 17:15	1
sec-Butylbenzene	**9.7**		1.0		ug/L			11/06/17 17:15	1
tert-Butylbenzene	**2.0**		1.0		ug/L			11/06/17 17:15	1
Carbon disulfide	ND		5.0		ug/L			11/06/17 17:15	1
Carbon tetrachloride	ND		0.50		ug/L			11/06/17 17:15	1
Chlorobenzene	ND		0.50		ug/L			11/06/17 17:15	1
Chloroethane	ND		1.0		ug/L			11/06/17 17:15	1
Chloroform	ND		1.0		ug/L			11/06/17 17:15	1
Chloromethane	ND		1.0		ug/L			11/06/17 17:15	1
2-Chlorotoluene	ND		0.50		ug/L			11/06/17 17:15	1
4-Chlorotoluene	ND		0.50		ug/L			11/06/17 17:15	1
Chlorodibromomethane	ND		0.50		ug/L			11/06/17 17:15	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/06/17 17:15	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/06/17 17:15	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/06/17 17:15	1
1,3-Dichloropropane	ND		1.0		ug/L			11/06/17 17:15	1
1,1-Dichloropropene	ND		0.50		ug/L			11/06/17 17:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/06/17 17:15	1
Ethylene Dibromide	ND		0.50		ug/L			11/06/17 17:15	1
Dibromomethane	ND		0.50		ug/L			11/06/17 17:15	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/06/17 17:15	1
1,1-Dichloroethane	ND		0.50		ug/L			11/06/17 17:15	1
1,2-Dichloroethane	ND		0.50		ug/L			11/06/17 17:15	1
1,1-Dichloroethene	ND		0.50		ug/L			11/06/17 17:15	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 17:15	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 17:15	1
1,2-Dichloropropane	ND		0.50		ug/L			11/06/17 17:15	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 17:15	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 17:15	1
Ethylbenzene	**2.9**		0.50		ug/L			11/06/17 17:15	1
Hexachlorobutadiene	ND		1.0		ug/L			11/06/17 17:15	1
2-Hexanone	ND		50		ug/L			11/06/17 17:15	1
Isopropylbenzene	**58**		0.50		ug/L			11/06/17 17:15	1
4-Isopropyltoluene	**1.1**		1.0		ug/L			11/06/17 17:15	1
Methylene Chloride	ND		5.0		ug/L			11/06/17 17:15	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/06/17 17:15	1
Naphthalene	**1.6**		1.0		ug/L			11/06/17 17:15	1
N-Propylbenzene	**74**		1.0		ug/L			11/06/17 17:15	1
Styrene	ND		0.50		ug/L			11/06/17 17:15	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 17:15	1

Client Sample ID: MW-3
Date Collected: 10/31/17 09:08
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 17:15	1
Tetrachloroethene	ND		0.50		ug/L			11/06/17 17:15	1
Toluene	**5.0**		0.50		ug/L			11/06/17 17:15	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/06/17 17:15	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/06/17 17:15	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/06/17 17:15	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/06/17 17:15	1
Trichloroethene	ND		0.50		ug/L			11/06/17 17:15	1
Trichlorofluoromethane	ND		1.0		ug/L			11/06/17 17:15	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/06/17 17:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/06/17 17:15	1
1,2,4-Trimethylbenzene	**0.52**		0.50		ug/L			11/06/17 17:15	1
1,3,5-Trimethylbenzene	**0.98**		0.50		ug/L			11/06/17 17:15	1
Vinyl acetate	ND		10		ug/L			11/06/17 17:15	1
Vinyl chloride	ND		0.50		ug/L			11/06/17 17:15	1
Xylenes, Total	**13**		1.0		ug/L			11/06/17 17:15	1
2,2-Dichloropropane	ND		0.50		ug/L			11/06/17 17:15	1
Gasoline Range Organics (GRO) -C4-C12	**3400**		250		ug/L			11/07/17 13:14	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*67 - 130*		*11/06/17 17:15*	*1*
4-Bromofluorobenzene	*115*		*67 - 130*		*11/07/17 13:14*	*5*
1,2-Dichloroethane-d4 (Surr)	*109*		*72 - 130*		*11/06/17 17:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*		*11/07/17 13:14*	*5*
Toluene-d8 (Surr)	*106*		*70 - 130*		*11/06/17 17:15*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/07/17 13:14*	*5*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Acenaphthylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Benzo[a]anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Benzo[a]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Benzo[b]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Benzo[k]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Chrysene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Fluorene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Naphthalene	**1.3**		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Phenanthrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1
Pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*29 - 120*	*11/06/17 14:25*	*11/07/17 01:14*	*1*
Terphenyl-d14	*52*		*45 - 120*	*11/06/17 14:25*	*11/07/17 01:14*	*1*

Client Sample ID: MW-3

Date Collected: 10/31/17 09:08
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**930**		50		ug/L		11/01/17 15:51	11/01/17 22:17	1
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		11/01/17 15:51	11/01/17 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*91*		*23 - 156*	*11/01/17 15:51*	*11/01/17 22:17*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			10/31/17 23:17	1
Sulfate	**5.0**		1.0		mg/L			10/31/17 23:17	1
Nitrate Nitrite as N	**0.35**		0.23		mg/L			10/31/17 23:17	1
Nitrite as N	**0.35**		0.30		mg/L			10/31/17 23:17	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		1.0		mg/L		11/03/17 09:16	11/06/17 11:57	1
Manganese	**4.4**		0.020		mg/L		11/03/17 09:16	11/06/17 11:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**550**		5.0		mg/L			10/31/17 16:23	1
Bicarbonate Alkalinity as CaCO3	**550**		5.0		mg/L			10/31/17 16:23	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/31/17 16:23	1
Hydroxide Alkalinity	ND		5.0		mg/L			10/31/17 16:23	1

Client Sample ID: MW-4
Date Collected: 10/31/17 07:56
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/06/17 17:45	1
Acetone	ND		50		ug/L			11/06/17 17:45	1
Benzene	ND		0.50		ug/L			11/06/17 17:45	1
Dichlorobromomethane	ND		0.50		ug/L			11/06/17 17:45	1
Bromobenzene	ND		1.0		ug/L			11/06/17 17:45	1
Chlorobromomethane	ND		1.0		ug/L			11/06/17 17:45	1
Bromoform	ND		1.0		ug/L			11/06/17 17:45	1
Bromomethane	ND		1.0		ug/L			11/06/17 17:45	1
2-Butanone (MEK)	ND		50		ug/L			11/06/17 17:45	1
n-Butylbenzene	ND		1.0		ug/L			11/06/17 17:45	1
sec-Butylbenzene	ND		1.0		ug/L			11/06/17 17:45	1
tert-Butylbenzene	ND		1.0		ug/L			11/06/17 17:45	1
Carbon disulfide	ND		5.0		ug/L			11/06/17 17:45	1
Carbon tetrachloride	ND		0.50		ug/L			11/06/17 17:45	1
Chlorobenzene	ND		0.50		ug/L			11/06/17 17:45	1
Chloroethane	ND		1.0		ug/L			11/06/17 17:45	1
Chloroform	ND		1.0		ug/L			11/06/17 17:45	1
Chloromethane	ND		1.0		ug/L			11/06/17 17:45	1
2-Chlorotoluene	ND		0.50		ug/L			11/06/17 17:45	1
4-Chlorotoluene	ND		0.50		ug/L			11/06/17 17:45	1
Chlorodibromomethane	ND		0.50		ug/L			11/06/17 17:45	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/06/17 17:45	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/06/17 17:45	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/06/17 17:45	1
1,3-Dichloropropane	ND		1.0		ug/L			11/06/17 17:45	1
1,1-Dichloropropene	ND		0.50		ug/L			11/06/17 17:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/06/17 17:45	1
Ethylene Dibromide	ND		0.50		ug/L			11/06/17 17:45	1
Dibromomethane	ND		0.50		ug/L			11/06/17 17:45	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/06/17 17:45	1
1,1-Dichloroethane	ND		0.50		ug/L			11/06/17 17:45	1
1,2-Dichloroethane	ND		0.50		ug/L			11/06/17 17:45	1
1,1-Dichloroethene	ND		0.50		ug/L			11/06/17 17:45	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 17:45	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 17:45	1
1,2-Dichloropropane	ND		0.50		ug/L			11/06/17 17:45	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 17:45	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 17:45	1
Ethylbenzene	ND		0.50		ug/L			11/06/17 17:45	1
Hexachlorobutadiene	ND		1.0		ug/L			11/06/17 17:45	1
2-Hexanone	ND		50		ug/L			11/06/17 17:45	1
Isopropylbenzene	ND		0.50		ug/L			11/06/17 17:45	1
4-Isopropyltoluene	ND		1.0		ug/L			11/06/17 17:45	1
Methylene Chloride	ND		5.0		ug/L			11/06/17 17:45	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/06/17 17:45	1
Naphthalene	ND		1.0		ug/L			11/06/17 17:45	1
N-Propylbenzene	ND		1.0		ug/L			11/06/17 17:45	1
Styrene	ND		0.50		ug/L			11/06/17 17:45	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 17:45	1

Client Sample ID: MW-4
Date Collected: 10/31/17 07:56
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 17:45	1
Tetrachloroethene	ND		0.50		ug/L			11/06/17 17:45	1
Toluene	ND		0.50		ug/L			11/06/17 17:45	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/06/17 17:45	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/06/17 17:45	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/06/17 17:45	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/06/17 17:45	1
Trichloroethene	ND		0.50		ug/L			11/06/17 17:45	1
Trichlorofluoromethane	ND		1.0		ug/L			11/06/17 17:45	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/06/17 17:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/06/17 17:45	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/06/17 17:45	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/06/17 17:45	1
Vinyl acetate	ND		10		ug/L			11/06/17 17:45	1
Vinyl chloride	ND		0.50		ug/L			11/06/17 17:45	1
Xylenes, Total	ND		1.0		ug/L			11/06/17 17:45	1
2,2-Dichloropropane	ND		0.50		ug/L			11/06/17 17:45	1
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/07/17 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*67 - 130*		*11/06/17 17:45*	*1*
4-Bromofluorobenzene	*100*		*67 - 130*		*11/07/17 12:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*72 - 130*		*11/06/17 17:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*72 - 130*		*11/07/17 12:17*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*11/06/17 17:45*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*11/07/17 12:17*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Acenaphthylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Benzo[a]anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Benzo[a]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Benzo[b]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Benzo[k]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Chrysene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Fluorene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Naphthalene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Phenanthrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1
Pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 01:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*29 - 120*	*11/06/17 14:25*	*11/07/17 01:38*	*1*
Terphenyl-d14	*59*		*45 - 120*	*11/06/17 14:25*	*11/07/17 01:38*	*1*

Client Sample ID: MW-4
Date Collected: 10/31/17 07:56
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		11/01/17 15:51	11/01/17 22:41	1
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		11/01/17 15:51	11/01/17 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*90*		*23 - 156*	*11/01/17 15:51*	*11/01/17 22:41*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.53**		0.23		mg/L			10/31/17 23:51	1
Sulfate	**11**		1.0		mg/L			10/31/17 23:51	1
Nitrate Nitrite as N	**0.78**		0.23		mg/L			10/31/17 23:51	1
Nitrite as N	ND		0.30		mg/L			10/31/17 23:51	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		1.0		mg/L		11/03/17 09:16	11/06/17 12:09	1
Manganese	**0.92**		0.020		mg/L		11/03/17 09:16	11/06/17 12:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**430**		5.0		mg/L			10/31/17 16:31	1
Bicarbonate Alkalinity as CaCO3	**430**		5.0		mg/L			10/31/17 16:31	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/31/17 16:31	1
Hydroxide Alkalinity	ND		5.0		mg/L			10/31/17 16:31	1

Client Sample ID: MW-5
Date Collected: 10/31/17 10:24
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/07/17 13:44	1
Acetone	ND		50		ug/L			11/07/17 13:44	1
Benzene	**7.4**		0.50		ug/L			11/07/17 13:44	1
Dichlorobromomethane	ND		0.50		ug/L			11/07/17 13:44	1
Bromobenzene	ND		1.0		ug/L			11/07/17 13:44	1
Chlorobromomethane	ND		1.0		ug/L			11/07/17 13:44	1
Bromoform	ND		1.0		ug/L			11/07/17 13:44	1
Bromomethane	ND		1.0		ug/L			11/07/17 13:44	1
2-Butanone (MEK)	ND		50		ug/L			11/07/17 13:44	1
n-Butylbenzene	**29**		1.0		ug/L			11/07/17 13:44	1
sec-Butylbenzene	**16**		1.0		ug/L			11/07/17 13:44	1
tert-Butylbenzene	**44**		1.0		ug/L			11/07/17 13:44	1
Carbon disulfide	ND		5.0		ug/L			11/07/17 13:44	1
Carbon tetrachloride	ND		0.50		ug/L			11/07/17 13:44	1
Chlorobenzene	ND		0.50		ug/L			11/07/17 13:44	1
Chloroethane	ND		1.0		ug/L			11/07/17 13:44	1
Chloroform	ND		1.0		ug/L			11/07/17 13:44	1
Chloromethane	ND		1.0		ug/L			11/07/17 13:44	1
2-Chlorotoluene	ND		0.50		ug/L			11/07/17 13:44	1
4-Chlorotoluene	ND		0.50		ug/L			11/07/17 13:44	1
Chlorodibromomethane	ND		0.50		ug/L			11/07/17 13:44	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/07/17 13:44	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/07/17 13:44	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/07/17 13:44	1
1,3-Dichloropropane	ND		1.0		ug/L			11/07/17 13:44	1
1,1-Dichloropropene	ND		0.50		ug/L			11/07/17 13:44	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/07/17 13:44	1
Ethylene Dibromide	ND		0.50		ug/L			11/07/17 13:44	1
Dibromomethane	ND		0.50		ug/L			11/07/17 13:44	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/07/17 13:44	1
1,1-Dichloroethane	ND		0.50		ug/L			11/07/17 13:44	1
1,2-Dichloroethane	ND		0.50		ug/L			11/07/17 13:44	1
1,1-Dichloroethene	ND		0.50		ug/L			11/07/17 13:44	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/07/17 13:44	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/07/17 13:44	1
1,2-Dichloropropane	ND		0.50		ug/L			11/07/17 13:44	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/07/17 13:44	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/07/17 13:44	1
Ethylbenzene	**42**		0.50		ug/L			11/07/17 13:44	1
Hexachlorobutadiene	ND		1.0		ug/L			11/07/17 13:44	1
2-Hexanone	ND		50		ug/L			11/07/17 13:44	1
Isopropylbenzene	**78**		0.50		ug/L			11/07/17 13:44	1
4-Isopropyltoluene	ND		1.0		ug/L			11/07/17 13:44	1
Methylene Chloride	ND		5.0		ug/L			11/07/17 13:44	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/07/17 13:44	1
Naphthalene	**4.4**		1.0		ug/L			11/07/17 13:44	1
N-Propylbenzene	**150**		1.0		ug/L			11/07/17 13:44	1
Styrene	ND		0.50		ug/L			11/07/17 13:44	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/07/17 13:44	1

Client Sample ID: MW-5
Date Collected: 10/31/17 10:24
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/07/17 13:44	1
Tetrachloroethene	ND		0.50		ug/L			11/07/17 13:44	1
Toluene	**1.4**		0.50		ug/L			11/07/17 13:44	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/07/17 13:44	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/07/17 13:44	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/07/17 13:44	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/07/17 13:44	1
Trichloroethene	ND		0.50		ug/L			11/07/17 13:44	1
Trichlorofluoromethane	ND		1.0		ug/L			11/07/17 13:44	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/07/17 13:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/07/17 13:44	1
1,2,4-Trimethylbenzene	**0.75**		0.50		ug/L			11/07/17 13:44	1
1,3,5-Trimethylbenzene	**2.5**		0.50		ug/L			11/07/17 13:44	1
Vinyl acetate	ND		10		ug/L			11/07/17 13:44	1
Vinyl chloride	ND		0.50		ug/L			11/07/17 13:44	1
Xylenes, Total	**5.7**		1.0		ug/L			11/07/17 13:44	1
2,2-Dichloropropane	ND		0.50		ug/L			11/07/17 13:44	1
Gasoline Range Organics (GRO) -C4-C12	**3500**		250		ug/L			11/07/17 15:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*67 - 130*		*11/07/17 13:44*	*1*
4-Bromofluorobenzene	*102*		*67 - 130*		*11/07/17 15:15*	*5*
1,2-Dichloroethane-d4 (Surr)	*103*		*72 - 130*		*11/07/17 13:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 130*		*11/07/17 15:15*	*5*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/07/17 13:44*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*11/07/17 15:15*	*5*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.28**		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Acenaphthylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Benzo[a]anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Benzo[a]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Benzo[b]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Benzo[k]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Chrysene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Fluorene	**0.23**		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Naphthalene	**2.7**		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Phenanthrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1
Pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*29 - 120*	*11/06/17 14:25*	*11/07/17 02:01*	*1*
Terphenyl-d14	*51*		*45 - 120*	*11/06/17 14:25*	*11/07/17 02:01*	*1*

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Client Sample ID: MW-5
Date Collected: 10/31/17 10:24
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1200**		52		ug/L		11/01/17 15:51	11/01/17 23:05	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		11/01/17 15:51	11/01/17 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*109*		*23 - 156*	*11/01/17 15:51*	*11/01/17 23:05*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			11/01/17 01:00	1
Sulfate	ND		1.0		mg/L			11/01/17 01:00	1
Nitrate Nitrite as N	**0.96**		0.23		mg/L			11/01/17 01:00	1
Nitrite as N	**0.96**		0.30		mg/L			11/01/17 01:00	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		1.0		mg/L		11/03/17 09:16	11/06/17 12:13	1
Manganese	**7.1**		0.020		mg/L		11/03/17 09:16	11/06/17 12:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**380**		5.0		mg/L			10/31/17 16:37	1
Bicarbonate Alkalinity as CaCO3	**380**		5.0		mg/L			10/31/17 16:37	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/31/17 16:37	1
Hydroxide Alkalinity	ND		5.0		mg/L			10/31/17 16:37	1

Client Sample ID: MW-6
Date Collected: 10/31/17 08:14
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/07/17 14:12	1
Acetone	ND		50		ug/L			11/07/17 14:12	1
Benzene	ND		0.50		ug/L			11/07/17 14:12	1
Dichlorobromomethane	ND		0.50		ug/L			11/07/17 14:12	1
Bromobenzene	ND		1.0		ug/L			11/07/17 14:12	1
Chlorobromomethane	ND		1.0		ug/L			11/07/17 14:12	1
Bromoform	ND		1.0		ug/L			11/07/17 14:12	1
Bromomethane	ND		1.0		ug/L			11/07/17 14:12	1
2-Butanone (MEK)	ND		50		ug/L			11/07/17 14:12	1
n-Butylbenzene	ND		1.0		ug/L			11/07/17 14:12	1
sec-Butylbenzene	ND		1.0		ug/L			11/07/17 14:12	1
tert-Butylbenzene	ND		1.0		ug/L			11/07/17 14:12	1
Carbon disulfide	ND		5.0		ug/L			11/07/17 14:12	1
Carbon tetrachloride	ND		0.50		ug/L			11/07/17 14:12	1
Chlorobenzene	ND		0.50		ug/L			11/07/17 14:12	1
Chloroethane	ND		1.0		ug/L			11/07/17 14:12	1
Chloroform	ND		1.0		ug/L			11/07/17 14:12	1
Chloromethane	ND		1.0		ug/L			11/07/17 14:12	1
2-Chlorotoluene	ND		0.50		ug/L			11/07/17 14:12	1
4-Chlorotoluene	ND		0.50		ug/L			11/07/17 14:12	1
Chlorodibromomethane	ND		0.50		ug/L			11/07/17 14:12	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/07/17 14:12	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/07/17 14:12	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/07/17 14:12	1
1,3-Dichloropropane	ND		1.0		ug/L			11/07/17 14:12	1
1,1-Dichloropropene	ND		0.50		ug/L			11/07/17 14:12	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/07/17 14:12	1
Ethylene Dibromide	ND		0.50		ug/L			11/07/17 14:12	1
Dibromomethane	ND		0.50		ug/L			11/07/17 14:12	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/07/17 14:12	1
1,1-Dichloroethane	ND		0.50		ug/L			11/07/17 14:12	1
1,2-Dichloroethane	ND		0.50		ug/L			11/07/17 14:12	1
1,1-Dichloroethene	ND		0.50		ug/L			11/07/17 14:12	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/07/17 14:12	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/07/17 14:12	1
1,2-Dichloropropane	ND		0.50		ug/L			11/07/17 14:12	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/07/17 14:12	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/07/17 14:12	1
Ethylbenzene	ND		0.50		ug/L			11/07/17 14:12	1
Hexachlorobutadiene	ND		1.0		ug/L			11/07/17 14:12	1
2-Hexanone	ND		50		ug/L			11/07/17 14:12	1
Isopropylbenzene	ND		0.50		ug/L			11/07/17 14:12	1
4-Isopropyltoluene	ND		1.0		ug/L			11/07/17 14:12	1
Methylene Chloride	ND		5.0		ug/L			11/07/17 14:12	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/07/17 14:12	1
Naphthalene	ND		1.0		ug/L			11/07/17 14:12	1
N-Propylbenzene	ND		1.0		ug/L			11/07/17 14:12	1
Styrene	ND		0.50		ug/L			11/07/17 14:12	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/07/17 14:12	1

Client Sample ID: MW-6
Date Collected: 10/31/17 08:14
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/07/17 14:12	1
Tetrachloroethene	ND		0.50		ug/L			11/07/17 14:12	1
Toluene	ND		0.50		ug/L			11/07/17 14:12	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/07/17 14:12	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/07/17 14:12	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/07/17 14:12	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/07/17 14:12	1
Trichloroethene	ND		0.50		ug/L			11/07/17 14:12	1
Trichlorofluoromethane	ND		1.0		ug/L			11/07/17 14:12	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/07/17 14:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/07/17 14:12	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/07/17 14:12	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/07/17 14:12	1
Vinyl acetate	ND		10		ug/L			11/07/17 14:12	1
Vinyl chloride	ND		0.50		ug/L			11/07/17 14:12	1
Xylenes, Total	ND		1.0		ug/L			11/07/17 14:12	1
2,2-Dichloropropane	ND		0.50		ug/L			11/07/17 14:12	1
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/07/17 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*67 - 130*		*11/07/17 14:12*	*1*
4-Bromofluorobenzene	*99*		*67 - 130*		*11/07/17 15:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*72 - 130*		*11/07/17 14:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*72 - 130*		*11/07/17 15:44*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*11/07/17 14:12*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/07/17 15:44*	*1*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Acenaphthylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Benzo[a]anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Benzo[a]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Benzo[b]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Benzo[k]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Chrysene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Fluorene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Naphthalene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Phenanthrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1
Pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*29 - 120*	*11/06/17 14:25*	*11/07/17 02:25*	*1*
Terphenyl-d14	*55*		*45 - 120*	*11/06/17 14:25*	*11/07/17 02:25*	*1*

Client Sample ID: MW-6
Date Collected: 10/31/17 08:14
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		11/01/17 15:51	11/01/17 23:29	1
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		11/01/17 15:51	11/01/17 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*91*		*23 - 156*	*11/01/17 15:51*	*11/01/17 23:29*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			11/01/17 01:34	1
Sulfate	**6.5**		1.0		mg/L			11/01/17 01:34	1
Nitrate Nitrite as N	ND		0.23		mg/L			11/01/17 01:34	1
Nitrite as N	ND		0.30		mg/L			11/01/17 01:34	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		1.0		mg/L		11/03/17 09:16	11/06/17 12:18	1
Manganese	**0.99**		0.020		mg/L		11/03/17 09:16	11/06/17 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**320**		5.0		mg/L			10/31/17 16:43	1
Bicarbonate Alkalinity as CaCO3	**320**		5.0		mg/L			10/31/17 16:43	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/31/17 16:43	1
Hydroxide Alkalinity	ND		5.0		mg/L			10/31/17 16:43	1

Client Sample ID: MW-10
Date Collected: 10/31/17 10:27
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/07/17 14:41	1
Acetone	ND		50		ug/L			11/07/17 14:41	1
Benzene	**3.0**		0.50		ug/L			11/07/17 14:41	1
Dichlorobromomethane	ND		0.50		ug/L			11/07/17 14:41	1
Bromobenzene	ND		1.0		ug/L			11/07/17 14:41	1
Chlorobromomethane	ND		1.0		ug/L			11/07/17 14:41	1
Bromoform	ND		1.0		ug/L			11/07/17 14:41	1
Bromomethane	ND		1.0		ug/L			11/07/17 14:41	1
2-Butanone (MEK)	ND		50		ug/L			11/07/17 14:41	1
n-Butylbenzene	**19**		1.0		ug/L			11/07/17 14:41	1
sec-Butylbenzene	**9.2**		1.0		ug/L			11/07/17 14:41	1
tert-Butylbenzene	**45**		1.0		ug/L			11/07/17 14:41	1
Carbon disulfide	ND		5.0		ug/L			11/07/17 14:41	1
Carbon tetrachloride	ND		0.50		ug/L			11/07/17 14:41	1
Chlorobenzene	ND		0.50		ug/L			11/07/17 14:41	1
Chloroethane	ND		1.0		ug/L			11/07/17 14:41	1
Chloroform	ND		1.0		ug/L			11/07/17 14:41	1
Chloromethane	ND		1.0		ug/L			11/07/17 14:41	1
2-Chlorotoluene	ND		0.50		ug/L			11/07/17 14:41	1
4-Chlorotoluene	ND		0.50		ug/L			11/07/17 14:41	1
Chlorodibromomethane	ND		0.50		ug/L			11/07/17 14:41	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/07/17 14:41	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/07/17 14:41	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/07/17 14:41	1
1,3-Dichloropropane	ND		1.0		ug/L			11/07/17 14:41	1
1,1-Dichloropropene	ND		0.50		ug/L			11/07/17 14:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/07/17 14:41	1
Ethylene Dibromide	ND		0.50		ug/L			11/07/17 14:41	1
Dibromomethane	ND		0.50		ug/L			11/07/17 14:41	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/07/17 14:41	1
1,1-Dichloroethane	ND		0.50		ug/L			11/07/17 14:41	1
1,2-Dichloroethane	ND		0.50		ug/L			11/07/17 14:41	1
1,1-Dichloroethene	ND		0.50		ug/L			11/07/17 14:41	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/07/17 14:41	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/07/17 14:41	1
1,2-Dichloropropane	ND		0.50		ug/L			11/07/17 14:41	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/07/17 14:41	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/07/17 14:41	1
Ethylbenzene	**8.9**		0.50		ug/L			11/07/17 14:41	1
Hexachlorobutadiene	ND		1.0		ug/L			11/07/17 14:41	1
2-Hexanone	ND		50		ug/L			11/07/17 14:41	1
Isopropylbenzene	**25**		0.50		ug/L			11/07/17 14:41	1
4-Isopropyltoluene	ND		1.0		ug/L			11/07/17 14:41	1
Methylene Chloride	ND		5.0		ug/L			11/07/17 14:41	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/07/17 14:41	1
Naphthalene	**1.3**		1.0		ug/L			11/07/17 14:41	1
N-Propylbenzene	**47**		1.0		ug/L			11/07/17 14:41	1
Styrene	ND		0.50		ug/L			11/07/17 14:41	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/07/17 14:41	1

Client Sample ID: MW-10
Date Collected: 10/31/17 10:27
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/07/17 14:41	1
Tetrachloroethene	ND		0.50		ug/L			11/07/17 14:41	1
Toluene	**1.0**		0.50		ug/L			11/07/17 14:41	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/07/17 14:41	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/07/17 14:41	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/07/17 14:41	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/07/17 14:41	1
Trichloroethene	ND		0.50		ug/L			11/07/17 14:41	1
Trichlorofluoromethane	ND		1.0		ug/L			11/07/17 14:41	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/07/17 14:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/07/17 14:41	1
1,2,4-Trimethylbenzene	**0.78**		0.50		ug/L			11/07/17 14:41	1
1,3,5-Trimethylbenzene	**2.5**		0.50		ug/L			11/07/17 14:41	1
Vinyl acetate	ND		10		ug/L			11/07/17 14:41	1
Vinyl chloride	ND		0.50		ug/L			11/07/17 14:41	1
Xylenes, Total	**6.1**		1.0		ug/L			11/07/17 14:41	1
2,2-Dichloropropane	ND		0.50		ug/L			11/07/17 14:41	1
Gasoline Range Organics (GRO) -C4-C12	**2600**		250		ug/L			11/07/17 16:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*67 - 130*		*11/07/17 14:41*	*1*
4-Bromofluorobenzene	*101*		*67 - 130*		*11/07/17 16:12*	*5*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 130*		*11/07/17 14:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*		*11/07/17 16:12*	*5*
Toluene-d8 (Surr)	*106*		*70 - 130*		*11/07/17 14:41*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/07/17 16:12*	*5*

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.31**		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Acenaphthylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Benzo[a]anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Benzo[a]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Benzo[b]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Benzo[k]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Chrysene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Fluorene	**0.24**		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Naphthalene	**1.2**		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Phenanthrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1
Pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 02:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*29 - 120*	*11/06/17 14:25*	*11/07/17 02:49*	*1*
Terphenyl-d14	*43*	*X*	*45 - 120*	*11/06/17 14:25*	*11/07/17 02:49*	*1*

Client Sample ID: MW-10

Date Collected: 10/31/17 10:27
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**1300**		51		ug/L		11/01/17 15:51	11/01/17 23:54	1
Motor Oil Range Organics [C24-C36]	ND		100		ug/L		11/01/17 15:51	11/01/17 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*98*		*23 - 156*	*11/01/17 15:51*	*11/01/17 23:54*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			11/01/17 02:09	1
Sulfate	ND		1.0		mg/L			11/01/17 02:09	1
Nitrate Nitrite as N	**0.91**		0.23		mg/L			11/01/17 02:09	1
Nitrite as N	**0.91**		0.30		mg/L			11/01/17 02:09	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		1.0		mg/L		11/03/17 09:16	11/06/17 12:22	1
Manganese	**6.2**		0.020		mg/L		11/03/17 09:16	11/06/17 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**370**		5.0		mg/L			10/31/17 17:02	1
Bicarbonate Alkalinity as CaCO3	**370**		5.0		mg/L			10/31/17 17:02	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/31/17 17:02	1
Hydroxide Alkalinity	ND		5.0		mg/L			10/31/17 17:02	1

Surrogate Summary

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	12DCE	TOL
Lab Sample ID	Client Sample ID	(67-130)	(72-130)	(70-130)
720-82853-1	TB-1	102	109	103
720-82853-2	FB-1	102	111	101
720-82853-3	MW-1	102	112	101
720-82853-4	MW-2	113	110	105
720-82853-4	MW-2	112	101	101
720-82853-5	MW-3	116	109	106
720-82853-5	MW-3	115	99	100
720-82853-6	MW-4	106	112	103
720-82853-6	MW-4	100	101	92
720-82853-7	MW-5	112	103	105
720-82853-7	MW-5	102	104	98
720-82853-8	MW-6	98	102	98
720-82853-8	MW-6	99	99	99
720-82853-9	MW-10	111	100	106
720-82853-9	MW-10	101	96	100
LCS 720-233432/6	Lab Control Sample	101	104	102
LCS 720-233432/8	Lab Control Sample	103	108	103
LCS 720-233527/5	Lab Control Sample	96	93	98
LCS 720-233527/7	Lab Control Sample	99	96	99
LCSD 720-233432/7	Lab Control Sample Dup	100	103	101
LCSD 720-233432/9	Lab Control Sample Dup	103	107	103
LCSD 720-233527/6	Lab Control Sample Dup	97	96	96
LCSD 720-233527/8	Lab Control Sample Dup	101	101	98
MB 720-233432/5	Method Blank	101	111	101
MB 720-233527/4	Method Blank	100	104	95

Surrogate Legend

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

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		FBP	TPH
Lab Sample ID	Client Sample ID	(29-120)	(45-120)
720-82853-3	MW-1	72	62
720-82853-4	MW-2	70	46
720-82853-5	MW-3	65	52
720-82853-6	MW-4	65	59
720-82853-7	MW-5	61	51
720-82853-8	MW-6	65	55
720-82853-9	MW-10	66	43 X
LCS 720-233482/2-A	Lab Control Sample	80	87
LCSD 720-233482/3-A	Lab Control Sample Dup	75	87
MB 720-233482/1-A	Method Blank	77	74

Surrogate Legend

FBP = 2-Fluorobiphenyl

TPH = Terphenyl-d14

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

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	PTP1 (23-156)
720-82853-3	MW-1	87
720-82853-4	MW-2	98
720-82853-5	MW-3	91
720-82853-6	MW-4	90
720-82853-7	MW-5	109
720-82853-8	MW-6	91
720-82853-9	MW-10	98
LCS 720-233244/2-A	Lab Control Sample	102
MB 720-233244/1-A	Method Blank	88

Surrogate Legend

PTP = p-Terphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-233432/5
Matrix: Water
Analysis Batch: 233432

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/06/17 09:14	1
Acetone	ND		50		ug/L			11/06/17 09:14	1
Benzene	ND		0.50		ug/L			11/06/17 09:14	1
Dichlorobromomethane	ND		0.50		ug/L			11/06/17 09:14	1
Bromobenzene	ND		1.0		ug/L			11/06/17 09:14	1
Chlorobromomethane	ND		1.0		ug/L			11/06/17 09:14	1
Bromoform	ND		1.0		ug/L			11/06/17 09:14	1
Bromomethane	ND		1.0		ug/L			11/06/17 09:14	1
2-Butanone (MEK)	ND		50		ug/L			11/06/17 09:14	1
n-Butylbenzene	ND		1.0		ug/L			11/06/17 09:14	1
sec-Butylbenzene	ND		1.0		ug/L			11/06/17 09:14	1
tert-Butylbenzene	ND		1.0		ug/L			11/06/17 09:14	1
Carbon disulfide	ND		5.0		ug/L			11/06/17 09:14	1
Carbon tetrachloride	ND		0.50		ug/L			11/06/17 09:14	1
Chlorobenzene	ND		0.50		ug/L			11/06/17 09:14	1
Chloroethane	ND		1.0		ug/L			11/06/17 09:14	1
Chloroform	ND		1.0		ug/L			11/06/17 09:14	1
Chloromethane	ND		1.0		ug/L			11/06/17 09:14	1
2-Chlorotoluene	ND		0.50		ug/L			11/06/17 09:14	1
4-Chlorotoluene	ND		0.50		ug/L			11/06/17 09:14	1
Chlorodibromomethane	ND		0.50		ug/L			11/06/17 09:14	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/06/17 09:14	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/06/17 09:14	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/06/17 09:14	1
1,3-Dichloropropane	ND		1.0		ug/L			11/06/17 09:14	1
1,1-Dichloropropene	ND		0.50		ug/L			11/06/17 09:14	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/06/17 09:14	1
Ethylene Dibromide	ND		0.50		ug/L			11/06/17 09:14	1
Dibromomethane	ND		0.50		ug/L			11/06/17 09:14	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/06/17 09:14	1
1,1-Dichloroethane	ND		0.50		ug/L			11/06/17 09:14	1
1,2-Dichloroethane	ND		0.50		ug/L			11/06/17 09:14	1
1,1-Dichloroethene	ND		0.50		ug/L			11/06/17 09:14	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 09:14	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/06/17 09:14	1
1,2-Dichloropropane	ND		0.50		ug/L			11/06/17 09:14	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 09:14	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/06/17 09:14	1
Ethylbenzene	ND		0.50		ug/L			11/06/17 09:14	1
Hexachlorobutadiene	ND		1.0		ug/L			11/06/17 09:14	1
2-Hexanone	ND		50		ug/L			11/06/17 09:14	1
Isopropylbenzene	ND		0.50		ug/L			11/06/17 09:14	1
4-Isopropyltoluene	ND		1.0		ug/L			11/06/17 09:14	1
Methylene Chloride	ND		5.0		ug/L			11/06/17 09:14	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/06/17 09:14	1
Naphthalene	ND		1.0		ug/L			11/06/17 09:14	1
N-Propylbenzene	ND		1.0		ug/L			11/06/17 09:14	1
Styrene	ND		0.50		ug/L			11/06/17 09:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-233432/5
Matrix: Water
Analysis Batch: 233432

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 09:14	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/06/17 09:14	1
Tetrachloroethene	ND		0.50		ug/L			11/06/17 09:14	1
Toluene	ND		0.50		ug/L			11/06/17 09:14	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/06/17 09:14	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/06/17 09:14	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/06/17 09:14	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/06/17 09:14	1
Trichloroethene	ND		0.50		ug/L			11/06/17 09:14	1
Trichlorofluoromethane	ND		1.0		ug/L			11/06/17 09:14	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/06/17 09:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/06/17 09:14	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/06/17 09:14	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/06/17 09:14	1
Vinyl acetate	ND		10		ug/L			11/06/17 09:14	1
Vinyl chloride	ND		0.50		ug/L			11/06/17 09:14	1
Xylenes, Total	ND		1.0		ug/L			11/06/17 09:14	1
2,2-Dichloropropane	ND		0.50		ug/L			11/06/17 09:14	1
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/06/17 09:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*67 - 130*		*11/06/17 09:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*72 - 130*		*11/06/17 09:14*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/06/17 09:14*	*1*

Lab Sample ID: LCS 720-233432/6
Matrix: Water
Analysis Batch: 233432

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	28.4		ug/L		114	70 - 130
Acetone	125	151		ug/L		121	58 - 147
Benzene	25.0	28.2		ug/L		113	84 - 130
Dichlorobromomethane	25.0	29.4		ug/L		118	81 - 130
Bromobenzene	25.0	26.4		ug/L		105	84 - 130
Chlorobromomethane	25.0	26.0		ug/L		104	81 - 130
Bromoform	25.0	26.1		ug/L		105	79 - 127
Bromomethane	25.0	19.7		ug/L		79	65 - 151
2-Butanone (MEK)	125	141		ug/L		113	66 - 133
n-Butylbenzene	25.0	30.2		ug/L		121	86 - 134
sec-Butylbenzene	25.0	29.5		ug/L		118	85 - 134
tert-Butylbenzene	25.0	28.5		ug/L		114	85 - 135
Carbon disulfide	25.0	25.8		ug/L		103	60 - 159
Carbon tetrachloride	25.0	29.0		ug/L		116	79 - 133
Chlorobenzene	25.0	27.3		ug/L		109	85 - 130
Chloroethane	25.0	21.8		ug/L		87	62 - 148
Chloroform	25.0	27.1		ug/L		109	82 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-233432/6
Matrix: Water
Analysis Batch: 233432

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	25.0	19.5		ug/L		78	46 - 147
2-Chlorotoluene	25.0	29.0		ug/L		116	83 - 130
4-Chlorotoluene	25.0	29.3		ug/L		117	85 - 130
Chlorodibromomethane	25.0	27.8		ug/L		111	77 - 133
1,2-Dichlorobenzene	25.0	26.2		ug/L		105	85 - 130
1,3-Dichlorobenzene	25.0	26.4		ug/L		106	86 - 130
1,4-Dichlorobenzene	25.0	26.7		ug/L		107	86 - 130
1,3-Dichloropropane	25.0	28.1		ug/L		112	77 - 130
1,1-Dichloropropene	25.0	29.4		ug/L		117	83 - 130
1,2-Dibromo-3-Chloropropane	25.0	26.9		ug/L		108	70 - 136
Ethylene Dibromide	25.0	27.8		ug/L		111	80 - 130
Dibromomethane	25.0	27.7		ug/L		111	79 - 130
Dichlorodifluoromethane	25.0	11.8		ug/L		47	18 - 173
1,1-Dichloroethane	25.0	27.7		ug/L		111	77 - 130
1,2-Dichloroethane	25.0	28.2		ug/L		113	66 - 132
1,1-Dichloroethene	25.0	22.9		ug/L		92	64 - 128
cis-1,2-Dichloroethene	25.0	27.9		ug/L		112	77 - 130
trans-1,2-Dichloroethene	25.0	26.0		ug/L		104	79 - 130
1,2-Dichloropropane	25.0	28.6		ug/L		115	79 - 130
cis-1,3-Dichloropropene	25.0	27.8		ug/L		111	82 - 130
trans-1,3-Dichloropropene	25.0	27.8		ug/L		111	76 - 129
Ethylbenzene	25.0	29.0		ug/L		116	87 - 127
Hexachlorobutadiene	25.0	26.3		ug/L		105	78 - 140
2-Hexanone	125	148		ug/L		119	57 - 140
Isopropylbenzene	25.0	29.5		ug/L		118	90 - 130
4-Isopropyltoluene	25.0	28.5		ug/L		114	88 - 130
Methylene Chloride	25.0	26.4		ug/L		106	75 - 128
4-Methyl-2-pentanone (MIBK)	125	155		ug/L		124	58 - 140
Naphthalene	25.0	28.5		ug/L		114	81 - 130
N-Propylbenzene	25.0	30.7		ug/L		123	84 - 130
Styrene	25.0	29.1		ug/L		116	84 - 130
1,1,1,2-Tetrachloroethane	25.0	27.9		ug/L		111	88 - 130
1,1,2,2-Tetrachloroethane	25.0	28.7		ug/L		115	70 - 130
Tetrachloroethene	25.0	26.1		ug/L		104	81 - 130
Toluene	25.0	27.8		ug/L		111	85 - 120
1,2,3-Trichlorobenzene	25.0	27.3		ug/L		109	87 - 130
1,2,4-Trichlorobenzene	25.0	26.7		ug/L		107	88 - 130
1,1,1-Trichloroethane	25.0	28.7		ug/L		115	81 - 130
1,1,2-Trichloroethane	25.0	29.0		ug/L		116	80 - 130
Trichloroethene	25.0	25.8		ug/L		103	85 - 130
Trichlorofluoromethane	25.0	22.8		ug/L		91	75 - 132
1,2,3-Trichloropropane	25.0	29.5		ug/L		118	77 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.9		ug/L		95	70 - 145
1,2,4-Trimethylbenzene	25.0	29.0		ug/L		116	87 - 132
1,3,5-Trimethylbenzene	25.0	29.4		ug/L		118	87 - 130
Vinyl acetate	25.0	30.9		ug/L		124	43 - 146
Vinyl chloride	25.0	20.8		ug/L		83	50 - 156

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-233432/6
Matrix: Water
Analysis Batch: 233432

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	25.0	28.5		ug/L		114	86 - 126
o-Xylene	25.0	28.9		ug/L		116	86 - 130
2,2-Dichloropropane	25.0	31.5		ug/L		126	80 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCS 720-233432/8
Matrix: Water
Analysis Batch: 233432

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) -C4-C12	500	488		ug/L		98	77 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*108*		*72 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 720-233432/7
Matrix: Water
Analysis Batch: 233432

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	28.2		ug/L		113	70 - 130	1	20
Acetone	125	150		ug/L		120	58 - 147	1	30
Benzene	25.0	28.4		ug/L		114	84 - 130	1	20
Dichlorobromomethane	25.0	29.1		ug/L		116	81 - 130	1	20
Bromobenzene	25.0	26.7		ug/L		107	84 - 130	1	20
Chlorobromomethane	25.0	26.0		ug/L		104	81 - 130	0	20
Bromoform	25.0	26.2		ug/L		105	79 - 127	0	20
Bromomethane	25.0	20.4		ug/L		82	65 - 151	3	20
2-Butanone (MEK)	125	136		ug/L		109	66 - 133	4	20
n-Butylbenzene	25.0	30.7		ug/L		123	86 - 134	2	20
sec-Butylbenzene	25.0	30.4		ug/L		122	85 - 134	3	20
tert-Butylbenzene	25.0	29.1		ug/L		117	85 - 135	2	20
Carbon disulfide	25.0	26.0		ug/L		104	60 - 159	1	20
Carbon tetrachloride	25.0	29.2		ug/L		117	79 - 133	1	20
Chlorobenzene	25.0	27.3		ug/L		109	85 - 130	0	20
Chloroethane	25.0	22.3		ug/L		89	62 - 148	2	20
Chloroform	25.0	27.3		ug/L		109	82 - 130	1	20
Chloromethane	25.0	20.4		ug/L		82	46 - 147	5	20
2-Chlorotoluene	25.0	29.4		ug/L		118	83 - 130	1	20
4-Chlorotoluene	25.0	29.8		ug/L		119	85 - 130	2	20
Chlorodibromomethane	25.0	27.7		ug/L		111	77 - 133	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-233432/7
Matrix: Water
Analysis Batch: 233432

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene			25.0	26.6		ug/L		106	85 - 130	1	20
1,3-Dichlorobenzene			25.0	27.0		ug/L		108	86 - 130	2	20
1,4-Dichlorobenzene			25.0	26.8		ug/L		107	86 - 130	0	20
1,3-Dichloropropane			25.0	27.7		ug/L		111	77 - 130	1	20
1,1-Dichloropropene			25.0	29.5		ug/L		118	83 - 130	1	20
1,2-Dibromo-3-Chloropropane			25.0	27.0		ug/L		108	70 - 136	0	20
Ethylene Dibromide			25.0	27.5		ug/L		110	80 - 130	1	20
Dibromomethane			25.0	27.7		ug/L		111	79 - 130	0	20
Dichlorodifluoromethane			25.0	12.2		ug/L		49	18 - 173	3	20
1,1-Dichloroethane			25.0	28.0		ug/L		112	77 - 130	1	20
1,2-Dichloroethane			25.0	28.3		ug/L		113	66 - 132	0	20
1,1-Dichloroethene			25.0	23.2		ug/L		93	64 - 128	1	20
cis-1,2-Dichloroethene			25.0	28.0		ug/L		112	77 - 130	0	20
trans-1,2-Dichloroethene			25.0	26.1		ug/L		105	79 - 130	0	20
1,2-Dichloropropane			25.0	29.0		ug/L		116	79 - 130	1	20
cis-1,3-Dichloropropene			25.0	27.7		ug/L		111	82 - 130	0	20
trans-1,3-Dichloropropene			25.0	27.7		ug/L		111	76 - 129	0	20
Ethylbenzene			25.0	29.2		ug/L		117	87 - 127	1	20
Hexachlorobutadiene			25.0	26.3		ug/L		105	78 - 140	0	20
2-Hexanone			125	143		ug/L		114	57 - 140	4	20
Isopropylbenzene			25.0	29.8		ug/L		119	90 - 130	1	20
4-Isopropyltoluene			25.0	29.1		ug/L		116	88 - 130	2	20
Methylene Chloride			25.0	26.6		ug/L		106	75 - 128	1	20
4-Methyl-2-pentanone (MIBK)			125	150		ug/L		120	58 - 140	3	20
Naphthalene			25.0	28.8		ug/L		115	81 - 130	1	20
N-Propylbenzene			25.0	31.3		ug/L		125	84 - 130	2	20
Styrene			25.0	28.9		ug/L		116	84 - 130	1	20
1,1,1,2-Tetrachloroethane			25.0	27.7		ug/L		111	88 - 130	1	20
1,1,2,2-Tetrachloroethane			25.0	28.9		ug/L		116	70 - 130	1	20
Tetrachloroethene			25.0	26.2		ug/L		105	81 - 130	0	20
Toluene			25.0	28.3		ug/L		113	85 - 120	1	20
1,2,3-Trichlorobenzene			25.0	27.7		ug/L		111	87 - 130	1	20
1,2,4-Trichlorobenzene			25.0	26.7		ug/L		107	88 - 130	0	20
1,1,1-Trichloroethane			25.0	29.0		ug/L		116	81 - 130	1	20
1,1,2-Trichloroethane			25.0	28.5		ug/L		114	80 - 130	2	20
Trichloroethene			25.0	26.2		ug/L		105	85 - 130	2	20
Trichlorofluoromethane			25.0	23.9		ug/L		95	75 - 132	5	20
1,2,3-Trichloropropane			25.0	29.2		ug/L		117	77 - 130	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	24.2		ug/L		97	70 - 145	2	20
1,2,4-Trimethylbenzene			25.0	29.6		ug/L		118	87 - 132	2	20
1,3,5-Trimethylbenzene			25.0	30.0		ug/L		120	87 - 130	2	20
Vinyl acetate			25.0	30.7		ug/L		123	43 - 146	1	20
Vinyl chloride			25.0	21.3		ug/L		85	50 - 156	2	20
m-Xylene & p-Xylene			25.0	28.6		ug/L		115	86 - 126	1	20
o-Xylene			25.0	29.2		ug/L		117	86 - 130	1	20
2,2-Dichloropropane			25.0	31.7		ug/L		127	80 - 140	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-233432/7
Matrix: Water
Analysis Batch: 233432

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)	*103*		*72 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 720-233432/9
Matrix: Water
Analysis Batch: 233432

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	490		ug/L		98	77 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	*103*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 720-233527/4
Matrix: Water
Analysis Batch: 233527

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50		ug/L			11/07/17 11:48	1
Acetone	ND		50		ug/L			11/07/17 11:48	1
Benzene	ND		0.50		ug/L			11/07/17 11:48	1
Dichlorobromomethane	ND		0.50		ug/L			11/07/17 11:48	1
Bromobenzene	ND		1.0		ug/L			11/07/17 11:48	1
Chlorobromomethane	ND		1.0		ug/L			11/07/17 11:48	1
Bromoform	ND		1.0		ug/L			11/07/17 11:48	1
Bromomethane	ND		1.0		ug/L			11/07/17 11:48	1
2-Butanone (MEK)	ND		50		ug/L			11/07/17 11:48	1
n-Butylbenzene	ND		1.0		ug/L			11/07/17 11:48	1
sec-Butylbenzene	ND		1.0		ug/L			11/07/17 11:48	1
tert-Butylbenzene	ND		1.0		ug/L			11/07/17 11:48	1
Carbon disulfide	ND		5.0		ug/L			11/07/17 11:48	1
Carbon tetrachloride	ND		0.50		ug/L			11/07/17 11:48	1
Chlorobenzene	ND		0.50		ug/L			11/07/17 11:48	1
Chloroethane	ND		1.0		ug/L			11/07/17 11:48	1
Chloroform	ND		1.0		ug/L			11/07/17 11:48	1
Chloromethane	ND		1.0		ug/L			11/07/17 11:48	1
2-Chlorotoluene	ND		0.50		ug/L			11/07/17 11:48	1
4-Chlorotoluene	ND		0.50		ug/L			11/07/17 11:48	1
Chlorodibromomethane	ND		0.50		ug/L			11/07/17 11:48	1
1,2-Dichlorobenzene	ND		0.50		ug/L			11/07/17 11:48	1
1,3-Dichlorobenzene	ND		0.50		ug/L			11/07/17 11:48	1
1,4-Dichlorobenzene	ND		0.50		ug/L			11/07/17 11:48	1
1,3-Dichloropropane	ND		1.0		ug/L			11/07/17 11:48	1
1,1-Dichloropropene	ND		0.50		ug/L			11/07/17 11:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-233527/4
Matrix: Water
Analysis Batch: 233527

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			11/07/17 11:48	1
Ethylene Dibromide	ND		0.50		ug/L			11/07/17 11:48	1
Dibromomethane	ND		0.50		ug/L			11/07/17 11:48	1
Dichlorodifluoromethane	ND		0.50		ug/L			11/07/17 11:48	1
1,1-Dichloroethane	ND		0.50		ug/L			11/07/17 11:48	1
1,2-Dichloroethane	ND		0.50		ug/L			11/07/17 11:48	1
1,1-Dichloroethene	ND		0.50		ug/L			11/07/17 11:48	1
cis-1,2-Dichloroethene	ND		0.50		ug/L			11/07/17 11:48	1
trans-1,2-Dichloroethene	ND		0.50		ug/L			11/07/17 11:48	1
1,2-Dichloropropane	ND		0.50		ug/L			11/07/17 11:48	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			11/07/17 11:48	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			11/07/17 11:48	1
Ethylbenzene	ND		0.50		ug/L			11/07/17 11:48	1
Hexachlorobutadiene	ND		1.0		ug/L			11/07/17 11:48	1
2-Hexanone	ND		50		ug/L			11/07/17 11:48	1
Isopropylbenzene	ND		0.50		ug/L			11/07/17 11:48	1
4-Isopropyltoluene	ND		1.0		ug/L			11/07/17 11:48	1
Methylene Chloride	ND		5.0		ug/L			11/07/17 11:48	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/L			11/07/17 11:48	1
Naphthalene	ND		1.0		ug/L			11/07/17 11:48	1
N-Propylbenzene	ND		1.0		ug/L			11/07/17 11:48	1
Styrene	ND		0.50		ug/L			11/07/17 11:48	1
1,1,1,2-Tetrachloroethane	ND		0.50		ug/L			11/07/17 11:48	1
1,1,2,2-Tetrachloroethane	ND		0.50		ug/L			11/07/17 11:48	1
Tetrachloroethene	ND		0.50		ug/L			11/07/17 11:48	1
Toluene	ND		0.50		ug/L			11/07/17 11:48	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			11/07/17 11:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/07/17 11:48	1
1,1,1-Trichloroethane	ND		0.50		ug/L			11/07/17 11:48	1
1,1,2-Trichloroethane	ND		0.50		ug/L			11/07/17 11:48	1
Trichloroethene	ND		0.50		ug/L			11/07/17 11:48	1
Trichlorofluoromethane	ND		1.0		ug/L			11/07/17 11:48	1
1,2,3-Trichloropropane	ND		0.50		ug/L			11/07/17 11:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50		ug/L			11/07/17 11:48	1
1,2,4-Trimethylbenzene	ND		0.50		ug/L			11/07/17 11:48	1
1,3,5-Trimethylbenzene	ND		0.50		ug/L			11/07/17 11:48	1
Vinyl acetate	ND		10		ug/L			11/07/17 11:48	1
Vinyl chloride	ND		0.50		ug/L			11/07/17 11:48	1
Xylenes, Total	ND		1.0		ug/L			11/07/17 11:48	1
2,2-Dichloropropane	ND		0.50		ug/L			11/07/17 11:48	1
Gasoline Range Organics (GRO) -C4-C12	ND		50		ug/L			11/07/17 11:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*67 - 130*		*11/07/17 11:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*72 - 130*		*11/07/17 11:48*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/07/17 11:48*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-233527/5
Matrix: Water
Analysis Batch: 233527

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	23.8		ug/L		95	70 - 130
Acetone	125	119		ug/L		95	58 - 147
Benzene	25.0	24.7		ug/L		99	84 - 130
Dichlorobromomethane	25.0	25.6		ug/L		102	81 - 130
Bromobenzene	25.0	24.6		ug/L		98	84 - 130
Chlorobromomethane	25.0	24.6		ug/L		98	81 - 130
Bromoform	25.0	26.8		ug/L		107	79 - 127
Bromomethane	25.0	25.0		ug/L		100	65 - 151
2-Butanone (MEK)	125	116		ug/L		93	66 - 133
n-Butylbenzene	25.0	29.8		ug/L		119	86 - 134
sec-Butylbenzene	25.0	29.3		ug/L		117	85 - 134
tert-Butylbenzene	25.0	28.7		ug/L		115	85 - 135
Carbon disulfide	25.0	25.8		ug/L		103	60 - 159
Carbon tetrachloride	25.0	27.4		ug/L		110	79 - 133
Chlorobenzene	25.0	24.8		ug/L		99	85 - 130
Chloroethane	25.0	26.1		ug/L		104	62 - 148
Chloroform	25.0	25.1		ug/L		100	82 - 130
Chloromethane	25.0	25.4		ug/L		101	46 - 147
2-Chlorotoluene	25.0	27.1		ug/L		109	83 - 130
4-Chlorotoluene	25.0	26.4		ug/L		106	85 - 130
Chlorodibromomethane	25.0	24.8		ug/L		99	77 - 133
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	85 - 130
1,3-Dichlorobenzene	25.0	25.4		ug/L		101	86 - 130
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	86 - 130
1,3-Dichloropropane	25.0	22.3		ug/L		89	77 - 130
1,1-Dichloropropene	25.0	26.4		ug/L		106	83 - 130
1,2-Dibromo-3-Chloropropane	25.0	23.5		ug/L		94	70 - 136
Ethylene Dibromide	25.0	22.0		ug/L		88	80 - 130
Dibromomethane	25.0	23.6		ug/L		95	79 - 130
Dichlorodifluoromethane	25.0	26.0		ug/L		104	18 - 173
1,1-Dichloroethane	25.0	25.8		ug/L		103	77 - 130
1,2-Dichloroethane	25.0	23.3		ug/L		93	66 - 132
1,1-Dichloroethene	25.0	24.6		ug/L		98	64 - 128
cis-1,2-Dichloroethene	25.0	25.6		ug/L		102	77 - 130
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	79 - 130
1,2-Dichloropropane	25.0	24.7		ug/L		99	79 - 130
cis-1,3-Dichloropropene	25.0	23.9		ug/L		96	82 - 130
trans-1,3-Dichloropropene	25.0	24.5		ug/L		98	76 - 129
Ethylbenzene	25.0	27.1		ug/L		109	87 - 127
Hexachlorobutadiene	25.0	26.1		ug/L		105	78 - 140
2-Hexanone	125	122		ug/L		98	57 - 140
Isopropylbenzene	25.0	28.4		ug/L		114	90 - 130
4-Isopropyltoluene	25.0	29.2		ug/L		117	88 - 130
Methylene Chloride	25.0	21.2		ug/L		85	75 - 128
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	58 - 140
Naphthalene	25.0	26.4		ug/L		105	81 - 130
N-Propylbenzene	25.0	29.2		ug/L		117	84 - 130
Styrene	25.0	26.4		ug/L		106	84 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-233527/5
Matrix: Water
Analysis Batch: 233527

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	27.3		ug/L		109	88 - 130		
1,1,2,2-Tetrachloroethane			25.0	26.3		ug/L		105	70 - 130		
Tetrachloroethene			25.0	24.0		ug/L		96	81 - 130		
Toluene			25.0	26.2		ug/L		105	85 - 120		
1,2,3-Trichlorobenzene			25.0	25.7		ug/L		103	87 - 130		
1,2,4-Trichlorobenzene			25.0	26.2		ug/L		105	88 - 130		
1,1,1-Trichloroethane			25.0	27.1		ug/L		109	81 - 130		
1,1,2-Trichloroethane			25.0	22.6		ug/L		91	80 - 130		
Trichloroethene			25.0	24.8		ug/L		99	85 - 130		
Trichlorofluoromethane			25.0	25.8		ug/L		103	75 - 132		
1,2,3-Trichloropropane			25.0	24.5		ug/L		98	77 - 130		
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	25.5		ug/L		102	70 - 145		
1,2,4-Trimethylbenzene			25.0	28.3		ug/L		113	87 - 132		
1,3,5-Trimethylbenzene			25.0	28.4		ug/L		114	87 - 130		
Vinyl acetate			25.0	25.2		ug/L		101	43 - 146		
Vinyl chloride			25.0	28.1		ug/L		112	50 - 156		
m-Xylene & p-Xylene			25.0	26.9		ug/L		107	86 - 126		
o-Xylene			25.0	27.3		ug/L		109	86 - 130		
2,2-Dichloropropane			25.0	29.7		ug/L		119	80 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*72 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Lab Sample ID: LCS 720-233527/7
Matrix: Water
Analysis Batch: 233527

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) -C4-C12			500	475		ug/L		95	77 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 720-233527/6
Matrix: Water
Analysis Batch: 233527

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether			25.0	25.4		ug/L		102	70 - 130	7	20
Acetone			125	131		ug/L		105	58 - 147	9	30
Benzene			25.0	25.2		ug/L		101	84 - 130	2	20
Dichlorobromomethane			25.0	26.5		ug/L		106	81 - 130	4	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-233527/6
Matrix: Water
Analysis Batch: 233527

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromobenzene	25.0	25.0		ug/L		100	84 - 130	2	20
Chlorobromomethane	25.0	25.6		ug/L		102	81 - 130	4	20
Bromoform	25.0	27.7		ug/L		111	79 - 127	3	20
Bromomethane	25.0	24.8		ug/L		99	65 - 151	1	20
2-Butanone (MEK)	125	123		ug/L		98	66 - 133	6	22
n-Butylbenzene	25.0	28.9		ug/L		116	86 - 134	3	20
sec-Butylbenzene	25.0	29.1		ug/L		116	85 - 134	1	20
tert-Butylbenzene	25.0	28.7		ug/L		115	85 - 135	0	20
Carbon disulfide	25.0	25.6		ug/L		102	60 - 159	1	20
Carbon tetrachloride	25.0	26.9		ug/L		108	79 - 133	2	20
Chlorobenzene	25.0	24.8		ug/L		99	85 - 130	0	20
Chloroethane	25.0	25.4		ug/L		102	62 - 148	3	20
Chloroform	25.0	25.9		ug/L		104	82 - 130	3	20
Chloromethane	25.0	25.0		ug/L		100	46 - 147	1	20
2-Chlorotoluene	25.0	27.1		ug/L		109	83 - 130	0	20
4-Chlorotoluene	25.0	26.2		ug/L		105	85 - 130	1	20
Chlorodibromomethane	25.0	25.9		ug/L		103	77 - 133	4	20
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	85 - 130	3	20
1,3-Dichlorobenzene	25.0	25.6		ug/L		102	86 - 130	1	20
1,4-Dichlorobenzene	25.0	25.4		ug/L		102	86 - 130	1	20
1,3-Dichloropropane	25.0	23.0		ug/L		92	77 - 130	3	20
1,1-Dichloropropene	25.0	25.9		ug/L		104	83 - 130	2	20
1,2-Dibromo-3-Chloropropane	25.0	24.1		ug/L		96	70 - 136	3	20
Ethylene Dibromide	25.0	22.8		ug/L		91	80 - 130	3	20
Dibromomethane	25.0	24.2		ug/L		97	79 - 130	2	20
Dichlorodifluoromethane	25.0	24.6		ug/L		98	18 - 173	6	20
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 130	2	20
1,2-Dichloroethane	25.0	24.2		ug/L		97	66 - 132	4	20
1,1-Dichloroethene	25.0	24.6		ug/L		98	64 - 128	0	20
cis-1,2-Dichloroethene	25.0	26.3		ug/L		105	77 - 130	3	20
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	79 - 130	0	20
1,2-Dichloropropane	25.0	25.0		ug/L		100	79 - 130	1	20
cis-1,3-Dichloropropene	25.0	24.5		ug/L		98	82 - 130	3	20
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	76 - 129	3	20
Ethylbenzene	25.0	26.6		ug/L		107	87 - 127	2	20
Hexachlorobutadiene	25.0	25.7		ug/L		103	78 - 140	2	20
2-Hexanone	125	129		ug/L		103	57 - 140	5	24
Isopropylbenzene	25.0	28.0		ug/L		112	90 - 130	1	20
4-Isopropyltoluene	25.0	29.0		ug/L		116	88 - 130	1	20
Methylene Chloride	25.0	22.0		ug/L		88	75 - 128	4	20
4-Methyl-2-pentanone (MIBK)	125	136		ug/L		109	58 - 140	4	21
Naphthalene	25.0	27.8		ug/L		111	81 - 130	5	20
N-Propylbenzene	25.0	28.5		ug/L		114	84 - 130	2	20
Styrene	25.0	26.5		ug/L		106	84 - 130	0	20
1,1,1,2-Tetrachloroethane	25.0	28.1		ug/L		113	88 - 130	3	20
1,1,2,2-Tetrachloroethane	25.0	27.3		ug/L		109	70 - 130	4	20
Tetrachloroethene	25.0	23.5		ug/L		94	81 - 130	2	20
Toluene	25.0	25.9		ug/L		103	85 - 120	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-233527/6
Matrix: Water
Analysis Batch: 233527

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene			25.0	26.8		ug/L		107	87 - 130	4	20
1,2,4-Trichlorobenzene			25.0	26.3		ug/L		105	88 - 130	0	20
1,1,1-Trichloroethane			25.0	27.0		ug/L		108	81 - 130	0	20
1,1,2-Trichloroethane			25.0	23.5		ug/L		94	80 - 130	4	20
Trichloroethene			25.0	24.9		ug/L		100	85 - 130	0	20
Trichlorofluoromethane			25.0	25.1		ug/L		100	75 - 132	3	20
1,2,3-Trichloropropane			25.0	25.1		ug/L		100	77 - 130	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane			25.0	25.0		ug/L		100	70 - 145	2	20
1,2,4-Trimethylbenzene			25.0	28.5		ug/L		114	87 - 132	1	20
1,3,5-Trimethylbenzene			25.0	28.6		ug/L		115	87 - 130	1	20
Vinyl acetate			25.0	26.1		ug/L		104	43 - 146	3	20
Vinyl chloride			25.0	27.2		ug/L		109	50 - 156	3	20
m-Xylene & p-Xylene			25.0	26.4		ug/L		105	86 - 126	2	20
o-Xylene			25.0	27.4		ug/L		110	86 - 130	0	20
2,2-Dichloropropane			25.0	28.6		ug/L		115	80 - 140	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*67 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 720-233527/8
Matrix: Water
Analysis Batch: 233527

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12			500	462		ug/L		92	77 - 130	3	20

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

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 720-233482/1-A
Matrix: Water
Analysis Batch: 233515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 233482

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Acenaphthylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Benzo[a]anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Benzo[a]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Benzo[b]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 720-233482/1-A
Matrix: Water
Analysis Batch: 233515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 233482

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Benzo[k]fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Chrysene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Fluoranthene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Fluorene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Naphthalene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Phenanthrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1
Pyrene	ND		0.10		ug/L		11/06/17 14:25	11/07/17 00:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*29 - 120*	*11/06/17 14:25*	*11/07/17 00:03*	*1*
Terphenyl-d14	*74*		*45 - 120*	*11/06/17 14:25*	*11/07/17 00:03*	*1*

Lab Sample ID: LCS 720-233482/2-A
Matrix: Water
Analysis Batch: 233515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233482

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	10.0	7.48		ug/L		75	24 - 120
Acenaphthylene	10.0	7.74		ug/L		77	24 - 120
Anthracene	10.0	7.31		ug/L		73	44 - 120
Benzo[a]anthracene	10.0	7.54		ug/L		75	48 - 120
Benzo[a]pyrene	10.0	8.17		ug/L		82	43 - 120
Benzo[b]fluoranthene	10.0	7.97		ug/L		80	42 - 120
Benzo[g,h,i]perylene	10.0	5.83		ug/L		58	35 - 120
Benzo[k]fluoranthene	10.0	7.47		ug/L		75	42 - 120
Chrysene	10.0	7.28		ug/L		73	47 - 120
Dibenz(a,h)anthracene	10.0	6.76		ug/L		68	33 - 120
Fluoranthene	10.0	7.91		ug/L		79	43 - 120
Fluorene	10.0	7.90		ug/L		79	27 - 120
Indeno[1,2,3-cd]pyrene	10.0	6.53		ug/L		65	36 - 120
Naphthalene	10.0	7.58		ug/L		76	19 - 120
Phenanthrene	10.0	7.61		ug/L		76	31 - 120
Pyrene	10.0	7.56		ug/L		76	47 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*29 - 120*
Terphenyl-d14	*87*		*45 - 120*

Lab Sample ID: LCSD 720-233482/3-A
Matrix: Water
Analysis Batch: 233515

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233482

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	10.0	7.03		ug/L		70	24 - 120	6	35
Acenaphthylene	10.0	7.27		ug/L		73	24 - 120	6	35

Method: 8270C SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 720-233482/3-A
Matrix: Water
Analysis Batch: 233515

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 233482

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Anthracene			10.0	7.14		ug/L		71	44 - 120	2	35
Benzo[a]anthracene			10.0	7.46		ug/L		75	48 - 120	1	35
Benzo[a]pyrene			10.0	7.98		ug/L		80	43 - 120	2	35
Benzo[b]fluoranthene			10.0	7.78		ug/L		78	42 - 120	2	35
Benzo[g,h,i]perylene			10.0	5.82		ug/L		58	35 - 120	0	35
Benzo[k]fluoranthene			10.0	7.48		ug/L		75	42 - 120	0	35
Chrysene			10.0	7.34		ug/L		73	47 - 120	1	35
Dibenz(a,h)anthracene			10.0	6.76		ug/L		68	33 - 120	0	35
Fluoranthene			10.0	7.87		ug/L		79	43 - 120	1	35
Fluorene			10.0	7.44		ug/L		74	27 - 120	6	35
Indeno[1,2,3-cd]pyrene			10.0	6.49		ug/L		65	36 - 120	1	35
Naphthalene			10.0	7.11		ug/L		71	19 - 120	6	35
Phenanthrene			10.0	7.47		ug/L		75	31 - 120	2	35
Pyrene			10.0	7.49		ug/L		75	47 - 120	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*29 - 120*
Terphenyl-d14	*87*		*45 - 120*

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

Lab Sample ID: MB 720-233244/1-A
Matrix: Water
Analysis Batch: 233190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 233244

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		50		ug/L		11/01/17 15:51	11/02/17 02:52	1
Motor Oil Range Organics [C24-C36]	ND		99		ug/L		11/01/17 15:51	11/02/17 02:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
p-Terphenyl	*88*		*23 - 156*	*11/01/17 15:51*	*11/02/17 02:52*	*1*

Lab Sample ID: LCS 720-233244/2-A
Matrix: Water
Analysis Batch: 233190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 233244

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]			2500	2230		ug/L		89	34 - 115

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*102*		*23 - 156*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 720-233176/29
Matrix: Water
Analysis Batch: 233176

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0		mg/L			10/31/17 18:31	1

Lab Sample ID: LCS 720-233176/30
Matrix: Water
Analysis Batch: 233176

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: 720-82853-3 MS
Matrix: Water
Analysis Batch: 233176

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	19		100	123		mg/L		104	80 - 120

Lab Sample ID: 720-82853-3 MSD
Matrix: Water
Analysis Batch: 233176

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	19		100	122		mg/L		103	80 - 120	1	20

Lab Sample ID: MB 720-233177/29
Matrix: Water
Analysis Batch: 233177

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.23		mg/L			10/31/17 18:31	1
Nitrate Nitrite as N	ND		0.23		mg/L			10/31/17 18:31	1
Nitrite as N	ND		0.30		mg/L			10/31/17 18:31	1

Lab Sample ID: LCS 720-233177/30
Matrix: Water
Analysis Batch: 233177

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	2.26	2.33		mg/L		103	90 - 110
Nitrate Nitrite as N	5.30	5.48		mg/L		103	90 - 110
Nitrite as N	3.04	3.14		mg/L		103	90 - 110

Lab Sample ID: 720-82853-3 MS
Matrix: Water
Analysis Batch: 233177

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	5.2		22.6	28.2		mg/L		102	80 - 120
Nitrate Nitrite as N	5.2		53.0	60.5		mg/L		104	80 - 120
Nitrite as N	ND		30.4	32.3		mg/L		106	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 720-82853-3 MSD
Matrix: Water
Analysis Batch: 233177

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	5.2		22.6	27.5		mg/L		99	80 - 120	2	20
Nitrate Nitrite as N	5.2		53.0	60.8		mg/L		105	80 - 120	1	20
Nitrite as N	ND		30.4	33.3		mg/L		110	80 - 120	3	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-233366/1-A
Matrix: Water
Analysis Batch: 233477

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 233366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		1.0		mg/L		11/03/17 09:16	11/06/17 11:22	1
Manganese	ND		0.020		mg/L		11/03/17 09:16	11/06/17 11:22	1

Lab Sample ID: LCS 720-233366/2-A
Matrix: Water
Analysis Batch: 233477

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 233366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.28		mg/L		93	80 - 120
Manganese	1.00	0.992		mg/L		99	80 - 120

Lab Sample ID: MB 720-233280/1-B
Matrix: Water
Analysis Batch: 233477

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 233366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		1.0		mg/L		11/03/17 09:16	11/06/17 11:30	1
Manganese	ND		0.020		mg/L		11/03/17 09:16	11/06/17 11:30	1

Lab Sample ID: 720-82853-3 MS
Matrix: Water
Analysis Batch: 233477

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 233366

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	8.97		mg/L		90	75 - 125
Manganese	ND		1.00	0.956		mg/L		95	75 - 125

Lab Sample ID: 720-82853-3 MSD
Matrix: Water
Analysis Batch: 233477

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 233366

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.25		mg/L		93	75 - 125	3	20
Manganese	ND		1.00	0.978		mg/L		97	75 - 125	2	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 720-233172/2
Matrix: Water
Analysis Batch: 233172

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	ND		5.0		mg/L			10/31/17 15:46	1
Bicarbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/31/17 15:46	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			10/31/17 15:46	1
Hydroxide Alkalinity	ND		5.0		mg/L			10/31/17 15:46	1

Lab Sample ID: LCS 720-233172/3
Matrix: Water
Analysis Batch: 233172

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			250	252		mg/L		101	80 - 120		

Lab Sample ID: LCSD 720-233172/4
Matrix: Water
Analysis Batch: 233172

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity			250	252		mg/L		101	80 - 120	0	20

Lab Sample ID: 720-82853-3 DU
Matrix: Water
Analysis Batch: 233172

Client Sample ID: MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	160			156		mg/L				0	20
Bicarbonate Alkalinity as CaCO3	160			156		mg/L				0	20
Carbonate Alkalinity as CaCO3	ND			ND		mg/L				NC	20
Hydroxide Alkalinity	ND			ND		mg/L				NC	20

GC/MS VOA

Analysis Batch: 233432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-1	TB-1	Total/NA	Water	8260B	
720-82853-2	FB-1	Total/NA	Water	8260B	
720-82853-3	MW-1	Total/NA	Water	8260B	
720-82853-4	MW-2	Total/NA	Water	8260B	
720-82853-5	MW-3	Total/NA	Water	8260B	
720-82853-6	MW-4	Total/NA	Water	8260B	
MB 720-233432/5	Method Blank	Total/NA	Water	8260B	
LCS 720-233432/6	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-233432/8	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-233432/7	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-233432/9	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 233527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-4	MW-2	Total/NA	Water	8260B	
720-82853-5	MW-3	Total/NA	Water	8260B	
720-82853-6	MW-4	Total/NA	Water	8260B	
720-82853-7	MW-5	Total/NA	Water	8260B	
720-82853-7	MW-5	Total/NA	Water	8260B	
720-82853-8	MW-6	Total/NA	Water	8260B	
720-82853-8	MW-6	Total/NA	Water	8260B	
720-82853-9	MW-10	Total/NA	Water	8260B	
720-82853-9	MW-10	Total/NA	Water	8260B	
MB 720-233527/4	Method Blank	Total/NA	Water	8260B	
LCS 720-233527/5	Lab Control Sample	Total/NA	Water	8260B	
LCS 720-233527/7	Lab Control Sample	Total/NA	Water	8260B	
LCSD 720-233527/6	Lab Control Sample Dup	Total/NA	Water	8260B	
LCSD 720-233527/8	Lab Control Sample Dup	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 233482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Total/NA	Water	3510C	
720-82853-4	MW-2	Total/NA	Water	3510C	
720-82853-5	MW-3	Total/NA	Water	3510C	
720-82853-6	MW-4	Total/NA	Water	3510C	
720-82853-7	MW-5	Total/NA	Water	3510C	
720-82853-8	MW-6	Total/NA	Water	3510C	
720-82853-9	MW-10	Total/NA	Water	3510C	
MB 720-233482/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-233482/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-233482/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 233515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Total/NA	Water	8270C SIM	233482
720-82853-4	MW-2	Total/NA	Water	8270C SIM	233482
720-82853-5	MW-3	Total/NA	Water	8270C SIM	233482
720-82853-6	MW-4	Total/NA	Water	8270C SIM	233482

GC/MS Semi VOA (Continued)

Analysis Batch: 233515 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-7	MW-5	Total/NA	Water	8270C SIM	233482
720-82853-8	MW-6	Total/NA	Water	8270C SIM	233482
720-82853-9	MW-10	Total/NA	Water	8270C SIM	233482
MB 720-233482/1-A	Method Blank	Total/NA	Water	8270C SIM	233482
LCS 720-233482/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	233482
LCSD 720-233482/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	233482

GC Semi VOA

Analysis Batch: 233190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Total/NA	Water	8015B	233244
720-82853-4	MW-2	Total/NA	Water	8015B	233244
720-82853-5	MW-3	Total/NA	Water	8015B	233244
720-82853-6	MW-4	Total/NA	Water	8015B	233244
720-82853-7	MW-5	Total/NA	Water	8015B	233244
720-82853-8	MW-6	Total/NA	Water	8015B	233244
720-82853-9	MW-10	Total/NA	Water	8015B	233244
MB 720-233244/1-A	Method Blank	Total/NA	Water	8015B	233244
LCS 720-233244/2-A	Lab Control Sample	Total/NA	Water	8015B	233244

Prep Batch: 233244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Total/NA	Water	3510C	
720-82853-4	MW-2	Total/NA	Water	3510C	
720-82853-5	MW-3	Total/NA	Water	3510C	
720-82853-6	MW-4	Total/NA	Water	3510C	
720-82853-7	MW-5	Total/NA	Water	3510C	
720-82853-8	MW-6	Total/NA	Water	3510C	
720-82853-9	MW-10	Total/NA	Water	3510C	
MB 720-233244/1-A	Method Blank	Total/NA	Water	3510C	
LCS 720-233244/2-A	Lab Control Sample	Total/NA	Water	3510C	

HPLC/IC

Analysis Batch: 233176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Total/NA	Water	300.0	
720-82853-4	MW-2	Total/NA	Water	300.0	
720-82853-5	MW-3	Total/NA	Water	300.0	
720-82853-6	MW-4	Total/NA	Water	300.0	
720-82853-7	MW-5	Total/NA	Water	300.0	
720-82853-8	MW-6	Total/NA	Water	300.0	
720-82853-9	MW-10	Total/NA	Water	300.0	
MB 720-233176/29	Method Blank	Total/NA	Water	300.0	
LCS 720-233176/30	Lab Control Sample	Total/NA	Water	300.0	
720-82853-3 MS	MW-1	Total/NA	Water	300.0	
720-82853-3 MSD	MW-1	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 233177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Total/NA	Water	300.0	
720-82853-3	MW-1	Total/NA	Water	300.0	
720-82853-4	MW-2	Total/NA	Water	300.0	
720-82853-5	MW-3	Total/NA	Water	300.0	
720-82853-6	MW-4	Total/NA	Water	300.0	
720-82853-7	MW-5	Total/NA	Water	300.0	
720-82853-8	MW-6	Total/NA	Water	300.0	
720-82853-9	MW-10	Total/NA	Water	300.0	
MB 720-233177/29	Method Blank	Total/NA	Water	300.0	
LCS 720-233177/30	Lab Control Sample	Total/NA	Water	300.0	
720-82853-3 MS	MW-1	Total/NA	Water	300.0	
720-82853-3 MSD	MW-1	Total/NA	Water	300.0	

Metals

Filtration Batch: 233280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Dissolved	Water	FILTRATION	
720-82853-4	MW-2	Dissolved	Water	FILTRATION	
720-82853-5	MW-3	Dissolved	Water	FILTRATION	
720-82853-6	MW-4	Dissolved	Water	FILTRATION	
720-82853-7	MW-5	Dissolved	Water	FILTRATION	
720-82853-8	MW-6	Dissolved	Water	FILTRATION	
720-82853-9	MW-10	Dissolved	Water	FILTRATION	
MB 720-233280/1-B	Method Blank	Dissolved	Water	FILTRATION	
720-82853-3 MS	MW-1	Dissolved	Water	FILTRATION	
720-82853-3 MSD	MW-1	Dissolved	Water	FILTRATION	

Prep Batch: 233366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Dissolved	Water	3005A	233280
720-82853-4	MW-2	Dissolved	Water	3005A	233280
720-82853-5	MW-3	Dissolved	Water	3005A	233280
720-82853-6	MW-4	Dissolved	Water	3005A	233280
720-82853-7	MW-5	Dissolved	Water	3005A	233280
720-82853-8	MW-6	Dissolved	Water	3005A	233280
720-82853-9	MW-10	Dissolved	Water	3005A	233280
MB 720-233280/1-B	Method Blank	Dissolved	Water	3005A	233280
MB 720-233366/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 720-233366/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
720-82853-3 MS	MW-1	Dissolved	Water	3005A	233280
720-82853-3 MSD	MW-1	Dissolved	Water	3005A	233280

Analysis Batch: 233477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Dissolved	Water	6010B	233366
720-82853-4	MW-2	Dissolved	Water	6010B	233366
720-82853-5	MW-3	Dissolved	Water	6010B	233366
720-82853-6	MW-4	Dissolved	Water	6010B	233366
720-82853-7	MW-5	Dissolved	Water	6010B	233366

Metals (Continued)

Analysis Batch: 233477 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-8	MW-6	Dissolved	Water	6010B	233366
720-82853-9	MW-10	Dissolved	Water	6010B	233366
MB 720-233280/1-B	Method Blank	Dissolved	Water	6010B	233366
MB 720-233366/1-A	Method Blank	Total Recoverable	Water	6010B	233366
LCS 720-233366/2-A	Lab Control Sample	Total Recoverable	Water	6010B	233366
720-82853-3 MS	MW-1	Dissolved	Water	6010B	233366
720-82853-3 MSD	MW-1	Dissolved	Water	6010B	233366

General Chemistry

Analysis Batch: 233172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-82853-3	MW-1	Total/NA	Water	SM 2320B	
720-82853-4	MW-2	Total/NA	Water	SM 2320B	
720-82853-5	MW-3	Total/NA	Water	SM 2320B	
720-82853-6	MW-4	Total/NA	Water	SM 2320B	
720-82853-7	MW-5	Total/NA	Water	SM 2320B	
720-82853-8	MW-6	Total/NA	Water	SM 2320B	
720-82853-9	MW-10	Total/NA	Water	SM 2320B	
MB 720-233172/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 720-233172/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 720-233172/4	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
720-82853-3 DU	MW-1	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Client Sample ID: TB-1
Date Collected: 10/31/17 00:00
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233432	11/06/17 15:15	JRM	TAL PLS

Client Sample ID: FB-1
Date Collected: 10/31/17 10:05
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233432	11/06/17 15:45	JRM	TAL PLS

Client Sample ID: MW-1
Date Collected: 10/31/17 09:19
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233432	11/06/17 16:15	JRM	TAL PLS
Total/NA	Prep	3510C			233482	11/06/17 14:25	BRR	TAL PLS
Total/NA	Analysis	8270C SIM		1	233515	11/07/17 00:27	MQL	TAL PLS
Total/NA	Prep	3510C			233244	11/01/17 15:51	BRR	TAL PLS
Total/NA	Analysis	8015B		1	233190	11/01/17 21:28	JXL	TAL PLS
Total/NA	Analysis	300.0		1	233177	10/31/17 21:34	ECB	TAL PLS
Total/NA	Analysis	300.0		10	233176	10/31/17 21:52	ECB	TAL PLS
Total/NA	Analysis	300.0		10	233177	10/31/17 21:52	ECB	TAL PLS
Dissolved	Filtration	FILTRATION			233280	11/02/17 10:03	JNG	TAL PLS
Dissolved	Prep	3005A			233366	11/03/17 09:16	JNG	TAL PLS
Dissolved	Analysis	6010B		1	233477	11/06/17 11:49	BKR	TAL PLS
Total/NA	Analysis	SM 2320B		1	233172	10/31/17 16:04	TNL	TAL PLS

Client Sample ID: MW-2
Date Collected: 10/31/17 10:22
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233432	11/06/17 16:45	JRM	TAL PLS
Total/NA	Analysis	8260B		5	233527	11/07/17 12:45	JRM	TAL PLS
Total/NA	Prep	3510C			233482	11/06/17 14:25	BRR	TAL PLS
Total/NA	Analysis	8270C SIM		1	233515	11/07/17 00:50	MQL	TAL PLS
Total/NA	Prep	3510C			233244	11/01/17 15:51	BRR	TAL PLS
Total/NA	Analysis	8015B		1	233190	11/01/17 21:53	JXL	TAL PLS
Total/NA	Analysis	300.0		1	233176	10/31/17 22:43	ECB	TAL PLS
Total/NA	Analysis	300.0		1	233177	10/31/17 22:43	ECB	TAL PLS
Dissolved	Filtration	FILTRATION			233280	11/02/17 10:03	JNG	TAL PLS
Dissolved	Prep	3005A			233366	11/03/17 09:16	JNG	TAL PLS

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Client Sample ID: MW-2

Date Collected: 10/31/17 10:22
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010B		1	233477	11/06/17 11:53	BKR	TAL PLS
Total/NA	Analysis	SM 2320B		1	233172	10/31/17 16:16	TNL	TAL PLS

Client Sample ID: MW-3

Date Collected: 10/31/17 09:08
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233432	11/06/17 17:15	JRM	TAL PLS
Total/NA	Analysis	8260B		5	233527	11/07/17 13:14	JRM	TAL PLS
Total/NA	Prep	3510C			233482	11/06/17 14:25	BRR	TAL PLS
Total/NA	Analysis	8270C SIM		1	233515	11/07/17 01:14	MQL	TAL PLS
Total/NA	Prep	3510C			233244	11/01/17 15:51	BRR	TAL PLS
Total/NA	Analysis	8015B		1	233190	11/01/17 22:17	JXL	TAL PLS
Total/NA	Analysis	300.0		1	233176	10/31/17 23:17	ECB	TAL PLS
Total/NA	Analysis	300.0		1	233177	10/31/17 23:17	ECB	TAL PLS
Dissolved	Filtration	FILTRATION			233280	11/02/17 10:03	JNG	TAL PLS
Dissolved	Prep	3005A			233366	11/03/17 09:16	JNG	TAL PLS
Dissolved	Analysis	6010B		1	233477	11/06/17 11:57	BKR	TAL PLS
Total/NA	Analysis	SM 2320B		1	233172	10/31/17 16:23	TNL	TAL PLS

Client Sample ID: MW-4

Date Collected: 10/31/17 07:56
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233432	11/06/17 17:45	JRM	TAL PLS
Total/NA	Analysis	8260B		1	233527	11/07/17 12:17	JRM	TAL PLS
Total/NA	Prep	3510C			233482	11/06/17 14:25	BRR	TAL PLS
Total/NA	Analysis	8270C SIM		1	233515	11/07/17 01:38	MQL	TAL PLS
Total/NA	Prep	3510C			233244	11/01/17 15:51	BRR	TAL PLS
Total/NA	Analysis	8015B		1	233190	11/01/17 22:41	JXL	TAL PLS
Total/NA	Analysis	300.0		1	233176	10/31/17 23:51	ECB	TAL PLS
Total/NA	Analysis	300.0		1	233177	10/31/17 23:51	ECB	TAL PLS
Dissolved	Filtration	FILTRATION			233280	11/02/17 10:03	JNG	TAL PLS
Dissolved	Prep	3005A			233366	11/03/17 09:16	JNG	TAL PLS
Dissolved	Analysis	6010B		1	233477	11/06/17 12:09	BKR	TAL PLS
Total/NA	Analysis	SM 2320B		1	233172	10/31/17 16:31	TNL	TAL PLS

Client Sample ID: MW-5

Lab Sample ID: 720-82853-7

Date Collected: 10/31/17 10:24

Matrix: Water

Date Received: 10/31/17 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233527	11/07/17 13:44	JRM	TAL PLS
Total/NA	Analysis	8260B		5	233527	11/07/17 15:15	JRM	TAL PLS
Total/NA	Prep	3510C			233482	11/06/17 14:25	BRR	TAL PLS
Total/NA	Analysis	8270C SIM		1	233515	11/07/17 02:01	MQL	TAL PLS
Total/NA	Prep	3510C			233244	11/01/17 15:51	BRR	TAL PLS
Total/NA	Analysis	8015B		1	233190	11/01/17 23:05	JXL	TAL PLS
Total/NA	Analysis	300.0		1	233176	11/01/17 01:00	ECB	TAL PLS
Total/NA	Analysis	300.0		1	233177	11/01/17 01:00	ECB	TAL PLS
Dissolved	Filtration	FILTRATION			233280	11/02/17 10:03	JNG	TAL PLS
Dissolved	Prep	3005A			233366	11/03/17 09:16	JNG	TAL PLS
Dissolved	Analysis	6010B		1	233477	11/06/17 12:13	BKR	TAL PLS
Total/NA	Analysis	SM 2320B		1	233172	10/31/17 16:37	TNL	TAL PLS

Client Sample ID: MW-6

Lab Sample ID: 720-82853-8

Date Collected: 10/31/17 08:14

Matrix: Water

Date Received: 10/31/17 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233527	11/07/17 14:12	JRM	TAL PLS
Total/NA	Analysis	8260B		1	233527	11/07/17 15:44	JRM	TAL PLS
Total/NA	Prep	3510C			233482	11/06/17 14:25	BRR	TAL PLS
Total/NA	Analysis	8270C SIM		1	233515	11/07/17 02:25	MQL	TAL PLS
Total/NA	Prep	3510C			233244	11/01/17 15:51	BRR	TAL PLS
Total/NA	Analysis	8015B		1	233190	11/01/17 23:29	JXL	TAL PLS
Total/NA	Analysis	300.0		1	233176	11/01/17 01:34	ECB	TAL PLS
Total/NA	Analysis	300.0		1	233177	11/01/17 01:34	ECB	TAL PLS
Dissolved	Filtration	FILTRATION			233280	11/02/17 10:03	JNG	TAL PLS
Dissolved	Prep	3005A			233366	11/03/17 09:16	JNG	TAL PLS
Dissolved	Analysis	6010B		1	233477	11/06/17 12:18	BKR	TAL PLS
Total/NA	Analysis	SM 2320B		1	233172	10/31/17 16:43	TNL	TAL PLS

Client Sample ID: MW-10

Lab Sample ID: 720-82853-9

Date Collected: 10/31/17 10:27

Matrix: Water

Date Received: 10/31/17 12:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233527	11/07/17 14:41	JRM	TAL PLS
Total/NA	Analysis	8260B		5	233527	11/07/17 16:12	JRM	TAL PLS
Total/NA	Prep	3510C			233482	11/06/17 14:25	BRR	TAL PLS
Total/NA	Analysis	8270C SIM		1	233515	11/07/17 02:49	MQL	TAL PLS
Total/NA	Prep	3510C			233244	11/01/17 15:51	BRR	TAL PLS
Total/NA	Analysis	8015B		1	233190	11/01/17 23:54	JXL	TAL PLS

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Client Sample ID: MW-10

Date Collected: 10/31/17 10:27
Date Received: 10/31/17 12:17

Lab Sample ID: 720-82853-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	233176	11/01/17 02:09	ECB	TAL PLS
Total/NA	Analysis	300.0		1	233177	11/01/17 02:09	ECB	TAL PLS
Dissolved	Filtration	FILTRATION			233280	11/02/17 10:03	JNG	TAL PLS
Dissolved	Prep	3005A			233366	11/03/17 09:16	JNG	TAL PLS
Dissolved	Analysis	6010B		1	233477	11/06/17 12:22	BKR	TAL PLS
Total/NA	Analysis	SM 2320B		1	233172	10/31/17 17:02	TNL	TAL PLS

Laboratory References:

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

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc. TestAmerica Job ID: 720-82853-1
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

Laboratory: TestAmerica Pleasanton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-18

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
300.0	Anions, Ion Chromatography	MCAWW	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
SM 2320B	Alkalinity	SM	TAL PLS

Protocol References:

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

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Nestle-Dryer's Grand Ice Cream, Glendale

TestAmerica Job ID: 720-82853-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-82853-1	TB-1	Water	10/31/17 00:00	10/31/17 12:17
720-82853-2	FB-1	Water	10/31/17 10:05	10/31/17 12:17
720-82853-3	MW-1	Water	10/31/17 09:19	10/31/17 12:17
720-82853-4	MW-2	Water	10/31/17 10:22	10/31/17 12:17
720-82853-5	MW-3	Water	10/31/17 09:08	10/31/17 12:17
720-82853-6	MW-4	Water	10/31/17 07:56	10/31/17 12:17
720-82853-7	MW-5	Water	10/31/17 10:24	10/31/17 12:17
720-82853-8	MW-6	Water	10/31/17 08:14	10/31/17 12:17
720-82853-9	MW-10	Water	10/31/17 10:27	10/31/17 12:17

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566-4756
phone 925.484.1919 fax 925.600 3002

Chain of Custody Record for Haley & Aldrich, Inc. Blanket Service Agreement #2015-18-TestAmerica

179306

720-82853

TestAmerica

TestAmerica Laboratories, Inc.

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2015-18-TestAmerica by and between Haley & Aldrich, Inc., its subsidiaries and affiliates, and TestAmerica Laboratories Inc.

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

11/7/2017 (Rev. 1)

Client Contact	**H&A Project Manager:** Mike Calhoun	**H&A Site Contact:** Tyler Ketron	**Date:** 10-30-17	COC No:
Nestle USA	**Tel/Fax:** 510-879-4554	**Lab Contact:** Micah Smith	**Carrier:** Deliver to Lab	1 of 1 COCs
Address	**Analysis Turnaround Time**			Sampler:
Glendale, CA	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
Phone	TAT if different from Below ____			Walk-in Client:
FAX	☐ 2 weeks			Lab Sampling:
H&A Project Number : 130654	☑ 1 week			
Site Nestle - Dreyer's Grand Ice Cream	☐ 2 days			Job / SDG No..
H&A P O # 130654-003 SID 1	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TPHg Full list EPA 8260B	TPHd and TPHmo EPA 8015M	PAHs EPA 8270C	Nitrate and Sulfate EPA 300.0	Fe & Mn (Dissolved in lab EPA 6010B)	Alkalinity SM 2320B	Sample Specific Notes:
TB-1	10/31/17	—	G	W	3	N	N	X						Please filter the metal samples before analysis
FB-1	10/31/17	1005	G	W	3	N	N	X						
MW-1	10/31/17	0819	G	W	9	N	N	X	X	X	X	X	X	
MW-2	10/31/17	1022	G	W	9	N	N	X	X	X	X	X	X	
MW-3	10/31/17	0903	G	W	9	N	N	X	X	X	X	X	X	
MW-4	10/31/17	0750	G	W	9	N	N	X	X	X	X	X	X	
MW-5	10/31/17	1024	G	W	9	N	N	X	X	X	X	X	X	
MW-6	10/31/17	0814	G	W	9	N	N	X	X	X	X	X	X	
MW-10	10/31/17	1027	G	W	9	N	N	X	X	X	X	X	X	

720-82853 Chain of Custody

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

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

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

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

Special Instructions/QC Requirements & Comments: Please provide Haley & Aldrich format EDD and Geotracker format EDF (ID # T0600100466)

5.6 °C

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd. ____ Corr'd ____		Therm ID No.. ____
Relinquished by:	Company: H.S.I.	Date/Time: 10/31/17 1247	Received by:	Company: TA	Date/Time: 10/31/17 1247
Relinquished by	Company	Date/Time.	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by	Company	Date/Time

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-82853-1

Login Number: 82853
List Number: 1
Creator: Alcantara, Michael A

List Source: TestAmerica Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	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	

APPENDIX C

Survey Data

KISTER, SAVIO, AND REI LS8178
KSR JOB # 19853 SURVEY DATE: OCTOBER 23, 2017
HALEY & ALDRICH - 5929 COLLEGE AVE.
OAKLAND,CALIF

KSR PT.NO.	NAD 83 NORTHING	NAD 83 EASTING	LATITUDE	LONGITUDE	NAVD 88 ELEV.	DESCRIPTION
10026	2135962.41	6055594.26	37.8479589	-122.2528098	194.49	MW-1/2"PVC
10025					195.89	MW-1/CONC
10024					195.89	MW-1/RIM
10014	2135719.04	6055595.82	37.8472908	-122.2527886	191.15	MW-2/4"PVC
10016					192.28	MW-2/P
10015					192.28	MW-2/RIM
10006	2135647.71	6055712.11	37.8471009	-122.2523813	190.57	MW-3/4"PVC
10008					191.43	MW-3/GR
10007					191.52	MW-3/RIM
10003	2135635.05	6055677.14	37.8470643	-122.2525015	190.13	MW-4/2"PVC
10005					190.59	MW-4/GR
10004					190.71	MW-4/RIM
10017	2135703.00	6055562.77	37.8472450	-122.2529020	190.14	MW-5/2"PVC
10019					190.41	MW-5/P
10018					190.45	MW-5/RIM
10009	2135677.65	6055767.95	37.8471859	-122.2521899	192.60	MW-6/4"PVC
10011					192.83	MW-6/GR
10010					192.89	MW-6/RIM

APPENDIX D

Historical Groundwater Elevation Data

TABLE D-1
HISTORICAL GROUNDWATER ELEVATION DATA
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well ID	Top of Casing Elevation (feet NAVD88)[1]	Date	Depth to Groundwater (feet BTOC)[2]	Groundwater Elevation (feet NAVD88)[c]
MW1	194.49	8/12/91	14.86	179.63
		12/4/91	16.16	178.33
		4/24/92	11.93	182.56
		5/4/92	12.15	182.34
		6/17/92	13.17	181.32
		7/15/92	13.66	180.83
		8/31/92	14.91	179.58
		9/14/92	15.18	179.31
		10/22/92	15.34	179.15
		11/20/92	15.27	179.22
		12/3/92	14.44	180.05
		1/18/93	7.85	186.64
		2/10/93	9.29	185.20
		3/10/93	9.88	184.61
		4/20/93	10.13	184.36
		6/2/93	10.82	183.67
		7/9/93	11.62	182.87
		8/10/93	12.31	182.18
		10/8/93	13.68	180.81
		11/10/93	14.72	179.77
		12/8/93	14.28	180.21
		1/21/94	14.30	180.19
		2/2/94	13.06	181.43
		3/25/94	12.26	182.23
		4/29/94	12.55	181.94
		5/20/94	12.59	181.90
		6/6/94	12.96	181.53
		7/27/94	13.81	180.68
		8/30/94	14.29	180.20
		9/20/94	14.55	179.94
		10/13/94	14.83	179.66
		11/15/94	11.00	183.49
		12/6/94	11.33	183.16
		1/31/95	8.14	186.35
		2/28/95	10.16	184.33
		3/14/95	7.90	186.59
		6/27/95	10.31	184.18

TABLE D-1
HISTORICAL GROUNDWATER ELEVATION DATA
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well ID	Top of Casing Elevation (feet NAVD88)[1]	Date	Depth to Groundwater (feet BTOC)[2]	Groundwater Elevation (feet NAVD88)[c]
MW1 (continued)	194.49	8/3/95	11.11	183.38
		8/31/95	11.80	182.69
		9/28/95	12.39	182.10
		12/8/95	14.04	180.45
		1/30/96	9.99	184.50
		2/8/96	8.64	185.85
		3/22/96	9.61	184.88
		4/17/96	9.73	184.76
		5/31/96	9.99	184.50
		6/28/96	10.75	183.74
		7/31/96	11.31	183.18
		8/30/96	11.85	182.64
		9/27/96	12.46	182.03
		10/3/96	12.55	181.94
		12/9/96	9.10	185.39
		10/27/98	12.40	182.09
		3/16/99	9.66	184.83
		6/4/99	10.94	183.55
		10/31/17	13.12	181.37
MW2	191.15	8/12/91	12.26	178.89
		12/4/91	12.30	178.85
		4/24/92	10.00	181.15
		5/4/92	10.29	180.86
		6/17/92	10.86	180.29
		7/15/92	11.48	179.67
		8/31/92	12.02	179.13
		9/14/92	12.34	178.81
		10/22/92	12.37	178.78
		11/20/92	11.64	179.51
		12/3/92	11.95	179.20
		1/18/93	5.86	185.29
		2/10/93	8.20	182.95
		3/10/93	8.57	182.58
		4/20/93	8.95	182.20
		6/2/93	9.10	182.05
		7/9/93	8.35	182.80
		8/10/93	8.45	182.70

TABLE D-1
HISTORICAL GROUNDWATER ELEVATION DATA
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well ID	Top of Casing Elevation (feet NAVD88)[1]	Date	Depth to Groundwater (feet BTOC)[2]	Groundwater Elevation (feet NAVD88)[c]
MW2 (continued)	191.15	10/8/93	10.19	180.96
		11/10/93	11.15	180.00
		12/8/93	11.13	180.02
		1/21/94	11.40	179.75
		2/2/94	9.85	181.30
		3/25/94	10.05	181.10
		4/29/94	9.86	181.29
		5/20/94	9.68	181.47
		6/6/94	10.27	180.88
		7/27/94	10.32	180.83
		8/30/94	11.01	180.14
		9/20/94	11.34	179.81
		10/13/94	11.42	179.73
		11/15/94	8.92	182.23
		12/6/94	8.79	182.36
		1/31/95	5.91	185.24
		2/28/95	9.01	182.14
		3/14/95	5.95	185.20
		6/27/95	8.84	182.31
		8/3/95	9.16	181.99
		8/31/95	9.26	181.89
		9/28/95	9.97	181.18
		12/8/95	10.31	180.84
		1/30/96	6.93	184.22
		2/8/96	5.90	185.25
		3/22/96	8.30	182.85
		4/17/96	7.91	183.24
		5/31/96	8.08	183.07
		6/28/96	8.75	182.40
		7/31/96	9.40	181.75
		8/30/96	9.85	181.30
		9/27/96	10.51	180.64
		10/3/96	10.37	180.78
		12/9/96	8.15	183.00
		10/27/98	9.55	181.60
		3/16/99	7.55	183.60
		6/4/99	8.30	182.85

TABLE D-1
HISTORICAL GROUNDWATER ELEVATION DATA
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well ID	Top of Casing Elevation (feet NAVD88)[1]	Date	Depth to Groundwater (feet BTOC)[2]	Groundwater Elevation (feet NAVD88)[c]
MW2	191.15	10/31/17	11.03	180.12
MW3	190.57	8/12/91	11.73	178.84
		12/4/91	11.65	178.92
		4/24/92	11.00	179.57
		5/4/92	11.09	179.48
		6/17/92	11.51	179.06
		7/15/92	11.84	178.73
		8/31/92	11.70	178.87
		9/14/92	11.74	178.83
		10/22/92	11.33	179.24
		11/20/92	10.58	179.99
		12/3/92	10.12	180.45
		1/18/93	8.42	182.15
		2/10/93	9.94	180.63
		3/10/93	10.19	180.38
		4/20/93	10.22	180.35
		6/2/93	10.73	179.84
		7/9/93	10.03	180.54
		8/10/93	8.32	182.25
		10/8/93	10.53	180.04
		11/10/93	11.22	179.35
		12/8/93	11.79	178.78
		1/21/94	12.02	178.55
		2/2/94	11.48	179.09
		3/25/94	11.26	179.31
		4/29/94	11.47	179.10
		5/20/94	11.16	179.41
		6/6/94	11.55	179.02
		7/27/94	9.78	180.79
		8/30/94	11.50	179.07
		9/20/94	11.74	178.83
		10/13/94	11.52	179.05
		11/15/94	10.28	180.29
		12/6/94	11.19	179.38
		1/31/95	8.91	181.66
		2/28/95	11.35	179.22
		3/14/95	9.96	180.61

TABLE D-1
HISTORICAL GROUNDWATER ELEVATION DATA
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well ID	Top of Casing Elevation (feet NAVD88)[1]	Date	Depth to Groundwater (feet BTOC)[2]	Groundwater Elevation (feet NAVD88)[c]
MW3 (continued)	190.57	6/27/95	7.15	183.42
		8/3/95	11.02	179.55
		8/31/95	11.10	179.47
		9/28/95	11.21	179.36
		12/8/95	10.79	179.78
		1/30/96	10.18	180.39
		2/8/96	8.94	181.63
		3/22/96	10.75	179.82
		4/17/96	10.42	180.15
		5/31/96	10.72	179.85
		6/28/96	11.54	179.03
		7/31/96	11.55	179.02
		9/27/96	12.05	178.52
		10/3/96	12.11	178.46
		12/9/96	11.17	179.40
		10/27/98	10.84	179.73
		3/16/99	9.90	180.67
		6/4/99	11.49	179.08
		10/31/17	10.56	180.01
MW4	190.13	10/8/93	10.29	179.84
		11/10/93	11.14	178.99
		12/8/93	11.82	178.31
		1/21/94	12.07	178.06
		2/2/94	11.41	178.72
		3/25/94	11.03	179.10
		4/29/94	11.50	178.63
		5/20/94	11.13	179.00
		6/6/94	11.56	178.57
		7/27/94	9.57	180.56
		8/30/94	11.21	178.92
		9/20/94	11.56	178.57
		10/13/94	11.40	178.73
		11/15/94	9.83	180.30
		12/6/94	10.85	179.28
		1/31/95	8.53	181.60
		2/28/95	10.95	179.18
		3/14/95	9.81	180.32

TABLE D-1
HISTORICAL GROUNDWATER ELEVATION DATA
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well ID	Top of Casing Elevation (feet NAVD88)[1]	Date	Depth to Groundwater (feet BTOC)[2]	Groundwater Elevation (feet NAVD88)[c]
MW4 (continued)	190.13	6/27/95	10.90	179.23
		8/3/95	11.18	178.95
		8/31/95	10.97	179.16
		9/28/95	11.08	179.05
		12/8/95	10.63	179.50
		1/30/96	9.90	180.23
		2/8/96	8.59	181.54
		3/22/96	10.37	179.76
		4/17/96	10.22	179.91
		5/31/96	10.38	179.75
		6/28/96	11.45	178.68
		7/31/96	11.28	178.85
		8/30/96	12.10	178.03
		9/27/96	12.23	177.90
		10/3/96	12.25	177.88
		12/9/96	10.54	179.59
		10/27/98	10.97	179.16
		3/16/99	9.63	180.50
		6/4/99	11.62	178.51
		10/31/17	10.70	179.43
MW5	190.14	10/8/93	9.84	180.30
		11/10/93	10.53	179.61
		12/8/93	10.69	179.45
		1/21/94	11.22	178.92
		2/2/94	8.80	181.34
		3/25/94	9.75	180.39
		4/29/94	9.00	181.14
		5/20/94	9.29	180.85
		6/6/94	9.74	180.40
		7/27/94	9.88	180.26
		8/30/94	10.44	179.70
		9/20/94	10.56	179.58
		10/13/94	10.87	179.27
		11/15/94	8.17	181.97
		12/6/94	7.98	182.16
		1/31/95	5.09	185.05
		2/28/95	8.48	181.66

TABLE D-1
HISTORICAL GROUNDWATER ELEVATION DATA
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well ID	Top of Casing Elevation (feet NAVD88)[1]	Date	Depth to Groundwater (feet BTOC)[2]	Groundwater Elevation (feet NAVD88)[c]
MW5 (continued)	190.14	3/14/95	5.10	185.04
		6/27/95	8.33	181.81
		8/3/95	8.55	181.59
		8/31/95	8.66	181.48
		9/28/95	9.31	180.83
		12/8/95	9.47	180.67
		1/30/96	6.05	184.09
		2/8/96	5.09	185.05
		3/22/96	7.69	182.45
		4/17/96	7.37	182.77
		5/31/96	7.38	182.76
		6/28/96	8.04	182.10
		7/31/96	8.43	181.71
		8/30/96	9.13	181.01
		9/27/96	9.62	180.52
		10/3/96	9.67	180.47
		12/9/96	6.79	183.35
		10/27/98	9.01	181.13
		3/16/99	6.68	183.46
		6/4/99	7.81	182.33
		10/31/17	10.27	179.87
MW6	192.60	10/8/93	8.23	184.37
		11/10/93	7.74	184.86
		12/8/93	8.53	184.07
		1/21/94	8.46	184.14
		2/2/94	7.84	184.76
		3/25/94	7.72	184.88
		4/29/94	7.64	184.96
		5/20/94	7.60	185.00
		6/6/94	7.91	184.69
		7/27/94	6.90	185.70
		8/30/94	8.10	184.50
		9/20/94	8.17	184.43
		10/13/94	8.21	184.39
		11/15/94	7.62	184.98
		12/6/94	8.15	184.45
		1/31/95	5.75	186.85

TABLE D-1
HISTORICAL GROUNDWATER ELEVATION DATA
DREYERS GRAND ICE CREAM
5929 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Well ID	Top of Casing Elevation (feet NAVD88)[1]	Date	Depth to Groundwater (feet BTOC)[2]	Groundwater Elevation (feet NAVD88)[c]
MW6 (continued)	192.60	2/28/95	7.75	184.85
		3/14/95	5.70	186.90
		6/27/95	7.53	185.07
		8/3/95	7.86	184.74
		8/31/95	7.91	184.69
		9/28/95	8.35	184.25
		12/8/95	8.61	183.99
		1/30/96	6.62	185.98
		2/8/96	5.61	186.99
		3/22/96	7.10	185.50
		4/17/96	7.50	185.10
		5/31/96	7.34	185.26
		6/28/96	8.38	184.22
		7/31/96	10.11	182.49
		8/30/96	9.10	183.50
		9/27/96	9.35	183.25
		10/3/96	9.45	183.15
		12/9/96	10.11	182.49
		10/27/98	7.62	184.98
		3/16/99	5.55	187.05
		6/4/99	7.07	185.53
		10/31/17	9.58	183.02

Notes
1. Top of casing resurveyed by a California licensed surveyor on 23 October 2017.
2. Depth to groundwater measured from top of casing (TOC).
3. Groundwater elevation is relative to the North American Vertical Datum of 1988.

APPENDIX E

Historical Analytical Data

TABLE E-1

SUMMARY OF HISTORICAL ANALYTICAL RESULTS

DREYERS GRAND ICE CREAM

5929 COLLEGE AVENUE

OAKLAND, CALIFORNIA

Results are reported in micrograms per liter (µg/L)

Well ID	Sample Date	TPHg	TPHd	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Naphthalene (SVOC)	Naphthalene (VOC)
2016 Tier 1 ESL		100	100	1.0	13	40	20	0.17	0.17
	08/05/1991	< 50	-	**1.1**	< 0.5	< 0.5	< 0.5	-	-
	12/04/1991	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	03/10/1993	< 50	**85**	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	06/02/1993	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	10/08/1993	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	12/08/1993	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	03/25/1994	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	06/06/1994	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	09/20/1994	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	12/06/1994	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	06/27/1995	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	12/08/1995	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	03/22/1996	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	08/03/1996	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	12/18/1996	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	10/27/1998	< 50	**70**	< 0.5	< 0.5	< 0.5	< 0.5	-	-
	03/16/1999	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	-
MW-01	10/31/2017	< 50	< 51	< 0.50	< 0.50	< 0.50	< 1.0	< 0.10	< 1.0
	08/05/1991	**38,000**	**1,900**	**8,300**	**8,200**	**2,300**	**13,000**	-	-
	12/04/1991	**91,000**	< 50	**6,900**	**6,800**	**3,200**	**25,000**	-	-
	03/10/1993	**59,000**	**89**	**5,800**	**5,300**	**3,100**	**15,000**	-	-
	06/02/1993	**58,000**	< 50	**50**	**68**	**70**	**170**	-	-
	10/08/1993	**56,000**	**110**	**2,800**	**2,400**	**2,900**	**12,000**	-	-
	12/08/1993	**54,000**	< 50	**2,400**	**1,700**	**2,900**	**10,000**	-	-
	03/25/1994	**91,000**	< 50	**1,900**	**1,500**	**2,100**	**8,100**	-	-
	06/06/1994	**7,700**	< 50	**1,900**	**1,300**	**2,300**	**9,400**	-	-
	09/20/1994	**63,000**	< 500	**1,900**	**1,200**	**3,000**	**12,000**	-	-
	12/06/1994	**25,000**	< 50	**1,800**	**910**	**1,800**	**7,600**	-	-
	06/27/1995	**33,000**	< 50	**1,700**	**820**	**2,800**	**9,700**	-	-
	12/08/1995	**37,000**	< 50	**1,400**	**850**	**2,700**	**9,700**	-	-
	06/28/1996	**30,000**	< 50	**1,000**	**450**	**2,600**	**4,700**	-	-
	12/18/1996	**34,000**	< 50	**930**	**420**	**2,100**	**6,500**	-	-
	10/27/1998	**21,000**	**11,000**	**370**	**120**	**1,900**	**2,600**	-	**320**
	03/16/1999	**16,000**	**4,900**	**400**	**86**	**2,300**	**1,400**	-	**190**
	06/04/1999	**21,000**	**4,300**	**380**	**74**	**2,300**	**1,200**	**150**	-
MW-02	10/31/2017	**4,500**	**1,300**	**3.3**	**1.1**	**9.6**	**6.3**	**1.2**	**1.3**
	08/05/1991	**3,300**	**800**	**3,900**	**95**	**160**	**150**	-	-
	12/04/1991	**10,000**	< 50	**3,300**	**88**	**80**	**130**	-	-
	03/10/1993	**8,100**	< 50	**2,000**	**31**	**240**	**30**	-	-
	06/02/1993	**14,000**	< 50	**11**	**13**	**16**	**49**	-	-
	10/08/1993	**7,600**	< 50	**2,400**	< 10	**49**	< 10	-	-
	12/08/1993	**3,800**	< 50	**340**	**3.9**	**29**	**13**	-	-
	03/25/1994	**5,700**	< 50	**500**	**10**	**21**	**25**	-	-
	06/06/1994	**12,000**	< 50	**1,100**	**23**	**33**	**43**	-	-
	09/20/1994	**5,200**	< 50	**1,100**	**22**	**32**	**42**	-	-
	12/06/1994	**4,100**	< 50	**790**	**16**	**23**	**45**	-	-
	06/27/1995	**11,000**	< 50	**2,700**	**65**	**74**	**72**	-	-
	12/08/1995	**8,100**	< 50	**1,600**	**40**	**70**	**91**	-	-
	06/28/1996	**7,100**	< 50	**2,600**	**28**	**48**	**55**	-	-
	12/18/1996	**8,100**	< 50	**1,400**	**33**	**60**	**44**	-	-
	10/27/1998	**7,100**	**2,200**	**1,500**	**57**	**46**	**47**	-	-
	03/16/1999	**5,600**	**1,500**	**1,000**	**200**	**88**	**80**	-	**12**
	06/04/1999	**4,300**	**640**	**580**	**63**	**57**	**6.7**	< 2	-
MW-03	10/31/2017	**3,400**	**930**	**130**	**5.0**	**2.9**	**13**	**1.3**	**1.6**

TABLE E-1

SUMMARY OF HISTORICAL ANALYTICAL RESULTS

DREYERS GRAND ICE CREAM

5929 COLLEGE AVENUE

OAKLAND, CALIFORNIA

Results are reported in micrograms per liter (µg/L)

Well ID	Sample Date	TPHg	TPHd	Benzene	Toluene	Ethylbenzene	Xylenes (total)	Naphthalene (SVOC)	Naphthalene (VOC)
2016 Tier 1 ESL		100	100	1.0	13	40	20	0.17	0.17
	10/08/1993	**1,400**	< 50	< 0.5	< 0.5	**2.9**	**3.1**	-	-
	12/08/1993	**2,800**	< 50	**460**	< 0.5	**3.8**	**3.8**	-	-
	03/25/1994	**1,600**	< 50	**94**	**1.7**	**4.4**	**5.6**	-	-
	06/06/1994	**12,000**	< 50	**3,100**	**15**	**11**	**13**	-	-
	09/20/1994	**1,900**	< 50	**6.2**	**2.4**	**7.1**	**8.7**	-	-
	12/06/1994	**1,000**	< 50	**0.7**	< 0.5	**14**	**17**	-	-
	06/27/1995	**720**	< 50	< 0.5	< 0.5	**5.2**	**24**	-	-
	12/08/1995	**840**	< 50	< 0.5	< 0.5	**4.2**	< 0.5	-	-
	03/22/1996	**820**	< 50	**3.4**	< 0.5	**3.3**	**10**	-	-
	08/03/1996	**870**	< 50	**7.3**	**2.7**	**5.4**	**14**	-	-
	12/18/1996	**1,100**	< 50	**2.1**	**2.9**	**4.6**	**8.8**	-	-
	10/27/1998	**600**	**480**	**4.2**	**5.5**	**6.4**	**8.2**	-	-
	03/16/1999	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	-	< 2.1
	06/04/1999	**410**	**300**	< 0.5	**3.7**	**8.0**	**1.1**	< 2	-
MW-04	10/31/2017	< 50	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.10	< 1.0
	10/08/1993	**31,000**	< 50	**4,000**	**1,200**	**1,800**	**5,100**	-	-
	12/08/1993	**25,000**	< 50	**2,600**	**110**	**1,700**	**2,400**	-	-
	03/25/1994	**41,000**	< 50	**2,400**	**500**	**1,400**	**2,800**	-	-
	06/06/1994	**42,000**	< 50	**2,500**	**320**	**1,700**	**3,000**	-	-
	09/20/1994	**23,000**	< 50	**2,100**	**170**	**1,500**	**2,400**	-	-
	12/06/1994	**16,000**	< 50	**800**	**35**	**1,300**	**1,600**	-	-
	06/27/1995	**25,000**	< 50	**3,200**	**750**	**2,500**	**7,900**	-	-
	12/08/1995	**21,000**	< 50	**2,700**	**200**	**2,400**	**4,300**	-	-
	03/22/1996	**22,000**	< 50	**2,100**	**260**	**2,000**	**3,500**	-	-
	08/30/1996	**26,000**	< 50	**2,400**	**480**	**2,600**	**6,600**	-	-
	12/18/1996	**23,000**	< 50	**1,500**	**97**	**2,000**	**2,100**	-	-
	10/27/1998	**22,000**	**9,300**	**1,200**	**140**	**2,200**	**2,600**	-	**320**
	03/16/1999	**400**	**3,100**	**38**	**2.2**	**45**	**14**	-	**110**
	06/04/1999	**23,000**	**3,100**	**1,700**	**120**	**2,800**	**1,500**	**120**	-
MW-05	10/31/2017	**3,500**	**1,200**	**7.4**	**1.4**	**42**	**5.7**	**2.7**	**4.4**
	10/08/1993	**2,100**	< 50	**85**	< 0.5	**70**	**190**	-	-
	12/08/1993	**3,800**	< 50	**74**	< 0.5	**210**	**150**	-	-
	03/25/1994	**460**	< 50	**9.6**	**27**	**15**	**11**	-	-
	06/06/1994	**440**	< 50	**8.4**	**1.00**	**4.9**	**3.0**	-	-
	09/20/1994	**490**	< 50	**4.5**	**0.6**	**12**	**2.4**	-	-
	12/06/1994	**730**	< 50	**28**	**15**	**86**	**11**	-	-
	06/27/1995	**660**	< 50	**11**	< 0.5	**20**	**22**	-	-
	12/08/1995	**1,100**	< 50	**23**	< 0.5	**69**	**52**	-	-
	06/28/1996	**200**	< 50	**3.2**	< 0.5	**6.5**	**5.0**	-	-
	12/18/1996	**770**	< 50	**7.3**	**1.4**	**12**	**16**	-	-
	10/27/1998	**1,200**	**910**	**8.4**	**2.7**	**12**	**4.1**	-	-
	03/16/1999	**1,500**	**760**	**7.6**	**2.3**	**6.2**	**6.1**	-	-
	06/04/1999	**1,800**	**760**	**14**	**4.00**	**8.2**	**2.6**	-	-
MW-06	10/31/2017	< 50	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.10	< 1.0

Notes:

Results in **bold** indicate the analyte was detected in the sample above the reporting limit

"<" indicates the analyte was not detected in the sample above the reporting limit shown

Where primary/duplicate results exist, the higher concentration is shown

2016 Regional Water Quality Control Board (RWQCB) Tier 1 Environmental Screening Levels (ESL) used for reference value.

APPENDIX F

Quality Assurance/Quality Control Data

Haley & Aldrich, Inc.
600 South Meyer Ave
Suite 100
Tucson, AZ 85701
520.289.8621

Data Usability Summary Report

Level II

Project Name: Nestle – Dreyer's Grand Ice Cream

Analytical Laboratory: TestAmerica Laboratories, Inc. – Pleasanton, CA

Validation Performed by: Vanessa Boocher

Haley & Aldrich, Inc. prepared this Data Usability Report (DUSR) to summarize the review and validation of the Nestle – Dreyer's Grand Ice Cream groundwater samples collected on 31 October 2017. Analytical results for each Sample Delivery Group (SDG) below were reviewed with guidance provided by the United States Environmental Protection Agency (EPA) to determine the data's usability. This data validation and usability assessment was performed per the guidance and requirements established by the EPA National Functional Guidelines for Inorganic Data Review and the EPA National Functional Guidelines for Organic Data Review. The following quality assurance/quality control (QA/QC) criteria from the analysis of the project samples were reviewed as applicable:

1. Sample Delivery Group Number 720-82853-1

- Holding Times/Preservation
- Reporting Limits and Sample Dilution
- Blank Sample Analysis
- Surrogate Recovery Compliance
- Laboratory Control Samples
- Matrix Spike Samples
- Field and Laboratory Duplicate Samples
- Use of Laboratory Data Qualifiers

Analytical precision and accuracy were evaluated based on the laboratory control, matrix spike, or lab duplicate analyses performed concurrently with the project samples.

Data reported in this sampling event were reported to the laboratory reporting limit (RL).

Sample data were qualified by the laboratory in accordance with standard operating procedures (SOPs). Based on a check of the data qualifiers assigned as project sample results, these flags were applied to the reported results in accordance with the laboratory-specific SOPs. The results presented in each laboratory report were found to be compliant with the data quality objectives (DQOs) for the project and usable; any exceptions are noted in the following pages.

1. Sample Delivery Group Number 720-82853-1

1.1 SUMMARY

This DUSR summarizes the review of SDG number 720-82853-1. Samples were collected, preserved, and shipped following standard chain of custody protocol. Samples were also received appropriately, identified correctly, and analyzed according to the monitoring schedule. Chains of custody were appropriately signed and dated by the field and/or laboratory personnel, with the following exceptions:

- Custody seals were not utilized on the sample cooler or sample containers.
- A lab report revision was issued on 11/7/2017 to correct the metals list (Iron and Manganese only).
- The metals fraction was filtered at the laboratory per request.
- Validation report revised 12/12/2017 to account for the blind field duplicate.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Collection Date	Matrix	Methods
TB-1	TB	720-82853-1	10/31/2017	Quality Control	VOCs and GRO only
FB-1	FB	720-82853-2	10/31/2017	Quality Control	
MW-1	N	720-82853-3	10/31/2017	Groundwater	VOCs, GRO, DRO, MO, PAHs, Anions, Metals, and Alkalinity
MW-2	N	720-82853-4	10/31/2017	Groundwater	
MW-3	N	720-82853-5	10/31/2017	Groundwater	
MW-4	N	720-82853-6	10/31/2017	Groundwater	
MW-5	N	720-82853-7	10/31/2017	Groundwater	
MW-6	N	720-82853-8	10/31/2017	Groundwater	
MW-10	FD	720-82853-9	10/31/2017	Groundwater	

Holding Times:

Nitrate (as N) & Nitrite (as N) by EPA Method 300 ---------- 48 hours
Nitrate/Nitrite & SO4 by EPA Method 300 ---------- 28 days
Alkalinity Variations by Method SM2320B ---------- 14 days
Dissolved Iron and Manganese by EPA 6010B ---------- 180 days
TPH Diesel and Motor Oil by EPA Method 8015D ---------- 7 days extraction, 40 days analysis
VOCs & GRO by EPA Method 8260B ---------- 14 days
PAHs by EPA Method 8270C SIM ---------- 7 days extraction, 40 days analysis

1.2 HOLDING TIMES/PRESERVATION

The samples were prepared and analyzed within the holding time and preservation criteria specified per EPA protocol.

Cooler temperature on arrival to the laboratory was: 5.6 Degrees C.

1.3 REPORTING LIMITS AND SAMPLE DILUTION

All dilutions were reviewed and found to be justified. Any non-detects with elevated reported limits are noted and explained below. In cases when multiple dilutions are reported per sample, the reviewer chose the lowest dilution with results still within the calibration range and rejected the alternative result.

1.4 BLANK SAMPLE ANALYSIS

Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination. Method blank samples did not have detections, indicating that contamination from laboratory activities did not occur.

Field blanks are prepared to identify contamination that may have been introduced during field activity. Trip blanks are prepared when volatile analysis is requested to identify contamination that may have been introduced during transport. Blank samples for field QC did not have detections, indicating that contamination from field activities did not occur.

1.5 SURROGATE RECOVERY COMPLIANCE

Surrogates, also known as deuterated monitoring compounds, are compounds added to each sample prior to sample preparation to evaluate the percent recovery (%R) to ensure that the organic analytical method is efficient. The percent recoveries were within the limits specified by the EPA, with the following exceptions:

- Surrogate Terphenyl-d14 for method 8270C SIM recovered low in sample MW-10 at 43%. Qualify targeted analytes J-/UJ.

1.6 LABORATORY CONTROL SAMPLES

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. Compounds associated with the LCS/LCSD analyses exhibited recoveries and relative percent difference (RPD) within the control limits specified by the SOPs.

1.7 MATRIX SPIKE SAMPLES

Matrix spike/matrix spike duplicate (MS/MSD) data are used to assess the precision and accuracy of the analytical method and evaluate the effect of the sample matrix on the sample preparation procedures and measurement methodologies. The below samples were used for MS/MSD:

Lab Sample Number	Matrix Spike/ Matrix Spike Duplicate Sample Client ID	Method(s)
720-82853-3	MW-1	EPA 300 (Anions), EPA 6010B (Metals)

The MS/MSD recoveries and the RPD between the MS and MSD results were within the acceptance limits specified by the EPA.

1.8 LABORATORY AND FIELD DUPLICATE SAMPLES

The laboratory duplicate sample analysis is used by the laboratory at the time of analysis to demonstrate acceptable method precision. The following sample was used for laboratory duplicate analysis and the RPDs were all below 20%.

- Sample MW-1 was used as a laboratory duplicate for Alkalinity by method SM2320B.

The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The RPD comparison for any field duplicates in this SDG are shown below.

Field Duplicate RPD Calculations:

Method: EPA 300				
Analyte (mg/L)	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
	MW-2	**MW-10**		
Nitrate (as N)	0.23 U	0.23 U	NA	None, Both ND
Nitrite (as N)	**0.89**	**0.91**	NA	None, Abs. Diff. < RL
Nitrite/Nitrate	**0.89**	**0.91**	NA	None, Abs. Diff. < RL
Sulfate	1.0 U	1.0 U	NA	None, Both ND
Method: EPA 2320B				
Analyte (mg/L)	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
	MW-2	**MW-10**		
Alkalinity, Hydroxide	5.0 U	5.0 U	NA	None, Both ND
Alkalinity, Bicarbonate	**370**	**370**	0.0	None, RPD < 35%
Alkalinity, Carbonate	5.0 U	5.0 U	NA	None, Both ND
Alkalinity, Total (as CaCO3)	**370**	**370**	0.0	None, RPD < 35%
Method: EPA 6010B				
Analyte (mg/L)	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
	MW-2	**MW-10**		
Dissolved Iron	1.0 U	1.0 U	NA	None, Both ND
Dissolved Manganese	**6.4**	**6.2**	3.2	None, RPD < 35%
Method: EPA 8015D				
Analyte (ug/L)	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
	MW-2	**MW-10**		
TPH Diesel	**1100**	**1300**	16.7	None, RPD < 35%
TPD Motor Oil	110 U	100 U	NA	None, Both ND
Method: EPA 8260B (Detects Only)				
Analyte (ug/L)	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
	MW-2	**MW-10**		
1,2,4-Trimethylbenzene	**0.75**	**0.78**	NA	None, Abs. Diff. < RL
1,3,5-Trimethylbenzene	**2.5**	**2.5**	0.0	None, RPD < 35%
Sec-Butylbenzene	1.0 U	**9.2**	NA	**J-Flag, Abs. Diff. > RL**
Benzene	**3.3**	**3.0**	9.5	None, RPD < 35%
Ethylbenzene	**9.6**	**8.9**	7.6	None, RPD < 35%
Isopropylbenzene (Cumene)	**26**	**25**	3.9	None, RPD < 35%
Naphthalene	**1.2**	**1.3**	NA	None, Abs. Diff. < RL
n-Butylbenzene	**18**	**19**	5.4	None, RPD < 35%
n-Propylbenzene	**49**	**47**	4.2	None, RPD < 35%
tert-Butylbenzene	**43**	**45**	4.5	None, RPD < 35%
Toluene	**1.1**	**1.0**	NA	None, Abs. Diff. < RL
TPH (C4-C12)	**4500**	**2600**	**53.5**	**J-Flag, RPD > 35%**
Xylene (total)	**6.3**	**6.1**	3.2	None, RPD < 35%
Method: EPA 8270SIM (Detects Only)				
Analyte (ug/L)	**Primary Sample ID**	**Duplicate Sample ID**	**% RPD**	**Qualification**
	MW-2	**MW-10**		
Acenaphthene	**0.26**	**0.31**	NA	None, Abs. Diff. < RL
Fluorene	**0.21**	**0.24**	NA	None, Abs. Diff. < RL
Naphthalene	**1.0**	**1.2**	18.2	None, RPD < 35%

1.9 USE OF LABORATORY DATA QUALIFIERS

The results presented in this report were found to be compliant with the DQOs for the project and the guidelines specified by the analytical methods and EPA. Based on the review of this report, the data are 100% useable. A summary of qualifiers applied to this SDG are shown below.

Sample ID	Analyte	Reported Result	Validated Result	Reason for Qualifier
MW-10	Anthracene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Benzo(a)anthracene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Benzo(a)pyrene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Benzo(b)fluoranthene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Benzo(g,h,i)perylene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Benzo(k)fluoranthene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Chrysene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Dibenz(a,h)anthracene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Fluoranthene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Indeno(1,2,3-cd)pyrene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Phenanthrene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-10	Pyrene	0.10 U	0.10 UJ	Low Surrogate Recovery
MW-2	Sec-Butylbenzene	1.0 U	1.0 UJ	Field Duplicate Incongruence
MW-10	Sec-Butylbenzene	9.2	9.2 J	Field Duplicate Incongruence
MW-2	TPH (C4-C12)	4500	4500 J	Field Duplicate Incongruence
MW-10	TPH (C4-C12)	2600	2600 J	Field Duplicate Incongruence

References

1. United States Environmental Protection Agency ,2017a. National Functional Guidelines for Inorganic Superfund Methods Data Review. EPA-540-R-2017-001. January.
2. United States Environmental Protection Agency, 2017b. National Functional Guidelines for Organic Superfund Methods Data Review. EPA-540-R-2017-002. January.

Glossary

Laboratory qualified and unqualified data are verified against the supporting documentation during the review process. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with EPA National Functional Guidelines:

- Concentration (C) Qualifiers:
  - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
  - B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers:
  - E The compound was quantitated above the calibration range.
  - D The concentration is based on a diluted sample analysis.
- Validation Qualifiers:
  - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
  - J+ The result is an estimated quantity, but the result may be biased high.
  - J- The result is an estimated quantity, but the result may be biased low.
  - UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is approximate and may or may not represent the actual limit of quantitation.
  - JN The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is therefore an estimated concentration only.
  - R The sample results were rejected as unusable; the compound may or may not be present in the sample.
- Sample Types:
  - N Primary Sample
  - FD Field Duplicate Sample
  - FB Field Blank Sample
  - EB Equipment Blank Sample
  - TB Trip Blank Sample

APPENDIX G

Low-Threat Case Closure Evaluation

TABLE G-1
LOW-THREAT UNDERGROUND STORAGE TANK CLOSURE POLICY CRITERIA
DREYER'S GRAND ICE CREAM FACILITY
OAKLAND, CALIFORNIA

CRITERIA	DESCRIPTION	DOES THE SITE MEET THE CRITERIA?	COMMENTS/NOTES
General Criteria			
A.	The unauthorized release is located within the services area of a public water system.	Y	Water supplied by East Bay Municipal Utility District - no action needed.
B.	The unauthorized release consists only of petroleum:	Y	Underground storgage tanks (USTs) removed from the site contained gasoline, diesel, and waste oil. Sampling conducted at the Site, including the most recent groundwater monitoring event, indicate that petroleum fuel-related compounds such as TPHg, TPHd, and BTEX are the chemicals of concern.
C.	The unauthorized (primary) release from the UST system has been stopped.	Y	Between December 1989 and February 1990, seven underground fuel and waste oil storage tanks and approximately 500 to 550 cubic yards of impacted soil were removed from the Site.
D.	Free product has been removed to the maximum extent practicable.	N/A	Historical and recent groundwater monitoring do not indicate the presence of free product at the Site.
E.	A conceptual site model that assesses the nature, extent, and mobility of the release has been developed.	Y	A conceptual site model is included as Section 4 of this report.
F.	Secondary source has been removed to the extent practicable	Y	Soil impacted with diesel, gasoline, and waste oil removed in 1989 through 1990.
G.	Soil or groundwater has been tested for MTBE and results reported in accordance with H&S Code 25296.15	Y	In 1999 groundwater samples were analyzed for MTBE. No detections were reported. There are no available records of soil samples analyzed for MTBE at the site. In October 2017 groundwater samples were collected and analyzed for MTBE; no detections were reported.
H.	Nuisance as defined by Water Code section 13050 does not exist at the Site	Y	No nuisance exists at the Site.
Media-Specific Criteria			
Groundwater (Must meet the general and one of the 5 other criteria below)			
General	Groundwater plume is stable or decreasing	Y	Historical and current analytical results generally show decreasing concentrations, by several orders of magnitude in some cases; this indicates that the plume is stable or decreasing.
1	The contaminant plume that exceeds water quality objectives is <100 feet in length	Y	The downgradient edge of the plume is defined by MW4, within approximately 50 feet downgradient of the former excavation area. Although MW5 is cross-gradient of MW4, based on the rapid attenuation with distance at MW4, the plume does not likely extend far beyond MW5.
	There is no free product		There is no free product based on historical and current sampling results.
	The nearest existing water supply well or surface water body is >250 feet from the plume boundary		There is no surface water body within one mile of the downgradient edge of the Site; based on a review of the State's Geotracker GAMA database and recent reports for nearby sites, the closest water supply well is 0.5 miles downgradient of the Site.
2	The contaminant plume that exceeds water quality objectives is <250 feet in length	Y	The downgradient edge of the plume is defined by MW4, within approximately 50 feet downgradient of the former excavation area. Although MW5 is cross-gradient of MW4, based on the rapid attenuation with distance at MW4, the plume does not likely extend far beyond MW5.
	There is no free product		There is no free product based on historical and current sampling results
	The nearest existing water supply well or surface water body is >1,000 feet from the plume boundary		There is no surface water body within one mile of the downgradient edge of the Site; based on a review of the State's Geotracker GAMA database, there are no water supply wells within one mile of the site.
	The dissolved concentrations of benzene is <3,000 ug/L, and dissolved MTBE is <1,000 ug/L		This condition is met.

TABLE G-1
LOW-THREAT UNDERGROUND STORAGE TANK CLOSURE POLICY CRITERIA
DREYER'S GRAND ICE CREAM FACILITY
OAKLAND, CALIFORNIA

CRITERIA	DESCRIPTION	DOES THE SITE MEET THE CRITERIA?	COMMENTS/NOTES
3	The contaminant plume that exceeds water quality objectives is <250 feet in length	Y	The downgradient edge of the plume is defined by MW4, within approximately 50 feet downgradient of the former excavation area. Although MW5 is cross-gradient of MW4, based on the rapid attenuation with distance at MW4, the plume does not likely extend far beyond MW5.
	Free product has been removed to the maximum extent practicable, may still be present below the Site where the release originated, but does not extend off-Site		There is no free product based on historical and current sampling results
	The plume has been stable or decreasing for a minimum of 5 years		Historical and current analytical results generally shown decreasing concentrations, by several orders of magnitude in some cases; this indicates that the plume is stable or decreasing.
	The nearest existing water supply well or surface water body is >1,000 feet from the plume boundary		There is no surface water body within one mile of the downgradient edge of the Site; based on a review of the State's Geotracker GAMA database and recent reports for nearby sites, the closest water supply well is 0.5 miles downgradient of the Site.
	The property owner is willing to accept a land use restriction if the regulatory agency requires one as a condition of case closure		This condition is acceptable to the property owner.
4	The contaminant plume that exceeds water quality objectives is <1,000 feet in length	Y	The downgradient edge of the plume is defined by MW4, within approximately 50 feet downgradient of the former excavation area. Although MW5 is cross-gradient of MW4, based on the rapid attenuation with distance at MW4, the plume does not likely extend far beyond MW5.
	There is no free product		There is no free product based on historical and current sampling results
	The nearest existing water supply well or surface water body is >1,000 feet from the plume boundary		There is no surface water body within one mile of the downgradient edge of the Site; based on a review of the State's Geotracker GAMA database and recent reports for nearby sites, the closest water supply well is 0.5 miles downgradient of the Site.
	The dissolved concentrations of benzene is <1,000 ug/L, and dissolved MTBE is <1,000 ug/L		This condition is met.
5	The regulatory agency determines, based on an analysis of Site-specific conditions, that under current and reasonable anticipated near-term future scenarios, the plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame.	**Potentially; to be determined by ACDEH**	The analytical results obtained from the sampling event conducted on 31 October 2017 clearly demonstrate a decreasing trend in concentrations of TPH and BTEX compounds in groundwater over time. As described in Section 4, water quality objectives (Tier 1 ESLs) can likely be achieved in perimeter monitoring wells within a reasonable time frame. Moreover, geochemical conditions (ORP, DO) and the analytical results for nitrate, sulfate, and dissolved manganese indicate that natural attenuation is occuring. The generally low permability subsurface soil materials suggests low groundwater velocities and COC mass flux. Lastly, there is little risk to human health (via direct contact/drinking) or the environment (as there are no surface water bodies near the Site.
Vapor Intrusion to Indoor Air (one of the following must apply)			
A. (cont. on next page)	Scenario 1: LNAPL is present in groundwater, but is separated from building foundation by 30 feet vertically with soil containing <100 mg/kg TPH	Y (cont. on next page)	Not applicable - there is no free product based on historical and current sampling results.
	Scenario 2: LNAPL in present in soil, but is separated from building foundation by 30 feet (laterally and vertically) with soil containing <100 mg/kg TPH		Not applicable - there is no free product based on historical and current sampling results.
	Scenario 3a: If no soil oxygen data is available, a minimum vertical separation of 5 feet (benzene in GW <100 ug/L) or 10 feet (benzene in GW between 100 and 1000 ug/L) between groundwater and building foundation, with soil containing <100 mg/kg TPH		No soil oxygen data is available. Benzene concentrations are below 100 ug/L in all wells except MW3 (130 ug/L; Table 3), and the average depth to water historically is greater than 10 feet (Appendix D). Limited soil analytical data is available; however with the exception of MW3 (which may have been installed in former excavation backfill), concentrations of TPH in soil are below 100 mg/kg.
	Senario 3b: if soil oxygen is >4%, groundwater is separated from building foundation by 5 feet vertically with soil containing <100 mg/kg TPH (only for GW <1,000 ug/L)		Not applicable - no soil oxygen data is available.

TABLE G-1
LOW-THREAT UNDERGROUND STORAGE TANK CLOSURE POLICY CRITERIA
DREYER'S GRAND ICE CREAM FACILITY
OAKLAND, CALIFORNIA

CRITERIA	DESCRIPTION	DOES THE SITE MEET THE CRITERIA?	COMMENTS/NOTES
A.	Senario 4a: If soil gas data is available, meet the criteria with no bioattenuation zone		Not applicable - no soil vapor data is available
(cont.)	Senario 4b: If soil gas data is available, meet the criteria with bioattenuation zone	Y	Not applicable - no soil vapor data is available
B.	A site-specific risk assessment for the VI pathway is conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency	N/A	A site-specific risk assessment has not been conducted; however, a comparison of groundwater concentrations to Vapor Intrusion ESLs (Table 3) indicates that concentrations are below applicable ESLs for all wells except MW3.
C.	As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, the agency determines that petroleum vapors migrating from soil or GW will have no significant risk of adversely affecting human health.	**Potentially; to be determined by ACDEH**	If ACDEH determines that vapor intrusion is a potential concern, mitigation measure or institutional/engineering controls can be proposed to mitigate the risk to human health.
Direct Contact/Outdoor Air (one of the following must apply)			
a	Concentrations of petroleum constituents in soil meet the Criteria in Table 1 of the policy	**Potentially**	Historical soil samples collected at 10 feet meet the criteria for benzene and ethylbenzene; no soil data for naphthalene or other PAHs is available. However, based on the low concentrations of PAHs in groundwater (less than 5 ug/L; Table 3), it is unlikely that concentrations in soil are present above the criteria listed in Table 1 of the policy.
b	Max concentrations of petroleum constituents in soil are less than levels that a site-specific risk assessment demonstrates will have no sigificant risk of adversely affecting human health	N/A	Not applicable - a site-specific risk assessment has not been conducted.
c	As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, the agency determines that concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health.	**Potentially; to be determined by ACDEH**	If ACDEH determines that direct contact or exposure via outdoor air is a potential concern, mitigation measure or institutional/engineering controls can be proposed to mitigate the risk to human health.