First Quarter 2016 Groundwater Monitoring and Sampling Report

Maryland Square PCE Site

3661 South Maryland Parkway
Las Vegas, Nevada
Facility ID: H-000086

ATC Project No. NPMMA16002

Prepared for
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April 18, 2016

ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

Executive Summary

April 18, 2016

Herman Kishner Trust
c/o Mr. Tom Vandenberg, Esq.
707 Wilshire Boulevard, 45th Floor
Los Angeles, California 90017

Re: First Quarter 2016 Groundwater Monitoring and Sampling Report
Maryland Square PCE Site
3661 South Maryland Parkway
Las Vegas, Nevada
NDEP Facility ID No. H-000086

Dear Mr. Vandenberg:

ATC Group Services LLC (ATC) is submitting this report documenting the results of a recent quarterly groundwater monitoring event conducted at the Maryland Square PCE Site (site). The groundwater monitoring was conducted to evaluate dissolved chlorinated ethenes, specifically tetrachloroethene (PCE), detected in the soil and groundwater in the vicinity of the above referenced site in accordance with requests from the Nevada Division of Environmental Protection (NDEP).

Work Performed First Quarter 2016

ATC performed quarterly monitoring and sampling activities at 59 of the 59 site groundwater monitoring wells.

Current Phase of Project:	Monitoring and Sampling
Frequency of Sampling:	Groundwater: Select Wells Quarterly (Semi-annual or Annual for 2016)
Frequency of Monitoring:	Groundwater: Select Wells Quarterly (Semi-annual or Annual for 2016)
Purge Water Removed This Quarter:	96.80 gallons
Approximate Depth to Groundwater:	19.11 ft btoc
Groundwater Gradient:	Site Monitoring Network: 0.013 feet/foot
Groundwater Flow Direction:	Site Monitoring Network: East
Groundwater Analytical Methods:	Select VOCs by EPA 8260B, metals by EPA 6020, and hexavalent chromium (Cr(VI)) by EPA 218.6
Monitoring Wells Sampled with PCE Concentrations Greater than 5.0 µg/L:	42 of 59 monitoring points
Maximum PCE Concentration (µg/L):	11,000 (MW-14I)
Monitoring Wells Sampled with PCE Concentrations Greater than 5.0 µg/L Previous Quarter:	12 of 18 monitoring points
Maximum PCE Concentration Previous Quarter (µg/L):	9,400 (MW-14I)

Historical groundwater elevation data and analytical results are summarized in Table A-1. Current groundwater elevation data and analytical results are summarized in Table A-2. Site figures and groundwater analytical isoconcentration maps, are included as Figures 1 and 2. Groundwater field sampling forms and laboratory analytical reports are included in Appendix A and B, respectively. Mann-Kendall Trend Tests for Plume Stability are included in Appendix C.

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1 Background

The source area for the Maryland Square tetrachloroethene (PCE) Site is located at 3661 South Maryland Parkway in Las Vegas, Nevada. The source area is the location of a former dry cleaner (Al Phillips the Cleaner) that was contained within the former Maryland Square Shopping Center. Al Phillips the Cleaner operated at the site from 1969 through 2000.

The parent parcel for the former shopping center is located at the northwest corner of Maryland Parkway and Twain Avenue, and lies within the Southeast ¼ of the Northeast ¼ of Section 15, Township 21 South, Range 61 East. This parcel is designated as assessor's parcel number (APN) 162-15-602-009 and is a 6.57-acre tract of land. The parcel lies northwest of the corner of South Maryland Parkway and East Twain Avenue.

Properties surrounding the former Maryland Square Shopping Center consist primarily of commercial developments, as well as some residential areas. The Boulevard Mall lies directly east of the source area, across South Maryland Parkway. A residential neighborhood and a golf course are located east of The Boulevard Mall.

The initial spill report for PCE in groundwater was reported to NDEP in November 2000. The contamination was discovered during environmental investigations being performed for a property transaction. A soil boring installed during the initial environmental investigation at the former shopping center was converted into a monitoring well (MW-1). Analysis of the groundwater sample collected from MW-1 found 2,300 micrograms per liter (µg/L) or parts per billion (ppb) of PCE in groundwater. This concentration of PCE exceeded Nevada's action level of 5 µg/L, as defined in NAC445A.2273.5(1)(c), which adopts the primary maximum contamination level (MCL) of 5 µg/L for PCE in drinking water, as defined by the U.S. Environmental Protection Agency (EPA).

From 2000 through 2004, additional soil borings and monitoring wells were installed at the former Maryland Square Shopping Center and to the east on the Boulevard Mall property in an attempt to find the eastern extent of the PCE plume. In February, the parent company (DCI) of the former dry cleaners accepted responsibility for the PCE contamination and assumed control of assessment activities, using URS Corporation (URS) to perform additional characterization and groundwater monitoring.

In March 2005, after not finding the eastern extent of the PCE plume on mall property, URS installed five monitoring wells within the residential neighborhood east of the Boulevard Mall (see: http://ndep.nv.gov/pce/graphic/2012_Map_Well_History.pdf). Concentrations of PCE exceeded the action level (5 µg/L) in groundwater samples collected from three of these five wells, with the highest concentration at 1,430 µg/L. In 2006, two additional wells were installed farther east in the neighborhood, and groundwater samples from the wells confirmed the presence of the PCE plume in groundwater beneath the neighborhood.

In early 2007, the NDEP performed vapor transport modeling using the analytical data for wells within the neighborhood. The results of modeling indicated the potential for unacceptable level of PCE vapors in indoor air, via the process of vapor intrusion. In response to a NDEP requirement to sample soil gas for PCE, URS conducted a soil vapor study in March 2007. Soil borings were installed along three transects across the inferred extent of the PCE plume; one transect in the eastern parking lot of the Boulevard Mall, and two within the residential neighborhood east of the mall. Soil gas samples were collected at multiple depths within each boring. The concentrations of PCE in soil vapor samples ranged from not detected to 170,000 micrograms per cubic meter (µg/m3), with the maximum concentration measured for a vapor sample collected at 20 feet bgs from boring SVB-14.

The dry cleaner's parent company (DCI) declared bankruptcy in July 2008, and URS discontinued work at the site. Converse, on behalf of the Trust, resumed quarterly monitoring as required by the NDEP. Converse continued with monitoring until July 2010, when field activities and responsibilities were transferred from Converse to Tetra Tech EM Inc. (Tetra Tech) during the second quarter of 2010. Groundwater monitoring

protocol and procedures used by Converse and accepted by NDEP were continued to maintain data consistency.

On December 27, 2010, the U.S District Court issued a Permanent Injunction that dictated the schedule for remediation of source-area soils and PCE-contaminated groundwater across the site. The injunction also decreed that groundwater monitoring should continue based on the schedule previously defined by the NDEP.

Responsibilities for groundwater monitoring and sampling were transferred from Tetra Tech to ATC (formerly ATC Associates) in the fourth quarter of 2011. Tetra Tech continued to provide the Trust with support for indoor air testing and performed field pilot testing for groundwater remedies in early 2013. Pilot testing focused on in situ chemical oxidation (ISCO).

Based on the 2007 NDEP vapor transport modeling, NDEP has instituted an indoor air sampling program for residents within the plume that are potentially affected by vapor intrusion within their homes. Rounds of testing were performed in 2007/2008, 2012, 2014, and 2015. Indoor air sampling has shown that the largest potential for vapor intrusion concerns are those residents that are within the 100 µg/L boundary of the PCE plume. Residents with home PCE indoor air concentrations exceeding the interim-action level of 32 $\mu g/m^3$ were offered sub-slab depressurization systems (SSD) to mitigate the vapor intrusion concerns. To date, there have been 17 SSDs installed within homes.

As of the date of this quarterly report, there are 59 monitoring wells (some of which include nested and multi-depth wells) located across the site. The site spans approximately 6,000 feet in length, from the source area to the terminus of the plume, as defined by the 5 µg/L boundary.

Additional information, including the full administrative record detailing correspondence with NDEP can be found at http://ndep.nv.gov/pce/maryland_square.htm and clicking on the Administrative Record link.

2 Groundwater Monitoring and Sampling

NDEP has directed monitoring of the site-related groundwater monitoring well network as outlined in its response letter to the Converse report titled “Groundwater Monitoring Report, 3rd Quarter 2009, Maryland Square Shopping Center,” dated December 22, 2009.

Select monitoring wells are sampled in 2015 on a quarterly, semi-annual, or annual basis as per agreement with NDEP. The sampling schedule is based on the relative PCE concentrations detected in individual monitoring wells in addition to the proximity of a monitoring well to the ascertained plume area. The 2015 sampling schedule has been modified and approved by NDEP.

The NDEP modified the sampling schedule in response to ATC’s request in the “Fourth Quarter 2013 Groundwater Monitoring and Sampling Report,” dated January 28, 2014. The letter proposed that the 2014 monitoring be revised to include all site wells as the annual sampling event. The NDEP concurred with ATC’s recommended sampling schedule, with minor changes, in the response letter dated February 21, 2014. The sampling schedule is expected to continue in 2016.

The NDEP approved annual sampling schedule for monitoring wells in the groundwater monitoring program is as follows:

- First Quarter – MW-1 through MW-3, MW-5 through MW-39, MW-40 (all depths), MW-41, MW-42, MW-43 MW-14I, MW-19I, MW-6D1, MW-6D2, MW-6D3, MW-19D1, MW-19D2, MW-19D3, MW-20D1, MW-20D2, and MW-20D3.
- Second Quarter – MW-1, MW-5, MW-6, MW-18, MW-38, MW-41, MW-42, MW-43, MW-14I, MW-19I, MW-6D1, MW-19D1, MW-19D2, MW-19D3, MW-20D2, MW-40 CMT-30, MW-40 CMT-45, and MW-40 CMT-60 (plus any newly installed wells).
- Third Quarter – MW-1, MW-5, MW-6, MW-7, MW-9, MW-13, MW-14, MW-18, MW-19, MW-23, MW-25, MW-26, MW-27, MW-32, MW-38, MW-41, MW-42, MW-43, MW-14I, MW-19I, MW-6D1, MW-6D3, MW-19D1, MW-19D2, MW-19D3, MW-20D1, MW-20D2, MW-20D3, MW-40 CMT-30, MW-40 CMT-45, and MW-40 CMT-60 (plus any newly installed wells).
- Fourth Quarter – MW-1, MW-5, MW-6, MW-18, MW-38, MW-41, MW-42, MW-43, MW-14I, MW-19I, MW-6D1, MW-19D1, MW-19D2, MW-19D3, MW-20D2, MW-40 CMT-30, MW-40 CMT-45, and MW-40 CMT-60 (plus any newly installed wells).

The groundwater monitoring procedures are consistent with the protocol presented by URS in its August 2007 letter and accepted by NDEP in its September 10, 2007 letter. The prescribed groundwater monitoring protocol used at the site was revised to employ the ASTM D6771-02 method in the fourth quarter of 2007. This sampling method relies on low flow pumping that moderates the velocity of water entering the pump intake from the formation pore water surrounding the well. Minimized stress and turbulence within the water-bearing unit during pumping allows collection of groundwater samples generally considered more representative of water quality in the formation than the conventional method, which calls for evacuation of three well volumes of groundwater using downhole pumps or bailers.

ATC reviewed prior field notes to determine a consistent sampling depth in each well within the monitoring network. The depth chosen was based on the PCE results taken over time. The representative depth was placed on each sampling sheet for the First Quarter 2015 sampling event along with a marking on the dedicated hose in each well casing, and will be carried over for each sampling event, irrespective of the depth to water and total depth measurements. ATC will continue to utilize the depths used this quarter going forward, and sampling depths have been added to Table A.1.

Groundwater parameters (i.e., pH, temperature, dissolved oxygen (DO), oxidation reduction potential (ORP), and electrical conductivity) were measured to evaluate the entrance of actual formation water into the well. ATC

placed the inlet of the pump at the pre-determined depth that will be consistently used at each particular well. Groundwater was pumped at a flow rate of 0.25 L/min. The pump rate was lowered following the stabilization of groundwater parameters to minimize turbulence, and groundwater was transferred to clean laboratory-supplied 40-milliliter glass volatile organic analysis vials (VOAs), sealed, labeled, and placed in a cool environment for transport to an NDEP-certified laboratory for analysis.

The groundwater monitoring procedure for MW-40 CMT wells had to be modified due to the well construction of MW-40 CMT. CMT is a product manufactured by Solinst that stands for continuous multichannel tubing, meaning that there are multiple tubings set at different depths in one borehole. The benefits of a CMT well is that each channel of tubing allows for discrete sampling at a particular depth which in turn gives a three dimensional view of contamination through the entire range of sampling depths, rather than an average of the entire well length. The method used for groundwater sampling all depths of MW-40 CMT was a 3/8 inch Model 408M Micro Double Valve Pump. The double-valve pump is a pneumatic pump which was set to the bottom of each well depth, and pumped at each depth until groundwater parameters stabilized, and then groundwater was transferred to clean laboratory-supplied 40-milliliter glass volatile organic analysis vials (VOAs), sealed, labeled, and placed in a cool environment for transport to an NDEP-certified laboratory for analysis.

Decontamination procedures were performed throughout sampling. The pump, water level meter, and field meter probe were decontaminated after sampling each well. Purge water generated during the sampling of the monitoring wells was containerized in properly labeled steel 55-gallon drums and stored onsite pending off-site disposal.

ATC submitted the collected groundwater samples to an NDEP-certified analytical laboratory for the analysis of volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (EPA) Method 8260B. The analysis of metals (arsenic, chromium, and manganese) using EPA method 6020 for wells MW-19I, MW-40 CMT-55, and MW-40 CMT-60, and the analysis of hexavalent chromium using EPA method 218.6 for wells MW-40 CMT-55 and MW-40 CMT-60 was also performed.

Groundwater data collected during this sampling event are summarized in Table 1 and Table A-1. Monitoring and sampling field sheets are included in Appendix A.

2.1 Deviations

Trip, field, and equipment blanks were sent to the lab along with the groundwater samples collected at each monitoring well in order to insure quality control. ATC also collected a duplicate groundwater sample from monitoring well MW-13.

Laboratory analysis of each groundwater sample produced quantitative data within quality assurance standards. The groundwater extracted from MW-19I remains purple and therefore could not be analyzed for hexavalent chromium.

No laboratory quality control data were flagged outside of established tolerances. The analytical data on water quality for the first quarter were accepted as representative of actual site conditions.

2.2 Groundwater Conditions

Groundwater elevations for this sampling event are summarized in Table 1, while historical groundwater data are summarized in Table A-1. Depths to groundwater in the wells sampled during this quarterly event ranged from 11.98 feet bgs (MW-18) to 26.44 feet bgs (MW-22). The average groundwater elevation of monitored wells (excluding MW-40 CMT-35 through CMT-60) was 1,951.09 feet amsl. There was a 1.05 foot increase when comparing depth to water of similar monitoring wells that had groundwater measurements for both the Fourth Quarter 2015 and First Quarter 2016. A similar increase can be seen in the comparison of Fourth Quarter 2014 and First Quarter 2015. Based on the first quarter results, the local hydraulic gradient across the site is generally toward the east.

DO readings for across the site ranged from 0.10 to 10.41 milligrams per liter (mg/L). As stated by NDEP in the Fourth Quarter 2014 response letter, a DO reading of above 8.0 mg/L is not theoretically possible under the

conditions present at the site. The 10.41 mg/L reading was taken from well MW-40 CMT-55. Anomalous readings have been observed from the MW-40 CMT wells in the past, but the DO reading had remained consistent between readings taken over ten minutes. No other wells exceeded the theoretical DO limit at the site. ORP readings from across the site ranged from -143.30 to 594.40 millivolts (mV).

ATC also noted on the field sheet that the YSI meter was not working properly at MW-27 on April 15th. This was the last well sampled that day, and on the next day a new YSI meter was used for the remainder of the sampling event.

2.2.1 Vertical Gradient Assessment

ATC utilized measured groundwater elevations to determine vertical gradients within two of the five sets of clustered wells at the site (MW-19D and MW-40 CMT). Vertical gradients are measured to determine the upward or downward flow of groundwater. Clustered wells measured will have a deep and shallow well that are screened at different lengths which shows the vertical movement of the water within the adjacent geologic units. The EPA On-Line Vertical Gradient Calculator (https://www3.epa.gov/ceampubl/learn2model/part-two/onsite/vgradient.html) was used to determine the vertical gradient at the various well clusters

Table 2-1 Vertical Gradient Calculation, 1st Quarter 2016

Clustered/ Nested Well	Surface Elevation (feet asml)	Depth to Well Screen (feet bgs)	Screen Length (feet)	Depth to Water (feet bgs)	Magnitude (Screen mid-point value)	Flow Direction
MW-1 MW-9	MW-1: 1992.01 MW-9: 1992.25	MW-1: 10 MW-9: 48.5	MW-1: 20 MW-9: 1.5	MW-1: 19.04 MW-9: 19.31	0.001225	Down
MW-6D1 MW-6D2	MW-6D1: 1988.72 MW-6D2: 1988.72	MW-6D1: 50 MW-6D2: 80	MW-6D1: 10 MW-6D2: 10	MW-6D1: 14.95 MW-6D2: 14.81	0.004667	Up
MW-6D2 MW-6D3	MW-6D2: 1988.72 MW-6D3: 1988.72	MW-6D2: 80 MW-6D3: 100	MW-6D2: 10 MW-6D3: 10	MW-6D2: 14.81 MW-6D3: 13.75	0.05300	**Up**
MW-6D1 MW-6D3	MW-6D1: 1988.72 MW-6D3: 1988.72	MW-6D1: 50 MW-6D3: 100	MW-6D1: 10 MW-6D3: 10	MW-6D1: 14.95 MW-6D3: 13.75	0.06000	**Up**
MW-19D1 MW-19D2	MW-19D1: 1979.25 MW-19D2: 1979.28	MW-19D1: 31 MW-19D2: 60	MW-19D1: 20 MW-19D2: 10	MW-19D1: 24.80 MW-19D2: 26.21	0.05757	Down
MW-19D2 MW-19D3	MW-19D2: 1979.28 MW-19D3: 1979.32	MW-19D1: 60 MW-19D3: 92	MW-19D1: 10 MW-19D3: 10	MW-19D2: 26.21 MW-19D3: 22.36	0.1217	Up
MW-19D1 MW-19D3	MW-19D1: 1979.25 MW-19D3: 1979.32	MW-19D1: 31 MW-19D3: 92	MW-19D1: 20 MW-19D3: 10	MW-19D1: 24.80 MW-19D3: 22.36	0.04488	Up
MW-20D1 MW-20D2	MW-20D1: 1978.81 MW-20D2: 1978.66	MW-20D1: 25 MW-20D2: 55	MW-20D1: 20 MW-20D2: 10	MW-20D1: 24.62 MW-20D2: 25.11	0.02545	Down
MW-20D2 MW-20D3	MW-20D2: 1978.66 MW-20D3: 1978.69	MW-20D2: 55 MW-20D3: 90	MW-20D2: 10 MW-20D3: 10	MW-20D2: 25.11 MW-20D3: 21.66	0.09951	Up

Clustered/ Nested Well	Surface Elevation (feet asml)	Depth to Well Screen (feet bgs)	Screen Length (feet)	Depth to Water (feet bgs)	Magnitude (Screen mid-point value)	Flow Direction
MW-20D1 MW-20D3	MW-20D1: 1978.81 MW-20D3: 1978.69	MW-20D1: 25 MW-20D3: 90	MW-20D1: 20 MW-20D3: 10	MW-20D1: 24.62 MW-20D3: 21.66	0.04724	Up
MW-40 CMT-30 MW-40 CMT-45	MW-40 CMT-30: 1978.49 MW-40 CMT-45: 1978.49	MW-40 CMT-30: 30 MW-40 CMT-45: 45	MW-40 CMT-30: 0.6 MW-40 CMT-45: 0.6	MW-40 CMT-30: 24.44 MW-40 CMT-45: 23.40	0.06933	Up
MW-40 CMT-45 MW-40 CMT-60	MW-40 CMT-45: 1978.49 MW-40 CMT-60: 1978.49	MW-40 CMT-45: 45 MW-40 CMT-60: 60	MW-40 CMT-45: 0.6 MW-40 CMT-60: 0.6	MW-40 CMT-45: 23.40 MW-40 CMT-60: 24.37	0.06467	**Down**
MW-40 CMT-30 MW-40 CMT-60	MW-40 CMT-30: 1978.49 MW-40 CMT-60: 1978.49	MW-40 CMT-30: 30 MW-40 CMT-60: 60	MW-40 CMT-30: 0.6 MW-40 CMT-60: 0.6	MW-40 CMT-30: 24.44 MW-40 CMT-60: 24.37	0.002333	Up

Bold: Direction change from previous quarter measured

2.3 Groundwater Analytical Results

ATC collected groundwater samples on February 15th through February 26th, 2016 from the existing groundwater monitoring wells (MW-1 through MW-3, MW-5 through MW-39, MW-40 (all depths), MW-41, MW-42, MW-43 MW-14I, MW-19I, MW-6D1, MW-6D2, MW-6D3, MW-19D1, MW-19D2, MW-19D3, MW-20D1, MW-20D2, and MW-20D3.) over the vicinity of the site (Figure 2).

Groundwater samples were submitted to Asset Laboratories of Las Vegas, Nevada, an NDEP-certified laboratory, for the analysis of VOCs using EPA method 8260B for samples collected, the analysis of metals (arsenic, chromium, and manganese) using EPA method 6020 for well MW-19I, and the analysis of hexavalent chromium using EPA method 218.6 for wells MW-40 CMT-55, and MW-40 CMT-60.

The laboratory analytical results compared with qualitative changes in groundwater elevation and concentrations are summarized in Table 1. Laboratory analytical reports are provided in Appendix B.

Table 2-2 Groundwater Elevations, Current PCE/TCE Concentrations, and PCE Plume Stability Test

Well ID	Depth to GW Level (feet)	Groundwater Elevation (feet amsl)	PCE (µg/L)	TCE (µg/L)	Mann-Kendall Trend (Since Well Installation)
MW-1	19.04	1972.97	290	<0.50	Decreasing
MW-2	17.54	1965.99	1,400	6.2	Decreasing
MW-3	18.28	1965.53	23	<0.50	**Increasing** (Prob. Increasing 4th quarter 2015)
MW-5	18.21	1970.48	370	1.5	Increasing
MW-6	18.81	1969.31	3,700	9.1	Increasing
MW-6D1	14.95	1973.77	2.0	<0.50	No Trend
MW-6D2	14.81	1975.91	2.6	0.68	No Trend
MW-6D3	13.75	1975.97	30	0.7	Increasing
MW-7	17.00	1973.78	15	<0.50	Increasing
MW-8	19.77	1971.94	2.1	<0.50	Decreasing
MW-9	19.31	1972.94	6.3	<0.50	Decreasing
MW-10	19.88	1963.40	<0.50	<0.50	No Trend
MW-11	25.41	1954.46	<0.50	<0.50	NM
MW-12	14.92	1981.03	0.75	<0.50	No Trend
MW-13	17.16	1966.15	1,700	4.3	Decreasing
MW-14	17.75	1969.58	1,800	4.7	Decreasing
MW-14I	18.31	1969.23	11,000	32	**Prob. Increasing** (No Trend 4th quarter 2015)
MW-15	15.14	1967.60	3.8	<0.50	Stable
MW-16	26.43	1954.10	<0.50	<0.50	NM
MW-17	18.65	1972.39	50	<0.50	Decreasing
MW-18	11.98	1950.92	1,300	3.0	Decreasing
MW-19	25.61	1954.52	1,100	5.2	Prob. Decreasing
MW-19I	24.65	1953.72	110	<0.50	No Trend
MW-19D1	24.80	1954.45	360	1.9	No Trend
MW-19D2	26.21	1953.07	140	1.2	Increasing
MW-19D3	22.36	1956.96	130	0.57	No Trend
MW-20	25.31	1954.51	740	2.5	Decreasing
MW-20D1	24.62	1955.19	410	1.6	Increasing
MW-20D2	25.11	1953.55	170	1.2	Increasing
MW-20D3	21.66	1957.03	2.0	<0.50	No Trend
MW-21	24.59	1954.66	9.3	<0.50	Decreasing
MW-22	26.44	1948.75	<0.50	<0.50	NM
MW-23	16.09	1946.36	790	1.7	Decreasing
MW-24	13.87	1946.95	2.3	<0.50	Decreasing

Well ID	Depth to GW Level (feet)	Groundwater Elevation (feet amsl)	PCE (µg/L)	TCE (µg/L)	Mann-Kendall Trend (Since Well Installation)
MW-25	19.09	1940.20	530	0.57	Decreasing
MW-26	17.19	1937.26	680	0.50	Decreasing
MW-27	14.98	1929.17	350	0.8	No Trend
MW-28	12.82	1930.25	0.78	<0.50	Decreasing
MW-29	14.34	1918.01	<0.50	<0.50	Decreasing
MW-30	17.11	1923.48	63	<0.50	Stable
MW-31	16.46	1921.20	81	<0.50	**Increasing** (Prob. Increasing 4th quarter 2015)
MW-32	18.62	1934.28	650	1.4	Decreasing
MW-33	17.70	1933.28	<0.50	<0.50	Decreasing
MW-34	17.67	1976.21	180	<0.50	Decreasing
MW-35	18.68	1972.69	170	<0.50	Decreasing
MW-36	19.36	1935.94	110	<0.50	Stable
MW-37	19.59	1910.39	41	<0.50	No Trend
MW-38	14.93	1893.45	9.6	<0.50	Increasing
MW-39	24.55	1943.00	190	0.57	Prob. Decreasing
MW-40 CMT-30	24.44	1954.05	15	<0.50	No Trend
MW-40 CMT-35	24.54	1953.95	75	4.9	No Trend
MW-40 CMT-40	24.38	1954.11	340	5.5	**No Trend** (Stable 4th quarter 2015)
MW-40 CMT-45	23.40	1955.09	320	2.1	Stable
MW-40 CMT-50	25.10	1954.39	290	18	**No Trend** (Stable 4th quarter 2015)
MW-40 CMT-55	24.52	1953.97	640	4.4	**No Trend** (Stable 4th quarter 2015)
MW-40 CMT-60	24.37	1954.12	870	8.1	Decreasing
MW-41	14.67	1894.22	4.0	<0.50	Increasing
MW-42	16.31	1894.00	0.54	<0.50	No Trend
MW-43	15.95	1942.38	<0.50	<0.50	Stable

Notes: [1]Mann-Kendall Trend Test was not utilized on MW-11, MW-16, and MW-22 because they had historically been reported under laboratory detection limits
NM = Not sampled and depth to groundwater level measurements not taken
AMSL: Above Mean Sea Level
Bold: Trend change from previous quarter

The groundwater locations selected for quarterly monitoring represent the wells that cover the groundwater conditions at the Maryland Square site. The range of groundwater elevations spanned from 1893.45 feet above mean sea level (AMSL) (MW-38) to 1981.03 feet AMSL (MW-12). Groundwater elevations are summarized in Tables 1, A-1, and A-2.

Groundwater elevations increased in the groundwater monitoring wells located on the Maryland Square property by an average of 0.26 feet compared with levels in similar wells during Fourth Quarter 2015 event. Groundwater elevations increased in the groundwater monitoring wells on Boulevard Mall property by an average of 1.45 feet compared with levels in similar wells during Fourth Quarter 2015 event. Groundwater elevations increased in groundwater monitoring wells located on the surrounding streets and golf course area by 0.46 feet compared with levels in similar wells during Fourth Quarter 2015 event. Application of a large volume of irrigation water at the golf course, especially during summer months, may influence water elevation in shallow groundwater measured in the monitoring wells. This influence is historically observed in MW-27, MW-28, MW-30, MW-31, MW-32, and MW-33.

PCE was detected in all groundwater samples collected from the project monitoring wells except for MW-10, MW-11, MW-16, MW-22, MW-29, MW-33, and MW-43. PCE was detected at concentrations ranging from 0.54 µg/L (MW-42) to 11,000 µg/L (MW-14I). Reported PCE concentrations in the groundwater samples exceeded the maximum contaminant levels (MCL) for PCE in groundwater of 5 µg/L in 42 of 59 wells.

Due to the heterogeneous soil conditions present across the site, it is possible that the pump depth could have been placed in a higher or lower permeability zone that led to varying PCE results in previous quarters. In addition, vertical gradients have changed direction in some of the nested wells indicating that PCE may be also migrating vertically and that concentrations may vary with depth or length of the screen; regarding variability resulting from screen length, screen with greater than 10 feet may impact the effectiveness of low flow sampling. Based on previous pumping depths that had yielded consistent results, ATC designated pump depths that would be used at each monitoring well at the site. The designated pump depth was placed on to the sampling sheets before sampling occurred, so that the pumping depth would remain consistent from quarter to quarter. The dedicated hose present in each well was measured and marked to the proper depth, to ensure consistency for future sampling events. This method produced PCE concentrations during First Quarter 2016 that were consistent with expected values for PCE based on recent historical averages.

Additionally, ATC incorporated a system of custody seals on the site monitoring wells using zip ties. The zip ties were placed in a fashion so cap is secure but if the cap is removed, the zip tie system will come apart and show if any tampering occurred between monitoring events. ATC did not observe evidence of tampering at any monitoring wells that were sampled.

Additional sampling was recommended by NDEP at well MW-19D following pilot testing activities utilizing potassium permanganate. Pilot testing activities seemed to have unintended consequences in the movement of contamination due to the injection that warranted further investigation. The following table shows the results of testing following pilot testing activities that occurred in March 2013.

Table 2-3 Summary of MW-19D Groundwater Testing, 1st Quarter 2013 to 1st Quarter 2016

Well ID	Date	PCE (µg/L)	TCE (µg/L)
MW-19D1	03/08/13	300	2.9
	06/13/13	690	4.2
	09/09/13	990	4.2
	11/08/13	620	3.5
	01/27/14	490	2.4
	02/19/14	210	1.1
	03/12/14	3.7	<0.50
	06/11/14	730	4.2
	09/19/14	240	1.5
	11/18/14	1,000	5.9
	03/15/15	210	1.3
	06/03/15	720	4.6
	09/21/15	820	5.3
	11/18/15	920	5.4
	02/19/16	360	1.9
MW-19D2	03/08/13	170	1.5
	06/13/13	<0.50	<0.50
	09/09/13	<0.50	<0.50
	11/08/13	<0.50	<0.50
	01/27/14	<0.50	<0.50
	02/19/14	<0.50	<0.50
	03/12/14	0.53	<0.50
	06/11/14	6.0	<0.50
	09/19/14	10	<0.50
	11/18/14	39	<0.50
	03/15/15	44	<0.50
	06/03/15	73	<0.50
	09/21/15	110	0.94
	11/18/15	120	1.0
	02/19/16	140	1.2
MW-19D3	03/08/13	0.50	<0.50
	06/13/13	0.68	<0.50
	09/09/13	710	4.8
	11/08/13	160	0.75
	01/27/14	32	<0.50
	02/19/14	36	<0.50
	03/12/14	17	<0.50
	06/11/14	40	<0.50
	09/19/14	710	4.7
	11/28/14	190	3.2
	03/15/15	41	<0.50
	06/03/15	21	<0.50
	09/21/15	590	4.6
	11/18/15	450	4.0
	02/19/16	130	0.57

Shaded row represents results prior to pilot testing
Grey text represents First Quarter 2014 sampling event, not deemed representative of site conditions.

After potassium permanganate pilot testing, by the Third Quarter 2013 sampling event, PCE concentrations had increased significantly at MW-19D1 and MW-19D3 while decreasing significantly at MW-19D2. After monthly and quarterly monitoring of MW-19D1, it appeared that PCE concentrations had either stabilized or were decreasing from the high points observed during the Third Quarter 2013 sampling at MW-19D2 and MW-19D3, but may still

have been increasing at MW-19D1. After the Third Quarter 2014 sampling however, a large increase in PCE concentration occurred in MW-19D3 with a corresponding decrease in MW-19D1. The primary concern from the Third Quarter 2014 sampling event was the substantial increase in PCE concentration noted at MW-19D3, which was previously thought to have stabilized. When the initial spike happened in Third Quarter 2013, it was assumed that the nearby injection of large volumes of potassium permanganate had displaced the existing PCE contamination in the area and caused the PCE plume to travel deeper where it was not formerly thought to exist. ATC notes that spikes have occurred during the third quarter of the year for the third time during Third Quarter 2015. ATC assessed the vertical gradients between MW-19D1 and MW-19D3 for each quarter from First Quarter 2013 to Third Quarter 2014. The vertical gradient between the two wells was “up” every quarter monitored, except for Third Quarter 2013 and Third Quarter 2014 when the vertical gradient was “down”. The same downward trend has been observed again during Third Quarter 2015. Groundwater extraction planned for this area next year should control vertical and horizontal gradients.

A duplicate sample was collected from MW-1. MW-1 PCE concentrations were measured at 1,700 µg/L and 1,700 µg/L, a relative percent difference (RPD) of 0%. The duplicate sample result did not show significant statistical variation based on the levels of the concentrations.

Trichloroethene (TCE) was detected at concentrations ranging from 0.50 µg/L to 32 µg/L in the groundwater samples collected from 28 of the 59 site monitoring wells. The detected concentrations were below the MCL for TCE in groundwater of 5 µg/L, with the exception of MW-2 (6.2 µg/L), MW-6 (9.1 µg/L), MW-14I (32 µg/L), MW-19 (5.2 µg/L), MW-40 CMT 40 (5.5 µg/L), MW-40 CMT 50 (18 µg/L), and MW-40 CMT 60 (8 µg/L).

Cis-1,2-dichloroethene (DCE) was detected in monitoring wells at concentrations ranging from 0.80 µg/L to 26 µg/L in 7 of the 59 site monitoring wells. The detected concentrations were below the MCL for DCE in groundwater of 70 µg/L.

Vinyl chloride (VC) was not detected at concentrations in excess of laboratory detection levels (0.50 µg/L). The presence of trace amounts of TCE and cis-1,2 DCE suggests that reductive dechlorination is not significant at the site.

Metals and hexavalent chromium were also analyzed this quarter, to compare with concentrations obtained by Tetra Tech after pilot tests were conducted using potassium permanganate ($KMnO_4$) and PulseOx in early 2013. The following table shows Tetra Tech data along with concentrations detected during ATC’s successive sampling events.

Table 2-4 Summary of Metals Concentrations in Select Wells, 1st Quarter 2013 to 1st Quarter 2016

Well ID	Date	PCE (µg/L)	Arsenic (µg/L)	Manganese (µg/L)	Chromium (µg/L)	Hexavalent Chromium (µg/L)
MW-19I ($KMnO_4$ Pilot Test, downgradient)	03/08/13	710	2.0	ND	1.6	NA
	03/12/13	280	1.7	2,700	14	NA
	03/26/13	9.4	0.93	27,000	44	NA
	04/04/13	3.5	3	4,700	170	NA
	04/11/13	1.7	0.19	9,400	52	NA
	05/02/13	0.61	1.2	20,000	43	NA
	06/12/13	<0.50	0.34	62,000	87	NA*
	09/09/13	<0.50	0.24	26,000	12	NA*
	11/08/13	<0.50	1.1	48,000	290	NA*
	03/12/14	<0.50	<0.10	51,000	300	NA*
	06/11/14	<0.50	0.97	260,000	370	NA*
	09/18/14	<0.50	<0.10	14,000	260	NA*
	11/18/14	<0.50	<2.5	94,000	260	NA*
	03/04/15	0.62	1.0	54,000	160	NA*
	06/02/15	1.9	0.69	25,000	140	NA*
	09/18/15	<0.50	0.71	6,300	170	NA*
	11/18/15	2.3	NA	NA	NA	NA
	02/19/16	110	1.4	11,000	86	NA
MW-40 CMT-55 (PulseOx Pilot Test, downgradient)	03/25/13	390	1.5	NA	ND	NA
	04/10/13	570	1.6	NA	3.9	NA
	04/23/13	510	1.5	NA	10	NA
	05/01/13	430	2.7	NA	12	NA
	06/17/13	200	1.6	<0.50	26	27
	09/11/13	38	3.4	38	<1.0	0.49
	11/06/13	110	2.4	69	20	11
	03/06/14	130	1.2	380	4.7	5.1
	06/09/14	NS	NS	NS	NS	NS
	09/15/14	NS	NS	NS	NS	NS
	11/17/14	NS	NS	NS	NS	NS
	03/05/15	430	1.8	12	21	22
	06/02/15	NS	NS	NS	NS	NS
	09/23/15	520	NS	NS	NS	NS
	11/18/15	NS	NS	NS	NS	NS
	02/25/16	640	1.2`	<0.50	31	33
MW-40 CMT-60 (PulseOx Pilot Test, upgradient)	03/25/13	1,200	1.8	NA	ND	NA
	04/10/13	1,200	1.7	NA	ND	NA
	04/23/13	1,400	1.5	NA	1.1	NA
	05/01/13	1,200	2.7	NA	2	NA
	06/17/13	1,000	1.4	<0.50	5.7	6.6
	09/11/13	20	2.5	18	<1.0	0.92
	11/06/13	190	0.96	43	3.2	3.7
	03/06/14	360	1.3	470	4.4	1.3
	06/10/14	750	1.2	140	31	18
	09/18/14	700	1.3	290	52	12
	11/19/14	1,000	1.3	<0.50	110	120
	03/05/15	190	1.3	23	61	56
	06/03/15	140	1.1	69	88	80
	09/23/15	690	0.96	9.8	130	130
	11/18/15	8.9	1.2	<1.0	150	150
	02/18/16	870	1.2	<0.50	160	170

Notes: NA=Not Analyzed NS= Not Sampled
ND=Non Detect
Shaded row represents baseline test

Grey text represents First Quarter 2014 sampling event, not deemed representative of site conditions.

*=Sample could not be analyzed for Cr(VI) because sample was saturated with potassium permanganate

The primary metal of concern was the effects of the oxidant on trivalent and hexavalent chromium concentrations in groundwater. ATC performed groundwater testing after the completion of the pilot testing and found elevated levels of chromium in the tested wells, except for MW-19 and MW-20, compared to before pilot testing. Both MW-19 and MW-20 are located upgradient from the pilot testing. ATC also performed analysis of hexavalent chromium (Cr(VI)), because the oxidizing effect of the two treatments has the potential to change the non-toxic, non- mobile Cr(III) into the acutely toxic, mobile Cr(VI). Monitoring well MW-40 CMT-60 showed a concentration of hexavalent chromium of 170 µg/L. Chromium concentrations from well MW-40 CMT-60 was 160 µg/L. Monitoring well MW-40 CMT-60 exceeded the MCL of 100 µg/L for total chromium in groundwater. No MCL has been established for CR(VI), but NDEP has set a basic comparison level (BCL) of 100 µg/L in groundwater, which MW-40 CMT-60 exceeded. Literature suggests that the increase of chromium levels may be a temporary condition. Analysis of metals in MW-40 CMT-55 showed level of chromium to be 31 µg/L. The concentration of hexavalent chromium was 33 µg/L.

The potassium permanganate pilot test led to an expected increase of manganese at MW-19 and MW-19I due to the injection of the solution containing manganese into the groundwater. Manganese levels in MW-19 have steadily decreased to below laboratory detection limits; however monitoring well MW-19I had reported levels of manganese at 11,000 µg/L for the First Quarter 2016, which is still equivalent to the manganese levels observed in the well shortly after the pilot test was conducted. MW-40 CMT 55 and MW-40 CMT 60 were both analyzed for Manganese for First Quarter 2016, and were both found to be below the detection limit of 0.5 µg/L. Manganese has persisted within MW-19I longer than initially anticipated. Chromium concentrations have remained elevated within MW-19I. This condition will continue to be monitored in the future.

The MW-40 CMT wells exhibited increases in PCE concentrations compared with the previous sampling events at each depth. This rebound effect is expected as the levels of manganese decrease. MW-19I was analyzed for manganese this quarter (11,000 mg/kg). PCE concentrations have now been above laboratory detection limits for four of the previous five monitoring events, after being non-detect for six quarters. Although the timeframe of the manganese within the wells lasted significantly longer than previously anticipated, rebound should be expected, especially in the deeper wells that proved difficult to effectively administer the potassium permanganate injection.

2.4 Mann-Kendall Trend Test for Plume Stability

The Mann-Kendall Trend Test for Plume Stability was used to determine whether the plume is increasing, probably increasing, decreasing, probably decreasing, stable, or showing no trend at each particular well. At least four quarters of sampling data is needed for the test to determine whether the plume is increasing or decreasing at a well. A confidence factor greater than 95% was needed to state whether PCE concentrations at a given well are increasing or decreasing. A confidence factor between 90% and 95% was needed to state PCE concentrations at a given well are increasing or decreasing. Past sample data was gathered for each well. Results of the Mann-Kendall Test indicated that the PCE plume was decreasing at twenty-one wells and increasing at eleven wells. The Mann-Kendall Test also showed that the plume was probably decreasing at two wells, probably increasing at one well, stable at five wells, and showed no trend at sixteen wells (nineteen including MW-11, MW-16, and MW-22 which weren't analyzed due to historically low readings). Many wells have just reached or are close to the minimum amount of sampling data necessary for the Mann-Kendall Trend Test to give an output and therefore many currently show no trend.

Eleven wells currently are increasing according to the trend test at the site (MW-3, MW-5, MW-6, MW-7, MW-31, MW-38, MW-6D3, MW-19D2, MW-20D1, MW-20D2, and MW-41).

Concentrations at MW-7 fluctuate between 1 and 17 µg/L over the span of thirteen years. The low concentrations of PCE and small range of concentrations of MW-7 represent a low concern at the site, however

the continued PCE results from the well could show that some residual source material still remains at the Maryland Square property.

Concentrations at MW-41 have fluctuated between 1.7 and 4.0 µg/L over the span of ten quarters. The PCE concentrations remain low at MW-41, however Second Quarter 2015 was the first time that MW-42 also showed a probably increasing trend. During Third Quarter 2015, the PCE concentration fell to below laboratory detection limits for the first time. During Fourth Quarter 2015, the PCE concentration increased back above laboratory detection limits. During First Quarter 2016, the PCE concentration increased to a high point of 4.0 µg/L. The previous high of 3.7 µg/L had not been surpassed for five quarters. These two wells along with MW-38 (increasing) represent the current lateral extents of the plume. As stated by NDEP in their First Quarter 2015 response letter, these wells represent “sentinel wells” and if the increasing trend continues it may represent the continuing movement of the plume to the east.

Although concentrations are also low at MW-6D3, ranging from less than the laboratory detection limit to 32 µg/L, MW-6D3 is screened from 100 feet to 110 feet below ground surface and could demonstrate that PCE contamination is deeper than originally thought or is migrating downward. The vertical gradient analysis between MW-6D1 and MW-6D3 showed a downward movement between the two wells. However, only eight sampling events (including non-detects) are used in the Mann-Kendall model currently so the model lacks precision at this time.

Results at MW-19D2 may have been affected by the pilot testing that occurred during First Quarter 2013. Only one sampling event was taken before pilot testing was conducted nearby, followed by a decrease in PCE concentration from 170 µg/L to below laboratory detection limits for three consecutive quarters. The eight most recent monitoring events have experienced increasing concentrations that may be indicative of some rebound at the well. The most recent increase shows a concentration closer to what was detected before the pilot testing (140 µg/L). There has also been hypothesized movement of PCE due to vertical gradients in the vicinity of MW-19D over multiple quarters. The condition will continue to be monitored.

Wells MW-5, MW-6 both have higher PCE concentrations (approximately 400 µg/L in MW-5 and approximately 4,000 µg/L in MW-6). MW-6 is located directly along the centerline of the plume and MW-5 is south of MW-6 by approximately 90 feet. The two wells have exhibited the increasing trend over the span of thirteen years. Based on their location, to the east of Maryland Parkway, it is possible that additional source material remains under the road and is continuing to contribute to the plume. Mann Kendall analysis during First Quarter 2015 also showed MW-14I and MW-3 have an increasing trend for the first time. Monitor well MW-14I has consistently had the highest PCE concentration across the entire site, averaging around 9,000 µg/L. Well MW-14I is also located near MW-5 and MW-6, approximately 100 feet north of MW-6, and on the east side of Maryland Parkway. The future remediation plan for the site should address the possibility of source material being present under Maryland Parkway and be prepared for the possible migration on to the Boulevard Mall Property.

Second Quarter 2015 was the first time MW-20D2 showed an increasing trend at the site. MW-20D2 is located to the east of the Boulevard Mall building. The PCE concentration in MW-20D2 did decrease in First Quarter 2016 compared with Fourth Quarter 2015. Concentrations at MW-20D1 also reached an increasing trend during Third Quarter 2015. The PCE concentration in MW-20D1 did decrease in First Quarter 2016 compared with Third Quarter 2015. MW-31 also showed an increasing trend for PCE concentrations for the first time. These wells will continue to be monitored.

3 Summary

ATC provides the following summary based on the results of the First Quarter 2016 groundwater sampling event:

- Tetrachloroethene (PCE) was detected at concentrations ranging from 0.54 µg/L to 11,000 µg/L. The MCL for PCE in groundwater is 5 µg/L. PCE concentrations are summarized in the following table:

Table 3-1 Summary of PCE Concentrations in Monitoring Wells across the Site, 1st Quarter 2016

Non Detect (<0.50 µg/L)	>0.50 µg/L to <5.0 µg/L	5.0 µg/L to 11,000 µg/L	
MW-10	MW-8	MW-1	MW-19
MW-11	MW-12	MW-7	MW-19D1
MW-16	MW-6D1	MW-9	MW-19D2
MW-22	MW-6D2	MW-17	MW-19D3
MW-29	MW-15	MW-34	MW-19I
MW-33	MW-20D3	MW-35	MW-20
MW-43	MW-24	MW-2	MW-20D1
	MW-28	MW-3	MW-20D2
	MW-41	MW-5	MW-21
	MW-42	MW-6	MW-18
		MW-6D3	MW-23
		MW-13	MW-25
		MW-14	MW-26
		MW-14I	MW-27
		MW-40 CMT-30	MW-30
		MW-40 CMT-35	MW-31
		MW-40 CMT-40	MW-32
		MW-40 CMT-45	MW-36
		MW-40 CMT-50	MW-37
		MW-40 CMT-55	MW-38
		MW-40 CMT-60	MW-39

- Trichloroethene (TCE) was detected at concentrations ranging from 0.50 µg/L to 32 µg/L. The MCL for TCE in groundwater is 5 µg/L. TCE concentrations are summarized in the following table:

Table 3-2 Summary of TCE Concentrations in Monitoring Wells across the Site, 1st Quarter 2016

Non Detect (<0.50 µg/L)		≥0.5 µg/L to <5.0 µg/L		5.0 µg/L to 32 µg/L
MW-1	MW-31	MW-5	MW-40 CMT-35	MW-2
MW-7	MW-33	MW-6D2	MW-40 CMT-45	MW-6
MW-8	MW-36	MW-6D3	MW-40 CMT-55	MW-14I
MW-9	MW-37	MW-13	MW-18	MW-19
MW-12	MW-38	MW-14	MW-25	MW-40 CMT-40
MW-17	MW-41	MW-19D1	MW-26	MW-40 CMT-50
MW-34	MW-42	MW-19D2	MW-27	
MW-35	MW-43	MW-19D3	MW-32	
MW-3		MW-20	MW-39	
MW-6D1		MW-20D1		
MW-10		MW-20D2		

Non Detect (<0.50 µg/L)		≥0.5 µg/L to <5.0 µg/L		5.0 µg/L to 32 µg/L
MW-11				
MW-15				
MW-16				
MW-19I				
MW-20D3				
MW-21				
MW-40 CMT-30				
MW-22				
MW-24				
MW-28				
MW-29				
MW-30				

- Cis-1,2-dichloroethene (DCE) was detected in monitoring wells at concentrations ranging from 0.80 µg/L to 26 µg/L in 7 of the 59 site monitoring wells. The detected concentrations were below the MCL for DCE in groundwater of 70 µg/L.
- Chromium concentration from well MW-40 CMT-60 was 160 µg/L. Monitoring well MW-40 CMT-60 exceeded the MCL of 100 µg/L for total chromium in groundwater. Monitoring well MW-40 CMT-60 also showed a concentration of hexavalent chromium of 170 µg/L. No MCL has been established for CR(VI), but NDEP has set a basic comparison level (BCL) of 100 µg/L in groundwater, which MW-40 CMT-60 exceeded.
- ATC incorporated a system of custody seals on the site monitoring wells using zip ties. The zip ties were placed in a fashion so cap is secure but if the cap is removed, the zip tie system will come apart and show if any tampering occurred between monitoring events, results of these custody seals will be updated in the next quarterly report. The addition of custody seals was requested by NDEP due to uncharacteristically low PCE concentrations during First Quarter 2014. However, testing since that time shows that the low concentrations appear to have been related to variable pump depth placement, not due to outside interference. Zip tie custody seals will continue to be used at the site although no disturbance has been observed in any monitored wells.

3.2 Recommendations

ATC recommends continuing monitoring and sampling of the site monitoring wells in accordance with the NDEP approved 2014 schedule for 2016, with the exception that metals testing be reduced to only MW-19I, MW-40 CMT-55, and MW-40 CMT-60.

A copy of this report has been forwarded to the NDEP case officer for review.

3.3 Limitations

This report has been prepared for the exclusive use of Herman Kishner Trust, as it pertains to Maryland Square PCE Site located at 3661 South Maryland Parkway, in Las Vegas, Nevada. Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This warranty is in lieu of all other warranties either expressed or implied. This company is not responsible for the independent conclusions, opinions, or recommendations made by others based on the records review, site inspection, field exploration, and laboratory test data presented in this report.

It should be noted that all surficial environmental assessments are inherently limited in the sense that conclusions are drawn and recommendations developed from information obtained from limited research and site evaluation. For these types of evaluations, it is often necessary to use information prepared by others and ATC cannot be responsible for the accuracy of such information. In addition, the passage of time may result in a change in the environmental characteristics at this site and surrounding properties. This report does not warrant against future operations or conditions, nor does it warrant operations or conditions present of a type or at a location not investigated. This report is not a regulatory compliance audit and is not intended to satisfy the requirements of any state, federal, or local real estate transfer laws.

It must be noted that no investigation can absolutely rule out the existence of any hazardous materials at a given site. This assessment has been based upon prior site history, observable conditions, and the subsurface soil sampling described in this report. Existing hazardous materials and contaminants can escape detection using these methods.

4 Environmental Certification Jurat

This First Quarter 2016 Groundwater Monitoring and Sampling Report for Maryland Square PCE Site located at 3661 South Maryland Parkway, Las Vegas, Nevada, has been prepared in accordance with Nevada Administrative Code (NAC), Chapter 459, Section 9717.

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and, to the best of my knowledge, comply with all applicable Federal, State and local statutes, regulations and ordinances.

If you have any questions or require additional information, please feel free to contact the undersigned at (702) 990-9300.

Sincerely,

ATC Group Services LLC

James Jimenez
Staff Scientist
Nevada Certified Environmental Manager
No. EM-2201 (Expires 04/14/2017)
Date Signed: April 18, 2016

Adam Katlein
Project Manager

Andrew Stuart, CEM
National Program Director
Nevada Certified Environmental Manager
No. EM-1905 (Expires 01/26/17)
Date Signed: April 18, 2016

cc: Dr. Mary Siders, Nevada Division of Environmental Protection-Carson City, Nevada

Maryland Square PCE Site

TABLES

Table A-1: Current Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date of Well Installation	Date of Sampling	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	Screen Interval (feet bgs)	Sampling Depth	Dissolved Oxygen (mg/L)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)
Project Monitoring Wells Located on Maryland Square Property													
MW-1	Aug 00	Feb 16	1992.01	19.04	1972.97	10-30	23	1.20	2.3	171.4	**290**	<0.50	<0.50
MW-7	Sep 02	Feb 16	1990.78	17.00	1973.78	10-30	24	2.60	2.2	189.7	**15**	<0.50	<0.50
MW-8	Sep 02	Feb 16	1991.71	19.77	1971.94	10-30	25	2.86	2.0	169.2	2.1	<0.50	<0.50
MW-9	Sep 02	Feb 16	1992.25	19.31	1972.94	48.5-50	49	2.25	0.9	157.8	**6.3**	<0.50	<0.50
MW-12	Sep 02	Feb 16	1995.95	14.92	1981.03	13.5-33.5	24	2.61	2.2	230.2	0.75	<0.50	<0.50
MW-17	Nov 03	Feb 16	1991.04	18.65	1972.39	15-30	25	1.21	2.1	165.5	**50**	<0.50	<0.50
MW-34	Dec 11	Feb 16	1993.88	17.67	1976.21	--	24	3.02	2.3	186.2	**180**	<0.50	<0.50
MW-35	Dec 11	Feb 16	1991.37	18.68	1972.69	--	24	3.30	2.2	194.7	**170**	<0.50	<0.50
Project Monitoring Wells Located on Boulevard Mall Property													
MW-2	Oct 00	Feb 16	1983.53	17.54	1965.99	10-32	24	3.48	2.04	208.2	**1,400**	**6.2**	2.3
MW-3	Oct 00	Feb 16	1983.81	18.28	1965.53	10-31	25	0.33	2.63	170.6	**23**	<0.50	<0.50
MW-5	Oct 00	Feb 16	1988.69	18.21	1970.48	10-32	24	4.78	2.0	185.8	**370**	1.5	0.80
MW-6	Oct 00	Feb 16	1988.12	18.81	1969.31	10-32	25	3.19	2.1	198.7	**3,700**	**9.1**	2.3
MW-6D1	Jan 13	Feb 16	1988.72	14.95	1973.77	50-60	55	6.21	0.4	170.1	2.0	<0.50	<0.50
MW-6D2	Jan 13	Feb 16	1988.72	14.81	1973.91	80-90	85	6.23	0.4	146.7	2.6	0.68	<0.50

Table A-1: Current Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date of Well Installation	Date of Sampling	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	Screen Interval (feet bgs)	Sampling Depth	Dissolved Oxygen (mg/L)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)
Project Monitoring Wells Located on Boulevard Mall Property													
MW-6D3	Jan 13	Feb 16	1988.72	13.75	1975.97	100-110	105	5.49	0.3	183.2	**30**	0.7	<0.50
MW-10	Sep 02	Feb 16	1983.28	19.88	1963.40	10-30	26	0.51	2.3	-143.3	<0.50	<0.50	<0.50
MW-11	Sep 02	Feb 16	1979.87	25.41	1954.46	13.5-33.5	29	0.82	2.3	-61.6	<0.50	<0.50	<0.50
MW-13	May 03	Feb 16	1983.31	17.16	1966.15	9-29	22	1.35	2.2	205.5	**1,700**	4.3	<0.50
MW-14	Nov 03	Feb 16	1987.33	17.75	1969.58	15-40	24.5	2.42	2.2	255.5	**1,800**	4.7	<0.50
MW-14I	Jul 12	Feb 16	1987.54	18.31	1969.23	40-55	47.5	3.78	0.8	238.6	**11,000**	**32**	26
MW-15	Nov 03	Feb 16	1982.74	15.14	1967.60	15-32	24	2.19	2.1	130.3	3.8	<0.50	<0.50
MW-16	Nov 03	Feb 16	1980.53	26.43	1954.10	19-32	31	0.10	1.9	-50.4	<0.50	<0.50	<0.50
MW-19	Nov 03	Feb 16	1980.13	25.61	1954.52	19-35	29	4.30	2.1	266.2	**1,100**	**5.2**	<0.50
MW-19D1	Jan 13	Feb 16	1979.25	24.80	1954.45	31-51	41	5.65	0.9	356.0	**360**	1.9	<0.50
MW-19D2	Jan 13	Feb 16	1979.28	26.21	1953.07	60-70	65	0.95	1.4	388.0	**140**	1.2	<0.50
MW-19D3	Jan 13	Feb 16	1979.32	22.36	1956.96	92-102	97	5.82	0.5	362.0	**130**	0.57	<0.50
MW-19I	Jul 12	Feb 16	1978.37	24.65	1953.72	34-54	40.0	4.33	2.0	594	**110**	<0.50	<0.50
MW-20	Nov 03	Feb 16	1979.82	25.31	1954.51	19-35	30	3.49	2.2	254.2	**740**	2.5	<0.50
MW-20D1	Jan 13	Feb 16	1978.81	24.62	1954.19	25-45	36	3.97	1.5	209.9	**410**	1.6	<0.50

Table A-1: Current Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date of Well Installation	Date of Sampling	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	Screen Interval (feet bgs)	Sampling Depth	Dissolved Oxygen (mg/L)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)
Project Monitoring Wells Located on Boulevard Mall Property													
MW-20D2	Jan 13	Feb 16	1978.66	25.11	1953.55	55-65	60	6.73	0.7	232.5	**170**	1.2	<0.50
MW-20D3	Jan 13	Feb 16	1978.69	21.66	1957.03	90-100	95	6.22	0.3	234.8	2.0	<0.50	<0.50
MW-21	Nov 03	Feb 16	1979.25	24.59	1954.66	19-36	30	0.14	2.1	429.5	**9.3**	<0.50	<0.50
MW-40 CMT-30	Jul 12	Feb 16	1978.49	24.44	1954.05	30-30.6	--	8.51	2.1	-9.7	**15**	<0.50	<0.50
MW-40 CMT-35	Jul 12	Feb 16	1978.49	24.54	1953.95	35-35.6	--	7.42	1.9	-42.1	**75**	4.9	<0.50
MW-40 CMT-40	Jul 12	Feb 16	1978.49	24.38	1954.11	40-40.7	--	4.25	1.8	-29.5	**340**	**5.5**	<0.50
MW-40 CMT-45	Jul 12	Feb 16	1978.49	23.40	1955.09	45-45.6	--	4.15	1.8	7.6	**320**	2.1	<0.50
MW-40 CMT-50	Jul 12	Feb 16	1978.49	25.10	1954.39	50-50.6	--	2.15	1.4	-4.9	**290**	**18**	1.4
MW-40 CMT-55	Jul 12	Feb 16	1978.49	24.52	1953.97	55-55.6	--	10.41	1.8	77.9	**640**	4.4	1.1
MW-40 CMT-60	Jul 12	Feb 16	1978.49	24.37	1954.12	60-60.6	--	4.98	1.8	12.9	**870**	8.1	2.1
Project Monitoring Wells Located on Surrounding Streets and Golf Course													
MW-18	Nov 03	Feb 16	1962.90	11.98	1950.92	5-26	17	3.46	2.2	152.7	**1,300**	3.0	<0.50
MW-22	Mar 05	Feb 16	1975.19	26.44	1948.75	15-36	31	0.93	2.3	123.9	<0.50	<0.50	<0.50
MW-23	Mar 05	Feb 16	1962.45	16.09	1946.36	5-26	21	1.65	2.1	140.6	**790**	1.7	<0.50
MW-24	Mar 05	Feb 16	1960.82	13.87	1946.95	5-26	17	0.72	2.1	118.7	2.3	<0.50	<0.50
MW-25	Mar 05	Feb 16	1959.29	19.09	1940.20	5-26	23	1.73	2.3	142.2	**530**	0.57	<0.50

Table A-1: Current Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date of Well Installation	Date of Sampling	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	Screen Interval (feet bgs)	Sampling Depth	Dissolved Oxygen (mg/L)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)
Project Monitoring Wells Located on Surrounding Streets and Golf Course													
MW-26	Mar 06	Feb 16	1953.45	17.19	1937.26	10-36	27	2.67	2.4	150.1	**680**	0.5	<0.50
MW-27	Mar 06	Feb 16	1944.15	14.98	1929.17	10-36	26	1.55	2.1	-18.5	**350**	0.82	<0.50
MW-28	Oct 07	Feb 16	1943.07	12.82	1930.25	15-36	25	1.17	2.2	89.5	0.78	<0.50	<0.50
MW-29	Oct 07	Feb 16	1932.35	14.34	1918.01	15-36	24	4.41	2.3	89.0	<0.50	<0.50	<0.50
MW-30	Oct 07	Feb 16	1940.59	17.11	1923.48	20-41	30	3.58	1.8	80.5	**63**	<0.50	<0.50
MW-31	Mar 08	Feb 16	1937.66	16.46	1921.20	13.5-33.6	25	2.84	2.3	-0.4	**81**	<0.50	<0.50
MW-32	Mar 08	Feb 16	1952.90	18.62	1934.28	13.5-33.7	27	3.17	2.1	-37.3	**650**	1.4	<0.50
MW-33	Mar 08	Feb 16	1950.98	17.70	1933.28	13.5-33.8	25	1.17	2.2	-98.3	<0.50	<0.50	<0.50
MW-36	Jan 12	Feb 16	1955.30	19.36	1935.94	17-38	28.5	2.04	2.1	-63.0	**110**	<0.50	<0.50
MW-37	Jan 12	Feb 16	1929.98	19.59	1910.39	17-38	29	3.95	2.2	-81.9	**41**	<0.50	<0.50
MW-38	Apr 12	Feb 16	1908.38	14.93	1893.45	15-36	25	4.59	2.3	-37.6	**9.6**	<0.50	<0.50
MW-39	Apr 12	Feb 16	1967.55	24.55	1943.00	15-36	31	1.51	2.1	-31.6	**190**	0.57	<0.50
MW-41	Aug 13	Feb 16	1908.89	14.67	1894.22	10-35	25	1.05	2.1	-71.5	4.0	<0.50	<0.50
MW-42	Sep 13	Feb 16	1910.31	16.31	1894.00	10-35	26	2.73	2.3	105.6	0.54	<0.50	<0.50
MW-43	Sep 13	Feb 16	1958.33	15.95	1942.38	10-35	26	1.78	1.9	-106.7	<0.50	<0.50	<0.50

Notes:

NM = Not Measured
msl = mean sea level
ND = Non Detect
NS = Not Sampled

°C = degrees Celsius
g/L = gallons per liter
mg/L = milligrams per liter
mS/cm = milli Siemens per centimeter

µg/L = micrograms per liter
mV = milllivolts
NTU = Nephelometric Turbudity Units

Bold value indicates concentration that exceeds regulatory standard.

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-1	Aug 00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	2,300	ND	ND	ND
	Oct 00	1991.81	17.54	1974.27	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 02	1992.04	17.9	1974.14	NM	NM	NM	NM	NM	NM	NM	2,000	ND	ND	ND
	May 03	1992.04	18.7	1973.34	NM	NM	NM	NM	NM	NM	NM	870	ND	ND	ND
	Sep 03	1992.04	18.97	1973.07	NM	NM	NM	NM	NM	NM	NM	2,300	ND	ND	ND
	Jan 04	1992.04	19.3	1972.74	7.0	3.5	NM	0.9	22.50	NM	NM	1,700	ND	ND	ND
	May 05	1992.04	15.24	1976.8	7.0	4.0	441.0	5.4	26.00	NM	110	3,500	ND	ND	ND
	Sep 05	1992.04	16.74	1975.3	7.1	4.2	64.0	7.0	27.50	2.7	129	1700	ND	ND	ND
	Dec 05	1992.04	17.61	1974.43	7.0	5.1	290.0	2.0	26.90	3.2	404	820	ND	ND	ND
	Mar 06	1992.04	18.42	1973.62	NM	5.6	>999	NM	23.10	3.7	545	420	ND	ND	ND
	Jun 06	1992.04	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 06	1992.04	18.3	1973.74	6.3	3.7	81.0	4.6	26.70	2.4	129	1100	ND	ND	ND
	Dec 06	1992.04	18.88	1973.16	6.7	4.4	>999	5.1	26.90	2.8	111	1300	ND	ND	ND
	Mar 07	1992.04	20.08	1971.96	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1992.04	19.81	1972.23	7.0	2.3	611.0	6.2	25.70	1.4	468	450	ND	ND	ND
	Sep 07	1992.04	18.39	1973.65	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1992.04	19.01	1973.03	6.4	3.9	15.0	5.5	22.20	2.5	223	710	ND	ND	ND
	Mar 08	1992.04	20.03	1972.01	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1992.04	NM	NM	NM	NM	NM	NM	NM	NM	NM	260	ND	ND	ND
	Oct 08	1992.01	19.82	1972.19	6.6	3.7	62.4	1.1	27.10	2.4	130	460	ND	ND	ND
	Feb 09	1992.01	19.65	1972.36	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1992.01	19.88	1972.13	7.1	3.7	39.6	1.6	26.20	2.4	101	NS	NS	NS	NS
	Jul 09	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	590	ND	ND	ND
	Sep 09	1992.01	19.9	1970.11	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1992.01	20.33	1971.68	6.3	3.4	-10.0	1.5	26.90	2.2	126	390	ND	ND	ND
	Feb 10	1992.01	20.04	1971.97	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1992.01	19.98	1972.03	7.0	3.3	0.0	3.2	26.13	NM	NM	400	ND	ND	ND
	Oct 10	1992.01	19.44	1972.57	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1992.01	19.54	1972.47	6.7	3.5	1.2	1.4	27.56	NM	212	430	ND	ND	ND
	Mar 11	1992.01	20.1	1971.91	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1992.01	20.18	1971.83	7.2	3.6	0.0	1.7	25.58	NM	259	460	ND	ND	ND
	Sep 11	1992.01	19.85	1972.16	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1992.01	19.65	1972.36	7.0	3.4	NM	1.3	25.97	2.2	266	410	ND	ND	ND
	Mar 12	1992.01	20.41	1971.6	7.2	3.5	5.4	1.3	25.48	2.3	-70	370	NS	NS	NS
*	Jun 12	1992.01	19.18	1972.83	7.3	3.5	15.9	3.0	25.97	2.3	90	410	ND	ND	ND
	Sep 12	1992.01	19.97	1972.04	7.6	3.6	NM	1.2	27.28	2.3	98	390	ND	ND	ND
	Nov 12	1992.01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1992.01	20.35	1971.66	6.97	3.9	NM	0.90	24.80	2.5	59	260	<0.50	<0.50	<0.50
	Jun 13	1992.01	20.69	1971.32	7.16	3.9	NM	1.72	25.43	2.5	78	240	<0.50	<0.50	<0.50
	Sep 13	1992.01	20.52	1971.49	7.06	3.8	NM	0.76	26.95	2.4	-14	240	<0.50	<0.50	<0.50
	Nov 13	1992.01	20.31	1971.70	5.97	3.5	2.9	0.31	25.51	2.2	166	270	<0.50	<0.50	<0.50
	Mar 14	1992.01	20.10	1971.91	7.23	3.3	28.7	1.71	24.14	2.2	1	350	<0.50	<0.50	<0.50
	Jun 14	1992.01	20.29	1971.72	6.94	3.3	28.7	2.61	28.57	2.4	133	350	<0.50	<0.50	<0.50
	Sep 14	1992.01	20.15	1971.86	7.68	3.6	10.6	6.41	29.16	2.3	66	96	<0.50	<0.50	<0.50
	Nov 14	1992.01	20.42	1971.59	7.05	3.8	9.3	2.12	25.08	2.4	-39	240	<0.50	<0.50	<0.50
	Mar 15	1992.01	20.15	1971.86	6.43	3.7	4.8	1.34	25.49	2.4	85	210	<0.50	<0.50	<0.50
	Jun 15	1992.01	20.45	1971.56	7.23	3.7	16.9	1.60	26.93	2.2	117	230	<0.50	<0.50	<0.50
	Sep 15	1992.01	19.68	1972.33	7.46	3.2	17.5	1.37	27.97	2.1	296	230	<0.50	<0.50	<0.50
	Nov 15	1992.01	19.30	1972.71	7.62	3.2	NM	0.91	25.92	2.1	159	250	<0.50	<0.50	<0.50
	Feb 16	1992.01	19.04	1972.97	6.97	3.6	5.9	1.20	25.36	2.3	171	290	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-2	Oct 00	1983.79	15.52	1968.27	NM	NM	NM	NM	NM	NM	NM	3,000	18.0	18.0	ND
	Sep 02	1983.99	16.62	1967.37	NM	NM	NM	NM	NM	NM	NM	3,000	13.0	13.0	ND
	May 03	1983.99	17.15	1966.84	NM	NM	NM	NM	NM	NM	NM	1,400	ND	ND	ND
	Sep 03	1983.97	17.70	1966.27	NM	NM	NM	NM	NM	NM	NM	1,700	ND	ND	ND
	Jan 04	1983.97	18.25	1965.72	7.1	3.1	NM	1.1	23.20	NM	NM	1,700	ND	ND	ND
	May 05	1983.97	14.65	1969.32	6.9	3.5	698.0	4.8	23.40	NM	193	2,050	17.0	9.7	ND
	Dec 05	1983.97	16.00	1967.97	6.6	4.8	360.0	2.7	25.40	3.1	264	2,900	ND	ND	ND
	Mar 06	1983.97	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1983.97	17.55	1966.42	NM	3.7	728.0	7.0	24.90	2.4	116	1,600	ND	ND	ND
	Oct 06	1983.97	17.25	1966.72	6.1	3.5	20.0	5.1	24.40	2.2	161	1,900	ND	ND	ND
	Dec 06	1983.97	17.60	1966.37	6.8	4.2	28.0	4.9	24.50	2.7	241	1,300	ND	ND	ND
	Mar 07	1983.97	18.84	1965.13	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1983.97	19.01	1964.96	7.0	3.5	539.0	5.7	24.40	2.3	305	1,400	ND	ND	ND
	Sep 07	1983.97	17.94	1966.03	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1983.97	18.04	1965.93	6.3	3.6	144.0	6.9	21.80	2.3	314	1,000	ND	ND	ND
	Mar 08	1983.97	18.82	1965.15	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1983.97	NM	NM	NM	NM	NM	NM	NM	NM	NM	900	ND	ND	ND
	Oct 08	1983.97	18.54	1965.43	6.9	3.5	44.7	3.4	24.80	2.3	103	960	3.4	1.2	ND
	Feb 09	1983.97	18.68	1965.29	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1983.97	18.95	1965.02	7.0	3.7	15.4	1.9	24.50	2.4	116	880	3.2	1.1	ND
	Sep 09	1983.97	18.95	1965.02	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1983.97	19.32	1964.65	5.6	3.3	280.0	1.9	24.40	2.1	155	530	2.4	ND	ND
	Feb 10	1983.97	19.68	1964.29	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1983.97	19.08	1964.89	7.0	3.1	14.8	3.5	24.19	NM	NM	570	2.1	0.8	ND
	Oct 10	1983.97	18.76	1965.21	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1983.97	18.78	1965.19	6.9	3.4	32.8	3.0	24.11	NM	92	560	2.4	0.7	ND
	Mar 11	1983.97	19.19	1964.78	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1983.97	19.50	1964.47	7.2	3.4	25.9	2.6	24.47	NM	273	680	2.2	0.6	ND
	Sep 11	1983.97	19.11	1964.86	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1983.97	19.08	1964.89	7.0	3.3	NM	2.7	23.55	2.1	168	610	2.1	0.66	NS
	Mar 12	1983.97	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1983.53	19.11	1964.42	7.2	3.3	57.1	2.6	23.57	2.2	87	490	2	0.6	ND
	Sep 12	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1983.53	19.29	1964.24	7.1	3.5	NM	2.7	23.24	2.3	205	580	2.5	1	<0.50
	Jun 13	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1983.53	19.27	1964.26	7.3	3.7	36.9	2.0	24.28	2.4	83	720	2.3	0.91	<0.50
	Mar 14	1983.53	19.15	1964.38	7.3	3.1	39.2	1.6	23.05	2.0	-65	340	1.8	<0.50	<0.50
	Jun 14	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1983.53	19.17	1964.36	6.44	3.38	19.21	1.75	23.35	2.20	197.00	550	2.3	0.61	<0.50
	Jun 15	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1983.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1983.53	17.54	1965.99	7.03	3.12	21.30	3.48	23.00	2.04	208.20	1,400	6.2	2.3	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-3	Oct 00	1984.19	15.95	1968.24	NM	NM	NM	NM	NM	NM	NM	98	ND	ND	ND
	Sep 02	1984.46	17.20	1967.26	NM	NM	NM	NM	NM	NM	NM	ND	ND	ND	ND
	May 03	1984.46	17.70	1966.76	NM	NM	NM	NM	NM	NM	NM	6.9	ND	ND	ND
	Sep 03	1984.46	18.35	1966.08	NM	NM	NM	NM	NM	NM	NM	12	ND	ND	ND
	Jan 04	1984.46	19.25	1965.18	6.9	2.9	NM	1.0	22.40	NM	NM	6.7	ND	ND	ND
	May 05	1984.46	15.22	1969.21	7.0	2.9	NM	2.5	26.00	NM	149	ND	ND	ND	ND
	Dec 05	1984.46	16.45	1967.98	6.6	4.7	100.0	0.9	27.30	3.0	33	ND	ND	ND	ND
	Mar 06	1984.46	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1984.46	18.38	1966.05	NM	3.8	285.0	5.6	26.40	2.4	-32	ND	ND	ND	ND
	Oct 06	1984.46	17.88	1966.55	5.9	3.9	26.0	2.0	26.70	2.5	279	ND	ND	ND	ND
	Dec 06	1984.46	18.26	1966.17	6.7	4.8	272.0	2.9	26.70	3.1	9	1.2	ND	ND	ND
	Mar 07	1984.46	19.86	1964.57	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1984.46	20.23	1964.2	7.1	3.7	605.0	3.6	25.90	2.4	43	ND	ND	ND	ND
	Sep 07	1984.46	18.99	1965.44	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1984.46	18.99	1965.44	6.1	3.9	55.1	2.2	21.90	2.5	135	1.4	ND	ND	ND
	Mar 08	1984.46	19.94	1964.49	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1984.46	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1984.41	19.46	1964.95	6.7	3.8	44.2	0.4	27.50	2.4	99	6.5	ND	ND	ND
	Feb 09	1984.41	19.80	1964.61	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1984.41	20.20	1964.21	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1984.41	20.16	1964.25	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1984.41	20.48	1963.93	6.0	3.8	180.0	1.3	26.60	2.4	143	5.1	ND	ND	ND
	Feb 10	1984.41	21.07	1963.34	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1984.41	13.91	1970.50	6.8	3.5	2.2	2.0	27.36	NM	NM	NS	NS	NS	NS
	Oct 10	1984.41	19.95	1964.46	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1984.41	19.91	1964.50	6.7	3.9	12.5	0.6	27.29	NM	106	5.8	ND	ND	ND
	Mar 11	1984.41	20.47	1963.94	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1984.41	20.86	1963.55	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1984.41	20.45	1963.96	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1984.41	20.35	1964.06	6.7	4.5	NM	3.3	26.17	NM	-38	16	ND	ND	NS
	Mar 12	1984.41	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1983.81	20.43	1963.38	7.0	4.0	102.0	2.6	25.50	2.6	122	25	ND	ND	ND
	Sep 12	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1983.81	20.37	1963.44	6.9	4.5	NM	1.7	25.15	2.9	153	12	<0.50	<0.50	<0.50
	Jun 13	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1983.81	20.25	1963.56	7.2	4.3	107.0	2.0	24.79	2.8	149	11	<0.50	<0.50	<0.50
	Jun 14	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1983.81	20.02	1963.79	6.18	4.28	11.14	0.65	25.52	2.78	218.50	13	<0.50	<0.50	<0.50
	Jun 15	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1983.81	18.28	1965.53	6.81	4.04	12.00	0.33	25.79	2.63	170.60	23	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-4	Oct 00	1989.68	16.95	1972.73	NM	NM	NM	NM	NM	NM	NM	14	ND	ND	ND
	Sep 02	1989.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	25	ND	ND	ND
	May 03	1989.87	18.71	1971.16	NM	NM	NM	NM	NM	NM	NM	24	ND	ND	ND
	Sep 03	1989.85	19.05	1970.8	NM	NM	NM	NM	NM	NM	NM	100	ND	ND	ND
	Jan 04	1989.85	19.86	1969.99	7.0	2.7	NM	1.2	22.00	NM	NM	220	ND	ND	ND
	May 05	1989.85	15.83	1974.02	6.8	3.7	664.0	3.7	24.20	NM	160	25	ND	ND	ND
	Dec 05	1989.85	17.62	1972.23	6.7	4.9	670.0	3.2	25.90	3.1	219	15	ND	ND	ND
	Mar 06	1989.85	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1989.85	18.36	1971.49	NM	NM	NM	NM	NM	NM	NM	27	ND	ND	ND
	Oct 06	1989.85	18.34	1971.51	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 06	1989.85	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 07	1989.85	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1989.85	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 07	1989.85	18.96	1970.89	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1989.85	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 08	1989.85	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1989.85	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 09	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1989.86	Dry	Dry	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1989.86	Dry	Dry	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1989.86	Dry	Dry	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 10	1989.86	Dry	Dry	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 11	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 12	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 14	1989.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Abandoned June 4, 2012														

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-5	Oct 00	1988.93	16.20	1972.73	NM	NM	NM	NM	NM	NM	NM	100	ND	ND	ND
	Sep 02	1989.18	17.00	1972.18	NM	NM	NM	NM	NM	NM	NM	110	ND	ND	ND
	May 03	1989.18	17.80	1971.38	NM	NM	NM	NM	NM	NM	NM	240	ND	ND	ND
	Sep 03	1989.18	18.07	1971.11	NM	NM	NM	NM	NM	NM	NM	220	ND	ND	ND
	Jan 04	1989.18	18.65	1970.53	6.7	2.6	NM	1.2	22.30	NM	NM	370	ND	ND	ND
	May 05	1989.18	14.87	1974.31	7.1	2.6	NM	4.6	25.40	NM	184	146	ND	ND	ND
	Dec 05	1989.18	16.80	1972.38	6.8	5.3	>999	1.5	26.80	3.3	377	93	ND	ND	ND
	Mar 06	1989.18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1989.18	17.40	1971.78	NM	3.8	>999	6.9	26.60	2.4	126	220	ND	ND	ND
	Oct 06	1989.18	17.46	1971.72	6.2	3.5	21.0	4.8	26.70	2.2	99	67	ND	ND	ND
	Dec 06	1989.18	18.01	1971.17	6.8	4.5	134.0	5.4	26.50	2.9	93	130	ND	ND	ND
	Mar 07	1989.18	19.30	1969.88	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1989.18	19.12	1970.06	7.0	3.4	375.0	6.5	25.20	2.2	460	550	ND	ND	ND
	Sep 07	1989.18	17.85	1971.33	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1989.18	18.33	1970.85	6.3	3.8	28.3	5.7	24.40	2.4	159	170	ND	ND	ND
	Mar 08	1989.18	19.31	1969.87	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1989.18	NM	NM	NM	NM	NM	NM	NM	NM	NM	400	ND	ND	ND
	Oct 08	1989.15	18.99	1970.16	6.8	3.5	21.4	4.8	27.40	2.3	119	340	2.7	1.2	ND
	Feb 09	1989.15	18.99	1970.16	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1989.15	19.17	1969.98	7.0	3.6	0.0	5.6	26.20	2.3	125	700	4.6	1.3	ND
	Sep 09	1989.15	19.14	1970.01	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1989.15	19.55	1969.6	5.8	3.2	-6.0	3.8	27.10	2.1	132	520	3.9	1.4	ND
	Feb 10	1989.15	19.57	1969.58	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1989.15	19.21	1969.94	7.1	3.1	7.0	6.7	25.60	NM	273	550	2.9	1.3	ND
	Oct 10	1989.15	18.67	1970.48	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1989.15	18.85	1970.30	7.0	5.4	2.0	4.7	25.64	NM	104	360	2.4	1.0	ND
	Mar 11	1989.15	19.41	1969.74	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1989.15	19.50	1969.65	6.9	3.5	14.0	4.9	26.58	NM	412	670	2.7	1.1	ND
	Sep 11	1989.15	19.19	1969.96	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1989.15	19.22	1969.93	6.9	4.0	NM	3.8	25.54	NM	-30	540	2.5	1.1	ND
	Mar 12	1989.15	19.74	1969.41	7.2	3.3	123.0	5.6	23.51	2.4	-38	800	NS	NS	NS
*	Jun 12	1988.69	19.25	1969.44	7.3	3.3	50.1	6.0	25.30	2.1	106	520	2.5	1.2	ND
	Sep 12	1988.69	18.25	1970.44	7.3	3.3	NM	5.3	26.25	2.2	129	340	2.2	0.95	ND
	Nov 12	1988.69	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1988.69	19.69	1969.00	7.1	3.6	NM	4.4	25.23	2.3	134	530	2.3	0.67	<0.50
	Jun 13	1988.69	20.00	1968.69	7.2	3.5	NM	4.7	27.60	2.3	126	600	2.9	0.95	<0.50
	Sep 13	1988.69	19.60	1969.09	7.0	3.4	NM	4.3	26.63	2.2	167	830	3.7	1.3	<0.50
	Nov 13	1988.69	19.52	1969.17	7.8	3.6	9.7	4.1	25.37	2.3	90	690	2.8	1.2	<0.50
	Mar 14	1988.69	19.37	1969.32	7.3	3.1	18.3	5.1	24.90	2.0	-85	440	2.2	<0.50	<0.50
	Jun 14	1988.69	19.68	1969.01	7.0	3.4	37.4	5.1	27.98	2.2	87	780	2.6	1.1	<0.50
	Sep 14	1988.69	19.08	1969.61	7.5	3.4	4.2	6.6	28.41	2.2	70	350	0.94	<0.50	<0.50
	Nov 14	1988.69	19.55	1969.14	7.1	3.6	4.5	4.2	25.89	2.3	59	740	3.9	1.5	<0.50
	Mar 15	1988.69	19.35	1969.34	6.4	3.5	12.2	2.8	24.02	2.2	205	790	3.7	1.2	<0.50
	Jun 15	1988.69	19.60	1969.09	7.2	3.4	11.9	2.5	25.60	2.2	106	660	3.0	0.95	<0.50
	Sep 15	1988.69	18.83	1969.86	7.6	2.7	21.2	4.3	27.19	1.8	122	500	2.1	0.90	<0.50
	Nov 15	1988.69	18.50	1970.19	7.8	3.0	NM	2.3	26.86	2.0	159	360	2.0	0.79	<0.50
	Feb 16	1988.69	18.21	1970.48	7.1	3.1	34.8	4.8	23.92	2.0	186	370	1.5	0.80	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-6	Oct 00	1988.72	17.41	1971.31	NM	NM	NM	NM	NM	NM	NM	2200	13.0	8.1	ND
	Sep 02	1989.01	18.26	1970.75	NM	NM	NM	NM	NM	nM	NM	1000	41.0	14.0	ND
	May 03	1989.01	18.87	1970.14	NM	NM	NM	NM	NM	NM	NM	710	22.0	ND	ND
	Sep 03	1989.01	19.25	1969.76	NM	NM	NM	NM	NM	NM	NM	1300	ND	ND	ND
	Jan 04	1989.01	19.74	1969.27	7.0	2.3	NM	1.2	22.40	NM	NM	2400	ND	ND	ND
	May 05	1989.01	16.21	1972.8	6.9	2.4	NM	2.8	25.90	NM	123	2090	13.0	11.0	ND
	Sep 05	1989.01	17.26	1971.75	7.0	4.0	34.0	6.2	26.90	2.3	-119	890	13.0	23.0	ND
	Dec 05	1989.01	17.88	1971.13	6.8	4.9	220.0	1.1	26.50	3.2	163	530	41.0	21.0	ND
	Mar 06	1989.01	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1989.01	18.80	1970.21	NM	4.0	707.0	6.3	26.70	2.4	172	1100	ND	ND	ND
	Oct 06	1989.01	18.73	1970.28	6.3	3.6	7.0	4.1	26.50	2.3	61	1300	ND	ND	ND
	Dec 06	1989.01	19.18	1969.83	6.7	4.2	96.0	4.4	26.20	2.7	239	810	9.9	8.9	ND
	Mar 07	1989.01	20.40	1968.61	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1989.01	20.28	1968.73	7.1	3.5	352.0	5.6	24.90	2.2	241	1300	ND	ND	ND
	Sep 07	1989.01	19.00	1970.01	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1989.01	19.29	1969.72	6.2	3.8	4.3	5.4	24.80	2.4	277	1500	ND	ND	ND
	Mar 08	1989.01	20.26	1968.75	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1989.01	NM	NM	NM	NM	NM	NM	NM	NM	NM	1,900	ND	ND	ND
	Oct 08	1989.03	20.00	1969.03	6.8	3.5	46.3	3.3	26.30	2.3	117	2,000	13.0	3.9	ND
	Feb 09	1989.03	20.03	1969	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1989.03	20.20	1968.83	7.0	3.5	76.3	2.8	26.70	2.2	121	2,800	14.0	4.1	ND
	Sep 09	1989.03	20.27	1968.76	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1989.03	20.66	1968.37	5.9	3.1	87.0	2.5	26.30	1.9	132	2,100	14.0	6.4	ND
	Feb 10	1989.03	20.77	1968.26	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1989.03	20.38	1968.65	7.0	3.0	23.2	4.1	26.32	NM	NM	2,500	13.0	6.2	NS
	Oct 10	1989.03	19.94	1969.09	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1989.03	20.02	1969.01	6.9	3.3	7.0	3.5	25.26	NM	86	2,300	13.0	8.2	ND
	Mar 11	1989.03	20.49	1968.54	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1989.03	20.66	1968.37	7.0	3.3	8.2	3.7	26.52	NM	365	2,400	10.0	3.7	ND
	Sep 11	1989.03	20.30	1968.73	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1989.03	20.30	1968.73	7.0	3.2	NM	3.4	25.16	2.1	113	2,900	12	5.6	ND
	Mar 12	1989.03	20.84	1968.19	7.3	3.2	107.0	4.4	24.30	2.1	-44	3,500	NS	NS	NS
*	Jun 12	1988.12	19.71	1968.41	7.6	3.1	57.1	7.5	27.25	2.0	114	1,700	8.5	5.4	ND
	Sep 12	1988.12	19.23	1968.89	7.3	3.1	NM	3.7	26.27	2.0	122	3,000	17	8.1	ND
	Nov 12	1988.12	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1988.12	20.23	1967.89	7.1	3.4	NM	3.3	24.83	2.2	100	2,600	10	2.2	<0.50
	Jun 13	1988.12	20.58	1967.54	7.3	3.4	NM	3.6	30.62	2.2	130	2,400	7.7	1.3	<0.50
	Sep 13	1988.12	20.25	1967.87	7.0	3.3	NM	3.0	29.86	2.2	90	2,500	11	11	<0.50
	Nov 13	1988.12	20.14	1967.98	7.8	3.5	16.2	3.1	25.27	2.3	97	3,100	12	3.5	<0.50
	Mar 14	1988.12	20.00	1968.12	7.2	2.9	152.0	4.8	24.30	1.9	-108	2,700	11	2.3	<0.50
	Jun 14	1988.12	20.30	1967.82	7.2	3.2	21.3	6.7	26.43	2.1	158	3,000	8.7	2.6	<0.50
	Sep 14	1988.12	19.27	1968.85	7.4	3.2	56.6	6.5	32.77	2.1	64	700	4.0	1.2	<0.50
	Nov 14	1988.12	20.09	1968.03	6.9	3.5	5.0	3.3	24.83	2.3	79	3,300	12.0	3.1	<0.50
	Mar 15	1988.12	19.96	1968.16	6.4	3.4	11.6	2.3	25.06	2.2	99	3,300	9.3	2.3	<0.50
	Jun 15	1988.12	20.23	1967.89	7.3	3.4	14.3	2.6	26.80	2.2	93	3,400	10	2.1	<0.50
	Sep 15	1988.12	19.68	1968.44	7.3	3.0	9.1	2.5	28.00	1.9	237	3,400	11	2.5	<0.50
	Nov 15	1988.12	19.27	1968.85	7.7	3.0	NM	1.8	25.02	2.0	155	3,100	8.7	2.0	<0.50
	Feb 16	1988.12	18.81	1969.31	7.0	3.2	22.2	3.2	24.26	2.1	199	3,700	9.1	2.3	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-6D1	Mar 13	1988.72	16.29	1972.43	7.6	0.6	NM	5.7	23.48	0.4	86	<0.50	<0.50	<0.50	<0.50
	Jun 13	1988.72	20.20	1968.52	7.5	0.7	NM	5.2	25.82	0.4	280	<0.50	<0.50	<0.50	<0.50
	Sep 13	1988.72	21.40	1967.32	7.4	0.9	NM	4.4	27.20	0.6	61	58	<0.50	<0.50	<0.50
	Nov 13	1988.72	19.24	1969.48	6.9	0.6	49.3	5.0	23.81	0.4	84	3.2	<0.50	<0.50	<0.50
	Mar 14	1988.72	16.20	1972.52	7.4	0.5	62.4	4.3	26.16	0.3	87	1.2	<0.50	<0.50	<0.50
	Jun 14	1988.72	19.60	1969.12	7.3	0.6	47.4	5.8	26.70	0.4	200	0.67	<0.50	<0.50	<0.50
	Sep 14	1988.72	20.40	1968.32	7.2	0.8	51.3	4.2	25.75	0.5	120	120	<0.50	<0.50	<0.50
	Nov 14	1988.72	18.40	1970.32	7.4	0.7	6.7	6.1	23.50	0.4	40	21	<0.50	<0.50	<0.50
	Mar 15	1988.72	15.41	1973.31	6.8	0.6	19.3	3.4	26.20	0.4	102	3.0	<0.50	<0.50	<0.50
	Jun 15	1988.72	18.50	1970.22	7.2	0.3	49.1	3.9	25.02	0.3	127	0.52	<0.50	<0.50	<0.50
	Sep 15	1988.72	20.41	1968.31	7.6	0.7	11.2	2.5	26.83	0.5	154	39	<0.50	<0.50	<0.50
	Nov 15	1988.72	18.42	1970.30	7.6	0.6	NM	2.5	23.24	0.4	152	7.7	<0.50	<0.50	<0.50
	Feb 16	1988.72	14.95	1973.77	7.5	0.6	33.7	6.2	21.89	0.4	170	2.0	<0.50	<0.50	<0.50
MW-6D2	Mar 13	1988.72	14.94	1973.78	7.6	0.6	NM	4.3	22.93	0.4	55	<0.50	<0.50	<0.50	<0.50
	Jun 13	1988.72	20.40	1968.32	7.5	0.7	NM	5.9	25.49	0.4	142	<0.50	<0.50	<0.50	<0.50
	Sep 13	1988.72	21.61	1967.11	7.4	0.7	NM	5.0	26.61	0.5	58	33	<0.50	<0.50	<0.50
	Nov 13	1988.72	18.94	1969.78	7.5	0.6	18.0	NM	23.22	0.4	24	3.3	<0.50	<0.50	<0.50
	Mar 14	1988.72	15.90	1972.82	7.3	0.5	52.3	4.4	24.76	0.3	88	1.6	<0.50	<0.50	<0.50
	Jun 14	1988.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1988.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1988.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1988.72	15.35	1973.37	6.8	0.6	58.6	3.7	24.31	0.4	113	3.2	<0.50	<0.50	<0.50
	Jun 15	1988.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1988.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1988.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1988.72	14.81	1973.91	6.04	0.58	103.00	6.23	22.48	0.37	147	2.6	0.7	<0.50	<0.50
MW-6D3	Mar 13	1988.72	14.04	1974.68	7.6	0.5	NM	0.7	22.18	0.3	29	<0.50	<0.50	<0.50	<0.50
	Jun 13	1988.72	24.40	1964.32	7.7	0.5	NM	2.8	31.09	0.4	155	<0.50	<0.50	<0.50	<0.50
	Sep 13	1988.72	24.89	1963.83	7.2	0.6	NM	2.2	28.92	0.4	112	2.0	<0.50	<0.50	<0.50
	Nov 13	1988.72	22.16	1966.56	6.9	0.5	43.6	5.7	23.58	0.3	78	3.0	<0.50	<0.50	<0.50
	Mar 14	1988.72	16.70	1972.02	7.3	0.5	86.4	5.4	24.62	0.3	61	1.9	<0.50	<0.50	<0.50
	Jun 14	1988.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1988.72	26.93	1961.79	7.42	0.49	67.50	6.17	27.28	0.32	65.40	10	<0.50	<0.50	<0.50
	Nov 14	1988.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1989.72	15.47	1974.25	6.8	0.5	99.1	3.9	25.30	0.3	107	32	0.50	<0.50	<0.50
	Jun 15	1989.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1989.72	25.36	1964.36	7.59	0.45	8.10	3.59	26.83	0.29	146	30	0.68	<0.50	<0.50
	Nov 15	1989.72	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1989.72	13.75	1975.97	7.55	0.48	55.40	5.49	22.48	0.31	183	30	0.70	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-7	Sep 02	1990.28	18.27	1972.01	NM	NM	NM	NM	NM	NM	NM	ND	ND	ND	ND
	May 03	1990.28	16.60	1973.68	NM	NM	NM	NM	NM	NM	NM	1.7	ND	ND	ND
	Sep 03	1990.25	16.79	1973.46	NM	NM	NM	NM	NM	NM	NM	2	ND	ND	ND
	Jan 04	1990.25	17.32	1972.93	7.0	2.2	NM	0.9	22.40	NM	NM	11	ND	ND	ND
	May 05	1990.25	13.86	1976.39	7.1	1.8	NM	4.0	24.80	NM	129	ND	ND	ND	ND
	Sep 05	1990.25	14.97	1975.28	7.0	4.6	140.0	6.2	26.60	3.0	144	3.3	ND	ND	ND
	Dec 05	1990.25	15.45	1974.80	6.7	5.3	5.0	1.8	23.80	3.4	472	1.2	ND	ND	ND
	Mar 06	1990.25	16.41	1973.84	4.7	6.7	428.0	NM	22.40	4.2	634	1.5	ND	ND	ND
	Jun 06	1990.25	16.50	1973.75	NM	4.1	>999	6.6	26.20	2.6	-14	2.2	ND	ND	ND
	Oct 06	1990.25	16.50	1973.75	6.2	3.7	>999	4.4	25.00	2.3	92	2.9	ND	ND	ND
	Dec 06	1990.25	16.87	1973.38	6.9	4.8	>999	5.7	25.10	3.0	65	2.1	ND	ND	ND
	Mar 07	1990.25	18.19	1972.06	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1990.25	18.08	1972.17	7.1	3.6	450.0	6.3	25.10	2.2	129	1.1	ND	ND	ND
	Sep 07	1990.25	16.31	1973.94	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1990.25	16.60	1973.65	6.2	4.0	0.0	2.3	22.50	2.6	161	1.3	ND	ND	ND
	Mar 08	1990.25	17.93	1972.32	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1990.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1990.22	17.57	1972.65	6.6	3.8	204.0	3.5	26.70	2.4	134	2.5	ND	ND	ND
	Feb 09	1990.22	17.52	1972.70	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1990.22	17.92	1972.30	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1990.22	18.13	1972.09	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1990.22	18.50	1971.72	5.8	3.4	46.0	3.2	26.70	2.2	160	7.9	ND	ND	ND
	Feb 10	1990.22	18.36	1971.86	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1990.22	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1990.22	17.54	1972.68	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1990.22	17.65	1972.57	6.9	3.7	230.8	4.9	26.17	NM	98	2.0	ND	ND	ND
	Mar 11	1990.22	18.19	1972.03	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1990.22	18.40	1971.82	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1990.22	18.02	1972.20	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1990.22	17.86	1972.36	7.0	3.5	NM	3.7	25.20	2.2	302	8.9	ND	ND	ND
	Mar 12	1990.22	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1989.78	17.78	1972.00	7.3	3.5	8.0	4.8	27.56	2.3	-42	10	ND	ND	ND
	Sep 12	1989.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1989.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1989.78	18.47	1971.31	7.0	3.8	NM	3.4	25.22	2.5	70	10	<0.50	<0.50	<0.50
	Jun 13	1989.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1989.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1990.78	18.40	1972.38	6.1	3.4	53.0	1.64	26.34	2.17	165	8.4	<0.50	<0.50	<0.50
	Mar 14	1990.78	18.12	1972.66	7.3	3.3	39.0	4.18	24.49	2.11	90	1.3	<0.50	<0.50	<0.50
	Jun 14	1990.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1990.78	18.23	1972.55	7.42	3.48	59.40	6.32	28.59	2.25	108	4.7	<0.50	<0.50	<0.50
	Nov 14	1990.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1990.78	18.20	1972.58	6.5	3.6	11.5	2.3	26.60	2.4	206	17	<0.50	<0.50	<0.50
	Jun 15	1990.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1990.78	17.76	1973.02	7.51	3.05	17.20	2.13	28.28	1.98	413	11	<0.50	<0.50	<0.50
	Nov 15	1990.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1990.78	17.00	1973.78	7.02	3.38	11.00	2.60	25.29	2.20	190	15	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-8	Sep 02	1994.25	18.55	1975.70	NM	NM	NM	NM	NM	NM	NM	5.4	ND	ND	ND
	May 03	1994.25	19.50	1974.75	NM	NM	NM	NM	NM	NM	NM	3.2	ND	ND	ND
	Sep 03	1994.23	19.55	1974.68	NM	NM	NM	NM	NM	NM	NM	3.7	ND	ND	ND
	Jan 04	1994.23	19.91	1974.32	7.0	2.2	NM	1.0	22.00	NM	NM	4.7	ND	ND	ND
	May 05	1994.23	15.51	1978.72	7.0	1.8	NM	3.6	27.70	NM	107	5.6	5.6	ND	ND
	Dec 05	1994.23	18.48	1975.75	6.7	4.2	>999	2.1	24.10	2.7	483	3.6	ND	ND	ND
	Mar 06	1994.23	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1994.23	18.89	1975.34	NM	3.7	>999	6.9	27.40	2.3	185	2.6	ND	ND	ND
	Oct 06	1994.23	19.12	1975.11	6.2	3.4	>999	5.9	26.70	2.2	108	3.4	ND	ND	ND
	Dec 06	1994.23	19.60	1974.63	6.2	3.4	>999	5.9	26.70	2.2	108	4.3	ND	ND	ND
	Mar 07	1994.23	20.56	1973.67	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1994.23	20.31	1973.92	7.1	3.5	259.0	7.3	27.30	2.3	287	2.8	ND	ND	ND
	Sep 07	1994.23	19.14	1975.09	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1994.23	19.81	1974.42	6.5	3.7	0.0	3.5	25.50	2.4	158	2.8	ND	ND	ND
	Mar 08	1994.23	20.61	1973.62	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1994.23	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1994.22	20.79	1973.43	6.8	3.5	421.0	5.2	26.90	2.2	154	3.7	ND	ND	ND
	Feb 09	1994.22	20.29	1973.93	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1994.22	20.44	1973.78	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1994.22	20.41	1973.81	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1994.22	20.71	1973.51	6.7	3.2	450.0	5.0	26.80	2.0	133	2.8	ND	ND	ND
	Feb 10	1994.22	20.86	1973.36	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1994.22	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1994.22	19.68	1974.54	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1994.22	19.94	1974.28	7.0	3.5	39.5	5.3	26.65	NM	98	4	ND	ND	ND
	Mar 11	1994.22	20.41	1973.81	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1994.22	20.50	1973.72	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1994.22	20.27	1973.95	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 12	1994.22	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1991.71	19.32	1972.39	7.4	3.2	93.1	6.6	27.55	2.1	17	3.5	ND	ND	ND
	Sep 12	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1991.71	20.65	1971.06	7.0	3.5	NM	5.0	25.97	2.3	78	1.5	<0.50	<0.50	<0.50
	Jun 13	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1991.71	20.60	1971.11	6.1	3.2	95.0	2.3	26.12	2.1	194	2.2	<0.50	<0.50	<0.50
	Mar 14	1991.71	20.45	1971.26	7.3	3.1	92.9	5.4	24.07	2.0	89	1.6	<0.50	<0.50	<0.50
	Jun 14	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1991.71	20.55	1971.16	6.3	3.4	18.7	1.0	26.64	2.2	201	2.4	<0.50	<0.50	<0.50
	Jun 15	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1991.71	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1991.71	19.77	1971.94	7.00	3.15	20.60	2.86	24.34	2.05	169	2.1	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-9	Sep 02	1992.26	18.46	1973.80	NM	NM	NM	NM	NM	NM	NM	670	ND	ND	ND
	May 03	1992.26	19.15	1973.11	NM	NM	NM	NM	NM	NM	NM	59	ND	ND	ND
	Sep 03	1992.26	19.02	1973.24	NM	NM	NM	NM	NM	NM	NM	9.2	ND	ND	ND
	Jan 04	1992.26	19.05	1973.21	7.0	2.5	NM	1.2	22.60	NM	NM	10	ND	ND	ND
	May 05	1992.26	15.36	1976.90	7.1	2.7	296.0	7.6	26.10	NM	130	353	ND	ND	ND
	Sep 05	1992.26	17.85	1974.41	7.2	1.8	4.0	6.6	27.10	1.2	111	64	ND	ND	ND
	Dec 05	1992.26	17.68	1974.58	6.9	2.5	33.0	2.5	26.60	1.6	123	190	ND	ND	ND
	Mar 06	1992.26	18.55	1973.71	5.1	2.1	>999	NM	25.90	1.3	496	ND	ND	ND	ND
	Jun 06	1992.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 06	1992.26	18.40	1973.86	6.3	2.4	0.0	4.1	25.70	1.5	86	160	ND	ND	ND
	Dec 06	1992.26	19.00	1973.26	6.8	3.0	0.0	5.1	25.50	1.9	233	45	ND	ND	ND
	Mar 07	1992.26	20.19	1972.07	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1992.26	19.95	1972.31	7.1	2.5	0.0	5.6	26.10	1.6	428	170	ND	ND	ND
	Sep 07	1992.26	18.51	1973.75	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1992.26	19.20	1973.06	NM	NM	NM	NM	NM	NM	NM	110	ND	ND	ND
	Mar 08	1992.26	20.16	1972.10	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1992.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1992.25	19.87	1972.38	7.0	1.4	162.0	4.7	26.60	0.9	58	12	ND	ND	ND
	Feb 09	1992.25	19.76	1972.49	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1992.25	20.00	1972.25	7.5	1.4	>-5.0	4.0	26.50	0.8	-9	13	ND	ND	ND
	Sep 09	1992.25	20.20	1972.05	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1992.25	20.45	1971.80	7.0	1.1	-10.0	4.0	26.40	0.7	-157	5.5	ND	ND	ND
	Feb 10	1992.25	20.21	1972.04	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1992.25	20.10	1972.15	7.3	1.2	12.0	5.1	27.67	NM	NM	6.6	ND	ND	ND
	Oct 10	1992.25	19.44	1972.81	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1992.25	19.63	1972.62	7.1	1.2	7.0	3.5	27.31	NM	50	3.7	ND	ND	ND
	Mar 11	1992.25	20.13	1972.12	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1992.25	20.40	1971.85	7.1	1.2	0.4	0.5	31.96	NM	286	2.3	ND	ND	ND
	Sep 11	1992.25	19.99	1972.26	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1992.25	19.91	1972.34	7.3	1.2	NM	2.2	24.70	0.8	265	5.6	ND	ND	ND
	Mar 12	1992.25	20.50	1971.75	7.5	1.2	17.8	1.7	26.86	0.8	-79	5.2	NS	NS	NS
*	Jun 12	1992.25	19.45	1972.80	7.6	1.0	13.4	4.7	30.27	0.8	-8	5.7	ND	ND	ND
	Sep 12	1992.25	19.07	1973.18	7.7	1.2	NM	2.2	27.57	0.8	118	3.7	ND	ND	ND
	Nov 12	1992.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1992.25	20.56	1971.69	7.2	1.4	NM	0.6	25.53	0.9	-0.1	6.6	<0.50	<0.50	<0.50
	Jun 13	1992.25	20.91	1971.34	7.2	1.4	NM	2.3	25.44	0.9	110	9.8	<0.50	<0.50	<0.50
	Sep 13	1992.25	20.69	1971.56	7.3	1.4	NM	2.4	27.88	0.9	-81	6.6	<0.50	<0.50	<0.50
	Nov 13	1992.25	20.53	1971.72	6.4	1.3	35.3	0.6	25.32	0.8	56	11	<0.50	<0.50	<0.50
	Mar 14	1992.25	20.36	1971.89	7.3	1.4	13.8	4.1	24.73	0.9	75	11	<0.50	<0.50	<0.50
	Jun 14	1992.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1992.25	20.55	1971.70	7.25	1.31	17.60	3.98	29.12	0.86	58.50	7.9	<0.50	<0.50	<0.50
	Nov 14	1992.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1992.25	20.62	1971.63	6.73	1.59	13.33	2.37	25.95	1.04	90.80	9.7	<0.50	<0.50	<0.50
	Jun 15	1992.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1992.25	19.89	1972.36	7.71	1.22	21.90	0.94	28.85	0.80	350.10	4.0	<0.50	<0.50	<0.50
	Nov 15	1992.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1992.25	19.31	1972.94	7.27	1.42	15.95	2.25	24.33	0.92	157.80	6.3	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-10	Sep 02	1983.81	18.51	1965.30	NM	NM	NM	NM	NM	NM	NM	ND	ND	ND	ND
	May 03	1983.81	18.65	1965.16	NM	NM	NM	NM	NM	NM	NM	ND	ND	ND	ND
	Sep 03	1983.81	19.45	1964.36	NM	NM	NM	NM	NM	NM	NM	15	ND	ND	ND
	Jan 04	1983.81	20.32	1963.49	7.0	3.1	NM	1.0	24.40	NM	NM	ND	ND	ND	ND
	May 05	1983.81	16.76	1967.05	6.8	3.2	25.0	1.5	28.10	NM	-253	ND	ND	ND	ND
	Sep 05	1983.81	16.95	1966.86	7.0	2.9	28.0	3.9	27.90	1.9	-239	ND	ND	ND	ND
	Dec 05	1983.81	17.64	1966.17	6.7	3.7	57.0	1.5	23.90	2.3	-140	ND	ND	ND	ND
	Mar 06	1983.81	19.25	1964.56	5.7	1.8	153.0	NM	21.30	1.2	-154	ND	ND	ND	ND
	Jun 06	1983.81	17.90	1965.91	NM	2.1	>999	3.5	28.10	1.5	-303	ND	ND	ND	ND
	Oct 06	1983.81	19.00	1964.81	6.2	1.4	86.0	1.6	27.10	0.9	-272	ND	ND	ND	ND
	Dec 06	1983.81	19.21	1964.60	6.8	3.9	144.0	3.9	26.60	2.5	-321	1	ND	ND	ND
	Mar 07	1983.81	20.84	1962.97	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1983.81	21.39	1962.42	7.0	3.5	>999	2.7	27.30	2.1	-179	ND	ND	ND	ND
	Sep 07	1983.81	20.38	1963.43	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1983.81	20.26	1963.55	6.9	3.6	0.0	0.6	24.50	2.3	-170	1	ND	ND	ND
	Mar 08	1983.81	21.06	1962.75	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1983.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1983.78	20.45	1963.33	6.8	2.9	100.0	0.0	27.70	1.9	-226	ND	ND	ND	ND
	Feb 09	1983.78	20.90	1962.88	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1983.78	21.42	1962.36	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1983.78	21.46	1962.32	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1983.78	21.67	1962.11	6.3	2.6	-10.0	0.2	27.40	1.6	-330	ND	ND	ND	ND
	Feb 10	1983.78	22.47	1961.31	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1983.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1983.78	21.23	1962.55	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1983.78	21.10	1962.68	7.1	1.0	1.0	0.1	28.00	NM	-274	ND	ND	ND	ND
	Mar 11	1983.78	21.76	1962.02	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1983.78	22.18	1961.60	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1983.78	21.75	1962.03	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1983.78	21.62	1962.16	6.9	1.3	NM	0.2	26.91	NM	-335	ND	ND	ND	ND
	Mar 12	1983.78	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1983.28	21.76	1961.52	7.4	3.0	11.0	1.0	27.50	2.0	-283	0.9	ND	ND	ND
	Sep 12	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1983.28	21.36	1961.92	7.1	2.7	NM	0.7	26.34	1.7	-238	<0.50	<0.50	<0.50	<0.50
	Jun 13	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1983.28	21.43	1961.85	7.3	3.0	76.1	4.7	27.18	1.9	-78	<0.50	<0.50	<0.50	<0.50
	Jun 14	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1983.28	21.60	1961.68	6.4	3.6	5.8	0.4	25.38	2.3	-181	<0.50	<0.50	<0.50	<0.50
	Jun 15	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1983.28	19.88	1963.40	6.92	3.47	14.56	0.51	26.53	2.25	-143	<0.50	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-11	Sep 02	1980.24	24.22	1956.02	NM	NM	NM	NM	NM	NM	NM	ND	ND	ND	ND
	May 03	1980.24	24.25	1955.99	NM	NM	NM	NM	NM	NM	NM	ND	ND	ND	ND
	Sep 03	1980.24	25.62	1954.62	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jan 04	1980.24	26.22	1954.02	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	May 05	1980.24	22.55	1957.69	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 06	1980.24	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1980.24	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 06	1980.24	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 06	1980.24	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 07	1980.24	25.51	1954.73	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1980.24	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 07	1980.24	26.13	1954.11	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1980.24	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 08	1980.24	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1980.24	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1980.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 09	1980.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1980.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1980.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1980.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 10	1980.21	27.54	1952.67	6.7	3.3	3.0	5.0	24.30	2.1	-134	ND	ND	ND	ND
	Jun 10	1980.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1980.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1980.21	26.69	1953.52	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 11	1980.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1980.21	27.36	1952.85	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1980.21	27.45	1952.76	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1980.21	27.28	1952.93	6.9	3.3	NM	0.2	24.72	21.3	-94	1.4	ND	ND	ND
	Mar 12	1980.21	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1979.87	27.37	1952.50	7.3	3.4	3.9	0.9	26.07	2.2	-194	1.4	ND	ND	ND
	Sep 12	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1979.87	25.81	1954.06	7.0	3.7	NM	1.2	24.43	2.4	-104	<0.50	<0.50	<0.50	<0.50
	Jun 13	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1979.87	26.32	1953.55	7.2	3.2	13.2	0.9	24.93	2.1	-19	<0.50	<0.50	<0.50	<0.50
	Jun 14	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1979.87	26.55	1953.32	6.8	3.5	3.7	1.0	23.66	2.3	-96	<0.50	<0.50	<0.50	<0.50
	Jun 15	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1979.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1979.87	25.41	1954.46	6.96	3.47	6.42	0.82	24.20	2.28	-62	<0.50	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-12	Sep 02	1996.59	14.90	1981.69	NM	NM	NM	NM	NM	NM	NM	ND	ND	ND	ND
	May 03	1996.59	15.07	1981.52	NM	NM	NM	NM	NM	NM	NM	1.3	ND	ND	ND
	Sep 03	1996.59	15.30	1981.29	NM	NM	NM	NM	NM	NM	NM	14	ND	ND	ND
	Jan 04	1996.59	15.40	1981.19	7.0	2.2	NM	NM	22.40	NM	NM	6.1	ND	ND	ND
	May 05	1996.59	12.34	1984.25	6.8	2.6	NM	3.2	24.90	NM	219	ND	ND	ND	ND
	Sep 05	1996.59	13.45	1983.14	7.0	4.2	160.0	5.0	25.60	2.7	95	1.1	ND	ND	ND
	Dec 05	1996.59	14.20	1982.39	6.7	5.0	210.0	2.0	22.50	3.2	523	1.2	ND	ND	ND
	Mar 06	1996.59	15.00	1981.59	NM	6.7	91.0	NM	23.50	4.2	503	1.1	ND	ND	ND
	Jun 06	1996.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 06	1996.59	14.71	1981.88	6.3	3.9	>999	3.9	26.10	2.5	112	ND	ND	ND	ND
	Dec 06	1996.59	15.05	1981.54	6.6	4.4	>999	6.2	25.30	2.8	206	1.4	ND	ND	ND
	Mar 07	1996.59	16.55	1980.04	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1996.59	16.31	1980.28	7.1	3.8	>999	3.5	25.50	2.4	-39	ND	ND	ND	ND
	Sep 07	1996.59	14.27	1982.32	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1996.59	15.04	1981.55	6.3	3.9	286.0	2.6	24.70	2.5	207	ND	ND	ND	ND
	Mar 08	1996.59	16.51	1980.08	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1996.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1996.48	15.73	1980.75	6.7	3.8	366.0	0.8	26.90	2.4	119	2	ND	ND	ND
	Feb 09	1996.48	15.61	1980.87	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1996.48	16.26	1980.22	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1996.48	16.29	1980.19	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1996.48	16.76	1979.72	6.0	3.5	370.0	1.5	27.60	2.2	54	1.2	ND	ND	ND
	Feb 10	1996.48	16.92	1979.56	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1996.48	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1996.48	15.58	1980.90	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1996.48	15.85	1980.63	6.8	3.6	20.4	1.6	26.18	NM	109	0.76	ND	ND	ND
	Mar 11	1996.48	16.49	1979.99	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1996.48	16.66	1979.82	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1996.48	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1996.48	15.93	1980.55	7.0	3.5	NM	2.0	24.82	2.3	315	0.95	ND	ND	ND
	Mar 12	1996.48	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1995.95	15.37	1980.58	7.3	3.5	15.3	2.8	28.24	2.3	-18	1.2	ND	ND	ND
	Sep 12	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1995.95	16.76	1979.19	7.0	3.8	NM	2.4	25.55	2.5	46	0.65	<0.50	<0.50	<0.50
	Jun 13	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1995.95	16.66	1979.29	6.0	3.4	79.0	1.1	24.57	2.2	189	0.86	<0.50	<0.50	<0.50
	Mar 14	1995.95	16.26	1979.69	7.3	3.3	83.0	4.4	23.31	2.1	48	0.67	<0.50	<0.50	<0.50
	Jun 14	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1995.95	16.69	1979.26	6.52	3.58	101.00	1.76	25.65	2.32	221.40	0.77	<0.50	<0.50	<0.50
	Jun 15	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1995.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1995.95	14.92	1981.03	7.00	3.33	27.70	2.61	22.99	2.17	230.20	0.75	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-13	May 03	1984.23	17.25	1966.98	NM	NM	NM	NM	NM	NM	NM	2,100	ND	ND	ND
	Sep 03	1984.23	17.60	1966.63	NM	NM	NM	NM	NM	NM	NM	2,800	ND	ND	ND
	Jan 04	1984.23	18.00	1966.23	6.6	3.3	NM	1.1	22.20	NM	NM	2,700	ND	ND	ND
	May 05	1984.23	14.76	1969.47	7.0	2.1	>999	4.2	24.50	NM	118	5,310	ND	ND	ND
	Sep 05	1984.23	15.60	1968.63	7.1	4.0	270.0	6.9	25.40	2.5	144	2,600	ND	ND	ND
	Dec 05	1984.23	16.05	1968.18	6.7	5.0	330.0	2.2	24.90	3.2	250	3,400	ND	ND	ND
	Mar 06	1984.23	17.24	1966.99	5.5	3.6	44.0	NM	22.80	2.3	68	3,700	ND	ND	ND
	Jun 06	1984.23	17.40	1966.83	NM	3.7	425.0	7.1	24.20	2.4	120	2,900	NS	NS	NS
	Oct 06	1984.23	17.15	1967.08	6.2	3.6	50.0	3.8	24.60	2.3	169	2,800	ND	ND	ND
	Dec 06	1984.23	17.47	1966.76	6.8	4.3	94.0	4.2	24.50	2.7	330	3,200	ND	ND	ND
	Mar 07	1984.23	18.58	1965.65	6.9	3.5	308.0	9.5	24.00	2.3	514	2,500	ND	ND	ND
	Jun 07	1984.23	18.66	1965.57	7.0	3.5	0.0	6.1	23.60	2.2	411	3,700	ND	ND	ND
	Sep 07	1984.23	17.41	1966.82	6.7	3.3	3.0	4.7	27.70	2.1	228	2,000	ND	ND	ND
	Dec 07	1984.23	17.50	1966.73	6.4	3.7	19.7	6.5	21.30	2.4	282	2,500	ND	ND	ND
	Mar 08	1984.23	18.31	1965.92	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1984.23	NM	NM	NM	NM	NM	NM	NM	NM	NM	2,300	ND	ND	ND
	Oct 08	1984.18	18.25	1965.93	6.8	3.5	50.3	3.1	24.80	2.2	87	2,600	5.3	ND	ND
	Feb 09	1984.18	18.28	1965.90	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1984.18	18.41	1965.77	7.0	3.8	15.7	3.0	24.40	2.4	120	2,200	2.9	ND	ND
	Sep 09	1984.18	18.63	1965.55	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1984.18	19.05	1965.13	6.0	3.4	0.0	2.0	25.20	2.1	135	1,700	3.7	ND	ND
	Feb 10	1984.18	19.22	1964.96	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1984.18	18.72	1965.46	7.0	3.2	5.2	2.9	25.27	NM	NM	1,600	3.2	ND	ND
	Oct 10	1984.18	18.44	1965.74	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1984.18	18.45	1965.73	6.9	3.5	2.0	2.3	23.79	NM	90	1,900	3.9	ND	ND
	Mar 11	1984.18	18.75	1965.43	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1984.18	19.15	1965.03	7.1	3.5	4.0	2.7	24.74	NM	284	1,600	3.2	ND	ND
	Sep 11	1984.18	18.64	1965.54	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1984.18	18.67	1965.51	6.9	3.7	NM	1.6	23.97	2.4	113	1,700	2.4	ND	ND
	Mar 12	1984.18	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1983.31	18.45	1964.86	7.2	3.5	19.6	1.9	23.36	2.3	86	1,500	3.7	ND	ND
	Sep 12	1983.31	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1983.31	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1983.31	18.53	1964.78	7.0	3.8	NM	1.6	22.69	2.5	159	1,300	2.8	<0.50	<0.50
	Jun 13	1983.31	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1983.31	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1983.31	18.50	1964.81	7.5	3.9	19.7	0.9	23.77	2.5	104	1,800	3.5	<0.50	<0.50
	Mar 14	1983.31	18.37	1964.94	7.2	3.2	12.2	3.6	23.95	2.1	-158	1,500	3.7	<0.50	<0.50
	Jun 14	1983.31	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1983.31	18.31	1965.00	7.39	3.52	7.97	5.92	29.88	2.31	133	640	2.8	<0.50	<0.50
	Nov 14	1983.31	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1983.31	18.40	1964.91	6.34	3.61	12.03	1.12	23.24	2.35	216.80	1,700	4.6	<0.50	<0.50
	Jun 15	1983.31	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1983.31	18.20	1965.11	7.40	3.11	9.50	1.68	26.90	2.02	122.70	770	4.1	<0.50	<0.50
	Nov 15	1983.31	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1983.31	17.16	1966.15	6.98	3.32	13.66	1.35	22.60	2.16	205.50	1,700	4.3	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-14	Nov 03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1,900	ND	ND	ND
	Jan 04	1987.89	18.35	1969.54	7.0	2.3	NM	1.3	22.30	NM	NM	2,100	ND	ND	ND
	May 05	1987.89	15.02	1972.87	7.0	3.2	NM	NM	24.70	NM	140	2,920	5.5	ND	ND
	Dec 05	1987.89	16.50	1971.39	6.8	5.3	>999	2.1	26.10	3.3	206	3,400	ND	ND	ND
	Mar 06	1987.89	17.54	1970.35	5.2	6.8	898.0	NM	24.20	4.3	234	2,500	ND	ND	ND
	Jun 06	1987.89	17.61	1970.28	NM	3.9	>999	6.8	25.40	2.5	119	1,800	NS	NS	NS
	Oct 06	1987.89	17.42	1970.47	6.1	3.6	>999	7.0	24.80	2.3	297	1,900	ND	ND	ND
	Dec 06	1987.89	17.78	1970.11	6.8	4.5	350.0	4.2	25.70	2.9	226	3,500	ND	ND	ND
	Mar 07	1987.89	18.93	1968.96	6.8	3.7	455.0	8.1	25.10	2.4	501	1,900	ND	ND	ND
	Jun 07	1987.89	18.80	1969.09	7.0	3.7	259.0	6.4	24.80	2.4	299	1,700	ND	ND	ND
	Sep 07	1987.89	17.40	1970.49	6.8	3.5	103.0	4.2	32.20	2.2	220	650	ND	ND	ND
	Dec 07	1987.89	17.66	1970.23	6.4	4.0	9.7	5.7	23.30	2.6	147	1,500	ND	ND	ND
	Mar 08	1987.89	18.63	1969.26	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1987.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	1,500	ND	ND	ND
	Oct 08	1987.86	18.60	1969.26	6.8	3.7	249.0	3.1	25.70	2.4	116	1,500	2.9	ND	ND
	Feb 09	1987.86	18.47	1969.39	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1987.86	18.63	1969.23	7.0	4.0	>-5.0	2.9	25.60	2.5	118	1,900	4.4	ND	ND
	Sep 09	1987.86	18.88	1968.98	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1987.86	19.20	1968.66	5.6	3.6	300.0	1.8	26.20	2.3	132	1,200	2.1	ND	ND
	Feb 10	1987.86	19.26	1968.60	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1987.86	18.88	1968.98	7.0	3.3	84.2	3.6	25.49	NM	NM	1,500	2.4	ND	ND
	Oct 10	1987.86	18.50	1969.36	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1987.86	18.56	1969.30	6.9	3.6	25.8	2.9	25.07	NM	101	1,500	2.6	ND	ND
	Mar 11	1987.86	18.97	1968.89	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1987.86	19.15	1968.71	7.3	3.6	11.4	3.2	25.78	NM	259	1,700	2	ND	ND
	Sep 11	1987.86	18.74	1969.12	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1987.86	18.72	1969.14	7.0	3.5	NM	2.6	25.40	2.3	111	1,700	2.5	ND	ND
	Mar 12	1987.86	19.33	1968.53	7.2	3.6	87.5	4.3	23.33	2.3	-51	1,600	NS	NS	NS
*	Jun 12	1987.33	18.71	1968.62	7.3	3.5	122.0	3.9	25.77	2.3	104	1,400	2.5	ND	ND
	Sep 12	1987.33	18.28	1969.05	7.3	3.5	NM	3.2	25.71	2.3	144	1,300	2.8	ND	ND
	Nov 12	1987.33	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1987.33	19.12	1968.21	7.0	3.9	NM	2.6	24.10	2.5	112	1,900	2.9	<0.50	<0.50
	Jun 13	1987.33	19.44	1967.89	7.2	3.1	NM	3.5	28.28	2.5	130	1,300	2.1	<0.50	<0.50
	Sep 13	1987.33	19.16	1968.17	7.0	3.7	NM	2.8	26.13	2.4	91	1,400	2.5	<0.50	<0.50
	Nov 13	1987.33	18.96	1968.37	7.8	3.9	28.9	2.6	25.17	3.5	96	1,500	2.7	<0.50	<0.50
	Mar 14	1987.33	18.89	1968.44	7.3	3.0	165.0	6.0	24.70	2.1	-114	930	2.2	<0.50	<0.50
	Jun 14	1987.33	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1987.33	18.95	1968.38	7.34	3.60	67.60	3.53	27.45	2.34	122	330	1	<0.50	<0.50
	Nov 14	1987.33	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1987.33	18.85	1968.48	6.44	3.67	69.60	2.06	25.28	2.39	104.90	1,900	3.6	<0.50	<0.50
	Jun 15	1987.33	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1987.33	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1987.33	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1987.33	17.75	1969.58	6.98	3.44	68.00	2.42	25.36	2.24	255.50	1,800	4.7	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-14I	Mar 13	NM	19.52	NM	7.4	1.3	NM	4.1	24.19	0.9	95	7,200	51	4.9	<0.50
	Jun 13	1987.54	19.95	1967.59	7.5	1.4	NM	4.2	30.76	0.9	101	5,500	27	3.8	<0.50
	Sep 13	1987.54	19.66	1967.88	7.4	1.4	NM	2.9	35.26	0.9	82	3,700	23	1.6	<0.50
	Nov 13	1987.54	19.53	1968.01	7.8	1.4	6.3	4.0	24.38	0.9	102	10,000	38	17	<0.50
	Mar 14	1987.54	19.53	1968.01	7.3	1.1	11.3	4.4	25.36	0.7	134	7,600	32	17	<0.50
	Jun 14	1987.54	19.69	1967.85	7.2	1.3	6.5	4.4	28.29	0.9	111	9,800	21	6.9	<0.50
	Sep 14	1987.54	19.41	1968.13	7.3	1.3	6.4	4.0	30.32	0.9	93	9,300	21	1.4	<0.50
	Nov 14	1987.54	19.44	1968.10	7.0	1.3	3.4	4.0	24.91	0.9	26	11,000	25	17	<1.0
	Mar 15	1987.54	19.41	1968.13	6.7	1.3	6.3	2.7	24.99	0.8	106	11,000	32	20	<0.50
	Jun 15	1987.54	19.64	1967.90	7.5	1.3	8.5	2.4	28.07	0.8	84	9,600	25	11	<0.50
	Sep 15	1987.54	19.21	1968.33	7.7	1.2	15.1	2.7	30.32	0.8	192	9,300	23	8.3	<0.50
	Nov 15	1987.54	18.63	1968.91	7.9	1.2	NM	0.5	24.94	0.8	142	9,400	26	21	<0.50
	Feb 16	1987.54	18.31	1969.23	7.3	1.2	26.4	3.8	25.30	0.8	239	11,000	32	26	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-15	Nov 03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	5.2	ND	ND	ND
	Jan 04	1983.28	15.60	1967.68	6.4	2.2	NM	1.0	22.40	NM	NM	2.7	ND	ND	ND
	May 05	1983.28	12.59	1970.69	7.0	2.3	NM	2.9	25.10	NM	164	ND	ND	ND	ND
	Sep 05	1983.28	13.45	1969.83	7.0	3.6	36.0	3.5	25.80	2.3	-24	3.6	ND	ND	ND
	Dec 05	1983.28	13.77	1969.51	6.6	4.5	140.0	1.0	25.90	2.8	-38	5	ND	ND	ND
	Mar 06	1983.28	15.00	1968.28	4.7	6.4	20.0	NM	23.90	4.0	613	4.5	ND	ND	ND
	Jun 06	1983.28	15.15	1968.13	NM	3.8	300.0	4.3	26.00	2.5	106	4.4	NS	NS	NS
	Oct 06	1983.28	14.91	1968.37	6.2	3.7	10.0	2.0	25.70	2.3	51	3.3	ND	ND	ND
	Dec 06	1983.28	15.17	1968.11	6.8	4.7	15.0	3.4	25.90	3.0	28	3.7	ND	ND	ND
	Mar 07	1983.28	16.31	1966.97	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1983.28	16.16	1967.12	7.0	3.6	37.0	3.1	25.30	2.3	362	3	ND	ND	ND
	Sep 07	1983.28	14.80	1968.48	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1983.28	14.71	1968.57	6.4	3.7	0.0	1.9	23.30	2.3	170	3	ND	ND	ND
	Mar 08	1983.28	16.62	1966.66	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1983.28	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1983.25	15.80	1967.45	6.8	3.6	132.0	2.1	27.00	2.3	112	7.8	ND	ND	ND
	Feb 09	1983.25	15.76	1967.49	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1983.25	15.89	1967.36	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1983.25	16.34	1966.91	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1983.25	16.68	1966.57	5.8	3.2	44.0	1.8	26.60	2.1	34	3	ND	ND	ND
	Feb 10	1983.25	16.81	1966.44	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1983.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1983.25	16.10	1967.15	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1983.25	16.08	1967.17	6.8	3.4	7.6	2.3	27.60	NM	154	2.5	ND	ND	ND
	Mar 11	1983.25	16.29	1966.96	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1983.25	16.64	1966.61	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1983.25	16.18	1967.07	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1983.25	16.17	1967.08	6.8	4.0	NM	2.1	26.75	NM	-42	3.5	ND	ND	ND
	Mar 12	1983.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 12	1982.74	16.70	1966.04	7.3	3.1	25.4	4.1	27.82	2.1	-64	4.2	ND	ND	ND
	Sep 12	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1982.74	16.41	1966.33	7.0	3.6	NM	2.9	26.24	2.3	48	2.7	<0.50	<0.50	<0.50
	Jun 13	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1982.74	16.25	1966.49	7.2	3.1	62.6	2.9	26.32	2.0	66	2.8	<0.50	<0.50	<0.50
	Jun 14	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1982.74	16.70	1966.04	6.43	3.46	21.70	1.79	26.25	2.25	95.40	3.6	<0.50	<0.50	<0.50
	Jun 15	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1982.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1982.74	15.14	1967.60	6.97	3.21	13.11	2.19	26.08	2.09	130.30	3.8	<0.50	<0.50	<0.50

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Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-16	Nov 03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	ND	ND	ND	ND
	Jan 04	1980.63	26.22	1954.41	7.0	2.3	NM	0.7	22.40	NM	NM	ND	ND	ND	ND
	May 05	1980.63	23.41	1957.22	7.1	2.9	NM	1.1	25.20	NM	-4	ND	ND	ND	ND
	Sep 05	1980.63	24.12	1956.51	7.0	3.4	520.0	3.5	24.60	2.3	-31	ND	ND	ND	ND
	Dec 05	1980.63	24.21	1956.42	6.7	3.8	>999	1.3	25.30	2.4	48	ND	ND	ND	ND
	Mar 06	1980.63	25.06	1955.57	5.2	5.7	199.0	NM	23.80	3.6	162	ND	ND	ND	ND
	Jun 06	1980.63	26.05	1954.58	NM	3.4	>999	5.6	27.10	2.2	-64	ND	ND	ND	ND
	Oct 06	1980.63	25.67	1954.96	6.3	3.4	32.0	2.0	24.60	2.2	-145	ND	ND	ND	ND
	Dec 06	1980.63	25.56	1955.07	6.5	3.6	271.0	2.9	24.40	1.3	-52	ND	ND	ND	ND
	Mar 07	1980.63	26.33	1954.30	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1980.63	27.28	1953.35	6.7	3.3	282.0	2.2	25.00	2.1	94	ND	ND	ND	ND
	Sep 07	1980.63	27.03	1953.60	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1980.63	26.46	1954.17	6.5	3.4	0.0	1.9	24.90	2.2	82	ND	ND	ND	ND
	Mar 08	1980.63	26.33	1954.30	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1980.63	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1980.61	27.19	1953.42	6.9	3.2	68.0	0.0	24.90	2.1	38	ND	2.8	ND	ND
	Feb 09	1980.61	26.52	1954.09	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1980.61	27.30	1953.31	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1980.61	27.86	1952.75	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1980.61	27.99	1952.62	5.7	3.0	100.0	0.4	26.00	1.9	-96	1.9	ND	ND	ND
	Feb 09	1980.61	28.43	1952.18	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1980.61	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1980.61	27.95	1952.66	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1980.61	27.68	1952.93	6.6	3.1	2.5	0.2	26.52	NM	140	ND	ND	ND	ND
	Mar 11	1980.61	27.49	1953.12	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1980.61	28.22	1952.39	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1980.61	28.36	1952.25	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1980.61	28.17	1952.44	6.9	3.5	NM	0.2	24.40	NM	-74	ND	ND	ND	ND
	Mar 12	1980.61	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1980.53	28.51	1952.02	7.2	2.9	NM	1.2	25.13	1.9	-23	ND	ND	ND	ND
	Sep 12	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1980.53	26.86	1953.67	7.0	3.3	NM	1.7	25.33	2.2	-111	<0.50	<0.50	<0.50	<0.50
	Jun 13	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1980.53	27.39	1953.14	7.3	2.8	1.8	2.5	24.61	1.8	23	<0.50	<0.50	<0.50	<0.50
	Jun 14	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1980.53	27.55	1952.98	6.8	3.2	3.4	0.3	24.24	2.1	2	<0.50	<0.50	<0.50	<0.50
	Jun 15	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1980.53	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1980.53	26.43	1954.10	7.0	3.0	4.5	0.1	24.50	1.9	-50	<0.50	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-17	May 05	1990.92	15.07	1975.85	6.9	3.5	22.0	5.9	24.10	NM	181	520	ND	ND	ND
	Dec 05	1990.92	17.05	1973.87	6.9	4.7	6.0	2.3	26.80	3.0	240	470	ND	ND	ND
	Mar 06	1990.92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1990.92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 06	1990.92	17.91	1973.01	6.2	3.5	2.0	7.4	24.90	2.2	174	1,300	ND	ND	ND
	Dec 06	1990.92	18.41	1972.51	6.9	4.1	25.0	6.8	24.10	2.7	386	710	ND	ND	ND
	Mar 07	1990.92	19.63	1971.29	7.0	3.6	87.0	8.1	24.30	2.3	350	440	ND	ND	ND
	Jun 07	1990.92	19.48	1971.44	7.0	3.7	37.0	7.3	25.00	2.3	471	300	ND	ND	ND
	Sep 07	1990.92	17.91	1973.01	6.7	3.4	0.0	5.0	26.70	2.2	197	380	ND	ND	ND
	Dec 07	1990.92	18.45	1972.47	6.3	3.9	0.0	4.8	19.70	2.5	176	480	ND	ND	ND
	Mar 08	1990.92	19.51	1971.41	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1990.92	NM	NM	NM	NM	NM	NM	NM	NM	NM	360	ND	ND	ND
	Oct 08	1990.89	18.84	1972.05	6.8	3.7	-3.1	4.1	25.00	2.4	136	290	ND	ND	ND
	Feb 09	1990.89	19.12	1971.77	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1990.89	19.44	1971.45	5.6	3.8	0.0	1.3	25.00	2.4	170	270	ND	ND	ND
	Sep 09	1990.89	19.58	1971.31	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1990.89	19.95	1970.94	6.6	3.5	-10.0	3.0	25.20	2.2	131	310	ND	ND	ND
	Feb 10	1990.89	19.71	1971.18	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1990.89	19.62	1971.27	7.0	2.9	-0.7	3.1	25.10	NM	NM	270	ND	ND	ND
	Oct 10	1990.89	19.10	1971.79	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1990.89	19.14	1971.75	6.6	3.7	1.3	1.8	26.48	NM	207	240	ND	ND	ND
	Mar 11	1990.89	19.65	1971.24	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1990.89	19.85	1971.04	6.7	3.7	0.5	1.7	25.89	NM	399	350	ND	ND	ND
	Sep 11	1990.89	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1990.89	19.45	1971.44	7.0	3.5	NM	2.7	24.09	2.6	274	350	ND	ND	ND
	Mar 12	1990.89	20.03	1970.86	7.2	3.6	4.1	1.3	24.72	2.3	-92	320	NS	NS	NS
*	Jun 12	1991.04	19.09	1971.95	7.2	3.5	4.5	1.6	24.31	2.3	101	260	ND	ND	ND
	Sep 12	1991.04	18.83	1972.21	7.5	3.5	NM	2.0	25.50	2.8	72	250	ND	ND	ND
	Nov 12	1991.04	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1991.04	19.94	1971.10	7.0	3.7	NM	1.0	23.75	2.4	54	190	<0.50	<0.50	<0.50
	Jun 13	1991.04	20.30	1970.74	7.0	3.8	NM	1.1	23.43	2.4	91	150	<0.50	<0.50	<0.50
	Sep 13	1991.04	20.18	1970.86	7.1	3.7	NM	1.4	25.61	2.4	-86	130	<0.50	<0.50	<0.50
	Nov 13	1991.04	19.90	1971.14	6.0	3.2	1.7	0.4	24.10	2.1	154	120	<0.50	<0.50	<0.50
	Mar 14	1991.04	19.67	1971.37	7.2	3.2	2.0	2.2	23.49	2.1	47	69	<0.50	<0.50	<0.50
	Jun 14	1991.04	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1991.04	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1991.04	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1991.04	19.80	1971.24	6.4	3.5	4.1	1.0	24.82	2.3	89	65	<0.50	<0.50	<0.50
	Jun 15	1991.04	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1991.04	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1991.04	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1991.04	18.65	1972.39	7.03	3.17	6.10	1.21	23.37	2.14	166	50	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-18	May 05	1962.87	8.71	1954.16	7.1	3.9	>999	5.6	24.30	NM	139	1,600	ND	ND	ND
	Sep 05	1962.87	9.69	1953.18	7.1	4.1	3.0	6.2	26.30	2.6	88	1,700	ND	ND	ND
	Dec 05	1962.87	9.70	1953.17	6.8	4.7	NM	2.0	25.20	3.0	420	2,400	ND	ND	ND
	Mar 06	1962.87	10.21	1952.66	5.2	6.2	3.0	NM	23.30	3.9	237	1,700	NS	NS	NS
	Jun 06	1962.87	11.64	1951.23	NM	3.6	304.0	6.2	25.40	2.3	166	1,600	NS	NS	NS
	Oct 06	1962.87	11.21	1951.66	6.3	3.5	0.0	4.1	25.50	2.2	127	2,100	ND	ND	ND
	Dec 06	1962.87	10.98	1951.89	6.8	4.2	0.0	4.3	24.70	2.7	297	1,400	ND	ND	ND
	Mar 07	1962.87	11.36	1951.51	7.0	3.4	23.0	7.5	22.80	2.2	286	1,400	ND	ND	ND
	Jun 07	1962.87	12.53	1950.34	7.0	3.5	24.0	5.5	23.90	2.2	394	1,300	ND	ND	ND
	Sep 07	1962.87	12.45	1950.42	6.8	3.3	22.0	5.4	29.30	2.1	210	930	ND	ND	ND
	Dec 07	1962.87	11.54	1951.33	6.3	3.6	0.0	5.8	21.60	2.3	232	1,400	ND	ND	ND
	Mar 08	1962.87	11.15	1951.72	6.9	3.5	0.2	4.3	21.20	2.2	212	1,800	ND	ND	ND
	Jun 08	1962.87	NM	NM	NM	NM	NM	NM	NM	NM	NM	1,200	ND	ND	ND
	Oct 08	1962.86	11.96	1950.90	5.5	3.5	14.3	7.8	25.50	2.2	196	950	3.7	ND	ND
	Feb 09	1962.86	11.48	1951.38	6.7	3.3	0.0	3.8	22.70	2.1	90	1,500	5.2	ND	ND
	Jun 09	1962.86	12.36	1950.50	7.3	3.5	20.2	3.5	23.90	2.3	131	3,500	5.1	ND	ND
	Sep 09	1962.86	13.24	1949.62	6.6	3.9	18.9	4.3	28.00	2.5	136	1,200	ND	ND	ND
	Nov 09	1962.86	13.27	1949.59	5.9	3.3	40.0	3.6	25.80	2.1	132	1,400	4.1	ND	ND
	Feb 10	1962.86	13.37	1949.49	6.9	3.3	9.0	4.0	23.30	2.1	134	1,600	4.8	ND	ND
	Jun 10	1962.86	12.90	1949.96	7.1	3.1	-0.9	8.0	25.10	NM	NM	1,100	3.5	ND	ND
	Oct 10	1962.86	13.43	1949.43	6.7	3.3	-0.7	4.4	26.19	2.2	528	1,300	3.4	ND	ND
	Nov 10	1962.86	13.20	1949.66	6.8	3.3	0.2	4.0	25.79	NM	192	1,200	3.8	ND	ND
	Mar 11	1962.86	12.43	1950.43	7.5	3.4	25.7	7.8	22.14	NM	118	1,000	2.7	ND	ND
	Jun 11	1962.86	13.32	1949.54	7.4	3.4	0.7	4.4	24.99	NM	234	1,300	2.9	ND	ND
	Sep 11	1962.86	13.61	1949.25	7.0	3.4	39.0	6.2	26.60	2.2	276	1,300	3.2	ND	ND
	Nov 11	1962.86	13.39	1949.47	7.0	3.2	NM	4.0	24.97	2.1	178	1,100	3.3	ND	ND
	Mar 12	1962.86	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1962.9	13.80	1949.10	7.3	3.2	6.1	4.8	25.23	2.1	115	1,300	3.4	ND	ND
	Sep 12	1962.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1962.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1962.9	12.06	1950.84	7.1	3.6	NM	2.6	23.54	2.3	83	1,200	2.5	<0.50	<0.50
	Jun 13	1962.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1962.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1962.9	13.62	1949.28	6.8	3.6	8.3	3.6	25.49	2.4	152	780	<0.50	<0.50	<0.50
	Mar 14	1962.9	12.75	1950.15	7.3	3.2	58.1	4.6	19.23	2.1	247	230	<0.50	<0.50	<0.50
	Jun 14	1962.9	13.78	1949.12	7.1	3.4	4.8	4.9	27.63	2.2	71	1,100	1.2	<0.50	<0.50
	Sep 14	1962.9	13.97	1948.93	8.0	2.9	7.6	2.5	30.26	1.8	92	620	0.78	<0.50	<0.50
	Nov 14	1962.9	13.22	1949.68	7.0	3.5	2.9	3.9	24.09	2.3	71	1,100	1.7	<0.50	<0.50
	Mar 15	1962.9	12.50	1950.40	6.5	3.5	7.4	2.3	22.37	2.3	243	1,200	2.5	<0.50	<0.50
	Jun 15	1962.9	13.04	1949.86	7.3	3.4	3.2	2.1	26.97	2.2	443	1,200	2.4	<0.50	<0.50
	Sep 15	1962.9	13.74	1949.16	7.6	2.9	20.8	2.1	28.93	1.9	98	1,000	2.6	<0.50	<0.50
	Nov 15	1962.9	13.18	1949.72	7.4	2.9	NM	1.9	24.81	1.9	470	1,000	2.6	<0.50	<0.50
	Feb 16	1962.9	11.98	1950.92	7.0	3.3	5.3	3.5	24.01	2.2	153	1,300	3.0	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-19	Nov 03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1,100	ND	ND	ND
	Jan 04	1980.26	25.65	1954.61	7.0	1.9	NM	1.0	22.40	NM	NM	1,200	ND	ND	ND
	May 05	1980.26	22.70	1957.56	7.1	1.9	NM	5.8	25.00	NM	130	873	ND	ND	ND
	Dec 05	1980.26	23.65	1956.61	6.6	4.7	NM	2.0	24.70	3.0	388	1,300	ND	ND	ND
	Mar 06	1980.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1980.26	25.55	1954.71	NM	3.7	>999	7.9	27.10	2.4	86	910	ND	ND	ND
	Oct 06	1980.26	25.23	1955.03	6.1	3.7	>999	4.6	23.90	2.4	175	840	ND	ND	ND
	Dec 06	1980.26	25.01	1955.25	6.8	4.4	>999	5.7	23.90	2.8	595	1,200	ND	ND	ND
	Mar 07	1980.26	25.77	1954.49	6.9	3.7	>999	9.1	24.30	2.3	284	890	ND	ND	ND
	Jun 07	1980.26	26.84	1953.42	7.1	3.5	>999	6.7	24.50	2.3	551	870	ND	ND	ND
	Sep 07	1980.26	26.41	1953.85	6.8	3.4	352.0	5.1	27.40	2.2	201	510	ND	ND	ND
	Dec 07	1980.26	25.52	1954.74	6.4	3.8	440.0	5.6	24.30	2.4	150	990	ND	ND	ND
	Mar 08	1980.26	25.35	1954.91	7.0	3.7	7.6	5.2	24.80	2.3	190	1,200	NS	NS	NS
	Jun 08	1980.26	NM	NM	NM	NM	NM	NM	NM	NM	NM	930	ND	ND	ND
	Oct 08	1980.24	26.19	1954.05	6.9	3.5	18.0	4.1	24.40	2.2	135	1,300	5.7	ND	ND
	Feb 09	1980.24	25.76	1954.48	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1980.24	26.59	1953.65	7.0	3.6	178.0	4.5	25.80	2.3	125	1,400	6.1	ND	ND
	Sep 09	1980.24	27.34	1952.90	6.4	3.9	999.0	4.7	26.60	2.5	157	880	ND	ND	ND
	Nov 09	1980.24	27.42	1952.82	5.9	3.4	>990	2.7	25.50	2.2	131	580	3.7	ND	ND
	Feb 10	1980.24	27.78	1952.46	6.9	3.2	120.0	4.8	23.70	2.1	135	990	5.5	ND	ND
	Jun 10	1980.24	27.08	1953.16	7.0	3.0	2.7	5.0	25.41	NM	NM	930	4.2	ND	ND
	Oct 10	1980.24	27.50	1952.74	7.1	3.2	15.3	5.2	25.28	2.1	394	420	3.2	ND	ND
	Nov 10	1980.24	27.24	1953.00	7.1	3.3	15.5	5.0	25.25	NM	241	840	4.1	ND	ND
	Mar 11	1980.24	26.73	1953.51	6.9	3.4	71.3	5.4	24.59	NM	258	880	3.7	ND	ND
	Jun 11	1980.24	27.55	1952.69	7.4	3.3	20.5	5.0	26.19	NM	190	1,000	3.5	ND	ND
	Sep 11	1980.24	27.68	1952.56	7.0	3.4	570.0	6.5	26.90	2.2	250	950	3.6	ND	ND
	Nov 11	1980.24	27.50	1952.74	7.1	3.1	NM	4.6	23.94	2.0	131	1,100	4.2	ND	ND
	Mar 12	1980.24	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1980.13	27.88	1952.25	7.5	3.1	27.1	5.3	25.86	2.0	102	1,000	3.5	ND	ND
	Sep 12	1980.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1980.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1980.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	520	3.2	<0.50	<0.50
	Jun 13	1980.13	27.46	1952.67	7.2	3.4	NM	4.9	28.16	2.2	119	530	3.4	<0.50	<0.50
	Sep 13	1980.13	27.94	1952.19	7.2	3.2	NM	4.7	27.22	2.1	255	840	3.2	<0.50	<0.50
	Nov 13	1980.13	27.48	1952.65	6.3	3.1	65.8	3.2	26.49	2.0	228	440	3.2	<0.50	<0.50
	Mar 14	1980.13	26.66	1953.47	7.3	3.0	72.1	3.2	24.47	2.0	160	910	3.7	<0.50	<0.50
	Jun 14	1980.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1980.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1980.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1980.13	26.60	1953.53	6.9	3.3	36.2	3.4	23.35	2.2	NM	930	4.0	<0.50	<0.50
	Jun 15	1980.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1980.13	27.51	1952.62	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1980.13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1980.13	25.61	1954.52	7.01	3.25	12.92	4.30	25.36	2.1	266	1,100	5.2	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-19I	Sep 12	1967.55	26.60	1940.95	7.7	3.0	NM	3.9	26.53	2.0	131	690	4.0	0.8	ND
	Nov 12	1967.55	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1967.55	NM	NM	NM	NM	NM	NM	NM	NM	NM	710	5.2	0.74	<0.50
	Jun 13	1967.55	26.42	1941.13	7.3	3.4	NM	4.4	26.1	2.1	589	<0.50	<0.50	<0.50	<0.50
	Sep 13	1978.37	26.92	1951.45	7.0	3.9	NM	5.2	28.5	2.5	650	<0.50	<0.50	<0.50	<0.50
	Nov 13	1978.37	26.47	1951.90	4.3	4.2	20.8	4.3	25.6	2.7	579	<0.50	<0.50	<0.50	<0.50
	Mar 14	1978.37	25.62	1952.75	7.3	3.4	69.4	3.6	23.0	2.2	626	<0.50	<0.50	<0.50	<0.50
	Jun 14	1978.37	26.71	1951.66	6.9	3.5	15.7	5.6	28.5	2.2	650	<0.50	<0.50	<0.50	<0.50
	Sep 14	1978.37	26.81	1951.56	7.4	3.3	46.2	7.3	27.0	2.1	631	<0.50	<0.50	<0.50	<0.50
	Nov 14	1978.37	26.02	1952.35	7.1	3.4	6.3	5.1	22.5	2.2	643	<0.50	<0.50	<0.50	<0.50
	Mar 15	1978.37	25.52	1952.85	6.9	3.3	10.9	2.9	24.0	2.2	539	0.62	<0.50	<0.50	<0.50
	Jun 15	1978.37	25.86	1952.51	7.2	3.3	17.5	2.4	29.0	2.1	630	1.9	<0.50	<0.50	<0.50
	Sep 15	1978.37	26.49	1951.88	7.4	2.7	NM	2.3	27.2	1.8	616	<0.50	<0.50	<0.50	<0.50
	Nov 15	1978.37	25.91	1952.46	7.4	2.7	NM	2.4	24.0	1.8	590	2.3	<0.50	<0.50	<0.50
	Feb 16	1978.37	24.65	1953.72	7.1	3.0	92.7	4.3	24.3	2.0	594	110	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-19D1	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	300	2.9	<0.50	<0.50
	Jun 13	1979.25	27.73	1951.52	7.3	3.0	NM	4.7	27.42	1.9	3	690	4.2	<0.50	<0.50
	Sep 13	1979.25	27.17	1952.08	7.0	3.2	NM	4.3	26.23	2.1	485	990	4.2	<0.50	<0.50
	Nov 13	1979.25	26.70	1952.55	7.3	2.4	28.1	4.7	24.24	1.7	385	620	3.5	<0.50	<0.50
	Jan 14	1979.25	25.81	1953.44	7.3	1.1	NM	4.8	23.10	0.7	274	490	2.4	<0.50	<0.50
	Feb 14	1979.25	25.83	1953.42	7.4	0.5	NM	3.7	23.68	0.4	230	210	1.1	<0.50	<0.50
	Mar 14	1979.25	25.91	1953.34	7.4	0.5	52.8	4.1	23.31	0.3	239	3.7	<0.50	<0.50	<0.50
	Jun 14	1979.25	26.97	1952.28	7.0	2.6	56.2	5.5	31.79	1.7	501	730	4.2	<0.50	<0.50
	Sep 14	1979.25	27.06	1952.19	7.8	2.9	61.4	6.4	29.97	2.1	333	240	1.5	<0.50	<0.50
	Nov 14	1979.25	26.30	1952.95	7.1	3.3	18.6	4.8	23.11	2.1	68	1,000	5.9	<0.50	<0.50
	Mar 15	1979.25	25.74	1953.51	6.8	0.9	44.4	3.9	25.94	0.6	159	210	1.3	<0.50	<0.50
	Jun 15	1979.25	26.20	1953.05	7.4	3.0	20.2	2.6	28.78	1.9	242	720	4.6	<0.50	<0.50
	Sep 15	1979.25	26.74	1952.51	7.6	2.6	9.2	2.2	27.89	1.7	108	820	5.3	<0.50	<0.50
	Nov 15	1979.25	26.15	1953.10	7.8	2.7	NM	2.4	23.75	1.7	431	920	5.4	<0.50	<0.50
	Feb 16	1979.25	24.80	1954.45	7.3	1.4	66.3	5.7	23.77	0.9	356	360	1.9	<0.50	<0.50
MW-19D2	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	170	1.5	<0.50	<0.50
	Jun 13	1979.28	27.85	1951.43	7.4	2.7	NM	2.0	26.09	1.8	607	<0.50	<0.50	<0.50	<0.50
	Sep 13	1979.28	28.50	1950.78	7.2	2.4	NM	2.6	25.10	1.6	565	<0.50	<0.50	<0.50	<0.50
	Nov 13	1979.28	27.71	1951.57	7.5	2.6	18.0	3.3	24.83	1.7	485	<0.50	<0.50	<0.50	<0.50
	Jan 14	1979.28	26.66	1952.62	7.4	2.0	NM	3.5	22.53	1.3	531	<0.50	<0.50	<0.50	<0.50
	Feb 14	1979.28	26.85	1952.43	7.4	2.1	NM	2.1	23.04	1.3	502	<0.50	<0.50	<0.50	<0.50
	Mar 14	1979.28	26.97	1952.31	7.4	2.1	28.0	4.0	23.12	1.4	509	0.53	<0.50	<0.50	<0.50
	Jun 14	1979.28	27.88	1951.40	7.2	2.2	17.0	3.7	29.19	1.4	617	6.0	<0.50	<0.50	<0.50
	Sep 14	1979.28	27.67	1951.61	7.6	2.2	7.9	4.8	26.23	1.4	531	10	<0.50	<0.50	<0.50
	Nov 14	1979.28	27.01	1952.27	7.2	2.5	3.8	2.9	23.63	1.6	75	39	<0.50	<0.50	<0.50
	Mar 15	1979.28	26.88	1952.40	6.7	2.2	6.0	0.7	25.77	1.5	180	44	<0.50	<0.50	<0.50
	Jun 15	1979.28	27.15	1952.13	7.2	2.2	7.3	0.5	25.77	1.4	381	73	<0.50	<0.50	<0.50
	Sep 15	1979.28	27.12	1952.16	7.7	1.8	13.4	0.8	26.94	1.2	91	110	0.94	<0.50	<0.50
	Nov 15	1979.28	27.34	1951.94	7.4	1.9	NM	0.9	23.11	1.2	407	120	1.0	<0.50	<0.50
	Feb 16	1979.28	26.21	1953.07	7.3	2.1	6.4	1.0	23.27	1.4	388	140	1.2	<0.50	<0.50
MW-19D3	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.50	<0.50	<0.50	<0.50
	Jun 13	1979.32	25.53	1953.79	7.7	0.5	NM	4.0	28.15	0.3	68	0.68	<0.50	<0.50	<0.50
	Sep 13	1979.32	28.80	1950.52	6.9	3.2	NM	4.9	24.91	2.1	133	710	4.8	<0.50	<0.50
	Nov 13	1979.32	25.42	1953.90	7.6	1.0	10.3	4.1	24.27	0.7	424	160	0.75	<0.50	<0.50
	Jan 14	1979.32	24.87	1954.45	7.4	0.5	NM	4.8	22.46	0.3	368	32	<0.50	<0.50	<0.50
	Feb 14	1979.32	24.67	1954.65	7.4	0.5	NM	4.6	22.68	0.3	344	36	<0.50	<0.50	<0.50
	Mar 14	1979.32	24.72	1954.60	7.4	0.5	17.0	4.4	23.47	0.3	80	17	<0.50	<0.50	<0.50
	Jun 14	1979.32	26.99	1952.33	7.7	0.6	41.6	4.6	33.28	0.4	158	40	<0.50	<0.50	<0.50
	Sep 14	1979.32	29.00	1950.32	7.0	3.1	6.9	6.5	26.73	2.0	256	710	4.7	<0.50	<0.50
	Nov 14	1979.32	26.48	1952.84	7.1	3.2	50.6	6.7	23.14	2.1	135	190	3.2	<0.50	<0.50
	Mar 15	1979.32	24.12	1955.20	6.7	0.6	14.8	3.9	25.63	0.4	201	41	<0.50	<0.50	<0.50
	Jun 15	1979.32	25.50	1953.82	7.6	0.6	26.5	3.3	28.40	0.4	269	21	<0.50	<0.50	<0.50
	Sep 15	1979.32	28.64	1950.68	7.5	2.5	20.5	2.3	26.45	1.6	135	590	4.6	<0.50	<0.50
	Nov 15	1979.32	25.35	1953.97	7.3	2.6	NM	2.8	23.02	1.6	423	450	4.0	<0.50	<0.50
	Feb 16	1979.32	22.36	1956.96	7.5	0.8	9.5	5.8	24.48	0.5	362	130	0.6	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-20	Nov 03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1,800	ND	ND	ND
	Jan 04	1979.99	25.50	1954.49	6.9	2.1	NM	1.1	22.60	NM	NM	290	2.8	ND	ND
	May 05	1979.99	22.58	1957.41	7.2	1.3	NM	5.0	23.60	NM	131	1,460	ND	ND	ND
	Dec 05	1979.99	23.55	1956.44	6.8	4.4	NM	0.8	20.50	2.8	272	1,800	ND	ND	ND
	Mar 06	1979.99	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1979.99	25.48	1954.51	NM	3.8	736.0	6.9	28.60	2.1	70	2,100	ND	ND	ND
	Oct 06	1979.99	25.04	1954.95	6.1	2.6	>999	4.1	23.70	1.8	234	2,000	ND	ND	ND
	Dec 06	1979.99	24.85	1955.14	6.8	4.1	284.0	4.3	23.90	2.6	245	2,500	ND	ND	ND
	Mar 07	1979.99	26.63	1953.36	6.9	3.3	999.0	9.8	23.80	2.2	530	1,500	ND	ND	ND
	Jun 07	1979.99	26.76	1953.23	7.0	3.5	>999	5.4	23.80	2.2	346	1,300	ND	ND	ND
	Sep 07	1979.99	26.30	1953.69	6.8	3.3	248.0	4.4	32.50	2.1	207	730	ND	ND	ND
	Dec 07	1979.99	25.38	1954.61	6.3	3.8	24.6	5.4	21.90	2.4	180	1,400	ND	ND	ND
	Mar 08	1979.99	25.12	1954.87	6.9	3.5	33.0	4.0	23.60	2.3	184	1,600	NS	NS	NS
	Jun 08	1979.99	NM	NM	NM	NM	NM	NM	NM	NM	NM	1,200	ND	ND	ND
	Oct 08	1979.95	26.05	1953.90	7.3	3.5	-5.0	2.3	25.20	NM	181	1,000	3.5	ND	ND
	Feb 09	1979.95	25.57	1954.38	6.6	3.5	247.0	2.5	23.40	2.2	99	830	ND	ND	ND
	Jun 09	1979.95	26.45	1953.50	6.9	3.7	>-5.0	2.2	23.90	2.3	140	1,100	3.3	ND	ND
	Sep 09	1979.95	27.21	1952.74	6.5	4.1	386.0	2.5	25.70	2.6	146	940	ND	ND	ND
	Nov 09	1979.95	27.30	1952.65	5.8	3.4	380.0	1.9	25.30	2.2	142	640	2.2	ND	ND
	Feb 10	1979.95	27.54	1952.41	6.9	3.3	38.0	2.5	24.30	2.0	130	990	3.3	ND	ND
	Jun 10	1979.95	27.86	1952.09	7.0	3.2	1.4	3.5	24.59	NM	NM	780	2.4	ND	ND
	Oct 10	1979.95	27.35	1952.60	6.4	3.3	39.3	2.9	26.58	2.2	519	340	1.8	ND	ND
	Nov 10	1979.95	27.12	1952.83	6.6	3.4	0.9	3.0	25.50	NM	194	890	2.6	ND	ND
	Mar 11	1979.95	26.59	1953.36	6.9	3.5	49.7	3.4	25.69	NM	237	800	2.3	ND	ND
	Jun 11	1979.95	27.40	1952.55	6.8	3.5	3.1	3.5	31.92	NM	452	740	1.9	ND	ND
	Sep 11	1979.95	27.56	1952.39	6.9	3.6	20.0	3.4	26.50	2.2	182	680	1.8	ND	ND
	Nov 11	1979.95	27.35	1952.60	7.0	3.3	NM	2.8	24.35	2.2	131	800	1.9	ND	ND
	Mar 12	1979.95	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1979.82	27.62	1952.20	7.4	3.3	40.1	3.7	25.17	2.2	87	660	2.1	ND	ND
	Sep 12	1979.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1979.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1979.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	290	1.8	<0.50	<0.50
	Jun 13	1979.82	27.20	1952.62	7.2	3.7	NM	4.7	26.67	2.4	192	660	2.1	<0.50	<0.50
	Sep 13	1979.82	27.70	1952.12	7.0	3.5	NM	4.5	26.41	2.3	428	570	1.8	<0.50	<0.50
	Nov 13	1979.82	27.28	1952.54	6.1	3.4	21.8	2.5	25.53	2.2	245	530	1.4	<0.50	<0.50
	Mar 14	1979.82	26.46	1953.36	7.3	3.1	22.0	3.9	25.92	2.0	345	170	0.66	<0.50	<0.50
	Jun 14	1979.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1979.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1979.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1979.82	26.34	1953.48	6.4	3.6	25.0	2.1	23.14	2.4	210	680	2.3	<0.50	<0.50
	Jun 15	1979.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1979.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1979.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1979.82	25.31	1954.51	7.00	3.33	41.30	3.49	23.91	2.17	254	740	2.5	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-20D1	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	69	2.8	3.6	<0.50
	Jun 13	1978.81	26.17	1952.64	7.3	3.0	NM	5.2	27.38	2.0	115	110	<0.50	<0.50	<0.50
	Sep 13	1978.81	27.01	1951.80	7.1	3.4	NM	4.8	27.83	2.2	113	100	0.56	<0.50	<0.50
	Nov 13	1978.81	26.60	1952.21	7.1	3.3	83.3	4.5	25.16	2.2	57	260	0.86	<0.50	<0.50
	Mar 14	1978.81	25.70	1953.11	7.4	0.9	70.4	4.9	25.09	0.6	76	76	<0.50	<0.50	<0.50
	Jun 14	1978.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1978.81	27.05	1951.76	7.6	3.1	29.1	4.0	27.20	2.0	213	160	0.62	<0.50	<0.50
	Nov 14	1978.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1978.81	25.56	1953.25	6.3	2.4	45.5	2.0	25.17	1.6	191	340	0.98	<0.50	<0.50
	Jun 15	1978.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1978.81	26.50	1952.31	7.51	2.92	15.10	3.17	26.81	1.90	146	550	2.0	<0.50	<0.50
	Nov 15	1978.81	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1978.81	24.62	1954.19	7.15	2.35	59.20	3.97	24.08	1.53	210	410	1.6	<0.50	<0.50
MW-20D2	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	25	<0.50	<0.50	<0.50
	Jun 13	1978.66	26.23	1952.43	7.4	0.8	NM	4.6	25.83	0.5	107	64	<0.50	<0.50	<0.50
	Sep 13	1978.66	26.90	1951.76	7.0	3.5	NM	4.2	27.95	2.3	114	210	0.77	<0.50	<0.50
	Nov 13	1978.66	26.92	1951.74	6.7	2.5	9.0	4.3	24.88	1.6	75	160	1	0.81	<0.50
	Mar 14	1978.66	26.05	1952.61	7.4	0.5	11.1	5.4	23.88	0.3	68	11	<0.50	<0.50	<0.50
	Jun 14	1978.66	26.55	1952.11	7.3	2.1	9.3	5.5	27.33	1.4	77	120	0.78	<0.50	<0.50
	Sep 14	1978.66	27.21	1951.45	7.4	3.4	7.5	3.9	25.21	2.2	229	140	0.84	<0.50	<0.50
	Nov 14	1978.66	26.28	1952.38	7.2	3.2	10.3	12.2	24.38	2.1	142	410	2.2	0.78	<0.50
	Mar 15	1978.66	25.95	1952.71	6.7	2.2	26.7	6.3	26.88	1.5	180	230	1.9	0.96	<0.50
	Jun 15	1978.66	26.47	1952.19	7.5	2.2	15.0	6.6	27.12	1.5	126	520	2.6	1	<0.50
	Sep 15	1978.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1978.66	26.50	1952.16	7.42	2.09	NM	4.47	23.10	1.35	159	390	2.9	0.67	<0.50
	Feb 16	1978.66	25.11	1953.55	7.47	1.01	69.90	6.73	23.14	0.65	233	170	1.2	<0.50	<0.50
MW-20D3	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.66	<0.50	<0.50	<0.50
	Jun 13	1978.69	26.17	1952.52	7.1	0.5	NM	3.9	24.81	0.3	119	<0.50	<0.50	<0.50	<0.50
	Sep 13	1978.69	27.28	1951.41	7.1	3.0	NM	4.9	33.54	1.9	100	25	<0.50	0.8	<0.50
	Nov 13	1978.69	26.57	1952.12	6.9	1.4	31.9	4.0	24.89	0.9	81	62	<0.50	<0.50	<0.50
	Mar 14	1978.69	22.92	1955.77	7.4	0.5	61.1	4.8	23.65	0.3	277	7.9	<0.50	<0.50	<0.50
	Jun 14	1978.69	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1978.69	31.52	1947.17	7.4	0.8	37.2	3.9	28.12	0.5	215	9.6	<0.50	<0.50	<0.50
	Nov 14	1978.69	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1978.69	20.10	1958.59	6.8	0.5	11.7	3.2	24.48	0.3	208	<0.50	<0.50	<0.50	<0.50
	Jun 15	1978.69	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1978.69	30.86	1947.83	7.72	0.62	9.10	2.15	27.57	0.40	137	8.3	<0.50	<0.50	<0.50
	Nov 15	1978.69	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1978.69	21.66	1957.03	7.56	0.49	49.20	6.22	23.13	0.32	235	2.0	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-21	Nov 03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	51	ND	ND	ND
	Jan 04	1979.56	24.72	1954.84	6.9	2.0	NM	1.1	22.30	NM	NM	55	ND	ND	ND
	May 05	1979.56	21.76	1957.80	7.1	2.8	NM	2.9	24.60	NM	131	30	ND	ND	ND
	Sep 05	1979.56	22.70	1956.86	7.1	4.7	39.0	4.1	25.80	2.6	109	19	2.4	1.5	ND
	Dec 05	1979.56	22.85	1956.71	6.6	4.6	>999	0.5	24.30	2.9	264	16	1.8	1.3	ND
	Mar 06	1979.56	23.46	1956.10	5.5	3.6	140.0	NM	23.00	2.3	309	43	ND	ND	ND
	Jun 06	1979.56	24.68	1954.88	NM	3.5	>999	4.7	28.50	2.3	112	32	ND	ND	ND
	Oct 06	1979.56	24.35	1955.21	6.2	3.5	>999	2.0	24.10	2.2	79	23	ND	ND	ND
	Dec 06	1979.56	24.15	1955.41	6.7	4.5	617.0	2.7	24.00	2.9	89	39	ND	ND	ND
	Mar 07	1979.56	24.87	1954.69	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1979.56	25.95	1953.61	7.0	3.4	>999	4.2	24.20	2.2	373	28	ND	ND	ND
	Sep 07	1979.56	25.44	1954.12	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1979.56	24.34	1955.22	6.2	3.7	>999	4.4	19.30	2.4	117	83	ND	ND	ND
	Mar 08	1979.56	24.19	1955.37	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1979.56	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1979.54	24.80	1954.74	7.2	3.4	545.0	0.0	24.50	NM	173	20	ND	ND	ND
	Feb 09	1979.54	24.73	1954.81	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1979.54	25.53	1954.01	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1979.54	26.39	1953.15	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1979.54	26.40	1953.14	6.0	3.4	90.0	0.9	24.90	2.2	119	11	ND	ND	ND
	Feb 10	1979.54	26.14	1953.40	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1979.54	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1979.54	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1979.54	26.32	1953.22	6.6	3.5	2.6	0.3	25.18	NM	202	13	ND	ND	ND
	Mar 11	1979.54	25.68	1953.86	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1979.54	26.57	1952.97	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1979.54	26.67	1952.87	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1979.54	26.47	1953.07	6.8	4.0	NM	0.2	24.75	NM	-38	13	ND	ND	ND
	Mar 12	1979.54	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1979.25	26.77	1952.48	7.3	3.4	8.6	1.0	26.21	2.2	-127	9.4	ND	ND	ND
	Sep 12	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1979.25	25.03	1954.22	6.9	3.7	NM	0.2	24.49	2.4	107	8.4	<0.50	<0.50	<0.50
	Jun 13	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1979.25	25.58	1953.67	7.2	3.1	61.2	2.7	23.96	2.0	430	1.4	<0.50	<0.50	<0.50
	Jun 14	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1979.25	25.37	1953.88	6.7	3.5	17.3	0.4	25.03	2.3	46	11	<0.50	<0.50	<0.50
	Jun 15	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1979.25	24.59	1954.66	6.92	3.26	30.50	0.14	24.50	2.12	430	9.3	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-22	May 05	1974.76	23.04	1951.72	6.8	3.9	474.0	1.7	24.10	NM	46	ND	ND	ND	ND
	Sep 05	1974.76	24.18	1950.58	6.9	4.3	10.0	7.2	23.90	2.7	46	ND	ND	ND	ND
	Dec 05	1974.76	24.30	1950.46	6.4	4.2	NM	1.3	24.60	2.7	213	1	ND	ND	ND
	Mar 06	1974.76	24.68	1950.08	4.8	6.1	30.0	NM	24.00	3.8	269	ND	ND	ND	ND
	Jun 06	1974.76	25.91	1948.85	NM	3.4	287.0	6.0	26.40	2.2	376	ND	ND	ND	ND
	Oct 06	1974.76	25.79	1948.97	6.0	3.7	11.0	2.4	23.80	2.4	141	ND	ND	ND	ND
	Dec 06	1974.76	25.49	1949.27	6.5	4.5	0.0	3.5	23.50	2.9	477	ND	ND	ND	ND
	Mar 07	1974.76	24.73	1950.03	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 07	1974.76	26.91	1947.85	6.7	3.8	26.0	3.4	24.30	2.4	137	ND	ND	ND	ND
	Sep 07	1974.76	26.90	1947.86	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1974.76	25.88	1948.88	6.3	4.0	55.6	2.3	23.80	2.5	216	ND	ND	ND	ND
	Mar 08	1974.76	25.17	1949.59	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1974.76	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1974.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 09	1974.75	25.60	1949.15	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1974.75	26.59	1948.16	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1974.75	27.58	1947.17	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1974.75	27.38	1947.37	6.0	3.6	31.0	1.4	24.50	2.3	131	1.4	ND	ND	ND
	Feb 10	1974.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1974.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1974.75	27.82	1946.93	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1974.75	27.55	1947.20	6.7	3.7	0.1	1.6	24.30	NM	129	ND	ND	ND	ND
	Mar 11	1974.75	26.58	1948.17	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1974.75	27.45	1947.30	7.2	3.4	50.2	5.2	24.89	NM	266	NS	NS	NS	NS
	Sep 11	1974.75	27.87	1946.88	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1974.75	27.57	1947.18	6.9	3.6	NM	1.6	23.70	2.3	88	0.55	ND	ND	ND
	Mar 12	1974.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1975.19	28.05	1947.14	6.8	4.1	250.0	4.0	26.20	2.6	102	0.58	ND	ND	ND
	Sep 12	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1975.19	26.27	1948.92	6.9	3.9	NM	1.7	23.49	2.5	140	<0.50	<0.50	<0.50	<0.50
	Jun 13	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1975.19	26.95	1948.24	7.3	3.3	120.0	5.0	24.37	2.2	17	0.58	<0.50	<0.50	<0.50
	Jun 14	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1975.19	26.47	1948.72	6.6	3.6	4.9	0.9	21.25	2.4	93	<0.50	<0.50	<0.50	<0.50
	Jun 15	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1975.19	26.44	1948.75	6.86	3.53	6.92	0.93	23.83	2.30	124	<0.50	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-23	May 05	1962.32	13.06	1949.26	7.0	3.6	NM	2.6	24.50	NM	121	1,430	ND	ND	ND
	Dec 05	1962.32	14.05	1948.27	6.7	4.9	NM	2.1	24.90	3.1	320	1,900	ND	ND	ND
	Mar 06	1962.32	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 06	1962.32	15.60	1946.72	NM	3.7	318.0	5.8	23.80	2.3	238	1,500	ND	ND	ND
	Oct 06	1962.32	15.48	1946.84	6.3	3.5	0.0	2.5	24.00	2.2	107	2,000	ND	ND	ND
	Dec 06	1962.32	15.16	1947.16	6.8	4.2	0.0	3.2	24.20	2.7	2	2,100	ND	ND	ND
	Mar 07	1962.32	15.12	1947.20	NM	NM	NM	NM	NM	NM	NM	2.1	ND	ND	ND
	Jun 07	1962.32	16.40	1945.92	7.0	3.5	31.0	4.2	23.50	2.2	301	1300	ND	ND	ND
	Sep 07	1962.32	16.61	1945.71	6.8	3.3	1.0	3.8	25.80	2.1	204	750	ND	ND	ND
	Dec 07	1962.32	15.80	1946.52	6.3	3.7	0.0	5.5	22.10	2.4	250	1200	ND	ND	ND
	Mar 08	1962.32	15.18	1947.14	7.0	6.3	0.4	2.2	24.00	4.1	188	1400	ND	ND	ND
	Jun 08	1962.32	NM	NM	NM	NM	NM	NM	NM	NM	NM	1100	ND	ND	ND
	Oct 08	1962.29	16.34	1945.95	6.7	3.5	18.3	2.0	23.40	2.3	170	1300	4.4	ND	ND
	Feb 09	1962.29	15.41	1946.88	6.7	3.4	0.0	1.1	23.00	2.2	82	1100	ND	ND	ND
	Jun 09	1962.29	16.40	1945.89	7.2	3.6	7.1	0.6	23.80	2.3	124	1400	4.6	ND	ND
	Sep 09	1962.29	17.30	1944.99	6.6	4.0	24.5	2.0	25.40	2.5	133	1200	ND	ND	ND
	Nov 09	1962.29	17.31	1944.98	5.9	3.3	51.0	2.0	24.80	2.1	139	880	3.2	ND	ND
	Feb 10	1962.29	17.18	1945.11	6.8	3.4	9.0	1.8	23.70	2.2	135	1000	3.8	ND	ND
	Jun 10	1962.29	16.93	1945.36	7.0	3.2	3.8	4.2	26.24	NM	NM	900	2.6	ND	ND
	Oct 10	1962.29	17.53	1944.76	5.7	3.4	-0.1	2.2	23.60	2.2	610	1100	2.6	ND	ND
	Nov 10	1962.29	17.30	1944.99	7.0	3.4	0.1	2.5	22.72	NM	76	970	2.7	ND	ND
	Mar 11	1962.29	16.30	1945.99	6.9	3.6	2.9	1.9	23.42	NM	202	1100	2.5	ND	ND
	Jun 11	1962.29	17.22	1945.07	NM	NM	NM	NM	NM	NM	NM	970	2.3	ND	ND
	Sep 11	1962.29	17.67	1944.62	6.9	3.5	8.0	3.0	24.50	2.2	229	1,000	2.4	ND	ND
	Nov 11	1962.29	17.41	1944.88	7.0	3.3	NM	2.3	23.58	2.1	170	1,100	2.4	ND	ND
	Mar 12	1962.29	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1962.45	17.83	1944.62	7.3	3.2	5.1	5.8	24.66	2.1	114	950	2.3	ND	ND
	Sep 12	1962.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1962.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1962.45	15.95	1946.50	7.0	3.6	NM	1.4	23.52	2.4	107	960	2.2	<0.50	<0.50
	Jun 13	1962.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1962.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1962.45	17.57	1944.88	6.7	3.7	5.1	2.1	24.32	2.4	152	900	1.8	<0.50	<0.50
	Mar 14	1962.45	16.63	1945.82	7.2	3.2	46.2	2.5	18.77	2.1	226	170	0.63	<0.50	<0.50
	Jun 14	1962.45	17.74	1944.71	6.9	3.4	6.0	2.4	27.06	2.2	151	850	1.4	<0.50	<0.50
	Sep 14	1962.45	17.89	1944.56	7.9	2.8	57.4	3.2	26.69	1.9	95	120	<0.50	<0.50	<0.50
	Nov 14	1962.45	17.19	1945.26	7.0	3.5	2.4	2.1	23.68	2.3	11	870	1.7	<0.50	<0.50
	Mar 15	1962.45	16.50	1945.95	6.7	3.4	5.4	2.0	21.66	2.2	58	740	1.5	<0.50	<0.50
	Jun 15	1962.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1962.45	17.40	1945.05	7.47	2.81	16.50	1.22	26.33	1.83	104	730	1.6	<0.50	<0.50
	Nov 15	1962.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1962.45	16.09	1946.36	6.98	3.26	4.09	1.65	24.35	2.12	141	790	1.7	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-24	May 05	1960.74	10.72	1950.02	7.0	3.6	>999	1.5	23.10	NM	76	ND	ND	ND	ND
	Sep 05	1960.74	11.75	1948.99	7.0	3.8	25.0	3.6	25.80	2.4	5	4.3	ND	ND	ND
	Dec 05	1960.74	11.65	1949.09	6.6	4.5	29.0	1.0	25.60	2.7	183	6.7	ND	ND	ND
	Mar 06	1960.74	12.10	1948.64	4.7	6.0	1.0	NM	22.60	3.8	503	6.5	ND	ND	ND
	Jun 06	1960.74	13.16	1947.58	NM	3.4	201.0	5.1	25.10	2.2	132	5.6	ND	ND	ND
	Oct 06	1960.74	13.06	1947.68	6.2	3.2	0.0	1.2	25.50	2.0	-23	2.6	ND	ND	ND
	Dec 06	1960.74	12.80	1947.94	6.9	4.1	0.0	2.6	25.10	2.6	62	2.6	ND	ND	ND
	Mar 07	1960.74	12.88	1947.86	NM	NM	NM	NM	NM	NM	NM	1	ND	ND	ND
	Jun 07	1960.74	13.94	1946.80	7.1	3.3	23.0	2.5	23.20	2.1	409	ND	ND	ND	ND
	Sep 07	1960.74	14.24	1946.50	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Dec 07	1960.74	13.58	1947.16	6.2	3.5	0.0	1.7	24.40	2.2	118	NS	NS	NS	NS
	Mar 08	1960.74	12.98	1947.76	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1960.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 08	1960.73	14.03	1946.70	6.8	3.4	-2.3	1.1	25.20	2.1	152	6.1	ND	ND	ND
	Feb 09	1960.73	13.20	1947.53	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1960.73	14.10	1946.63	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 09	1960.73	14.93	1945.80	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1960.73	14.99	1945.74	5.9	3.1	45.0	1.4	26.50	1.9	130	2.9	ND	ND	ND
	Feb 10	1960.73	14.23	1946.50	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1960.73	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Oct 10	1960.73	15.16	1945.57	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1960.73	14.90	1945.83	7.0	3.2	-0.8	1.4	25.24	NM	68	0.81	ND	ND	ND
	Mar 11	1960.73	14.06	1946.67	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1960.73	14.89	1945.84	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 11	1960.73	15.31	1945.42	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1960.73	15.12	1945.61	7.0	3.1	NM	1.3	24.98	2.0	149	0.95	ND	ND	ND
	Mar 12	1960.73	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1960.82	15.49	1945.33	6.9	3.4	110.0	1.8	25.00	2.2	94	1.3	ND	ND	ND
	Sep 12	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1960.82	13.62	1947.20	7.1	3.6	NM	1.8	22.77	2.3	62	1.3	<0.50	<0.50	<0.50
	Jun 13	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1960.82	14.34	1946.48	7.3	3.0	10.2	2.4	20.18	1.9	42	2.0	<0.50	<0.50	<0.50
	Jun 14	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1960.82	14.32	1946.50	6.7	3.3	3.6	1.3	22.86	2.1	79	0.58	<0.50	<0.50	<0.50
	Jun 15	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1960.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1960.82	13.87	1946.95	7.02	3.24	4.83	0.72	22.89	2.10	119	2.3	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-25	May 05	1960.74	16.01	1944.73	7.0	4.0	>999	4.3	23.60	NM	141	993	ND	ND	ND
	Sep 05	1960.74	17.45	1943.29	7.0	4.2	30.0	5.1	26.20	2.7	57	920	ND	ND	ND
	Dec 05	1960.74	16.85	1943.89	6.6	5.3	0.0	1.4	24.70	3.3	417	1000	ND	ND	ND
	Mar 06	1960.74	17.30	1943.44	5.2	6.7	94.0	NM	23.60	4.2	255	970	ND	ND	ND
	Jun 06	1960.74	18.64	1942.10	NM	3.9	228.0	5.7	23.50	2.5	376	960	ND	ND	ND
	Oct 06	1960.74	18.75	1941.99	6.2	3.7	0.0	3.1	23.60	2.4	106	1300	ND	ND	ND
	Dec 06	1960.74	18.61	1942.13	6.7	4.5	0.0	3.8	23.90	2.8	429	1200	ND	ND	ND
	Mar 07	1960.74	17.72	1943.02	7.0	3.7	>999	7.5	23.30	2.4	258	670	ND	ND	ND
	Jun 07	1960.74	19.31	1941.43	7.0	3.7	50.0	4.5	23.00	2.4	485	960	ND	ND	ND
	Sep 07	1960.74	19.96	1940.78	6.7	3.5	15.0	3.6	27.00	2.3	195	560	ND	ND	ND
	Dec 07	1960.74	18.92	1941.82	6.3	3.9	0.0	4.8	19.40	2.5	168	780	ND	ND	ND
	Mar 08	1960.74	17.87	1942.87	6.9	3.7	11.9	2.5	24.40	2.3	170	890	ND	ND	ND
	Jun 08	1960.74	NM	NM	NM	NM	NM	NM	NM	NM	NM	630	ND	ND	ND
	Oct 08	1960.73	19.84	1940.89	6.8	3.7	30.2	2.3	23.50	2.4	-94	730	1.5	ND	ND
	Feb 09	1960.73	18.07	1942.66	6.7	3.5	0.0	2.1	23.70	2.3	66	770	ND	ND	ND
	Jun 09	1960.73	19.35	1941.38	7.2	3.7	6.9	1.2	24.10	2.4	127	880	2.0	ND	ND
	Sep 09	1960.73	18.60	1942.13	6.5	4.2	14.2	2.5	25.90	2.7	136	770	ND	ND	ND
	Nov 09	1960.73	20.65	1940.08	5.8	3.5	66.0	2.2	24.70	2.2	140	570	1.3	ND	ND
	Feb 10	1960.73	19.81	1940.92	6.8	3.5	9.0	2.2	22.50	2.2	122	460	2.3	ND	ND
	Jun 10	1960.73	19.85	1940.88	7.0	3.3	-0.1	5.5	26.26	NM	NM	550	0.9	ND	ND
	Oct 10	1960.73	20.85	1939.88	5.9	3.5	-0.7	2.4	24.21	2.3	603	760	0.9	ND	ND
	Nov 10	1960.73	20.62	1940.11	6.7	3.5	0.5	2.8	25.16	NM	182	550	0.9	ND	ND
	Mar 11	1960.73	18.97	1941.76	7.0	3.4	0.0	4.1	20.24	NM	115	420	0.6	ND	ND
	Jun 11	1960.73	19.83	1940.90	7.3	3.6	-1.2	2.4	24.31	NM	216	700	0.8	ND	ND
	Sep 11	1960.73	20.83	1939.90	6.9	3.7	4.0	2.9	24.00	2.3	257	680	0.8	ND	ND
	Nov 11	1960.73	20.62	1940.11	7.0	3.4	NM	2.3	23.26	2.2	166	740	0.82	ND	ND
	Mar 12	1960.73	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1959.29	21.06	1938.23	6.8	3.9	56.0	2.9	25.20	2.5	89	640	0.88	ND	ND
	Sep 12	1959.29	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1959.29	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1959.29	18.75	1940.54	7.0	3.8	NM	2.3	23.84	2.5	127	660	0.75	<0.50	<0.50
	Jun 13	1959.29	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1959.29	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1959.29	20.87	1938.42	6.2	3.9	6.5	1.4	24.38	2.5	114	700	0.88	<0.50	<0.50
	Mar 14	1959.29	19.48	1939.81	5.9	3.3	28.3	2.7	15.90	2.1	229	340	0.61	<0.50	<0.50
	Jun 14	1959.29	20.94	1938.35	6.9	3.6	3.9	2.3	27.02	2.4	258	780	0.69	<0.50	<0.50
	Sep 14	1959.29	20.82	1938.47	7.5	3.5	47.8	NM	27.69	2.3	90	550	<0.50	<0.50	<0.50
	Nov 14	1959.29	20.32	1938.97	7.0	3.7	2.4	1.6	22.93	2.4	24	590	0.91	<0.50	<0.50
	Mar 15	1959.29	19.25	1940.04	6.7	3.6	4.5	1.2	22.82	2.4	53	640	0.71	<0.50	<0.50
	Jun 15	1959.29	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1959.29	21.11	1938.18	7.38	3.20	20.70	1.89	26.29	2.08	92	520	0.70	<0.50	<0.50
	Nov 15	1959.29	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1959.29	19.09	1940.20	6.95	3.51	4.02	1.73	24.39	2.29	142	530	0.57	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-26	Mar 06	1953.48	15.60	1937.88	6.8	3.8	0.0	2.6	23.80	2.4	158	730	ND	ND	ND
	Jun 06	1953.48	17.00	1936.48	NM	2.3	229.0	4.8	24.10	1.5	305	770	ND	ND	ND
	Oct 06	1953.48	17.17	1936.31	6.2	69.4	0.0	2.9	23.70	2.4	180	1100	ND	ND	ND
	Dec 06	1953.48	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 07	1953.48	15.66	1937.82	7.0	3.8	>999	7.1	23.50	2.4	422	790	ND	ND	ND
	Jun 07	1953.48	17.50	1935.98	7.0	3.5	41.0	4.8	23.60	2.5	517	960	ND	ND	ND
	Sep 07	1953.48	18.12	1935.36	6.7	3.6	5.0	3.5	27.10	2.3	176	620	ND	ND	ND
	Dec 07	1953.48	17.01	1936.47	6.4	4.0	0.0	5.1	21.70	2.5	212	910	ND	ND	ND
	Mar 08	1953.48	15.91	1937.57	7.0	3.8	0.7	7.9	24.30	2.4	176	1,100	ND	ND	ND
	Jun 08	1953.48	NM	NM	NM	NM	NM	NM	NM	NM	NM	930	ND	ND	ND
	Oct 08	1953.48	18.34	1935.14	6.8	3.9	-7.2	2.7	24.00	2.5	86	900	1.4	ND	ND
	Feb 09	1953.48	16.04	1937.44	6.7	3.7	0.0	3.3	23.90	2.3	82	960	ND	ND	ND
	Jun 09	1953.48	17.57	1935.91	7.2	3.8	49.3	2.2	25.40	2.5	133	970	1.5	ND	ND
	Sep 09	1953.48	18.79	1934.69	6.6	4.3	10.5	2.8	26.40	2.8	137	910	ND	ND	ND
	Nov 09	1953.48	18.85	1934.63	5.8	3.6	210.0	2.8	24.30	2.3	139	690	ND	ND	ND
	Feb 10	1953.48	17.61	1935.87	6.9	3.6	7.0	2.5	22.60	2.3	143	790	1.8	ND	ND
	Jun 10	1953.48	17.95	1935.53	7.0	2.4	0.2	6.6	26.14	NM	NM	680	0.74	ND	ND
	Oct 10	1953.48	19.09	1934.39	6.8	3.7	-0.8	2.0	24.60	2.4	504	450	0.61	ND	ND
	Nov 10	1953.48	18.75	1934.73	6.9	3.7	0.6	2.6	24.91	NM	92	750	0.74	ND	ND
	Mar 11	1953.48	18.83	1934.65	6.9	3.8	0.0	2.7	23.78	NM	141	760	0.6	ND	ND
	Jun 11	1953.48	17.82	1935.66	6.7	3.7	-1.2	2.0	25.86	NM	475	860	0.67	ND	ND
	Sep 11	1953.48	19.04	1934.44	6.9	3.8	7.0	2.9	24.40	2.4	260	780	0.59	ND	ND
	Nov 11	1953.48	18.72	1934.76	7.0	3.6	NM	2.1	23.33	2.3	161	690	0.61	ND	ND
	Mar 12	1953.48	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1953.45	19.24	1934.21	6.8	4.1	72.0	2.8	26.00	2.6	85	740	0.54	ND	ND
	Sep 12	1953.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1953.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1953.45	16.81	1936.64	7.0	3.8	NM	2.7	24.35	2.6	118	740	0.51	<0.50	<0.50
	Jun 13	1953.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1953.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1953.45	19.02	1934.43	6.4	4.0	7.0	2.4	24.59	2.6	138	770	0.62	<0.50	<0.50
	Mar 14	1953.45	17.44	1936.01	7.3	2.2	20.3	4.8	21.08	1.4	270	210	<0.50	<0.50	<0.50
	Jun 14	1953.45	19.10	1934.35	6.9	3.7	2.1	2.8	26.43	2.4	233	860	0.5	<0.50	<0.50
	Sep 14	1953.45	18.60	1934.85	7.3	3.6	32.7	NM	25.85	2.4	80	360	<0.50	<0.50	<0.50
	Nov 14	1953.45	18.31	1935.14	7.0	3.8	2.4	2.2	22.84	2.5	-44	890	0.66	<0.50	<0.50
	Mar 15	1953.45	17.09	1936.36	6.7	3.8	2.7	1.8	21.61	2.4	67	680	<0.50	<0.50	<0.50
	Jun 15	1953.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1954.45	19.37	1935.08	7.45	3.04	16.20	1.30	26.51	1.98	96	670	0.54	<0.50	<0.50
	Nov 15	1954.45	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1954.45	17.19	1937.26	6.98	3.69	4.46	2.67	24.44	2.40	150	680	0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-27	Mar 06	1944.23	13.48	1930.75	6.8	3.3	0.0	2.4	21.90	2.1	142	220	ND	ND	ND
	Jun 06	1944.23	18.50	1925.73	NM	3.7	626.0	4.6	26.10	2.3	69	350	ND	ND	ND
	Oct 06	1944.23	16.16	1928.07	6.2	3.3	0.0	2.8	22.20	2.1	155	380	ND	ND	ND
	Dec 06	1944.23	13.85	1930.38	6.8	4.0	507.0	4.5	22.20	2.6	444	380	ND	ND	ND
	Mar 07	1944.23	12.58	1931.65	7.0	3.3	83.0	7.0	21.90	2.1	181	160	ND	ND	ND
	Jun 07	1944.23	18.43	1925.80	7.0	3.3	238.0	4.1	22.20	2.1	392	340	ND	ND	ND
	Sep 07	1944.23	17.85	1926.38	6.8	3.4	22.0	3.4	24.20	2.2	198	320	ND	ND	ND
	Dec 07	1944.23	14.41	1929.82	6.4	3.8	0.0	3.5	20.60	2.5	153	430	ND	ND	ND
	Mar 08	1944.23	13.65	1930.58	7.0	3.4	1.4	2.5	22.60	2.2	174	580	ND	ND	ND
	Jun 08	1944.23	NM	NM	NM	NM	NM	NM	NM	NM	NM	320	ND	ND	ND
	Oct 08	1944.23	18.33	1925.90	6.5	3.8	25.2	1.1	22.59	2.4	105	510	2.6	ND	ND
	Feb 09	1944.23	13.22	1931.01	6.6	3.6	0.0	0.7	21.90	2.3	108	510	ND	ND	ND
	Jun 09	1944.23	18.39	1925.84	7.1	3.9	0.0	0.5	24.10	2.5	128	570	3.3	ND	ND
	Sep 09	1944.23	19.73	1924.50	6.6	4.3	-6.7	0.9	24.20	2.7	131	640	ND	ND	ND
	Nov 09	1944.23	18.92	1925.31	NM	NM	NM	NM	NM	NM	NM	400	2	ND	ND
	Feb 10	1944.23	13.00	1931.23	NM	NM	NM	NM	NM	NM	NM	770	3.5	ND	ND
	Jun 10	1944.23	17.77	1926.46	7.1	3.4	10.2	6.8	24.66	NM	NM	330	1.4	ND	ND
	Oct 10	1944.23	18.87	1925.36	6.9	3.6	0.4	1.4	22.95	2.4	434	420	1.4	ND	ND
	Nov 10	1944.23	17.19	1927.04	6.8	3.7	2.9	1.5	23.57	NM	115	480	1.8	ND	ND
	Mar 11	1944.23	12.99	1931.24	7.0	3.7	259.3	6.7	21.37	NM	108	370	1.2	ND	ND
	Jun 11	1944.23	16.68	1927.55	7.3	3.7	-1.4	1.6	23.61	NM	180	440	1.3	ND	ND
	Sep 11	1944.23	20.23	1924.00	6.8	3.8	10.0	2.2	23.60	2.4	237	470	1.3	ND	ND
	Nov 11	1944.23	17.32	1926.91	7.0	3.5	NM	2.1	22.62	2.3	164	380	1.3	ND	ND
	Mar 12	1944.23	16.22	1928.01	7.2	3.6	5.9	2.5	23.10	2.4	-58	470	NS	NS	NS
*	Jun 12	1944.15	14.46	1929.69	6.8	3.9	230.0	2.9	23.80	2.4	108	440	0.97	ND	ND
	Sep 12	1944.15	18.54	1925.61	7.3	3.6	NM	2.1	23.06	2.3	152	430	1.2	ND	ND
	Nov 12	1944.15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1944.15	15.33	1928.82	7.0	4.0	NM	1.8	23.16	2.6	100	450	1	<0.50	<0.50
	Jun 13	1944.15	20.37	1923.78	7.0	4.0	NM	2.1	25.31	2.6	95	300	1.1	<0.50	<0.50
	Sep 13	1944.15	19.67	1924.48	7.2	2.0	NM	2.4	27.75	1.3	88	350	0.79	<0.50	<0.50
	Nov 13	1944.15	17.49	1926.66	7.2	4.0	7.2	1.7	24.27	2.6	120	420	0.94	<0.50	<0.50
	Mar 14	1944.15	14.67	1929.48	7.2	3.4	29.3	4.3	23.18	2.2	15	220	0.59	<0.50	<0.50
	Jun 14	1944.15	18.96	1925.19	7.0	3.7	4.9	2.3	27.29	2.4	271	430	0.94	<0.50	<0.50
	Sep 14	1944.15	17.94	1926.21	7.3	3.4	24.2	NM	25.78	2.1	96	290	<0.50	<0.50	<0.50
	Nov 14	1944.15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1944.15	13.33	1930.82	6.7	3.7	6.4	1.3	21.76	2.4	39	450	1.3	<0.50	<0.50
	Jun 15	1944.15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1944.15	20.13	1924.02	7.44	3.22	17.80	1.67	26.27	2.09	96	370	0.95	<0.50	<0.50
	Nov 15	1944.15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1944.15	14.98	1929.17	8.91	3.26	7.10	1.55	24.23	2.12	-19	350	0.82	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-28	Nov 07	1942.97	14.02	1928.95	6.8	4.2	196.0	9.6	26.80	2.7	125	3	ND	ND	ND
	Dec 07	1942.97	12.80	1930.17	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 08	1942.97	11.61	1931.36	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1942.97	NM	NM	NM	NM	NM	NM	NM	NM	NM	1	ND	ND	ND
	Oct 08	1942.96	14.60	1928.36	6.8	4.2	165.0	0.6	22.80	2.7	82	2.2	ND	ND	ND
	Feb 09	1942.96	11.66	1931.30	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1942.96	13.91	1929.05	7.2	4.2	63.8	0.0	23.50	2.7	119	3.3	ND	ND	ND
	Sep 09	1942.96	14.96	1928.00	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1942.96	14.83	1928.13	6.0	3.8	180.0	1.1	23.20	2.5	136	1.3	ND	ND	ND
	Feb 10	1942.96	12.78	1930.18	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1942.96	13.91	1929.05	7.0	3.7	3.7	3.3	23.89	NM	NM	0.94	ND	ND	ND
	Oct 10	1942.96	14.93	1928.03	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1942.96	14.31	1928.65	6.7	3.9	0.6	0.9	24.25	NM	162	0.66	ND	ND	ND
	Mar 11	1942.96	12.10	1930.86	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1942.96	13.50	1929.46	7.0	4.0	2.4	0.7	23.71	NM	185	ND	ND	ND	ND
	Sep 11	1942.96	14.93	1928.03	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1942.96	14.42	1928.54	7.0	3.7	NM	1.0	22.10	2.4	157	0.62	ND	ND	ND
	Mar 12	1942.96	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1943.07	15.30	1927.77	6.8	4.1	32.0	1.1	22.70	2.6	133	0.73	ND	ND	ND
	Sep 12	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1943.07	12.50	1930.57	7.0	4.1	NM	1.9	24.06	2.7	70	0.50	<0.50	<0.50	<0.50
	Jun 13	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1943.07	12.87	1930.20	7.3	3.5	20.8	1.8	22.59	2.3	66	0.69	<0.50	<0.50	<0.50
	Jun 14	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1943.07	12.36	1930.71	6.7	3.8	6.3	0.7	22.63	2.5	80	0.69	<0.50	<0.50	<0.50
	Jun 15	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1943.07	12.82	1930.25	8.50	3.41	13.60	1.17	23.05	2.21	90	0.78	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-29	Nov 07	1932.27	14.20	1918.07	6.9	4.3	15.1	6.0	21.80	2.7	108	2.5	ND	ND	ND
	Dec 07	1932.27	14.01	1918.26	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 08	1932.27	13.77	1918.50	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1932.27	NM	NM	NM	NM	NM	NM	NM	NM	NM	1	ND	ND	ND
	Oct 08	1932.25	14.44	1917.81	6.8	4.0	500.0	3.9	20.00	2.6	122	2.2	ND	ND	ND
	Feb 09	1932.25	13.81	1918.44	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 09	1932.25	13.98	1918.27	7.2	4.0	212.0	3.3	20.50	2.6	133	1.3	ND	ND	ND
	Sep 09	1932.25	14.38	1917.87	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 09	1932.25	14.37	1917.88	6.1	3.8	200.0	3.9	20.80	2.4	139	ND	ND	ND	ND
	Feb 10	1932.25	14.19	1918.06	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 10	1932.25	13.92	1918.33	6.9	3.5	3.8	4.8	23.43	NM	NM	0.58	ND	ND	ND
	Oct 10	1932.25	14.19	1918.06	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 10	1932.25	13.90	1918.35	6.8	3.9	1.5	4.0	21.09	NM	138	ND	ND	ND	ND
	Mar 11	1932.25	13.52	1918.73	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 11	1932.25	13.65	1918.60	6.9	3.9	-1.4	4.1	20.62	NM	232	ND	ND	ND	ND
	Sep 11	1932.25	13.84	1918.41	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 11	1932.25	13.85	1918.40	7.0	3.7	NM	4.0	19.77	2.4	183	ND	ND	ND	ND
	Mar 12	1932.25	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1932.35	13.99	1918.36	6.9	3.8	79.0	5.2	20.30	2.4	133	ND	ND	ND	ND
	Sep 12	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1932.35	13.30	1919.05	7.0	4.1	NM	4.4	19.43	2.7	85	<0.50	<0.50	<0.50	<0.50
	Jun 13	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 14	1932.35	13.55	1918.80	7.3	3.6	42.3	3.6	18.53	2.4	170	<0.50	<0.50	<0.50	<0.50
	Jun 14	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1932.35	13.85	1918.50	6.8	4.0	1.6	2.7	18.75	2.6	85	<0.50	<0.50	<0.50	<0.50
	Jun 15	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1932.35	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1932.35	14.34	1918.01	8.21	3.57	2.98	4.41	18.98	2.32	89	<0.50	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-30	Nov 07	1940.56	20.11	1920.45	6.8	3.7	144.0	3.1	24.20	2.4	135	74	ND	ND	ND
	Dec 07	1940.56	17.12	1923.44	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 08	1940.56	16.32	1924.24	6.9	3.3	7.2	3.7	18.80	2.1	204	86	ND	ND	ND
	Jun 08	1940.56	NM	NM	NM	NM	NM	NM	NM	NM	NM	49	ND	ND	ND
	Oct 08	1940.56	20.91	1919.65	6.7	3.7	221.0	0.9	20.10	2.4	124	100	1.8	ND	ND
	Feb 09	1940.56	16.05	1924.51	6.6	3.3	7.2	3.2	19.60	2.1	97	71	ND	ND	ND
	Jun 09	1940.56	19.88	1920.68	7.1	3.7	34.3	1.2	21.40	2.3	141	110	2	ND	ND
	Sep 09	1940.56	21.57	1918.99	6.6	4.2	0.8	2.0	23.40	2.7	127	70	1.1	ND	ND
	Nov 09	1940.56	20.55	1920.01	5.9	3.3	-10.0	2.3	20.40	2.1	167	85	1.4	ND	ND
	Feb 10	1940.56	16.49	1924.07	6.7	3.2	12.0	3.9	19.60	2.1	162	60	ND	ND	ND
	Jun 10	1940.56	18.98	1921.58	6.9	2.9	1.0	5.3	25.04	NM	NM	41	ND	ND	ND
	Oct 10	1940.56	20.63	1919.93	6.0	3.1	0.1	4.2	21.95	2.0	595	62	ND	ND	ND
	Nov 10	1940.56	19.32	1921.24	6.6	3.1	0.7	4.4	22.09	NM	212	54	ND	ND	ND
	Mar 11	1940.56	15.85	1924.71	6.5	3.3	0.0	4.7	19.41	NM	142	50	ND	ND	ND
	Jun 11	1940.56	18.17	1922.39	6.3	3.1	-1.1	4.2	22.48	NM	446	50	ND	ND	ND
	Sep 11	1940.56	21.28	1919.28	7.1	2.9	16.0	7.9	22.20	1.9	237	25	ND	ND	ND
	Nov 11	1940.56	19.47	1921.09	7.0	2.8	NM	4.7	20.48	1.8	182	38	ND	ND	ND
	Mar 12	1940.56	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1940.59	21.42	1919.17	6.9	3.2	210.0	3.7	21.00	2.0	125	84	0.73	ND	ND
	Sep 12	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1940.59	17.38	1923.21	6.9	3.3	NM	4.2	19.45	2.1	144	62	<0.50	<0.50	<0.50
	Jun 13	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1940.59	19.89	1920.70	6.6	3.3	7.6	3.3	22.07	2.1	141	96	0.58	<0.50	<0.50
	Mar 14	1940.59	17.14	1923.45	7.2	2.9	3.8	3.5	21.39	1.9	166	42	<0.50	<0.50	<0.50
	Jun 14	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1940.59	15.90	1924.69	6.6	2.9	4.3	2.4	19.18	1.9	50	93	0.76	<0.50	<0.50
	Jun 15	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1940.59	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1940.59	17.11	1923.48	8.73	2.73	4.60	3.58	20.28	1.78	81	63	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-31	Mar 08	1937.93	15.23	1922.70	7.0	4.7	125.0	6.0	22.50	2.9	152	49	ND	ND	ND
	Jun 08	1937.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	31	ND	ND	ND
	Oct 08	1937.93	18.94	1918.99	6.7	4.2	265.0	3.6	22.40	2.7	123	39	ND	ND	ND
	Feb 09	1937.93	15.59	1922.34	6.5	4.0	11.0	3.4	21.90	2.6	99	44	ND	ND	ND
	Jun 09	1937.93	17.30	1920.63	7.0	4.3	77.9	4.6	21.10	2.8	137	45	ND	ND	ND
	Sep 09	1937.93	19.08	1918.85	6.6	4.8	45.2	4.9	23.60	3.0	124	38	ND	ND	ND
	Nov 09	1937.93	18.40	1919.53	6.0	4.0	230.0	4.0	22.90	2.5	141	24	ND	ND	ND
	Feb 10	1937.93	16.41	1921.52	6.7	4.0	18.0	3.9	21.10	2.5	148	34	1.2	ND	ND
	Jun 10	1937.93	16.94	1920.99	6.9	3.7	14.8	5.2	23.60	NM	NM	34	ND	ND	ND
	Oct 10	1937.93	18.80	1919.13	5.9	4.0	3.5	3.9	22.86	2.6	582	30	ND	ND	ND
	Nov 10	1937.93	18.33	1919.60	6.5	4.0	10.1	3.9	24.41	NM	225	27	ND	ND	ND
	Mar 11	1937.93	15.70	1922.23	6.9	4.1	22.7	5.0	22.63	NM	145	26	ND	ND	ND
	Jun 11	1937.93	16.76	1921.17	6.2	4.0	9.8	4.2	25.43	NM	480	64	ND	ND	ND
	Sep 11	1937.93	18.73	1919.20	6.8	4.1	9.5	4.8	24.90	2.6	256	57	ND	ND	ND
	Nov 11	1937.93	17.93	1920.00	6.9	3.8	NM	3.9	21.23	2.5	178	58	ND	ND	ND
	Mar 12	1937.93	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1937.66	18.37	1919.29	6.8	4.1	440.0	3.9	23.20	2.6	121	44	0.52	ND	ND
	Sep 12	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1937.66	16.27	1921.39	6.9	4.2	NM	2.9	21.34	2.7	139	61	<0.50	<0.50	<0.50
	Jun 13	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1937.66	18.55	1919.11	6.4	4.2	12.7	2.4	24.30	2.7	192	54	<0.50	<0.50	<0.50
	Mar 14	1937.66	16.45	1921.21	7.2	3.6	16.7	2.3	25.83	2.4	92	35	<0.50	<0.50	<0.50
	Jun 14	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1937.66	15.34	1922.32	6.7	4.0	5.6	2.7	21.20	2.6	57	73	<0.50	<0.50	<0.50
	Jun 15	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1937.66	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1937.66	16.46	1921.20	8.75	3.52	7.15	2.84	23.08	2.28	-0.40	81	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-32	Mar 08	1952.82	17.25	1935.57	7.4	3.6	5.4	2.4	23.30	2.3	136	720	ND	ND	ND
	Jun 08	1952.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	750	ND	ND	ND
	Oct 08	1952.82	19.95	1932.87	6.9	3.8	23.7	1.0	23.80	2.4	-101	990	6.1	ND	ND
	Feb 09	1952.82	17.22	1935.60	6.7	3.6	22.5	1.0	23.40	2.3	75	1000	7.2	ND	ND
	Jun 09	1952.82	19.14	1933.68	7.1	3.7	32.7	2.7	23.40	2.4	120	1000	5.3	ND	ND
	Sep 09	1952.82	20.47	1932.35	6.5	4.2	4.1	1.2	25.30	2.7	157	1000	ND	ND	ND
	Nov 09	1952.82	20.44	1932.38	5.8	3.4	180.0	2.8	24.10	2.2	145	660	3.7	ND	ND
	Feb 10	1952.82	18.81	1934.01	6.8	3.5	16.0	1.6	22.70	2.2	158	830	5.4	ND	ND
	Jun 10	1952.82	19.46	1933.36	7.0	3.2	1.2	6.3	26.41	NM	NM	480	2.6	ND	ND
	Oct 10	1952.82	20.77	1932.05	6.5	3.5	8.2	2.7	24.89	2.3	585	660	2.7	ND	ND
	Nov 10	1952.82	20.40	1932.42	6.6	3.5	1.9	2.4	24.50	NM	244	740	3.3	ND	ND
	Mar 11	1952.82	18.21	1934.61	7.1	3.5	4.3	6.7	23.41	NM	111	610	2.3	ND	ND
	Jun 11	1952.82	19.40	1933.42	6.8	3.5	-1.3	3.4	24.82	NM	424	790	2.3	ND	ND
	Sep 11	1952.82	20.91	1931.91	6.9	3.6	10.0	5.1	24.40	2.3	274	610	1.9	ND	ND
	Nov 11	1952.82	20.24	1932.58	7.0	3.3	NM	3.3	23.32	2.2	161	700	2.7	ND	ND
	Mar 12	1952.82	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1952.9	20.94	1931.96	6.9	3.6	240.0	4.7	25.10	2.3	101	640	2	ND	ND
	Sep 12	1952.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1952.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1952.9	18.43	1934.47	7.0	3.7	NM	3.4	23.98	2.4	114	720	1.8	<0.50	<0.50
	Jun 13	1952.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1952.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1952.9	20.68	1932.22	6.6	3.7	8.3	2.5	24.57	2.4	124	610	2	<0.50	<0.50
	Mar 14	1952.9	18.83	1934.07	7.3	3.3	72.5	1.0	24.26	2.1	73	640	12	<0.50	<0.50
	Jun 14	1952.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1952.9	20.15	1932.75	7.4	3.3	64.4	NM	27.43	2.2	78	360	1	<0.50	<0.50
	Nov 14	1952.9	19.37	1933.53	7.0	3.6	4.9	2.4	23.12	2.4	-163	850	2.7	<0.50	<0.50
	Mar 15	1952.9	18.32	1934.58	6.7	3.5	5.4	1.8	22.15	2.3	53	730	2	<0.50	<0.50
	Jun 15	1952.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1952.9	21.06	1931.84	7.47	2.95	12.10	1.88	27.19	1.92	103	590	1.4	<0.50	<0.50
	Nov 15	1952.9	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1952.9	18.62	1934.28	8.90	3.17	8.25	3.17	25.30	2.06	-37	650	1.4	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-33	Mar 08	1950.92	16.02	1934.90	7.0	3.5	82.4	7.6	20.30	2.2	161	2.4	ND	ND	ND
	Jun 08	1950.92	NM	NM	NM	NM	NM	NM	NM	NM	NM	1	ND	ND	ND
	Oct 08	1950.92	18.00	1932.92	6.7	3.8	6.7	1.0	22.20	2.4	85	3.4	ND	ND	ND
	Feb 09	1950.92	16.11	1934.81	6.4	3.7	0.0	0.0	21.30	2.4	120	ND	ND	ND	ND
	Jun 09	1950.92	17.28	1933.64	7.0	4.0	0.0	0.0	21.40	2.5	138	ND	ND	ND	ND
	Sep 09	1950.92	18.93	1931.99	6.6	4.2	2.2	1.2	23.50	2.7	166	3.3	ND	ND	ND
	Nov 09	1950.92	18.78	1932.14	6.0	3.5	200.0	1.7	22.60	2.2	136	1.4	ND	ND	ND
	Feb 10	1950.92	17.28	1933.64	6.7	3.5	0.0	0.7	21.50	2.2	146	ND	ND	ND	ND
	Jun 10	1950.92	17.71	1933.21	6.9	3.4	1.1	2.1	28.96	NM	NM	ND	ND	ND	ND
	Oct 10	1950.92	19.42	1931.50	6.1	3.6	3.7	1.4	23.04	2.3	558	ND	ND	ND	ND
	Nov 10	1950.92	19.25	1931.67	6.6	3.6	1.7	1.6	23.34	NM	217	ND	ND	ND	ND
	Mar 11	1950.92	17.36	1933.56	6.5	3.8	2.8	1.7	21.27	NM	107	ND	ND	ND	ND
	Jun 11	1950.92	18.00	1932.92	7.3	3.8	-1.2	0.8	22.54	NM	74	ND	ND	ND	ND
	Sep 11	1950.92	19.31	1931.61	6.9	3.8	10.0	4.2	23.10	2.4	191	ND	ND	ND	ND
	Nov 11	1950.92	18.72	1932.20	7.0	3.6	NM	2.2	21.62	2.3	181	ND	ND	ND	ND
	Mar 12	1950.92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
*	Jun 12	1950.98	19.03	1931.95	6.8	4.0	130.0	1.3	22.90	2.5	136	ND	ND	ND	ND
	Sep 12	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 12	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 13	1950.98	17.25	1933.73	6.9	4.2	NM	1.9	21.50	2.7	134	<0.50	<0.50	<0.50	<0.50
	Jun 13	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 13	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 13	1950.98	19.40	1931.58	6.9	4.0	7.6	1.4	21.58	2.6	146	<0.50	<0.50	<0.50	<0.50
	Mar 14	1950.98	17.66	1933.32	7.2	3.4	68.8	4.9	18.82	2.2	45	<0.50	<0.50	<0.50	<0.50
	Jun 14	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1950.98	17.06	1933.92	6.6	4.1	8.9	0.7	21.50	2.7	68	<0.50	<0.50	<0.50	<0.50
	Jun 15	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1950.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1950.98	17.70	1933.28	8.72	3.44	7.24	1.17	21.91	2.2	-98	<0.50	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-34	Dec 11	--		--								910	NS	NS	NS
	Jan 12	--		--								1000	NS	NS	NS
	Mar 12	--		--	7.2	3.7	27.4	2.0	22.63	2.4	-47	1000	NS	NS	NS
*	Jun 12	1993.88	17.74	1976.14	7.3	3.4	16.4	2.4	24.19	2.4	89	860	0.97	ND	ND
	Sep 12	1993.88	18.07	1975.81	7.3	3.6	NM	2.1	24.43	2.4	141	730	1.2	ND	ND
	Nov 12	1993.88	17.75	1976.13	8.0	3.7	NM	2.0	24.86	2.4	45	550	1.1	<0.50	<0.50
	Mar 13	1993.88	19.06	1974.82	7.1	4.0	NM	1.6	22.65	2.6	125	550	0.86	<0.50	<0.50
	Jun 13	1993.88	19.32	1974.56	7.3	4.0	NM	1.9	24.03	2.6	63	380	0.9	<0.50	<0.50
	Sep 13	1993.88	19.36	1974.52	7.0	3.8	NM	1.6	25.41	2.5	71	440	0.78	<0.50	<0.50
	Nov 13	1993.88	19.14	1974.74	6.1	3.4	20.0	0.9	23.56	2.3	184	500	0.86	<0.50	<0.50
	Mar 14	1993.88	18.75	1975.13	7.3	3.4	10.4	3.8	22.73	2.2	81	360	0.73	<0.50	<0.50
	Jun 14	1993.88	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1993.88	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1993.88	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1993.88	19.09	1974.79	6.5	3.8	6.6	1.6	24.17	2.4	91	370	0.91	<0.50	<0.50
	Jun 15	1993.88	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1993.88	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1993.88	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1993.88	17.67	1976.21	7.07	3.56	5.38	3.02	23.15	2.3	186	180	<0.50	<0.50	<0.50
MW-35	Dec 11	--		--								410	NS	NS	NS
	Jan 12	--		--								630	NS	NS	NS
	Mar 12	--	20.03	--	7.3	3.4	181.0	3.6	23.81	2.2	-21	580	NS	NS	NS
*	Jun 12	1991.37	18.90	1972.47	7.3	3.4	87.1	4.0	24.30	2.2	100	530	ND	ND	ND
	Sep 12	1991.37	18.77	1972.60	7.2	3.4	NM	3.5	23.19	2.2	150	520	ND	ND	ND
	Nov 12	1991.37	18.55	1972.82	8.0	3.4	NM	3.9	24.06	2.2	70	480	<0.50	<0.50	<0.50
	Mar 13	1991.37	19.99	1971.38	7.1	3.7	NM	3.2	23.20	2.4	129	340	<0.50	<0.50	<0.50
	Jun 13	1991.37	20.30	1971.07	7.2	3.8	NM	3.9	24.12	2.5	84	250	<0.50	<0.50	<0.50
	Sep 13	1991.37	20.21	1971.16	7.2	3.6	NM	3.3	25.54	2.3	50	250	<0.50	<0.50	<0.50
	Nov 13	1991.37	19.93	1971.44	6.1	3.8	45.8	1.8	23.47	2.2	184	310	<0.50	<0.50	<0.50
	Mar 14	1991.37	19.72	1971.65	7.3	3.3	323	5.4	23.24	2.1	89	92	<0.50	<0.50	<0.50
	Jun 14	1991.37	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1991.37	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1991.37	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1991.37	19.82	1971.55	6.5	3.7	23	2.4	25.22	2.3	87	180	<0.50	<0.50	<0.50
	Jun 15	1991.37	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1991.37	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1991.37	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1991.37	18.68	1972.69	7.03	3.34	10.94	3.30	23.55	2.2	195	170	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-36	Mar 12	1955.30	19.51	1935.79	7.1	3.5	15.8	2.3	23.44	2.3	-62	160	NS	NS	NS
*	Jun 12	1955.30	21.26	1934.04	6.8	3.8	110.0	2.2	25.30	2.5	74	130	ND	ND	ND
	Sep 12	1955.30	21.55	1933.75	7.5	3.4	NM	1.9	25.53	2.2	128	130	ND	ND	ND
	Nov 12	1955.30	20.62	1934.68	7.8	3.5	NM	2.1	22.87	2.7	71	150	<0.50	<0.50	<0.50
	Mar 13	1955.30	19.03	1936.27	6.9	3.8	NM	1.7	23.48	2.5	121	160	0.52	<0.50	<0.50
	Jun 13	1955.30	20.75	1934.55	7.0	3.8	NM	1.8	25.96	2.5	104	110	0.52	<0.50	<0.50
	Sep 13	1955.30	21.48	1933.82	7.0	3.6	NM	1.7	24.72	2.4	131	140	<0.50	<0.50	<0.50
	Nov 13	1955.30	21.22	1934.08	7.4	3.9	9.4	1.9	23.32	2.5	126	130	<0.50	<0.50	<0.50
	Mar 14	1955.30	19.50	1935.80	7.3	3.1	53.6	4.2	24.34	2.1	147	62	<0.50	<0.50	<0.50
	Jun 14	1955.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1955.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1955.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1955.30	19.09	1936.21	6.7	3.6	7.3	1.4	23.23	2.4	60	150	<0.50	<0.50	<0.50
	Jun 15	1955.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1955.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1955.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1955.30	19.36	1935.94	8.93	3.25	7.66	2.04	24.20	2.1	-63	110	<0.50	<0.50	<0.50
MW-37	Mar 12	1930.06	18.89	1911.17	7.2	3.7	9.5	5.6	20.42	2.4	-27	36	NS	NS	NS
*	Jun 12	1929.98	19.10	1910.88	6.9	3.8	200.0	6.3	20.80	2.4	128	34	ND	ND	ND
	Sep 12	1929.98	20.05	1909.93	7.4	3.7	NM	5.5	21.79	2.4	144	32	ND	ND	ND
	Nov 12	1929.98	19.66	1910.32	7.9	3.8	NM	5.0	20.46	2.5	97	31	<0.50	<0.50	<0.50
	Mar 13	1929.98	18.83	1911.15	7.0	4.1	NM	4.3	19.76	2.7	139	34	<0.50	<0.50	<0.50
	Jun 13	1929.98	19.33	1910.65	7.0	4.1	NM	4.2	21.58	2.6	114	37	<0.50	<0.50	<0.50
	Sep 13	1929.98	19.80	1910.18	7.0	3.8	NM	4.6	21.66	2.5	215	40	<0.50	<0.50	<0.50
	Nov 13	1929.98	19.79	1910.19	6.5	4.0	7.2	4.2	21.71	2.6	335	33	<0.50	<0.50	<0.50
	Mar 14	1929.98	18.44	1911.54	7.4	3.5	33.9	4.6	23.10	2.3	113	30	<0.50	<0.50	<0.50
	Jun 14	1929.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1929.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1929.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1929.98	19.25	1910.73	6.7	3.6	3.6	3.0	20.22	2.5	64	35	<0.50	<0.50	<0.50
	Jun 15	1929.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1929.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1929.98	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1929.98	19.59	1910.39	8.66	3.32	5.67	3.95	20.88	2.2	-82	41	<0.50	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-38	Jun 12	1908.38	15.05	1893.33	6.8	3.9	550.0	5.0	22.00	2.5	124	5.8	ND	ND	ND
	Sep 12	1908.38	14.95	1893.43	7.6	3.8	NM	4.2	24.26	2.5	140	5.7	ND	ND	ND
	Nov 12	1908.38	14.69	1893.69	7.9	3.8	NM	3.6	22.20	2.5	89	5.9	<0.50	<0.50	<0.50
	Mar 13	1908.38	14.48	1893.90	7.0	4.2	NM	3.9	20.46	2.7	138	7.3	<0.50	<0.50	<0.50
	Jun 13	1908.38	15.05	1893.33	7.0	4.1	NM	3.9	23.24	2.7	117	7.8	<0.50	<0.50	<0.50
	Sep 13	1908.38	14.75	1893.63	6.8	3.9	NM	3.8	23.26	2.5	380	6.6	<0.50	<0.50	<0.50
	Nov 13	1908.38	14.97	1893.41	6.5	4.2	19.1	3.3	22.33	2.7	356	7.0	<0.50	<0.50	<0.50
	Mar 14	1908.38	14.65	1893.73	7.2	3.6	6.8	2.2	20.57	2.4	92	7.3	<0.50	<0.50	<0.50
	Jun 14	1908.38	15.16	1893.22	7.1	3.9	17.4	3.2	54.90	2.5	100	5.4	<0.50	<0.50	<0.50
	Sep 14	1908.38	15.12	1893.26	7.2	3.8	22.4	6.1	25.74	2.5	82	5.8	<0.50	<0.50	<0.50
	Nov 14	1908.38	15.23	1893.15	6.9	4.0	7.6	3.7	21.82	2.6	75	8.2	<0.50	<0.50	<0.50
	Mar 15	1908.38	14.75	1893.63	6.7	4.0	4.3	2.9	20.24	2.6	59	6.0	<0.50	<0.50	<0.50
	Jun 15	1908.38	14.86	1893.52	7.1	3.9	4.5	2.0	22.85	2.5	50	8.1	<0.50	<0.50	<0.50
	Sep 15	1908.38	15.11	1893.27	7.4	3.3	22.1	2.4	23.86	2.2	125	8.1	<0.50	<0.50	<0.50
	Nov 15	1908.38	15.13	1893.25	7.1	0.1	NM	3.7	20.74	0.0	49	7.4	<0.50	<0.50	<0.50
	Feb 16	1908.38	14.93	1893.45	8.8	3.5	4.6	4.6	21.00	2.3	-38	9.6	<0.50	<0.50	<0.50
MW-39	Jun 12	1967.55	26.15	1941.40	7.3	3.4	252.0	3.3	25.73	2.2	50	250	0.63	ND	ND
	Sep 12	1967.55	26.10	1941.45	7.4	3.5	NM	1.6	25.75	2.2	132	240	0.83	ND	ND
	Nov 12	1967.55	25.51	1942.04	7.7	3.5	NM	2.2	22.11	2.3	61	270	0.91	<0.50	<0.50
	Mar 13	1967.55	24.20	1943.35	7.0	3.8	NM	1.4	22.63	2.4	137	280	0.83	<0.50	<0.50
	Jun 13	1967.55	25.63	1941.92	7.0	3.8	NM	1.7	26.48	2.5	94	210	0.83	<0.50	<0.50
	Sep 13	1967.55	26.34	1941.21	6.9	3.7	NM	2.0	26.67	2.4	122	250	0.76	<0.50	<0.50
	Nov 13	1967.55	26.01	1941.54	6.7	3.9	133	1.4	26.36	2.5	157	260	0.81	<0.50	<0.50
	Mar 14	1967.55	24.87	1942.68	7.3	3.3	120	4.9	28.81	2.1	116	59	<0.50	<0.50	<0.50
	Jun 14	1967.55	26.07	1941.48	7.2	3.5	60	4.1	30.55	2.3	389	120	<0.50	<0.50	<0.50
	Sep 14	1967.55	26.15	1941.40	7.5	3.2	84	4.8	26.92	2.0	135	120	<0.50	<0.50	<0.50
	Nov 14	1967.55	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1967.55	24.67	1942.88	6.7	3.7	96.2	1.3	23.51	2.4	60	160	<0.50	<0.50	<0.50
	Jun 15	1967.55	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1967.55	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 15	1967.55	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1967.55	24.55	1943.00	8.90	3.27	37.50	1.51	26.63	2.1	-32	190	0.57	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-40 CMT-30	Nov 12	NM	25.28	NM	7.9	3.6	NM	2.6	17.93	2.3	-68	340	1.1	<0.50	<0.50
	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	4.7	<0.50	<0.50	<0.50
	Jun 13	1978.49	26.15	1952.34	7.6	3.3	NM	4.7	35.97	2.1	160	10	<0.50	<0.50	<0.50
	Sep 13	1978.49	26.71	1951.78	7.9	2.2	NM	3.0	34.38	1.5	35	2.1	<0.50	<0.50	<0.50
	Nov 13	1978.49	26.35	1952.14	7.6	3.0	9.6	3.0	20.28	1.9	91	1.3	<0.50	<0.50	<0.50
	Mar 14	1978.49	26.52	1951.97	7.6	3.1	73.6	3.8	23.63	2.0	103	4.5	<0.50	<0.50	<0.50
	Jun 14	1978.49	26.44	1952.05	8.3	3.6	5.0	4.4	46.19	2.3	79	3.2	<0.50	<0.50	<0.50
	Sep 14	1978.49	26.65	1951.84	8.4	2.7	18.1	5.1	32.95	1.8	313	4.6	<0.50	<0.50	<0.50
	Nov 14	1978.49	25.74	1952.75	8.1	3.6	2.7	8.9	19.34	2.4	-49	35	<0.50	<0.50	<0.50
	Mar 15	1978.49	25.19	1953.30	8.0	3.6	4.1	4.2	18.74	2.3	287	14	<0.50	<0.50	<0.50
	Jun 15	1978.49	25.61	1952.88	8.5	3.5	6.1	2.9	32.98	2.3	164	18	<0.50	<0.50	<0.50
	Sep 15	1978.49	26.25	1952.24	8.8	2.6	20.0	3.1	31.43	1.7	13	5.3	<0.50	<0.50	<0.50
	Nov 15	1978.49	26.21	1952.28	8.2	2.5	NM	4.9	16.87	1.6	282	<0.50	<0.50	<0.50	<0.50
	Feb 16	1978.49	24.44	1954.05	8.2	3.2	4.1	8.5	17.36	2.1	-10	15	<0.50	<0.50	<0.50
MW-40 CMT-35	Nov 12	NM	25.30	NM	8.1	4.1	NM	1.9	17.84	2.7	-163	260	6.6	<0.50	<0.50
	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	48	3.1	<0.50	<0.50
	Jun 13	NM	26.15	NM	7.3	3.3	NM	5.0	36.39	2.2	127	3.6	<0.50	<0.50	<0.50
	Sep 13	1978.49	26.71	1951.78	7.1	2.4	NM	3.0	33.82	1.3	55	7.9	0.93	<0.50	<0.50
	Nov 13	1978.49	26.20	1952.29	6.5	2.4	4.3	1.7	23.26	1.6	88	12	2.4	<0.50	<0.50
	Mar 14	1978.49	26.47	1952.02	7.6	2.6	58.7	3.6	23.75	1.7	128	2.6	<0.50	<0.50	<0.50
	Jun 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1978.49	25.36	1953.13	7.9	2.8	4.5	5.0	17.67	1.8	207	13	1.6	<0.50	<0.50
	Jun 15	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1978.49	34.21	1944.28	8.7	2.6	15.0	0.0	28.64	1.7	61	19	1.5	<0.50	<0.50
	Nov 15	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1978.49	24.54	1953.95	7.8	2.9	4.3	7.4	21.42	1.9	-42	75	4.9	<0.50	<0.50
MW-40 CMT-40	Nov 12	NM	25.34	NM	8.1	3.1	NM	2.0	20.43	2.0	-132	320	1.7	<0.50	<0.50
	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	270	1.6	<0.50	<0.50
	Jun 13	NM	26.18	NM	7.5	3.2	NM	3.5	37.72	2.1	135	53	0.73	<0.50	<0.50
	Sep 13	1978.49	26.69	1951.80	7.7	2.0	NM	4.0	37.45	1.3	-39	37	0.73	<0.50	<0.50
	Nov 13	1978.49	26.19	1952.30	6.4	2.3	238.0	3.5	26.72	1.5	38	51	0.64	<0.50	<0.50
	Mar 14	1978.49	26.50	1951.99	7.6	2.7	33.8	3.2	23.34	1.8	46	27	<0.50	<0.50	<0.50
	Jun 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1978.49	25.32	1953.17	7.3	3.0	92.3	3.5	21.84	1.9	340	100	1.5	<0.50	<0.50
	Jun 15	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1978.49	26.24	1952.25	7.60	2.59	11.10	2.70	35.72	1.68	-97	280	5.9	<0.50	<0.50
	Nov 15	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1978.49	24.38	1954.11	7.09	2.80	6.34	4.25	21.78	1.8	-30	340	5.5	<0.50	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-40 CMT-45	Nov 12	NM	25.28	NM	8.0	3.3	NM	2.1	20.47	2.1	-159	280	1.9	<0.50	<0.50
	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	310	1.6	<0.50	<0.50
	Jun 13	NM	26.14	NM	7.7	3.1	NM	4.2	29.10	2.0	203	47	<0.50	<0.50	<0.50
	Sep 13	1978.49	26.66	1951.83	7.2	2.2	NM	2.9	38.22	1.2	-90	110	1.3	<0.50	<0.50
	Nov 13	1978.49	26.16	1952.33	6.3	2.6	5.0	3.0	26.60	1.6	82	77	1.1	<0.50	<0.50
	Mar 14	1978.49	26.55	1951.94	7.6	2.7	67.9	4.7	26.76	1.8	57	24	<0.50	<0.50	<0.50
	Jun 14	1978.49	26.41	1952.08	7.0	3.0	7.1	4.7	36.07	2.0	-66	250	1.3	<0.50	<0.50
	Sep 14	1978.49	26.50	1951.99	7.3	2.0	25.4	3.3	33.31	1.3	-51	240	3.0	<0.50	<0.50
	Nov 14	1978.49	25.69	1952.80	7.5	3.1	5.2	6.6	20.28	2.0	-14	150	0.9	<0.50	<0.50
	Mar 15	1978.49	25.12	1953.37	6.4	0.8	12.2	4.2	23.38	0.5	361	120	3.2	<0.50	<0.50
	Jun 15	1978.49	25.66	1952.83	8.2	1.8	25.4	2.9	33.49	1.2	-170	36	1.9	<0.50	<0.50
	Sep 15	1978.49	26.25	1952.24	7.6	2.6	8.0	2.4	33.08	1.7	42	310	2.8	<0.50	<0.50
	Nov 15	1978.49	25.55	1952.94	7.5	2.3	NM	2.3	22.05	1.5	51	2.1	<0.50	<0.50	<0.50
	Feb 16	1978.49	23.40	1955.09	7.1	2.8	6.2	4.2	21.46	1.8	8	320	2.1	<0.50	<0.50
MW-40 CMT-50	Nov 12	NM	25.28	NM	8.2	3.4	NM	2.0	19.27	2.2	-175	300	2.5	<0.50	<0.50
	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	280	2.4	<0.50	<0.50
	Jun 13	NM	26.14	NM	7.7	3.2	NM	5.7	29.51	2.1	165	64	<0.50	<0.50	<0.50
	Sep 13	1978.49	26.63	1951.86	7.2	3.4	NM	5.8	29.36	2.3	243	24	<0.50	<0.50	<0.50
	Nov 13	1978.49	26.15	1952.34	6.5	2.5	12.9	1.5	25.67	1.6	29	120	1.8	<0.50	<0.50
	Mar 14	1978.49	26.49	1952.00	7.5	2.6	81.0	3.3	20.48	1.7	41	72	0.89	<0.50	<0.50
	Jun 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1979.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1979.49	25.11	1954.38	6.7	0.5	5.0	3.2	23.78	0.3	315	160	6.8	<0.50	<0.50
	Jun 15	1979.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1979.49	26.14	1953.35	7.66	2.23	14.50	2.03	34.68	1.4	-155	280	10.0	1.2	<0.50
	Nov 15	1979.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1979.49	25.10	1954.39	7.23	2.20	7.60	2.15	23.15	1.4	-5	290	18.0	1.4	<0.50
MW-40 CMT-55	Nov 12	NM	25.33	NM	8.0	2.9	NM	3.6	20.60	1.9	-55	930	4.0	1.7	<0.50
	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	390	4.1	1.7	<0.50
	Jun 13	NM	26.12	NM	7.5	3.1	NM	4.3	28.93	2.0	178	200	0.57	<0.50	<0.50
	Sep 13	1978.49	26.61	1951.88	7.7	3.2	NM	4.5	31.25	2.4	168	38	1.0	<0.50	<0.50
	Nov 13	1978.49	26.15	1952.34	6.2	2.3	17.2	3.1	26.89	1.4	38	110	0.86	<0.50	<0.50
	Mar 14	1978.49	26.56	1951.93	7.4	2.5	90.3	3.9	31.25	1.6	-69	130	3.1	<0.50	<0.50
	Jun 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Nov 14	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Mar 15	1978.49	25.11	1953.38	7.3	0.6	5.3	2.8	23.03	0.4	379	430	6.7	1.0	<0.50
	Jun 15	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Sep 15	1978.49	26.20	1952.29	7.63	2.44	15.80	4.68	31.93	1.6	-153	520	5.1	1.2	<0.50
	Nov 15	1978.49	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Feb 16	1978.49	24.52	1953.97	7.12	2.69	11.47	10.41	23.58	1.8	78	640	4.4	1.1	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-40	Nov 12	NM	25.38	NM	8.0	3.2	NM	2.6	18.85	2.1	-128	1,400	11	6.3	<0.50
CMT-60	Mar 13	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1,200	9.5	6.0	<0.50
	Jun 13	NM	26.16	NM	7.5	3.3	NM	4.9	29.49	2.1	220	1,000	5.9	3.6	<0.50
	Sep 13	1978.49	26.62	1951.87	7.6	3.4	NM	5.0	29.80	2.2	236	20	0.56	<0.50	<0.50
	Nov 13	1978.49	26.16	1952.33	5.9	1.0	619.0	1.7	22.22	0.7	-78	190	3.6	2.5	<0.50
	Mar 14	1978.49	26.54	1951.95	7.4	2.6	65.3	5.5	31.53	1.7	-84	360	6.5	2.2	<0.50
	Jun 14	1978.49	26.56	1951.93	7.1	3.0	5.7	5.4	35.94	1.9	-49	750	8.0	2.9	<0.50
	Sep 14	1978.49	26.52	1951.97	7.2	2.9	35.2	3.4	32.51	1.9	-114	700	10.0	2.8	<0.50
	Nov 14	1978.49	25.70	1952.79	7.2	3.0	2.3	18.4	22.40	2.0	28	1,000	6.8	2.6	<0.50
	Mar 15	1978.49	25.17	1953.32	6.7	2.9	5.9	3.1	23.42	1.9	253	190	8.9	1.8	<0.50
	Jun 15	1978.49	25.60	1952.89	7.9	3.0	7.2	3.5	34.58	1.9	-112	140	7.2	1.9	<0.50
	Sep 15	1978.49	26.20	1952.29	7.6	2.6	16.5	6.2	32.89	1.7	-109	690	12	2.7	<0.50
	Nov 15	1978.49	24.30	1954.19	7.6	2.5	NM	2.8	22.15	1.6	-80	8.9	<0.50	<0.50	<0.50
	Feb 16	1978.49	24.37	1954.12	7.2	2.7	9.1	5.0	20.06	1.8	13	870	8.1	2.1	<0.50

Table A-2: Historical Groundwater Gauging and Analytical Data
Maryland Square Shopping Center

Well ID	Date	Top of Casing Elevation (feet msl)	Depth to Groundwater Level (feet)	Groundwater Elevation (feet msl)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (ºC)	TDS (g/L)	ORP (mV)	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	Vinyl Chloride (µg/L)
MW-41	Sep 13	1908.89	14.81	1894.08	6.9	3.7	NM	2.7	26.56	2.8	135	1.7	<0.50	<0.50	<0.50
	Nov 13	1908.89	15.05	1893.84	6.7	3.9	239.0	1.1	21.40	2.2	360	2.6	<0.50	<0.50	<0.50
	Mar 14	1908.89	14.55	1894.34	7.3	3.3	192.0	2.8	20.93	2.2	64	2.1	<0.50	<0.50	<0.50
	Jun 14	1908.89	15.34	1893.55	6.9	3.6	76.1	1.2	26.24	2.3	85	2.8	<0.50	<0.50	<0.50
	Sep 14	1908.89	15.50	1893.39	7.0	3.6	68.4	2.4	26.18	2.3	54	2.8	<0.50	<0.50	<0.50
	Nov 14	1908.89	15.47	1893.42	6.9	3.7	57.0	1.2	20.80	2.4	25	3.7	<0.50	<0.50	<0.50
	Mar 15	1908.89	14.85	1894.04	6.7	3.7	33.1	1.6	21.17	2.4	38	3.5	<0.50	<0.50	<0.50
	Jun 15	1908.89	14.57	1894.32	7.0	3.6	34.5	0.7	23.92	2.4	66	3.6	<0.50	<0.50	<0.50
	Sep 15	1908.89	14.80	1894.09	7.3	3.1	25.7	1.3	24.04	2.0	136	3.5	<0.50	<0.50	<0.50
	Nov 15	1908.89	14.70	1894.19	7.0	3.0	NM	0.9	20.30	1.9	60	3.0	<0.50	<0.50	<0.50
	Feb 16	1908.89	14.67	1894.22	8.1	3.3	46.8	1.1	22.05	2.1	-72	4.0	<0.50	<0.50	<0.50
MW-42	Sep 13	1910.31	16.16	1894.15	7.1	4.1	NM	3.0	24.55	2.7	66	0.53	<0.50	<0.50	<0.50
	Nov 13	1910.31	16.32	1893.99	7.0	4.3	29.4	2.1	21.41	2.8	326	0.60	<0.50	<0.50	<0.50
	Mar 14	1910.31	16.01	1894.30	7.3	3.7	73.8	1.5	20.05	2.4	41	<0.50	<0.50	<0.50	<0.50
	Jun 14	1910.31	16.51	1893.80	6.7	4.0	13.6	2.1	23.60	2.6	105	0.58	<0.50	<0.50	<0.50
	Sep 14	1910.31	16.45	1893.86	6.8	4.0	21.4	3.2	23.75	2.6	107	0.53	<0.50	<0.50	<0.50
	Nov 14	1910.31	16.57	1893.74	7.0	4.1	6.3	1.7	22.21	2.7	-5	0.71	<0.50	<0.50	<0.50
	Mar 15	1910.31	16.12	1894.19	6.7	4.1	6.5	2.3	20.16	2.7	23	0.62	<0.50	<0.50	<0.50
	Jun 15	1910.31	16.25	1894.06	6.8	4.1	11.1	1.32	22.00	2.7	70	0.74	<0.50	<0.50	<0.50
	Sep 15	1910.31	16.48	1893.83	7.1	3.4	21.5	1.72	23.25	2.2	159	<0.50	<0.50	<0.50	<0.50
	Nov 15	1910.31	16.41	1893.90	6.9	3.3	NM	3.41	19.62	2.1	67	0.61	<0.50	<0.50	<0.50
	Feb 16	1910.31	16.31	1894.00	7.9	3.6	7.1	2.73	20.30	2.3	106	0.54	<0.50	<0.50	<0.50
MW-43	Sep 13	1958.33	17.14	1941.19	7.1	3.5	NM	3.1	26.33	2.2	45	<0.50	<0.50	<0.50	<0.50
	Nov 13	1958.33	16.96	1941.37	7.0	3.6	163.0	2.2	22.87	2.3	138	<0.50	<0.50	<0.50	<0.50
	Mar 14	1958.33	16.11	1942.22	7.2	3.0	109.0	1.6	22.15	1.9	45	<0.50	<0.50	<0.50	<0.50
	Jun 14	1958.33	17.15	1941.18	6.7	3.2	61.3	2.3	25.50	2.1	128	<0.50	<0.50	<0.50	<0.50
	Sep 14	1958.33	17.33	1941.00	6.8	3.1	70.4	2.7	25.53	2.0	170	<0.50	<0.50	<0.50	<0.50
	Nov 14	1958.33	16.63	1941.70	7.0	3.2	23.5	2.9	23.23	2.1	98	<0.50	<0.50	<0.50	<0.50
	Mar 15	1958.33	15.60	1942.73	6.7	3.2	20.3	1.4	21.61	2.1	85	<0.50	<0.50	<0.50	<0.50
	Jun 15	1958.33	16.35	1941.98	7.0	3.2	31.3	1.0	24.29	2.0	40	<0.50	<0.50	<0.50	<0.50
	Sep 15	1958.33	17.32	1941.01	7.4	2.8	13.4	1.9	25.12	1.8	118	<0.50	<0.50	<0.50	<0.50
	Nov 15	1958.33	16.74	1941.59	7.3	2.7	NM	1.4	23.44	1.7	34	<0.50	<0.50	<0.50	<0.50
	Feb 16	1958.33	15.95	1942.38	8.8	2.9	34.4	1.8	23.04	1.9	-107	<0.50	<0.50	<0.50	<0.50

Notes:

NM = Not Measured
msl = mean sea level
ND = Non Detect
NS = Not Sampled
µg/L = micrograms per liter

°C = degrees Celsius
g/L = gallons per liter
mg/L = milligrams per liter
mS/cm = milli Siemens per centimeter
mV = milllivolts
NTU = Nephelometric Turbudity Units

*: All wells were resurveyed to determine top of casing elevation
Mar 2014: Wells monitored were determined to not be representative of site conditions.

Maryland Square PCE Site

FIGURES

1 inch = 1,000 feet

Note: Scale and location are approximate

N

SOURCE: Google Earth

SITE VICINITIY MAP

MARYLAND SQUARE SHOPPING CENTER
3661 S. MARYLAND PARKWAY
LAS VEGAS, NEVADA

PROJECT NUMBER: LV20915008	**DATE:** 12/12	**Figure 1**
APPROVED BY: ADS	**DRAWN BY:** ABK	

ATC
7115 Amigo Street, Suite 100
Las Vegas, Nevada 89119
Ph: (702) 990-9300 *** Fax: (702) 990-9305

MW-1 GROUNDWATER MONITOR WELL

PW-1 PUMPING WELL

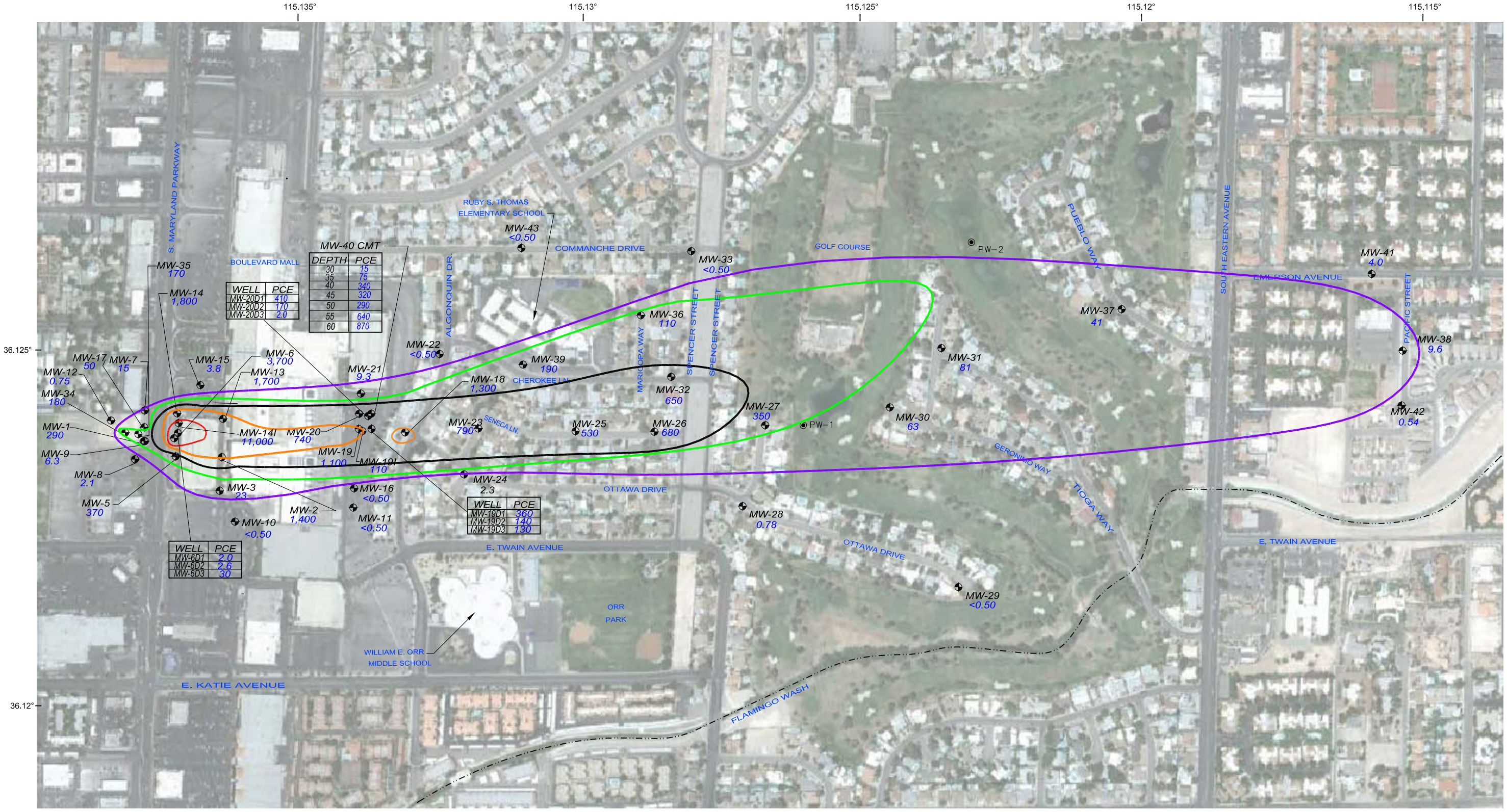
NM NOT MEASURED OR NO SURVEY DATA

GROUNDWATER POTENTIOMETRIC MAP
Feb 15 - 19 & Feb 22 - 26, 2016

MARYLAND SQUARE SHOPPING CENTER
3661 S. MARYLAND PARKWAY
LAS VEGAS, NV

PROJECT NUMBER: NPMMA16002		DATE: 03/09/16	FIGURE
APPROVED BY: AK		DRAWN BY: JG	2

ATC
7115 Amigo Street, Suite 100
Las Vegas, Nevada 89119
Ph: (702) 990-9300 *** Fax: (702) 990-9305



WELL	PCE
MW-20D1	410
MW-20D2	170
MW-20D3	2.0

DEPTH	PCE
30	15
35	15
40	340
45	320
50	290
55	640
60	870

WELL	PCE
MW-19D1	360
MW-19D2	140
MW-19D3	130

WELL	PCE
MW-6D1	2.0
MW-6D2	2.6
MW-6D3	30

LEGEND

MW-1 GROUNDWATER MONITOR WELL

PW-1 PUMPING WELL

3000 ISOCONTOUR, µg/L

1000 ISOCONTOUR, µg/L

500 ISOCONTOUR, µg/L

540 PCE, µg/L FEBRUARY 2016 DATA

NS NOT SAMPLED

100 ISOCONTOUR, µg/L

5 ISOCONTOUR, µg/L

0 500 1000

SCALE, FT

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE

PCE ISOCONCENTRATION MAP
Feb 15-19 & Feb 22-26, 2016

MARYLAND SQUARE SHOPPING CENTER
3661 S. MARYLAND PARKWAY
LAS VEGAS, NV

PROJECT NUMBER: NPMMA16002		DATE: 3/28/16	FIGURE 3
APPROVED BY: AK		DRAWN BY: JJ	

ATC
7115 Amigo Street, Suite 100
Las Vegas, Nevada 89119
Ph: (702) 990-9300 *** Fax: (702) 990-9305

Maryland Square PCE Site

APPENDIX A
FIELD SHEETS

Cardno ATC
Shaping the Future

GROUNDWATER LEVEL DATA

CARDNO ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9305 (702) 990-9305 fax

PROJECT: Maryland Square

LOCATION: 3661 S. Maryland Parkway

PROJECT NUMBER: LV20915014

RECORDED BY: Johanna Garcia

MEASURING DEVICE: WLI

WEATHER CONDITIONS:

WELL ID	DATE	TIME	DEPTH TO GROUNDWATER (feet bTOC)	TOTAL DEPTH (feet bTOC)	COMMENTS
MW-1	2/24/16	1150	19.04	25.95	
MW-2	2/25/16	825	17.54	29.21	
MW-5	2/23/16	1154	18.21	28.68	
MW-6	2/23/16	1215	18.81	28.31	
MW-7	2/24/16	1006	17.00	29.37	soft bottom
MW-8	2/24/16	855	19.77	~~22.70~~ 29.96	
MW-9	2/24/16	933	19.31	49.98	
MW-10	2/23/16	815	19.88	30.15	
MW-11	2/17/16	844	~~24.44~~ 25.41	32.80	
MW-12	2/24/16	821	14.92	33.26	
MW-13	2/29/16	900	17.16	25.00	
MW-14	2/22/16	1225	17.75	29.15	
MW-15	2/23/16	911	15.14	27.61	
MW-16	2/19/16	820	26.43	34.30	
MW-17	2/24/16	1040	18.65	30.05	
MW-18	2/17/16	1320	11.98	20.36	
MW-19	2/22/16	1114	25.61	29.75	
MW-20	2/22/16	1030	25.31	30.30	
MW-21	2/19/16	1011	24.59	33.54	
MW-22	2/17/16	926	26.44	36.42	
MW-23	2/17/16	1240	16.09	26.10	
MW-24	2/17/16	1007	13.87	20.55	
MW-25	2/17/16	1045	19.09	26.65	
MW-26	2/17/16	1204	17.19	36.50	
MW-27	2/15/16	1253	14.98	36.70	
MW-28	2/16/16	903	12.82	34.97	
MW-29	2/16/16	823	14.34	34.63	
MW-30	2/15/16	1148	17.11	39.82	
MW-31	2/15/16	1107	16.46	39.47	
MW-32	2/16/16	1242	18.62	34.61	
MW-33	2/16/16	1023	17.70	34.11	
MW-34	2/24/16	1225	17.67	29.10	
MW-35	2/24/16	1114	18.68	27.89	
MW-36	2/16/16	1117	19.36	38.88	
N-37	2/15/16	1025	19.59	37.07	
8	2/15/16	943	14.93	34.50	

GROUNDWATER LEVEL DATA

ATC
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(702) 990-9305 (702) 990-9305 fax

PROJECT: Maryland Square

LOCATION: 3661 S. Maryland Parkway

PROJECT NUMBER: LV20915014

RECORDED BY: Johanna Garcia

MEASURING DEVICE: WLI

WEATHER CONDITIONS:

WELL ID	DATE	TIME	DEPTH TO GROUNDWATER (feet bTOC)	TOTAL DEPTH (feet bTOC)	COMMENTS
MW-39	2/16/16	1202	24.55	37.61	
MW40-CMT30	2/18/16	831	~~29.80~~ 24.44	29.80	
MW40-CMT35	2/18/16	1050	24.54	35.10	
MW40-CMT40	2/18/16	1258	24.38	40.12	
MW40-CMT45	2/18/16	946	~~44.18~~ 23.40	45.07	
MW40-CMT50	2/25/16	949	25.10	50.05	
MW40-CMT55	2/25/16	1046	24.52	55.00	
MW40-CMT60	2/18/16	1140	24.37	—	
MW-41	2/15/16	900	14.67	35.30	
MW-42	2/15/16	810	16.31	34.91	
MW-43	2/16/16	946	15.95	34.80	
MW-14I	2/22/16	1302	18.31	56.10	
MW-6D1	2/23/16	1041	14.95	59.61	
MW-6D2	2/23/16	959	14.81	89.02	
MW-6D3	2/23/16	1111	13.75	—	
MW-19D1	2/19/16	1252	24.80	48.75	
MW-19D2	2/19/16	1056	26.21	70.50	
MW-19D3	2/19/16	1142	22.36	—	
MW-20D1	2/22/16	945	24.62	44.63	
MW-20D2	2/22/16	910	25.11	65.70	
MW-20D3	2/22/16	831	21.66	—	
MW-19I	2/19/16	908	24.65	54.24	
MW-3	2/26/16	910	18.28	29.26	

GROUNDWATER COLLECTION LOG

ATC
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(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-1
Sample ID: MW-1
Date: 2/24/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 25.95 feet
Depth to Water: 19.04 feet
Constructed Screen Interval 10 feet to 30 feet
Approximate Pump Depth Feet bgs 23 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	~~1145~~ 1200	25.07	3.570	2.316	0.75	7.3	190.4	Clear, No odor, 19.22/5.69
1.0	1205	25.12	3.572	2.317	0.85	7.0	179.9	Clear, No odor, 19.25/13.77
1.5	1210	25.24	3.560	2.309	1.36	6.97	173.1	Clear, No odor, 19.20/6.87
2.0	1215	25.36	3.556	2.292	1.20	6.97	171.4	Clear, No odor, 19.22/5.92

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	0.4	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1220	Sample Collection Time

GROUNDWATER COLLECTION LOG

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Well ID: MW-2
Sample ID: MW-2
Date: 2/25/10

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 29.21 feet
Depth to Water: 17.54 feet
Constructed Screen Interval: 10 feet to 32 feet
Approximate Pump Depth: Feet bgs 24 Feet btoc

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	834	22.59	3.076	2.004	3.70	7.05	202.1	DTW 17.60 turb. 87.3
.8	839	22.86	3.064	2.037	3.57	7.04	208.8	DTW 17.6[illegible] turb. 58.8
1.0	844	23.02	3.154	2.047	3.58	7.04	209.2	DTW 17.61 turb. 44.6
2.0	849	23.00	3.121	2.039	3.48	7.03	208.2	DTW 17.65 turb. 21.3

N/A Well Volumes

Total Water Volume Purged: 2.0 Gallons =
Purged Dry (Y/N): N
Comments:

Security: Locking cap? X yes ____no Replaced? ____yes X no 0.0 PID
Bolts secured? X yes ____no Replaced? ____yes X no — Vacuum
Surface Seal? X yes ____no Replaced? ____yes X no 850 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number:
Sampler's Name: JG

Well ID: MW-3
Sample ID: MW-3
Date: 2/26/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 29.26 feet
Depth to Water: 18.28 feet
Constructed Screen Interval 10 feet to 31 feet
Approximate Pump Depth Feet bgs 25 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	917	25.42	3.910	2.544	1.00	6.92	192.7	DTW 18.45 turb. 84.7
.9	922	25.57	3.972	2.583	0.63	6.81	183.6	DTW 18.47 turb. 53.6
1.5	927	25.78	4.022	2.614	0.42	6.81	175.6	DTW 18.47 turb. 22.9
1.9	932	25.79	4.042	2.628	0.33	6.81	170.6	DTW 18.47 turb. 12.00

Total Water Volume Purged: 1.9 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.0 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 935 Sample Collection Time

GROUNDWATER COLLECTION LOG

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Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-5
Sample ID: MW-5
Date: 2/23/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 28.68 feet
Depth to Water: 18.21 feet
Constructed Screen Interval 10 feet to 32 feet
Approximate Pump Depth _____ Feet bgs 24 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1203	23.94	3.076	2.005	4.90	7.07	185.9	DTW 18.29 tub. 55.3
1.0	1208	23.75	3.118	2.029	4.99	7.06	185.0	DTW 18.29 tub. 44.9
1.5	1213	23.95	3.146	2.034	4.84	7.06	186.0	DTW 18.29 tub. 24.2
2.0	1219	23.92	3.128	2.024	4.79	7.06	185.8	DTW 18.29 tub. 34.8

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no Replaced? ___ yes X no 0.0 PID
Bolts secured? X yes ___ no Replaced? ___ yes X no — Vacuum
Surface Seal? X yes ___ no Replaced? ___ yes X no 1220 Sample Collection Time

GROUNDWATER COLLECTION LOG

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(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-6
Sample ID: MW-6
Date: 2/23/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 28.31 feet
Depth to Water: 18.81 feet
Constructed Screen Interval 10 feet to 32 feet
Approximate Pump Depth Feet bgs 25 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1246	24.06	3.033	1.972	2.97	7.03	200.5	DTW 18.91, Tub 65.3
1.0	1251	24.24	3.076	2.065	3.14	7.00	198.5	DTW 18.89 tub. 71.5
1.4	1256	24.25	3.185	2.070	3.20	7.00	199.4	DTW 18.89 20.5
1.7	1301	24.26	3.202	2.082	3.19	7.00	198.7	DTW 18.90 tub. 22.2

Total Water Volume Purged: 1.7 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — O.O. PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1305 Sample Collection Time

GROUNDWATER COLLECTION LOG

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Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-7
Sample ID: MW-7
Date: 2/24/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 29.37 feet
Depth to Water: 17.00 feet
Constructed Screen Interval 10 feet to 30 feet
Approximate Pump Depth Feet bgs 24 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1016	24.90	3.318	2.156	2.59	7.02	190.5	DTW 17.11 tub. 63.2
1.0	1021	25.15	3.354	2.179	2.58	7.02	189.5	DTW 17.18 tub. 39.1
1.4	1026	25.07	3.368	2.189	2.55	7.02	188.7	DTW 17.20 tub. 31.3
1.6	1031	25.29	3.376	2.197	2.60	7.02	189.7	DTW 17.22 tub. 11.0

Total Water Volume Purged: 1.6 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	2.8	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1035	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-8
Sample ID: MW-8
Date: 2/24/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 29.96 ~~22.70~~ feet
Depth to Water: 19.77 feet
Constructed Screen Interval 10 feet to 30 feet
Approximate Pump Depth Feet bgs 25 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.3	905	22.89	3.115	2.025	2.24	6.99	159.6	DTW 20.11 tub. 101
.6	910	24.07	3.136	2.040	2.39	7.00	155.3	DTW 20.24 tub. 49.4
1.0	915	24.16	3.145	2.043	2.51	7.00	161.7	DTW 20.35 tub. 20.6
1.5	920	24.34	3.147	2.046	2.96	7.00	169.2	DTW 20.41 tub.

tal Water Volume Purged: 1.5 Gallons = N/A Well Volumes
ned Dry (Y/N): N
nents:

urity: Locking cap? X yes ___ no Replaced? ___ yes X no 0.4 PID
Bolts secured? X yes ___ no Replaced? ___ yes X no — Vacuum
Surface Seal? X yes ___ no Replaced? ___ yes X no 930 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-9
Sample ID: MW-9
Date: 2/24/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 49.98 feet
Depth to Water: 19.31 feet
Constructed Screen Interval 48.5 feet to 50 feet
Approximate Pump Depth _____ Feet bgs 40 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.4	940	24.04	1.342	0.872	0.36	7.24	152.5	DTW 19.65 tub. 25.6
.9	945	24.48	1.344	0.873	0.34	7.23	146.1	DTW 19.60 tub. 23.9
1.30	950	24.40	1.384	0.899	1.50	7.26	146.8	DTW 19.60 tub. 18.83
1.5	955	24.33	1.420	0.923	2.25	7.27	157.8	DTW 19.61 tub. 15.95

Total Water Volume Purged: 1.5 Gallons = N/A Well Volumes
Purged Dry (Y/N): no
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — 0.3 PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 1000 Sample Collection Time

GROUNDWATER COLLECTION LOG

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Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name:

Well ID: MW-10
Sample ID: MW-10
Date: 2/23/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 30.15 feet
Depth to Water: 19.88 feet
Constructed Screen Interval 10 feet to 30 feet
Approximate Pump Depth Feet bgs 26 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	0835	26.36	3.398	2.204	0.90	6.95	-39.9	DTW 20.55 Tub 27.6
1.0	0840	26.57	3.460	2.248	0.68	6.92	-101.2	20.93, 16.00
1.5	0845	26.49	3.431	2.213	0.64	6.92	-122.2	20.95, 14.73
2.0	0850	26.53	3.467	2.251	0.51	6.92	-143.3	21.15, 14.56

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.0 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — ___ Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 0853 Sample Collection Time

GROUNDWATER COLLECTION LOG

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(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-11
Sample ID: MW-11
Date: 2/17/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 32.80 feet
Depth to Water: 25.41 ~~24.41~~ feet
Constructed Screen Interval 13.5 feet to 33.5 feet
Approximate Pump Depth Feet bgs 29 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.4	852	24.07	3.447	2.239	0.97	6.97	-25.8	DTW 25.52 turb. 9.70
.9	857	24.08	3.430	2.233	0.90	6.96	-46.4	DTW 25.52 turb. 7.35
1.4	902	24.14	3.486	2.285	0.81	6.96	-55.2	DTW 25.52 turb. 6.00
1.7	907	24.20	3.471	2.276	0.82	6.96	-61.6	DTW 25.52 turb. 6.42

Total Water Volume Purged: 1.7 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — — PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 910 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-12
Sample ID: MW-12
Date: 2/24/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 33.26 feet
Depth to Water: 14.92 feet
Constructed Screen Interval 13.5 feet to 33.5 feet
Approximate Pump Depth _____ Feet bgs 24 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.4	831	22.71	3.213	2.093	2.67	6.99	253.15	DTW 15.28 tub. 36.3
.8	836	22.77	3.279	2.130	2.63	7.00	242.1	DTW 15.40 tub. 31.5
1.2	841	22.66	3.314	2.155	2.58	7.00	232.7	DTW 15.47 tub. 38.8
1.5	846	22.99	3.332	2.165	2.61	7.00	230.2	DTW 15.50 tub. 27.7

Total Water Volume Purged: 1.5 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap?	✓ yes ___ no	Replaced? ___ yes	X no
Bolts secured?	✓ yes ___ no	Replaced? ___ yes	X no
Surface Seal?	✓ yes ___ no	Replaced? ___ yes	X no

0.0 PID
— Vacuum
850 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-13
Sample ID: MW-13
Date: 2/25/10

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 25.00 feet
Depth to Water: 17.16 feet
Constructed Screen Interval 9 feet to 29 feet
Approximate Pump Depth Feet bgs 22 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	911	22.27	3.303	2.147	1.40	6.98	208.5	DTW 17.29 hub. 30.4
1.0	916	22.31	3.304	2.148	1.46	6.99	207.2	DTW 17.30 hub. 15.52
1.4	921	22.49	3.311	2.152	1.38	6.98	205.9	DTW 17.30 hub. 10.88
2.0	926	22.60	3.321	2.159	1.35	6.98	205.5	DTW 17.31 hub. 13.66

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.0 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 930 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-14
Sample ID: MW-14
Date: 2/22/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 29.15 feet
Depth to Water: 17.75 feet
Constructed Screen Interval 15 feet to 40 feet
Approximate Pump Depth Feet bgs 24.5 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1235	25.05	3.430	2.229	2.35	6.98	263.6	DTW 17.92 tub. 72.4
.7	1240	25.22	3.436	2.233	2.33	6.99	259.4	DTW 17.93 tub. 67.6
1.0	1245	25.42	2.098	2.228	2.55	6.98	256.7	DTW 17.94 tub. 63.5
1.5	1250	25.36	3.437	2.235	2.42	6.98	255.5	DTW 17.94 tub. 68.0

Total Water Volume Purged: 1.5 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.5 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1255 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-15
Sample ID: MW-15
Date: 2/23/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 27.61 feet
Depth to Water: 15.14 feet
Constructed Screen Interval 15 feet to 32 feet
Approximate Pump Depth Feet bgs 24 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	920	25.88	3.217	2.089	2.34	6.97	113.8	DTW 15.16 tub. 32.8
1.0	925	25.95	3.2110	2.086	2.26	6.97	122.1	DTW 15.17 tub. 26.3
1.5	930	26.17	3.214	2.089	2.22	6.97	126.9	DTW 15.23 tub. 21.3
2.0	935	26.08	3.214	2.089	2.19	6.97	130.3	DTW 15.23 tub. 13.4

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	0.2	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	940	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-16
Sample ID: MW-16
Date: 2/19/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 34.30 feet
Depth to Water: 26.43 feet
Constructed Screen Interval 19 feet to 32 feet
Approximate Pump Depth Feet bgs 31 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	833	23.94	2.908	1.889	0.45	7.00	-39.2	DTW 26.55 hd. 16.37
1.0	838	24.02	2.956	1.922	0.15	7.00	-61.5	DTW 26.55 hd. 10.06
1.5	843	24.24	2.966	1.926	0.12	7.00	-59.2	DTW 26.55 hd. 7.65
1.7	848	24.50	2.981	1.941	0.10	7.00	-50.4	DTW 26.55 hd. 4.54

Total Water Volume Purged: 1.7 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	0.1	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	850	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-17
Sample ID: MW-17
Date: 2/24/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 30.05 feet
Depth to Water: 18.65 feet
Constructed Screen Interval 15 feet to 30 feet
Approximate Pump Depth Feet bgs 25 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1049	22.97	3.280	2.129	0.99	7.03	172.5	DTW 18.95 turb. 27.9
1.0	1054	23.27	3.258	2.129	1.07	7.03	167.1	DTW 19.18 turb. 8.02
1.5	1059	23.40	3.261	2.137	1.10	7.03	165.6	DTW 19.35 turb. 7.28
2.0	1104	23.31	3.174	2.140	1.21	7.03	165.5	DTW 19.40 turb. 6.10

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	10.5	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1105	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-18
Sample ID: MW-18
Date: 2/17/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 20.36 feet
Depth to Water: 11.98 feet
Constructed Screen Interval 5 feet to 26 feet
Approximate Pump Depth Feet bgs 17 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments: Well bottom is above screen interval

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1332	23.97	3.339	2.170	3.62	7.04	149.3	DRW 12.03 turb. 6.84
1.4	1337	24.04	3.333	2.167	3.41	7.04	152.3	DRW 12.04 turb. 5.14
2.0	1342	24.20	3.331	2.167	3.39	7.04	153.2	DRW 12.04 turb. 5.29
2.5	1347	24.01	3.337	2.168	3.46	7.04	152.7	DRW turb.

Total Water Volume Purged: 2.5 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — — PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1350 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: SG

Well ID: MW-19
Sample ID: MW-19
Date: 2/22/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 29.75 feet
Depth to Water: 25.61 feet
Constructed Screen Interval 19 feet to 35 feet
Approximate Pump Depth ____ Feet bgs 28 29 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments: Well bottom above screen interval

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1129	25.30	3.258	2.118	5.20	7.01	264.4	DTW 25.80 hub 25.6
.9	1134	25.43	3.256	2.116	4.31	7.01	265.3	DTW 25.80 hub. 21.0
1.2	1139	25.46	3.253	2.114	4.40	7.01	266.1	DTW 25.80 hub. 17.96
1.6	1144	25.36	3.252	2.113	4.30	7.01	266.2	DTW 25.80 hub. 12.92

Total Water Volume Purged: 1.6 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ____ no	Replaced? ____ yes X no	0.0	PID
Bolts secured? X yes ____ no	Replaced? ____ yes X no	—	Vacuum
Surface Seal? X yes ____ no	Replaced? ____ yes X no	1145	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-20
Sample ID: MW-20
Date: 2/22/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 30.30 feet
Depth to Water: 25.31 feet
Constructed Screen Interval 19 feet to 35 feet
Approximate Pump Depth _____ Feet bgs 29 ~~30~~ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.3	1045	23.78	3.352	2.179	3.43	6.98	248.9	DTW — turb. 241
.5	1050	23.81	3.345	2.174	3.38	6.99	252.4	DTW — turb. 207
1.0	1055	23.91	3.345	2.167	3.52	7.00	253.8	DTW — turb. 95.6
1.3	1100	23.91	3.331	2.165	3.49	7.00	254.2	DTW — turb. 41.3

Total Water Volume Purged: 1.3 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ____no Replaced? ____yes X no 0.0 PID
Bolts secured? X yes ____no Replaced? ____yes X no — Vacuum
Surface Seal? X yes ____no Replaced? ____yes X no 1105 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-21
Sample ID: MW-21
Date: 2/9/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 33.54 feet
Depth to Water: 24.59 feet
Constructed Screen Interval 19 feet to 36 feet
Approximate Pump Depth Feet bgs 30 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1025	24.28	3.249	2.111	0.52	6.93	423.5	DTW 24.74 turb. 66.2
1.0	1030	24.32	3.256	2.116	0.20	6.93	428.5	DTW 24.74 turb. 127
1.3	1035	24.13	3.253	2.115	0.16	6.93	429.4	DTW 24.74 turb 28.9
1.6	1040	24.50	3.260	2.120	0.14	6.92	429.5	DTW 24.74 turb. 30.5

Total Water Volume Purged: 1.6 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.5 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1045 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-22
Sample ID: MW-22
Date: 2/17/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 36.42 feet
Depth to Water: 26.44 feet
Constructed Screen Interval 15 feet to 36 feet
Approximate Pump Depth Feet bgs 31 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	940	23.75	3.527	2.295	1.18	6.87	127.4	DTW 26.59 turb 5.55
1.0	945	23.83	3.534	2.298	1.02	6.87	124.9	DTW 26.60 turb. 7.44
1.5	950	23.71	3.536	2.298	0.98	6.87	124.0	DTW 26.60 turb. 6.92
2.0	955	23.83	3.531	2.295	0.93	6.86	123.9	DTW 26.60 turb. 6.92

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	—	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1000	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-23
Sample ID: MW-23
Date: 2/12/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 26.10 feet
Depth to Water: 16.09 feet
Constructed Screen Interval 5 feet to 26 feet
Approximate Pump Depth Feet bgs 21 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.6	1253	24.33	3.267	2.125	1.77	6.99	145.0	DTW 16.13 tub. 4.71
1.5	1258	24.30	3.265	2.122	1.64	6.99	143.4	DTW 16.13 tub. 4.72
2.0	1303	24.34	3.265	2.122	1.66	6.99	142.2	DTW 16.13 tub. 4.09
2.5	1308	24.35	3.263	2.121	1.65	6.98	140.6	DTW 16.13 tub.

Total Water Volume Purged: 2.5 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	—	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1310	Sample Collection Time

GROUNDWATER COLLECTION LOG

CARDNO
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-24
Sample ID: MW-24
Date: 2/17/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 20.55 feet
Depth to Water: 13.87 feet
Constructed Screen Interval 5 feet to 26 feet
Approximate Pump Depth Feet bgs 17 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.4	1015	22.60	3.253	2.114	1.03	7.02	126.9	DTW 13.92 turb. 5.20
.7	1020	22.72	3.246	2.111	0.82	7.02	124.0	DTW 13.92 turb. 5.46
1.1	1025	23.03	3.242	2.107	0.72	7.02	120.7	DTW 13.92 turb. 5.45
1.6	1030	22.89	3.237	2.104	0.72	7.02	118.7	DTW 13.92 turb. 4.83

Total Water Volume Purged: 1.6 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — — PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1035 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-25
Sample ID: MW-25
Date: 2/17/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 26.85 feet
Depth to Water: 19.09 feet
Constructed Screen Interval 5 feet to 26 feet
Approximate Pump Depth Feet bgs 23 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1055	24.14	3.517	2.285	2.00	6.96	145.8	DTW 19.13 tub. 6.84
1.0	1100	24.22	3.515	2.284	1.67	6.95	145.8	DTW 19.15 tub. 6.36
1.5	1105	24.34	3.515	2.285	1.75	6.95	143.6	DTW 19.15 tub 5.85
2.0	1110	24.39	3.514	2.285	1.73	6.95	142.2	DTW 19.15 tub. 4.02

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	—	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1115	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-26
Sample ID: MW-26
Date: 2/17/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 36.50 feet
Depth to Water: 17.19 feet
Constructed Screen Interval 10 feet to 36 feet
Approximate Pump Depth Feet bgs 27 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1211	24.38	3.701	2.406	2.91	6.99	150.3	DTW 17.23 turb. 3.95
1.0	1216	24.44	3.694	2.401	2.71	6.98	151.4	DTW 17.23 turb. 4.80
1.5	1221	24.30	3.693	2.400	2.74	6.98	150.2	DTW 17.23 turb. 5.82
2.0	1226	24.44	3.688	2.398	2.67	6.98	150.1	DTW 17.23 turb. 4.46

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N):
Comments:

Well Security:					
Locking cap?	X yes ___ no	Replaced? ___ yes	X no	—	PID
Bolts secured?	X yes ___ no	Replaced? ___ yes	X no	—	Vacuum
Surface Seal?	X yes ___ no	Replaced? ___ yes	X no	1230	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-27
Sample ID: MW-27
Date: 2/15/17

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 36.70 feet
Depth to Water: 14.98 feet
Constructed Screen Interval 10 feet to 36 feet
Approximate Pump Depth Feet bgs 26 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1301	24.16	3.248	2.112	2.28	9.14	-34.8	DTW 15.01 turb. 3.42
1.1	1306	24.22	3.254	2.115	1.70	8.94	-49.0	DTW 15.04 turb. 4.29
1.5	1311	24.27	3.257	2.117	1.60	8.93	-35.1	DTW 15.04 turb. 5.74
2.0	1316	24.23	3.260	2.119	1.55	8.91	-19.5	DTW 15.04 turb. 7.10

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments: YSI is not working properly.

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 13.5 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1320 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-28
Sample ID: MW-28
Date: 2/16/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 34.97 feet
Depth to Water: 12.82 feet
Constructed Screen Interval 15 feet to 36 feet
Approximate Pump Depth _____ Feet bgs 25 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.8	915	22.84	3.393	2.207	1.47	8.34	92.8	DTW 12.86 tub. 23.5
1.5	920	22.99	3.395	2.207	1.23	8.46	90.4	DTW 12.87 tub. 20.0
2.2	925	23.08	3.397	2.207	1.18	8.49	90.1	DTW 12.89 tub. 22.6
2.7	930	23.05	3.405	2.213	1.17	8.50	89.5	DTW 12.87 tub. 13.60

Total Water Volume Purged: 2.7 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — 0.2 PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 935 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JL

Well ID: MW-29
Sample ID: MW-29
Date: 2/16/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 34.65 feet
Depth to Water: 14.34 feet
Constructed Screen Interval 15 feet to 36 feet
Approximate Pump Depth Feet bgs 24 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	836	18.88	3.562	2.313	5.10	8.19	117.0	DTW 14.35, tub. 7.29
1.25	841	18.89	3.572	2.325	4.50	8.21	80.0	DTW 14.35 tub. 3.75
2.0	846	18.92	3.580	2.323	4.50	8.21	78.4	DTW 14.35 tub. 4.70
2.5	851	18.98	3.567	2.324	4.41	8.21	89.0	DTW 14.35 tub. 2.98

Total Water Volume Purged: 2.5 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.0 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 855 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JO

Well ID: MW-30
Sample ID: MW-30
Date: 2/15/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 39.82 feet
Depth to Water: 17.11 feet
Constructed Screen Interval 20 feet to 41 feet
Approximate Pump Depth _____ Feet bgs _____ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1200	20.58	2.755	1.778	4.04	8.93	87.8	DTW 17.13 tub 7.75
1.0	1205	20.46	2.733	1.777	3.69	8.81	84.5	DTW 17.14 tub 5.55
1.5	1210	20.40	2.733	1.777	3.59	8.77	81.2	DTW 17.14 tub. 4.62
2.0	1215	20.28	2.733	1.776	3.58	8.73	80.5	DTW 17.14 tub. 4.60

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ____ no	Replaced? ____ yes X no	0.4	PID
Bolts secured? X yes ____ no	Replaced? ____ yes X no	—	Vacuum
Surface Seal? X yes ____ no	Replaced? ____ yes X no	1220	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-31
Sample ID: MW-31
Date: 2/15/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 33.47 feet
Depth to Water: 16.46 feet
Constructed Screen Interval 13.5 feet to 33.6 feet
Approximate Pump Depth Feet bgs 25 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1119	23.05	3.509	2.281	3.46	8.86	-64.7	DTW 16.49 turb. 10.95
1.0	1124	23.05	3.511	2.282	2.95	8.79	-67.6	DTW 16.49 turb. 8.44
1.5	1129	23.24	3.513	2.284	2.86	8.76	-45.7	DTW 16.49 turb 8.05
2.0	1134	23.08	3.515	2.284	2.84	8.75	-0.4	DTW 16.49 turb 7.15

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 1.7 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes ___ no — 1140 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-32
Sample ID: MW-32
Date: 2/16/10

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 34.61 feet
Depth to Water: 18.62 feet
Constructed Screen Interval 13.5 feet to 33.7 feet
Approximate Pump Depth Feet bgs 27 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1250	25.21	3.164	2.055	3.17	9.01	55.8	DTW 18.66 tub. 15.63
.9	1255	25.19	3.166	2.058	3.17	8.94	49.6	DTW 18.69 tub. 14.42
1.3	1300	25.22	3.166	2.058	3.12	8.93	18.8	DTW 18.69 tub. 12.41
1.8	1305	25.30	3.166	2.058	3.17	8.90	-37.3	DTW 18.69 tub. 8.25

Total Water Volume Purged: 1.8 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 13.39 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1305 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-33
Sample ID: MW-33
Date: 2/16/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 34.11 feet
Depth to Water: 17.70 feet
Constructed Screen Interval 13.5 feet to 33.8 feet
Approximate Pump Depth Feet bgs 25 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1030	21.90	3.432	2.238	1.59	8.93	-62.1	DTW 17.75 tub. 14.89
.9	1035	21.91	3.426	2.231	1.29	8.78	-76.9	DTW 17.75 tub. 5.60
1.2	1040	21.80	3.395	2.229	1.44	8.74	-92.5	DTW 17.75 tub 5.61
1.5	1045	21.91	3.443	2.243	1.17	8.72	-98.3	DTW 17.75 tub. 7.24

Total Water Volume Purged: 1.5 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	0.4	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1050	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-34
Sample ID: MW-34
Date: 2/24/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 29.10 feet
Depth to Water: 17.67 feet
Constructed Screen Interval _____ feet to _____ feet
Approximate Pump Depth _____ Feet bgs 24 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1235	23.13	3.521	2.288	1.88	7.03	188.0	DTW 17.93 tub. 14.56
1.0	1240	23.25	3.524	2.290	2.11	7.04	185.1	DTW 17.97 tub. 8.69
1.5	1245	23.30	3.536	2.300	2.44	7.04	187.1	DTW 18.00 tub 7.15
2.0	1250	23.15	3.562	2.315	3.02	7.07	186.2	DTW 18.02 tub 5.38

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	1.4	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1255	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-35
Sample ID: MW-35
Date: 2/24/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 27.88 feet
Depth to Water: 18.68 feet
Constructed Screen Interval _____ feet to _____ feet
Approximate Pump Depth _____ Feet bgs 24 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1125	23.23	3.404	2.213	4.03	7.04	187.0	DTW 19.02 tub. 50.9
1.0	1130	23.31	3.378	2.195	3.54	7.04	191.3	DTW 19.08 tub. 68.2
1.5	1135	23.43	3.347	2.177	3.36	7.03	192.1	DTW 19.10 tub. 20.5
1.8	1140	23.55	3.341	2.173	3.30	7.03	194.7	DTW 19.12 tub. 10.94

Total Water Volume Purged: 1.8 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ____ no	Replaced? ____ yes X no	9.6	PID
Bolts secured? X yes ____ no	Replaced? ____ yes X no	—	Vacuum
Surface Seal? X yes ____ no	Replaced? ____ yes X no	1145	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-36
Sample ID: MW-36
Date: 2/16/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 38.80 feet
Depth to Water: 19.36 feet
Constructed Screen Interval 17 feet to 38 feet
Approximate Pump Depth Feet bgs 28.5 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.4	1130	24.16	3.241	2.106	2.43	9.16	-37.6	DTW 19.41 tub. 9.69
.8	1135	24.16	3.241	2.106	2.13	9.01	-54.2	DTW 19.44 tub. 6.61
1.2	1140	24.33	3.236	2.106	2.05	8.96	-59.8	DTW 19.44 tub. 8.35
1.7	1145	24.20	3.246	2.110	2.04	8.93	-63.0	DTW 19.44 tub. 7.66

Total Water Volume Purged: 1.7 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	1.5	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1145	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: SG

Well ID: MW-37
Sample ID: MW-37
Date: 2/15/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 37.07 feet
Depth to Water: 19.59 feet
Constructed Screen Interval 17 feet to 38 feet
Approximate Pump Depth Feet bgs 29 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1036	20.95	3.320	2.158	4.43	8.86	-32.6	DTW 19.63 turb. 6.92
1.0	1041	20.79	3.320	2.158	4.09	8.71	-54.2	DTW 19.63 turb. 5.43
1.5	1046	20.83	3.323	2.160	4.03	8.68	-72.7	DTW 19.63 turb. 5.67
2.0	1051	20.88	3.321	2.159	3.95	8.66	-81.9	DTW 19.63

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no Replaced? ___ yes X no 1.8 PID
Bolts secured? X yes ___ no Replaced? ___ yes X no — Vacuum
Surface Seal? X yes ___ no Replaced? ___ yes X no 1055 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: SG

Well ID: MW-38
Sample ID: MW-38
Date: 2/15/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 34.50 feet
Depth to Water: 14.93 feet
Constructed Screen Interval 15 feet to 36 feet
Approximate Pump Depth Feet bgs 25 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.4	951	21.22	3.483	2.264	4.22	8.87	-79.7	DTW 14.93, turb. 28.8
.7	956	21.00	3.486	2.266	3.85	8.84	-76.3	DTW 14.93, turb. 10.75
1.2	1001	21.06	3.486	2.266	3.76	8.74	-56.1	DTW 14.93, turb 10.21
1.6	1006	21.00	3.486	2.266	4.59	8.75	-37.6	DTW 14.93, turb. 4.62

Total Water Volume Purged: 1.6 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	0.0	PID
Bolts secured? / yes X no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1010	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: SG

Well ID: MW-39
Sample ID: MW-39
Date: 2/16/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 37.61 feet
Depth to Water: 24.55 feet
Constructed Screen Interval 15 feet to 36 feet
Approximate Pump Depth Feet bgs 31 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1211	24.44	3.246	2.110	1.79	9.23	-65.3	DTW 24.75, turb 54.9
1.0	1216	24.51	3.264	2.122	1.59	9.04	-58.9	DTW 24.74 turb 82.9
1.4	1221	24.63	3.268	2.124	1.53	8.97	-53.2	DTW 24.81 turb. 78.3
1.9	1226	26.63	3.270	2.126	1.51	8.90	-11.6	DTW 24.82 turb. 37.5

Total Water Volume Purged: 1.9 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.1 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1230 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-41
Sample ID: MW-41
Date: 2/15/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 35.30 feet
Depth to Water: 14.67 feet
Constructed Screen Interval 10 feet to 35 feet
Approximate Pump Depth Feet bgs 25 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	915	21.75	3.252	2.114	2.11	8.01	12.1	DTW 14.74, turb. 178
.9	920	21.86	3.253	2.113	1.18	8.03	-37.3	DTW 14.76, turb. 65.9
1.2	925	22.02	3.258	2.118	1.09	8.08	-46.1	DTW 14.76, turb. 55.1
1.7	930	22.05	3.261	2.120	1.05	8.13	-71.5	DTW 14.77, turb. 46.8

Total Water Volume Purged: 1.7 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.6 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? ✓ yes ___ no — Replaced? ___ yes X no — 935 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-42
Sample ID: MW-42
Date: 2/15/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 34.91 feet
Depth to Water: 16.31 feet
Constructed Screen Interval 10 feet to 35 feet
Approximate Pump Depth Feet bgs 26 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	825	20.17	3.575	2.323	3.87	7.76	128.7	DTW 16.31, TWB 30.4
1.0	830	20.23	3.502	2.306	3.89	7.87	118.6	DTW 16.31, twb. 29.48
1.5	835	20.31	3.570	2.331	2.89	7.91	112.3	DTW 16.31, twb 12.33
2.0	840	20.30	3.578	2.331	2.73	7.92	105.6	DTW twb. 7.08

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap?	✓ yes ___ no	Replaced? ___ yes X no	0.1 PID
Bolts secured?	X yes ___ no	Replaced? ___ yes X no	— Vacuum
Surface Seal?	X yes ___ no	Replaced? ___ yes X no	845 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-43
Sample ID: MW-43
Date: 2/16/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 34.80 feet
Depth to Water: 15.95 feet
Constructed Screen Interval 10 feet to 35 feet
Approximate Pump Depth Feet bgs 26 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.6	955	23.22	2.845	1.851	1.87	8.96	-6.2	DTW 16.10, tub ~~659~~ 270
1.0	1000	23.14	2.844	1.850	1.86	8.92	-46.8	DTW 16.01 tub. 79.5
1.6	1005	23.02	2.851	1.853	1.82	8.86	-87.7	DTW 16.01 tub. 40.9
2.0	1010	23.04	2.850	1.853	1.78	8.81	-106.7	DTW tub. 74.4

Total Water Volume Purged: 2.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — PID —
Bolts secured? X yes ___ no — Replaced? ___ yes X no — Vacuum —
Surface Seal? X yes ___ no — Replaced? ___ yes X no — Sample Collection Time 1015

GROUNDWATER COLLECTION LOG

ATC
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LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-40 CMT 30
Sample ID: MW-40 CMT 30
Date: 2/19/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: _____ inch
Depth to Well Bottom: 29.80 feet
Depth to Water: 24.44 feet
Constructed Screen Interval 30 feet to 30.6 feet
Approximate Pump Depth _____ Feet bgs 27.5 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
—	903	19.46	3.300	2.081	8.34	8.19	-55.8	tub. 8.97
—	913	18.14	3.211	2.087	8.61	8.10	-25.4	tub. 6.58
—	923	18.11	3.202	2.080	8.52	8.16	-25.6	tub. 3.70
—	933	17.36	3.241	2.081	8.51	8.18	-9.7	tub. 4.05

Total Water Volume Purged: _____ Gallons = N/A Well Volumes
Purged Dry (Y/N): _____
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — — PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 945 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-40 CMT 35
Sample ID: MW-40 CMT 35
Date: 2/18/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: _____ inch
Depth to Well Bottom: 35.10 feet
Depth to Water: 24.54 feet
Constructed Screen Interval 35 feet to 35.6 feet
Approximate Pump Depth _____ Feet bgs _____ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
—	1101	22.23	2.446	1.596	7.24	7.80	-147.0	Tub. 6.10
—	1111	22.83	2.826	1.837	7.24	7.81	-69.3	Tub. 5.71
—	1121	21.86	2.858	1.858	7.14	7.78	-46.0	Tub. 4.97
—	1131	21.42	2.869	1.865	7.42	7.75	-42.1	Tub. 4.34

Total Water Volume Purged: _____ Gallons = N/A Well Volumes
Purged Dry (Y/N): _____
Comments:

Well Security:

Locking cap?	X yes ___ no	Replaced? ___ yes X no	— PID
Bolts secured?	X yes ___ no	Replaced? ___ yes X no	— Vacuum
Surface Seal?	X yes ___ no	Replaced? ___ yes X no	— Sample Collection Time 1135

GROUNDWATER COLLECTION LOG

ATC
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LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-40 CMT 40
Sample ID: MW-40 CMT 40
Date: 2/18/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: _____ inch
Depth to Well Bottom: 40.12 feet
Depth to Water: 24.38 feet
Constructed Screen Interval 40 feet to 40.6 feet
Approximate Pump Depth _____ Feet bgs _____ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
—	1309	20.87	1.463	0.952	6.35	7.07	-173.7	turb. 23.6
—	1319	21.58	2.630	1.710	4.87	7.09	-136.1	9.23
—	1329	22.02	2.792	1.808	4.45	7.09	-86.9	" " 7.40
—	1339	21.78	2.802	1.821	4.25	7.09	+29.5	" 6.34

Total Water Volume Purged: _____ Gallons = N/A Well Volumes
Purged Dry (Y/N): _____
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — — PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 1340 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-40 CMT 45
Sample ID: MW-40 CMT 45
Date: 2/18/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: _____ inch
Depth to Well Bottom: 45.07 feet
Depth to Water: 23.40 feet
Constructed Screen Interval 45 feet to 45.6 feet
Approximate Pump Depth _____ Feet bgs _____ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
—	1009	21.73	2.223	1.451	4.16	7.07	-130.5	turb. 5.17
—	1019	21.49	2.728	1.773	4.27	7.08	-62.5	turb. 5.94
—	1029	21.24	2.778	1.806	4.12	7.08	-14.4	turb. 6.18
—	1039	21.46	2.797	1.812	4.15	7.09	7.6	

Total Water Volume Purged: _____ Gallons = N/A Well Volumes
Purged Dry (Y/N): _____
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — — PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 1045 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-40 CMT 50
Sample ID: MW-40 CMT 50
Date: 2/25/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: _____ inch
Depth to Well Bottom: 50.05 feet
Depth to Water: 25.10 feet
Constructed Screen Interval 50 feet to 50.6 feet
Approximate Pump Depth _____ Feet bgs _____ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
	1010	22.79	1.676	1.095	2.74	7.21	-101.7	turb. 11.28, clear, no odor
	1020	22.95	2.063	1.341	2.37	7.25	-38.	turb 7.58, clear, no odor
	1030	23.14	2.114	1.395	2.27	7.25	-13.3	turb. 11.17, clear, no odor
	1040	23.15	2.203	1.432	2.15	7.23	-4.9	turb. 7.60

Total Water Volume Purged: 1.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — — PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 1045 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-40 CMT 55
Sample ID: MW-40 CMT 55
Date: 2/25/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: _____ inch
Depth to Well Bottom: 55.00 feet
Depth to Water: 24.52 feet
Constructed Screen Interval 55 feet to 55.6 feet
Approximate Pump Depth _____ Feet bgs _____ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
	1102	23.46	1.961	1.275	6.78	7.11	-63.2	Tub: 23.7 clear no odor
	1112	23.36	2.380	1.547	8.74	7.12	-12.8	tub: 12.53
	1122	23.53	2.630	1.710	10.40	7.12	53.9	tub: 10.49
	1132	23.58	2.694	1.754	10.41	7.12	77.9	tub: 11.47

Total Water Volume Purged: 1.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — — PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 1135 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JB

Well ID: MW-40 CMT 60
Sample ID: MW-40 CMT 60
Date: 2/10/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: _____ inch
Depth to Well Bottom: — feet
Depth to Water: 24.37 feet
Constructed Screen Interval 60 feet to 60.6 feet
Approximate Pump Depth _____ Feet bgs _____ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
—	1200	20.66	2.703	1.757	8.81	7.11	-116.4	turb. 15.1
—	1210	20.46	2.707	1.760	5.60	7.17	-36.8	turb. 14.39
—	1220	20.29	2.704	1.757	5.00	7.17	-21.9	turb. 10.11
—	1230	20.06	2.697	1.753	4.93	7.18	12.9	turb. 9.05

Total Water Volume Purged: _____ Gallons = N/A Well Volumes
Purged Dry (Y/N): _____
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 1235 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
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LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JLr

Well ID: MW-14I
Sample ID: MW-14I
Date: 2/22/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 56.10 feet
Depth to Water: 18.31 feet
Constructed Screen Interval 40 feet to 55 feet
Approximate Pump Depth _____ Feet bgs _____ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1311	25.31	1.250	0.814	4.18	7.33	240.3	DTW 18.39 tub. 28.5
.7	1316	25.22	1.246	0.810	3.67	7.32	238.1	DTW 18.39 tub. 32.5
1.0	1321	25.16	1.246	0.810	3.81	7.33	238.3	DTW 18.39 tub. 28.2
1.3	1326	25.30	1.247	0.811	3.78	7.33	238.6	18.39 26.4

Total Water Volume Purged: 1.3 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ____ no	Replaced? ____ yes X no	0.0	PID
Bolts secured? X yes ____ no	Replaced? ____ yes X no	—	Vacuum
Surface Seal? X yes ____ no	Replaced? ____ yes X no	1330	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-19I
Sample ID: MW-19I
Date: 2/19/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 4 inch
Depth to Well Bottom: 54.26 feet
Depth to Water: 24.65 feet
Constructed Screen Interval 34 feet to 54 feet
Approximate Pump Depth Feet bgs 40 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	919	24.30	3.020	1.963	4.46	7.11	569.7	DTW 24.71 turb. 75.6
1.0	924	23.92	3.029	1.969	4.37	7.11	584.6	DTW 24.74 turb. 108
1.4	929	24.16	3.027	1.968	4.29	7.10	589.6	DTW 24.74 turb. 92.7
1.6	934	24.32	3.030	1.970	4.33	7.10	594.4	DTW turb:

Total Water Volume Purged: 1.6 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments: YSI replaced with proper working unit.

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.4 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 935 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-6D1
Sample ID: MW-6D1
Date: 2/22/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 59.61 feet
Depth to Water: 14.95 feet
Constructed Screen Interval 50 feet to 60 feet
Approximate Pump Depth _____ Feet bgs 55 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments: Previous inconsistent dtw readings

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.4	1050	21.52	0.586	0.381	6.71	7.53	138.9	DTW 15.45 turb. 226
.6	1055	22.08	0.588	0.382	6.59	7.52	155.8	DTW 15.80 turb 144
.9	1100	22.25	0.587	0.382	6.40	7.51	164.8	DTW 16.02 turb. 80.3
1.1	1105	21.89	0.585	0.381	6.21	7.52	170.1	DTW 16.08 turb. 55.7

Total Water Volume Purged: 1.1 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — 0.0 PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 1110 Sample Collection Time

GROUNDWATER COLLECTION LOG

CARDNO
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-6D2
Sample ID: MW-6D2
Date: 2/23/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 89.02 feet
Depth to Water: 14.81 feet
Constructed Screen Interval 80 feet to 90 feet
Approximate Pump Depth _____ Feet bgs 85 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments: Previous inconsistent dtw readings

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.25	1011	22.49	0.581	0.378	7.57	7.53	89.5	DTW 14.61, Tub 42.7
.5	1016	22.48	0.581	0.378	6.25	7.52	119.9	DTW 14.89 tub 84.3
.7	1021	22.05	0.578	0.375	6.22	7.51	137.3	DTW 14.89 tub. 104
1.0	1026	22.48	0.579	0.374	6.23	6.04	146.7	DTW 14.89 tub 103

Total Water Volume Purged: 1.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ____ no	Replaced? ____ yes X no	0.0	PID
Bolts secured? X yes ____ no	Replaced? ____ yes X no	—	Vacuum
Surface Seal? X yes ____ no	Replaced? ____ yes X no	1030	Sample Collection Time

GROUNDWATER COLLECTION LOG

CARDNO
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JO

Well ID: MW-6D3
Sample ID: MW-6D3
Date: 2/22/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: — feet
Depth to Water: 13.75 feet
Constructed Screen Interval 100 feet to 110 feet
Approximate Pump Depth _____ Feet bgs _____ Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments: Previous inconsistent dtw readings

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.3	1122	22.59	0.478	0.311	5.59	7.56	181.5	DTW 14.05 turb. 62.3
.6	1127	22.49	0.478	0.311	5.52	7.56	181.5	DTW 14.25 turb. 62.0
.8	1132	22.69	0.476	0.310	5.30	7.55	182.3	DTW 15.40 turb 55.2
1.0	1137	22.48	0.478	0.311	5.49	7.55	183.2	DTW 16.00 55.4

Total Water Volume Purged: 1.0 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ____ no — Replaced? ____ yes X no — 0.1 PID
Bolts secured? X yes ____ no — Replaced? ____ yes X no — — Vacuum
Surface Seal? X yes ____ no — Replaced? ____ yes X no — 1140 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-19D1
Sample ID: MW-19D1
Date: 2/19/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 48.75 feet
Depth to Water: 24.80 feet
Constructed Screen Interval 31 feet to 51 feet
Approximate Pump Depth Feet bgs 41 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	1301	23.94	1.014	0.659	6.33	7.40	325.5	DTW 24.95 turb. 79.2
.8	1306	23.90	0.902	0.586	6.20	7.43	341.1	DTW 25.00 turb. 90.6
1.2	1311	23.79	1.138	0.741	5.94	7.36	351.0	DTW 25.01 turb. 99.7
1.6	1316	23.77	1.354	0.881	5.65	7.32	356.0	DTW 25.01 turb. 66.3

Total Water Volume Purged: 1.6 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:

Locking cap? X yes ___ no	Replaced? ___ yes X no	0.0	PID
Bolts secured? X yes ___ no	Replaced? ___ yes X no	—	Vacuum
Surface Seal? X yes ___ no	Replaced? ___ yes X no	1320	Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-19D2
Sample ID: MW-19D2
Date: 2/19/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 70.30 feet
Depth to Water: 26.21 ~~27.65~~ feet
Constructed Screen Interval 60 feet to 70 feet
Approximate Pump Depth Feet bgs 65 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.3	1114	23.16	2.126	1.382	1.52	7.32	374.4	DTW 26.71 turb. 26.8
.6	1119	23.45	2.116	1.375	1.10	7.31	382.7	DTW 27.34 turb. 14.99
.9	1124	23.45	2.120	1.379	0.97	7.30	387.0	DTW 27.59 turb. 12.14
1.1	1129	23.27	2.128	1.383	0.95	7.30	388.0	DTW 28.00 turb. 6.36

Total Water Volume Purged: 1.1 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.0 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1130 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-19D3
Sample ID: MW-19D3
Date: 2/19/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 4100 — feet
Depth to Water: 22.36 feet
Constructed Screen Interval 92 feet to 102 feet
Approximate Pump Depth Feet bgs 97 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.10	1211	22.42	1.353	0.879	7.64	7.59	324.9	DTW 19.66, Tub. 6.37
.25	1227	23.86	0.830	0.539	5.84	7.45	358.6	DTW 20.41, Tub. 9.94
.5	1232	24.27	0.777	0.505	5.12	7.46	361.3	DTW 20.44 tub. 10.07
.4	1237	24.49	0.791	0.500	5.82	7.45	362.0	DTW 20.47 tub. 9.54

Total Water Volume Purged: 4 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.0 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1240 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-20D1
Sample ID: MW-20D1
Date: 2/22/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 44.63 feet
Depth to Water: 24.62 feet
Constructed Screen Interval 25 feet to 45 feet
Approximate Pump Depth Feet bgs 36 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
1.5	955	23.95	2.358	1.532	4.06	7.17	237.4	DTW 24.83 tub 14.6
1.0	1000	23.91	2.315	1.519	4.36	7.18	250.7	DTW 24.85 tub 110
1.5	1005	24.14	2.332	1.507	4.14	7.17	224.7	DTW 24.90 tub 73.3
1.5	1010	24.08	2.353	1.533	3.97	7.15	209.9	DTW 24.92 tub 59.2

Total Water Volume Purged: 1.5 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.0 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 1015 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-20D2
Sample ID: MW-20D2
Date: 2/22/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 65.70 feet
Depth to Water: 25.11 feet
Constructed Screen Interval 55 feet to 65 feet
Approximate Pump Depth Feet bgs 60 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	922	23.24	1.058	0.688	6.77	7.45	229.0	DTW 25.60 turb. 70.7
.7	927	23.16	0.979	0.636	6.48	7.47	250.4	DTW 25.72 turb. 88.9
.9	932	23.09	0.954	0.620	6.65	7.48	231.6	DTW 25.77 turb. 69.9
1.1	937	23.14	1.005	0.653	6.73	7.47	232.5	DTW 25.77 turb

Total Water Volume Purged: 1.1 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments:

Well Security:
Locking cap? X yes ___ no — Replaced? ___ yes X no — 0.1 PID
Bolts secured? X yes ___ no — Replaced? ___ yes X no — — Vacuum
Surface Seal? X yes ___ no — Replaced? ___ yes X no — 940 Sample Collection Time

GROUNDWATER COLLECTION LOG

ATC
7115 AMIGO STREET, SUITE 100
LAS VEGAS, NEVADA 89119
(702) 990-9300 (702) 990-9305 fax

Project Name: Maryland Square
Project Number: LV20915014
Sampler's Name: JG

Well ID: MW-20D3
Sample ID: MW-20D3
Date: 2/24/16

Purging Equipment: Low Flow Bladder Pump
Sampling Equipment: Low Flow Bladder Pump

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: — feet
Depth to Water: 21.66 feet
Constructed Screen Interval 90 feet to 100 feet
Approximate Pump Depth Feet bgs 95 Feet btoc

2" = 0.16 gal/lin ft.
3" = 0.37 gal/lin ft.
4" = 0.67 gal/lin ft.

Comments:

Purged (gal.)	Time	Temp. (°C)	Conductance (mS/cm)	TDS (g/L)	DO (mg/L)	pH (SU)	ORP (mV)	Water Description: Color, Turbidity, Sheen, Etc.
.5	842	23.01	0.490	0.318	6.50	7.57	251.2	DTW 21.00 turb. 29.1
.7	847	23.29	0.490	0.317	6.45	7.57	281.7	DTW 21.61 turb. 74.8
.9	852	23.38	0.488	0.317	6.41	7.56	234.3	DTW 21.65 turb. 59.2
1.1	857	23.13	0.488	0.317	6.22	7.56	234.8	DTW 21.66 turb. 49.2

l Water Volume Purged: 1.1 Gallons = N/A Well Volumes
ed Dry (Y/N): N
nents:

ecurity: Locking cap? X yes ___ no Replaced? ___ yes X no 0.2 PID
Bolts secured? X yes ___ no Replaced? ___ yes X no — Vacuum
Surface Seal? X yes ___ no Replaced? ___ yes X no 700 Sample Collection Time

Maryland Square PCE Site

APPENDIX B
LABORATORY ANALYTICAL REPORTS

March 04, 2016

Adam Katlein
Cardno ATC
7115 Amigo Street Suite 100
Las Vegas, NV 89119

TEL: (702) 990-9300
FAX:

CA-ELAP No.: 2676
NV Cert. No.: NV-00922

Workorder No.: N018817

RE: Maryland Square, LV20915014

Attention: Adam Katlein

Enclosed are the results for sample(s) received on February 22, 2016 by ASSET Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Glen Gesmundo
QA Manager

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories - Las Vegas.

CLIENT: Cardno ATC
Project: Maryland Square, LV20915014
Lab Order: N018817

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

Samples were received intact with proper chain of custody documentation.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Samples were analyzed within method holding time.

Analytical Comments for EPA 218.6:

Sample N018817-029 (MW-19I) was not analyzed for hexavalend chromium due to color of sample that might interfere with the analysis. Hexavalent Chromium analysis involves colorimetric procedure that might produce false positive results when colored samples were analyzed.

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES
CALIFORNIA
11060 Artesia Blvd., Ste C, Cerritos, CA 90703
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NEVADA
3151 W. Post Rd., Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691

"Serving Clients with Passion and Professionalism"

ASSET Laboratories

Date: *04-Mar-16*

CLIENT: Cardno ATC
Project: Maryland Square, LV20915014
Lab Order: N018817
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N018817-001A	MW-11	Groundwater	2/17/2016 9:10:00 AM	2/22/2016	3/4/2016
N018817-002A	MW-16	Groundwater	2/19/2016 8:50:00 AM	2/22/2016	3/4/2016
N018817-003A	MW-18	Groundwater	2/17/2016 1:50:00 PM	2/22/2016	3/4/2016
N018817-004A	MW-21	Groundwater	2/19/2016 10:45:00 AM	2/22/2016	3/4/2016
N018817-005A	MW-22	Groundwater	2/17/2016 10:00:00 AM	2/22/2016	3/4/2016
N018817-006A	MW-23	Groundwater	2/17/2016 1:10:00 PM	2/22/2016	3/4/2016
N018817-007A	MW-24	Groundwater	2/17/2016 10:35:00 AM	2/22/2016	3/4/2016
N018817-008A	MW-25	Groundwater	2/17/2016 11:15:00 AM	2/22/2016	3/4/2016
N018817-009A	MW-26	Groundwater	2/17/2016 12:30:00 PM	2/22/2016	3/4/2016
N018817-010A	MW-27	Groundwater	2/15/2016 1:20:00 PM	2/22/2016	3/4/2016
N018817-011A	MW-28	Groundwater	2/16/2016 9:35:00 AM	2/22/2016	3/4/2016
N018817-012A	MW-29	Groundwater	2/16/2016 8:55:00 AM	2/22/2016	3/4/2016
N018817-013A	MW-30	Groundwater	2/15/2016 12:20:00 PM	2/22/2016	3/4/2016
N018817-014A	MW-31	Groundwater	2/15/2016 11:40:00 AM	2/22/2016	3/4/2016
N018817-015A	MW-32	Groundwater	2/16/2016 1:05:00 PM	2/22/2016	3/4/2016
N018817-016A	MW-33	Groundwater	2/16/2016 10:50:00 AM	2/22/2016	3/4/2016
N018817-017A	MW-36	Groundwater	2/16/2016 11:45:00 AM	2/22/2016	3/4/2016
N018817-018A	MW-37	Groundwater	2/15/2016 10:55:00 AM	2/22/2016	3/4/2016
N018817-019A	MW-38	Groundwater	2/15/2016 10:10:00 AM	2/22/2016	3/4/2016
N018817-020A	MW-39	Groundwater	2/16/2016 12:30:00 PM	2/22/2016	3/4/2016
N018817-021A	MW-40 CMT30	Groundwater	2/18/2016 9:45:00 AM	2/22/2016	3/4/2016
N018817-022A	MW-40 CMT35	Groundwater	2/18/2016 11:35:00 AM	2/22/2016	3/4/2016
N018817-023A	MW-40 CMT40	Groundwater	2/18/2016 1:40:00 PM	2/22/2016	3/4/2016
N018817-024A	MW-40 CMT45	Groundwater	2/18/2016 10:45:00 AM	2/22/2016	3/4/2016
N018817-025A	MW-40 CMT60	Groundwater	2/18/2016 12:35:00 PM	2/22/2016	3/4/2016
N018817-025B	MW-40 CMT60	Groundwater	2/18/2016 12:35:00 PM	2/22/2016	3/4/2016
N018817-025C	MW-40 CMT60	Groundwater	2/18/2016 12:35:00 PM	2/22/2016	3/4/2016
N018817-026A	MW-41	Groundwater	2/15/2016 9:35:00 AM	2/22/2016	3/4/2016
N018817-027A	MW-42	Groundwater	2/15/2016 8:45:00 AM	2/22/2016	3/4/2016

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES
CALIFORNIA
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NEVADA
3151 W. Post Rd., Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691

"Serving Clients with Passion and Professionalism"

CLIENT: Cardno ATC
Project: Maryland Square, LV20915014
Lab Order: N018817
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N018817-028A	MW-43	Groundwater	2/16/2016 10:15:00 AM	2/22/2016	3/4/2016
N018817-029A	MW-19I	Groundwater	2/19/2016 9:35:00 AM	2/22/2016	3/4/2016
N018817-029B	MW-19I	Groundwater	2/19/2016 9:35:00 AM	2/22/2016	3/4/2016
N018817-029C	MW-19I	Groundwater	2/19/2016 9:35:00 AM	2/22/2016	3/4/2016
N018817-030A	MW-19D1	Groundwater	2/19/2016 1:20:00 PM	2/22/2016	3/4/2016
N018817-031A	MW-19D2	Groundwater	2/19/2016 11:30:00 AM	2/22/2016	3/4/2016
N018817-032A	MW-19D3	Groundwater	2/19/2016 12:40:00 PM	2/22/2016	3/4/2016

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NEVADA
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P: 702.307.2659 F: 702.307.2691

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ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-001

Client Sample ID: MW-11
Collection Date: 2/17/2016 9:10:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224A**	QC Batch: **P16VW040**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/24/2016 06:15 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/24/2016 06:15 PM
Tetrachloroethene	ND	0.16	0.50		µg/L	1	2/24/2016 06:15 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/24/2016 06:15 PM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/24/2016 06:15 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/24/2016 06:15 PM
Surr: 1,2-Dichloroethane-d4	98.3	0	78-125		%REC	1	2/24/2016 06:15 PM
Surr: 4-Bromofluorobenzene	102	0	80-120		%REC	1	2/24/2016 06:15 PM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/24/2016 06:15 PM
Surr: Toluene-d8	103	0	80-120		%REC	1	2/24/2016 06:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-002

Client Sample ID: MW-16
Collection Date: 2/19/2016 8:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224A**	QC Batch: **P16VW040**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/24/2016 06:41 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/24/2016 06:41 PM
Tetrachloroethene	ND	0.16	0.50		µg/L	1	2/24/2016 06:41 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/24/2016 06:41 PM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/24/2016 06:41 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/24/2016 06:41 PM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	1	2/24/2016 06:41 PM
Surr: 4-Bromofluorobenzene	101	0	80-120		%REC	1	2/24/2016 06:41 PM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/24/2016 06:41 PM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/24/2016 06:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-003

Client Sample ID: MW-18
Collection Date: 2/17/2016 1:50:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160225A**	QC Batch: **P16VW042**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 10:02 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 10:02 PM
Tetrachloroethene	1300	8.2	25		µg/L	50	2/26/2016 12:24 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 10:02 PM
Trichloroethene	3.0	0.12	0.50		µg/L	1	2/25/2016 10:02 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 10:02 PM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	50	2/26/2016 12:24 PM
Surr: 1,2-Dichloroethane-d4	102	0	78-125		%REC	1	2/25/2016 10:02 PM
Surr: 4-Bromofluorobenzene	101	0	80-120		%REC	50	2/26/2016 12:24 PM
Surr: 4-Bromofluorobenzene	97.1	0	80-120		%REC	1	2/25/2016 10:02 PM
Surr: Dibromofluoromethane	105	0	80-122		%REC	50	2/26/2016 12:24 PM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 10:02 PM
Surr: Toluene-d8	102	0	80-120		%REC	50	2/26/2016 12:24 PM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 10:02 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-21
Lab Order:	N018817	**Collection Date:**	2/19/2016 10:45:00 AM
Project:	Maryland Square, LV20915014	**Matrix:**	GROUNDWATER
Lab ID:	N018817-004		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224A**	QC Batch: **P16VW040**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/24/2016 08:23 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/24/2016 08:23 PM
Tetrachloroethene	9.3	0.16	0.50		µg/L	1	2/24/2016 08:23 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/24/2016 08:23 PM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/24/2016 08:23 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/24/2016 08:23 PM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/24/2016 08:23 PM
Surr: 4-Bromofluorobenzene	100	0	80-120		%REC	1	2/24/2016 08:23 PM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/24/2016 08:23 PM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/24/2016 08:23 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-005

Client Sample ID: MW-22
Collection Date: 2/17/2016 10:00:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224A**	QC Batch: **P16VW040**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/24/2016 07:06 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/24/2016 07:06 PM
Tetrachloroethene	ND	0.16	0.50		µg/L	1	2/24/2016 07:06 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/24/2016 07:06 PM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/24/2016 07:06 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/24/2016 07:06 PM
Surr: 1,2-Dichloroethane-d4	98.4	0	78-125		%REC	1	2/24/2016 07:06 PM
Surr: 4-Bromofluorobenzene	99.3	0	80-120		%REC	1	2/24/2016 07:06 PM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/24/2016 07:06 PM
Surr: Toluene-d8	100	0	80-120		%REC	1	2/24/2016 07:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-006

Client Sample ID: MW-23
Collection Date: 2/17/2016 1:10:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160225A**	QC Batch: **P16VW042**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 09:11 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 09:11 PM
Tetrachloroethene	790	3.3	10		µg/L	20	2/26/2016 12:50 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 09:11 PM
Trichloroethene	1.7	0.12	0.50		µg/L	1	2/25/2016 09:11 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 09:11 PM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	20	2/26/2016 12:50 PM
Surr: 1,2-Dichloroethane-d4	102	0	78-125		%REC	1	2/25/2016 09:11 PM
Surr: 4-Bromofluorobenzene	99.4	0	80-120		%REC	20	2/26/2016 12:50 PM
Surr: 4-Bromofluorobenzene	100	0	80-120		%REC	1	2/25/2016 09:11 PM
Surr: Dibromofluoromethane	104	0	80-122		%REC	20	2/26/2016 12:50 PM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 09:11 PM
Surr: Toluene-d8	101	0	80-120		%REC	20	2/26/2016 12:50 PM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/25/2016 09:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-007

Client Sample ID: MW-24
Collection Date: 2/17/2016 10:35:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224A**	QC Batch: **P16VW040**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/24/2016 07:32 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/24/2016 07:32 PM
Tetrachloroethene	2.3	0.16	0.50		µg/L	1	2/24/2016 07:32 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/24/2016 07:32 PM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/24/2016 07:32 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/24/2016 07:32 PM
Surr: 1,2-Dichloroethane-d4	98.7	0	78-125		%REC	1	2/24/2016 07:32 PM
Surr: 4-Bromofluorobenzene	99.8	0	80-120		%REC	1	2/24/2016 07:32 PM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/24/2016 07:32 PM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/24/2016 07:32 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-008

Client Sample ID: MW-25
Collection Date: 2/17/2016 11:15:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 08:19 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 08:19 AM
Tetrachloroethene	530	3.3	10		µg/L	20	2/25/2016 04:06 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 08:19 AM
Trichloroethene	0.57	0.12	0.50		µg/L	1	2/25/2016 08:19 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 08:19 AM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	20	2/25/2016 04:06 PM
Surr: 1,2-Dichloroethane-d4	99.3	0	78-125		%REC	1	2/25/2016 08:19 AM
Surr: 4-Bromofluorobenzene	101	0	80-120		%REC	20	2/25/2016 04:06 PM
Surr: 4-Bromofluorobenzene	100	0	80-120		%REC	1	2/25/2016 08:19 AM
Surr: Dibromofluoromethane	102	0	80-122		%REC	20	2/25/2016 04:06 PM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/25/2016 08:19 AM
Surr: Toluene-d8	102	0	80-120		%REC	20	2/25/2016 04:06 PM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/25/2016 08:19 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-009

Client Sample ID: MW-26
Collection Date: 2/17/2016 12:30:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160225A**	QC Batch: **P16VW042**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 08:20 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 08:20 PM
Tetrachloroethene	680	3.3	10		µg/L	20	2/26/2016 01:15 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 08:20 PM
Trichloroethene	0.50	0.12	0.50		µg/L	1	2/25/2016 08:20 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 08:20 PM
Surr: 1,2-Dichloroethane-d4	102	0	78-125		%REC	20	2/26/2016 01:15 PM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/25/2016 08:20 PM
Surr: 4-Bromofluorobenzene	101	0	80-120		%REC	20	2/26/2016 01:15 PM
Surr: 4-Bromofluorobenzene	99.0	0	80-120		%REC	1	2/25/2016 08:20 PM
Surr: Dibromofluoromethane	105	0	80-122		%REC	20	2/26/2016 01:15 PM
Surr: Dibromofluoromethane	103	0	80-122		%REC	1	2/25/2016 08:20 PM
Surr: Toluene-d8	102	0	80-120		%REC	20	2/26/2016 01:15 PM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/25/2016 08:20 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-010

Client Sample ID: MW-27
Collection Date: 2/15/2016 1:20:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 07:53 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 07:53 AM
Tetrachloroethene	350	1.6	5.0		µg/L	10	2/25/2016 04:31 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 07:53 AM
Trichloroethene	0.82	0.12	0.50		µg/L	1	2/25/2016 07:53 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 07:53 AM
Surr: 1,2-Dichloroethane-d4	95.4	0	78-125		%REC	10	2/25/2016 04:31 PM
Surr: 1,2-Dichloroethane-d4	94.2	0	78-125		%REC	1	2/25/2016 07:53 AM
Surr: 4-Bromofluorobenzene	99.6	0	80-120		%REC	10	2/25/2016 04:31 PM
Surr: 4-Bromofluorobenzene	99.7	0	80-120		%REC	1	2/25/2016 07:53 AM
Surr: Dibromofluoromethane	139	0	80-122	S	%REC	10	2/25/2016 04:31 PM
Surr: Dibromofluoromethane	99.5	0	80-122		%REC	1	2/25/2016 07:53 AM
Surr: Toluene-d8	114	0	80-120		%REC	10	2/25/2016 04:31 PM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 07:53 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-28
Lab Order:	N018817	**Collection Date:**	2/16/2016 9:35:00 AM
Project:	Maryland Square, LV20915014	**Matrix:**	GROUNDWATER
Lab ID:	N018817-011		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224A**	QC Batch: **P16VW040**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/24/2016 07:57 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/24/2016 07:57 PM
Tetrachloroethene	0.78	0.16	0.50		µg/L	1	2/24/2016 07:57 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/24/2016 07:57 PM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/24/2016 07:57 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/24/2016 07:57 PM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/24/2016 07:57 PM
Surr: 4-Bromofluorobenzene	98.0	0	80-120		%REC	1	2/24/2016 07:57 PM
Surr: Dibromofluoromethane	103	0	80-122		%REC	1	2/24/2016 07:57 PM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/24/2016 07:57 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-29
Lab Order:	N018817	**Collection Date:**	2/16/2016 8:55:00 AM
Project:	Maryland Square, LV20915014	**Matrix:**	GROUNDWATER
Lab ID:	N018817-012		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 01:04 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 01:04 AM
Tetrachloroethene	ND	0.16	0.50		µg/L	1	2/25/2016 01:04 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 01:04 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 01:04 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 01:04 AM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/25/2016 01:04 AM
Surr: 4-Bromofluorobenzene	98.0	0	80-120		%REC	1	2/25/2016 01:04 AM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 01:04 AM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 01:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-013

Client Sample ID: MW-30
Collection Date: 2/15/2016 12:20:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 04:55 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 04:55 AM
Tetrachloroethene	63	0.16	0.50		µg/L	1	2/25/2016 04:55 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 04:55 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 04:55 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 04:55 AM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	1	2/25/2016 04:55 AM
Surr: 4-Bromofluorobenzene	101	0	80-120		%REC	1	2/25/2016 04:55 AM
Surr: Dibromofluoromethane	100	0	80-122		%REC	1	2/25/2016 04:55 AM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/25/2016 04:55 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-014

Client Sample ID: MW-31
Collection Date: 2/15/2016 11:40:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 04:29 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 04:29 AM
Tetrachloroethene	81	0.16	0.50		µg/L	1	2/25/2016 04:29 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 04:29 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 04:29 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 04:29 AM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	1	2/25/2016 04:29 AM
Surr: 4-Bromofluorobenzene	99.1	0	80-120		%REC	1	2/25/2016 04:29 AM
Surr: Dibromofluoromethane	103	0	80-122		%REC	1	2/25/2016 04:29 AM
Surr: Toluene-d8	99.4	0	80-120		%REC	1	2/25/2016 04:29 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-015

Client Sample ID: MW-32
Collection Date: 2/16/2016 1:05:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160225A**	QC Batch: **P16VW042**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 07:54 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 07:54 PM
Tetrachloroethene	650	3.3	10		µg/L	20	2/26/2016 03:22 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 07:54 PM
Trichloroethene	1.4	0.12	0.50		µg/L	1	2/25/2016 07:54 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 07:54 PM
Surr: 1,2-Dichloroethane-d4	97.2	0	78-125		%REC	20	2/26/2016 03:22 PM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/25/2016 07:54 PM
Surr: 4-Bromofluorobenzene	98.5	0	80-120		%REC	20	2/26/2016 03:22 PM
Surr: 4-Bromofluorobenzene	99.7	0	80-120		%REC	1	2/25/2016 07:54 PM
Surr: Dibromofluoromethane	102	0	80-122		%REC	20	2/26/2016 03:22 PM
Surr: Dibromofluoromethane	104	0	80-122		%REC	1	2/25/2016 07:54 PM
Surr: Toluene-d8	100	0	80-120		%REC	20	2/26/2016 03:22 PM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 07:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-016

Client Sample ID: MW-33
Collection Date: 2/16/2016 10:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 12:13 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 12:13 AM
Tetrachloroethene	ND	0.16	0.50		µg/L	1	2/25/2016 12:13 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 12:13 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 12:13 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 12:13 AM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/25/2016 12:13 AM
Surr: 4-Bromofluorobenzene	99.6	0	80-120		%REC	1	2/25/2016 12:13 AM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/25/2016 12:13 AM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 12:13 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-017

Client Sample ID: MW-36
Collection Date: 2/16/2016 11:45:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 05:46 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 05:46 AM
Tetrachloroethene	110	0.82	2.5		µg/L	5	2/25/2016 04:57 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 05:46 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 05:46 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 05:46 AM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	5	2/25/2016 04:57 PM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	1	2/25/2016 05:46 AM
Surr: 4-Bromofluorobenzene	98.4	0	80-120		%REC	5	2/25/2016 04:57 PM
Surr: 4-Bromofluorobenzene	99.4	0	80-120		%REC	1	2/25/2016 05:46 AM
Surr: Dibromofluoromethane	101	0	80-122		%REC	5	2/25/2016 04:57 PM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/25/2016 05:46 AM
Surr: Toluene-d8	101	0	80-120		%REC	5	2/25/2016 04:57 PM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/25/2016 05:46 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-018

Client Sample ID: MW-37
Collection Date: 2/15/2016 10:55:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 04:04 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 04:04 AM
Tetrachloroethene	41	0.16	0.50		µg/L	1	2/25/2016 04:04 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 04:04 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 04:04 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 04:04 AM
Surr: 1,2-Dichloroethane-d4	102	0	78-125		%REC	1	2/25/2016 04:04 AM
Surr: 4-Bromofluorobenzene	98.8	0	80-120		%REC	1	2/25/2016 04:04 AM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 04:04 AM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/25/2016 04:04 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-019

Client Sample ID: MW-38
Collection Date: 2/15/2016 10:10:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 03:12 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 03:12 AM
Tetrachloroethene	9.6	0.16	0.50		µg/L	1	2/25/2016 03:12 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 03:12 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 03:12 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 03:12 AM
Surr: 1,2-Dichloroethane-d4	99.3	0	78-125		%REC	1	2/25/2016 03:12 AM
Surr: 4-Bromofluorobenzene	100	0	80-120		%REC	1	2/25/2016 03:12 AM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 03:12 AM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 03:12 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-020

Client Sample ID: MW-39
Collection Date: 2/16/2016 12:30:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 06:11 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 06:11 AM
Tetrachloroethene	190	1.6	5.0		µg/L	10	2/25/2016 05:22 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 06:11 AM
Trichloroethene	0.57	0.12	0.50		µg/L	1	2/25/2016 06:11 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 06:11 AM
Surr: 1,2-Dichloroethane-d4	98.8	0	78-125		%REC	10	2/25/2016 05:22 PM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/25/2016 06:11 AM
Surr: 4-Bromofluorobenzene	98.5	0	80-120		%REC	10	2/25/2016 05:22 PM
Surr: 4-Bromofluorobenzene	99.6	0	80-120		%REC	1	2/25/2016 06:11 AM
Surr: Dibromofluoromethane	100	0	80-122		%REC	10	2/25/2016 05:22 PM
Surr: Dibromofluoromethane	103	0	80-122		%REC	1	2/25/2016 06:11 AM
Surr: Toluene-d8	103	0	80-120		%REC	10	2/25/2016 05:22 PM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 06:11 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-021

Client Sample ID: MW-40 CMT30
Collection Date: 2/18/2016 9:45:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 02:47 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 02:47 AM
Tetrachloroethene	15	0.16	0.50		µg/L	1	2/25/2016 02:47 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 02:47 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 02:47 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 02:47 AM
Surr: 1,2-Dichloroethane-d4	99.9	0	78-125		%REC	1	2/25/2016 02:47 AM
Surr: 4-Bromofluorobenzene	99.8	0	80-120		%REC	1	2/25/2016 02:47 AM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/25/2016 02:47 AM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 02:47 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-022

Client Sample ID: MW-40 CMT35
Collection Date: 2/18/2016 11:35:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 03:38 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 03:38 AM
Tetrachloroethene	75	0.16	0.50		µg/L	1	2/25/2016 03:38 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 03:38 AM
Trichloroethene	4.9	0.12	0.50		µg/L	1	2/25/2016 03:38 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 03:38 AM
Surr: 1,2-Dichloroethane-d4	99.0	0	78-125		%REC	1	2/25/2016 03:38 AM
Surr: 4-Bromofluorobenzene	98.7	0	80-120		%REC	1	2/25/2016 03:38 AM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 03:38 AM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 03:38 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-023

Client Sample ID: MW-40 CMT40
Collection Date: 2/18/2016 1:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 06:37 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 06:37 AM
Tetrachloroethene	340	1.6	5.0		µg/L	10	2/25/2016 05:47 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 06:37 AM
Trichloroethene	5.5	0.12	0.50		µg/L	1	2/25/2016 06:37 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 06:37 AM
Surr: 1,2-Dichloroethane-d4	87.4	0	78-125		%REC	10	2/25/2016 05:47 PM
Surr: 1,2-Dichloroethane-d4	99.3	0	78-125		%REC	1	2/25/2016 06:37 AM
Surr: 4-Bromofluorobenzene	108	0	80-120		%REC	10	2/25/2016 05:47 PM
Surr: 4-Bromofluorobenzene	99.5	0	80-120		%REC	1	2/25/2016 06:37 AM
Surr: Dibromofluoromethane	148	0	80-122	S	%REC	10	2/25/2016 05:47 PM
Surr: Dibromofluoromethane	104	0	80-122		%REC	1	2/25/2016 06:37 AM
Surr: Toluene-d8	101	0	80-120		%REC	10	2/25/2016 05:47 PM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 06:37 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-024

Client Sample ID: MW-40 CMT45
Collection Date: 2/18/2016 10:45:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 07:02 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 07:02 AM
Tetrachloroethene	320	1.6	5.0		µg/L	10	2/25/2016 06:13 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 07:02 AM
Trichloroethene	2.1	0.12	0.50		µg/L	1	2/25/2016 07:02 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 07:02 AM
Surr: 1,2-Dichloroethane-d4	98.6	0	78-125		%REC	10	2/25/2016 06:13 PM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/25/2016 07:02 AM
Surr: 4-Bromofluorobenzene	98.0	0	80-120		%REC	10	2/25/2016 06:13 PM
Surr: 4-Bromofluorobenzene	97.9	0	80-120		%REC	1	2/25/2016 07:02 AM
Surr: Dibromofluoromethane	99.8	0	80-122		%REC	10	2/25/2016 06:13 PM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 07:02 AM
Surr: Toluene-d8	101	0	80-120		%REC	10	2/25/2016 06:13 PM
Surr: Toluene-d8	100	0	80-120		%REC	1	2/25/2016 07:02 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-025

Client Sample ID: MW-40 CMT60
Collection Date: 2/18/2016 12:35:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160225A**	QC Batch: **P16VW042**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 08:45 PM
cis-1,2-Dichloroethene	2.1	0.051	0.50		µg/L	1	2/25/2016 08:45 PM
Tetrachloroethene	870	3.3	10		µg/L	20	2/26/2016 03:47 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 08:45 PM
Trichloroethene	8.1	0.12	0.50		µg/L	1	2/25/2016 08:45 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 08:45 PM
Surr: 1,2-Dichloroethane-d4	99.3	0	78-125		%REC	20	2/26/2016 03:47 PM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	1	2/25/2016 08:45 PM
Surr: 4-Bromofluorobenzene	99.0	0	80-120		%REC	20	2/26/2016 03:47 PM
Surr: 4-Bromofluorobenzene	100	0	80-120		%REC	1	2/25/2016 08:45 PM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/25/2016 08:45 PM
Surr: Dibromofluoromethane	102	0	80-122		%REC	20	2/26/2016 03:47 PM
Surr: Toluene-d8	100	0	80-120		%REC	20	2/26/2016 03:47 PM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/25/2016 08:45 PM
HEXAVALENT CHROMIUM BY IC							
EPA 218.6							
RunID: **IC6_160223A**	QC Batch: **R106115**			PrepDate:			Analyst: **RB**
Hexavalent Chromium	170	0.30	4.0		µg/L	20	2/23/2016 02:50 PM
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **ICP7_160224A**	QC Batch: **56365**			PrepDate: **2/24/2016**			Analyst: **CEI**
Arsenic	1.2	0.016	0.10		µg/L	1	2/24/2016 04:13 PM
Chromium	160	0.086	1.0		µg/L	1	2/24/2016 04:13 PM
Manganese	ND	0.023	0.50		µg/L	1	2/24/2016 04:13 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-026

Client Sample ID: MW-41
Collection Date: 2/15/2016 9:35:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160225A**	QC Batch: **P16VW042**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 01:03 PM
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 02:21 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 02:21 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 01:03 PM
Tetrachloroethene	4.0	0.16	0.50		µg/L	1	2/25/2016 01:03 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 01:03 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 02:21 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 01:03 PM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 02:21 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 02:21 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 01:03 PM
Surr: 1,2-Dichloroethane-d4	99.2	0	78-125		%REC	1	2/25/2016 02:21 AM
Surr: 1,2-Dichloroethane-d4	99.0	0	78-125		%REC	1	2/25/2016 01:03 PM
Surr: 4-Bromofluorobenzene	100	0	80-120		%REC	1	2/25/2016 01:03 PM
Surr: 4-Bromofluorobenzene	98.8	0	80-120		%REC	1	2/25/2016 02:21 AM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/25/2016 01:03 PM
Surr: Dibromofluoromethane	101	0	80-122		%REC	1	2/25/2016 02:21 AM
Surr: Toluene-d8	100	0	80-120		%REC	1	2/25/2016 02:21 AM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 01:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-027

Client Sample ID: MW-42
Collection Date: 2/15/2016 8:45:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 01:30 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 01:30 AM
Tetrachloroethene	0.54	0.16	0.50		µg/L	1	2/25/2016 01:30 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 01:30 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 01:30 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 01:30 AM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/25/2016 01:30 AM
Surr: 4-Bromofluorobenzene	98.0	0	80-120		%REC	1	2/25/2016 01:30 AM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 01:30 AM
Surr: Toluene-d8	98.6	0	80-120		%REC	1	2/25/2016 01:30 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-43
Lab Order:	N018817	**Collection Date:**	2/16/2016 10:15:00 AM
Project:	Maryland Square, LV20915014	**Matrix:**	GROUNDWATER
Lab ID:	N018817-028		

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 12:39 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 12:39 AM
Tetrachloroethene	ND	0.16	0.50		µg/L	1	2/25/2016 12:39 AM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 12:39 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 12:39 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 12:39 AM
Surr: 1,2-Dichloroethane-d4	101	0	78-125		%REC	1	2/25/2016 12:39 AM
Surr: 4-Bromofluorobenzene	99.8	0	80-120		%REC	1	2/25/2016 12:39 AM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 12:39 AM
Surr: Toluene-d8	100	0	80-120		%REC	1	2/25/2016 12:39 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-029

Client Sample ID: MW-19I
Collection Date: 2/19/2016 9:35:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
EPA 8260B							
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 01:56 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 01:56 AM
Tetrachloroethene	110	0.82	2.5		µg/L	5	2/25/2016 06:38 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 01:56 AM
Trichloroethene	ND	0.12	0.50		µg/L	1	2/25/2016 01:56 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 01:56 AM
Surr: 1,2-Dichloroethane-d4	98.4	0	78-125		%REC	5	2/25/2016 06:38 PM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	1	2/25/2016 01:56 AM
Surr: 4-Bromofluorobenzene	99.6	0	80-120		%REC	5	2/25/2016 06:38 PM
Surr: 4-Bromofluorobenzene	97.6	0	80-120		%REC	1	2/25/2016 01:56 AM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 01:56 AM
Surr: Dibromofluoromethane	102	0	80-122		%REC	5	2/25/2016 06:38 PM
Surr: Toluene-d8	101	0	80-120		%REC	5	2/25/2016 06:38 PM
Surr: Toluene-d8	99.1	0	80-120		%REC	1	2/25/2016 01:56 AM
DISSOLVED METALS BY ICP-MS							
EPA 3010A			**EPA 6020**				
RunID: **ICP7_160224A**	QC Batch: **56365**			PrepDate:	**2/24/2016**		Analyst: **CEI**
Arsenic	1.4	0.079	0.50		µg/L	5	2/24/2016 03:57 PM
Chromium	86	0.43	5.0		µg/L	5	2/24/2016 03:57 PM
Manganese	11000	2.3	50		µg/L	100	2/29/2016 09:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-030

Client Sample ID: MW-19D1
Collection Date: 2/19/2016 1:20:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160225A**	QC Batch: **P16VW042**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 09:36 PM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 09:36 PM
Tetrachloroethene	360	1.6	5.0		µg/L	10	2/26/2016 04:12 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 09:36 PM
Trichloroethene	1.9	0.12	0.50		µg/L	1	2/25/2016 09:36 PM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 09:36 PM
Surr: 1,2-Dichloroethane-d4	104	0	78-125		%REC	10	2/26/2016 04:12 PM
Surr: 1,2-Dichloroethane-d4	99.2	0	78-125		%REC	1	2/25/2016 09:36 PM
Surr: 4-Bromofluorobenzene	99.6	0	80-120		%REC	10	2/26/2016 04:12 PM
Surr: 4-Bromofluorobenzene	97.8	0	80-120		%REC	1	2/25/2016 09:36 PM
Surr: Dibromofluoromethane	105	0	80-122		%REC	10	2/26/2016 04:12 PM
Surr: Dibromofluoromethane	103	0	80-122		%REC	1	2/25/2016 09:36 PM
Surr: Toluene-d8	102	0	80-120		%REC	10	2/26/2016 04:12 PM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/25/2016 09:36 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-031

Client Sample ID: MW-19D2
Collection Date: 2/19/2016 11:30:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 05:20 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 05:20 AM
Tetrachloroethene	140	0.82	2.5		µg/L	5	2/25/2016 07:03 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 05:20 AM
Trichloroethene	1.2	0.12	0.50		µg/L	1	2/25/2016 05:20 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 05:20 AM
Surr: 1,2-Dichloroethane-d4	96.8	0	78-125		%REC	5	2/25/2016 07:03 PM
Surr: 1,2-Dichloroethane-d4	100	0	78-125		%REC	1	2/25/2016 05:20 AM
Surr: 4-Bromofluorobenzene	98.2	0	80-120		%REC	5	2/25/2016 07:03 PM
Surr: 4-Bromofluorobenzene	99.1	0	80-120		%REC	1	2/25/2016 05:20 AM
Surr: Dibromofluoromethane	99.9	0	80-122		%REC	5	2/25/2016 07:03 PM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 05:20 AM
Surr: Toluene-d8	101	0	80-120		%REC	5	2/25/2016 07:03 PM
Surr: Toluene-d8	102	0	80-120		%REC	1	2/25/2016 05:20 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *04-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018817
Project: Maryland Square, LV20915014
Lab ID: N018817-032

Client Sample ID: MW-19D3
Collection Date: 2/19/2016 12:40:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS							
			EPA 8260B				
RunID: **MS5_160224B**	QC Batch: **P16VW041**			PrepDate:			Analyst: **QBM**
1,1-Dichloroethene	ND	0.087	0.50		µg/L	1	2/25/2016 07:28 AM
cis-1,2-Dichloroethene	ND	0.051	0.50		µg/L	1	2/25/2016 07:28 AM
Tetrachloroethene	130	0.82	2.5		µg/L	5	2/25/2016 07:29 PM
trans-1,2-Dichloroethene	ND	0.070	0.50		µg/L	1	2/25/2016 07:28 AM
Trichloroethene	0.57	0.12	0.50		µg/L	1	2/25/2016 07:28 AM
Vinyl chloride	ND	0.095	0.50		µg/L	1	2/25/2016 07:28 AM
Surr: 1,2-Dichloroethane-d4	118	0	78-125		%REC	5	2/25/2016 07:29 PM
Surr: 1,2-Dichloroethane-d4	99.0	0	78-125		%REC	1	2/25/2016 07:28 AM
Surr: 4-Bromofluorobenzene	93.6	0	80-120		%REC	5	2/25/2016 07:29 PM
Surr: 4-Bromofluorobenzene	99.5	0	80-120		%REC	1	2/25/2016 07:28 AM
Surr: Dibromofluoromethane	111	0	80-122		%REC	5	2/25/2016 07:29 PM
Surr: Dibromofluoromethane	102	0	80-122		%REC	1	2/25/2016 07:28 AM
Surr: Toluene-d8	104	0	80-120		%REC	5	2/25/2016 07:29 PM
Surr: Toluene-d8	101	0	80-120		%REC	1	2/25/2016 07:28 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_W

Sample ID: **MB-R106115** SampType: **MBLK** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106115**
Client ID: **PBW** Batch ID: **R106115** TestNo: **EPA 218.6** Analysis Date: **2/23/2016** SeqNo: **2245451**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **LCS-R106115** SampType: **LCS** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106115**
Client ID: **LCSW** Batch ID: **R106115** TestNo: **EPA 218.6** Analysis Date: **2/23/2016** SeqNo: **2245452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.904	0.20	5.000	0	98.1	90	110				

Sample ID: **N018821-003CDUP** SampType: **DUP** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106115**
Client ID: **ZZZZZZ** Batch ID: **R106115** TestNo: **EPA 218.6** Analysis Date: **2/23/2016** SeqNo: **2245454**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Sample ID: **N018821-002CREP** SampType: **DUP** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106115**
Client ID: **ZZZZZZ** Batch ID: **R106115** TestNo: **EPA 218.6** Analysis Date: **2/23/2016** SeqNo: **2245460**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20						0	0	20	

Sample ID: **N018821-002CMS** SampType: **MS** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106115**
Client ID: **ZZZZZZ** Batch ID: **R106115** TestNo: **EPA 218.6** Analysis Date: **2/23/2016** SeqNo: **2245463**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.240	0.20	5.000	0	105	90	110				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_W

Sample ID: **N018821-002CMSD** SampType: **MSD** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106115**
Client ID: **ZZZZZZ** Batch ID: **R106115** TestNo: **EPA 218.6** Analysis Date: **2/23/2016** SeqNo: **2245464**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.113	0.20	5.000	0	102	90	110	5.240	2.45	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS

Sample ID: **MB-56365** SampType: **MBLK** TestCode: **6020_DIS** Units: **µg/L** Prep Date: **2/24/2016** RunNo: **106054**
Client ID: **PBW** Batch ID: **56365** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **2/24/2016** SeqNo: **2242186**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Chromium	ND	1.0									
Manganese	0.025	0.50									

Sample ID: **LCS-56365** SampType: **LCS** TestCode: **6020_DIS** Units: **µg/L** Prep Date: **2/24/2016** RunNo: **106054**
Client ID: **LCSW** Batch ID: **56365** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **2/24/2016** SeqNo: **2242187**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.086	0.10	10.00	0	90.9	85	115				
Chromium	9.526	1.0	10.00	0	95.3	85	115				
Manganese	97.141	0.50	100.0	0	97.1	85	115				

Sample ID: **N018825-001B-MS** SampType: **MS** TestCode: **6020_DIS** Units: **µg/L** Prep Date: **2/24/2016** RunNo: **106054**
Client ID: **ZZZZZZ** Batch ID: **56365** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **2/24/2016** SeqNo: **2242191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.035	0.10	10.00	0.9435	90.9	75	125				
Chromium	10.783	1.0	10.00	1.551	92.3	75	125				
Manganese	91.176	0.50	100.0	0	91.2	75	125				

Sample ID: **N018825-001B-MSD** SampType: **MSD** TestCode: **6020_DIS** Units: **µg/L** Prep Date: **2/24/2016** RunNo: **106054**
Client ID: **ZZZZZZ** Batch ID: **56365** TestNo: **EPA 6020** **EPA 3010A** Analysis Date: **2/24/2016** SeqNo: **2242192**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.136	0.10	10.00	0.9435	91.9	75	125	10.03	1.01	20	
Chromium	10.740	1.0	10.00	1.551	91.9	75	125	10.78	0.399	20	
Manganese	90.483	0.50	100.0	0	90.5	75	125	91.18	0.763	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **P160224LCS** SampType: **LCS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106058**
Client ID: **LCSW** Batch ID: **P16VW040** TestNo: **EPA 8260B** Analysis Date: **2/24/2016** SeqNo: **2242697**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.280	0.50	20.00	0	96.4	71	127				
cis-1,2-Dichloroethene	21.740	0.50	20.00	0	109	80	120				
Tetrachloroethene	21.500	0.50	20.00	0	108	80	120				
trans-1,2-Dichloroethene	22.220	0.50	20.00	0	111	78	126				
Trichloroethene	20.150	0.50	20.00	0	101	80	120				
Vinyl chloride	18.550	0.50	20.00	0	92.8	70	135				
Surr: 1,2-Dichloroethane-d4	30.480		25.00		122	78	125				
Surr: 4-Bromofluorobenzene	25.770		25.00		103	80	120				
Surr: Dibromofluoromethane	28.390		25.00		114	80	122				
Surr: Toluene-d8	23.950		25.00		95.8	80	120				

Sample ID: **P160224MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106058**
Client ID: **PBW** Batch ID: **P16VW040** TestNo: **EPA 8260B** Analysis Date: **2/24/2016** SeqNo: **2242698**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
Tetrachloroethene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	30.410		25.00		122	78	125				
Surr: 4-Bromofluorobenzene	25.770		25.00		103	80	120				
Surr: Dibromofluoromethane	28.570		25.00		114	80	122				
Surr: Toluene-d8	26.500		25.00		106	80	120				

Sample ID: **N018808-001AMSD** SampType: **MSD** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106058**
Client ID: **ZZZZZZ** Batch ID: **P16VW040** TestNo: **EPA 8260B** Analysis Date: **2/24/2016** SeqNo: **2242703**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **N018808-001AMSD** SampType: **MSD** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106058**
Client ID: **ZZZZZZ** Batch ID: **P16VW040** TestNo: **EPA 8260B** Analysis Date: **2/24/2016** SeqNo: **2242703**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.620	0.50	20.00	0	88.1	62	135	17.51	0.626	20	
cis-1,2-Dichloroethene	20.800	0.50	20.00	0	104	73	125	20.29	2.48	20	
Tetrachloroethene	21.380	0.50	20.00	0	107	71	123	21.10	1.32	20	
trans-1,2-Dichloroethene	20.660	0.50	20.00	0	103	64	132	20.44	1.07	20	
Trichloroethene	20.240	0.50	20.00	0	101	79	121	20.77	2.58	20	
Vinyl chloride	22.640	0.50	20.00	0	113	64	134	21.56	4.89	20	
Surr: 1,2-Dichloroethane-d4	25.610		25.00		102	78	125		0		
Surr: 4-Bromofluorobenzene	26.100		25.00		104	80	120		0		
Surr: Dibromofluoromethane	25.840		25.00		103	80	122		0		
Surr: Toluene-d8	25.730		25.00		103	80	120		0		

Sample ID: **N018808-001AMS** SampType: **MS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106058**
Client ID: **ZZZZZZ** Batch ID: **P16VW040** TestNo: **EPA 8260B** Analysis Date: **2/24/2016** SeqNo: **2242704**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.510	0.50	20.00	0	87.6	62	135				
cis-1,2-Dichloroethene	20.290	0.50	20.00	0	101	73	125				
Tetrachloroethene	21.100	0.50	20.00	0	106	71	123				
trans-1,2-Dichloroethene	20.440	0.50	20.00	0	102	64	132				
Trichloroethene	20.770	0.50	20.00	0	104	79	121				
Vinyl chloride	21.560	0.50	20.00	0	108	64	134				
Surr: 1,2-Dichloroethane-d4	25.420		25.00		102	78	125				
Surr: 4-Bromofluorobenzene	25.200		25.00		101	80	120				
Surr: Dibromofluoromethane	25.610		25.00		102	80	122				
Surr: Toluene-d8	25.600		25.00		102	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **P160224LCS2** SampType: **LCS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106075**
Client ID: **LCSW** Batch ID: **P16VW041** TestNo: **EPA 8260B** Analysis Date: **2/24/2016** SeqNo: **2243610**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	16.050	0.50	20.00	0	80.2	71	127				
cis-1,2-Dichloroethene	20.390	0.50	20.00	0	102	80	120				
Tetrachloroethene	21.300	0.50	20.00	0	106	80	120				
trans-1,2-Dichloroethene	20.140	0.50	20.00	0	101	78	126				
Trichloroethene	20.290	0.50	20.00	0	101	80	120				
Vinyl chloride	21.310	0.50	20.00	0	107	70	135				
Surr: 1,2-Dichloroethane-d4	25.740		25.00		103	78	125				
Surr: 4-Bromofluorobenzene	25.680		25.00		103	80	120				
Surr: Dibromofluoromethane	25.420		25.00		102	80	122				
Surr: Toluene-d8	25.660		25.00		103	80	120				

Sample ID: **P160224LCSD** SampType: **LCSD** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106075**
Client ID: **LCSS02** Batch ID: **P16VW041** TestNo: **EPA 8260B** Analysis Date: **2/24/2016** SeqNo: **2243611**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.880	0.50	20.00	0	89.4	71	127	16.05	10.8	20	
cis-1,2-Dichloroethene	20.220	0.50	20.00	0	101	80	120	20.39	0.837	20	
Tetrachloroethene	20.760	0.50	20.00	0	104	80	120	21.30	2.57	20	
trans-1,2-Dichloroethene	20.100	0.50	20.00	0	101	78	126	20.14	0.199	20	
Trichloroethene	19.790	0.50	20.00	0	99.0	80	120	20.29	2.50	20	
Vinyl chloride	21.990	0.50	20.00	0	110	70	135	21.31	3.14	20	
Surr: 1,2-Dichloroethane-d4	25.600		25.00		102	78	125		0		
Surr: 4-Bromofluorobenzene	25.330		25.00		101	80	120		0		
Surr: Dibromofluoromethane	25.410		25.00		102	80	122		0		
Surr: Toluene-d8	25.410		25.00		102	80	120		0		

Sample ID: **P160224MB6** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106075**
Client ID: **PBW** Batch ID: **P16VW041** TestNo: **EPA 8260B** Analysis Date: **2/24/2016** SeqNo: **2243612**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **P160224MB6** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106075**
Client ID: **PBW** Batch ID: **P16VW041** TestNo: **EPA 8260B** Analysis Date: **2/24/2016** SeqNo: **2243612**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
Tetrachloroethene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	24.930		25.00		99.7	78	125				
Surr: 4-Bromofluorobenzene	24.850		25.00		99.4	80	120				
Surr: Dibromofluoromethane	25.580		25.00		102	80	122				
Surr: Toluene-d8	25.060		25.00		100	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **P160225LCS** SampType: **LCS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106081**
Client ID: **LCSW** Batch ID: **P16VW042** TestNo: **EPA 8260B** Analysis Date: **2/25/2016** SeqNo: **2244037**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.880	0.50	20.00	0	89.4	71	127				
cis-1,2-Dichloroethene	19.520	0.50	20.00	0	97.6	80	120				
Tetrachloroethene	21.140	0.50	20.00	0	106	80	120				
trans-1,2-Dichloroethene	19.710	0.50	20.00	0	98.6	78	126				
Trichloroethene	20.090	0.50	20.00	0	100	80	120				
Vinyl chloride	19.340	0.50	20.00	0	96.7	70	135				
Surr: 1,2-Dichloroethane-d4	25.010		25.00		100	78	125				
Surr: 4-Bromofluorobenzene	25.190		25.00		101	80	120				
Surr: Dibromofluoromethane	25.500		25.00		102	80	122				
Surr: Toluene-d8	25.480		25.00		102	80	120				

Sample ID: **P160225LCSD** SampType: **LCSD** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106081**
Client ID: **LCSS02** Batch ID: **P16VW042** TestNo: **EPA 8260B** Analysis Date: **2/25/2016** SeqNo: **2244038**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.010	0.50	20.00	0	95.1	71	127	17.88	6.13	20	
cis-1,2-Dichloroethene	19.930	0.50	20.00	0	99.7	80	120	19.52	2.08	20	
Tetrachloroethene	20.500	0.50	20.00	0	103	80	120	21.14	3.07	20	
trans-1,2-Dichloroethene	17.420	0.50	20.00	0	87.1	78	126	19.71	12.3	20	
Trichloroethene	20.200	0.50	20.00	0	101	80	120	20.09	0.546	20	
Vinyl chloride	19.960	0.50	20.00	0	99.8	70	135	19.34	3.16	20	
Surr: 1,2-Dichloroethane-d4	25.040		25.00		100	78	125		0		
Surr: 4-Bromofluorobenzene	25.200		25.00		101	80	120		0		
Surr: Dibromofluoromethane	25.100		25.00		100	80	122		0		
Surr: Toluene-d8	25.800		25.00		103	80	120		0		

Sample ID: **P160225MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106081**
Client ID: **PBW** Batch ID: **P16VW042** TestNo: **EPA 8260B** Analysis Date: **2/25/2016** SeqNo: **2244039**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **P160225MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106081**
Client ID: **PBW** Batch ID: **P16VW042** TestNo: **EPA 8260B** Analysis Date: **2/25/2016** SeqNo: **2244039**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
Tetrachloroethene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	24.580		25.00		98.3	78	125				
Surr: 4-Bromofluorobenzene	24.780		25.00		99.1	80	120				
Surr: Dibromofluoromethane	25.450		25.00		102	80	122				
Surr: Toluene-d8	25.630		25.00		103	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **P160226LCS** SampType: **LCS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **LCSW** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244437**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.660	0.50	20.00	0	88.3	71	127				
cis-1,2-Dichloroethene	20.360	0.50	20.00	0	102	80	120				
Tetrachloroethene	21.300	0.50	20.00	0	106	80	120				
trans-1,2-Dichloroethene	11.530	0.50	20.00	0	57.6	78	126				S
Trichloroethene	20.750	0.50	20.00	0	104	80	120				
Vinyl chloride	18.650	0.50	20.00	0	93.3	70	135				
Surr: 1,2-Dichloroethane-d4	25.670		25.00		103	78	125				
Surr: 4-Bromofluorobenzene	25.360		25.00		101	80	120				
Surr: Dibromofluoromethane	25.780		25.00		103	80	122				
Surr: Toluene-d8	25.590		25.00		102	80	120				

Sample ID: **P160226MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **PBW** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244438**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
Tetrachloroethene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	21.650		25.00		86.6	78	125				
Surr: 4-Bromofluorobenzene	24.750		25.00		99.0	80	120				
Surr: Dibromofluoromethane	22.340		25.00		89.4	80	122				
Surr: Toluene-d8	28.840		25.00		115	80	120				

Sample ID: **N018857-007AMS** SampType: **MS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **ZZZZZZ** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018817
Project: Maryland Square, LV20915014

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **N018857-007AMS** SampType: **MS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **ZZZZZZ** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.970	0.50	20.00	0	94.8	62	135				
cis-1,2-Dichloroethene	20.880	0.50	20.00	0	104	73	125				
Tetrachloroethene	27.800	0.50	20.00	6.330	107	71	123				
trans-1,2-Dichloroethene	13.580	0.50	20.00	0	67.9	64	132				
Trichloroethene	20.570	0.50	20.00	0	103	79	121				
Vinyl chloride	21.710	0.50	20.00	0	109	64	134				
Surr: 1,2-Dichloroethane-d4	25.030		25.00		100	78	125				
Surr: 4-Bromofluorobenzene	25.190		25.00		101	80	120				
Surr: Dibromofluoromethane	25.750		25.00		103	80	122				
Surr: Toluene-d8	25.690		25.00		103	80	120				

Sample ID: **N018857-007AMSD** SampType: **MSD** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **ZZZZZZ** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244445**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.270	0.50	20.00	0	96.4	62	135	18.97	1.57	20	
cis-1,2-Dichloroethene	20.790	0.50	20.00	0	104	73	125	20.88	0.432	20	
Tetrachloroethene	27.640	0.50	20.00	6.330	107	71	123	27.80	0.577	20	
trans-1,2-Dichloroethene	20.780	0.50	20.00	0	104	64	132	13.58	41.9	20	R
Trichloroethene	21.070	0.50	20.00	0	105	79	121	20.57	2.40	20	
Vinyl chloride	19.540	0.50	20.00	0	97.7	64	134	21.71	10.5	20	
Surr: 1,2-Dichloroethane-d4	25.450		25.00		102	78	125		0		
Surr: 4-Bromofluorobenzene	24.900		25.00		99.6	80	120		0		
Surr: Dibromofluoromethane	25.460		25.00		102	80	122		0		
Surr: Toluene-d8	25.140		25.00		101	80	120		0		

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
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Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

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Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y ☑ N ☐ (3.2 ID#2)
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☑ N ☐
4. SEALED Y ☐ N ☑
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: LV20915014
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.* (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
[signature]	2/19/16	15:00	[signature]	2/22/16	1252
[signature]	2/22/16	1406	Yoandra Rodriguez	2/22/16	14:06

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Johanna Garcia
Print Name: [signature] Date: 2/19/16
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	N018817-1	MW-1	—	—				X					X		E	3	V	H	
	-2	MW-2	—	—				X					X		E	3	V	H	
	-3	MW-5	—	—				X					X		E	3	V	H	
	-4	MW-6	—	—				X					X		E	3	V	H	
	-5	MW-7	—	—				X					X		E	3	V	H	
	-6	MW-8	—	—				X					X		E	3	V	H	
	-7	MW-9	—	—				X					X		E	3	V	H	
	-8	MW-10	—	—				X					X		E	3	V	H	
	-9	MW-11	2/17/16	910				X					X		E	3	V	H	
	-10	MW-12	—	—				X					X		E	3	V	H	

SPECIFY APPROPRIATE MATRIX

QA/QC
RTNE ☐
CT ☐
SWRCB ☐ Logcode_____
OTHER _____

HRC 2/23/16

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____

Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED 3.2°C 1042 Y ☑ N ☐
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☑ N ☐
4. SEALED Y ☐ N ☑
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: LV20915014
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.* (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
[signature]	2/19/16	15:00	[signature]	2/22/16	~~1300~~
[signature]	2/22/16	1406	Yolandra Rodriguez	2/22/16	14:06

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Johanna Garcia
Print Name Date
[signature] 2/19/16
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

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- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
		MW-13	—	—				X					X		E	3	V	H	
		MW-14	—	—				X					X		E	3	V	H	
		MW-15	—	—				X					X		E	3	V	H	
	N018817-2	MW-16	2/19/16	850				X					X		E	3	V	H	
		MW-17	—	—				X					X		E	3	V	H	
	-3	MW-18	2/17/16	1350				X					X		E	3	V	H	
		MW-19	—	—				X					X		E	3	V	H	
		MW-20	—	—				X					X		E	3	V	H	
	-4	MW-21	2/19/16	1045				X					X		E	3	V	H	
	-5	MW-22	2/17/16	1000				X					X		E	3	V	H	

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED 3.7°C 1.8°C Y ☐ N ☐
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☑ N ☐
4. SEALED Y ☐ N ☑
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: LV20915014
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.* (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
[signature]	2/19/16	15:00	[signature]	2/22/16	1352
[signature]	2/22/16	1406	Yoanda Rodriguez	2/22/16	14:06

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Johanna Garcia
Print Name Date 2/19/16
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
		MW-22	—	—				X					X		E	3	V	H	
	N018817-6	MW-23	2/17/16	1310				X					X		E	3	V	H	
	-7	MW-24	2/17/16	1035				X					X		E	3	V	H	
	-8	MW-25	2/17/16	1115				X					X		E	3	V	H	
	-9	MW-26	2/17/16	1230				X					X		E	3	V	H	
	-10	MW-27	2/15/16	1320				X					X		E	3	V	H	
	-11	MW-28	2/16/16	935				X					X		E	3	V	H	
	-12	MW-29	2/16/16	855				X					X		E	3	V	H	
	-13	MW-30	2/15/16	1220				X					X		E	3	V	H	
	-14	MW-31	2/15/16	1140				X					X		E	3	V	H	

QA/QC
RTNE ☐
CT ☐
SWRCB ☐ Logcode_____
OTHER _____

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives:
H=HCl N=HNO_3 S=H_2SO_4 C=4°C
Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____

Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED 3-2C 1442 Y ☐ N ☐
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☑ N ☐
4. SEALED Y ☐ N ☑
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: Cardno
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: LV20915014
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.* (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
[signature]	2/19/16	15:00	[signature]	2/22/16	1352
[signature]	2/22/16	1406	Yoanna Rodriguez [signature]	2/22/16	14:06

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Johanna Garcia
Print Name: [signature] Date: 2/19/16
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

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Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

Q A / Q C
RTNE ☐
CT ☐
SWRCB ☐ Logcode_____
OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	N018817-15	MW-32	2/16/16	1305				X					X		E	3	V	H	
	-16	MW-33	2/16/16	1050				X					X		E	3	V	H	
		MW-34	—	—				X					X		E	3	V	H	
		MW-35	—	—				X					X		E	3	V	H	
	-17	MW-36	2/16/16	1145				X					X		E	3	V	H	
	-18	MW-37	2/15/16	1055				X					X		E	3	V	H	
	-19	MW-38	2/15/16	1010				X					X		E	3	V	H	
	-20	MW-39	2/16/16	1230				X					X		E	3	V	H	
	-21	MW-40 CMT30	2/18/16	945				X					X		E	3	V	H	
	-22	MW-40 CMT35	2/18/16	1135				X					X		E	3	V	H	

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Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
11060 Artesia Blvd., Suite C
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Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED 3.2 ℃ Y ☐ N ☐
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☑ N ☐
4. SEALED Y ☐ N ☑
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: LV20915014
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.* (Printed Name) (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
[signature]	2/19/16	15:00	[signature]	2/22/16	1052
[signature]	2/22/16	1406	Yoandra Rodriguez	2/22/16	14:06

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Johanna Garcia
Print Name Date
Signature 2/19/16

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

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Circle or Add Analysis(es) Requested — SPECIFY APPROPRIATE MATRIX

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	N018817-23	MW-40 CMT40	2/19/16	1340				X					X		E	3	V	H	
	-24	MW-40 CMT45	2/19/16	1045				X					X		E	3	V	H	
		MW-40 CMT50	—	—				X					X		E	3	V	H	
		MW-40 CMT55	—	—				X					X		E	3	V	H	
	-25	MW-40 CMT60	2/19/16	1235				X	X	X			X		E	3	V	H	
	-26	MW-41	2/15/16	935				X					X		E	3	V	H	
	-27	MW-42	2/15/16	845				X					X		E	3	V	H	
	-28	MW-43	2/16/16	1015				X					X		E	3	V	H	
		MW-14I	—	—				X					X		E	3	V	H	
	-29	MW-19I	2/19/16	935				X	X	X			X		E	3	V	H	

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Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
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Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED 3.2C 1.8C Y ☐ N ☐
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☑ N ☐
4. SEALED Y ☐ N ☑
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6. PRESERVED Y ☐ N ☐

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Fax: 702-990-9305

Project Name: Maryland Square
LV20915014
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Relinquished by: (Signature and Printed Name)	Date	Time	Received by: (Signature and Printed Name)	Date	Time
[signature]	2/19/16	15:00	[signature]	2/22/16	1872
[signature]	2/22/16	1406	Yoandra Rodriguez	2/22/16	14:06

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Johanna Gain
Print Name: [signature] Date: 2/19/16
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

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Circle or Add Analysis(es) Requested

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SPECIFY APPROPRIATE MATRIX: SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode____ OTHER ____ REMARKS
		MW-6D1	—	—				X					X		E	3	V	H	
		MW-6D2	—	—				X					X		E	3	V	H	
		MW-6D3	—	—				X					X		E	3	V	H	
	N01885 17 - 30	MW-19D1	2/19/16	1320				X					X		E	3	V	H	
	- 31	MW-19D2	2/19/16	1130				X					X		E	3	V	H	
	- 32	MW-19D3	2/19/16	1240				X					X		E	3	V	H	
		MW-20D1	—	—				X					X		E	3	V	H	
		MW-20D2	—	—				X					X		E	3	V	H	
		MW-20D3	—	—				X					X		E	3	V	H	
		Equipment Blank	—	—				X					X		E	3	V	H	

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives:
H=HCl N=HNO_3 S=H_2SO_4 C=4°C
Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	2/22/2016	Workorder:	N018817
Rep sample Temp (Deg C):	3.2	IR Gun ID:	2
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☐	No ☑	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☑	No ☐	NA ☐
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☑	No ☐	NA ☐
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: HG 2/23/2016

Reviewed By: 02/29/2016

ASSET Laboratories

WORK ORDER Summary

22-Feb-16

WorkOrder: N018817

Client ID: CARAT01

Project: Maryland Square, LV20915014 **QC Level:** RTNE **Date Received:** 2/22/2016

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N018817-001A	MW-11	2/17/2016 9:10:00 AM	2/29/2016	Groundwater	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-002A	MW-16	2/19/2016 8:50:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-003A	MW-18	2/17/2016 1:50:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-004A	MW-21	2/19/2016 10:45:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-005A	MW-22	2/17/2016 10:00:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-006A	MW-23	2/17/2016 1:10:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-007A	MW-24	2/17/2016 10:35:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-008A	MW-25	2/17/2016 11:15:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-009A	MW-26	2/17/2016 12:30:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-010A	MW-27	2/15/2016 1:20:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-011A	MW-28	2/16/2016 9:35:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-012A	MW-29	2/16/2016 8:55:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-013A	MW-30	2/15/2016 12:20:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-014A	MW-31	2/15/2016 11:40:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-015A	MW-32	2/16/2016 1:05:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-016A	MW-33	2/16/2016 10:50:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

22-Feb-16

WorkOrder: N018817

Client ID: CARAT01

Project: Maryland Square, LV20915014 **QC Level:** RTNE **Date Received:** 2/22/2016

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N018817-017A	MW-36	2/16/2016 11:45:00 AM	2/29/2016	Groundwater	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-018A	MW-37	2/15/2016 10:55:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-019A	MW-38	2/15/2016 10:10:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-020A	MW-39	2/16/2016 12:30:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-021A	MW-40 CMT30	2/18/2016 9:45:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-022A	MW-40 CMT35	2/18/2016 11:35:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-023A	MW-40 CMT40	2/18/2016 1:40:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-024A	MW-40 CMT45	2/18/2016 10:45:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-025A	MW-40 CMT60	2/18/2016 12:35:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-025B			2/29/2016		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			2/29/2016		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N018817-025C			2/29/2016		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N018817-026A	MW-41	2/15/2016 9:35:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-027A	MW-42	2/15/2016 8:45:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-028A	MW-43	2/16/2016 10:15:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-029A	MW-19I	2/19/2016 9:35:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-029B			2/29/2016		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			2/29/2016		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW

ASSET Laboratories

WORK ORDER Summary

22-Feb-16

WorkOrder: N018817

Client ID: CARAT01

Project: Maryland Square, LV20915014 **QC Level:** RTNE **Date Received:** 2/22/2016

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N018817-029C	MW-19I	2/19/2016 9:35:00 AM	2/29/2016	Groundwater	EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N018817-030A	MW-19D1	2/19/2016 1:20:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-031A	MW-19D2	2/19/2016 11:30:00 AM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-032A	MW-19D3	2/19/2016 12:40:00 PM	2/29/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018817-033A	FOLDER		2/29/2016		Folder	Folder	☐	☐	☐	LAB

March 09, 2016

Adam Katlein
Cardno ATC
7115 Amigo Street Suite 100
Las Vegas, NV 89119

TEL: (702) 990-9300
FAX:

CA-ELAP No.: 2676
NV Cert. No.: NV-00922

Workorder No.: N018857

RE: Maryland Square, NPMMA16002

Attention: Adam Katlein

Enclosed are the results for sample(s) received on February 25, 2016 by ASSET Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Glen Gesmundo
QA Manager

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories - Las Vegas.

ASSET Laboratories **Date:** *09-Mar-16*

CLIENT: Cardno ATC
Project: Maryland Square, NPMMA16002
Lab Order: N018857

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

Samples were received intact with proper chain of custody documentation.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Samples were analyzed within method holding time.

Analytical Comments for EPA 8260B:

Method Blank has hit above the reporting limit but less than 1/10 of the amount measured in sample.

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES
CALIFORNIA
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NEVADA
3151 W. Post Rd., Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691

"Serving Clients with Passion and Professionalism"

ASSET Laboratories

Date: *09-Mar-16*

CLIENT: Cardno ATC
Project: Maryland Square, NPMMA16002
Lab Order: N018857
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N018857-001A	MW-1	Groundwater	2/24/2016 12:20:00 PM	2/25/2016	3/9/2016
N018857-002A	MW-2	Groundwater	2/25/2016 8:50:00 AM	2/25/2016	3/9/2016
N018857-003A	MW-5	Groundwater	2/23/2016 12:20:00 PM	2/25/2016	3/9/2016
N018857-004A	MW-6	Groundwater	2/23/2016 1:05:00 PM	2/25/2016	3/9/2016
N018857-005A	MW-7	Groundwater	2/24/2016 10:35:00 AM	2/25/2016	3/9/2016
N018857-006A	MW-8	Groundwater	2/24/2016 9:30:00 AM	2/25/2016	3/9/2016
N018857-007A	MW-9	Groundwater	2/24/2016 10:00:00 AM	2/25/2016	3/9/2016
N018857-008A	MW-10	Groundwater	2/23/2016 8:53:00 AM	2/25/2016	3/9/2016
N018857-009A	MW-12	Groundwater	2/24/2016 8:50:00 AM	2/25/2016	3/9/2016
N018857-010A	MW-13	Groundwater	2/23/2016 9:30:00 AM	2/25/2016	3/9/2016
N018857-011A	MW-14	Groundwater	2/22/2016 12:55:00 PM	2/25/2016	3/9/2016
N018857-012A	MW-15	Groundwater	2/23/2016 9:40:00 AM	2/25/2016	3/9/2016
N018857-013A	MW-17	Groundwater	2/24/2016 11:05:00 AM	2/25/2016	3/9/2016
N018857-014A	MW-19	Groundwater	2/22/2016 11:45:00 AM	2/25/2016	3/9/2016
N018857-015A	MW-20	Groundwater	2/22/2016 11:05:00 AM	2/25/2016	3/9/2016
N018857-016A	MW-34	Groundwater	2/24/2016 12:55:00 PM	2/25/2016	3/9/2016
N018857-017A	MW-35	Groundwater	2/24/2016 11:45:00 AM	2/25/2016	3/9/2016
N018857-018A	MW-40 CMT50	Groundwater	2/25/2016 10:45:00 AM	2/25/2016	3/9/2016
N018857-019A	MW-40 CMT55	Groundwater	2/25/2016 11:35:00 AM	2/25/2016	3/9/2016
N018857-019B	MW-40 CMT55	Groundwater	2/25/2016 11:35:00 AM	2/25/2016	3/9/2016
N018857-019C	MW-40 CMT55	Groundwater	2/25/2016 11:35:00 AM	2/25/2016	3/9/2016
N018857-020A	MW-14I	Groundwater	2/22/2016 1:30:00 PM	2/25/2016	3/9/2016
N018857-021A	MW-6D1	Groundwater	2/23/2016 11:10:00 AM	2/25/2016	3/9/2016
N018857-022A	MW-6D2	Groundwater	2/23/2016 10:30:00 AM	2/25/2016	3/9/2016
N018857-023A	MW-6D3	Groundwater	2/23/2016 11:40:00 AM	2/25/2016	3/9/2016
N018857-024A	MW-20D1	Groundwater	2/22/2016 10:15:00 AM	2/25/2016	3/9/2016
N018857-025A	MW-20D2	Groundwater	2/22/2016 9:40:00 AM	2/25/2016	3/9/2016
N018857-026A	MW-20D3	Groundwater	2/22/2016 9:00:00 AM	2/25/2016	3/9/2016
N018857-027A	Equipment Blank	Groundwater	2/25/2016 9:45:00 AM	2/25/2016	3/9/2016

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES
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NEVADA
3151 W. Post Rd., Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691

"Serving Clients with Passion and Professionalism"

CLIENT: Cardno ATC
Project: Maryland Square, NPMMA16002
Lab Order: N018857
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N018857-028A	Field Blank	Groundwater	2/25/2016 11:00:00 AM	2/25/2016	3/9/2016
N018857-029A	Trip Blank	Groundwater	2/25/2016 7:00:00 AM	2/25/2016	3/9/2016
N018857-030A	DUP	Groundwater	2/25/2016 9:30:00 AM	2/25/2016	3/9/2016

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ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-001

Client Sample ID: MW-1
Collection Date: 2/24/2016 12:20:00 PM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch: P16VW043			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 08:26 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 08:26 PM
Tetrachloroethene	290	5.0		µg/L	10	3/6/2016 11:12 AM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 08:26 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 08:26 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 08:26 PM
Surr: 1,2-Dichloroethane-d4	103	78-125		%REC	1	2/26/2016 08:26 PM
Surr: 1,2-Dichloroethane-d4	118	78-125		%REC	10	3/6/2016 11:12 AM
Surr: 4-Bromofluorobenzene	99.8	80-120		%REC	1	2/26/2016 08:26 PM
Surr: 4-Bromofluorobenzene	94.0	80-120		%REC	10	3/6/2016 11:12 AM
Surr: Dibromofluoromethane	105	80-122		%REC	1	2/26/2016 08:26 PM
Surr: Dibromofluoromethane	119	80-122		%REC	10	3/6/2016 11:12 AM
Surr: Toluene-d8	101	80-120		%REC	1	2/26/2016 08:26 PM
Surr: Toluene-d8	104	80-120		%REC	10	3/6/2016 11:12 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-002

Client Sample ID: MW-2
Collection Date: 2/25/2016 8:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 07:49 PM
cis-1,2-Dichloroethene	2.3	0.50		µg/L	1	3/5/2016 07:49 PM
Tetrachloroethene	1400	25		µg/L	50	3/6/2016 11:38 AM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 07:49 PM
Trichloroethene	6.2	0.50		µg/L	1	3/5/2016 07:49 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 07:49 PM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	50	3/6/2016 11:38 AM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	1	3/5/2016 07:49 PM
Surr: 4-Bromofluorobenzene	97.7	80-120		%REC	50	3/6/2016 11:38 AM
Surr: 4-Bromofluorobenzene	97.0	80-120		%REC	1	3/5/2016 07:49 PM
Surr: Dibromofluoromethane	120	80-122		%REC	50	3/6/2016 11:38 AM
Surr: Dibromofluoromethane	117	80-122		%REC	1	3/5/2016 07:49 PM
Surr: Toluene-d8	104	80-120		%REC	50	3/6/2016 11:38 AM
Surr: Toluene-d8	105	80-120		%REC	1	3/5/2016 07:49 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-003

Client Sample ID: MW-5
Collection Date: 2/23/2016 12:20:00 PM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch: P16VW043			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 08:51 PM
cis-1,2-Dichloroethene	0.80	0.50		µg/L	1	2/26/2016 08:51 PM
Tetrachloroethene	370	5.0		µg/L	10	3/6/2016 12:05 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 08:51 PM
Trichloroethene	1.5	0.50		µg/L	1	2/26/2016 08:51 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 08:51 PM
Surr: 1,2-Dichloroethane-d4	103	78-125		%REC	1	2/26/2016 08:51 PM
Surr: 1,2-Dichloroethane-d4	119	78-125		%REC	10	3/6/2016 12:05 PM
Surr: 4-Bromofluorobenzene	96.7	80-120		%REC	1	2/26/2016 08:51 PM
Surr: 4-Bromofluorobenzene	95.8	80-120		%REC	10	3/6/2016 12:05 PM
Surr: Dibromofluoromethane	105	80-122		%REC	1	2/26/2016 08:51 PM
Surr: Dibromofluoromethane	121	80-122		%REC	10	3/6/2016 12:05 PM
Surr: Toluene-d8	99.1	80-120		%REC	1	2/26/2016 08:51 PM
Surr: Toluene-d8	105	80-120		%REC	10	3/6/2016 12:05 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-004

Client Sample ID: MW-6
Collection Date: 2/23/2016 1:05:00 PM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	1.0		µg/L	2	3/5/2016 10:27 PM
cis-1,2-Dichloroethene	2.3	1.0		µg/L	2	3/5/2016 10:27 PM
Tetrachloroethene	3700	50		µg/L	100	3/6/2016 12:31 PM
trans-1,2-Dichloroethene	ND	1.0		µg/L	2	3/5/2016 10:27 PM
Trichloroethene	9.1	1.0		µg/L	2	3/5/2016 10:27 PM
Vinyl chloride	ND	1.0		µg/L	2	3/5/2016 10:27 PM
Surr: 1,2-Dichloroethane-d4	122	78-125		%REC	100	3/6/2016 12:31 PM
Surr: 1,2-Dichloroethane-d4	118	78-125		%REC	2	3/5/2016 10:27 PM
Surr: 4-Bromofluorobenzene	99.2	80-120		%REC	100	3/6/2016 12:31 PM
Surr: 4-Bromofluorobenzene	96.8	80-120		%REC	2	3/5/2016 10:27 PM
Surr: Dibromofluoromethane	121	80-122		%REC	100	3/6/2016 12:31 PM
Surr: Dibromofluoromethane	118	80-122		%REC	2	3/5/2016 10:27 PM
Surr: Toluene-d8	103	80-120		%REC	100	3/6/2016 12:31 PM
Surr: Toluene-d8	104	80-120		%REC	2	3/5/2016 10:27 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-7
Lab Order:	N018857	**Collection Date:**	2/24/2016 10:35:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-005		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch:	P16VW043		PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 02:06 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 02:06 PM
Tetrachloroethene	15	0.50		µg/L	1	2/26/2016 02:06 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 02:06 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 02:06 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 02:06 PM
Surr: 1,2-Dichloroethane-d4	102	78-125		%REC	1	2/26/2016 02:06 PM
Surr: 4-Bromofluorobenzene	97.8	80-120		%REC	1	2/26/2016 02:06 PM
Surr: Dibromofluoromethane	104	80-122		%REC	1	2/26/2016 02:06 PM
Surr: Toluene-d8	103	80-120		%REC	1	2/26/2016 02:06 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-006

Client Sample ID: MW-8
Collection Date: 2/24/2016 9:30:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch:	P16VW043		PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 06:44 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 06:44 PM
Tetrachloroethene	2.1	0.50		µg/L	1	2/26/2016 06:44 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 06:44 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 06:44 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 06:44 PM
Surr: 1,2-Dichloroethane-d4	103	78-125		%REC	1	2/26/2016 06:44 PM
Surr: 4-Bromofluorobenzene	100	80-120		%REC	1	2/26/2016 06:44 PM
Surr: Dibromofluoromethane	106	80-122		%REC	1	2/26/2016 06:44 PM
Surr: Toluene-d8	102	80-120		%REC	1	2/26/2016 06:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-9
Lab Order:	N018857	**Collection Date:**	2/24/2016 10:00:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-007		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch: P16VW043			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 01:40 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 01:40 PM
Tetrachloroethene	6.3	0.50		µg/L	1	2/26/2016 01:40 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 01:40 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 01:40 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 01:40 PM
Surr: 1,2-Dichloroethane-d4	104	78-125		%REC	1	2/26/2016 01:40 PM
Surr: 4-Bromofluorobenzene	97.7	80-120		%REC	1	2/26/2016 01:40 PM
Surr: Dibromofluoromethane	106	80-122		%REC	1	2/26/2016 01:40 PM
Surr: Toluene-d8	102	80-120		%REC	1	2/26/2016 01:40 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-10
Lab Order:	N018857	**Collection Date:**	2/23/2016 8:53:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-008		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch:	P16VW043		PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 05:54 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 05:54 PM
Tetrachloroethene	ND	0.50		µg/L	1	2/26/2016 05:54 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 05:54 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 05:54 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 05:54 PM
Surr: 1,2-Dichloroethane-d4	102	78-125		%REC	1	2/26/2016 05:54 PM
Surr: 4-Bromofluorobenzene	99.5	80-120		%REC	1	2/26/2016 05:54 PM
Surr: Dibromofluoromethane	104	80-122		%REC	1	2/26/2016 05:54 PM
Surr: Toluene-d8	103	80-120		%REC	1	2/26/2016 05:54 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-009

Client Sample ID: MW-12
Collection Date: 2/24/2016 8:50:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch:	P16VW043		PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 06:19 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 06:19 PM
Tetrachloroethene	0.75	0.50		µg/L	1	2/26/2016 06:19 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 06:19 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 06:19 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 06:19 PM
Surr: 1,2-Dichloroethane-d4	102	78-125		%REC	1	2/26/2016 06:19 PM
Surr: 4-Bromofluorobenzene	99.5	80-120		%REC	1	2/26/2016 06:19 PM
Surr: Dibromofluoromethane	105	80-122		%REC	1	2/26/2016 06:19 PM
Surr: Toluene-d8	101	80-120		%REC	1	2/26/2016 06:19 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-010

Client Sample ID: MW-13
Collection Date: 2/23/2016 9:30:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 09:08 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 09:08 PM
Tetrachloroethene	1700	25		µg/L	50	3/6/2016 12:57 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 09:08 PM
Trichloroethene	4.3	0.50		µg/L	1	3/5/2016 09:08 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 09:08 PM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	50	3/6/2016 12:57 PM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	1	3/5/2016 09:08 PM
Surr: 4-Bromofluorobenzene	96.5	80-120		%REC	50	3/6/2016 12:57 PM
Surr: 4-Bromofluorobenzene	94.3	80-120		%REC	1	3/5/2016 09:08 PM
Surr: Dibromofluoromethane	120	80-122		%REC	50	3/6/2016 12:57 PM
Surr: Dibromofluoromethane	120	80-122		%REC	1	3/5/2016 09:08 PM
Surr: Toluene-d8	104	80-120		%REC	50	3/6/2016 12:57 PM
Surr: Toluene-d8	104	80-120		%REC	1	3/5/2016 09:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-14
Lab Order:	N018857	**Collection Date:**	2/22/2016 12:55:00 PM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-011		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 10:01 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 10:01 PM
Tetrachloroethene	1800	25		µg/L	50	3/6/2016 01:49 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 10:01 PM
Trichloroethene	4.7	0.50		µg/L	1	3/5/2016 10:01 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 10:01 PM
Surr: 1,2-Dichloroethane-d4	121	78-125		%REC	50	3/6/2016 01:49 PM
Surr: 1,2-Dichloroethane-d4	121	78-125		%REC	1	3/5/2016 10:01 PM
Surr: 4-Bromofluorobenzene	95.0	80-120		%REC	50	3/6/2016 01:49 PM
Surr: 4-Bromofluorobenzene	95.6	80-120		%REC	1	3/5/2016 10:01 PM
Surr: Dibromofluoromethane	117	80-122		%REC	50	3/6/2016 01:49 PM
Surr: Dibromofluoromethane	121	80-122		%REC	1	3/5/2016 10:01 PM
Surr: Toluene-d8	102	80-120		%REC	50	3/6/2016 01:49 PM
Surr: Toluene-d8	105	80-120		%REC	1	3/5/2016 10:01 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-15
Lab Order:	N018857	**Collection Date:**	2/23/2016 9:40:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-012		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch: P16VW043			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 07:10 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 07:10 PM
Tetrachloroethene	3.8	0.50		µg/L	1	2/26/2016 07:10 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 07:10 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 07:10 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 07:10 PM
Surr: 1,2-Dichloroethane-d4	102	78-125		%REC	1	2/26/2016 07:10 PM
Surr: 4-Bromofluorobenzene	98.6	80-120		%REC	1	2/26/2016 07:10 PM
Surr: Dibromofluoromethane	107	80-122		%REC	1	2/26/2016 07:10 PM
Surr: Toluene-d8	101	80-120		%REC	1	2/26/2016 07:10 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-013

Client Sample ID: MW-17
Collection Date: 2/24/2016 11:05:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch:	P16VW043		PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 07:35 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 07:35 PM
Tetrachloroethene	50	0.50		µg/L	1	2/26/2016 07:35 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 07:35 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 07:35 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 07:35 PM
Surr: 1,2-Dichloroethane-d4	102	78-125		%REC	1	2/26/2016 07:35 PM
Surr: 4-Bromofluorobenzene	97.3	80-120		%REC	1	2/26/2016 07:35 PM
Surr: Dibromofluoromethane	104	80-122		%REC	1	2/26/2016 07:35 PM
Surr: Toluene-d8	101	80-120		%REC	1	2/26/2016 07:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-014

Client Sample ID: MW-19
Collection Date: 2/22/2016 11:45:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 08:41 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 08:41 PM
Tetrachloroethene	1100	25		µg/L	50	3/6/2016 02:15 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 08:41 PM
Trichloroethene	5.2	0.50		µg/L	1	3/5/2016 08:41 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 08:41 PM
Surr: 1,2-Dichloroethane-d4	117	78-125		%REC	50	3/6/2016 02:15 PM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	1	3/5/2016 08:41 PM
Surr: 4-Bromofluorobenzene	94.0	80-120		%REC	50	3/6/2016 02:15 PM
Surr: 4-Bromofluorobenzene	94.3	80-120		%REC	1	3/5/2016 08:41 PM
Surr: Dibromofluoromethane	119	80-122		%REC	50	3/6/2016 02:15 PM
Surr: Dibromofluoromethane	118	80-122		%REC	1	3/5/2016 08:41 PM
Surr: Toluene-d8	102	80-120		%REC	50	3/6/2016 02:15 PM
Surr: Toluene-d8	103	80-120		%REC	1	3/5/2016 08:41 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-20
Lab Order:	N018857	**Collection Date:**	2/22/2016 11:05:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-015		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 08:15 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 08:15 PM
Tetrachloroethene	740	10		µg/L	20	3/6/2016 02:42 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 08:15 PM
Trichloroethene	2.5	0.50		µg/L	1	3/5/2016 08:15 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 08:15 PM
Surr: 1,2-Dichloroethane-d4	118	78-125		%REC	20	3/6/2016 02:42 PM
Surr: 1,2-Dichloroethane-d4	117	78-125		%REC	1	3/5/2016 08:15 PM
Surr: 4-Bromofluorobenzene	96.2	80-120		%REC	20	3/6/2016 02:42 PM
Surr: 4-Bromofluorobenzene	95.7	80-120		%REC	1	3/5/2016 08:15 PM
Surr: Dibromofluoromethane	115	80-122		%REC	20	3/6/2016 02:42 PM
Surr: Dibromofluoromethane	118	80-122		%REC	1	3/5/2016 08:15 PM
Surr: Toluene-d8	102	80-120		%REC	20	3/6/2016 02:42 PM
Surr: Toluene-d8	104	80-120		%REC	1	3/5/2016 08:15 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-34
Lab Order:	N018857	**Collection Date:**	2/24/2016 12:55:00 PM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-016		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch:	P16VW043		PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 09:17 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 09:17 PM
Tetrachloroethene	180	2.5		µg/L	5	3/6/2016 03:08 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 09:17 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 09:17 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 09:17 PM
Surr: 1,2-Dichloroethane-d4	103	78-125		%REC	1	2/26/2016 09:17 PM
Surr: 1,2-Dichloroethane-d4	119	78-125		%REC	5	3/6/2016 03:08 PM
Surr: 4-Bromofluorobenzene	97.7	80-120		%REC	1	2/26/2016 09:17 PM
Surr: 4-Bromofluorobenzene	94.6	80-120		%REC	5	3/6/2016 03:08 PM
Surr: Dibromofluoromethane	104	80-122		%REC	1	2/26/2016 09:17 PM
Surr: Dibromofluoromethane	117	80-122		%REC	5	3/6/2016 03:08 PM
Surr: Toluene-d8	101	80-120		%REC	1	2/26/2016 09:17 PM
Surr: Toluene-d8	104	80-120		%REC	5	3/6/2016 03:08 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-017

Client Sample ID: MW-35
Collection Date: 2/24/2016 11:45:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch: P16VW043			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 08:00 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 08:00 PM
Tetrachloroethene	170	2.5		µg/L	5	3/6/2016 03:35 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 08:00 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 08:00 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 08:00 PM
Surr: 1,2-Dichloroethane-d4	104	78-125		%REC	1	2/26/2016 08:00 PM
Surr: 1,2-Dichloroethane-d4	121	78-125		%REC	5	3/6/2016 03:35 PM
Surr: 4-Bromofluorobenzene	98.8	80-120		%REC	1	2/26/2016 08:00 PM
Surr: 4-Bromofluorobenzene	96.0	80-120		%REC	5	3/6/2016 03:35 PM
Surr: Dibromofluoromethane	105	80-122		%REC	1	2/26/2016 08:00 PM
Surr: Dibromofluoromethane	120	80-122		%REC	5	3/6/2016 03:35 PM
Surr: Toluene-d8	101	80-120		%REC	1	2/26/2016 08:00 PM
Surr: Toluene-d8	102	80-120		%REC	5	3/6/2016 03:35 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-40 CMT50
Lab Order:	N018857	**Collection Date:**	2/25/2016 10:45:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-018		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 06:03 PM
cis-1,2-Dichloroethene	1.4	0.50		µg/L	1	3/5/2016 06:03 PM
Tetrachloroethene	290	5.0		µg/L	10	3/6/2016 04:01 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 06:03 PM
Trichloroethene	18	0.50		µg/L	1	3/5/2016 06:03 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 06:03 PM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	10	3/6/2016 04:01 PM
Surr: 1,2-Dichloroethane-d4	118	78-125		%REC	1	3/5/2016 06:03 PM
Surr: 4-Bromofluorobenzene	94.6	80-120		%REC	10	3/6/2016 04:01 PM
Surr: 4-Bromofluorobenzene	93.1	80-120		%REC	1	3/5/2016 06:03 PM
Surr: Dibromofluoromethane	117	80-122		%REC	10	3/6/2016 04:01 PM
Surr: Dibromofluoromethane	120	80-122		%REC	1	3/5/2016 06:03 PM
Surr: Toluene-d8	101	80-120		%REC	10	3/6/2016 04:01 PM
Surr: Toluene-d8	99.3	80-120		%REC	1	3/5/2016 06:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-40 CMT55
Lab Order:	N018857	**Collection Date:**	2/25/2016 11:35:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-019		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
EPA 8260B						
RunID: MS8_160305A QC Batch: R16VW007 PrepDate: Analyst: **QBM**						
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 07:22 PM
cis-1,2-Dichloroethene	1.1	0.50		µg/L	1	3/5/2016 07:22 PM
Tetrachloroethene	640	10		µg/L	20	3/6/2016 04:27 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 07:22 PM
Trichloroethene	4.4	0.50		µg/L	1	3/5/2016 07:22 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 07:22 PM
Surr: 1,2-Dichloroethane-d4	121	78-125		%REC	1	3/5/2016 07:22 PM
Surr: 1,2-Dichloroethane-d4	122	78-125		%REC	20	3/6/2016 04:27 PM
Surr: 4-Bromofluorobenzene	94.1	80-120		%REC	1	3/5/2016 07:22 PM
Surr: 4-Bromofluorobenzene	95.4	80-120		%REC	20	3/6/2016 04:27 PM
Surr: Dibromofluoromethane	121	80-122		%REC	1	3/5/2016 07:22 PM
Surr: Dibromofluoromethane	121	80-122		%REC	20	3/6/2016 04:27 PM
Surr: Toluene-d8	103	80-120		%REC	20	3/6/2016 04:27 PM
Surr: Toluene-d8	104	80-120		%REC	1	3/5/2016 07:22 PM
HEXAVALENT CHROMIUM BY IC						
EPA 218.6						
RunID: IC7_160302A QC Batch: R106202 PrepDate: Analyst: **RB**						
Hexavalent Chromium	33	1.0		µg/L	5	3/2/2016 01:13 PM
DISSOLVED METALS BY ICP-MS						
EPA 3010A **EPA 6020**						
RunID: ICP7_160307A QC Batch: 56426 PrepDate: 2/26/2016 Analyst: **CEI**						
Arsenic	1.2	0.10		µg/L	1	3/7/2016 10:29 PM
Chromium	31	1.0		µg/L	1	3/7/2016 10:29 PM
Manganese	ND	0.50		µg/L	1	3/7/2016 10:29 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-020

Client Sample ID: MW-14I
Collection Date: 2/22/2016 1:30:00 PM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	5.0		µg/L	10	3/5/2016 10:53 PM
cis-1,2-Dichloroethene	26	5.0		µg/L	10	3/5/2016 10:53 PM
Tetrachloroethene	11000	250		µg/L	500	3/6/2016 04:53 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	10	3/5/2016 10:53 PM
Trichloroethene	32	5.0		µg/L	10	3/5/2016 10:53 PM
Vinyl chloride	ND	5.0		µg/L	10	3/5/2016 10:53 PM
Surr: 1,2-Dichloroethane-d4	119	78-125		%REC	500	3/6/2016 04:53 PM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	10	3/5/2016 10:53 PM
Surr: 4-Bromofluorobenzene	93.7	80-120		%REC	500	3/6/2016 04:53 PM
Surr: 4-Bromofluorobenzene	96.2	80-120		%REC	10	3/5/2016 10:53 PM
Surr: Dibromofluoromethane	119	80-122		%REC	500	3/6/2016 04:53 PM
Surr: Dibromofluoromethane	119	80-122		%REC	10	3/5/2016 10:53 PM
Surr: Toluene-d8	103	80-120		%REC	500	3/6/2016 04:53 PM
Surr: Toluene-d8	106	80-120		%REC	10	3/5/2016 10:53 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-021

Client Sample ID: MW-6D1
Collection Date: 2/23/2016 11:10:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 04:44 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 04:44 PM
Tetrachloroethene	2.0	0.50		µg/L	1	3/5/2016 04:44 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 04:44 PM
Trichloroethene	ND	0.50		µg/L	1	3/5/2016 04:44 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 04:44 PM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	1	3/5/2016 04:44 PM
Surr: 4-Bromofluorobenzene	95.3	80-120		%REC	1	3/5/2016 04:44 PM
Surr: Dibromofluoromethane	121	80-122		%REC	1	3/5/2016 04:44 PM
Surr: Toluene-d8	102	80-120		%REC	1	3/5/2016 04:44 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-6D2
Lab Order:	N018857	**Collection Date:**	2/23/2016 10:30:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-022		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 05:11 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 05:11 PM
Tetrachloroethene	2.6	0.50		µg/L	1	3/5/2016 05:11 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 05:11 PM
Trichloroethene	0.68	0.50		µg/L	1	3/5/2016 05:11 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 05:11 PM
Surr: 1,2-Dichloroethane-d4	118	78-125		%REC	1	3/5/2016 05:11 PM
Surr: 4-Bromofluorobenzene	96.2	80-120		%REC	1	3/5/2016 05:11 PM
Surr: Dibromofluoromethane	120	80-122		%REC	1	3/5/2016 05:11 PM
Surr: Toluene-d8	104	80-120		%REC	1	3/5/2016 05:11 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-6D3
Lab Order:	N018857	**Collection Date:**	2/23/2016 11:40:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-023		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 05:37 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 05:37 PM
Tetrachloroethene	30	0.50		µg/L	1	3/5/2016 05:37 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 05:37 PM
Trichloroethene	0.70	0.50		µg/L	1	3/5/2016 05:37 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 05:37 PM
Surr: 1,2-Dichloroethane-d4	121	78-125		%REC	1	3/5/2016 05:37 PM
Surr: 4-Bromofluorobenzene	95.8	80-120		%REC	1	3/5/2016 05:37 PM
Surr: Dibromofluoromethane	121	80-122		%REC	1	3/5/2016 05:37 PM
Surr: Toluene-d8	106	80-120		%REC	1	3/5/2016 05:37 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-024

Client Sample ID: MW-20D1
Collection Date: 2/22/2016 10:15:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 06:56 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 06:56 PM
Tetrachloroethene	410	5.0		µg/L	10	3/6/2016 05:20 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 06:56 PM
Trichloroethene	1.6	0.50		µg/L	1	3/5/2016 06:56 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 06:56 PM
Surr: 1,2-Dichloroethane-d4	118	78-125		%REC	10	3/6/2016 05:20 PM
Surr: 1,2-Dichloroethane-d4	118	78-125		%REC	1	3/5/2016 06:56 PM
Surr: 4-Bromofluorobenzene	92.4	80-120		%REC	10	3/6/2016 05:20 PM
Surr: 4-Bromofluorobenzene	94.8	80-120		%REC	1	3/5/2016 06:56 PM
Surr: Dibromofluoromethane	118	80-122		%REC	10	3/6/2016 05:20 PM
Surr: Dibromofluoromethane	123	80-122	S	%REC	1	3/5/2016 06:56 PM
Surr: Toluene-d8	104	80-120		%REC	10	3/6/2016 05:20 PM
Surr: Toluene-d8	103	80-120		%REC	1	3/5/2016 06:56 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-025

Client Sample ID: MW-20D2
Collection Date: 2/22/2016 9:40:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 06:30 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 06:30 PM
Tetrachloroethene	170	2.5		µg/L	5	3/6/2016 05:46 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 06:30 PM
Trichloroethene	1.2	0.50		µg/L	1	3/5/2016 06:30 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 06:30 PM
Surr: 1,2-Dichloroethane-d4	117	78-125		%REC	5	3/6/2016 05:46 PM
Surr: 1,2-Dichloroethane-d4	117	78-125		%REC	1	3/5/2016 06:30 PM
Surr: 4-Bromofluorobenzene	93.9	80-120		%REC	5	3/6/2016 05:46 PM
Surr: 4-Bromofluorobenzene	94.5	80-120		%REC	1	3/5/2016 06:30 PM
Surr: Dibromofluoromethane	116	80-122		%REC	5	3/6/2016 05:46 PM
Surr: Dibromofluoromethane	119	80-122		%REC	1	3/5/2016 06:30 PM
Surr: Toluene-d8	101	80-120		%REC	5	3/6/2016 05:46 PM
Surr: Toluene-d8	105	80-120		%REC	1	3/5/2016 06:30 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	MW-20D3
Lab Order:	N018857	**Collection Date:**	2/22/2016 9:00:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-026		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 04:18 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 04:18 PM
Tetrachloroethene	2.0	0.50		µg/L	1	3/5/2016 04:18 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 04:18 PM
Trichloroethene	ND	0.50		µg/L	1	3/5/2016 04:18 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 04:18 PM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	1	3/5/2016 04:18 PM
Surr: 4-Bromofluorobenzene	98.6	80-120		%REC	1	3/5/2016 04:18 PM
Surr: Dibromofluoromethane	121	80-122		%REC	1	3/5/2016 04:18 PM
Surr: Toluene-d8	104	80-120		%REC	1	3/5/2016 04:18 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-027

Client Sample ID: Equipment Blank
Collection Date: 2/25/2016 9:45:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch:	P16VW043		PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 04:38 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 04:38 PM
Tetrachloroethene	ND	0.50		µg/L	1	2/26/2016 04:38 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 04:38 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 04:38 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 04:38 PM
Surr: 1,2-Dichloroethane-d4	102	78-125		%REC	1	2/26/2016 04:38 PM
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	2/26/2016 04:38 PM
Surr: Dibromofluoromethane	106	80-122		%REC	1	2/26/2016 04:38 PM
Surr: Toluene-d8	104	80-120		%REC	1	2/26/2016 04:38 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-028

Client Sample ID: Field Blank
Collection Date: 2/25/2016 11:00:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch: P16VW043			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 05:03 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 05:03 PM
Tetrachloroethene	ND	0.50		µg/L	1	2/26/2016 05:03 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 05:03 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 05:03 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 05:03 PM
Surr: 1,2-Dichloroethane-d4	108	78-125		%REC	1	2/26/2016 05:03 PM
Surr: 4-Bromofluorobenzene	97.0	80-120		%REC	1	2/26/2016 05:03 PM
Surr: Dibromofluoromethane	109	80-122		%REC	1	2/26/2016 05:03 PM
Surr: Toluene-d8	98.2	80-120		%REC	1	2/26/2016 05:03 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT:	Cardno ATC	**Client Sample ID:**	Trip Blank
Lab Order:	N018857	**Collection Date:**	2/25/2016 7:00:00 AM
Project:	Maryland Square, NPMMA16002	**Matrix:**	GROUNDWATER
Lab ID:	N018857-029		

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS5_160226A	QC Batch: P16VW043			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 05:28 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 05:28 PM
Tetrachloroethene	ND	0.50		µg/L	1	2/26/2016 05:28 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	2/26/2016 05:28 PM
Trichloroethene	ND	0.50		µg/L	1	2/26/2016 05:28 PM
Vinyl chloride	ND	0.50		µg/L	1	2/26/2016 05:28 PM
Surr: 1,2-Dichloroethane-d4	107	78-125		%REC	1	2/26/2016 05:28 PM
Surr: 4-Bromofluorobenzene	101	80-120		%REC	1	2/26/2016 05:28 PM
Surr: Dibromofluoromethane	106	80-122		%REC	1	2/26/2016 05:28 PM
Surr: Toluene-d8	104	80-120		%REC	1	2/26/2016 05:28 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018857
Project: Maryland Square, NPMMA16002
Lab ID: N018857-030

Client Sample ID: MW-13 DUP
Collection Date: 2/25/2016 9:30:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160305A	QC Batch: R16VW007			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 09:34 PM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 09:34 PM
Tetrachloroethene	1700	25		µg/L	50	3/6/2016 01:23 PM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/5/2016 09:34 PM
Trichloroethene	4.3	0.50		µg/L	1	3/5/2016 09:34 PM
Vinyl chloride	ND	0.50		µg/L	1	3/5/2016 09:34 PM
Surr: 1,2-Dichloroethane-d4	119	78-125		%REC	50	3/6/2016 01:23 PM
Surr: 1,2-Dichloroethane-d4	124	78-125		%REC	1	3/5/2016 09:34 PM
Surr: 4-Bromofluorobenzene	94.2	80-120		%REC	50	3/6/2016 01:23 PM
Surr: 4-Bromofluorobenzene	97.9	80-120		%REC	1	3/5/2016 09:34 PM
Surr: Dibromofluoromethane	114	80-122		%REC	50	3/6/2016 01:23 PM
Surr: Dibromofluoromethane	125	80-122	S	%REC	1	3/5/2016 09:34 PM
Surr: Toluene-d8	102	80-120		%REC	50	3/6/2016 01:23 PM
Surr: Toluene-d8	104	80-120		%REC	1	3/5/2016 09:34 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: Cardno ATC
Work Order: N018857
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_W

Sample ID: **LCS-R106202** SampType: **LCS** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106202**
Client ID: **LCSW** Batch ID: **R106202** TestNo: **EPA 218.6** Analysis Date: **3/2/2016** SeqNo: **2250057**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	4.841	0.20	5.000	0	96.8	90	110				

Sample ID: **MB-R106202** SampType: **MBLK** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106202**
Client ID: **PBW** Batch ID: **R106202** TestNo: **EPA 218.6** Analysis Date: **3/2/2016** SeqNo: **2250058**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID: **N018857-019CDUP** SampType: **DUP** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106202**
Client ID: **ZZZZZZ** Batch ID: **R106202** TestNo: **EPA 218.6** Analysis Date: **3/2/2016** SeqNo: **2250060**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	32.673	1.0						32.75	0.234	20	

Sample ID: **N018857-019CMS** SampType: **MS** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106202**
Client ID: **ZZZZZZ** Batch ID: **R106202** TestNo: **EPA 218.6** Analysis Date: **3/2/2016** SeqNo: **2250061**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	57.704	1.0	25.00	32.75	99.8	90	110				

Sample ID: **N018857-019CMSD** SampType: **MSD** TestCode: **218.6_W** Units: **µg/L** Prep Date: RunNo: **106202**
Client ID: **ZZZZZZ** Batch ID: **R106202** TestNo: **EPA 218.6** Analysis Date: **3/2/2016** SeqNo: **2250062**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	57.627	1.0	25.00	32.75	99.5	90	110	57.70	0.134	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018857
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS

Sample ID: **MB-56426**	SampType: **MBLK**	TestCode: **6020_DIS**	Units: **µg/L**	Prep Date: **2/26/2016**	RunNo: **106294**
Client ID: **PBW**	Batch ID: **56426**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **3/7/2016**	SeqNo: **2254558**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.10									
Manganese	ND	0.50									

Sample ID: **LCS-56426**	SampType: **LCS**	TestCode: **6020_DIS**	Units: **µg/L**	Prep Date: **2/26/2016**	RunNo: **106294**
Client ID: **LCSW**	Batch ID: **56426**	TestNo: **EPA 6020**	**EPA 3010A**	Analysis Date: **3/7/2016**	SeqNo: **2254559**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	10.266	0.10	10.00	0	103	85	115				
Manganese	100.802	0.50	100.0	0	101	85	115				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018857
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **P160226LCS** SampType: **LCS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **LCSW** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244437**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17.660	0.50	20.00	0	88.3	71	127				
cis-1,2-Dichloroethene	20.360	0.50	20.00	0	102	80	120				
Tetrachloroethene	21.300	0.50	20.00	0	106	80	120				
trans-1,2-Dichloroethene	11.530	0.50	20.00	0	57.6	78	126				S
Trichloroethene	20.750	0.50	20.00	0	104	80	120				
Vinyl chloride	18.650	0.50	20.00	0	93.3	70	135				
Surr: 1,2-Dichloroethane-d4	25.670		25.00		103	78	125				
Surr: 4-Bromofluorobenzene	25.360		25.00		101	80	120				
Surr: Dibromofluoromethane	25.780		25.00		103	80	122				
Surr: Toluene-d8	25.590		25.00		102	80	120				

Sample ID: **P160226MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **PBW** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244438**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
Tetrachloroethene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	21.650		25.00		86.6	78	125				
Surr: 4-Bromofluorobenzene	24.750		25.00		99.0	80	120				
Surr: Dibromofluoromethane	22.340		25.00		89.4	80	122				
Surr: Toluene-d8	28.840		25.00		115	80	120				

Sample ID: **N018857-007AMS** SampType: **MS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **ZZZZZZ** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018857
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **N018857-007AMS** SampType: **MS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **ZZZZZZ** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.970	0.50	20.00	0	94.8	62	135				
cis-1,2-Dichloroethene	20.880	0.50	20.00	0	104	73	125				
Tetrachloroethene	27.800	0.50	20.00	6.330	107	71	123				
trans-1,2-Dichloroethene	13.580	0.50	20.00	0	67.9	64	132				
Trichloroethene	20.570	0.50	20.00	0	103	79	121				
Vinyl chloride	21.710	0.50	20.00	0	109	64	134				
Surr: 1,2-Dichloroethane-d4	25.030		25.00		100	78	125				
Surr: 4-Bromofluorobenzene	25.190		25.00		101	80	120				
Surr: Dibromofluoromethane	25.750		25.00		103	80	122				
Surr: Toluene-d8	25.690		25.00		103	80	120				

Sample ID: **N018857-007AMSD** SampType: **MSD** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106099**
Client ID: **ZZZZZZ** Batch ID: **P16VW043** TestNo: **EPA 8260B** Analysis Date: **2/26/2016** SeqNo: **2244445**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.270	0.50	20.00	0	96.4	62	135	18.97	1.57	20	
cis-1,2-Dichloroethene	20.790	0.50	20.00	0	104	73	125	20.88	0.432	20	
Tetrachloroethene	27.640	0.50	20.00	6.330	107	71	123	27.80	0.577	20	
trans-1,2-Dichloroethene	20.780	0.50	20.00	0	104	64	132	13.58	41.9	20	R
Trichloroethene	21.070	0.50	20.00	0	105	79	121	20.57	2.40	20	
Vinyl chloride	19.540	0.50	20.00	0	97.7	64	134	21.71	10.5	20	
Surr: 1,2-Dichloroethane-d4	25.450		25.00		102	78	125		0		
Surr: 4-Bromofluorobenzene	24.900		25.00		99.6	80	120		0		
Surr: Dibromofluoromethane	25.460		25.00		102	80	122		0		
Surr: Toluene-d8	25.140		25.00		101	80	120		0		

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018857
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **R160305LCS** SampType: **LCS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106247**
Client ID: **LCSW** Batch ID: **R16VW007** TestNo: **EPA 8260B** Analysis Date: **3/5/2016** SeqNo: **2252031**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.390	0.50	20.00	0	92.0	71	127				
cis-1,2-Dichloroethene	17.690	0.50	20.00	0	88.4	80	120				
Tetrachloroethene	19.090	0.50	20.00	0	95.4	80	120				
trans-1,2-Dichloroethene	18.590	0.50	20.00	0	93.0	78	126				
Trichloroethene	19.030	0.50	20.00	0	95.2	80	120				
Vinyl chloride	19.130	0.50	20.00	0	95.7	70	135				
Surr: 1,2-Dichloroethane-d4	25.600		25.00		102	78	125				
Surr: 4-Bromofluorobenzene	26.140		25.00		105	80	120				
Surr: Dibromofluoromethane	26.580		25.00		106	80	122				
Surr: Toluene-d8	26.040		25.00		104	80	120				

Sample ID: **R160305LCSD** SampType: **LCSD** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106247**
Client ID: **LCSS02** Batch ID: **R16VW007** TestNo: **EPA 8260B** Analysis Date: **3/5/2016** SeqNo: **2252032**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.710	0.50	20.00	0	93.6	71	127	18.39	1.73	20	
cis-1,2-Dichloroethene	18.060	0.50	20.00	0	90.3	80	120	17.69	2.07	20	
Tetrachloroethene	19.950	0.50	20.00	0	99.8	80	120	19.09	4.41	20	
trans-1,2-Dichloroethene	18.750	0.50	20.00	0	93.8	78	126	18.59	0.857	20	
Trichloroethene	19.360	0.50	20.00	0	96.8	80	120	19.03	1.72	20	
Vinyl chloride	19.260	0.50	20.00	0	96.3	70	135	19.13	0.677	20	
Surr: 1,2-Dichloroethane-d4	25.380		25.00		102	78	125		0		
Surr: 4-Bromofluorobenzene	26.700		25.00		107	80	120		0		
Surr: Dibromofluoromethane	25.580		25.00		102	80	122		0		
Surr: Toluene-d8	25.900		25.00		104	80	120		0		

Sample ID: **R160305MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106247**
Client ID: **PBW** Batch ID: **R16VW007** TestNo: **EPA 8260B** Analysis Date: **3/5/2016** SeqNo: **2252033**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018857
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **R160305MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106247**
Client ID: **PBW** Batch ID: **R16VW007** TestNo: **EPA 8260B** Analysis Date: **3/5/2016** SeqNo: **2252033**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
Tetrachloroethene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	0.310	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	28.750		25.00		115	78	125				
Surr: 4-Bromofluorobenzene	23.860		25.00		95.4	80	120				
Surr: Dibromofluoromethane	28.670		25.00		115	80	122				
Surr: Toluene-d8	25.730		25.00		103	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018857
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **R160306LCS** SampType: **LCS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106251**
Client ID: **LCSW** Batch ID: **R16VW008** TestNo: **EPA 8260B** Analysis Date: **3/6/2016** SeqNo: **2252166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.600	0.50	20.00	0	93.0	71	127				
cis-1,2-Dichloroethene	18.310	0.50	20.00	0	91.6	80	120				
Tetrachloroethene	20.310	0.50	20.00	0	102	80	120				B
trans-1,2-Dichloroethene	19.450	0.50	20.00	0	97.3	78	126				
Trichloroethene	19.680	0.50	20.00	0	98.4	80	120				
Vinyl chloride	19.020	0.50	20.00	0	95.1	70	135				
Surr: 1,2-Dichloroethane-d4	25.560		25.00		102	78	125				
Surr: 4-Bromofluorobenzene	26.160		25.00		105	80	120				
Surr: Dibromofluoromethane	25.710		25.00		103	80	122				
Surr: Toluene-d8	26.280		25.00		105	80	120				

Sample ID: **R160306LCSD** SampType: **LCSD** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106251**
Client ID: **LCSS02** Batch ID: **R16VW008** TestNo: **EPA 8260B** Analysis Date: **3/6/2016** SeqNo: **2252167**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.680	0.50	20.00	0	93.4	71	127	18.60	0.429	20	
cis-1,2-Dichloroethene	18.450	0.50	20.00	0	92.2	80	120	18.31	0.762	20	
Tetrachloroethene	20.730	0.50	20.00	0	104	80	120	20.31	2.05	20	B
trans-1,2-Dichloroethene	19.280	0.50	20.00	0	96.4	78	126	19.45	0.878	20	
Trichloroethene	19.380	0.50	20.00	0	96.9	80	120	19.68	1.54	20	
Vinyl chloride	19.480	0.50	20.00	0	97.4	70	135	19.02	2.39	20	
Surr: 1,2-Dichloroethane-d4	25.620		25.00		102	78	125		0		
Surr: 4-Bromofluorobenzene	26.190		25.00		105	80	120		0		
Surr: Dibromofluoromethane	25.710		25.00		103	80	122		0		
Surr: Toluene-d8	26.070		25.00		104	80	120		0		

Sample ID: **R160306MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106251**
Client ID: **PBW** Batch ID: **R16VW008** TestNo: **EPA 8260B** Analysis Date: **3/6/2016** SeqNo: **2252168**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018857
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **R160306MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106251**
Client ID: **PBW** Batch ID: **R16VW008** TestNo: **EPA 8260B** Analysis Date: **3/6/2016** SeqNo: **2252168**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
Tetrachloroethene	0.570	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	29.870		25.00		119	78	125				
Surr: 4-Bromofluorobenzene	24.490		25.00		98.0	80	120				
Surr: Dibromofluoromethane	29.340		25.00		117	80	122				
Surr: Toluene-d8	26.030		25.00		104	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y ☐ N ☐ (1.2°C, 1/#2 ice)
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☐ N ☐
4. SEALED Y ☐ N ☐
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: ~~LV20915014~~ NPMMA16002
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.*
(Printed Name) Johanna Garcia
(Signature)

Relinquished by: (Signature and Printed Name)	Date	Time	Received by: (Signature and Printed Name)	Date	Time
	2/25/16	1300		2/25/16 @ 1300	
	2/25/16	1545		2/25/16	15:45

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
	N018857-1	MW-1	2/24/16	1220				X					X		E	3	V	H	
	-2	MW-2	2/25/16	850				X					X		E	3	V	H	
	-3	MW-5	2/23/16	1220				X					X		E	3	V	H	
	-4	MW-6	2/23/16	1305				X					X		E	3	V	H	
	-5	MW-7	2/24/16	1035				X					X		E	3	V	H	
	-6	MW-8	2/24/16	930				X					X		E	3	V	H	
	-7	MW-9	2/24/16	1000				X					X		E	3	V	H	
	-8	MW-10	2/23/16	853				X					X		E	3	V	H	
	-9	MW-11	—	—				X					X		E	3	V	H	
	-9b	MW-12	2/24/16	850				X					X		E	3	V	H	

HSC 2/25/16

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives:
H=HCl N=HNO_3 S=H_2SO_4 C=4°C
Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED Y ☐ N ☐ (1.2°C, ICE PACK)
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☐ N ☐
4. SEALED Y ☐ N ☐
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: ~~LV20915014~~ LVMA1602
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.*
(Printed Name) Johanna Gaia
(Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Johanna Gaia	2/25/16	17		2/25/16	1430
	2/25/16 @ 1545			2/25/16	15:45

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

QA / QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode _____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	N018857-10	MW-13	2/23/16	930				X					X		E	3	V	H	
	-11	MW-14	2/22/16	1255				X					X		E	3	V	H	
	-12	MW-15	2/23/16	940				X					X		E	3	V	H	
		MW-16	—	—				X					X		E	3	V	H	
	-13	MW-17	2/24/16	1105				X					X		E	3	V	H	
		MW-18	—	—				X					X		E	3	V	H	
	-14	MW-19	2/22/16	1145				X					X		E	3	V	H	
	-15	MW-20	2/22/16	1105				X					X		E	3	V	H	
		MW-21	—	—				X					X		E	3	V	H	
		MW-22	—	—				X					X		E	3	V	H	

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES

11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____

Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED 1.2°C ICE Y ☐ N ☐
2. HEADSPACE (VOA) 1242 Y ☐ N ☐
3. CONTAINER INTACT Y ☐ N ☐
4. SEALED Y ☐ N ☐
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: Cardno
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: ~~LV20915014~~ NPMMA160082
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.* (Printed Name) Johanna Garcia (Signature)

Relinquished by: (Signature and Printed Name)	Date	Time	Received by: (Signature and Printed Name)	Date	Time
Johanna Garcia	2/25/16	1300		2/25/16	@ 1430
	2/25/16	1545		2/25/16	15:45

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

Q A / Q C: RTNE ☐ CT ☐ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
		MW-32	—	—				X					X		E	3	V	H	
		MW-33	—	—				X					X		E	3	V	H	
	N018857-16	MW-34	2/24/16	1255				X					X		E	3	V	H	
	1 -17	MW-35	2/24/16	1145				X					X		E	3	V	H	
		MW-36	—	—				X					X		E	3	V	H	
		MW-37	—	—				X					X		E	3	V	H	
		MW-38	—	—				X					X		E	3	V	H	
		MW-39	—	—				X					X		E	3	V	H	
		MW-40 CMT30	—	—				X					X		E	3	V	H	
		MW-40 CMT35	—	—				X					X		E	3	V	H	

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives:
H=HCl N=HNO_3 S=H_2SO_4 C=4°C
Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED 1.2°C IR#2 Y ☐ N ☐
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☐ N ☐
4. SEALED Y ☐ N ☐
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: ~~LV20915014~~ NPMMS16002
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.*
(Printed Name) Johanna Gaia
(Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Johanna Gaia	2/25/16	1300		2/25/16	@ 1400
	2/25/16	1545		2/25/16	15:45

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
		MW-40 CMT40	—	—				X					X		E	3	V	H	
		MW-40 CMT45	—	—				X					X		E	3	V	H	
	N018857-18	MW-40 CMT50	2/25/16	1045				X					X		E	3	V	H	
	-19	MW-40 CMT55	2/25/16	1135				X	X	X			X		E	3	V	H	
		MW-40 CMT60	—	—				X					X		E	3	V	H	
		MW-41	—	—				X					X		E	3	V	H	
		MW-42	—	—				X					X		E	3	V	H	
		MW-43	—	—				X					X		E	3	V	H	
	-20	MW-14I	2/22/16	1330				X					X		E	3	V	H	
		MW-19I	—	—				X					X		E	3	V	H	

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED 1.2°C ICE Y ☐ N ☐
2. HEADSPACE (VOA) IR#2 Y ☐ N ☐
3. CONTAINER INTACT Y ☐ N ☐
4. SEALED Y ☐ N ☐
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adama Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
~~LV20915014~~ NPMMA16002
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.*
(Printed Name) Johanna Gair
(Signature)

Relinquished by: (Signature and Printed Name)	Date	Time	Received by: (Signature and Printed Name)	Date	Time
Johanna Gair	2/25/16	1200		2/25/16	1420
	2/25/16	1545		2/25/16	15:45

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
	N018857-21	MW-6D1	2/23/16	1110			X					X			E	3	V	H	
	-22	MW-6D2	2/23/16	1030			X					X			E	3	V	H	
	-23	MW-6D3	2/23/16	1140			X					X			E	3	V	H	
		MW-19D1	—	—			X					X			E	3	V	H	
		MW-19D2	—	—			X					X			E	3	V	H	
		MW-19D3	—	—			X					X			E	3	V	H	
	-24	MW-20D1	2/22/16	1015			X					X			E	3	V	H	
	-25	MW-20D2	2/22/16	940			X					X			E	3	V	H	
	-26	MW-20D3	2/22/16	900			X					X			E	3	V	H	
	-27	Equipment Blank	2/25/16	945			X					X			E	3	V	H	

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives:
H=HCl N=HNO_3 S=H_2SO_4 C=4°C
Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

ASSET LABORATORIES
11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED 1.2°C Y ☐ N ☐ 4. SEALED Y ☐ N ☐
2. HEADSPACE (VOA) Y ☐ N ☐ 5. # OF SPLS MATCH COC Y ☐ N ☐
3. CONTAINER INTACT Y ☐ N ☐ 6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: ~~LV20915014~~ NPMMA 16002

Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.* (Printed Name) Johanna Garcia (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Johanna Garcia	2/25/16	1300		2/25/16	1430
	2/25/16	1545		2/25/16	15:45
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	N018857-28	Field Blank	2/25/16	1100				X					X		E	3	V	H	
	1 -29	Trip Blank	2/25/16	700				X					X		E	3	V	H	
	1 -30	DUP	2/25/16	930				X					X		E	3	V	H	
								X					X		E	3	V	H	
								X					X		E	3	V	H	
								X					X		E	3	V	H	
								X					X		E	3	V	H	
								X					X		E	3	V	H	
								X					X		E	3	V	H	
								X					X		E	3	V	H	
								X					X		E	3	V	H	

SPECIFY APPROPRIATE MATRIX

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode_____ OTHER _____

- TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	2/25/2016	Workorder:	N018857
Rep sample Temp (Deg C):	1.2	IR Gun ID:	2
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☐	No ☑	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☑	No ☐	NA ☐
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☑	No ☐	NA ☐
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☑	No ☐	NA ☐
Was Client notified?	Yes ☑	No ☐	NA ☐

Comments: Sample 30A: Sample ID on COC is DUP and sample ID on sample label is MW-13 Dup. Sample 8A: Collection time on COC is 8:53 am and collection time on sample label is 8:35 am.

Checklist Completed By: MBC For: 2/29/2016

Reviewed By: 02/29/2016

ASSET Laboratories

WORK ORDER Summary

25-Feb-16

WorkOrder: N018857

Client ID: CARAT01

Project: Maryland Square, NPMMA16002 **QC Level:** RTNE **Date Received:** 2/25/2016

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N018857-001A	MW-1	2/24/2016 12:20:00 PM	3/3/2016	Groundwater	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-002A	MW-2	2/25/2016 8:50:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-003A	MW-5	2/23/2016 12:20:00 PM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-004A	MW-6	2/23/2016 1:05:00 PM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-005A	MW-7	2/24/2016 10:35:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-006A	MW-8	2/24/2016 9:30:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-007A	MW-9	2/24/2016 10:00:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-008A	MW-10	2/23/2016 8:53:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-009A	MW-12	2/24/2016 8:50:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-010A	MW-13	2/23/2016 9:30:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-011A	MW-14	2/22/2016 12:55:00 PM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-012A	MW-15	2/23/2016 9:40:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-013A	MW-17	2/24/2016 11:05:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-014A	MW-19	2/22/2016 11:45:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-015A	MW-20	2/22/2016 11:05:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-016A	MW-34	2/24/2016 12:55:00 PM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

25-Feb-16

WorkOrder: N018857

Client ID: CARAT01

Project: Maryland Square, NPMMA16002 **QC Level:** RTNE **Date Received:** 2/25/2016

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N018857-017A	MW-35	2/24/2016 11:45:00 AM	3/3/2016	Groundwater	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-018A	MW-40 CMT50	2/25/2016 10:45:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-019A	MW-40 CMT55	2/25/2016 11:35:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-019B			3/3/2016		EPA 3010A	AQPREP TOTAL METALS: ICP, FLAA	☐	☐	☐	WW
			3/3/2016		EPA 6020	DISSOLVED METALS BY ICP-MS	☐	☐	☐	WW
N018857-019C			3/3/2016		EPA 218.6	Hexavalent Chromium by IC	☐	☐	☐	WW
N018857-020A	MW-14I	2/22/2016 1:30:00 PM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-021A	MW-6D1	2/23/2016 11:10:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-022A	MW-6D2	2/23/2016 10:30:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-023A	MW-6D3	2/23/2016 11:40:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-024A	MW-20D1	2/22/2016 10:15:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-025A	MW-20D2	2/22/2016 9:40:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-026A	MW-20D3	2/22/2016 9:00:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-027A	Equipment Blank	2/25/2016 9:45:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-028A	Field Blank	2/25/2016 11:00:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-029A	Trip Blank	2/25/2016 7:00:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018857-030A	DUP	2/25/2016 9:30:00 AM	3/3/2016		EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW

ASSET Laboratories

WORK ORDER Summary

25-Feb-16

WorkOrder: N018857

Client ID: CARAT01

Project: Maryland Square, NPMMA16002 **QC Level:** RTNE **Date Received:** 2/25/2016

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N018857-031A	FOLDER		3/3/2016		Folder	Folder	☐	☐	☐	LAB

March 09, 2016

Adam Katlein
Cardno ATC
7115 Amigo Street Suite 100
Las Vegas, NV 89119

TEL: (702) 990-9300
FAX:

CA-ELAP No.: 2676
NV Cert. No.: NV-00922

Workorder No.: N018869

RE: Maryland Square, NPMMA16002

Attention: Adam Katlein

Enclosed are the results for sample(s) received on February 26, 2016 by ASSET Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,

Glen Gesmundo
QA Manager

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories - Las Vegas.

ASSET Laboratories **Date:** *09-Mar-16*

CLIENT: Cardno ATC
Project: Maryland Square, NPMMA16002
Lab Order: N018869

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

Sample was received intact with proper chain of custody documentation.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Sample was analyzed within method holding time.

Analytical Comments for EPA 8260B:

Method Blank has hit above the reporting limit but less than 1/10 of the amount measured in sample.

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES
CALIFORNIA
11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F: 562.219.7436
NEVADA
3151 W. Post Rd., Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691

"Serving Clients with Passion and Professionalism"

ASSET Laboratories

Date: *09-Mar-16*

CLIENT: Cardno ATC
Project: Maryland Square, NPMMA16002
Lab Order: N018869
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N018869-001A	MW-3	Groundwater	2/26/2016 9:35:00 AM	2/26/2016	3/9/2016

ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES
CALIFORNIA
11060 Artesia Blvd., Ste C, Cerritos, CA 90703
P: 562.219.7435 F: 562.219.7436
NEVADA
3151 W. Post Rd., Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691

"Serving Clients with Passion and Professionalism"

ASSET Laboratories

ANALYTICAL RESULTS

Print Date: *09-Mar-16*

CLIENT: Cardno ATC
Lab Order: N018869
Project: Maryland Square, NPMMA16002
Lab ID: N018869-001

Client Sample ID: MW-3
Collection Date: 2/26/2016 9:35:00 AM
Matrix: GROUNDWATER

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS BY GC/MS						
			EPA 8260B			
RunID: MS8_160306A	QC Batch: R16VW008			PrepDate:		Analyst: **QBM**
1,1-Dichloroethene	ND	0.50		µg/L	1	3/6/2016 09:27 AM
cis-1,2-Dichloroethene	ND	0.50		µg/L	1	3/6/2016 09:27 AM
Tetrachloroethene	23	0.50	B	µg/L	1	3/6/2016 09:27 AM
trans-1,2-Dichloroethene	ND	0.50		µg/L	1	3/6/2016 09:27 AM
Trichloroethene	ND	0.50		µg/L	1	3/6/2016 09:27 AM
Vinyl chloride	ND	0.50		µg/L	1	3/6/2016 09:27 AM
Surr: 1,2-Dichloroethane-d4	120	78-125		%REC	1	3/6/2016 09:27 AM
Surr: 4-Bromofluorobenzene	98.2	80-120		%REC	1	3/6/2016 09:27 AM
Surr: Dibromofluoromethane	117	80-122		%REC	1	3/6/2016 09:27 AM
Surr: Toluene-d8	103	80-120		%REC	1	3/6/2016 09:27 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
S	Spike/Surrogate outside of limits due to matrix interference		Results are wet unless otherwise specified
DO	Surrogate Diluted Out		

CLIENT: Cardno ATC
Work Order: N018869
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **R160306LCS** SampType: **LCS** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106251**
Client ID: **LCSW** Batch ID: **R16VW008** TestNo: **EPA 8260B** Analysis Date: **3/6/2016** SeqNo: **2252166**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.600	0.50	20.00	0	93.0	71	127				
cis-1,2-Dichloroethene	18.310	0.50	20.00	0	91.6	80	120				
Tetrachloroethene	20.310	0.50	20.00	0	102	80	120				B
trans-1,2-Dichloroethene	19.450	0.50	20.00	0	97.3	78	126				
Trichloroethene	19.680	0.50	20.00	0	98.4	80	120				
Vinyl chloride	19.020	0.50	20.00	0	95.1	70	135				
Surr: 1,2-Dichloroethane-d4	25.560		25.00		102	78	125				
Surr: 4-Bromofluorobenzene	26.160		25.00		105	80	120				
Surr: Dibromofluoromethane	25.710		25.00		103	80	122				
Surr: Toluene-d8	26.280		25.00		105	80	120				

Sample ID: **R160306LCSD** SampType: **LCSD** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106251**
Client ID: **LCSS02** Batch ID: **R16VW008** TestNo: **EPA 8260B** Analysis Date: **3/6/2016** SeqNo: **2252167**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18.680	0.50	20.00	0	93.4	71	127	18.60	0.429	20	
cis-1,2-Dichloroethene	18.450	0.50	20.00	0	92.2	80	120	18.31	0.762	20	
Tetrachloroethene	20.730	0.50	20.00	0	104	80	120	20.31	2.05	20	B
trans-1,2-Dichloroethene	19.280	0.50	20.00	0	96.4	78	126	19.45	0.878	20	
Trichloroethene	19.380	0.50	20.00	0	96.9	80	120	19.68	1.54	20	
Vinyl chloride	19.480	0.50	20.00	0	97.4	70	135	19.02	2.39	20	
Surr: 1,2-Dichloroethane-d4	25.620		25.00		102	78	125		0		
Surr: 4-Bromofluorobenzene	26.190		25.00		105	80	120		0		
Surr: Dibromofluoromethane	25.710		25.00		103	80	122		0		
Surr: Toluene-d8	26.070		25.00		104	80	120		0		

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CLIENT: Cardno ATC
Work Order: N018869
Project: Maryland Square, NPMMA16002

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: **R160306MB3** SampType: **MBLK** TestCode: **8260WATERP** Units: **µg/L** Prep Date: RunNo: **106251**
Client ID: **PBW** Batch ID: **R16VW008** TestNo: **EPA 8260B** Analysis Date: **3/6/2016** SeqNo: **2252168**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
Tetrachloroethene	0.570	0.50									
trans-1,2-Dichloroethene	ND	0.50									
Trichloroethene	ND	0.50									
Vinyl chloride	ND	0.50									
Surr: 1,2-Dichloroethane-d4	29.870		25.00		119	78	125				
Surr: 4-Bromofluorobenzene	24.490		25.00		98.0	80	120				
Surr: Dibromofluoromethane	29.340		25.00		117	80	122				
Surr: Toluene-d8	26.030		25.00		104	80	120				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits	S	Spike/Surrogate outside of limits due to matrix interference
DO	Surrogate Diluted Out		Calculations are based on raw values		

CHAIN OF CUSTODY RECORD

Page 1 of 1

ASSET LABORATORIES

11060 Artesia Blvd., Suite C
Cerritos, CA 90703
Tel: (562) 219-7435 • Fax: (562) 219-7436

FOR LABORATORY USE ONLY

P.O. #: _____

Logged By: _____ Date: _____

Method of Transport: Client ☐ ASSET ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED 4.6°C IR#2 Y ☑ N ☐
2. HEADSPACE (VOA) Y ☐ N ☐
3. CONTAINER INTACT Y ☐ N ☐
4. SEALED Y ☐ N ☐
5. # OF SPLS MATCH COC Y ☐ N ☐
6. PRESERVED Y ☐ N ☐

Client: ATC Group Services LLC
Attention: Adam Katlein
Address: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip Code: 89119
Tel: 702-990-9300
Fax: 702-990-9305

Project Name: Maryland Square
Project #: ~~LV20915014~~ NPMMA16002
Sampler: *I attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.*
(Printed Name) Johanna Garcia
(Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Johanna Garcia	2/26/16	1400	Flores	2/26/16	1422
Flores	2/26/16	1433	Flores	2/26/16	1433

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter:
Print Name Date
Signature

Send Report To:
Attn: Adam Katlein
Co: ATC
Addr: 7115 Amigo Street, Suite 100
City: Las Vegas State: NV Zip: 89119

Bill To:
Attn: (same)
Co:
Addr:
City: State: Zip:

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ASSET workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

Q A / Q C: RTNE ☐ CT ☐ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8260B (Volatiles)	8015M - GRO	8015B - DRO/ORO	PCE/TCE/DCE/VC 8260	6020 (metals)	218.6 Hexavalent Chromium	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
	N018869-1	MW-3	2/26/16	935				X					X		E	3	V	H	

TAT starts 8AM the following day if samples received after 3 PM

TAT: ☐ A = Overnight ≤ 24 hrs ☐ B = Emergency Next Workday ☐ C = Critical 2 Workdays ☐ D = Urgent 3 Workdays ☑ E = Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On:	2/26/2016	Workorder:	N018869
Rep sample Temp (Deg C):	4.6	IR Gun ID:	2
Temp Blank:	☑ Yes ☐ No		
Carrier name:	ASSET		
Last 4 digits of Tracking No.:	NA	Packing Material Used:	None
Cooling process:	☑ Ice ☐ Ice Pack ☐ Dry Ice ☐ Other ☐ None		

Sample Receipt Checklist

1. Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
2. Custody seals intact, signed, dated on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
3. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
4. Chain of custody present?	Yes ☑	No ☐	
5. Sampler's name present in COC?	Yes ☑	No ☐	
6. Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
7. Chain of custody agrees with sample labels?	Yes ☑	No ☐	
8. Samples in proper container/bottle?	Yes ☑	No ☐	
9. Sample containers intact?	Yes ☑	No ☐	
10. Sufficient sample volume for indicated test?	Yes ☑	No ☐	
11. All samples received within holding time?	Yes ☑	No ☐	
12. Temperature of rep sample or Temp Blank within acceptable limit?	Yes ☑	No ☐	NA ☐
13. Water - VOA vials have zero headspace?	Yes ☑	No ☐	NA ☐
14. Water - pH acceptable upon receipt? Example: pH > 12 for (CN,S); pH<2 for Metals	Yes ☐	No ☐	NA ☑
15. Did the bottle labels indicate correct preservatives used?	Yes ☑	No ☐	NA ☐
16. Were there Non-Conformance issues at login?	Yes ☐	No ☐	NA ☑
Was Client notified?	Yes ☐	No ☐	NA ☑

Comments:

Checklist Completed By: HG 3/1/2016

Reviewed By: 3/2/16

ASSET Laboratories

WORK ORDER Summary

29-Feb-16

WorkOrder: N018869

Client ID: CARAT01

Project: Maryland Square, NPMMA16002 **QC Level:** RTNE **Date Received:** 2/26/2016

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N018869-001A	MW-3	2/26/2016 9:35:00 AM	3/4/2016	Groundwater	EPA 8260B	VOLATILE ORGANIC COMPOUNDS BY GC/MS	☐	☐	☐	VW
N018869-002A	FOLDER		3/4/2016		Folder	Folder	☐	☐	☐	LAB

Maryland Square PCE Site

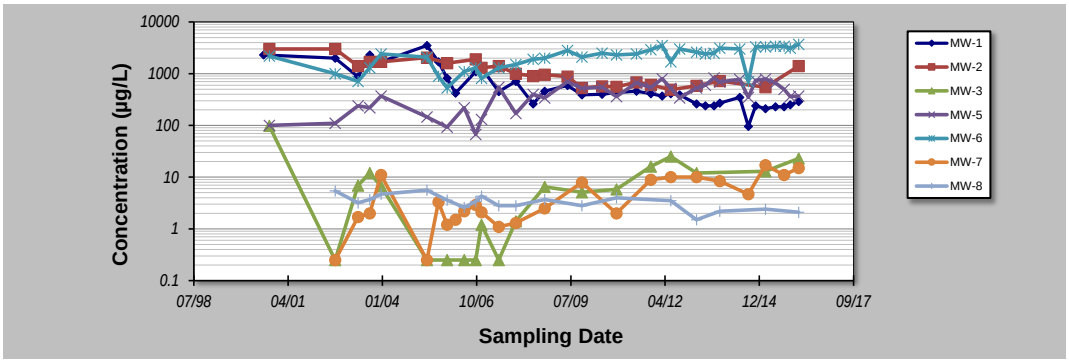
APPENDIX C

MANN-KENDALL TREND TEST FOR PLUME STABILITY

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	1-Mar-16	Job ID:	NPMMA16002
Facility Name:	Maryland Square PCE Site	Constituent:	PCE
Conducted By:	ATC	Concentration Units:	µg/L

Sampling Point ID:	MW-1	MW-2	MW-3	MW-5	MW-6	MW-7	MW-8
Sampling Event / Sampling Date	PCE CONCENTRATION (µg/L)						
1 Aug 00	2,300						
2 Oct 00		3,000	98	100	2,200		
3 Sep 02	2,000	3,000	0.25	110	1,000	0.25	5.4
4 May 03	870	1,400	6.9	240	710	1.7	3.2
5 Sep 03	2,300	1,700	12	220	1,300	2	3.7
6 Jan 04	1,700	1,700	6.7	370	2,400	11	4.7
7 May 05	3,500	2,050	0.25	146	2,090	0.25	5.6
8 Sep 05	1,700				890	3.3	
9 Dec 05	820	1,600	0.25	93	530	1.2	3.6
10 Mar 06	420					1.5	
11 Jun 06			0.25	220	1,100	2.2	2.6
12 Oct 06	1,100	1,900	0.25	67	1,300	2.9	3.4
13 Dec 06	1,300	1,300	1.2	130	810	2.1	4.3
14 Jun 07	450	1,400	0.25	550	1,300	1.1	2.8
15 Dec 07	710	1,000	1.4	170	1,500	1.3	2.8
16 Jun 08	260	900		400	1,900		
17 Oct 08	460	960	6.5	340	2,000	2.5	3.7
18 Jun 09	590	880		700	2,800		
19 Nov 09	390	530	5.1	520	2,100	7.9	2.8
20 Jun 10	400	570		550	2,500		
21 Nov 10	430	560	5.8	360	2,300	2.0	4
22 Jun 11	460	680		670	2,400		
23 Nov 11	410	610	16	540	2,900	8.9	
24 Mar 12	370			800	3,500		
25 Jun 12	410	490	25	520	1,700	10	3.5
26 Sep 12	390			340	3,000		
27 Mar 13	260	580	12	530	2,600	10	1.5
28 Jun 13	240			600	2,400		
29 Sep 13	240			830	2,500		
30 Nov 13	270	720		690	3,100	8.4	2.2
31 Jun 14	350			780	3,000		
32 Sep 14	96			350	700	4.7	
33 Nov 14	240			740	3,300		
34 Mar 15	210	550	13	790	3,300	17	2.4
35 Jun 15	230			660	3,400		
36 Sep 15	230			500	3,400	11	
37 Nov 15	250			360	3,100		
38 Feb 16	290	1400	23	370	3,700	15	2.1
39							
40							
Coefficient of Variation:	1.04	0.59	1.85	0.53	0.43	0.92	0.32
Mann-Kendall Statistic (S):	-456	-177	56	267	375	146	-81
Confidence Factor:	>99.9%	>99.9%	96.3%	>99.9%	>99.9%	>99.9%	99.8%
Concentration Trend:	Decreasing	Decreasing	Increasing	Increasing	Increasing	Increasing	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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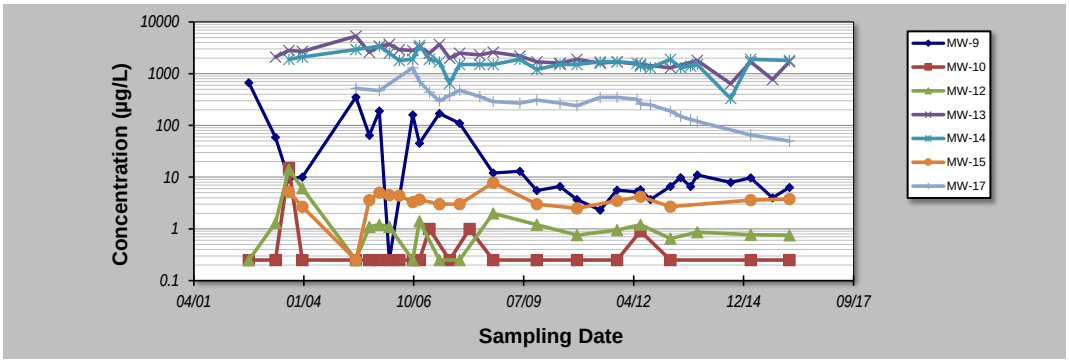
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **1-Mar-16**
Facility Name: **Maryland Square PCE Site**
Conducted By: **ATC**

Job ID: **NPMMA16002**
Constituent: **PCE**
Concentration Units: **µg/L**

Sampling Point ID:		MW-9	MW-10	MW-12	MW-13	MW-14	MW-15	MW-17
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	Sep 02	670	0.25	0.25				
2	May 03	59	0.25	1.3	2100			
3	Sep 03	9	15	14	2,800	1900	5.2	
4	Jan 04	10	0.25	6.1	2,700	2100	2.7	
5	May 05	353	0.25	0.25	5,310	2,920	0.25	520
6	Sep 05	64	0.25	1.1	2,600		3.6	
7	Dec 05	190	0.25	1.2	3,400	3,400	5	470
8	Mar 06	0.25	0.25	1.1	3,700	2,500	4.5	
9	Jun 06		0.25		2,900	1,800	4.4	
10	Oct 06	160	0.25	0.25	2,800	1,900	3.3	1300
11	Dec 06	45	0.25	1.4	3,200	3,500	3.7	710
12	Mar 07		1		2,500	1,900		440
13	Jun 07	170		0.25	3,700	1,700	3	300
14	Sep 07		0.25		2,000	650		380
15	Dec 07	110		0.25	2,500	1,500	3	480
16	Mar 08		1					
17	Jun 08				2,300	1,500		360
18	Oct 08	12	0.25	2	2,600	1,500	7.8	290
19	Jun 09	13			2,200	1,900		270
20	Nov 09	6	0.25	1.2	1,700	1,200	3	310
21	Jun 10	7			1,600	1,500		270
22	Nov 10	4	0.25	0.76	1,900	1,500	2.5	240
23	Jun 11	2			1,600	1,700		350
24	Nov 11	5.6	0.25	0.95	1,700	1,700	3.5	350
25	May 12	5.2				1,600		320
26	Jun 12	5.7	0.9	1.2	1,500	1,400	4.2	260
27	Sep 12	3.7				1,300		250
28	Mar 13	6.6	0.25	0.65	1,300	1,900	2.7	190
29	Jun 13	9.8				1,300		150
30	Sep 13	6.6				1,400		130
31	Nov 13	11.0		0.86	1,800	1,500		120
32	Jun 14							
33	Sep 14	7.9			640	330		
34	Nov 14							
35	Mar 15	9.7	0.25	0.77	1,700	1,900	3.6	65
36	Jun 15							
37	Sep 15	4.0			770			
38	Nov 15							
39	Feb 16	6.3	0.25	0.75	1,700	1,800	3.8	50
40								
Coefficient of Variation:		2.12	3.08	1.76	0.42	0.37	0.40	0.73
Mann-Kendall Statistic (S):		-157	-1	-34	-253	-165	-16	-232
Confidence Factor:		99.8%	50.0%	83.8%	>99.9%	99.9%	69.8%	>99.9%
Concentration Trend:		Decreasing	No Trend	No Trend	Decreasing	Decreasing	Stable	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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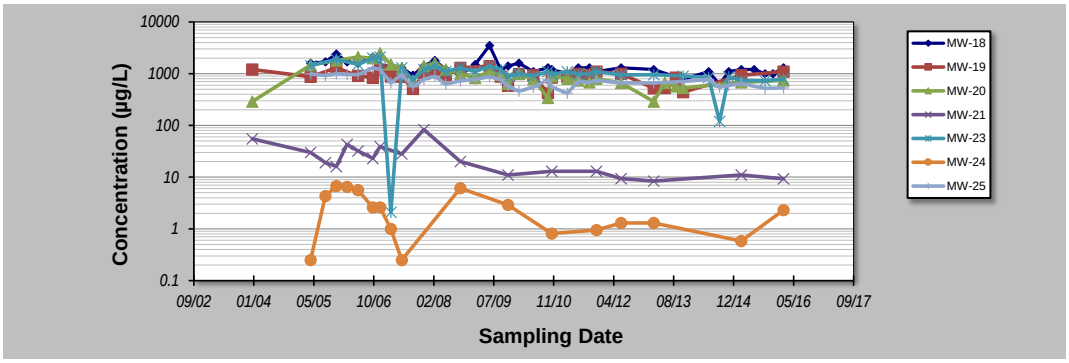
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **1-Mar-16**
Facility Name: **Maryland Square PCE Site**
Conducted By: **ATC**

Job ID: **NPMMA16002**
Constituent: **PCE**
Concentration Units: **µg/L**

Sampling Point ID:		MW-18	MW-19	MW-20	MW-21	MW-23	MW-24	MW-25
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	Jan 04		1,200	290	55			
2	May 05	1,600	873	1,460	30	1,430	0.25	993
3	Sep 05	1,700			19		4.3	920
4	Dec 05	2,400	1,300	1,800	16	1,900	6.7	1,000
5	Mar 06	1,700			43		6.5	970
6	Jun 06	1,600	910	2,100	32	1,500	5.6	960
7	Oct 06	2,100	840	2,000	23	2,000	2.6	1,300
8	Dec 06	1,400	1,200	2,500	39	2,100	2.6	1,200
9	Mar 07	1,400	890	1,500		2.1	1.0	670
10	Jun 07	1,300	870	1,300	28	1,300	0.25	960
11	Sep 07	930	510	730		750		560
12	Dec 07	1,400	990	1,400	83	1,200		780
13	Mar 08	1,800	1,200	1,600		1,400		890
14	Jun 08	1,200	930	1,200		1,100		630
15	Oct 08	950	1,300	1,000	20	1,300	6.1	730
16	Feb 09	1,500		830		1,100		770
17	Jun 09	3,500	1,400	1,100		1,400		880
18	Sep 09	1,200	880	940		1,200		770
19	Nov 09	1,400	580	640	11	880	2.9	570
20	Feb 10	1,600	990	990		1,000		460
21	Jun 10	1,100	930	780		900		550
22	Oct 10	1,300	420	340		1,100		760
23	Nov 10	1,200	840	890	13	970	0.81	550
24	Mar 11	1,000	880	800		1,100		420
25	Jun 11	1,300	1,000	740		970		700
26	Sep 11	1,300	950	680		1,000		680
27	Nov 11	1,100	1,100	800	13	1,100	0.95	740
28	Jun 12	1,300	1,000	660	9.4	950	1.3	660
29	Mar 13	1,200	520	290	8.4	960	1.3	660
30	Jun 13		530	660				
31	Sep 13		840	570				
32	Nov 13	780	440	530		900		700
33	Jun 14	1,100				850		780
34	Sep 14	620				120		550
35	Nov 14	1,100				870		590
36	Mar 15	1,200	930	680	11.0	740	0.58	640
37	Jun 15	1,200						
38	Sep 15	1,000				730		520
39	Nov 15	1,000						
40	Feb 16	1,300	1,100	740	9.3	790	2.3	530
Coefficient of Variation:		0.37	0.28	0.53	0.74	0.40	0.86	0.27
Mann-Kendall Statistic (S):		-312	-80	-269	-72	-280	-39	-275
Confidence Factor:		>99.9%	92.0%	>99.9%	99.9%	>99.9%	95.7%	>99.9%
Concentration Trend:		Decreasing	Prob. Decreasing	Decreasing	Decreasing	Decreasing	Decreasing	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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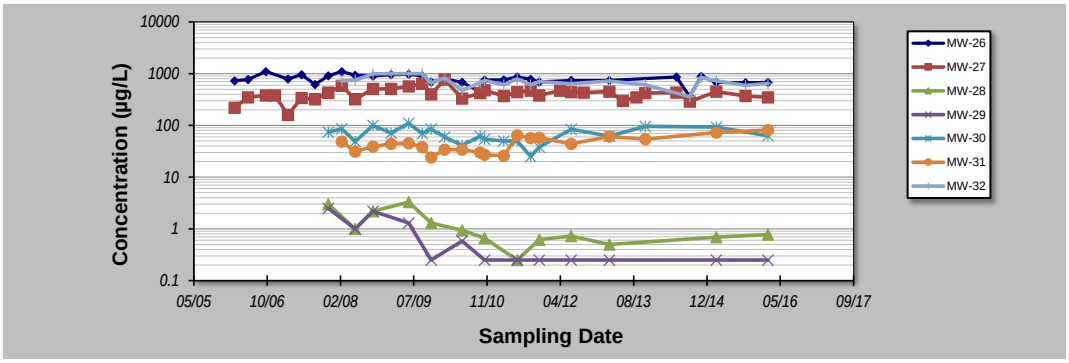
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	1-Mar-16	Job ID:	NPMMA16002
Facility Name:	Maryland Square PCE Site	Constituent:	PCE
Conducted By:	ATC	Concentration Units:	µg/L

Sampling Point ID:	MW-26	MW-27	MW-28	MW-29	MW-30	MW-31	MW-32
Sampling Event / Sampling Date	PCE CONCENTRATION (µg/L)						
1 Mar 06	730	220					
2 Jun 06	770	350					
3 Oct 06	1,100	380					
4 Dec 06		380					
5 Mar 07	790	160					
6 Jun 07	960	340					
7 Sep 07	620	320					
8 Dec 07	910	430	3.0	2.5	74		
9 Mar 08	1,100	580			86	49	720
10 Jun 08	930	320	1.0	1.0	49	31	750
11 Oct 08	900	510	2.2	2.2	100	39	990
12 Feb 09	960	510			71	44	1,000
13 Jun 09	970	570	3.3	1.3	110	45	1,000
14 Sep 09	910	640			70	38	1,000
15 Nov 09	690	400	1.3	0.25	85	24	660
16 Feb 10	790	770			60	34	830
17 Jun 10	680	330	0.94	0.58	41	34	480
18 Oct 10	450	420	.		62	30	660
19 Nov 10	750	480	0.66	0.25	54	27	740
20 Mar 11	760	370			50	26	610
21 Jun 11	860	440	0.25	0.25	50	64	790
22 Sep 11	780	470			25	57	610
23 Nov 11	690	380	0.62	0.25	38	58	700
24 Mar 12		470					
25 Jun 12	740	440	0.73	0.25	84	44	640
26 Sep 12		430					
27 Mar 13	740	450	0.50	0.25	62	61	720
28 Jun 13		300					
29 Sep 13		350					
30 Nov 13		420			96	54	610
31 Jun 14	860	430					
32 Sep 14	360	290					360
33 Nov 14	890						850
34 Mar 15	680	450	0.69	0.25	93	73	730
35 Jun 15							
36 Sep 15	670	370					590
37 Nov 15							
38 Feb 16	680	350	0.78	0.25	63	81	650
39							
40							
Coefficient of Variation:	0.21	0.28	0.79	1.08	0.33	0.35	0.23
Mann-Kendall Statistic (S):	-147	19	-38	-44	-32	62	-85
Confidence Factor:	99.6%	60.0%	98.9%	99.7%	82.3%	97.7%	98.7%
Concentration Trend:	Decreasing	No Trend	Decreasing	Decreasing	Stable	Increasing	Decreasing



Notes:

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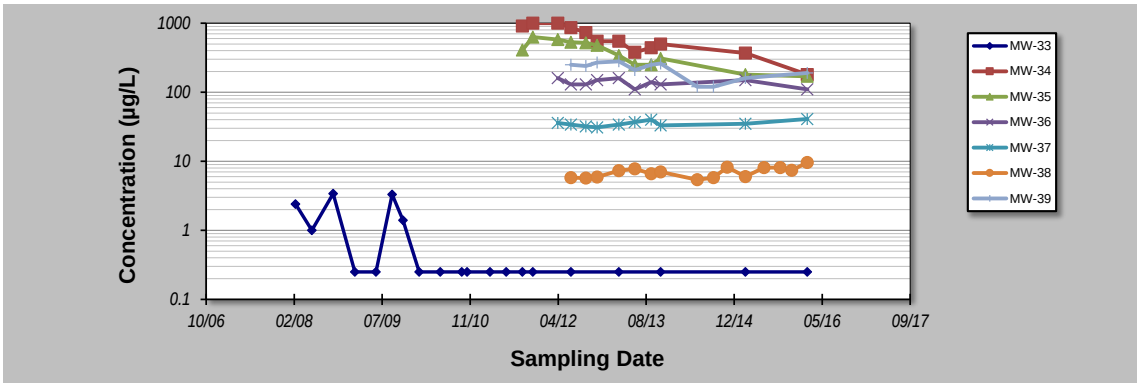
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **1-Mar-16**
Facility Name: **Maryland Square PCE Site**
Conducted By: **ATC**

Job ID: **NPMMA16002**
Constituent: **PCE**
Concentration Units: **µg/L**

Sampling Point ID:		MW-33	MW-34	MW-35	MW-36	MW-37	MW-38	MW-39
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	Mar 08	2.4						
2	Jun 08	1.0						
3	Oct 08	3.4						
4	Feb 09	0.25						
5	Jun 09	0.25						
6	Sep 09	3.3						
7	Nov 09	1.4						
8	Feb 10	0.25						
9	Jun 10	0.25						
10	Oct 10	0.25						
11	Nov 10	0.25						
12	Mar 11	0.25						
13	Jun 11	0.25						
14	Sep 11	0.25	910	410				
15	Nov 11	0.25	1,000	630				
16	Mar 12		1,000	580	160	36		
17	Jun 12	0.25	860	530	130	34	5.8	250
18	Sep 12		730	520	130	32	5.7	240
19	Nov 12		550	480	150	31	5.9	270
20	Mar 13	0.25	550	340	160	34	7.3	280
21	Jun 13		380	250	110	37	7.8	210
22	Sep 13		440	250	140	40	6.6	250
23	Nov-13	0.25	500	310	130	33	7.0	260
24	Jun 14						5.4	120
25	Sep 14						5.8	120
26	Nov 14						8.2	
27	Mar 15	0.25	370	180	150	35	6.0	160
28	Jun 15						8.1	
29	Sep 15						8.1	
30	Nov 15						7.4	
31	Feb 16	0.25	180	170	110	41	9.6	190
32								
33								
34								
35								
Coefficient of Variation:		1.36	0.44	0.41	0.13	0.09	0.18	0.27
Mann-Kendall Statistic (S):		-67	-54	-51	-11	14	47	-21
Confidence Factor:		98.5%	>99.9%	>99.9%	81.0%	87.3%	99.0%	94.0%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Stable	No Trend	Increasing	Prob. Decreasing



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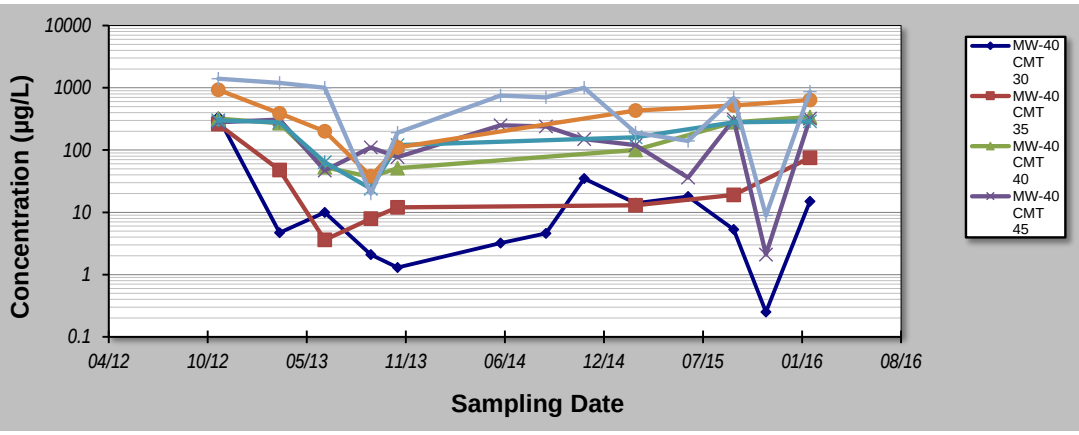
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date: **1-Mar-16**
Facility Name: **Maryland Square PCE Site**
Conducted By: **ATC**

Job ID: **NPMMA16002**
Constituent: **PCE**
Concentration Units: **µg/L**

Sampling Point ID:		MW-40 CMT 30	MW-40 CMT 35	MW-40 CMT 40	MW-40 CMT 45	MW-40 CMT50	MW-40 CMT 55	MW-40 CMT 60
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	Nov 12	340	260	320	280	300	930	1,400
2	Mar 13	4.7	48	270	310	280	390	1,200
3	Jun 13	10	3.6	53	47	64	200	1,000
4	Sep 13	2.1	7.9	37	110	24	38	20
5	Nov-13	1.3	12	51	77	120	110	190
6	Jun 14	3.2			250			750
7	Sep 14	4.6			240			700
8	Nov 14	35			150			1,000
9	Mar 15	14	13	100	120	160	430	190
10	Jun 15	18			36			140
11	Sep 15	5.3	19	280	310	280	520	690
12	Nov 15	0.25			2.1			8.9
13	Feb 16	15	75	340	320	290	640	870
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		2.64	1.58	0.73	0.67	0.59	0.72	0.75
Mann-Kendall Statistic (S):		0	4	4	-5	3	4	-30
Confidence Factor:		47.6%	64.0%	64.0%	59.4%	59.4%	64.0%	96.2%
Concentration Trend:		No Trend	No Trend	No Trend	Stable	No Trend	No Trend	Decreasing



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
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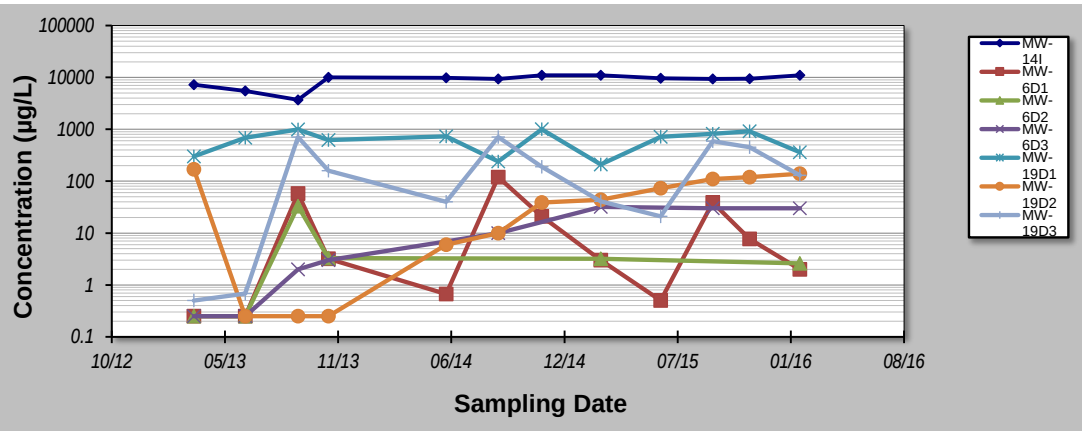
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	1-Mar-16	Job ID:	NPMMA16002
Facility Name:	Maryland Square PCE Site	Constituent:	PCE
Conducted By:	ATC	Concentration Units:	µg/L

Sampling Point ID:		MW-14I	MW-6D1	MW-6D2	MW-6D3	MW-19D1	MW-19D2	MW-19D3
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	Mar 13	7,200	0.25	0.25	0.25	300	170	0.50
2	Jun 13	5,500	0.25	0.25	0.25	690	0.25	0.68
3	Sep 13	3,700	58	33	2.0	990	0.25	710
4	Nov-13	10,000	3.2	3.3	3.0	620	0.25	160
5	Jun 14	9,800	0.67			730	6.0	40
6	Sep 14	9,300	120		10	240	10	710
7	Nov 14	11,000	21			1,000	39	190
8	Mar 15	11,000	3.0	3.2	32	210	44	41
9	Jun 15	9,600	0.5			720	73	21
10	Sep 15	9,300	39		30	820	110	590
11	Nov 15	9,400	7.7			920	120	450
12	Feb 16	11,000	2.0	2.6	30	360	140	130
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.26	1.70	1.80	1.09	0.46	1.04	1.11
Mann-Kendall Statistic (S):		22	9	2	22	6	41	13
Confidence Factor:		92.4%	70.4%	57.0%	99.8%	63.1%	99.8%	79.0%
Concentration Trend:		Prob. Increasing	No Trend	No Trend	Increasing	No Trend	Increasing	No Trend



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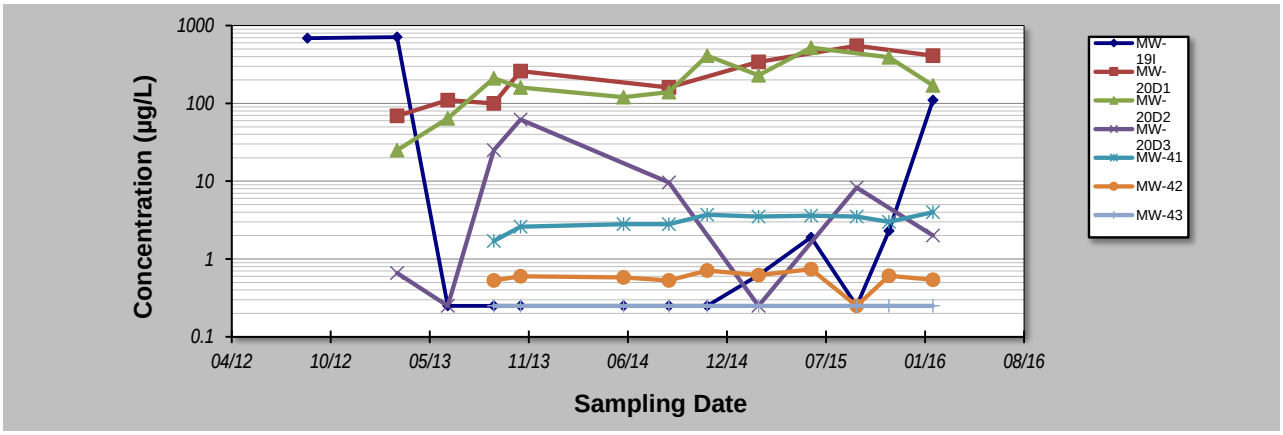
for Constituent Trend Analysis

Evaluation Date:	1-Mar-16	Job ID:	NPMMA16002
Facility Name:	Maryland Square PCE Site	Constituent:	PCE
Conducted By:	ATC	Concentration Units:	µg/L

Sampling Point ID:		MW-19I	MW-20D1	MW-20D2	MW-20D3	MW-41	MW-42	MW-43
Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)						
1	Sep 12	690						
2	Mar 13	710	69	25	0.66			
3	Jun 13	0.25	110	64	0.25			
4	Sep 13	0.25	100	210	25	1.7	0.53	0.25
5	Nov-13	0.25	260	160	62	2.6	0.60	0.25
6	Jun 14	0.25		120		2.8	0.58	0.25
7	Sep 14	0.25	160	140	10	2.8	0.53	0.25
8	Nov 14	0.25		410		3.7	0.71	0.25
9	Mar 15	0.62	340	230	0.25	3.5	0.62	0.25
10	Jun 15	1.9		520		3.6	0.74	
11	Sep 15	0.25	550		8.3	3.5	0.25	0.25
12	Nov 15	2.3		390		3.0	0.61	0.25
13	Feb 16	110	410	170	2.0	4.0	0.54	0.25
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		2.23	0.69	0.70	1.58	0.22	0.23	0.00
Mann-Kendall Statistic (S):		9	22	29	-1	27	4	0
Confidence Factor:		68.4%	99.8%	98.7%	50.0%	99.2%	60.3%	46.0%
Concentration Trend:		No Trend	Increasing	Increasing	No Trend	Increasing	No Trend	Stable



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