

Second Quarter 2014 Groundwater Monitoring and Sampling Report

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

Cardno ATC Project No. 085.42620.0001

Prepared for
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July 18, 2014



Executive Summary

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707 Wilshire Boulevard, 45th Floor
Los Angeles, California 90017

Re: Second Quarter 2014 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:

Cardno 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 Second Quarter 2014

Cardno ATC performed quarterly monitoring and sampling activities at 23 of the 59 site groundwater monitoring wells.

Current Phase of Project:	<u>Monitoring and Sampling</u>
Frequency of Sampling:	<u>Groundwater: Select Wells Quarterly (Semi-annual or Annual for 2014)</u>
Frequency of Monitoring:	<u>Groundwater: Select Wells Quarterly (Semi-annual or Annual for 2014)</u>
Purge Water Removed This Quarter:	<u>27.00 gallons</u>
Approximate Depth to Groundwater:	<u>21.04 ft btoc</u>
Groundwater Gradient:	<u>Site Monitoring Network: 0.012 feet/foot</u>
Groundwater Flow Direction:	<u>Site Monitoring Network: East</u>
Groundwater Analytical Methods:	<u>Select VOCs by EPA 8260B, metals by EPA 6020, and hexavalent chromium (Cr(VI)) by EPA 218.6</u>
Monitoring Wells Sampled with PCE Concentrations Greater than 5.0 µg/L:	<u>17 of 23 monitoring points</u>
Maximum PCE Concentration (µg/L):	<u>9,800 (MW-14I)</u>
Monitoring Wells Sampled with PCE Concentrations Greater than 5.0 µg/L Fourth Quarter 2013:	<u>37 of 49 monitoring points</u>
Maximum PCE Concentration Fourth Quarter 2013 (µg/L):	<u>10,000 (MW-14I)</u>

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 Maryland Square PCE Site (site) is located at 3661 South Maryland Parkway in Las Vegas, Nevada. The site is located within a retail shopping center (parent parcel) located at the northwest corner of Maryland Parkway and Twain Avenue and within the Southeast $\frac{1}{4}$ of the Northeast $\frac{1}{4}$ of Section 15, Township 21 South, Range 61 East. The parent parcel is designated as assessor's parcel number (APN) 162-15-602-009 and is a 6.57-acre tract of land. The shopping center previously included a dry cleaning facility, Al Phillips the Cleaner. Al Phillips the Cleaner operated at the site from 1969 through 2000.

Surrounding properties consist primarily of commercial and residential developments. The Boulevard Mall lies directly to the east of the site across South Maryland Parkway. Beyond the mall is a residential neighbourhood and a golf course. South Maryland Parkway is located to the east of the site and East Twain Avenue is located south of the site.

Subsurface soil and groundwater conditions were investigated along the eastern boundary of the property as a result of a property transaction, in November of 2000, by advancing one soil boring and converting it into a monitoring well (MW-1). Analysis of water samples collected from MW-1 confirmed PCE concentrations in groundwater at the property exceeded the established U.S. Environmental protection Agency (EPA) primary maximum contamination level (MCL) for PCE in drinking water of 5.0 micrograms per liter ($\mu\text{g/L}$) or parts per billion (ppb).

Multiple soil and groundwater samples were taken from 2000 to 2004 after the initial discovery. Monitoring wells were installed both at the site and extending on to the Boulevard Mall property in a failed attempt to determine the eastern extent of the PCE plume.

Al Phillips the Cleaner (APTC) accepted responsibility for the release in February 2004 and assumed control of assessment activities from the Trust after which all site characterization and monitoring work was conducted by URS Corporation (URS). Converse was retained to review documents prepared by URS on behalf of the Trust.

Monitoring wells were installed in the residential neighbourhood starting in March 2005 east of the Boulevard Mall property. PCE concentrations in these wells were above the MCL levels of 5 $\mu\text{g/L}$, suggesting the eastern extent of the PCE plume was not defined. The discovery of the plume migration into the residential area raised concerns of possible vapor intrusion affecting residents in the neighbourhood. URS conducted an off-site soil vapor study in the Boulevard Mall parking lot in March 2007 at select locations in the residential area east of the mall. Soil vapor concentrations measured at total depth ranged from below method detection limits at Soil Vapor Boring (SVB)-2, and 11 to 170,000 micrograms per cubic meter ($\mu\text{g/m}^3$) at SVB-14.

APTC declared bankruptcy in July 2008 and URS discontinued work at the site. Converse, on behalf of the Trust, resumed quarterly monitoring, supported the litigation work and prepared a remediation scope of work. 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.

A permanent injunction was issued on December 27, 2010 by the U.S District Court that dictated the schedule for remediation of the source area and groundwater at the site. It also decreed that groundwater monitoring should continue based on the previously defined NDEP schedule.

Groundwater monitoring and sampling responsibilities transferred from Tetra Tech to Cardno ATC for the fourth quarter of 2011.

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 tab.

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 2014 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 2014 sampling schedule has been modified and approved by NDEP.

The NDEP modified the sampling schedule in response to Cardno 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 Cardno ATC's recommended sampling schedule, with minor changes, in the response letter dated February 21, 2014.

The NDEP approved 2014 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-13, MW-14, MW-18, MW-19, MW-23, MW-25, MW-26, 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 excavation of three well volumes of groundwater using downhole pumps or bailers.

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. Cardno ATC placed the inlet of the pump in the middle of the saturated zone for each well (between top of groundwater and bottom of well) for consistency with previous events. 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.

Cardno 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-30, MW-40 CMT-45, and MW-40 CMT-60, and the analysis of hexavalent chromium using EPA method 218.6 for wells MW-19I, MW-40 CMT-30, MW-40 CMT-45, 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

Select PCE laboratory results were deemed to not be representative of site conditions for First Quarter 2014 results. An unknown error took place either during sampling or laboratory analysis that caused PCE concentrations to appear significantly lower in a large percentage of wells compared to their historical levels. Cardno ATC reviewed procedures used at the site including type of equipment used, personnel that conducted sampling, pump depth placement, volume of water purged, decontamination of equipment, and storage of equipment. Procedures used during the Second Quarter 2014 matched up with procedures used during all previous sampling events. The sampling took place over multiple days and only select wells showed large decreases while other wells remained relatively unchanged. The laboratory also undertook an investigation into their analytical methods, and upon review and reanalysis of samples, found no anomalies that would account for the lower than expected PCE concentrations.

For the reasons stated above and discussions with NDEP, First Quarter 2014 results are not used for comparison purposes in this report, and MW-23, MW-25, MW-26, MW-27, and MW-39 were added to the sampling schedule to confirm that PCE concentrations had not significantly dropped at the site.

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. Cardno ATC also collected a duplicate groundwater sample from monitoring well MW-19D2.

Laboratory analysis of each groundwater sample produced quantitative data within quality assurance standards, with the exception of the analysis for hexavalent chromium from MW-19I and two comments made about sample issues. The sample for MW-19I was purple, most likely due to saturation from the prior nearby potassium permanganate pilot test, and therefore the analysis could not be performed. Other comments made were:

- EPA 6020_Dissolved: Matrix Spike Duplicate (MSD) is outside recovery criteria for Chromium possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.
- EPA 8260B: Dilution was necessary on sample N012742-005 due to high Tetrachloroethene concentrations.

After reanalysis, no laboratory quality control data were flagged outside of established tolerances. The analytical data on water quality for the second 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 13.78 feet bgs (MW-18) to 27.88 feet bgs (MW-19D2). The average groundwater elevation of monitored wells (excluding MW-40 CMT-35 through CMT-60) was 21.04 feet bgs. There was a 0.39 foot decrease when comparing similar monitoring wells that had groundwater measurements for both the Fourth Quarter 2013 and Second Quarter 2014. Based on the second quarter results, the local hydraulic gradient across the site is generally toward the east.

DO readings for across the site ranged from 1.23 to 6.71 milligrams per liter (mg/L). ORP readings from across the site ranged from -66.4 to 649.8 millivolts (mV).

2.2.1 Vertical Gradient Assessment

Cardno ATC utilized measured groundwater elevations to determine vertical gradients within two of the five sets of clustered wells at the site (MW-1/MW-9, MW-6D, MW-19D, MW-20D, 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 (<http://www.epa.gov/athens/learn2model/part-two/onsite/vgradient.html>) was used to determine the vertical gradient at the various well clusters.

Table 1: Vertical Gradient Calculation, 2nd Quarter 2014

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-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: 26.97 MW-19D2: 27.88	0.03671	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: 27.88 MW-19D3: 26.99	0.02910	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: 26.97 MW-19D3: 26.99	0.0008940	Up
MW-40 CMT-30 MW-40 CMT-45	MW-40 CMT-30: 1978.48 MW-40 CMT-45: 1978.48	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: 26.44 MW-40 CMT-45: 26.41	0.002000	Up (Down 4 th Quarter 2013)
MW-40 CMT-45 MW-40 CMT-60	MW-40 CMT-45: 1978.48 MW-40 CMT-60: 1978.48	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: 26.41 MW-40 CMT-60: 26.56	0.01000	Down
MW-40 CMT-30 MW-40 CMT-60	MW-40 CMT-30: 1978.48 MW-40 CMT-60: 1978.48	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: 26.44 MW-40 CMT-60: 26.56	0.004000	Down

Bold: Direction change from previous quarter

2.3 Groundwater Analytical Results

Cardno ATC collected groundwater samples on June 9th through 12th, 2014 from the existing groundwater monitoring wells (MW-1, MW-5, MW-6, MW-18, MW-23, MW-25, MW-26, MW-27, MW-38, MW-39, 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.) over the vicinity of the site (Figure 2).

Groundwater samples were submitted to Advanced Technologies Laboratory (ATL) 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 wells MW-19I, MW-40 CMT-30, MW-40 CMT-45, and MW-40 CMT-60, and the analysis of hexavalent chromium using EPA method 218.6 for wells MW-19I, MW-40 CMT-30, MW-40 CMT-45, 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: 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	20.29	1971.72	350	<0.50	Decreasing
MW-2	NM	NM	NS	NS	Decreasing
MW-3	NM	NM	NS	NS	No Trend
MW-5	19.68	1969.01	780	2.6	Increasing
MW-6	20.30	1967.82	3,000	8.7	Increasing
MW-6D1	19.60	1969.12	0.67	<0.50	No Trend
MW-6D2	NM	NM	NS	NS	No Trend
MW-6D3	NM	NM	NS	NS	No Trend
MW-7	NM	NM	NS	NS	Increasing
MW-8	NM	NM	NS	NS	Decreasing
MW-9	NM	NM	NS	NS	Decreasing
MW-10	NM	NM	NS	NS	No Trend
MW-11	NM	NM	NS	NS	N/A ²
MW-12	NM	NM	NS	NS	No Trend
MW-13	NM	NM	NS	NS	Decreasing
MW-14	NM	NM	NS	NS	Decreasing
MW-14I	19.69	1967.85	9,800	21	No Trend (Stable 4 th Quarter 2013)
MW-15	NM	NM	NS	NS	Stable
MW-16	NM	NM	NS	NS	N/A ²
MW-17	NM	NM	NS	NS	Decreasing
MW-18	13.78	1949.12	1,100	1.2	Decreasing
MW-19	NM	NM	NS	NS	Probably Decreasing
MW-19I	26.71	1951.66	<0.50	<0.50	No Trend
MW-19D1	26.97	1952.28	730	4.2	No Trend

Well ID	Depth to GW Level (feet)	Groundwater Elevation (feet amsl)	PCE (µg/L)	TCE (µg/L)	Mann-Kendall Trend (Since Well Installation)
MW-19D2	27.88	1951.40	6.0	<0.50	No Trend
MW-19D3	26.99	1952.33	40	<0.50	No Trend
MW-20	NM	NM	NS	NS	Decreasing
MW-20D1	NM	NM	NS	NS	N/A ¹
MW-20D2	26.55	1952.11	120	0.78	Stable
MW-20D3	NM	NM	NS	NS	N/A ¹
MW-21	NM	NM	NS	NS	Decreasing
MW-22	NM	NM	NS	NS	N/A ²
MW-23	17.74	1944.71	850	1.4	Decreasing
MW-24	NM	NM	NS	NS	Probably Decreasing
MW-25	20.94	1938.35	780	0.69	Decreasing
MW-26	19.10	1934.35	860	0.50	Probably Decreasing (Decreasing 4 th Quarter 2013)
MW-27	18.96	1925.19	430	0.94	No Trend
MW-28	NM	NM	NS	NS	Decreasing
MW-29	NM	NM	NS	NS	Decreasing
MW-30	NM	NM	NS	NS	Probably Decreasing
MW-31	NM	NM	NS	NS	No Trend
MW-32	NM	NM	NS	NS	Decreasing
MW-33	NM	NM	NS	NS	Decreasing
MW-34	NM	NM	NS	NS	Decreasing
MW-35	NM	NM	NS	NS	Decreasing
MW-36	NM	NM	NS	NS	Stable
MW-37	NM	NM	NS	NS	No Trend
MW-38	15.16	1893.22	5.4	<0.50	No Trend (Probably Increasing 4 th Quarter 2013)
MW-39	26.07	1941.48	120	<0.50	Stable (No Trend 4 th Quarter 2013)
MW-40 CMT-30	26.44	1952.05	3.2	<0.50	Probably Decreasing (Decreasing 4 th Quarter 2013)
MW-40 CMT-35	NM	NM	NS	NS	No Trend
MW-40 CMT-40	NM	NM	NS	NS	Decreasing
MW-40 CMT-45	26.41	1952.08	250	1.3	Stable
MW-40 CMT-50	NM	NM	NS	NS	Stable
MW-40 CMT-55	NM	NM	NS	NS	Stable
MW-40 CMT-60	26.56	1951.93	750	8.0	Probably Decreasing (Decreasing 4 th Quarter 2013)
MW-41	15.34	1893.55	2.8	<0.50	N/A ¹
MW-42	16.51	1893.80	0.58	<0.50	N/A ¹

Well ID	Depth to GW Level (feet)	Groundwater Elevation (feet amsl)	PCE (µg/L)	TCE (µg/L)	Mann-Kendall Trend (Since Well Installation)
MW-43	17.15	1941.18	<0.50	<0.50	N/A ¹

Notes: ¹Unable to evaluate trend without at least four sampling events of data

Notes: ²Mann-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 dtw measurements not taken

Amsl: Above Mean Sea Level

Bold: Trend change from previous quarter

The groundwater locations selected for quarterly monitoring represent the most recently installed wells and wells that cover the groundwater conditions at the Maryland Square site. The range of groundwater elevations spanned from 1893.22 feet above mean sea level (amsl) (MW-38) to 1971.72 feet amsl (MW-1). Groundwater elevations are summarized in Tables 1, A-1, and A-2.

Groundwater elevations increased across groundwater monitoring wells located on the Maryland Square property by 0.02 feet compared with similar wells with Fourth Quarter 2013 data. Groundwater elevations across the Boulevard Mall property decreased by an average of 0.27 feet. Groundwater elevations decreased across groundwater monitoring wells located on the surrounding streets and golf course area by 0.49 feet when compared with similar wells with Fourth Quarter 2013 data. 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 the groundwater samples collected from monitoring wells except MW-19I and MW-43. PCE was detected at concentrations ranging from 0.58 µg/L (MW-42) to 9,800 µg/L (MW-14I). PCE concentrations identified by the laboratory in the groundwater samples collected from wells MW-1, MW-5, MW-6, MW-18, MW-23, MW-25, MW-26, MW-27, MW-38, MW-39, MW-14I, MW-19D1, MW-19D2, MW-19D3, MW-20D2, MW-40 CMT-45, and MW-40 CMT-60 exceeded the maximum contaminant levels (MCL) for PCE in groundwater of 5 µg/L.

Additional sampling was recommended 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 3: Summary of MW-19D Groundwater Testing, 1st Quarter 2013 to 2nd Quarter 2014

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
MW-19D2	06/11/14	730	4.2
	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	

Well ID	Date	PCE (µg/L)	TCE (µg/L)
	02/19/14	<0.50	<0.50
	03/12/14	0.53	<0.50
	06/11/14	6.0	<0.50
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

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-19D, it appears that PCE concentrations have either stabilized or are decreasing from the high points observed during the Third Quarter 2013 sampling at MW-19D2 and MW-19D3, but may still be increasing at MW-19D1.

A duplicate sample was collected from MW-19D2. MW-19D2 PCE concentrations were measured at 6.0 µg/L and 5.4 µg/L, a relative percent difference (RPD) of 10.5%. The duplicate sample result did not show significant statistical variation based on the levels of the concentrations.

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, so the wells installed this year were not included in the analysis. 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 nineteen wells and increasing at three wells. The Mann-Kendall Test also showed that the plume was probably decreasing at six wells, probably increasing at zero wells, stable at seven wells, showed no trend at sixteen wells (nineteen including MW-11, MW-16, and MW-22 which weren't analysed due to historically low readings), and weren't able to be determined in five wells due to lack of available sampling data.

There are currently three approximate vertical zones that monitoring wells are grouped in at the site. PCE concentrations and plume size varied significantly based on its location among the three zones. The upper zone contains the majority of monitoring wells, and covers the wells sampled from 25 feet bgs to 40 feet bgs. The intermediate zone is considered to be wells with screen intervals and pump inlet levels from 40 feet bgs to 55 feet bgs, and the lower zone is considered to be wells with screen intervals and pump inlet levels greater than 55 feet bgs.

Trichloroethene (TCE) was detected at concentrations ranging from 0.50 µg/L to 21 µg/L in the groundwater samples collected from wells MW-5, MW-6, MW-14I, MW-18, MW-19D1, MW-20D2, MW-23, MW-25, MW-26, MW-27, MW-40 CMT-45 and MW-40 CMT-60. The detected concentrations were below the MCL for TCE in groundwater of 5 µg/L, with the exception of MW-6 (8.7 µg/L), MW-14I (21 µg/L), MW-40 CMT-60 (8.0 µg/L), and MW-40 CMT-60 (6.5 µg/L).

Cis-1,2-dichloroethene (DCE) was detected in monitoring wells MW-5 (1.1 µg/L), MW-6 (2.6 µg/L), and MW-14I (6.9 µg/L), and MW-40 CMT-60 (2.9 µg/L). 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 small 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 (KMnO₄) and PulseOx in early 2013. The following table shows Tetra Tech data along with concentrations detected during Cardno ATC's successive sampling events.

Table 4: Summary of Metals Concentrations in Select Wells, 1st Quarter 2013 to 2nd Quarter 2014

Well ID	Date	PCE (µg/L)	Arsenic (µg/L)	Manganese (µg/L)	Chromium (µg/L)	Hexavalent Chromium (µg/L)	
MW-19 (KMnO ₄ Pilot Test, upgradient)	03/08/13	520	7.4	170	17	NA	
	03/12/13	390	2	120,000	25	NA	
	03/27/13	14	0.33	43,000	130	NA	
	04/04/13	110	2	7,100	79	NA	
	04/11/13	220	1.8	5,400	44	NA	
	05/02/13	810	2.7	460	9.7	NA	
	06/14/13	530	2.3	68	4.6	2.5	
	09/09/13	840	4.0	<0.50	1.8	1.9	
	11/07/13	440	3.3	<0.50	1.3	1.7	
	03/07/14	910	3.2	<0.50	1.7	2.0	
	06/09/14	NS	NS	NS	NS	NS	
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*	
MW-20 (PulseOx Pilot Test, upgradient)	03/26/13	290	4.7	NA	4.3	NA	
	04/10/13	480	5.6	NA	9.7	NA	
	04/23/13	850	6.1	NA	8.8	NA	
	05/02/13	470	4	NA	2.7	NA	
	06/12/13	660	2.4	<0.50	1.6	1.1	
	09/09/13	570	3.2	<0.50	1.1	1.2	
	11/07/13	530	2.6	<0.50	<1.0	1.3	
		03/12/14	170	3.6	64	5.1	3.5
		06/09/14	NS	NS	NS	NS	NS
MW-40 CMT-30 (PulseOx Pilot Test, downgradient)	03/25/13	4.7	4	NA	ND	NA	
	04/10/13	0.86	7.2	NA	65	NA	
	04/23/13	8.8	4.6	NA	180	NA	
	05/01/13	1.2	5.9	NA	210	NA	
	06/14/13	10	3.9	<0.50	140	140	
	09/04/13	2.1	2.3	43	55	120	
	11/06/13	1.3	3.6	77	110	110	
		03/06/14	4.5	3.6	83	15	17
	06/10/14	3.2	3.6	25	5.0	5.5	
MW-40 CMT-35 (PulseOx Pilot Test, downgradient)	03/25/13	14	14	NA	ND	NA	
	04/10/13	6.9	6.9	NA	ND	NA	
	04/23/13	2.6	2.6	NA	5.7	NA	
	05/01/13	3.5	3.5	NA	25	NA	

Well ID	Date	PCE (µg/L)	Arsenic (µg/L)	Manganese (µg/L)	Chromium (µg/L)	Hexavalent Chromium (µg/L)
	06/14/13	3.6	4	250	2.9	1.1
	09/04/13	9.6	9.6	450	<1.0	0.23
	11/06/13	12	7.8	430	<1.0	<0.20
	03/06/14	2.6	4.6	370	<1.0	0.31
	06/09/14	NS	NS	NS	NS	NS
MW-40 CMT-40 (PulseOx Pilot Test, downgradient)	03/25/13	270	2.5	NA	3.2	NA
	04/10/13	94	2.5	NA	6.6	NA
	04/23/13	150	2.4	NA	20	NA
	05/01/13	96	3.3	NA	38	NA
	06/14/13	53	3.0	26	9.8	22
	09/04/13	37	2.7	100	22	25
	11/06/13	51	1.9	61	14	15
	03/06/14	27	1.9	360	1.3	2.0
06/09/14	NS	NS	NS	NS	NS	
MW-40 CMT-45 (PulseOx Pilot Test, downgradient)	03/25/13	310	2.4	NA	ND	NA
	04/10/13	120	2.0	NA	15	NA
	04/23/13	100	1.8	NA	41	NA
	05/01/13	78	2.7	NA	47	NA
	06/17/13	47	1.6	<0.50	39	43
	09/04/13	110	2.4	100	7.6	8.3
	11/06/13	77	1.5	110	6.0	6.1
	03/06/14	24	1.8	160	4.0	5.1
06/10/14	250	1.6	250	<1.0	0.85	
MW-40 CMT-50 (PulseOx Pilot Test, downgradient)	03/25/13	280	4.1	NA	ND	NA
	04/10/13	110	2.2	NA	14	NA
	04/23/13	120	2	NA	38	NA
	05/01/13	79	3.1	NA	41	NA
	06/17/13	64	2.2	<0.50	8.2	8.9
	09/11/13	24	4.3	43	<1.0	0.39
	11/06/13	120	1.9	250	<1.0	0.35
	03/06/14	72	2.0	120	<1.0	0.25
06/09/14	NS	NS	NS	NS	NS	
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	
MW-40 CMT-60 (PulseOx Pilot Test, downgradient)	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	

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 analysed 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. Cardno 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. Cardno 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). Hexavalent chromium levels ranged from 0.85 µg/L to 18 µg/L. Monitoring well MW-19I (370 µg/L) 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 none of the monitoring wells exceeded. Literature suggests that the increase of chromium levels may be a temporary condition.

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 260,000 µg/L, the highest levels observed at that well and across the site since the potassium permanganate pilot test was conducted in early 2013. The concentration of manganese had been fairly stable over the previous year, and the manganese has persisted within MW-19I longer than initially anticipated. Cardno ATC also noted a corresponding increase in the chromium concentration from MW-19I. This condition will continue to be monitored in the future.

With the exception of MW-19I and MW-40 CMT-60, monitoring wells affected by the pilot testing appear to have returned to pre-pilot testing conditions. Metals will continue to be monitored in MW-19I and MW-40 CMT-60 until pre-pilot test conditions are identified.

3 Summary

Cardno ATC provides the following summary based on the results of the Second Quarter 2014 groundwater sampling event:

- Tetrachloroethene (PCE) was detected at concentrations ranging from 0.58 µg/L to 9,800 µg/L. The MCL for PCE in groundwater is 5 µg/L. PCE concentrations are summarized in the following table:

Table 5: Summary of PCE Concentrations in Monitoring Wells across the Site, 2nd Quarter 2014

Non Detect (<0.50 µg/L)	>0.50 µg/L to <5.0 µg/L	5.0 µg/L to 9,800 µg/L	
MW-19I	MW-6D1	MW-1	MW-23
MW-43	MW-40 CMT-30	MW-5	MW-25
	MW-41	MW-6	MW-26
	MW-42	MW-14I	MW-27
		MW-18	MW-38
		MW-19D1	MW-39
		MW-19D2	MW-40 CMT-45
		MW-19D3	MW-40 CMT-60
		MW-20D2	

- Trichloroethene (TCE) was detected at concentrations ranging from 0.50 µg/L to 21 µg/L. The MCL for TCE in groundwater is 5 µg/L. TCE concentrations are summarized in the following table:

Table 6: Summary of TCE Concentrations in Monitoring Wells across the Site, 2nd Quarter 2014

Non Detect (<0.50 µg/L)		>0.5 µg/L to <5.0 µg/L	5.0 µg/L to 21 µg/L
MW-1	MW-42	MW-5	MW-6
MW-6D1	MW-43	MW-18	MW-14I
MW-19D2		MW-19D1	MW-40 CMT-60
MW-19D3		MW-20D2	
MW-19I		MW-23	
MW-38		MW-25	
MW-39		MW-26	
MW-40 CMT-30		MW-27	
MW-41		MW-40 CMT-45	

- Cis-1,2-dichloroethene (DCE) was detected in monitoring wells MW-5 (1.1 µg/L), MW-6 (2.6 µg/L), and MW-14I (6.9 µg/L), and MW-40 CMT-60 (2.9 µg/L). The detected concentrations were below the MCL for DCE in groundwater of 70 µg/L.
- Hexavalent Chromium (Cr(VI)) was detected in monitoring wells MW-40 CMT-30 (5.5 µg/L), MW-40 CMT-45 (0.85 µg/L), and MW-40 CMT-60 (18 µg/L). Tested monitoring wells were below the NDEP basic comparison level (BCL) of 110 µg/L in groundwater. However, the total chromium concentration measured in MW-19I (370 µg/L) exceeded the MCL of 100 µg/L in groundwater. MW-19I was not able to be analysed for hexavalent chromium content due to the color of the groundwater sample.

3.1 Recommendations

Cardno ATC recommends continuing monitoring and sampling of the site monitoring wells in accordance with the NDEP approved 2014 schedule.

After approximately one year of metals testing, with the exception of MW-19I and MW-40 CMT-60, monitoring wells affected by the pilot testing appear to have returned to pre-pilot testing conditions. Metals will continue to be monitored in MW-19I and MW-40 CMT-60 until pre-pilot test conditions are identified.

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

3.2 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 Cardno 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 Second Quarter 2014 Groundwater Monitoring 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,

Cardno ATC



Adam Katlein
Senior Staff Scientist



Andrew D. Stuart
Senior Project Manager
Nevada Certified Environmental Manager
No. EM-1905 (Expires 01/26/15)

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)	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	Jun 14	1992.01	20.29	1971.72	10-30	2.61	2.4	133.0	350	<0.50	<0.50
MW-7	Sep 02	Jun 14	1990.78	NM	NM	10-30	NM	NM	NM	NS	NS	NS
MW-8	Sep 02	Jun 14	1991.71	NM	NM	10-30	NM	NM	NM	NS	NS	NS
MW-9	Sep 02	Jun 14	1992.25	NM	NM	48.5-50	NM	NM	NM	NS	NS	NS
MW-12	Sep 02	Jun 14	1995.95	NM	NM	13.5-33.5	NM	NM	NM	NS	NS	NS
MW-17	Nov 03	Jun 14	1991.04	NM	NM	15-30	NM	NM	NM	NS	NS	NS
MW-34	Dec 11	Jun 14	1993.88	NM	NM	--	NM	NM	NM	NS	NS	NS
MW-35	Dec 11	Jun 14	1991.37	NM	NM	--	NM	NM	NM	NS	NS	NS
Project Monitoring Wells Located on Boulevard Mall Property												
MW-2	Oct 00	Jun 14	1983.53	NM	NM	10-32	NM	NM	NM	NS	NS	NS
MW-3	Oct 00	Jun 14	1983.81	NM	NM	10-31	NM	NM	NM	NS	NS	NS
MW-4	Oct 00	Mar 12	1989.86	NM	NM	10-32	NM	NM	NM	NS	NS	NS
MW-5	Oct 00	Jun 14	1988.69	19.68	1969.01	10-32	5.11	2.2	87.2	780	2.6	1.1
MW-6	Oct 00	Jun 14	1988.12	20.30	1967.82	10-32	6.71	2.1	158.4	3,000	8.7	2.6
MW-6D1	Jan 13	Jun 14	1988.72	19.60	1969.12	50-60	5.83	0.4	199.6	0.67	<0.50	<0.50
MW-6D2	Jan 13	Jun 14	1988.72	NM	NM	80-90	NM	NM	NM	NS	NS	NS

**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)	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	Jun 14	1988.72	NM	NM	100-110	NM	NM	NM	NS	NS	NS
MW-10	Sep 02	Jun 14	1983.28	NM	NM	10-30	NM	NM	NM	NS	NS	NS
MW-11	Sep 02	Jun 14	1979.87	NM	NM	13.5-33.5	NM	NM	NM	NS	NS	NS
MW-13	May 03	Jun 14	1983.31	NM	NM	9-29	NM	NM	NM	NS	NS	NS
MW-14	Nov 03	Jun 14	1987.33	NM	NM	15-40	NM	NM	NM	NS	NS	NS
MW-14I	Jul 12	Jun 14	1987.54	19.69	1967.85	40-55	4.35	0.9	111.1	9,800	21	6.9
MW-15	Nov 03	Jun 14	1982.74	NM	NM	15-32	NM	NM	NM	NS	NS	NS
MW-16	Nov 03	Jun 14	1980.53	NM	NM	19-32	NM	NM	NM	NS	NS	NS
MW-19	Nov 03	Jun 14	1980.13	NM	NM	19-35	NM	NM	NM	NS	NS	NS
MW-19D1	Jan 13	Jun 14	1979.25	26.97	1952.28	31-51	5.51	1.7	501.2	730	4.2	<0.50
MW-19D2	Jan 13	Jun 14	1979.28	27.88	1951.40	60-70	3.67	1.4	616.5	6.0	<0.50	<0.50
MW-19D3	Jan 13	Jun 14	1979.32	26.99	1952.33	92-102	4.57	0.4	158.0	40	<0.50	<0.50
MW-19I	Jul 12	Jun 14	1978.37	26.71	1951.66	34-54	5.57	2.2	649.8	<0.50	<0.50	<0.50
MW-20	Nov 03	Jun 14	1979.82	NM	NM	19-35	NM	NM	NM	NS	NS	NS
MW-20D1	Jan 13	Jun 14	1978.81	NM	NM	25-45	NM	NM	NM	NS	NS	NS

**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)	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	Jun 14	1978.66	26.55	1952.11	55-65	5.46	1.4	76.6	120	0.78	<0.50
MW-20D3	Jan 13	Jun 14	1978.69	NM	NM	90-100	NM	NM	NM	NS	NS	NS
MW-21	Nov 03	Jun 14	1979.25	NM	NM	19-36	NM	NM	NM	NS	NS	NS
MW-40 CMT-30	Jul 12	Jun 14	1978.49	26.44	1952.05	30-30.6	4.41	2.3	78.9	3.2	<0.50	<0.50
MW-40 CMT-35	Jul 12	Jun 14	1978.49	NM	NM	35-35.6	NM	NM	NM	NS	NS	NS
MW-40 CMT-40	Jul 12	Jun 14	1978.49	NM	NM	40-40.7	NM	NM	NM	NS	NS	NS
MW-40 CMT-45	Jul 12	Jun 14	1978.49	26.41	1952.08	45-45.6	4.68	2.0	-66.4	250	1.3	<0.50
MW-40 CMT-50	Jul 12	Jun 14	1978.49	NM	NM	50-50.6	NM	NM	NM	NS	NS	NS
MW-40 CMT-55	Jul 12	Jun 14	1978.49	NM	NM	55-55.6	NM	NM	NM	NS	NS	NS
MW-40 CMT-60	Jul 12	Jun 14	1978.49	26.56	1951.93	60-60.6	5.44	1.9	-49.1	750	8.0	2.9
Project Monitoring Wells Located on Surrounding Streets and Golf Course												
MW-18	Nov 03	Jun 14	1962.90	13.78	1949.12	5-26	4.87	2.2	70.5	1,100	1.2	<0.50
MW-22	Mar 05	Jun 14	1975.19	NM	NM	15-36	NM	NM	NM	NS	NS	NS
MW-23	Mar 05	Jun 14	1962.45	17.74	1944.71	5-26	2.44	2.2	151.3	850	1.4	<0.50
MW-24	Mar 05	Jun 14	1960.82	NM	NM	5-26	NM	NM	NM	NS	NS	NS
MW-25	Mar 05	Jun 14	1959.29	20.94	1938.35	5-26	2.33	2.4	257.6	780	0.69	<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)	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	Jun 14	1953.45	19.10	1934.35	10-36	2.80	2.4	232.7	860	0.50	<0.50
MW-27	Mar 06	Jun 14	1944.15	18.96	1925.19	10-36	2.26	2.4	270.9	430	0.94	<0.50
MW-28	Oct 07	Jun 14	1943.07	NM	NM	15-36	NM	NM	NM	NS	NS	NS
MW-29	Oct 07	Jun 14	1932.35	NM	NM	15-36	NM	NM	NM	NS	NS	NS
MW-30	Oct 07	Jun 14	1940.59	NM	NM	20-41	NM	NM	NM	NS	NS	NS
MW-31	Mar 08	Jun 14	1937.66	NM	NM	13.5-33.6	NM	NM	NM	NS	NS	NS
MW-32	Mar 08	Jun 14	1952.90	NM	NM	13.5-33.7	NM	NM	NM	NS	NS	NS
MW-33	Mar 08	Jun 14	1950.98	NM	NM	13.5-33.8	NM	NM	NM	NS	NS	NS
MW-36	Jan 12	Jun 14	1955.30	NM	NM	17-38	NM	NM	NM	NS	NS	NS
MW-37	Jan 12	Jun 14	1929.98	NM	NM	17-38	NM	NM	NM	NS	NS	NS
MW-38	Apr 12	Jun 14	1908.38	15.16	1893.22	15-36	3.21	2.5	99.8	5.4	<0.50	<0.50
MW-39	Apr 12	Jun 14	1967.55	26.07	1941.48	15-36	4.06	2.3	388.6	120	<0.50	<0.50
MW-41	Aug 13	Jun 14	1908.89	15.34	1893.55	10-35	1.23	2.3	84.5	2.8	<0.50	<0.50
MW-42	Sep 13	Jun 14	1910.31	16.51	1893.80	10-35	2.14	2.6	105.3	0.58	<0.50	<0.50
MW-43	Sep 13	Jun 14	1958.33	17.15	1941.18	10-35	2.25	2.1	127.5	<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

Bold value indicates concentration that exceeds regulatory standard.

µg/L = micrograms per liter mV = millivolts
NTU = Nephelometric Turbidity Units

**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 (°C)	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	17.90	1974.14	NM	NM	NM	NM	NM	NM	NM	2,000	ND	ND	ND
	May 03	1992.04	18.70	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	19.30	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	1,700	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	18.30	1973.74	6.3	3.7	81.0	4.6	26.70	2.4	129	1,100	ND	ND	ND
	Dec 06	1992.04	18.88	1973.16	6.7	4.4	>999	5.1	26.90	2.8	111	1,300	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	19.90	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	20.10	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	1971.60	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	

**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 (°C)	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	<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	0.9	<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

**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 (°C)	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	

**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 (°C)	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 (°C)	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	

**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 (°C)	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	2,200	13.0	8.1	ND	
	Sep 02	1989.01	18.26	1970.75	NM	NM	NM	NM	NM	nM	NM	1,000	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	1,300	ND	ND	ND	
	Jan 04	1989.01	19.74	1969.27	7.0	2.3	NM	1.2	22.40	NM	NM	2,400	ND	ND	ND	
	May 05	1989.01	16.21	1972.8	6.9	2.4	NM	2.8	25.90	NM	123	2,090	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	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	1,100	ND	ND	ND	
	Oct 06	1989.01	18.73	1970.28	6.3	3.6	7.0	4.1	26.50	2.3	61	1,300	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	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	1,300	ND	ND	ND	
	Sep 07	1989.01	19.00	1970.01	NM	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	1,500	ND	ND	ND	
	Mar 08	1989.01	20.26	1968.75	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS
	Jun 08	1989.01	NM	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	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	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	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	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	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	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	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	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		

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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 (°C)	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
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
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

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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	2.0	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	

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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 (°C)	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	

**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 (°C)	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	

**Table A-2: Historical Groundwater Gauging and Analytical Data
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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 (°C)	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	

**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 (°C)	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	

**Table A-2: Historical Groundwater Gauging and Analytical Data
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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 (°C)	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	

**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 (°C)	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	

**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 (°C)	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	2.0	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	

**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 (°C)	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

**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 (°C)	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	

**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 (°C)	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	

**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 (°C)	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	

**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 (°C)	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	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	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	NM	NS	NS	NS	NS	
Nov 12	1962.9	NM	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	NM	NS	NS	NS	NS	
Sep 13	1962.9	NM	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		

**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 (°C)	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	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	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	

**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 (°C)	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
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
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
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

**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 (°C)	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	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	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	

**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 (°C)	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
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	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
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	0.80	<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

**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 (°C)	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	NS	NS	NS	NS	
		Nov 12	1979.25	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	NS	NS	NS	NS		
	Sep 13	1979.25	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS		
	Nov 13	1979.25	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	NS	NS	NS	NS		

**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 (°C)	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	NS	NS	NS	NS	
		Nov 12	1975.19	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	NS	NS	NS	NS		
	Sep 13	1975.19	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS		
	Nov 13	1975.19	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	NS	NS	NS	NS		

**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 (°C)	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	1,300	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	1,200	ND	ND	ND
	Mar 08	1962.32	15.18	1947.14	7.0	6.3	0.4	2.2	24.00	4.1	188	1,400	ND	ND	ND
	Jun 08	1962.32	NM	NM	NM	NM	NM	NM	NM	NM	NM	1,100	ND	ND	ND
	Oct 08	1962.29	16.34	1945.95	6.7	3.5	18.3	2.0	23.40	2.3	170	1,300	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	1,100	ND	ND	ND
	Jun 09	1962.29	16.40	1945.89	7.2	3.6	7.1	0.6	23.80	2.3	124	1,400	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	1,200	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	1,000	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	1,100	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	1,100	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	

**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 (°C)	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	

**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 (°C)	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	1,000	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	1,300	ND	ND	ND
	Dec 06	1960.74	18.61	1942.13	6.7	4.5	0.0	3.8	23.90	2.8	429	1,200	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
	Sep 12	1959.29	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	
	Nov 12	1959.29	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	NS	NS	NS	NS	
	Sep 13	1959.29	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

**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 (°C)	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	1,100	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	0.7	ND	ND
	Oct 10	1953.48	19.09	1934.39	6.8	3.7	-0.8	2.0	24.60	2.4	504	450	0.6	ND	ND
	Nov 10	1953.48	18.75	1934.73	6.9	3.7	0.6	2.6	24.91	NM	92	750	0.7	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	0.6	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	0.50	<0.50	<0.50	

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**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 (°C)	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	2.0	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	<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	

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**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 (°C)	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	NS	NS	NS	NS	
	Nov 12	1943.07	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	NS	NS	NS	NS	
	Sep 13	1943.07	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	
	Nov 13	1943.07	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	NS	NS	NS	NS	

**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 (°C)	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		

**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 (°C)	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	2.0	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	

**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 (°C)	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

**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 (°C)	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	1,000	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	1,000	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	1,000	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	1952.90	20.94	1931.96	6.9	3.6	240.0	4.7	25.10	2.3	101	640	2.0	ND	ND
Sep 12	1952.90	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	
Nov 12	1952.90	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	
Mar 13	1952.90	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	1952.90	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	
Sep 13	1952.90	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	
Nov 13	1952.90	20.68	1932.22	6.6	3.7	8.3	2.5	24.57	2.4	124	610	2.0	<0.50	<0.50	
Mar 14	1952.90	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	1952.90	NM	NM	NM	NM	NM	NM	NM	NM	NM	NS	NS	NS	NS	

**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 (°C)	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	

**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 (°C)	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	0.90	<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	NS	NS	NS	NS	
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	NS	NS	NS	NS	

**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 (°C)	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	
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	
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	
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	

**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 (°C)	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
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
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

**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 (°C)	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
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
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
MW-40 CMT-60	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
	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

**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 (°C)	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
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
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

Notes:

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

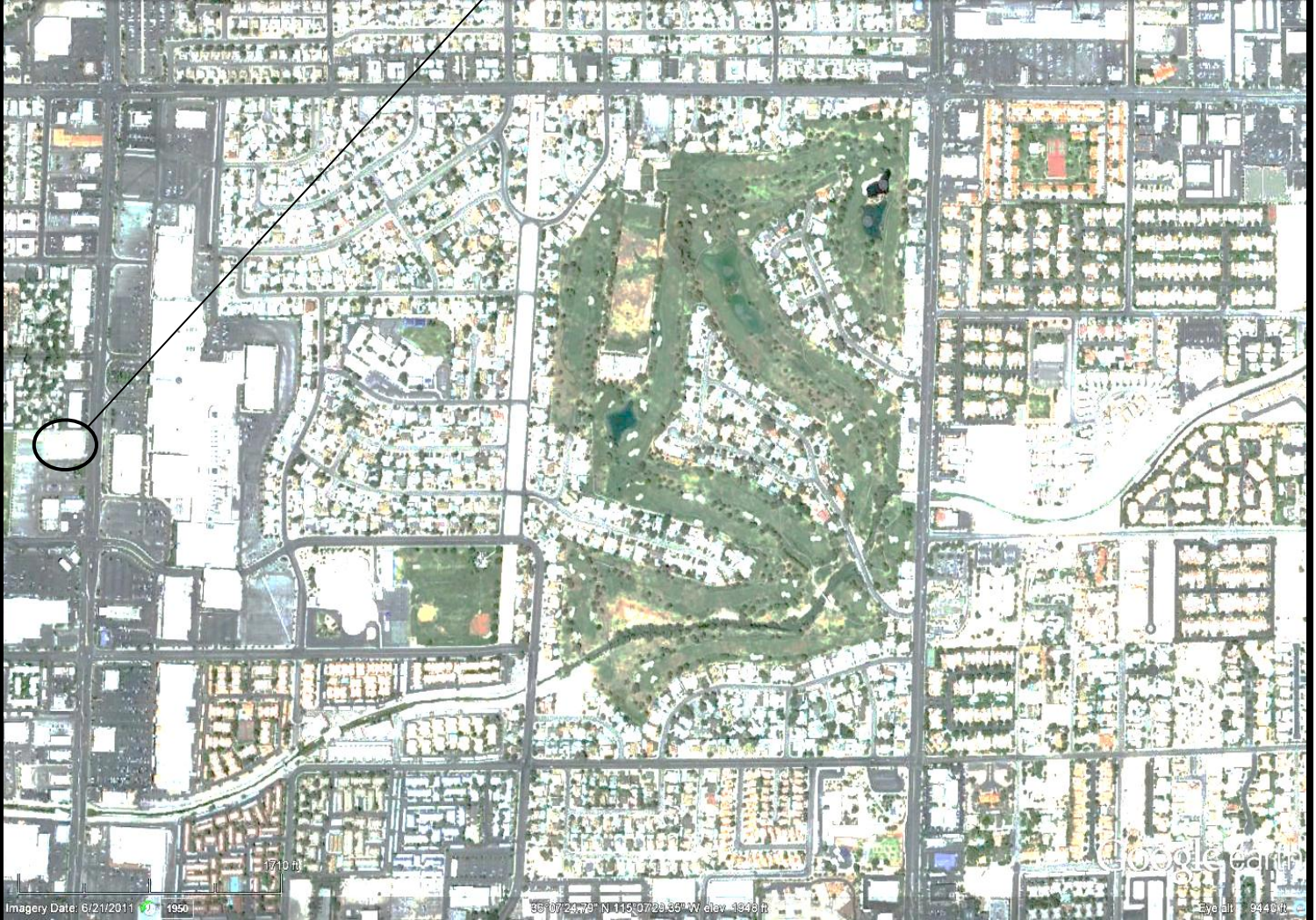
°C = degrees Celsius
 g/L = gallons per liter
 mg/L = milligrams per liter
 mS/cm = milli Siemens per centimeter
 mV = millivolts
 NTU = Nephelometric Turbidity Units

*: 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

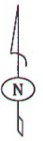
FIGURES

SITE LOCATION



1 inch = 1,000 feet

Note: Scale and location are approximate



SOURCE: Google Earth

SITE VICINITY MAP

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

PROJECT NUMBER: 085.42620.0001	DATE: 12/12	Figure 1
APPROVED BY: ADS	DRAWN BY: ABK	
		2925 East Patrick Lane, Suite M Las Vegas, Nevada 89120-2457 Ph: (702) 798-5750 *** Fax: (702) 798-5742



LEGEND

MMW-1 GROUNDWATER MONITOR WELL

PW-1 PUMPING WELL

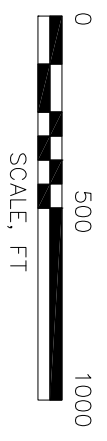
1962.16 GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

1950 GROUNDWATER ELEVATION CONTOUR (5 FT. INTERVALS)

GROUNDWATER FLOW DIRECTION

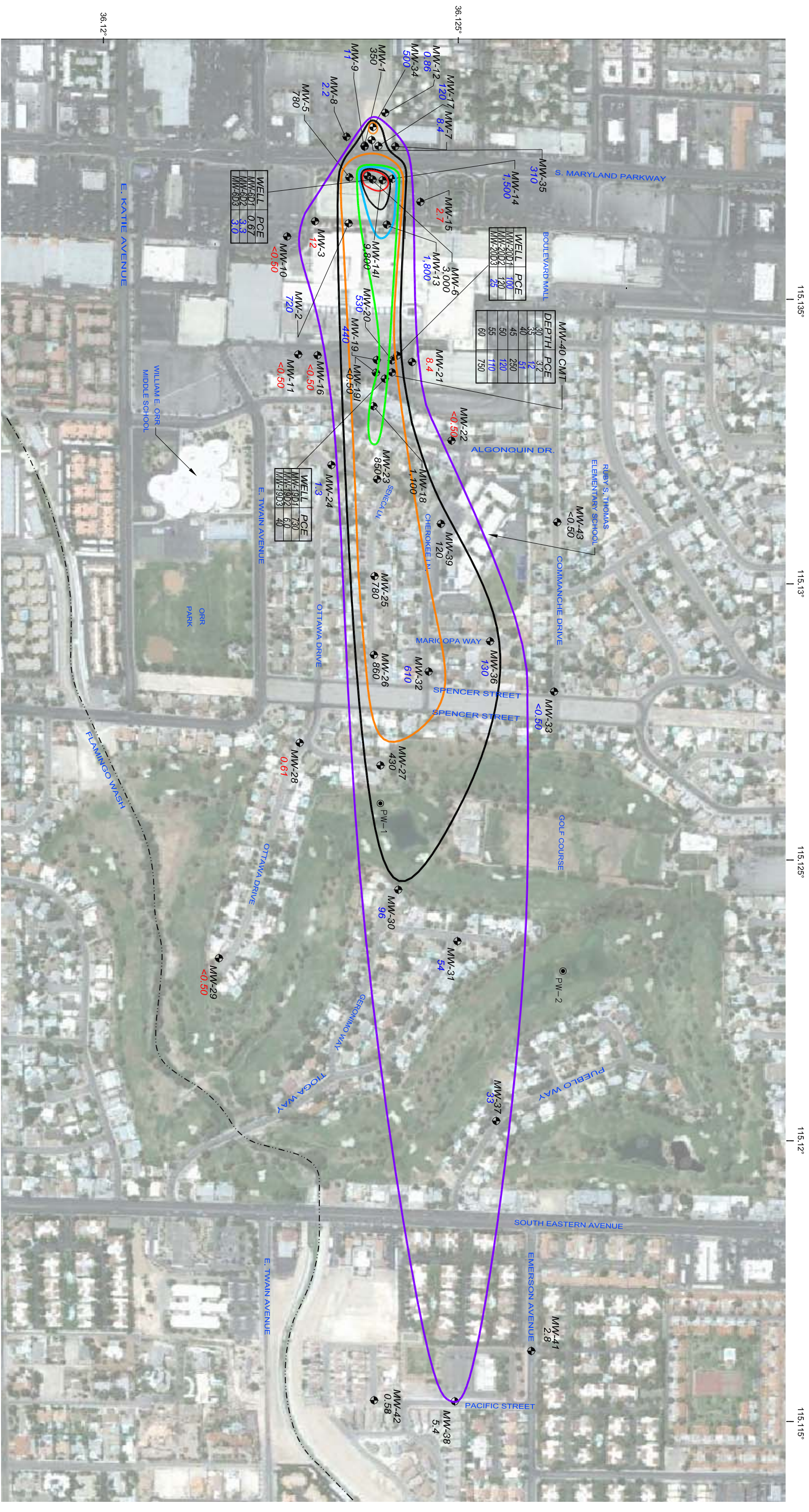
NM NOT MEASURED OR NO SURVEY DATA

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE



GROUNDWATER POTENTIOMETRIC MAP
JUNE 09 - JUNE 12, 2014
 MARYLAND SQUARE SHOPPING CENTER
 3661 S. MARYLAND PARKWAY
 LAS VEGAS, NV

PROJECT NUMBER: 85-42620.0001	DATE: 07/15/14	FIGURE
APPROVED BY: AS	DRAWN BY: AK	2
7115 Amigo Street, Suite 100 Las Vegas, Nevada 89119 Ph: (702) 990-9300 *** Fax: (702) 990-9305		



LEGEND

MW-1 GROUNDWATER MONITOR WELL

PW-1 PUMPING WELL

2500 ISOCONTOUR, µg/L

2000 ISOCONTOUR, µg/L

1500 ISOCONTOUR, µg/L

1000 ISOCONTOUR, µg/L

500 ISOCONTOUR, µg/L

100 ISOCONTOUR, µg/L

540 PCE, µg/L

NS NOT SAMPLED

1,000 March 2013, Data

1,500 November 2013, Data

2,000 June 2014, Data

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE



SCALE, FT

PCE ISOCONCENTRATION MAP

JUNE 9 - JUNE 12, 2014

MARYLAND SQUARE SHOPPING CENTER

3661 S. MARYLAND PARKWAY

LAS VEGAS, NV

PROJECT NUMBER: 85-42620.0001

DATE: 06/30/14

FIGURE 3

APPROVED BY: AS

DRAWN BY: ABK

Cartho 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



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-1
 Sample ID: MW-1
 Date: 6/11

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 25.91 feet 3" = 0.37 gal/lin ft.
 Depth to Water: 20.29 feet 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 10 feet to 30 feet
 Approximate Pump Depth: 23.5 Feet bgs 23 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.	
0.25	1429	30.64	3.591	2.371	2.89	6.96	124.1	Clear, no odor 14.23	MTU
0.50	1434	28.62	3.629	2.358	2.68	6.97	133.3	Clear, no odor 19.62	MTU
0.75	1439	28.58	3.633	2.363	2.65	6.95	133.1	Clear, no odor 23.8	MTU
1.0	1444	28.56	3.633	2.365	2.63	6.94	133.0	Clear, no odor 16.59	MTU
1.25	1449	28.57	3.634	2.366	2.61	6.94	133.0	Clear, no odor 9.22	MTU

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes
 Purged Dry (Y/N): N
 Comments: _____

Well Security: Locking cap? yes no Replaced? yes no PID 0.1
 Bolts secured? yes no Replaced? yes no Vacuum N/A
 Surface Seal? yes no Replaced? yes no Sample Collection Time 5:04



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: JR

Well ID: MW-5
 Sample ID: MW-5
 Date: 6/9

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 29.03 feet 1Q14: 28.91 3" = 0.37 gal/lin ft.
 Depth to Water: 19.68 feet 1Q14: 19.37 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 10 feet to 32 feet
 Approximate Pump Depth: 76.5 Feet bgs 26 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.	
0.25	1440	30.79	3.390	2.199	5.21	7.05	92.9	Sl. Turbid, no odor 135	NTO
0.50	1445	28.02	3.421	2.223	5.10	7.00	87.4	Clear, No odor 71.6	NTO
0.75	1450	28.00	3.421	2.223	5.08	7.02	87.3	Clear, No odor 33.2	NTO
1.0	1455	27.98	3.423	2.224	5.09	7.01	87.3	Clear, No odor 37.2	NTO
1.25	1500	27.98	3.422	2.224	5.11	7.01	87.2	Clear, No odor 37.4	NTO

Total Water Volume Purged: 1.25 Gallons = _____ Well Volumes
 Purged Dry (Y/N): N
 Comments: _____

Well Security: Locking cap? yes no Replaced? yes no 0.3 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 15.0 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DF

Well ID: MW-6
 Sample ID: MW-6
 Date: 6/10

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

Casing Type: PVC

Casing Diameter: 2 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 28.85 feet 1Q14: 28.87
 Depth to Water: 20.30 feet 1Q14: 20.00
 Constructed Screen Interval: 10 feet to 32 feet 4" = 0.67 gal/lin ft.
 Approximate Pump Depth: 26.5 Feet bgs 26 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.	
0.25	939	27.12	3.065	1.997	6.53	7.17	176.3	Sl. Turbid, No odor 552	MU
0.50	944	26.44	3.147	2.047	6.76	7.17	159.0	Sl. Turbid, No odor 354	MU
0.75	949	26.45	3.152	2.053	6.74	7.16	158.8	Sl. Turbid, No odor 71.4	MU
1.0	954	26.43	3.153	2.054	6.73	7.15	158.6	Sl. Turbid, No odor 34.7	MU
1.25	959	26.43	3.155	2.055	6.71	7.15	158.4	Clear, no odor 21.3	UTU

Total Water Volume Purged: 1.25 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 N/A Vacuum
 Surface Seal? X yes ___ no Replaced? ___ yes X no 10/2 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DF

Well ID: MW-6D1
 Sample ID: MW-6D1
 Date: 6/10

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 59.73 feet 1Q14: 59.73 3" = 0.37 gal/lin ft.
 Depth to Water: 19.60 feet 1Q14: 16.20 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 50 feet to 60 feet
 Approximate Pump Depth: 55.5 Feet bgs 55 Feet btoc

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.	
0.25	850	26.83	0.606	0.394	5.83	7.24	215.1	Sl. Turbid, no odor 642	MU
0.50	855	26.73	0.608	0.395	5.84	7.28	201.1	Sl. Turbid, no odor 264	MU
0.75	900	26.71	0.606	0.394	5.86	7.27	199.9	Sl. Turbid, no odor 119	MU
1.0	905	26.71	0.604	0.394	5.84	7.27	199.7	Sl. Turbid, no odor 49.4	MU
1.25	910	26.70	0.600	0.390	5.83	7.28	199.6	Clear, no odor 47.4	MU

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes
 Purged Dry (Y/N): _____
 Comments: _____

Well Security: Locking cap? yes no Replaced? yes no 0.0 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 917 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-141
 Sample ID: MW-141
 Date: 6/10

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

Casing Type: PVC

Casing Diameter: 4 inch 2" = 0.16 gal/in ft.
 Depth to Well Bottom: 54.66 feet 1Q14: 54.64
 Depth to Water: 19.60 feet 1Q14: 19.53
 Constructed Screen Interval: 40 feet to 55 feet 4" = 0.67 gal/in ft.
 Approximate Pump Depth: 40 Feet bgs 47.5 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.	
0.25	1030	28.44	1.251	0.814	4.76	7.23	115.1	Clear, no odor 10-02	MTU
0.50	1035	28.29	1.250	0.812	4.35	7.22	111.5	Clear, no odor 7-58	MTU
0.75	1040	28.25	1.244	0.812	4.37	7.22	111.4	Clear, no odor 5-71	MTU
1.0	1045	28.26	1.249	0.812	4.34	7.22	111.2	Clear, no odor 10-27	MTU
1.25	1050	28.27	1.250	0.813	4.33	7.23	111.2	Clear, no odor 7-72	MTU
1.50	1055	28.29	1.252	0.815	4.35	7.23	111.1	Clear, no odor 6-45	MTU

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

Well Security: Locking cap? 1 yes no Replaced? yes 1 no 2-7 PID
 Bolts secured? 1 yes no Replaced? yes 1 no N/A Vacuum
 Surface Seal? 1 yes no Replaced? yes 1 no 1109 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: OK

Well ID: MW-18
 Sample ID: MW-18
 Date: 6/19

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

Casing Type: PVC
 Casing Diameter: 4 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 22.76 feet 1Q14: 20.36 3" = 0.37 gal/lin ft.
 Depth to Water: 13.78 feet 1Q14: 12.75 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 5 feet to 26 feet
 Approximate Pump Depth: 17.5 Feet bgs 17 Feet btoc

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.	
0.25	1320	27.67	3.373	2.192	4.38	7.18	77.6	clear, no odor 8.44	NVU
0.50	1325	27.67	3.376	2.194	4.91	7.11	71.1	clear, no odor 5.47	NVU
0.75	1330	27.62	3.379	2.196	4.89	7.11	70.7	clear, no odor 4.78	NVU
1.0	1335	27.62	3.377	2.195	4.88	7.10	70.6	clear, no odor 4.44	NVU
1.25	1340	27.63	3.376	2.195	4.88	7.10	70.5	clear, no odor 4.81	NVU
1.5	1345	27.63	3.375	2.194	4.87	7.10	70.5	clear, no odor 4.82	NVU

Total Water Volume Purged: 1.50 Gallons = N/A Well Volumes
 Purged Dry (Y/N): N
 Comments: _____

Well Security: Locking cap? X yes ___ no Replaced? ___ yes X no 0.24 PID
 Bolts secured? X yes ___ no Replaced? ___ yes X no N/A Vacuum
 Surface Seal? X yes ___ no Replaced? ___ yes X no 1359 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
Project Number: 085.42620.0001
Sampler's Name: DK

Well ID: MW-19I
Sample ID: MW-19I
Date: 6/11

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

Casing Type: PVC
Casing Diameter: 4 inch 2" = 0.16 gal/lin ft.
Depth to Well Bottom: 54.26 feet 1Q14: 54.24 3" = 0.37 gal/lin ft.
Depth to Water: 26.71 feet 1Q14: 25.62 4" = 0.67 gal/lin ft.
Constructed Screen Interval: 34 feet to 54 feet
Approximate Pump Depth: 40.5 Feet bgs 40 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.	
0.25	0959	30.38	3.452	2.241	6.24	6.98	629.7	Purple, no odor 95.5	NTU
0.50	1004	28.45	3.458	2.247	5.55	6.94	649.2	Purple, no odor 24.1	NTU
0.75	1009	28.47	3.457	2.247	5.57	6.94	649.4	Purple, no odor 24.9	NTU
1.0	1014	28.46	3.454	2.246	5.59	6.93	649.5	Purple, no odor 10.17	NTU
1.25	1019	28.46	3.455	2.247	5.58	6.92	649.7	Purple, no odor 14.3	NTU
1.50	1024	28.47	3.456	2.248	5.57	6.92	649.8	Purple, no odor 15.7	NTU

Total Water Volume Purged: 1.5 Gallons = N/A Well Volumes
Purged Dry (Y/N): N
Comments: 2.0 Permanganate

Well Security: Locking cap? yes no Replaced? yes no 0.1 PID
Bolts secured? yes no Replaced? yes no N/A Vacuum
Surface Seal? yes no Replaced? yes no 1037 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-19D1
 Sample ID: MW-19D1
 Date: 6/11

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/in ft.
 Depth to Well Bottom: 50.70 feet 1Q14: 50.72 3" = 0.37 gal/in ft.
 Depth to Water: 26.97 feet 1Q14: 25.91 4" = 0.67 gal/in ft.
 Constructed Screen Interval: 31 feet to 51 feet
 Approximate Pump Depth: 41.5 Feet bgs 41 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.	
0.25	1149	32.15	2.437	1.589	6.60	7.14	490.5	Slt turbid, no odor 226	NVU
0.50	1154	31.72	2.629	1.709	5.57	7.06	501.1	Slt turbid, no odor 203	NVU
0.75	1159	31.74	2.634	1.714	5.56	7.04	501.5	Slt turbid, no odor 94.3	NVU
1.00	1204	31.77	2.636	1.717	5.54	7.03	501.4	slt clear, no odor 78.3	NVU
1.25	1204	31.79	2.637	1.719	5.51	7.02	501.2	clear, no odor 56.2	NVU

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes
 Purged Dry (Y/N): N
 Comments:

Well Security: Locking cap? yes no Replaced? yes no 0.1 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 12.25 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: [Signature]

Well ID: MW-19D2
 Sample ID: MW-19D2
 Date: 6/11

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/in ft.
 Depth to Well Bottom: 70.24 feet 1Q14: 70.25
 Depth to Water: 27.86 feet 1Q14: 26.47
 Constructed Screen Interval: 60 feet to 70 feet 4" = 0.67 gal/in ft.
 Approximate Pump Depth: 65.5 Feet bgs 65 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.	
0.25	1059	29.91	2.171	1.411	4.06	7.26	607.8	lt pink, no odor 25.4	N/A
0.50	1104	29.21	2.173	1.412	3.73	7.24	615.8	lt pink, no odor 21.4	N/A
0.75	1109	29.18	2.175	1.415	3.64	7.24	610.2	lt pink, no odor 10.11	N/A
1.0	1114	29.19	2.177	1.418	3.68	7.23	610.3	lt pink, no odor 19.19	N/A
1.25	1119	29.19	2.178	1.420	3.67	7.23	610.5	lt pink, no odor 17.01	N/A

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes
 Purged Dry (Y/N): N
 Comments: DWP 0.5 permanent garnate

Well Security: Locking cap? yes no Replaced? yes no 0.2 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 1129 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-19D3
 Sample ID: MW-19D3
 Date: 07/11

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 49.49 feet 1Q14: 101.86
 Depth to Water: 26.99 feet 1Q14: 25.72
 Constructed Screen Interval: 92 feet to 102 feet 4" = 0.67 gal/lin ft.
 Approximate Pump Depth: 96.5 Feet bgs 96 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.	
0.25	1317	33.21	0.561	0.365	4.62	7.63	157.6	Clear, no odor 12.3.4	NPU
0.50	1322	33.27	0.557	0.361	4.60	7.64	158.0	Clear, no odor 74.3	NPU
0.75	1327	33.25	0.558	0.364	4.61	7.64	158.1	Clear, no odor 61.2	NPU
1.0	1332	33.26	0.560	0.366	4.59	7.64	158.1	Clear, no odor 45.4	NPU
1.25	1337	33.28	0.561	0.364	4.57	7.65	158.0	Clear, no odor 41.6	NPU

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes
 Purged Dry (Y/N): N

Comments: _____

Well Security: Locking cap? ✓ yes no Replaced? yes ✓ no 0.2 PID
 Bolts secured? ✓ yes no Replaced? yes ✓ no N/A Vacuum
 Surface Seal? ✓ yes no Replaced? yes ✓ no 1350 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-20D2
 Sample ID: MW-20D2
 Date: 6/9

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 65.69 feet 1Q14: 65.62 3" = 0.37 gal/lin ft.
 Depth to Water: 26.55 feet 1Q14: 26.05 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 55 feet to 65 feet
 Approximate Pump Depth: 60.5 Feet bgs 60 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.
0.25	1153	27.34	1.954	1.275	5.58	7.20	85.2	Clear, No odor 18.41 NTU
0.50	1158	27.34	2.097	1.363	5.51	7.26	76.8	Clear, No odor 16.72 NTU
0.75	1203	27.32	2.101	1.365	5.47	7.26	76.0	Clear, No odor 8.34 NTU
1.0	1208	27.33	2.102	1.366	5.47	7.26	76.5	Clear, No odor 9.14 NTU
1.25	1213	27.33	2.099	1.364	5.46	7.25	76.6	Clear, No odor 9.31 NTU

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes
 Purged Dry (Y/N): N
 Comments:

Well Security: Locking cap? yes no Pingcap Replaced? yes no 0.3 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 1230 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-38
 Sample ID: MW-38
 Date: 5/4

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/in ft.
 Depth to Well Bottom: 34.81 feet 1Q14: 34.94 3" = 0.37 gal/in ft.
 Depth to Water: 15.16 feet 1Q14: 14.65 4" = 0.67 gal/in ft.
 Constructed Screen Interval: 15 feet to 36 feet
 Approximate Pump Depth: 25.5 Feet bgs 25 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.
0.25	1053	26.18	3.887	2.527	3.72	7.01	116.1	Clear, no odor 37.5 MTU
0.50	1059	24.83	3.986	2.526	3.24	7.04	100.3	Clear, no odor 39.2 MTU
0.75	1103	24.92	3.857	2.532	3.22	7.06	99.6	Clear, no odor 34.3 MTU
1.0	1108	24.91	3.884	2.529	3.21	7.06	99.6	Clear, no odor 22.2 MTU
1.25	1113	24.90	3.882	2.532	3.21	7.07	99.8	Clear, no odor 17.35 MTU

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes

Purged Dry (Y/N): N

Comments: _____

Well Security: Locking cap? 1 yes no Replaced? yes X no 0.2 PID
 Bolts secured? 1 yes no Replaced? yes X no N/A Vacuum
 Surface Seal? 1 yes no Replaced? yes X no 1129 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
Project Number: 085.42620.0001
Sampler's Name: DK

Well ID: MW-40 CMT 30
Sample ID: MW-40 CMT 30
Date: 6/10

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

Casing Type: PVC
Casing Diameter: _____ inch 2" = 0.16 gal/lin ft.
Depth to Well Bottom: 29.77 feet 1Q14: 29.75 3" = 0.37 gal/lin ft.
Depth to Water: _____ feet 1Q14 26.52 4" = 0.67 gal/lin ft.
Constructed Screen Interval: _____ 30 feet to _____ 30.6 feet
Approximate Pump Depth: _____ Feet bgs 30.0 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.	
	1230	42.20	3.536	2.310	4.49	8.30	91.3	Clear, no odor	3.84 MV
	1235	43.54	3.554	2.310	4.51	8.30	78.3	Clear, no odor	4.72 MV
	1240	45.96	3.557	2.314	4.47	8.29	78.4	Clear, no odor	4.41 MV
	1245	46.16	3.586	2.317	4.43	8.20	78.8	Clear, no odor	4.83 MV
	1250	46.19	3.585	2.321	4.41	8.27	78.4	Clear, no odor	4.96 MV

Total Water Volume Purged: _____ Gallons = N/A Well Volumes

Purged Dry (Y/N): N

Comments: _____

Well Security: Locking cap? yes no Replaced? yes no 0.2 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 0.5 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
Project Number: 085.42620.0001
Sampler's Name: DK

Well ID: MW-40 CMT 45
Sample ID: MW-40 CMT 45
Date: 6/10

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

Casing Type: PVC
Casing Diameter: _____ inch 2" = 0.16 gal/lin ft.
Depth to Well Bottom: 44.3 feet 1Q14: 44.92 3" = 0.37 gal/lin ft.
Depth to Water: 26.1 feet 1Q14: 26.55 4" = 0.67 gal/lin ft.
Constructed Screen Interval: _____ 45 feet to _____ 45.6 feet
Approximate Pump Depth: _____ Feet bgs _____ 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.	
	1328	38.39	3.037	1.974	4.80	7.06	-65.5	Clear, No odor 7.03	NTU
	1333	35.98	3.023	1.965	4.68	7.00	-67.4	Clear, No odor 7.08	NTU
	1338	36.15	3.027	1.968	4.64	7.01	-67.1	Clear, No odor 7.90	NTU
	1343	36.03	3.021	1.964	4.71	7.01	-66.7	Clear, No odor 7.32	NTU
	1348	36.07	3.020	1.963	4.68	7.03	-66.4	Clear, No odor 7.09	NTU

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

Well Security: Locking cap? yes K no Replaced? yes K no 0.5 PID
Bolts secured? X yes no Replaced? yes 5 no N/A Vacuum
Surface Seal? K yes no Replaced? yes 2 no 350 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: JK

Well ID: MW-40 CMT 60
 Sample ID: MW-40 CMT 60
 Date: 6/10

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

Casing Type: PVC
 Casing Diameter: _____ inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 59.87 feet 1Q14: 59.85 3" = 0.37 gal/lin ft.
 Depth to Water: 26.56 feet 1Q14: 26.54 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 60 feet to 60.6 feet
 Approximate Pump Depth: _____ Feet bgs _____ 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.	
	1420	36.99	2.945	1.914	5.72	7.07	-66.3	clear, no odor 4.90	NTU
	1430	35.92	2.943	1.914	5.51	7.06	-49.8	clear, no odor 6.12	NTU
	1435	35.95	2.945	1.913	5.47	7.08	-49.6	clear, no odor 4.11	NTU
	1440	35.97	2.953	1.919	5.46	7.07	-49.4	clear, no odor 3.96	NTU
	1445	35.94	2.952	1.917	5.44	7.08	-49.1	clear, no odor 3.65	NTU

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

Well Security: Locking cap? yes no Replaced? yes no 0.4 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 1450 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
Project Number: 085.42620.0001
Sampler's Name: PK

Well ID: MW-41
Sample ID: MW-41
Date: 6/9

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

Casing Type: PVC
Casing Diameter: 2 inch
Depth to Well Bottom: 35.27 feet
Depth to Water: 18.34 feet
Constructed Screen Interval: 10 feet to 35 feet
Approximate Pump Depth: 25.5 Feet bgs, 2.5 Feet btoc

Comments:

Table with 9 columns: Purged (gal.), Time, Temp. (°C), Conductance (mS/cm), TDS (g/L), DO (mg/L), pH (SU), ORP (mV), Water Description: Color, Turbidity, Sheen, Etc. Includes handwritten data for purging volumes up to 1.25 gallons.

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes
Purged Dry (Y/N): Y

Well Security: Locking cap? [X] yes [] no Replaced? [] yes [X] no 0.3 PID
Bolts secured? [X] yes [] no Replaced? [] yes [X] no N/A Vacuum
Surface Seal? [X] yes [] no Replaced? [] yes [X] no 1024 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-42
 Sample ID: MW-42
 Date: 6/9

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 35.04 feet 1Q14: 35.24 3" = 0.37 gal/lin ft.
 Depth to Water: 16.51 feet 1Q14: 16.01 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 10 feet to 35 feet
 Approximate Pump Depth: 26.5 Feet bgs 26 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.	
0.25	905	23.73	3.981	2.580	2.45	6.89	106.5	sl Turbidity, no odor	171 NTU
0.50	910	24.02	3.991	2.594	2.17	6.68	105.9	sl Turbidity, no odor	41.6 NTU
0.75	915	23.61	3.994	2.597	2.15	6.71	105.7	clear, no odor	22.0 NTU
1.0	920	23.61	3.997	2.597	2.14	6.71	105.5	clear, no odor	14.23 NTU
1.25	925	23.60	3.996	2.599	2.14	6.72	105.3	clear, no odor	13.63 NTU

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes
 Purged Dry (Y/N): _____
 Comments: _____

Well Security: Locking cap? yes no Replaced? yes no 0.2 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 932 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-43
 Sample ID: MW-43
 Date: 6/11

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

Casing Type: PVC

Casing Diameter: 2 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 35.25 feet 1Q14: 35.23
 Depth to Water: 17.15 feet 1Q14: 16.11
 Constructed Screen Interval: 10 feet to 35 feet 4" = 0.67 gal/lin ft.
 Approximate Pump Depth: 26.5 Feet bgs 26 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.
0.25	837	26.01	3.164	2.057	2.67	6.79	130.6	Sl. Turbid, no odor 590 NTU
0.50	842	25.54	3.167	2.061	2.30	6.75	127.7	Sl. Turbid, no odor 315 NTU
0.75	847	25.51	3.171	2.060	2.28	6.73	127.6	Clean, no odor 132 NTU
1.0	852	25.51	3.172	2.061	2.27	6.74	127.6	Clean, no odor 121 NTU
1.25	857	25.50	3.172	2.061	2.25	6.74	127.5	Clean, no odor 65.1 NTU
1.50	902	25.50	3.172	2.062	2.25	6.74	127.5	Clean, no odor 61.3 NTU

Total Water Volume Purged: 1.50 Gallons = N/A Well Volumes
 Purged Dry (Y/N): _____
 Comments: GW > 1'

Well Security: Locking cap? yes no Replaced? yes no 0.0 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 9.15 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-39
 Sample ID: MW-39
 Date: 6/17

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

Casing Type: PVC
 Casing Diameter: 2 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 37.94 feet 3" = 0.37 gal/lin ft.
 Depth to Water: 26.07 feet 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 15 feet to 36 feet
 Approximate Pump Depth: 32-3 Feet bgs 32 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.	
0.25	912	29.04	3.507	2.293	4.09	7.14	393.2	Sl. Turbid, no odor 21.9	NTU
0.50	917	30.58	3.496	2.294	4.03	7.17	388.4	Sl. Turbid, no odor 117	NTU
0.75	922	30.57	3.498	2.300	4.03	7.17	388.5	Clear, No odor 57.7	NTU
1.00	927	30.55	3.499	2.302	4.04	7.16	388.5	Clear, no odor 62.4	NTU
1.25	932	30.55	3.501	2.303	4.06	7.16	388.6	Clear, no odor 60.3	NTU

Total Water Volume Purged: 1.25 Gallons = N/A Well Volumes
 Purged Dry (Y/N): N

Comments:

Well Security: Locking cap? yes no Replaced? yes no 0.2 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 934 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: AK

Well ID: MW-23
 Sample ID: MW-23
 Date: 6/12

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

Casing Type: PVC
 Casing Diameter: 4 inch 2" = 0.16 gal/in ft.
 Depth to Well Bottom: 25.27 feet 3" = 0.37 gal/in ft.
 Depth to Water: 17.74 feet 4" = 0.67 gal/in ft.
 Constructed Screen Interval: 5 feet to 26 feet
 Approximate Pump Depth: 21.5 Feet bgs 21 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.	
0.25	1114	28.49	3.362	2.188	2.62	6.94	144.9	clear, no odor 47.8	NTU
0.50	1119	27.13	3.365	2.188	2.51	6.93	148.3	clear, no odor 19.09	NTU
0.75	1124	27.11	3.365	2.188	2.48	6.90	151.1	clear, no odor 10.16	NTU
1.0	1129	27.08	3.367	2.189	2.47	6.90	151.4	clear, no odor 9.52	NTU
1.25	1134	27.08	3.370	2.190	2.45	6.89	151.3	clear, no odor 6.63	NTU
1.50	1139	27.06	3.370	2.191	2.44	6.89	151.3	clear, no odor 6.02	NTU

Total Water Volume Purged: 1.50 Gallons = N/A Well Volumes

Purged Dry (Y/N): N

Comments: _____

Well Security: Locking cap? yes no Replaced? yes no 0.3 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 1147 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-26
 Sample ID: MW-26
 Date: 6/10

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

Casing Type: PVC
 Casing Diameter: 4 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 35.31 feet 3" = 0.37 gal/lin ft.
 Depth to Water: 19.10 feet 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 10 feet to 36 feet
 Approximate Pump Depth: 27.5 Feet bgs 27 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.	
0.25	1220	26.46	3.722	2.420	2.73	6.91	225.2	Clean No odor 4.88	NTU
0.50	1225	26.40	3.727	2.422	2.74	6.91	231.9	Clean, no odor 2.77	NTU
0.75	1230	26.37	3.727	2.423	2.71	6.91	232.3	Clean, no odor 1.02	NTU
1.0	1235	26.39	3.728	2.424	2.76	6.91	232.5	Clean, no odor 2.31	NTU
1.25	1240	26.42	3.727	2.423	2.78	6.90	232.5	Clean No odor 3.24	NTU
1.50	1245	26.43	3.730	2.424	2.80	6.90	232.7	Clean, no odor 2.06	NTU

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 no 0.4 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 1254 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-27
 Sample ID: MW-27
 Date: 6/12

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

Casing Type: PVC
 Casing Diameter: 4 inch 2" = 0.16 gal/lin ft.
 Depth to Well Bottom: 35.26 feet 3" = 0.37 gal/lin ft.
 Depth to Water: 18.96 feet 4" = 0.67 gal/lin ft.
 Constructed Screen Interval: 10 feet to 36 feet
 Approximate Pump Depth: 27.5 Feet bgs 27 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.	
0.25	1324	27.64	3.659	2.378	1.89	6.90	281.4	Clear, no odor 7.43	MTU
0.50	1329	27.41	3.663	2.381	2.36	7.01	271.7	Clear, no odor 6.62	MTU
0.75	1334	27.37	3.661	2.380	2.34	7.00	271.4	Clear, no odor 7.24	MTU
1.0	1339	27.28	3.665	2.381	2.31	7.01	271.2	Clear, no odor 5.40	MTU
1.25	1344	27.28	3.663	2.382	2.27	7.01	270.4	Clear, no odor 4.88	MTU
1.50	1349	27.29	3.664	2.382	2.26	7.00	270.4	Clear, no odor 4.92	MTU

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

Well Security: Locking cap? yes no Replaced? yes no 0.0 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 1357 Sample Collection Time



GROUNDWATER COLLECTION LOG

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

Project Name: Maryland Square
 Project Number: 085.42620.0001
 Sampler's Name: DK

Well ID: MW-25
 Sample ID: MW-25
 Date: 9/12

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

Casing Type: PVC
 Casing Diameter: 4 inch 2" = 0.16 gal/in ft.
 Depth to Well Bottom: 25.96 feet 3" = 0.37 gal/in ft.
 Depth to Water: 20.94 feet 4" = 0.67 gal/in ft.
 Constructed Screen Interval: 5 feet to 26 feet
 Approximate Pump Depth: 23.5 Feet bgs 23 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.	
0.25	1423	28.04	3.615	2347	3.38	6.93	258.5	Clean, No odor 8.21	NTU
0.50	1428	27.06 27.06	3.616	2350	2.26	6.90	258.1	Clean, No odor 4.85	NTU
0.75	1433	27.03	3.615	2349	2.28	6.90	257.8	Clean, No odor 5.08	NTU
1.0	1438	27.05	3.614	2349	2.29	6.89	257.7	Clean, No odor 10.43	NTU
1.25	1443	27.03	3.613	2350	2.31	6.89	257.5	Clean, No odor 4.30	NTU
1.50	1448	27.02	3.615	2350	2.33	6.88	257.6	Clean, No odor 3.86	NTU

Total Water Volume Purged: 1.50 Gallons = N/A Well Volumes
 Purged Dry (Y/N): N
 Comments: _____

Well Security: Locking cap? yes no Replaced? yes no 0.0 PID
 Bolts secured? yes no Replaced? yes no N/A Vacuum
 Surface Seal? yes no Replaced? yes no 1450 Sample Collection Time

Maryland Square PCE Site

APPENDIX B
LABORATORY ANALYTICAL REPORTS

June 20, 2014

Andrew Stuart
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.: N012742

RE: Maryland Square, 085.42620.0001

Attention: Andrew Stuart

Enclosed are the results for sample(s) received on June 13, 2014 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,



Jose Tenorio Jr.
Laboratory Director

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.

Advanced Technology Laboratories, Inc.
dba ASSET Laboratories

3151 W. Post Rd, Las Vegas, NV 89118
P: 702.307.2659 F: 702.307.2691
www.assetlaboratories.com

CLIENT: Cardno ATC
Project: Maryland Square, 085.42620.0001
Lab Order: N012742

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 N012742-007C (MW-19I) was not analyzed for hexavalend chromium due to color of sample that might interfere with the analysis.

Analytical Comments for EPA 6020_Dissolved:

Matrix Spike Duplicate (MSD) is outside recovery criteria for Chromium possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.

Analytical Comments for EPA 8260B:

Dilution was necessary on sample N012742-005 due to high Tetrachloroethene concentration.

CLIENT: Cardno ATC
Project: Maryland Square, 085.42620.0001
Lab Order: N012742
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N012742-001A	MW-1	Groundwater	6/11/2014 3:04:00 PM	6/13/2014	
N012742-002A	MW-5	Groundwater	6/9/2014 3:10:00 PM	6/13/2014	
N012742-003A	MW-6	Groundwater	6/10/2014 10:12:00 AM	6/13/2014	
N012742-004A	MW-6D1	Groundwater	6/10/2014 9:17:00 AM	6/13/2014	
N012742-005A	MW-14I	Groundwater	6/10/2014 11:09:00 AM	6/13/2014	
N012742-006A	MW-18	Groundwater	6/9/2014 1:59:00 PM	6/13/2014	
N012742-007A	MW-19I	Groundwater	6/11/2014 10:37:00 AM	6/13/2014	
N012742-007B	MW-19I	Groundwater	6/11/2014 10:37:00 AM	6/13/2014	
N012742-007C	MW-19I	Groundwater	6/11/2014 10:37:00 AM	6/13/2014	
N012742-008A	MW-19D1	Groundwater	6/11/2014 12:25:00 PM	6/13/2014	
N012742-009A	MW-19D2	Groundwater	6/11/2014 11:29:00 AM	6/13/2014	
N012742-010A	MW-19D3	Groundwater	6/11/2014 1:50:00 PM	6/13/2014	
N012742-011A	MW-20D2	Groundwater	6/9/2014 12:30:00 PM	6/13/2014	
N012742-012A	MW-38	Groundwater	6/9/2014 11:29:00 AM	6/13/2014	
N012742-013A	MW-40 CMT-30	Groundwater	6/10/2014 12:52:00 PM	6/13/2014	
N012742-013B	MW-40 CMT-30	Groundwater	6/10/2014 12:52:00 PM	6/13/2014	
N012742-013C	MW-40 CMT-30	Groundwater	6/10/2014 12:52:00 PM	6/13/2014	
N012742-014A	MW-40 CMT-45	Groundwater	6/10/2014 1:50:00 PM	6/13/2014	
N012742-014B	MW-40 CMT-45	Groundwater	6/10/2014 1:50:00 PM	6/13/2014	
N012742-014C	MW-40 CMT-45	Groundwater	6/10/2014 1:50:00 PM	6/13/2014	
N012742-015A	MW-40 CMT-60	Groundwater	6/10/2014 2:50:00 PM	6/13/2014	
N012742-015B	MW-40 CMT-60	Groundwater	6/10/2014 2:50:00 PM	6/13/2014	
N012742-015C	MW-40 CMT-60	Groundwater	6/10/2014 2:50:00 PM	6/13/2014	
N012742-016A	MW-41	Groundwater	6/9/2014 10:29:00 AM	6/13/2014	
N012742-017A	MW-42	Groundwater	6/9/2014 9:32:00 AM	6/13/2014	
N012742-018A	MW-43	Groundwater	6/11/2014 9:15:00 AM	6/13/2014	
N012742-019A	MW-23	Groundwater	6/12/2014 11:47:00 AM	6/13/2014	
N012742-020A	MW-25	Groundwater	6/12/2014 2:58:00 PM	6/13/2014	
N012742-021A	MW-26	Groundwater	6/12/2014 12:54:00 PM	6/13/2014	

CLIENT: Cardno ATC
Project: Maryland Square, 085.42620.0001
Lab Order: N012742
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N012742-022A	MW-27	Groundwater	6/12/2014 1:57:00 PM	6/13/2014	
N012742-023A	MW-39	Groundwater	6/12/2014 9:39:00 AM	6/13/2014	
N012742-024A	MW-19D2 DUP	Groundwater	6/11/2014 11:29:00 AM	6/13/2014	
N012742-025A	Trip Blank 061114	Water	6/11/2014 7:20:00 AM	6/13/2014	
N012742-026A	Field Blank 061114	Water	6/11/2014 12:30:00 PM	6/13/2014	
N012742-027A	Equipment Blank 061114	Water	6/11/2014 3:17:00 PM	6/13/2014	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-001A

Client Sample ID: MW-1
Collection Date: 6/11/2014 3:04:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102				PrepDate:	Analyst: QBM	
1,1-Dichloroethene	ND	0.16	0.50		µg/L	1	6/18/2014 11:17 AM
cis-1,2-Dichloroethene	ND	0.057	0.50		µg/L	1	6/18/2014 11:17 AM
Tetrachloroethene	350	1.2	5.0		µg/L	10	6/18/2014 12:16 AM
trans-1,2-Dichloroethene	ND	0.074	0.50		µg/L	1	6/18/2014 11:17 AM
Trichloroethene	ND	0.074	0.50		µg/L	1	6/18/2014 11:17 AM
Vinyl chloride	ND	0.044	0.50		µg/L	1	6/18/2014 11:17 AM
Surr: 1,2-Dichloroethane-d4	120	0	76-124		%REC	1	6/18/2014 11:17 AM
Surr: 1,2-Dichloroethane-d4	115	0	76-124		%REC	10	6/18/2014 12:16 AM
Surr: 4-Bromofluorobenzene	103	0	80-120		%REC	1	6/18/2014 11:17 AM
Surr: 4-Bromofluorobenzene	106	0	80-120		%REC	10	6/18/2014 12:16 AM
Surr: Dibromofluoromethane	110	0	80-124		%REC	1	6/18/2014 11:17 AM
Surr: Dibromofluoromethane	108	0	80-124		%REC	10	6/18/2014 12:16 AM
Surr: Toluene-d8	104	0	80-120		%REC	1	6/18/2014 11:17 AM
Surr: Toluene-d8	102	0	80-120		%REC	10	6/18/2014 12:16 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-002A

Client Sample ID: MW-5
Collection Date: 6/9/2014 3:10:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102				PrepDate:	Analyst: QBM	
1,1-Dichloroethene	ND	0.16	0.50		µg/L	1	6/18/2014 12:54 PM
cis-1,2-Dichloroethene	1.1	0.057	0.50		µg/L	1	6/18/2014 12:54 PM
Tetrachloroethene	780	1.2	5.0		µg/L	10	6/18/2014 12:40 AM
trans-1,2-Dichloroethene	ND	0.074	0.50		µg/L	1	6/18/2014 12:54 PM
Trichloroethene	2.6	0.074	0.50		µg/L	1	6/18/2014 12:54 PM
Vinyl chloride	ND	0.044	0.50		µg/L	1	6/18/2014 12:54 PM
Surr: 1,2-Dichloroethane-d4	120	0	76-124		%REC	1	6/18/2014 12:54 PM
Surr: 1,2-Dichloroethane-d4	113	0	76-124		%REC	10	6/18/2014 12:40 AM
Surr: 4-Bromofluorobenzene	108	0	80-120		%REC	1	6/18/2014 12:54 PM
Surr: 4-Bromofluorobenzene	103	0	80-120		%REC	10	6/18/2014 12:40 AM
Surr: Dibromofluoromethane	113	0	80-124		%REC	1	6/18/2014 12:54 PM
Surr: Dibromofluoromethane	108	0	80-124		%REC	10	6/18/2014 12:40 AM
Surr: Toluene-d8	105	0	80-120		%REC	1	6/18/2014 12:54 PM
Surr: Toluene-d8	104	0	80-120		%REC	10	6/18/2014 12:40 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-003A

Client Sample ID: MW-6
Collection Date: 6/10/2014 10:12:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/18/2014 02:06 PM
cis-1,2-Dichloroethene	2.6	0.057	0.50	µg/L	1	6/18/2014 02:06 PM
Tetrachloroethene	3000	12	50	µg/L	100	6/18/2014 02:43 AM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/18/2014 02:06 PM
Trichloroethene	8.7	0.074	0.50	µg/L	1	6/18/2014 02:06 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/18/2014 02:06 PM
Surr: 1,2-Dichloroethane-d4	119	0	76-124	%REC	1	6/18/2014 02:06 PM
Surr: 1,2-Dichloroethane-d4	119	0	76-124	%REC	100	6/18/2014 02:43 AM
Surr: 4-Bromofluorobenzene	104	0	80-120	%REC	1	6/18/2014 02:06 PM
Surr: 4-Bromofluorobenzene	104	0	80-120	%REC	100	6/18/2014 02:43 AM
Surr: Dibromofluoromethane	110	0	80-124	%REC	1	6/18/2014 02:06 PM
Surr: Dibromofluoromethane	109	0	80-124	%REC	100	6/18/2014 02:43 AM
Surr: Toluene-d8	103	0	80-120	%REC	1	6/18/2014 02:06 PM
Surr: Toluene-d8	104	0	80-120	%REC	100	6/18/2014 02:43 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-004A

Client Sample ID: MW-6D1
Collection Date: 6/10/2014 9:17:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101				PrepDate:	Analyst: QBM
1,1-Dichloroethene	ND	0.16	0.50		µg/L	1 6/17/2014 10:14 PM
cis-1,2-Dichloroethene	ND	0.057	0.50		µg/L	1 6/17/2014 10:14 PM
Tetrachloroethene	0.67	0.12	0.50		µg/L	1 6/17/2014 10:14 PM
trans-1,2-Dichloroethene	ND	0.074	0.50		µg/L	1 6/17/2014 10:14 PM
Trichloroethene	ND	0.074	0.50		µg/L	1 6/17/2014 10:14 PM
Vinyl chloride	ND	0.044	0.50		µg/L	1 6/17/2014 10:14 PM
Surr: 1,2-Dichloroethane-d4	111	0	76-124		%REC	1 6/17/2014 10:14 PM
Surr: 4-Bromofluorobenzene	102	0	80-120		%REC	1 6/17/2014 10:14 PM
Surr: Dibromofluoromethane	108	0	80-124		%REC	1 6/17/2014 10:14 PM
Surr: Toluene-d8	101	0	80-120		%REC	1 6/17/2014 10:14 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC	Client Sample ID: MW-14I
Lab Order: N012742	Collection Date: 6/10/2014 11:09:00 AM
Project: Maryland Square, 085.42620.0001	Matrix: GROUNDWATER
Lab ID: N012742-005A	

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102	PrepDate:	Analyst: QBM
1,1-Dichloroethene	ND 0.33	1.0	µg/L 2 6/18/2014 02:30 PM
cis-1,2-Dichloroethene	6.9 0.11	1.0	µg/L 2 6/18/2014 02:30 PM
Tetrachloroethene	9800 23	100	µg/L 200 6/18/2014 06:00 AM
trans-1,2-Dichloroethene	ND 0.15	1.0	µg/L 2 6/18/2014 02:30 PM
Trichloroethene	21 0.15	1.0	µg/L 2 6/18/2014 02:30 PM
Vinyl chloride	ND 0.088	1.0	µg/L 2 6/18/2014 02:30 PM
Surr: 1,2-Dichloroethane-d4	122 0	76-124	%REC 2 6/18/2014 02:30 PM
Surr: 1,2-Dichloroethane-d4	117 0	76-124	%REC 200 6/18/2014 06:00 AM
Surr: 4-Bromofluorobenzene	104 0	80-120	%REC 2 6/18/2014 02:30 PM
Surr: 4-Bromofluorobenzene	104 0	80-120	%REC 200 6/18/2014 06:00 AM
Surr: Dibromofluoromethane	111 0	80-124	%REC 2 6/18/2014 02:30 PM
Surr: Dibromofluoromethane	111 0	80-124	%REC 200 6/18/2014 06:00 AM
Surr: Toluene-d8	106 0	80-120	%REC 2 6/18/2014 02:30 PM
Surr: Toluene-d8	104 0	80-120	%REC 200 6/18/2014 06:00 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-006A

Client Sample ID: MW-18
Collection Date: 6/9/2014 1:59:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/18/2014 12:29 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/18/2014 12:29 PM
Tetrachloroethene	1100	2.3	10	µg/L	20	6/20/2014 02:54 AM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/18/2014 12:29 PM
Trichloroethene	1.2	0.074	0.50	µg/L	1	6/18/2014 12:29 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/18/2014 12:29 PM
Surr: 1,2-Dichloroethane-d4	93.6	0	76-124	%REC	20	6/20/2014 02:54 AM
Surr: 1,2-Dichloroethane-d4	117	0	76-124	%REC	1	6/18/2014 12:29 PM
Surr: 4-Bromofluorobenzene	102	0	80-120	%REC	20	6/20/2014 02:54 AM
Surr: 4-Bromofluorobenzene	104	0	80-120	%REC	1	6/18/2014 12:29 PM
Surr: Dibromofluoromethane	96.9	0	80-124	%REC	20	6/20/2014 02:54 AM
Surr: Dibromofluoromethane	110	0	80-124	%REC	1	6/18/2014 12:29 PM
Surr: Toluene-d8	101	0	80-120	%REC	20	6/20/2014 02:54 AM
Surr: Toluene-d8	103	0	80-120	%REC	1	6/18/2014 12:29 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-007A

Client Sample ID: MW-19I
Collection Date: 6/11/2014 10:37:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/17/2014 08:37 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/17/2014 08:37 PM
Tetrachloroethene	ND	0.12	0.50	µg/L	1	6/17/2014 08:37 PM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 08:37 PM
Trichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 08:37 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/17/2014 08:37 PM
Surr: 1,2-Dichloroethane-d4	111	0	76-124	%REC	1	6/17/2014 08:37 PM
Surr: 4-Bromofluorobenzene	105	0	80-120	%REC	1	6/17/2014 08:37 PM
Surr: Dibromofluoromethane	107	0	80-124	%REC	1	6/17/2014 08:37 PM
Surr: Toluene-d8	84.5	0	80-120	%REC	1	6/17/2014 08:37 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	

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CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-007B

Client Sample ID: MW-19I
Collection Date: 6/11/2014 10:37:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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DISSOLVED METALS BY ICP-MS

RunID: ICP7_140617A	EPA 3010A			EPA 6020		
	QC Batch: 45878			PrepDate: 6/16/2014		Analyst: CEI
Arsenic	0.97	0.027	0.10	µg/L	1	6/17/2014 01:14 PM
Chromium	370	0.76	25	µg/L	25	6/17/2014 12:46 PM
Manganese	260000	64	1200	µg/L	2500	6/17/2014 01:19 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-008A

Client Sample ID: MW-19D1
Collection Date: 6/11/2014 12:25:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/18/2014 11:41 AM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/18/2014 11:41 AM
Tetrachloroethene	730	1.2	5.0	µg/L	10	6/18/2014 01:05 AM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/18/2014 11:41 AM
Trichloroethene	4.2	0.074	0.50	µg/L	1	6/18/2014 11:41 AM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/18/2014 11:41 AM
Surr: 1,2-Dichloroethane-d4	120	0	76-124	%REC	1	6/18/2014 11:41 AM
Surr: 1,2-Dichloroethane-d4	112	0	76-124	%REC	10	6/18/2014 01:05 AM
Surr: 4-Bromofluorobenzene	102	0	80-120	%REC	1	6/18/2014 11:41 AM
Surr: 4-Bromofluorobenzene	105	0	80-120	%REC	10	6/18/2014 01:05 AM
Surr: Dibromofluoromethane	110	0	80-124	%REC	1	6/18/2014 11:41 AM
Surr: Dibromofluoromethane	107	0	80-124	%REC	10	6/18/2014 01:05 AM
Surr: Toluene-d8	104	0	80-120	%REC	1	6/18/2014 11:41 AM
Surr: Toluene-d8	103	0	80-120	%REC	10	6/18/2014 01:05 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC	Client Sample ID: MW-19D2
Lab Order: N012742	Collection Date: 6/11/2014 11:29:00 AM
Project: Maryland Square, 085.42620.0001	Matrix: GROUNDWATER
Lab ID: N012742-009A	

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101	PrepDate:	Analyst: QBM
1,1-Dichloroethene	ND 0.16	0.50	µg/L 1 6/17/2014 10:39 PM
cis-1,2-Dichloroethene	ND 0.057	0.50	µg/L 1 6/17/2014 10:39 PM
Tetrachloroethene	6.0 0.12	0.50	µg/L 1 6/17/2014 10:39 PM
trans-1,2-Dichloroethene	ND 0.074	0.50	µg/L 1 6/17/2014 10:39 PM
Trichloroethene	ND 0.074	0.50	µg/L 1 6/17/2014 10:39 PM
Vinyl chloride	ND 0.044	0.50	µg/L 1 6/17/2014 10:39 PM
Surr: 1,2-Dichloroethane-d4	112 0	76-124	%REC 1 6/17/2014 10:39 PM
Surr: 4-Bromofluorobenzene	103 0	80-120	%REC 1 6/17/2014 10:39 PM
Surr: Dibromofluoromethane	107 0	80-124	%REC 1 6/17/2014 10:39 PM
Surr: Toluene-d8	97.0 0	80-120	%REC 1 6/17/2014 10:39 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-010A

Client Sample ID: MW-19D3
Collection Date: 6/11/2014 1:50:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102				PrepDate:	Analyst: QBM
1,1-Dichloroethene	ND	0.16	0.50		µg/L	1 6/18/2014 09:40 AM
cis-1,2-Dichloroethene	ND	0.057	0.50		µg/L	1 6/18/2014 09:40 AM
Tetrachloroethene	40	0.12	0.50		µg/L	1 6/18/2014 09:40 AM
trans-1,2-Dichloroethene	ND	0.074	0.50		µg/L	1 6/18/2014 09:40 AM
Trichloroethene	ND	0.074	0.50		µg/L	1 6/18/2014 09:40 AM
Vinyl chloride	ND	0.044	0.50		µg/L	1 6/18/2014 09:40 AM
Surr: 1,2-Dichloroethane-d4	117	0	76-124		%REC	1 6/18/2014 09:40 AM
Surr: 4-Bromofluorobenzene	105	0	80-120		%REC	1 6/18/2014 09:40 AM
Surr: Dibromofluoromethane	109	0	80-124		%REC	1 6/18/2014 09:40 AM
Surr: Toluene-d8	103	0	80-120		%REC	1 6/18/2014 09:40 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-011A

Client Sample ID: MW-20D2
Collection Date: 6/9/2014 12:30:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/18/2014 09:16 AM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/18/2014 09:16 AM
Tetrachloroethene	120	1.2	5.0	µg/L	10	6/18/2014 01:54 AM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/18/2014 09:16 AM
Trichloroethene	0.78	0.074	0.50	µg/L	1	6/18/2014 09:16 AM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/18/2014 09:16 AM
Surr: 1,2-Dichloroethane-d4	116	0	76-124	%REC	1	6/18/2014 09:16 AM
Surr: 1,2-Dichloroethane-d4	110	0	76-124	%REC	10	6/18/2014 01:54 AM
Surr: 4-Bromofluorobenzene	104	0	80-120	%REC	1	6/18/2014 09:16 AM
Surr: 4-Bromofluorobenzene	104	0	80-120	%REC	10	6/18/2014 01:54 AM
Surr: Dibromofluoromethane	110	0	80-124	%REC	1	6/18/2014 09:16 AM
Surr: Dibromofluoromethane	108	0	80-124	%REC	10	6/18/2014 01:54 AM
Surr: Toluene-d8	102	0	80-120	%REC	1	6/18/2014 09:16 AM
Surr: Toluene-d8	102	0	80-120	%REC	10	6/18/2014 01:54 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		

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-012A

Client Sample ID: MW-38
Collection Date: 6/9/2014 11:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/17/2014 11:27 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/17/2014 11:27 PM
Tetrachloroethene	5.4	0.12	0.50	µg/L	1	6/17/2014 11:27 PM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 11:27 PM
Trichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 11:27 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/17/2014 11:27 PM
Surr: 1,2-Dichloroethane-d4	114	0	76-124	%REC	1	6/17/2014 11:27 PM
Surr: 4-Bromofluorobenzene	106	0	80-120	%REC	1	6/17/2014 11:27 PM
Surr: Dibromofluoromethane	107	0	80-124	%REC	1	6/17/2014 11:27 PM
Surr: Toluene-d8	103	0	80-120	%REC	1	6/17/2014 11:27 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-013A

Client Sample ID: MW-40 CMT-30
Collection Date: 6/10/2014 12:52:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/17/2014 11:51 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/17/2014 11:51 PM
Tetrachloroethene	3.2	0.12	0.50	µg/L	1	6/17/2014 11:51 PM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 11:51 PM
Trichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 11:51 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/17/2014 11:51 PM
Surr: 1,2-Dichloroethane-d4	111	0	76-124	%REC	1	6/17/2014 11:51 PM
Surr: 4-Bromofluorobenzene	102	0	80-120	%REC	1	6/17/2014 11:51 PM
Surr: Dibromofluoromethane	107	0	80-124	%REC	1	6/17/2014 11:51 PM
Surr: Toluene-d8	102	0	80-120	%REC	1	6/17/2014 11:51 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-013B

Client Sample ID: MW-40 CMT-30
Collection Date: 6/10/2014 12:52:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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DISSOLVED METALS BY ICP-MS

RunID: ICP7_140617A	EPA 3010A			EPA 6020		
	QC Batch: 45878			PrepDate: 6/16/2014		Analyst: CEI
Arsenic	3.6	0.027	0.10	µg/L	1	6/17/2014 12:57 PM
Chromium	5.0	0.030	1.0	µg/L	1	6/17/2014 12:57 PM
Manganese	25	0.026	0.50	µg/L	1	6/17/2014 12:57 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-013C

Client Sample ID: MW-40 CMT-30
Collection Date: 6/10/2014 12:52:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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HEXAVALENT CHROMIUM BY IC

EPA 218.6

RunID: **IC7_140617A** QC Batch: **R93815** PrepDate: Analyst: **RB**
Hexavalent Chromium 5.5 0.024 0.20 µg/L 1 6/17/2014 02:10 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		

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-014A

Client Sample ID: MW-40 CMT-45
Collection Date: 6/10/2014 1:50:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102	PrepDate:	Analyst: QBM
1,1-Dichloroethene	ND 0.16	0.50	µg/L 1 6/18/2014 06:49 AM
cis-1,2-Dichloroethene	ND 0.057	0.50	µg/L 1 6/18/2014 06:49 AM
Tetrachloroethene	250 1.2	5.0	µg/L 10 6/20/2014 03:19 AM
trans-1,2-Dichloroethene	ND 0.074	0.50	µg/L 1 6/18/2014 06:49 AM
Trichloroethene	1.3 0.074	0.50	µg/L 1 6/18/2014 06:49 AM
Vinyl chloride	ND 0.044	0.50	µg/L 1 6/18/2014 06:49 AM
Surr: 1,2-Dichloroethane-d4	93.4 0	76-124	%REC 10 6/20/2014 03:19 AM
Surr: 1,2-Dichloroethane-d4	115 0	76-124	%REC 1 6/18/2014 06:49 AM
Surr: 4-Bromofluorobenzene	102 0	80-120	%REC 10 6/20/2014 03:19 AM
Surr: 4-Bromofluorobenzene	106 0	80-120	%REC 1 6/18/2014 06:49 AM
Surr: Dibromofluoromethane	96.8 0	80-124	%REC 10 6/20/2014 03:19 AM
Surr: Dibromofluoromethane	105 0	80-124	%REC 1 6/18/2014 06:49 AM
Surr: Toluene-d8	100 0	80-120	%REC 10 6/20/2014 03:19 AM
Surr: Toluene-d8	101 0	80-120	%REC 1 6/18/2014 06:49 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		

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-014B

Client Sample ID: MW-40 CMT-45
Collection Date: 6/10/2014 1:50:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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DISSOLVED METALS BY ICP-MS

EPA 3010A

EPA 6020

RunID: ICP7_140617A	QC Batch: 45878			PrepDate: 6/16/2014		Analyst: CEI
Arsenic	1.6	0.027	0.10	µg/L	1	6/17/2014 01:03 PM
Chromium	ND	0.030	1.0	µg/L	1	6/17/2014 01:03 PM
Manganese	250	0.13	2.5	µg/L	5	6/17/2014 12:35 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-014C

Client Sample ID: MW-40 CMT-45
Collection Date: 6/10/2014 1:50:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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HEXAVALENT CHROMIUM BY IC

EPA 218.6

RunID: **IC7_140617A** QC Batch: **R93815** PrepDate: Analyst: **RB**
Hexavalent Chromium 0.85 0.024 0.20 µg/L 1 6/17/2014 02:20 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		

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-015A

Client Sample ID: MW-40 CMT-60
Collection Date: 6/10/2014 2:50:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102	PrepDate:	Analyst: QBM
1,1-Dichloroethene	ND 0.16	0.50	µg/L 1 6/18/2014 10:29 AM
cis-1,2-Dichloroethene	2.9 0.057	0.50	µg/L 1 6/18/2014 10:29 AM
Tetrachloroethene	750 1.2	5.0	µg/L 10 6/18/2014 07:14 AM
trans-1,2-Dichloroethene	ND 0.074	0.50	µg/L 1 6/18/2014 10:29 AM
Trichloroethene	8.0 0.074	0.50	µg/L 1 6/18/2014 10:29 AM
Vinyl chloride	ND 0.044	0.50	µg/L 1 6/18/2014 10:29 AM
Surr: 1,2-Dichloroethane-d4	119 0	76-124	%REC 1 6/18/2014 10:29 AM
Surr: 1,2-Dichloroethane-d4	116 0	76-124	%REC 10 6/18/2014 07:14 AM
Surr: 4-Bromofluorobenzene	104 0	80-120	%REC 1 6/18/2014 10:29 AM
Surr: 4-Bromofluorobenzene	105 0	80-120	%REC 10 6/18/2014 07:14 AM
Surr: Dibromofluoromethane	109 0	80-124	%REC 1 6/18/2014 10:29 AM
Surr: Dibromofluoromethane	112 0	80-124	%REC 10 6/18/2014 07:14 AM
Surr: Toluene-d8	103 0	80-120	%REC 1 6/18/2014 10:29 AM
Surr: Toluene-d8	106 0	80-120	%REC 10 6/18/2014 07:14 AM

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

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-015B

Client Sample ID: MW-40 CMT-60
Collection Date: 6/10/2014 2:50:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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DISSOLVED METALS BY ICP-MS

RunID: ICP7_140617A	EPA 3010A			EPA 6020		
	QC Batch: 45878			PrepDate: 6/16/2014		Analyst: CEI
Arsenic	1.2	0.027	0.10	µg/L	1	6/17/2014 01:08 PM
Chromium	31	0.030	1.0	µg/L	1	6/17/2014 01:08 PM
Manganese	140	0.026	0.50	µg/L	1	6/17/2014 01:08 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-015C

Client Sample ID: MW-40 CMT-60
Collection Date: 6/10/2014 2:50:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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HEXAVALENT CHROMIUM BY IC

EPA 218.6

RunID: **IC7_140617A** QC Batch: **R93815** PrepDate: Analyst: **RB**
Hexavalent Chromium 18 0.048 0.40 µg/L 2 6/17/2014 02:29 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		

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-016A

Client Sample ID: MW-41
Collection Date: 6/9/2014 10:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101				PrepDate:	Analyst: QBM
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/17/2014 11:03 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/17/2014 11:03 PM
Tetrachloroethene	2.8	0.12	0.50	µg/L	1	6/17/2014 11:03 PM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 11:03 PM
Trichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 11:03 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/17/2014 11:03 PM
Surr: 1,2-Dichloroethane-d4	108	0	76-124	%REC	1	6/17/2014 11:03 PM
Surr: 4-Bromofluorobenzene	104	0	80-120	%REC	1	6/17/2014 11:03 PM
Surr: Dibromofluoromethane	106	0	80-124	%REC	1	6/17/2014 11:03 PM
Surr: Toluene-d8	101	0	80-120	%REC	1	6/17/2014 11:03 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-017A

Client Sample ID: MW-42
Collection Date: 6/9/2014 9:32:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/17/2014 09:01 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/17/2014 09:01 PM
Tetrachloroethene	0.58	0.12	0.50	µg/L	1	6/17/2014 09:01 PM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 09:01 PM
Trichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 09:01 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/17/2014 09:01 PM
Surr: 1,2-Dichloroethane-d4	109	0	76-124	%REC	1	6/17/2014 09:01 PM
Surr: 4-Bromofluorobenzene	102	0	80-120	%REC	1	6/17/2014 09:01 PM
Surr: Dibromofluoromethane	105	0	80-124	%REC	1	6/17/2014 09:01 PM
Surr: Toluene-d8	101	0	80-120	%REC	1	6/17/2014 09:01 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-018A

Client Sample ID: MW-43
Collection Date: 6/11/2014 9:15:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/17/2014 09:25 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/17/2014 09:25 PM
Tetrachloroethene	ND	0.12	0.50	µg/L	1	6/17/2014 09:25 PM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 09:25 PM
Trichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 09:25 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/17/2014 09:25 PM
Surr: 1,2-Dichloroethane-d4	111	0	76-124	%REC	1	6/17/2014 09:25 PM
Surr: 4-Bromofluorobenzene	103	0	80-120	%REC	1	6/17/2014 09:25 PM
Surr: Dibromofluoromethane	107	0	80-124	%REC	1	6/17/2014 09:25 PM
Surr: Toluene-d8	104	0	80-120	%REC	1	6/17/2014 09:25 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		

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-019A

Client Sample ID: MW-23
Collection Date: 6/12/2014 11:47:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102				PrepDate:	Analyst: QBM	
1,1-Dichloroethene	ND	0.16	0.50		µg/L	1	6/18/2014 01:18 PM
cis-1,2-Dichloroethene	ND	0.057	0.50		µg/L	1	6/18/2014 01:18 PM
Tetrachloroethene	850	1.2	5.0		µg/L	10	6/18/2014 07:38 AM
trans-1,2-Dichloroethene	ND	0.074	0.50		µg/L	1	6/18/2014 01:18 PM
Trichloroethene	1.4	0.074	0.50		µg/L	1	6/18/2014 01:18 PM
Vinyl chloride	ND	0.044	0.50		µg/L	1	6/18/2014 01:18 PM
Surr: 1,2-Dichloroethane-d4	119	0	76-124		%REC	1	6/18/2014 01:18 PM
Surr: 1,2-Dichloroethane-d4	119	0	76-124		%REC	10	6/18/2014 07:38 AM
Surr: 4-Bromofluorobenzene	102	0	80-120		%REC	1	6/18/2014 01:18 PM
Surr: 4-Bromofluorobenzene	103	0	80-120		%REC	10	6/18/2014 07:38 AM
Surr: Dibromofluoromethane	110	0	80-124		%REC	1	6/18/2014 01:18 PM
Surr: Dibromofluoromethane	109	0	80-124		%REC	10	6/18/2014 07:38 AM
Surr: Toluene-d8	101	0	80-120		%REC	1	6/18/2014 01:18 PM
Surr: Toluene-d8	104	0	80-120		%REC	10	6/18/2014 07:38 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-020A

Client Sample ID: MW-25
Collection Date: 6/12/2014 2:58:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/18/2014 01:42 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/18/2014 01:42 PM
Tetrachloroethene	780	1.2	5.0	µg/L	10	6/18/2014 08:03 AM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/18/2014 01:42 PM
Trichloroethene	0.69	0.074	0.50	µg/L	1	6/18/2014 01:42 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/18/2014 01:42 PM
Surr: 1,2-Dichloroethane-d4	119	0	76-124	%REC	1	6/18/2014 01:42 PM
Surr: 1,2-Dichloroethane-d4	119	0	76-124	%REC	10	6/18/2014 08:03 AM
Surr: 4-Bromofluorobenzene	105	0	80-120	%REC	1	6/18/2014 01:42 PM
Surr: 4-Bromofluorobenzene	106	0	80-120	%REC	10	6/18/2014 08:03 AM
Surr: Dibromofluoromethane	109	0	80-124	%REC	1	6/18/2014 01:42 PM
Surr: Dibromofluoromethane	110	0	80-124	%REC	10	6/18/2014 08:03 AM
Surr: Toluene-d8	105	0	80-120	%REC	1	6/18/2014 01:42 PM
Surr: Toluene-d8	104	0	80-120	%REC	10	6/18/2014 08:03 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC	Client Sample ID: MW-26
Lab Order: N012742	Collection Date: 6/12/2014 12:54:00 PM
Project: Maryland Square, 085.42620.0001	Matrix: GROUNDWATER
Lab ID: N012742-021A	

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102	PrepDate:	Analyst: QBM
1,1-Dichloroethene	ND 0.16	0.50	µg/L 1 6/18/2014 12:05 PM
cis-1,2-Dichloroethene	ND 0.057	0.50	µg/L 1 6/18/2014 12:05 PM
Tetrachloroethene	860 1.2	5.0	µg/L 10 6/18/2014 08:27 AM
trans-1,2-Dichloroethene	ND 0.074	0.50	µg/L 1 6/18/2014 12:05 PM
Trichloroethene	0.50 0.074	0.50	µg/L 1 6/18/2014 12:05 PM
Vinyl chloride	ND 0.044	0.50	µg/L 1 6/18/2014 12:05 PM
Surr: 1,2-Dichloroethane-d4	122 0	76-124	%REC 1 6/18/2014 12:05 PM
Surr: 1,2-Dichloroethane-d4	118 0	76-124	%REC 10 6/18/2014 08:27 AM
Surr: 4-Bromofluorobenzene	107 0	80-120	%REC 1 6/18/2014 12:05 PM
Surr: 4-Bromofluorobenzene	104 0	80-120	%REC 10 6/18/2014 08:27 AM
Surr: Dibromofluoromethane	111 0	80-124	%REC 1 6/18/2014 12:05 PM
Surr: Dibromofluoromethane	109 0	80-124	%REC 10 6/18/2014 08:27 AM
Surr: Toluene-d8	105 0	80-120	%REC 1 6/18/2014 12:05 PM
Surr: Toluene-d8	104 0	80-120	%REC 10 6/18/2014 08:27 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-022A

Client Sample ID: MW-27
Collection Date: 6/12/2014 1:57:00 PM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102				PrepDate:	Analyst: QBM	
1,1-Dichloroethene	ND	0.16	0.50		µg/L	1	6/18/2014 10:53 AM
cis-1,2-Dichloroethene	ND	0.057	0.50		µg/L	1	6/18/2014 10:53 AM
Tetrachloroethene	430	1.2	5.0		µg/L	10	6/18/2014 08:52 AM
trans-1,2-Dichloroethene	ND	0.074	0.50		µg/L	1	6/18/2014 10:53 AM
Trichloroethene	0.94	0.074	0.50		µg/L	1	6/18/2014 10:53 AM
Vinyl chloride	ND	0.044	0.50		µg/L	1	6/18/2014 10:53 AM
Surr: 1,2-Dichloroethane-d4	119	0	76-124		%REC	1	6/18/2014 10:53 AM
Surr: 1,2-Dichloroethane-d4	120	0	76-124		%REC	10	6/18/2014 08:52 AM
Surr: 4-Bromofluorobenzene	104	0	80-120		%REC	1	6/18/2014 10:53 AM
Surr: 4-Bromofluorobenzene	104	0	80-120		%REC	10	6/18/2014 08:52 AM
Surr: Dibromofluoromethane	111	0	80-124		%REC	1	6/18/2014 10:53 AM
Surr: Dibromofluoromethane	110	0	80-124		%REC	10	6/18/2014 08:52 AM
Surr: Toluene-d8	104	0	80-120		%REC	1	6/18/2014 10:53 AM
Surr: Toluene-d8	105	0	80-120		%REC	10	6/18/2014 08:52 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-023A

Client Sample ID: MW-39
Collection Date: 6/12/2014 9:39:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617B	QC Batch: P14VW102				PrepDate:	Analyst: QBM	
1,1-Dichloroethene	ND	0.16	0.50		µg/L	1	6/18/2014 10:05 AM
cis-1,2-Dichloroethene	ND	0.057	0.50		µg/L	1	6/18/2014 10:05 AM
Tetrachloroethene	120	1.2	5.0		µg/L	10	6/18/2014 02:18 AM
trans-1,2-Dichloroethene	ND	0.074	0.50		µg/L	1	6/18/2014 10:05 AM
Trichloroethene	ND	0.074	0.50		µg/L	1	6/18/2014 10:05 AM
Vinyl chloride	ND	0.044	0.50		µg/L	1	6/18/2014 10:05 AM
Surr: 1,2-Dichloroethane-d4	119	0	76-124		%REC	1	6/18/2014 10:05 AM
Surr: 1,2-Dichloroethane-d4	118	0	76-124		%REC	10	6/18/2014 02:18 AM
Surr: 4-Bromofluorobenzene	103	0	80-120		%REC	1	6/18/2014 10:05 AM
Surr: 4-Bromofluorobenzene	104	0	80-120		%REC	10	6/18/2014 02:18 AM
Surr: Dibromofluoromethane	109	0	80-124		%REC	1	6/18/2014 10:05 AM
Surr: Dibromofluoromethane	110	0	80-124		%REC	10	6/18/2014 02:18 AM
Surr: Toluene-d8	103	0	80-120		%REC	1	6/18/2014 10:05 AM
Surr: Toluene-d8	105	0	80-120		%REC	10	6/18/2014 02:18 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-024A

Client Sample ID: MW-19D2 DUP
Collection Date: 6/11/2014 11:29:00 AM
Matrix: GROUNDWATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/17/2014 09:50 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/17/2014 09:50 PM
Tetrachloroethene	5.4	0.12	0.50	µg/L	1	6/17/2014 09:50 PM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 09:50 PM
Trichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 09:50 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/17/2014 09:50 PM
Surr: 1,2-Dichloroethane-d4	110	0	76-124	%REC	1	6/17/2014 09:50 PM
Surr: 4-Bromofluorobenzene	103	0	80-120	%REC	1	6/17/2014 09:50 PM
Surr: Dibromofluoromethane	108	0	80-124	%REC	1	6/17/2014 09:50 PM
Surr: Toluene-d8	96.8	0	80-120	%REC	1	6/17/2014 09:50 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-025A

Client Sample ID: Trip Blank 061114
Collection Date: 6/11/2014 7:20:00 AM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101				PrepDate:	Analyst: QBM
1,1-Dichloroethene	ND	0.16	0.50		µg/L	1 6/17/2014 07:23 PM
cis-1,2-Dichloroethene	ND	0.057	0.50		µg/L	1 6/17/2014 07:23 PM
Tetrachloroethene	ND	0.12	0.50		µg/L	1 6/17/2014 07:23 PM
trans-1,2-Dichloroethene	ND	0.074	0.50		µg/L	1 6/17/2014 07:23 PM
Trichloroethene	ND	0.074	0.50		µg/L	1 6/17/2014 07:23 PM
Vinyl chloride	ND	0.044	0.50		µg/L	1 6/17/2014 07:23 PM
Surr: 1,2-Dichloroethane-d4	109	0	76-124		%REC	1 6/17/2014 07:23 PM
Surr: 4-Bromofluorobenzene	104	0	80-120		%REC	1 6/17/2014 07:23 PM
Surr: Dibromofluoromethane	105	0	80-124		%REC	1 6/17/2014 07:23 PM
Surr: Toluene-d8	103	0	80-120		%REC	1 6/17/2014 07:23 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-026A

Client Sample ID: Field Blank 061114
Collection Date: 6/11/2014 12:30:00 PM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/17/2014 07:48 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/17/2014 07:48 PM
Tetrachloroethene	ND	0.12	0.50	µg/L	1	6/17/2014 07:48 PM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 07:48 PM
Trichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 07:48 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/17/2014 07:48 PM
Surr: 1,2-Dichloroethane-d4	104	0	76-124	%REC	1	6/17/2014 07:48 PM
Surr: 4-Bromofluorobenzene	102	0	80-120	%REC	1	6/17/2014 07:48 PM
Surr: Dibromofluoromethane	102	0	80-124	%REC	1	6/17/2014 07:48 PM
Surr: Toluene-d8	102	0	80-120	%REC	1	6/17/2014 07:48 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	

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ANALYTICAL RESULTS

Print Date: 20-Jun-14

CLIENT: Cardno ATC
Lab Order: N012742
Project: Maryland Square, 085.42620.0001
Lab ID: N012742-027A

Client Sample ID: Equipment Blank 061114
Collection Date: 6/11/2014 3:17:00 PM
Matrix: WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS BY GC/MS

EPA 8260B

RunID: MS5_140617A	QC Batch: P14VW101	PrepDate:	Analyst: QBM			
1,1-Dichloroethene	ND	0.16	0.50	µg/L	1	6/17/2014 08:12 PM
cis-1,2-Dichloroethene	ND	0.057	0.50	µg/L	1	6/17/2014 08:12 PM
Tetrachloroethene	ND	0.12	0.50	µg/L	1	6/17/2014 08:12 PM
trans-1,2-Dichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 08:12 PM
Trichloroethene	ND	0.074	0.50	µg/L	1	6/17/2014 08:12 PM
Vinyl chloride	ND	0.044	0.50	µg/L	1	6/17/2014 08:12 PM
Surr: 1,2-Dichloroethane-d4	107	0	76-124	%REC	1	6/17/2014 08:12 PM
Surr: 4-Bromofluorobenzene	104	0	80-120	%REC	1	6/17/2014 08:12 PM
Surr: Dibromofluoromethane	105	0	80-124	%REC	1	6/17/2014 08:12 PM
Surr: Toluene-d8	102	0	80-120	%REC	1	6/17/2014 08:12 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	

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CLIENT: Cardno ATC
Work Order: N012742
Project: Maryland Square, 085.42620.0001

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_W

Sample ID:	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
MB-R93815	MBLK	218.6_W	µg/L		93815						
Client ID: PBW	Batch ID: R93815	TestNo: EPA 218.6		Analysis Date: 6/17/2014	SeqNo: 1794594						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	ND	0.20									

Sample ID:	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
LCS-R93815	LCS	218.6_W	µg/L		93815						
Client ID: LCSW	Batch ID: R93815	TestNo: EPA 218.6		Analysis Date: 6/17/2014	SeqNo: 1794595						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	5.003	0.20	5.000	0	100	90	110				

Sample ID:	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
N012738-001BDUP	DUP	218.6_W	µg/L		93815						
Client ID: ZZZZZZ	Batch ID: R93815	TestNo: EPA 218.6		Analysis Date: 6/17/2014	SeqNo: 1794597						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	35.308	1.0						35.61	0.857	20	

Sample ID:	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
N012738-001B-MS	MS	218.6_W	µg/L		93815						
Client ID: ZZZZZZ	Batch ID: R93815	TestNo: EPA 218.6		Analysis Date: 6/17/2014	SeqNo: 1794598						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	60.392	1.0	25.00	35.61	99.1	90	110				

Sample ID:	SampType:	TestCode:	Units:	Prep Date:	RunNo:						
N012738-002B-MS	MS	218.6_W	µg/L		93815						
Client ID: ZZZZZZ	Batch ID: R93815	TestNo: EPA 218.6		Analysis Date: 6/17/2014	SeqNo: 1794600						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	60.336	1.0	25.00	35.95	97.5	90	110				

Qualifiers:

- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- E Value above quantitation range
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference

CLIENT: Cardno ATC
Work Order: N012742
Project: Maryland Square, 085.42620.0001

ANALYTICAL QC SUMMARY REPORT

TestCode: 218.6_W

Sample ID: N012738-002B-MSD	SampType: MSD	TestCode: 218.6_W	Units: µg/L	Prep Date:	RunNo: 93815						
Client ID: ZZZZZZ	Batch ID: R93815	TestNo: EPA 218.6	Analysis Date: 6/17/2014	SeqNo: 1794601							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Hexavalent Chromium	61.135	1.0	25.00	35.95	101	90	110	60.34	1.32	20	

Qualifiers:

B Analyte detected in the associated Method Blank
 ND Not Detected at the Reporting Limit
 DO Surrogate Diluted Out

E Value above quantitation range
 R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
 S Spike/Surrogate outside of limits due to matrix interference

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Work Order: N012742
Project: Maryland Square, 085.42620.0001

ANALYTICAL QC SUMMARY REPORT

TestCode: 6020_DIS

Sample ID: MB-45878	SampType: MBLK	TestCode: 6020_DIS	Units: µg/L	Prep Date: 6/16/2014	RunNo: 93824						
Client ID: PBW	Batch ID: 45878	TestNo: EPA 6020	EPA 3010A	Analysis Date: 6/17/2014	SeqNo: 1795053						
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	ND	0.50									

Sample ID: LCS-45878	SampType: LCS	TestCode: 6020_DIS	Units: µg/L	Prep Date: 6/16/2014	RunNo: 93824						
Client ID: LCSW	Batch ID: 45878	TestNo: EPA 6020	EPA 3010A	Analysis Date: 6/17/2014	SeqNo: 1795054						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	9.996	0.10	10.00	0	100	85	115				
Chromium	9.344	1.0	10.00	0	93.4	85	115				
Manganese	95.377	0.50	100.0	0	95.4	85	115				

Sample ID: N012738-003A-MS	SampType: MS	TestCode: 6020_DIS	Units: µg/L	Prep Date: 6/16/2014	RunNo: 93824						
Client ID: ZZZZZ	Batch ID: 45878	TestNo: EPA 6020	EPA 3010A	Analysis Date: 6/17/2014	SeqNo: 1795068						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	26.551	0.10	10.00	16.97	95.8	75	125				
Chromium	40.754	1.0	10.00	32.38	83.7	75	125				
Manganese	87.554	0.50	100.0	0	87.6	75	125				

Sample ID: N012738-003A-MSD	SampType: MSD	TestCode: 6020_DIS	Units: µg/L	Prep Date: 6/16/2014	RunNo: 93824						
Client ID: ZZZZZ	Batch ID: 45878	TestNo: EPA 6020	EPA 3010A	Analysis Date: 6/17/2014	SeqNo: 1795069						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	26.299	0.10	10.00	16.97	93.3	75	125	26.55	0.953	20	
Chromium	39.565	1.0	10.00	32.38	71.9	75	125	40.75	2.96	20	S
Manganese	86.090	0.50	100.0	0	86.1	75	125	87.55	1.69	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 | |

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: P140617LCS	SampType: LCS	TestCode: 8260WATERP	Units: µg/L	Prep Date:	RunNo: 93822
Client ID: LCSW	Batch ID: P14VW101	TestNo: EPA 8260B		Analysis Date: 6/17/2014	SeqNo: 1794902

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20.290	0.50	20.00	0	101	71	128				
cis-1,2-Dichloroethene	20.270	0.50	20.00	0	101	77	120				
Tetrachloroethene	19.660	0.50	20.00	0	98.3	80	120				
trans-1,2-Dichloroethene	20.220	0.50	20.00	0	101	75	122				
Trichloroethene	19.480	0.50	20.00	0	97.4	80	120				
Vinyl chloride	20.570	0.50	20.00	0	103	66	131				
Surr: 1,2-Dichloroethane-d4	26.750		25.00		107	76	124				
Surr: 4-Bromofluorobenzene	26.440		25.00		106	80	120				
Surr: Dibromofluoromethane	26.430		25.00		106	80	124				
Surr: Toluene-d8	26.130		25.00		105	80	120				

Sample ID: P140617LCSD	SampType: LCSD	TestCode: 8260WATERP	Units: µg/L	Prep Date:	RunNo: 93822
Client ID: LCSS02	Batch ID: P14VW101	TestNo: EPA 8260B		Analysis Date: 6/17/2014	SeqNo: 1794903

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	20.970	0.50	20.00	0	105	71	128	20.29	3.30	20	
cis-1,2-Dichloroethene	20.710	0.50	20.00	0	104	77	120	20.27	2.15	20	
Tetrachloroethene	20.250	0.50	20.00	0	101	80	120	19.66	2.96	20	
trans-1,2-Dichloroethene	20.470	0.50	20.00	0	102	75	122	20.22	1.23	20	
Trichloroethene	20.830	0.50	20.00	0	104	80	120	19.48	6.70	20	
Vinyl chloride	21.240	0.50	20.00	0	106	66	131	20.57	3.20	20	
Surr: 1,2-Dichloroethane-d4	25.930		25.00		104	76	124		0		
Surr: 4-Bromofluorobenzene	26.840		25.00		107	80	120		0		
Surr: Dibromofluoromethane	26.620		25.00		106	80	124		0		
Surr: Toluene-d8	25.890		25.00		104	80	120		0		

Sample ID: P140617MB2	SampType: MBLK	TestCode: 8260WATERP	Units: µg/L	Prep Date:	RunNo: 93822
Client ID: PBW	Batch ID: P14VW101	TestNo: EPA 8260B		Analysis Date: 6/17/2014	SeqNo: 1794905

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
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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 | |

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: P140617MB2	SampType: MBLK	TestCode: 8260WATERP Units: µg/L	Prep Date:	RunNo: 93822							
Client ID: PBW	Batch ID: P14VW101	TestNo: EPA 8260B	Analysis Date: 6/17/2014	SeqNo: 1794905							
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	25.710		25.00		103	76	124				
Surr: 4-Bromofluorobenzene	25.400		25.00		102	80	120				
Surr: Dibromofluoromethane	25.770		25.00		103	80	124				
Surr: Toluene-d8	25.710		25.00		103	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
 ND Not Detected at the Reporting Limit
 DO Surrogate Diluted Out

E Value above quantitation range
 R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
 S Spike/Surrogate outside of limits due to matrix interference

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: P140617LCS2		SampType: LCS		TestCode: 8260WATERP Units: µg/L			Prep Date:		RunNo: 93829		
Client ID: LCSW		Batch ID: P14VW102		TestNo: EPA 8260B			Analysis Date: 6/18/2014		SeqNo: 1795208		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	22.490	0.50	20.00	0	112	71	128				
cis-1,2-Dichloroethene	20.760	0.50	20.00	0	104	77	120				
Tetrachloroethene	19.510	0.50	20.00	0	97.6	80	120				
trans-1,2-Dichloroethene	20.900	0.50	20.00	0	104	75	122				
Trichloroethene	19.660	0.50	20.00	0	98.3	80	120				
Vinyl chloride	22.940	0.50	20.00	0	115	66	131				
Surr: 1,2-Dichloroethane-d4	28.600		25.00		114	76	124				
Surr: 4-Bromofluorobenzene	26.310		25.00		105	80	120				
Surr: Dibromofluoromethane	26.380		25.00		106	80	124				
Surr: Toluene-d8	25.670		25.00		103	80	120				

Sample ID: P140617LCSD		SampType: LCSD		TestCode: 8260WATERP Units: µg/L			Prep Date:		RunNo: 93829		
Client ID: LCSS02		Batch ID: P14VW102		TestNo: EPA 8260B			Analysis Date: 6/18/2014		SeqNo: 1795209		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	23.140	0.50	20.00	0	116	71	128	22.49	2.85	20	
cis-1,2-Dichloroethene	21.540	0.50	20.00	0	108	77	120	20.76	3.69	20	
Tetrachloroethene	20.360	0.50	20.00	0	102	80	120	19.51	4.26	20	
trans-1,2-Dichloroethene	21.700	0.50	20.00	0	108	75	122	20.90	3.76	20	
Trichloroethene	20.360	0.50	20.00	0	102	80	120	19.66	3.50	20	
Vinyl chloride	23.200	0.50	20.00	0	116	66	131	22.94	1.13	20	
Surr: 1,2-Dichloroethane-d4	28.760		25.00		115	76	124		0		
Surr: 4-Bromofluorobenzene	26.890		25.00		108	80	120		0		
Surr: Dibromofluoromethane	27.400		25.00		110	80	124		0		
Surr: Toluene-d8	26.310		25.00		105	80	120		0		

Sample ID: P140617MB4		SampType: MBLK		TestCode: 8260WATERP Units: µg/L			Prep Date:		RunNo: 93829		
Client ID: PBW		Batch ID: P14VW102		TestNo: EPA 8260B			Analysis Date: 6/18/2014		SeqNo: 1795211		
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 | |

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Project: Maryland Square, 085.42620.0001

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: P140617MB4	SampType: MBLK	TestCode: 8260WATERP Units: µg/L	Prep Date:	RunNo: 93829							
Client ID: PBW	Batch ID: P14VW102	TestNo: EPA 8260B	Analysis Date: 6/18/2014	SeqNo: 1795211							
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	28.900		25.00		116	76	124				
Surr: 4-Bromofluorobenzene	25.920		25.00		104	80	120				
Surr: Dibromofluoromethane	27.180		25.00		109	80	124				
Surr: Toluene-d8	25.610		25.00		102	80	120				

Qualifiers:

B Analyte detected in the associated Method Blank
 ND Not Detected at the Reporting Limit
 DO Surrogate Diluted Out

E Value above quantitation range
 R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
 S Spike/Surrogate outside of limits due to matrix interference

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: P140619LCS		SampType: LCS		TestCode: 8260WATERP Units: µg/L			Prep Date:		RunNo: 93858		
Client ID: LCSW		Batch ID: P14VW103		TestNo: EPA 8260B			Analysis Date: 6/19/2014		SeqNo: 1795955		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.720	0.50	20.00	0	98.6	71	128				
cis-1,2-Dichloroethene	19.090	0.50	20.00	0	95.4	77	120				
Tetrachloroethene	19.840	0.50	20.00	0	99.2	80	120				
trans-1,2-Dichloroethene	19.820	0.50	20.00	0	99.1	75	122				
Trichloroethene	19.730	0.50	20.00	0	98.6	80	120				
Vinyl chloride	20.080	0.50	20.00	0	100	66	131				
Surr: 1,2-Dichloroethane-d4	24.770		25.00		99.1	76	124				
Surr: 4-Bromofluorobenzene	26.130		25.00		105	80	120				
Surr: Dibromofluoromethane	25.550		25.00		102	80	124				
Surr: Toluene-d8	25.760		25.00		103	80	120				

Sample ID: N012758-001AMS		SampType: MS		TestCode: 8260WATERP Units: µg/L			Prep Date:		RunNo: 93858		
Client ID: ZZZZZ		Batch ID: P14VW103		TestNo: EPA 8260B			Analysis Date: 6/19/2014		SeqNo: 1795956		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.630	0.50	20.00	0	98.2	66	134				
cis-1,2-Dichloroethene	19.950	0.50	20.00	0	99.8	78	121				
Tetrachloroethene	21.580	0.50	20.00	2.170	97.1	62	128				
trans-1,2-Dichloroethene	20.090	0.50	20.00	0	100	70	128				
Trichloroethene	19.850	0.50	20.00	0	99.2	80	120				
Vinyl chloride	20.000	0.50	20.00	0	100	63	138				
Surr: 1,2-Dichloroethane-d4	25.080		25.00		100	76	124				
Surr: 4-Bromofluorobenzene	26.000		25.00		104	80	120				
Surr: Dibromofluoromethane	25.640		25.00		103	80	124				
Surr: Toluene-d8	25.790		25.00		103	80	120				

Sample ID: N012758-001AMSD		SampType: MSD		TestCode: 8260WATERP Units: µg/L			Prep Date:		RunNo: 93858		
Client ID: ZZZZZ		Batch ID: P14VW103		TestNo: EPA 8260B			Analysis Date: 6/19/2014		SeqNo: 1795957		
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 |

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260WATERP

Sample ID: N012758-001AMSD	SampType: MSD	TestCode: 8260WATERP	Units: µg/L	Prep Date:	RunNo: 93858						
Client ID: ZZZZZZ	Batch ID: P14VW103	TestNo: EPA 8260B		Analysis Date: 6/19/2014	SeqNo: 1795957						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19.090	0.50	20.00	0	95.4	66	134	19.63	2.79	20	
cis-1,2-Dichloroethene	19.160	0.50	20.00	0	95.8	78	121	19.95	4.04	20	
Tetrachloroethene	20.950	0.50	20.00	2.170	93.9	62	128	21.58	2.96	20	
trans-1,2-Dichloroethene	19.330	0.50	20.00	0	96.7	70	128	20.09	3.86	20	
Trichloroethene	19.800	0.50	20.00	0	99.0	80	120	19.85	0.252	20	
Vinyl chloride	19.220	0.50	20.00	0	96.1	63	138	20.00	3.98	20	
Surr: 1,2-Dichloroethane-d4	25.030		25.00		100	76	124		0		
Surr: 4-Bromofluorobenzene	26.240		25.00		105	80	120		0		
Surr: Dibromofluoromethane	25.980		25.00		104	80	124		0		
Surr: Toluene-d8	25.880		25.00		104	80	120		0		

Sample ID: P140619MB3	SampType: MBLK	TestCode: 8260WATERP	Units: µg/L	Prep Date:	RunNo: 93858						
Client ID: PBW	Batch ID: P14VW103	TestNo: EPA 8260B		Analysis Date: 6/19/2014	SeqNo: 1795958						
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	25.610		25.00		102	76	124				
Surr: 4-Bromofluorobenzene	26.140		25.00		105	80	120				
Surr: Dibromofluoromethane	25.590		25.00		102	80	124				
Surr: Toluene-d8	25.910		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 |

Calculations are based on raw values
 3151 W. Post Rd, Las Vegas, NV 89118
 P: 702.307.2659 F: 702.307.2691
www.assetlaboratories.com

CHAIN OF CUSTODY RECORD



**Advanced Technology
Laboratories, Inc.**

3151-3153 W. Post Rd.
Las Vegas, NV 89118
Tel: (702) 307-2659 • Fax: (702) 307-2691

FOR LABORATORY USE ONLY:

P.O.# _____	Method of Transport Client <input type="checkbox"/> ATL INC <input checked="" type="checkbox"/> FEDEX <input type="checkbox"/> Other: _____	Sample Condition Upon Receipt 1. CHILLED ^{2.5°C} <input checked="" type="checkbox"/> 12#2 <input type="checkbox"/> N <input type="checkbox"/> 4. SEALED <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> 2. HEADSPACE (VOA) Y <input type="checkbox"/> N <input checked="" type="checkbox"/> 5. # OF SPLS MATCH COC Y <input checked="" type="checkbox"/> N <input type="checkbox"/> 3. CONTAINER INTACT Y <input checked="" type="checkbox"/> N <input type="checkbox"/> 6. PRESERVED Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
Logged By: <u>AC</u>	Date: <u>6/13/14</u>	

Client: <u>Cardno ATC</u>	Address: <u>7115 Amigo, Ste. 100</u>	TEL: <u>(702) 990 9300</u>
Attn: <u>Andrew Stuart</u>	City: <u>Las Vegas</u> State: <u>NV</u> Zip Code: <u>89119</u>	FAX: <u>(702) 990 9305</u>

Project Name: Maryland Square Project #: 085.42620.0001 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) <u>[Signature]</u>	Date: <u>6/12/14</u>	Time: <u>1600</u>	Received by: (Signature and Printed name) <u>[Signature]</u>	Date: <u>6/13/14</u>	Time: <u>0914</u>
Relinquished by: (Signature and Printed name) <u>[Signature]</u>	Date: <u>6/13/14</u>	Time: <u>0926</u>	Received by: (Signature and Printed name) <u>[Signature]</u>	Date: <u>6/13/14</u>	Time: <u>0926</u>
Relinquished by: (Signature and Printed name) _____	Date: _____	Time: _____	Received by: (Signature and Printed name) _____	Date: _____	Time: _____

I hereby authorize ATL INC to perform the work indicated below: Project Mgr/Submitter: <u>Dwight Kikukawa</u> <u>6/12/14</u> <small>Print Name Date</small>	Send Report To: Attn: <u>Andrew Stuart</u> Co: <u>Cardno ATC</u> Address: <u>7115 Amigo St. Ste. 100</u> City: <u>Las Vegas</u> State: <u>NV</u> Zip: <u>89119</u>	Bill To: Attn: <u>(same)</u> Co: _____ Address: _____ City: _____ State: _____ Zip: _____	Special Instructions/Comments: <u>Hexavalent Chromium</u>
--	--	---	--

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 : \$ 1.00 / ATL workorder / mo (after 1 year)

ITEM	LAB USE ONLY:				SPECIFY APPROPRIATE MATRIX										PRESERVATION	REMARKS						
	Batch #:				MATRIX												Container(s)					
	Lab No.	Sample I.D. / Location	Date	Time	8260B (VOC)	8260B (BTEX)(MTBE)	8015B (GRO)	8015B (DRO)	RCR48 (Motor Oil)(ORO)	6020 (METAL)	216.6 (LEAD)	HEXAVALENT CHROMIUM	SOIL	WATER				GROUND WATER	WASTEWATER	TAT	#	Type
	N012742-11	MW-20D2	6/9	1230					X									E	3	V	H	
	-12	MW-38	6/9	1129					X									E	3	V	H	
	-13	MW-40 CMT 30	6/10	1252					X	X	X							E	5	V	P	H
	-14	MW-40 CMT 45	6/10	1350					X	X	X							E	5	V	P	H
	-15	MW-40 CMT 60	6/10	1450					X	X	X							E	5	V	P	H
	-16	MW-41	6/9	1029					X									E	3	V	H	
	-17	MW-42	6/9	932					X									E	3	V	H	
	-18	MW-43	6/11	915					X									E	3	V	H	
	-19	MW-19D2 DVP	6/11	1129					X									E	3	V	H	
	-20	MW-23	6/12	1147					X									E	3	V	H	

*TAT starts 8 a.m. following day if samples received after 3 p.m.	TAT: <input type="checkbox"/> A= Overnight ≤ 24 hr	<input type="checkbox"/> B= Emergency Next workday <input type="checkbox"/> C= Critical 2 Workdays <input type="checkbox"/> D= Urgent 3 Workdays <input type="checkbox"/> E= Routine 7 Workdays	Preservatives: H=HCl N=HNO ₃ S=H ₂ SO ₄ C=4°C Z=Zn(AC) ₂ O=NaOH T=Na ₂ S ₂ O ₃
Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal			

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: 6/13/2014 Workorder: N012742
 Rep sample Temp (Deg C): 2.8 IR Gun ID: 2
 Temp Blank: Yes No
 Carrier name: ATL
 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 <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact, signed, dated on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Sampler's name present in COC? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| 6. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Temperature of rep sample or Temp Blank within acceptable limit? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 13. Water - VOA vials have zero headspace? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 14. Water - pH acceptable upon receipt?
Example: pH > 12 for (CN,S); pH<2 for Metals | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 15. Did the bottle labels indicate correct preservatives used? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 16. Were there Non-Conformance issues at login? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Was Client notified? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |

Comments:

Checklist Completed B

AC

ACortez 6/16/2014

Reviewed By:

ti 06/18/14

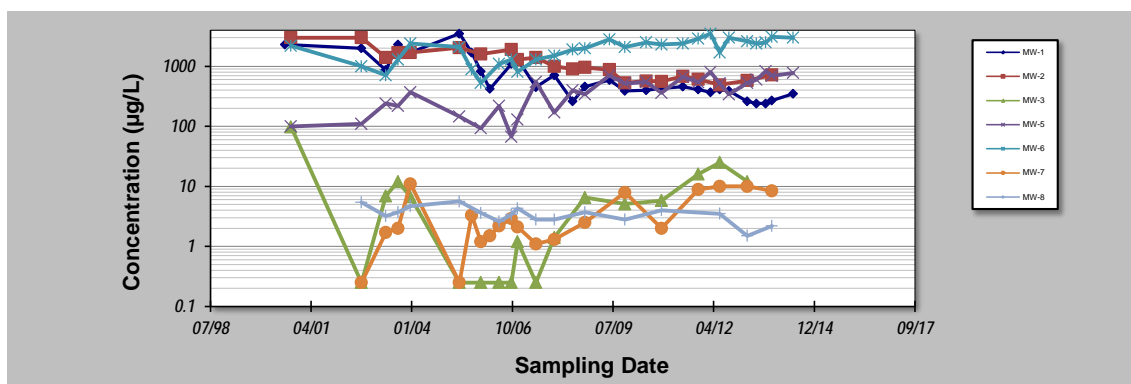
Maryland Square PCE Site

APPENDIX C
MANN-KENDALL TREND TEST FOR
PLUME STABILITY

GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **15-Jul-14** Job ID: **085.42620.0001**
 Facility Name: **Maryland Square PCE Site** Constituent: **PCE**
 Conducted By: **Cardno 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	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									
33									
34									
35									
Coefficient of Variation:		0.94	0.60	2.07	0.58	0.41	0.92	0.31	
Mann-Kendall Statistic (S):		-283	-166	29	216	228	77	-52	
Confidence Factor:		>99.9%	>99.9%	85.3%	>99.9%	>99.9%	99.4%	98.3%	
Concentration Trend:		Decreasing	Decreasing	No Trend	Increasing	Increasing	Increasing	Decreasing	



Notes:

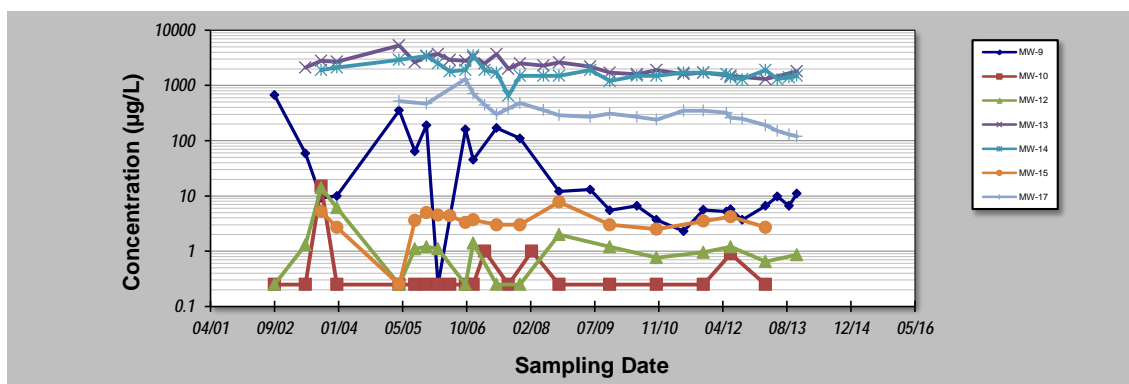
- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S=0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- 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: 15-Jul-14	Job ID: 085.42620.0001
Facility Name: Maryland Square PCE Site	Constituent: PCE
Conducted By: Cardno ATC	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								
34								
35								
Coefficient of Variation:		1.98	2.95	1.74	0.36	0.35	0.43	0.66
Mann-Kendall Statistic (S):		-121	3	-21	-176	-157	-24	-185
Confidence Factor:		99.6%	52.7%	75.5%	>99.9%	>99.9%	82.6%	>99.9%
Concentration Trend:		Decreasing	No Trend	No Trend	Decreasing	Decreasing	Stable	Decreasing



Notes:

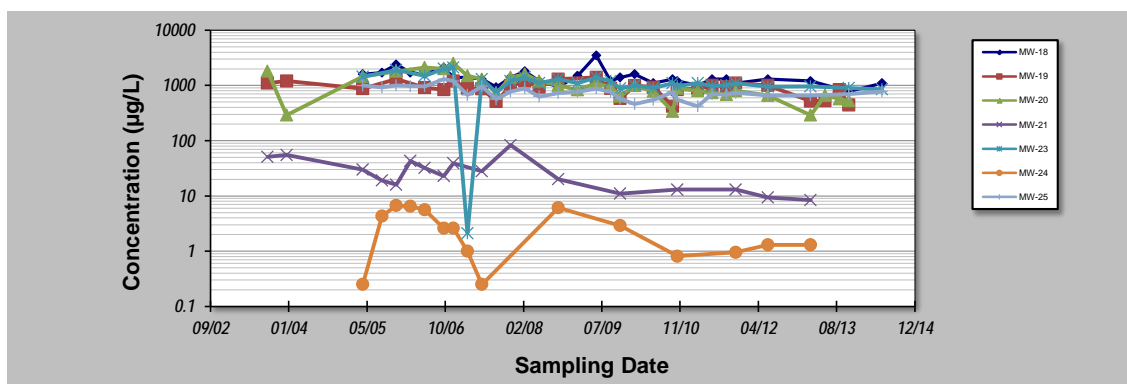
- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S=0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- 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: 15-Jul-14	Job ID: 085.42620.0001
Facility Name: Maryland Square PCE Site	Constituent: PCE
Conducted By: Cardno ATC	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	Sep 03		1,100	1,800	51			
2	Jan 04		1,200	290	55			
3	May 05	1,600	873	1,460	30	1,430	0.25	993
4	Sep 05	1,700			19		4.3	920
5	Dec 05	2,400	1,300	1,800	16	1,900	6.7	1,000
6	Mar 06	1,700			43		6.5	970
7	Jun 06	1,600	910	2,100	32	1,500	5.6	960
8	Oct 06	2,100	840	2,000	23	2,000	2.6	1,300
9	Dec 06	1,400	1,200	2,500	39	2,100	2.6	1,200
10	Mar 07	1,400	890	1,500		2.1	1.0	670
11	Jun 07	1,300	870	1,300	28	1,300	0.25	960
12	Sep 07	930	510	730		750		560
13	Dec 07	1,400	990	1,400	83	1,200		780
14	Mar 08	1,800	1,200	1,600		1,400		890
15	Jun 08	1,200	930	1,200		1,100		630
16	Oct 08	950	1,300	1,000	20	1,300	6.1	730
17	Feb 09	1,500		830		1,100		770
18	Jun 09	3,500	1,400	1,100		1,400		880
19	Sep 09	1,200	880	940		1,200		770
20	Nov 09	1,400	580	640	11	880	2.9	570
21	Feb 10	1,600	990	990		1,000		460
22	Jun 10	1,100	930	780		900		550
23	Oct 10	1,300	420	340		1,100		760
24	Nov 10	1,200	840	890	13	970	0.81	550
25	Mar 11	1,000	880	800		1,100		420
26	Jun 11	1,300	1,000	740		970		700
27	Sep 11	1,300	950	680		1,000		680
28	Nov 11	1,100	1,100	800	13	1,100	0.95	740
29	Jun 12	1,300	1,000	660	9.4	950	1.3	660
30	Mar 13	1,200	520	290	8.4	960	1.3	660
31	Jun 13		530	660				
32	Sep 13		840	570				
33	Nov 13	780	440	530		900		700
34	Jun 14	1,100				850		780
35								
Coefficient of Variation:		0.36	0.29	0.53	0.69	0.35	0.82	0.26
Mann-Kendall Statistic (S):		-194	-83	-279	-73	-180	-28	-191
Confidence Factor:		>99.9%	93.8%	>99.9%	99.9%	>99.9%	90.8%	>99.9%
Concentration Trend:		Decreasing	Prob. Decreasing	Decreasing	Decreasing	Decreasing	Prob. Decreasing	Decreasing



Notes:

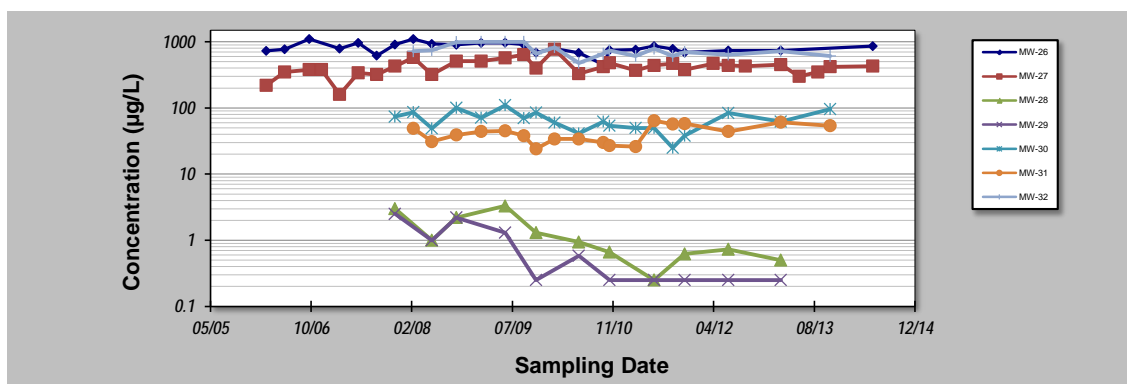
- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S=0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
- 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: 15-Jul-14	Job ID: 085.42620.0001
Facility Name: Maryland Square PCE Site	Constituent: PCE
Conducted By: Cardno 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								
33								
34								
35								
Coefficient of Variation:		0.18	0.27	0.79	1.01	0.34	0.30	0.21
Mann-Kendall Statistic (S):		-69	33	-35	-34	-45	25	-55
Confidence Factor:		94.4%	71.4%	99.7%	99.6%	93.8%	81.6%	98.0%
Concentration Trend:		Prob. Decreasing	No Trend	Decreasing	Decreasing	Prob. Decreasing	No Trend	Decreasing



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- 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.
- 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.

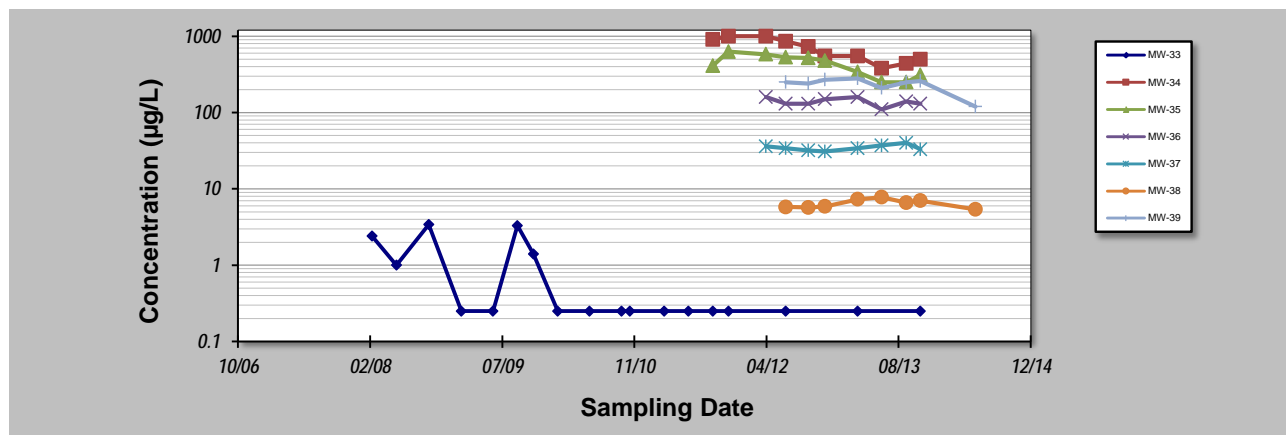
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GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **15-Jul-14** Job ID: **085.42620.0001**
 Facility Name: **Maryland Square PCE Site** Constituent: **PCE**
 Conducted By: **Cardno ATC** 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)						
		MW-33	MW-34	MW-35	MW-36	MW-37	MW-38	MW-39
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								
Coefficient of Variation:		1.32	0.34	0.32	0.12	0.08	0.13	0.22
Mann-Kendall Statistic (S):		-57	-33	-30	-6	3	4	-5
Confidence Factor:		98.4%	99.9%	99.7%	72.6%	59.4%	64.0%	68.3%
Concentration Trend:		Decreasing	Decreasing	Decreasing	Stable	No Trend	No Trend	Stable



Notes:

- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
- 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.
- 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.

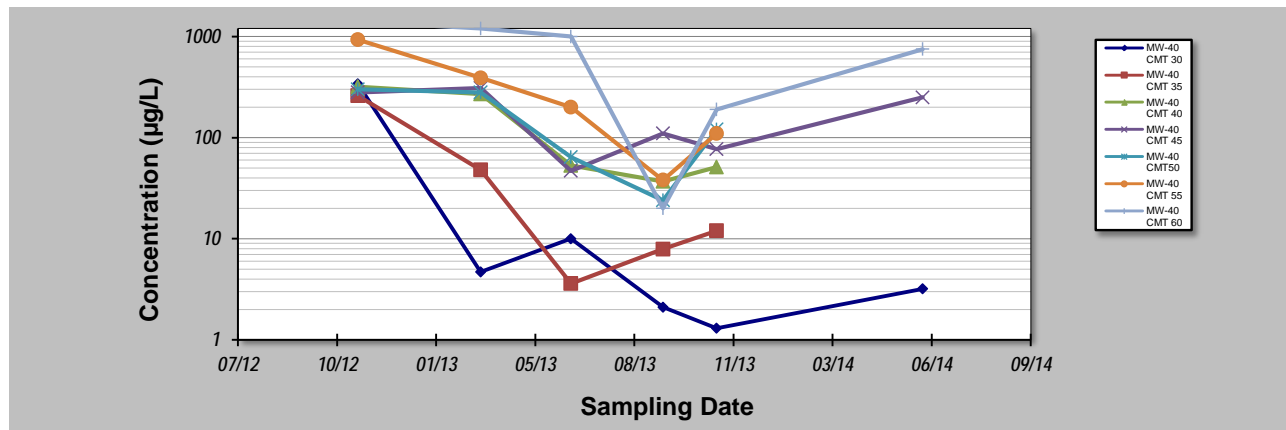
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GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **15-Jul-14** Job ID: **085.42620.0001**
 Facility Name: **Maryland Square PCE Site** Constituent: **PCE**
 Conducted By: **Cardno ATC** 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)						
		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
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								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		2.28	1.14	0.94	0.64	0.80	0.82	0.73
Mann-Kendall Statistic (S):		-9	0	-8	-3	-6	-4	-9
Confidence Factor:		93.2%	37.5%	95.8%	64.0%	88.3%	83.3%	93.2%
Concentration Trend:		Prob. Decreasing	No Trend	Decreasing	Stable	Stable	Stable	Prob. Decreasing



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- 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.
- 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.

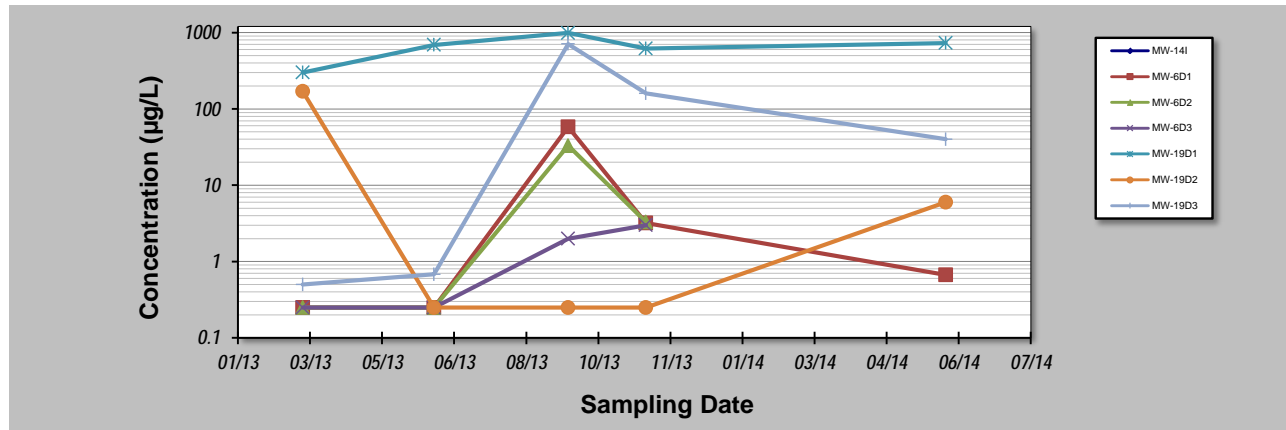
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GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **15-Jul-14** Job ID: **085.42620.0001**
 Facility Name: **Maryland Square PCE Site** Constituent: **PCE**
 Conducted By: **Cardno 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)						
		MW-14I	MW-6D1	MW-6D2	MW-6D3	MW-19D1	MW-19D2	MW-19D3
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								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.38	1.83	1.73	0.99	0.37	1.70	1.66
Mann-Kendall Statistic (S):		2	0	3	5	4	3	4
Confidence Factor:		59.2%	37.5%	72.9%	89.6%	75.8%	72.9%	75.8%
Concentration Trend:		No Trend	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- 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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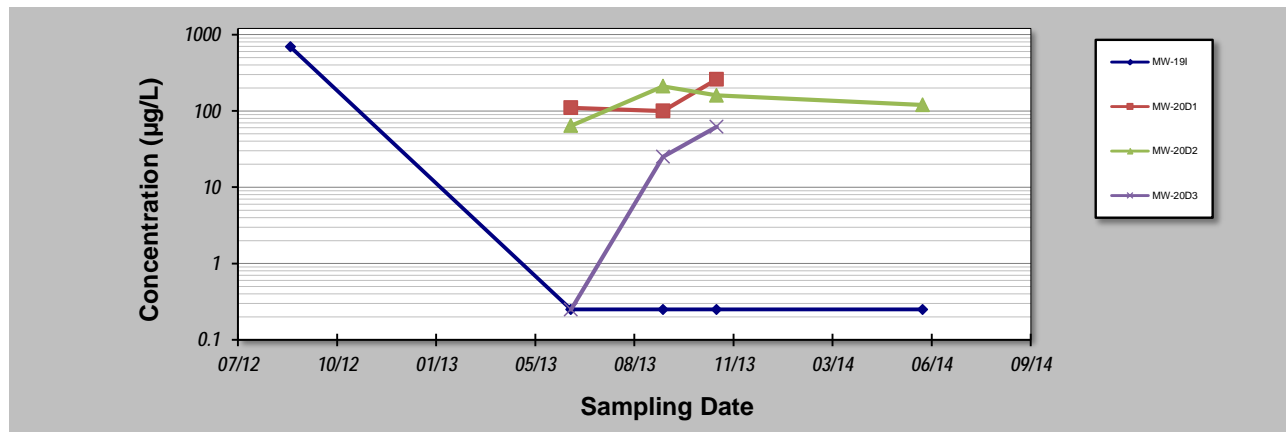
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GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: **15-Jul-14** Job ID: **085.42620.0001**
 Facility Name: **Maryland Square PCE Site** Constituent: **PCE**
 Conducted By: **Cardno ATC** Concentration Units: **µg/L**

Sampling Point ID: **MW-19I** **MW-20D1** **MW-20D2** **MW-20D3**

Sampling Event	Sampling Date	PCE CONCENTRATION (µg/L)			
		MW-19I	MW-20D1	MW-20D2	MW-20D3
1	Sep 12	690			
2	Jun 13	0.25	110	64	0.25
3	Sep 13	0.25	100	210	25
4	Nov-13	0.25	260	160	62
5	Jun 14	0.25		120	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
Coefficient of Variation:		2.23	0.57	0.45	1.07
Mann-Kendall Statistic (S):		-4	1	0	3
Confidence Factor:		75.8%		37.5%	
Concentration Trend:		No Trend		Stable	



Notes:

- At least four independent sampling events per well are required for calculating the trend. Methodology is valid for 4 to 40 samples.
- 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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