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AECOM

2013 ANNUAL GROUNDWATER MONITORING REPORT

FORMER TRW MICROWAVE FACILITY
825 STEWART DRIVE
SUNNYVALE, CALIFORNIA

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1.0 INTRODUCTION

This Annual Groundwater Monitoring report (report) presents the results of the October 2013 groundwater-monitoring program at the former TRW Microwave Operable Unit (OU) (the "site") in Sunnyvale, California (Figure 1). Northrop Grumman Systems Corporation (Northrop Grumman) conducted the annual monitoring activities to fulfill the requirements of the California Regional Water Quality Control Board - San Francisco Bay Region (Water Board, 1999). In accordance with the Water Board's February 17, 2004 letter (Water Board, 2004a), this report also summarizes 2013 groundwater monitoring data collected as part of the Enhanced Anaerobic Biodegradation (EAB) program and Non-Pumping Conditions (NPC) evaluation.

Forty-two (42) wells and the Eductor (a groundwater extraction pipe installed within the former underground storage tank [UST] gravel backfill pit) have been completed at the site in four depth intervals, designated as Zones A, B1, B2, and B4 (Table 1). Figure 2 shows the site layout and existing well locations.

The NPC evaluation was initiated in April 2001 and involves the evaluation of volatile organic compound (VOC) concentration trends after complete suspension of groundwater extraction at the site. The NPC evaluation is discussed in Section 4.1 as part of the discussion on the site groundwater extraction and treatment (GWET) system. The EAB program was initiated in October 2000 in order to more aggressively remediate the former site source area (the former UST area) and was expanded to the area immediately downgradient of the former site source area starting in August 2005. The EAB program is discussed in Section 4.2.

Selected wells are monitored on a semi-annual basis as part of the EAB program and/or NPC evaluation. For the 2013 calendar year, Northrop Grumman followed the approved monitoring schedule submitted to the Water Board and U.S. Environmental Protection Agency (USEPA) in 2007 (Water Board, 2007). Groundwater samples were analyzed for VOCs using USEPA Test Method 8260B. As part of the EAB program, select samples were also analyzed for geochemical parameters, electron acceptors, and metabolic by-products using USEPA Test Methods or other standard methods, and dechlorinating microbes using polymerase chain reaction methods. In addition to these analyses, selected wells have periodically been sampled and analyzed for compound specific isotope analysis (CSIA) to evaluate off-site and source area contaminant contributions and effectiveness of the EAB program.

2.0 SITE ACTIVITIES

During the current monitoring period (calendar year 2013), AECOM, on behalf of Northrop Grumman, continued periodic groundwater monitoring of selected site wells for the EAB program, NPC evaluation, and the annual groundwater-monitoring program. In addition to the monitoring activities, a membrane interface probe (MIP) investigation was performed in accordance with the Water Board approved July 2013 *Work Plan for MIP and Remediation Activities at the Former Source Area Excavation* (AECOM, 2013a). Results of the MIP investigation were presented in the *Membrane Interface Probe (MIP) Activities Report* (AECOM, 2013b), and a brief summary is provided below. A vapor intrusion (VI) evaluation was also performed at the site in December 2013 in accordance with the Water Board and USEPA approved *Revised Final Vapor Intrusion Evaluation Sampling and Analysis Work Plan* (AECOM, 2013c). Results of the VI evaluation will be presented in a separate document in early 2014.

Groundwater Monitoring

For the EAB program, AECOM collected groundwater samples in May and October 2013 (in conjunction with the annual site-wide groundwater monitoring event). AECOM collected EAB samples from May 20 to 22, 2013. For the annual groundwater monitoring event, Blaine Tech Services, Inc., under the oversight of AECOM, collected groundwater samples from October 14 through 17, 2013, and measured groundwater levels in all of the site wells on October 14, 2013. Standard field procedures utilized for groundwater sampling and the low-flow sampling logs for each well are included in Appendix A.

MIP Investigation Summary

The primary purpose of the MIP investigation was to identify and delineate any remaining VOC-impacted material in the vicinity of the original source area excavation. Between July 8 and 14, 2013, six MIP points were advanced through Zones A and B1 using direct push methods. One continuous soil core was also collected and nearby MIP results were used to select intervals for sample collection and VOC analysis. VOCs were detected in the MIP points and soil samples; however, there was no evidence for remaining high-concentration VOC-impacted material in the vicinity of the original excavation.

3.0 RESULTS

This section presents a discussion of the water-level elevations and VOC groundwater analytical results for the October 2013 groundwater-monitoring event. Analytical results associated with the EAB program are discussed in Section 4.2.

3.1 Water-Level Elevations

The October 2013 water-level elevation data for the site wells and the Eductor are presented in Table 2 and historic water-level data are presented in Appendix B. The historic data include measured depths to groundwater and the calculated water-level elevations recorded for each well since 1986. Potentiometric surface contours generated for Zones A, B1, and B2 using the October 2013 water-level elevation data are presented on Figures 3, 4, and 5, respectively. There is only one well screened in Zone B4, therefore there is no horizontal groundwater information for that zone. Hydrographs of water-level elevations versus (vs.) time in selected site wells, including three in Zone A (T-1A, T-7A, and T-8A), three in Zone B1 (T-1B, T-7B, and T-8B), and two in Zone B2 (T-2C and T-11C) are presented on Figure 6. For wells T-8A, T-8B, and T-2C, the hydrographs begin in year 2000, the start of groundwater extraction suspension at these wells. For wells T-1A and T-1B, the hydrographs end in year 2004, when the wells were abandoned.

Philips Semiconductors (Philips) and Advanced Micro Devices (AMD) provided Northrop Grumman with their October 2013 water-level elevation data. Although these data are not posted on Figures 3, 4, and 5, they were considered during interpretation of potentiometric surface contours near the site boundaries.

Depth to water, as measured in October 2013, indicate that the static depth to water in the Zone A water table ranged from approximately 6.4 feet to 8.6 feet below ground surface (bgs). The regional and local direction of groundwater movement in Zone A is to the north at an average horizontal gradient of 0.01 horizontal foot per vertical foot, consistent with previous monitoring events. The general groundwater gradient in Zone B1 is to the north. Locally the groundwater movement is influenced by channelized flow related to stream

deposits. Groundwater movement in Zone B2 is to the northwest. Water levels and groundwater movement in Zones B1 and B2 have historically been, and continue to be, affected by groundwater extraction at the Philips sites (815 Stewart Avenue and 440 Wolfe Road).

Water levels in Zone A wells observed during the October 2013 monitoring event decreased in elevation by 0.2-foot to 0.5-foot compared to the October 2012 measurements (excluding the Eductor) but the water levels continue to be near the high end of the historic range. Hydraulic heads in Zone B1 wells during October 2013 are approximately 0.2-foot to 0.7-foot lower than October 2012. Hydraulic heads in Zone B2 wells during October 2013 are lower than October 2012, by approximately 0.2-foot to 0.6-foot.

Vertical hydraulic gradients in primarily the downward direction exist between the Zone A and Zone B1 intervals and between the Zone B1 and Zone B2 intervals. The vertical hydraulic gradient between Zone B4 and the overlying zones is upward. Hydraulic head values measured in October 2013 under NPC, indicate that the vertical head difference between Zones A and B1 is:

- Approximately 0.2 feet downward in the vicinity of the Eductor (between T-2A and T-2B);
- Fairly neutral in the central site area (between T-8A and T-8B, and T-16A and T-10B) and at the southern property boundary (between T-7A and T-7B); and
- Approximately 0.1 feet downward at the southwestern property boundary (between 37S and T-5B), at the northern property boundary (between T-9A and T-9B), and at the western property boundary (between 38S and T-4B).

These vertical gradients between Zone A and Zone B1 are due to the influence of pumping within Zone B at the nearby Philips site. A downward head difference occurs between Zones B1 and B2 in all areas of the site.

3.2 Groundwater Analytical Results

VOCs detected during the October 2013 groundwater sampling event are summarized in Table 3. The historic results for previous monitoring events performed since 1990, including monitoring events for the EAB program and the NPC evaluation are presented in Appendix C. Historically, low concentrations of other VOCs (not listed in Table 3 or in Appendix C) have occasionally been detected. These VOCs are not listed as they are not associated with site operations and have not been detected above their site cleanup requirements (SCRs) (e.g., California Maximum Contaminant Levels [MCLs] or action levels, federal MCLs, or risk-based levels).

Graphs of trichloroethene (TCE) and cis-1,2-dichloroethene (cDCE) concentrations vs. time for representative wells located on site, including seven wells in Zone A (T-2A, T-7A, T-8A, T-9A, T-13A, T-15A, and T-16A) and seven wells in Zone B1 (T-2B, T-4B, T-7B, T-8B, T-9B, T-10B, and T-17B), are presented on Figures 7 through 10. Figure 11 presents TCE concentrations vs. time for representative on-site Zone B2 wells (T-2C, T-9C, T-10C, T-11C, and T-12C).

Graphs of concentrations of tetrachloroethene (PCE), TCE, cDCE, trans-1,2-dichloroethene (tDCE), and vinyl chloride (VC) for October 2013 at select wells in Zone A and Zone B1, along the general groundwater flow direction across the site, are presented in Figures 12 and 13,

respectively. Compound-specific isotope analysis (CSIA) results for TCE, cDCE, and VC are also plotted on Figure 12 and are discussed in Section 4.2.

A copy of the laboratory analytical reports and chain-of-custody forms for the 2013 groundwater monitoring events are contained in Appendix D. For selected site wells, trend plots of chlorinated ethene concentrations prior to and after suspension of groundwater extraction are presented in Appendices E and F.

Conclusions

Groundwater monitoring data collected in 2013 continue to support previously stated conclusions:

- The impact to groundwater from the former site source is restricted to a relatively small and localized area near the Eductor.
- Impact to the site from offsite sources continues to be apparent in Zones A, B1, and B2. Continued migration of VOC-impacted groundwater onto the site complicates long-term site groundwater remediation.
- Groundwater quality across the site continues to improve following complete suspension of groundwater extraction and the implementation of the EAB program.
- Suspension of groundwater extraction at the Eductor and wells T-2A, T-2B, T-8A, and T-8B, in conjunction with the EAB program, has facilitated an increased rate of VOC biodegradation occurring within the former site source area.
- Suspension of groundwater extraction at wells T-9A, T-9B, and T-2C has halted pumping-induced migration of the Philips 815 plume toward the site.
- Suspension of groundwater extraction has not increased the risk for migration of VOC-containing groundwater from the site to potential downgradient receptors.

Site Zone A and Zone B1 Upgradient Wells

Impacts to the site from offsite sources continue to be apparent for Zones A, B1, and B2. Zone A wells 36S, 36D, T-7A, and 37S, located along the upgradient site boundary, indicate migration of VOCs, primarily TCE and cDCE, onto the site. Concentrations of TCE migrating onto the site (particularly from areas around well T-7A) are similar to or greater than those present for wells downgradient of the former site source area (see Figure 12).

Zone A wells 36D and 37S, located along the upgradient site boundary, have had TCE concentrations ranging from 19 µg/L to 95 µg/L and cDCE concentrations ranging from 2.2 µg/L to 40 µg/L over the last five years. TCE and cDCE concentrations for T-7A, located approximately 175 feet upgradient of the former site source area, have varied from 56 µg/L to 220 µg/L and 51 µg/L to 230 µg/L, respectively, over the same time period. In October 2012, TCE and cDCE concentrations were 56 µg/L and 230 µg/L, respectively; notably, this was the only year the cDCE concentration was substantially higher than the TCE concentration and was likely a result of the EAB activities performed at the upgradient AMD site. In October 2013, the concentration of TCE in T-7A increased to 240 µg/L and

cDCE decreased to 77 µg/L, suggesting less influence from the EAB program at the AMD site.

Zone B1 wells T-5B and T-7B along the southern site boundary also indicate substantial VOC migration onto the site, primarily due to pumping-induced groundwater flow towards the Philips 815 extraction system. TCE was detected in well T-5B at concentrations greater than most other wells within the former site source area (1,500 µg/L in 2013) (see Table 3). Concentrations in this well have fluctuated over time, usually in relation to the operational status of the Phillips 815 groundwater extraction and treatment system. Since 2007, TCE concentrations for Zone B1 well T-7B have ranged from 130 µg/L to 200 µg/L. Between 2006 and 2011, TCE, cDCE, and Freon 113 concentrations for Zone B1 well T-5B have exhibited fluctuations due to periodic shutdown of the Philips 815 groundwater extraction system, which allowed migration of impacted groundwater from upgradient, offsite source areas onto the site. In 2013, concentrations of TCE, cDCE, and Freon 113 detected in groundwater in well T-5B were 1,500 µg/L, 51 µg/L, and 1,500 µg/L, respectively; similar to concentrations detected in 2012.

In Zone B1 and B2, the historical presence of Freon 113, a VOC which has not been attributed to the former site source area, was previously demonstrated to be related to offsite sources. Historical and current Freon 113 concentration data (Appendix C) from site Zone B1 wells T-5B, T-7B, T-17B, and T-19B and Zone B2 wells T-2C, T-10C, T-11C, and T-12C indicate impact from offsite sources. With the exception of a temporary increase in October 2007, the concentration of Freon 113 in well T-2C steadily decreased since suspension of groundwater extraction at the well and has not been detected since 2011. Two additional Zone B1/B2 wells, T-5B and T-10C, exhibited decreasing trends between October 2008 and October 2011 and have remained generally similar between 2012 and 2013. This finding further supports continued shutdown of onsite extraction in order to prevent further migration of VOCs from off-site sources onto the site.

Site Zone A and Zone B1 Former Source Area Wells

From the start in 2000, monitoring data has shown that the EAB program has had a beneficial impact on groundwater quality in the former site source area, as indicated by the decrease in TCE concentrations observed (see concentration trend plots for the Eductor and wells T-2A, and T-2B in Appendices E and F). These decreases were accompanied by temporary increases in cDCE and VC, the intermediary products generated during the complete biodegradation/dechlorination of PCE and TCE to ethene and/or ethane endpoints.

In 2008, TCE concentrations in the Eductor rebounded to 100,000 µg/L, similar to the concentration detected in 1993. In 2009 and 2010, TCE concentrations decreased to non-detect and 2,100 µg/L, respectively. The 2008 through 2010 fluctuations for the Eductor are similar to those observed in 2002 and 2003 and are attributed to (1) enhanced mass transfer of VOCs into the aqueous phase; (2) increased solubility of VOCs resulting from the presence of metabolic acids; and, (3) VOCs migrating into this area from upgradient, offsite sources as evidenced by the concentrations for upgradient well T-7A (see Figures 7 and 12). Concurrent with decreases in TCE, concentrations of daughter products cDCE and VC significantly increased. In 2010, cDCE and VC concentrations were 78,000 µg/L

and 67,000 µg/L, respectively, indicating significant dechlorination of aqueous-phase TCE. A similar trend was observed in the Eductor in 2004 following a significant increase in aqueous-phase TCE concentration in 2003. As discussed in Section 4.2, EAB activities (injection of emulsified and neat vegetable oil) were performed in the former source area (Zone A) in October 2010 resulting in VOC sequestration and significant decreases in VOCs by October 2011. Between October 2011 and October 2012, concentrations of TCE and cDCE increased by one to two orders of magnitude and the concentration of VC was approximately four times higher. In October 2012, TCE, cDCE, and VC concentrations in the Eductor were 1,200, 83,000, and 5,200 µg/L, respectively.

Prior to 2013, groundwater samples were collected from the middle of the screen interval of the Eductor (approximately 11 feet bgs) using tubing that was lowered through the layer of floating neat vegetable oil. To evaluate sampling depth as a potential cause for the fluctuating VOC concentrations in the Eductor groundwater samples, a modified sampling approach was employed during the October 2013 sampling event. A drop tube (2-inch PVC) was lowered into the Eductor prior to sampling to protect the sample tubing from exposure to the floating neat vegetable oil; which has sequestered high concentrations of VOCs. Using the drop tube, groundwater samples were collected from two discrete depths within the screen interval of the Eductor, 11 feet bgs (consistent with previous sampling events) and 15 feet bgs (within the original 13 to 16 feet bgs injection interval for the neat vegetable oil). In the sample collected from 11 feet bgs, TCE was not detected above the reporting limit of 500 µg/L and concentrations of cDCE and VC were 29,000 µg/L and 1,800 µg/L, respectively. Compared to October 2012, these concentrations indicated a decrease in VOCs within the Eductor. However, in the sample collected from 15 feet bgs, high concentrations of TCE and cDCE were detected (8,800 µg/L and 160,000 µg/L, respectively), and VC was not detected above the reporting limit of 1,000 µg/L. These sampling results indicate vertical stratification of VOC concentrations in the Eductor, with the shallow sample exhibiting more evidence of biodegradation. The lower sample was collected within the injection interval of the neat vegetable oil where the permeability was significantly reduced after injection. Therefore, the shallow sample is considered more representative of groundwater concentrations that could migrate beyond the former site source area.

In 2009 and 2010, total chlorinated ethene concentrations (primarily cDCE and VC) for Zone A well T-2A and Zone B1 well T-2B, were above pre-EAB conditions contrary to the previous trend of concentrations significantly lower than pre-EAB conditions (see Appendix E). The high concentrations of daughter products were believed to be related to degradation of TCE detected in the adjacent Eductor in October 2008. Following the 2010 EAB activities in the former source area (emulsified and neat vegetable oil injections), cDCE and VC concentrations significantly decreased in both wells T-2A and T-2B. In T-2A, cDCE and VC decreased by more than two orders of magnitude from 8,700 µg/L and 5,400 µg/L in October 2010 (just prior to the EAB activities) to 12 µg/L and 11 µg/L, respectively, in October 2011. In October 2012, concentrations of cDCE and VC in T-2A increased to 120 µg/L and 67 µg/L, respectively. In October 2013, concentrations of cDCE and VC increased again slightly to 340 µg/L and 86 µg/L, respectively. While there have been some increases in cDCE and VC concentrations since October 2011, concentrations

are still one to two orders of magnitude below pre-injection (October 2010) levels. In Zone B1 well T-2B, cDCE and VC decreased from 200 µg/L and 260 µg/L in October 2010 to 79 µg/L and 140 µg/L, respectively, in October 2011 even though the 2010 EAB activities were performed in Zone A only. In October 2012, cDCE and VC concentrations remained similar to 2011 values. In October 2013, cDCE and VC concentrations in T-2B increased to 140 µg/L and 150 µg/L, respectively, but were still below pre-injection October 2010 values. TCE concentrations have been below SCRs for wells T-2A and T-2B since 2007.

Site Zone A and Zone B1 Downgradient Wells

Downgradient of the former source area, the influence of the EAB program has been more pronounced for Zone B1 than Zone A, consistent with better hydraulic connection and greater transmissivity in the deeper zones. EAB remedial activities, consisting of cheese whey injections, were conducted in downgradient Zone A wells in September 2007, December 2007, March 2008, and June 2008; and subsequent emulsified vegetable oil and neat vegetable oil injections were performed in the former source area in October 2010. In November 2011, EHC-L was injected in downgradient Zone A wells; and ABC+ was injected in direct push points downgradient of the source area in Zones A and B1. These EAB remedial activities are summarized in Section 4.2.

In downgradient Zone A monitoring wells, the observed trends since the initiation of the EAB program, including the expansion to encompass areas around well T-8A, are less pronounced than Zone B1 and are perhaps not directly attributable to the EAB program. The EAB process has and continues to remove considerable VOC mass from the former site source area and immediate vicinity. This has reduced the VOC mass migrating to the downgradient site areas. The cessation of groundwater extraction has enhanced conditions by returning the groundwater gradient to its natural condition, allowing for longer residence times between T-8A and T-9A, and hence, higher attenuation potential within these areas. TCE concentrations for well T-9A are consistently lower than the upgradient property boundary well T-7A and total chlorinated ethene concentrations for T-13A, T-14A, T-8A, T-15A, T-16A, and T-9A are less than those for upgradient property boundary well T-7A (see Figure 12 and Appendices E and F).

VOC samples collected from wells T-19A, T-23A, and T-25A in early September 2007 prior to cheese whey injections, contained TCE and cDCE at concentrations ranging from 140 µg/L to 210 µg/L and 21 µg/L to 55 µg/L, respectively. VC was not detected in these wells at that time. Following cheese whey injection in wells T-13A, T-14A, T-19A, T-23A, and T-25A in late September 2007, decreases in TCE concentrations and increases in cDCE concentrations were observed. Starting in April 2010, TCE concentrations in these wells started rebounding with October 2011 concentrations ranging from 28 µg/L to 70 µg/L (with the exception of well T-19A which was 4.1 µg/L). These concentration trends indicated a decrease in dechlorination in the groundwater downgradient of the source area as a result of cheese whey depletion. After injection of additional electron donor (EHC-L) in November 2011, concentrations of TCE decreased in all of the former whey injection wells to below SCRs, except well T-23A. Concentrations of cDCE also decreased in all of the wells with limited VC increases, again with the exception of well T-23A.

Until October 2007, decreases in TCE and cDCE concentrations were observed in well T-8A without detectable concentrations of VC. After cheese whey injections began in September 2007 immediately upgradient of well T-8A, VC was detected in well T-8A at concentrations up to 36 µg/L. In February 2009, TCE and cDCE concentrations were at historical lows of 21 µg/L and 23 µg/L, respectively. These low concentrations of TCE and cDCE and increases in VC were attributed to increased dechlorination under the effect of the cheese whey injections implemented in the area of Zone A wells T-13A and T-14A. After 2009, TCE and cDCE concentrations slowly rebounded and VC concentrations decreased in well T-8A, indicating depletion of the cheese whey in the upgradient injection wells. In November 2011, EHC-L was injected into wells T-13A, T-14A, and T-18A through T-24A (the same wells used for cheese whey injection). Concentrations of TCE, cDCE, and VC detected in T-8A in October 2013 remained roughly equivalent to concentrations prior to the EHC-L injections, indicating that the effects of the EHC-L injections did not reach this location.

In Zone B1, downgradient monitoring well T-8B total chlorinated ethene concentrations in groundwater decreased by more than 50 percent (%) following initiation of Zone B1 EAB activities in 2000 (see Appendix F). Since 2007, TCE concentrations have started to rebound (from 7.5 µg/L in October 2008 to 36 µg/L in October 2013). Concentrations of daughter product cDCE have been increasing in this well since 2009 to the maximum concentration detected in this well (450 µg/L in October 2013). This elevated concentration may be attributable to migration of cDCE from the former site source area and/or related to cDCE migrating on to and through the site from upgradient sources.

In Zone B1 well T-4B, located near the western property boundary, TCE concentrations were below the SCR of 5 µg/L in October 2006 and have since fluctuated between 2.5 µg/L and 9.2 µg/L. Concentrations of cDCE have been consistently higher since 2006, steadily increasing between October 2010 through October 2013, from 360 µg/L to 830 µg/L. These increases in cDCE concentrations for well T-4B (and also for T-17B and T-9B) since 2006 may be attributable to migration of EAB dechlorination products (cDCE, VC, and ethene) in groundwater from the former site source area and/or related to cDCE migrating on to and through the site from upgradient sources.

It is suspected that well T-9B was impacted by an offsite source, and that pumping from T-9B induced the migration of VOCs onto the site in Zone B1 from this offsite source (CDM, 1999 and 2000b). This conclusion is based on the historical substantially higher TCE concentrations for T-9B compared to upgradient Zone B1 well T-8B and the historical presence of Freon 113 in T-9B, which is not attributed to the site. The decrease in TCE concentrations following the suspension of groundwater extraction at T-9B, in addition to the results from the more recently installed Zone B1 well T-10B with VOC concentrations similar to or less than T-8B, support the conclusion that groundwater around T-9B is impacted by historical, pumping-induced, migration of the Philips plume onto the site.

Site Zone B2 Wells

VOC concentrations for Zone B2 in the central site area have decreased substantially since suspension of groundwater extraction from site well T-2C in November 2000. In

October 2013, the TCE concentration in well T-2C decreased from 310 µg/L in October 2012 to 110 µg/L and Freon 113 was not detected.

Concentrations in well T-2C have historically been elevated relative to Zone B1 and have resulted solely from offsite sources, as substantiated by a differing suite of VOCs with differing VOC ratios for Zone B2 relative to overlying Zone B1 (e.g., the presence of Freon 113 in Zone B2, which is not attributed to the site) and the absence of VOCs common to the former site source area (PCE). Groundwater extraction from T-2C in the past is suspected to have contributed to the migration of VOCs onto the site. Since the suspension of groundwater extraction from this well, TCE concentrations have decreased more than 90% and Freon 113 was not detected in October 2012 or October 2013. These decreases are attributed to capture of a significant portion of the plume by the Philips 815 site extraction system.

3.3 Offsite Groundwater Analytical Data

VOC results for the October 2013 monitoring events conducted on the nearby Philips and AMD properties were provided to Northrop Grumman and reviewed during the preparation of this annual report. These data indicate that the neighboring Philips sites continue to demonstrate substantial VOC impact in groundwater with a maximum TCE concentration of 18,000 µg/L and cDCE concentration of 12,000 µg/L.

VOC data for the AMD 901/902 site, located upgradient of the site (for Zone A), indicate maximum TCE of 280 µg/L for Zone A. TCE concentrations on the AMD 915 site, located downgradient of the site (for Zone A), indicate a maximum of 200 µg/L. The VOC concentrations observed for site Zone A wells 36S and 36D located in the easterly site area since 1999 are attributed, in full or in part, to the migration of contamination from upgradient properties including Mohawk Laboratories and AMD.

4.0 GROUNDWATER REMEDIATION

This section presents a discussion of the GWET system (which was removed in 2012) and the EAB program at the site. Figure 14 illustrates previous soil and groundwater remediation activities performed at the site.

4.1 Groundwater Extraction and Treatment System

The GWET system operated from 1985 to April 2001. The GWET system consisted of seven extraction wells (completed at three cluster locations), the Eductor, transmission pipelines and treatment system. Although groundwater extraction no longer occurs, the following extraction wells and Eductor are still present and used for groundwater monitoring.

- The T-2 cluster consists of wells T-2A, T-2B, and T-2C, completed in Zones A, B1, and B2, respectively.

- The T-8 cluster consists of wells T-8A and T-8B, completed in Zones A and B1, respectively.

- The T-9 cluster consists of wells T-9A and T-9B, completed in Zones A and B1, respectively.

- The Eductor consists of a perforated PVC pipe within a gravel-backfilled excavation (site source area), completed in Zone A at a location adjacent to and immediately upgradient of the T-2 cluster.

Extracted groundwater was treated at the site via an air stripper to remove VOCs, under a Bay Area Air Quality Management District permit. Treated groundwater was discharged to the storm drain under a National Pollutant Discharge Elimination System (NPDES) permit. A total of approximately 92.5 million gallons of groundwater were extracted prior to suspension in 2001, from which approximately 3,100 pounds of TCE were removed.

Pumps in extraction wells at and near the former site source area (T-2A, T-2B, T-2C, T-8A, T-8B, and the Eductor) were turned off prior to, or shortly after, the initiation of the EAB program (Water Board, 2000). In April 2001, pumps in the remaining two extraction wells, located near the northern property boundary (T-9A and T-9B), were turned off to allow the property owner to conduct site redevelopment activities (Water Board, 2001a). Subsequently, approval from the Water Board was received for the continued suspension of groundwater extraction based on changes in VOC concentrations after suspension (CDM, 2001b and Water Board, 2001c). As a result of continued improvements in groundwater VOC concentrations across the site, the Water Board approved suspension of groundwater extraction and recommended suspension be continued in their Five-Year Review report to USEPA (Water Board, 2004a and 2004b). USEPA approved the Water Board's Five-Year Review report (USEPA, 2004). Since April 2001, groundwater extraction at the site has not occurred.

As discussed in Section 3.2, VOC results from 2013 groundwater monitoring continue to support suspension of groundwater extraction at the site. In particular, suspension of groundwater extraction should be continued so as not to interfere with the site EAB program and the capture of offsite plume sources by the Philips 815 groundwater extraction. In line with this discussion, and because the GWET system had not been operated in over 11 years, it was removed from the site in November 2012.

4.2 Enhanced Anaerobic Biodegradation Program

Background

Following completion of CDM's *Evaluation of Natural Attenuation and Chemical Oxidation Report* (CDM, 2000a) and approval from the Water Board (Water Board, 2000), Northrop Grumman (then TRW Inc.) implemented the EAB program at the site. The following presents the chronology of the implementation and progress of the EAB program:

Date	Report/Letter/Event
March 2000	CDM's report on the evaluation of natural attenuation and chemical oxidation recommended that in situ remediation via EAB be implemented for Zone B1 (CDM, 2000a).

Date	Report/Letter/Event
August 2000	CDM submitted a work plan to implement an EAB pilot program in Zone B1 at the former site source area (CDM, 2000c).
October 2000	After verbal approval from the Water Board, CDM implemented the EAB pilot program by injecting polylactate ester (via Regenesis' Hydrogen Release Compound [HRC] products) into Zone B1 in and around the former site source area (see Figure 14).
April 2001	Based on the periodic monitoring of Zone A wells within the EAB treatment area, CDM determined that the limited amount of the HRC product that was injected into Zone A during the injection into Zone B1 had significantly changed conditions in Zone A to support EAB. CDM submitted an addendum to the EAB work plan to inject electron donor into Zone A. The Water Board approved the addendum. (CDM, 2001a and Water Board, 2001a)
June 2001	CDM injected slow-releasing HRC to target Zone A. In addition, injections within the footprint of the former treatment system, which was not possible during October 2000 injection, were advanced into Zone B1.
December 2003, January 2004, and February 2005	The effectiveness monitoring showed that the EAB application increased the rate of chlorinated VOC biodegradation occurring within the former site source area and accelerated VOC attenuation rates across the downgradient portions of the site.
August 2005	Subsequent to Water Board approval (Water Board, 2005), the EAB pilot program was expanded to include groundwater immediately downgradient of the former site source area in Zone A and Zone B1 (CDM, 2005) (see Figure 14).
April 2006	CDM submitted Revised Proposed Plan to USEPA in order to change the groundwater remedy from GWET to in situ bioremediation (CDM, 2006).
July 2006	Water Board issued letter to USEPA in which they concurred with conclusions of the Revised Proposed Plan and recommended to USEPA to change the groundwater remedy for the site from GWET to in situ bioremediation (Water Board, 2006).
January 2007	EAB performance monitoring showed that EAB continues to improve the groundwater quality and enhance VOC degradation in and around the former site source area; however, VOC degradation has slowed at downgradient portions of the plume due to competing electron acceptors (Northrop Grumman, 2007).
June 2007	CDM submitted work plan for additional Zone A EAB remedial activities, which proposed to conduct four quarterly cheese whey injections in the expanded portion of Zone A downgradient of the former site source area (CDM, 2007).
August 2007	Subsequent to Water Board approval (Water Board, 2007), CDM installed seven injection wells and one monitoring well as part of the downgradient Zone A EAB treatment area.

Date	Report/Letter/Event
September 2007	Tamalpais Environmental Consultants (TEC), under CDM's oversight, performed the first of four quarterly cheese whey injection events into wells T-13A, T-14A, and T-18A through T-24A.
November 2007	CDM performed a one-time bioaugmentation event into wells T-13A, T-14A, and T-18A through T-24A, using groundwater from Eductor well.
December 2007	TEC, under CDM's oversight, performed the second of four quarterly cheese whey injection events into wells T-13A, T-14A, and T-18A through T-24A.
March 2008	TEC, under CDM's oversight, performed the third of four quarterly cheese whey injection events into wells T-13A, T-14A, and T-18A through T-24A.
June 2008	TEC, under CDM's oversight, performed the last of four quarterly cheese whey injection events into wells T-13A, T-14A, and T-18A through T-24A.
January 2010	EAB performance monitoring showed depletion of electron donor (cheese whey) and initial rebound of competing electron acceptors in the expanded EAB treatment area (Northrop Grumman, 2010).
October 2010	AECOM submitted a work plan for additional Zone A EAB remedial activities, which proposed to conduct one emulsified vegetable oil injection and one neat vegetable oil injection in the former site source area.
October 2010	AECOM injected emulsified vegetable oil (EVO) into the Eductor, located in Zone A within the former site source area excavation.
November 2010	Vironex, under AECOM oversight, injected neat vegetable oil into the Eductor, located in Zone A within the former site source area excavation.
November 2011	AECOM submitted a work plan for additional EAB remedial activities, which proposed to inject EHC-L and ABC+ downgradient of the former site source area.
November 2011	Redox Tech, under AECOM oversight, injected EHC-L into injection wells T-13A, T-14A, and T-18A through T-24A and injected ABC+ into Zone A and Zone B1 via nine direct push locations.

EAB Performance Evaluation

The intent of this section is to evaluate the EAB program's ability to (1) sustain conditions that provide complete reductive dechlorination of VOCs in groundwater; (2) maintain SCRs where they have been achieved; and, (3) influence downgradient groundwater conditions. A detailed discussion of the relevance of the individual EAB analyses was presented in the *Evaluation of Natural Attenuation and Chemical Oxidation Report* (CDM, 2000a). A detailed discussion of the EAB process, and groundwater oxidizing and reducing conditions was presented in the work plan for the initial EAB program (CDM, 2000b).

Section 3.2 presents a discussion of the October 2013 VOC results associated with the EAB program. This section presents a discussion of the other EAB program results, such as VOC concentrations detected in the floating neat vegetable oil in the Eductor, geochemical parameters, electron acceptors, metabolic by-products, electron donor

indicators like total organic carbon (TOC), dechlorinating microbes, and CSIA. Results of the October 2013 groundwater EAB analyses are summarized in Tables 4, 5, and 6. These results represent groundwater conditions after the 2010 EVO and neat vegetable oil injections and the November 2011 EHC-L and ABC+ injections. The historical analytical results for pre- and post-EAB monitoring events performed since 2000 are presented in Appendix C.

Ability to Sustain EAB Conditions

The May and October 2013 biogeochemical data indicate that within the vicinity of the Eductor, T-2A, and T-2B, conditions are favorable for reductive dechlorination as a result of the 2010 EVO and neat vegetable oil injections (with the exception of the continuing sub-optimal pH in the Eductor). Downgradient of the former site source area, methane is still present within the area impacted by the November 2011 EHC-L and ABC+ injections for both Zones A and B1, but sulfate has rebounded in most of the wells, making conditions less ideal for complete reductive dechlorination. This is consistent with decreasing TOC concentrations in most of the injection wells, indicating that sufficient hydrogen (electron donor) may not be readily available to satisfy the demand of competing electron acceptor processes. It is important to note that a benefit of EHC-L and ABC+ is that these products also stimulate the abiotic reduction of chlorinated solvents (due to the iron present in their formulations), which is not as affected by the presence of sulfate. This could account for the continued reductions of chlorinated solvents observed in some of the EHC-L injection wells in October 2013.

As mentioned in Section 3.2, the elevated TCE concentrations detected in the Eductor in October 2008 (100,000 µg/L) decreased significantly through October 2010 with a coincident and significant increase in cDCE, VC, and ethene concentrations. In October 2011, VOC concentrations in the Eductor decreased significantly from October 2010 levels in response to the EVO and neat vegetable oil injections, with TCE decreasing from 2,100 to 54 µg/L, cDCE decreasing from 78,000 to 8,000 µg/L, and VC decreasing from 67,000 to 1,100 µg/L. This significant decrease was due, at least in part, to the neat vegetable oil sequestering high concentrations of VOCs. In October 2012, concentrations of TCE, cDCE, and VC increased to 1,200 µg/L, 83,000 µg/L, and 5,200 µg/L, respectively. Based on the 11-foot groundwater sample collected from the Eductor in October 2013, concentrations of TCE, cDCE, and VC steadily declined from October 2012 values to below the reporting limit (500 µg/L), 29,000 µg/L, and 1,800 µg/L, respectively. This decline may indicate that contaminant mass continues to be significantly reduced within the vicinity of the Eductor three years after the EVO and neat vegetable oil injections.

As discussed in Section 3.2, groundwater samples have historically been collected from the middle of the screen interval of the Eductor (approximately 11 feet bgs). However, to evaluate whether concentrations were consistent along the length of the Eductor screen interval an additional sample was collected in October 2013 from near the bottom of the screen, within the area targeted during the EVO and neat vegetable oil injections (approximately 15 feet bgs). The concentrations of TCE and cDCE detected in the 15-foot sample (8,800 µg/L, 160,000 µg/L, respectively) were significantly different from those detected in the 11-foot sample and are similar to the ratio and makeup of contaminants detected in the floating vegetable oil (discussed in the next paragraph).

In March 2011, four months after the neat vegetable oil injection, floating vegetable oil was present in the Eductor and a sample of it was collected and analyzed for chlorinated VOCs.

Results indicated that the floating vegetable oil contained 38,000 µg/kg (equivalent to 34,200 µg/L) of TCE and 110,000 µg/kg (equivalent to 99,000 µg/L) of cDCE. In October 2012, analysis of the floating vegetable oil showed that concentrations of TCE and cDCE in the oil increased to 90,000 µg/kg (equivalent to 81,000 µg/L) and 180,000 µg/kg (equivalent to 162,000 µg/L), respectively. In October 2013, concentrations of both TCE and cDCE remained similar to October 2012 with TCE detected at 79,000 µg/kg (equivalent to 71,100 µg/L) and cDCE detected at 140,000 µg/kg (equivalent to 126,000 µg/L). PCE was detected in the floating vegetable oil for the first time in October 2012 (12,000 µg/kg, equivalent to 10,800 µg/L); however, PCE was not detected in October 2013. The initial increase in concentrations after injection may indicate that the injected neat vegetable oil separated into the free phase over the first 1 to 2 years following injection, carrying sequestered contaminants from the targeted injection zone at the bottom of the former excavation into the floating vegetable oil detected in the Eductor. The relatively stable concentrations observed in the floating vegetable oil over the last year could indicate that the neat vegetable oil in the targeted injection zone is no longer migrating to the water table.

While TCE groundwater concentrations have been one to two orders of magnitude lower than cDCE groundwater concentrations in the Eductor since October 2009, significant TCE concentrations have been detected in the vegetable oil samples. This indicates that the vegetable oil is sequestering parent compound TCE prior to undergoing significant dechlorination in the dissolved phase. As discussed in Section 3.2, the groundwater sample collected in October 2013 from the Eductor at 15 feet bgs (within the injection interval of the neat vegetable oil), exhibited a very different profile from the 11-foot sample with a high TCE concentration (8,800 µg/L) and no detection of vinyl chloride. The profile of the 15-foot sample more closely resembles that of the vegetable oil samples and therefore could be 1) representative of groundwater concentrations being sequestered by the vegetable oil or 2) an indication that the vegetable oil is degrading and releasing these compounds into the aqueous phase. Regardless, the shallower 11-foot sample indicates that significant degradation is occurring in the immediate vicinity of the Eductor.

As discussed in Section 3.2, the significant impacts of the 2010 EVO and neat vegetable oil injections observed in the Eductor were also observed in wells T-2A and T-2B located immediately downgradient of the former site source area. Following the October 2010 injections, cDCE and VC concentrations decreased by at least three orders of magnitude in T-2A by March 2011 and were reduced approximately 50 percent in T-2B, even though Zone B1 was not targeted for treatment. While both wells have shown some increases more recently, cDCE and VC concentrations in T-2A are still one to two orders of magnitude lower than pre-injection concentrations. Continuing detections of ethane in wells T-2A and T-2B suggest that EAB is ongoing. Geochemical conditions near well T-2A remain conducive to EAB, with a dissolved oxygen concentration less than 0.5 milligrams per liter (mg/L), an ORP value less than -100 millivolts, and an elevated methane concentration.

The TOC concentration trends in wells T-2A, and T-2B and the Eductor are generally in line with VOC trends in these wells. In the Eductor, TOC increased from 280 mg/L in October 2010 prior to injection to 3,600 mg/L following the EVO and neat vegetable oil injections and then decreased steadily to 1,390 mg/L in October 2013, with the exception of low concentrations detected in October 2011 and October 2012. Decreasing TOC concentrations indicate utilization of the carbon source to enhance degradation processes. In Well T-2A, TOC concentration trends were similar to the Eductor as TOC increased from 4.8 mg/L in

October 2010 to 180 mg/L following the EVO and neat vegetable oil injections followed by a decrease to 4.8 mg/L in October 2012 as robust degradation occurred. TOC concentrations have remained generally unchanged (less than 10 mg/L) since October 2011, suggesting that the vegetable oil remains within the former source area excavation and has not undergone significant degradation. In Well T-2B, TOC concentrations increased from non-detect to 27 mg/L following injection of the less viscous and more mobile EVO, but following the neat vegetable oil injection, TOC concentrations were 2.2 mg/L or less through October 2013. These TOC concentrations explain the temporary increase in microbial activity and contaminant reduction followed by the onset of rebound in well T-2B. TOC concentrations for the EHC-L injection wells increased up to 34 mg/L in April 2012 following EHC-L injection and decreased to below 10 mg/L in all of the wells by October 2012 and remained below 10 mg/L through October 2013. These decreases in TOC concentrations, corresponding decrease in contaminant concentrations, and increased production of daughter products (VC) suggest that electron donor is being utilized to facilitate degradation of VOCs.

The population count of *Dehalococcodies* (Dhc) type microbes for the Eductor decreased following the 2010 EVO and neat vegetable oil injections from 2.78E+06 cells per milliliter (cells/mL) in October 2010 to 8.35E+01 cells/mL in October 2011. In October 2012, the population increased by an order of magnitude to 4.88E+02 cells/mL; however, the population decreased again to 1.47E+01 cells/mL in October 2013. Although the Dhc population decreased in the Eductor, it significantly increased in well T-2A from 1.10E+03 cells/mL in October 2010 to 2.67E+05 in October 2011 following the vegetable oil injections. The population detected in October 2012 (1.23E+05 cells/mL) was essentially the same as the population detected in October 2011. Between October 2012 and October 2013, the population decreased by three orders of magnitude to 6.22E+02 cells/mL. Low VOC and TOC concentrations as well as a decrease in pH since October 2012 could be contributing to the decrease in Dhc population. Dhc was detected in the EHC-L injection wells in October 2013, at population counts up to 2.33E+03 (T-23A). The Dhc concentration trends over time for the Eductor and selected Zone A wells within the expanded EAB treatment area are presented in Figure 15.

The results of the 2013 EAB monitoring program indicate significant reductions in contaminant mass and maintenance of conditions conducive to EAB in the vicinity of the former site source area and downgradient EHC-L injection area. As discussed in Section 3.2, effects of the 2010 vegetable oil injections were not realized in downgradient wells and influence from the EHC-L and ABC+ injections has not extended significantly downgradient of the injection locations as of October 2013.

Ability to Maintain SCRs

While the 2010 EVO and neat vegetable oil injections in the Eductor reduced contaminant mass in the former site source area and EHC-L/ABC+ injections increased reductive dechlorination downgradient of the site source area, groundwater containing TCE and cDCE above SCRs continues to migrate into the onsite EAB treatment area from upgradient, offsite sources (as discussed in Section 3.3). Therefore, maintaining site VOC concentrations at or below the currently established SCRs for the Eductor and downgradient wells (e.g., T-2A, T-8A, etc.) and for Zone B1 is not likely attainable.

For Zone B1, the Philips 815 extraction system continues to influence groundwater movement at the site (as discussed in Section 3.1). Well T-7B has VOCs above SCRs,

similar to those present for the upgradient offsite well 23-D, located about 400 feet to the south of T-7B.

In absence of complete remediation of upgradient offsite plumes, an attainable goal for the site EAB program is to reduce site VOC mass such that the attenuation rate of VOCs across the site can be attributed solely to the attenuation dynamics of the upgradient offsite plumes (i.e. decreases in VOC concentrations to background levels [concentrations migrating onsite from upgradient offsite sources]).

Ability to Influence Downgradient Groundwater Conditions

The goal of the EAB program is to reduce contaminant mass in and near the former site source area to facilitate enhanced attenuation of contaminants downgradient. With respect to this goal, the EAB program has been and continues to be successful in influencing downgradient groundwater conditions. As the 2010 EVO/neat vegetable oil injections and 2011 EHC-L and ABC+ injections mature and VOC biodegradation continues, Zone A groundwater quality is expected to continue improving in downgradient areas, converting more TCE to its biodegradation products.

Since 2006, TCE and cDCE concentrations for downgradient well T-9A continue to show no trend, ranging from 47 to 130 and 82 to 190 µg/L, respectively, which are similar to pre-EAB concentrations in October 2000. However, these TCE concentrations have been and continue to be less than concentrations for upgradient well T-7A, which during the same period had TCE concentrations ranging from 56 to 430. Concentrations of cDCE in T-9A continue to be similar to or less than those detected in upgradient well T-7A (ranging from 51 to 230 µg/L since 2006). As total VOC concentrations are less for T-9A compared to T-7A, it appears that offsite VOC mass is being significantly attenuated as it migrates through the Former TRW Microwave site, primarily through biodegradation in the EAB treatment areas. This attenuation is occurring even with potential contribution from the site and contribution from upgradient off-site sources. It is important to note that in October 2012, cDCE concentrations were significantly higher than TCE concentrations in well T-7A for the first time. This was likely the result of EAB activities being performed at the upgradient AMD property, resulting in reductive dechlorination of TCE to cDCE. However, in October 2013, cDCE concentrations decreased to significantly less than TCE concentrations, suggesting less influence from the EAB activities performed at the AMD site. However, as EAB activities at the AMD site are ongoing and this groundwater continues to migrate onsite from upgradient, it may start to confound comparison of VOC concentrations in wells T-7A and T-9A as well as evaluation of onsite EAB activities.

In order to better understand and quantify allocation of upgradient offsite plume and former site source area contributions to current site plume configuration, as well as evaluate the effectiveness of past and ongoing EAB processes, monitoring of CSIA of TCE and cDCE was initiated in 2007. Carbon isotopes present in TCE and cDCE include ^{13}C and ^{12}C, with ^{13}C being the much less naturally abundant isotope. During anaerobic microbial reductive dechlorination of chlorinated compounds, the light (^{12}C) versus the heavy isotope (^{13}C) bonds are preferentially degraded, resulting in isotopic enrichment of the residual contaminant in ^{13}C and a change in the isotopic ratio of $^{13}C/^{12}C$, also known as $\delta^{13}C$. CSIA measures the $\delta^{13}C$ in a groundwater sample (with units of $^{0}/_{00}$) using the following equation:

$$\delta^{13}C \text{ in } ‰ = \frac{(^{13}C/^{12}C_{sample} - ^{13}C/^{12}C_{standard})}{^{13}C/^{12}C_{standard}} \times 1000$$

For chlorinated compounds, $\delta^{13}C$ is typically a negative number that increases, or becomes less negative, as the compound is degraded and becomes enriched with ^{13}C (heavier).

To date, samples from selected site wells for CSIA have been collected in July 2007, October 2007, July 2008, October 2008, October 2009, October 2010, October 2011, October 2012, and October 2013 and results are summarized in Appendix C. In October 2013, groundwater samples were collected from Zone A wells across the site in the direction of groundwater flow and results are plotted on Figure 12 along with VOC concentrations. Groundwater samples were also collected from select Zone B1 wells for the first time in October 2013 to start compiling a CSIA dataset for Zone B1. Results are included in Appendix C but will not be discussed or interpreted until additional rounds of CSIA sampling are performed.

The Zone A CSIA data were collected in order to further evaluate the following conclusions:

- Even though TCE concentrations are higher for the former site source area (Eductor) than in upgradient well T-7A, the degree of TCE biodegradation (i. e., TCE dechlorination to cDCE, VC, and ethene) is higher for former site source area groundwater compared to that migrating on to the site from the upgradient offsite plume. This can be demonstrated by showing that the groundwater migrating on to the site from the upgradient offsite plume (T-7A) is lighter (more negative $\delta^{13}C$) than former site source area groundwater (Eductor) with respect to the stable isotope ratio $\delta^{13}C$ for parent compound TCE. CSIA data continue to support this conclusion. In October 2013, $\delta^{13}C$ values for TCE and cDCE indicate that the compounds continue to be more degraded in the vicinity of the former site source area (i.e. well T-2A) compared to groundwater migrating on to the site (i.e. well T-7A) (Figure 12).

- Even though TCE fluctuations in the Eductor have occurred periodically since 2003, biodegradation processes in the immediate vicinity of the Eductor are sufficient to prevent further downgradient migration of TCE. This can be demonstrated by comparing the CSIA data of the Eductor and well T-2A, located immediately downgradient of the Eductor. CSIA data collected to date strongly support this conclusion with TCE and cDCE in well T-2A being significantly more degraded than TCE and cDCE in the Eductor since April 2008. It is also important to note that the 2010 EVO and neat vegetable oil injections appear to have had a dramatic impact on degradation of cDCE near T-2A in particular with the $\delta^{13}C$ values for cDCE increasing from -11.85 $^{0}/_{00}$ in October 2010 to 2.21 $^{0}/_{00}$ in October 2011. In October 2012, the $\delta^{13}C$ value for cDCE decreased to -6.42 $^{0}/_{00}$ (less degraded than in October 2011) and then increased to -3.23 $^{0}/_{00}$ in October 2013, showing that cDCE in the vicinity of the Eductor is continuing to degrade three years after the EVO and neat vegetable oil injection. Also of note, the $\delta^{13}C$ values for cDCE and VC in EHC-L injection well T-13A (located directly downgradient from the Eductor and well T-2A) increased significantly between October 2011 and October 2012 (from -15.39 $^{0}/_{00}$ to 9.45 $^{0}/_{00}$ and from -25.31 $^{0}/_{00}$ to -0.93 $^{0}/_{00}$, respectively) indicating that the cDCE and VC detected in this well are highly degraded due to the EHC-L injection. In October 2013, the $\delta^{13}C$ value

for cDCE in this well decreased to -1.86 $^{0}/_{00}$ indicating less degradation than in 2012, but still highly degraded cDCE compared to pre-injection values.

- EAB processes are sufficient to ensure that contaminant mass from the former site source area is not contributing to the offsite groundwater plume. This can be demonstrated by showing that the groundwater migrating downgradient from the site is similar or heavier for $\delta^{13}C$ for TCE and cDCE than that migrating onto the site from the upgradient offsite plume, as shown on Figure 12. According to available guidance on CSIA data interpretation (EPA, 2008), differences in $\delta^{13}C$ values must be at a minimum greater than 1$^{0}/_{00}$ to be considered real and greater than 2 $^{0}/_{00}$ for positive identification of degradation. Therefore, if $\delta^{13}C$ values for downgradient wells T-8A and T-9A are similar to (within 1$^{0}/_{00}$) or less negative (by at least 2 $^{0}/_{00}$) than $\delta^{13}C$ values for wells located outside the influence of the former site source area (e.g., T-7A and T-3A), current EAB processes will be considered sufficient to limit contribution of contamination from the former site source area to the offsite groundwater plume. These data coupled with VOC concentration trend analysis (see Figure 12) and demonstration of conditions favorable for biodegradation, can demonstrate the attainment of background conditions or that background conditions will be achieved within a reasonable time period. CSIA data collected in 2013 support this conclusion.

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TABLES

Table 1
Well Completion and Sampling Information
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Screen Interval (feet bgs)	Total Depth (feet bgs)	Top of Casing Elevation (feet, MSL)	Sampling Schedule (annual quarters)	EPA Test Method
EDUCTOR	A	8-16	16.5	42.24	4TH	8260B
T-1A	A	10-20	20	41.16	Well Abandoned in 2004	
T-1B	B1	28-38	38	41.72	Well Abandoned in 2004	
T-2A	A	10-20	20	42.16	4TH	8260B
T-2B	B1	23-33	33	42.23	4TH	8260B
T-2C	B2	51-59	59	41.38	4TH	8260B
T-3A	A	10-20	20	41.74	4TH	8260B
T-4B	B1	31.5-41.5	42	40.93	4TH	8260B
T-5B	B1	34.5-44.5	45	42.45	4TH	8260B
T-6A	A	10-20	20	39.92	4TH	8260B
T-7A	A	8-20	20	42.09	4TH	8260B
T-7B	B1	34-41	41	42.01	4TH	8260B
T-8A	A	8-19	19	40.38	4TH	8260B
T-8B	B1	24-36	36	40.33	4TH	8260B
T-8D	B4	90-102	102	40.35	Sampling Suspended in 2002	
T-9A	A	7-19	19	39.22	4TH	8260B
T-9B	B1	28-37	37	38.89	4TH	8260B
T-9C	B2	55-65	65	38.81	4TH	8260B
T-10B	B1	23-32	32	40.09	4TH	8260B
T-10C	B2	49-59	60	39.76	4TH	8260B
T-11C	B2	46-56	56	38.65	4TH	8260B
T-12C	B2	45.5-55.5	56	40.74	4TH	8260B
T-13A	A	10-20	20	40.76	4TH	8260B
T-14A	A	10-20	20	40.62	4TH	8260B
T-15A	A	10-20	20	40.11	4TH	8260B
T-16A	A	10-20	20	40.02	4TH	8260B
T-17A	A	10-20	20	38.23	4TH	8260B
T-17B	B1	25-35	35	40.61	4TH	8260B
T-18A	A	12-22	22	TBD	4TH	8260B
T-18B	B1	41-46	46	38.78	4TH	8260B
T-19A	A	10-20	22	TBD	4TH	8260B
T-19B	B1	29-39	39	38.72	4TH	8260B
T-20A	A	7-17	20	TBD	4TH	8260B
T-21A	A	10-20	20	TBD	4TH	8260B
T-22A	A	10-20	20	TBD	4TH	8260B
T-23A	A	10-20	20	TBD	4TH	8260B
T-24A	A	10-20	20	TBD	4TH	8260B
T-25A	A	10-20	20	TBD	4TH	8260B
36S	A	10-16	16	41.46	4TH	+
36D	A	15-20	20	41.26	4TH	+
36DD	B2	51.5-61.5	61.5	41.58	4TH	+
37S	A	9-15	15	42.06	4TH	+
38S	A	9-15	15	41.05	4TH	8260B

Notes:
+ = Sample collected and analyzed by AMD.
TBD = To be determined; well casing elevations have not been surveyed.
Top of casing elevations presented in NAVD88.
Eductor screen interval and total depth revised based on September 2010 well videolog

Table 2
Water-Level Elevation Measurements - October 2013
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Date Measured	Depth to Water (feet, BTOC)	Updated Top of Casing Elevation (feet, MSL NAVD88)	Updated Water-Level Elevation (feet, MSL NAVD88)
T-1A	A	Destroyed			
T-2A	A	10/14/13	8.53	42.16	33.63
T-3A	A	10/14/13	7.99	41.74	33.75
T-6A	A	--	NM	39.92	--
T-7A	A	10/14/13	7.11	42.09	34.98
T-8A	A	10/14/13	7.25	40.38	33.13
T-9A	A	10/14/13	7.71	39.22	31.51
T-13A	A	10/14/13	7.49	40.76	33.27
T-14A	A	10/14/13	7.46	40.62	33.16
T-15A	A	10/14/13	7.38	40.11	32.73
T-16A	A	10/14/13	7.56	40.02	32.46
T-17A	A	10/14/13	7.82	38.23	30.41
T-18A	A	10/14/13	7.96	NA	--
T-19A	A	10/14/13	7.79	NA	--
T-20A	A	10/14/13	7.54	NA	--
T-21A	A	10/14/13	7.88	NA	--
T-22A	A	10/14/13	7.81	NA	--
T-23A	A	10/14/13	8.06	NA	--
T-24A	A	10/14/13	7.84	NA	--
T-25A	A	10/14/13	6.99	NA	--
36S	A	10/14/13	DRY	41.46	--
36D	A	10/14/13	6.44	41.26	34.82
37S	A	10/14/13	7.01	42.06	35.05
38S	A	10/14/13	8.64	41.05	32.41
EDUCTOR*	A	10/14/13	8.45	42.24	33.79
T-1B	B1	Destroyed			
T-2B	B1	10/14/13	8.36	42.23	33.87
T-4B	B1	10/14/13	9.71	40.93	31.22
T-5B	B1	10/14/13	9.99	42.45	32.46
T-7B	B1	10/14/13	6.73	42.01	35.28
T-8B	B1	10/14/13	7.31	40.33	33.02
T-9B	B1	10/14/13	8.61	38.89	30.28
T-10B	B1	10/14/13	7.52	40.09	32.57
T-17B	B1	10/14/13	7.92	40.61	32.69
T-18B	B1	10/14/13	6.28	38.78	32.50
T-19B	B1	10/14/13	7.20	38.72	31.52
T-2C	B2	10/14/13	8.98	41.38	32.40
T-9C	B2	10/14/13	8.54	38.81	30.27
T-10C	B2	10/14/13	11.03	39.76	28.73
T-11C	B2	10/14/13	8.45	38.65	30.20
T-12C	B2	10/14/13	7.68	40.74	33.06
36DD	B2	10/14/13	6.05	41.58	35.53
T-8D	B4	10/14/13	2.57	40.35	37.78

Notes:
BTOC - below top of casing
CDTW - corrected depth to water
MSL - mean sea level
NA - Not available. While depth to water measurements were collected in all wells, only selected former injection wells were surveyed for top of casing.
NAVD88 - North American Vertical Datum 1988
NM - not measured
*CDTW = measured depth to water - [(density soybean oil/density of water) x (thickness of soybean oil)]
= 8.80 feet -[(0.9/1) x (0.39 feet)] = 8.45 feet

Table 3
Groundwater Volatile Organic Compound Results - October 2013
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Zone	Sample Name	Sample Date	1,1,1-TCA (µg/L)	1,1-DCA (µg/L)	1,1-DCE (µg/L)	1,2-DCB (µg/L)	1,4-DCB (µg/L)	CBN (µg/L)	cDCE (µg/L)	PCE (µg/L)	tDCE (µg/L)	TCE (µg/L)	Freon 113 (µg/L)	VC (µg/L)
T-1A	A	Destroyed													
T-2A	A	J6038-T2A-101713	10/17/2013	<0.50	<0.50	<0.50	19	2.4	85	340	<0.50	86	0.76	<0.50	430
T-3A	A	J6038-T3A-101513	10/15/2013	<1.0	<1.0	0.70 J	<1.0	<1.0	<1.0	88	1.9	2.6	250	0.61 J	<1.0
T-7A	A	J6038-T7A-101613-1	10/16/2013	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	77	1.6 J	1.7 J	240	<2.5	<2.5
T-7A Dup	A	J6038-T7A-101613-2	10/16/2013	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	81	1.7 J	1.8 J	250	<2.5	<2.5
T-8A	A	J6038-T8A-101613	10/16/2013	0.25 J	0.46 J	0.69	<0.50	<0.50	<0.50	57	2.0	3.6	110	0.56	0.91
T-9A	A	J6038-T9A-101513	10/15/2013	<0.50	0.47 J	0.44 J	3.1	<0.50	<0.50	74	0.97	2.9	67	<0.50	0.81
T-13A	A	J6038-T13A-101713	10/17/2013	<0.50	0.59	<0.50	<0.50	<0.50	<0.50	79	<0.50	8.2	1.2	<0.50	38
T-14A	A	J6038-T14A-101613	10/16/2013	<0.50	0.78	0.29 J	2.1	0.16 J	0.19 J	53	<0.50	6.3	2.0	<0.50	35
T-15A	A	J6038-T15A-101513	10/15/2013	0.35 J	0.49 J	0.70	1.2	<0.50	<0.50	62	2.0	2.9	100	0.36 J	0.46 J
T-16A	A	J6038-T16A-101513	10/15/2013	0.20 J	0.58	0.58	1.4	<0.50	<0.50	69	1.2	3.6	94	0.23 J	3.2
T-17A	A	J6038-T17A-101613	10/16/2013	<0.50	0.35 J	0.25 J	<0.50	<0.50	<0.50	21	1.3	0.42 J	86	<0.50	<0.50
T-18A	A	Not sampled by AECOM - Not part of sampling and analysis plan													
T-19A	A	J6038-T19A-101713	10/17/2013	<0.50	<0.50	<0.50	0.92	<0.50	2.6	2.6	<0.50	0.87	<0.50	<0.50	2.3
T-20A	A	Not sampled by AECOM - Not part of sampling and analysis plan													
T-21A	A	Not sampled by AECOM - Not part of sampling and analysis plan													
T-22A	A	Not sampled by AECOM - Not part of sampling and analysis plan													
T-23A	A	J6038-T23A-101713	10/17/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	54	<0.50	12	19	<0.50	7.6
T-25A	A	J6038-T25A-101613	10/16/2013	<0.50	0.75	<0.50	2.5	<0.50	<0.50	27	<0.50	4.7	0.57	<0.50	42
36S[1]	A	--	10/23/2013	0.5	<0.5	<0.5	<0.5	--	--	8.1	2.3	<0.5	74	<2.0	<0.5
36D[1]	A	--	10/22/2013	<0.5	<0.5	<0.5	<0.5	--	--	28	1.3	0.8	38	<2.0	<0.5
38-S	A	J6038-38S-101613	10/16/2013	<0.50	0.36 J	0.70	<0.50	<0.50	<0.50	150	0.93	1.7	96	1.4	7.4
Eductor (11 feet)[2]	A	J6038-EDUCTOR-11-101713	10/17/2013	<500	<500	<500	<500	<500	<500	29,000	<500	<500	<500	<500	1800
Eductor (15 feet)[2]	A	J6038-EDUCTOR-15-101713	10/17/2013	<1000	<1000	<1000	1,800	<1000	<1000	160,000	<1000	<1000	8,800	<1000	<1000
T-1B	B1	Destroyed													
T-2B	B1	J6038-T2B-101713	10/17/2013	<0.50	1.0	<0.50	10	<0.50	12	140	<0.50	1.6	<2.5	<0.50	150
T-4B	B1	J6038-T4B-101613	10/16/2013	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	830	<5.0	1.4 J	9.2	<5.0	<5.0
T-5B	B1	J6038-T5B-101613-1	10/16/2013	<10	<10	<10	<10	<10	<10	51	4.5 J	<10	1,500	150	<10
T-5B Dup	B1	J6038-T5B-101613-2	10/16/2013	<5.0	<5.0	2.3 J	<5.0	<5.0	<5.0	73	4.8 J	1.8 J	1,400	190	<5.0
T-7B	B1	J6038-T7B-101513-1	10/15/2013	0.58	0.55	0.73	2.2	<0.50	<0.50	10	0.86	0.77	150	4.3	0.38 J
T-7B Dup	B1	J6038-T7B-101513-2	10/15/2013	0.59	0.56	0.70	2.1	<0.50	<0.50	11	0.85	0.76	150	4.3	0.39 J
T-8B	B1	J6038-T8B-101513	10/15/2013	<2.5	<2.5	3.0	10	<2.5	<2.5	450	<2.5	8.8	36	<2.5	17
T-9B	B1	J6038-T9B-101613	10/16/2013	<5.0	<5.0	3.3 J	<5.0	<5.0	<5.0	280	2.2 J	5.0	410	1.5 J	3.6 J
T-10B	B1	J6038-T10B-101513	10/15/2013	<0.50	0.43 J	<0.50	<0.50	<0.50	<0.50	50	0.59	0.21 J	17	<0.50	<0.50
T-17B	B1	J6038-T17B-101713	10/17/2013	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	390	<5.0	<5.0	130	<5.0	<5.0
T-18B	B1	J6038-T18B-101413	10/14/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
T-19B	B1	J6038-T19B-101413	10/14/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	<0.50	<0.50	56	1.4	<0.50
T-2C	B2	J6038-T2C-101713	10/17/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	44	<0.50	<0.50	110	<0.50	<0.50
T-9C	B2	J6038-T9C-101513	10/15/2013	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.36 J	<0.50	<0.50	<0.50	<0.50	<0.50
T-10C	B2	J6038-T10C-101713	10/17/2013	<10	<10	<10	<10	<10	<10	58	<10	<10	1,100	170	<10
T-11C	B2	J6038-T11C-101613	10/16/2013	<2.5	<2.5	2.4 J	<2.5	<2.5	<2.5	35	<2.5	0.68 J	460	22	4.8
T-12C	B2	J6038-T12C-101513	10/15/2013	<0.50	<0.50	2.3	<0.50	<0.50	<0.50	85	<0.50	1.5	140	2.7	4.7
36DD[1]	B2	--	10/21/2013	<0.50	<0.50	<0.50	<0.50	--	--	11	<0.50	0.9	<0.50	<2.0	1.3
T-8D	B4	Not sampled by AECOM - Water Board approval to discontinue sampling requirement for well													

Notes:
[1] Groundwater analytical data provided by AMD.
[2] The Eductor was sampled at two discrete intervals, 11 feet below ground surface and 15 feet below ground surface.

<	Not detected at or above the detection limit shown	cDCE	cis-1,2-Dichloroethene
µg/L	micrograms per liter	Dup	Duplicate sample
1,1,1-TCA	1,1,1-Trichloroethane	J	Estimated concentration. Compound detected between the detection limit and the reporting limit.
1,1-DCA	1,1-Dichloroethane	PCE	Tetrachloroethene
1,1-DCE	1,1-Dichloroethene	tDCE	trans-1,2-Dichloroethene
1,2-DCB	1,2-Dichlorobenzene	TCE	Trichloroethene
1,4-DCB	1,4-Dichlorobenze	Freon 113	Trifluorotrichloroethane
CBN	Chlorobenzene	VC	Vinyl Chloride

Table 4
Groundwater General Environmental Parameter Results - October 2013
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (uS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Total Organic Carbon (mg/L)
Zone A Aquifer Wells							
EDUCTOR (11 feet)	10/17/2013	19.9	4.91	2,306	7	11.3	1,390
EDUCTOR (15 feet)	10/17/2013	19.5	5	3,206	7	-8.8	--
T-2A	10/17/2013	19.8	6.36	1,877	2	-117.5	5.9
T-3A	10/15/2013	20	6.71	1,303	1	134.9	--
T-7A	10/16/2013	22.5	6.6	1,380	1	50.2	--
T-8A	10/16/2013	19.6	6.63	1,313	2	190.6	<1
T-9A	10/15/2013	22.1	6.59	1,315	1	96.8	--
T-13A	10/17/2013	20.6	6.85	1,418	52	-79.1	1.2
T-14A	10/16/2013	18.2	6.67	1,232	4	-109.9	<1
T-15A	10/15/2013	21.4	6.55	1,282	4	170.9	--
T-16A	10/15/2013	21	6.58	1,275	26	149.2	--
T-17A	10/16/2013	20.4	6.79	1,231	2	-30.5	<1
T-19A	10/17/2013	21.7	6.67	1,542	11	-105.2	4.4
T-23A	10/17/2013	20.5	6.69	1,523	847	-108	3.6
T-25A	10/16/2013	19.3	6.57	1,252	3	-90.2	<1
38S	10/16/2013	21.4	6.65	1,286	3	5.8	<1
Zone B1 Aquifer Wells							
T-2B	10/17/2013	19.3	6.49	1,449	2	-125.8	<1
T-4B	10/16/2013	20.9	7.09	1,071	1	110	--
T-5B	10/16/2013	21.5	6.88	1,148	3	95.8	--
T-7B	10/15/2013	20.4	6.83	1,024	3	111.4	--
T-8B	10/15/2013	20.6	6.63	1,338	10	-75.6	--
T-9B	10/16/2013	25.1	6.76	1,471	1	99.4	--
T-10B	10/15/2013	18.6	6.72	1,121	2	184.8	--
T-17B	10/17/2013	20.2	7.22	1,246	6	-14.6	<1
T-18B	10/14/2013	22	7.35	898	5	-89.5	--
T-19B	10/14/2013	20.6	6.86	1,008	118	93.6	--
Zone B2 Aquifer Wells							
T-2C	10/17/2013	19.1	7.97	817	2	147.2	--
T-9C	10/15/2013	19.4	7.48	739	4	122.2	--
T-10C	10/17/2013	20.9	7.71	783	7	-50.3	--
T-11C	10/16/2013	20.6	6.93	931	3	103.7	--
T-12C	10/15/2013	20	7.38	858	23	113.8	--

Notes:
^oC = degree Celsius
SU = standard units
uS/cm = micro Siemens per centimeter
NTU = Nephelometric Turbidity Unit
mV = millivolts
nM = nanomolar
mg/L = milligram per liter
$CaCo_3$ = calcium carbonate
-- = not analyzed/measured

Table 5
Groundwater Electron Acceptor/Metabolic By-Product Results - October 2013
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Electron Acceptors		Metabolic By-Products		
		Dissolved Oxygen (mg/L)	Sulfate (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
Zone A Aquifer Wells						
EDUCTOR (11 feet)	10/17/2013	0.19	1.6	6,400	22	910
EDUCTOR (15 feet)	10/17/2013	0.14	--	--	--	--
T-2A	10/17/2013	0.21	34	8,200	250	170
T-3A	10/15/2013	0.98	--	--	--	--
T-7A	10/16/2013	0.34	--	--	--	--
T-8A	10/16/2013	0.4	180	100	0.076	0.023 J
T-9A	10/15/2013	0.31	--	--	--	--
T-13A	10/17/2013	0.45	180	6,000	1.8	3.4
T-14A	10/16/2013	0.43	160	320	0.85	8.5
T-15A	10/15/2013	0.37	--	--	--	--
T-16A	10/15/2013	0.32	--	--	--	--
T-17A	10/16/2013	0.24	130	530	0.61	0.14
T-19A	10/17/2013	0.85	32	8,400	3.4	3.3
T-23A	10/17/2013	0.9	130	6,100	2.8	1.8
T-25A	10/16/2013	0.33	160	47	0.13	15
38S	10/16/2013	0.24	140	--	--	--
Zone B1 Aquifer Wells						
T-2B	10/17/2013	0.33	220	5,500	17	52
T-4B	10/16/2013	3.26	--	--	--	--
T-5B	10/16/2013	0.25	--	--	--	--
T-7B	10/15/2013	0.34	--	--	--	--
T-8B	10/15/2013	0.28	--	--	--	--
T-9B	10/16/2013	0.64	--	--	--	--
T-10B	10/15/2013	3.32	--	--	--	--
T-17B	10/17/2013	0.77	150	170	2.0	0.61
T-18B	10/14/2013	0.72	--	--	--	--
T-19B	10/14/2013	0.32	--	--	--	--
Zone B2 Aquifer Wells						
T-2C	10/17/2013	6.06	--	--	--	--
T-9C	10/15/2013	0.36	--	--	--	--
T-10C	10/17/2013	0.52	--	--	--	--
T-11C	10/16/2013	0.24	--	--	--	--
T-12C	10/15/2013	0.34	--	--	--	--

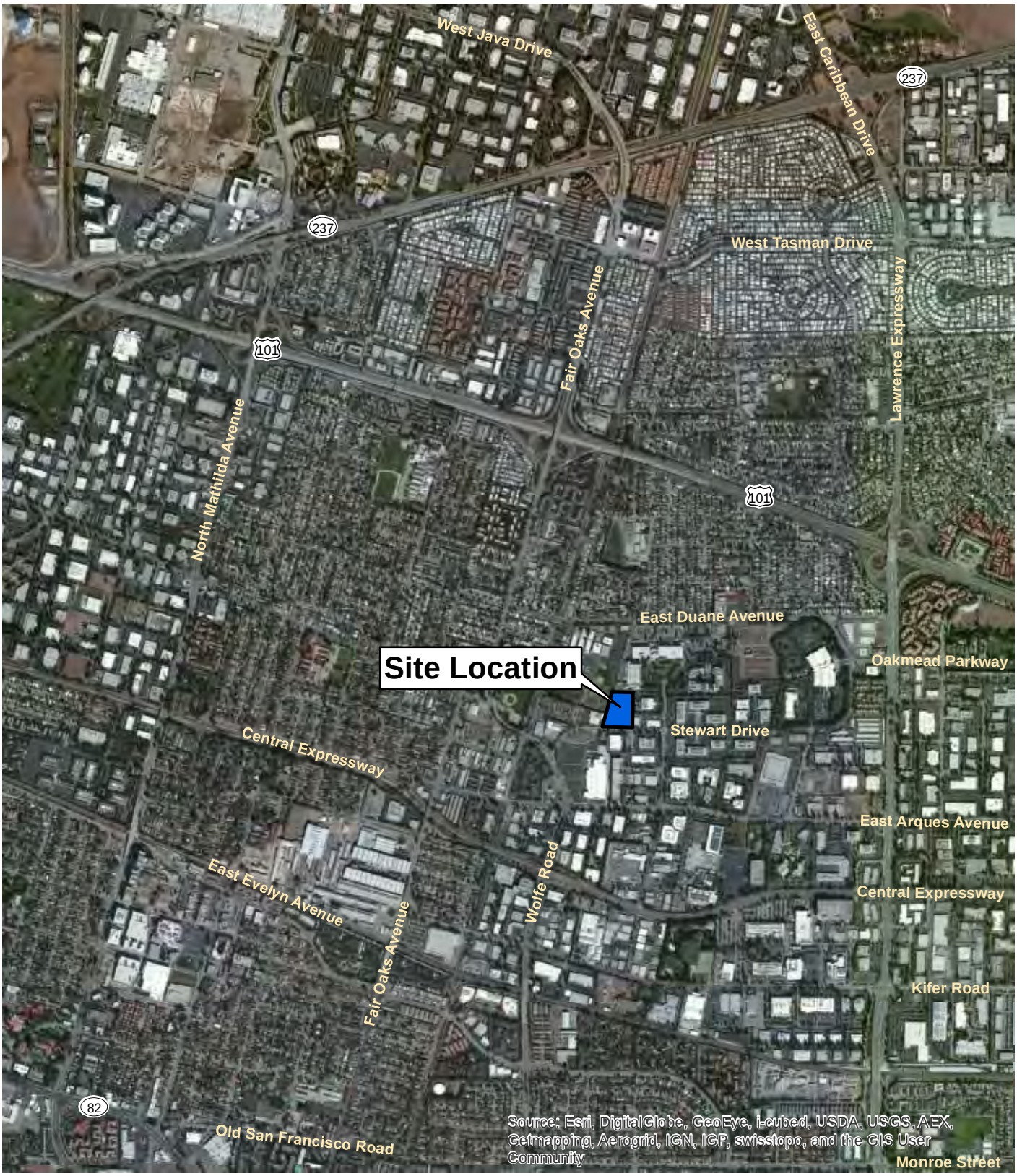
Notes:
mg/L = milligram per liter
µg/L = microgram per liter
-- = not analyzed/measured

Table 6
Groundwater Dechlorinating Microbe Results - October 2013
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Dechlorinating Microbes *Dehalococcodies* type Microbes cells/mL
Eductor	10/17/2013	1.47E+01
T-2A	10/17/2013	6.22E+02
T-2B	10/17/2013	4.93E+01
T-13A	10/17/2013	6.97E+02
T-19A	10/17/2013	1.20E+01
T-23A	10/17/2013	2.33E+03

Notes:
cells/mL = cells per milliliter

FIGURES



N

0 1,000 2,000 Feet

1 " = 2,000 '

Former TRW Microwave Facility

Site Location

Date 12-13	NORTHROP GRUMMAN	Figure
Project No. 60238860		1

File: W:\work\60238860_NG\GIS\Projects\Site_Location.mxd
Date: Wednesday, December 04, 2013 7:44:21 AM

LEGEND

- A-ZONE MONITORING WELL
- B1-ZONE MONITORING WELL
- B2-ZONE MONITORING WELL
- B4-ZONE MONITORING WELL
- EDUCTOR
- PROPERTY BOUNDARY

N

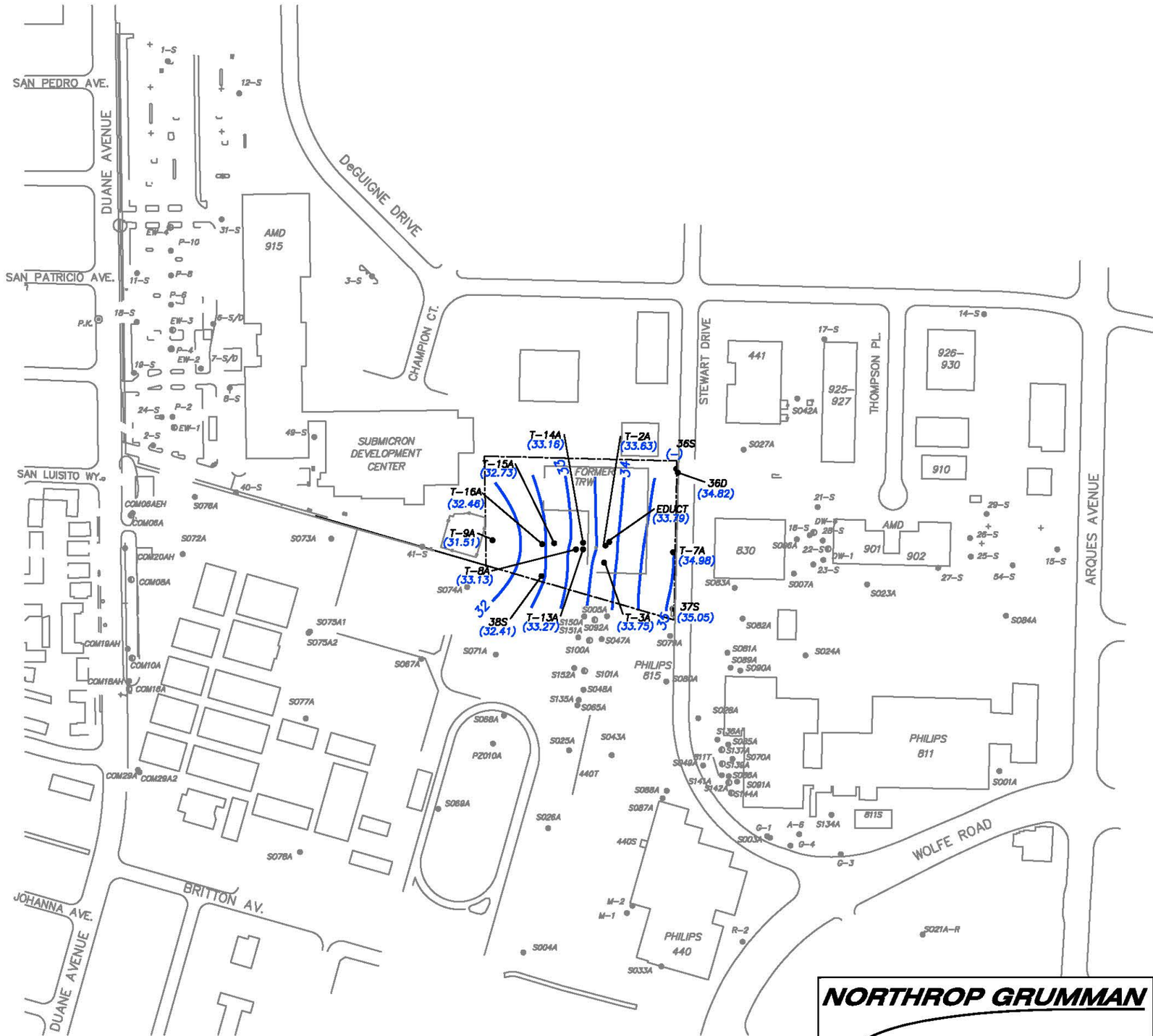
0 25 50 Feet

1 " = 50 '

Site Layout

Date 12-13	AECOM	Figure
Project No. 60238860		2

File: W:\work\60238860_NG\GIS\Projects\Site_Layout.mxd
Date: Friday, January 10, 2014 11:49:54 AM



LEGEND:

- ● INDICATES APPROXIMATE LOCATION OF ZONE A MONITORING WELL
- ◐ INDICATES APPROXIMATE LOCATION OF ZONE A EXTRACTION WELL
- (34.82) INDICATES WATER-LEVEL ELEVATION IN ZONE A MONITORING WELL (FEET, MSL & NAVD 88) IN OCTOBER 2013
- INDICATES APPROXIMATE POTENTIOMETRIC SURFACE CONTOUR IN ZONE A IN OCTOBER 2013

N

SCALE

0 300 600 FEET

NORTHROP GRUMMAN

Northrop Grumman Space & Mission Systems Corp.

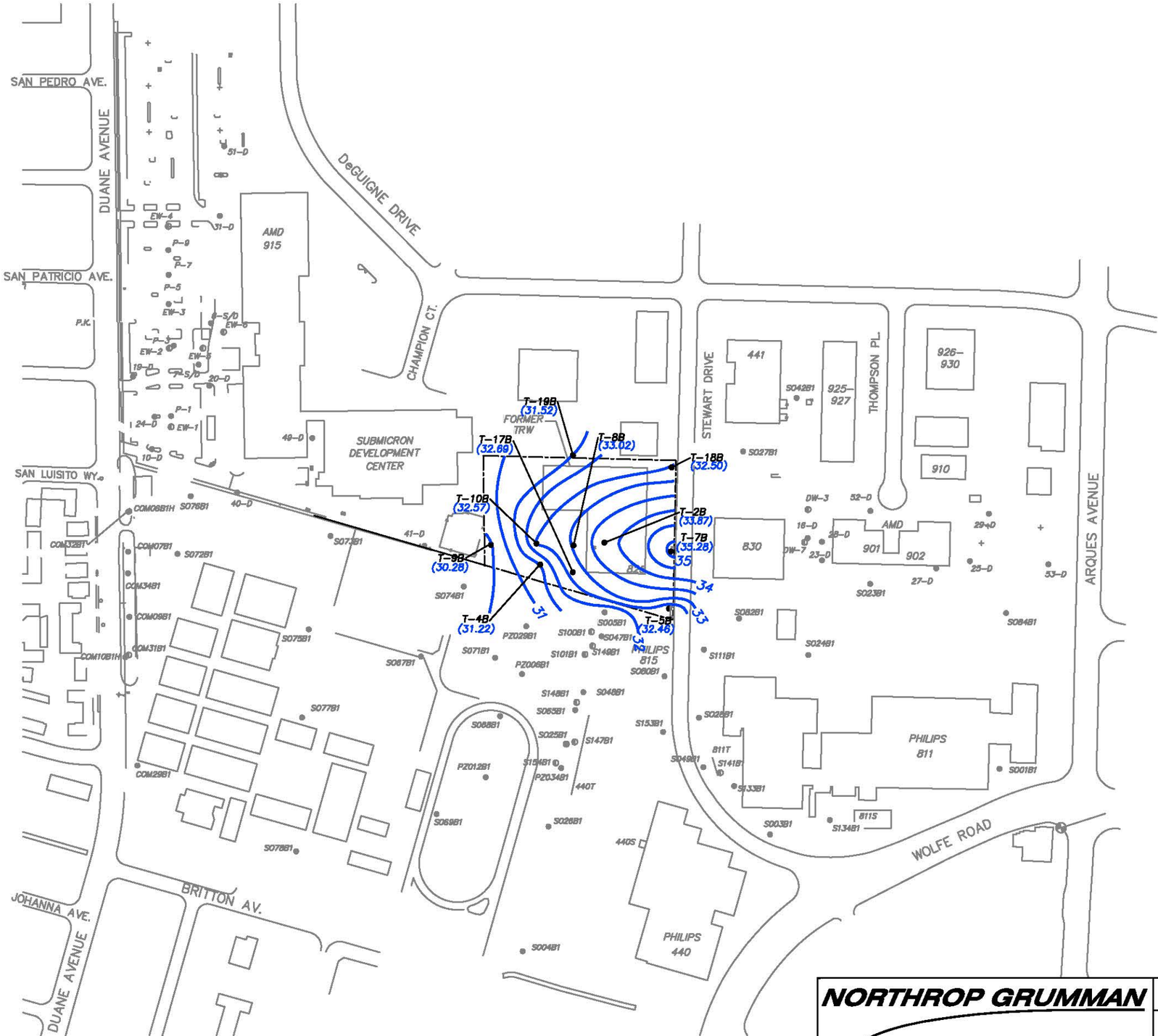
FORMER TRW MICROWAVE FACILITY

POTENTIOMETRIC SURFACE CONTOURS
ZONE A
OCTOBER 2013

DATE 12-06-2013

FIGURE 3

File: W:\work\60147454\CADD\2012\Projects\60134425 – 2010 – Fig 2 thru 8.dwg Time: Jan 08, 2014 – 12:00pm



LEGEND:

- ● INDICATES APPROXIMATE LOCATION OF ZONE B1 MONITORING WELL
- ◐ INDICATES APPROXIMATE LOCATION OF ZONE B1 EXTRACTION WELL
- (33.02) INDICATES WATER–LEVEL ELEVATION IN ZONE B1 MONITORING WELL (FEET, MSL & NAVD88) IN OCTOBER 2013
- INDICATES APPROXIMATE POTENTIOMETRIC SURFACE CONTOUR IN ZONE B1 IN OCTOBER 2013

SCALE

0 300 600 FEET

NORTHROP GRUMMAN

Northrop Grumman Space & Mission Systems Corp.

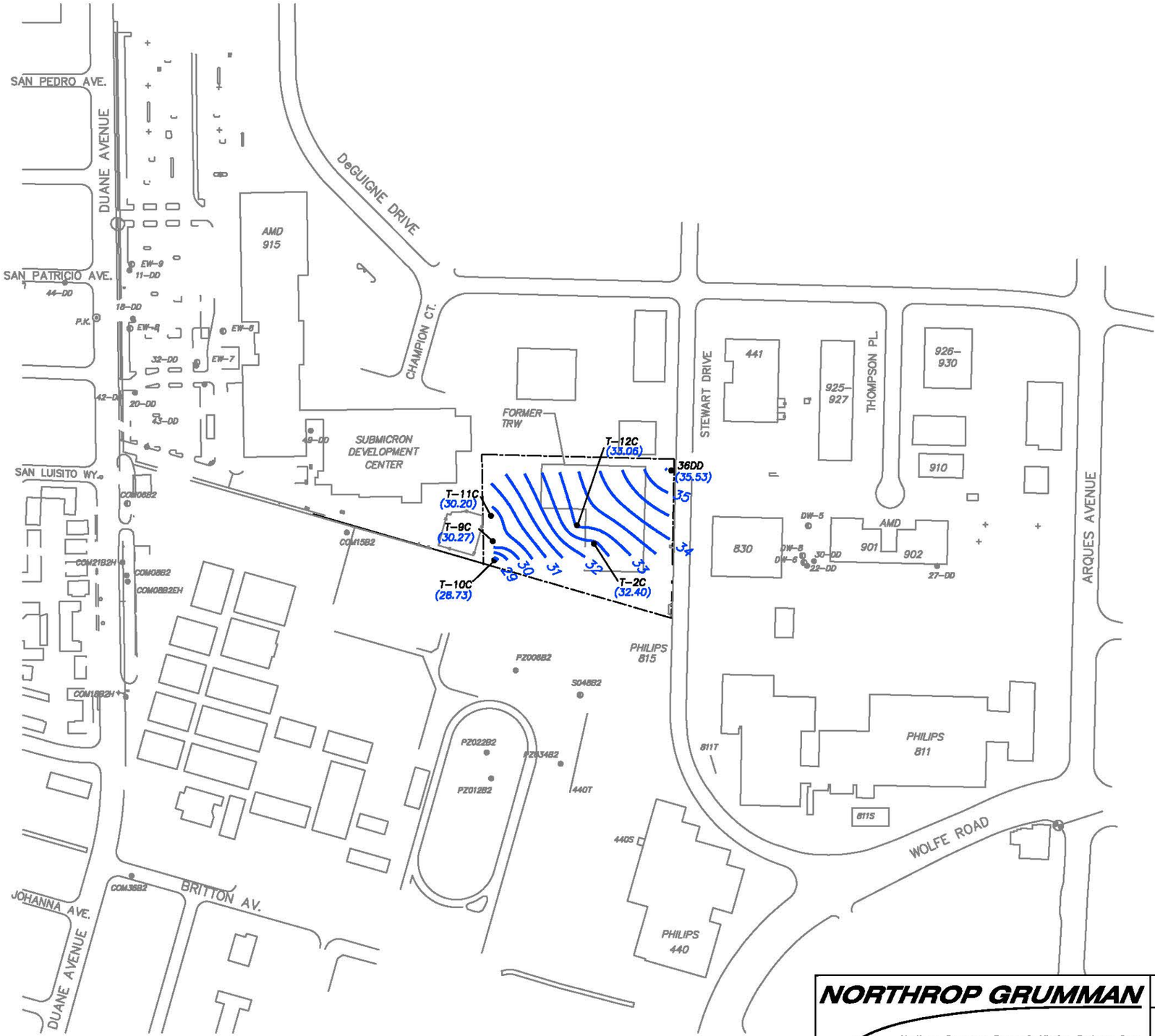
FORMER TRW MICROWAVE FACILITY

POTENTIOMETRIC SURFACE CONTOURS
ZONE B1
OCTOBER 2013

DATE 12–06–2013

FIGURE 4

File: W:\work\60147454\CADD\2012\Projects\60134425 – 2010 – Fig 2 thru 8.dwg Time: Jan 10, 2014 – 1:20pm



LEGEND:

- ● INDICATES APPROXIMATE LOCATION OF ZONE B2 MONITORING WELL
- ◐ INDICATES APPROXIMATE LOCATION OF ZONE B2 EXTRACTION WELL
- (35.53) INDICATES WATER–LEVEL ELEVATION IN ZONE B2 MONITORING WELL (FEET, MSL & NAVD88) IN OCTOBER 2013
- INDICATES APPROXIMATE POTENTIOMETRIC SURFACE CONTOUR IN ZONE B2 IN OCTOBER 2013

SCALE

0 300 600 FEET

NORTHROP GRUMMAN

Northrop Grumman Space & Mission Systems Corp.

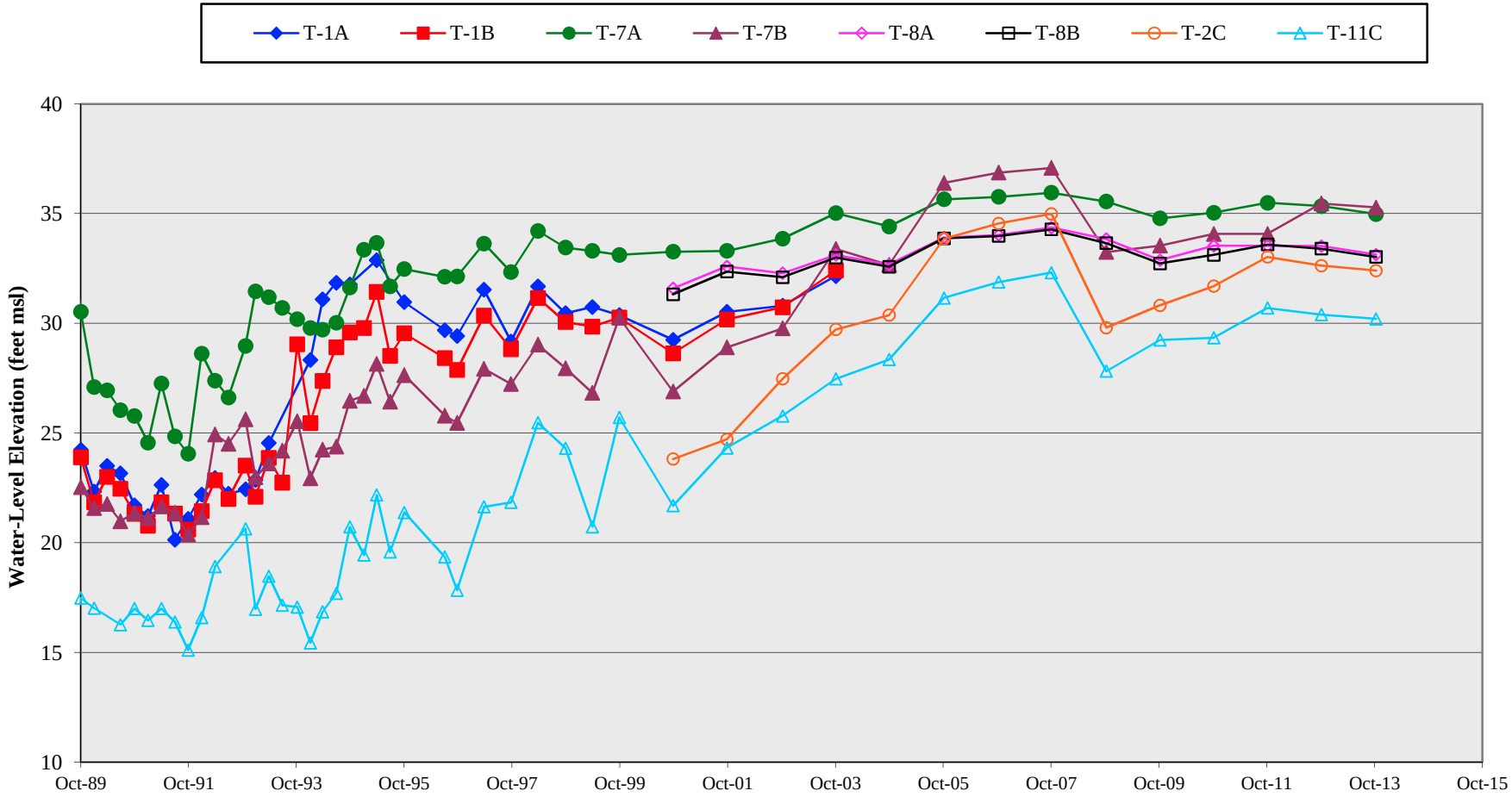
FORMER TRW MICROWAVE FACILITY

POTENTIOMETRIC SURFACE CONTOURS
ZONE B2
OCTOBER 2013

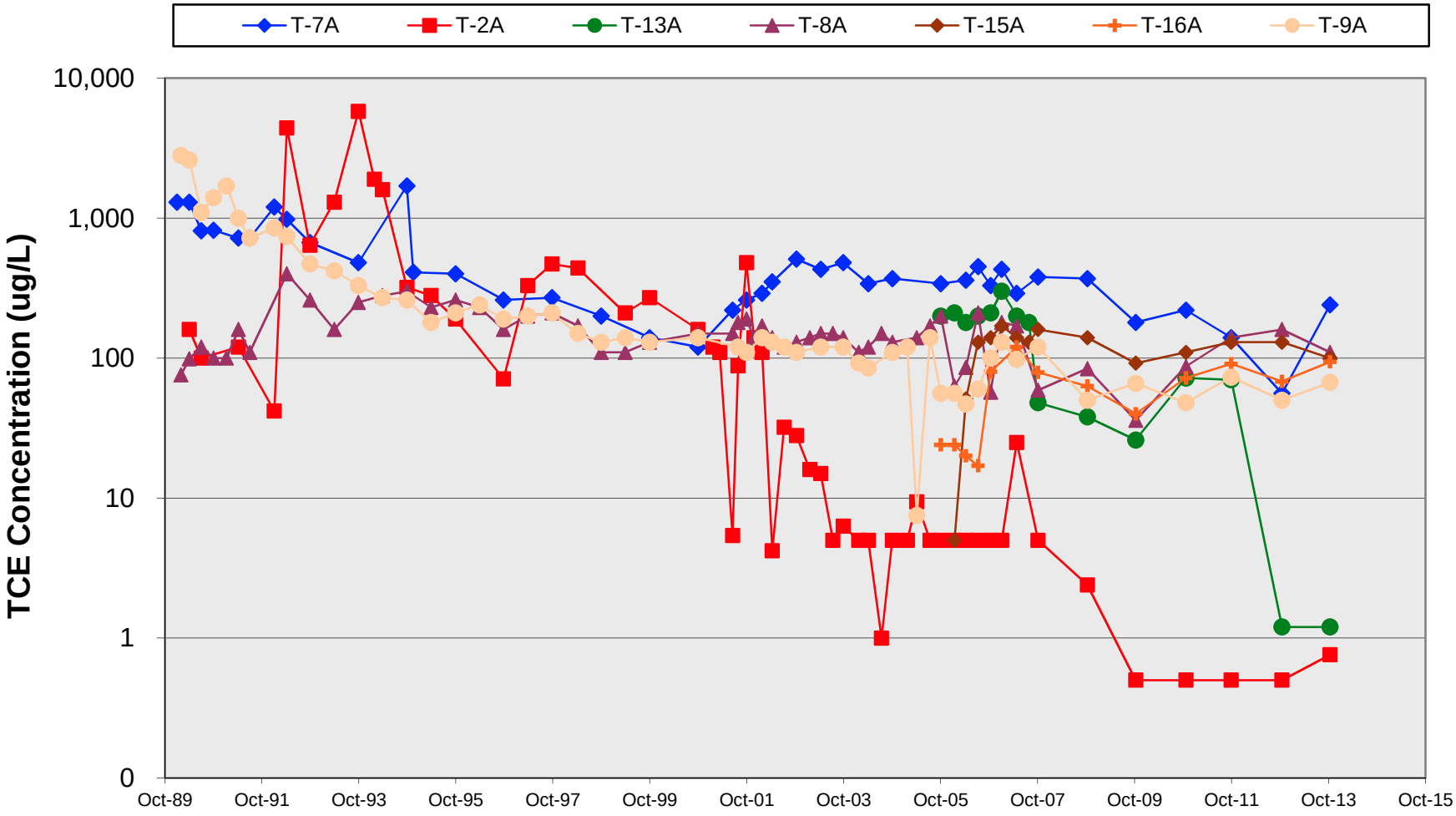
DATE 12–06–2013

FIGURE 5

File: W:\work\60147454\CADD\2012\Projects\60134425 – 2010 – Fig 2 thru 8.dwg Time: Jan 10, 2014 – 1:06pm



NORTHROP GRUMMAN	Former TRW Microwave Facility	
	Water-Level Elevations vs. Time - Wells T-1A, T-1B, T-7A, T-7B, T-8A, T-8B, T-2C, and T-11C Note: Per Water Board approval, wells T-1A and T-1B were abandoned in February 2004. Wells T-8A, T-8B, and T-2C were included in this figure starting with year 2000 data, corresponding with suspension of groundwater extraction at these wells. Elevations presented in NAVD88.	**FIGURE 6**



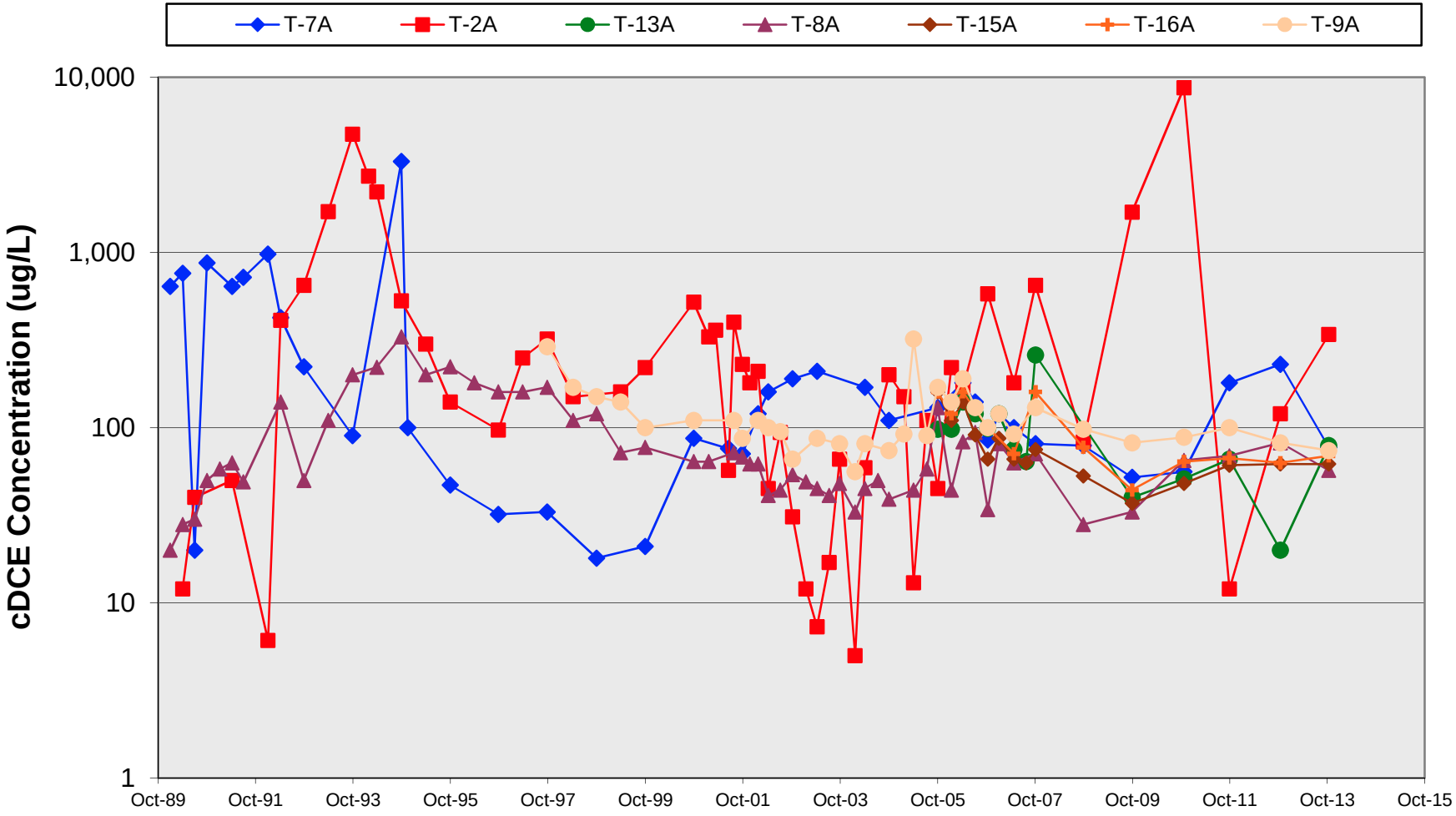
NORTHROP GRUMMAN

Former TRW Microwave Facility

TCE Concentrations vs. Time - Wells T-2A, T-7A, T-8A, T-9A, T-13A, T-15A, and T-16A

Note: For non-detects less than 5 ug/L, detection limit is presented for the data point. For non-detects greater than 5 ug/L, the data point has been omitted from the figure.

FIGURE 7



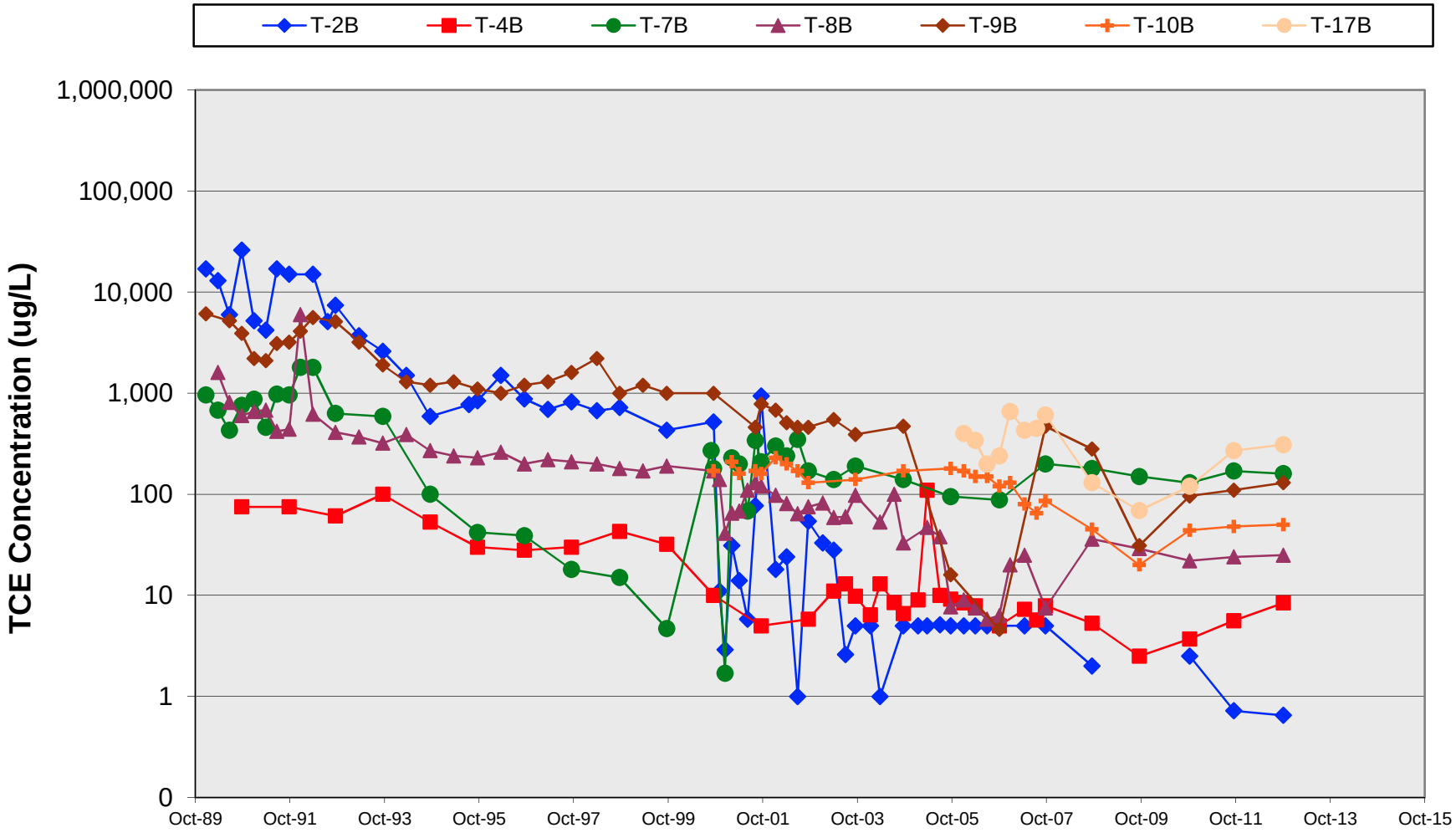
NORTHROP GRUMMAN

Former TRW Microwave Facility

cDCE Concentrations vs. Time - Wells T-2A, T-7A, T-8A, T-9A, T-13A, T-15A, and T-16A

Note: For non-detects less than 5 ug/L, detection limit is presented for the data point. For non-detects greater than 5 ug/L, the data point has been omitted from the figure. Data reported as total 1,2-DCE prior to 1996.

FIGURE 8



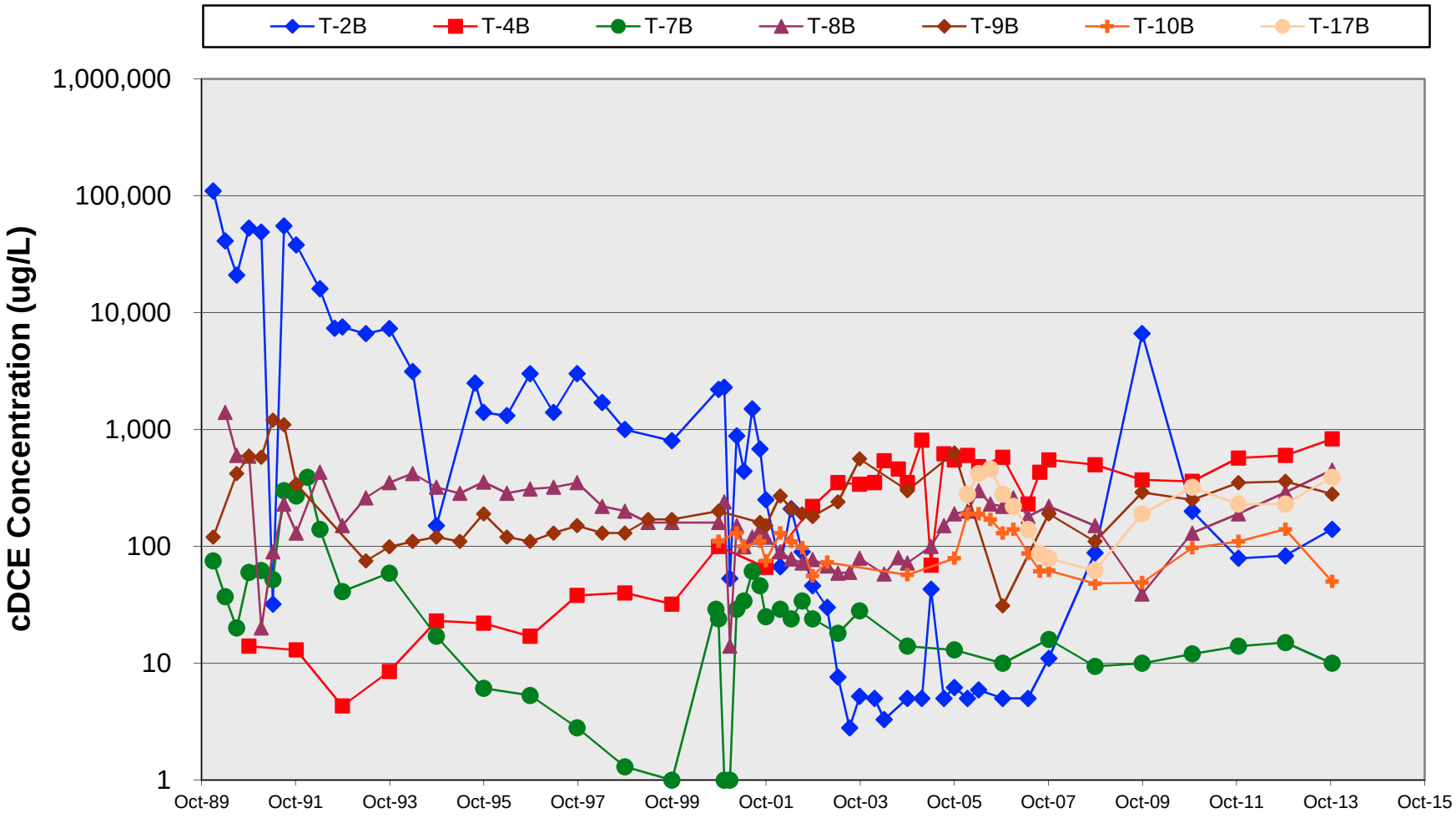
NORTHROP GRUMMAN

Former TRW Microwave Facility

TCE Concentrations vs. Time - Wells T-2B, T-4B, T-7B, T-8B, T-9B, T-10B, and T-17B

Note: For non-detects less than 5 ug/L, detection limit is presented for the data point. For non-detects greater than 5 ug/L, the data point has been omitted from the figure.

FIGURE 9



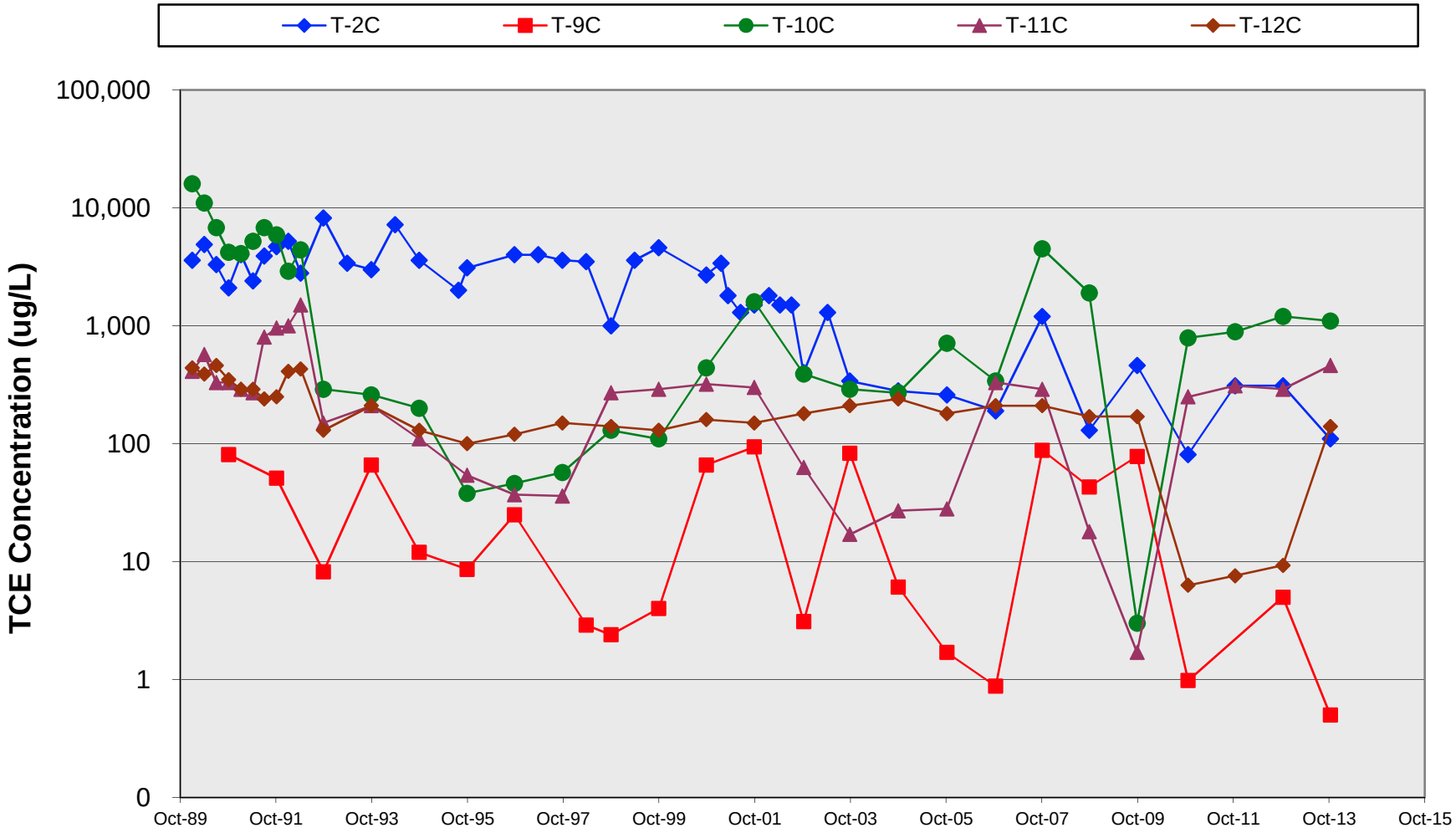
NORTHROP GRUMMAN

Former TRW Microwave Facility

cDCE Concentrations vs. Time - Wells T-2B, T-4B, T-7B, T-8B, T-9B, T-10B, and T-17B

Note: For non-detects less than 5 ug/L, detection limit is presented for the data point. For non-detects greater than 5 ug/L, the data point has been omitted from the figure. Data reported as total 1,2-DCE prior to 1996.

FIGURE 10



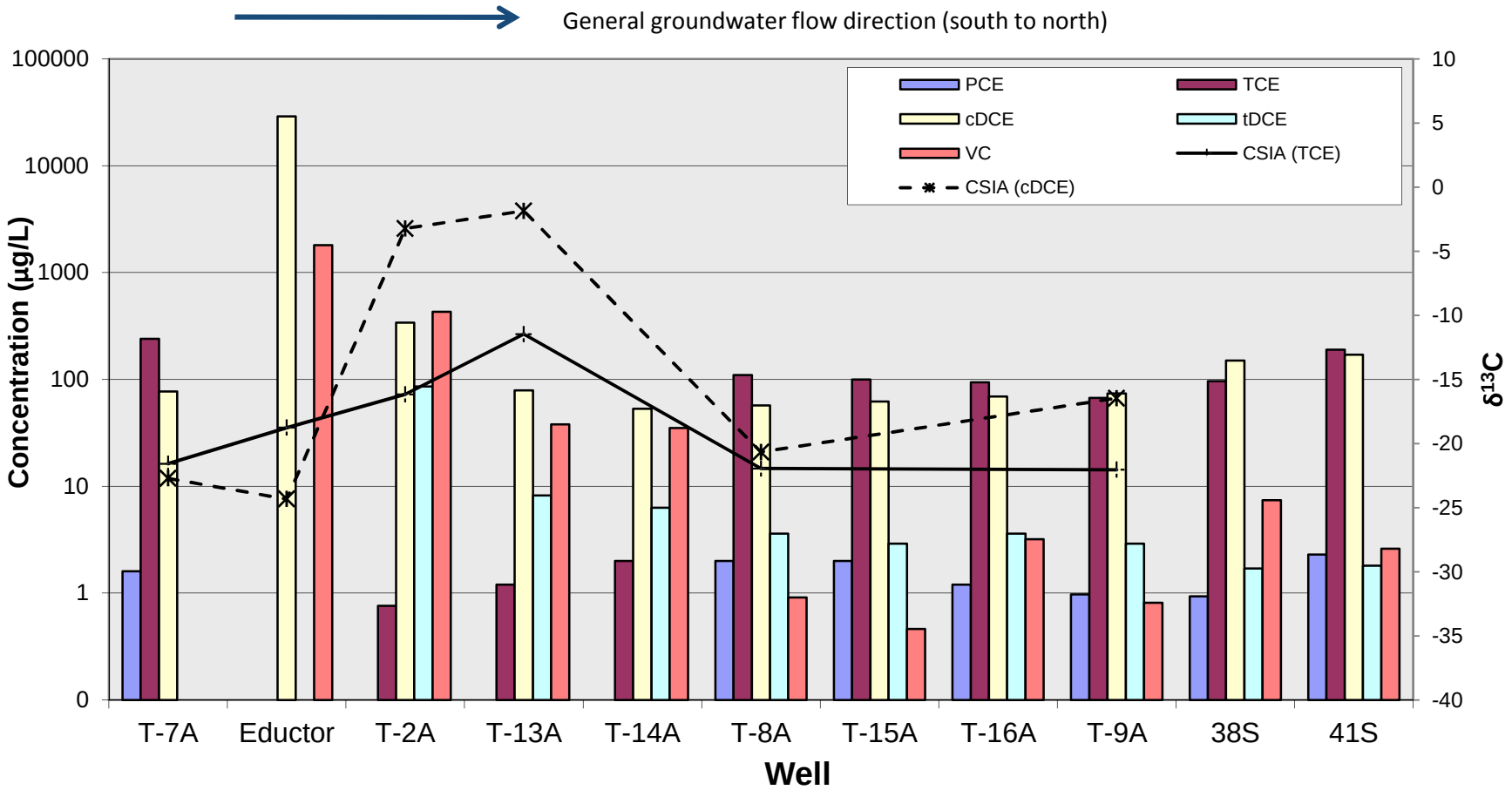
NORTHROP GRUMMAN

Former TRW Microwave Facility

TCE Concentrations vs. Time - Wells T-2C, T-9C, T-10C, T-11C, and T-12C

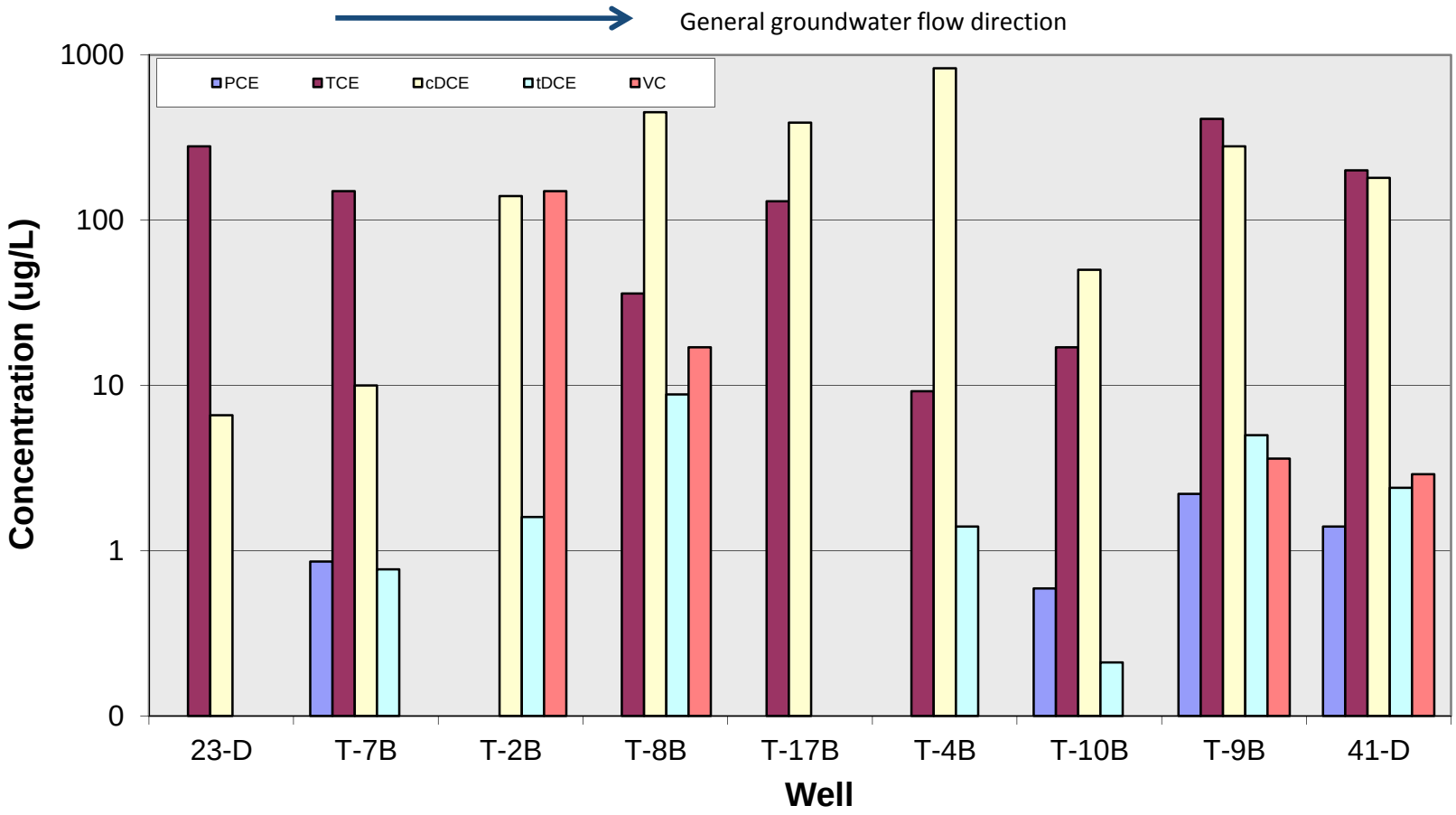
Note: For non-detects less than 5 ug/L, detection limit is presented for the data point. For non-detects greater than 5 ug/L, the data point has been omitted from the figure.

FIGURE 11



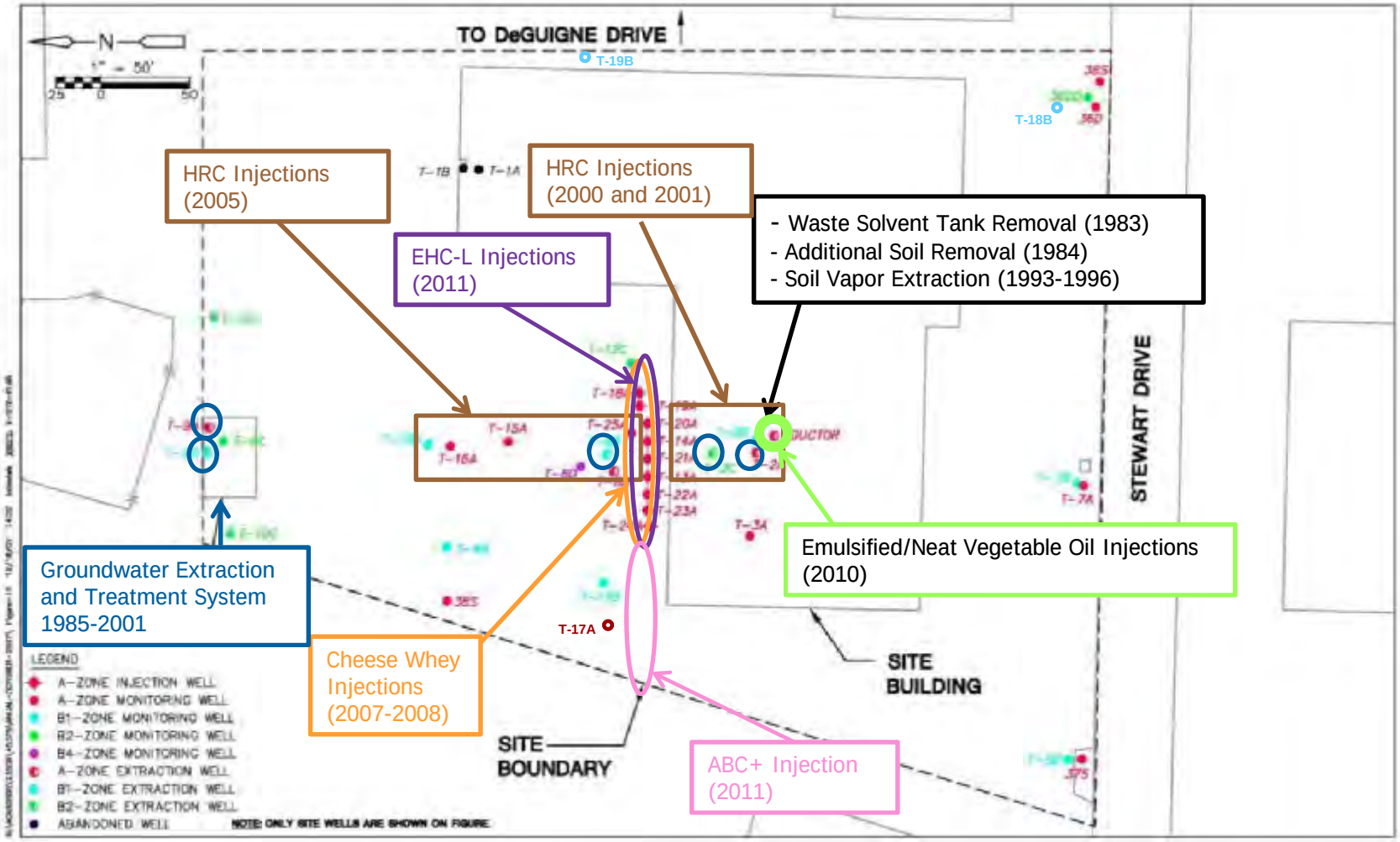
Note: Groundwater flow direction is generally along the wells listed above, from south to north, from onsite well T-7A to offsite AMD well 41S.

NORTHROP GRUMMAN	Former TRW Microwave Facility	
	Chlorinated Ethene Concentrations, Zone A - October 2013	**FIGURE 12**

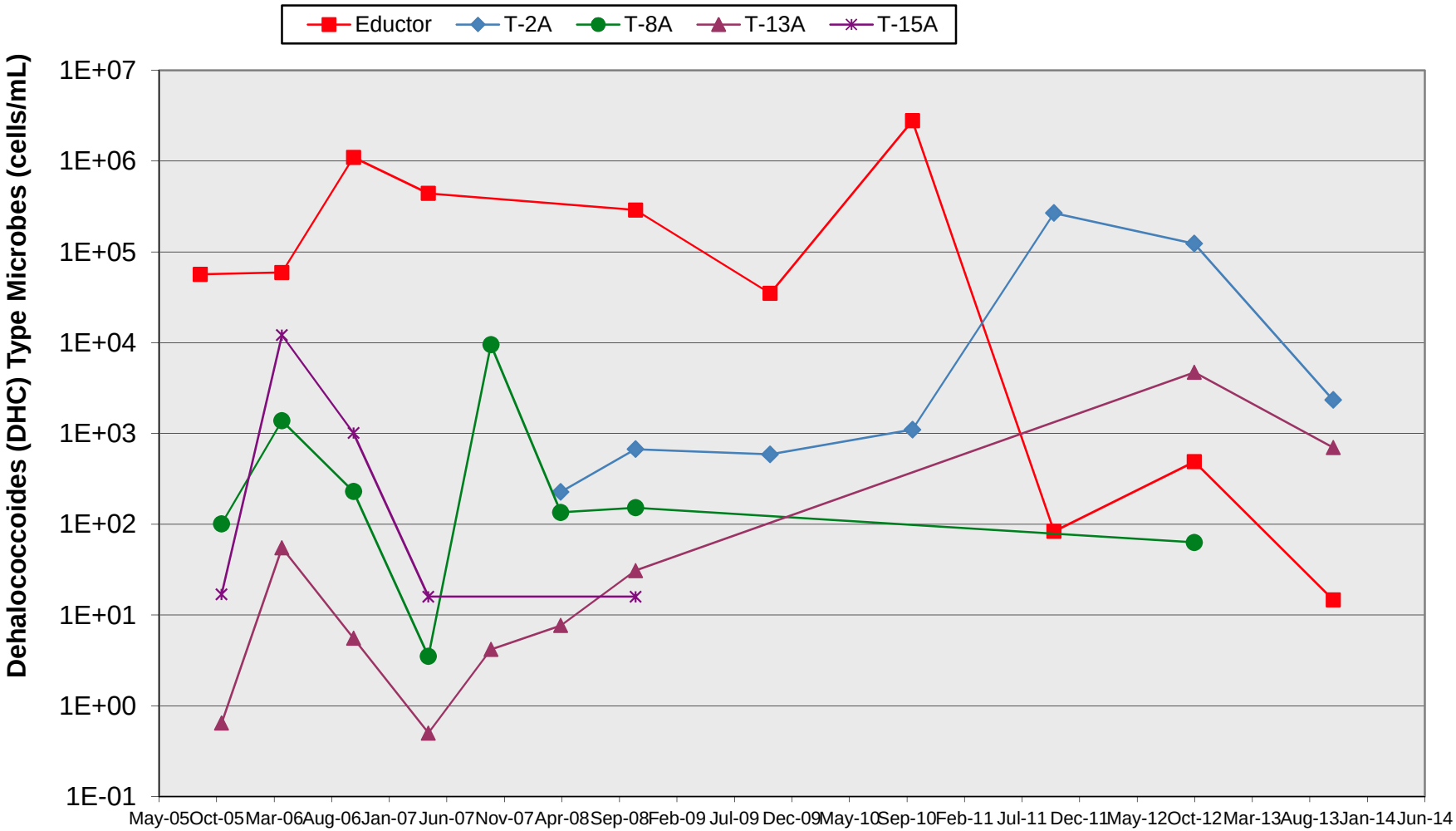


Note: Groundwater flow direction is generally along the wells listed above from offsite well 23-D to offsite well 41-D.

NORTHROP GRUMMAN	Former TRW Microwave Facility	
	Chlorinated Ethene Concentrations, Zone B1 - October 2013	**FIGURE 13**



NORTHROP GRUMMAN	Former TRW Microwave Facility	
	Previous Remedial Activities	**FIGURE 14**



NORTHROP GRUMMAN	Former TRW Microwave Facility **Dehalococcoides (Dhc) Type Microbe Concentrations vs. Time - Wells Eductor, T-8A, T-13A and T-15A**	**FIGURE 15**

APPENDICES

Appendix A

Standard Groundwater Sampling Procedures and Low-Flow Sampling Logs

PROJECT WELL MONITORING AND SAMPLING FIELD PROCEDURES

Prior to purging the wells, static groundwater levels are measured in all wells. A clean electronic sounder is used to measure the depth to water below the top of each well casing to the nearest 0.01 foot. Where previous data indicate the presence or likely presence, an interface probe is used to monitor the presence and thickness of light or dense non-aqueous phase liquid (LNAPL/DNAPL).

Each monitoring well is micro-purged with a low-flow peristaltic pump until environmental parameters stabilize prior to sampling. For monitoring wells where the sampling depth is greater than 27 feet below ground surface a 2" Grundfos pump is used for micro-purging. During the micro-purging, the purge flow rate is adjusted to match the rate at which the well produces water (the yield rate). Measurements of environmental parameters, including pH, specific conductivity, temperature, dissolved oxygen, turbidity, and oxidation-reduction potential, are recorded at periodic intervals during the purging of all wells. Water-level measurement, well purging, and well sampling data are recorded for each well on water purging logs. Copies of the logs follow these procedures.

Groundwater samples are immediately collected from each well through new or dedicated tubing. The samples are slowly transferred to new sample containers supplied by the analytical laboratory for each specific analysis. Volatile organic analysis vials are filled in a manner such that no headspace exists. Each sample is logged on a chain-of-custody form that accompanies the samples. The samples are then stored in a clean portable ice chest and cooled with ice until delivery to the analytical laboratory.

Monitoring equipment is decontaminated between use in each well using a non-phosphate detergent wash followed by two deionized water rinses. Wastewater, generated from decontamination activities, is collected in 55-gallon drums. The drummed wastewater is then stored onsite for later disposal or treatment.

Field quality assurance/quality control (QA/QC) procedures are employed during each monitoring event to document that the sampling results meet accepted QA/QC standards. The QA/QC samples collected in the field include blind duplicates and trip blanks. Additional QA/QC procedures employed in the field include sequencing the sampling in such a manner that the wells with the lowest levels of contamination are monitored/sampled prior to those with the highest levels.

May 2013

Low-Flow Sampling Logs

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.l2c Well Designation: 38 S

Site: NGC Microwave – Sunnyvale Date: May 20, 2013

Well Type: Flush Mount Stove pipe Is well cap sealed? YES NO (explain in remarks) NA

Bolts: 0 / 0 Well O-ring? YES NO Tabs Broken? YES(#___/___) NO

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump Peristaltic Pump Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1"	2"	4" X	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 1430

Depth of well: 15

Depth to water: 8.65

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): ____ Recharge (sec): ____ Pressure (psi): ____

No decimals

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
1440	23.16	1.465	7.06	-63	261	1.84	8.65	200 ml/m	250 ml
1443	22.61	1.487	7.19	-77	169.0	~~0.41~~	8.67		0.85
1446	22.59	1.451	7.18	-81	128.0	1.54	8.67		1.45
1449	22.53	1.481	7.12	-81	87.1	1.51	8.67		2.05
1452	22.61	1.463	7.10	-80	68.4	1.49	8.67		2.65
1455	~~22.65~~ 22.61	1.484	7.06	-79	48.9	1.50	8.69		3.25
1458	22.70	1.487	7.04	-77	39.0	1.48	8.69		3.85
1501	22.75	1.438	7.03	-77	37.0	1.45	8.68		4.45
1504	22.68	1.448	7.02	-76	32.2	1.46	8.68		5.05
1507	22.69	1.429	7.01	-76	35.4	1.44	8.69		5.65
1510	22.80	1.435	7.09	-75	32.8	1.41	8.69		6.25
Sample 1510									

Note pump set at 13 feet. Actual purge volume: 6.25

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: MS/MSD Time: 1510

Remarks: Screen 9-15' bgs
In Concrete / Ivy

Signature: Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.l2c Well Designation: Eductor

Site: NGC Microwave – Sunnyvale Date: May 21, 2013

Well Type: Flush Mount Stove pipe (NA) Is well cap sealed? (YES) NO (explain in remarks)

Bolts: 0/0 Well O-ring? YES NO (NA) Tabs Broken? YES(#___/___) NO (NA)

General condition of Wellhead assembly: Excellent (Good) Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump (Peristaltic Pump) Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1"	2"	4" X	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement	Recharge Measurement	Purge Volume
Time: —	Time:	Calculated:
Depth of well: 18	Depth to water:	Actual:
Depth to water: —	80% recharge depth:	

Discharge (sec): ____ Recharge (sec): ____ Pressure (psi): ____

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
1606	20.37	3452	5.51	-0.92	18.2	0.15	—	200ml/min	0.250
1609	20.35	3468	5.49	-13.1	15.1	0.14	—	↓	0.850
1612	20.32	3462	5.49	-15.3	8.4	0.14	—	↓	1.45
1615	20.31	3459	5.49	-16.1	9.5	0.14	—	↓	2.05
1618	20.28	3472	5.47	-15.9	9.2	0.15	—	↓	2.65
1621	20.27	3481	5.46	-15.8	9.4	0.14	—	↓	3.25
1624	20.26	3478	5.49	-15.9	9.4	0.15	—	↓	3.85
1625	— Sample								
Headspace Reading: LEL = 0% CO = 0ppm									
			Methane = 0 ppm						
			O_2 = 19.8%						

Note pump set at 12 feet. Actual purge volume: 3.85

Sample appearance: Clear

QC samples collected? YES (NO) QC sample ID: ____ Time: ____

Remarks:

Screen 8-18 | Additional Oil Sample only
Unable to take Water Level | able to ~~sample~~ collect
due to oil | (2) 40ml VOA-HCl

Signature: ____ Review: ____

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.I2c Well Designation: T2A

Site: NGC Microwave – Sunnyvale Date: May 22, 2013

Well Type: Flush Mount Stove pipe Vault Is well cap sealed? YES NO (explain in remarks) NA

Bolts: 0 / 0 Well O-ring? YES NO NA Tabs Broken? YES(#___/___) NO NA

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump Peristaltic Pump Watera

Sampled with: Disposable bailer ____ From Pump tubing ✓

Well diameter:	1"	2"	4" X	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 0920

Depth of well: 20

Depth to water: 8.22

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): — Recharge (sec): — Pressure (psi): —

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
0932	20.26	2209	7.36	-129	59.9	2.42	8.52	200ml/min	250ml
0935	20.31	2282	7.38	-134	59.4	1.32	8.58	↓	.85
0938	20.33	2287	7.35	-136	57.5	1.43	8.61		1.45
0941	20.34	2283	7.31	-137	57.9	1.73	8.64		2.05
0945	Sample								

Note pump set at 15 feet. Actual purge volume: 2.05

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: Duplicate Time: 0945

Remarks:

Screen @ 8.5-18.5 Duplicate ID J1038-T2A-052213-2

Signature: [illegible] Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.l2c Well Designation: T2B

Site: NGC Microwave – Sunnyvale Date: May 22, 2013

Well Type: Flush Mount Stove pipe (Vault) Is well cap sealed? YES NO (explain in remarks)

Bolts: ___/___ Well O-ring? YES NO Tabs Broken? YES(#___/___) NO

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes_____ Low Flow X

Sample Method: Submersible Bladder Pump (Peristaltic Pump) Watera

Sampled with: Disposable bailer _____ From Pump tubing X

Well diameter:	1"	2"	4" X	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 0915

Depth of well: 35

Depth to water: 8.19

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): _____ Recharge (sec): _____ Pressure (psi): _____

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)	
1031	20.63	1500	7.44	-103	63.4	0.95	8.65	0.2	~~0.7~~	0
1034	20.65	1500	7.34	-103	61.5	0.25	8.73	0.2	~~0.2~~	0.6
1037	20.67	1500	7.28	-106	60.9	0.11	8.82	0.2	~~0.4~~	1.2
1040	20.67	1505	7.25	-106	64.7	0.00	8.99	0.2	~~0.6~~	1.8
1043	20.66	1506	7.23	-107	73.3	0.08	9.12	0.2	~~0.8~~	2.4
1046	20.66	1500	7.21	-108	89.3	0.39	9.22	0.2	~~1.0~~	3.0
1049	20.66	1500	7.21	-108	77.5	0.77	9.32	0.2	3.6	
1052	20.65	1500	7.20	-109	97.0	1.04	9.41	0.2	4.2	
1055	20.67	1502	7.19	-109	120.0	1.22	9.47	0.2	4.8	
1058	20.67	1503	7.18	-110	117.0	1.39	9.51	0.2	5.4	
1101	20.68	1501	7.18	-111	123.0	1.46	9.61	0.2	6.0	
Sampled @ 1105										

Note pump set at 30 feet. Actual purge volume: 6.0

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: _____ Time: 1105

Remarks:

Screen 23-33'

Signature: [signature] Review: _____

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.l2c Well Designation: T-817

Site: NGC Microwave – Sunnyvale Date: May 20, 2013

Well Type: Flush Mount Stove pipe Vault Is well cap sealed? YES NO (explain in remarks)

Bolts: 0/0 Well O-ring? YES NO Tabs Broken? YES(#___/___) NO N/A

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump Peristaltic Pump Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1"	2"	4" X	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 1750

Depth of well: 19

Depth to water: 7.60

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): — Recharge (sec): — Pressure (psi): —

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
1757	23.85	1432	6.76	69	169.0	1.65	7.65	200ml/min	0.250
1800	23.12	1427	6.68	66	161.0	0.32	7.66		0.850
1803	22.95	1442	6.63	66	122.0	0.27	7.75		1.45
1806	22.85	1438	6.60	66	102.0	0.25	7.75		2.05
1809	22.70	1431	6.58	65	82.5	0.26	7.75		2.65
1812	22.69	1443	6.58	66	67.9	0.23	7.75		3.25
1815	22.62	1442	6.59	65	54.3	0.22	7.75		3.85
1818	22.57	1441	6.58	63	41.3	0.21	7.75		4.45
1821	22.52	1438	6.59	63	33.3	0.23	7.75		5.05
1824	22.49	1448	6.57	62	27.6	0.20	7.75		5.65
1827	22.48	1431	6.59	63	26.8	0.21	7.75		6.25
1830	—	Sample							

Note pump set at 12.5 feet. Actual purge volume: 6.25 L

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: ____ Time: ____

Remarks:

Signature: RL Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.I2c Well Designation: T13A

Site: NGC Microwave – Sunnyvale Date: May 21, 2013

Well Type: Flush Mount Stove pipe Is well cap sealed? YES NO (explain in remarks)

Bolts: 2/2 Well O-ring? YES NO Tabs Broken? YES(#__/__) NO

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump Peristaltic Pump Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1" X	2"____	4"____	6"____	8"____	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement	Recharge Measurement	Purge Volume
Time: 0850	Time:	Calculated:
Depth of well: 20	Depth to water:	Actual:
Depth to water: 7.29	80% recharge depth:	

Discharge (sec): ____ Recharge (sec): ____ Pressure (psi): ____

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
0853	20.23	1350	7.15	-126	96.0	2.86	7.94	200ml/min	250 ml
0856	20.27	1352	7.07	-128	100.3	0.26	7.94	↓	0.850
0859	20.30	1361	7.12	-127	95.5	0.30	7.94	↓	1.45
0902	20.33	1400	7.04	-128	60.1	0.64	7.91	↓	2.05
0905	20.33	1410	7.01	-130	55.5	0.62	7.91	↓	2.65
0908	20.32	1412	7.02	-131	56.2	0.65	7.91	↓	3.25
0911	20.41	1412	7.02	-133	55.1	0.66	7.91	↓	3.85
0915 — Sample									

Note pump set at 16 feet. Actual purge volume: 3.85

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: Duplicate Time: 3.85

Remarks:

Screen @ 10'-20' Duplicate ID: J1038-T13A-052113-2

Signature: [illegible] Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.I2c Well Designation: T14A

Site: NGC Microwave – Sunnyvale Date: May 21, 2013

Well Type: (Flush Mount) Stove pipe Is well cap sealed? (YES) NO (explain in remarks)

Bolts: 1 / 2 Well O-ring? (YES) NO Tabs Broken? YES(#__/__) (NO)

General condition of Wellhead assembly: Excellent Good (Fair) Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump (Peristaltic Pump) Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1" X	2"	4"	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 0656

Depth of well: 20

Depth to water: 7.31

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): — Recharge (sec): — Pressure (psi): —

	Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
	0706	19.65	1436	7.02	-111	77.9	2.73	7.35	200ml/min	0.250
	0709	19.94	1421	7.24	-130	85.4	0.49	7.36		0.850
	0712	20.00	1389	7.29	-141	84.7	0.19	7.36		1.45
	0715	20.04	1399	7.30	-146	99.0	0.15	7.36		2.05
	0718	20.08	1392	7.25	-147	98.6	0.14	7.36		2.65
	0721	20.09	1395	7.25	-149	62.1	0.15	7.35		3.25
0724	~~0723~~	20.10	1398	7.23	-150	30.9	0.19	7.35		3.85
0727	~~0726~~	20.10	1391	7.22	-150	31.1	0.23	7.35		4.45
0730	~~0729~~	20.10	1393	7.21	-151	31.2	0.24	7.36		5.05
	0730	Sample								

Note pump set at 16 feet. Actual purge volume: 5.05

Sample appearance: Clear

QC samples collected? YES (NO) QC sample ID: ____ Time: ____

Remarks: Water in Well casing Pumped out
Slight sulfide odor; Black specks suspended

Signature: [illegible] Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.I2c Well Designation: T15A

Site: NGC Microwave – Sunnyvale Date: May 20, 2013

Well Type: (Flush Mount) Stove pipe Is well cap sealed? (YES) NO (explain in remarks)

Bolts: 2 R Well O-ring? (YES) NO Tabs Broken? YES(#___/___) (NO)

General condition of Wellhead assembly: Excellent (Good) Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes ___ Low Flow X

Sample Method: Submersible Bladder Pump (Peristaltic Pump) X Watera

Sampled with: Disposable bailer ___ From Pump tubing ___

Well diameter:	1" X	2"	4"	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 1525

Depth of well: 20

Depth to water: 7.20

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): Recharge (sec): Pressure (psi):

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
1537	23.33	1.432	5.98	148	157.0	2.32	7.23	200 ml/min	250 ml
1540	22.99	1.457	6.31	133	191.0	1.57	7.23		650 ml
1543	22.28	1.449	6.35	128	179.0	1.23	7.25		1.45 L
1546	22.30	1.431	6.40	124	143.0	1.12	7.25		2.05 L
1549	22.26	1.411	6.42	121	146.0	0.83	7.25		2.65 L
1552	22.23	1.427	6.44	118	108.0	0.54	7.25		3.25
1555	22.24	1.432	6.45	116	103.0	0.32	7.25		3.85
1558	22.21	1.441	6.46	115	102.0	0.30	7.25		4.45
1601	22.05	1.444	6.47	114	101.0	0.30	7.25		5.05
1605	—	Sample							

Note pump set at 15 feet. Actual purge volume: 5.05

Sample appearance: Clear

QC samples collected? YES (NO) QC sample ID: ___ Time: ___

Remarks:

Screen 10-20' bgs

Signature: Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.l2c Well Designation: T-17A

Site: NGC Microwave – Sunnyvale Date: May 20, 2013

Well Type: Flush Mount Stove pipe Is well cap sealed? YES NO (explain in remarks)

Bolts: 2 / 2 Well O-ring? YES NO Tabs Broken? YES(#___/___) NO

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump Peristaltic Pump Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1"	2" X	4"	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 0858

Depth of well: 20

Depth to water: ~~6~~ 7.62

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): — Recharge (sec): — Pressure (psi): —

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO (mg/L)	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
0920	21.75	1.352	6.22	199	139.0	0.40	7.65	200 ml/min	250 ml
0923	21.01	1.341	6.36	192	118.0	0.09	7.67		850 ml
0926	20.78	1.345	6.41	185	81.7	0.08	7.67		1.45L
0929	20.76	1.348	6.43	183	45.4	0.08	7.67		2.05L
0932	20.75	1.348	6.45	181	50.1	0.08	7.67		2.65L
0935	20.76	1.337	6.45	178	46.0	0.08	7.67		3.25L
0938	20.79	1.306	6.45	175	40.0	0.08	7.67		3.85L
0941	20.80	1.309	6.45	172	39.0	0.09	7.67		4.45L
0944	20.79	1.308	6.46	170	38.1	0.08	7.67		5.05L
0945	Sample								

Note pump set at 17 feet. Actual purge volume:

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: TA/MS Time:

Remarks:

Screen @ 10'-20' bgs

Signature: Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.I2c Well Designation: T-17B

Site: NGC Microwave – Sunnyvale Date: May , 2013

Well Type: Flush Mount Stove pipe Is well cap sealed? YES NO (explain in remarks)

Bolts: 2/2 Well O-ring? YES NO Tabs Broken? YES(#__/__) NO

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump Peristaltic Pump Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1" X	2"	4"	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement
Time: 1005
Depth of well: 35
Depth to water: 7.80

Recharge Measurement
Time:
Depth to water:
80% recharge depth:

Purge Volume
Calculated:
Actual:

Discharge (sec): — Recharge (sec): — Pressure (psi): —

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
1026	22.85	1.384	7.49	-8	554.0	1.40	7.83	200ml/min	250
1029	22.42	1.383	7.42	-10	410.0	0.14	7.85		850
1032	22.22	1.361	7.34	-12	334.0	~~8.8~~ 8.35	7.87		1.45
1035	22.25	1.385	7.29	-13	182.0	0.31	7.87		2.05
1038	22.26	1.387	7.26	-14	164.0	0.32	7.87		~~6.65~~ RM 2.65
1041	22.25	1.308	7.26	-9	134.0	0.46	7.87		3.25
1044	22.25	1.321	7.25	-5	88.1	0.36	7.88		3.85
1047	22.28	1.311	7.20	-8	84.1	0.33	7.89		4.45
1050	22.29	1.317	7.20	-9	70.3	0.34	7.89		5.05
1053	22.21	1.319	7.20	-14	60.9	0.35	7.89		5.65
1056	22.00	1.313	7.20	-17	63.7	0.35	7.89		6.25
1100	—	Sample							

Note pump set at 30 feet. Actual purge volume: 6.25

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: ____ Time: 1100

Remarks:
Screen 25-35'

Signature: [signature] Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.l2c Well Designation: T18B

Site: NGC Microwave – Sunnyvale Date: May 21, 2013

Well Type: Flush Mount Stove pipe Is well cap sealed? YES NO (explain in remarks)

Bolts: 2/2 Well O-ring? YES NO Tabs Broken? YES(#___/___) NO

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes___ Low Flow X

Sample Method: Submersible Bladder Pump Peristaltic Pump Watera

Sampled with: Disposable bailer ___ From Pump tubing X

Well diameter:	1"	2" X	4"	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 1330

Depth of well: 46

Depth to water: 5.93

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): — Recharge (sec): — Pressure (psi): —

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
1402	23.43	1005	7.56	-155	375.0	2.45	6.45	200mL/min	0.250
1405	23.72	995	8.02	-173	341.0	0.71	7.00		0.850
1408	23.38	998	8.21	-176	305.0	0.27	7.33		1.45
1411	23.10	997	8.23	-177	210.0	0.15	7.51		2.05
1414	23.04	996	8.19	-178	123.0	0.14	7.57		2.65
1417	23.06	998	8.15	-177	74.5	0.15	7.57		3.25
1420	23.00	994	8.11	-177	52.3	0.14	7.59		3.85
1423	23.02	998	8.08	-176	53.6	0.16	7.61		4.45
1426	23.01	996	8.06	-177	52.9	0.17	7.64		5.05
1429	23.04	994	8.04	-175	53.2	0.17	7.67		5.65
1430	— Sample								

Note pump set at 43 feet. Actual purge volume: 5.65

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: ___ Time: 1430

Remarks:

Screen 41'-46'

Signature: [illegible] Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.I2c Well Designation: T19A

Site: NGC Microwave – Sunnyvale Date: May 21, 2013

Well Type: Flush Mount Stove pipe Is well cap sealed? YES NO (explain in remarks)

Bolts: 2/2 Well O-ring? YES NO Tabs Broken? YES(#__/__) NO

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes___ Low Flow X

Sample Method: Submersible Bladder Pump Peristaltic Pump Watera

Sampled with: Disposable bailer ___ From Pump tubing X

Well diameter:	1" X	2"	4"	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 0748

Depth of well: 20

Depth to water: 7.52

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): — Recharge (sec): — Pressure (psi): —

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
0757	19.40	1538	7.19	-139	101.0	1.51	7.82	200mL/min	0.250
0800	19.24	1525	7.16	-147	94.8	0.45	7.83	↓	0.850
0803	19.21	1531	7.16	-151	90.1	1.29	7.86	↓	1.45
0806	19.17	1527	7.13	-154	64.3	1.80	7.87	↓	2.05
0809	19.11	1525	7.10	-156	64.1	1.84	7.88	↓	2.65
0812	19.09	1522	7.10	-158	62.9	1.75	7.89	↓	3.25
0815	19.08	1520	7.10	-159	31.2	1.56	7.89	↓	3.85
0818	19.07	1520	7.09	-159	30.4	1.54	7.91	↓	4.45
0821	19.07	1519	7.09	-159	30.1	1.52	7.91	↓	5.05
0825	Sample								~~5.65~~

Note pump set at 17 feet. Actual purge volume: 5.05

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: ___ Time: ___

Remarks:

screen= 10'-20'; Slight sulfate odor, black specks suspended

Signature: ___ Review: ___

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval 2.5'
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.l2c Well Designation: T19B

Site: NGC Microwave – Sunnyvale Date: May 21, 2013

Well Type: Flush Mount Stove pipe Is well cap sealed? YES NO (explain in remarks)

Bolts: 2/2 Well O-ring? YES NO Tabs Broken? YES(#___/___) NO

General condition of Wellhead assembly: Excellent Good Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump Peristaltic Pump Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1"	2" X	4"	6"	8"	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement

Time: 1100

Depth of well: 39

Depth to water: 6.78

Recharge Measurement

Time:

Depth to water:

80% recharge depth:

Purge Volume

Calculated:

Actual:

Discharge (sec): Recharge (sec): Pressure (psi):

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
1114	21.79	1195	6.96	40	447.0	0.69	6.91	200 ml/min	250ml
1117	21.78	1095	6.94	38	435.0	0.29	7.15		850ml
1120	21.56	1093	6.93	36	401.0	0.15	7.25		1.45
1123	21.51	1089	6.93	35	311.0	0.13	7.28		2.05
1126	21.52	1091	6.92	34	125.0	0.13	7.31		2.65
1129	21.48	1090	6.93	34	53.7	0.12	7.31		3.25
1132	21.45	1092	6.93	35	52.3	0.12	7.32		3.85
1135	21.44	1095	6.94	34	52.6	0.13	7.32		4.45
1135	— Sample								

Note pump set at 34 feet. Actual purge volume: 4.45

Sample appearance: Clear

QC samples collected? YES NO QC sample ID: Time: 1135

Remarks:

Screen 29'-39'

Water in Well

Signature: Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.l2c Well Designation: T23A

Site: NGC Microwave – Sunnyvale Date: May 21, 2013

Well Type: (Flush Mount) Stove pipe Is well cap sealed? (YES) NO (explain in remarks)

Bolts: 0 / 2 Well O-ring? (YES) NO Tabs Broken? YES(#___/___) (NO)

General condition of Wellhead assembly: Excellent Good (Fair) Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump (Peristaltic Pump) Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1" X	2"___	4"___	6"___	8"___	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement	Recharge Measurement	Purge Volume
Time: 0950	Time:	Calculated:
Depth of well: 20	Depth to water:	Actual:
Depth to water: 7.82	80% recharge depth:	

Discharge (sec): — Recharge (sec): — Pressure (psi): —

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
0959	20.49	1734	7.15	-143	642.0	1.33	8.13	200mL/min	0.250
1002	20.32	1691	7.15	-152	407.0	0.52	8.13		0.850
1005	20.26	1584	7.14	-151	210.0	0.44	8.09		1.45
1008	20.29	1565	7.12	-150	148.0	0.13	8.09		2.05
1011	20.28	1495	7.10	-149	125.0	0.11	8.14		2.65
1014	20.24	1491	7.09	-150	120.0	0.14	8.13		3.25
1017	20.29	1494	7.08	-150	113.0	0.15	8.08		3.85
1020	20.24	1491	7.09	-149	75.3	0.16	8.09		4.45
1023	20.29	1489	7.06	-148	64.4	0.14	8.08		5.05
1026	20.27	1487	7.06	-147	51.2	0.13	8.08		5.65
1029	20.28	1484	7.06	-147	51.5	0.13	8.09		6.25

Note pump set at 15 feet. Actual purge volume:

Sample appearance: Clear

QC samples collected? YES (NO) QC sample ID: Time: 1030

Remarks:
Screen 10-20 Black particulates in water
Pumped water out of Well Casing

Signature: Review:

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

MONITORING WELL SAMPLING DATA SHEET

AECOM

Client: Northrop Grumman Project No: 60238860.I2c Well Designation: T25A

Site: NGC Microwave – Sunnyvale Date: May 20, 2013

Well Type: (Flush Mount) Stove pipe Is well cap sealed? (YES) NO (explain in remarks)

Bolts: 2/2 Well O-ring? (YES) NO Tabs Broken? YES(#___/___) (NO)

General condition of Wellhead assembly: Excellent (Good) Fair Poor (Explain in remarks)

Sample Type: 3 Casing Volumes____ Low Flow X

Sample Method: Submersible Bladder Pump (Peristaltic Pump) Watera

Sampled with: Disposable bailer ____ From Pump tubing X

Well diameter:	1" X	2"___	4"___	6"___	8"___	
Purge Vol. Multiplier:	0.04	0.163	0.653	1.47	2.61	gal/ft.

Initial Measurement	Recharge Measurement	Purge Volume
Time: 1636	Time:	Calculated:
Depth of well: 20	Depth to water:	Actual:
Depth to water: 6.78	80% recharge depth:	

Discharge (sec): ____ Recharge (sec): ____ Pressure (psi): ____

Time	Temp (C)	E.C. (µS)	pH	ORP	Turb (NTU)	DO	DTW (FT BTOC)	Flow Rate (LPM)	Vol. (Liters)
1648	22.31	1.437	7.79	-114	217.0	2.22	6.78	200mL/min	0.250
1651	22.00	1429	7.68	-118	195.1	0.85	6.78		0.850
1654	22.04	1414	7.41	-111	197.3	0.23	6.81		1.45
1657	21.98	1431	7.32	-110	166.0	0.22	6.83		2.05
1700	21.93	1437	7.39	-100	164.0	0.21	6.83		2.65
1703	21.91	1433	7.35	-105	158.0	0.22	6.83		3.25
1706 ~~1706~~	21.73	1421	7.32	-101	155.0	0.23	6.82		3.85
1709	21.86	1405	7.28	-100	150.0	0.22	6.83		4.45
1712	21.76	1410	7.29	-101	150.0	0.22	6.83		5.05
1715	—	Sample							~~5.65~~ RM

Note pump set at 17 feet. Actual purge volume: 5.05

Sample appearance: Clear

QC samples collected? YES (NO) QC sample ID: ____ Time: 1510

Remarks:

No well cap. Only PVC cap

Signature: RL Review: ____

Flow rate: 0.1 – 0.5 L/min
Drawdown: <25% of well screen interval
pH: ±0.2 pH units
Conductivity: ±3% of reading

Dissolved Oxygen: ±10% of reading or 0.2 mg/L, whichever is greater
ORP: ±20mV
Turbidity: ±10% of prior reading or ±1.0 NTU, whichever is greater

October 2013

Low-Flow Sampling Logs

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-17-13
Well I.D.: T-2A	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 8.56 Post: 8.97
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other____

Flow Rate: 200 ml/min SCREEN: 8.5-18.5' Pump Depth: 13.5' START PURGE: 1207

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1210	19.7	6.37	1861	3	0.46	-111.1	600	8.80
1213	19.7	6.36	1874	3	0.26	-115.6	1200	8.88
1216	19.7	6.36	1876	2	0.24	-116.4	1800	8.92
1219	19.8	6.36	1877	2	0.21	-117.5	2400	8.97
*	COLLECTED MS/MSD							

Did well dewater? Yes (No) Amount actually evacuated: 2400 gals. or ml

Sampling Time: 1220 Sampling Date: 10-17-13

Sample I.D.: JG038-T2A-101713 Laboratory: TA / MICROBESPS / Microbial Insights

Analyzed for: TPH-G BTEX MTBE TPH-D Other: see COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 13/014-MEM	Client: AECOM
Sampler: MM	Start Date: 10-17-13
Well I.D.: T-2B	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 8.50 Post: 9.15
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other____

Flow Rate: 200 ml/min SCREEN: 23-33 Pump Depth: 28' START PURGE 1040

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1043	19.2	6.55	1505	3	0.31	-105.6	600	5.57
1046	19.3	6.51	1489	3	0.27	-116.4	1200	9.04
1049	19.2	6.50	1468	2	0.30	-121.9	1800	9.10
1052	19.3	6.49	1449	2	0.33	-125.8	2400	9.15

Did well dewater? Yes (No)	Amount actually evacuated: 2400 gals. or (ml)
Sampling Time: 1053	Sampling Date: 10-17-13
Sample I.D.: J6038-T2B-101713	Laboratory: TA/MICROBEEPS/Microbial Insights
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-17-13
Well I.D.: T-2C	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 8.99 Post: 9.17
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 200 ml/min SCREEN: 50-58 Pump Depth: 54' START PURGE: 0846

Time	Temp. (°C or °F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	DTW / Observations
0849	19.3	7.98	822	5	6.11	154.5	600	9.03
0852	19.2	8.03	821	3	6.05	146.9	1200	9.09
0855	19.2	8.01	820	3	6.05	146.6	1800	9.12
0858	19.1	7.98	818	2	6.04	146.8	2400	9.15
0901	19.1	7.97	817	2	6.06	147.2	3000	9.17

Did well dewater? Yes (No)	Amount actually evacuated: 3000 gals. or (ml)
Sampling Time: 0902	Sampling Date: 10-17-13
Sample I.D.: J6038-T2C-101713	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-15-13
Well I.D.: T-3A	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 7.99 Post: 8.19
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other____

Flow Rate: 200 ml/min SCREEN: 10-20' Pump Depth: 15' START PURGE: 0838

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0841	19.5	6.88	1286	2	1.58	173.3	600	8.09
0844	19.9	6.80	1291	2	0.99	160.7	1200	8.12
0847	19.9	6.76	1297	1	1.12	152.8	1800	8.14
0850	19.9	6.73	1301	1	1.04	142.7	2400	8.16
0853	20.0	6.71	1303	1	0.98	134.9	3000	8.18

Did well dewater? Yes (No)	Amount actually evacuated: 3000 gals. or (ml)
Sampling Time: JG0385-T3A-101513	Sampling Date: 10-15-13
Sample I.D.: 0854	Laboratory: TA / microseeps
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: see COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: T-4B	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 9.68 Post: 10.24
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other____

Flow Rate: 400-200 31.5-41.5 Pump Depth: 36.5' START PURGE: 1302

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1305	20.8	7.11	1114	2	2.85	118.2	1200	9.86
1308	20.7	7.10	1051	2	3.59	114.9	2100	10.04
1311	20.9	7.10	1054	1	3.55	112.3	2700	10.16
1314	20.9	7.09	1071	1	3.26	110.0	3300	10.24

Did well dewater? Yes (No) Amount actually evacuated: 3300 gals. or (ml)

Sampling Time: 1315 Sampling Date: 10-16-13

Sample I.D.: J6038-T4B-101613 Laboratory: TA/MICROSEEPS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: SCR COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: T-5B	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: —	Depth to Water Pre: 9.99 Post: 10.17
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other ___

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other ___

Flow Rate: ___ SCREEN: 34.5-44.5 Pump Depth: 39.5 START PURGE: 1516

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1519	22.8	7.12	1148	3	1.04	104.2	900	10.01
1522	22.2	6.99	1154	3	0.59	104.1	1800	10.06
1525	21.6	6.92	1150	3	0.36	101.7	2700	10.10
1528	21.5	6.89	1148	3	0.28	98.8	3600	10.13
1531	21.5	6.88	1148	3	0.25	95.8	4500	10.17

Did well dewater? Yes (No)	Amount actually evacuated: 4500 gals. or (ml)
Sampling Time: 1532	Sampling Date: 10-16-13
Sample I.D.: J6038-T5B-101613-1	Laboratory: TA / MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: SEE COC
Equipment Blank I.D.: @ Time	Duplicate I.D.: J6038-T5B-101613-2 @ 1537

LOW FLOW WELL MONITORING DATA SHEET

Project #: 13/014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: T-7A	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: —	Depth to Water Pre: 7.08 Post: 7.14
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 400-200 ml/min SCREEN: 8-20' Pump Depth: 14' START PURGE: 1047

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1050	22.4	6.81	1382	2	0.40	64.5	600	7.12
1053	22.5	6.64	1378	2	0.34	59.6	1200	7.12
1056	22.5	6.64	1379	1	0.37	51.0	2400	7.13
1059	22.5	6.60	1380	1	0.34	50.2	3600	7.14

Did well dewater? Yes (No)	Amount actually evacuated: 3600 gals. or (ml)
Sampling Time: 1100	Sampling Date: 10-16-13
Sample I.D.: J6038-T7A-101613-1	Laboratory: TA / MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: SEE COC
Equipment Blank I.D.: @ Time	Duplicate I.D.: J6038-T7A-101613-2 @ 1105

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-15-13
Well I.D.: T-7B	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 6.71 Post: 6.81
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 300 mL/min SCREEN: 34-41' Pump Depth: 37.5' START PURGE: 1538

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1541	21.4	7.25	1047	8	2.71	128.1	900	6.74
1544	20.8	7.03	1038	6	0.74	134.1	1800	6.76
1547	20.5	6.91	1032	3	0.46	133.7	2700	6.78
1550	20.4	6.85	1028	4	0.34	125.7	3600	6.79
1553	20.4	6.83	1024	3	0.34	111.4	4500	6.81

Did well dewater? Yes (No)	Amount actually evacuated: 4500 gals. or (ml)
Sampling Time: 1554	Sampling Date: 10-15-13
Sample I.D.: J6038-T7B-101513-1	Laboratory: TA / MICRO SEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.: J6038-T7B-101513-2 @ 1559

LOW FLOW WELL MONITORING DATA SHEET

Project #: 13014-MM	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: T-8A	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 7.29 Post: 7.29
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other____

Flow Rate: 300-200 ml/min SCREEN: 7-18 Pump Depth: 12.5' START PURGE: 0725

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0728	19.3	6.95	1366	3	0.44	191.4	600	7.29
0731	19.4	6.83	1349	2	0.35	189.8	1500	7.29
0734	19.4	6.72	1331	2	0.52	190.1	2400	7.29
0737	19.6	6.68	1322	1	0.53	190.9	3300	7.29
0740	19.6	6.63	1313	2	0.40	190.6	4200	7.29

Did well dewater? Yes (No)	Amount actually evacuated: 4200 gals. or (ml)
Sampling Time: 0741	Sampling Date: 10-16-13
Sample I.D.: J6038-T8A-101613	Laboratory: TA / Microseeps /
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-15-13
Well I.D.: T-8B	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 7.28 Post:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other____

Flow Rate: 200 ml/min SCREEN: 23-35' Pump Depth: 29' START PURGE: 1300

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1303	20.8	6.69	1337	4	0.39	-53.6	600	7.46
1306	21.0	6.63	1339	12	0.48	-67.5	1200	7.55
1309	20.7	6.62	1337	16	0.49	-71.7	1800	7.61
1312	20.7	6.61	1335	18	0.38	-74.5	2400	7.64
1315	20.8	6.62	1335	10	0.32	-76.1	3000	7.65
1318	20.8	6.63	1336	11	0.29	-74.0	3600	7.66
1321	20.6	6.63	1338	10	0.28	-75.6	4200	7.68

Did well dewater? Yes (No)	Amount actually evacuated: 4200 gals. or (ml)
Sampling Time: 1322	Sampling Date: 10-15-13
Sample I.D.: J6038-T8B-101513	Laboratory: TA / MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-15-13
Well I.D.: T-9A	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: —	Depth to Water Pre: 7.69 Post: 7.73
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 200 ml/min SCREEN: 7-19' Pump Depth: 13.5' START PURGE: 1059

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1102	21.9	6.72	1313	8	0.44	128.0	600	7.73
1105	22.0	6.66	1312	3	0.62	123.6	1200	7.73
1108	22.0	6.62	1312	1	0.39	109.1	1800	7.73
1111	22.1	6.61	1313	2	0.34	104.6	2400	7.73
1114	22.1	6.59	1315	1	0.31	96.8	3000	7.73

Did well dewater? Yes (No)	Amount actually evacuated: 3000 gals. or (ml)
Sampling Time: 1115	Sampling Date: 10-15-13
Sample I.D.: 56038-T9A-101513	Laboratory: TA / MicroSeeps
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 13104-MM1	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: T-9B	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: ____	Depth to Water Pre: 8.60 Post: 8.73
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other____

Flow Rate: 200 ml/min 28-37 Pump Depth: 32.5' START PURGE 1350

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1353	25.6	6.98	1472	2	1.05	104.2	600	8.65
1356	25.1	6.73	1467	2	0.68	108.4	1200	8.68
1359	25.2	6.76	1467	1	0.59	103.2	1800	8.70
1402	25.1	6.76	1471	1	0.64	99.4	2400	8.73

Did well dewater? Yes (No)	Amount actually evacuated: 2400 gals. or (ml)
Sampling Time: 1403	Sampling Date: 10-16-13
Sample I.D.: J6038-T9B-101613	Laboratory: TA / MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: see COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-15-13
Well I.D.: T-9C	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 8.55 Post: 9.01
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 200 mL/min SCREEN: 55-65' Pump Depth: 60' START PURGE: 0931

Time	Temp. (°C or °F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	DTW / Observations
0934	18.8	7.41	743	8	2.24	126.9	600	8.60
0937	19.3	7.39	739	4	0.96	127.1	1200	8.71
0940	19.2	7.44	739	3	0.53	124.6	1800	8.81
0943	19.4	7.46	737	3	0.39	123.4	2400	8.90
0946	19.4	7.48	739	4	0.36	122.2	3000	8.01

Did well dewater? Yes (No)	Amount actually evacuated: 3000 gals. or (ml)
Sampling Time: 0947	Sampling Date: 10-15-13
Sample I.D.: J6038-T9C-101513	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: see COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-15-13
Well I.D.: T-10B	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: →	Depth to Water Pre: 7.51 Post: 7.61
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other____

Flow Rate: 200 mL/min SCREEN: 23-32' Pump Depth: 27.5' START PURGE: 0752

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0755	18.3	6.58	1159	5	4.61	200.1	600	7.56
0758	18.6	6.64	1153	3	3.62	192.3	1200	7.59
0801	18.7	6.69	1131	2	3.48	188.0	1800	7.60
0804	18.6	6.72	1121	2	3.32	184.8	2400	7.61

Did well dewater? Yes (No)	Amount actually evacuated: 2400 gals. or (ml)
Sampling Time: 0805	Sampling Date: 10-15-13
Sample I.D.: J6038-T10B-101513	Laboratory: TA / MICROSEEDS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: CK	Start Date: 10/17/13
Well I.D.: T-10C	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: —	Depth to Water Pre: 10.73 Post: 10.85
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 150 ml/min SCREEN: 49-59 Pump Depth: 54'

@ 1038 Time	Temp. (°C or °F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	DTW / Observations
1041	20.7	7.82	792	10	1.48	-12.0	450	10.80
1044	20.9	7.73	788	8	0.90	-30.6	900	10.80
1047	20.9	7.72	786	7	0.63	-40.1	1350	10.82
1050	20.9	7.72	785	7	0.56	-46.2	1800	10.84
1053	20.9	7.72	784	7	0.54	-48.3	2250	10.84
1056	20.9	7.71	783	7	0.52	-50.3	2700	10.85

Did well dewater? Yes (No)	Amount actually evacuated: 2700 gals. or ml
Sampling Time: 1100	Sampling Date: 10/17/13
Sample I.D.: J6038-T10C-101713	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: T-11C	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 8.46 Post: 8.46
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 200-400 ml/min SCREEN: 46-56 Pump Depth: 51' START PURGE: 1226

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1229	24.2	7.30	887	5	5.20	108.3	600	8.46
1232	21.5	7.09	923	3	1.37	110.3	1800	8.46
1235	20.8	6.95	933	4	0.41	109.4	3000	8.46
1238	20.6	6.93	930	3	0.29	105.9	4200	8.46
1241	20.6	6.93	931	3	0.24	103.7	5400	8.46

Did well dewater? Yes (No)	Amount actually evacuated: 5400 gals. or (ml)
Sampling Time: 1242	Sampling Date: 10-16-13
Sample I.D.: J6038-T11C-101613	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: ACCOM
Sampler: MM	Start Date: 10-15-13
Well I.D.: T-12C	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: —	Depth to Water Pre: 7.69 Post: 7.75
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 200-300 mL/min SCREEN 1:45.5-55.5 Pump Depth: 50.5 START PURGE: 1500

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1503	21.5	7.99	538	50	1.26	101.1	600	7.70
1506	20.5	7.68	813	53	0.78	113.3	1500	7.70
1509	20.3	7.56	819	38	0.57	117.1	2400	7.71
1512	20.1	7.49	826	30	0.47	117.6	3300	7.72
1515	20.0	7.45	838	23	0.44	116.1	4200	7.73
1518	20.0	7.40	849	22	0.38	115.1	5100	7.74
1521	20.0	7.38	858	23	0.34	113.8	6000	7.75

Did well dewater? Yes (No)	Amount actually evacuated: 6000 gals. or (mL)
Sampling Time: 1522	Sampling Date: 10-15-13
Sample I.D.: JC0638-T12C-101513	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: CK	Start Date: 10/17/13
Well I.D.: T-13A	Well Diameter: 2 3 4 6 8 1"
Total Well Depth: —	Depth to Water Pre: 7.51 Post: 7.84
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	Flow Cell Type: YSI

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other_____

Flow Rate: 100 ml/min SCREEN: 10-20 Pump Depth: 15'

@ 1317 Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1320	20.6	6.86	1425	123	0.55	-51.3	300	7.69
1323	20.6	6.84	1423	63	0.60	-71.2	600	7.72
1326	20.6	6.85	1422	59	0.49	-75.8	900	7.75
1329	20.6	6.85	1420	55	0.47	-76.9	1200	7.80
1332	20.5	6.86	1419	53	0.46	-78.2	1500	7.82
1335	20.6	6.85	1418	52	0.45	-79.1	1800	7.84

Did well dewater? Yes (No)	Amount actually evacuated: 1800 gals. or mL
Sampling Time: 1340	Sampling Date: 10/17/13
Sample I.D.: J6038-T13A-101713	Laboratory: TA / MICROSEEPS / MICROBIAL INSIGHTS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: STL COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 13014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: T14A	Well Diameter: 2 3 4 6 8 1"
Total Well Depth: —	Depth to Water Pre: 7.48 Post: 7.59
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other_____

Flow Rate: 200-100 ml/min SCREEN: 10-20 Pump Depth: 15" START PURGE: 0814

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0814	16.8	6.77	1240	5	0.49	-98.7	300	7.50
0817	17.4	6.71	1232	5	0.56	-106.1	900	7.51
0820	17.8	6.69	1231	5	0.66	-107.8	1500	7.56
0823	18.2	6.67	1232	4	0.43	-109.9	2100	7.59

Did well dewater? Yes No	Amount actually evacuated: 2100 gals. or ml
Sampling Time: 0824	Sampling Date: 10-16-13
Sample I.D.: J6038-T14A-101613	Laboratory: TA / MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-15-13
Well I.D.: T-15A	Well Diameter: 2 3 4 6 8 1"
Total Well Depth: —	Depth to Water Pre: 7.29 Post: 7.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other_____

Flow Rate: 200-~~100~~ 150 mL/min SCREEN: 10-20' Pump Depth: 15' START PURGE: 1228

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1231	21.5	6.80	1285	2	0.86	176.6	600	7.42
1234	21.6	6.65	1287	3	0.57	175.7	900	7.42
1237	21.4	6.58	1283	4	0.46	174.7	1350	7.44
1240	21.4	6.55	1282	4	0.37	170.9	1800	7.45

Did well dewater? Yes No	Amount actually evacuated: 1800 gals. or ml
Sampling Time: 1241	Sampling Date: 10-15-13
Sample I.D.: 56038-T15A-101513	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: see COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-15-13
Well I.D.: T-16A	Well Diameter: 2 3 4 6 8 1"
Total Well Depth: —	Depth to Water Pre: 7.52 Post: 7.61
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other_____

Flow Rate: 100-200 ml/min SCREEN: 10-20' Pump Depth: 15' START PURGE: 1016

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1019	20.6	6.94	1254	67	0.51	155.2	300	7.55
1022	20.9	6.77	1272	52	0.45	156.7	600	7.56
1025	21.0	6.71	1276	33	0.62	154.8	1050	7.56
1028	21.1	6.68	1277	36	0.45	152.6	1650	7.58
1031	21.0	6.64	1276	28	0.40	151.9	2250	7.59
1034	21.0	6.60	1275	27	0.35	152.3	2850	7.60
1037	21.0	6.58	1275	26	0.32	149.2	3450	7.61

Did well dewater? Yes No	Amount actually evacuated: 3450 gals. or ml
Sampling Time: 1038	Sampling Date: 10-15-13
Sample I.D.: JL0038-T16A-101513	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: T-17A	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: —	Depth to Water Pre: 7.82 Post: 7.97
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 400 ml/min SCREEN: 10-20 Pump Depth: 15' START PURGE: 0851

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0854	19.5	7.03	1240	27	0.40	-24.1	1200	7.85
0857	19.7	7.03	1248	25	0.31	-40.5	2400	7.88
0900	19.8	7.03	1252	24	0.23	-49.2	3600	7.92
0903	20.1	7.03	1257	16	0.22	-56.4	4800	7.93
0906	20.2	7.00	1257	9	0.30	-55.5	6000	7.94
0909	20.3	6.92	1245	4	0.31	-42.8	7200	7.95
0912	20.4	6.82	1236	3	0.26	-34.5	8400	7.96
0915	20.4	6.79	1231	2	0.24	-30.5	9600	7.97

Did well dewater? Yes (No)	Amount actually evacuated: 9600 gals. or (ml)
Sampling Time: 0916	Sampling Date: 10-16-13
Sample I.D.: J6038-T17A-101613	Laboratory: TA/MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: CK	Start Date: 10/17/13
Well I.D.: T-17B	Well Diameter: ~~2~~ 3 4 6 8 (1")
Total Well Depth: —	Depth to Water Pre: 7.92 Post: 8.18
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: (PVC) Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 100 mL/min SCREEN: 25-35' Pump Depth: 30'

@ 0846 Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	DTW / Observations
0849	20.2	7.24	1217	11	0.87	-1.7	300	8.10
0852	20.3	7.23	1234	8	0.79	-8.6	600	8.13
0855	20.2	7.23	1244	8	0.76	-11.2	900	8.15
0858	20.2	7.23	1248	7	0.78	-13.2	1200	8.17
0901	20.2	7.23	1249	7	0.79	-14.2	1500	8.18
0904	20.2	7.22	1246	6	0.79	-14.8	1800	8.18

Did well dewater? Yes (No) Amount actually evacuated: 1800 gals. or (mL)

Sampling Time: 0910 Sampling Date: 10/17/13

Sample I.D.: JG038-T17B-101713 Laboratory: TA / MICROSEEPS

Analyzed for: TPH-G BTEX MTBE TPH-D (Other): SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-14-13
Well I.D.: T-18B	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 47.33	Depth to Water Pre: 6.28 Post: 6.46
Depth to Free Product: —	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other ___

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other ___

Flow Rate: 200-100 mL/min Screen: 41-46' Pump Depth: 43' START PURGE: 1349

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1352	21.9	7.85	761	6	3.17	56.2	600	6.35
1355	21.4	7.46	867	5	1.18	-49.7	900	6.36
1358	22.0	7.37	877	4	1.11	-63.4	1200	6.38
1401	22.1	7.37	891	7	0.93	-81.4	1500	6.41
1404	22.1	7.42	894	4	0.83	-83.0	1800	6.44
1407	22.0	7.35	898	5	0.72	-89.5	2100	6.46

Did well dewater? Yes (No)	Amount actually evacuated: 2100 gals. or (ml)
Sampling Time: 1408	Sampling Date: 10-14-13
Sample I.D.: JG038-T18B-101413	Laboratory: TA SF / MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: CR	Start Date: 10/17/13
Well I.D.: T-19A	Well Diameter: 2 3 4 6 8 1"
Total Well Depth: —	Depth to Water Pre: ~~10.70~~ 7.70 Post: 7.98
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other

Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other

Flow Rate: 100 ml/min SCREEN: 10-20 Pump Depth: 15'

@ 1120 Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1123	21.6	6.69	1572	14	1.10	-77.5	300	7.80
1126	21.7	6.67	1572	12	0.90	-84.4	600	7.86
1129	21.7	6.68	1546	12	0.89	-98.1	900	7.90
1132	21.7	6.68	1543	11	0.86	-102.1	1200	7.93
1135	21.7	6.68	1542	11	0.85	-104.0	1500	7.96
1138	21.7	6.67	1542	11	0.85	-105.2	1800	7.98

Did well dewater? Yes No	Amount actually evacuated: 1800 gals. or ml
Sampling Time: 1145	Sampling Date: 10/17/13
Sample I.D.: J6038-T19A-101713	Laboratory: TA / MICROSEEPS / MICROBIAL INSIGHTS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: SEE COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014 + MM1	Client: AECOM
Sampler: CK	Start Date: 10/17/13
Well I.D.: T-23A	Well Diameter: 2 3 4 6 8 1"
Total Well Depth: —	Depth to Water Pre: 7.96 Post: 8.21
Depth to Free Product: —	Thickness of Free Product (feet): —
Referenced to: PVC Grade	Flow Cell Type: YSI 556

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other_____

Flow Rate: 100 ml/min SCREEN: 10-20 Pump Depth: 15'

@ 1225 Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1228	20.8	6.67	1613	71000	0.80	-86.4	300	8.02
1231	20.8	6.66	1570	873	0.78	-96.4	600	8.08
1234	20.8	6.65	1568	868	0.82	-101.3	900	8.12
1237	20.7	6.66	1541	859	0.85	-103.2	1200	8.14
1240	20.6	6.68	1535	860	0.87	-104.2	1500	8.16
1243	20.6	6.69	1528	853	0.88	-106.3	1800	8.19
1246	20.5	6.69	1523	847	0.90	-108.0	2100	8.21

Did well dewater? Yes (No) Amount actually evacuated: 2100 gals. or ml

Sampling Time: 1250 Sampling Date: 10/17/13

Sample I.D.: J6038-T23A-101713 Laboratory: TA/MICROSEEPS/MICROBIAL INSIGHTS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: T-25A	Well Diameter: 2 3 4 6 8 1"
Total Well Depth: —	Depth to Water Pre: 6.99 Post: 7.18
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other_____

Flow Rate: 100 ml/min SCREEN: 10-20 Pump Depth: 15' START PURGE: 0934

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
0937	19.0	6.72	1256	4	0.52	-59.1	300	7.06
0940	19.2	6.59	1251	3	0.40	-77.8	600	7.11
0943	19.2	6.57	1253	4	0.50	-83.3	900	7.14
0946	19.2	6.56	1252	2	0.35	-88.1	1200	7.16
0949	19.3	6.57	1252	3	0.33	-90.2	1500	7.18

Did well dewater? Yes No	Amount actually evacuated: 1500 gals. or ml
Sampling Time: 0950	Sampling Date: 10-16-13
Sample I.D.: J6038-T25A-101613	Laboratory: TA/MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-16-13
Well I.D.: 38S	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water Pre: 8.74 Post: 8.84
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other____

Flow Rate: 200 ml/min SCREEN: 9-15' Pump Depth: 12' START PURGE: 1012

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1015	21.2	6.76	1279	2	0.34	10.6	600	8.78
1018	21.4	6.72	1285	3	0.44	6.8	1200	8.81
1021	21.4	6.68	1285	3	0.28	5.7	1800	8.82
1024	21.4	6.65	1286	3	0.24	5.8	2400	8.84
(no) 1027								

Did well dewater? Yes (No)	Amount actually evacuated: 2400 gals. or (ml)
Sampling Time: 1025	Sampling Date: 10-16-13
Sample I.D.: J6038-38S-101613	Laboratory: TA / MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: SEE COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-14-13
Well I.D.: T-19B	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: —	Depth to Water Pre: 7.20 Post: 7.50
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other ___

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other ___

Flow Rate: 200-100 mL/min SCREEN: 29-39 Pump Depth: 34' START PURGE: 1454

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1457	22.4	6.99	1049	567	1.96	110.9	600	7.41
1500	22.9	6.89	1041	988	1.30	107.8	900	7.42
1503	22.3	6.84	1037	>1000	1.07	104.2	1200	7.43
1506	21.6	6.81	1029	>1000	0.68	101.5	1500	7.43
1509	21.6	6.80	1025	848	0.61	101.0	1800	7.44
1512	21.6	6.79	1020	731	0.47	99.2	2100	7.45
1515	21.1	6.81	1021	683	0.42	99.1	2400	7.45
1518	21.2	6.81	1017	549	0.44	99.9	2700	7.46
1521	21.1	6.82	1017	452	0.64	100.5	3000	7.46
1524	21.0	6.82	1015	392	0.60	101.3	3300	7.47
1527	21.0	6.83	1013	340	0.51	101.3	3600	7.47

Did well dewater? Yes (No)	Amount actually evacuated: 2100 gals. or (ml)
Sampling Time:	Sampling Date: 10-14-2013
Sample I.D.: J6038-T19-101413	Laboratory: TA SF / MICRO SEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: SEE COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-14-13
Well I.D.: T-19B	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: —	Depth to Water Pre: 7.20 Post: 7.50
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump (Bladder Pump) Other_____

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other_____

Flow Rate: 100 mL/min Screen 29-39' Pump Depth: 34' START PURGE: 1454

Time	Temp. (°C or °F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	DTW / Observations
1530	20.9	6.84	1013	276	0.45	100.7	3900	7.48
1533	20.8	6.84	1011	196	0.40	98.4	4200	7.48
1536	20.7	6.85	1010	155	0.38	96.1	4500	7.49
1539	20.8	6.85	1010	131	0.35	95.3	4800	7.49
1542	20.7	6.87	1010	123	0.34	94.0	5100	7.50
1545	20.6	6.86	1008	118	0.32	93.6	5400	7.50

Did well dewater? Yes (No)	Amount actually evacuated: 5400 gals. or (ml)
Sampling Time: 1546	Sampling Date: 10-14-13
Sample I.D.: J6038-T19-101413	Laboratory: TA / MICROSEEPS
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-17-13
Well I.D.: Eductor	Well Diameter: 2 3 4 (6) 8 ___
Total Well Depth: —	Depth to Water Pre: ~~10.27~~ 8.44 Post: 8.44
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other w/ Drop tube

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other

Flow Rate: 200 ml/min SCREEN: 8-18' Pump Depth: 11' START PURGE: 1322

Time	Temp. (°C or °F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or (mL))	DTW / Observations
1325	19.9	5.23	2207	9	0.80	23.4	600	8.44
1328	19.9	5.06	2230	7	0.42	19.3	1200	8.44
1331	19.9	4.96	2265	7	0.27	15.8	1800	8.44
1334	19.9	4.93	2292	6	0.22	12.9	2400	8.44
1337	19.9	4.91	2306	7	0.19	11.3	3000	8.44

Did well dewater? Yes (No)	Amount actually evacuated: 3000 gals. or (ml)
Sampling Time: 1338	Sampling Date: 10-17-13
Sample I.D.: J6038-Eductor-11-101713	Laboratory: TA / MICROSEEPS / Microbial Insights
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: See COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-17-13
Well I.D.: Eductor	Well Diameter: 2 3 4 (6) 8 ___
Total Well Depth: —	Depth to Water Pre: 8.44 Post: 8.44
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra (Peristaltic Pump) Bladder Pump Other w/ Drop Tube

Sampling Method: Dedicated Tubing Disp Bailer (New Tubing) Other ___

Flow Rate: 200 ml/min SCREEN: 8-18' Pump Depth: 15' START PURGE: 1414

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1417	19.5	4.99	3146	7	0.21	-17.9	600	8.44
1420	19.5	5.00	3184	7	0.18	-15.2	1200	8.44
1423	19.5	5.01	3203	8	0.15	-12.2	1800	8.44
1426	19.5	5.00	3206	7	0.14	-8.8	2400	8.44

Did well dewater? Yes (No)	Amount actually evacuated: 2400 gals. or (ml)
Sampling Time: 1427	Sampling Date: 10-17-13
Sample I.D.: J6038-Eductor-15-101713	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: see COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM, CK	Start Date: 10-17-13
Well I.D.: Eductor O-1	Well Diameter: 2 3 4 (6) 8 ___
Total Well Depth: —	Depth to Water Pre: 8.80 Post: 8.80
Depth to Free Product: 8.41	Thickness of Free Product (feet): 0.39
Referenced to: (PVC) Grade	Flow Cell Type: —

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other GRAB SAMPLE

Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other ___

Flow Rate: — Pump Depth: 8.5'

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
	SPH (PRODUCT) SAMPLE NO PARAMETERS TAKEN							

Did well dewater? Yes (No) Amount actually evacuated: — gals. or ml

Sampling Time: 0948 Sampling Date: 10-17-13

Sample I.D.: J10038-Eductor-O-101713 Laboratory: TA / MICROSEEPS

Analyzed for: TPH-G BTEX MTBE TPH-D Other: SEE COC

Equipment Blank I.D.: @ Time Duplicate I.D.:

LOW FLOW WELL MONITORING DATA SHEET

Project #: 131014-MM1	Client: AECOM
Sampler: MM	Start Date: 10-17-13
Well I.D.: DRUM	Well Diameter: 2 3 4 6 8 DRUM
Total Well Depth: —	Depth to Water Pre: — Post: —
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	Flow Cell Type: YSI PRO PLUS

Purge Method: 2" Grundfos Pump Watterra Peristaltic Pump Bladder Pump Other_____

Sampling Method: Dedicated Tubing Disp Bailer New Tubing Other_____

Flow Rate: _____ Pump Depth: _____

Time	Temp. (°C or °F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Water Removed (gals. or mL)	DTW / Observations
1540	24.5	5.74	806	146	4.01	-0.8	GRAB SAMPLE	

Did well dewater? Yes No	Amount actually evacuated: — gals. or ml
Sampling Time: 1540	Sampling Date: 10-17-13
Sample I.D.: J6038-DRUMS-101713	Laboratory: TA
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: see COC
Equipment Blank I.D.: @ Time	Duplicate I.D.:

Appendix B

Historic Water Level Elevation Measurements

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-1A	A				
Per Water Board approval, well T-1A was abandoned in February 2004.					
			Oct-03	9.01	29.45
			Oct-02	10.36	28.10
			Oct-01	10.64	27.82
			Oct-00	11.91	26.55
			Oct-99	10.79	27.67
			Apr-99	10.42	28.04
			Oct-98	10.70	27.76
			Apr-98	9.48	28.98
		38.46	Oct-97	11.99	26.47
			Apr-97	10.83	28.83
			Oct-96	12.94	26.72
			Jul-96	12.67	26.99
			Oct-95	11.40	28.26
			Jul-95	NM	NA
			Apr-95	9.48	30.18
			Jan-95	NM	NA
			Oct-94	10.59	29.07
			Jul-94	10.51	29.15
			Apr-94	11.27	28.39
			Jan-94	14.03	25.63
			Oct-93	NM	NA
			Jul-93	NM	NA
			Apr-93	17.82	21.84
			Jan-93	19.50	20.16
			Oct-92	19.93	19.73
			Jul-92	20.13	19.53
			Apr-92	19.41	20.25
			Jan-92	20.17	19.49
			Oct-91	21.27	18.39
			Jul-91	22.22	17.44
			Apr-91	19.72	19.94
			Jan-91	21.15	18.51
			Oct-90	20.66	19.00
			Jul-90	19.20	20.46
			Apr-90	18.86	20.80
			Jan-90	20.03	19.63
			Oct-89	18.13	21.53
			Sep-89	17.87	21.79
			Apr-89	18.63	21.03
		39.66	Jan-89	15.07	24.59
			Oct-88	15.17	22.31
			Jul-88	14.69	22.79
			Apr-88	12.62	24.86
			Feb-88	11.70	25.78
			Nov-87	11.64	25.84
			Oct-87	9.75	27.73
			Jul-86	8.93	28.55
			May-86	8.15	29.33
			Apr-86	8.50	28.98
			Mar-86	6.35	31.13
		37.48	Jan-86	7.50	29.98

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-2A	A		Oct-13	8.53	33.63
			Oct-12	8.03	34.13
			Oct-11	8.01	34.15
			Oct-10	8.45	33.71
			Oct-09	8.78	33.38
			Oct-08	7.83	34.33
		42.16	Oct-07	7.39	34.77
			Oct-06	7.69	31.77
			Oct-05	7.82	31.64
			Oct-04	9.02	30.44
			Oct-03	8.56	30.90
		39.46	Oct-02	9.42	30.04
			Oct-01	11.46	29.53
			Oct-00	13.22	27.77
			Oct-99	16.87	24.12
			Apr-99	14.51	26.48
			Oct-98	Dry	NA
			Apr-98	12.08	28.91
		40.99	Oct-97	16.70	24.29
			Apr-97	17.32	22.36
			Oct-96	12.56	27.12
			Jul-96	17.45	22.23
			Oct-95	18.60	21.08
			Jul-95	19.25	20.43
			Apr-95	17.91	21.77
			Jan-95	18.65	21.03
			Oct-94	Dry	NA
			Jul-94	18.97	20.71
			Apr-94	Dry	NA
			Jan-94	18.47	21.21
			Oct-93	Dry	NA
			Jul-93	17.54	22.14
			Apr-93	17.34	22.34
			Jan-93	Dry	NA
			Oct-92	16.61	23.07
			Jul-92	15.26	24.42
			Apr-92	16.91	22.77
			Jan-92	16.37	23.31
			Oct-91	17.16	22.52
			Jul-91	16.66	23.02
			Apr-91	NM	NA
			Jan-91	10.18	29.50
			Oct-90	16.64	23.04
			Jul-90	16.06	23.62
			Apr-90	17.40	22.28
			Jan-90	12.88	26.80
			Oct-89	15.77	23.91
			Sep-89	16.31	23.37
			Apr-89	12.55	27.13
		39.68	Jan-89	15.50	24.18
			Oct-88	15.88	23.77
			Jul-88	15.59	24.06
			Apr-88	15.32	24.33
			Feb-88	11.74	27.91
			Nov-87	12.15	27.50
			Oct-87	10.67	28.98
			Jul-86	12.73	26.92
		39.65	May-86	23.00	16.65

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-3A	A		Oct-13	7.99	33.75
			Oct-12	7.59	41.74
			Oct-11	7.48	34.26
			Oct-10	7.92	33.82
			Oct-09	8.32	33.42
			Oct-08	7.28	34.46
		41.74	Oct-07	6.78	34.96
			Oct-06	7.11	31.93
			Oct-05	7.25	31.79
			Oct-04	8.56	30.48
			Oct-03	8.07	30.97
			Oct-02	8.90	30.14
			Oct-01	9.23	29.81
			Oct-00	9.97	29.07
			Oct-99	9.69	29.35
			Apr-99	9.46	29.58
			Oct-98	6.52	32.52
			Apr-98	8.42	30.62
		39.04	Oct-97	10.82	28.22
			Apr-97	10.03	29.44
			Oct-96	11.69	27.78
			Jul-96	11.37	28.10
			Oct-95	11.73	27.74
			Jul-95	11.42	28.05
			Apr-95	9.70	29.77
			Jan-95	10.35	29.12
			Oct-94	10.72	28.75
			Jul-94	13.34	26.13
			Apr-94	13.64	25.83
			Jan-94	14.04	25.43
			Oct-93	13.73	25.74
			Jul-93	13.12	26.35
			Apr-93	10.95	28.52
			Jan-93	11.34	28.13
			Oct-92	11.00	28.47
			Jul-92	14.90	24.57
			Apr-92	11.28	28.19
			Jan-92	12.25	27.22
			Oct-91	11.06	28.41
			Jul-91	12.50	26.97
			Apr-91	11.80	27.67
			Jan-91	10.65	28.82
			Oct-90	12.57	26.90
			Jul-90	10.22	29.25
			Apr-90	10.17	29.30
			Jan-90	9.73	29.74
			Oct-89	10.76	28.71
			Sep-89	10.04	29.43
			Apr-89	9.12	30.35
		39.47	Jan-89	NM	NA
			Oct-88	9.75	29.91
			Jul-88	10.01	29.65
			Apr-88	9.30	30.36
			Feb-88	9.62	30.04
			Nov-87	9.78	29.88
			Oct-87	8.68	30.98
			Jul-86	9.89	29.77
			May-86	9.75	29.91
			Apr-86	9.50	30.16
			Mar-86	7.16	32.50
		39.66	Jan-86	7.90	31.76

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-6A	A		Oct-13	NM	--
			Oct-12	NM	--
			Oct-11	NM	--
			Oct-10	NM	--
			Oct-09	8.42	31.50
			Oct-08	NM	--
		39.92	Oct-07	8.00	31.92
			Oct-06	8.21	29.01
			Oct-05	8.45	28.77
			Oct-03	7.29	29.93
			Oct-02	8.31	28.91
			Oct-01	8.40	28.82
			Oct-00	10.55	26.67
			Oct-99	10.37	26.85
			Apr-99	9.96	27.26
			Oct-98	10.17	27.05
			Apr-98	9.02	28.20
		37.22	Oct-97	11.23	25.99
			Apr-97	10.05	27.76
			Oct-96	11.69	26.12
			Jul-96	11.77	26.04
			Oct-95	11.40	26.41
			Jul-95	11.17	26.64
			Apr-95	8.89	28.92
			Jan-95	10.66	27.15
			Oct-94	10.80	27.01
			Jul-94	11.54	26.27
			Apr-94	11.90	25.91
			Jan-94	12.48	25.33
			Oct-93	11.28	26.53
			Jul-93	12.48	25.33
			Apr-93	11.63	26.18
			Jan-93	12.98	24.83
			Oct-92	13.08	24.73
			Jul-92	14.20	23.61
			Apr-92	14.47	23.34
			Jan-92	16.33	21.48
			Oct-91	15.73	22.08
			Jul-91	14.79	23.02
			Apr-91	15.33	22.48
			Jan-91	16.03	21.78
			Oct-90	16.12	21.69
			Jul-90	NM	NA
			Apr-90	15.29	22.52
			Jan-90	15.44	22.37
			Oct-89	14.92	22.89
			Sep-89	14.76	23.05
			Apr-89	14.34	23.47
		37.81	Jan-89	13.42	24.39
			Oct-88	13.35	24.64
			Jul-88	12.95	25.04
			Apr-88	12.61	25.38
			Feb-88	12.15	25.84
			Nov-87	12.30	25.69
			Oct-87	11.63	26.36
			Jul-86	10.14	27.85
			May-86	9.85	28.14
		37.99	Jan-86	9.75	30.17

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-7A	A		Oct-13	7.11	34.98
			Oct-12	6.75	35.34
			Oct-11	6.60	35.49
			Oct-10	7.05	35.04
			Oct-09	7.31	34.78
			Oct-08	6.54	35.55
		42.09	Oct-07	6.14	35.95
			Oct-06	6.33	33.06
			Oct-05	6.44	32.95
			Oct-04	7.68	31.71
			Oct-03	7.07	32.32
		39.39	Oct-02	8.23	31.16
			Oct-01	8.37	30.60
			Oct-00	8.41	30.56
			Oct-99	8.55	30.42
			Apr-99	8.37	30.60
			Oct-98	8.22	30.75
			Apr-98	7.46	31.51
		38.97	Oct-97	9.34	29.63
			Apr-97	8.60	30.93
			Oct-96	10.10	29.43
			Jul-96	10.11	29.42
			Oct-95	9.76	29.77
			Jul-95	10.55	28.98
			Apr-95	8.56	30.97
			Jan-95	8.88	30.65
			Oct-94	10.60	28.93
			Jul-94	12.21	27.32
			Apr-94	12.52	27.01
			Jan-94	12.45	27.08
			Oct-93	12.04	27.49
			Jul-93	11.53	28.00
			Apr-93	11.04	28.49
			Jan-93	10.77	28.76
			Oct-92	13.26	26.27
			Jul-92	15.61	23.92
			Apr-92	14.84	24.69
			Jan-92	13.61	25.92
			Oct-91	18.18	21.35
			Jul-91	17.39	22.14
			Apr-91	14.97	24.56
			Jan-91	17.67	21.86
			Oct-90	16.46	23.07
			Jul-90	16.19	23.34
			Apr-90	15.29	24.24
			Jan-90	15.13	24.40
			Oct-89	11.71	27.82
			Sep-89	10.17	29.36
			Apr-89	12.21	27.32
		39.53	Jan-89	11.84	27.69
			Oct-88	11.36	28.21
			Jul-88	11.22	28.35
			Apr-88	10.71	28.86
			Feb-88	10.09	29.48
			Nov-87	9.89	29.68
			Oct-87	9.01	30.56
			Jul-86	8.13	31.44
			May-86	8.19	31.38
			Apr-86	7.80	31.77
			Mar-86	6.20	33.37
			Mar-86	6.05	33.52
		39.57	Jan-86	7.90	34.19

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-8A	A		Oct-13	7.25	33.13
			Oct-12	6.86	33.52
			Oct-11	6.68	33.70
			Oct-10	6.85*	33.53
			Apr-10	6.16	34.22
			Oct-09	7.50	32.88
			Oct-08	6.54	33.84
		40.38	Oct-07	6.02	34.36
			Oct-06	6.35	31.33
			Oct-05	6.48	31.20
			Oct-04	7.70	29.98
			Oct-03	7.27	30.41
		37.68	Oct-02	8.10	29.58
			Oct-01	8.43	29.89
			Oct-00	9.43	28.89
			Oct-99	8.88	29.44
			Apr-99	8.75	29.57
			Oct-98	9.27	29.05
			Apr-98	8.21	30.11
		38.32	Oct-97	10.95	27.37
			Apr-97	10.95	27.37
			Oct-96	13.00	25.32
			Jul-96	13.09	25.23
			Oct-95	16.02	22.30
			Jul-95	15.90	22.42
			Apr-95	12.76	25.56
			Jan-95	11.91	26.41
			Oct-94	11.95	26.37
			Jul-94	12.67	25.65
			Apr-94	13.20	25.12
			Jan-94	13.97	24.35
			Oct-93	15.78	22.54
			Jul-93	12.52	25.80
			Apr-93	15.57	22.75
			Jan-93	12.92	25.40
			Oct-92	13.23	25.09
			Jul-92	14.08	24.24
			Apr-92	14.76	23.56
			Jan-92	15.40	22.92
			Oct-91	15.68	22.64
			Jul-91	15.21	23.11
			Apr-91	14.54	23.78
			Jan-91	15.84	22.48
			Oct-90	15.46	22.86
			Jul-90	14.73	23.59
			Apr-90	15.11	23.21
			Jan-90	14.10	24.22
			Oct-89	16.67	21.65
			Sep-89	14.40	23.92
			Apr-89	15.06	23.26
		38.32	Jan-89	NM	NA
			Oct-88	14.77	23.59
			Jul-88	15.85	22.51
			Apr-88	NM	NA
			Feb-88	11.09	27.27
			Nov-87	10.70	27.66
			Oct-87	9.66	28.70
			Jul-86	13.34	25.02
			May-86	11.55	26.81
		38.36	Mar-86	6.11	34.27

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-9A	A		Oct-13	7.71	31.51
			Oct-12	7.26	31.96
			Oct-11	7.07	32.15
			Oct-10	7.53	31.69
			Oct-09	7.89	31.33
			Oct-08	6.80	32.42
		39.22	Oct-07	6.33	32.89
		36.52	Oct-06	6.77	23.02
			Oct-05	6.53	30.68
			Oct-04	7.84	29.37
			Oct-03	7.51	29.70
			Oct-02	8.27	28.94
			Oct-01	8.67	28.54
			Oct-00	11.30	25.91
			Oct-99	9.94	27.27
			Apr-99	10.07	27.14
			Oct-98	9.17	28.04
			Apr-98	8.57	28.64
		37.21	Oct-97	11.29	25.92
			Apr-97	9.88	27.34
			Oct-96	11.03	26.19
			Jul-96	10.67	26.55
			Oct-95	11.33	25.89
			Jul-95	11.00	26.22
			Apr-95	8.84	28.38
			Jan-95	11.12	26.10
			Oct-94	12.72	24.50
			Jul-94	12.85	24.37
			Apr-94	12.93	24.29
			Jan-94	15.20	22.02
			Oct-93	13.26	23.96
			Jul-93	12.80	24.42
			Apr-93	14.12	23.10
			Jan-93	Dry	NA
			Oct-92	13.21	24.01
			Jul-92	13.97	23.25
			Apr-92	14.52	22.70
			Jan-92	15.04	22.18
			Oct-91	15.34	21.88
			Jul-91	14.94	22.28
			Apr-91	14.31	22.91
			Jan-91	15.57	21.65
			Oct-90	15.26	21.96
			Jul-90	14.58	22.64
			Apr-90	14.10	23.12
			Jan-90	14.09	23.13
			Oct-89	14.63	22.59
			Sep-89	13.43	23.79
			Apr-89	12.54	24.68
		37.22	Jan-89	12.33	24.89
			Oct-88	12.34	24.88
			Jul-88	11.85	25.37
			Apr-88	12.01	25.21
			Feb-88	12.80	24.42
			Nov-87	11.98	25.24
			Oct-87	9.66	27.56
			May-86	12.12	25.10
			Mar-86	11.85	25.37
			Mar-86	13.50	23.72
		37.22	Mar-86	6.12	33.10

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-13A	A		Oct-13	7.49	33.27
			Oct-12	7.12	33.64
			Oct-11	7.04	33.72
			Oct-10	7.44	33.32
			Apr-10	6.38	34.38
			Oct-09	7.78	32.98
			Oct-08	6.92	33.84
		40.76	Oct-07	6.31	34.45
		38.06	Oct-06	6.58	31.48
T-14A	A		Oct-13	7.46	33.16
			Oct-12	7.07	33.55
			Oct-11	6.93	33.69
			Oct-10	7.38	33.24
			Apr-10	6.28	34.34
			Oct-09	7.71	32.91
			Oct-08	6.73	33.89
		40.62	Oct-07	6.30	34.32
		37.92	Oct-06	6.52	31.40
T-15A	A		Oct-13	7.38	32.73
			Oct-12	6.98	33.13
			Oct-11	6.81	33.30
			Oct-10	7.28	32.83
			Oct-09	7.61	32.50
			Oct-08	6.68	33.43
		40.11	Oct-07	6.15	33.96
		37.41	Oct-06	6.48	30.93
T-16A	A		Oct-13	7.56	32.46
			Oct-12	7.11	32.91
			Oct-11	6.91	33.11
			Oct-10	7.36	32.66
			Oct-09	7.74	32.28
			Oct-08	6.75	33.27
		40.02	Oct-07	6.30	33.72
		37.32	Oct-06	6.60	30.72
T-17A	A	38.23	Oct-13	7.82	30.41

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
36S	A		Oct-13	DRY	--
			Oct-12	DRY	--
			Oct-11	6.25	35.21
			Oct-10	6.65	34.81
			Oct-09	6.83	34.63
			Oct-08	6.29	35.17
		41.46	Oct-07	5.92	35.54
			Oct-06	6.07	32.55
			Oct-05	6.20	32.42
			Oct-04	6.93	31.69
			Oct-03	6.60	32.02
			Oct-02	7.37	31.25
			Oct-01	7.47	31.15
			Oct-00	7.79	30.83
			Oct-99	7.70	30.92
			Apr-99	7.14	31.48
			Oct-98	7.39	31.23
			Apr-98	6.58	32.04
		38.62	Oct-97+	8.50	30.12
			Apr-97	7.85	31.18
			Oct-96	9.40	29.63
			Jul-96	9.14	29.89
			Oct-95	9.02	30.01
			Jul-95	9.25	29.78
			Apr-95	7.59	31.44
			Jan-95	7.60	31.43
			Oct-94	9.37	29.66
			Jul-94	10.90	28.13
			Apr-94	11.48	27.55
			Jan-94	11.82	27.21
			Oct-93	11.40	27.63
			Jul-93	10.69	28.34
			Apr-93	9.66	29.37
			Jan-93	11.35	27.68
			Oct-92	11.81	27.22
			Jul-92	11.80	27.23
			Apr-92	9.36	29.67
			Jan-92	12.98	26.05
			Oct-91	14.23	24.80
			Jul-91	13.93	25.10
			Apr-91	13.08	25.95
			Jan-91	Dry	NA
			Oct-90	11.33	27.70
			Jul-90	13.67	25.36
			Apr-90	12.64	26.39
			Jan-90	10.87	28.16
			Oct-89	10.72	28.31
			Sep-89	10.79	28.24
			Apr-89	11.60	27.43
		39.03	Jan-89	11.14	27.89
			Oct-88	10.93	28.28
			Jul-88	10.47	28.74
			Apr-88	10.19	29.02
			Feb-88	9.54	29.67
			Nov-87	9.33	29.88
			Oct-87	8.55	30.66
			Jul-86	7.42	31.79
			May-86	6.51	32.70
			Apr-86	7.50	31.71
			Mar-86	5.94	33.27
			Mar-86	6.08	33.13
		39.21	Jan-86	7.50	33.96

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
36D	A		Oct-13	6.44	34.82
			Oct-12	6.20	35.06
			Oct-11	6.03	35.23
			Oct-10	6.43	34.83
			Oct-09	6.61	34.65
			Oct-08	6.02	35.24
		41.26	Oct-07	5.67	35.59
			Oct-06	5.82	32.58
			Oct-05	5.96	32.44
			Oct-04	6.72	31.68
			Oct-03	6.40	32.00
			Oct-02	7.12	31.28
			Oct-01	7.24	31.16
			Oct-00	7.52	30.88
			Oct-99	7.43	30.97
			Apr-99	7.17	31.23
			Oct-98	7.19	31.21
			Apr-98	6.38	32.02
		38.40	Oct-97+	8.20	30.20
			Apr-97	7.61	31.27
			Oct-96	9.16	29.72
			Jul-96	8.89	29.99
			Oct-95	8.71	30.17
			Jul-95	9.03	29.85
			Apr-95	7.41	31.47
			Jan-95	7.57	31.31
			Oct-94	9.02	29.86
			Jul-94	10.76	28.12
			Apr-94	11.26	27.62
			Jan-94	11.62	27.26
			Oct-93	11.26	27.62
			Jul-93	10.60	28.28
			Apr-93	11.00	27.88
			Jan-93	11.67	27.21
			Oct-92	11.40	27.48
			Jul-92	12.52	26.36
			Apr-92	10.68	28.20
			Jan-92	14.37	24.51
			Oct-91	14.51	24.37
			Jul-91	14.28	24.60
			Apr-91	13.66	25.22
			Jan-91	14.83	24.05
			Oct-90	13.26	25.62
			Jul-90	13.93	24.95
			Apr-90	13.55	25.33
			Jan-90	12.51	26.37
			Oct-89	11.68	27.20
			Sep-89	11.71	27.17
			Apr-89	11.35	27.53
		38.88	Jan-89	10.95	27.93
			Oct-88	10.74	28.32
			Jul-88	10.23	28.83
			Apr-88	9.96	29.10
			Feb-88	9.35	29.71
			Nov-87	9.08	29.98
			Oct-87	8.32	30.74
			Jul-86	7.32	31.74
			May-86	7.37	31.69
			Apr-86	NM	NA
			Apr-86	7.20	31.86
			Apr-86	NM	NA
			Mar-86	NM	NA
			Mar-86	5.82	33.24
			Mar-86	5.90	33.16
			Mar-86	NM	NA
		39.06	Jan-86	7.50	33.76

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
37S	A		Oct-13	7.01	35.05
			Oct-12	6.56	35.50
			Oct-11	6.43	35.63
			Oct-10	6.92	35.14
			Oct-09	7.30	34.76
			Oct-08	6.20	35.86
		42.06	Oct-07	5.60	36.46
			Oct-06	5.95	33.84
			Oct-05	6.21	33.58
			Oct-04	7.82	31.97
			Oct-03	7.38	32.41
		39.79	Oct-02	8.23	31.56
			Oct-01	8.40	30.84
			Oct-00	8.49	30.75
			Oct-99	7.70	30.92
			Oct-99	8.36	30.88
			Apr-99	7.14	31.48
			Apr-99	8.33	30.91
			Oct-98	8.42	30.82
			Apr-98	7.38	31.86
		39.24	Oct-97+	9.20	30.04
			Apr-97	8.29	31.41
			Oct-96	9.67	30.03
			Jul-96	9.25	30.45
			Oct-95	9.86	29.84
			Jul-95	9.85	29.85
			Apr-95	8.34	31.36
			Jan-95	10.56	29.14
			Oct-94	10.69	29.01
			Jul-94	11.81	27.89
			Apr-94	12.46	27.24
			Jan-94	12.73	26.97
			Oct-93	11.72	27.98
			Jul-93	12.01	27.69
			Apr-93	9.80	29.90
			Jan-93	Dry	NA
			Oct-92	Dry	NA
			Jul-92	Dry	NA
			Apr-92	Dry	NA
			Jan-92	Dry	NA
			Oct-91	Dry	NA
			Jul-91	Dry	NA
			Apr-91	Dry	NA
			Jan-91	Dry	NA
			Oct-90	Dry	NA
			Jul-90	Dry	NA
			Apr-90	Dry	NA
			Jan-90	Dry	NA
			Oct-89	12.20	27.50
			Sep-89	11.73	27.97
			Apr-89	13.00	26.70
		39.70	Jan-89	12.47	27.23
			Oct-88	12.03	28.16
			Jul-88	11.92	28.27
			Apr-88	11.24	28.95
			Feb-88	10.65	29.54
			Nov-87	10.64	29.55
			Oct-87	8.53	31.66
			Jul-86	8.53	31.66
			May-86	8.54	31.65
			Mar-86	6.44	33.75
			Mar-86	6.42	33.77
		40.19	Jan-86	8.20	33.86

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
38S	A		Oct-13	8.64	32.41
			Oct-12	8.25	32.80
			Oct-11	8.05	33.00
			Oct-10	8.55	32.50
			Oct-09	9.02	32.03
			Oct-08	7.71	33.34
		41.05	Oct-07	7.07	33.98
			Oct-06	7.56	30.79
			Oct-05	7.57	30.78
			Oct-04	9.12	29.23
			Oct-03	8.63	29.72
			Oct-02	9.57	28.78
			Oct-01	10.05	28.30
			Oct-00	11.21	27.14
			Oct-99	10.50	27.85
			Apr-99	10.72	27.63
			Oct-98	10.81	27.54
			Apr-98	9.15	29.20
		38.35	Oct-97+	11.63	26.72
			Apr-97	10.45	28.40
			Oct-96	11.91	26.94
			Jul-96	11.74	27.11
			Oct-95	12.12	26.73
			Jul-95	11.62	27.23
			Apr-95	9.50	29.35
			Jan-95	11.36	27.49
			Oct-94	9.81	29.04
			Jul-94	13.70	25.15
			Apr-94	14.19	24.66
			Jan-94	14.45	24.40
			Oct-93	Dry	NA
			Jul-93	14.30	24.55
			Apr-93	13.08	25.77
			Jan-93	13.97	24.88
			Oct-92	Dry	NA
			Jul-92	Dry	NA
			Apr-92	Dry	NA
			Jan-92	Dry	NA
			Oct-91	Dry	NA
			Jul-91	Dry	NA
			Apr-91	Dry	NA
			Jan-91	Dry	NA
			Oct-90	Dry	NA
			Jul-90	Dry	NA
			Apr-90	Dry	NA
			Jan-90	Dry	NA
			Oct-89	14.32	24.53
			Sep-89	14.53	24.32
			Apr-89	13.97	24.88
		38.85	Jan-89	13.68	25.17
			Oct-88	13.62	25.52
			Jul-88	13.12	26.02
			Apr-88	12.68	26.46
			Feb-88	12.55	26.59
			Nov-87	12.68	26.46
			Oct-87	11.49	27.65
			Jul-86	10.52	28.62
			May-86	9.95	29.19
			Mar-86	7.34	31.80
		39.14	Jan-86	8.80	32.25

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
EDUCTOR	A	*corrected for	Oct-13	8.45*	33.79
		soybean oil	Oct-12	8.08	34.16
			Oct-11	8.39	33.85
			Oct-10	8.48	33.76
			Oct-09	8.81	33.43
			Oct-08	7.88	34.36
		42.24	Oct-07	7.50	34.74
			Oct-06	7.78	31.76
			Oct-05	7.89	31.65
			Oct-04	9.03	30.51
			Oct-03	8.57	30.97
		39.54	Oct-02	9.36	30.18
			Oct-01	11.27	29.80
			Oct-00	16.31	24.76
			Oct-99	15.97	25.10
			Apr-99	16.08	24.99
			Oct-98	11.87	29.20
			Apr-98	16.09	24.98
		41.07	Oct-97	16.22	24.85
			Apr-97	15.90	24.38
			Oct-96	NM	NA
			Jul-96	16.37	23.91
			Oct-95	16.25	24.03
			Jul-95	16.08	24.20
			Apr-95	16.11	24.17
			Jan-95	15.98	24.30
			Oct-94	16.24	24.04
			Jul-94	16.35	23.93
			Apr-94	16.56	23.72
			Jan-94	16.50	23.78
			Oct-93	16.54	23.74
			Jul-93	16.37	23.91
			Apr-93	15.08	25.20
			Jan-93	15.54	24.74
			Oct-92	13.92	26.36
			Jul-92	15.60	24.68
			Apr-92	15.13	25.15
			Jan-92	15.25	25.03
			Oct-91	16.72	23.56
			Jul-91	16.04	24.24
			Apr-91	14.99	25.29
			Jan-91	12.66	27.62
			Oct-90	12.76	27.52
			Jul-90	11.72	28.56
			Apr-90	11.89	28.39
			Jan-90	12.07	28.21
			Oct-89	12.40	27.88
			Sep-89	11.55	28.73
			Apr-89	11.63	28.65
		40.28	Jan-89	10.59	29.69
			Oct-88	12.33	27.95
			Jul-88	13.30	26.98
			Apr-88	12.95	27.33
			Feb-88	12.74	27.54
			Nov-87	NM	NA
			Oct-87	11.50	28.78
		40.28	May-86	11.59	30.65

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-1B	B1				
Per Water Board approval, well 1B was abandoned in February 2004.					
			Oct-03	9.31	29.71
			Oct-02	10.99	28.03
			Oct-01	11.54	27.48
			Oct-00	13.09	25.93
			Oct-99	11.46	27.56
			Apr-99	11.87	27.15
			Oct-98	11.66	27.36
			Apr-98	10.56	28.46
		39.02	Oct-97	12.90	26.12
		39.53	Apr-97	11.88	27.65
			Oct-96	14.51	25.17
			Jul-96	13.97	25.71
			Oct-95	12.84	26.84
			Jul-95	13.86	25.82
			Apr-95	10.95	28.73
			Jan-95	12.60	27.08
			Oct-94	12.80	26.88
			Jul-94	13.47	26.21
			Apr-94	15.01	24.67
			Jan-94	16.93	22.75
			Oct-93	13.34	26.34
			Jul-93	19.64	20.04
			Apr-93	18.52	21.16
			Jan-93	20.28	19.40
			Oct-92	18.86	20.82
			Jul-92	20.38	19.30
			Apr-92	19.53	20.15
			Jan-92	20.94	18.74
			Oct-91	21.78	17.90
			Jul-91	21.05	18.63
			Apr-91	20.54	19.14
			Jan-91	21.60	18.08
			Oct-90	21.07	18.61
			Jul-90	19.92	19.76
			Apr-90	19.38	20.30
			Jan-90	20.54	19.14
			Oct-89	18.49	21.19
			Sep-89	18.23	21.45
			Apr-89	18.95	20.73
		39.68	Jan-89	15.46	24.22
			Oct-88	15.90	21.50
			Jul-88	15.21	22.19
			Apr-88	14.03	23.37
			Feb-88	12.86	24.54
			Nov-87	12.70	24.70
			Oct-87	10.45	26.95
			Jul-86	9.75	27.65
			May-86	8.23	29.17
			Apr-86	9.40	28.00
			Mar-86	7.47	29.93
			Mar-86	6.29	31.11
		37.40	Jan-86	7.70	29.70

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-2B	B1		Oct-13	8.36	33.87
			Oct-12	8.08	34.15
			Oct-11	7.89	34.34
			Oct-10	8.41	33.82
			Oct-09	8.82	33.41
			Oct-08	8.05	34.18
		42.23	Oct-07	7.29	34.94
			Oct-06	7.57	31.96
			Oct-05	7.71	31.82
			Oct-04	9.04	30.49
			Oct-03	8.56	30.97
		39.53	Oct-02	9.79	29.74
			Oct-01	9.76	29.48
			Oct-00	10.76	28.48
			Oct-99	25.48	13.76
			Apr-99	Dry	NA
			Oct-98	11.89	27.35
			Apr-98	25.58	13.66
		39.24	Oct-97	NM	NA
			Apr-97	26.15	13.52
			Oct-96	14.08	25.59
			Jul-96	23	16.67
			Oct-95	25.44	14.23
			Jul-95	22.58	17.09
			Apr-95	10.75	28.92
			Jan-95	26.98	12.69
			Oct-94	25.32	14.35
			Jul-94	21.36	18.31
			Apr-94	26.18	13.49
			Jan-94	21.31	18.36
			Oct-93	22.98	16.69
			Jul-93	26.50	13.17
			Apr-93	24.94	14.73
			Jan-93	24.65	15.02
			Oct-92	26.35	13.32
			Jul-92	15.70	23.97
			Apr-92	27.36	12.31
			Jan-92	16.95	22.72
			Oct-91	29.98	9.69
			Jul-91	24.67	15.00
			Apr-91	24.75	14.92
			Jan-91	24.32	15.35
			Oct-90	23.96	15.71
			Jul-90	29.13	10.54
			Apr-90	24.96	14.71
			Jan-90	22.99	16.68
			Oct-89	23.53	16.14
			Sep-89	23.42	16.25
			Apr-89	23.84	15.83
		39.67	Jan-89	26.07	13.60
			Oct-88	26.29	13.40
			Jul-88	23.00	16.69
			Apr-88	24.56	15.13
			Feb-88	26.00	13.69
			Nov-87	25.89	13.80
			Oct-87	20.46	19.23
			Jul-86	19.23	20.46
			May-86	26.24	13.45
		39.69	Mar-86	9.19	33.04

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-4B	B1		Oct-13	9.71	31.22
			Oct-12	9.38	31.55
			Oct-11	9.16	31.77
			Oct-10	9.86	31.07
			Oct-09	10.71	30.22
			Oct-08	8.98	31.95
		40.93	Oct-07	7.60	33.33
			Oct-06	8.07	30.16
			Oct-05	8.32	29.91
			Oct-04	10.91	27.32
			Oct-03	11.00	27.23
			Oct-02	12.39	25.84
			Oct-01	13.36	24.87
			Oct-00	16.43	21.80
			Oct-99	14.07	24.16
			Apr-99	16.11	22.12
			Oct-98	13.89	24.34
			Apr-98	12.93	25.30
		38.23	Oct-97	15.89	22.34
			Apr-97	15.63	23.07
			Oct-96	18.70	20.00
			Jul-96	16.78	21.92
			Oct-95	16.75	21.95
			Jul-95	16.33	22.37
			Apr-95	14.26	24.44
			Jan-95	16.87	21.83
			Oct-94	17.33	21.37
			Jul-94	20.57	18.13
			Apr-94	22.16	16.54
			Jan-94	22.61	16.09
			Oct-93	19.84	18.86
			Jul-93	22.40	16.30
			Apr-93	21.46	17.24
			Jan-93	22.31	16.39
			Oct-92	20.42	18.28
			Jul-92	22.19	16.51
			Apr-92	21.83	16.87
			Jan-92	22.57	16.13
			Oct-91	24.44	14.26
			Jul-91	23.36	15.34
			Apr-91	22.69	16.01
			Jan-91	23.04	15.66
			Oct-90	22.95	15.75
			Jul-90	NM	NA
			Apr-90	20.47	18.23
			Jan-90	21.53	17.17
			Oct-89	19.50	19.20
			Sep-89	19.64	19.06
			Apr-89	20.95	17.75
		38.70	Jan-89	20.75	17.95
			Oct-88	20.98	17.98
			Jul-88	19.87	19.09
			Apr-88	19.63	19.33
			Feb-88	18.67	20.29
			Nov-87	19.59	19.37
			Oct-87	15.32	23.64
			Jul-86	15.88	23.08
			May-86	11.51	27.45
			Apr-86	15.60	23.36
			Mar-86	12.96	26.00
		38.96	Jan-86	9.30	31.63

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-5B	B1		Oct-13	9.99	32.46
			Oct-12	10.33	32.12
			Oct-11	10.04	32.41
			Oct-10	10.45	32.00
			Oct-09	14.55	27.90
			Oct-08	15.72	26.73
		42.45	Oct-07	4.99	37.46
			Oct-06	5.31	34.44
			Oct-05	6.17	33.58
			Oct-04	13.70	26.05
			Oct-03	13.95	25.80
		39.75	Oct-02	15.43	24.32
			Oct-01	14.99	24.22
			Oct-00	19.25	19.96
			Oct-99	10.46	28.75
			Apr-99	19.38	19.83
			Oct-98	17.77	21.44
			Apr-98	15.45	23.76
		39.21	Oct-97	17.32	21.89
			Apr-97	17.28	22.39
			Oct-96	20.60	19.07
			Jul-96	20.65	19.02
			Oct-95	18.24	21.43
			Jul-95	18.75	20.92
			Apr-95	17.70	21.97
			Jan-95	18.75	20.92
			Oct-94	18.77	20.90
			Jul-94	20.93	18.74
			Apr-94	21.13	18.54
			Jan-94	22.15	17.52
			Oct-93	20.65	19.02
			Jul-93	21.08	18.59
			Apr-93	21.24	18.43
			Jan-93	19.04	20.63
			Oct-92	17.55	22.12
			Jul-92	20.80	18.87
			Apr-92	20.59	19.08
			Jan-92	23.07	16.60
			Oct-91	23.79	15.88
			Jul-91	23.00	16.67
			Apr-91	22.81	16.86
			Jan-91	23.27	16.40
			Oct-90	22.87	16.80
			Jul-90	23.06	16.61
			Apr-90	22.92	16.75
			Jan-90	21.85	17.82
			Oct-89	21.03	18.64
			Sep-89	21.12	18.55
			Apr-89	20.55	19.12
		39.67	Jan-89	20.80	18.87
			Oct-88	20.71	19.96
			Jul-88	18.63	22.04
			Apr-88	19.20	21.47
			Feb-88	16.62	24.05
			Nov-87	17.12	23.55
			Oct-87	15.75	24.92
			Jul-86	10.86	29.81
			May-86	10.11	30.56
			Apr-86	11.20	29.47
			Mar-86	10.37	30.30
		40.67	Jan-86	10.00	32.45

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-7B	B1		Oct-13	6.73	35.28
			Oct-12	6.55	35.46
			Oct-11	6.39	35.62
			Oct-10	7.94*	34.07
			Oct-09	8.47	33.54
			Oct-08	8.76	33.25
		42.01	Oct-07	4.93	37.08
			Oct-06	5.14	34.17
			Oct-05	5.61	33.70
			Oct-04	9.35	29.96
			Oct-03	8.62	30.69
		39.31	Oct-02	12.24	27.07
			Oct-01	12.67	26.20
			Oct-00	14.68	24.19
			Oct-99	11.31	27.56
			Apr-99	14.74	24.13
			Oct-98	13.62	25.25
			Apr-98	12.54	26.33
		38.87	Oct-97	14.34	24.53
			Apr-97	14.22	25.22
			Oct-96	16.68	22.76
			Jul-96	16.35	23.09
			Oct-95	14.50	24.94
			Jul-95	15.71	23.73
			Apr-95	13.99	25.45
			Jan-95	15.45	23.99
			Oct-94	15.67	23.77
			Jul-94	17.76	21.68
			Apr-94	17.90	21.54
			Jan-94	19.20	20.24
			Oct-93	16.60	22.84
			Jul-93	17.95	21.49
			Apr-93	18.53	20.91
			Jan-93	19.15	20.29
			Oct-92	16.52	22.92
			Jul-92	17.63	21.81
			Apr-92	17.20	22.24
			Jan-92	20.98	18.46
			Oct-91	21.77	17.67
			Jul-91	20.77	18.67
			Apr-91	20.48	18.96
			Jan-91	21.01	18.43
			Oct-90	20.79	18.65
			Jul-90	21.16	18.28
			Apr-90	20.37	19.07
			Jan-90	20.56	18.88
			Oct-89	19.60	19.84
			Sep-89	19.35	20.09
			Apr-89	16.99	22.45
		39.44	Jan-89	17.82	21.62
			Oct-88	18.16	21.27
			Jul-88	16.37	23.06
			Apr-88	16.83	22.60
			Feb-88	15.21	24.22
			Nov-87	15.75	23.68
			Oct-87	13.98	25.45
			Jul-86	10.75	28.68
			May-86	9.65	29.78
			Apr-86	11.00	28.43
			Mar-86	9.90	29.53
			Mar-86	8.16	31.27
		39.43	Jan-86	9.70	32.31

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-8B	B1		Oct-13	7.31	33.02
			Oct-12	6.93	33.40
			Oct-11	6.74	33.59
			Oct-10	7.21	33.12
			Oct-09	7.60	32.73
			Oct-08	6.68	33.65
		40.33	Oct-07	6.05	34.28
			Oct-06	6.35	31.28
			Oct-05	6.46	31.17
			Oct-04	7.75	29.88
			Oct-03	7.34	30.29
		37.63	Oct-02	8.23	29.40
			Oct-01	8.64	29.66
			Oct-00	9.68	28.62
			Oct-99	14.37	23.93
			Apr-99	15.83	22.47
			Oct-98	14.77	23.53
			Apr-98	13.83	24.47
		38.30	Oct-97	13.44	24.86
			Apr-97	28.40	9.90
			Oct-96	30.87	7.43
			Jul-96	10.97	27.33
			Oct-95	31.00	7.30
			Jul-95	11.11	27.19
			Apr-95	31.59	6.71
			Jan-95	29.36	8.94
			Oct-94	25.92	12.38
			Jul-94	24.00	14.30
			Apr-94	23.25	15.05
			Jan-94	25.92	12.38
			Oct-93	21.81	16.49
			Jul-93	13.10	25.20
			Apr-93	24.44	13.86
			Jan-93	14.67	23.63
			Oct-92	14.51	23.79
			Jul-92	16.34	21.96
			Apr-92	20.11	18.19
			Jan-92	16.06	22.24
			Oct-91	27.44	10.86
			Jul-91	24.89	13.41
			Apr-91	25.41	12.89
			Jan-91	24.15	14.15
			Oct-90	23.80	14.50
			Jul-90	24.13	14.17
			Apr-90	26.09	12.21
			Jan-90	14.56	23.74
			Oct-89	13.86	24.44
			Sep-89	22.32	15.98
			Apr-89	24.65	13.65
		38.30	Jan-89	NM	NA
			Oct-88	24.34	14.00
			Jul-88	12.47	25.87
			Apr-88	26.35	11.99
			Feb-88	30.26	8.08
			Nov-87	11.15	27.19
			Oct-87	21.02	17.32
			Jul-86	10.24	28.10
			May-86	23.50	14.84
			Mar-86	24.30	14.04
		38.34	Mar-86	6.41	33.92

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-9B	B1		Oct-13	8.61	30.28
			Oct-12	8.30	30.59
			Oct-11	8.14	30.75
			Oct-10	8.69	30.20
			Oct-09	9.43	29.46
			Oct-08	8.87	30.02
		38.89	Oct-07	6.97	31.92
		36.19	Oct-06	7.50	28.69
			Oct-05	7.65	29.67
			Oct-04	9.68	27.64
			Oct-03	10.20	27.12
			Oct-02	11.31	26.01
			Oct-01	11.73	25.59
			Oct-00	18.41	18.91
			Oct-99	14.94	22.38
			Apr-99	16.40	20.92
			Oct-98	12.62	24.70
			Apr-98	13.83	23.49
		37.32	Oct-97	15.82	21.50
		37.01	Apr-97	14.57	22.44
			Oct-96	16.98	20.13
			Jul-96	16.43	20.68
			Oct-95	14.82	22.29
			Jul-95	16.40	20.71
			Apr-95	13.00	24.11
			Jan-95	16.34	20.77
			Oct-94	22.64	14.47
			Jul-94	20.45	16.66
			Apr-94	28.23	8.88
			Jan-94	29.42	7.69
			Oct-93	26.50	10.61
			Jul-93	30.58	6.53
			Apr-93	28.91	8.20
			Jan-93	29.41	7.70
			Oct-92	29.77	7.34
			Jul-92	31.47	5.64
			Apr-92	30.91	6.20
			Jan-92	31.80	5.31
			Oct-91	Dry	NA
			Jul-91	31.91	5.20
			Apr-91	22.70	14.41
			Jan-91	23.99	13.12
			Oct-90	31.99	5.12
			Jul-90	18.31	18.80
			Apr-90	20.54	16.57
			Jan-90	25.75	11.36
			Oct-89	21.48	15.63
			Sep-89	17.32	19.79
			Apr-89	23.66	13.45
		37.11	Jan-89	24.33	12.78
			Oct-88	26.65	10.49
			Jul-88	24.97	12.17
			Apr-88	23.50	13.64
			Feb-88	21.99	15.15
			Nov-87	19.34	17.80
			Oct-87	12.15	24.99
			Jul-86	27.67	9.47
			May-86	8.94	28.20
			Mar-86	24.25	12.89
			Mar-86	24.45	12.69
		37.14	Mar-86	6.75	32.14

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-10B	B1		Oct-13	7.52	32.57
			Oct-12	7.12	32.97
			Oct-11	6.82	33.27
			Oct-10	7.05*	33.04
			Oct-09	7.76	32.33
			Oct-08	6.81	33.28
		40.09	Oct-07	6.19	33.90
			Oct-06	6.56	30.83
			Oct-05	6.62	30.77
			Oct-04	7.86	29.53
			Oct-03	7.41	29.98
			Oct-02	8.44	28.95
		37.39	Oct-01	8.81	28.58
T-17B	B1		Oct-13	7.92	32.69
			Oct-12	7.20	33.41
			Oct-11	7.27	33.34
			Oct-10	7.80	32.81
			Oct-09	8.36	32.25
			Oct-08	7.12	33.49
		40.61	Oct-07	6.11	34.50
		37.91	Oct-06	6.51	31.40
T-18B	B1	38.78	Oct-13	6.28	32.50
T-19B	B1	38.72	Oct-13	7.20	31.52

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-2C	B2		Oct-13	8.98	32.40
			Oct-12	8.75	32.63
			Oct-11	8.36	33.02
			Oct-10	6.69	34.69
			Oct-09	10.56	30.82
			Oct-08	11.58	29.80
		41.38	Oct-07	6.39	34.99
			Oct-06	6.83	31.85
			Oct-05	7.53	31.15
			Oct-04	11.01	27.67
			Oct-03	11.66	27.02
		38.68	Oct-02	13.91	24.77
			Oct-01	17.50	22.01
			Oct-00	18.40	21.11
			Oct-99	25.18	14.33
			Apr-99	31.50	8.01
			Oct-98	15.45	24.06
			Apr-98	19.25	20.26
		39.51	Oct-97	29.50	10.01
			Apr-97	33.65	5.72
			Oct-96	31.00	8.37
			Jul-96	31	8.37
			Oct-95	31.59	7.78
			Jul-95	35.45	3.92
			Apr-95	18.21	21.16
			Jan-95	34.94	4.43
			Oct-94	31.41	7.96
			Jul-94	35.63	3.74
			Apr-94	40.30	-0.93
			Jan-94	44.54	-5.17
			Oct-93	38.82	0.55
			Jul-93	40.11	-0.74
			Apr-93	37.88	1.49
			Jan-93	39.84	-0.47
			Oct-92	42.87	-3.50
			Jul-92	46.92	-7.55
			Apr-92	42.57	-3.20
			Jan-92	47.25	-7.88
			Oct-91	47.67	-8.30
			Jul-91	36.12	3.25
			Apr-91	31.69	7.68
			Jan-91	29.47	9.90
			Nov-90	40.05	-0.68
			Aug-90	50.84	-11.47
			Apr-90	40.29	-0.92
			Jan-90	31.47	7.90
			Oct-89	33.84	5.53
			Sep-89	44.24	-4.87
			Apr-89	38.92	0.45
		39.37	Jan-89	NM	NA
			Oct-88	36.86	2.54
			Jul-88	35.70	3.70
			Apr-88	NM	NA
			Feb-88	34.71	4.69
			Nov-87	35.18	4.22
			Oct-87	25.15	14.25
		39.40	Jul-86	29.65	11.73

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-9C	B2		Oct-13	8.54	30.27
			Oct-12	8.33	30.48
			Oct-11	7.99	30.82
			Oct-10	9.4	29.41
			Oct-09	9.74	29.07
			Oct-08	11.13	27.68
		38.81	Oct-07	6.13	32.68
			Oct-06	6.78	29.33
			Oct-05	7.88	28.23
			Oct-04	10.45	25.66
			Oct-03	11.41	24.70
			Oct-02	12.98	23.13
			Oct-01	15.28	20.83
			Oct-00	17.64	18.47
			Oct-99	12.70	23.41
			Apr-99	18.44	17.67
			Oct-98	14.83	21.28
			Apr-98	13.16	22.95
		36.11	Oct-97	17.15	18.96
		36.57	Apr-97	15.69	20.88
			Oct-96	22.10	14.57
			Jul-96	20.37	16.30
			Oct-95	18.43	18.24
			Jul-95	20.42	16.25
			Apr-95	18.23	18.44
			Jan-95	20.94	15.73
			Oct-94	18.96	17.71
			Jul-94	22.57	14.10
			Apr-94	23.61	13.06
			Jan-94	24.99	11.68
			Oct-93	23.70	12.97
			Jul-93	23.42	13.25
			Apr-93	22.00	14.67
			Jan-93	22.95	13.72
			Oct-92	19.03	17.64
			Jul-92	21.73	14.94
			Apr-92	21.37	15.30
			Jan-92	23.55	13.12
			Oct-91	25.07	11.60
			Jul-91	23.60	13.07
			Apr-91	23.16	13.51
			Jan-91	23.58	13.09
			Nov-90	23.97	12.70
			Aug-90	23.39	13.28
			Apr-90	23.09	13.58
			Jan-90	22.51	14.16
			Oct-89	21.99	14.68
			Aug-89	22.74	13.93
			Apr-89	22.11	14.56
		36.67	Jan-89	21.29	15.38
			Oct-88	20.32	16.36
			Jul-88	18.85	17.83
			Apr-88	19.35	17.33
			Feb-88	17.76	18.92
			Nov-87	18.33	18.35
			Oct-87	17.16	19.52
			Jul-86	11.21	25.47
			May-86	9.83	26.85
			Apr-86	10.50	26.18
		36.68	Jan-86	7.20	31.61

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-10C	B2		Oct-13	11.03	28.73
			Oct-12	10.45	29.31
			Oct-11	9.92	29.84
			Oct-10	11.69	28.07
			Oct-09	12.62	27.14
			Oct-08	14.53	25.23
		39.76	Oct-07	6.91	32.85
			Oct-06	7.44	29.62
			Oct-05	8.29	28.77
			Oct-04	13.24	23.82
			Oct-03	14.03	23.03
			Oct-02	15.15	21.91
			Oct-01	16.35	20.71
			Oct-00	21.20	15.86
			Oct-99	13.59	23.47
			Apr-99	22.70	14.36
			Oct-98	17.39	19.67
			Apr-98	15.66	21.40
		37.06	Oct-97	19.91	17.15
		37.66	Apr-97	20.63	17.03
			Oct-96	25.72	11.78
			Jul-96	24.2	13.30
			Oct-95	19.80	17.70
			Jul-95	24.49	13.01
			Apr-95	21.76	15.74
			Jan-95	25.02	12.48
			Oct-94	21.24	16.26
			Jul-94	26.20	11.30
			Apr-94	27.26	10.24
			Jan-94	28.65	8.85
			Oct-93	26.97	10.53
			Jul-93	27.00	10.50
			Apr-93	25.46	12.04
			Jan-93	23.85	13.65
			Oct-92	20.87	16.63
			Jul-92	24.26	13.24
			Apr-92	24.30	13.20
			Jan-92	26.42	11.08
			Oct-91	27.91	9.59
			Jul-91	26.24	11.26
			Apr-91	25.66	11.84
			Jan-91	25.88	11.62
			Nov-90	26.41	11.09
			Aug-90	25.22	12.28
			Apr-90	24.89	12.61
			Jan-90	23.84	13.66
			Oct-89	23.23	14.27
			Sep-89	24.12	13.38
			Apr-89	23.73	13.77
		37.50	Jan-89	23.02	14.48
			Oct-88	22.05	15.46
			Jul-88	20.12	17.39
			Apr-88	20.65	16.86
			Feb-88	18.77	18.74
			Nov-87	19.36	18.15
			Oct-87	18.55	18.96
		37.51	Jul-86	11.73	28.03

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-11C	B2		Oct-13	8.45	30.20
			Oct-12	8.25	30.40
			Oct-11	7.95	30.70
			Oct-10	9.31	29.34
			Oct-09	9.41	29.24
			Oct-08	10.83	27.82
		38.65	Oct-07	6.34	32.31
			Oct-06	6.77	29.18
			Oct-05	7.49	28.46
			Oct-04	10.30	25.65
			Oct-03	11.18	24.77
			Oct-02	12.87	23.08
			Oct-01	14.33	21.62
			Oct-00	16.96	18.99
			Oct-99	12.94	23.01
			Apr-99	17.92	18.03
			Oct-98	14.34	21.61
			Apr-98	13.18	22.77
		35.95	Oct-97	16.81	19.14
		36.49	Apr-97	17.55	18.94
			Oct-96	21.46	15.14
			Jul-96	19.95	16.65
			Oct-95	17.92	18.68
			Jul-95	19.72	16.88
			Apr-95	17.12	19.48
			Jan-95	19.86	16.74
			Oct-94	18.58	18.02
			Jul-94	21.60	15.00
			Apr-94	22.44	14.16
			Jan-94	23.86	12.74
			Oct-93	22.23	14.37
			Jul-93	22.15	14.45
			Apr-93	20.82	15.78
			Jan-93	22.33	14.27
			Oct-92	18.66	17.94
			Jul-92	NM	NA
			Apr-92	20.38	16.22
			Jan-92	22.71	13.89
			Oct-91	24.19	12.41
			Jul-91	22.91	13.69
			Apr-91	22.30	14.30
			Jan-91	22.84	13.76
			Nov-90	22.30	14.30
			Aug-90	23.03	13.57
			Apr-90	NM	NA
			Jan-90	22.28	14.32
			Oct-89	21.82	14.78
			Sep-89	22.62	13.98
			Apr-89	21.74	14.86
			Jan-89	20.83	15.77
			Oct-88	19.78	16.82
			Jul-88	18.64	17.96
			Apr-88	19.12	17.48
			Feb-88	17.78	18.82
			Nov-87	18.28	18.32
			Oct-87	17.28	19.32
		36.60	Jul-86	10.89	27.76

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-12C	B2		Oct-13	7.68	33.06
			Oct-12	7.43	33.31
			Oct-11	7.16	33.58
			Oct-10	8.36	32.38
			Oct-09	8.83	31.91
			Oct-08	9.7	31.04
		40.74	Oct-07	5.91	34.83
			Oct-06	6.24	31.80
			Oct-05	6.92	31.12
			Oct-04	9.42	28.62
			Oct-03	10.11	27.93
			Oct-02	12.39	25.65
			Oct-01	14.35	23.69
			Oct-00	16.23	21.81
			Oct-99	13.77	24.27
			Apr-99	17.66	20.38
			Oct-98	14.12	23.92
			Apr-98	13.45	24.59
		38.04	Oct-97	16.84	21.20
		38.56	Apr-97	17.60	20.96
			Oct-96	21.61	17.01
			Jul-96	19.9	18.72
			Oct-95	18.00	20.62
			Jul-95	19.81	18.81
			Apr-95	16.14	22.48
			Jan-95	20.17	18.45
			Oct-94	18.91	19.71
			Jul-94	21.71	16.91
			Apr-94	22.63	15.99
			Jan-94	24.12	14.50
			Oct-93	22.40	16.22
			Jul-93	22.08	16.54
			Apr-93	21.41	17.21
			Jan-93	22.46	16.16
			Oct-92	20.15	18.47
			Jul-92	21.69	16.93
			Apr-92	21.11	17.51
			Jan-92	23.65	14.97
			Oct-91	25.31	13.31
			Jul-91	24.12	14.50
			Apr-91	23.82	14.80
			Jan-91	23.97	14.65
			Nov-90	23.47	15.15
			Aug-90	24.23	14.39
			Apr-90	24.48	14.14
			Jan-90	23.48	15.14
		38.62	Sep-89	24.42	16.32

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
36DD	B2		Oct-13	6.05	35.53
			Oct-12	5.91	35.67
			Oct-11	5.72	35.86
			Oct-10	6.55	35.03
			Oct-09	6.85	34.73
			Oct-08	6.76	34.82
		41.58	Oct-07	5.45	36.13
			Oct-06	5.76	32.98
			Oct-05	5.92	32.82
			Oct-04	7.07	31.67
			Oct-03	7.03	31.71
			Oct-02	8.64	30.10
			Oct-01	8.91	29.83
			Oct-00	9.40	29.34
			Oct-99	8.75	29.99
			Apr-99	8.72	30.02
			Oct-98	8.75	29.99
			Apr-98	7.87	30.87
		38.74	Oct-97+	9.62	29.12
			Apr-97	8.89	30.31
			Oct-96	10.56	28.64
			Jul-96	10.19	29.01
			Oct-95	9.52	29.68
			Jul-95	10.08	29.12
			Apr-95	8.46	30.74
			Jan-95	8.69	30.51
			Oct-94	10.75	28.45
			Jul-94	12.80	26.40
			Apr-94	12.58	26.62
			Jan-94	12.83	26.37
			Oct-93	12.46	26.74
			Jul-93	11.47	27.73
			Apr-93	10.88	28.32
			Jan-93	13.19	26.01
			Oct-92	12.50	26.70
			Jul-92	13.40	25.80
			Apr-92	10.95	28.25
			Jan-92	15.03	24.17
			Oct-91	15.80	23.40
			Jul-91	15.59	23.61
			Apr-91	14.69	24.51
			Jan-91	16.12	23.08
			Oct-90	14.46	24.74
			Aug-90	14.30	24.90
			Apr-90	14.75	24.45
			Jan-90	14.06	25.14
			Oct-89	13.25	25.95
			Aug-89	14.14	25.06
			Apr-89	13.18	26.02
		39.20	Jan-89	12.82	26.38
			Oct-88	12.36	27.01
			Jul-88	11.79	27.58
			Apr-88	11.52	27.85
			Feb-88	10.94	28.43
			Nov-87	11.08	28.29
			Oct-87	10.21	29.16
			Jul-86	8.23	31.14
			May-86	8.11	31.26
			Apr-86	NM	NA
			Apr-86	NM	NA
			Apr-86	8.10	31.27
			Mar-86	NM	NA
			Mar-86	6.56	32.81
			Mar-86	6.53	32.84
			Mar-86	NM	NA
		39.37	Jan-86	8.10	33.48

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Top of Casing Elevation (feet, MSL)	Date Measured	Depth to Water (feet below top of casing)	Water-Level Elevation (feet, MSL)
T-8D	B4		Oct-13	2.57	37.78
			Oct-12	1.81	38.54
			Oct-11	1.49	38.86
			Oct-10	3.14	37.21
			Oct-09	4.01	36.34
			Oct-08	3.20	37.15
		40.35	Oct-07	0.45	39.90
			Oct-06	1.1	36.55
			Oct-05	1.54	36.11
			Oct-04	3.77	33.88
			Oct-03	NM	NA
			Oct-02	5.89	31.76
			Oct-01	5.90	31.75
			Oct-00	8.17	29.48
			Oct-99	4.75	32.90
			Apr-99	5.43	32.22
			Oct-98	5.32	32.33
			Apr-98	3.83	33.82
		37.65	Oct-97	7.83	29.82
		38.19	Apr-97	7.11	31.08
			Oct-96	11.31	26.97
			Jul-96	10.49	27.79
			Oct-95	10.69	27.59
			Jul-95	11.26	27.02
			Apr-95	9.88	28.40
			Jan-95	12.06	26.22
			Oct-94	12.40	25.88
			Jul-94	14.54	23.74
			Apr-94	14.42	23.86
			Jan-94	15.31	22.97
			Oct-93	16.87	21.41
			Jul-93	14.32	23.96
			Apr-93	14.35	23.93
			Jan-93	17.02	21.26
			Oct-92	12.97	25.31
			Jul-92	15.02	23.26
			Apr-92	14.25	24.03
			Jan-92	16.94	21.34
			Oct-91	17.83	20.45
			Jul-91	17.15	21.13
			Apr-91	16.07	22.21
			Jan-91	17.53	20.75
			Oct-90	16.78	21.50
			Jul-90	17.97	20.31
			Apr-90	17.85	20.43
			Jan-90	18.57	19.71
			Oct-89	18.26	20.02
			Sep-89	14.97	23.31
			Apr-89	18.27	20.01
		38.28	Jan-89	17.15	21.13
			Oct-88	17.18	21.11
			Jul-88	15.03	23.26
			Apr-88	14.27	24.02
			Feb-88	13.46	24.83
			Nov-87	14.48	23.81
			Oct-87	14.55	23.74
			Jul-86	9.34	28.95
			May-86	8.03	30.26
			Apr-86	8.10	30.19
		38.29	Jan-86	7.50	32.85

Notes:
Wells resurveyed as needed after work that changes top of casing elevation.
Elevations in NGVD29 prior to 2007. From 2007, elevations in NAVD88.

MSL Mean Sea Level
NM Well not measured due to inaccessibility.
NA Not Applicable

NAVD88 North American Vertical Datum 1988
NGVD29 National Goeodetic Vertical Datum 1929

Appendix C

Historic Groundwater Analytical Results

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-1A ZA																				
Per Water Board approval, well T-1A was abandoned in February 2004.																				
Oct-02	<0.5	404,000	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-01	<0.5	28	--	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<2.0	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-00	<2.0	34	--	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	<2.0	ND	<2.0	<2.0	NA	NA	NA	NA
Oct-99	<1.0	34	--	--	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-98	<1.0	42	2.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-97	<1.0	51	--	--	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<2.0	ND	NA	NA	NA	NA
Oct-96	<0.5	48	3.6	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	61	--	--	--	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<5.0	74	--	--	<5	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-93	<5.0	120	--	--	--	<10	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Apr-90	<0.5	110	--	--	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-89	<0.5	90	--	--	--	<0.5	<0.5	<0.5	<0.5	--	--	--	<0.5		<0.5	--	--	--	--	--
Aug-89	<0.5	87	--	--	--	<0.5	<0.5	<0.5	0.9	--	--	--	<0.5		<0.5	--	--	--	--	--
Feb-89	<0.5	86	--	--	--	<0.5	<0.5	<0.5	1.3	--	--	--	<0.5		<0.5	--	--	--	--	--
Nov-88	<0.5	88	--	--	--	<0.5	0.5	<0.5	2.7	--	--	--	<0.5		<0.5	--	--	--	--	--
Aug-88	<1.0	60	--	--	67	<1.0	0.9	<1.0	<1.0	--	--	--	<1.0		<1.0	--	--	--	--	--
Jun-88	<0.5	56	--	--	--	<0.5	1.5	<0.5	<0.5	--	--	--	10		<0.5	--	--	--	--	--
Jan-88	<1.0	200	--	--	--	<1.0	3.1	<1.0	1.5	--	--	--	9.1		<1.0	--	--	--	--	--
Oct-87	<2.5	160	--	--	--	<2.5	8.6	<2.5	<2.5	--	--	--	<2.5		<2.5	--	--	--	--	--
Jun-87	<1.0	190	--	--	--	<1.0	7.0	<1.0	<1.0	--	--	--	<1.0		<1.0	--	--	--	--	--
Apr-87	<2.5	160	--	--	--	<2.5	<2.5	<2.5	<2.5	--	--	--	<2.5		<2.5	--	--	--	--	--
Jan-87	<10	140	--	--	--	<10	<10	<10	<10	--	--	--	<10		<10	--	--	--	--	--
Sep-86	<2.0	420	--	--	--	<2.0	5	<2.0	<2.0	--	--	--	<2.0		<2.0	--	--	--	--	--
Jul-86	<1.0	140	--	--	--	<1.0	<1.0	<1.0	<1.0	--	--	--	<1.0		<1.0	--	--	--	--	--
Apr-86	<2.0	340	--	--	--	<2.0	<2.0	<2.0	<2.0	--	--	--	<2.0		<2.0	--	--	--	--	--
Jan-86	<5.0	630	--	--	490	<5.0	<5.0	<5.0	<5.0	--	--	--	NA		<5.0	--	--	--	--	--
Oct-85	10	640	--	--	--	<5.0	30	<5.0	<5.0	--	--	--	<5.0		<5.0	--	--	--	--	--
Nov-84	4	930	--	--	--	NA	5	NA	NA	--	--	--	NA		NA	--	--	--	--	--
Aug-84	5	950	--	--	360	ND	7	ND	ND	--	--	--	ND		ND	--	--	--	--	--
Mar-84	NA	680	--	--	--	NA	NA	NA	NA	--	--	--	NA		NA	--	--	--	--	--
Sep-83	7	1,000	--	--	--	NA	5	ND	<1.0	--	--	--	ND		NA	--	--	--	--	--
Sep-83	3	540	--	--	510	NA	3	ND	<1.0	--	--	--	ND		NA	--	--	--	--	--
Aug-83	<1.0	660	--	--	--	ND	4	<1.0	<1.0	--	--	--	<1.0		ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-2A ZA																				
Oct-13	<0.50	0.76	340	86		430	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	19	85	NA	NA	NA	NA
May-13	<0.50	0.53	130	35		68	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	5.8	43	<0.50	<0.50	<0.50	<1.0
May-13 Dup	<0.50	0.59	160	35		81	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	6.6	47	<0.50	<0.50	<0.50	<1.0
Oct-12	<0.50	<0.50	120	48		67	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	8.9	78	<0.50	1.9	0.53	2.6
Apr-12	<0.50	0.84	34	16		27	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	6.1	47	<0.50	1.1	0.57	1.8
Oct-11	<0.50	<0.50	12	6	--	11	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	3.4	74	<0.50	1.7	0.94	5.3
May-11	<0.50	0.52	3	2.3	--	5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.7	39	<0.50	<0.50	<0.50	<0.50
Mar-11	<0.50	0.68	7	2.5	--	31	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2	57	<0.50	1.7	<0.50	4.8
Nov-10	<50	<50	3,200	<50	--	2,700	<50	<50	<50	<50	<100	<50	<50	<100	57	120	--	--	--	--
Oct-10	<20	<20	8,700	75	--	5,400	<20	<20	<20	<20	<40	<20	<20	<40	23	140	<20	<20	<20	<40
Oct-09	<20	<20	--	--	--	1,100	<20	<20	<20	<20	<40	<20	<20	<40	<20	46	<20	<20	<20	<40
Oct-08	<1	2.4	--	--	--	52	<1	<1	<1	<1	<2	<1	<1	<2	9.4	31	<1	<1	<1	<2
Oct-07	<5.0	<5.0	650	280	--	200	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	48	<5.0	<5.0	<5.0	<15
Apr-07	<5.0	25	180	<5.0	--	65	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	<5.0	580	270	--	140	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	41	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	<5.0	170	110	--	35	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	14	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	<5.0	220	190	--	120	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	39	<5.0	<5.0	<5.0	<15
Oct-05	<5.0	<5.0	45	49	--	22	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	18	<5.0	<5.0	<5.0	<15
Jul-05	<5.0	<5.0	110	96	--	50	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	60	<5.0	<5.0	<5.0	<15
Apr-05	<5.0	9.4	13	9.0	--	23	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	13	<5.0	<5.0	<5.0	<15
Jan-05	<5.0	<5.0	150	100	--	49	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	30	<5.0	<5.0	<5.0	<15
Oct-04	<5.0	<5.0	200	69	--	100	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	46	<5.0	<5.0	<5.0	<15
Apr-04	<1.0	4.4	59	<1.0	--	30	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Jan-04	<5.0	<5.0	<5.0	<5.0	--	9.7	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
Oct-03	<5.0	6.3	66	<5.0	--	130	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	24	<5.0	<5.0	<5.0	<10
Jul-03	<1.0	2.5	17	<1.0	--	48	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	14	NA	19	<1.0	3.8
Apr-03	<1.0	15	7.3	<1.0	--	13	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	6.6	NA	<1.0	<1.0	<2.0
Jan-03	<1.0	16	12	1.1	--	24	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	16	NA	NA	NA	NA
Oct-02	1.2	28	31	2	--	37	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	28	<1.0	<1.0	<1.0	3.9
Jul-02	<1.0	32	94	6.7	--	140	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	NA	NA	7.1	NA	<1.0	<1.0	<2.0
Apr-02	<1.0	4.2	45	<1.0	--	76	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	76	NA	<1.0	<1.0	<2.0
Jan-02	<13	110	210	<13	--	240	<13	<13	<13	ND	<25	<13	NA	ND	20	<13	NA	NA	NA	NA
Nov-01	10	140	180	6.7	--	460	<5.0	<5.0	<5.0	ND	<5.0	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	<5.0	<10
Oct-01	<50	480	230	<50	--	310	<50	<50	<50	<50	<100	<100	<100	<50	NA	<50	NA	<50	<50	<100
Aug-01	19	88	400	8.6	--	690	<1.0	<1.0	1.1	ND	<2.0	<2.0	NA	ND	NA	2.9	NA	1.8	<1.0	5.4
Jun-01	1.1	5.4	57	5.2	--	620	<1.0	1.2	1.9	ND	4.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Mar-01	13	110	360	5.3	--	400	1.6	1.2	<1.0	ND	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Jan-01	11	120	330	4.2	--	86	2.3	1.3	<1.0	ND	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-00	<20	160	520	<20	--	330	<20	<20	<20	<20	ND	ND	<20	ND	<20	<20	NA	NA	NA	NA
Oct-99	27	270	220	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	<10	NA	NA	NA	NA
Apr-99	20	210	160	<10	--	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	<25	NA	NA	NA	NA
Oct-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Apr-98	20	440	150	<10	--	<10	<10	<10	<10	ND	ND	ND	<40	ND	<10	<25	NA	NA	NA	NA
Oct-97	71	470	320	<25	--	<25	<25	<25	<25	ND	ND	ND	<25	ND	<50	<50	NA	NA	NA	NA
Apr-97	37	330	250	4.4	--	3.1	<1.7	2.1	<1.7	ND	ND	ND	1.8	ND	<1.7	ND	NA	NA	NA	NA
Oct-96	3.3	71	97	1.0	--	9.5	<0.5	0.6	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	14	190	--	--	140	13	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Apr-95	18	280	--	--	300	<10	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-94	<25	320	--	--	530	<25	<25	<25	<25	ND	ND	ND	<25	ND	<25	ND	NA	NA	NA	NA
Apr-94	3.9	1,600	--	--	2,216	120	<0.5	21	<0.5	ND	ND	ND	<0.5	ND	2.2	ND	NA	NA	NA	NA
Feb-94	6.3	1,900	--	--	2,723	260	<0.5	32	1.1	ND	ND	ND	1.9	ND	9.6	ND	NA	NA	NA	NA
Oct-93	16	5,800	--	--	4,732	300	<5.0	49	<5.0	ND	ND	ND	<5.0	ND	23	ND	NA	NA	NA	NA
Apr-93	18	1,300	--	--	1,710	14	<0.5	13	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	10	640	--	--	650	80	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	2.1	ND	NA	NA	NA	NA
Apr-92	30	4,400	--	--	410	120	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Jan-92	0.8	42	--	--	6.1	4.0	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-91	12	120	--	--	50	<1	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Jul-90	40	100	--	--	40	3.3	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	3.4	ND	NA	NA	NA	NA
Apr-90	40	160	--	--	12	7.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-89	84	230	--	--	23	220	<1.0	3	<1.0	--	--	--	<1.0	ND	79	--	--	--	--	--
Aug-89	41	2,300	--	--	30	<10	<10	<10	<10	--	--	--	18	ND	<10	--	--	--	--	--
May-89	140	470	--	--	500	340	<5.0	<5.0	<5.0	--	--	--	<5.0	ND	<5.0	--	--	--	--	--
Feb-89	220	620	--	--	240	<10	<10	<10	<10	--	--	--	380	ND	<10	--	--	--	--	--
Nov-88	260	1,300	--	--	4,200	18,000	<100	<100	<100	--	--	--	<100	ND	<100	--	--	--	--	--
Nov-88	<10	1,300	--	--	3,800	3,600	<10	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Aug-88	250	1,400	--	--	5,700	11,000	<100	<100	<100	--	--	--	<100	ND	<100	--	--	--	--	--
Jun-88	610	4,000	--	--	4,200	4,600	<50	<50	<50	--	--	--	<50	ND	<50	--	--	--	--	--
Jun-88	530	3,200	--	--	3,100	4,000	1.6	15	1.4	--	--	--	<5.0	ND	32	--	--	--	--	--
Oct-87	190	980	--	--	330	40	7.5	<5.0	<5.0	--	--	--	<5.0	ND	46	--	--	--	--	--
Jan-87	380	2,900	--	--	5,500	<50	<50	<50	<50	--	--	--	<50	ND	610	--	--	--	--	--
Jul-86	980	6,400	--	--	5,400	540	<50	<50	<50	--	--	--	<50	ND	650	--	--	--	--	--
Apr-86	1,700	10,000	--	--	30,000	740	<100	<100	<100	--	--	--	<100	ND	<100	--	--	--	--	--
Apr-86	3,700	15,000	--	--	13,000	650	<100	<100	<100	--	--	--	NA	ND	<100	--	--	--	--	--
Mar-86	<100	9,800	--	--	2,500	<100	<100	<100	<100	--	--	--	NA	ND	<100	--	--	--	--	--
Oct-85	4,600	12,000	--	--	15,000	<50	<50	<50	<50	--	--	--	<50	ND	<50	--	--	--	--	--
Nov-84	5,400	520,000	--	--	17,000	NA	<500	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--
Aug-84	8,600	190,000	--	--	21,000	300	ND	600	ND	--	--	--	ND	ND	ND	--	--	--	--	--
Mar-84	NA	13,000	--	--	NA	NA	NA	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--
Sep-83	4,000	730,000	--	--	2,000	NA	ND	ND	ND	--	--	--	ND	ND	NA	--	--	--	--	--
Sep-83	7,000	890,000	--	--	3,000	NA	ND	ND	ND	--	--	--	ND	ND	NA	--	--	--	--	--
Aug-83	86,000	6,100,000	--	--	<5.0	<5.0	130	<5.0	<5.0	--	--	--	<5.0	ND	<5.0	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-3A ZA																				
Oct-13	1.9	250	88	2.6		<1.0	<1.0	0.70 J	<1.0		<2.0	<1.0	0.61 J	<2.0	<1.0	<1.0	NA	NA	NA	NA
Oct-12	<1.0	120	38	1.9		<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Oct-11	1.8	120	38	1.6	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	1.1	120	42	1.4	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	1.7	170	44	2.2	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	<2	140	8.0	<2	--	<2	<2	<2	<2	<2	<4	<2	<2	<4	<2	<2	<2	<2	<2	<4
Oct-07	<5.0	210	15	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	3.7	230	49	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA
Oct-05	4.1	180	48	1.3	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Oct-04	2.3	130	41	1.7	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0	<4.0	<1.0	<1.0	NA	NA	NA	NA
Oct-03	<5.0	150	43	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-02	<2.0	180	17	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	<2.0	<8.0	<2.0	<2.0	NA	NA	NA	NA
Oct-01	<5.0	130	48	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	NA	NA	NA	NA
Oct-00	<10	140	71	<10	--	<10	<10	<10	<10	<10	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-99	2.1	95	78	<2.0	--	9	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Oct-98	<5.0	140	84	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-97	<5.0	180	100	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<10	ND	NA	NA	NA	NA
Oct-96	2.0	110	52	0.6	--	<0.5	0.9	<0.5	<0.5	ND	ND	ND	0.8	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	2.9	180	--	--	121.2	<2.0	3.1	<1.0	1.1	ND	ND	ND	1.9	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<5.0	170	--	--	130	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Feb-94	3.7	130	--	--	60	<1.0	4.6	<0.5	1.2	ND	ND	ND	1.7	ND	<0.5	ND	NA	NA	NA	NA
Oct-93	<5.0	280	--	--	120	<10	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-92	1.1	3.0	--	--	<0.5	<1.0	1.7	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	4.7	17	--	--	<0.5	<0.5	5.9	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-92	2.0	11	--	--	<0.5	<0.5	2.3	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-91	5.8	25	--	--	<0.5	<0.5	5.4	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jul-91	3.2	19	--	--	<0.5	<0.5	6.2	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-91	2.1	10	--	--	<0.5	<0.5	3.1	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-91	1.4	7.4	--	--	<0.5	<0.5	0.7	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-90	1.4	11	--	--	<0.5	<0.5	4.2	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jul-90	<0.5	4.6	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-90	<0.5	1.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-90	<0.5	8.2	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-89	<0.5	4	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<0.5	ND	<0.5	--	--	--	--	--
Aug-89	0.7	5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<0.5	ND	<0.5	--	--	--	--	--
May-89	<1.0	2	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	--	<1.0	ND	<1.0	--	--	--	--	--
Feb-89	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<0.5	ND	<0.5	--	--	--	--	--
Nov-88	<0.5	4	--	--	1.8	<0.5	<0.5	<0.5	<0.5	--	--	--	<0.5	ND	<0.5	--	--	--	--	--
Aug-88	0.5	5	--	--	1.1	<0.5	1.1	<0.5	<0.5	--	--	--	<0.5	ND	<0.5	--	--	--	--	--
May-88	0.4	2	--	--	0.7	<0.1	0.2	<0.1	<0.1	--	--	--	<0.1	ND	<0.2	--	--	--	--	--
May-88	0.4	2	--	--	0.8	<0.1	0.2	<0.1	<0.1	--	--	--	<0.1	ND	<0.1	--	--	--	--	--
Jan-88	0.7	4	--	--	0.8	<0.5	0.6	<0.5	<0.5	--	--	--	<0.5	ND	<0.5	--	--	--	--	--
Jan-88	0.5	2	--	--	0.6	<0.1	0.2	<0.1	<0.1	--	--	--	<0.1	ND	<0.2	--	--	--	--	--
Oct-87	15	460	--	--	310	<2.5	16	<2.5	<2.5	--	--	--	<2.5	ND	<2.5	--	--	--	--	--
Jun-87	24	900	--	--	720	<10	72	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Apr-87	20	920	--	--	740	<10	100	12	<10	--	--	--	86	ND	<10	--	--	--	--	--
Jan-87	<10	3,000	--	--	880	<10	<10	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Sep-86	15	560	--	--	340	<2.0	15	<2.0	<2.0	--	--	--	<2.0	ND	<2.0	--	--	--	--	--
Jul-86	180	1,800	--	--	790	<10	<10	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Apr-86	91	1,500	--	--	220	<1.0	12	<1.0	<1.0	--	--	--	<1.0	ND	<1.0	--	--	--	--	--
Oct-85	<25	2,700	--	--	1,100	<25	<25	<25	<25	--	--	--	<25	ND	<25	--	--	--	--	--
Oct-85	170	3,100	--	--	3,200	<50	95	<50	<50	--	--	--	480	ND	<50	--	--	--	--	--
Nov-84	260	1,300	--	--	1,100	NA	42	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--
Aug-84	210	530	--	--	690	ND	13	ND	2	--	--	--	ND	ND	ND	--	--	--	--	--
Mar-84	NA	240	--	--	NA	NA	NA	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--
Sep-83	560	300	--	--	91	NA	16	ND	<1.0	--	--	--	52	ND	NA	--	--	--	--	--
Sep-83	580	290	--	--	96	NA	16	NA	<1.0	--	--	--	35	ND	NA	--	--	--	--	--
Aug-83	1,100	1,600	--	--	36	<5.0	0.2	<5.0	<5.0	--	--	--	<5.0	ND	<5.0	--	--	--	--	--
T-6A ZA																				
Oct-07	<0.5	22	17	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.62	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
Oct-06	<0.5	24	22	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
Oct-05	<0.5	21	28	0.51	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
Oct-04	<0.5	14	30	0.92	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-03	0.61	8.5	2.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-02	0.72	9.3	2.7	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-01	<0.5	9.2	1.7	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<2.0	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-00	<1.0	7.3	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	ND	ND	<1.0	ND	<1.0	<1.0	NA	NA	NA	NA
Oct-99	<1.0	9.4	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-98	<1.0	9.4	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-97	<0.5	7.4	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	0.6	ND	<1.0	ND	NA	NA	NA	NA
Oct-96	<0.5	7.6	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	0.8	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	6.5	--	--	<1.0	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<5.0	19	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-93	<0.5	6.3	--	--	<0.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	5.6	--	--	<0.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Oct-91	<0.5	7.8	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-90	<0.5	9.0	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Aug-89	<0.5	14	--	--	0.7	<0.5	0.6	<0.5	<0.5	--	--	--	0.7	ND	<0.5	--	--	--	--	--
May-88	<0.5	13	--	--	1.5	<0.5	2.5	<0.5	<0.5	--	--	--	2.1	ND	<0.5	--	--	--	--	--
Jan-88	<0.5	21	--	--	1.6	<0.5	2.6	<0.5	<0.5	--	--	--	2.1	ND	<0.5	--	--	--	--	--
Jan-87	<10	52	--	--	<10	<10	<10	<10	<10	--	--	--	37	ND	<10	--	--	--	--	--
Oct-85	<0.5	68.5	--	--	10	<0.5	12	<0.5	<0.5	--	--	--	21	ND	<0.5	--	--	--	--	--
Mar-84	NA	27	--	--	NA	NA	NA	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-7A ZA																				
Oct-13	1.6 J	240	77	1.7 J		<2.5	<2.5	<2.5	<2.5		<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	NA	NA	NA	NA
Oct-13 Dup	1.7 J	250	81	1.8 J		<2.5	<2.5	<2.5	<2.5		<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	NA	NA	NA	NA
Oct-12	<2.5	56/63	230	<2.5		<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-11 Dup	<2.5	140	170	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-11	0.67	140	180	2.1	--	1.8	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10 Dup	<5.0	190	51	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-10	<5.0	220	56	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-09 Dup	1.6	180	54	1.9	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	1.6	180	52	2.4	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08 Dup	<4	330	75	<4	--	<4	<4	<4	<4	<4	<8	<4	<4	<8	<4	<4	<4	<4	<4	<8
Oct-08	<4	370	79	4.2	--	<4	<4	<4	<4	<4	<8	<4	<4	<8	<4	<4	<4	<4	<4	<8
Oct-07	<5.0	370	80	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-07 Dup	<5.0	380	81	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
May-07	<5.0	290	100	<5.0	--	NA	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	5.4	<5.0	<5.0	<5.0	<15
Jan-07	NA	430	120	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<4.0	330	85	<4.0	--	<4.0	<4.0	<4.0	<4.0	<4.0	<8.0	<4.0	<4.0	<8.0	<4.0	<4.0	NA	NA	NA	NA
Oct-06 Dup	<2.0	320	76	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<4.0	<2.0	<2.0	NA	NA	NA	NA
Jul-06	<5.0	450	140	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	360	180	9.9	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-05	<2.0	340	130	3.3	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA
Oct-04	<2.0	370	110	4.6	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	<2.0	<8.0	<2.0	<2.0	NA	NA	NA	NA
Apr-04	2.0	340	170	4.4	--	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<2.0
Oct-03 (1)	<5.0	480	268	8.7	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Apr-03	<1.0	430	210	2.6	--	<1.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-02	<5.0	510	190	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	<5.0	<20	<5.0	<5.0	NA	NA	NA	NA
Apr-02	<10	350	160	<10	--	<10	<10	<10	<10	ND	<20	<10	<10	ND	<10	<10	NA	NA	NA	NA
Jan-02	<10	290	120	<10	--	<10	<10	<10	<10	ND	<20	<10	<10	ND	<10	<10	NA	NA	NA	NA
Oct-01	<5.0	260	71	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	NA	NA	NA	NA
Jun-01	1.6	220	76	1.4	--	<2.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	1.2	<2.0
Oct-00	<10	120	87	<10	--	<10	<10	<10	<10	<10	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-99	<2.0	130	21	<2.0	--	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	<2.0	NA	NA	NA	NA
Oct-99 Dup	<2.0	140	20	<2.0	--	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Oct-98	<5.0	200	18	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	<25	NA	NA	NA	NA
Oct-97	<10	270	33	<10	--	<10	<10	<10	<10	ND	ND	ND	<10	ND	<20	<50	NA	NA	NA	NA
Oct-96	1.8	260	32	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	1.5	ND	<1.0	ND	NA	NA	NA	NA
Oct-95	<5.0	400	--	--	47	<10	<5.0	<5.0	<5.0	ND	ND	ND	5.9	ND	<5.0	ND	NA	NA	NA	NA
Nov-94	<25	410	--	--	100	<25	<25	<25	<25	ND	ND	ND	<25	ND	<25	ND	NA	NA	NA	NA
Oct-94	450	1,700	--	--	3,300	<250	<250	<250	<250	ND	ND	ND	<250	ND	<250	ND	NA	NA	NA	NA
Oct-93	<5.0	480	--	--	90	<10	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-92	2.4	670	--	--	222	<1.0	2	<0.5	1	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	5.0	980	--	--	425	<0.5	3	1	2	ND	ND	ND	1	ND	<0.5	ND	NA	NA	NA	NA
Jan-92	<10	1,200	--	--	980	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Jul-91	10	720	--	--	720	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	14	ND	<5.0	ND	NA	NA	NA	NA
Apr-91	<5.0	720	--	--	640	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-90	<5.0	820	--	--	870	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Jul-90	<20	810	--	--	20	<20	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Apr-90	<10	1,300	--	--	760	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Jan-90	<10	1,300	--	--	640	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Oct-89	<5.0	1,000	--	--	340	<5.0	<5.0	<5.0	<5.0	--	--	--	<10	ND	<5.0	--	--	--	--	--
Oct-89	6	820	--	--	320	<2.0	5	<2.0	<2.0	--	--	--	<2.0	ND	<2.0	--	--	--	--	--
Aug-89	<10	1,400	--	--	340	<10	38	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
May-89	5.7	1,300	--	--	320	<5.0	<5.0	<5.0	<5.0	--	--	--	<5.0	ND	<5.0	--	--	--	--	--
Feb-89	<25	1,200	--	--	190	<25	<25	<25	<25	--	--	--	<25	ND	<25	--	--	--	--	--
Feb-89	<25	1,100	--	--	200	<25	<25	<25	<25	--	--	--	<25	ND	<25	--	--	--	--	--
Nov-88	<10	1,200	--	--	300	<10	<10	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Aug-88	<10	970	--	--	320	<10	<10	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Jun-88	<25	1,200	--	--	610	<25	<25	<25	<25	--	--	--	360	ND	<25	--	--	--	--	--
Jan-88	<50	3,200	--	--	570	<50	<50	<50	<50	--	--	--	<50	ND	<50	--	--	--	--	--
Oct-87	<25	2,700	--	--	1,600	<25	<25	<25	<25	--	--	--	<25	ND	<25	--	--	--	--	--
Jun-87	<25	3,000	--	--	3,900	<25	<25	<25	<25	--	--	--	<25	ND	<25	--	--	--	--	--
Apr-87	<25	2,800	--	--	3,500	<25	<25	59	<25	--	--	--	<25	ND	<25	--	--	--	--	--
Jan-87	<10	3,000	--	--	2,500	<10	<10	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Sep-86	<12	2,200	--	--	1,500	<12	<12	<12	<12	--	--	--	<12	ND	<12	--	--	--	--	--
Jul-86	<25	3,300	--	--	1,900	<25	<25	<25	<25	--	--	--	<25	ND	<25	--	--	--	--	--
Apr-86	<10	1,400	--	--	<10	<10	<10	1,800	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Jan-86	<25	2,500	--	--	1,400	<25	<25	<25	<25	--	--	--	NA	ND	<25	--	--	--	--	--
Oct-85	28	3,800	--	--	4,200	340	87	<50	<50	--	--	--	<50	ND	<50	--	--	--	--	--
Oct-85	<50	3,600	--	--	3,700	<50	<50	<50	<50	--	--	--	690	ND	<50	--	--	--	--	--
Nov-84	15	3,100	--	--	1,800	NA	22	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--
Aug-84	120	6,800	--	--	2,200	ND	ND	ND	ND	--	--	--	ND	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-8A ZA																				
Oct-13	2.0	110	57	3.6		0.91	0.25 J	0.69	0.46 J		<1.0	<0.50	0.56	<1.0	<0.50	<0.50	NA	NA	NA	NA
May-13	1.5	110	58	2.8		0.71	<0.50	0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-12	<2.5	160	82	<2.5		<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Apr-12	1.1	110	67	1.1		0.88	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-11	1.6	140	69	2.1	--	1.3	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	0.99	87	65	2.8	--	4.6	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-10	<0.50	43	26	2.1	--	3.7	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	0.54	36	33	3.2	--	21	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Feb-09	<0.50	21	23	1.4	--	9.2	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-08	0.76	84	28	1.1	--	4.9	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1
Oct-07	<5.0	59	71	<5.0	--	36.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-07	<5.0	170	63	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-07	8.2	180	81	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	57	34	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-06	<5.0	210	94	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	86	83	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	63	44	<5.0	--	5.8	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-05	<5.0	200	130	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-05	<5.0	170	58	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-05	<5.0	140	44	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-04	2.8	130	39	2.3	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0	<4.0	<1.0	<1.0	NA	NA	NA	NA
Jul-04	<5.0	150	50	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Apr-04	3.2	120	45	2.5	--	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<2.0
Jan-04	<5.0	110	33	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Oct-03	<5.0	140	48	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Jul-03	2.0	150	41	1.2	--	<2.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Mar-03	1.9	150	45	<1.0	--	<2.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Jan-03	3.3	140	49	1.2	--	<2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<2.0	<1.0	NA	<1.0	NA	NA	NA	NA
Oct-02	2.4	130	54	1.4	--	14	1.2	2.8	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	1.3	<1.0	1.2	<2.0
Jul-02	<1.0	120	44	<1.0	--	<2.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Mar-02	2.4	140	41	1.3	--	<2.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Jan-02	2.0	170	62	1.5	--	<2.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	6.8	2.7
Nov-01	<5.0	140	62	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	ND	NA	<5.0	NA	<5.0	<5.0	<10
Oct-01	2.8	190	68	1.4	--	<2.0	1.5	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Aug-01	5.9	180	72	1.4	--	<2.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Jun-01	2.6	150	64	1.4	--	<2.0	1.6	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	2.2	<2.0
Oct-00	<10	150	64	<10	--	<10	<10	<10	<10	<10	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-00 Dup	<10	140	62	<10	--	<10	<10	<10	<10	<10	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-99	2.6	130	77	<2.0	--	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	<2.0	NA	NA	NA	NA
Apr-99	<10	110	72	<10	--	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-98	3.0	110	120	<2.0	--	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	<2.0	NA	NA	NA	NA
Apr-98	<5.0	170	110	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<20	ND	<5.0	<5.0	NA	NA	NA	NA
Oct-97	<10	210	170	<10	--	<10	<10	<10	<10	ND	ND	ND	<10	ND	<20	<10	NA	NA	NA	NA
Apr-97	3.8	200	160	12	--	<1.0	2.9	<1.0	1.3	ND	ND	ND	2.7	ND	2.2	ND	NA	NA	NA	NA
Oct-96	2.4	160	160	3.7	--	<0.5	2.3	0.8	1.1	ND	ND	ND	1.5	ND	2.2	ND	NA	NA	NA	NA
Apr-96	4.0	230	--	--	180	<2.5	3	<2.5	<2.5	ND	ND	ND	<2.5	ND	<2.5	ND	NA	NA	NA	NA
Oct-95	4.4	260	--	--	222.5	<4.0	4.9	2.1	<2.0	ND	ND	ND	4	ND	<2.0	ND	NA	NA	NA	NA
Apr-95	<5.0	230	--	--	200	<10	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-94	<25	300	--	--	330	<25	<25	<25	<25	ND	ND	ND	<25	ND	<25	ND	NA	NA	NA	NA
Apr-94	4.9	280	--	--	221	<0.5	8	3	<0.5	ND	ND	ND	3	ND	1	ND	NA	NA	NA	NA
Oct-93	<5.0	250	--	--	200	<10	7	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Apr-93	2.6	160	--	--	110	<5.0	4	<2.5	<2.5	ND	ND	ND	<2.5	ND	<2.5	ND	NA	NA	NA	NA
Oct-92	7.3	260	--	--	<50	2	4	<0.5	<0.5	ND	ND	ND	NA	ND	1	ND	NA	NA	NA	NA
Apr-92	8.0	400	--	--	140	<2.0	19	<2.0	<2.0	ND	ND	ND	21	ND	<2.0	ND	NA	NA	NA	NA
Jul-91	4.6	110	--	--	49	<0.5	2	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-91	<2.0	160	--	--	63	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Jan-91	1.0	100	--	--	58	<1.0	1	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-90	2.8	100	--	--	50	<0.5	4	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jul-90	<2.0	120	--	--	30	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Apr-90	3.0	99	--	--	28	<0.5	1	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Feb-90	2.6	76	--	--	20	<0.5	1	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-89	7	250	--	--	65	2	7	2	<1.0	--	--	--	3	ND	8	--	--	--	--	--
Aug-89	14	340	--	--	62	<1.0	10	4	1	--	--	--	5	ND	<1.0	--	--	--	--	--
Feb-89	<10	200	--	--	24	<10	<10	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Nov-88	7	260	--	--	<2.0	<2.0	7	<2.0	<2.0	--	--	--	4	ND	9	--	--	--	--	--
Aug-88	9.0	370	--	--	180	<5.0	10	<5.0	<5.0	--	--	--	25	ND	<5.0	--	--	--	--	--
Jan-88	23	570	--	--	330	<5.0	18	<5.0	<5.0	--	--	--	27	ND	<5.0	--	--	--	--	--
Oct-87	9.8	690	--	--	350	<5.0	17	<5.0	<5.0	--	--	--	<5.0	ND	<5.0	--	--	--	--	--
Oct-87	<0.5	830	--	--	290	<1.0	<0.5	<0.5	<0.5	--	--	--	<1.0	ND	NA	--	--	--	--	--
Jul-87	<10	1,700	--	--	1,000	<10	25	<10	<10	--	--	--	12	ND	<10	--	--	--	--	--
Jan-87	23	1,200	--	--	540	<5.0	24	<5.0	<5.0	--	--	--	<5.0	ND	53	--	--	--	--	--
Jul-86	<10	1,400	--	--	650	<10	<10	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Apr-86	20	1,100	--	--	<10	<10	<10	<10	<10	--	--	--	<10	ND	800	--	--	--	--	--
Oct-85	44	2,200	--	--	2,400	<25	77	<25	<25	--	--	--	320	ND	<25	--	--	--	--	--
Nov-84	37	2,200	--	--	1,300	NA	9.8	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--
Aug-84	130	2,800	--	--	2,100	ND	ND	ND	ND	--	--	--	ND	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-9A ZA																				
Oct-13	0.97	67	74	2.9		0.81	<0.50	0.44 J	0.47 J		<1.0	<0.50	<0.50	<1.0	3.1	<0.50	NA	NA	NA	NA
Oct-12	0.9	50	82	3.3		0.91	<0.5	0.54	<0.5	<0.5	<1.0	<0.5	<0.5	<1.0	3	<0.5	<0.5	<0.5	<0.5	<1.0
Oct-11	1.6	73	100	2.9	--	2.2	<0.50	0.55	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	3.7	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	0.83	48	88	2.2	--	3.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	2.6	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	1.5	66	82	3.0	--	2.0	<0.50	0.58	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	4.0	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	1.3	50	98	2.7	--	1.2	<1	<1	<1	<1	<2	<1	<1	<2	3.1	<1	<1	<1	<1	<2
Oct-07	<5.0	120	130	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
May-07	<5.0	98	92	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-07	<5.0	130	120	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	100	100	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-06	<5.0	60	130	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	47	190	8.1	--	6.8	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	56	140	<5.0	--	21	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-05	<5.0	56	170	<5.0	--	7.3	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-05	<5.0	140	90	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-05	<5.0	7.5	320	<5.0	--	8.2	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-05	<5.0	120	92	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-04	<5.0	110	74	<5.0	--	5.3	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-04	2.9	85	81	2.3	--	7.2	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<2.0
Jan-04	<5.0	92	56	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Oct-03	<5.0	120	81	<5.0	--	24	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Apr-03	1.8	120	87	1.4	--	<2.0	1.1	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-02	<5.0	110	66	<5.0	--	8.1	<5.0	<5.0	<5.0	<5.0	<10	<10	<5.0	<20	<5.0	<5.0	NA	NA	NA	NA
Jul-02	<2.5	120	95	<2.5	--	7.3	<2.5	<2.5	<2.5	ND	<5.0	<2.5	<2.5	ND	<2.5	<2.5	NA	NA	NA	NA
Apr-02	3.0	130	100	<2.5	--	9.0	<2.5	<2.5	<2.5	ND	<5.0	<2.5	<2.5	ND	3.0	<2.5	NA	NA	NA	NA
Jan-02	3.0	140	110	<2.5	--	11	<2.5	<2.5	<2.5	ND	<5.0	<2.5	<2.5	ND	3.9	<2.5	NA	NA	NA	NA
Oct-01	<5.0	110	87	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<20	<5.0	<5.0	NA	NA	NA	NA
Aug-01	<5.0	120	110	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	<5.0	<5.0	<25	ND	NA	<5.0	<5.0	<5.0	<5.0	<5.0
Oct-00	<10	140	110	<10	--	<10	<10	<10	<10	<10	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-00 Dup	<10	140	110	<10	--	<10	<10	<10	<10	<10	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-99	3.5	130	100	2.2	--	<2.0	2.4	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	<2.0	NA	NA	NA	NA
Apr-99	<10	140	140	<10	--	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-98	3.4	130	150	2.1	--	<2.0	2.6	<2.0	<2.0	ND	ND	ND	<2.0	ND	6.0	<2.0	NA	NA	NA	NA
Apr-98	<5.0	150	170	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<20	ND	<5.0	<5.0	NA	NA	NA	NA
Oct-97	<10	210	290	<10	--	<10	<10	<10	<10	ND	ND	ND	<10	ND	<20	<10	NA	NA	NA	NA
Apr-97	5.0	200	250	16	--	1.4	3.9	1.9	1.7	ND	ND	ND	3.3	ND	9.8	ND	NA	NA	NA	NA
Oct-96	4.2	190	270	3.5	--	<1.0	4.4	2.7	1.7	ND	ND	ND	2.8	ND	11	ND	NA	NA	NA	NA
Apr-96	6.2	240	--	--	293	<2.5	5.3	2.7	<2.5	ND	ND	ND	<2.5	ND	12	ND	NA	NA	NA	NA
Oct-95	5.7	210	--	--	252.9	<5.0	5.4	3.2	<2.5	ND	ND	ND	3.5	ND	14	ND	NA	NA	NA	NA
Apr-95	4.7	180	--	--	170	<6.0	3.8	<3.0	<3.0	ND	ND	ND	<3.0	ND	12	ND	NA	NA	NA	NA
Oct-94	<25	260	--	--	160	<25	<25	<25	<25	ND	ND	ND	<25	ND	<25	ND	NA	NA	NA	NA
Apr-94	9.2	270	--	--	263	6.7	12	9.1	2.3	ND	ND	ND	<0.5	ND	22	ND	NA	NA	NA	NA
Oct-93	7.0	330	--	--	320	<10	8.0	<5.0	<5.0	ND	ND	ND	8.0	ND	17	ND	NA	NA	NA	NA
Apr-93	8.0	420	--	--	240	30	8.0	<5.0	<5.0	ND	ND	ND	5.0	ND	16	ND	NA	NA	NA	NA
Oct-92	13	470	--	--	233	8.7	9.3	5.8	3.2	ND	ND	ND	NA	ND	21	ND	NA	NA	NA	NA
Apr-92	16	740	--	--	380	<5.0	18	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Jan-92	22	850	--	--	770	<5.0	24	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Jul-91	26	720	--	--	580	<5.0	17	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Apr-91	20	1,000	--	--	940	<10	<10	<10	<10	ND	ND	ND	<10	ND	22	ND	NA	NA	NA	NA
Jan-91	30	1,700	--	--	700	<10	10	10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Oct-90	20	1,400	--	--	930	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Jul-90	45	1,100	--	--	880	64	8.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	11	ND	NA	NA	NA	NA
Apr-90	30	2,600	--	--	1,500	120	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Feb-90	<50	2,800	--	--	200	<50	<50	<50	<50	ND	ND	ND	<50	ND	<50	ND	NA	NA	NA	NA
Oct-89	69	820	--	--	770	200	14	3	<2.0	--	--	--	<2.0	ND	110	--	--	--	--	--
May-88	25	1,000	--	--	710	170	26	13	<5.0	--	--	--	24	ND	63	--	--	--	--	--
Jan-88	<25	1,700	--	--	1,400	230	<25	<25	<25	--	--	--	<25	ND	<25	--	--	--	--	--
Oct-87	44	770	--	--	430	220	22	<5.0	<5.0	--	--	--	55	ND	<5.0	--	--	--	--	--
Jul-87	<10	1,000	--	--	1,400	390	13	<10	<10	--	--	--	18	ND	36	--	--	--	--	--
Jul-86	21	1,100	--	--	1,200	540	<10	<10	<10	--	--	--	<10	ND	82	--	--	--	--	--
Apr-86	<10	1,100	--	--	1,600	780	<10	<10	<10	--	--	--	<10	ND	<10	--	--	--	--	--
Mar-86	<10	2,500	--	--	2,000	<10	<10	<10	<10	--	--	--	NA	ND	<10	--	--	--	--	--
Mar-86	<10	1,700	--	--	2,100	<10	<10	<10	<10	--	--	--	NA	ND	<10	--	--	--	--	--
Mar-86	120	1,100	--	--	2,500	710	<10	<10	<10	--	--	--	NA	ND	<10	--	--	--	--	--
Oct-85	320	5,600	--	--	<50	<50	60	<50	<50	--	--	--	1,200	ND	<50	--	--	--	--	--
Nov-84	31	1,800	--	--	4,200	NA	12	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--
Aug-84	280	2,000	--	--	7,900	3,500	ND	47	ND	--	--	--	ND	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-13A ZA																				
Oct-13	<0.50	1.2	79	8.2		38	<0.50	<0.50	0.59		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
May-13	<0.50	3.1	31	4.1		16	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
May-13 Dup	<0.50	2.9	30	3.9		16	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-12	<0.50	1.2	20	2.3		17	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-12	<0.50	0.74	18	1.6		5.8	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.52	<0.50	<0.50	<0.50	0.56	<1.0
Oct-11	0.84	70	66	2.8	--	10.0	<0.50	0.54	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	0.52	72	51	2.2	--	6.9	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-10	<0.50	57	31	1.4	--	4.2	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	26	40	2.40	--	8.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.52	1.2	<0.50	<0.50	<0.50	<1.0
Feb-09	<0.50	30	32	2.1	--	8.3	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	2.1	2.9	NA	NA	NA	NA
Oct-08	<25	38	<25	<25	--	<25	<25	<25	<25	<25	<50	<25	<25	<50	<25	<25	<25	<25	3100	<50
Oct-07	<5.0	48	260	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-07	<5.0	180	64	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-07	<5.0	200	75	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-07	6.2	300	120	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	210	99	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-06	<5.0	200	120	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	180	140	6.2	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	210	98	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Nov-05	<5.0	200	98	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
T-14A ZA																				
Oct-13	<0.50	2.0	53	6.3		35	<0.50	0.29 J	0.78		<1.0	<0.50	<0.50	<1.0	2.1	0.19 J	NA	NA	NA	NA
May-13	<0.50	4.2	33	4.4		25	<0.50	<0.50	0.63		<1.0	<0.50	<0.50	<1.0	2.1	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-12	<0.50	0.96	27	3.8		26	<0.50	<0.50	0.71	<0.50	<1.0	<0.50	<0.50	<1.0	2	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-12	<0.50	3.0	42	3.1		16	<0.50	<0.50	0.51	<0.50	<1.0	<0.50	<0.50	<1.0	2.3	0.86	<0.50	<0.50	<0.50	<1.0
Oct-11	<0.50	28	38	2.8	--	6.7	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.0	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	<0.50	36	42	2.4	--	9.0	<0.50	<0.50	0.60	<0.50	<1.0	<0.50	<0.50	<1.0	1.9	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-10	<0.50	28	37	2.2	--	9.7	<0.50	<0.50	0.51	<0.50	<1.0	<0.50	<0.50	<1.0	1.7	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	9.0	16	1.9	--	7.4	<0.50	<0.50	0.53	<0.50	<1.0	<0.50	<0.50	<1.0	1.8	1.9	<0.50	<0.50	0.54	<1.0
Feb-09	<0.50	6.2	15	2.0	--	7.8	<0.50	<0.50	0.59	<0.50	<1.0	<0.50	<0.50	<1.0	2.4	2.2	NA	NA	NA	NA
Oct-08	<20	<20	45	<20	--	<20	<20	<20	<20	<20	<40	<20	<20	<40	<20	<20	<20	<20	1300	<40
Oct-07	<5.0	54	200	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-07	<5.0	120	51	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-07	<5.0	160	58	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	200	57	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	6.8	140	92	8	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	150	63	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Nov-05	<5.0	130	59	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
T-15A ZA																				
Oct-13	2.0	100	62	2.9		0.46 J	0.35 J	0.70	0.49 J		<1.0	<0.50	0.36 J	<1.0	1.2	<0.50	NA	NA	NA	NA
May-13	1.8	100	50	2.7		<0.50	<0.50	0.61	<0.50		<1.0	<0.50	<0.50	<1.0	1.0	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-12	<2.5	130	62	3.8		<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Apr-12	2.2	130	58	3.2		<0.50	<0.50	0.64	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.1	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-11	3	130	61	3.8	--	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-10	1.3	110	48	2.2	--	0.50	<0.50	0.54	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.91	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	92	37	2.4	--	0.61	<0.50	0.64	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.90	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	1.6	140	53	2.2	--	1.5	<1	<1	<1	<1	<2	<1	<1	<2	<1	<1	<1	<1	<1	<2
Oct-07	<5.0	160	75	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-07	<5.0	130	63	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
May-07	<5.0	140	66	<5.0	--	8.2	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-07	5.2	170	87	<5.0	--	7.4	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	140	66	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-06	<5.0	130	91	<5.0	--	8.2	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	51	140	11	--	29	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	<5.0	110	<5.0	--	83	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Nov-05	<5.0	8.2	160	<5.0	--	37	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
T-16A ZA																				
Oct-13	1.2	94	69	3.6		3.2	0.20 J	0.58	0.58		<1.0	<0.50	0.23 J	<1.0	1.4	<0.50	NA	NA	NA	NA
Oct-12	1	68	63	3.2		2.1	<0.50	0.57	0.5	<0.50	<1.0	<0.50	<0.50	<1.0	1.1	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-11	1.6	91	67	2.9	--	0.53	<0.50	0.7	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.5	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	0.81	72	64	2.2	--	0.76	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.89	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	0.59	40	44	2.2	--	0.84	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.61	<0.5	0.6	<0.50	0.56 B	<1.0
Oct-08	0.9	63	77	2.3	--	2.6	<0.5	0.53	<0.5	<0.5	<1	<0.5	<0.5	<1	1.4	<0.5	<0.5	<0.5	<0.5	<1
Oct-07	<5.0	79	160	<5.0	--	8.8	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.1	NA	<5.0	<5.0	<5.0	<5.0	<15
May-07	<5.0	120	71	<5.0	--	7.3	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	80	100	<5.0	--	8.2	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	17	160	9.5	--	26	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	20	120	<5.0	--	45	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Nov-05	<5.0	24	160	<5.0	--	32	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
T-17A ZA																				
Oct-13	1.3	86	21	0.42 J		<0.50	<0.50	0.25 J	0.35 J		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
May-13	0.80	71	14	<0.50		<0.50	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-12	1.3	92	4.5	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	0.62	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-12	1.3	96	5.8	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Nov-11	1.7	110	6.6	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-19A ZA																				
Oct-13	<0.50	<0.50	2.6	0.87		2.3	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	0.92	2.6	NA	NA	NA	NA
May-13	<0.50	<0.50	3.4	0.84		4.3	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	0.98	2.0	<0.50	<0.50	<0.50	<1.0
Oct-12	<0.50	<0.50	9.1	1.3		5.6	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.8	3.8	<0.50	<0.50	0.8	<1.0
Apr-12	<0.50	<0.50	2.1	1.2		0.92	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.60	4.3	<0.50	<0.50	0.77	<1.0
Oct-11	<0.50	4.1	16	1.60	--	10	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.80	1.3	<0.50	<0.50	<0.50	1
Oct-10	<0.50	0.89	7.7	0.72	--	10	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.87	1.2	<0.50	<0.50	<0.50	<1.0
Apr-10 Dup	<0.50	0.89	1.6	<0.50	--	0.81	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.56	1.1	<0.50	<0.50	<0.50	<1.0
Apr-10	<0.50	0.98	1.6	<0.50	--	0.88	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.65	1.3	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	<0.50	4.6	0.84	--	2.8	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.3	3.9	<0.50	<0.50	<0.50	<1.0
Feb-09 Dup	<0.50	<0.50	2.6	0.78	--	1.4	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.2	6.3	NA	NA	NA	NA
Feb-09	<0.50	<0.50	1.9	0.65	--	1.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.0	6.0	NA	NA	NA	NA
Oct-08	<50	<50	<50	<50	--	<50	<50	<50	<50	<50	<100	<50	<50	<100	<50	<50	<50	<50	3500	<100
Oct-07	<5.0	53	140	<5.0	--	8	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Sep-07	<5.0	140	55	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
T-23A ZA																				
Oct-13	<0.50	19	54	12		7.6	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
May-13	<0.50	48	57	4.4		7.6	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-12	<0.50	36	73	2.4		6.6	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-12	<0.50	2.0	58	2.0		3.2	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.1	0.79	<0.50	<0.50	3.5	<1.0
Apr-12 Dup	<0.50	2.0	61	1.9		3.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.0	0.76	<0.50	<0.50	3.3	<1.0
Oct-11	0.62	62	39	4.2	--	2.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	0.60	51	37	4.3	--	3.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.56	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-10	<0.50	41	19	2.8	--	2.0	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.54	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	11	14	2.0	--	3.1	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.55	ND	<0.50	<0.50	<0.50	<1.0
Feb-09	<0.50	17	29	2.1	--	9.7	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.5	1.8	NA	NA	NA	NA
Oct-08	<10	16	12	<10	--	<10	<10	<10	<10	<10	<20	<10	<10	<20	<10	<10	<10	<10	890	<20
Oct-07	<5.0	130	120	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Sep-07	7.7	210	21	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
T-25A ZA																				
Oct-13	<0.50	0.57	27	4.7		42	<0.50	<0.50	0.75		<1.0	<0.50	<0.50	<1.0	2.5	<0.50	NA	NA	NA	NA
May-13	<0.50	1.4	22	3.4		22	<0.50	<0.50	0.65		<1.0	<0.50	<0.50	<1.0	2.2	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-12	<0.50	0.86	10	3.5		12	<0.50	<0.50	0.71	<0.50	<1.0	<0.50	<0.50	<1.0	2.3	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-12	<0.50	1.1	19	2.7		7.3	<0.50	<0.50	0.52	<0.50	<1.0	<0.50	<0.50	<1.0	3.1	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-11	1.5	63	50	3.0	--	2.1	<0.50	0.51	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.8	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	0.8	47	50	2.5	--	7.3	<0.50	<0.50	0.55	<0.50	<1.0	<0.50	<0.50	<1.0	2.1	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-10	1.0	39	34	2.3	--	6.8	<0.50	<0.50	<0.50	<0.50	<1.0	0.5	<0.50	<1.0	2.5	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	ND	26	17	2.0	--	3.3	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.3	<0.50	<0.50	<0.50	<0.50	<1.0
Feb-09	1.3	41	42	2.3	--	9.7	<0.50	<0.50	0.55	<0.50	<1.0	<0.50	<0.50	<1.0	3.3	<0.50	NA	NA	NA	NA
Oct-08	1.0	42	38	2.2	--	7.6	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<1	4.2	<0.5	<0.5	<0.5	<0.5	<1
Oct-07	<5.0	66	160	<5.0	--	9.6	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Sep-07	5.5	160	52	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
36S ZA																				
Oct-13	2.3	74	8.1	<0.5	--	<0.5	0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
Oct-12	2.0 J	1	10	<0.5	--	<0.5	0.6	0.5	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
Oct-11	1.8 J	73	8	<0.5	--	<0.5	0.7	0.5	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
Oct-10+	2.0	75	11	0.6	--	<0.5	0.7	0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-09+	2.2	80	9.3	<0.5	--	<0.5	0.6	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-08+	2.4	98	13	0.6	--	<0.5	0.7	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-07+	1.5	70	15	0.9	--	<0.7	<0.7	0.8	<0.7	ND	ND	ND	<0.7	ND	<0.7	<0.7	NA	NA	NA	NA
Oct-06+	2.6	98	20	0.9	--	<0.5	0.9	0.6	<0.5	ND	ND	ND	0.8	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-05+	2.1	91	22	0.8	--	<1.0	1.1	0.6	<0.5	ND	ND	ND	0.6	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-04+	1.8	91	34	1.1	--	<0.5	1.1	0.6	0.5	ND	ND	ND	1.9	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-03+	1.7	100	53	1.6	--	1.1	1.2	0.7	0.7	ND	ND	ND	<1.0	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-02+	1.8	140	70	1.9	--	<0.5	1.7	0.8	0.7	ND	ND	ND	1.2	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-01+	2.1	140	110	2.8	--	<0.5	2.5	1.1	1.0	ND	ND	ND	1.8	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-00+	1.3	83	100	5.6	--	<1.0	1.6	1.2	0.9	ND	ND	ND	1.8	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-99	1.2	50	83	4.4	--	<1.0	1.7	<1.0	<1.0	ND	ND	ND	1.0	ND	<1.0	<1.0	NA	NA	NA	NA
Oct-97+	<0.5	20	16	5.2	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-96	0.7	25	6.1	3.0	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-95	<1.0	21	--	--	<1.0	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	<1.0	NA	NA	NA	NA
Oct-94	<5.0	19	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	<5.0	NA	NA	NA	NA
Oct-93	<2.5	66	--	--	<2.5	<5.0	<2.5	<2.5	<2.5	ND	ND	ND	<2.5	ND	<2.5	<2.5	NA	NA	NA	NA
Oct-92	2.1	35	--	--	<0.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-89	4	130	--	--	13	<0.5	5.7	0.8	<0.5	--	--	--	2	ND	<0.5	--	--	--	--	--
May-88	3.9	140	--	--	26	<1.0	20	3.3	1.6	--	--	--	13	ND	1.8	--	--	--	--	--
Jan-88	5.8	170	--	--	15	<1.0	23	3.8	1.3	--	--	--	14	ND	<1.0	--	--	--	--	--
Oct-87	3.5	160	--	--	10	<1.0	20	2.5	1.7	--	--	--	14	ND	<1.0	--	--	--	--	--
Jun-87	<1.0	170	--	--	11	<1.0	15	1.6	<1.0	--	--	--	8.2	ND	<1.0	--	--	--	--	--
Apr-87	4	200	--	--	12	<2.5	34	6	<2.5	--	--	--	19	ND	<2.5	--	--	--	--	--
Jan-87	<10	140	--	--	<10	<10	34	<10	<10	--	--	--	28	ND	<10	--	--	--	--	--
Sep-86	5.3	200	--	--	5.75	<1.0	27.5	2.9	2.1	--	--	--	16.5	ND	7.95	--	--	--	--	--
Jul-86	3.3	59	--	--	7.7	<0.5	32	3.2	1.6	--	--	--	15	ND	<0.5	--	--	--	--	--
Apr-86	3.4	130	--	--	10	<0.5	36	3.5	1.5	--	--	--	<0.5	ND	<0.5	--	--	--	--	--
Jan-86	11	190	--	--	25	<2.0	42	3.4	<2.0	--	--	--	<2.0	ND	<2.0	--	--	--	--	--
Oct-85	<5.0	250	--	--	23	<5.0	65	<5.0	<5.0	--	--	--	90	ND	ND	--	--	--	--	--
Nov-84	4.7	150	--	--	8.8	NA	19	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--
Aug-84	8	230	--	--	12	ND	23	2	ND	--	--	--	40	ND	ND	--	--	--	--	--
Mar-84	NA	360	--	--	NA	NA	NA	NA	NA	--	--	--	NA	ND	NA	--	--	--	--	--
Aug-83	19	470	--	--	<1.0	ND	36	16	<1.0	--	--	--	<1.0	ND	ND	--	--	--	--	--
May-83	ND	82	--	--	ND	ND	ND	ND	ND	--	--	--	ND	ND	ND	--	--	--	--	--
Apr-83	13	400	--	--	23	ND	16	ND	ND	--	--	--	12	ND	ND	--	--	--	--	--
Aug-82	10	590	--	--	55	ND	19	<2.0	<2.0	--	--	--	2	ND	ND	--	--	--	--	--
Jun-82	18	710	--	--	<10	ND	42	<10	<10	--	--	--	19	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
36D ZA																				
Oct-13	1.3	38	28	0.8	--	<0.5	<0.5	0.6	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
Oct-11	1.6 J	47	29	1.0	--	<0.5	<0.5	0.6	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
Oct-11	0.7 J	29	34	1.2	--	<0.5	<0.5	0.7	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
Oct-10+	1.4	47	34	1.2	--	<0.5	<0.5	0.7	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-09+	<0.5	19	40	1.1	--	<0.5	<0.5	0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-08+	0.7	27	5.8	<0.5	--	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-07+	<0.5	17	6.1	<0.5	--	<0.5	<0.5	<0.5	<0.5	0.8	ND	ND	<0.5	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-06+	2.1	92	42	1.6	--	0.6	0.9	1.0	0.7	ND	ND	ND	1.2	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-05+	<0.5	4.6	1.5	<0.5	--	0.5	<0.5	<0.5	<0.5	ND	ND	ND	<1.0	ND	<0.5	ND	NA	NA	NA	NA
Oct-04+	1.6	85	46	1.7	--	2.4	1.1	0.8	0.6	ND	ND	ND	1.7	ND	0.8	ND	NA	NA	NA	NA
Apr-04	<1.0	45	27	2.5	--	12	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<2.0
Oct-03+	1.7	110	57	1.5	--	0.9	1.3	0.9	0.8	ND	ND	ND	1.1	ND	0.8	ND	NA	NA	NA	NA
Apr-03	<1.0	69	40	<1.0	--	8.2	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-02+	1.8	150	90	2.3	--	<0.5	1.7	1.2	1.0	ND	ND	ND	1.9	ND	1.1	ND	NA	NA	NA	NA
Oct-01+	0.9	67	48	1.1	--	<0.5	1.2	0.6	<0.5	ND	ND	ND	1.4	<1.0	<0.5	ND	NA	NA	NA	NA
Oct-00+	1.6	110	97	2.2	--	<1.0	1.9	1.0	0.8	ND	ND	ND	1.6	ND	0.7	ND	NA	NA	NA	NA
Oct-00 Dup+	1.6	100	91	2.5	--	<1.0	1.8	1.1	0.7	ND	ND	ND	1.5	ND	0.7	ND	NA	NA	NA	NA
Oct-99	<2.0	85	120	2.7	--	<2.0	2.6	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Apr-98+	<5.0	81	130	<5.0	--	<5.0	NA	<5.0	<5.0	ND	ND	ND	<20	ND	<5.0	ND	NA	NA	NA	NA
Oct-97+	<0.5	52	91	1.2	--	<0.5	2.1	<0.5	0.9	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-96	1.2	48	34	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	0.6	ND	NA	NA	NA	NA
Oct-95	<1.0	25	--	--	2.1	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<5.0	66	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-93	<5.0	94	--	--	<5.0	<10	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-92	2.1	92	--	--	6.4	<1.0	1.0	<0.5	<0.5	ND	ND	ND	NA	ND	1.6	ND	NA	NA	NA	NA
Apr-92	4.0	180	--	--	25	<1.0	3.0	1.0	2.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Jan-92	1.6	170	--	--	48	<1.0	2.9	<1.0	<1.0	ND	ND	ND	<1.0	ND	1.6	ND	NA	NA	NA	NA
Oct-91	2.5	120	--	--	41	<0.5	2.2	1.8	1.2	ND	ND	ND	0.6	ND	2.3	ND	NA	NA	NA	NA
Jul-91	2.0	130	--	--	32	<1.0	1.0	<1.0	1.0	ND	ND	ND	1.0	ND	3.0	ND	NA	NA	NA	NA
Apr-91	<2.0	180	--	--	48	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Jan-91	2.0	120	--	--	39	<1.0	1.0	1.0	1.0	ND	ND	ND	<1.0	ND	3.0	ND	NA	NA	NA	NA
Oct-90	2.6	120	--	--	37	<0.5	2.7	<0.5	<0.5	ND	ND	ND	<0.5	ND	2.1	ND	NA	NA	NA	NA
Jul-90	2.7	110	--	--	31	<0.5	2.7	1.3	0.9	ND	ND	ND	1.3	ND	5.0	ND	NA	NA	NA	NA
Apr-90	3.0	170	--	--	18	<1.0	2.0	1.0	<1.0	ND	ND	ND	<1.0	ND	4.0	ND	NA	NA	NA	NA
Jan-90	3.0	170	--	--	26	<1.0	4.0	2.0	<1.0	ND	ND	ND	1.0	ND	4.0	ND	NA	NA	NA	NA
Oct-89	4.3	120	--	--	23	<0.5	9.6	2.7	0.8	--	ND	--	7.4	ND	<0.5	--	--	--	--	--
Aug-89	4	200	--	--	27	<2.0	10	6	<2.0	--	ND	--	7	ND	8	--	--	--	--	--
May-89	<2.5	<2.5	--	--	<2.5	<2.5	<2.5	<2.5	<2.5	--	ND	--	<2.5	ND	<2.5	--	--	--	--	--
Feb-89	<5.0	180	--	--	36	<5.0	8	<5.0	<5.0	--	ND	--	12	ND	<5.0	--	--	--	--	--
Feb-89	<2.0	61	--	--	21	<2.0	4	<2.0	<2.0	--	ND	--	<2.0	ND	5	--	--	--	--	--
Feb-89	<2.0	51	--	--	17	<2.0	3	<2.0	<2.0	--	ND	--	<2.0	ND	3	--	--	--	--	--
Nov-88	3.2	180	--	--	37	<1.0	14	3.5	1.6	--	ND	--	16	ND	13	--	--	--	--	--
Aug-88	5	150	--	--	53	<1.0	30	5.6	2.8	--	ND	--	34	ND	11	--	--	--	--	--
May-88	4.2	170	--	--	47	<1.0	31	5.5	2.6	--	ND	--	20	ND	11	--	--	--	--	--
Jan-88	4.1	100	--	--	20	<1.0	34	3.5	1.9	--	ND	--	30	ND	9.4	--	--	--	--	--
Oct-87	3.3	68	--	--	16	<0.5	29	3.4	2.3	--	ND	--	22	ND	14	--	--	--	--	--
Jun-87	5.9	170	--	--	14	<1.0	22	2.9	1.9	--	ND	--	21	ND	24	--	--	--	--	--
Apr-87	3	160	--	--	13	<1.0	25	4.7	1.7	--	ND	--	16	ND	18	--	--	--	--	--
Jan-87	<10	170	--	--	<10	<10	28	<10	<10	--	ND	--	54	ND	<10	--	--	--	--	--
Sep-86	20	170	--	--	8.6	<1.0	40	5.1	3.5	--	ND	--	17	ND	18	--	--	--	--	--
Jul-86	3.6	60	--	--	10	<0.5	43	4.8	2.3	--	ND	--	25	ND	<0.5	--	--	--	--	--
Apr-86	3	130	--	--	12	<0.5	39	4.3	1.9	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Oct-85	16	220	--	--	17	<5.0	77	<5.0	<5.0	--	ND	--	120	ND	<5.0	--	--	--	--	--
Nov-84	4.2	160	--	--	10	NA	26	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-84	6	180	--	--	12	ND	19	2	ND	--	ND	--	30	ND	ND	--	--	--	--	--
Mar-84	NA	260	--	--	NA	NA	NA	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-83	15	600	--	--	18	NA	36	13	16	--	ND	--	<1.0	ND	NA	--	--	--	--	--
Jul-83	8	650	--	--	38	ND	18	2	2	--	ND	--	ND	ND	ND	--	--	--	--	--
May-83	14	9,200	--	--	ND	ND	18	ND	ND	--	ND	--	ND	ND	ND	--	--	--	--	--
Aug-82	6.8	500	--	--	52	ND	19	<2.0	<2.0	--	ND	--	<2.0	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
37S ZA																				
Oct-13	1.0	95	1.6	<0.5	--	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
Oct-12	0.8 J	63	2.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
Oct-11	0.8 J	63	2.3	<0.5	--	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
Oct-10+	0.9	60	3.7	<0.5	--	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-09+	1.4	91	2.2	<0.5	--	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-08+	1.1	81	3.6	<0.5	--	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-07+	1.0	81	2.4	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	1.8	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-05+	1.0	91	5.2	<0.7	--	<0.7	<0.7	<0.7	<0.7	ND	ND	ND	<1.4	ND	<0.7	ND	NA	NA	NA	NA
Oct-04+	1.2	11	3.3	<0.7	--	<0.7	<0.7	<0.7	<0.7	ND	ND	ND	1.9	ND	<0.7	ND	NA	NA	NA	NA
Oct-03+	1.3	160	2.9	<0.6	--	<0.6	<0.6	<0.6	<0.6	ND	ND	ND	<1.3	ND	<0.6	ND	NA	NA	NA	NA
Oct-02+	0.9	170	3.7	<0.7	--	<0.7	<0.7	<0.7	<0.7	ND	ND	ND	<1.4	ND	<0.7	ND	NA	NA	NA	NA
Oct-01	<5.0	140	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<20	ND	<5.0	ND	NA	NA	NA	NA
Oct-00+	1.2	200	9.7	<0.5	--	1.8	<0.5	<0.5	<0.5	ND	ND	ND	2.1	ND	<0.5	ND	NA	NA	NA	NA
Oct-99	<5.0	180	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-97+	<2.5	260	12	<2.5	--	<2.5	<2.5	<2.5	<2.5	ND	ND	ND	<2.5	ND	<2.5	ND	NA	NA	NA	NA
Oct-96	1.2	270	6.3	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	2.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-95	<1.0	380	--	--	7.1	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	3.8	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<5.0	330	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-93	<5.0	400	--	--	8.0	<10	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Jun-88	<1.0	150	--	--	170	<1.0	5.8	<1.0	<1.0	--	--	ND	<1.0	ND	<1.0	--	--	--	--	--
Jan-88	<10	1,100	--	--	34	<10	<10	<10	<10	--	--	ND	95	ND	<10	--	--	--	--	--
Jan-87	<5.0	600	--	--	25	<5.0	<5.0	<5.0	<5.0	--	--	ND	52	ND	<5.0	--	--	--	--	--
Nov-84	6.6	1,300	--	--	32	NA	3.2	NA	NA	--	--	ND	NA	ND	NA	--	--	--	--	--
Aug-84	8	760	--	--	52	ND	4	ND	ND	--	--	ND	ND	ND	ND	--	--	--	--	--
Mar-84	NA	1,400	--	--	NA	NA	NA	NA	NA	--	--	ND	NA	ND	NA	--	--	--	--	--
Sep-83	37	4,200	--	--	290	NA	4	ND	ND	--	--	ND	190	ND	NA	--	--	--	--	--
Sep-83	47	3,500	--	--	240	NA	5	ND	ND	--	--	ND	14	ND	NA	--	--	--	--	--
Aug-83	34	41,000	--	--	4,600	5	13	2.0	1.6	--	--	ND	<1.0	ND	ND	--	--	--	--	--
May-83	ND	270	--	--	17	ND	ND	ND	ND	--	--	ND	ND	ND	ND	--	--	--	--	--
Apr-83	10	330	--	--	77	ND	ND	ND	ND	--	--	ND	120	ND	ND	--	--	--	--	--
Aug-82	9	1,400	--	--	27	ND	13	<2.0	<2.0	--	--	ND	78	ND	ND	--	--	--	--	--
Jun-82	<10	2,600	--	--	<10	ND	<10	<10	<10	--	--	ND	370	ND	ND	--	--	--	--	--
38S ZA																				
Oct-13	0.93	96	150	1.7		7.4	<0.50	0.70	0.36 J		<1.0	<0.50	1.4	<1.0	<0.50	<0.50	NA	NA	NA	NA
May-13	<2.5	60	180	<2.5		7.2	<2.5	<2.5	<2.5		<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-12	0.84	91	200	2.5		11	<0.50	0.84	<0.50	<0.50	<1.0	<0.50	1.8	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Apr-12	<0.50	32	120	1.4		11	<0.50	0.60	<0.50	<0.50	<1.0	<0.50	0.80	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-11	<2.5	130	140	<2.5	--	6.7	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-10	1.3	150	130	1.8	--	5.7	<0.50	0.50	<0.50	<0.50	<1.0	<0.50	1.5	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	1.5	150	120	2.8	--	6.3	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	1.1	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	0.65	50	82	2.4	--	30	<0.5	<0.5	<0.5	<0.5	<1	<0.5	1.0	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1
Oct-07	1.3	85	50	0.82	--	16	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	0.61	<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<1.0
Oct-06	1.5	130	33	<1.0	--	5.8	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Oct-05	2.0	140	68	1.5	--	14	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
Oct-04	<5.0	190	190	<5.0	--	6.9	<5.0	<5.0	<5.0	<5.0	<10	<10	<5.0	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-03	<1.0	51	110	1.2	--	21	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0	<4.0	<1.0	<1.0	NA	NA	NA	NA
Oct-02	2.6	240	200	6.3	--	8.6	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	3.5	<8.0	<2.0	<2.0	NA	NA	NA	NA
Oct-01	<5.0	170	120	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-00	<20	240	240	<20	--	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	NA	NA	NA	NA
Oct-99	<5.0	270	240	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-97+	<5.0	160	520	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-96	<1.7	440	540	4.0	--	<1.7	<1.7	2.7	<1.7	ND	ND	ND	2.9	ND	<1.7	ND	NA	NA	NA	NA
Oct-95	<10	1,100	--	--	180	<20	<10	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Oct-94	<5.0	910	--	--	190	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
May-88	<25	3,400	--	--	240	<25	<25	<25	<25	--	ND	--	95	ND	<25	--	--	--	--	--
Jan-88	<50	2,900	--	--	240	<50	<50	<50	<50	--	ND	--	<50	ND	<50	--	--	--	--	--
Oct-87	<25	2,400	--	--	270	<25	<25	<25	<25	--	ND	--	100	ND	<25	--	--	--	--	--
Jun-87	260	2,200	--	--	910	<10	13	<10	<10	--	ND	--	83	ND	<10	--	--	--	--	--
Apr-87	26	2,700	--	--	420	<10	74	<10	<10	--	ND	--	91	ND	<10	--	--	--	--	--
Jan-87	<10	2,500	--	--	220	<10	<10	<10	<10	--	ND	--	180	ND	<10	--	--	--	--	--
Sep-86	<25	4,600	--	--	120	<25	<25	<25	<25	--	ND	--	150	ND	<25	--	--	--	--	--
Jul-86	<5.0	2,800	--	--	200	<5.0	<5.0	<5.0	<5.0	--	ND	--	250	ND	<5.0	--	--	--	--	--
Oct-85	45	3,700	--	--	410	<25	33	<25	<25	--	ND	--	590	ND	<25	--	--	--	--	--
Nov-84	28	3,200	--	--	510	NA	20	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-84	28	1,400	--	--	1100	ND	5	3	ND	--	ND	--	ND	ND	ND	--	--	--	--	--
Mar-84	NA	3,500	--	--	NA	NA	NA	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Sep-83	59	2,700	--	--	970	ND	<2.0	<4.0	1	--	ND	--	140	ND	ND	--	--	--	--	--
Sep-83	72	6,300	--	--	1700	ND	<2.0	4	3	--	ND	--	120	ND	ND	--	--	--	--	--
May-83	23	2,000	--	--	350	ND	ND	ND	ND	--	ND	--	ND	ND	ND	--	--	--	--	--
Aug-82	17	2,200	--	--	300	ND	<2.0	<2.0	<2.0	--	ND	--	35	ND	ND	--	--	--	--	--
Aug-82	76	40,000	--	--	3100	3	6.4	2	2.6	--	ND	--	<1.0	ND	ND	--	--	--	--	--
Jun-82	<10	1,250	--	--	<10	ND	<10	<10	<10	--	ND	--	103	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
EDUCTOR ZA																				
Oct-13	<500	<500	29,000	<500	--	1,800	<500	<500	<500	--	<1000	<500	<500	<1000	<500	<500	NA	NA	NA	NA
May-13	<1000	1,000	37,000	<1,000	--	2,900	<1000	<1000	<1000	--	<2000	<1000	<1000	<2000	<1000	<1000	<1000	<1000	<1000	<2000
Oct-12	<1,000	1,200	83,000	<1,000	--	5,200	<1,000	<1,000	<1,000	<1,000	<2,000	<1,000	<1,000	<2,000	2,400	<1,000	<1,000	<1,000	<1,000	<2,000
Apr-12	<50	620	93,000	74	--	6,400	<50	110	<50	<50	<100	<50	<50	<100	880	190	<50	120	<50	430
Oct-11	<50	54	8,000	<50	--	1,100	<50	<50	<50	<50	<100	<50	<50	<100	<50	<50	<50	<50	<50	<100
May-11	<500	3,600	100,000	<500	--	11,000	<500	<500	<500	<500	<500	<500	<500	<500	1,500	<500	<500	<500	<500	<500
Mar-11	<500	1,100	94,000	<500	--	5,900	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500
Nov-10	<500	670	29,000	<500	--	2,700	<500	<500	<500	<500	<1,000	<500	<500	<1,000	1,300	660	--	--	--	--
Oct-10	<200	2,100	78,000	<200	--	67,000	<200	<200	<200	<200	<400	<200	<200	<400	1,900	6900	<200	<200	<200	<400
Oct-09	<200	<200	34,000	<200	--	9,300	<200	<200	<200	<200	<400	<200	<200	<400	1,600	840	<200	230	<200	<400
Oct-08	<2000	100,000	23,000	<2000	--	28,000	<2000	<2000	<2000	<2000	<4000	<2000	<2000	<4000	3100	5200	<2000	<2000	<2000	<4000
Oct-07	55	3,500	8,300	120	--	15,000	<5.0	30	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	4,200	<5.0	<500	13	1,300
Apr-07	<5.0	5.1	29,000	200	--	28,000	<5.0	57	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	14	<5.0	<200	9.2	960
Oct-06	<100	<100	25,000	<100	--	9,800	<100	<100	<100	NA	<100	<100	NA	<100	NA	2,200	<100	290	<100	880
Apr-06	<5.0	<5.0	20,000	<500	--	8,500	<5.0	37	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	1,500	<5.0	160	5.7	200
Jan-06	150	4,800	2,300	30	--	12,000	<5.0	12	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	3,000	<5.0	<500	9.9	<1500
Oct-05	<250	<250	3,600	<250	--	3,900	<250	<250	<250	NA	<250	<250	NA	<250	NA	1,000	<250	<250	<250	<750
Sep-05	<250	<250	27,000	<250	--	18,000	<250	<250	<250	<250	<250	<500	<250	<250	420	2,900	NA	NA	NA	NA
Jul-05	82	2,200	27,000	150	--	15,000	<5.0	130	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	3,600	<5.0	<500	11	1,200
Jul-05-Dup	92	2,100	27,000	180	--	14,000	<5.0	140	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	3,500	<5.0	<500	11	1,100
Apr-05	23	490	19,000	160	--	33,000	<5.0	57	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	2,900	<5.0	340	8.7	1,180
Apr-05 Dup	23	430	19,000	160	--	35,000	<5.0	66	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	2,800	<5.0	330	9.6	1,180
Jan-05	<0.5	<0.5	4,700	180	--	4,400	<5.0	9.3	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	1,900	<5.0	200	<5.0	650
Oct-04	<5.0	<5.0	<5.0	9.3	--	28	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	1,200	<5.0	120	<5.0	380
Apr-04	<1.0	<1.0	<1.0	7	--	<1.0	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Jan-04	<10	<10	<10	<10	--	<10	<10	<10	<10	NA	<10	<10	NA	<10	NA	<10	<10	<10	<10	<20
Oct-03	14	75	34	9.6	--	560	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	340	<5.0	32	<5.0	113
Oct-03 Dup	20	110	53	12	--	550	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	300	<5.0	39	<5.0	144
Jul-03	870	15,000	3,800	210	--	24,000	<1.0	120	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	97	NA	460	5.9	1,020
Jul-03 Dup	880	32,000	4,000	200	--	27,000	<1.0	120	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	98	NA	490	7.2	1,030
Apr-03	<1.0	11	570	12	--	4,500	<1.0	1.2	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	130	NA	35	1.9	63
Apr-03 Dup	<1.0	7.6	790	12	--	5,500	1.4	1.8	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	110	NA	46	1.8	56
Jan-03	21	670	9,400	34	--	5,700	7.2	27	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	60	NA	NA	NA	NA
Jan-03 Dup	32	1,200	9,600	28	--	5,600	2.9	24	1.3	<1.0	<2.0	<2.0	<1.0	<1.0	<1.0	62	NA	NA	NA	NA
Oct-02	120	17,000	20,000	38	--	21,000	<1.0	32	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	40	2.9	62	4.0	249
Jul-02	62	2,600	6,400	30	--	2,400	<1.0	19	<1.0	NA	<2.0	<2.0	NA	ND	NA	13	NA	<50	<50	<100
Mar-02	170	3,800	8,000	<50	--	540	<50	NA	<50	NA	<50	<50	NA	ND	NA	<50	NA	<50	<50	<100
Jan-02	1,400	80,000	17,000	110	--	1,200	<50	<50	<50	NA	<50	<50	NA	ND	NA	400	NA	<50	<50	1,170
Nov-01	150	5,000	5,600	48	--	750	<5.0	8.0	<5.0	NA	<5.0	<5.0	NA	ND	NA	11	<5.0	42	<5.0	169
Oct-01	1,200	53,000	18,000	<1,000	--	<2,000	<1,000	<1,000	<1,000	NA	<2,000	<2,000	NA	<1,000	NA	<1,000	NA	<1,000	<1,000	<2,000
Aug-01	140	5,100	7,700	44	--	710	1.2	43	<1.0	NA	<2.0	<2.0	NA	ND	NA	39	NA	36	<1.0	100
Jun-01	7.9	230	15,000	140	--	6,100	15	66	3.3	NA	5.6	<2.0	NA	ND	NA	72	NA	63	3.8	97
Mar-01	19	310	14,000	110	--	1,500	12	2.0	35	NA	<2.0	<2.0	NA	ND	NA	20	NA	13	<1.0	179
Oct-00	<400	8,400	680	<400	--	<400	<400	<400	<400	<400	ND	ND	<400	ND	<400	<400	NA	NA	NA	NA
Oct-99	470	13,000	650	<250	--	<250	<250	<250	<250	ND	ND	ND	<250	ND	<250	<250	NA	NA	NA	NA
Apr-99	<1,000	11,000	<1,000	<1,000	--	<1,000	<1,000	<1,000	<1,000	ND	ND	ND	<1,000	ND	<1,000	<1,000	NA	NA	NA	NA
Oct-98	<500	17,000	740	<500	--	<500	<500	<500	<500	ND	ND	ND	<500	ND	<500	<500	NA	NA	NA	NA
Apr-98	520	20,000	810	<100	--	<100	<100	<100	<100	ND	ND	ND	<400	ND	<100	<100	NA	NA	NA	NA
Oct-97	<500	16,000	<500	<500	--	<500	<500	<500	<500	ND	ND	ND	<500	ND	<1000	<500	NA	NA	NA	NA
Apr-97	120	6,700	450	<31	--	<31	<31	<31	<31	ND	ND	ND	<31	ND	<31	ND	NA	NA	NA	NA
Oct-96	140	9,800	1,100	<50	--	<50	<50	<50	<50	ND	ND	ND	<50	ND	<50	ND	NA	NA	NA	NA
Apr-96	440	23,000	--	--	1,106	100	<5.0	6.7	<5.0	ND	ND	ND	<5.0	ND	370	ND	NA	NA	NA	NA
Oct-95	670	46,000	--	--	1,100	<500	<250	<250	<250	ND	ND	ND	<250	ND	380	ND	NA	NA	NA	NA
Apr-95	<200	13,000	--	--	690	<400	<200	200	200	ND	ND	ND	<200	ND	<200	ND	NA	NA	NA	NA
Oct-94	260	12,000	--	--	370	<250	<250	<250	<250	ND	ND	ND	<250	ND	<250	ND	NA	NA	NA	NA
Apr-94	810	63,000	--	--	370	49	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Feb-94	520	28,000	--	--	150	1.0	1.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	10	ND	NA	NA	NA	NA
Oct-93	730	100,000	--	--	630	<100	<50	<50	<50	ND	ND	ND	<50	ND	<50	ND	NA	NA	NA	NA
Aug-93	730	29,000	--	--	470	<100	<50	<50	<50	ND	ND	ND	<100	ND	<50	ND	NA	NA	NA	NA
Apr-93	1,200	26,000	--	--	1,103	3.5	1.9	2.2	<0.5	ND	ND	ND	NA	ND	15	ND	NA	NA	NA	NA
Jul-90	3.0	53	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-90	<0.5	12	--	--	<0.5	<0.5	1.2	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-90	<2.0	240	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Oct-89	3.3	60	--	--	2.8	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	3.3	--	--	--	--	--
May-89	51	970	--	--	120	<10	<10	<10	<10	--	ND	--	<10	ND	<10	--	--	--	--	--
Feb-89	3.6	62	--	--	1.6	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Dec-87	130	62	--	--	320	<50	<50	<50	<50	--	ND	--	<50	ND	<50	--	--	--	--	--
Oct-87	3,400	8,400	--	--	8,800	<1,000	<1,000	<1,000	<1,000	--	ND	--	<1,000	ND	<1,000	--	--	--	--	--
Jan-87	2,700	230,000	--	--	12,000	<500	<500	<500	<500	--	ND	--	<500	ND	6,700	--	--	--	--	--
Jul-86	2700	75,000	--	--	28,000	2,000	<250	<250	<250	--	ND	--	<250	ND	7,700	--	--	--	--	--
Apr-86	4200	24,000	--	--	14,000	530	<100	<100	<100	--	ND	--	<100	ND	9,200	--	--	--	--	--
Oct-85	13000	32,000	--	--	63,000	<250	<250	<250	<250	--	ND	--	<250	ND	<250	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-1B ZB1																				
Per Water Board approval, well 1B was abandoned in February 2004.																				
Oct-02 Dup	<0.5	<0.5	1.7	0.76	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-02	<0.5	<0.5	1.8	0.79	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-01	<0.5	<0.5	1.4	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<2.0	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-00	<1.0	<1.0	1.5	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	ND	ND	<1.0	ND	<1.0	<1.0	NA	NA	NA	NA
Oct-99	<1.0	<1.0	1.4	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-98	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-97	<0.5	<0.5	1.3	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<1.0	ND	NA	NA	NA	NA
Oct-96	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	<1.0	--	--	<1.0	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-93	<0.5	<0.5	--	--	0.7	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	<0.5	--	--	<0.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-92	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-91	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jul-91	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-91	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-91	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-90	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jul-90	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-90	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-90	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-89	<0.5	5	--	--	1.4	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Aug-89	<0.5	<0.5	--	--	0.6	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
May-89	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Feb-89	<0.5	<0.5	--	--	0.6	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Nov-88	<0.5	<0.5	--	--	1.4	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Aug-88	<0.5	<0.5	--	--	1.6	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
May-88	<0.5	<0.5	--	--	1.3	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Jan-88	<0.5	<0.5	--	--	0.7	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Oct-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Jun-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Apr-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Jan-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Sep-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Jul-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Apr-86	<0.5	1	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Jan-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	NA	ND	<0.5	--	--	--	--	--
Oct-85	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Nov-84	<0.5	<0.5	--	--	NA	NA	<0.5	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-84	ND	ND	--	--	ND	ND	ND	ND	ND	--	ND	--	ND	ND	ND	--	--	--	--	--
Mar-84	NA	<.5	--	--	NA	NA	NA	NA	NA	--	ND	--	NA	ND	ND	--	--	--	--	--
Aug-83	<1.0	<1.0	--	--	<1	<1.0	<1.0	<1.0	<1.0	--	ND	--	<1.0	ND	<1.0	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-2B ZB1																				
Oct-13	<0.50	<2.5	140	1.6		150	<0.50	<0.50	1.0		<1.0	<0.50	<0.50	<1.0	10	12	NA	NA	NA	NA
May-13	<0.50	0.76	80	6.3		77	<0.50	<0.50	0.76		<1.0	<0.50	<0.50	<1.0	6.7	11	<0.50	<0.50	<0.50	<1.0
Oct-12	<0.50	0.65	83	2.5		100	<0.50	<0.50	0.77	<0.50	<1.0	<0.50	<0.50	<1.0	5.7	14	<0.50	<0.50	<0.50	<1.0
Apr-12	<0.50	<0.50	38	1.0	--	34	<0.50	<0.50	0.53	<0.50	<1.0	<0.50	<0.50	<1.0	6.5	25	<0.50	<0.50	<0.50	<1.0
Oct-11	<0.50	0.72	79	2.1	--	140	<0.50	<0.50	0.72	<0.50	<1.0	<0.50	<0.50	<1.0	7.1	19	<0.50	<0.50	<0.50	1.5
May-11	<0.50	0.59	40	<0.50	--	82	<0.50	<0.50	0.69	<0.50	<0.50	<0.50	<0.50	<0.50	7.5	22	<0.50	<0.50	<0.50	<0.50
Mar-11	<0.50	0.52	9.4	<0.50	--	46	<0.50	<0.50	0.7	<0.50	<0.50	<0.50	<0.50	<0.50	8.6	57	<0.50	<0.50	<0.50	3.2
Nov-10	<2.5	2.5	160	<2.5	--	290	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	23	39	--	--	--	--
Oct-10	<2.5	<2.5	200	<2.5	--	260	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	6.4	17	<2.5	<2.5	<2.5	<5.0
Oct-09	<20	<20	6,600	29	--	3,600	<20	<20	<20	<20	<40	<20	<20	<40	39	230	<20	<20	<20	<40
Oct-08	<2	<2	88	6	--	210	<2	<2	<2	<2	<4	<2	<2	<4	5.2	4.1	<2	<2	<2	<4
Oct-07	<5.0	<5.0	11	7.8	--	270	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	23	<5.0	<5.0	<5.0	<15
Apr-07	<5.0	<5.0	<5.0	<5.0	--	92	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	31	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	<5.0	<5.0	8.2	--	47	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	49	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	<5.0	5.9	11	--	24	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	49	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	<5.0	<5.0	7.0	--	22	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	67	<5.0	<5.0	<5.0	<15
Oct-05	<5.0	<5.0	6.2	<5.0	--	48	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	73	<5.0	<5.0	<5.0	<15
Jul-05	<5.0	5.1	<5.0	<5.0	--	16	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	94	<5.0	<5.0	<5.0	<15
Apr-05	<5.0	<5.0	43	<5.0	--	360	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	130	<5.0	<5.0	<5.0	<15
Jan-05	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	72	<5.0	<5.0	<5.0	<15
Oct-04	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	63	<5.0	<5.0	<5.0	<15
Apr-04	<1.0	<1.0	3.3	<1.0	--	5.4	<1.0	<1.0	<1.0	NA	<1.0	<1.0	NA	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Jan-04	<5.0	<5.0	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
Oct-03	<5.0	<5.0	5.2	<5.0	--	9.1	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	88	<5.0	<5.0	<5.0	<10
Jul-03	<1.0	2.6	2.8	<1.0	--	5.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	71	NA	90	<1.0	4.1
Apr-03	<1.0	28	7.6	<1.0	--	41	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	60	NA	7.8	<1.0	2.1
Jan-03	<1.0	33	30	<1.0	--	14	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	66	NA	NA	NA	NA
Oct-02	<1.0	54	46	<1.0	--	170	<1.0	2.5	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	66	2.0	<1.0	1.8	<2.0
Jul-02	<1.0	<1.0	90	<1.0	--	150	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	67	NA	<1.0	<1.0	<2.0
Apr-02	2.7	24	210	6.2	--	190	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	5.9	NA	<1.0	<1.0	<2.0
Jan-02	<10	18	67	<10	--	210	<10	<10	<10	NA	<20	<20	NA	ND	NA	78	NA	<10	11	<20
Oct-01	<50	940	250	180	--	540	<50	<50	<50	NA	<100	<100	NA	<50	NA	<50	NA	90	<50	<100
Oct-01 Dup	<50	580	140	<50	--	700	<50	<50	<50	NA	<100	<100	NA	90	NA	<50	NA	120	<50	<100
Aug-01	2.5	77	680	12	--	800	<1.0	2.5	<1.0	NA	<2.0	<2.0	NA	ND	NA	20	NA	<1.0	<1.0	<2.0
Jun-01	<1.0	5.8	1,500	16	--	1,400	2.6	5.5	1.7	NA	3.1	<2.0	NA	ND	NA	1.7	NA	<1.0	<1.0	<2.0
Apr-01	1.6	14	440	8.7	--	980	<1.0	1.2	<1.0	NA	<2.0	<2.0	NA	ND	NA	2.6	NA	<1.0	<1.0	<2.0
Feb-01	23	31	880	12	--	1,300	<1.0	3.5	<1.0	NA	<2.0	<2.0	NA	ND	NA	1.6	NA	<1.0	<1.0	8.5
Dec-00	<1.0	2.9	53	9.3	--	1,000	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	1.6	NA	<1.0	<1.0	<2.0
Nov-00	<1.0	11	2,300	15	--	300	<1.0	9.5	1.2	NA	<2.0	<2.0	NA	ND	NA	2.0	NA	<1.0	<1.0	<2.0
Oct-00	110	520	2,200	<50	--	340	<50	<50	<50	NA	ND	ND	NA	ND	NA	1.4	NA	<1.0	<1.0	<2.0
Oct-99	55	430	800	<10	--	35	<10	<10	<10	ND	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-98	81	720	1,000	<25	--	110	<25	<25	<25	ND	ND	ND	<25	ND	<25	<25	NA	NA	NA	NA
Apr-98	100	670	1,700	<20	--	300	<20	<20	<20	ND	ND	ND	<80	ND	<20	<20	NA	NA	NA	NA
Oct-97	220	820	3,000	<50	--	200	<50	<50	<50	ND	ND	ND	<50	ND	<100	<50	NA	NA	NA	NA
Oct-97 Dup	220	810	2,800	<50	--	170	<50	<50	<50	ND	ND	ND	<50	ND	<100	ND	NA	NA	NA	NA
Apr-97	170	690	1,400	14	--	230	<13	<13	<13	ND	ND	ND	<13	ND	24	ND	NA	NA	NA	NA
Oct-96	200	880	3,000	21	--	190	<10	19	<10	ND	ND	ND	<10	ND	15	ND	NA	NA	NA	NA
Apr-96	300	1,500	--	--	1,313	230	<2.5	13	<2.5	ND	ND	ND	<2.5	ND	4.9	ND	NA	NA	NA	NA
Oct-95	180	840	--	--	1,400	130	<25	<25	<25	ND	ND	ND	<25	ND	<25	ND	NA	NA	NA	NA
Aug-95	<40	770	--	--	2,500	540	<40	<40	<40	ND	ND	ND	<40	ND	<40	ND	NA	NA	NA	NA
Oct-94	<25	590	--	--	150	<25	<25	<25	<25	ND	ND	ND	<25	ND	<25	ND	NA	NA	NA	NA
Apr-94	330	1,500	--	--	3,134	<5	7	32	<5.0	ND	ND	ND	1.1	ND	35	ND	NA	NA	NA	NA
Oct-93	300	2,600	--	--	7,322	640	<5.0	23	<5.0	ND	ND	ND	<5.0	ND	42	ND	NA	NA	NA	NA
Apr-93	530	3,700	--	--	6,600	2,300	<50	<50	<50	ND	ND	ND	<50	ND	<50	ND	NA	NA	NA	NA
Oct-92	1,900	7,400	--	--	7,533	1,400	4.8	40	6.8	ND	ND	ND	NA	ND	<500	ND	NA	NA	NA	NA
Aug-92	1,200	5,100	--	--	7,336	1,100	6.5	42	1.7	ND	ND	ND	<1.0	ND	21	ND	NA	NA	NA	NA
Apr-92	1,600	15,000	--	--	16,000	<100	<100	<100	<100	ND	ND	ND	<100	ND	<100	ND	NA	NA	NA	NA
Apr-92	1,100	9,300	--	--	9,800	2,400	<50	53	<50	ND	ND	ND	<50	ND	110	ND	NA	NA	NA	NA
Oct-91	700	15,000	--	--	38,000	3,300	<100	<100	<100	ND	ND	ND	<100	ND	<100	ND	NA	NA	NA	NA
Oct-91	500	10,000	--	--	14,000	1,600	<100	<100	<100	ND	ND	ND	<100	ND	<100	ND	NA	NA	NA	NA
Jul-91	1,000	17,000	--	--	55,120	3,500	<50	150	<50	ND	ND	ND	<50	ND	<50	ND	NA	NA	NA	NA
Jul-91	240	6,100	--	--	7,200	<100	<50	<50	<50	ND	ND	ND	<100	ND	<50	ND	NA	NA	NA	NA
Apr-91	4.3	2,300	--	--	32	1.0	0.8	<0.5	<0.5	ND	ND	ND	180	ND	<0.5	ND	NA	NA	NA	NA
Apr-91	<50	4,200	--	--	<50	<50	<50	<50	<50	ND	ND	ND	240	ND	<50	ND	NA	NA	NA	NA
Jan-91	<200	2,000	--	--	49,000	6,500	<200	<200	<200	ND	ND	ND	<200	ND	<200	ND	NA	NA	NA	NA
Jan-91	<500	5,200	--	--	22,000	7,000	<500	<500	<500	ND	ND	ND	<500	ND	<500	ND	NA	NA	NA	NA
Oct-90	<500	26,000	--	--	53,000	14,000	<500	<500	<500	ND	ND	ND	<500	ND	<500	ND	NA	NA	NA	NA
Oct-90	<200	19,000	--	--	52,000	7,800	<200	<200	<200	ND	ND	ND	<200	ND	<200	ND	NA	NA	NA	NA
Jul-90	<100	3,400	--	--	15,000	3,900	<100	<100	<100	ND	ND	ND	<100	ND	<100	ND	NA	NA	NA	NA
Jul-90	<200	6,000	--	--	21,000	12,000	<200	<200	<200	ND	ND	ND	<200	ND	<200	ND	NA	NA	NA	NA
Apr-90	130	13,000	--	--	41,000	13,000	<100	<100	<100	ND	ND	ND	<100	ND	<100	ND	NA	NA	NA	NA
Apr-90	90	4,200	--	--	11,000	14,000	<50	80	<50	ND	ND	ND	<50	ND	<50	ND	NA	NA	NA	NA
Jan-90	<1,000	17,000	--	--	110,000	30,000	<1,000	<1000	<1000	ND	ND	ND	<1,000	ND	<1,000	ND	NA	NA	NA	NA
Jan-90	<500	1,600	--	--	40,000	24,000	<500	<500	<500	ND	ND	ND	<500	ND	<500	ND	NA	NA	NA	NA
Oct-89	<200	7,500	--	--	34,000	44,000	<200	<200	<200	--	ND	--	<200	ND	<200	--	--	--	--	--
Aug-89	<2,500	<2500	--	--	48,000	26,000	<2,500	<2500	<2500	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-89	<500	4,000	--	--	40,000	45,000	<500	<500	<500	--	ND	--	<500	ND	<500	--	--	--	--	--
May-89	<200	1,400	--	--	34,000	32,000	<200	<200	<200	--	ND	--	<200	ND	<200	--	--	--	--	--
Feb-89	<500	7,200	--	--	36,000	13,000	<500	<500	<500	--	ND	--	<500	ND	<500	--	--	--	--	--
Nov-88	230	970	--	--	8,700	3,300	<100	<100	<100	--	ND	--	<100	ND	<100	--	--	--	--	--
Aug-88	180	970	--	--	7,300	3,800	<100	<100	<100	--	ND	--	<100	ND	<100	--	--	--	--	--
May-88	54	630	--	--	5,800	1,000	12	120	<5.	--	ND	--	<5.0	ND	<5.0	--	--	--	--	--
Jan-88	170	1,400	--	--	12,000	4,200	<50	<50	<50	--	ND	--	<50	ND	<50	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-2B ZB1 (continued)																				
Oct-87	330	2,000	--	--	3,300	860	59	<25	<25	--	ND	--	<25	ND	71	--	--	--	--	--
Jul-87	490	2,100	--	--	5,400	730	<50	<50	<50	--	ND	--	100	ND	<50	--	--	--	--	--
Jan-87	800	9,100	--	--	7,000	1,100	<25	<25	<25	--	ND	--	<25	ND	710	--	--	--	--	--
Jul-86	1,200	3,800	--	--	2,800	1,400	<10	<10	<10	--	ND	--	<10	ND	860	--	--	--	--	--
Apr-86	580	4,000	--	--	3,600	180	<50	<50	<50	--	ND	--	<50	ND	<50	--	--	--	--	--
Mar-86	1,300	5,500	--	--	3,300	750	<25	<25	<25	--	ND	--	NA	ND	<25	--	--	--	--	--
Oct-85	2,700	7,500	--	--	7,700	<50	<50	<50	<50	--	ND	--	840	ND	<50	--	--	--	--	--
Nov-84	2,300	52,000	--	--	7,200	NA	<130	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-84	1,500	11,000	--	--	650	ND	ND	ND	ND	--	ND	--	ND	ND	ND	--	--	--	--	--
Mar-84	NA	130,000	--	--	NA	NA	NA	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Sep-83	2,000	73,000	--	--	2,000	NA	ND	ND	ND	--	ND	--	ND	ND	NA	--	--	--	--	--
Sep-83	2,000	290,000	--	--	2,000	NA	ND	ND	ND	--	ND	--	ND	ND	NA	--	--	--	--	--
Aug-83	2,800	1,100,000	--	--	160	<5.0	<5.0	<5.0	<5.0	--	ND	--	<5.0	ND	<5.0	--	--	--	--	--
T-4B ZB1																				
Oct-13	<5.0	9.2	830	1.4 J		<5.0	<5.0	<5.0	<5.0		<10	<5.0	<5.0	<10	<5.0	<5.0	NA	NA	NA	NA
Oct-12	<5.0	8.4	600	17	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-11	<5.0	5.6	570	5.1	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-10	<0.50	3.7	360	10	--	<0.50	<0.50	1.2	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	2.5	370	2.2	--	<0.50	<0.50	1.1	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	1.4	<0.50	<0.50	<1.0
Oct-08	<5	5.3	500	<5	--	<5	<5	<5	<5	<5	<10	<5	<5	<10	<5	<5	<5	<5	<5	<10
Oct-07	<5.0	7.9	550	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-07	<5.0	5.7	430	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
May-07	<5.0	7.3	230	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	<5.0	580	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	7.9	480	12	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	8.4	600	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-05	<5.0	9.2	550	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-05	<5.0	10	620	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-05	<5.0	110	69	<5.0	--	12	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-05	<5.0	9.0	810	20	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-04	<5.0	6.6	350	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-04	<5.0	8.5	460	5.8	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Apr-04	<1.0	13	540	6.3	--	<1.0	<1.0	<1.0	1.6	NA	<2.0	6.3	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Jan-04	<12	6.4	350	<12	--	<12	<12	<12	<12	NA	<12	<12	NA	<12	NA	<12	<12	<12	<12	<24
Oct-03	<5.0	9.8	340	<5.0	--	7.4	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Jul-03	<1.0	13	<20	3.1	--	<2.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Apr-03	<1.0	11	350	<1.0	--	<2.0	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-02	<5.0	5.8	220	<5.0	--	5.7	<5.0	<5.0	<5.0	<5.0	<10	<10	<5.0	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-01	<5.0	<5.0	66	12	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-00	<2.0	10	100	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	<2.0	ND	<2.0	<2.0	NA	NA	NA	NA
Oct-00 Dup	<2.0	9.0	100	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	<2.0	ND	<2.0	<2.0	NA	NA	NA	NA
Oct-99	<1.0	32	32	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	1.6	ND	<1.0	ND	NA	NA	NA	NA
Oct-98	<1.0	43	40	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	1.8	ND	<1.0	ND	NA	NA	NA	NA
Oct-97	<1.0	30	38	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	2.0	ND	<2.0	ND	NA	NA	NA	NA
Oct-96	<0.5	28	17	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	1.7	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	30	--	--	22	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	2.4	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<5.0	53	--	--	23	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-93	<0.5	100	--	--	8.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	2.6	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	61	--	--	4.3	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Oct-91	<0.5	75	--	--	13	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	3.6	ND	<0.5	ND	NA	NA	NA	NA
Oct-90	<0.5	75	--	--	14	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	1.8	ND	<0.5	ND	NA	NA	NA	NA
Aug-89	<0.5	57	--	--	3	<0.5	<0.5	<0.5	<0.5	--	ND	--	1.8		<0.5	--	--	--	--	--
May-88	<0.5	9	--	--	0.7	<0.5	<0.5	<0.5	<0.5	--	ND	--	0.5		<0.5	--	--	--	--	--
Jan-88	<0.5	14	--	--	0.6	<0.5	<0.5	<0.5	<0.5	--	ND	--	0.6		<0.5	--	--	--	--	--
Apr-86	<0.5	1	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5		<0.5	--	--	--	--	--
Jan-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5		<0.5	--	--	--	--	--
Oct-85	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5		<0.5	--	--	--	--	--
Nov-84	<0.5	1.5	--	--	<0.5	NA	<0.5	NA	NA	--	ND	--	NA		NA	--	--	--	--	--
Aug-84	ND	ND	--	--	ND	ND	ND	ND	ND	--	ND	--	ND		ND	--	--	--	--	--
Mar-84	NA	4	--	--	NA	NA	NA	NA	NA	--	ND	--	NA		NA	--	--	--	--	--
Aug-83	<1.0	<1.0	--	--	10	ND	<1.0	3.6	<1.0	--	ND	--	<1.0		ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-5B ZB1																				
Oct-13	4.5 J	1500	51	<10		<10	<10	<10	<10		<20	<10	150	<20	<10	<10	NA	NA	NA	NA
Oct-13 Dup	4.8 J	1400	73	1.8 J		<5.0	<5.0	2.3 J	<5.0		<10	<5.0	190	<10	<5.0	<5.0	NA	NA	NA	NA
Oct-12	<10	1,600	70/71			<10	<10	<10	<10	<10	<20	<10	170/180	<20	<10	<10	<10	<10	<10	<20
Oct-11 Dup	<25	1,700	58	<25	--	<25	<25	<25	<25	<25	<25	200	200	<25	<25	<25	<25	<25	<25	<50
Oct-11	<10	1,700	58	<10	--	<10	<10	<10	<10	<10	<10	200	200	<10	<10	<10	<10	<10	<10	<20
Oct-10 Dup	3.5	1,200	49	1.2	--	<0.50	<0.50	1.2	0.59	<0.50	<1.0	<0.50	96	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	3.3	1,200	51	1.2	--	<0.50	<0.50	1.2	0.57	<0.50	<1.0	<0.50	89	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09 Dup	1.3	390	12	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	45	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	1.5	380	14	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08 Dup	<20	2,200	39	<20	--	<20	<20	<20	<20	<20	<40	<20	540	<40	<20	<20	<20	<20	<20	<40
Oct-08	<20	2,300	39	<20	--	<20	<20	<20	<20	<20	<40	<20	550	<40	<20	<20	<20	<20	<20	<40
Oct-07	6.2	2,300	46	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	470	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0
Oct-07 Dup	5.9	2,200	45	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	380	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0
Oct-06	<2.0	270	5.9	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	18	<4.0	<2.0	<2.0	NA	NA	NA	NA
Oct-06 Dup	<2.0	270	6.1	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	20	<4.0	<2.0	<2.0	NA	NA	NA	NA
Oct-05	<5.0	420	12	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	44	<5.0	<5.0	<5.0	NA	NA	NA	NA
Oct-05 Dup	<5.0	410	12	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	40	<5.0	<5.0	<5.0	NA	NA	NA	NA
Oct-04	<5.0	720	21	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	49	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-04 Dup	<5.0	760	21	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	63	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-03	<10	720	18	<10	--	<10	<10	<10	<10	<10	<20	<20	31	<40	<10	<10	NA	NA	NA	NA
Oct-03 Dup	<10	1,200	29	<10	--	<10	<10	<10	<10	<10	<20	<20	60	<40	<10	<10	NA	NA	NA	NA
Oct-02	30	2,200	55	<20	--	<20	<20	<20	<20	<20	<40	<40	450	<80	<20	<20	NA	NA	NA	NA
Oct-02 Dup	<20	2,100	52	<20	--	<20	<20	<20	<20	<20	<40	<40	410	<80	<20	<20	NA	NA	NA	NA
Oct-01	<50	1,700	88	<50	--	<50	<50	<50	<50	<50	<50	<100	<200	<200	<50	<50	NA	NA	NA	NA
Oct-01 Dup	<50	1,900	91	<50	--	<50	<50	<50	<50	<50	<50	<100	<200	<200	<50	<50	NA	NA	NA	NA
Oct-00	<200	2,400	<200	<200	--	<200	<200	<200	<200	<200	ND	ND	260	ND	<200	<200	NA	NA	NA	NA
Oct-99	<10	500	16	<10	--	<10	<10	<10	<10	ND	ND	ND	63	ND	<10	ND	NA	NA	NA	NA
Oct-98	<10	300	<10	<10	--	<10	<10	<10	<10	ND	ND	ND	15	ND	<10	ND	NA	NA	NA	NA
Oct-97	<10	360	<10	<10	--	<10	<10	<10	<10	ND	ND	ND	<10	ND	<20	ND	NA	NA	NA	NA
Oct-96	<1.3	390	8.2	<1.3	--	<1.3	<1.3	<1.3	<1.3	ND	ND	ND	34	ND	<1.3	ND	NA	NA	NA	NA
Oct-95	<1.0	110	--	--	1.6	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	4.9	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<25	420	--	--	<25	<25	<25	<25	<25	ND	ND	ND	41	ND	<25	ND	NA	NA	NA	NA
Oct-93	<5.0	500	--	--	<5.0	<10	<5.0	<5.0	<5.0	ND	ND	ND	54	ND	<5.0	ND	NA	NA	NA	NA
Oct-92	<1000	3,600	--	--	33	<1.0	2.2	<0.5	10	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<150	4,000	--	--	<150	<150	<150	<150	<150	ND	ND	ND	640	ND	<150	ND	NA	NA	NA	NA
Apr-92	<100	11,000	--	--	<100	<100	<100	<100	<100	ND	ND	ND	2,400	ND	<100	ND	NA	NA	NA	NA
Jan-92	<100	16,000	--	--	<100	<100	<100	<100	<100	ND	ND	ND	2,800	ND	<100	ND	NA	NA	NA	NA
Oct-91	<100	12,000	--	--	<100	<100	<100	<100	<100	ND	ND	ND	1,900	ND	<100	ND	NA	NA	NA	NA
Jul-91	<50	9,300	--	--	60	<50	<50	<50	<50	ND	ND	ND	2,200	ND	<50	ND	NA	NA	NA	NA
Apr-91	<20	5,700	--	--	30	<20	<20	<20	<20	ND	ND	ND	1,600	ND	<20	ND	NA	NA	NA	NA
Jan-91	<20	2,500	--	--	<20	<20	<20	<20	<20	ND	ND	ND	280	ND	<20	ND	NA	NA	NA	NA
Oct-90	<50	6,300	--	--	<50	<50	<50	<50	<50	ND	ND	ND	270	ND	<50	ND	NA	NA	NA	NA
Jul-90	<20	4,100	--	--	<20	<20	<20	<20	<20	ND	ND	ND	910	ND	<20	ND	NA	NA	NA	NA
Apr-90	<20	3,000	--	--	<20	<20	<20	<20	<20	ND	ND	ND	250	ND	<20	ND	NA	NA	NA	NA
Jan-90	<20	5,500	--	--	<20	<20	<20	<20	<20	ND	ND	ND	1,300	ND	<20	ND	NA	NA	NA	NA
Oct-89	33	6,700	--	--	39	<2.0	2	<2.0	<2.0	--	ND	--	2,700	ND	<2.0	--	--	--	--	--
Aug-89	<50	10,000	--	--	<50	<50	<50	<50	<50	--	ND	--	2,100	ND	<50	--	--	--	--	--
Aug-89	<50	9,200	--	--	<50	<50	<50	<50	<50	--	ND	--	2,300	ND	<50	--	--	--	--	--
Feb-89	<250	8,000	--	--	<250	<250	<250	<250	<250	--	ND	--	2,000	ND	<250	--	--	--	--	--
Nov-88	<5.0	5,500	--	--	18	<5.0	<5.0	<5.0	<5.0	--	ND	--	<5.0	ND	<5.0	--	--	--	--	--
Nov-88	<50	8,000	--	--	<50	<50	<50	<50	<50	--	ND	--	2,000	ND	<50	--	--	--	--	--
Aug-88	<100	14,000	--	--	<100	<100	<100	<100	<100	--	ND	--	2,700	ND	<100	--	--	--	--	--
Jun-88	<250	11,000	--	--	<250	<250	<250	<250	<250	--	ND	--	1,200	ND	<250	--	--	--	--	--
Jun-88	18	7,400	--	--	13	<0.5	7.8	2.5	1.4	--	ND	--	2,500	ND	<0.5	--	--	--	--	--
Jan-88	<250	17,000	--	--	<250	<250	<250	<250	<250	--	ND	--	2,800	ND	<250	--	--	--	--	--
Oct-87	<50	7,800	--	--	<50	<50	120	<50	<50	--	ND	--	1,800	ND	<50	--	--	--	--	--
Jun-87	140	5,500	--	--	25	<25	<25	<25	<25	--	ND	--	1,800	ND	<25	--	--	--	--	--
Apr-87	<25	15,000	--	--	<25	<25	<25	480	<25	--	ND	--	1,700	ND	<25	--	--	--	--	--
Jan-87	33	4,900	--	--	<10	<10	<10	<10	<10	--	ND	--	3,100	ND	<10	--	--	--	--	--
Sep-86	<100	20,500	--	--	<100	<100	<100	<100	<100	--	ND	--	3,150	ND	<100	--	--	--	--	--
Jul-86	<50	6,700	--	--	<50	<50	<50	<50	<50	--	ND	--	3,300	ND	<50	--	--	--	--	--
Apr-86	<25	8,200	--	--	<25	<25	<25	<25	<25	--	ND	--	6,900	ND	<25	--	--	--	--	--
Jan-86	<25	9,100	--	--	<25	<25	<25	<25	<25	--	ND	--	NA	ND	<25	--	--	--	--	--
Oct-85	73	19,000	--	--	<50	<50	<50	<50	<50	--	ND	--	6,300	ND	<50	--	--	--	--	--
Nov-84	19	15,000	--	--	<20	NA	17	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-84	ND	17,000	--	--	ND	ND	ND	ND	ND	--	ND	--	10,000	ND	ND	--	--	--	--	--
Mar-84	NA	16,000	--	--	NA	NA	NA	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-83	<1.0	3,200	--	--	14	<1.0	<1.0	<1.0	<1.0	--	ND	--	<1.0	ND	<1.0	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-7B ZB1																				
Oct-13	0.86	150	10	0.77		0.38 J	0.58	0.73	0.55		<1.0	<0.50	4.3	<1.0	2.2	<0.50	NA	NA	NA	NA
Oct-13 Dup	0.85	150	11	0.76		0.39 J	0.59	0.70	0.56		<1.0	<0.50	4.3	<1.0	2.1	<0.50	NA	NA	NA	NA
Oct-12	0.55/0.70	160/170	15	0.75/0.79		<0.5	0.52/0.55	0.61/0.60	0.51/0.52	<0.5	<1.0	<0.5	3.2/3.6	<1.0	1.6/2.0	<0.5	<0.5	<0.5	<0.5	<1.0
Oct-11 Dup	1.0	180	14	0.57	--	0.81	0.58	0.58	<0.50	<0.50	<0.50	<0.50	4	<1.0	2.6	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-11	1.1	170	14	0.57	--	0.82	0.56	0.55	0.5	<0.50	<1.0	<0.50	4	<1.0	2.4	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10 Dup	<1.0	140	13	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	2.9	<2.0	2.0	<1.0	<0.50	<0.50	<0.50	<1.0
Oct-10	<1.0	130	12	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	2.7	<2.0	1.8	<1.0	<0.50	<0.50	<0.50	<1.0
Oct-09 Dup	0.77	140	9.8	<0.50	--	0.60	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	2.8	<1.0	1.2	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	0.79	150	10	<0.50	--	0.63	0.52	<0.50	<0.50	<0.50	<1.0	<0.50	3.1	<1.0	1.2	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08 Dup	<2	150	7.6	<2	--	<2	<2	<2	<2	<2	<4	<2	4.8	<4	2.3	<2	<2	<2	<2	<4
Oct-08	<2	180	9.4	<2	--	<2	<2	<2	<2	<2	<4	<2	5.7	<4	3.0	<2	<2	<2	<2	<4
Oct-07	1.80	190	16	0.63	--	<0.5	0.92	0.65	0.55	<0.5	<1.0	<0.5	6.6	<0.5	3.6	<0.5	<0.5	<0.5	<0.5	<1.0
Oct-07 Dup	1.70	200	16	0.62	--	<0.5	0.92	0.65	0.57	<0.5	<1.0	<0.5	6.4	<0.5	3.7	<0.5	<0.5	<0.5	<0.5	<1.0
Oct-06	0.71	80	10	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	1.9	<0.5	<0.5	<0.5	NA	NA	NA	NA
Oct-06 Dup	0.58	88	10	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	1.8	<0.5	<0.5	<0.5	NA	NA	NA	NA
Oct-05	<1.0	95	13	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	1.9	<1.0	<1.0	<1.0	NA	NA	NA	NA
Oct-05 Dup	<1.0	88	13	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	1.7	<1.0	<1.0	<1.0	NA	NA	NA	NA
Oct-04	<1.0	140	14	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	2.3	<4.0	<1.0	<1.0	NA	NA	NA	NA
Oct-04 Dup	<1.0	140	14	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	2.4	<4.0	<1.0	<1.0	NA	NA	NA	NA
Oct-03	<5.0	190	28	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<10	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Oct-03 Dup	<5.0	190	29	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<10	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Apr-03	<1.0	140	18	<1.0	--	<2.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	2.9	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-02	<5.0	170	24	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	55	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-02 Dup	<2.0	160	24	<2.0	--	2	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	53	<8.0	<2.0	<2.0	NA	NA	NA	NA
Jul-02	<10	350	34	<10	--	<10	<10	<10	<10	ND	<20	<10	60	ND	<10	<10	NA	NA	NA	NA
Apr-02	<10	240	24	<10	--	<10	<10	<10	<10	ND	<20	<10	35	ND	<10	<10	NA	NA	NA	NA
Jan-02	<10	300	29	<10	--	<10	<10	<10	<10	ND	<20	<10	<10	ND	<10	<10	NA	NA	NA	NA
Oct-01	<5.0	210	25	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	13	<5.0	<5.0	<5.0	NA	NA	NA	NA
Oct-01 Dup	<5.0	200	25	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	12	<5.0	<5.0	<5.0	NA	NA	NA	NA
Aug-01	2.1	340	46	1.3	--	<2.0	1.9	2.4	<1.0	ND	8.6	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Jun-01	<1.0	68	61	<1.0	--	3.6	<1.0	1.6	<1.0	ND	51	24	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Apr-01	1.4	200	34	<1.0	--	<2.0	1.8	1.2	<1.0	ND	20	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Feb-01	1.2	230	29	<1.0	--	<2.0	1.4	<1.0	<1.0	ND	11	14	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Dec-00	<1.0	1.7	<1.0	<1.0	--	<2.0	<1.0	<1.0	<1.0	ND	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Nov-00	<1.0	<1.0	<1.0	<1.0	--	<2.0	<1.0	<1.0	<1.0	ND	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-00	<10	180	24	<10	--	<10	<10	<10	<10	<10	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Sep-00	1.6	270	29	<1.0	--	<2.0	2.5	1.2	<1.0	ND	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-99	<1.0	4.7	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	<1.0	NA	NA	NA	NA
Oct-98	<1.0	15	1.3	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	5.1	ND	<1.0	<1.0	NA	NA	NA	NA
Oct-97	<0.5	18	2.8	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	1.9	ND	<1.0	<0.5	NA	NA	NA	NA
Oct-96	<0.5	39	5.3	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	1.9	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	42	--	--	6.1	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	2.4	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<5.0	100	--	--	17	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-93	<5.0	590	--	--	59	<10	<5.0	<5.0	<5.0	ND	ND	ND	11	ND	<5.0	ND	NA	NA	NA	NA
Oct-92	1.7	630	--	--	41	3.1	5.7	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	<10	1,800	--	--	140	<10	40	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Jan-92	<10	1,800	--	--	390	<10	29	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Oct-91	7.0	960	--	--	270	<5.0	14	<5.0	<5.0	ND	ND	ND	18	ND	<5.0	ND	NA	NA	NA	NA
Jul-91	6.0	980	--	--	300	<5.0	11	<5.0	<5.0	ND	ND	ND	35	ND	<5.0	ND	NA	NA	NA	NA
Apr-91	<2.0	460	--	--	52	<2.0	4.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Jan-91	<5.0	870	--	--	62	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	15	ND	<5.0	ND	NA	NA	NA	NA
Oct-90	<5.0	760	--	--	60	<5.0	6.0	<5.0	<5.0	ND	ND	ND	22	ND	<5.0	ND	NA	NA	NA	NA
Jul-90	<2.0	430	--	--	20	<2.0	2.0	<2.0	<2.0	ND	ND	ND	17	ND	<2.0	ND	NA	NA	NA	NA
Apr-90	<5.0	680	--	--	37	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Jan-90	<5.0	960	--	--	75	<5.0	6.0	<5.0	<5.0	ND	ND	ND	21	ND	<5.0	ND	NA	NA	NA	NA
Oct-89	<10	1,400	--	--	110	<10	<10	<10	<10	--	ND	--	20	ND	<10	--	--	--	--	--
Aug-89	5	980	--	--	93	13	13	<2.0	<2.0	--	ND	--	40	ND	<2.0	--	--	--	--	--
May-89	6.0	1,400	--	--	60	<5.0	<5.0	<5.0	<5.0	--	ND	--	25	ND	<5.0	--	--	--	--	--
Feb-89	<25	1,600	--	--	<25	<25	<25	<25	<25	--	ND	--	420	ND	<25	--	--	--	--	--
Nov-88	<10	1,300	--	--	<10	<10	<10	<10	<10	--	ND	--	50	ND	<10	--	--	--	--	--
Aug-88	<25	1,800	--	--	<25	<25	<25	<25	<25	--	ND	--	69	ND	<25	--	--	--	--	--
Jun-88	<10	1,300	--	--	32	<10	<10	<10	<10	--	ND	--	56	ND	<10	--	--	--	--	--
Jan-88	<25	2,100	--	--	<25	<25	<25	<25	<25	--	ND	--	280	ND	<25	--	--	--	--	--
Oct-87	<25	2,600	--	--	<25	<25	31	<25	<25	--	ND	--	54	ND	<25	--	--	--	--	--
Jun-87	<25	3,200	--	--	<25	<25	<25	<25	<25	--	ND	--	87	ND	<25	--	--	--	--	--
Apr-87	<25	3,800	--	--	31	<25	<25	<25	<25	--	ND	--	<25	ND	<25	--	--	--	--	--
Jan-87	24	3,100	--	--	25	<10	<10	<10	<10	--	ND	--	360	ND	<10	--	--	--	--	--
Sep-86	<25	5,100	--	--	<25	<25	<25	<25	<25	--	ND	--	660	ND	<25	--	--	--	--	--
Jul-86	<25	5,300	--	--	<25	<25	<25	<25	<25	--	ND	--	370	ND	<25	--	--	--	--	--
Apr-86	<25	3,500	--	--	<25	<25	<25	<25	<25	--	ND	--	<25	ND	<25	--	--	--	--	--
Jan-86	<25	3,500	--	--	<25	<25	<25	<25	<25	--	ND	--	NA	ND	<25	--	--	--	--	--
Oct-85	60	3,300	--	--	26	<25	41	<25	<25	--	ND	--	420	ND	<25	--	--	--	--	--
Nov-84	16	4,400	--	--	19	NA	6.4	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-84	ND	3,000	--	--	ND	ND	ND	ND	ND	--	ND	--	100	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-8B ZB1																				
Oct-13	<2.5	36	450	8.8		17	<2.5	3.0	<2.5		<5.0	<2.5	<2.5	<5.0	10	<2.5	NA	NA	NA	NA
Oct-12	<2.5	25	290	11		10	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	7.6	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-11	0.92	24	190	4.1	--	21	<0.50	1.1	0.85	<1.0	<1.0	<0.50	<0.50	<1.0	7.1	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	0.59	22	130	3.5	--	18	<0.50	0.73	0.74	<0.50	<1.0	<0.50	<0.50	<1.0	3.7	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	0.68	29	39	6.6	--	0.97	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.3	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	<2	36	150	3.0	--	34	<2	<2	<2	<2	<4	<2	<2	<4	7.1	<2	<2	<2	<2	<4
Oct-07	<5.0	7.5	220	5.9	--	35	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-07	<5.0	25.0	180	<5.0	--	65	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-07	<5.0	20.0	260	<5.0	--	120	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	6.3	220	<5.0	--	47	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-06	<5.0	5.8	230	<5.0	--	64	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	7.5	300	14	--	120	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	9.0	200	5.6	--	170	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-05	<5.0	7.7	190	6.3	--	160	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-05	<5.0	38	150	<5.0	--	120	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-05	<5.0	47	100	<5.0	--	310	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-04	<2.0	33	72	3.0	--	140	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	<2.0	<8.0	6.8	<2.0	NA	NA	NA	NA
Jul-04	<5.0	100	80	<5.0	--	150	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Apr-04	1.7	53	58	3.8	--	99	<1.0	<1.0	1.5	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-03	<5.0	98	79	<5.0	--	230	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Jul-03	1.1	60	60	3.6	--	120	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Apr-03	<1.0	59	59	2.3	--	260	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Jan-03	1.7	82	68	2.5	--	80	1.5	1.2	1.4	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	NA	NA	NA
Oct-02	1.6	75	77	<1.0	--	96	1.2	1.2	1.2	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	1.1	<1.0	<1.0	<2.0
Jul-02	<1.0	64	72	<1.0	--	180	<1.0	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Mar-02	2.1	81	78	3.1	--	92	1.2	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Jan-02	1.8	98	90	3.8	--	76	1.1	1.3	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	1.6	6.7	7.2
Oct-01	1.8	120	120	4.5	--	<2.0	1.9	1.6	1.2	NA	<2.0	<2.0	NA	<2.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Aug-01	2.2	130	140	4.7	--	110	1.7	1.1	1.1	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Jun-01	1.9	110	120	3.3	--	100	2.5	1.4	1.3	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	1.6	<2.0
Apr-01	1.6	68	99	2.7	--	99	1.5	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Feb-01	1.6	65	150	2.4	--	100	1.3	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	1.7	<1.0	1.3
Dec-00	<1.0	41	14	1.7	--	6.8	2	<1.0	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Nov-00	3.6	140	240	3.5	--	32	3.8	2.2	1.3	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-00	<10	170	160	<10	--	25	<10	<10	<10	NA	ND	ND	<10	ND	NA	<10	NA	<1.0	<1.0	<2.0
Oct-99	6.5	190	160	<5.0	--	19	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	5.8	<5.0	NA	NA	NA	NA
Apr-99	<10	170	160	<10	--	15	<10	<10	<10	ND	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-98	<10	180	200	<10	--	19	<10	<10	<10	ND	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Apr-98	<5.0	200	220	<5.0	--	42	<5.0	<5.0	<5.0	ND	ND	ND	<20	ND	<5.0	<30	NA	NA	NA	NA
Oct-97	<10	210	350	<10	--	35	<10	<10	<10	ND	ND	ND	<10	ND	<20	<10	NA	NA	NA	NA
Apr-97	7.1	220	320	5.4	--	28	4.0	3.0	2.0	ND	ND	ND	4.2	ND	4.8	ND	NA	NA	NA	NA
Oct-96	5.4	200	310	5.2	--	44	3.8	2.4	1.6	ND	ND	ND	3.2	ND	5.8	ND	NA	NA	NA	NA
Apr-96	8.2	260	--	--	284.3	<2.5	4.8	2.5	<2.5	ND	ND	ND	<2.5	ND	<2.5	ND	NA	NA	NA	NA
Oct-95	8.1	230	--	--	354.7	37	5.5	3.1	<2.5	ND	ND	ND	3.3	ND	3.7	ND	NA	NA	NA	NA
Apr-95	9.9	240	--	--	284	41	4.9	<4.0	<4.0	ND	ND	ND	<4.0	ND	<4.0	ND	NA	NA	NA	NA
Oct-94	<25	270	--	--	320	<25	<25	<25	<25	ND	ND	ND	<25	ND	<25	ND	NA	NA	NA	NA
Apr-94	13	390	--	--	420	220	9.0	<5.0	<5.0	ND	ND	ND	3.6	ND	10	ND	NA	NA	NA	NA
Oct-93	10	320	--	--	350	140	5.0	<5.0	<5.0	ND	ND	ND	6.0	ND	<5.0	ND	NA	NA	NA	NA
Apr-93	10	370	--	--	260	240	8.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-92	13	410	--	--	150	62	11	5.3	3.8	ND	ND	ND	NA	ND	17	ND	NA	NA	NA	NA
Apr-92	14	620	--	--	430	110	38	8.0	<5.0	ND	ND	ND	<5.0	ND	10	ND	NA	NA	NA	NA
Jan-92	<50	6,000	--	--	<50	<50	<50	<50	<50	ND	ND	ND	160	ND	<50	ND	NA	NA	NA	NA
Oct-91	20	440	--	--	130	<2.0	26	6	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Jul-91	18	420	--	--	230	<2.0	19	6.0	2.0	ND	ND	ND	5.0	ND	6.0	ND	NA	NA	NA	NA
Apr-91	20	680	--	--	90	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Jan-91	26	660	--	--	20	<5.0	9.0	5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-90	17	600	--	--	590	350	10	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Jul-90	26	810	--	--	600	390	12	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Apr-90	40	1,600	--	--	1,400	1,700	<10	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
May-89	54	1,700	--	--	340	880	<10	<10	<10	--	ND	--	<10	ND	<10	--	--	--	--	--
Feb-89	51	2,500	--	--	270	870	<25	<25	<25	--	ND	--	<25	ND	<25	--	--	--	--	--
Nov-88	25	360	--	--	100	490	15	<5.0	<5.0	--	ND	--	15	ND	<5.0	--	--	--	--	--
Aug-88	24	370	--	--	340	1,800	28	<10	<10	--	ND	--	36	ND	<10	--	--	--	--	--
May-88	40	750	--	--	610	770	24	5.2	<5.0	--	ND	--	24	ND	41	--	--	--	--	--
Jan-88	79	1,000	--	--	610	690	100	<10	<10	--	ND	--	59	ND	41	--	--	--	--	--
Oct-87	63	610	--	--	610	460	33	4.9	<5.0	--	ND	--	55	ND	36	--	--	--	--	--
Jul-87	85	720	--	--	990	260	12	<10	<10	--	ND	--	<10	ND	17	--	--	--	--	--
Jan-87	170	570	--	--	560	170	19	4.8	<2.5	--	ND	--	<2.5	ND	90	--	--	--	--	--
Jul-86	170	<5.0	--	--	600	<5.0	25	<5.0	<5.0	--	ND	--	<5.0	ND	<5.0	--	--	--	--	--
Apr-86	240	650	--	--	1,300	360	<5.0	<5.0	<5.0	--	ND	--	<5.0	ND	<5.0	--	--	--	--	--
Mar-86	1,100	4,300	--	--	3,200	<25	<25	<25	<25	--	ND	--	NA	ND	<25	--	--	--	--	--
Mar-86	750	2,800	--	--	1,700	<10	<10	<10	<10	--	ND	--	NA	ND	<10	--	--	--	--	--
Mar-86	810	2,200	--	--	1,400	<10	<10	<10	<10	--	ND	--	NA	ND	<10	--	--	--	--	--
Oct-85	370	1,600	--	--	880	<25	63	<25	<25	--	ND	--	200	ND	<25	--	--	--	--	--
Oct-85	330	1,600	--	--	890	<25	62	<25	<25	--	ND	--	250	ND	<25	--	--	--	--	--
Nov-84	360	2,600	--	--	410	NA	6	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-84	260	2,300	--	--	580	ND	ND	ND	ND	--	ND	--	ND	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-9B ZB1																				
Oct-13	2.2 J	410	280	5.0		3.6 J	<5.0	3.3 J	<5.0		<10	<5.0	1.5 J	<10	<5.0	<5.0	NA	NA	NA	NA
Oct-12	<5.0	130	360	5.1		<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-11	<5.0	110	350	<5.0	--	5.1	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-10	0.87	96	250	3.4	--	12	<0.50	1.7	0.76	<0.50	<1.0	<0.50	1.0	<1.0	1.1	<0.50	<0.5	<0.5	<0.5	<1.0
Oct-09	<10	31	290	<10	--	69	<10	<10	<10	<10	<20	<10	<10	<20	<10	<10	<10	<10	<10	<20
Oct-08	<5	280	110	<5	--	<5	<5	<5	<5	<5	<10	<5	7.9	<10	<5	<5	<5	<5	<5	<10
Oct-07	4.4	470	190	3.2	--	9.8	<0.5	2.2	0.83	<0.5	<1.0	<0.5	8.4	<1.0	1.6	<0.5	<0.5	<0.5	<0.5	<1.0
Oct-06	<0.5	4.6	31	1.4	--	30	<0.5	<0.5	0.51	<0.5	<0.5	<1.0	<0.5	<0.5	0.61	<0.5	NA	NA	NA	NA
Oct-05	<5.0	16	630	5.9	--	150	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA
Oct-04	<5.0	470	300	5.1	--	33	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-03	<5.0	390	560	7.8	--	38	<5.0	6.4	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Apr-03	2.0	550	240	3.6	--	19	1.7	4.3	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-02	3.4	460	180	3.7	--	8.7	<2.5	2.8	<2.5	<2.5	<5.0	<5.0	5.3	<10	<2.5	<2.5	NA	NA	NA	NA
Jul-02	<5.0	460	190	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	<10	<5.0	<5.0	ND	<5.0	<5.0	NA	NA	NA	NA
Apr-02	<5.0	510	210	<5.0	--	5.3	<5.0	<5.0	<5.0	ND	<10	<5.0	<5.0	ND	<5.0	<5.0	NA	NA	NA	NA
Jan-02	<10	680	270	<10	--	<10	<10	<10	<10	ND	<20	<10	<10	ND	<10	<10	NA	NA	NA	NA
Oct-01	<10	780	150	<10	--	<10	<10	<10	<10	<10	<10	<20	<40	<40	<10	<10	NA	NA	NA	NA
Aug-01	<10	460	160	<10	--	<10	<10	<10	<10	NA	<10	<10	NA	ND	NA	<10	<10	<10	<10	<10
Oct-00	<70	1,000	200	<70	--	<70	<70	<70	<70	<70	ND	ND	<70	ND	<70	<70	NA	NA	NA	NA
Oct-99	<25	1,000	170	<25	--	46	<25	<25	<25	ND	ND	ND	<25	ND	<25	<25	NA	NA	NA	NA
Apr-99	<100	1,200	170	<100	--	<100	<100	<100	<100	ND	ND	ND	<100	ND	<100	<100	NA	NA	NA	NA
Apr-99 Dup	<100	1,100	160	<100	--	<100	<100	<100	<100	ND	ND	ND	<100	ND	<100	ND	NA	NA	NA	NA
Oct-98	<25	1,000	130	<25	--	37	<25	<25	<25	ND	ND	ND	<25	ND	<25	<25	NA	NA	NA	NA
Apr-98	<100	2,200	130	<100	--	<100	<100	<100	<100	ND	ND	ND	<400	ND	<100	<600	NA	NA	NA	NA
Apr-98 Dup	<100	2,000	<100	<100	--	<100	<100	<100	<100	ND	ND	ND	<400	ND	<100	ND	NA	NA	NA	NA
Oct-97	<50	1,600	150	<50	--	<50	<50	<50	<50	ND	ND	ND	<50	ND	<100	<50	NA	NA	NA	NA
Apr-97	15	1,300	130	<6.3	--	33	<6.3	<6.3	<6.3	ND	ND	ND	26	ND	8.1	ND	NA	NA	NA	NA
Oct-96	12	1,200	110	<5.0	--	25	<5.0	<5.0	<5.0	ND	ND	ND	13	ND	<5.0	ND	NA	NA	NA	NA
Apr-96	19	1,000	--	--	120	15	<2.5	<2.5	<2.5	ND	ND	ND	9.3	ND	6.1	ND	NA	NA	NA	NA
Oct-95	11	1,100	--	--	190	22	<10	<10	<10	ND	ND	ND	12	ND	<10	ND	NA	NA	NA	NA
Apr-95	<20	1,300	--	--	110	<40	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Oct-94	<25	1,200	--	--	120	<25	<25	<25	<25	ND	ND	ND	<25	ND	<25	ND	NA	NA	NA	NA
Apr-94	22	1,300	--	--	110	55	<5.0	<5.0	<5.0	ND	ND	ND	28	ND	5.0	ND	NA	NA	NA	NA
Oct-93	14	1,900	--	--	99	35	<5.0	<5.0	<5.0	ND	ND	ND	51	ND	<5.0	ND	NA	NA	NA	NA
Apr-93	<50	3,200	--	--	75	<100	<50	<50	<50	ND	ND	ND	69	ND	<50	ND	NA	NA	NA	NA
Oct-92	36	5,100	--	--	<500	19	3.9	<0.5	3.4	ND	ND	ND	NA	ND	6.1	ND	NA	NA	NA	NA
Apr-92	<50	5,600	--	--	<50	<50	<50	<50	<50	ND	ND	ND	<50	ND	<50	ND	NA	NA	NA	NA
Jan-92	<30	4,100	--	--	<30	<30	<30	<30	<30	ND	ND	ND	<30	ND	<30	ND	NA	NA	NA	NA
Oct-91	<20	3,200	--	--	340	<20	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Jul-91	<20	3,100	--	--	1,100	<20	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Apr-91	<20	2,100	--	--	1,200	<20	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Jan-91	10	2,200	--	--	580	30	<10	10	<10	ND	ND	ND	20	ND	<10	ND	NA	NA	NA	NA
Oct-90	<20	3,900	--	--	590	<20	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Jul-90	30	5,200	--	--	420	<20	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Jan-90	61	6,100	--	--	120	<50	<50	<50	<50	ND	ND	ND	<50	ND	<50	ND	NA	NA	NA	NA
Oct-89	38	3,800	--	--	160	20	<10	<10	<10	--	ND	--	50	ND	<10	--	--	--	--	--
Aug-89	61	7,300	--	--	<50	<50	<50	<50	<50	--	ND	--	200	ND	<50	--	--	--	--	--
Jun-89	39	3,500	--	--	130	73	<10	<10	<10	--	ND	--	150	ND	<10	--	--	--	--	--
Feb-89	<25	6,400	--	--	45	<25	<25	<25	<25	--	ND	--	200	ND	<25	--	--	--	--	--
Nov-88	50	6,900	--	--	<50	<50	80	<50	<50	--	ND	--	310	ND	<50	--	--	--	--	--
Aug-88	36	5,200	--	--	85	18	13	4.7	1.5	--	ND	--	170	ND	8	--	--	--	--	--
Aug-88	<50	6,000	--	--	<50	<50	<50	<50	<50	--	ND	--	<50	ND	<50	--	--	--	--	--
May-88	360	12,000	--	--	710	120	180	<100	<100	--	ND	--	1,700	ND	<100	--	--	--	--	--
Jan-88	50	4,800	--	--	70	<10	10	<10	<10	--	ND	--	180	ND	<10	--	--	--	--	--
Jan-88	<100	12,000	--	--	<100	<100	<100	<100	<100	--	ND	--	<100	ND	<100	--	--	--	--	--
Nov-87	<50	3,900	--	--	340	150	<50	<50	<50	--	ND	--	290	ND	NA	--	--	--	--	--
Oct-87	<50	6,900	--	--	450	150	<50	<50	<50	--	ND	--	390	ND	<50	--	--	--	--	--
Jul-87	44	1,300	--	--	1300	220	30	<10	<10	--	ND	--	36	ND	54	--	--	--	--	--
Jan-87	<50	17,000	--	--	<50	<50	160	<50	<50	--	ND	--	620	ND	<50	--	--	--	--	--
Jul-86	<50	7,900	--	--	<50	<50	<50	<50	<50	--	ND	--	<50	ND	<50	--	--	--	--	--
Apr-86	98	7,300	--	--	<25	<25	<25	<25	<25	--	ND	--	<25	ND	<25	--	--	--	--	--
Mar-86	590	14,000	--	--	<100	<100	<100	<100	<100	--	ND	--	NA	ND	<100	--	--	--	--	--
Mar-86	<100	16,000	--	--	<100	<100	<100	<100	<100	--	ND	--	NA	ND	<100	--	--	--	--	--
Mar-86	<100	9,600	--	--	<100	<100	<100	<100	<100	--	ND	--	NA	ND	<100	--	--	--	--	--
Oct-85	320	29,000	--	--	<50	<50	<50	<50	<50	--	ND	--	1,200	ND	<50	--	--	--	--	--
Nov-84	15	2,900	--	--	9	NA	<25	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-84	330	7,900	--	--	ND	ND	ND	ND	ND	--	ND	--	700	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-10B ZB1																				
Oct-13	0.59	17	50	0.21 J		<0.50	<0.50	<0.50	0.43 J		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-12	2.7	50	140	3.1		21	<0.50	0.99	0.76	<0.50	<1.0	<0.50	<0.50	<1.0	5.4	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-11	3.2	48	110	3.0	--	24	<0.50	1.2	1	<0.50	<1.0	<0.50	<0.50	<1.0	5.2	<0.50	<0.5	<0.5	<0.5	1.2
Oct-10	2.0	44	97	2.3	--	23	<0.50	0.57	0.77	<0.50	<1.0	<0.50	<0.50	<1.0	3.7	<0.50	<0.5	<0.5	<0.5	<1
Oct-09	0.94	20	49	1.4	--	9.8	<0.50	<0.50	0.55	<0.50	<1.0	<0.50	<0.50	<1.0	1.5	<0.50	1.5	<0.50	<0.50	<1.0
Oct-08	2.1	45	48	1.8	--	10	<0.5	<0.5	0.82	<0.5	<1	<0.5	<0.5	<1	3.2	<0.5	<0.5	<0.5	<0.5	<1
Oct-07	6.6	86	62	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-07	5.4	65	61	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
May-07	7.2	80	87	<5.0	--	8.9	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-07	12.0	130	140	<5.0	--	17.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	7.8	120	130	<5.0	--	6.2	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-06	8.1	150	170	<5.0	--	9.3	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	20	150	190	10.0	--	17	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	10	170	190	<5.0	--	51	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-05	9.9	180	79	<5.0	--	39	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-04	11	170	57	2.0	--	29	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	1.1	<4.0	10	<1.0	NA	NA	NA	NA
Oct-03	12	140	73	2.1	--	43	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	<2.0	<8.0	10	<2.0	NA	NA	NA	NA
Oct-02	8.9	130	56	2.8	--	11	1.2	<1.0	<1.0	<1.0	<2.0	<2.0	1.4	<4.0	8.4	<1.0	NA	NA	NA	NA
Jul-02	10	170	97	<2.5	--	16	<2.5	<2.5	<2.5	ND	<2.5	<5.0	<2.5	ND	6.9	<2.5	NA	NA	NA	NA
Apr-02	12	200	110	<2.5	--	15	<2.5	<2.5	<2.5	ND	<2.5	<5.0	<2.5	ND	10	<2.5	NA	NA	NA	NA
Jan-02	14	230	130	<2.5	--	25	<2.5	<2.5	<2.5	ND	<2.5	<5.0	<2.5	ND	12	<2.5	NA	NA	NA	NA
Oct-01	8.2	160	75	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<20	<5.0	<5.0	NA	NA	NA	NA
Aug-01	7.6	170	110	<5.0	--	27	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	ND	NA	<5.0	<5.0	<5.0	<5.0	<5.0
Apr-01	9.6	160	100	<2.5	--	20	<2.5	<2.5	<2.5	ND	<10	<2.5	<10	ND	9.6	<2.5	NA	NA	NA	NA
Jan-01	13	210	130	2.7	--	12	2.9	1.2	<1.0	NA	<2.0	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-00	<20	170	110	<15	--	<15	<15	<15	<15	<15	<15	<20	<20	<15	<15	<15	NA	NA	NA	NA
T-17B ZB1																				
Oct-13	<5.0	130	390	<5.0		<5.0	<5.0	<5.0	<5.0		<10	<5.0	<5.0	<10	<5.0	<5.0	NA	NA	NA	NA
May-13	<5.0	120	370	<5.0		<5.0	<5.0	<5.0	<5.0		<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-12	<5.0	310	230	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	14	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Apr-12	<5.0	110	510	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	8.9	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Apr-12 Dup	<5.0	110	490	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	9.9	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-11	<5.0	270	230	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	8.1	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-10	<5.0	120	320	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	69.0	190	3.5	--	<0.50	<0.50	0.69	<0.50	<0.50	<1.0	<0.50	2.1	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	<5	400.0	62	<5	--	<5	<5	<5	<5	<5	<10	<5	20	<10	<5	<5	<5	<5	<5	<10
Oct-07	<5.0	610	79	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-07	<5.0	450	87	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
May-07	<5.0	430	140	<5.0	--	11	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-07	12	660	220	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Oct-06	<5.0	240	280	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jul-06	<5.0	200	460	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Apr-06	<5.0	340	420	6.8	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
Jan-06	<5.0	400	280	<5.0	--	<5.0	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<15
T-18B ZB1																				
Oct-13	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
May-13	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
T-19B ZB1																				
Oct-13	<0.50	56	1.8	<0.50		<0.50	<0.50	<0.50	<0.50		<1.0	<0.50	1.4	<1.0	<0.50	<0.50	NA	NA	NA	NA
May-13	<0.50	53	1.9	<0.50		<0.50	<0.50	<0.50	<0.50		<1.0	<0.50	1.2	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-2C ZB2																				
Oct-13	<0.50	110	44	<0.50		<0.50	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-12	<5.0	310	160	<0.50		19	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-11	<0.50	310	88	1.1	--	11	<0.50	1.4	<0.50	<0.50	<1.0	<0.50	3	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	<0.50	81	22	0.60	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	0.56	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	0.65	460	94	2.0	--	33	<0.50	1.4	<0.50	<0.50	<1.0	<0.50	9.2	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	<1	130	33	<1	--	1.6	<1	<1	<1	<1	<2	<1	2.3	<2	<1	<1	<1	<1	<1	<2
Oct-07	2.3	1,200	43	<2.0	--	6.8	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	36	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0
Oct-06	<2.0	190	28	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	2.8	<2.0	<2.0	<2.0	NA	NA	NA	NA
Oct-05	<2.0	260	38	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	4.8	<2.0	<2.0	<2.0	NA	NA	NA	NA
Oct-04	<2.0	280	37	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	6.3	<8.0	<2.0	<2.0	NA	NA	NA	NA
Oct-03	<5.0	340	56	<5.0	--	6.7	<5.0	<5.0	<5.0	NA	<5.0	<5.0	NA	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<10
Apr-03	<1.0	1,300	47	<1.0	--	52	1.7	1.9	<1.0	NA	<2.0	<2.0	NA	<1.0	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-02	<2.5	400	59	<2.5	--	2.7	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	11	<10	<2.5	<2.5	NA	NA	NA	NA
Jul-02	<25	1,500	47	<25	--	42	<25	<25	<25	ND	<25	<50	<25	ND	<25	<25	NA	NA	NA	NA
Apr-02	<25	1,500	74	<25	--	32	<25	<25	<25	ND	<25	<50	<25	ND	<25	<25	NA	NA	NA	NA
Jan-02	<25	1,800	110	<25	--	45	<25	<25	<25	ND	<25	<50	<25	ND	<25	<25	NA	NA	NA	NA
Oct-01	7.0	1,500	220	2.3	--	49	<1.0	2	<1.0	NA	5.1	<2.0	NA	<1.0	NA	1.4	NA	5.8	<1.0	19.9
Jun-01	<25	1,300	630	<25	--	110	<25	<25	<25	ND	<25	<25	<100	ND	<25	ND	NA	NA	NA	NA
Mar-01	<25	1,800	79	<25	--	52	<25	<25	<25	ND	<25	<25	<100	ND	<25	<25	NA	NA	NA	NA
Jan-01	3.3	3,400	70	2.5	--	20	<1.0	6.6	<1.0	NA	12	<2.0	NA	ND	NA	<1.0	NA	<1.0	<1.0	<2.0
Oct-00	<100	2,700	110	<100	--	<100	<100	<100	<100	<100	ND	ND	380	ND	<100	<100	NA	NA	NA	NA
Oct-99	<100	4,600	<100	<100	--	<100	<100	<100	<100	ND	ND	ND	510	ND	<100	<100	NA	NA	NA	NA
Oct-99 Dup	<100	4,000	<100	<100	--	<100	<100	<100	<100	ND	ND	ND	440	ND	<100	ND	NA	NA	NA	NA
Apr-99	<100	3,600	<100	<100	--	<100	<100	<100	<100	ND	ND	ND	410	ND	<100	<100	NA	NA	NA	NA
Oct-98	<25	1,000	130	<25	--	<25	<25	<25	<25	ND	ND	ND	92	ND	<25	<25	NA	NA	NA	NA
Apr-98 **	<50	3,500	<50	<50	--	<50	<50	<50	<50	ND	ND	ND	320	ND	<50	<50	NA	NA	NA	NA
Oct-97	<100	3,600	<100	<100	--	<100	<100	<100	<100	ND	ND	ND	400	ND	<200	<100	NA	NA	NA	NA
Apr-97	<25	4,000	28	<25	--	34	<25	<25	<25	ND	ND	ND	420	ND	<25	ND	NA	NA	NA	NA
Oct-96	<17	4,000	21	<17	--	34	<17	<17	<17	ND	ND	ND	260	ND	<17	ND	NA	NA	NA	NA
Oct-95	<25	3,100	--	--	<25	<50	<25	<25	<25	ND	ND	ND	280	ND	<25	ND	NA	NA	NA	NA
Aug-95	<40	2,000	--	--	<40	<80	<40	<40	<40	ND	ND	ND	51	ND	<40	ND	NA	NA	NA	NA
Oct-94	<50	3,600	--	--	<50	<50	<50	<50	<50	ND	ND	ND	300	ND	<50	ND	NA	NA	NA	NA
Apr-94	<5.0	7,200	--	--	20	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	200	ND	<5.0	ND	NA	NA	NA	NA
Oct-93	<5.0	3,000	--	--	10	<10	<5.0	<5.0	<5.0	ND	ND	ND	180	ND	<5.0	ND	NA	NA	NA	NA
Apr-93	<50	3,400	--	--	<50	<100	<50	<50	<50	ND	ND	ND	210	ND	<50	ND	NA	NA	NA	NA
Oct-92	3.9	8,200	--	--	14	<1.0	1	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	<20	2,800	--	--	<20	<20	<20	<20	<20	ND	ND	ND	60	ND	<20	ND	NA	NA	NA	NA
Jan-92	<30	5,200	--	--	<30	<30	<30	<30	<30	ND	ND	ND	120	ND	<30	ND	NA	NA	NA	NA
Oct-91	<20	4,700	--	--	120	<20	<20	<20	<20	ND	ND	ND	200	ND	<20	ND	NA	NA	NA	NA
Jul-91	<20	3,900	--	--	<20	<20	<20	<20	<20	ND	ND	ND	210	ND	<20	ND	NA	NA	NA	NA
Apr-91	<20	2,400	--	--	<20	<20	<20	<20	<20	ND	ND	ND	50	ND	<20	ND	NA	NA	NA	NA
Jan-91	<20	4,000	--	--	<20	<20	<20	<20	<20	ND	ND	ND	220	ND	<20	ND	NA	NA	NA	NA
Oct-90	<20	2,100	--	--	<20	<20	<20	<20	<20	ND	ND	ND	90	ND	<20	ND	NA	NA	NA	NA
Jul-90	<20	3,300	--	--	<20	<20	<20	<20	<20	ND	ND	ND	240	ND	<20	ND	NA	NA	NA	NA
Apr-90	<20	4,900	--	--	<20	<20	<20	<20	<20	ND	ND	ND	370	ND	<20	ND	NA	NA	NA	NA
Jan-90	<20	3,600	--	--	<20	<20	<20	<20	<20	ND	ND	ND	390	ND	<20	ND	NA	NA	NA	NA
Oct-89	<20	3,300	--	--	<20	<20	<20	<20	<20	--	ND	ND	180	ND	<20	--	--	--	--	--
Aug-89	<25	4,300	--	--	<25	<25	25	<25	<25	--	ND	ND	420	ND	<25	--	--	--	--	--
May-89	<25	3,900	--	--	<25	<25	<25	<25	<25	--	ND	ND	270	ND	<25	--	--	--	--	--
May-89	<25	3,500	--	--	<25	<25	<25	<25	<25	--	ND	ND	230	ND	<25	--	--	--	--	--
Feb-89	<25	3,100	--	--	<25	<25	<25	<25	<25	--	ND	ND	220	ND	<25	--	--	--	--	--
Nov-88	65	3,000	--	--	<50	<50	<50	<50	<50	--	ND	ND	440	ND	<50	--	--	--	--	--
Aug-88	<25	3,400	--	--	<25	<25	36	<25	<25	--	ND	ND	400	ND	<25	--	--	--	--	--
Jun-88	<10	5,500	--	--	<10	<10	<10	<10	<10	--	ND	ND	330	ND	<10	--	--	--	--	--
Jan-88	<100	4,400	--	--	<100	<100	<100	<100	<100	--	ND	ND	<100	ND	<100	--	--	--	--	--
Oct-87	<25	3,500	--	--	<25	<25	<25	<25	<25	--	ND	ND	240	ND	<25	--	--	--	--	--
Jul-87	<25	4,200	--	--	<25	<25	<25	<25	<25	--	ND	ND	220	ND	<25	--	--	--	--	--
Jan-87	<10	3,300	--	--	<10	<10	<10	<10	<10	--	ND	ND	170	ND	<10	--	--	--	--	--
Jul-86	<10	2,000	--	--	<10	<10	<10	<10	<10	--	ND	ND	650	ND	<10	--	--	--	--	--
Apr-86	<2.0	1,200	--	--	<2	<2.0	<2.0	<2.0	<2.0	--	ND	ND	<2.0	ND	<2.0	--	--	--	--	--
Mar-86	49	4,200	--	--	<25	<25	<25	<25	<25	--	ND	ND	NA	ND	<25	--	--	--	--	--
Mar-86	<25	5,500	--	--	<25	<25	<25	<25	<25	--	ND	ND	NA	ND	<25	--	--	--	--	--
Oct-85	<25	4,200	--	--	31	<25	<25	<25	<25	--	ND	ND	950	ND	<25	--	--	--	--	--
Nov-84	8.4	4,400	--	--	13	NA	<1.0	NA	NA	--	ND	ND	NA	ND	NA	--	--	--	--	--
Aug-84	7.2	760	--	--	3	NA	<0.1	<0.1	NA	--	ND	ND	39	ND	NA	--	--	--	--	--
Aug-84	10	2,300	--	--	12	ND	ND	6	ND	--	ND	ND	1,000	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-9C ZB2																				
Oct-13	<0.50	<0.50	0.36 J	<0.50		<0.50	<0.50	<0.50	<0.50		<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-12	<0.50	5	3.7	<0.50		<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-11	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	<0.50	0.98	2.1	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	78	57	2.2	--	2.8	<0.50	1.7	<0.50	<0.50	<1.0	<0.50	0.63	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	<0.5	43	17	0.6	--	0.66	<0.5	0.82	<0.5	<0.5	<1	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1
Oct-07	<0.5	88	36	1.4	--	1.6	<0.5	1.7	<0.5	<0.5	<1.0	<0.5	1.1	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0
Oct-06	<0.5	0.88	0.54	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
Oct-05	<0.5	1.7	1.4	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
Oct-04	<0.5	6.1	2.9	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-03	<2.5	83	59	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<2.5	<10	<2.5	<2.5	NA	NA	NA	NA
Oct-02	<0.5	3.1	2.4	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-01	<5.0	94	65	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	NA	NA	NA	NA
Oct-00	<3.0	66	43	<3.0	--	<3.0	<3.0	<3.0	<3.0	<3.0	ND	ND	<3.0	ND	<3.0	<3.0	NA	NA	NA	NA
Oct-99	<1.0	3.9	1.9	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-99 Dup	<1.0	4.0	1.7	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-98	<1.0	2.4	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-97	<0.5	2.9	0.9	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<1.0	ND	NA	NA	NA	NA
Oct-96	<0.5	25	3.8	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	8.6	--	--	1.8	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<0.5	12	--	--	2	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-93	<0.5	66	--	--	13	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	4.9	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	8	--	--	<0.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Oct-91	<0.5	51	--	--	1	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	18	ND	<0.5	ND	NA	NA	NA	NA
Oct-90	<0.5	81	--	--	<0.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	9.0	ND	<0.5	ND	NA	NA	NA	NA
Oct-90	<0.5	73	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	9.8	ND	<0.5	ND	NA	NA	NA	NA
Aug-89	<1.0	190	--	--	1	<1.0	<1.0	<1.0	<1.0	--	--	--	33	ND	<1.0	--	--	--	--	--
May-88	<2.5	470	--	--	<2.5	<2.5	<2.5	<2.5	<2.5	--	--	--	160	ND	<2.5	--	--	--	--	--
Jan-88	<5.0	330	--	--	<5.0	<5.0	7.5	<5.0	<5.0	--	--	--	280	ND	<5.0	--	--	--	--	--
Jul-86	<0.5	9.2	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	32	ND	<0.5	--	--	--	--	--
Apr-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<0.5	ND	<0.5	--	--	--	--	--
Jan-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	NA	ND	<0.5	--	--	--	--	--
Oct-85	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	<0.5	ND	<0.5	--	--	--	--	--
Jan-85	<0.5	<0.5	--	--	<0.5	NA	<0.5	NA	NA	--	--	--	<0.5	ND	NA	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-10C ZB2																				
Oct-13	<10	1100	58	<10		<10	<10	<10	<10		<20	<10	170	<20	<10	<10	NA	NA	NA	NA
Oct-12	<5.0	1,200	83			<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	160	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-11	<5.0	890	88	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	160	<10	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Oct-10	<0.50	790	61	2.2	--	2.5	<0.50	2.4	<0.50	<0.50	<1.0	<0.50	120	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	3.0	350	4.0	--	14	<0.50	2.4	<0.50	<0.50	<1.0	<0.50	57	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	<50	1,900	68	<50	--	<50	<50	<50	<50	<50	<100	<50	450	<100	<50	<50	<50	<50	<50	<100
Oct-07	2.5	4,500	100	6.5	--	6.8	<2.5	7.1	<2.5	<2.5	<2.5	<2.5	570	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-06	<2.5	340	14	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	70	<2.5	<2.5	<2.5	NA	NA	NA	NA
Oct-05	<5.0	710	28	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	110	<5.0	<5.0	<5.0	NA	NA	NA	NA
Oct-04	<2.0	270	10	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	39	<8.0	<2.0	<2.0	NA	NA	NA	NA
Oct-03	<5.0	290	9.8	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<10	40	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-02	<2.5	390	18	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	61	<10	<2.5	<2.5	NA	NA	NA	NA
Oct-01	<50	1,600	180	<50	--	<50	<50	<50	<50	<50	<50	100	780	<200	<50	<50	NA	NA	NA	NA
Oct-00	<40	440	58	<40	--	<40	<40	<40	<40	<40	ND	ND	<40	ND	<40	<40	NA	NA	NA	NA
Oct-99	<2.0	110	20	<2.0	--	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	11	ND	<2.0	ND	NA	NA	NA	NA
Oct-98	<5.0	130	12	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	9.7	ND	<5.0	ND	NA	NA	NA	NA
Oct-97	<2.5	57	<2.5	<2.5	--	<2.5	<2.5	<2.5	<2.5	ND	ND	ND	<2.5	ND	<5.0	ND	NA	NA	NA	NA
Oct-96	<0.5	46	1.6	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	0.8	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	38	--	--	3.2	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<25	200	--	--	<25	<25	<25	<25	<25	ND	ND	ND	<25	ND	<25	ND	NA	NA	NA	NA
Oct-93	<0.5	260	--	--	0.9	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	250	--	--	0.8	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	290	--	--	0.9	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	97	--	--	1.1	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	8.3	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	3.0	2,300	--	--	6.5	<0.5	4.5	79	0.6	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	<20	4,400	--	--	<20	<20	<20	<20	<20	ND	ND	ND	<20	ND	<20	ND	NA	NA	NA	NA
Jan-92	<30	2,900	--	--	<30	<30	<30	<30	<30	ND	ND	ND	90	ND	<30	ND	NA	NA	NA	NA
Oct-91	<50	5,900	--	--	<50	<50	<50	<50	<50	ND	ND	ND	<50	ND	<50	ND	NA	NA	NA	NA
Oct-91	<20	2,700	--	--	<20	<20	<20	<20	<20	ND	ND	ND	110	ND	<20	ND	NA	NA	NA	NA
Oct-91	<10	4,100	--	--	<10	<20	<10	<10	<10	ND	ND	ND	180	ND	<10	ND	NA	NA	NA	NA
Jul-91	<50	7,000	--	--	<50	<50	<50	<50	<50	ND	ND	ND	220	ND	<50	ND	NA	NA	NA	NA
Jul-91	<50	6,800	--	--	<50	<50	<50	<50	<50	ND	ND	ND	360	ND	<50	ND	NA	NA	NA	NA
Jul-91	<50	5,400	--	--	<50	<100	<50	<50	<50	ND	ND	ND	200	ND	<50	ND	NA	NA	NA	NA
Apr-91	1	2,200	--	--	5.5	<1.0	6.0	16	1.4	ND	ND	ND	170	ND	<0.5	ND	NA	NA	NA	NA
Apr-91	<50	5,200	--	--	<50	<50	<50	<50	<50	ND	ND	ND	340	ND	<50	ND	NA	NA	NA	NA
Apr-91	<50	3,500	--	--	<50	<50	<50	<50	<50	ND	ND	ND	210	ND	<50	ND	NA	NA	NA	NA
Jan-91	<20	4,100	--	--	<20	<20	<20	40	<20	ND	ND	ND	150	ND	<20	ND	NA	NA	NA	NA
Jan-91	<20	4,000	--	--	<20	<20	<20	70	<20	ND	ND	ND	160	ND	<20	ND	NA	NA	NA	NA
Jan-91	<25	3,000	--	--	<25	<50	27	41	<25	ND	ND	ND	270	ND	<25	ND	NA	NA	NA	NA
Oct-90	<20	4,200	--	--	<20	<20	<20	<20	<20	ND	ND	ND	550	ND	<20	ND	NA	NA	NA	NA
Jul-90	<20	4,600	--	--	<20	<20	<20	<20	<20	ND	ND	ND	490	ND	<20	ND	NA	NA	NA	NA
Jul-90	<200	6,800	--	--	<200	<400	<200	<200	<200	ND	ND	ND	860	ND	<200	ND	NA	NA	NA	NA
Apr-90	<100	11,000	--	--	<100	<100	<100	<100	<100	ND	ND	ND	670	ND	<100	ND	NA	NA	NA	NA
Apr-90	<100	11,000	--	--	<100	<100	<100	<100	<100	ND	ND	ND	600	ND	<100	ND	NA	NA	NA	NA
Apr-90	<25	7,500	--	--	<25	<50	55	45	<25	ND	ND	ND	1,100	ND	<25	ND	NA	NA	NA	NA
Jan-90	<100	16,000	--	--	<100	<100	<100	<100	<100	ND	ND	ND	1,800	ND	<100	ND	NA	NA	NA	NA
Jan-90	<100	15,000	--	--	<100	<100	<100	<100	<100	ND	ND	ND	1,600	ND	<100	ND	NA	NA	NA	NA
Jan-90	<20	15,000	--	--	<20	<20	<90	<20	<20	ND	ND	ND	1,600	ND	<20	ND	NA	NA	NA	NA
Oct-89	<50	13,000	--	--	<50	<50	<50	<50	<50	--	ND	--	3,400	ND	<50	--	--	--	--	--
Aug-89	<50	13,000	--	--	<50	<50	200	<50	<50	--	ND	--	1,500	ND	<50	--	--	--	--	--
May-89	13	14,000	--	--	10.3	<0.2	320	80	10	--	ND	--	1,900	ND	<0.2	--	--	--	--	--
May-89	<50	13,000	--	--	<50	<50	250	<50	<50	--	ND	--	1,700	ND	<50	--	--	--	--	--
Feb-89	<250	9,300	--	--	<250	<250	<250	<250	<250	--	ND	--	550	ND	<250	--	--	--	--	--
Nov-88	<50	12,000	--	--	<50	<50	200	50	<50	--	ND	--	1,400	ND	<50	--	--	--	--	--
Aug-88	<100	16,000	--	--	<100	<100	300	<100	<100	--	ND	--	2,300	ND	<100	--	--	--	--	--
May-88	<50	7,100	--	--	<50	<50	100	<50	<50	--	ND	--	640	ND	<50	--	--	--	--	--
Jan-88	<100	10,000	--	--	<100	<100	<100	<100	<100	--	ND	--	3,200	ND	<100	--	--	--	--	--
Oct-87	<50	6,700	--	--	<50	<50	60	<50	<50	--	ND	--	1,700	ND	<50	--	--	--	--	--
Jun-87	<25	4,200	--	--	<25	<25	<25	<25	<25	--	ND	--	460	ND	<25	--	--	--	--	--
Apr-87	<10	2,000	--	--	<10	<10	<10	66	<10	--	ND	--	360	ND	<10	--	--	--	--	--
Jan-87	<50	9,500	--	--	<50	<50	<50	<50	<50	--	ND	--	700	ND	<50	--	--	--	--	--
Sep-86	130	3,600	--	--	<25	<25	<25	<25	<25	--	ND	--	1,100	ND	<25	--	--	--	--	--
Jul-86	<1.0	6,800	--	--	<1.0	<1.0	44	54	<1.0	--	ND	--	1,600	ND	<1.0	--	--	--	--	--
Jul-86	<25	5,400	--	--	<25	<25	<25	<25	<25	--	ND	--	2,700	ND	<25	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-11C ZB2																				
Oct-13	<2.5	460	35	0.68 J		4.8	<2.5	2.4 J	<2.5		<5.0	<2.5	22	<5.0	<2.5	<2.5	NA	NA	NA	NA
Oct-12	<2.5	290	26	<2.5		5.2	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	17	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-11	<2.5	310	22	<2.5	--	6.4	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	16	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-10	<0.50	250	16	<0.50	--	3.7	<0.50	1.1	<0.50	<0.50	<1.0	<0.50	5.5	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	1.7	3.9	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	<0.5	18	1.2	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.60	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<1
Oct-07	<2.5	290	20	<2.5	--	11	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	14	<5.0	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0
Oct-06	<2.5	330	22	<2.5	--	11	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	13	<2.5	<2.5	<2.5	NA	NA	NA	NA
Oct-05	<0.5	28	1.6	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.8	<0.5	<0.5	<0.5	NA	NA	NA	NA
Oct-04	<0.5	27	1.2	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-03	<0.5	17	0.53	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-02	<2.5	63	2.6	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<2.5	<10	<2.5	<2.5	NA	NA	NA	NA
Oct-01	<5.0	300	5.7	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	10	<5.0	<5.0	<5.0	NA	NA	NA	NA
Oct-00	<30	320	<30	<30	--	<30	<30	<30	<30	<30	ND	ND	<30	ND	<30	<30	NA	NA	NA	NA
Oct-99	<5.0	290	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-98	<10	270	<10	<10	--	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Oct-98 Dup	<2.0	160	<2.0	<2.0	--	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	4.4	ND	<2.0	ND	NA	NA	NA	NA
Oct-97	<1.0	36	2.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<2.0	ND	NA	NA	NA	NA
Oct-96	<0.5	37	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	1.0	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	54	--	--	<1.0	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	2.1	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<5.0	110	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-93	<0.5	210	--	--	2.3	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	7.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	150	--	--	9.3	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	<10	1,500	--	--	<10	<10	<10	<10	<10	ND	ND	ND	<10	ND	<10	ND	NA	NA	NA	NA
Jan-92	<5.0	1,000	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	67	ND	<5.0	ND	NA	NA	NA	NA
Oct-91	<5.0	960	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	28	ND	<5.0	ND	NA	NA	NA	NA
Jul-91	<2.0	800	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	42	ND	<2.0	ND	NA	NA	NA	NA
Apr-91	<2.0	270	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	18	ND	<2.0	ND	NA	NA	NA	NA
Jan-91	<2.0	290	--	--	4.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	10	ND	<2.0	ND	NA	NA	NA	NA
Oct-90	<2.0	330	--	--	16	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	16	ND	<2.0	ND	NA	NA	NA	NA
Jul-90	<5.0	330	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	7.0	ND	<5.0	ND	NA	NA	NA	NA
Apr-90	<5.0	570	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	13	ND	<5.0	ND	NA	NA	NA	NA
Jan-90	<2.0	410	--	--	5.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	15	ND	<2.0	ND	NA	NA	NA	NA
Oct-89	<1.0	500	--	--	40	<1.0	<1.0	<1.0	<1.0	--	ND	--	70	ND	<1.0	--	--	--	--	--
Aug-89	<2.0	680	--	--	72	<2.0	<2.0	<2.0	<2.0	--	ND	--	47	ND	<2.0	--	--	--	--	--
May-89	<2.5	560	--	--	23	<2.5	<2.5	<2.5	<2.5	--	ND	--	49	ND	<2.5	--	--	--	--	--
Feb-89	<25	780	--	--	<25	<25	<25	<25	<25	--	ND	--	42	ND	<25	--	--	--	--	--
Nov-88	<10	740	--	--	<10	<10	<10	<10	<10	--	ND	--	100	ND	<10	--	--	--	--	--
Aug-88	<25	1,800	--	--	87	<25	<25	<25	<25	--	ND	--	230	ND	<25	--	--	--	--	--
May-88	<5.0	1,100	--	--	40	<5.0	<5.0	<5.0	<5.0	--	ND	--	120	ND	<5.0	--	--	--	--	--
Jan-88	<25	2,200	--	--	<25	<25	<25	<25	<25	--	ND	--	430	ND	<25	--	--	--	--	--
Oct-87	<10	1,900	--	--	<10	<10	<10	<10	<10	--	ND	--	140	ND	<10	--	--	--	--	--
Jun-87	<10	2,900	--	--	<10	<10	<10	<10	<10	--	ND	--	230	ND	<10	--	--	--	--	--
Apr-87	11	1,600	--	--	87	<10	<10	12	<10	--	ND	--	210	ND	<10	--	--	--	--	--
Jan-87	<10	2,200	--	--	<10	<10	<10	<10	<10	--	ND	--	260	ND	<10	--	--	--	--	--
Sep-86	62	3,100	--	--	<25	<25	<25	<25	<25	--	ND	--	660	ND	<25	--	--	--	--	--
Jul-86	<1.0	1,800	--	--	<1.0	<1.0	9.7	3.2	<1.0	--	ND	--	710	ND	<1.0	--	--	--	--	--
Jul-86	<25	4,600	--	--	<25	<25	<25	<25	<25	--	ND	--	2,000	ND	<25	--	--	--	--	--
T-12C ZB2																				
Oct-13	<0.50	140	85	1.5		4.7	<0.50	2.3	<0.50		<1.0	0.23 J	2.7	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-12	<0.50	9.3	11	<0.50		<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-11	<0.50	7.6	8.7	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-10	<0.50	6.3	4.2	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-09	<0.50	170	53	1.2	--	3.8	<0.50	1.7	<0.50	<0.50	<1.0	<0.50	3.4	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-08	<2	170	65	<2	--	4.7	<2	<2	<2	<2	<4	<2	3.7	<4	<2	<2	<2	<2	<2	<4
Oct-07	<2.0	210	19	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	5.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0
Oct-06	<2.0	210	37	<2.0	--	3.1	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	5.7	<2.0	<2.0	<2.0	NA	NA	NA	NA
Oct-05	<2.0	180	39	<2.0	--	4.3	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	5.4	<2.0	<2.0	<2.0	NA	NA	NA	NA
Oct-04	<2.0	240	50	<2.0	--	4.2	<2.0	<2.0	<2.0	<2.0	<4.0	<4.0	7.6	<8.0	<2.0	<2.0	NA	NA	NA	NA
Oct-03	<5.0	210	61	<5.0	--	6.2	<5.0	<5.0	<5.0	<5.0	<10	<10	7.8	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-02	<1.0	180	17	1.4	--	1.9	<1.0	1.7	<1.0	<1.0	<2.0	<2.0	2.6	<4.0	<1.0	<1.0	NA	NA	NA	NA
Oct-01	<5.0	150	14	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<20	<20	<5.0	<5.0	NA	NA	NA	NA
Oct-00	<10	160	14	<10	--	<10	<10	<10	<10	<10	ND	ND	<10	ND	<10	<10	NA	NA	NA	NA
Oct-99	<2.0	130	18	<2.0	--	2.6	<2.0	<2.0	<2.0	ND	ND	ND	2.7	ND	<2.0	ND	NA	NA	NA	NA
Oct-98	<5.0	140	<5.0	<5.0	--	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-98 Dup	<2.0	110	5.6	<2.0	--	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	2.2	ND	<2.0	ND	NA	NA	NA	NA
Oct-97	<2.5	150	<2.5	<2.5	--	<2.5	<2.5	<2.5	<2.5	ND	ND	ND	<2.5	ND	<5.0	ND	NA	NA	NA	NA
Oct-96	<0.5	120	2.4	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	2.8	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	100	--	--	110	5.7	<1.0	<1.0	<1.0	ND	ND	ND	5.7	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<5.0	130	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	ND	ND	ND	<5.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-93	<5.0	210	--	--	<5.0	<10	<5.0	<5.0	<5.0	ND	ND	ND	6.0	ND	<5.0	ND	NA	NA	NA	NA
Oct-92	<0.5	130	--	--	2.0	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	<2.0	430	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	<2.0	ND	<2.0	ND	NA	NA	NA	NA
Jan-92	<3.0	410	--	--	<3.0	<3.0	<3.0	<3.0	<3.0	ND	ND	ND	10	ND	<3.0	ND	NA	NA	NA	NA
Oct-91	<1.0	250	--	--	10	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	11	ND	<1.0	ND	NA	NA	NA	NA
Jul-91	<1.0	240	--	--	19	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	16	ND	<1.0	ND	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-12C ZB2 (continued)																				
Apr-91	<2.0	290	--	--	6.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	7.0	ND	<2.0	ND	NA	NA	NA	NA
Jan-91	<2.0	290	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	4.0	ND	<2.0	ND	NA	NA	NA	NA
Oct-90	<2.0	350	--	--	2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	14	ND	<2.0	ND	NA	NA	NA	NA
Jul-90	<2.0	460	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	13	ND	<2.0	ND	NA	NA	NA	NA
Apr-90	<2.0	390	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	9.0	ND	<2.0	ND	NA	NA	NA	NA
Jan-90	<2.0	440	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	ND	ND	ND	21	ND	<2.0	ND	NA	NA	NA	NA
Oct-89	<2.0	410	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	--	ND	--	17	ND	<2.0	--	--	--	--	--
Aug-89	<2.0	350	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	--	ND	--	17	ND	<2.0	--	--	--	--	--
Aug-89	<10	260	--	--	<10	<20	<10	<10	<10	--	ND	--	NA	ND	NA	--	--	--	--	--
36DD ZB2																				
Oct-13	<0.5	<0.5	11	0.9	--	1.3	NA	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-12	<0.5	3.2	24	1.8	--	3.3	NA	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-11	<0.5	2.6	10	1.9	--	5.5	NA	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-10+	<0.5	<0.5	14	0.7	--	2.2	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-09+	<0.5	1.3	35	1.8	--	2.5	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-08+	<0.5	1.6	24	1.1	--	1.6	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
Oct-07+	<0.5	1.5	22	0.8	--	3.6	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-06+	<0.5	0.8	22	1.2	--	6.2	<0.5	<0.5	0.5	ND	ND	ND	<0.5	ND	<0.5	<0.5	NA	NA	NA	NA
Oct-05+	<0.5	<0.5	73	2.5	--	12	<0.5	0.5	0.7	ND	ND	ND	<1.0	ND	<0.5	ND	NA	NA	NA	NA
Oct-04+	<0.5	0.5	31	2.2	--	4.5	<0.5	<0.5	0.5	ND	ND	ND	<1.0	ND	<0.5	ND	NA	NA	NA	NA
Oct-03+	<0.5	1.2	29	1.9	--	4.6	<0.5	<0.5	<0.5	ND	ND	ND	<1.0	ND	<0.5	ND	NA	NA	NA	NA
Oct-02+	<0.5	8.1	130	2.2	--	1.3	<0.5	0.7	1.0	ND	ND	ND	<1.0	ND	<0.5	ND	NA	NA	NA	NA
Oct-01+	<0.5	11	110	1.6	--	<0.5	<0.5	0.8	1.1	ND	ND	ND	<1.0	ND	<0.5	ND	NA	NA	NA	NA
Oct-00+	<0.5	6.4	100	1.4	--	<1.0	<0.5	<0.5	1.0	ND	ND	ND	<1.0	ND	<0.5	ND	NA	NA	NA	NA
Apr-98+	<1.2	11	42	<1.2	--	<1.2	NA	<1.2	<1.2	ND	ND	ND	<5.0	ND	<1.2	ND	NA	NA	NA	NA
Oct-99	<1.0	10	77	1.2	--	<1.0	<1.0	<1.0	1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-97+	<0.5	13	49	1.1	--	<0.5	<0.5	0.5	0.7	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-96	<0.5	22	29	1.4	--	<0.5	<0.5	<0.5	0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	42	--	--	15.1	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<0.5	58	--	--	12	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-93	<0.5	38	--	--	8.7	<1.0	<0.5	<0.5	0.6	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	29	--	--	5.8	<1.0	<0.5	<0.5	0.6	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	<0.5	45	--	--	11	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-92	<0.5	37	--	--	23	<0.5	<0.5	<0.5	0.9	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-91	<0.5	36	--	--	21	<0.5	<0.5	<0.5	0.8	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jul-91	<0.5	29	--	--	22	<0.5	<0.5	<0.5	0.8	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-91	<0.5	27	--	--	18	<0.5	<0.5	<0.5	0.6	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-91	<0.5	26	--	--	16	<0.5	<0.5	<0.5	0.6	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-90	<0.5	1,100	--	--	16	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jul-90	<0.5	28	--	--	14	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-90	<0.5	35	--	--	15	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-90	<0.5	57	--	--	20	<0.5	<0.5	<0.5	0.7	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-89	<0.5	62	--	--	13	<0.5	<0.5	0.5	1.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Aug-89	<0.5	70	--	--	21	<0.5	<0.5	1.5	3.1	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
May-89	<0.5	68	--	--	18	<0.5	1.1	1	2	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Feb-89	<5.0	72	--	--	16	<5.0	<5.0	<5.0	<5.0	--	ND	--	<5.0	ND	<5.0	--	--	--	--	--
Nov-88	<5.0	85	--	--	25	<5.0	<5.0	<5.0	<5.0	--	ND	--	<5.0	ND	<5.0	--	--	--	--	--
Aug-88	<1.0	72	--	--	43	<1.0	1.6	1.4	3.7	--	ND	--	4.7	ND	<1.0	--	--	--	--	--
May-88	<0.5	68	--	--	40	<0.5	1.5	1.6	5.0	--	ND	--	2.6	ND	<0.5	--	--	--	--	--
Jan-88	<0.5	38	--	--	25	<0.5	1.0	<0.5	3.4	--	ND	--	1.9	ND	<0.5	--	--	--	--	--
Oct-87	<0.5	40	--	--	30	<0.5	1.4	0.7	3.0	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Jun-87	<0.5	32	--	--	38	<0.5	<0.5	<0.5	1.8	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Apr-87	<0.5	53	--	--	45	<0.5	2.8	1.3	2.2	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Jan-87	<0.5	26	--	--	16	<0.5	<0.5	<0.5	2.3	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Sep-86	<0.5	20	--	--	23	<0.5	<0.5	<0.5	1.8	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Jul-86	<0.5	27	--	--	22	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Apr-86	<0.5	27	--	--	2.4	<0.5	<0.5	<0.5	1.8	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Jan-86	<0.5	31	--	--	24	<0.5	<0.5	<0.5	<0.5	--	ND	--	NA	ND	<0.5	--	--	--	--	--
Oct-85	<0.5	8.6	--	--	17	<0.5	<0.5	<0.5	<0.5	--	ND	--	<0.5	ND	<0.5	--	--	--	--	--
Nov-84	<0.5	5.1	--	--	6.3	NA	<0.5	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Mar-84	NA	11	--	--	NA	NA	NA	NA	NA	--	ND	--	NA	ND	NA	--	--	--	--	--
Aug-83	<1.0	12	--	--	1.7	ND	<1.0	<1.0	<1.0	--	ND	--	<1.0	ND	ND	--	--	--	--	--
May-83	ND	990	--	--	120	ND	ND	ND	ND	--	ND	--	ND	ND	ND	--	--	--	--	--
Apr-83	20	18	--	--	2	ND	18	ND	ND	--	ND	--	ND	ND	ND	--	--	--	--	--

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well Number/ Dates	PCE (µg/L)	TCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Total 1,2-DCE (µg/L)	VC (µg/L)	1,1,1-TCA (µg/L)	1,1-DCE (µg/L)	1,1-DCA (µg/L)	CDM (µg/L)	Freon 11 (µg/L)	Freon 12 (µg/L)	Freon 113 (µg/L)	BFM (µg/L)	1,2-DCB (µg/L)	CBN (µg/L)	BEN (µg/L)	EBN (µg/L)	TOL (µg/L)	XYL (µg/L)
Drinking Water Standard	5	5	6	10	6	0.5	200	6	5	100	150	NE	1200	100	600	70	1	300	150	1750
T-8D ZB4																				
Per Water Board approval, groundwater sampling of well T-8D was suspended in 2002.																				
Oct-01	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<2.0	<2.0	<0.5	<0.5	NA	NA	NA	NA
Oct-00	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	ND	ND	<1.0	ND	<1.0	<1.0	NA	NA	NA	NA
Oct-99	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Apr-99	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-98	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Apr-98	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<2.0	ND	<0.5	ND	NA	NA	NA	NA
Oct-97	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<1.0	ND	NA	NA	NA	NA
Apr-97	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-96	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-96	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-95	<1.0	<1.0	--	--	<1.0	<2.0	<1.0	<1.0	<1.0	ND	ND	ND	<1.0	ND	<1.0	ND	NA	NA	NA	NA
Oct-94	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-94	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-93	<0.5	<0.5	--	--	<0.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-93	<0.5	<0.5	--	--	<0.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	NA	ND	<0.5	ND	NA	NA	NA	NA
Oct-92	<0.5	<0.5	--	--	<0.5	<1.0	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-92	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-92	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-91	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jul-91	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-91	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-91	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-90	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jul-90	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Apr-90	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Jan-90	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	ND	ND	ND	<0.5	ND	<0.5	ND	NA	NA	NA	NA
Oct-89	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Aug-89	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	ND	ND	<1.0	ND	<1.0	--	--	--	--	--
May-89	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Feb-89	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Nov-88	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Aug-88	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
May-88	<0.5	0.6	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Jan-88	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Oct-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Sep-86	<0.5	2.3	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Jul-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Apr-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	<0.5	ND	<0.5	--	--	--	--	--
Jan-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	NA	ND	<0.5	--	--	--	--	--
Oct-85	<0.5	1.1	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	--	ND	ND	55	ND	<0.5	--	--	--	--	--
Dec-84	<0.5	<0.5	--	--	<0.5	NA	<0.5	NA	NA	--	ND	ND	<0.5	ND	NA	--	--	--	--	--

Notes:
Drinking water standards are Maximum Contaminant Levels (MCLs) as established by the California Department of Health Services, or if no California MCLs have been established, then USEPA MCLs were used.

-- = Data reported as total 1,2-DCE prior to 1996.
^ = Data not previously reported due to low levels.
< = Not detected at the detection limit shown.
+ = Data provided by AMD.
** = Well resampled in July 1998 due to potential labeling error.
B = Compound was found in the blank and sample.
NA = Not Analyzed
ND = Not Detected
NE = Not Established
µg/L = microgram per liter
Water Board = California Regional Water Quality Control Board - San Francisco Bay Region
(1) - Initial results of 268 µg/L for cis-1,2-DCE was higher than standard of 200 µg/L. When rerun with dilution of 50, the result was <250 µg/L. Initial result reported in table.

1,1,1-TCA = 1,1,1-trichloroethane
1,1-DCA = 1,1-dichloroethane
1,1-DCE = 1,1-dichloroethene
1,2-DCB = 1,2-dichlorobenzene
1,2-DCE = 1,2-dichloroethene
BEN = Benzene
BFM = Bromoform
CBN = Chlorobenzene
CDM = Chlorodibromomethane

EBN = Ethylbenzene
Freon 11 = Trichlorofluoromethane
Freon 12 = Dichlorodifluoromethane
Freon 113 = 1,1,2-trichloro-1,2,2-trifluoroethane
PCE = Tetrachloroethene
TCE = Trichloroethene
TOL = Toluene
VC = Vinyl Chloride
XYL = Total Xylenes

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
Zone A Aquifer Wells									
36D	Apr-04	21.0	--	--	--	-299	--	--	--
	Apr-03	--	--	--	--	-263	--	--	--
	Nov-99	21.4	--	--	--	151	--	--	--
38S	Oct-13	21.4	6.65	1.435	3	5.8			<1
	May-13	22.8	7.01	1.286	32.8	-75			1.3
	Oct-12	22.57	6.69	1.27	5.30	-19.1	--	--	<1.0
	Apr-12	18.96	6.94	1.26	--	-139	--	--	1.1
	Oct-11	21.80	6.92	1.366	1.2	140.6	--	--	--
	Oct-10	22.01	6.93	9.507	1.5	44.0	--	--	--
	Oct-09	20.25	--	--	--	149	--	--	--
	Oct-08	21.5	--	--	--	17	--	--	--
T-7A	Oct-13	22.5	6.6	1.38	1	50.2			--
	Oct-12	20.88	7.01	1.472	0.0	69.1	--	--	<1.0
	Oct-11	20.54	6.91	1.535	0.0	222.0	--	--	--
	Oct-10	20.81	6.88	4.900	0.0	170.0	--	--	--
	Oct-09	21.40	7.01	1.70	30.8	115	--	--	--
	Oct-08	21.9	--	--	--	237	--	--	--
	Oct-07	21.3	7.34	0.16	202	--	--	--	--
	May-07	21.1	--	--	--	85	--	--	--
	Jan-07	18.2	6.25	1.67	--	168	--	--	--
	Apr-04	18.9	--	--	--	151	--	--	--
	Jun-01	18.9	--	--	--	197	3.00	410	<5.0
	Oct-99	20.5	--	--	--	202	1.65	500	2.3

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
EDUCTOR	Oct-13	19.9	4.91	2.306	7	11.3			1,390
	May-13	20.26	5.49	3.478	9.4	-15.9			1,800
	Oct-12	20.22	5.43	3.67	9.00	-19	--	--	49
	Apr-12	18.45	5.24	3.81	--	-26.6	--	--	2,200
	Oct-11	20.40	5.48	3.806	4.0	-81.7	--	1,400	280
	May-11	--	5.57	--	--	-67.0	--	2,200	3,200
	Mar-11	--	--	--	--	--	--	2,700	3,600
	11/15/2010[(a)]	19.79	6.25	2.47	362	-292	--	900	570
	10/21/2010[(b)]	18.94	7.24	2.213	391.4	-124.4	--	--	160.0
	10/13/2010[(c)]	19.81	5.99	4.413	7.1	-82.8	--	960	280.0
	Oct-09	20.68	--	--	--	-136	--	--	6.2
	Oct-08	20.5	--	--	--	-220	--	--	--
	Oct-07	20.0	--	--	--	-151	--	--	18
	Apr-07	19.3	6.43	0.23	51.2	-133	--	--	18
	Oct-06	20.5	--	--	--	-162	--	--	15
	Apr-06	19.3	--	--	--	-254	--	--	26
	Jan-06	19.8	--	--	--	-144	--	--	330
	Oct-05	20.5	--	--	--	-211	--	--	26
	Sep-05	20.7	--	--	--	--	--	--	--
	Jul-05	19.9	--	--	--	-115	--	--	61
	Apr-05	18.9	--	--	--	-178	--	--	55
	Jan-05	19.2	--	--	--	-239	--	--	14
	Oct-04	20.7	--	--	--	-220	--	1,800	25
	Apr-04	19.0	6.45	3.09	33	-247	--	1,600	46
	Jan-04	18.8	--	--	--	-260	--	1,200	16
	Oct-03	20.1	--	--	--	-236	--	2,100	200
	Jul-03	19.0	6.32	1.44	11	-87	--	6,200	8,000
	Apr-03	18.7	--	--	--	-400	--	2,200	1,700
	Jan-03	18.9	--	--	--	-77	--	2,200	2,800
	Oct-02	19.6	5.69	5.52	1	5	120	6,200	3,700
	Jul-02	19.2	--	--	--	-160	2,800	2,900	1,800
	Mar-02	19.7	--	--	--	-32	480	3,300	5,900
	Jan-02	19.0	--	--	--	-37	2,100	770	21,000
	Nov-01	19.5	--	--	--	-66	3,000	2,300	8,000
	Oct-01	21.2	4.85	5.22	147	-20	4,000	690	24,000
	Aug-01	21.0	4.92	4.17	22	-125	56,000	1,000	5,900
	Jun-01	19.6	6.93	1.44	0	-162	3.20	590	10
	Mar-01	18.9	7.06	1.46	20	-300	--	--	--
	Jan-01	24.4	7.01	1.45	4	-73	--	--	--
	Nov-99	21.3	7.02	1.46	0	200	0.96	470	<2.0

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
T-2A	Oct-13	19.8	6.36	1.877	2	-117.5			5.9
	May-13	20.34	7.31	2.283	57.9	-137			8.1
	May-13 Dup	20.34	7.31	2.283	57.9	-137			7.7
	Oct-12	20.03	6.73	2.25	2.1	-123.2	--	--	6.5
	Apr-12	18.66	6.97	1.96	--	-87.9	--	--	7.6
	Oct-11	20.16	6.65	2.339	2.2	-145.6	--	1,100	4.8
	May-11	--	--	--	--	--	--	960	28
	Mar-11	--	--	--	--	--	--	860	180
	11/15/2010[(a)]	19.9	6.73	0.82	225	-303	--	790	120
	10/20/2010[(b)]	19.91	6.65	1.655	773.4	-55.7	--	--	340
	10/12/2010[(c)]	20.19	6.66	2.006	0.0	-88.5	--	980	4.8
	Oct-09	20.64	6.81	2.50	4.3	-76	--	--	3.1 J
	Oct-08	20.7	7.02	0.19	48.6	-58	--	--	--
	Oct-07	20.7	6.49	2.41	8.6	-144	--	--	--
	Apr-07	19.4	6.18	0.00	131	-60	--	--	--
	Oct-06	19.6	7.72	2.12	202	-155	--	--	--
	Apr-06	19.5	6.86	1.82	580	-101	--	--	--
	Jan-06	20.0	6.78	0.26	13	-175	--	--	--
	Oct-05	20.7	7.06	2.03	410	-199	--	--	--
	Jul-05	20.2	6.41	2.62	--	-139	--	--	24
	Apr-05	19.1	6.67	2.20	235	-99	--	--	32
	Jan-05	19.2	6.74	2.58	16	-199	--	--	7.0
	Oct-04	20.7	6.51	2.82	--	-116	--	1,500	16
	Apr-04	19.3	6.54	2.37	7	-213	--	1,400	17
	Jan-04	19.3	6.32	2.33	0	-242	--	1,100	12
	Oct-03	20.2	6.79	2.53	21	-118	--	1,400	13
	Jul-03	19.2	7.11	2.51	35	-129	--	1,600	17
	Apr-03	18.9	6.65	2.39	0	-387	--	1,200	28
	Jan-03	18.6	6.82	2.68	5	-122	--	1,700	45
	Oct-02	19.6	6.48	3.79	53	-112	8	2,700	840
	Jul-02	19.2	6.40	4.23	--	-150	27	2,000	360
	Apr-02	19.3	6.53	3.13	48	-150	5.2	2,400	490
	Jan-02	--	--	--	--	--	--	--	--
	Nov-01	19.8	6.62	2.43	67	-85	11	1,200	1,100
	Oct-01	20.9	6.27	2.80	19	-103	15	1,700	460
	Aug-01	21.1	6.24	2.78	1	-127	29	330	410
	Jun-01	19.7	6.71	2.21	9	-121	12	1,900	1,600
	Mar-01	18.3	6.39	2.33	105	-221	580	820	150
	Jan-01	19.0	6.11	1.91	25	-324	190	840	410
	Nov-99	21.0	6.77	1.49	0	181	22.8	500	4.1
T-3A	Oct-13	20	6.71	1.303	1	134.9			--
	Oct-12	20.66	6.90	1.45	0.0	122.3	--	--	--
	Oct-11	20.39	6.93	1.67	0.2	222.3	--	--	--
	Oct-10	20.10	6.90	5.50	0.0	80.2	--	--	--
	Oct-09	20.10	7.44	1.68	5	1.67	--	--	--
	Oct-08	21.5	7.47	0.13	0	214	--	--	--

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
T-8A	Oct-13	19.6	6.63	1.313	2	190.6			<1
	May-13	22.48	6.59	1.431	26.8	63			1.2
	Oct-12	21.24	6.89	1.41	0	69	--		<1.0
	Apr-12	19.73	6.86	1.362	--	12.8	--		0.66 J
	Oct-11	20.50	6.87	1.538	0.2	192.4	--	--	<1.0
	Oct-10	20.40	6.85	1.546	0.0	33.1	--	--	<1.0
	Apr-10	18.98	6.97	1.32	24.5	-33	--	--	<5.0
	Oct-09	23.1	6.71	1.69	9.8	-69	--	--	<5.0
	Feb-09	18.5	7.31	1.61	2.3	-69	--	--	--
	Oct-08	21.8	6.98	1.87	--	-240	--	--	--
	Oct-07	22.2	7.03	0.16	8.1	-300	--	--	<5.0
	Apr-07	21.3	6.73	1.55	21.9	19	--	--	<5.0
	Jan-07	19.4	6.33	1.60	--	21	--	--	<5.0
	Oct-06	22.3	6.52	0.15	10	-101	--	--	<5.0
	Jul-06	22.4	6.59	0.16	12	8	--	--	<5.0
	Apr-06	19.1	6.69	1.37	13	-389	--	--	<5.0
	Jan-06	19.2	6.99	0.15	10	-176	--	--	<5.0
	Oct-05	22.1	6.55	1.61	0	-100	--	--	<5.0
	Jul-05	21.4	6.68	1.35	--	79	--	470	6.9
	Apr-05	20.0	6.98	1.44	849	77	--	--	--
	Oct-04	21.5	6.28	1.45	0	-138	--	--	--
	Apr-04	19.8	6.75	1.41	0	92	--	480	--
	Jan-04	19.6	6.50	1.46	0	170	--	420	--
	Oct-03	20.8	6.92	1.44	5	109	--	--	--
	Jul-03	20.4	7.18	1.46	0	86	--	--	--
	Apr-03	18.9	6.86	1.46	0	58	--	--	--
	Jan-03	18.9	6.89	1.40	0	143	--	--	--
	Oct-02	20.5	6.93	1.33	11	67	11	480	<5.0
	Jul-02	20.5	6.22	2.00	--	316	13	450	<5.0
	Mar-02	19.3	7.01	1.69	9	59	7.9	440	<5.0
	Jan-02	18.9	6.77	1.35	6	73.5	1.1	510	<5.0
	Nov-01	20.0	6.96	1.31	4	-116	220	450	<5.0
	Oct-01	21.0	6.35	1.40	10	77	3.90	470	6.4
	Aug-01	20.1	6.71	1.45	0	140	1.10	560	<5.0
	Jun-01	21.5	6.86	1.49	0	141	3.20	510	<5.0
	Mar-01	18.9	7.00	1.44	151	17	--	--	--
	Jan-01	18.8	6.57	1.44	11	-311	--	--	--
	Oct-99	21.5	5.78	1.44	1	124	1.36	510	2.2
T-9A	Oct-13	22.1	6.59	1.315	1	96.8			--
	Oct-12	22.03	6.84	1.415	0.0	-77.1	--	--	0.055 J
	Oct-11	21.53	6.81	1.506	0.0	234.0	--	--	--
	Oct-10	22.68	6.84	1.547	0.0	35.9	--	--	--
	Oct-09	21.89	6.59	1.66	2	49	--	--	--
	Oct-08	22.9	6.7	215	--	-131	--	--	--
	Oct-07	22.6	6.59	2.18	13	140	--	--	--
	May-07	20.7	6.82	1.56	-2	6.7	--	--	--
	Jan-07	20.2	6.36	1.57	--	92	--	--	--
	Oct-06	21.6	6.60	1.50	66	145	--	--	--
	Jul-06	20.6	6.74	0.15	113	69	--	--	--
	Apr-06	19.9	6.60	1.39	70.1	-221	--	--	--
	Jan-06	21.0	6.99	1.28	108	25	--	--	--
	Oct-05	22.5	6.91	1.46	724	88	--	--	<5.0
	Jul-05	20.8	6.37	1.34	--	126	--	470	11
	Apr-05	19.6	6.96	1.28	467	48	--	--	--
	Jan-05	20.7	6.92	1.36	503	65	--	--	--
	Oct-04	23.1	6.80	1.49	0	119	--	--	--
	Apr-04	19.2	6.75	1.65	7	144	--	490	--
	Jan-04	20.0	6.54	1.40	0	194	--	420	--

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
T-13A	Oct-13	20.6	6.85	1.418	52	-79.1	--	--	1.2
	May-13	20.41	7.02	1.412	55.1	-133	--	--	2.4
	May-13 Dup	20.41	7.02	1.412	55.1	-133	--	--	3.2
	Oct-12	20.4	6.60	1.48	3.4	-105.6	--	--	6.6
	Apr-12	18.9	6.41	1.55	--	-113	--	--	14
	Oct-11	19.60	6.79	1.524	0.0	-23	--	--	1.0
	Oct-10	19.24	6.75	1.538	0.0	-119	--	--	1.0
	Apr-10	18.57	6.77	1.47	23.4	-108	--	--	0.8 J
	Oct-09	20.28	6.53	1.77	1.8	-110	--	--	2.3 J
	Feb-09	19.02	7.09	1.93	65.2	-102	--	--	--
	Oct-08	20.4	7.15	0.32	325	-181	--	--	37
	Oct-07	20.5	6.10	2.24	259	-152	--	--	410
	Jul-07	20.4	6.70	0.13	9.9	236	--	--	<5.0
	Apr-07	20.2	6.38	1.69	--	145	--	--	<5.0
	Jan-07	20.4	6.39	1.72	--	65	--	--	<5.0
	Oct-06	20.6	5.86	0.17	10	188	--	--	<5.0
	Jul-06	20.8	6.23	0.15	5	199	--	--	<5.0
	Apr-06	20.0	6.98	0.72	38	111	--	--	<5.0
	Jan-06	20.2	6.97	0.16	0	244	--	--	<5.0
	Nov-05	21.0	6.43	1.48	0	248	--	510	6.5
T-14A	Oct-13	18.2	6.67	1.232	4	-109.9	--	--	<1
	May-13	20.10	7.21	1.393	31.2	-151	--	--	1.6
	Oct-12	20.51	6.63	1.36	3.9	-79.8	--	--	--
	Apr-12	17.8	6.71	1.41	--	-117	--	--	6.6
	Oct-11	20.03	6.77	1.455	0.9	91	--	--	1.2
	Oct-10	19.99	6.87	4.450	4.7	-170	--	--	1.2
	Apr-10	18.36	6.80	1.51	252.0	-110	--	--	1.3 J
	Oct-09	20.65	7.43	1.72	41.8	-154	--	--	8.0
	Feb-09	18.82	7.14	1.40	50.2	-89	--	--	--
	Oct-08	21.0	6.66	243	--	-466	--	--	22
	Oct-07	20.9	6.01	2.03	71.5	-163	--	--	430
	Jul-07	21.1	6.87	0.13	9.4	141	--	--	<5.0
	Apr-07	24.6	6.45	1.46	--	124	--	--	<5.0
	Oct-06	20.5	6.71	0.15	10	51	--	--	<5.0
	Apr-06	20.2	6.91	1.51	44	80	--	--	<5.0
	Jan-06	19.1	6.92	0.16	0	150	--	--	<5.0
	Nov-05	20.6	6.37	1.44	36	242	--	490	5.4

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
T-15A	Oct-13	21.4	6.55	1.282	4	170.9	--	--	--
	May-13	22.05	6.47	1.444	101	114	--	--	1.3
	Oct-12	22.0	6.47	1.37	0	6.47	--	--	1.6
	Apr-12	19.8	6.81	1.34	--	94	--	--	0.98 J
	Oct-10	21.27	6.84	1.489	0.0	63	--	--	--
	Oct-09	21.27	6.64	1.61	27.9	34	--	--	<5.0
	Oct-08	22.6	7.22	0.18	24.9	64	--	--	<5.0
	Oct-07	22.3	6.62	2.03	205	15	--	--	<5.0
	Jul-07	22.2	7.16	0.13	27.4	135	--	--	<5.0
	May-07	19.9	6.89	0.12	504	60	--	--	<5.0
	Jan-07	20.1	6.37	1.64	--	69	--	--	<5.0
	Oct-06	21.4	6.77	0.15	10	-15	--	--	<5.0
	Jul-06	22.3	6.64	0.15	215	-23	--	--	<5.0
	Apr-06	20.3	7.02	0.90	466	-104	--	--	<5.0
	Jan-06	20.3	7.00	0.16	54	-188	--	--	<5.0
	Nov-05	21.5	6.44	1.46	90	-125	--	580	<5.0
T-16A	Oct-13	21	6.58	1.275	26	149.2	--	--	--
	Oct-12	22.02	6.71	1.38	0.1	115.5	--	--	--
	Oct-11	21.35	6.80	1.48	-0.7	274.7	--	--	--
	Oct-10	21.26	6.82	3.00	3.1	139.7	--	--	--
	Oct-09	22.7	6.24	1.72	6	15	--	--	<5.0
	Oct-08	24.0	6.73	212	--	-135	--	--	<5.0
	Oct-07	21.8	7.06	0.15	567	-34	--	--	<5.0
	May-07	20.5	6.86	0.99	78	51	--	--	<5.0
	Oct-06	22.3	6.87	0.15	526	-57	--	--	<5.0
	Apr-06	20.3	7.03	1.43	582	-105	--	--	<5.0
	Jan-06	20.7	6.96	1.42	224	-107	--	--	<5.0
	Nov-05	22.0	6.41	1.48	15	-101	--	590	7.6
T-17A	Oct-13	20.4	6.79	1.231	2	-30.5	--	--	<1
	May-13	20.79	6.46	1.308	38.1	170	--	--	1.1
	Oct-12	21.1	6.87	1.31	4.9	147.6	--	--	<1.0
	Apr-12	18.2	6.91	1.20	--	61.2	--	--	0.63 J
	Nov-11	18.2	7.3	--	--	-58	--	--	3
	Nov-11	18.80	7.7	--	--	-25	--	--	0.71 J
T-19A	Oct-13	21.7	6.67	1.542	11	-105.2	--	--	4.4
	May-13	19.07	7.09	1.519	30.1	-159	--	--	5.4
	Oct-12	21.14	6.59	2.04	11	-136.4	--	--	12
	Apr-12	16.83	6.56	2.06	--	-141	--	--	16
	Oct-11	21.15	6.88	1.33	0.6	-133	--	--	5.5
	Oct-10	19.98	6.81	4.45	0.0	-120	--	--	5.5
	Apr-10	14.80	6.90	0.714	7.2	-137	--	--	7.6
	Oct-09	22.67	6.84	1.80	2	-120	--	--	5.1
	Feb-09	15.76	7.00	1.46	0.0	-94	--	--	--
	Oct-08	22.4	6.49	498	--	-344	--	--	24
	Oct-07	22.0	5.47	6.13	404	-136	--	--	3,500
	Sep-07	20.9	7.04	1.56	146	36	--	--	<5.0

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
T-23A	Oct-13	20.5	6.69	1.523	847	-108	--	--	3.6
	May-13	20.28	7.06	1.484	51.5	-147	--	--	3.3
	Oct-12	19.8	6.61	1.49	18.9	-91.9	--	--	6.8
	Apr-12	18.0	6.49	1.71	--	-123	--	--	34
	Oct-11	19.76	6.85	1.61	0.5	-16	--	--	1.1
	Oct-10	19.12	6.79	1.57	0.0	-82	--	--	1.1
	Apr-10	17.15	6.70	1.51	34.5	-144	--	--	1.3 J
	Oct-09	20.02	7.60	1.79	6.1	-141	--	--	15
	Feb-09	18.8	7.13	1.73	32.5	-89	--	--	--
	Oct-08	20.1	6.73	0.423	--	-444	--	--	19
	Oct-07	20.3	6.65	0.19	593	-230	--	--	190
	Sep-07	20.6	7.12	1.46	163	105	--	--	<5.0
T-25A	Oct-13	19.3	6.57	1.252	3	-90.2	--		<1
	May-13	21.76	7.29	1.41	150	-101	--	--	1.4
	Oct-12	20.86	6.54	1.37	1.1	-81.2	--	--	1.5
	Apr-12	19.1	6.76	1.31	--	-138.2	--	--	1.5
	Oct-11	20.33	6.74	1.46	1.4	299.5	--	--	<1.0
	Oct-10	20.06	6.87	6.54	12.1	-24.6	--	--	<1.0
	Apr-10	18.11	6.80	1.57	107.0	-87	--	--	0.8 J
	Oct-09	21.61	6.69	1.63	3.4	-101	--	--	<5.0
	Feb-09	18.35	7.20	1.57	16.1	-86	--	--	--
	Oct-08	22.0	7.18	0.19	17.2	-129	--	--	<5.0
	Oct-07	21.4	6.89	0.14	398	-155	--	--	24
	Sep-07	21.7	7.03	1.59	144	0.71	--	--	<5.0
Zone B1 Aquifer Wells									
T-7B	Oct-13	20.4	6.83	1.024	3	111.4			--
	Oct-12	20.79	7.02	1.09	1.1	131.1	--	--	<1.0
	Oct-11	21.03	7.15	1.08	9.6	66.7	--	--	--
	Oct-10	21.21	7.10	1.11	0.0	77.8	--	--	--
	Oct-09	20.06	6.92	1.12	46.8	101	--	--	--
	Oct-08	19.7	7.67	0.111	6.7	--	--	--	--
	Aug-01	19.1	6.88	1.17	0	9	2.2	360	5.6
	Jun-01	19.2	7.33	1.27	0	147	3.3	380	5.3
	Apr-01	19.4	6.92	1.19	30	-125	2.7	360	<2.0
	Feb-01	18.9	7.64	0.91	--	-163	0.96	160	18
	Dec-00	18.4	7.82	0.37	5	-215	10	130	11
	Nov-00	17.4	6.31	0.33	1	158	2.6	88	43
	Sep-00	19.9	6.60	1.16	2	-230	--	350	2.3
	Oct-99	19.3	8.74	0.41	0	75	1.19	330	2.1

Historic Groundwater General Environmental Parameter Results
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T-2B	Oct-13	19.3	6.49	1.449	2	-125.8			<1
	May-13	20.68	7.18	1.501	123	-111			1.5
	Oct-12	20.08	6.95	1.49	0	-119.7	--	--	0.11 J
	Apr-12	19.09	6.98	1.51	--	-105	--	--	1.2
	Oct-11	19.92	6.88	1.57	0.1	-131.5	--	510	<1.0
	May-11							500	1.4 J
	11/15/2010[(a)]	19.6	6.94	1.62	81.4	-118	--	540	27.0
	10/20/2010[(b)]	19.71	6.77	1.54	170.7	-95	--	--	57.0
	10/12/2010[(c)]	20.00	6.82	1.53	7.7	-108	--	490	<1.0
	Oct-09	20.56	6.65	2.03	3.1	-138	--	--	--
	Oct-08	20.4	6.86	--	--	-437	--	--	--
	Oct-07	20.0	7.11	0.146	144	-146	--	--	--
	Apr-07	19.7	6.84	0.13	5.9	-117	--	--	--
	Oct-06	19.0	7.78	1.58	331	-160	--	--	--
	Apr-06	20.0	6.99	1.56	58	-127	--	--	--
	Jan-06	19.6	6.84	0.19	92	-170	--	--	--
	Oct-05	20.1	7.19	1.68	11	-90	--	--	<5.0
	Jul-05	20.1	6.54	1.83	--	-152	--	--	20
	Apr-05	19.7	6.77	1.96	20	-146	--	--	28
	Jan-05	19.4	6.76	2.02	3	-163	--	--	<1.0
	Oct-04	20.7	6.54	2.34	0	-175	--	1,200	6.0
	Apr-04	19.3	6.62	2.31	3	-191	--	1,200	11
	Jan-04	19.3	6.47	2.54	0	-195	--	1,200	6.0
	Oct-03	20.0	6.76	2.60	20	-149	--	1,300	5.7
	Jul-03	19.4	7.05	2.60	32	-144	--	1,600	8.2
	Apr-03	19.1	6.73	2.61	10	-148	--	1,400	5.6
	Jan-03	18.5	6.89	2.83	3	-144	--	1,700	13
	Oct-02	19.8	6.79	2.98	286	-140	5.3	2,100	140
	Jul-02	19.6	6.55	2.79	--	-168	28	1,600	300
	Apr-02	18.4	6.38	3.69	40	-120	1.9	2,000	960
	Jan-02	19.3	6.45	3.52	56	-104	8.3	1,700	840
	Oct-01	20.2	6.12	3.86	16	-110	36	2,400	1,600
	Aug-01	21.0	6.07	3.41	0	-101	79	2,100	1,300
	Jun-01	19.6	6.95	1.47	0	-150	5.6	690	11
	Apr-01	19.6	6.66	1.55	46	-159	7.1	670	95
	Feb-01	20.4	6.85	1.50	--	-192	6	120	180
	Dec-00	19.7	6.52	2.11	75	-239	41	1,000	390
	Nov-00	20.6	6.57	1.57	20	-341	240	680	220
	Oct-00	21.0	6.92	1.41	11	-18	110	480	<2.0
	Nov-99	21.3	7.01	1.43	0	-6	1.65	470	4.1
T-5B	Oct-13	21.5	6.88	1.148	3	95.8			--
	Oct-12	21.05	7.11	1.23	0.0	76.9	--	--	--
	Oct-11	22.57	7.18	1.21	3.9	83.5	--	--	--
	Oct-10	21.33	7.11	1.24	0.0	107.1	--	--	--
	Oct-09	20.73	7.11	1.26	0.5	50	--	--	--
	Oct-08	20.0	7.69	0.118	5.9	--	--	--	--

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
T-8B	Oct-13	20.6	6.63	1.338	10	-75.6			--
	Oct-12	21.73	6.77	1.43	15.6	-61.4	--	--	<1.0
	Oct-11	20.13	6.90	1.52	9.0	59.4	--	--	--
	Oct-10	20.60	6.90	6.20	0.4	-57.0	--	--	--
	Oct-09	24.31	6.42	1.55	41	-64	--	--	<5.0
	Oct-08	22.0	6.78	199	--	-180	--	--	--
	Oct-07	21.9	6.68	2.87	186	-112	--	--	<5.0
	Apr-07	24.5	6.62	1.35	9	-56	--	--	<5.0
	Jan-07	20.0	6.36	1.65	--	-76	--	--	<5.0
	Oct-06	20.7	6.75	1.38	217	-158	--	--	<5.0
	Jul-06	22.4	6.65	0.15	43	-113	--	--	<5.0
	Apr-06	20.1	6.65	1.56	32	-230	--	--	<5.0
	Jan-06	19.6	6.95	1.35	93	-114	--	--	--
	Oct-05	21.4	6.84	1.51	0	-96	--	--	<5.0
	Jul-05	21.7	6.64	1.43	--	-59	--	500	8.3
	Apr-05	20.1	6.95	1.41	351	-83	--	--	--
	Oct-04	23.2	6.15	1.50	36	-161	--	--	--
	Apr-04	21.6	6.83	1.40	15	-23	--	--	--
	Oct-03	20.5	6.94	1.50	14	-30	--	--	--
	Jul-03	20.2	7.48	1.51	26	-40	--	--	--
	Apr-03	19.6	6.90	1.16	9	-83	--	--	--
	Jan-03	19.3	6.72	1.40	0	-35	--	--	--
	Oct-02	20.4	6.91	1.41	143	-72	6.1	550	<5.0
	Jul-02	20.0	6.39	2.00	--	322	2000	500	<5.0
	Mar-02	19.6	6.97	1.46	24	20	23	500	<5.0
	Jan-02	18.8	6.79	1.48	18	-75	33	590	<5.0
	Oct-01	21.5	6.09	1.39	22	77	11	510	<5.0
	Aug-01	20.4	6.64	1.43	0	-101	16	550	6.3
	Jun-01	22.8	6.81	1.59	0	-42	3.5	480	<5.0
	Apr-01	20.0	6.64	1.58	40	-133	140	610	3.6
	Feb-01	19.4	7.02	1.34	--	-186	11	74	<2.0
	Dec-00	19.8	7.02	1.59	7	-306	3.5	720	11
	Nov-00	20.1	6.60	1.42	1	-264	95	570	6.6
	Oct-00	21.5	6.82	1.46	10	180	290	500	4.1
	Oct-99	22.1	5.77	1.50	0	130	1.09	500	3.1
T-9B	Oct-13	25.1	6.76	1.471	1	99.4			--
	Oct-12	20.95	6.94	1.59	1.1	42.8	--	--	<1.0
	Oct-11	20.60	7.06	1.55	0.0	-131.8	--	--	--
	Oct-10	21.53	7.04	1.59	0.0	-168.6	--	--	--
	Oct-09	20.39	6.92	1.43	25.8	-55	--	--	--
	Oct-08	20.4	7.57	0.127	0	--	--	--	--

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
T-10B	Oct-13	18.6	6.72	1.121	2	184.8	--	--	--
	Oct-12	21.52	6.48	1.38	0.0	130.0	--	--	<1.0
	Oct-11	20.60	6.76	1.49	0.0	234.9	--	--	--
	Oct-10	20.68	6.85	5.93	0.0	-13.0	--	--	--
	Oct-09	21.62	6.27	1.65	2.3	-49	--	--	<5.0
	Oct-08	22.3	7.19	0.273	43.2	-51	--	--	--
	Oct-07	21.7	7.17	0.15	398	-55	--	--	<5.0
	Jul-07	22.0	7.51	0.11	216	-23	--	--	--
	May-07	21.2	6.88	0.11	404	-58	--	--	--
	Jan-07	20.2	6.39	1.52	--	8	--	--	<5.0
	Oct-06	23.9	6.75	1.32	--	4	--	--	<5.0
	Jul-06	22.9	6.51	0.15	86	30	--	--	<5.0
	Apr-06	20.8	6.61	1.59	43	-195	--	--	<5.0
	Jan-06	20.5	6.96	0.98	35	-43	--	--	<5.0
	Oct-05	22.0	7.04	1.30	462	15	--	--	5.4
T-4B	Oct-13	20.9	7.09	1.071	1	110			--
	Oct-12	21.42	7.07	1.42	5.5	19	--	--	--
	Oct-11	22.4	7.24	1.38	0	49.2	--	--	--
	Oct-10	21.74	7.23	5.53	6.8	-17.6	--	--	--
	Oct-09	19.92	6.61	1.57	9.9	-137	--	--	--
	Oct-08	21.9	7.3	187	--	-144	--	--	--
	Oct-07	20.2	7.59	0.14	311	-82	--	--	<5.0
	Jul-07	20.8	7.73	0.10	46.5	78	--	--	--
	May-07	20.3	7.54	1.05	--	95	--	--	--
	Oct-06	20.1	7.79	1.34	213	-111	--	--	--
	Apr-06	20.1	6.91	1.29	22	-161	--	--	--
	Jan-06	20.5	7.34	1.28	53	-121	--	--	--
	Oct-05	21.1	7.23	1.42	421	-37	--	--	<5.0
	Jul-05	20.7	6.98	1.32	--	11	--	460	7.6
	Apr-05	19.7	7.30	1.34	343	-63	--	--	--
	Jan-05	20.0	7.24	1.41	--	-92	--	--	--
	Oct-04	21.1	7.25	1.30	--	--	--	--	--
	Apr-04	20.1	6.95	1.29	0	-40	--	440	--
	Jan-04	19.4	6.86	1.39	0	-61	--	430	--
	Jul-03	19.7	7.86	1.34	3	-38	--	--	--
	Apr-03	19.5	7.30	1.22	0	277	--	--	--
	Oct-99	20.2	6.34	1.27	0	12	1.29	420	2.2
T-17B	Oct-13	20.2	7.22	1.246	6	-14.6	--	--	<1
	May-13	22.00	7.20	1.313		-17	--	--	1
	Oct-12	21.15	6.84	1.23	1.4	124.6			<1.0
	Apr-12	19.08	7.12	1.15	--	34.3			0.55 J
	Oct-11	21.03	7.15	1.08	9.6	66.7	--	--	--
	Oct-10	20.08	7.22	1.32	0.0	-28.8	--	--	--
	Oct-09	21.49	6.70	1.47	13.5	-36	--	--	--
	Oct-08	22.1	7.5	0.139	35.4	-186	--	--	--
	Oct-07	20.8	7.39	0.12	581	-65	--	--	<5.0
	Jul-07	21.5	7.57	0.09	255	73	--	--	--
	May-07	20.6	7.02	0.10	205	64	--	--	--
	Jan-07	19.6	6.30	1.28	--	25	--	--	--
	Oct-06	20.3	7.86	0.82	--	-113	--	--	--
	Jul-06	23.8	6.93	0.13	95	-106	--	--	--
	Apr-06	21.0	6.81	1.25	159	-237	--	--	--
	Jan-06	19.0	7.14	1.18	0	-82	--	--	--
T-18B	Oct-13	22	7.35	0.898	5	-89.5	--	--	--
	May-13	23.04	8.04	0.994		-175	--	--	--
T-19B	Oct-13	20.6	6.86	1.008	118	93.6	--	--	--
	May-13	21.44	6.94	1.095		34	--	--	--

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^oC)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)	Dissolved Hydrogen (nM)	Alkalinity (mg/L as CaCO3)	Total Organic Carbon (mg/L)
Zone B2 Aquifer Wells									
T-2C	Oct-13	19.1	7.97	0.817	2.0	147.2			--
	Oct-12	20.02	7.46	0.929	2.3	57.1	--	--	--
	Oct-11	20.32	7.50	0.899	0.9	64.3	--	--	--
	Oct-10	21.94	7.90	0.870	0.0	150.7	--	--	--
	Oct-09	20.02	7.08	0.96	372	20	--	--	--
	Oct-08	20	7.79	93	0	57	--	--	--
	Oct-07	21.8	7.06	1.26	9.5	11	2.0	320	--
	Oct-01	21.0	6.87	0.81	10	-24	2.0	320	<5.0
T-9C	Oct-13	19.4	7.48	0.739	4	122.2	--	--	--
	Oct-12	21.23	7.50	0.777	0.0	48.0	--	--	--
	Oct-11	20.35	7.78	0.765	0.0	-127.6	--	--	--
	Oct-10	24.07	7.55	0.807	0.0	21.3	--	--	--
	Oct-09	20.18	7.39	0.829	113	-96	--	--	--
	Oct-08	20.7	8.24	76	0.2	--	--	--	--
T-10C	Oct-13	20.9	7.71	0.783	7	-50.3	--	--	--
	Oct-12	21.22	7.40	0.825	0.0	162.3	--	--	--
	Oct-11	21.71	7.52	0.825	1.3	-192.2	--	--	--
	Oct-10	21.44	7.63	0.805	0.0	-117.5	--	--	--
	Oct-09	20.53	7.52	0.914	-4.1	-91	--	--	--
	Oct-08	19.9	7.98	86	0	--	--	--	--
T-11C	Oct-13	20.6	6.93	0.931	3	103.7	--	--	--
	Oct-12	21.66	6.94	0.971	0.0	208.0	--	--	--
	Oct-11	21.25	7.33	0.956	0.0	-8.0	--	--	--
	Oct-10	21.65	7.34	0.974	0.0	78.1	--	--	--
	Oct-09	20.31	7.22	0.98	156	71	--	--	--
	Oct-08	20.5	7.87	0.1	14.8	--	--	--	--
T-12C	Oct-13	20	7.38	0.858	23	113.8	--	--	--
	Oct-12	19.83	9.17	0.253	8.2	4.2	--	--	--
	Oct-11	20.36	8.95	0.255	20.9	-5.1	--	--	--
	Oct-10	20.53	9.44	12.84	1.8	65.0	--	--	--
	Oct-09	19.13	7.70	0.88	1.4	90	--	--	--
	Oct-08	19.8	10.4	32	19.3	73	--	--	--

Notes:
[a] One month post EVO injection (just before pure soybean oil injection)
[b] Immediately after EVO injection
[c] Immediately before EVO injection
^oC = degree Celsius
SU = standard units
uS/cm = micro Siemens per centimeter
NTU = Nephelometric Turbidity Unit
mV = millivolts
nM = nanomolar
mg/L = milligram per liter
$CaCo_3$ = calcium carbonate
-- = not analyzed/measured

Historic Groundwater Electron Acceptor/Metabolic By-Product Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

		Electron Acceptors				Metabolic By-Products						
Well	Date	Dissolved Oxygen (mg/L)	Nitrite and Nitrate (mg/L)	Sulfate (mg/L)	Total Iron (mg/L)	Ferrous Iron (mg/L)	Dissolved Manganese (mg/L)	Sulfide (mg/L)	Chloride (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
Zone A Aquifer Wells												
T-7A	Oct-13	0.34	--	--	--	--	--	--	--	--	--	--
	10/17/2012[a]	0.64	<0.50	170	--	--	--	--	--	1.5/0.64	0.031/0.038	0.76/0.74
	Oct-11	0.49	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.99	--	--	--	--	--	--	--	--	--	--
	Oct-09	5.53	--	--	--	--	--	--	--	--	--	--
	Oct-08	3.97	--	--	--	--	--	--	--	--	--	--
	May-07	3.44	--	--	--	--	--	--	--	--	--	--
	Jun-01	1.26	--	--	--	<1.0	0.012	<2.0	45	0.10	0.006	0.014
	Oct-99	0.71	3.0	190	<0.02	<1.0	<0.005	<2.0	55	0.05	0.013	0.017
EDUCTOR	Oct-13	0.19	--	1.6	--	--	--	--	--	6,400	22	910
	May-13	0.15	--	0.99 J	--	--	--	--	--	7,300	22	970
	Oct-12	0.07	<0.50	2.2	--	--	--	--	--	7,200	19	1,500
	Apr-12	0.71	--	3.0	--	--	--	--	--	6,100	18	1,400
	Oct-11	0.16	--	8.2	--	--	--	--	--	7,200	10	380
	May-11	0.14	--	--	--	--	--	--	--	520	3	1,300
	Mar-11	0.27	--	--	--	--	--	--	--	870	5	1,300
	11/15/2010[b]	2.06	--	--	--	--	--	--	--	7,600	90	2,400
	10/21/2010[c]	0.20	--	--	--	--	--	--	--	--	--	--
	10/13/2010[d]	5.99	--	2.8	--	--	--	--	--	6,900	14	24,000
	Oct-09	1.57	--	100	--	--	--	--	--	13,000	110	5,700
	Oct-08	0.00	--	--	--	--	--	--	--	9,100	12	14,000
	Oct-07	0.09	--	--	--	--	--	--	--	13,000	31	12,000
	Apr-07	2.79	--	4.2	--	6.5	--	--	250	13,000	52	7,300
	Oct-06	1.23	--	--	--	6.1	--	--	250	12,000	47	11,000
	Apr-06	0.00	--	--	--	4.7	--	--	250	14,000	63	9,300
	Jan-06	--	--	--	--	14	--	--	410	9,600	49	14,000
	Oct-05	--	--	--	--	3.7	--	--	220	12,000	79	6,100
	Sep-05	--	--	--	--	--	--	--	--	--	--	--
	Jul-05	0.20	--	--	--	1.5	--	--	240	11,000	110	6,100
	Apr-05	0.66	--	2.1	--	6.1	--	--	230	10,000	170	800
	Jan-05	0.06	--	--	--	4.9	--	--	160	9,500	260	6,700
	Oct-04	0.00	--	--	--	3.8	13	--	<1.0	11,000	300	4,200
	Apr-04	0.00	--	--	--	20	12	--	110	11,000	61	1,900
	Jan-04	0.00	--	--	--	2.0	16	--	--	11,000	9.6	600
	Oct-03	--	--	--	--	1.6	14	--	110	13,000	0.79	800
	Jul-03	0.00	--	--	--	58	41	--	310	950	8.1	9,900
	Apr-03	0.00	--	--	--	15	24	--	40	8,400	0.29	160
	Jan-03	--	--	--	--	29	21	--	120	3,600	1.4	310
	Oct-02	0.00	--	--	--	14	0.05	12	36	320	0.40	120
	Jul-02	--	6.3	7.8	3.0	--	--	--	100	380	0.080	85
	Mar-02	--	--	--	--	--	110	<2.0	740	11	0.045	4.6
	Jan-02	0.61	--	--	--	690	150	35	1,300	160	0.034	34
	Nov-01	--	<0.10	91	20	6.4	66	<2.0	54	4.6	0.018	1.4
	Oct-01	0.13	--	--	--	400	92	<2.0	4,000	0.95	0.050	15
	Aug-01	0.00	--	--	--	22	22	<2.0	64	2.4	0.11	29
	Jun-01	0.00	<0.05	120	1.0	1.1	2.5	<2.0	100	150	0.13	450
	Mar-01	0.39	--	--	--	0.97 w/HACH	--	--	--	--	--	--
	Jan-01	5.90	--	--	--	0.00 w/HACH	--	--	--	--	--	--
	Nov-99	6.20	--	--	--	<1.0	<0.005	<2.0	74	0.092	0.006	0.28
T-2A	Oct-13	0.21	--	34	--	--	--	--	--	8,200	250	170
	May-13	1.73	--	33	--	--	--	--	--	4,000	120	67
	May-13 Dup	1.73	--	37	--	--	--	--	--	4,300	120	72
	Oct-12	0.33	<0.50	13	--	--	--	--	--	10,000	280	470
	Apr-12	0.56		22	--	--	--	--	--	5,600	160	150
	Oct-11	0.20	--	5	--	--	--	--	--	11,000	490	190
	May-11	0.21	--	--	--	--	--	--	--	18,000	30	170
	Mar-11	0.17	--	--	--	--	--	--	--	20,000	19	530
	11/15/2010[a]	1.96	--	--	--	--	--	--	--	9,800	59	1,400
	10/20/2010[b]	6.65	--	--	--	--	--	--	--	--	--	--
	10/12/2010[c]	6.66	--	58	--	--	--	--	--	13,000	85	1,300
	Oct-09	4.29	--	88	--	--	--	--	--	6,100	32	180
	Oct-08	0.00	--	--	--	--	--	--	--	14,000	40	44
	Oct-07	4.01	--	--	--	--	--	--	--	5,700	24	16
	Apr-07	0.00	--	--	--	--	--	--	--	5,700	24	16
	Oct-06	--	--	--	--	--	--	--	--	11,000	59	53
	Apr-06	0.00	--	--	--	--	--	--	--	7,900	21	19
	Jan-06	--	--	--	--	--	--	--	--	7,800	31	26
	Oct-05	--	--	87	--	16	--	--	70	11,000	34	22
	Jul-05	0.45	--	20	--	2.5	--	--	85	12,000	52	41
	Apr-05	0.43	--	85	--	18	--	--	93	11,000	32	27
	Jan-05	0.09	--	14	--	10	--	--	72	6,800	26	30
	Oct-04	0.00	--	5.8	--	4.4	3.2	--	<1.0	8,200	25	41
	Apr-04	0.00	--	15	--	25	3.3	--	66	6,300	15	22
	Jan-04	0.00	--	25	--	21	3.7	--	94	9,900	26	18
	Oct-03	--	--	<1.0	--	25	2.2	--	65	9,100	5.2	29
	Jul-03	0.00	--	4.3	--	25	2.5	--	60	7,900	3.1	23
	Apr-03	0.00	--	6.1	8.6	35	3.5	--	29	9,800	6.5	13
	Jan-03	0.78	--	4.2	0.53	23	1.8	--	52	13,000	3.6	21
	Oct-02	0.00	12	16	160	70	7.9	--	72	1,200	0.26	7.3
	Jul-02	--	7.4	27	82	--	--	--	64	950	0.68	51
	Apr-02	0.12	1.7	4.3	67	56	8.0	<2.0	89	2,700	4.0	280

Historic Groundwater Electron Acceptor/Metabolic By-Product Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

		Electron Acceptors				Metabolic By-Products						
Well	Date	Dissolved Oxygen (mg/L)	Nitrite and Nitrate (mg/L)	Sulfate (mg/L)	Total Iron (mg/L)	Ferrous Iron (mg/L)	Dissolved Manganese (mg/L)	Sulfide (mg/L)	Chloride (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
T-2A	Jan-02	--	--	--	--	--	--	--	--	--	--	--
(continued)	Nov-01	0.35	2.0	80	23	35	5.4	3.2	2,400	1,200	0.009	44
	Oct-01	0.00	0.30	54	64	58	9.5	<2.0	57	1,400	0.016	49
	Aug-01	0.00	<0.10	53	60	48	9.0	<2.0	63	2,220	0.086	150
	Jun-01	0.00	<0.05	7.8	100	94	18	<2.0	71	6,300	<0.005	160
	Mar-01	2.03	2.0	120	15	8.4	4.8	<2.0	57	660	0.033	44
	Jan-01	5.90	0.77	63	15	9.5	3.2	<2.0	68	160	0.028	9.1
	Nov-99	2.64	3.3	290	<0.02	<1.0	<0.005	<2.0	72	0.093	0.019	0.062
T-3A	Oct-13	0.98	--	--	--	--	--	--	--	--	--	--
	Oct-12	1.23	--	--	--	--	--	--	--	--	--	--
	Oct-11	1.75	--	--	--	--	--	--	--	--	--	--
	Oct-10	1.40	--	--	--	--	--	--	--	--	--	--
	Oct-09	3.3	--	--	--	--	--	--	--	--	--	--
	Oct-08	4.21	--	--	--	--	--	--	--	--	--	--
T-8A	Oct-13	0.4	--	180	--	--	--	--	--	100	0.076	0.023 J
	May-13	0.21	--	170	--	--	--	--	--	13	0.030	0.050
	Oct-12	0.27	1.9	160	--	--	--	--	--	180	0.082	0.12
	Apr-12	0.53		180	--	--	--	--	--	2,900	0.38	0.26
	Oct-11	0.17	--	200	--	--	--	--	--	66	0.011J	0.037
	Oct-10	0.16	--	200	--	--	--	--	--	300	0.043	0.220
	Apr-10	6.97	--	--	--	--	--	--	--	560	0.042	0.330
	Oct-09	3.83	--	210	--	--	--	--	--	550	0.076	2.500
	Oct-08	0.00	--	--	--	--	--	--	--	--	--	--
	Oct-07	0.00	--	150	--	0.42	--	--	90	3,700	0.15	7.40
	Apr-07	1.23	--	260	--	<1.0	--	--	120	750	0.061	0.26
	Jan-07	0.00	--	240	--	<1.0	--	--	80	3,500	0.075	0.7
	Oct-06	1.66	--	240	--	2.6	--	--	95	4,200	<0.025	2.7
	Jul-06	0.21	--	260	--	<1.0	--	--	67	1,000	<0.025	0.24
	Apr-06	0.00	--	160	--	<1.0	--	--	51	3,000	0.12	3.8
	Jan-06	0.49	--	130	--	<1.0	--	--	41	2,200	<0.025	3.7
	Oct-05	0.00	--	210	--	<1.0	--	--	81	58	<0.025	0.029
	Jul-05	0.47	23	180	--	<1.0	<0.1	--	67	65	<0.025	0.031
	Apr-05	0.60	--	250	--	--	--	--	67	--	--	--
	Oct-04	0.00	--	--	--	--	--	--	--	--	--	--
	Apr-04	0.00	22	200	--	<1.0	--	--	59	38	<0.005	<0.005
	Jan-04	0.00	23	260	--	<1.0	--	--	72	13	0.058	0.11
	Oct-02	--	14	200	0.42	<1.0	0.016	<2.0	60	20	0.006	0.053
	Jul-02	--	16	190	0.086	--	--	--	68	44	0.009	0.038
	Mar-02	0.00	--	230	0.28	--	0.021	<2.0	59	56	0.008	0.066
	Jan-02	0.60	13	220	0.22	<1.0	0.027	<2.0	66	76	<0.005	0.066
	Nov-01	0.00	12	230	0.24	<1.0	0.047	3.2	63	52	0.008	0.079
	Oct-01	0.23	16	210	7.0	<1.0	0.057	<2.0	68	130	0.008	0.11
	Aug-01	0.00	16	2,500	0.38	<1.0	0.041	<2.0	65	43	0.007	0.072
	Jun-01	0.00	2.3	250	<0.050	<1.0	<0.010	<2.0	77	4.0	0.009	0.018
	Mar-01	0.61	--	--	--	0.17 w/HACH	--	--	--	--	--	--
	Jan-01	6.37	--	--	--	0.10 w/HACH	--	--	--	--	--	--
	Oct-99	3.82	3.6	280	0.0206	<1.0	0.014	<2.0	69	0.112	0.027	0.012
T-9A	Oct-13	0.31	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.30	<0.50	170	--	--	--	--	--	140	0.5	0.031
	Oct-11	0.17	--	--	--	--	--	--	--	--	--	--
	Oct-10	7.37	--	--	--	--	--	--	--	--	--	--
	Oct-09	0.00	--	--	--	--	--	--	--	--	--	--
	Oct-08	0.00	--	--	--	--	--	--	--	290	0.4	0.053
	Oct-07	4.19	--	--	--	--	--	--	--	260.0	0.330	0.084
	May-07	2.25	--	--	--	--	--	--	--	9.8	0.120	0.054
	Oct-06	3.32	--	--	--	--	--	--	--	5.6	0.062	<0.025
	Jul-06	0.17	--	--	--	--	--	--	--	--	--	--
	Apr-06	0.00	--	--	--	--	--	--	--	1,800	0.27	0.091
	Jan-06	--	--	--	--	--	--	--	--	2,000	0.12	0.14
	Oct-05	0.00	--	130	--	<1.0	--	--	63.0	530	0.12	0.096
	Jul-05	0.53	9.9	210	--	<1.0	0.2	--	68.0	100	0.057	0.048
	Apr-05	0.05	--	240	--	--	--	--	--	74	--	--
	Jan-05	0.21	--	--	--	--	--	--	--	--	--	--
	Oct-04	0	7.5	180	--	--	--	--	62	74	0.23	0.54
	Apr-04	0.00	11	190	--	<1.0	--	--	52	81	0.026	0.027
	Jan-04	0.00	16	200	--	<1.0	--	--	69	96	0.52	0.20
T-13A	Oct-13	0.45	--	180	--	--	--	--	--	6,000	1.8	3.4
	May-13	0.66	--	170	--	--	--	--	--	3,800	0.71	2.8
	May-13 Dup	0.66	--	160	--	--	--	--	--	4,600	0.83	3.0
	Oct-12	0.18	<0.50	100	--	--	--	--	--	7,700	1.30	22.00
	Apr-12	0.61		94	--	--	--	--	--	14,000	1.9	6.9
	Oct-11	0.13	--	200	--	--	--	--	--	2,200	0.180	3.8
	Oct-10	0.24	--	210	--	--	--	--	--	5,600	0.620	4.6
	Apr-10	6.77	--	--	--	--	--	--	--	9,200	5.300	8.0
	Oct-09	3.53	--	180	--	--	--	--	--	11,000	0.700	6.7
	Oct-08	4.95	--	77	--	14	--	--	120	12,000	1.2	5
	Oct-07	4.25	--	91	--	2.7	--	--	81.0	2,900	0.140	0.7
	Jul-07	0.62	--	250	--	<1.0	--	--	100.0	170	<0.025	<0.025
	Apr-07	2.65	--	260	--	<1.0	--	--	120.0	230	<0.025	<0.025
	Jan-07	0.09	--	260	--	<1.0	--	--	92.0	450	<0.025	0.0
	Oct-06	2.23	--	330	--	<1.0	--	--	81.0	370	<0.025	3.8
	Jul-06	0.24	--	260	--	<1.0	--	--	74.0	480	0.026	0.081
	Apr-06	0.65	--	230	--	<1.0	--	--	74.0	790	0.036	1.4
	Jan-06	1.04	--	230	--	<1.0	--	--	66.0	31	0.037	0.58
	Nov-05	0.00	13	210	--	<1.0	0.1	--	63.0	9.8	0.18	0.23

Historic Groundwater Electron Acceptor/Metabolic By-Product Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

		Electron Acceptors				Metabolic By-Products						
Well	Date	Dissolved Oxygen (mg/L)	Nitrite and Nitrate (mg/L)	Sulfate (mg/L)	Total Iron (mg/L)	Ferrous Iron (mg/L)	Dissolved Manganese (mg/L)	Sulfide (mg/L)	Chloride (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
T-14A	Oct-13	0.43	--	160	--	--	--	--	--	320	0.85	8.5
	May-13	0.24	--	140	--	--	--	--	--	360	0.82	9.8
	Oct-12	0.22	--	--	--	--	--	--	--	--	--	--
	Apr-12	0.73	--	160	--	--	--	--	--	5,500	2.6	8.6
	Oct-11	0.11	--	190	--	--	--	--	--	170	0.210	6.0
	Oct-10	0.38	--	190	--	--	--	--	--	300	0.400	7.4
	Apr-10	6.69	--	--	--	--	--	--	--	530	0.450	6.3
	Oct-09	0.54	--	180	--	--	--	--	--	4,300	0.760	12
	Oct-08	0	--	180	--	8.5	--	--	100	9,400	0.2	14
	Oct-07	4.25	--	45.0	--	15.0	--	--	73.0	520	0.340	0.560
	Jul-07	0.15	--	210.0	--	<1.0	--	--	89.0	160	0.059	0.052
	Apr-07	1.89	--	210.0	--	<1.0	--	--	110.0	91	0.029	0.031
	Oct-06	1.49	--	--	--	<1.0	--	--	--	260	0.041	0.53
	Apr-06	0.46	--	240	--	<1.0	--	--	65.0	1,400	0.076	0.64
	Jan-06	0.20	--	210	--	<1.0	--	--	56.0	560	0.029	0.088
	Nov-05	0.00	13	210	--	<1.0	0.1	--	60.0	640	0.084	0.16
T-15A	Oct-13	0.37	--	--	--	--	--	--	--	--	--	--
	May-13	0.30	--	170	--	--	--	--	--	2.5	0.023 J	0.026
	Oct-12	0.23	3.6	160	--	--	--	--	--	1.8	0.038	0.05
	Apr-12	0.42	--	190	--	--	--	--	--	9.9	0.10	0.11
	Oct-11	0.12	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.29	--	--	--	--	--	--	--	--	--	--
	Oct-09	3.27	--	--	--	--	--	--	--	--	--	--
	Oct-08	6.55	--	230	--	<1.0	--	--	97	6.4	<0.025	0.33
	Oct-07	2.88	--	250	--	<0.05	--	--	92	18	<0.025	0.14
	Jul-07	0.02	--	--	--	--	--	--	--	--	--	--
	Jan-07	0.00	--	210	--	<1.0	--	--	76	140	0.04	0.16
	Oct-06	1.63	--	260	--	<1.0	--	--	85	180	<0.025	0.26
	Jul-06	0.15	--	260	--	<1.0	--	--	63	240	0.049	0.59
	Apr-06	0.69	--	250	--	<1.0	--	--	66.0	1,200	0.16	3.6
	Jan-06	0.57	--	190	--	<1.0	--	--	60.0	2,100	0.12	5.2
	Nov-05	0.00	1.0	140	--	<1.0	1.7	--	63.0	3,200	0.042	1.6
T-16A	Oct-13	0.32	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.24	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.15	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.39	--	--	--	--	--	--	--	--	--	--
	Oct-09	3.16	--	--	--	--	--	--	--	--	--	--
	Oct-08	0.00	--	220	--	<1	--	--	95	160	<0.025	0.08
	Oct-07	0.00	--	240	--	<1.0	--	--	99.0	190	<0.025	0.92
	May-07	0.00	--	270	--	<1.0	--	--	100.0	47	0.057	0.13
	Oct-06	1.40	--	270	--	<1.0	--	--	84.0	320	<0.025	0.55
	Apr-06	0.22	--	240	--	<1.0	--	--	63.0	1,800	0.17	3.6
	Jan-06	--	--	200	--	1.1	--	--	57.0	2,500	0.084	3.7
	Nov-05	0.00	1.0	140	--	<1.0	2.0	--	62.0	5,900	0.076	2.0
T-17A	Oct-13	0.24	--	130	--	--	--	--	--	530	0.61	0.14
	May-13	0.08	--	140	--	--	--	--	--	1,100	0.66	0.21
	Oct-12	0.22	5.9	120	--	--	--	--	--	2500.0	1.2	0.070
	Apr-12	0.44	--	120	--	--	--	--	--	4,000	1.6	0.67
	Nov-11	--	--	140	--	--	--	--	--	1.8	0.14	0.39
T-19A	Oct-13	0.85	--	32	--	--	--	--	--	8,400	3.4	3.3
	May-13	1.52	--	37	--	--	--	--	--	8,900	2.6	4.9
	Oct-12	0.17	0.22 J	23	--	--	--	--	--	13,000	1.7	2.9
	Apr-12	0.61	--	7.3	--	--	--	--	--	16,000	1.1	1.1
	Oct-11	0.24	--	140	--	--	--	--	--	1,000	2.000	10.000
	Oct-10	0.43	--	170	--	--	--	--	--	3,200	2.900	13.000
	Apr-10	6.78	--	--	--	--	--	--	--	3,300	11.000	7.400
	Oct-09	2.03	--	81	--	--	--	--	--	12,000	6.600	7.100
	Oct-08	0	--	<2.0	--	22	--	--	140	11,000	0.52	2.3
	Oct-07	--	--	42	--	44.0	--	--	120.0	92	0.180	0.23
	Sep-07	0.82	--	250	--	<1.0	--	--	84.0	34	0.300	0.25
T-23A	Oct-13	0.9	--	130	--	--	--	--	--	6,100	2.8	1.8
	May-13	0.13	--	160	--	--	--	--	--	4,600	1.3	2.4
	Oct-12	0.13	<0.50	120	--	--	--	--	--	7,900	1.1	5.2
	Apr-12	0.79	--	100	--	--	--	--	--	9,300	0.48	3.1
	Oct-11	0.21	--	190	--	--	--	--	--	2,200	6.000	2.400
	Oct-10	0.49	--	190	--	--	--	--	--	3,000	7.200	6.100
	Apr-10	6.71	--	--	--	--	--	--	--	4,900	6.500	14.00
	Oct-09	0.47	--	200	--	--	--	--	--	3,400	6.500	14.00
	Oct-08	0	--	79	--	4.9	--	--	100	13,000	0.86	3.3
	Oct-07	0.00	--	100	--	1.5	--	--	83.0	6.70	0.530	0.480
	Sep-07	1.24	--	200	--	<1.0	--	--	97.0	1.50	0.091	0.110
T-24A	Oct-11	0.11		--						6,800	20.000	4.700
T-25A	Oct-13	0.33	--	160	--	--	--	--	--	47	0.13	15
	May-13	0.22	--	160	--	--	--	--	--	57	0.14	14
	Oct-12	0.22	--	--	--	--	--	--	--	--	--	--
	Apr-12	0.37	--	150	--	--	--	--	--	7,000	9.8	16
	Oct-11	0.21	--	190	--	--	--	--	--	21	0.059	0.740
	Oct-10	0.45	--	190	--	--	--	--	--	41	0.062	2.200
	Apr-10	6.80	--	--	--	--	--	--	--	450	0.280	5.300
	Oct-09	3.65	--	200	--	--	--	--	--	54.00	0.140	8.000
	Oct-08	4.75	--	220	--	2.7	--	--	93	1,200	0.48	14
	Oct-07	0.00	--	170	--	2.7	--	--	90.0	970	0.033	0.580
	Sep-07	0.71	--	260	--	<1.0	--	--	96.0	170	0.076	0.210

Historic Groundwater Electron Acceptor/Metabolic By-Product Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

		Electron Acceptors				Metabolic By-Products						
Well	Date	Dissolved Oxygen (mg/L)	Nitrite and Nitrate (mg/L)	Sulfate (mg/L)	Total Iron (mg/L)	Ferrous Iron (mg/L)	Dissolved Manganese (mg/L)	Sulfide (mg/L)	Chloride (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
38S	Oct-13	0.24	--	140	--	--	--	--	--	--	--	--
	May-13	1.41	--	130	--	--	--	--	--	--	--	--
	Oct-12	0.22	<0.50	110	--	--	--	--	--	880	1.5	0.64
	Apr-12	0.49	--	120	--	--	--	--	--	1,100	1.4	0.53
	Oct-11	0.38	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.70	--	--	--	--	--	--	--	--	--	--
	Oct-09	3.30	--	--	--	--	--	--	--	--	--	--
	Oct-08	4.7	--	--	--	--	--	--	--	--	--	--
Zone B1 Aquifer Wells												
T-7B	Oct-13	0.34	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.41	8.4	97	--	--	--	--	--	340/330	0.15/0.19	0.22/0.20
	Oct-10	0.37	--	--	--	--	--	--	--	--	--	--
	Oct-09	0.00	--	--	--	--	--	--	--	--	--	--
	Aug-01	0.24	7.4	230	0.49	<1.0	0.13	<2.0	59	16	0.027	0.13
	Jun-01	0.00	<0.05	260	0.14	<1.0	0.024	<2.0	74	13	0.014	0.22
	Apr-01	0.00	8.0	240	0.37	<1.0	0.23	<2.0	67	41	0.046	0.30
	Feb-01	0.34	9.1	240	0.60	<1.0	0.37	<2.0	66	100	0.059	0.61
	Dec-00	0.00	<0.1	22	0.88	<1.0	0.18	<2.0	44	38	0.008	0.19
	Nov-00	1.86	13	44	0.43	<1.0	<0.01	<2.0	23	7.2	<0.005	0.030
	Sep-00	0.11	19	330	0.37	<1.0	0.15	<2.0	110	--	--	--
	Oct-99	0.01	1.4	250	0.03	<1.0	0.04	<2.0	68	50	0.049	0.25
T-2B	Oct-13	0.33	--	220	--	--	--	--	--	5,500	17	52
	May-13	1.46	--	230	--	--	--	--	--	4,900	20	40
	Oct-12	0.38	0.27 J	200	--	--	--	--	--	4,900	19	70
	Apr-12	0.58		190	--	--	--	--	--	7,000	44	60
	Oct-11	0.27	--	--	--	--	--	--	--	9,800	53	150
	May-11	0.25	--	--	--	--	--	--	--	6,000	21	130
	Mar-11	0.09	--	--	--	--	--	--	--	15,000	54	540
	11/15/2010[b]	2.4	--	--	--	--	--	--	--	11,000	21	210
	10/20/2010[c]	6.77	--	--	--	--	--	--	--	--	--	--
	10/12/2010[d]	6.82	--	--	--	--	--	--	--	12,000	21	140
	Oct-09	0.63	--	--	--	--	--	--	--	8,900	45	760
	Oct-08	0	--	--	--	--	--	--	--	12,000	26	84
	Oct-07	0.00	--	--	--	--	--	--	--	18,000	57	120
	Apr-07	0.00	--	--	--	--	--	--	--	12,000	50	47
	Oct-06	2.73	--	--	--	--	--	--	--	19,000	120	210
	Apr-06	0.00	--	--	--	--	--	--	--	11,000	63	97
	Jan-06	--	--	--	--	--	--	--	--	18,000	110	290
	Oct-05	0.28	--	150	--	14	--	--	79	19,000	110	400
	Jul-05	0.26	--	150	--	19	--	--	93	21,000	150	390
	Apr-05	0.24	--	130	--	14	--	--	96	18,000	99	720
	Jan-05	0.10	--	68	--	<1.0	--	--	85	13,000	140	320
	Oct-04	0.00	--	22	--	29	2.1	--	<1.0	14,000	210	310
	Apr-04	0.00	--	6.3	--	23	2.5	--	84	10,000	260	160
	Jan-04	0.00	--	<1.0	--	27	2.6	--	120	13,000	420	120
	Oct-03	--	--	<1.0	--	35	3.0	--	92	14,000	390	120
	Jul-03	0.00	--	4.3	--	42	3.0	--	88	14,000	370	170
	Apr-03	0.00	--	3.9	<0.050	50	0.60	--	88	12,000	180	170
	Jan-03	0.61	--	4.2	1.7	44	4.5	--	85	15,000	160	260
	Oct-02	0.00	1.3	4.5	43	48	5.3	<2.0	79	3,300	20	150
	Jul-02	--	10	5.7	55	--	--	--	82	6,000	65	700
	Apr-02	1.22	3.0	32	110	80	16	<2.0	77	1,100	0.037	55
	Jan-02	0.73	1.5	4.0	78	45	10	<2.0	89	9,600	0.24	1,200
	Oct-01	0.00	<0.10	1.2	190	190	17	<2.0	110	6,000	0.18	980
	Aug-01	2.14	2.1	4.9	140	130	13	<2.0	100	1,700	0.24	840
	Jun-01	0.00	0.10	67	20	22	2.7	<2.0	67	430	0.019	130
	Apr-01	0.00	<0.10	61	15	15	1.8	<2.0	60	1,400	0.068	450
	Feb-01	0.55	0.98	46	24	25	1.6	<2.0	80	730	0.11	470
	Dec-00	0.00	1.6	<1.0	32	29	1.9	<2.0	77	180	0.14	120
	Nov-00	0.00	<0.1	<1.0	3.4	3.2	11	6.9	66	2.2	0.048	16
	Oct-00	0.01	<0.1	270	1.2	<1.0	0.56	<2.0	73	1.0	0.065	16
	Nov-99	0.24	1.2	290	0.44	<1.0	0.28	<2.0	75	1.2	0.076	21

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825 Stewart Drive, Sunnyvale, California

		Electron Acceptors				Metabolic By-Products						
Well	Date	Dissolved Oxygen (mg/L)	Nitrite and Nitrate (mg/L)	Sulfate (mg/L)	Total Iron (mg/L)	Ferrous Iron (mg/L)	Dissolved Manganese (mg/L)	Sulfide (mg/L)	Chloride (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
T-8B	Oct-13	0.28	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.33	<0.50	180	--	--	--	--	--	1,000	0.088	0.27
	Oct-11	0.1	--	--	--	--	--	--	--	840	0.094	0.450
	Oct-10	0.31	--	--	--	--	--	--	--	1,900	0.220	1.300
	Oct-09	3.96	--	--	--	--	--	--	--	490	0.081	0.045
	Oct-08	0	--	--	--	--	--	--	--	2,300	0.44	2.6
	Oct-07	2.41	--	210	--	0.5	--	--	70	3,000	0.065	0.58
	Apr-07	1.03	--	200	--	2.5	--	--	86	3,400	0.36	0.85
	Jan-07	0.00	--	190	--	<1.0	--	--	62	3,500	0.25	0.95
	Oct-06	1.62	--	220	--	2.3	--	--	70	3,300	0.072	0.73
	Jul-06	0.21	--	270	--	3.5	--	--	62	4,000	0.26	0.6
	Apr-06	0.00	--	240	--	1.9	--	--	65	5,100	0.46	3.5
	Jan-06	5.89	--	190	--	1.8	--	--	58	3,000	0.19	3.1
	Oct-05	0.00	--	200	--	2.2	--	--	69	3,000	0.44	3.4
	Jul-05	0.36	1.6	230	--	<1.0	0.91	--	68	4,500	0.50	8.0
	Apr-05	0.09	--	210	--	--	--	--	66	--	--	--
	Oct-04	0.00	--	--	--	--	--	--	--	--	--	--
	Apr-04	0.00	<0.50	190	--	--	--	--	62	3,600	0.19	7.0
	Oct-03	--	--	--	--	--	--	--	--	--	--	--
	Oct-02	0.00	4.3	200	8.6	1.6	0.85	<2.0	<1.0	580	0.025	7.5
	Jul-02	--	<0.10	190	10	--	--	--	64	3,300	0.13	33
	Mar-02	0.05	--	220	3.6	--	0.77	<2.0	66	580	0.014	9.5
	Jan-02	0.83	<0.10	210	4.0	2.2	0.82	<2.0	67	1,400	0.008	21
	Oct-01	0.00	2.6	200	3.7	2.1	0.70	<2.0	74	890	<0.005	15
	Aug-01	0.16	0.28	290	3.9	2.7	0.65	<2.0	81	600	<0.005	12
	Jun-01	0.00	0.49	270	5.6	1.9	0.68	<2.0	89	1,400	<0.005	13
	Apr-01	0.00	6.5	250	5.0	4.3	1.4	<2.0	75	2,200	<0.005	27
	Feb-01	0.29	5.7	210	7.0	7.2	1.5	<2.0	72	610	0.016	11
	Dec-00	0.07	0.62	220	0.82	<1.0	7.4	<2.0	62	71	0.032	2.5
	Nov-00	0.10	1.6	220	3.0	2.9	1.1	<2.0	70	1.3	0.037	2.0
	Oct-00	0.00	14	280	0.058	<1.0	0.43	<2.0	72	2.4	0.029	0.84
	Oct-99	3.35	4.3	300	<0.02	<1.0	0.12	<2.0	73	0.32	0.038	1.5
T-9B	Oct-13	0.64	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.43	0.20 J	190	--	--	--	--	--	580	0.83	0.34
	Oct-11	0.43	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.25	--	--	--	--	--	--	--	--	--	--
	Oct-09	0.00	--	--	--	--	--	--	--	--	--	--
T-10B	Oct-13	3.32	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.27	<0.50	170	--	--	--	--	--	990	1.6	0.31
	Oct-11	0.11	--	--	--	--	--	--	--	1,400	1.800	0.320
	Oct-10	0.30	--	--	--	--	--	--	--	1,700	1.200	0.360
	Oct-09	3.7	--	--	--	--	--	--	--	1,700	0.710	0.730
	Oct-08	--	--	--	--	--	--	--	--	4,000	1.6	1.4
	Jan-16	--	--	90	--	<1.0	--	--	60	6,000	4.2	0.32
	Oct-07	0.00	--	210	--	<1.0	--	--	81	3,000	0.93	0.450
	Jul-07	0.00	--	--	--	--	--	--	--	1,500	0.66	0.480
	Apr-07	0.00	--	250	--	<1.0	--	--	94	1,700	0.71	0.220
	Oct-06	1.47	--	220	--	<1.0	--	--	76	3,600	0.7	0.044
	Jul-06	0.18	--	240	--	<1.0	--	--	64	6,100	0.88	0.088
	Apr-06	0.00	--	200	--	<1.0	--	--	69	10,000	2.0	0.18
	Oct-05	0.00	--	110	--	<1.0	--	--	69	2,900	5.7	2.9
T-4B	Oct-13	3.26	--	--	--	--	--	--	--	--	--	--
	Oct-12	1.18	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.65	--	--	--	--	--	--	--	3.500	0.080	0.220
	Oct-10	1.11	--	--	--	--	--	--	--	2.900	0.078	0.200
	Oct-09	3.82	--	--	--	--	--	--	--	2.500	0.089	1.400
	Oct-08	0	--	--	--	--	--	--	--	1.5	0.096	0.2
	Oct-07	0.65	--	200	--	<1.0	--	--	68	2.2	0.120	0.400
	Jul-07	0.00	--	--	--	--	--	--	--	--	--	--
	May-07	8.33	--	--	--	--	--	--	--	0.89	0.092	0.084
	Oct-06	3.22	--	--	--	--	--	--	--	2.1	0.12	0.4
	Apr-06	0.54	--	--	--	--	--	--	--	13	0.13	0.18
	Jan-06	--	--	--	--	--	--	--	--	17	0.20	0.31
	Oct-05	0.00	--	200	--	<1.0	--	--	71	4.5	0.12	0.16
	Jul-05	0.68	1.0	220	--	<1.0	0.49	--	76	1.6	0.14	0.20
	Apr-05	0.16	--	200	--	--	--	--	60	--	--	--
	Jan-05	0.27	--	--	--	--	--	--	--	--	--	--
	Oct-04	--	1.3	200	--	--	--	--	69	--	--	--
	Apr-04	0.00	1.1	200	--	<1.0	--	--	65	2.1	0.088	0.079
	Jan-04	0.00	1.1		--	<1.0	--	--	84	3.6	0.20	0.13
	Oct-99	0.42	<0.05	280	0.3	<1.0	0.32	2.4	74	1.1	0.15	0.062

Historic Groundwater Electron Acceptor/Metabolic By-Product Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

		Electron Acceptors				Metabolic By-Products						
Well	Date	Dissolved Oxygen (mg/L)	Nitrite and Nitrate (mg/L)	Sulfate (mg/L)	Total Iron (mg/L)	Ferrous Iron (mg/L)	Dissolved Manganese (mg/L)	Sulfide (mg/L)	Chloride (mg/L)	Methane (µg/L)	Ethane (µg/L)	Ethene (µg/L)
T-5B	Oct-13	0.25	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.41	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.45	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.68	--	--	--	--	--	--	--	--	--	--
	Oct-09	4.63	--	--	--	--	--	--	--	--	--	--
T-17B	Oct-13	0.77	--	150	--	--	--	--	--	170	2.0	0.61
	May-13	0.35	--	140	--	--	--	--	--	140	2.1	0.84
	Oct-12	0.29	<0.50	130	--	--	--	--	--	190	2.8	1.7
	Apr-12	0.46	--	140	--	--	--	--	--	4.7	1.6	0.90
	Oct-11	0.15	--	--	--	--	--	--	--	1.600	0.054	0.043
	Oct-10	0.27	--	--	--	--	--	--	--	0.860	0.030	0.061
	Oct-09	3.23	--	--	--	--	--	--	--	2.9	0.045	0.070
	Oct-08	8.18	--	--	--	--	--	--	--	8.7	0.11	0.039
	Oct-07	0.00	--	150	--	<0.05	--	--	72	2.0	0.052	0.300
	Jul-07	0.00	--	--	--	--	--	--	--	--	--	--
	May-07	0.00	--	--	--	--	--	--	--	1.9	0.093	0.056
	Oct-06	3.15	--	--	--	--	--	--	--	1.2	0.056	0.028
	Jul-06	0.23	--	--	--	--	--	--	--			
	Apr-06	0.00	--	--	--	--	--	--	--	7.0	0.078	0.13
	Jan-06	5.35	--	--	--	--	--	--	--	5.0	0.081	0.11
T-18B	Oct-13	0.72	--	--	--	--	--	--	--	--	--	--
	May-13	0.17	--	--	--	--	--	--	--	--	--	--
T-19B	Oct-13	0.32	--	--	--	--	--	--	--	--	--	--
	May-13	0.13	--	--	--	--	--	--	--	--	--	--
Zone B2 Aquifer Wells												
T-2C	Oct-13	6.06	--	--	--	--	--	--	--	--	--	--
	Oct-12	1.60	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.88	--	--	--	--	--	--	--	--	--	--
	Oct-10	6.31	--	--	--	--	--	--	--	--	--	--
	Oct-09	0.00	--	--	--	--	--	--	--	--	--	--
	Oct-08	1.65	--	--	--	--	--	--	--	--	--	--
	Oct-07	3.81	--	--	--	--	--	--	--	--	--	--
	Oct-01	0.00	1.5	170	0.13	<1.0	0.16	<2.0	70	5.0	0.069	4.0
T-9C	Oct-13	0.36	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.51	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.60	--	--	--	--	--	--	--	--	--	--
	Oct-10	1.32	--	--	--	--	--	--	--	--	--	--
	Oct-09	0.00	--	--	--	--	--	--	--	--	--	--
T-10C	Oct-13	0.52	--	--	--	--	--	--	--	--	--	--
	Oct-12	3.01	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.50	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.32	--	--	--	--	--	--	--	--	--	--
	Oct-09	4.48	--	--	--	--	--	--	--	--	--	--
T-11C	Oct-13	0.24	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.42	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.55	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.39	--	--	--	--	--	--	--	--	--	--
	Oct-09	0.27	--	--	--	--	--	--	--	--	--	--
T-12C	Oct-13	0.34	--	--	--	--	--	--	--	--	--	--
	Oct-12	1.70	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.42	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.86	--	--	--	--	--	--	--	--	--	--
	Oct-09	6.21	--	--	--	--	--	--	--	--	--	--

Notes:
[(a)] One month post EVO injection (just before pure soybean oil injection)
[(b)] Immediately after EVO injection
[(c)] Immediately before EVO injection
mg/L = milligram per liter
µg/L = microgram per liter
-- = not analyzed/measured

Historic Groundwater Dechlorinating Microbe Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Dechlorinating Microbes	Dechlorinating Genes		
		Dehalococcodies type Microbes	*tceA*	*bvcA*	*vcrA*
		cells/mL			
Eductor	10/17/2013	1.47E+01	--	--	--
	10/17/2012	4.88E+02	2.06E+02	3.20E+00	1.80E+00(J)
	10/17/2011	8.35E+01	3.39E+01	9.00E-01 (J)	5.80E+00
	10/13/2010	2.78E+06	1.62E+06	5.54E+05	4.03E+05
	10/8/2009	3.49E+04	9.10E+03	7.86E+03	2.12E+03
	10/21/2008	2.89E+05	--	--	--
	4/30/2007	4.04E+05	--	--	--
	10/17/2006	1.10E+06	--	--	--
	4/13/2006	5.92E+04	--	--	--
	9/12/2005	5.64E+04	--	--	--
T-2A	10/17/2013	6.22E+02	--	--	--
	10/17/2012	1.23E+05	3.09E+04	1.29E+02	1.65E+04
	10/17/2011	2.67E+05	1.26E+05	6.08E+02	1.54E+05
	10/13/210	1.10E+03	1.12E+02	1.42E+02	7.86E+02
	10/8/2009	5.87E+02	2.01E+01	6.29E+01	5.28E+02
	10/21/2008	6.69E+02	--	--	--
	4/9/2008	2.26E+02	1.65E+01	3.93E+00	2.73E+02
T-2B	10/17/2013	4.93E+01	--	--	--
	10/17/2012	8.48E+02	4.00E+02	3.30E+00	4.86E+01
T-7A	10/17/2012	2.39E+03	2.34E+01	1.78E+01	<5.00E-01
	10/17/2012	2.30E+03	8.10E+00	1.64E+01	<5.00E-01
T-7B	10/16/2012	9.06E+02	6.00E-01	2.10E+00	3.52E+01
	10/16/2012	6.93E+02	1.80E+00	2.70E+00	2.32E+01
T-8A	10/15/2012	6.30E+01	1.12E+01	8.20E+00	1.60E+00
	10/21/2008	1.52E+02	--	--	--
	4/9/2008	1.35E+02	1.19E+01	1.21E+01	1.29E+02
	10/10/2007	9.48E+03	--	--	--
	4/30/2007	3.50E+00	--	--	--
	10/16/2006	2.29E+02	--	--	--
	4/13/2006	1.38E+03	--	--	--
	11/7/2005	1.01E+02	--	--	--
T-9A	10/16/2012	3.45E+01	2.43E+01	<5.00E-01	1.00E+00
T-9B	10/16/2012	1.02E+04	5.72E+02	5.47E+02	1.74E+02
T-10B	10/16/2012	1.00E+00(J)	<5.00E-01	<5.00E-01	<5.00E-01
T-13A	10/17/2013	6.97E+02	--	--	--
	10/15/2012	4.70E+03	4.36E+03	1.40E+03	1.03E+03
	10/21/2008	3.08E+01	--	--	--
	4/9/2008	7.65E+00	5.80E-01	1.07E+01	9.45E+00
	10/10/2007	<4.17E+00	--	--	--
	4/30/2007	<4.95E-01	--	--	--
	10/16/2006	5.54E+00	--	--	--
	4/13/2006	5.48E+01	--	--	--
	11/7/2005	6.45E-01	--	--	--
T-14A	11/7/2005	1.69E+01	--	--	--
T-15A	10/16/2012	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
	5/1/2007	1.59E+01	--	--	--
	10/17/2006	1.01E+03	--	--	--
	4/13/2006	1.21E+04	--	--	--

Historic Groundwater Dechlorinating Microbe Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Dechlorinating Microbes	Dechlorinating Genes		
		Dehalococcodies type Microbes	*tceA*	*bvcA*	*vcrA*
		cells/mL			
T-17A	10/15/2012	2.00E-01(J)	<5.00E-01	<5.00E-01	<5.00E-01
T-17B	10/15/2012	3.35E+01	<5.00E-01	<5.00E-01	<5.00E-01
T-19A	10/17/2013	1.20E+01	--	--	--
	10/15/2012	3.34E+02	2.91E+01	4.66E+01	1.41E+01
	10/17/2011	4.15E+03	7.59E+02	2.64E+02	8.23E+02
	4/9/2008	1.33E+03	2.38E+02	3.53E+02	1.01E+03
	10/10/2007	<4.35E+00	--	--	--
T-23A	10/17/2013	2.33E+03	--	--	--
	10/15/2012	2.25E+02	3.09E+01	5.90E+00	1.12E+01
	10/21/2008	2.72E+01	--	--	--
	4/9/2008	2.11E+01	2.31E+00	1.00E+01	1.92E+01
	10/10/2007	<1.49E+00	--	--	--
T-25A	10/21/2008	3.77E+02	--	--	--
	4/9/2008	1.65E+02	2.79E+01	1.65E+01	1.27E+02
	10/10/2007	1.10E+00	--	--	--
T-2B	10/17/2011	5.20E+03	2.46E+03	4.07E+01	2.76E+03
T-8B	10/16/2012	4.14E+01	4.90E+00	4.60E+00	<4.00E-01
	4/30/2007	8.77E+00	--	--	--
	10/17/2006	1.21E+02	--	--	--
	4/13/2006	4.43E+00	--	--	--
38S	10/16/2012	1.19E+03	5.20E+01	6.40E+01	3.10E+00

Notes:
cells/mL = cells per milliliter
DUP = duplicate sample

Compound-Specific Stable Carbon Isotope Analysis Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Concentration (µg/L)			δ C (/)		
		TCE	cDCE	VC	TCE	cDCE	VC
T-7A	10/16/2013	190	80	--	-21.58	-22.72	--
	10/16/2013 (Dup)	190	82	--	-21.82	-22.86	--
	10/17/2012	70.0	270	--	-21.88	-22.28	--
	10/19/2011	120	150	2 J	-22.44	-22.27	-12.91
	10/20/2008	400	70	--	-21.99	-23.24	--
	4/10/2008	200	80	--	-21.92	-22.38	--
	10/9/2007	400	90	--	-22.17	-23.03	--
	5/1/2007	300	70	--	-22.67	-21.54	--
Eductor	10/17/2013	5,800	60,000	--	-18.77	-24.33	--
	10/17/2012	830	67,000	6,000	-16.82	-25.76	-26.16
	10/17/2011	45	8,900	1,700	-18.46	-25.31	-28.99
	10/12/2010	4,000 J	100,000	91,000	NE*	-18.96	-27.05
	10/8/2009	30	80,000	--	NE*	-21.21	--
	10/21/2008	100,000	20,000	--	-25.37	-19.39	--
	4/9/2008	30,000	9,000	--	-25.43	-18.12	--
	11/21/2007	<1,000	30,000	--	-21.41	-14.95	--
	4/30/2007	6	30,000	--	NE*	-9.07	--
T-2A	10/17/2013	0.9 J	250	--	-16.17	-3.23	--
	10/17/2012	0.5 J	130	120	--	-6.42	-18.47
	10/17/2011	0.4 J	12	16	-18.85	2.21	-6.29
	10/12/2010	4 J	10,000	13,000	NE*	-11.85	-29.73
	10/8/2009	2 JM	1,000 M	--	NE*	-14.14	--
	10/21/2008	6	100	--	-15.34	-11.32	--
	4/9/2008	<5	100	--	-17.89	-11.87	--
	10/9/2007	<5	700	--	NE*	-18.08	--
	4/30/2007	<5	200	--	-9.65	-12.61	--
T-3A	10/15/2013	150	66	--	-21.65	-21.80	--
	11/16/2011	150	45	--	-22.5	-24.06	--
	10/20/2008	200	9	--	-22.91	-24.23	--
	4/10/2008	100	6	--	-22.60	-23.95	--
	10/9/2007	210	20	--	-22.68	-25.00	--
	5/1/2007	300	40	--	-22.82	-22.45	--
T-8A	10/16/2013	140	80	--	-21.95	-20.67	--
	10/15/2012	140	81	--	-22.19	-20.97	--
	10/18/2011	120	58	1.8J	-22.29	-20.5	-33.06
	10/21/2008	100	30	--	-22.06	-20.58	--
	4/9/2008	20	7	--	-21.61	-14.99	--
	10/10/2007	90	80	--	-21.82	-17.45	--
	4/30/2007	200	60	--	-21.81	-20.23	--
T-16A	5/1/2007	100	60	--	-22.46	-18.12	--
T-6A	5/1/2007	10	20	--	-21.18	-24.28	--
T-9A	10/15/2013	56	70	--	-22.05	-16.47	--
	10/16/2012	56.0	96	--	-22.81	-20.22	--
	10/19/2011	78	110	3.9J	-22.95	-19.83	-25.57
	10/21/2008	70	100	--	-22.67	-17.58	--
	4/10/2008	60	100	--	-22.43	-22.38	--
	5/1/2007	100	80	--	-23.08	-19.43	--

Compound-Specific Stable Carbon Isotope Analysis Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Concentration (µg/L)			δ C (/)		
		TCE	cDCE	VC	TCE	cDCE	VC
T-13A	10/17/2013	1.3 J	54	--	-11.47	-1.86	--
	10/15/2012	1.9 J	23	30	--	9.45	-0.93
	10/19/2011	63	62	15	-22.09	-15.39	-25.31
	10/23/2008	60	20	--	-21.78	-13.71	--
	4/9/2008	<20	30	--	-22.20	-14.32	--
	10/10/2007	50	300	--	-20.01	-22.26	--
T-17A	10/15/2012	96	5	--	-22.82	-23.68	--
T-19A	10/15/2012	1 J	7.0	8	--	0.73	-13.25
	10/17/2011	4.7J	15	16	-17.62	-2	-4.94
T-23A	10/18/2011	70	43	3.8	-24.74	-20.85	-24.78
	10/23/2008	70	20	--	-21.75	-12.26	--
	4/9/2008	10	30	--	-25.70	-8.44	--
	10/10/2007	200	100	--	-21.37	-23.65	--
T-25A	10/18/2011	44	45	2.9J	-22.84	-18.37	-20.85
	10/23/2008	80	50	--	-21.58	-15.91	--
	4/9/2008	20	40	--	-20.98	-17.97	--
	10/10/2007	70	200	--	-22.20	-21.70	--
T-38S	10/16/2012	97	200	21	-21.29	-21.13	-26.65
T-2B	10/17/2013	0.6 J	110		-12.70	-6.75	--
	10/17/2012	0.8 J	88.0	200	--	-5.03	-19.4
T-4B	10/16/2013	6	480	--	-11.41	-20.46	--
T-5B	10/16/2013	1,400	71	--	-20.86	-23.93	--
T-9B	10/16/2013	290	190	--	-23.39	-23.72	--
	10/16/2012	130	370	9	-23.40	-25.07	-21.46
	10/19/2011	89	270	7.1	-24.03	-25.19	-17.23
T-7B	10/15/2013	180	13	--	-18.43	-18.43	--
	10/16/2012	190	18	--	-22.77	-17.88	--
	10/18/2011	150	12	1.3	-23.72	-18.40	--
T-8B	10/15/2013	22	230	--	-20.13	-21.56	--
	10/16/2012	28	280	22	-20.64	-21.76	-29.42
	10/18/2011	20	180	24	-21.50	-21.63	-29.55
T-10B	10/15/2013	14	46	--	-20.20	-13.82	--
	10/16/2012	55	160	42	-22.92	-16.22	-26.51
T-17B	10/17/2013	150	350	--	-21.23	-20.93	--
	10/15/2012	260	220	--	-21.34	-21.95	--
T-18B	10/14/2013	<5.0 (U)	<5.0 (U)	--	--	--	--
T-19B	10/14/2013	59	2.2 (J)	--	-20.78	-23.63	--

Notes:
* = Concentration too low to quantify carbon-13 ratio
µg/L = Microgram per liter
$^{0}/_{00}$ = Per mil
J = Estimated value
M = Recovery/RPD poor for MS/MSD, SAMP/DUP
NE = Not estimated
-- = Not Analyzed

Historic Groundwater Fatty Acid Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Lactic Acid (mg/L)	Butyric Acid (mg/L)	Pyruvic Acid (mg/L)	Propionic Acid (mg/L)	Acetic Acid (mg/L)
Zone A Aquifer Wells						
T-7A	6/20/2001	<25	<1.0	<10	<1.0	<1.0
EDUCTOR	10/2/2003	<25	--	--	--	190
	7/16/2003	404,000	--	--	--	340
	4/17/2003	<25	--	--	--	720
	1/23/2003	<25	--	--	--	1,500
	10/2/2002	3,200	--	--	--	1,500
	7/13/2002	<25	550	<10	460	220
	3/31/2002	<25	--	--	--	780
	1/23/2002	14,000	3,700	31	1,600	480
	11/29/2001	2,400	--	--	--	480
	10/4/2001	7,500	3,700	36	750	400
	8/1/2001	950	--	--	--	460
	6/21/2001	<25	--	--	--	110
T-2A	10/2/2003	<25	--	--	--	<1.0
	7/16/2003	<25	--	--	--	<1.0
	4/17/2003	<25	--	--	--	6.3
	1/23/2003	<25	--	--	--	32
	10/2/2002	<25	120	<10	750	620
	7/13/2002	<25	--	--	--	310
	4/18/2002	<25	--	--	--	170
	11/29/2001	<25	--	--	--	110
	10/4/2001	<25	--	--	--	320
	8/1/2001	<25	--	--	--	320
	6/21/2001	<25	--	--	--	170
	3/17/2001	<25	--	--	--	130
	1/24/2001	<25	--	--	--	160
T-8A	10/21/2008	<25	--	--	--	<1.0
	10/10/2007	<25	<1.0	<10	<1.0	<1.0
	10/2/2002	<25	--	--	--	<1.0
	7/13/2002	<25	--	--	--	<1.0
	3/31/2002	<25	<1.0	<10	<1.0	<1.0
	1/23/2002	<25	--	--	--	<1.0
	11/29/2001	<25	--	--	--	<1.0
	10/2/2001	<25	<1.0	<10	<1.0	1.2
	8/1/2001	<25	--	--	--	<1.0
	6/20/2001	<25	--	--	--	<1.0
T-13A	10/23/2008	<25	--	--	--	<1.0
	10/10/2007	<25	--	--	--	260
T-19A	10/23/2008	<25	<1.0	12	<1.0	<1.0
	10/10/2007	<250	1100	<100	880	2100
	9/6/2007	<25	<1.0	<10	<1.0	<1.0
T-23A	10/23/2008	<25	<1.0	<10	<1.0	<1.0
	10/10/2007	<25	62	<10	37	160
	9/6/2007	<25	<1.0	<10	<1.0	<1.0
T-25A	10/25/2008	<25	<1.0	<10	<1.0	<1.0
	10/10/2007	<25	<1.0	<10	3.5	28
	9/6/2007	<25	<1.0	<10	<1.0	<1.0

Historic Groundwater Fatty Acid Results
Former TRW Microwave Facility
825 Stewart Drive, Sunnyvale, California

Well	Date	Lactic Acid (mg/L)	Butyric Acid (mg/L)	Pyruvic Acid (mg/L)	Propionic Acid (mg/L)	Acetic Acid (mg/L)
Zone B1 Aquifer Wells						
T-7B	8/20/2001	<25	<1.0	<10	<1.0	<1.0
	6/20/2001	<25	<1.0	<10	<1.0	<1.0
	4/18/2001	<25	<1.0	<10	<1.0	<1.0
	2/20/2001	<25	<1.0	<10	<1.0	<1.0
	12/29/2000	<25	<1.0	<10	<1.0	<1.0
	11/15/2000	<25	<1.0	<10	<1.0	<1.0
	9/12/2000	<25	<1.0	<10	<1.0	<1.0
T-2B	10/2/2003	<25	<1.0	<10	<1.0	<1.0
	7/16/2003	<25	<1.0	<10	<1.0	<1.0
	4/17/2003	<25	<1.0	<10	<1.0	<1.0
	1/23/2003	<25	<1.0	<10	<1.0	<1.0
	10/2/2002	<25	13	<10	130	110
	7/13/2002	<25	120	<10	200	200
	4/18/2002	<25	300	<10	600	390
	1/23/2002	<25	340	<10	580	290
	10/4/2001	<25	860	<10	1,100	1,100
	8/20/2001	35	570	<10	680	580
	6/21/2001	<25	<1.0	<10	<1.0	<1.0
	4/18/2001	<25	7.5	<10	52	65
	2/20/2001	<25	58	<10	120	160
	12/29/2000	<25	77	<10	320	400
	11/15/2000	<25	16	<10	180	290
	10/2/2000	<25	<1.0	<10	<1.0	<1.0
T-8B	10/2/2002	<25	<1.0	<10	<1.0	<1.0
	7/13/2002	<25	<1.0	<10	<1.0	<1.0
	3/31/2002	<25	<1.0	<10	<1.0	<1.0
	1/23/2002	<25	<1.0	<10	<1.0	<1.0
	10/4/2001	<25	<1.0	<10	<1.0	1.7
	8/20/2001	<25	<1.0	<10	<1.0	<1.0
	6/20/2001	<25	<1.0	<10	<1.0	<1.0
	4/18/2001	<25	<1.0	<10	<1.0	<1.0
	2/20/2001	<25	<1.0	<10	15	16
	12/29/2000	<25	<1.0	<10	6.8	<1.0
	11/15/2000	<25	<1.0	<10	10	7.7
	10/2/2000	<25	<1.0	<10	<1.0	<1.0
Zone B2 Aquifer Wells						
T-2C	10/4/2001	<25	<1.0	<10	<1.0	<1.0

Notes:
mg/L = milligram per liter

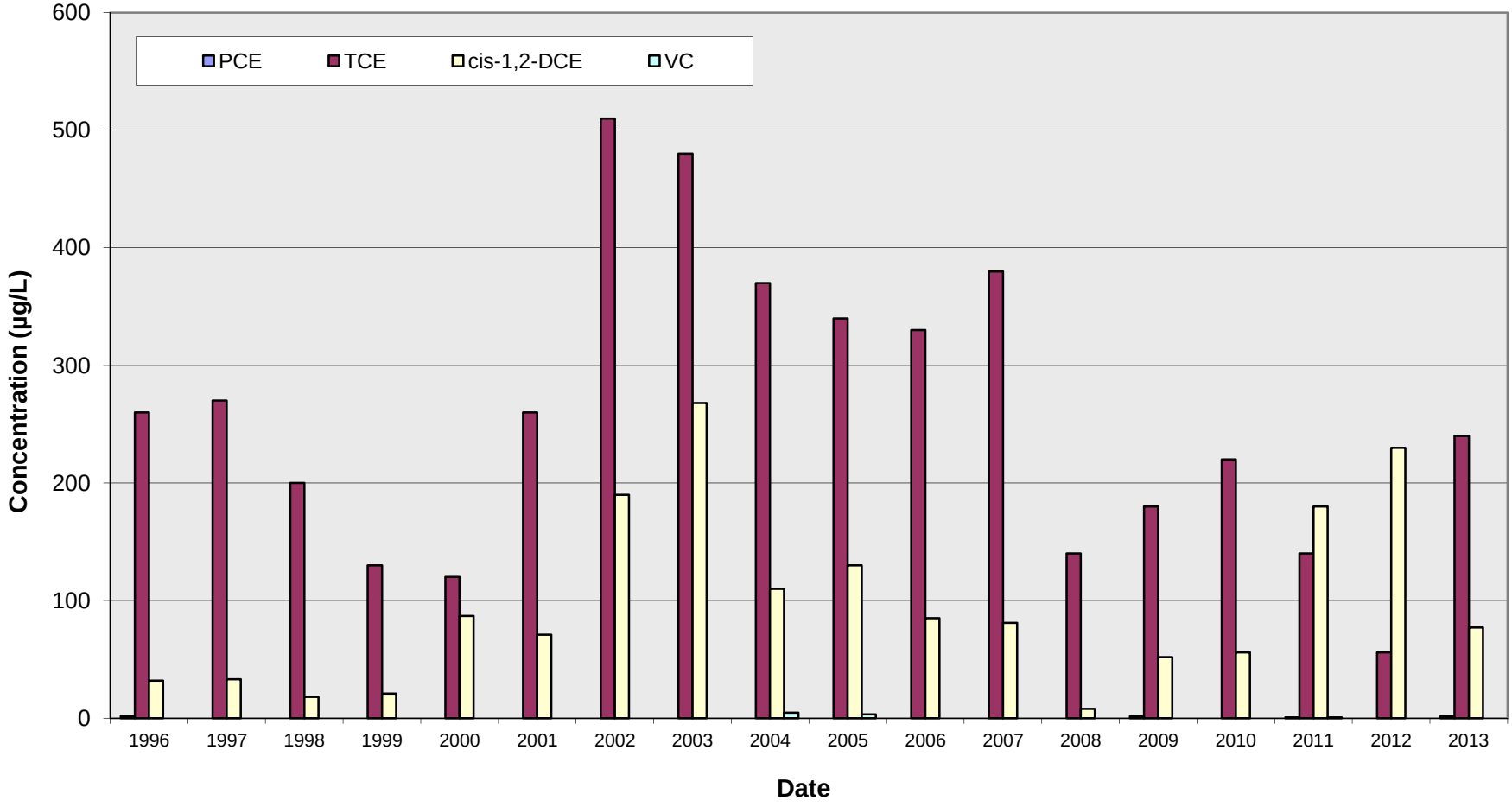
Appendix D

Analytical Laboratory Reports and Chain-of-Custody Forms – 2013
(included on CD only with hardcopy report)

Appendix E

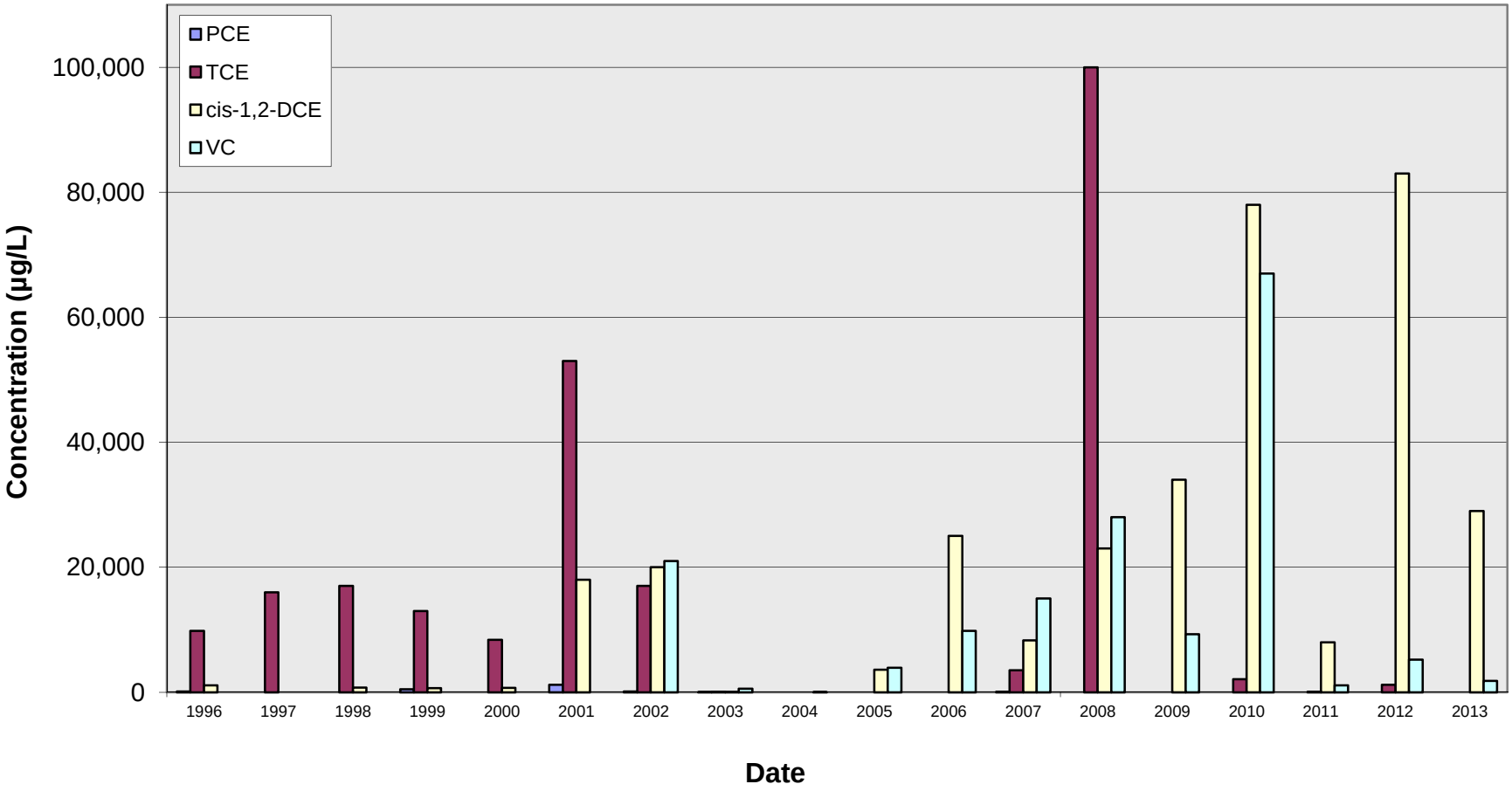
Chlorinated Ethene Concentration Trend Plots for Selected Wells

Chlorinated Ethene Concentration Trend Plot for Well T-7A



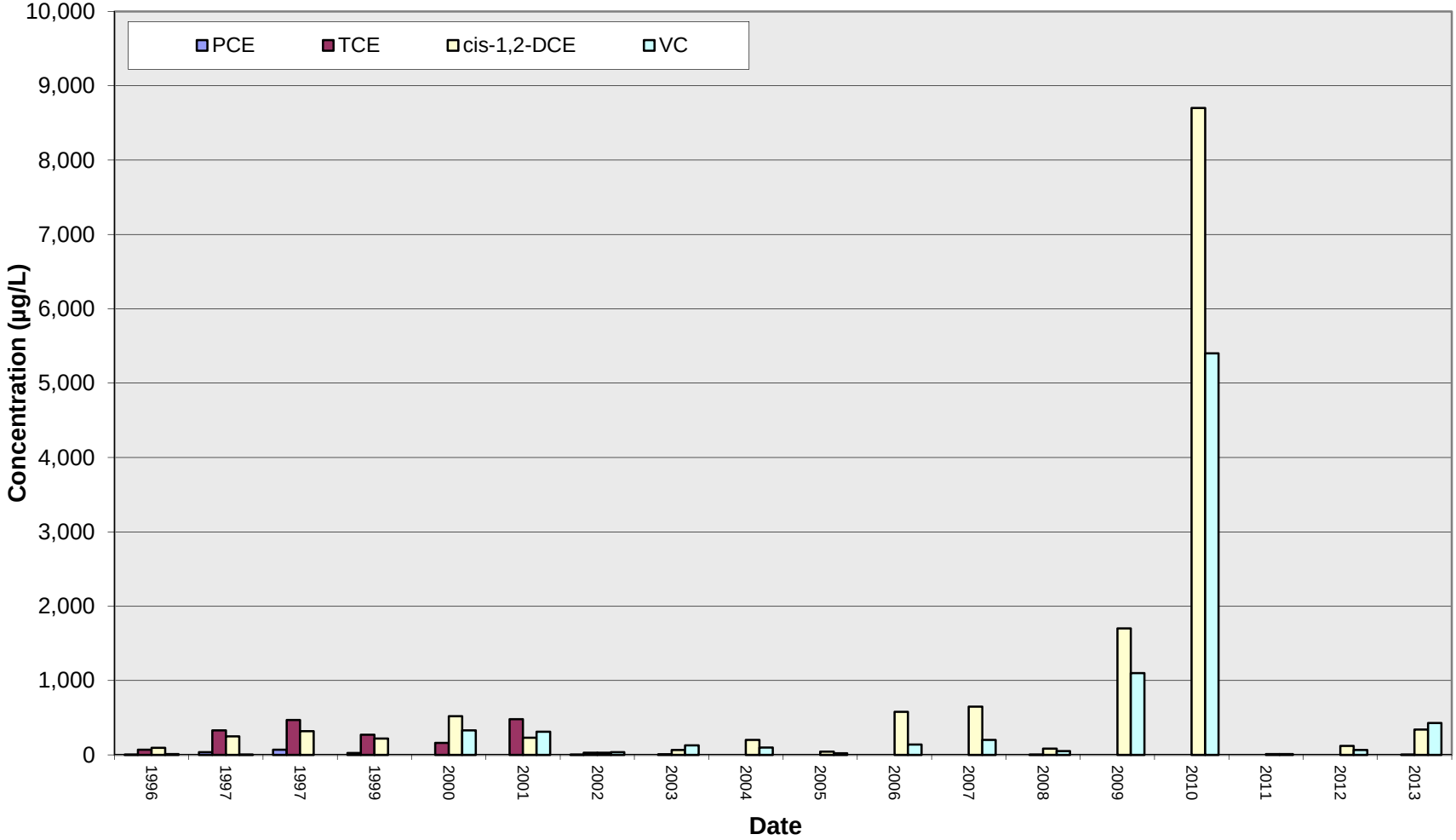
Note: Suspension of groundwater extraction at wells Eductor, T-2A, T-8A, and T-9A occurred on April 6, 2001.
Enhanced anaerobic bioremediaiton program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Eductor Well



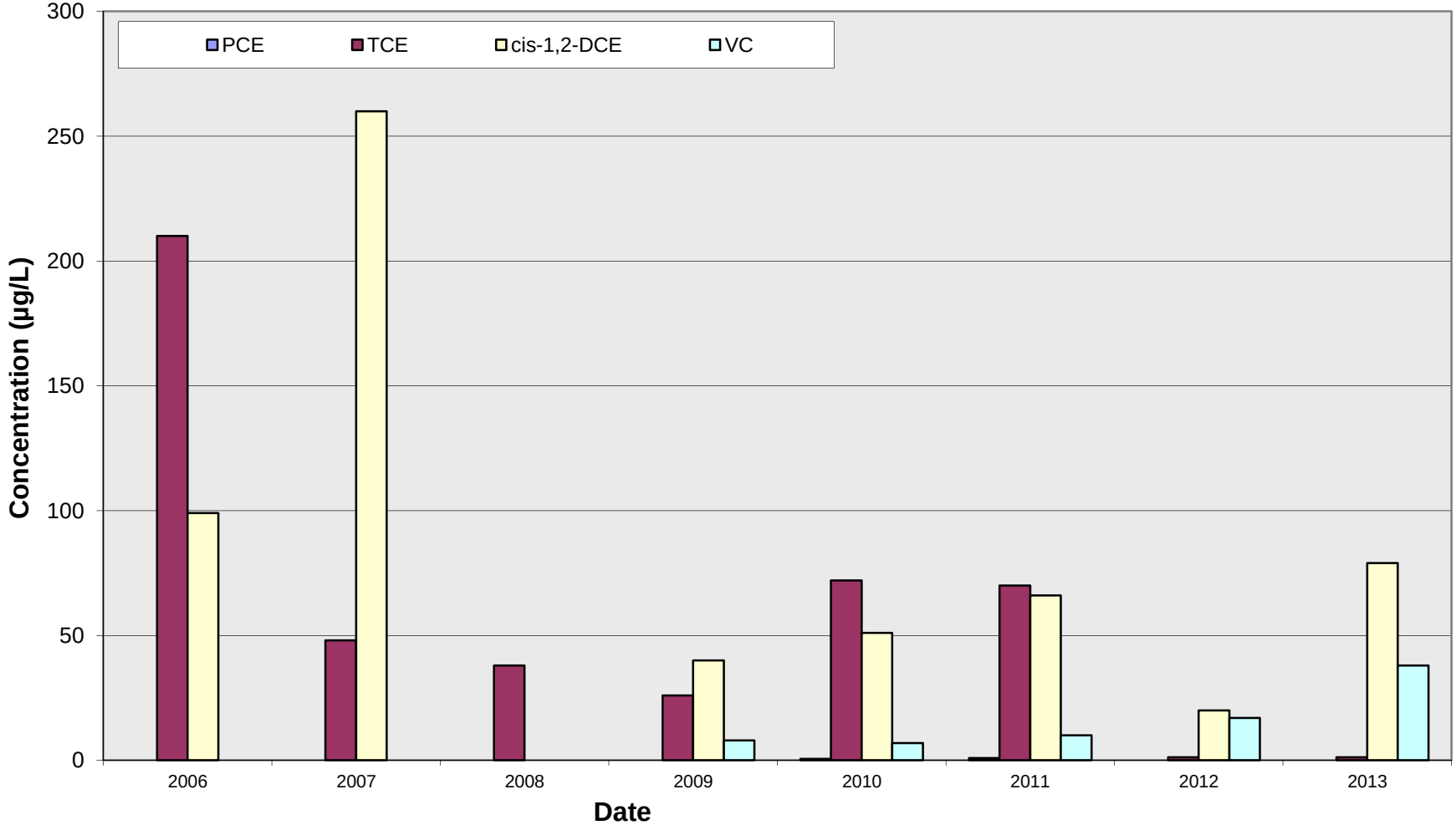
Note: Suspension of groundwater extraction at well occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-2A



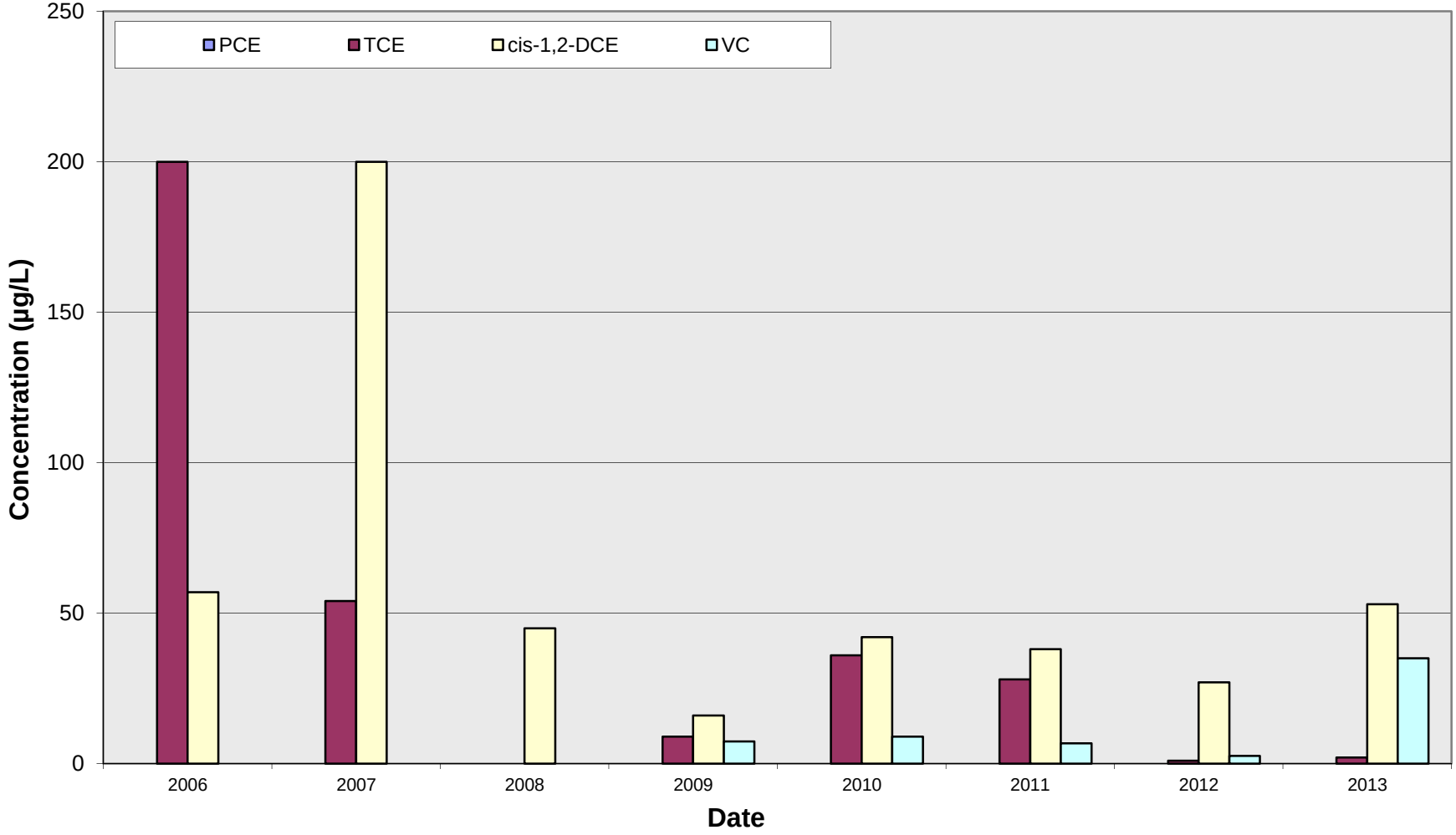
Note: Suspension of groundwater extraction occurend on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-13A



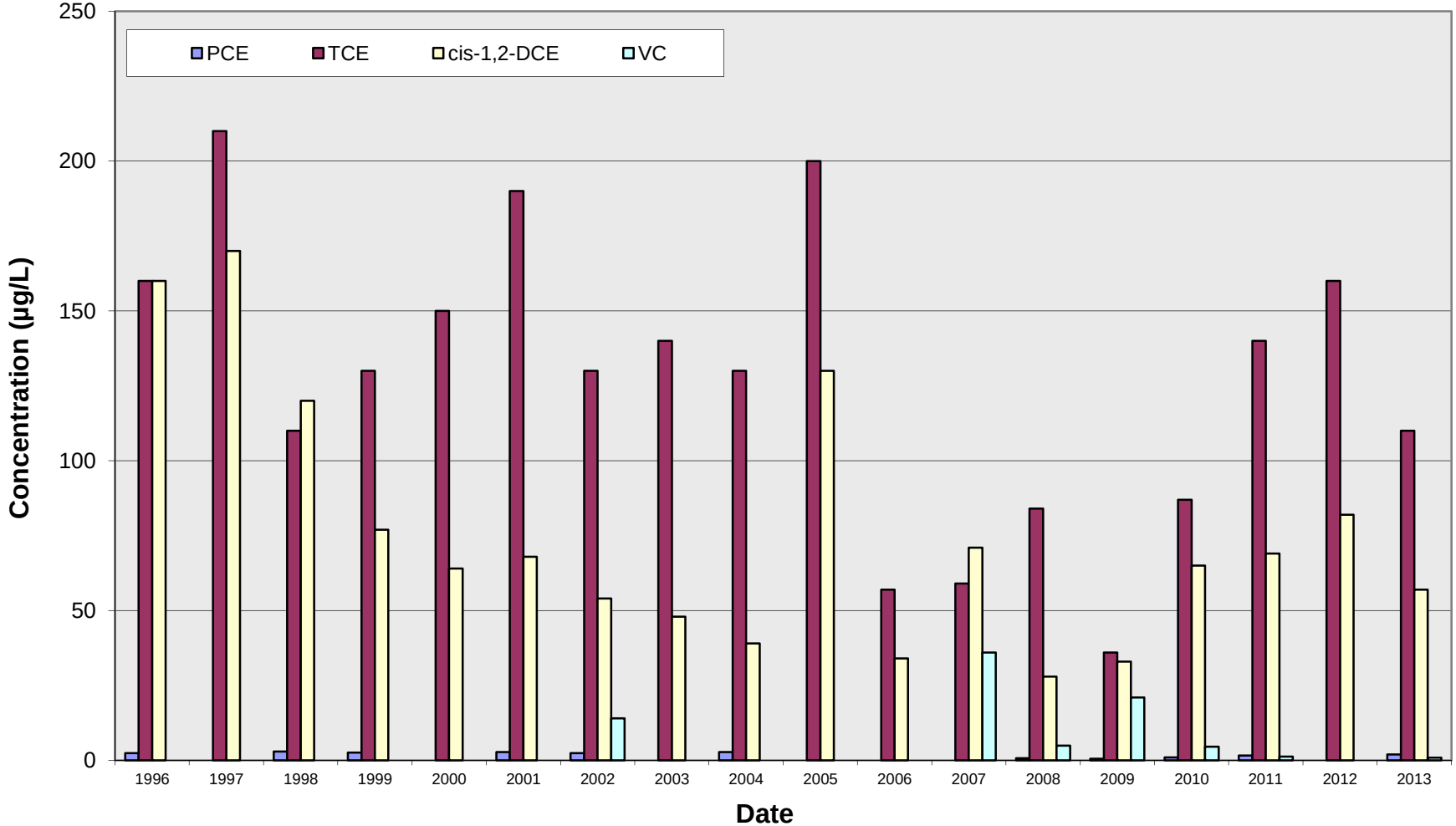
Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-14A



Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-8A

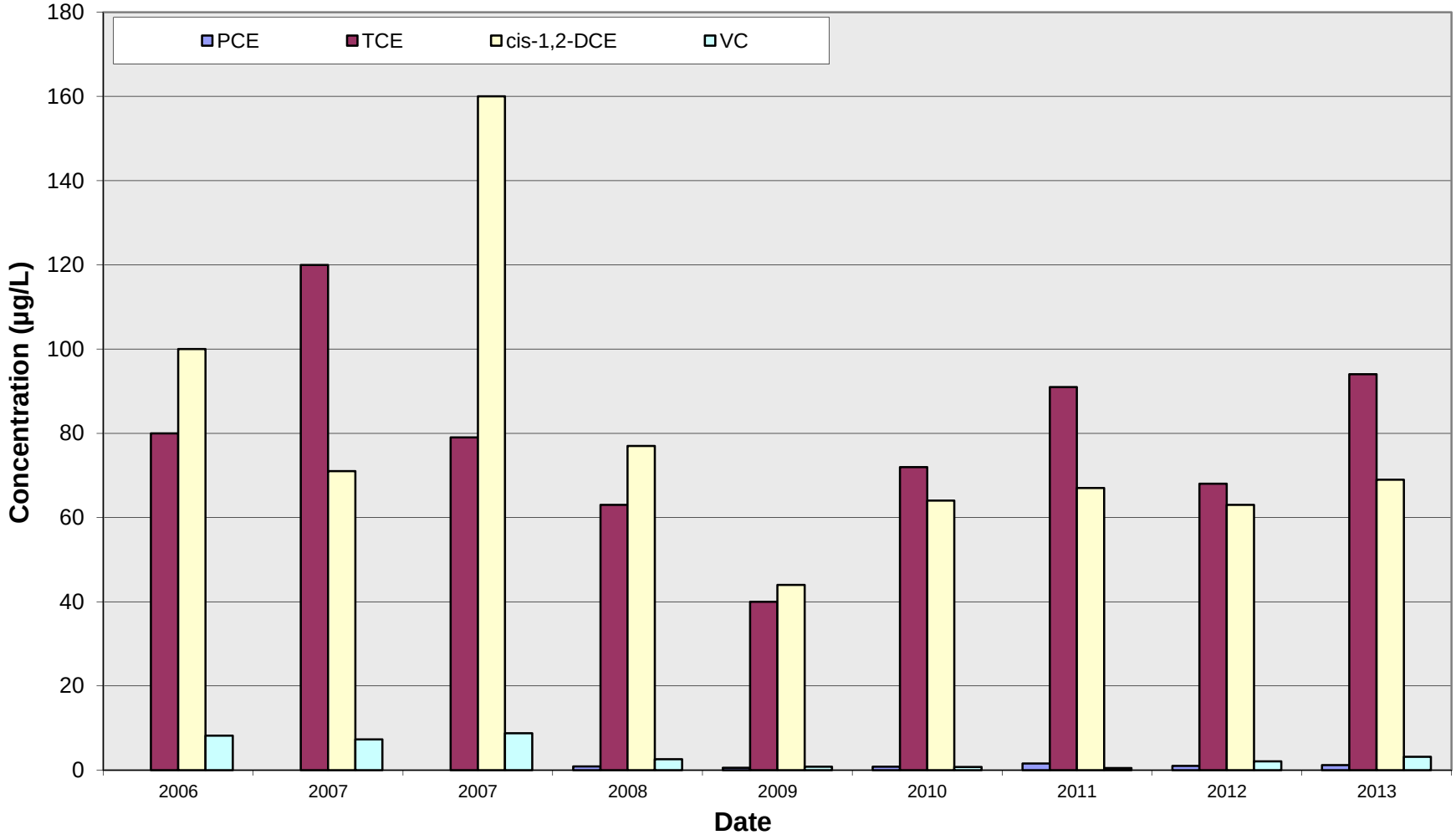


Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-15A

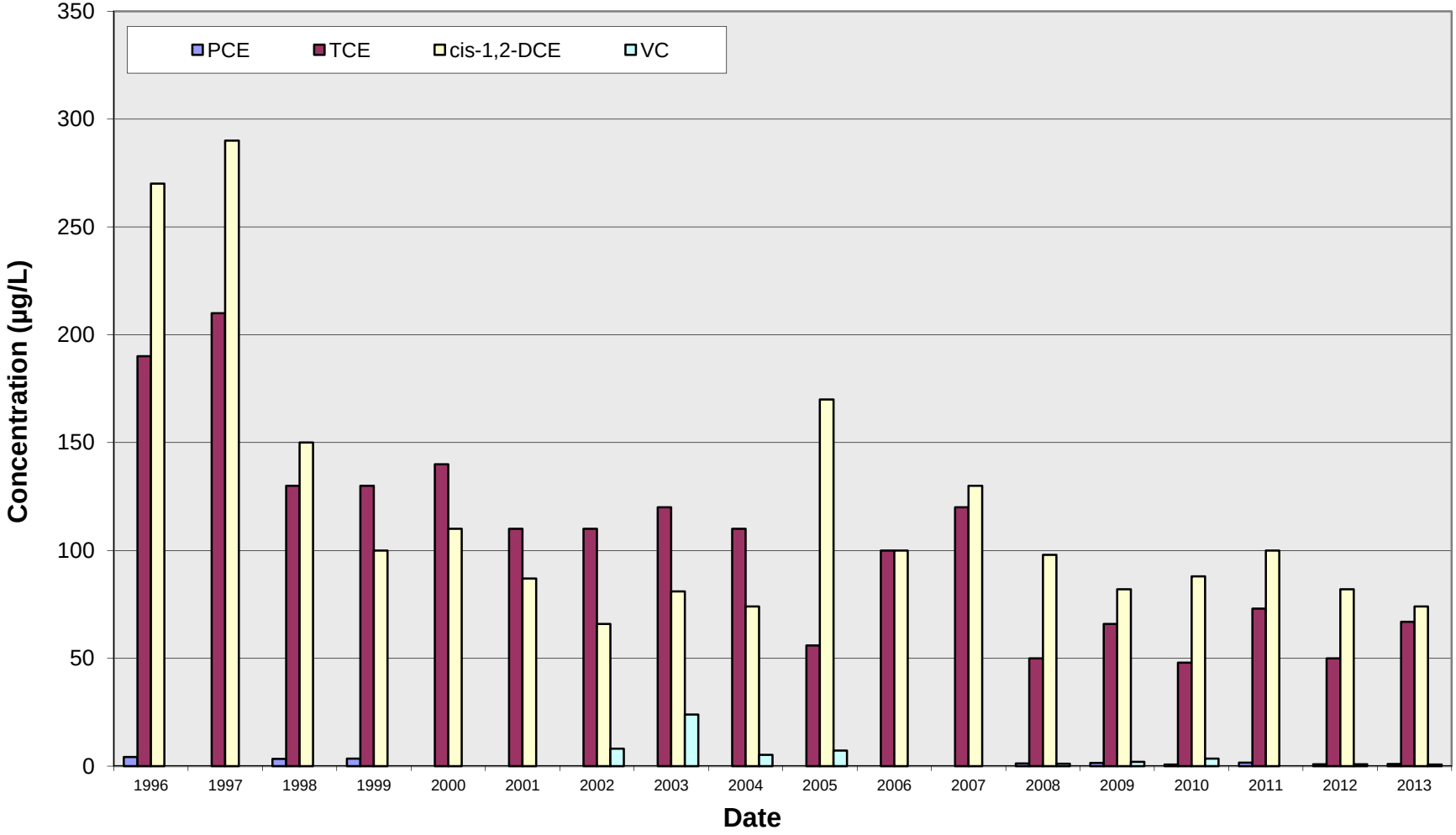
.Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-16A



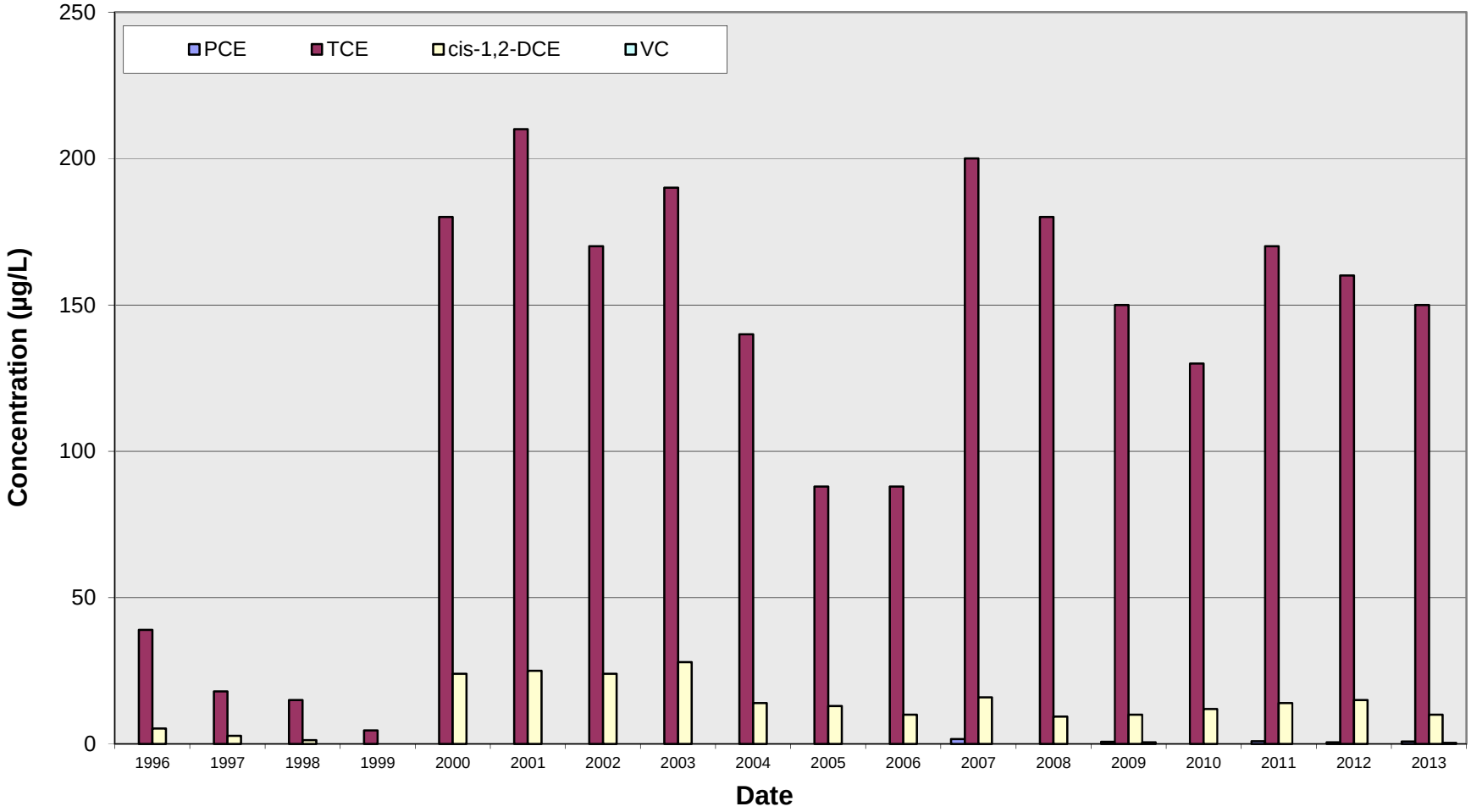
Note: Well installed in August 2005. Enhanced anaerobic reductive dechlorination program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-9A



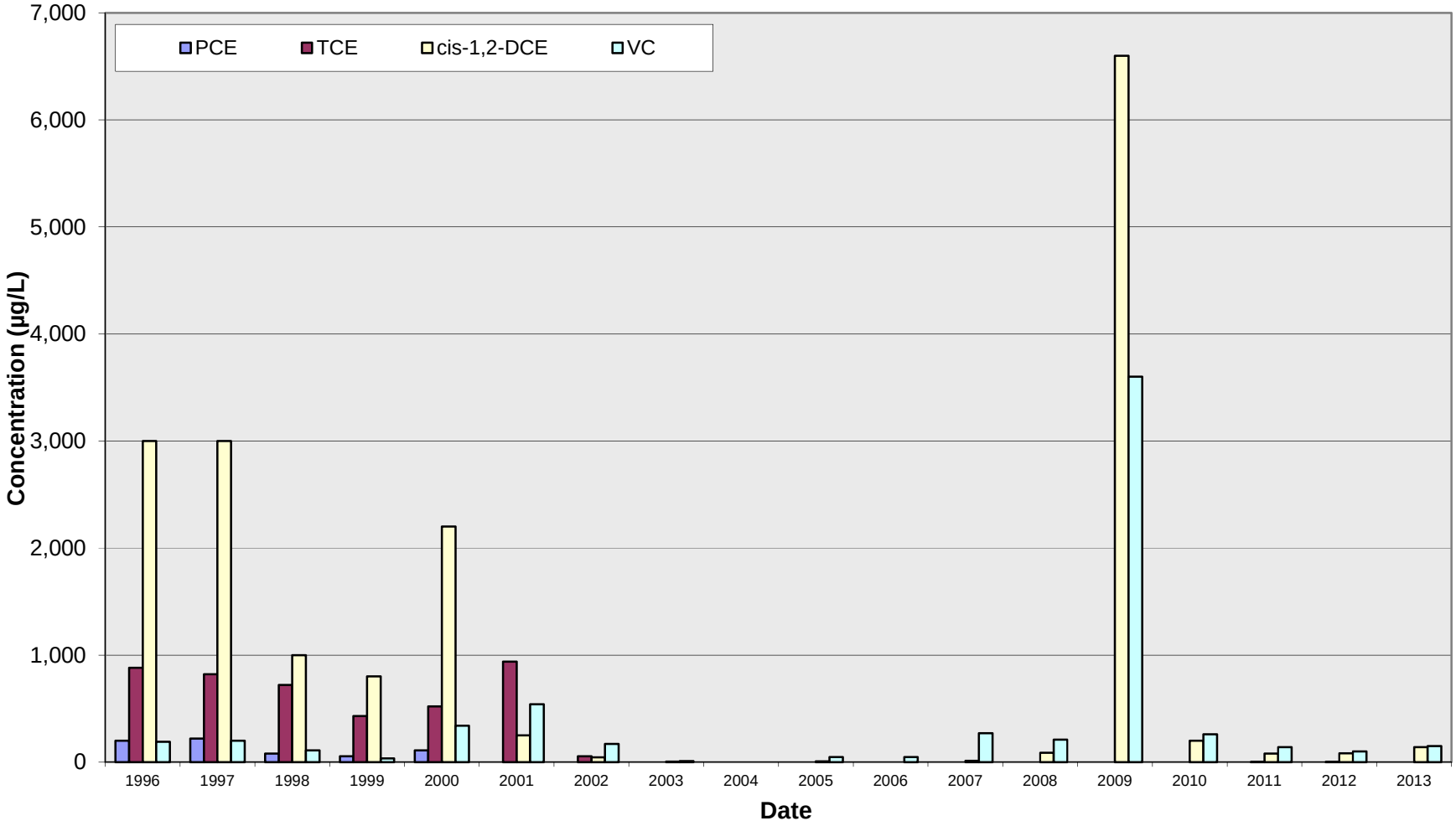
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-7B



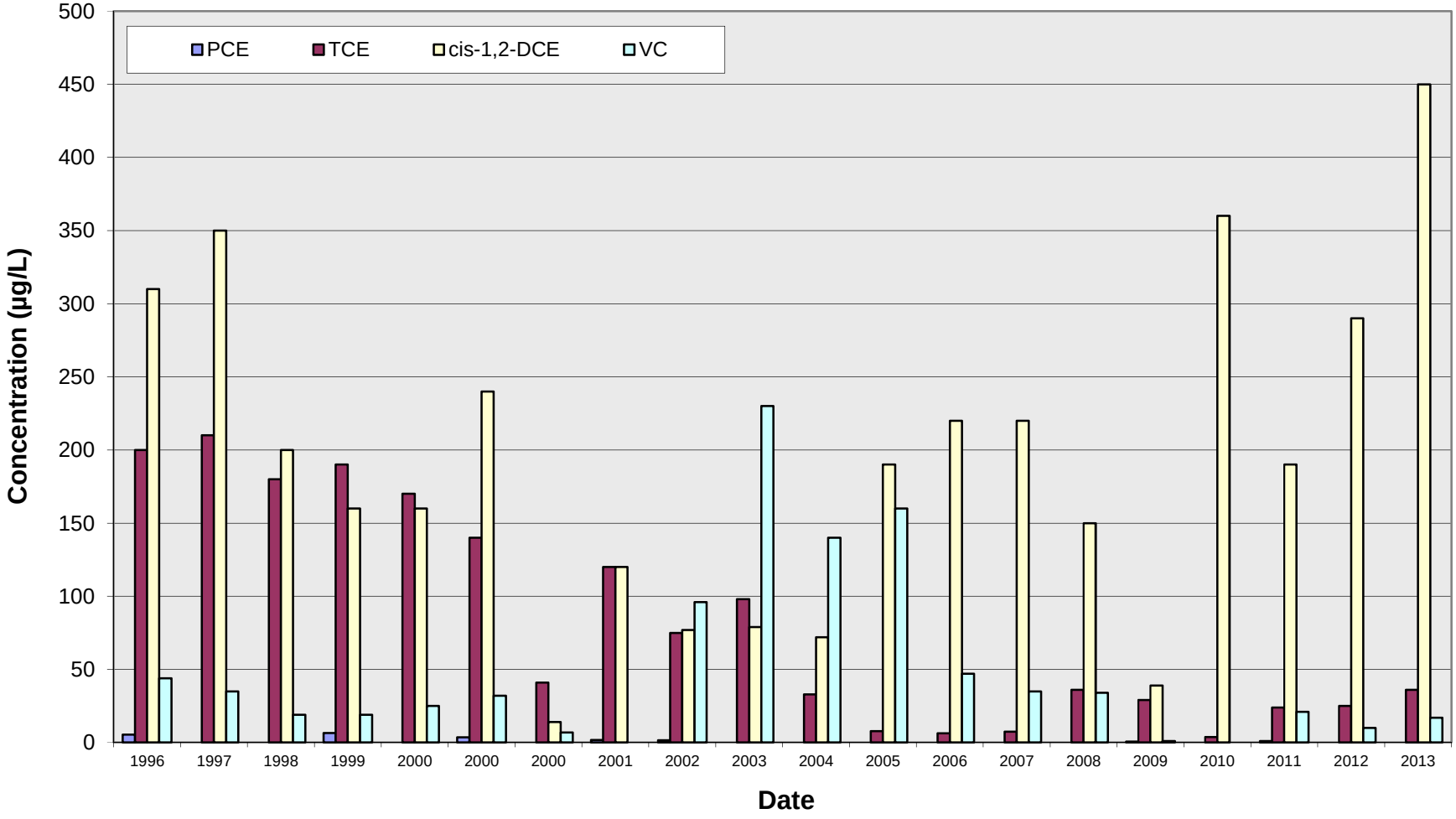
Note: Suspension of groundwater extraction at wells T-2B and T-8B occurred on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-2B



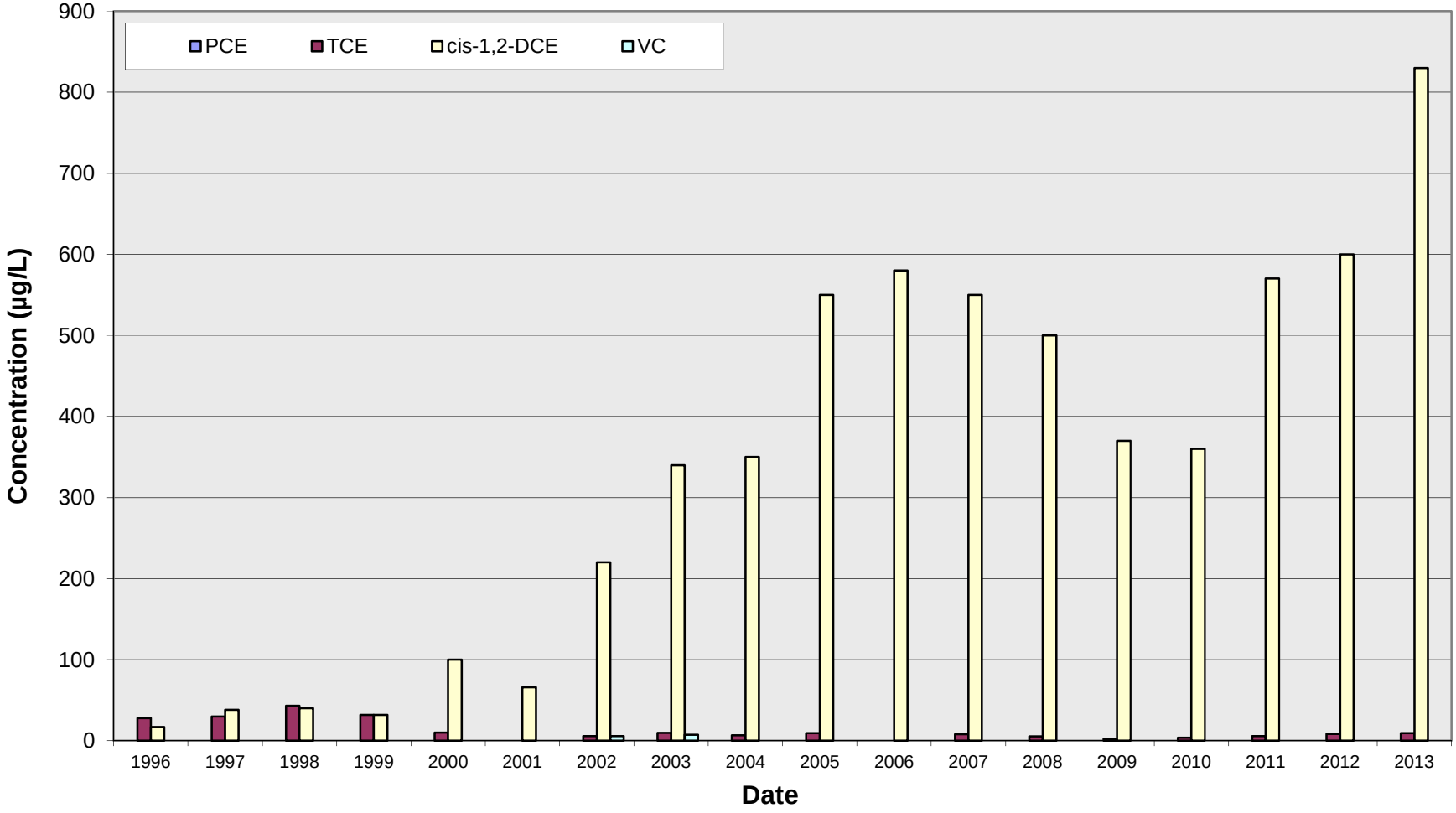
Note: Suspension of groundwater extraction on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-8B



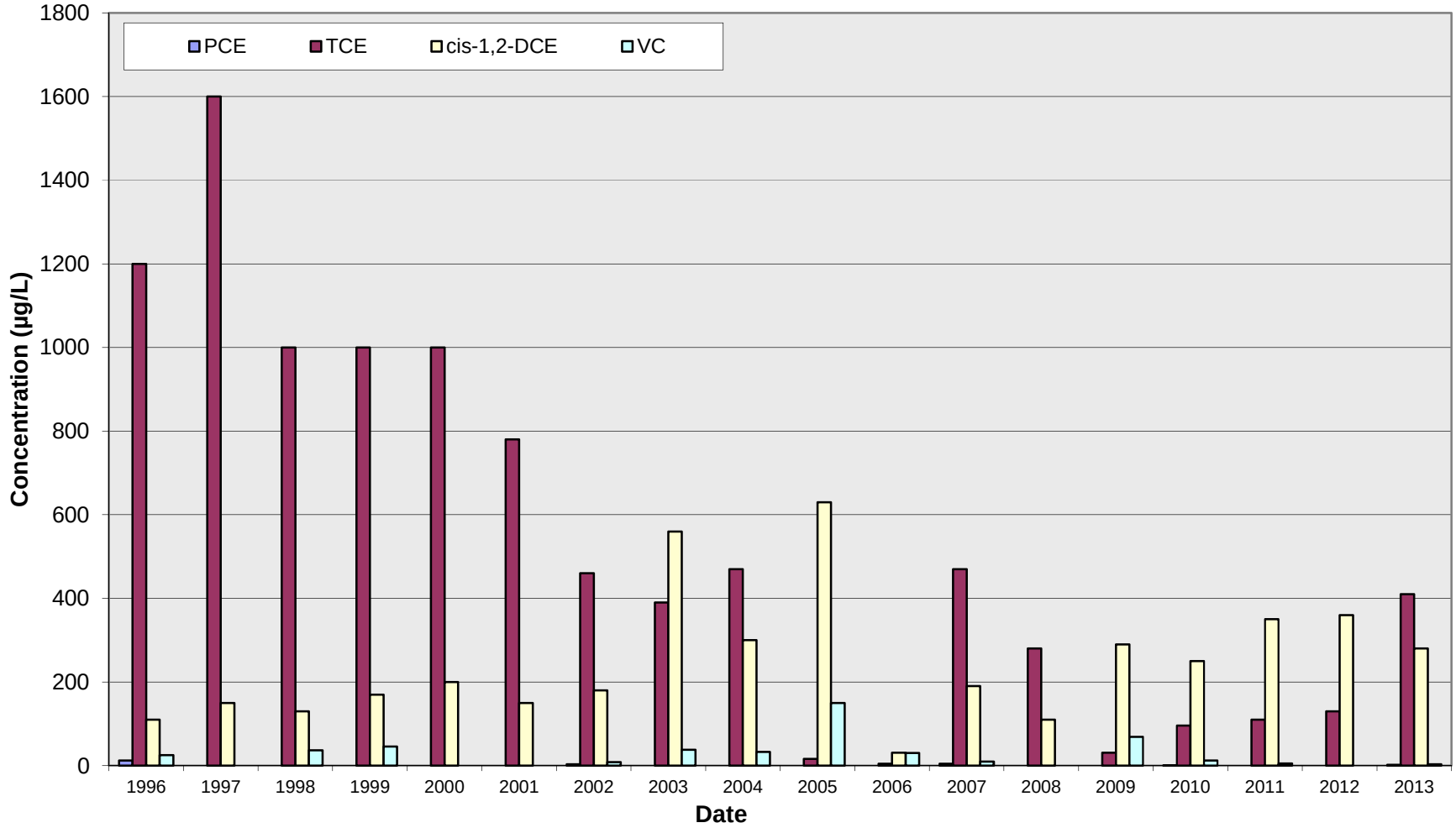
Note: Suspension of groundwater extraction on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-4B



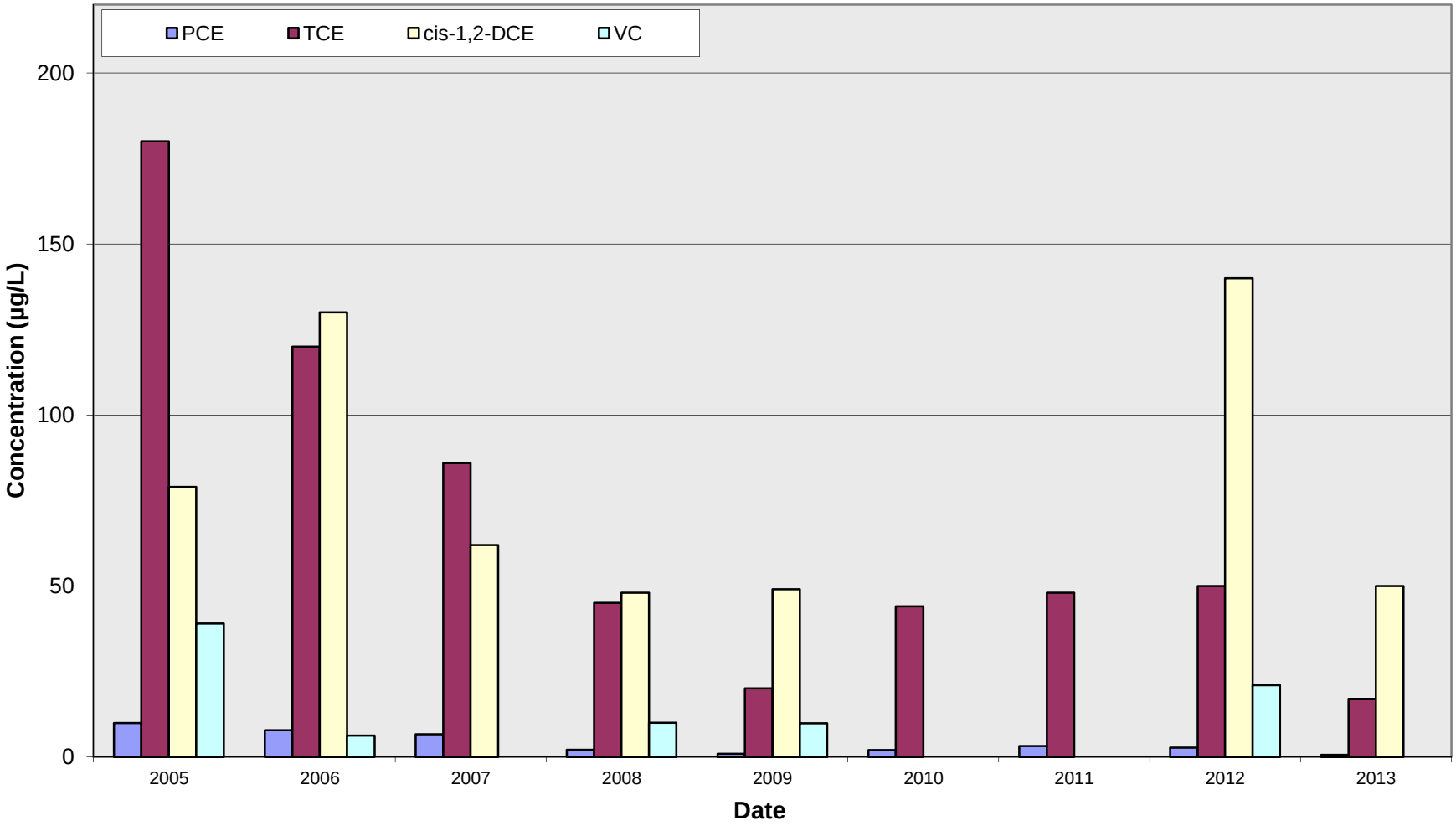
Note: Suspension of groundwater extraction at wells T-2B and T-8B occurred on August 1, 2000. Enhanced anaerobic bioremediation program inititated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-9B



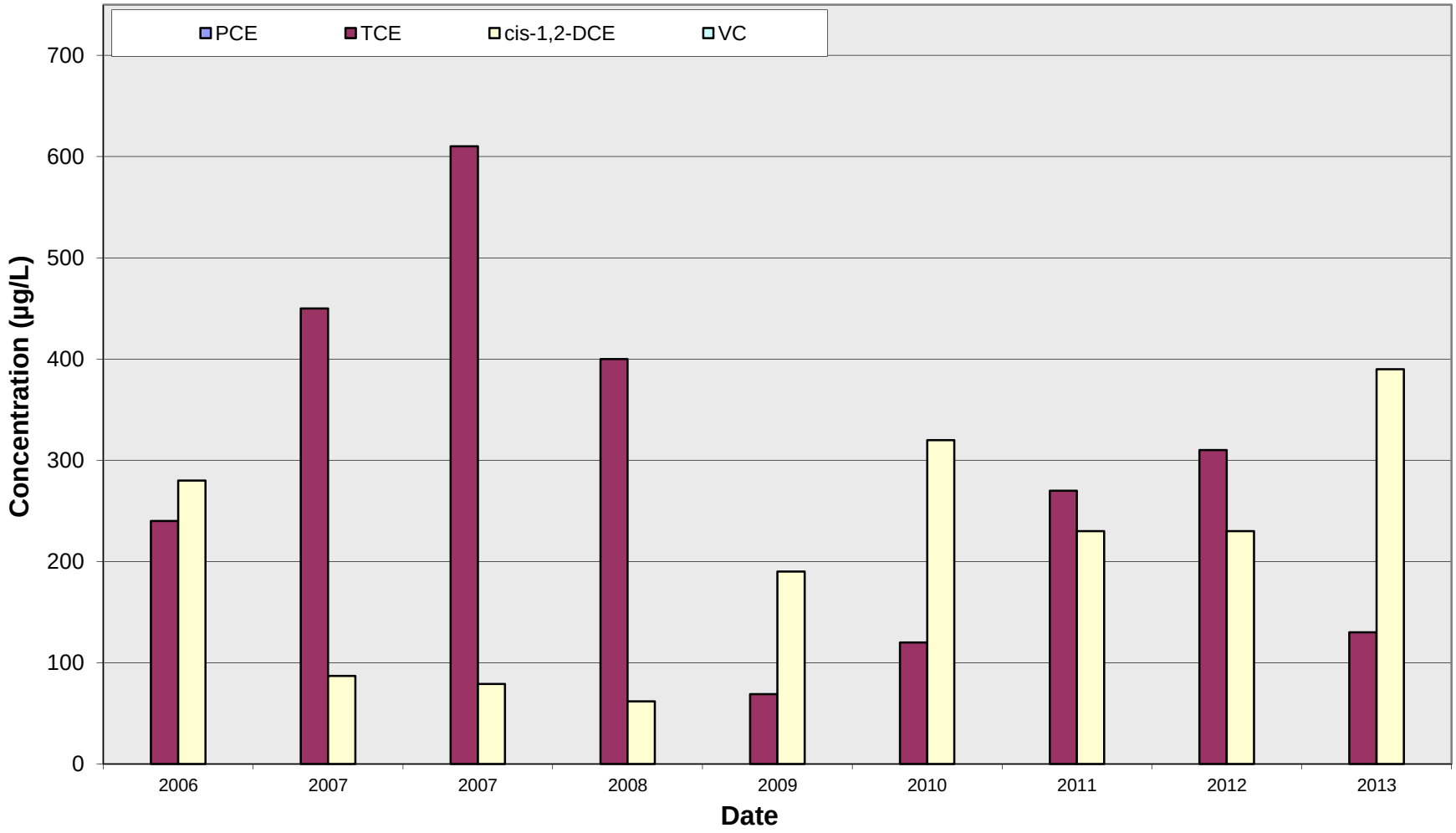
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-10B



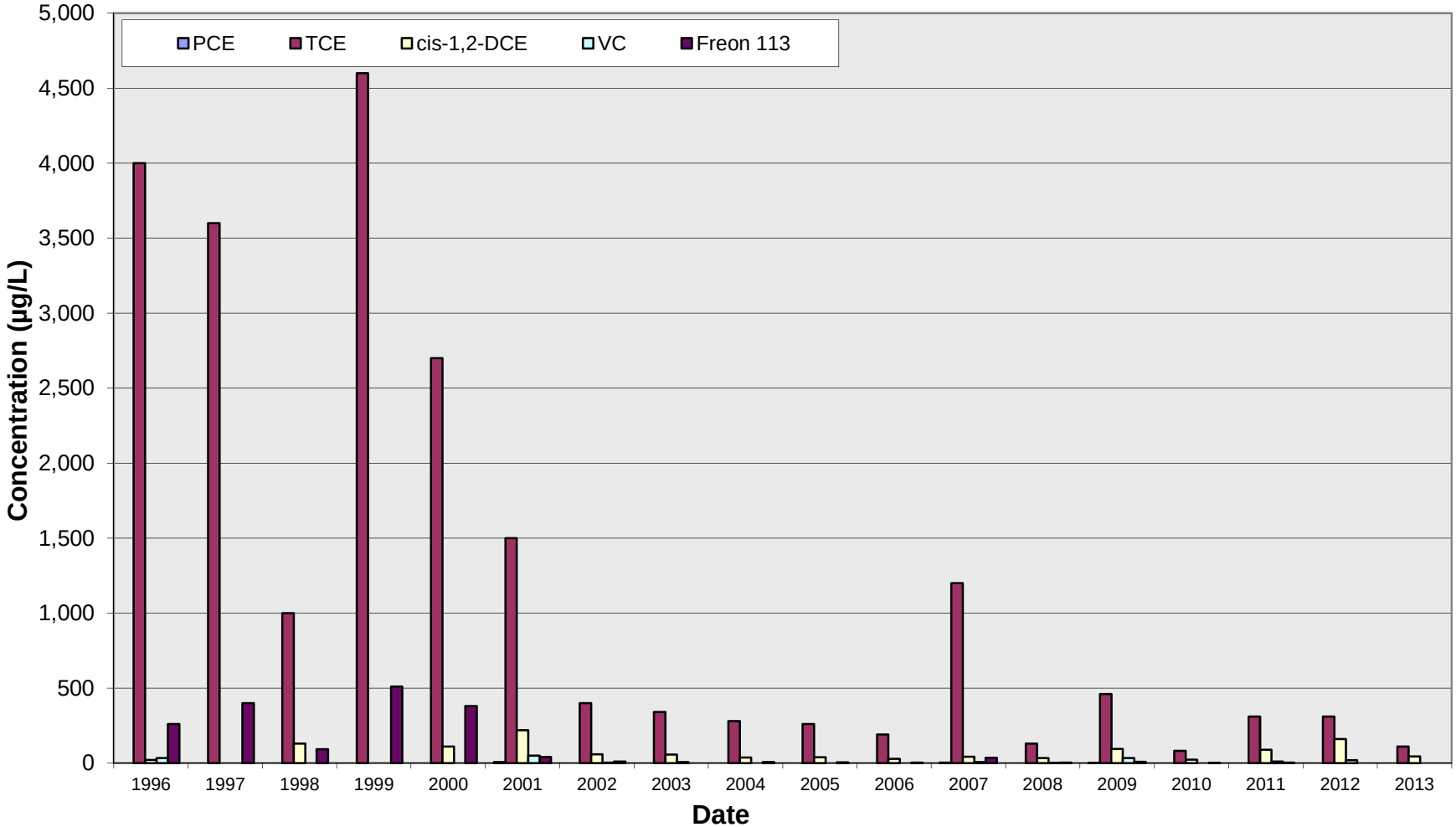
Note: Enhanced anaerobic reductive dechlorination program initiated in October 2000

Chlorinated Ethene Concentration Trend Plot for Well T-17B



.Note: Well installed in August 2005. Enhanced anaerobic reductive dechlorination program initiated in October 2000

Chlorinated Ethene Concentration Trend Plot for Well T-2C

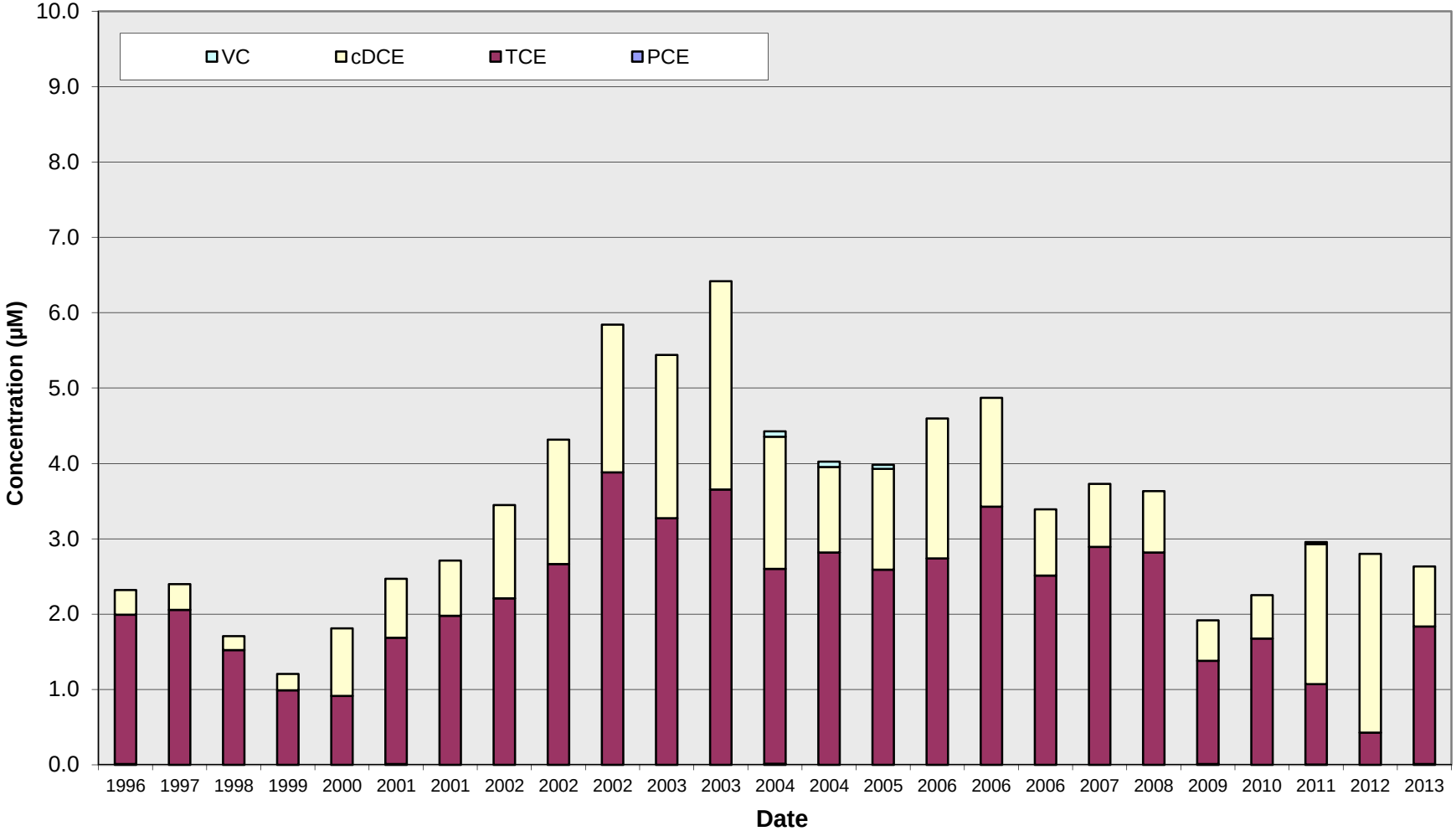


Note: Suspension of groundwater extraction occurred on November 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

Appendix F

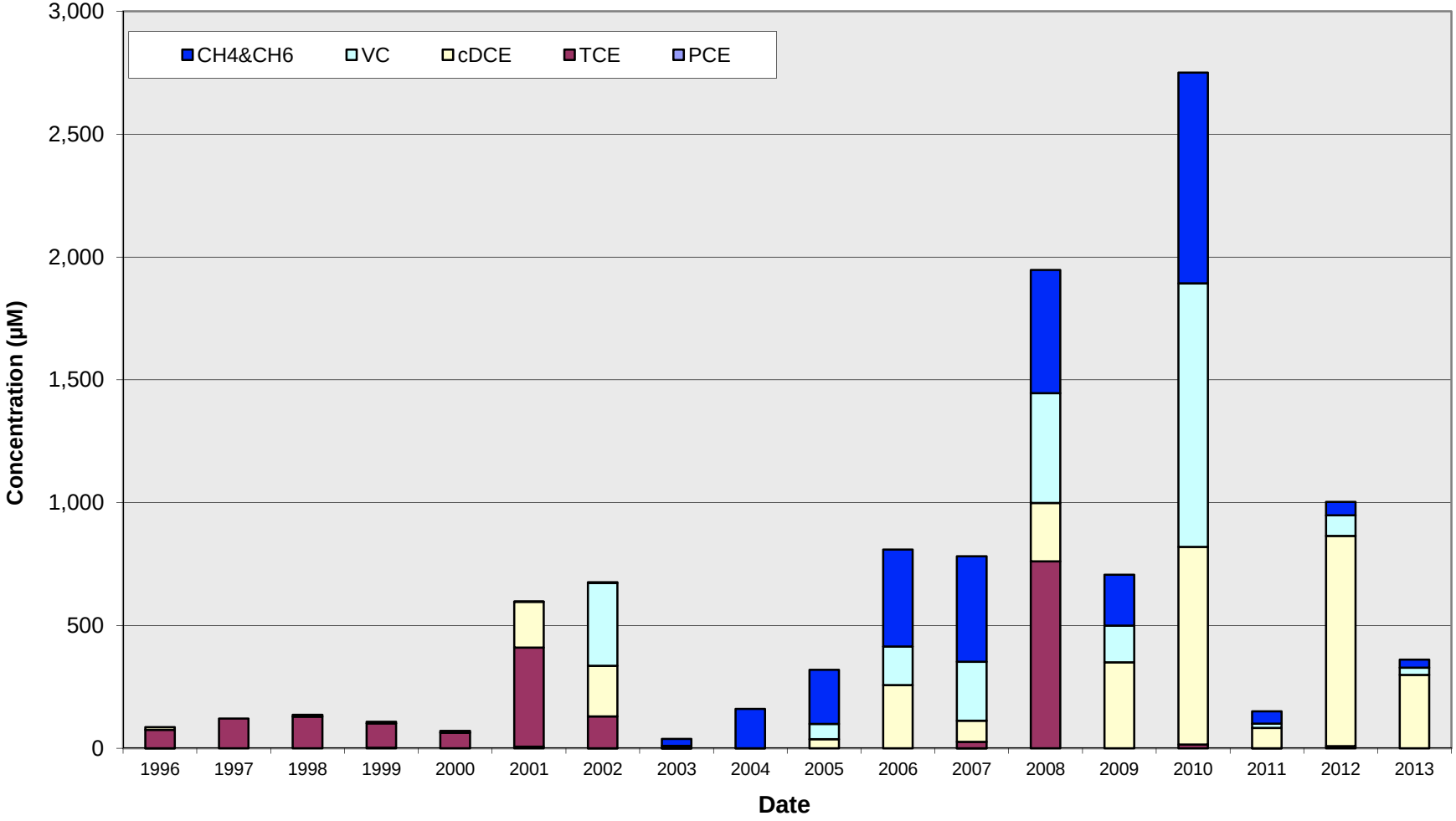
Chlorinated Ethene Molar Concentration Trend Plots for EAB Wells

Chlorinated Ethene Molar Concentration Trend Plot for Well T-7A



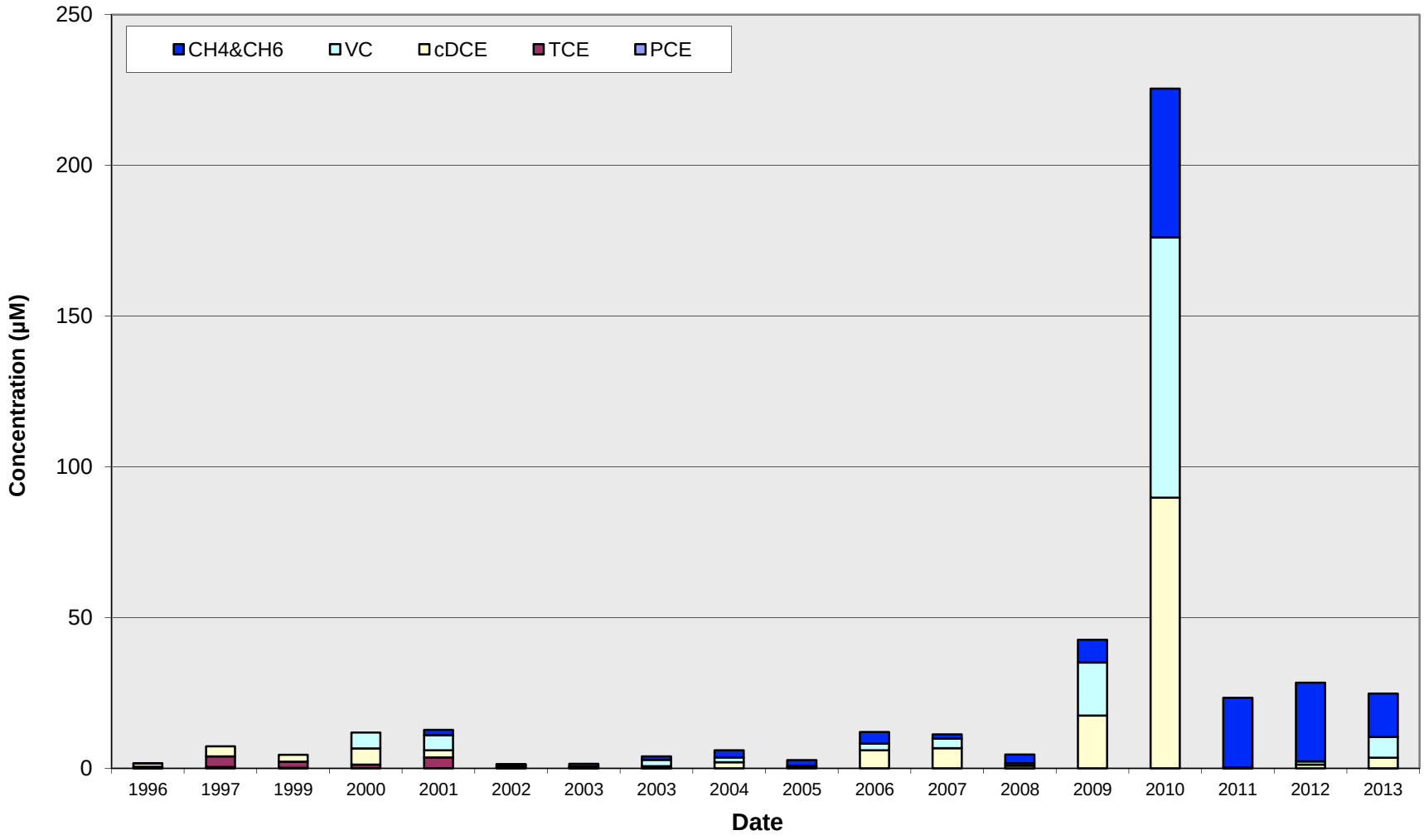
Note: Suspension of groundwater extraction at Eductor occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in .October 2000

Chlorinated Ethene Molar Concentration Trend Plot for Eductor Well



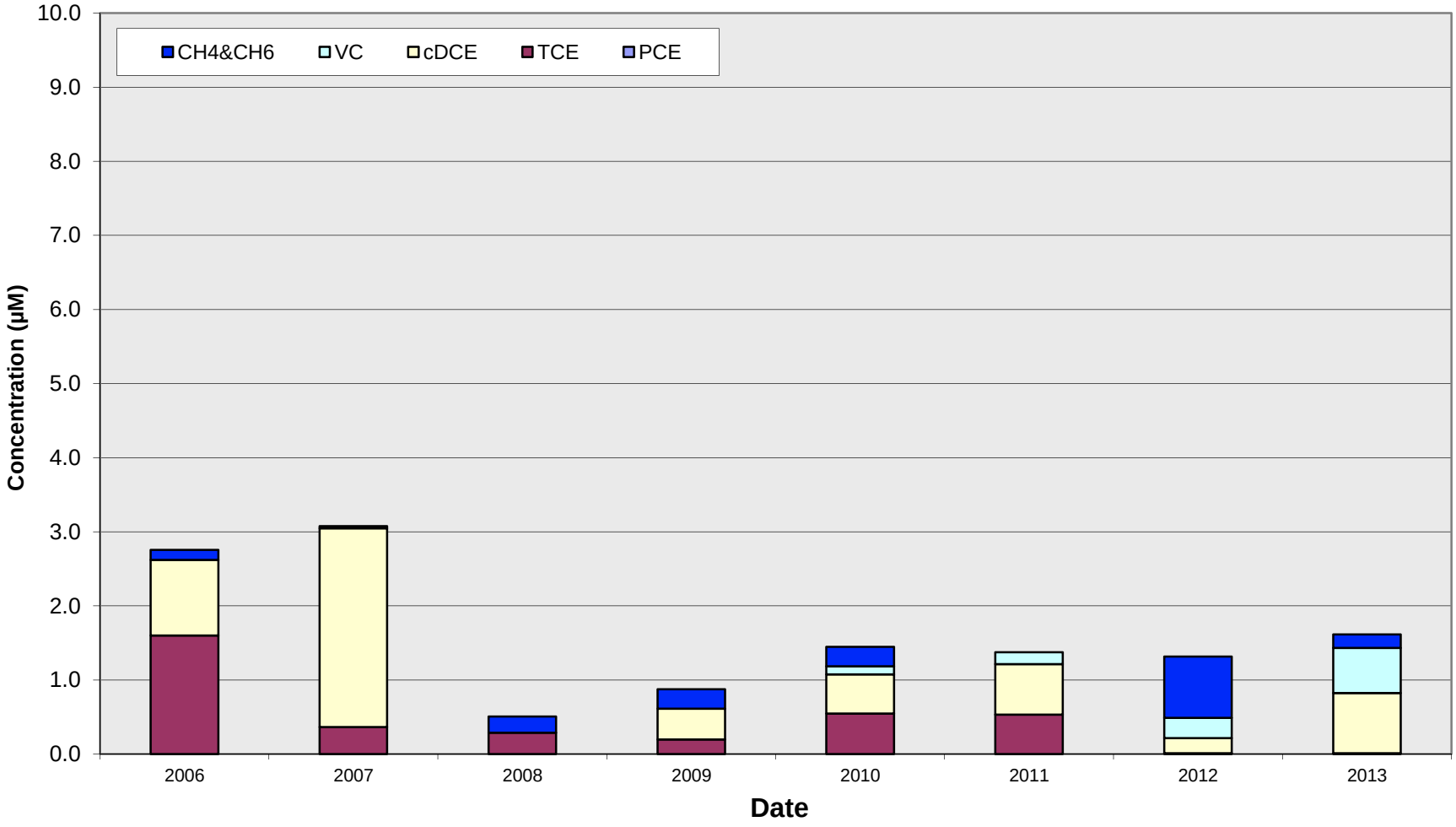
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-2A



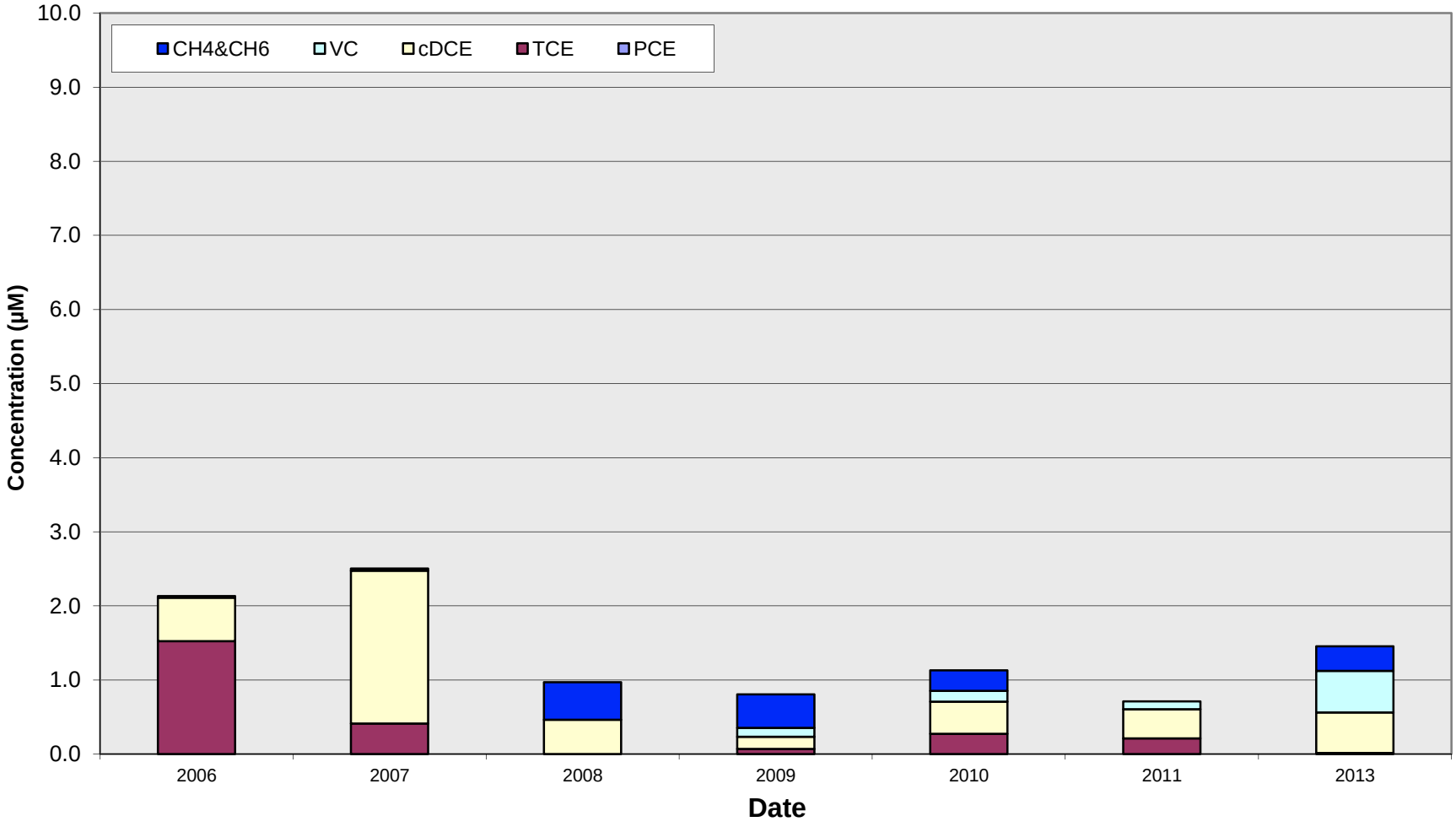
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-13A



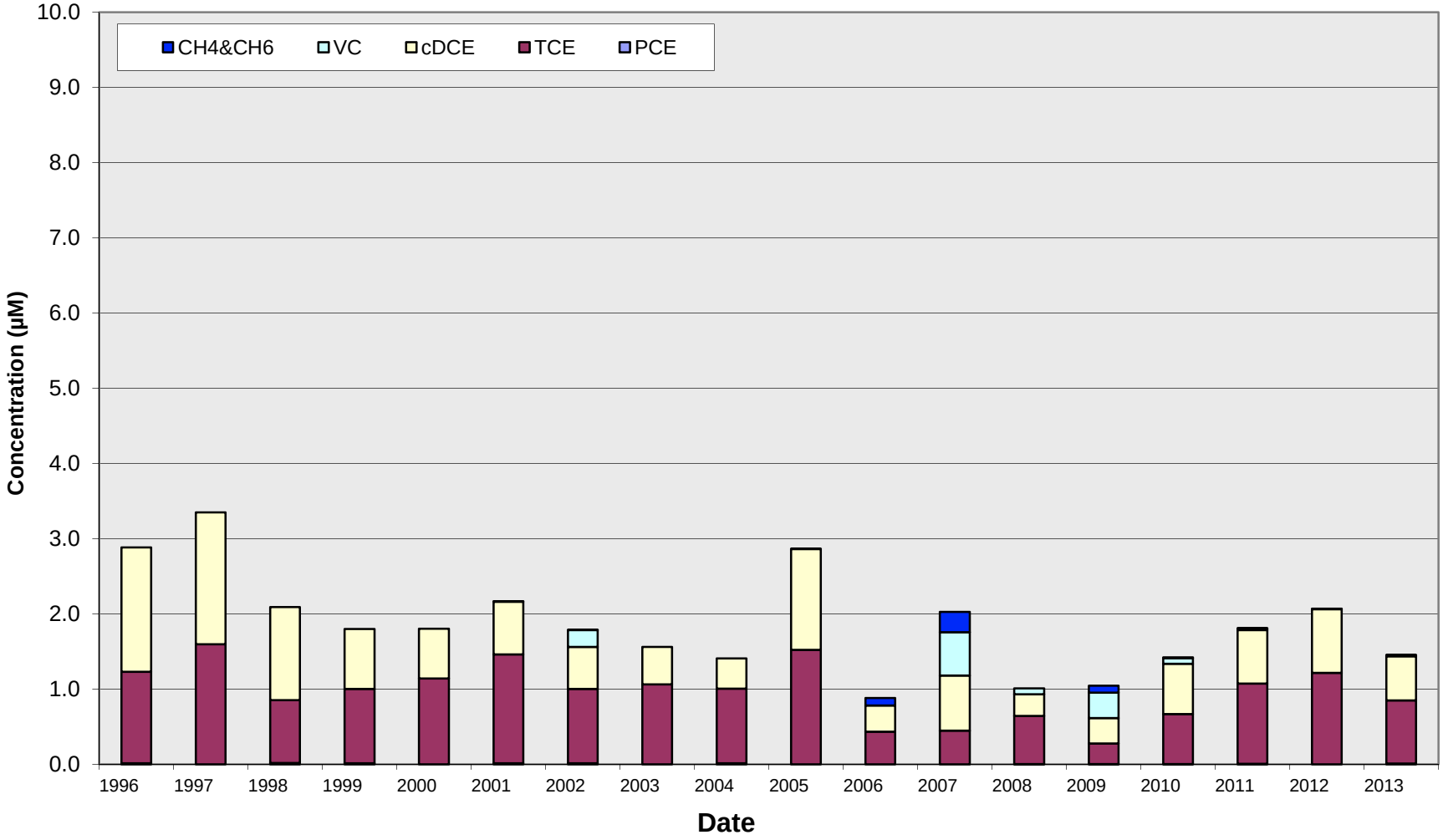
Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-14A



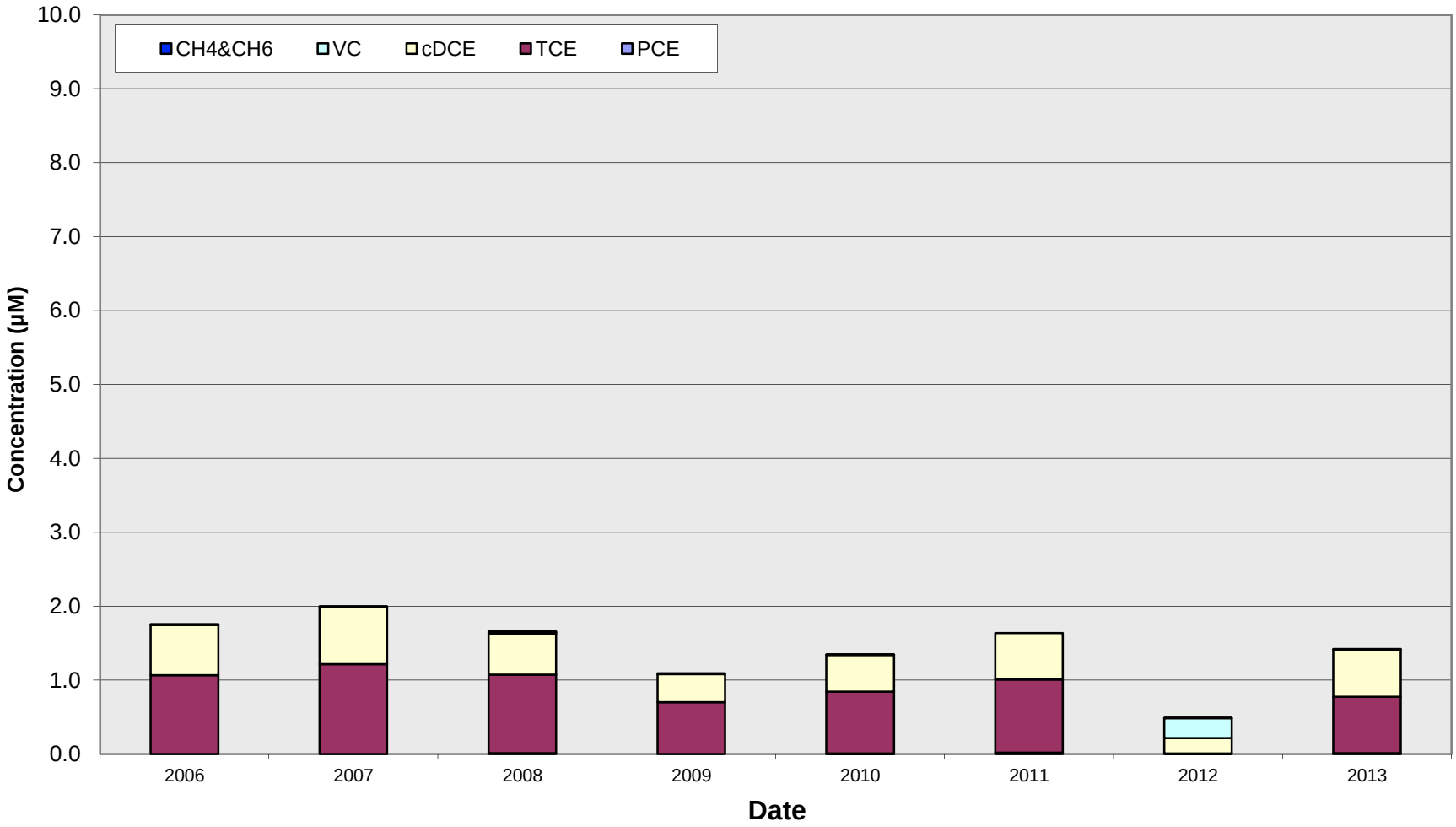
Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-8A



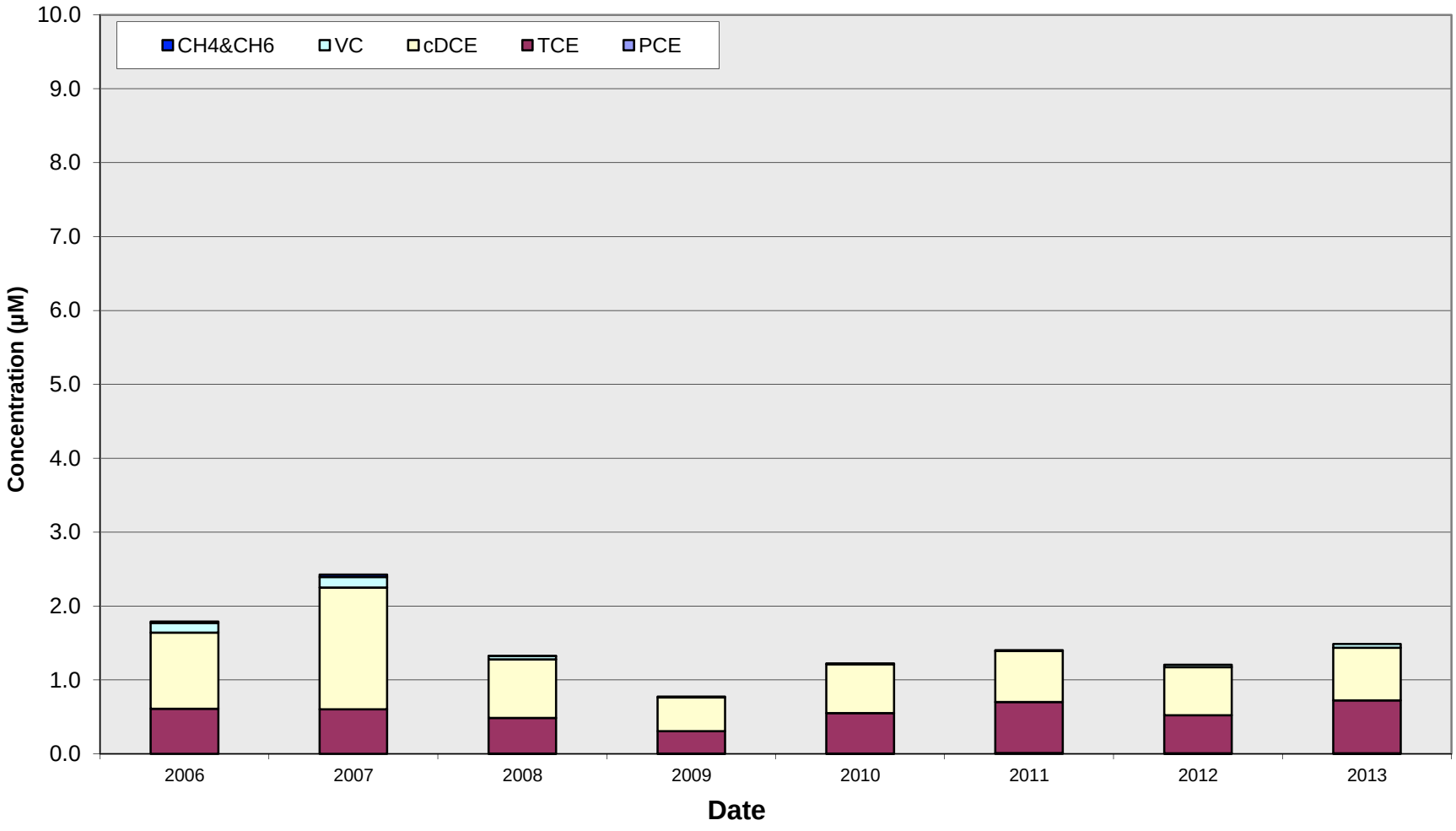
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-15A



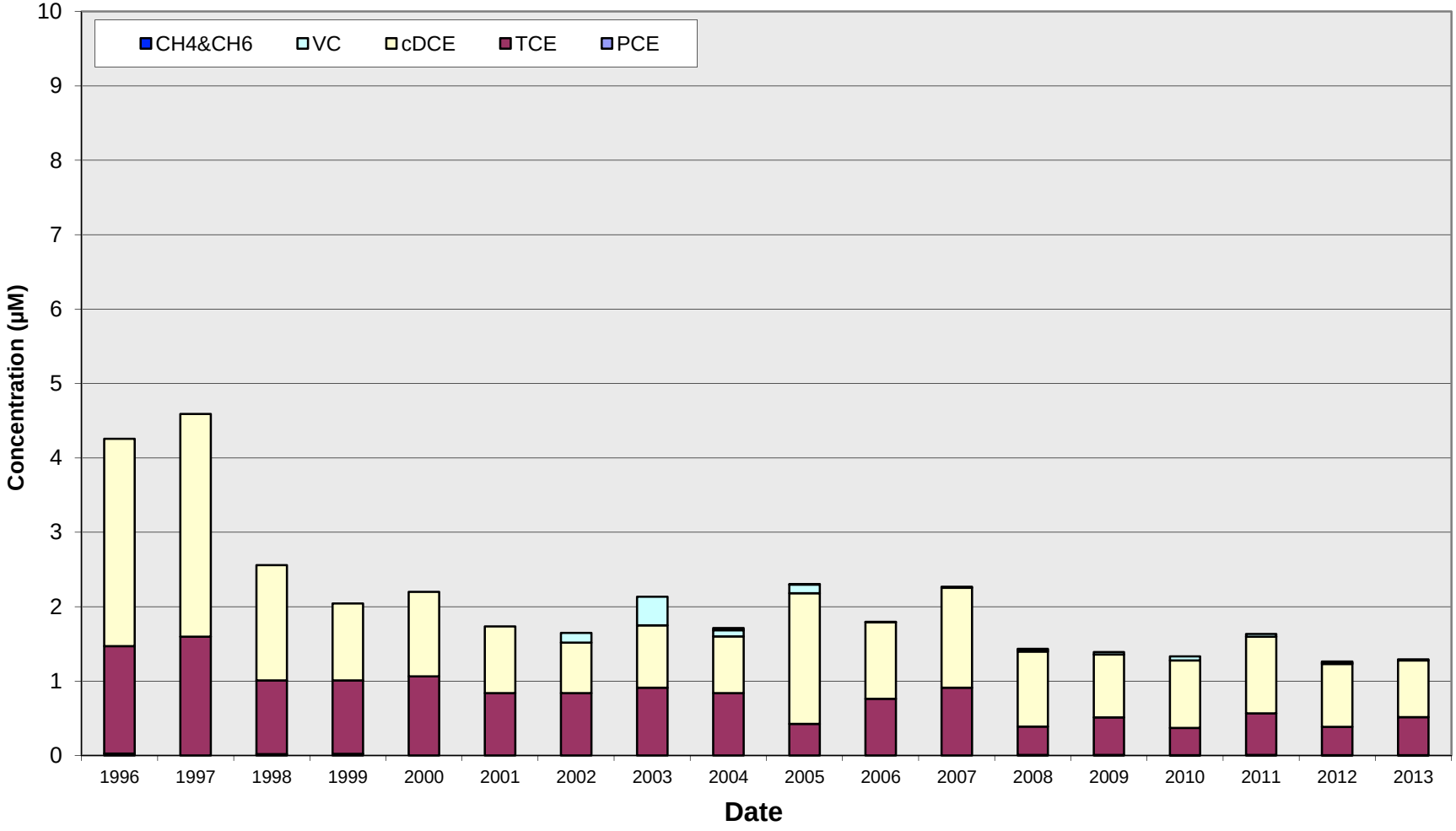
Note: Well was installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-16A



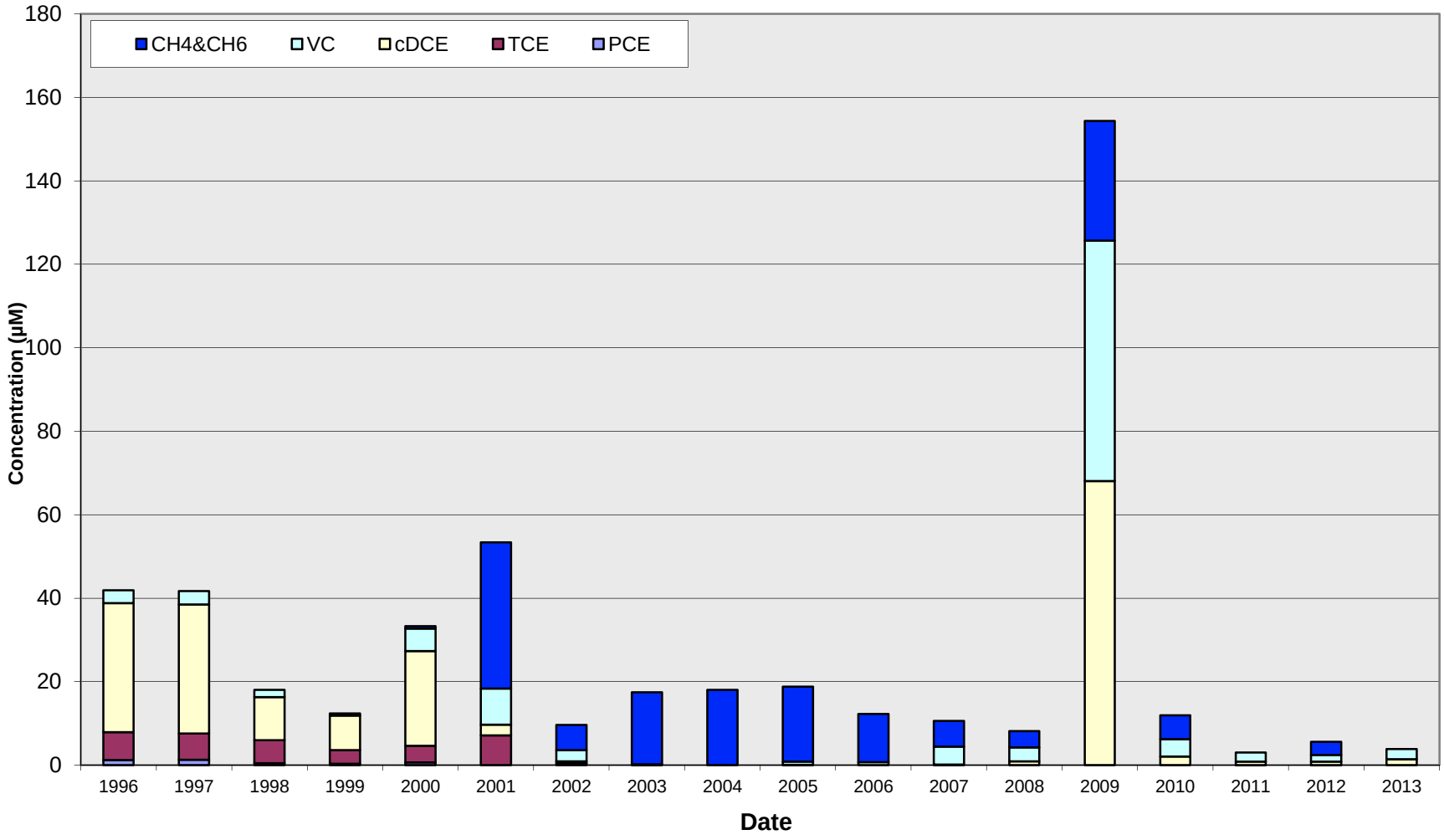
Note: Well was installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-9A



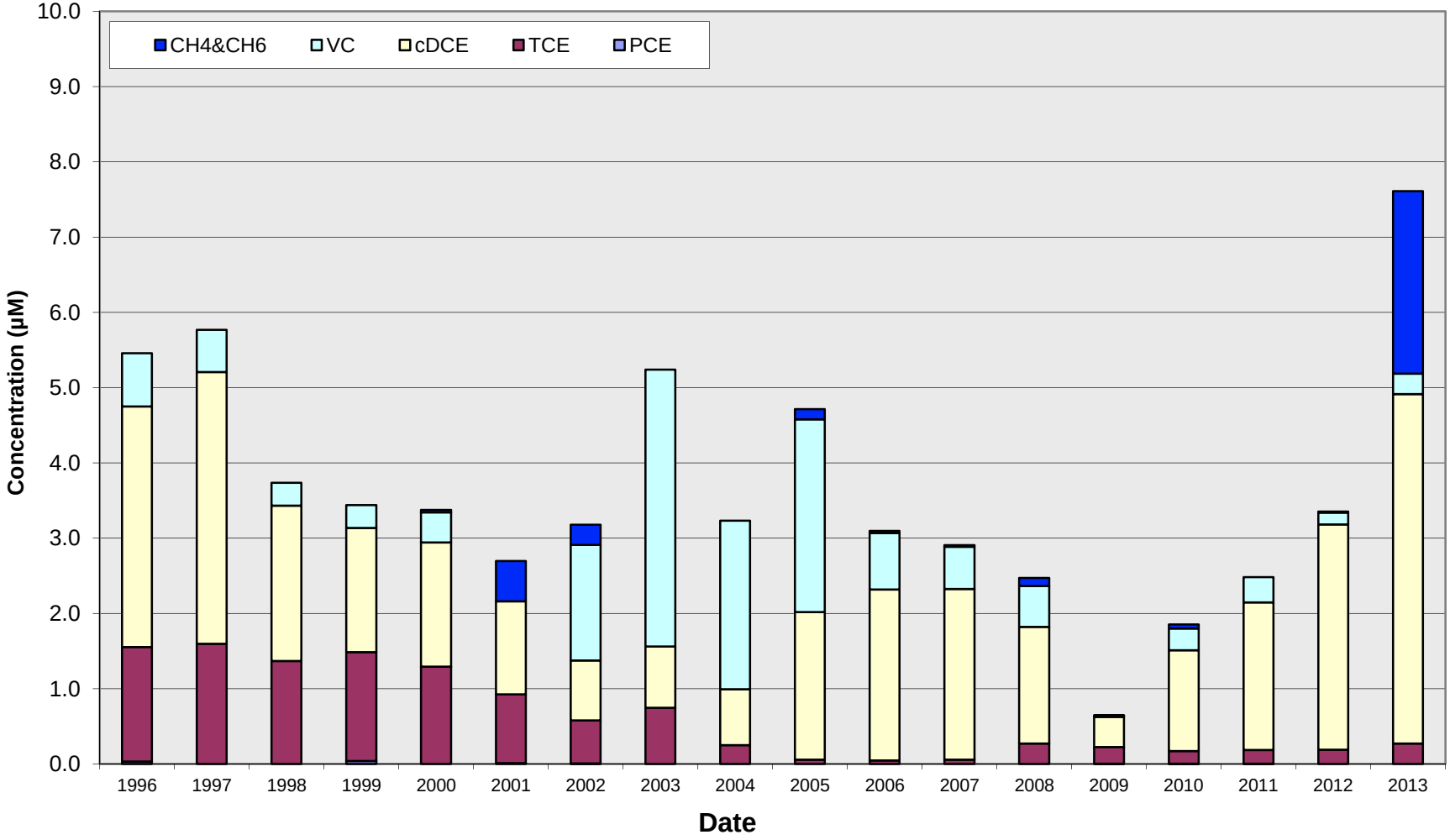
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-2B



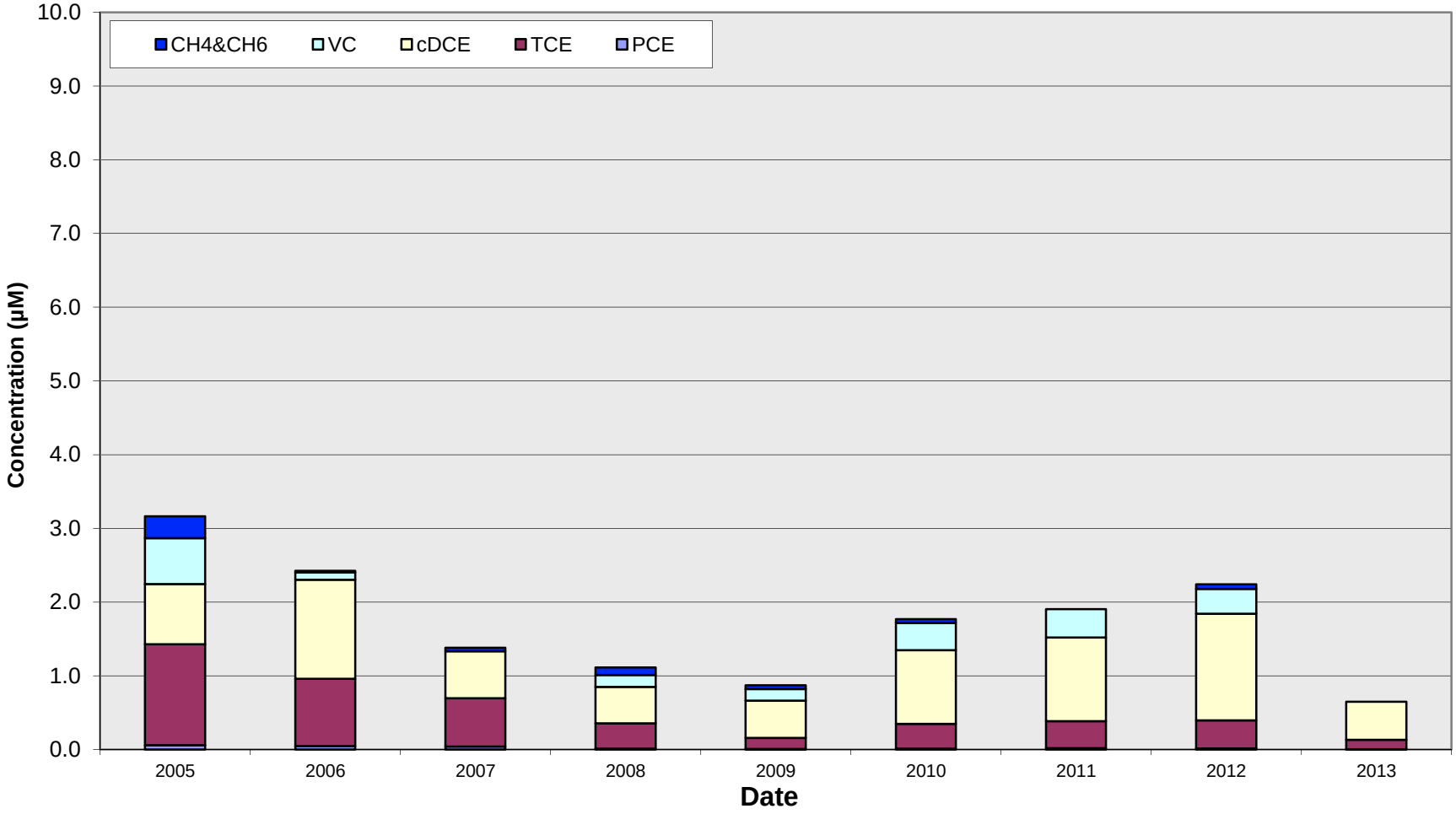
Note: Suspension of groundwater extraction occurred on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-8B



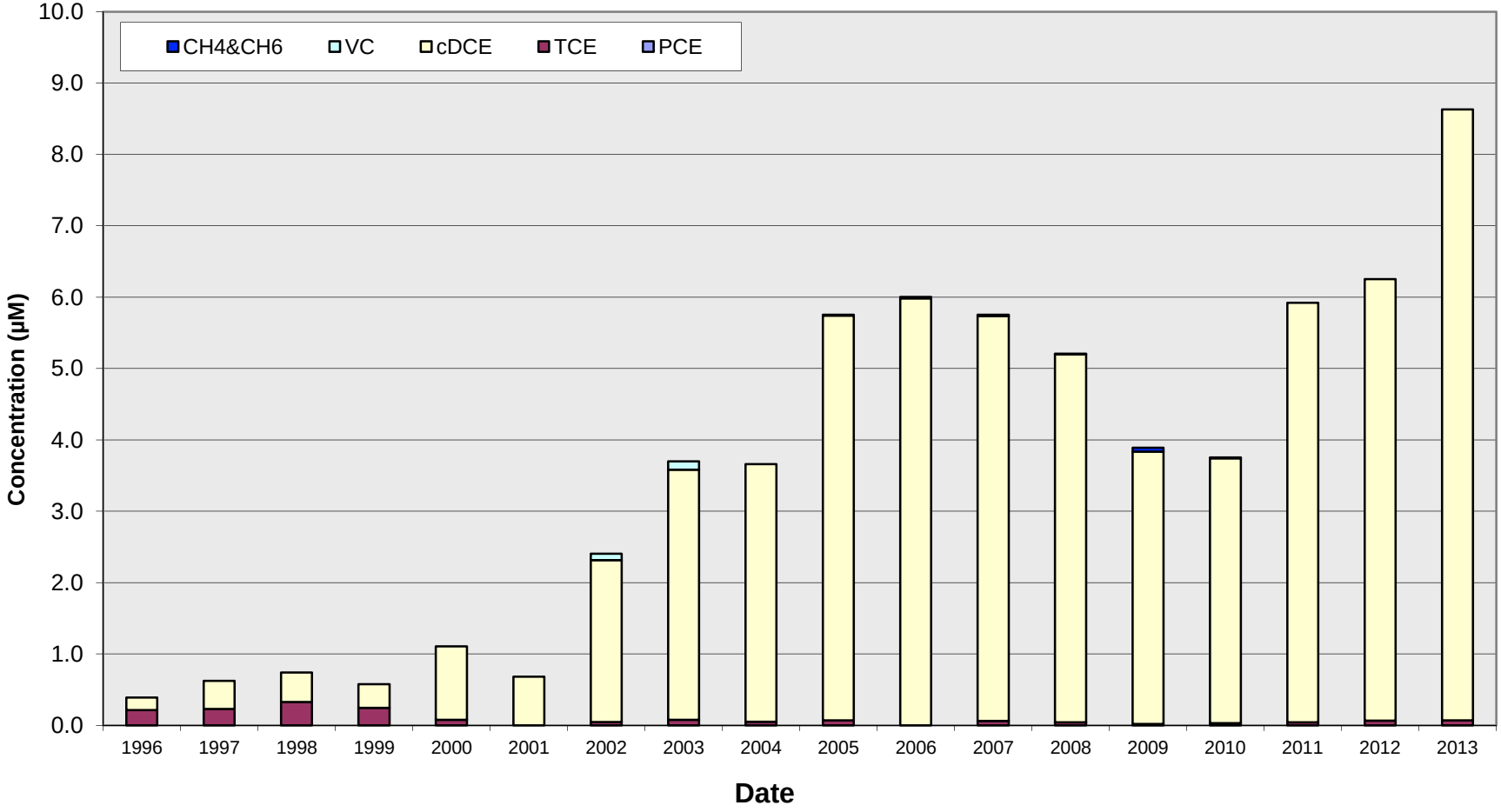
Note: Suspension of groundwater extraction occurred on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-10B



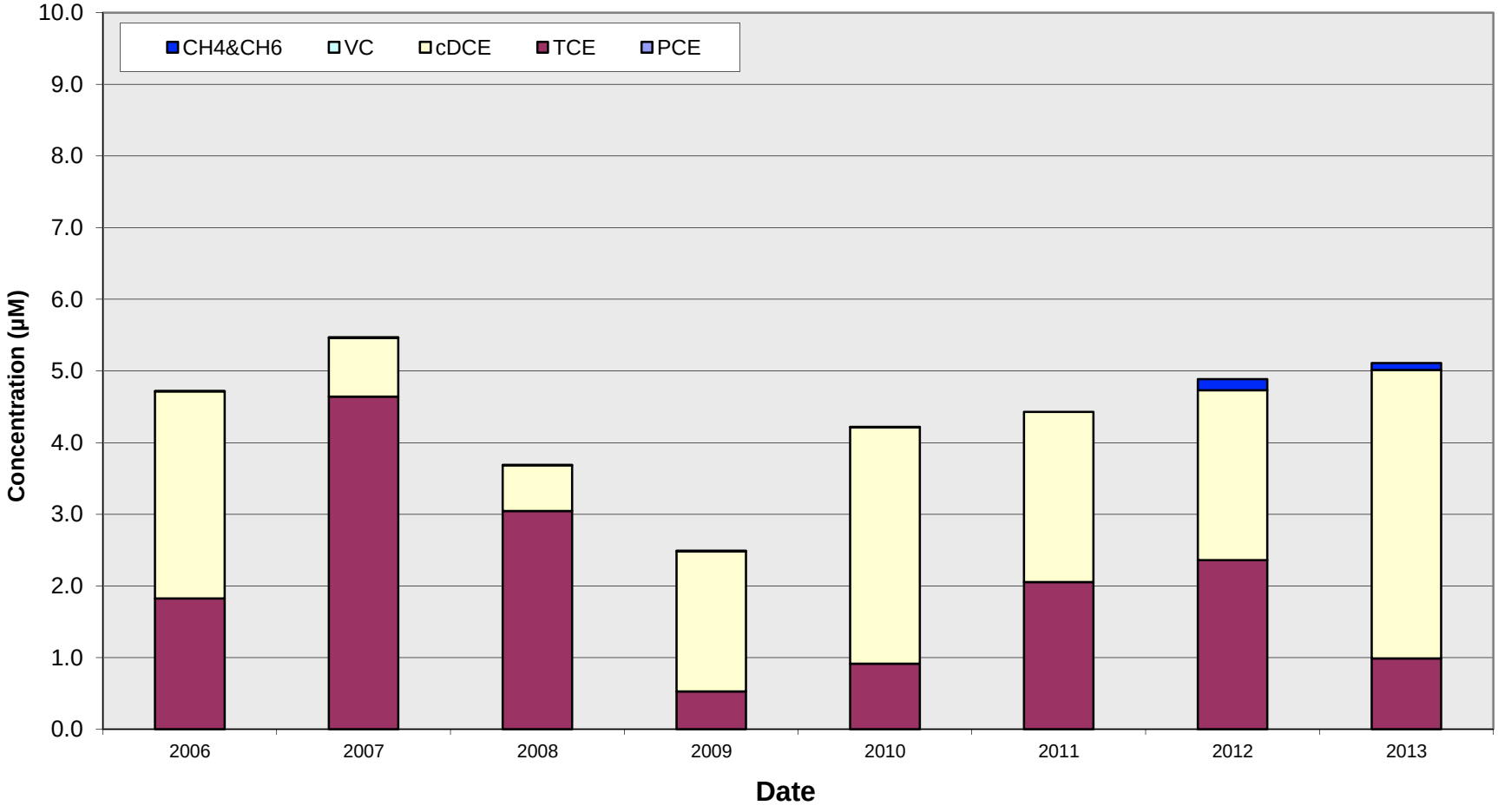
Note: Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-4B



Note: Enhanced anaerobic bioremediation initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Well T-17B



Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.