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19 April 2016

Ms. Melanie Morash
Remedial Project Manager
U. S. Environmental Protection Agency
Region 9
75 Hawthorne Street, SFD-7-1
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RE: Conceptual Site Model
Former TRW Microwave Site, 825 Stewart Drive, Sunnyvale, California

Dear Ms. Morash:

Northrop Grumman Systems Corporation is submitting the enclosed Conceptual Site Model (CSM) to present a comprehensive interpretation of the environmental conditions at the former TRW Microwave site. This CSM incorporates the results of the Environmental Sequence Stratigraphy study recently conducted to identify contaminant transport pathways, and is intended to provide the foundation to support the remedial strategy that we are planning to propose for the site, which is achievement of background water quality conditions. Preparation of the work plan to conduct a background water quality investigation is currently underway and we anticipate submitting it for your review later this month.

If you have any questions regarding the information provided in this CSM or on our proposed path forward, please do not hesitate to contact me at 310-332-5915, or our project manager, Linda Niemeyer, at 760-944-9490.

Sincerely,

Michael D. Shannon
Manager, Corporate Environmental Remediation
on behalf of Northrop Grumman Systems Corporation

Enclosure: Conceptual Site Model

cc: Rebecca Mora - AECOM
Linda Niemeyer - Watermark

AECOM

CONCEPTUAL SITE MODEL

FORMER TRW MICROWAVE SITE
825 STEWART DRIVE
SUNNYVALE, CALIFORNIA

April 2016

APPROVAL PAGE

CONCEPTUAL SITE MODEL

FORMER TRW MICROWAVE SITE
825 STEWART DRIVE
SUNNYVALE, CALIFORNIA

April 19, 2016

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Prepared on behalf of Northrop Grumman Systems Corporation

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ABBREVIATIONS AND ACRONYMNS

%	percent
µg/L	micrograms per liter
AECOM	AECOM, Inc.
Aertech	Aertech Industries, Inc.
AMD	Advanced Microwave Devices.
ANS	acid neutralization system
BAAQMD	Bay Area Air Quality Management District
bgs	below ground surface
cDCE	cis-1,2-dichloroethene
CDM	Camp Dresser & McKee, Inc.
COC	constituent of concern
CSIA	compound specific isotope analysis
CSM	Conceptual Site Model
EAB	Enhanced Anaerobic Bioremediation
ESS	Environmental Sequence Stratigraphy
EVO	emulsified vegetable oil
FEI Microwave	FEI Microwave, Inc.
GWET	groundwater extraction and treatment
HRC™	Hydrogen Release Compound
HSU	hydrostratigraphic unit
MIP	membrane interface probe
mg/kg	milligram per kilogram
mg/L	milligram per liter
NPC	non-pumping conditions
OOU	offsite operable unit
OU	operable unit
PCE	tetrachloroethene
Philips	Philips Semiconductors
PVC	polyvinyl chloride
ROD	Record of Decision
RWQCB	Regional Water Quality Control Board
SCR	Site Cleanup Requirement
SCVWD	Santa Clara Valley Water District

SVC	Sub-Slab Vapor Collection
SVE	soil vapor extraction
TCE	trichloroethene
Three Companies	AMD, Philips, and Northrop Grumman
TOC	total organic carbon
TRW	TRW Microwave, Inc.
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VC	vinyl chloride
VOC	volatile organic compound
VI	vapor intrusion
Weiss	Weiss Associates
WDR	waste discharge requirement

1.0 INTRODUCTION

This Conceptual Site Model (CSM) has been prepared on behalf of Northrop Grumman Systems Corporation (Northrop Grumman) by AECOM, Inc. (AECOM) for submittal to the United States Environmental Protection Agency (USEPA). The objectives of the CSM are as follows:

1. Integrate all pertinent site data into an interpretive depiction of the site setting and environmental conditions, including a comprehensive portrayal of the source area(s), distribution/delineation of contaminants of concern (COCs), geologic/hydrogeologic conditions, fate and transport of COCs, potential health and/or environmental risks associated with COCs and remedial measures installed and/or planned to remediate COCs and their associated potential risks;

2. Identify data gaps that have the potential to affect the understanding of the site conditions, in relation to site remediation and closure; and

3. Serve as the basis for development, refinement, and implementation of the site closure strategy and remedy selection and design.

1.1 Site Description

The former TRW Microwave Inc. (TRW, a subsidiary of TRW Inc.) site (hereafter referred to as either the “TRW site” or the “Site”) is located at 825 Stewart Drive in Sunnyvale, California, about 50 miles southeast of San Francisco, California. A site location map showing the TRW site and surrounding areas is presented on Figure 1.

The TRW site is surrounded by the following sites that have known volatile organic compound (VOC) releases: Advanced Micro Devices (AMD) Buildings 901/902 Thompson Place and 915 DeGuine Drive; Philips Semiconductors (Philips; formerly Signetics Inc.) Buildings 811 Arques Avenue, 815 Stewart Drive, and 440 Wolfe Road; and Mohawk Laboratories (surrounding sites are shown on Figure 2, with the exception of Mohawk Laboratories which is approximately 3,000 feet south of the TRW site on Kifer Road). Three of these facilities (AMD 901/902, Philips 811, and Mohawk Laboratories) are located hydraulically upgradient (south) of the TRW site; two facilities (Philips 815 and 440) are located approximately crossgradient (west) of the TRW site, and one facility (AMD Building 915) is located downgradient (north) of the Site. These surrounding sites have historically used trichloroethene (TCE) and other chlorinated VOCs in their manufacturing processes and have released these VOCs to groundwater. AMD, Northrop Grumman, and Philips (the Three Companies) share responsibility for the management and remediation of the downgradient commingled groundwater plume, defined as the Three Companies Offsite Operable Unit (OOU), as described in the following subsection.

1.2 Regulatory History

As a result of responses to a California Regional Water Quality Control Board – San Francisco Bay Region (RWQCB) questionnaire that was submitted in 1983 after the removal of the TRW site underground storage tank (UST), RWQCB issued a Cleanup and Abatement Order in June 1984 and in October 1985 adopted Waste Discharge Requirements (WDRs) for the Site. The Cleanup and Abatement Order and the WDRs

were formally adopted in RWQCB Order No. 85-107. In June 1991, RWQCB issued RWQCB Order No. 91-103 and established the final site cleanup requirements (SCRs) for the Site while rescinding the previous order (RWQCB, 1991). RWQCB was the lead regulatory agency at the Site until August 2014, when agency lead was transferred to USEPA, per notification from USEPA in a letter dated August 7, 2014 (USEPA, 2014).

In September 1991, USEPA issued a combined Record of Decision (ROD) (USEPA, 1991) that addressed four operable units (OUs): (1) the TRW site, (2) AMD 901/902, (3) Philips (which was Signetics Inc. at that time), and (4) the OOU. The remedy established for the TRW OU was operation of a groundwater extraction and treatment (GWET) system onsite. The OOU remedy consists of a GWET system operated by Philips with financial contribution from Northrop Grumman and AMD. Cleanup standards established by the 1991 ROD are shown below.

Compound	ROD Cleanup Standard (µg/L)
1,2-Dichlorobenzene	600 (AMD and TRW)
1,1-Dichlorobenzene	5
1,1-Dichloroethene	6
cis-1,2-Dichloroethene	6
trans-1,2-Dichloroethene	10
Freon 113	1,200
Tetrachloroethene	5 (AMD, TRW, OOU)
1,1,1-Trichloroethane	200
Trichloroethene	5
Vinyl Chloride	0.5 (AMD, TRW, Philips)

µg/L – micrograms per liter

In the draft Focused Feasibility Study submitted in 2010, a revised list of COCs was proposed; however, this document was never finalized because USEPA felt that the risk of vapor intrusion (VI) needed to be further evaluated. As noted above, as of August 2014, the lead regulatory agency for the TRW site/OU, as well as the other three OUs, is now USEPA.

1.3 Site History

1.3.1 Property Ownership and Use

Prior to 1968, the TRW site was not used for industrial activities. From 1968 to 1974, Aertech Industries, Inc. (Aertech) manufactured, assembled, and tested microwave and semiconductor components at the Site. In 1974, TRW acquired the Site from Aertech and in 1987 FEI Microwave, Inc. (FEI Microwave) purchased it from TRW. FEI Microwave subsequently became Tech Facility 1, Inc. During these changes in Site ownership, operations were continuous, with no significant process changes from 1968 to 1993. In 1993, FEI Microwave stopped production, and in 1995 the Site was acquired by Stewart Associates. The Site was subsequently leased to Diablo Research Corporation, a contract research and development company. Diablo Research Corporation occupied the Site until August 2000, when Cadence Inc. leased the Site and continued research and development operations (Camp Dresser & McKee, Inc. [CDM], 2009).

The Site was unoccupied between January 2001 and October 2015. Between 2001 and 2003, the Site building exterior was remodeled. As part of this remodeling, a portion of the Site building was demolished and a new structure, contiguous with the existing structure, was constructed. Figure 3 presents an aerial view of the previous and current Site building layout (note that north is to the left on the figure).

In 2004, the property was purchased by Pacific Landmark. In 2014, the property was purchased by 825 Stewart Acquisition Partners and tenant improvements were performed. During these changes in Site ownership, TRW Inc., and then Northrop Grumman (which acquired TRW Inc. in 2002), retained responsibility for Site cleanup.

1.3.2 Chemical Use at the Site

During operations at the Site between 1968 and 1993, TCE and other industrial solvents were used and hazardous wastes were generated as a byproduct of the operations. Figure 4 shows the areas of previous chemical storage and processing locations.

Chemicals used at the site were stored in a chemical storage yard located outside the northwesterly area of building. Waste solvent, composed mainly of TCE, was stored in an UST located near the chemical storage yard from 1970 through 1983. Although there was only one tank present at any time, four different tanks were installed and sequentially replaced at the one location. The tanks were installed in 1970, 1973, 1976, and 1980. The final tank was removed in 1983. Following removal of the UST, waste solvent was stored aboveground in the chemical storage yard until transport offsite for disposal. Figure 3 shows the location of the former UST in relation to the current Site layout.

An in-ground three-stage ammonia gas acid neutralization system (ANS) was located near the UST and operated from 1968 to 1984, after which it was disconnected, removed, and replaced by an aboveground system with secondary containment at the same location. The aboveground ANS was disconnected and removed in 2001, during remodeling of the Site building (CDM, 2009).

2.0 SOURCES OF CONTAMINATION

2.1 Identification and Characterization of the Sources of Contamination

Between 1983 and 1986, several subsurface investigations were conducted in the vicinity of the former UST, the ANS, and associated piping. The former UST is the only known source of contamination identified for the Site.

2.2 Identification of Constituents of Concern (COCs)

During investigations performed between 1983 and 1986, VOCs were the only COCs identified at the Site and the former UST was identified as the only source of VOC impact to Site groundwater. COCs have been identified in three of the five hydrogeologic units beneath the Site (see Section 3.2 for geologic/hydrogeologic details on the individual units and Section 6.0 for the current nature and extent of contamination in the different units).

3.0 SITE SUBSURFACE CONDITIONS

3.1 Regional Geology and Hydrogeology

The Site is located in the Santa Clara Valley, a structural basin bounded by the Santa Cruz Mountains to the south and west and San Francisco Bay to the north. The basin is filled with Quaternary-age alluvial sediments that were deposited in channel and floodplain environments by mildly sinuous (anastomosing or meandering-type) streams draining the Santa Cruz Mountains and flowing into San Francisco Bay. As these channels migrated across the landscape and changed direction with time, sand and gravel were deposited in channel axes and as point bars. During flooding events, silts and clays were deposited outside the channels in the floodplain, and rivers periodically changed course.

The resultant sedimentary deposits are characterized by highly permeable, sinuous sand and gravel channel deposits encased in relatively low-permeability silt and clay floodplain deposits. Groundwater flow and contaminant transport occurs primarily within the permeable channel deposits, and the variable orientation of channels deflects contaminant migration directions from the regional groundwater gradients. This can cause plumes to appear to spread laterally and assume complex plan-view morphologies.

Regionally, the alluvial sediments in the Site area have been divided into two broad hydrogeologic intervals or zones, referred to as the upper aquifer zone and the lower aquifer zone. These two zones are separated by a relatively continuous clay and silt aquitard that generally occurs at a depth of approximately 100 feet below ground surface (bgs). Numerous coarse-grained sand and gravel units have been identified in the upper and lower aquifer zones, and these water-yielding zones have been shown to roughly correlate throughout the area.

The upper aquifer zone was historically divided into two water-yielding zones, designated as Zone A and Zone B and defined as follows:

- Zone A occurs within the interval from the water table to a depth of about 25 feet bgs.
- Zone B consists of five sub-zones (Zones B1 through B5) extending from approximately 30 feet bgs to the base of the zone at approximately 100 feet bgs.

The lower aquifer zone, designated Zone C, is used regionally for groundwater production (see Section 4.2 herein), although not in the immediate vicinity of the Site. Data have not been collected below Zone B at the Site (CDM, 2000a).

This historic representation of depth-dependent zones presumes that the hydrostratigraphy is sheet-like. However, a more current evaluation of the stratigraphy, presented in Section 3.2 below, is based on the fluvial depositional environment of the sediments encountered. Each zone consists of multiple hydrostratigraphic units (HSUs) defined by channel sands which may not be hydraulically connected. These HSUs have implications when interpreting groundwater elevation data and contaminant chemistry data based on the

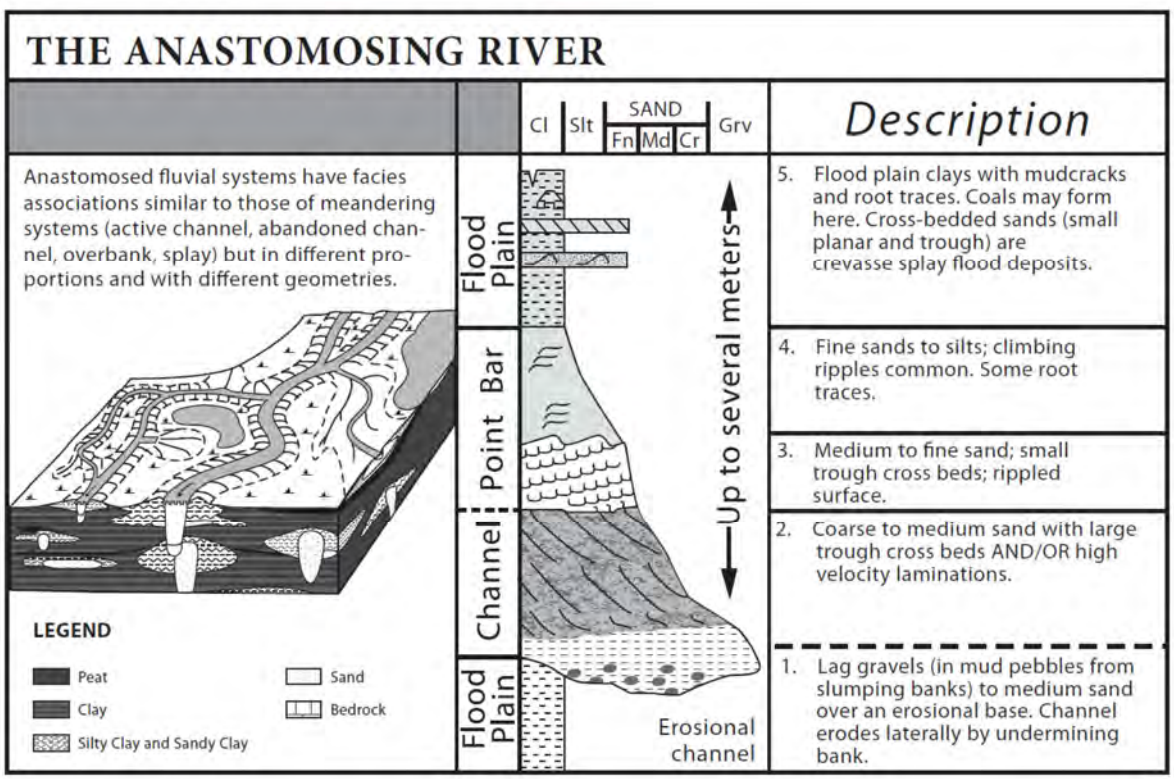
zonation terminology. The groundwater elevation contour maps represent a depth-averaged view of a channelized system.

3.2 Site Geology and Hydrogeology

The interpretation and understanding of the hydrostratigraphy underlying the Site was recently supplemented based on an evaluation of existing lithology data using a technique called Environmental Sequence Stratigraphy (ESS). The ESS evaluation mapped out HSUs defined by subsurface stream channel systems underlying the Site that serve as primary groundwater flow and contaminant migration pathways. A detailed summary of the ESS methodology and conclusions of the geologic evaluation are included in the Addendum to the Technical Memorandum in Response to the 2014 Five-Year Review Report (AECOM, 2016a). The results of the ESS evaluation were presented to USEPA on December 10, 2015; the slides for that presentation are included in Appendix B.

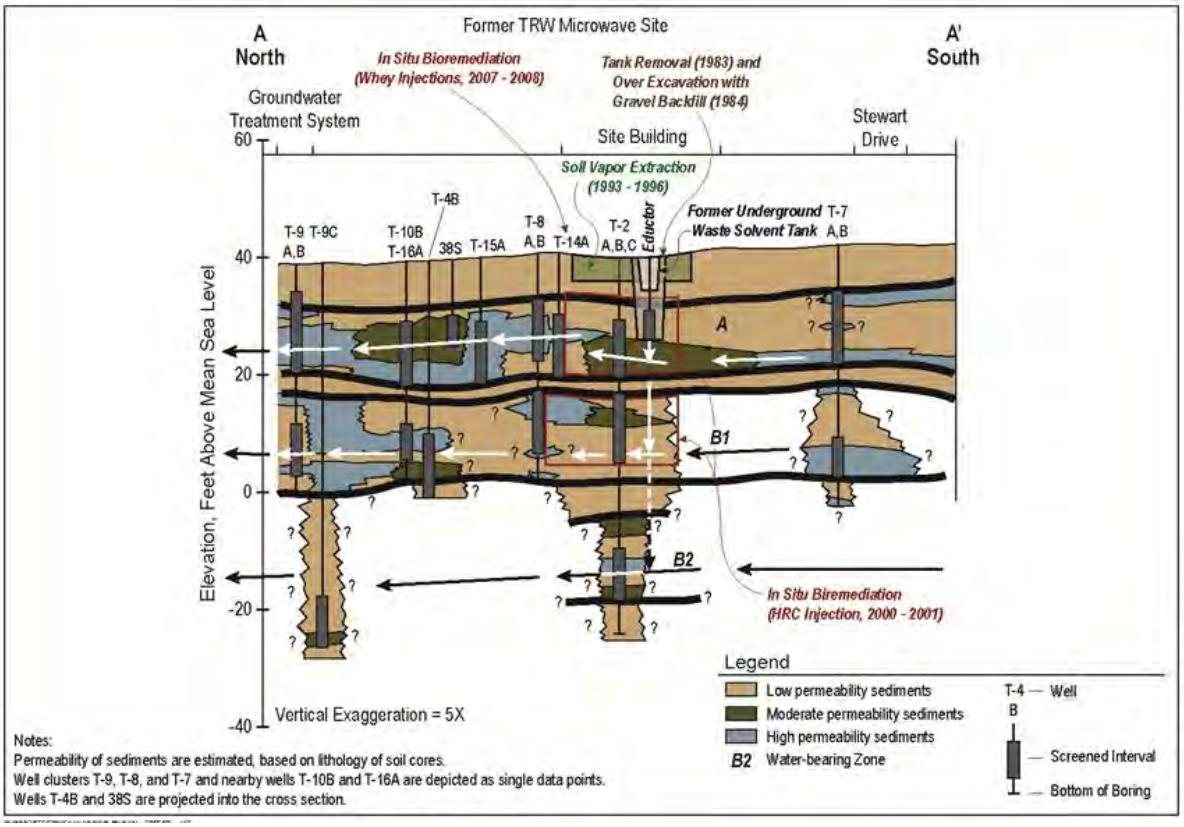
3.2.1 Site Geology

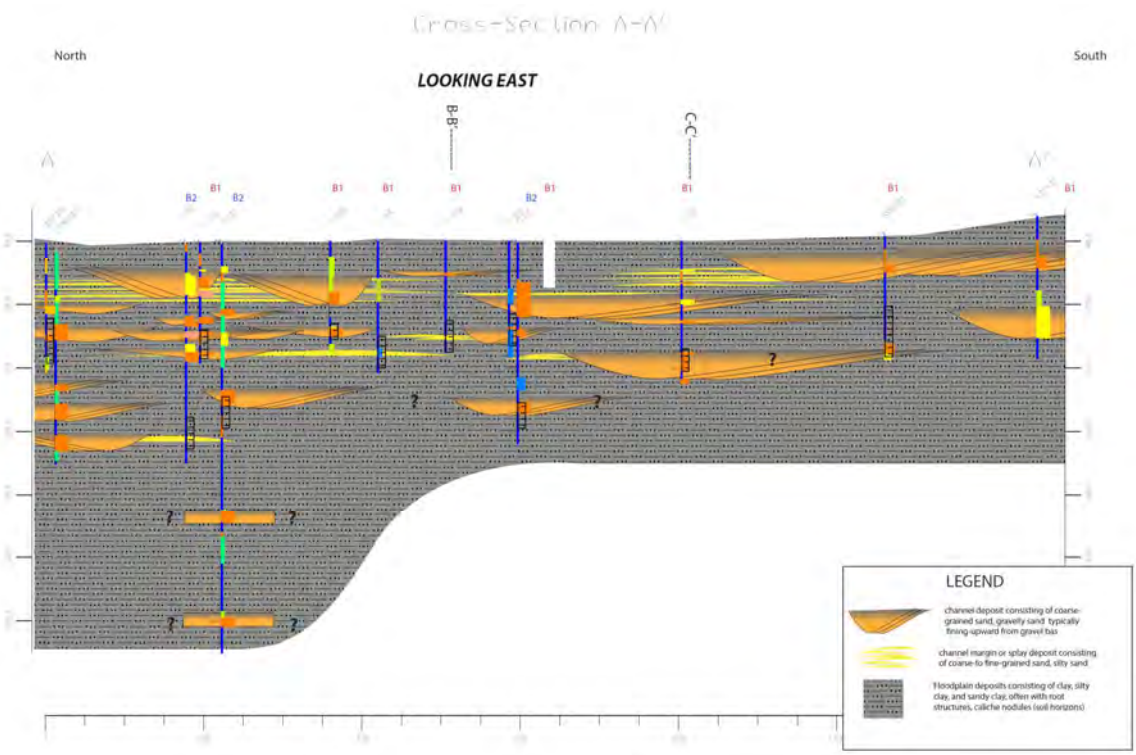
The Site stratigraphy is governed by the fluvial depositional environment and resulting coarse-grained (sand/gravel) channel lithofacies and lower permeability (silt/clay) floodplain lithofacies deposits. As depicted by the anastomosing fluvial facies model presented in the figure below, the subsurface consists of a highly channelized system, predominantly clay and silty clay floodplain deposits encasing the higher permeability sand and gravel-rich channel deposits.



The two cross sections on the following page show the contrast between the previous and current approach to interpreting groundwater flow and contaminant transport within the various zones beneath the Site. The previous stratigraphic framework depicted the sand units as relatively continuous (upper cross section), versus the current ESS stratigraphic framework that maps out the distinct channel occurrences (lower cross section). This has implications for the interpretation of groundwater monitoring data based only on the general depths of the well screen intervals (i.e., a depth-based aquifer zonation approach). For example, groundwater flow directions were previously generalized based on groundwater elevation contours that were generated without consideration of channel versus floodplain lithology. The underlying stratigraphic framework is now represented on the groundwater contour maps by plotting the HSUs that control groundwater flow, and groundwater flow directions are interpreted by considering both hydraulic head and stratigraphic data.

The stratigraphic pathways are shown on Figures 5, 6, and 7 for Zones A, B1, and B2, respectively. Two HSUs were mapped in Zone B1, one shallower HSU that traces back to the onsite source area (referred to as HSU1, occurring within the 10 to 20 ft. MSL interval), and another deeper unit which is oriented oblique to the general groundwater gradient (referred to as HSU2, occurring within the 0 to 10 ft. MSL interval) and is interpreted as a contaminant pathway from offsite sources (Figure 6). In addition, the screen interval for well T-9C, previously designated as a Zone B2 well, was reexamined and the designation of the well was changed from Zone B2 to Zone B3.


Former TRW Microwave Site
A
North
A'
South
In Situ Bioremediation
(Whey Injections, 2007 - 2008)
Tank Removal (1983) and
Over Excavation with
Gravel Backfill (1984)
Groundwater
Treatment System
Site Building
Stewart
Drive
Soil Vapor Extraction
(1993 - 1996)
Eductor
Former Underground
Waste Solvent Tank
T-7
A,B
T-9 T-9C
A,B
T-10B
T-16A
T-4B
38S
T-15A
T-8
A,B
T-14A
T-2
A,B,C
A
B1
B2
In Situ Biremediation
(HRC Injection, 2000 - 2001)
Elevation, Feet Above Mean Sea Level
60
40
20
0
-20
-40
Vertical Exaggeration = 5X
Legend
Low permeability sediments
Moderate permeability sediments
High permeability sediments
B2 Water-bearing Zone
T-4 — Well
B
— Screened Interval
— Bottom of Boring
Notes:
Permeability of sediments are estimated, based on lithology of soil cores.
Well clusters T-9, T-8, and T-7 and nearby wells T-10B and T-16A are depicted as single data points.
Wells T-4B and 38S are projected into the cross section.


Cross-Section A-A'
North
South
LOOKING EAST
B-B'
C-C'
A
A'
B1
B2
LEGEND
channel deposit consisting of coarse-grained sand, gravelly sand typically fining-upward from gravel base
channel margin or splay deposit consisting of coarse-to fine-grained sand, silty sand
floodplain deposits consisting of clay, silty clay, and sandy clay; often with root structures, caliche nodules (soil horizons)

3.2.2 Site Hydrogeology

Depth to first encountered groundwater is shallow, generally occurring at approximately 6 to 8 feet bgs, and the vadose zone is predominantly composed of lower permeability silt and clay floodplain deposits.

As shown on Figure 3, Site groundwater is monitored using a network of 42 monitoring wells and the Eductor (a groundwater extraction pipe installed within the former UST gravel backfill pit) completed in five depth intervals, designated as Zones A, B1, B2, B3, and B4 (Table 1). While the subsurface consists of discrete fluvial channel deposits encased in floodplain silt and clay deposits, the wells were designed based on the designated depth zones to create groundwater elevation maps and contaminant isoconcentration maps.

Table 1 provides well construction information. Historically, the zone classifications for the wells were as follows: 24 wells and the Eductor within Zone A, 11 wells within Zone B1, six wells within Zone B2, and one well within Zone B4. As stated in the 1991 ROD, Zone B3 at the Site is relatively thin and was only encountered in a few borings at the Site. Historically, no wells at the Site were designated as Zone B3 monitoring wells; however, recent re-evaluation of boring logs for the Site indicates that well T-9C, previously thought to be screened in Zone B2, is screened within Zone B3 (AECOM, 2015b). Borehole logs or water well driller's logs (if a borehole log is not available) for all monitoring wells (with the exception of T-1A and T-1B) are included in Appendix A.

In 2004, wells T-1A and T-1B were abandoned with permission from RWQCB (CDM, 2004 and RWQCB, 2004). These two wells monitored water quality downgradient of the eastern portion of the Site building and reflected background concentrations that demonstrated no impact in this area of the Site from an onsite source. Figure 3 shows the Site layout and existing well locations (as of October 2015). As discussed in the previous annual report (AECOM, 2015b), four wells (T-2A, T-2B, T-2C, and T-3A) and the Eductor, all located inside the building, were destroyed in October and November 2014 (AECOM, 2015b).

The ranges of hydraulic conductivities reported previously (Weiss Associates [Weiss], 1996 and CDM, 2000b) for Zones A and B1/B2 are 356 to 400 feet per day and 25 to 150 feet per day, respectively, and the ranges of groundwater flow velocities are 15 to 22.5 feet per day and 1.25 to 7.5 feet per day, respectively.

Depths to water measured in October 2015 indicate that the static depth to the water table ranged from approximately 7.04 feet (well 36D) to 10.57 feet bgs (well T-10C). The regional and local direction of groundwater movement in Zone A is to the north at an average horizontal gradient of 0.006 horizontal foot per vertical foot, consistent with previous monitoring events. The general horizontal groundwater gradient in Zone B1 is to the north. Based on the recent ESS evaluation (Section 3.2.1), locally the groundwater movement is influenced by channelized flow related to channel deposits. The gray areas on Figures 5, 6, and 7 represent areas of low permeability silt/clay-rich floodplain deposits that impede groundwater flow relative to the higher permeability sand/gravel stream channel 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 (located to the west at 815 Stewart Drive and 440 Wolfe Road).

Water levels observed in Zone A wells during the October 2015 monitoring event decreased in elevation by 0.7 foot to 1.3 feet compared to the October 2014 measurements. Hydraulic heads in Zone B1 wells during October 2015 also decreased in elevation by 0.4 foot to 1.1 feet as compared to October 2014. Hydraulic heads in Zone B2 wells during October 2015 ranged from 2.1 feet lower to 1.6 foot higher than October 2014 (Appendix C).

Hydraulic head values measured in October 2015 under non-pumping conditions (NPC) indicate that the vertical head difference between Zones A and B1 is:

- Fairly neutral in the central Site area (between wells T-8A and T-8B, and T-16A and T-10B) and at the southern property boundary (between wells T-7A and T-7B); and

- Approximately 0.1 feet upward at the southwestern property boundary (between wells 37S and T-5B), at the northern property boundary (between wells T-9A and T-9B), and at the western property boundary (between wells 38S and T-4B).

Vertical hydraulic gradients between Zone B1 and Zone B2 is downward at the northwest property boundary (near wells T-9B and T-10C). The vertical gradient between Zone B2 and Zone B3 is upward at the northwest property boundary (near wells T-10C and T-9C). The vertical gradient between Zone B4 and the overlying zones is upward.

4.0 POTENTIAL PATHWAYS AND RECEPTORS

Potential contaminant exposure pathways at the Site include inhalation of contaminants via the vapor intrusion pathway into the Site building, and exposure (ingestion or dermal contact) to groundwater via domestic use of groundwater.

4.1 Vapor Intrusion

Essentially all of the vadose zone VOC source area has been addressed either through vapor extraction or soil excavation during remediation activities; therefore vapor intrusion (VI) risk is primarily associated with existing shallow groundwater impacted by VOCs. Indoor air, outdoor air, and sub-slab vapor sampling was performed in December 2013. Based on the results of the sampling event, TCE was the only VI-related chemical that presented risk above a 1×10^{-6} exposure level (3×10^{-6}) in the building under the industrial exposure scenario. Risk results for a chemicals detected were within the low end of the Comprehensive Environmental Response, Compensation, and Liability Act risk management range (1×10^{-4} to 1×10^{-6}) with hazard approaching 1 (AECOM, 2014a).

As discussed in Section 5.8, a Sub-Slab Vapor Collection (SVC) system was installed below the concrete slab of the Site building in late 2014. In addition, monitoring wells located inside the building were removed as potential conduits for VI in late 2014 and all cracks and penetrations of the concrete slab were sealed in early 2015. Following these VI mitigation measures, a VI evaluation sampling event was performed in May 2015. Results

showed that no contaminants were detected in indoor air above regulatory screening criteria and chemicals detected in indoor air do not pose a human health risk under an industrial exposure scenario (AECOM, 2015c). To validate that chemicals in indoor air do not pose a risk under an industrial scenario prior to building occupancy, an additional monitoring event was performed by the building tenant in December 2015, utilizing the same sampling methodology and adjusting the sampling location rationale based on the final building layout after completion of tenant improvements. The results of this sampling indicate that chemicals detected in indoor air do not pose a human health risk under a commercial / industrial exposure scenario (AECOM, 2016b).

4.2 Groundwater

As required by RWQCB Order 91-103, in 1992, TRW and the current property owner at the time, Tech Facility 1, Inc., prepared and recorded a deed restriction for the property (Tech Facility 1, 1992) to:

- Prohibit the use of shallow groundwater for drinking water without approval from RWQCB and other agencies with jurisdiction, and
- Notify RWQCB before well installation.

This deed restriction continues to be in effect and protects potential human receptors from contacting impacted groundwater at the Site.

A database search was performed at the Santa Clara Valley Water District (SCVWD) in January 2000, to locate groundwater production wells within 0.5 mile of the Site. Based on the information provided to CDM by SCVWD and review of previous reports, the nearest public water well (SCVWD #274) is located more than 2,000 feet north and downgradient of the Site. The well is screened in the lower aquifer, Zone C, approximately 250 feet bgs. As no contamination is identified in Zone B4 and the upper and lower aquifers (i.e., from Zone B to Zone C) are separated by an appreciable aquitard, it is unlikely that contamination from the shallow aquifer at the Site has or will impact the public water well (Harding Lawson and Associates, 1991).

To protect potential downgradient receptors, the Three Companies contribute to the hydraulic containment of impacted groundwater within the defined OOU, downgradient of the former TRW, AMD, and Philips sites. The OOU extracts groundwater from a set of wells downgradient of the Three Companies' sites that prevent the migration of VOC-impacted groundwater beyond (north of) Highway 101.

5.0 PREVIOUS REMEDIAL ACTIVITIES

Figure 8 shows the locations of remedial activities performed through 2015. Remedial activities performed at the Site are discussed below in chronological order.

5.1 Tank Pit Excavation

In 1984, based on the soil investigations to delineate the former Site source area (the area around the former UST), TRW excavated additional soil that was not removed with the UST in 1983. The excavation was backfilled with gravel to serve as a pit for groundwater extraction. A polyvinyl chloride (PVC) pipe was placed in the gravel backfill pit, from the base of the pit to the surface, for groundwater extraction. The gravel backfill pit is identified as the Eductor pit and the PVC pipe as the Eductor. Figure 3 presents the locations of the former Site source area excavation (i.e., Eductor pit) and Eductor. A comprehensive soil investigation was conducted in 1988 to address remaining impacts at the identified source, the former UST (Weiss, 1988).

5.2 Groundwater Extraction and Treatment System

A GWET system was installed in 1985 and was operated at the Site from 1985 to April 2001. The GWET system consisted of seven extraction wells completed at three cluster locations (T-2A, T-2B and T-2C; T-8A and T-8B; and T-9A and T-9B) and the Eductor. After groundwater extraction ceased, these seven wells and the Eductor were used for groundwater monitoring. Extracted groundwater was treated through an air stripper to remove VOCs. Treated groundwater was discharged to the local storm drain under the Site's National Pollution Discharge Elimination System permit. Following treatment, off-gas from the air stripper was discharged to the atmosphere under the Site's Bay Area Air Quality Management District (BAAQMD) permit.

Decreases in TCE concentrations were most dramatic during the first five years of system operation (1985 to 1990). During the 1990s, the TCE concentrations appeared to have reached near asymptotic levels, particularly in the former Site source area (Eductor, and wells T-2A and T-2B). In 2000, the annual TCE mass removed was only 30 percent of that removed by the system in 1985.

Extraction at and near the former Site source area (wells T-2A, T-2B, T-2C, T-8A, T-8B, and the Eductor) was discontinued prior to, or shortly after, the initiation of the Enhanced Anaerobic Bioremediation (EAB) pilot program (RWQCB, 2001a). Extraction from the remaining two extraction wells located near the northern property boundary (wells T-9A and T-9B) was discontinued in April 2001 to allow for Site redevelopment activities (RWQCB, 2001b). Subsequent approval from RWQCB was received for the continued suspension of groundwater extraction at these two wells, based on evaluation of changes in VOC concentrations after suspension (CDM, 2001 and RWQCB, 2001a). The RWQCB directed TRW to continue quarterly groundwater monitoring at the extraction wells to evaluate NPC.

Based on continued improvement of groundwater VOC concentrations across the Site, RWQCB continued to support suspension of groundwater extraction through the end of 2005 with continued EAB and NPC evaluations (CDM, 2004 and RWQCB, 2004), and subsequently recommended to USEPA that the remedy be changed from GWET to EAB. At the time of its suspension in April 2001, the GWET system had removed a total of approximately 28 million, 44 million, and 43 million gallons of groundwater from Zones A, B1, and B2, respectively (total of approximately 115 million gallons of groundwater). Approximately 260, 1,480, and 1,310 pounds of VOCs (expressed as pounds of TCE-equivalent, the main VOC of concern) were removed corresponding to the volume of

groundwater extracted from Zones A, B1, and B2, respectively (total of approximately 3,050 pounds of VOCs).

5.3 SVE System

In July 1993, TRW installed a soil vapor extraction (SVE) system to remove VOCs in the vadose zone beneath the former Site source area. The system operated until November 1996, when it was terminated due to low VOC concentrations in the unsaturated zone. In May 1997, the BAAQMD approved elimination of the granular activated carbon vessels for the treatment of VOC vapors associated with the SVE system as long as the VOC concentrations were below emission limits (BAAQMD, 1997).

Based on soil vapor sample results from the SVE points in September 1997 and July 1998 that indicated little rebound in VOC concentrations, TRW gave a presentation to the RWQCB requesting the closure of the SVE system (CDM, 1997 and CDM, 1998). In August 1998, RWQCB concluded that no further soil remediation was necessary at the Site and that the SVE system could be removed. In November 1998, the SVE system was removed and 12 of the 13 SVE points were destroyed. SVE point MP-1 was capped due to its location within the Eductor pit (CDM, 1999a). In December 1998, RWQCB issued a letter stating that the SVE system had achieved the soil cleanup level (1 milligrams per kilogram [mg/kg] total VOCs) and no further action was required in the vadose zone (RWQCB, 1998). MP-1 was subsequently removed in 2002 during remodeling of the Site building exterior.

5.4 Enhanced Anaerobic Biodegradation Pilot Program

The EAB pilot program at the Site was initiated in 2000 within and surrounding the former source area and then expanded in 2005 to include the area immediately downgradient of the former source area. These initial EAB activities involved the injection of Hydrogen Release Compound (HRC™). The EAB program was then expanded in 2007 and 2008 to include installation of a line of injection wells downgradient of the former source area (perpendicular to groundwater flow) and injection of fresh cheese whey into these wells in September 2007, December 2007, March 2008, and June 2008.

Following cheese whey injection, decreases in TCE concentrations and increases in cis-1,2-dichloroethene (cDCE) concentrations were observed in the injection wells. Starting in April 2010, TCE concentrations in these wells began rebounding, indicating depletion of cheese whey. The results of the pilot study showed the in situ bioremediation could effectively decrease contaminant concentrations at the Site.

5.5 Source Area Enhanced Anaerobic Bioremediation

Based on elevated VOC concentrations detected in the Eductor between 2008 and 2010 (following the EAB pilot program), additional source area treatment was performed in 2010. To treat the residual VOC contaminant mass and supply a slow-release electron donor to sustain EAB within the former source area and downgradient, emulsified vegetable oil (EVO) and neat (not emulsified) vegetable oil were injected into the Eductor.

Injection of the less viscous and more easily distributed EVO was performed first (October 2010) to facilitate distribution of electron donor throughout the former excavation that was backfilled with pea gravel. Injection of the more viscous neat vegetable oil was performed second (November 2010) to sequester high concentrations of VOCs and provide a longer lasting electron donor for sustaining conditions conducive to EAB.

Performance monitoring for the EVO and neat vegetable oil injections continued through 2014 and were incorporated into the ongoing semiannual EAB monitoring program approved by RWQCB (RWQCB, 2007). In addition, one stand-alone performance monitoring event was performed in March 2011, approximately three months after the neat vegetable oil injection. The injection of neat vegetable oil effectively reduced concentrations by one to two orders of magnitude in the monitoring wells located immediately downgradient of the former excavation (wells T-2A and T-2B), and maintained these reductions more than 4 years after injection (AECOM, 2015b).

5.6 Downgradient Enhanced Anaerobic Bioremediation Injections

Based on results of the October 2010 groundwater sampling event, concentrations of cis-1,2-dichloroethene (cDCE) and vinyl chloride (VC) detected downgradient of the EAB treatment area were higher than those coming onsite. To facilitate complete degradation of these daughter products, additional EAB activities were performed in November 2011 downgradient of the former source area. Redox compound EHC-L and ABC+ were injected to create a biobarrier perpendicular to groundwater flow downgradient of the former source area (Figure 8). EHC-L and ABC+ stimulate both biological and abiotic degradation of chlorinated solvents. EHC-L contains a soluble carbon substrate and soluble (ferrous) iron while ABC+ contains a soluble carbon substrate referred to as ABC (25 percent) and micro-scale zero valent iron (75 percent). The benefit of using these types of amendments is that they typically accelerate degradation of chlorinated solvents compared to carbon substrate alone and limit generation of unwanted daughter products such as cDCE and VC by stimulating the abiotic pathway as well as the biological pathway.

EHC-L was injected into Zone A via the nine former cheese whey injection wells (T-13A, T-14A, and T-18A through T-24A) and ABC+ was injected into Zone A and Zone B1 (7.5 feet bgs to 35 feet bgs) via nine direct push locations from November 16 through 20, 2011.

Total organic carbon (TOC) concentrations for the EHC-L injection wells increased up to 34 milligrams per liter (mg/L) in April 2012 following EHC-L injection, decreased to below 10 mg/L in all of the wells by October 2012, and decreased to below 2 mg/L by October 2015. These decreases in TOC concentrations, corresponding decreases in contaminant concentrations, and increased production of daughter products (VC) suggest that electron donor has been utilized to facilitate degradation of VOCs. This is supported by geochemical data indicating that reducing conditions conducive to EAB are still present in the EHC-L injection wells with low oxidation-reduction potential values, low dissolved oxygen concentrations, and elevated methane concentrations. In addition, Dehalococcoides bacteria were detected in the EHC-L injection wells in October 2015 at population counts up to 3.43E+04 cells per milliliter (cells/mL), which are sufficient to

support continued microbial degradation. Contaminant concentrations decreased significantly in the EHC-L injection wells (AECOM, 2016c).

5.7 Membrane Interface Probe Investigations

In July 2013, a membrane interface probe (MIP) investigation was performed in the vicinity of the former Site source area. The primary purpose of the MIP investigation was to identify and delineate any remaining VOC-impacted material immediately adjacent to the former excavation. 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 soil sample collection and VOC analysis. VOCs were detected in the MIP points and soil samples; however, there was no evidence of remaining high-concentration VOC-impacted material in the vicinity of the original excavation (AECOM, 2013a).

In July 2014, an expanded MIP investigation was performed to supplement the previous MIP investigation conducted in 2013 (AECOM, 2014b). The goal of the investigation was to identify the location of elevated-concentration material to guide later excavation efforts. Results of the MIP investigation indicated that elevated concentration VOC-impacted material remained within the vicinity of the original excavation, southwest of the Eductor (AECOM, 2014c).

5.8 Sub-Slab Vapor Collection System

At the request of the property owner and as a conservative, proactive measure, Northrop Grumman agreed to install a passive SVC system below the existing Site building. In August and September 2014, the SVC system was installed beneath the concrete floor of the entire building (AECOM, 2014d). The purpose of the SVC system is to passively collect vapors below the building slab and vent them to the atmosphere as a protective measure against vapor intrusion. The approximate layout of the SVC system is shown on Figure 8. Following installation of the SVC system, a VI evaluation was performed in May 2015 and showed that VI did not present a human health risk to building occupants (AECOM, 2015c). An additional VI evaluation conducted by the building tenant in December 2015 confirmed these findings (AECOM, 2016b).

5.9 Source Area Soil Removal

In October and November 2014, a targeted excavation of the source area was performed (AECOM, 2014c). The excavation was performed using large-diameter augers to remove contaminated material. The extent of the excavation was guided by the results of the 2014 MIP investigation, as well as additional confirmation soil borings, and as a result the extent of the originally proposed excavation was expanded as the soil removal progressed (AECOM, 2014e). A total of approximately 590 tons of soil and semi-solids and approximately 9,000 gallons of water were removed from the source area (Orion Environmental Inc., 2015). The excavation targeted concentrations in soil that could impact groundwater remediation.

5.10 Additional Source Area Enhanced Anaerobic Bioremediation Injections

Following source area excavation, EAB injections were used to address remaining contamination that was not accessible during excavation (AECOM, 2014f). A majority of the injection activities targeted the area under the building footing, immediately east of the former Eductor, where excavation was not possible. A directional injection tool was used to focus distribution of EAB amendments (EVO, buffer, bioaugmentation culture, and anoxic water) under the footing. In addition, EAB amendments were injected below the excavation in an area southwest of the former Eductor. This area had been excavated to approximately 20 feet bgs with the large-diameter augers and backfilled; however, a grab groundwater sample collected after excavation activities from between 28 feet and 30 feet bgs contained elevated concentrations of VOCs (AECOM, 2015b).

5.11 Well Rehabilitation

Four wells (T-8A, T-8B, T-10B, and T-10C) were damaged in early 2015 during repaving activities in the parking lot. The damaged wells were inspected to assess their condition in May 2015 and repairs were subsequently conducted as necessary to restore them to their previous condition. well T-10B was found to be intact and only the well box was replaced. The vaults for previous extraction wells T-8A and T-8B were found to have been paved over and were subsequently located and uncovered. Well T-8A was completely filled with gravel and asphalt, which was removed using a macro core, vacuum truck, and surge block. Well T-8B was partially filled with gravel, but the well cap had slipped into the well casing and prevented the gravel that had fallen into the casing from entering the water column. The cap was retrieved and the gravel was removed using a vacuum truck. New 12-inch well boxes were installed and both wells were redeveloped. The well box for well T-10C had been completely removed during the repaving and the casing cut approximately 1 foot bgs. Approximately 4 feet of soil was found in the well and it was removed using a macro core, vacuum truck, and surge block. The well was redeveloped, a new 12-inch well box was installed, and the well top of casing elevation was resurveyed. In addition, well T-10C was inspected with a downhole camera and no apparent damage was observed.

6.0 NATURE AND EXTENT OF CONTAMINATION

As described in Section 5, remediation of the vadose zone at the Site was conducted using a SVE system from 1993 to 1998. In December 1998, RWQCB issued a letter stating that the SVE system had achieved the soil cleanup level (1 mg/kg total VOCs) and no further action was required in the vadose zone (RWQCB, 1998). Therefore, the current nature and extent of contamination is limited to groundwater.

In 1985, TRW implemented a full-scale groundwater monitoring program (Weiss, 1996). A Site plan showing monitoring well locations is presented on Figure 3. The purpose of the monitoring program was to assess groundwater quality and hydraulic control of the VOC groundwater plume at the Site. Between 1985 and 1992, the groundwater monitoring events were conducted quarterly. In 1992, RWQCB approved a reduced monitoring program conducted on a semi-annual basis. In 1999, RWQCB approved further revision to annual groundwater monitoring in October of each year (RWQCB, 1999). However, a more frequent schedule has been maintained since 1999 to monitor EAB performance.

The results and findings of the groundwater monitoring events were presented to RWQCB in reports following each event through January 2014 and then to USEPA after regulatory oversight of the Site was transferred. Each report includes a summary of current and historical groundwater elevation and analytical data; current potentiometric surface maps for Zones A, B1, and B2; and the purge and sampling records for the event.

Onsite VOC impact has been shown to be present in Zones A, B1, and B2. Under non-pumping conditions, VOCs were not detected in the only wells screened within Zone B3 and Zone B4 at the Site, indicating that the confining layer separating Zones B2 and B3 is continuous and sufficiently competent to prevent vertical migration of VOCs. VOCs were detected during and subsequent to groundwater pumping activities in well T-9C (screened in Zone B3); however the detections included the presence of Freon 113, a chemical that has not been attributed to the former Site source area, but is associated with activities at the upgradient Philips' facilities.

Historic groundwater analytical results for previous monitoring events performed since 1983 are summarized in Appendix C. Historically, low concentrations of other VOCs (not listed 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 SCRs.

Figures 9 through 11 present the analytical results for TCE, cDCE, and VC for each of the zones (A, B1, and B2) in October 2015 (the most recent groundwater monitoring event). Graphs of TCE and cDCE concentrations vs. time for representative Site wells, 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 12 through 15. Figure 16 presents TCE concentrations vs. time for representative onsite Zone B2 wells (T-2C, T-10C, T-11C, and T-12C). Note that wells T-2A, T-2B, and T-2C are still included on these figures for reference, even though the wells no longer exist.

Graphs of concentrations of tetrachloroethene (PCE), TCE, cDCE, trans-1,2-dichloroethene, and VC for October 2015 at select wells along the general groundwater flow direction in Zone A across the Site are presented on Figure 17. Due to the recently identified separate HSUs in Zone B1 and differing contaminant profiles in these HSUs (AECOM, 2016c), a similar figure was not created for Zone B1.

As mentioned in Section 1, Philips, AMD, and Mohawk Laboratories have historically used and released TCE and other chlorinated VOCs at their facilities which are located upgradient and crossgradient of the Site. Releases from these upgradient facilities have impacted the TRW Site (CDM, 2000c).

VOC analytical results for each part of the Site are discussed as follows: upgradient Zone A and Zone B1 wells (Section 6.1), downgradient Zone A and Zone B1 wells (Section 6.2), Zone B2 wells (Section 6.3), and offsite VOC concentrations (Section 6.4). A separate discussion is provided for compound specific isotope analysis (CSIA) results in Section 6.5. Note that former source area wells are not discussed as they were destroyed in late 2014 and therefore not sampled in 2015. However, historical data for former source area wells are still included on Figures 12 through 15 and in Appendix C.

6.1 Site Zone A and Zone B1 Upgradient

Impacts to the Site from offsite sources continue to be apparent for Zones A and B1. Groundwater analytical results from 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 in Zone A (see Figure 17).

- Zone A Wells 36D and 37S, located along the upgradient Site boundary, have had TCE concentrations ranging from 29 micrograms per liter (µg/L) to 95 µg/L and cDCE concentrations ranging from 1.6 µg/L to 34 µg/L over the last 5 years.

- TCE and cDCE concentrations for well T-7A, located approximately 175 feet upgradient of the former Site source area, have varied from 56 µg/L to 250 µg/L and 64 µg/L to 230 µg/L, respectively, over the same time period. In October 2015, the concentrations of TCE and cDCE in T-7A were 170 µg/L and 79 µg/L, respectively.

Groundwater analytical results from Zone B1 wells T-5B and T-7B along the upgradient Site boundary also indicate substantial VOC migration onto the Site.

- TCE was detected in well T-5B at concentrations greater than all onsite wells (1,800 µg/L in 2015). Between 2006 and 2011, TCE, cDCE, and Freon 113 concentrations for Zone B1 well T-5B exhibited fluctuations due to periodic shutdown of the Philips 815 groundwater extraction system, located adjacent to the southwesterly Site boundary, which allowed migration of impacted groundwater from upgradient, offsite source areas onto the Site. Concentrations have remained relatively unchanged since 2011. In 2015, concentrations of TCE, cDCE, and Freon 113 in well T-5B were 1,800 µg/L, 62 µg/L, and 130 µg/L, respectively.

- Since 2007, TCE concentrations for Zone B1 well T-7B have ranged from 73 µg/L to 200 µg/L.

In Zone B1, the historical presence of Freon 113, a VOC which has not been attributed to the former Site source area, has been demonstrated to be related to offsite sources. Historical and/or current Freon 113 concentration data (Appendix C) from Site Zone B1 wells T-5B, T-7B, T-17B, and T-19B continue to indicate impact from offsite sources. This chemical constituent evidence is corroborated by the channel mapping exercises undertaken at the site (ESS evaluation). One Zone B1 well, T-5B, exhibited a decreasing trend in Freon 113 between October 2008 and October 2011 and concentrations have remained generally similar between 2011 and 2015, with only slight decreases. This finding further supports the benefit of continued shutdown of onsite extraction to prevent further migration of VOCs from offsite sources onto the Site.

6.2 Site Zone A and Zone B1 Downgradient

Downgradient of the former source area, the influence of the EAB program has been more pronounced for Zone B1 than Zone A, consistent with greater hydraulic connection and higher transmissivity in the deeper zones due to more laterally continuous permeable zones. As described in Section 5.4, EAB remedial activities in the downgradient areas

have consisted of: 1) cheese whey injections in Zone A wells (T-13A, T-14A, and T-18A through T-24A) in 2007 and 2008; and 2) EHC-L injections into the same Zone A wells and ABC+ injections in direct push points in Zones A and B1 in 2011.

VOC Concentrations

Zone A

The EAB process has removed 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 more natural condition, allowing for longer residence times between wells 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 wells T-13A, T-14A, T-8A, T-15A, T-16A, and T-9A (listed from upgradient to downgradient) are less than those for upgradient property boundary well T-7A (see Figure 17 and Appendices D and E).

Following cheese whey injection in 2007, decreases in TCE concentrations and increases in cDCE concentrations were observed in the injection wells. TCE concentrations in these wells started rebounding in 2010, indicating depletion of cheese whey. Injection of additional electron donor (EHC-L) into the same wells was performed in 2011, after which concentrations of TCE decreased in all of the injection wells to below SCRs, with the exception of well T-23A. Concentrations of cDCE also decreased and VC increased slightly in all wells except T-23A.

After cheese whey injections began in 2007 immediately upgradient of well T-8A, decreases in TCE and cDCE concentrations and increases in VC concentrations were observed in well T-8A. 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. Following the EHC-L injections in 2011, concentrations of TCE, cDCE, and VC detected in well T-8A 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, likely due to the subsurface heterogeneity and presence of low permeability sediments near the injection wells (Figure 5).

In October 2015, TCE concentrations increased slightly in all of the former cheese whey and EHC-L injection wells sampled, with the exception of the well located farthest to the east (T-19A). This may have been due to the aggressive source area removal activities performed in the source area in late 2014 which could have temporarily mobilized some source mass. However, these concentrations remained below the concentration of TCE in upgradient monitoring well T-7A, which represents contamination migrating onto the Site. Concentrations of cDCE were generally stable.

Well 38-S, located near the western Site boundary and screened in Zone A, has historically and currently displayed a differing contaminant profile from other Zone A wells (higher cDCE concentrations and presence of Freon 113). Based on the recent ESS evaluation,

there is a northeast-oriented channel that traverses the neighboring Philips 815 site and continues onto and across the Site in the vicinity of well 38S (Figure 5). Contaminant profiles and subsurface mapping indicate that well 38-S is impacted by offsite sources.

Zone B1

As discussed in Section 3.2.2, two HSUs were mapped in Zone B1 during the ESS evaluation (Figure 6). HSU1 runs north-south across the Site and includes the former TRW source area. HSU2 is in communication with offsite contaminant source areas to the southwest that substantially contribute to contamination found in onsite wells T-17B, T-4B, and T-9B.

In downgradient monitoring well T-8B, which is screened exclusively in HSU1, total chlorinated ethene concentrations decreased by more than 50 percent (%) following initiation of Zone B1 EAB activities in 2000 (see Appendix C). TCE concentrations rebounded from October 2007 to October 2013 (from 7.5 µg/L to 36 µg/L), decreased to 10 µg/L in October 2014, and continued to decrease in October 2015 to 1 µg/L. Concentrations of daughter product cDCE increased in this well from 39 µg/L in 2009 to 450 µg/L in October 2013 and decreased in 2014 and 2015 to a concentration of 29 µg/L in October 2015.

In well T-4B, located near the western property boundary and screened in HSU2, TCE concentrations remained below the SCR of 5 µg/L in October 2015. Concentrations of cDCE have been consistently higher than TCE since 2000, and have fluctuated between 120 µg/L and 600 µg/L since 2007, with one exception of 830 µg/L in 2013. These elevated cDCE concentrations for well T-4B (and also for T-17B) since 2006/2007 could be partially attributable to migration of EAB dechlorination products (cDCE, VC, and ethene) in groundwater from the former Site source area (although VC has not been detected in wells T-4B or T-17B since 2007), but are also due to cDCE migrating onto and through the Site from offsite sources via HSU2. In June and October 2015, the concentration of cDCE in this well decreased by more than 50% to 130 µg/L and 120 µg/L, respectively.

It is suspected that well T-9B, screened in both HSU1 and HSU2, is impacted by an offsite source, and that historical pumping from T-9B induced the migration of VOCs onto the Site in Zone B1 from this offsite source (CDM, 1999b and 2000c). This conclusion is supported by the historical substantially higher TCE concentrations for well T-9B compared to upgradient Zone B1 wells T-8B and T-10B, and the historical presence of Freon 113 in T-9B which is not attributed to the Site. Based on October 2015 data, TCE concentrations are still substantially higher in well T-9B (150 µg/L) than upgradient wells T-8B (1.2 µg/L) and T-10B (31 µg/L). The decrease in TCE concentrations following the suspension of groundwater extraction at T-9B, the different contaminant profile than observed in upgradient onsite wells, and the mapping of HSUs within Zone B1 support the conclusion that groundwater around T-9B is impacted by migration of the Philips plume onto the Site.

6.3 Zone B2

In Zone B2, a lower permeability unit oriented to the north-northeast traverses the Site (Figure 7). Onsite well T-10C is located on the western side of this low permeability unit, indicating separation from onsite contamination and communication with contamination coming from offsite, promoting groundwater flow and contaminant transport from offsite sources. Contaminant concentrations detected in well T-10C are significantly different compared to other onsite wells in Zone B2 (e.g., the presence of Freon 113 at significantly higher concentrations than other Zone B2 wells at the Site). TCE concentrations decreased at least 85% between October 2014 and 2015 in all Site Zone B2 wells. In well T-10C, the concentration of cDCE increased by 95% over the same time period. This transition from TCE to cDCE occurred after the well was damaged and redeveloped in May 2015 (Section 5.11). Concentrations of cDCE in the Zone B2 wells located on the eastern site of the low permeability unit (T-11C and T-12C) decreased or remained relatively unchanged between October 2014 and 2015, consistent with an interpretation that these wells are in hydraulic communication with onsite source areas and are effectively monitoring onsite conditions.

6.4 Offsite Groundwater Analytical Data

VOC results for monitoring events conducted on the nearby Philips and AMD properties were reviewed during the preparation of this report. These data indicate that the neighboring Philips 815 site continues to demonstrate substantial VOC impact in groundwater with maximum October 2015 concentrations of TCE and cDCE of 7,400 µg/L and 8,800 µg/L, respectively (AECOM, 2016c).

VOC data for the AMD 901/902 site, located upgradient of the Site, indicate a maximum TCE concentration of 100 µg/L for Zone A and 260 µg/L for Zone B1. TCE concentrations on the AMD 915 site, located downgradient of the Site, indicate a maximum of 160 µg/L for Zone A and 53 µg/L for Zone B1. cDCE concentrations on the AMD 915 site indicate a maximum of 98 µg/L for Zone A and 290 µg/L for Zone B1. The VOC concentrations observed for Site Zone A wells 36S, 36D, and T-7A located along the upgradient Site boundary are attributed to the migration of contamination from upgradient properties such as Mohawk Laboratories and AMD.

6.5 Compound Specific Isotope Analysis

To better understand and quantify allocation of upgradient offsite plume and former Site source area contributions to the current Site plume configuration, as well as evaluate the effectiveness of past and ongoing EAB processes, monitoring for 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 broken, 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:

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

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).

Samples for CSIA have been collected from selected Site wells since July 2007 and results are summarized in Appendix C. In October 2015, groundwater samples were collected from Zone A wells across the Site; however, because the source area wells were destroyed in 2014, source area data are no longer available as part of this evaluation. Groundwater samples were also collected from select Zone B1 wells in October 2015 to compile a CSIA dataset for Zone B1. 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 to further evaluate EAB processes at the Site. EAB processes have been 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 source area 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 16. According to available guidance on CSIA data interpretation (USEPA, 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, since $\delta^{13}C$ values for downgradient wells T-8A and T-9A continue to be 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), EAB processes have been considered sufficient to limit contribution of contamination from the former Site source area to the offsite groundwater plume.

7.0 CONTAMINANT FATE AND TRANSPORT SUMMARY

A summary of Site fate and transport factors/mechanisms is presented below, including source material, Site geology and hydrology, contaminant degradation, and impacts from offsite.

Source Material

As discussed in Section 5.9, the onsite source has been removed through excavation and does not actively contribute to contaminant mass to groundwater.

Site Geology and Hydrology

Contaminant migration at the Site is primarily controlled by preferential pathways represented by sand- and gravel-filled channel deposits present in the subsurface at the Site as indicated by the results of the ESS evaluation (Section 3.2.1). Natural vertical hydraulic gradients at the Site prior to pumping activities varied with season in both

magnitude and direction across the Site. During operation of the GWET system, a downward gradient was induced between Zone A and B1 and Zone B1 and B2 (Weiss, 1988). This may have contributed to historic vertical migration of contaminants from the onsite source.

Contaminant Degradation

Contaminant degradation at the Site has been significantly influenced by EAB activities and has limited downgradient contaminant contribution. A natural attenuation potential evaluation was performed as part of the 2012 Annual Groundwater Monitoring Report (AECOM, 2013b). Results indicated that there was limited evidence supporting the occurrence of natural attenuation in the downgradient portion of Zone A. More favorable evidence was reported for the downgradient portion of Zone B1; however, more data were recommended to perform a more thorough evaluation. Subsequent to this evaluation, CSIA was performed at the Site. Based on evaluation of CSIA data (Section 6.5), EAB processes have been considered sufficient to limit contribution of contamination from the former Site source area to the offsite groundwater plume.

Impact from Offsite Sources

Suspension of groundwater extraction at wells T-9A, T-9B, and T-2C has halted pumping-induce migration of the Philips plume toward the Site. However, impact to the Site from offsite sources continues to be apparent in Zones A, B1, and B2. This continued migration of VOC-impacted groundwater onto the Site complicates long-term Site groundwater remediation. Based on the recent ESS evaluation and historic/current contaminant concentration data, Zone A well 38-S, Zone B wells T-17B, T-4B, and T-9B, and Zone B2 well T-10C are impacted by offsite sources. Residual contamination bound within fine-grained deposits both onsite and offsite may provide a long-term source of groundwater contamination via matrix diffusion.

8.0 IDENTIFIED DATA GAPS

Although substantial Site characterization has been performed at the Site, data gaps remain in some areas regarding onsite versus offsite sources of contaminant contribution. The ESS evaluation performed in 2015 identified multiple HSUs within Zone B1 and provided a basis to assess migration from offsite sources (i.e., background). Additional hydrostratigraphic and geochemical data along the western and southern Site boundaries are needed to fill these data gaps and increase understanding of contaminant migration pathways at the Site.

Additional site investigation to fill the identified data gaps is planned for Q2 2016. The proposed investigation will be performed using a combined Membrane Interface Probe/Hydraulic Profiling Tool followed by Hydropunch™ depth-discrete groundwater sampling. A work plan for the proposed investigation will be submitted for USEPA review and approval prior to proceeding.

9.0 REFERENCES

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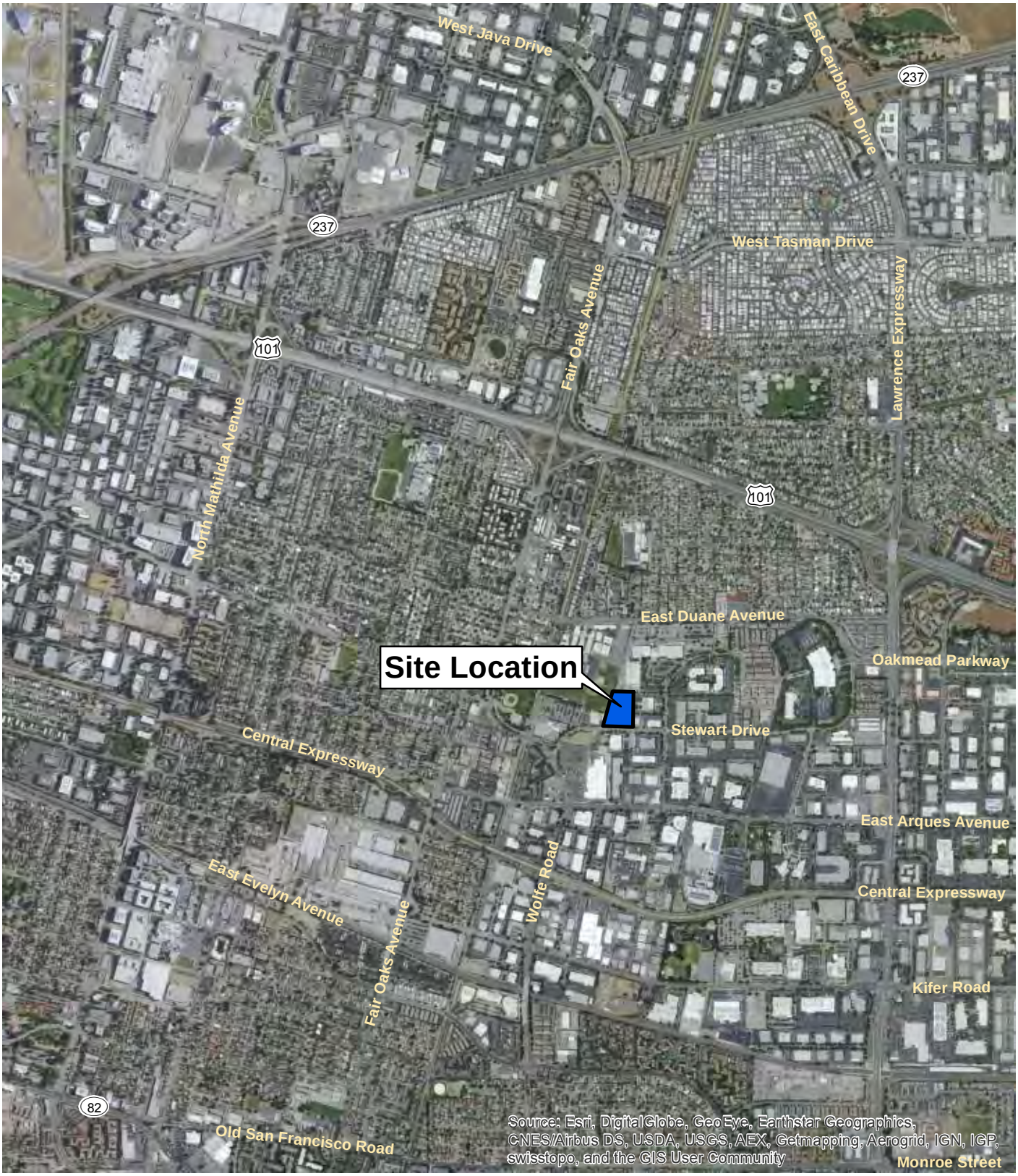
Tables

Table 1
Well Completion Information
Former TRW Microwave Site
825 Stewart Drive, Sunnyvale, California

Well Number	Zone	Screen Interval (feet bgs)	Total Depth (feet bgs)	Top of Casing Elevation (feet, MSL)	Notes
EDUCTOR	A	8-16	16.5	42.24	Well Abandoned in 2014
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	Well Abandoned in 2014
T-2B	B1	23-33	33	42.23	Well Abandoned in 2014
T-2C	B2	51-59	59	41.38	Well Abandoned in 2014
T-3A	A	10-20	20	41.74	Well Abandoned in 2014
T-4B	B1	31.5-41.5	42	40.93	-
T-5B	B1	34.5-44.5	45	42.45	-
T-6A	A	10-20	20	39.92	-
T-7A	A	8-20	20	42.09	-
T-7B	B1	34-41	41	42.01	-
T-8A	A	8-19	19	40.38	-
T-8B	B1	24-36	36	40.33	-
T-8D	B4	90-102	102	40.35	Sampling Suspended in 2002
T-9A	A	7-19	19	39.22	-
T-9B	B1	28-37	37	38.89	-
T-9C	B3	55-65	65	38.81	-
T-10B	B1	23-32	32	40.09	-
T-10C	B2	49-59	60	39.05	-
T-11C	B2	46-56	56	38.65	-
T-12C	B2	45.5-55.5	56	40.74	-
T-13A	A	10-20	20	40.76	-
T-14A	A	10-20	20	40.62	-
T-15A	A	10-20	20	40.11	-
T-16A	A	10-20	20	40.02	-
T-17A	A	10-20	20	38.23	-
T-17B	B1	25-35	35	40.61	-
T-18A	A	12-22	22	TBD	-
T-18B	B1	41-46	46	38.78	-
T-19A	A	10-20	22	TBD	-
T-19B	B1	29-39	39	38.72	-
T-20A	A	7-17	20	TBD	-
T-21A	A	10-20	20	TBD	-
T-22A	A	10-20	20	TBD	-
T-23A	A	10-20	20	TBD	-
T-24A	A	10-20	20	TBD	-
T-25A	A	10-20	20	TBD	-
36S	A	10-16	16	41.46	-
36D	A	15-20	20	41.26	-
36DD	B2	51.5-61.5	61.5	41.58	-
37S	A	9-15	15	42.06	-
38S	A	9-15	15	41.05	-

Notes:
MSL = mean sea level
TBD = To be determined; well casing elevations have not been surveyed.
Top of casing elevations presented in NAVD88 (North American Vertical Datum 1988).
Eductor screen interval and total depth revised based on September 2010 well videolog.
Top of casing elevation for well T-10C resurveyed in 2015 after completion of well repairs.

Figures



N

0 1,000 2,000 Feet

1 " = 2,000 '

Former TRW Microwave Site

Site Location

Date 03-2016	NORTHROP GRUMMAN	Figure
Project No. 60446335		1

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0 500 1,000 Feet

1 " = 1,000 '

Former TRW Microwave Site
Site Vicinity Map and
Surrounding Sites

Date 03-2016	NORTHROP GRUMMAN	Figure
Project No. 60446335		2

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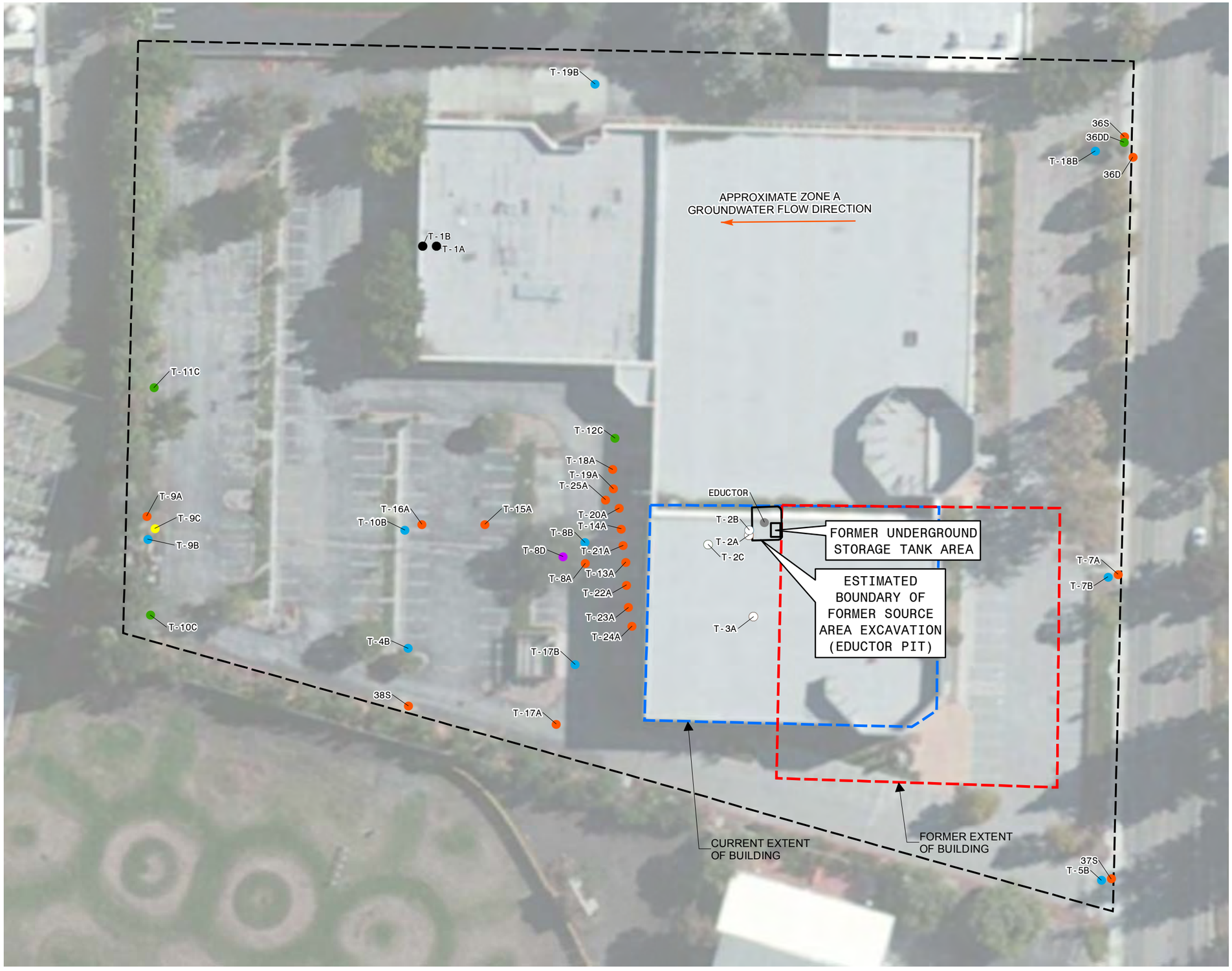

LEGEND

- A-ZONE MONITORING WELL
- B1-ZONE MONITORING WELL
- B2-ZONE MONITORING WELL
- B3-ZONE MONITORING WELL
- B4-ZONE MONITORING WELL
- EDUCTOR - DESTROYED 2014
- MONITORING WELL - DESTROYED 2014
- MONITORING WELL - DESTROYED 2004
- PROPERTY BOUNDARY

N

0 25 50 Feet

1 " = 50 '

Former TRW Microwave Site

Previous and Current Site Layout

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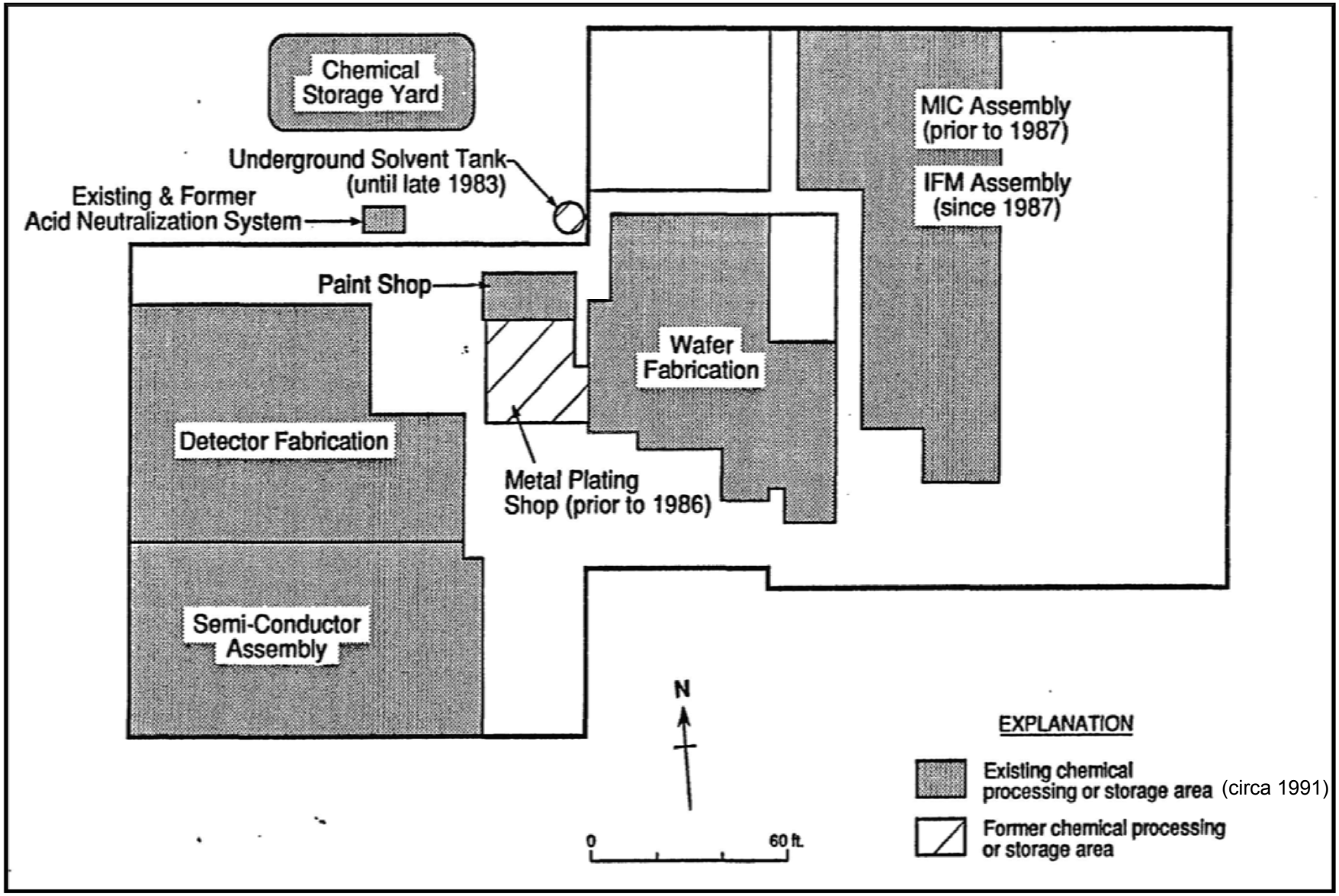
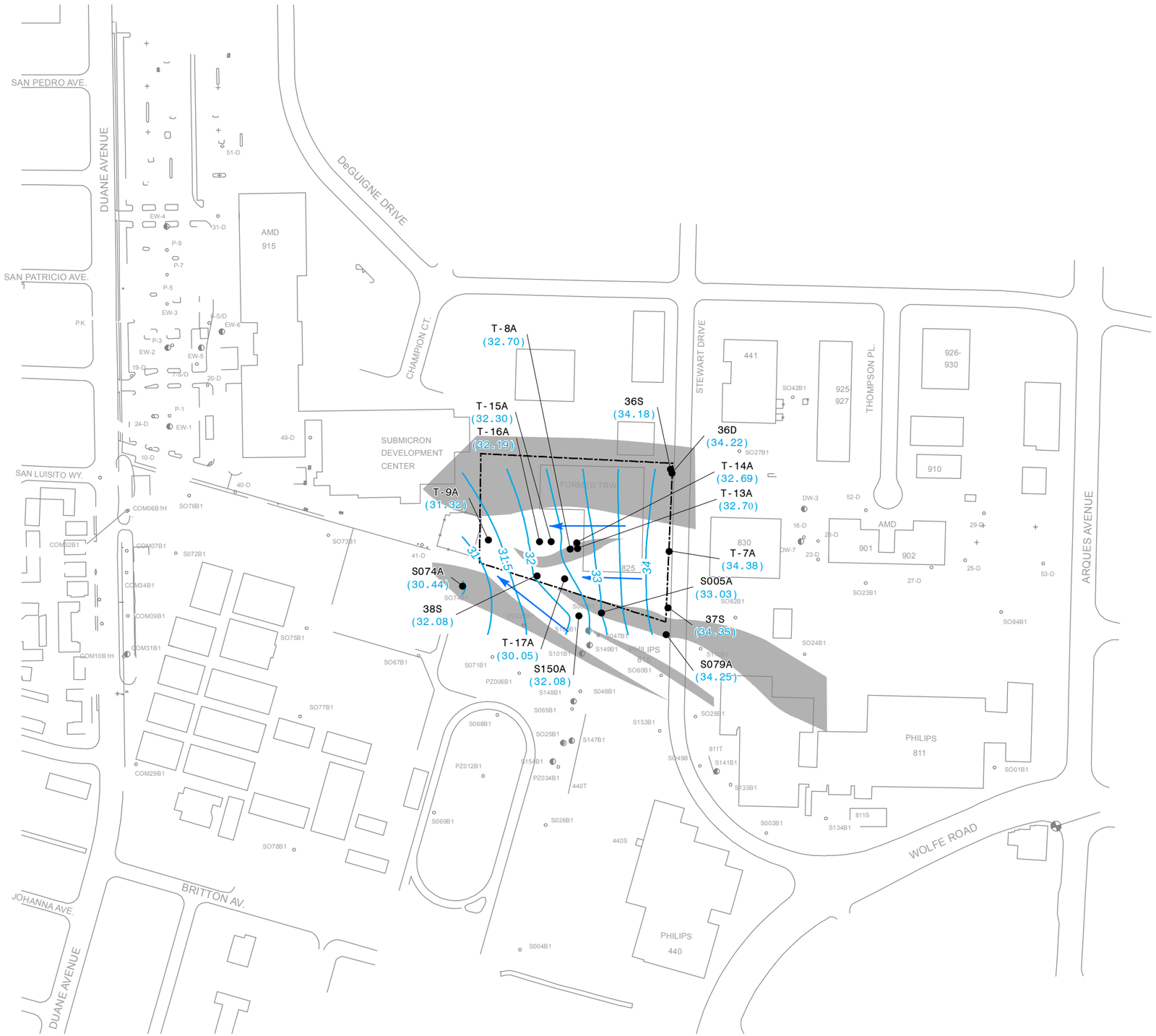


Adapted from the Record of Decision (USEPA 1991)

NORTHROP GRUMMAN	Former TRW Microwave Site **Previous Chemical Storage and Processing Locations**	**FIGURE 4**



LEGEND

●	INDICATES APPROXIMATE LOCATION OF ZONE A MONITORING WELL
◐	INDICATES APPROXIMATE LOCATION OF ZONE A EXTRACTION WELL
(33.02)	INDICATES WATER-LEVEL ELEVATION IN ZONE A MONITORING WELL (FEET, MSL) IN OCTOBER 2015
———	INDICATES APPROXIMATE POTENTIOMETRIC SURFACE CONTOUR IN ZONE A IN OCTOBER 2015
←—	APPROXIMATE GROUNDWATER FLOW DIRECTION
▒	LOW PERMEABILITY MATERIAL

ABBREVIATION

MSL	MEAN SEA LEVEL

N

0 150 300 Feet

1 " = 300 '

Former TRW Microwave Site

POTENTIOMETRIC SURFACE CONTOURS ZONE A OCTOBER 2015

Date 01-2016	NORTHROP GRUMMAN	Figure
Project No. 60446335		5

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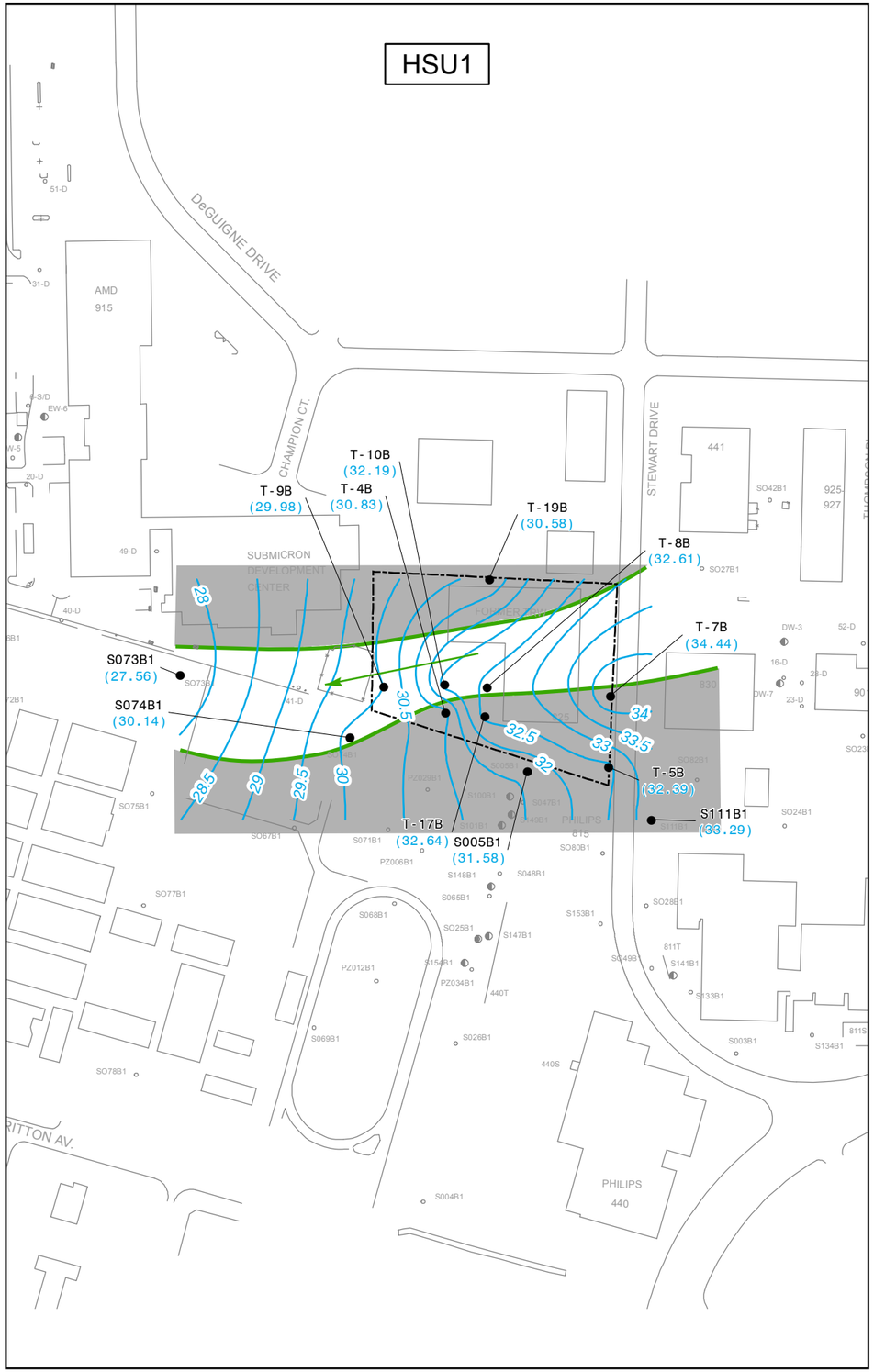

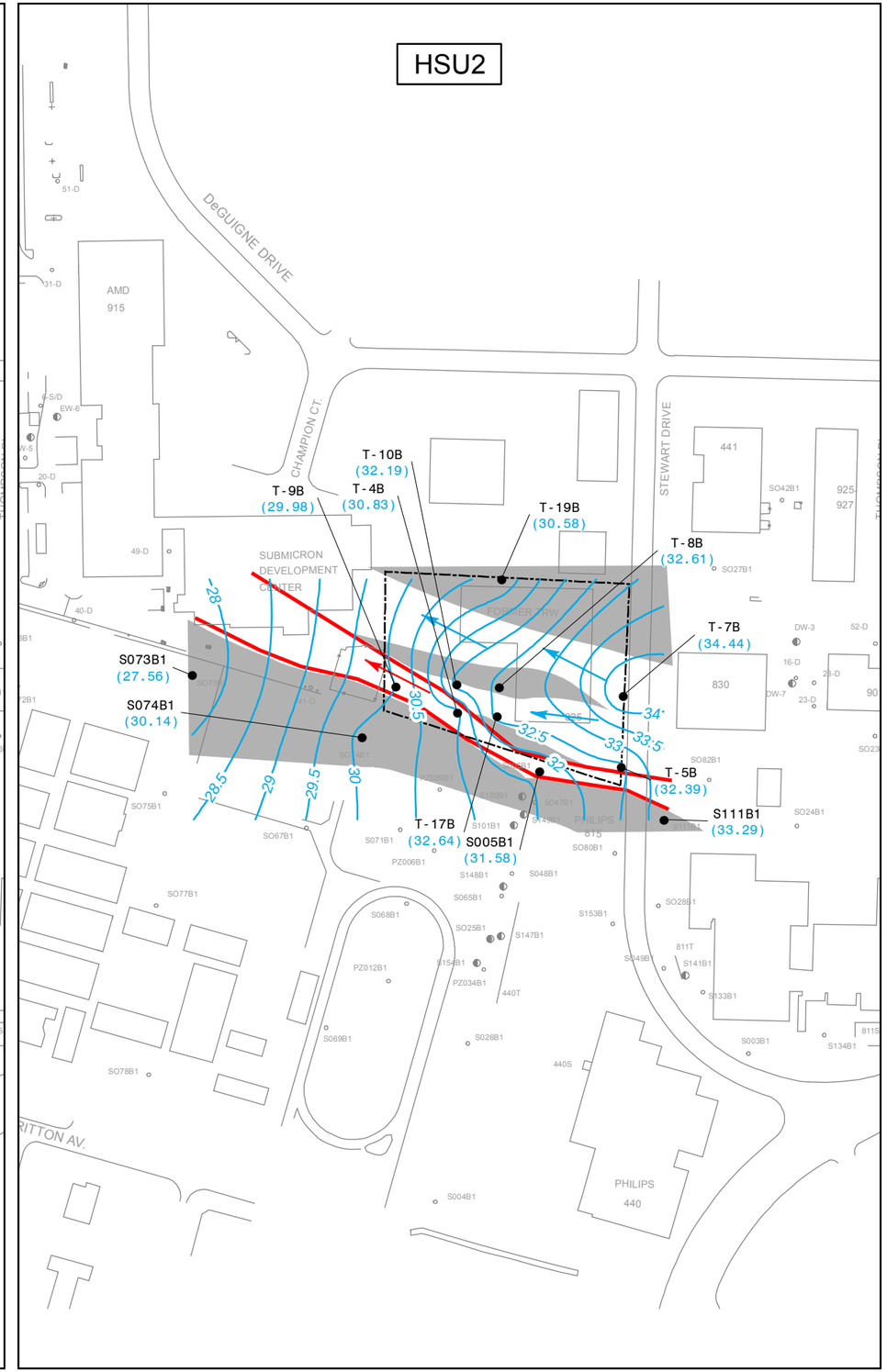

LEGEND

- ● INDICATES APPROXIMATE LOCATION OF ZONE B1 MONITORING WELL
- ◐ INDICATES APPROXIMATE LOCATION OF ZONE B1 EXTRACTION WELL
- (33.02) INDICATES WATER-LEVEL ELEVATION IN ZONE B2 MONITORING WELL (FEET, MSL) IN OCTOBER 2015
- INDICATES APPROXIMATE POTENTIOMETRIC SURFACE CONTOUR IN ZONE B2 IN OCTOBER 2015
- HSU1 (10-20 FEET, MSL)
- HSU2 (0-10 FEET, MSL)
- HSU1 APPROXIMATE GROUNDWATER FLOW DIRECTION
- HSU2 APPROXIMATE GROUNDWATER FLOW DIRECTION
- LOW PERMEABILITY MATERIAL

ABBREVIATION

HSU HYDROSTRATIGRAPHIC UNIT
MSL MEAN SEA LEVEL

N

0 150 300 Feet

1 " = 300 '

Former TRW Microwave Site

POTENTIOMETRIC SURFACE CONTOURS ZONE B1 OCTOBER 2015

Date 01-2016	NORTHROP GRUMMAN	Figure
Project No. 60446335		6

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LEGEND

●	INDICATES APPROXIMATE LOCATION OF ZONE B2 MONITORING WELL
◐	INDICATES APPROXIMATE LOCATION OF ZONE B2 EXTRACTION WELL
(33.02)	INDICATES WATER-LEVEL ELEVATION IN ZONE B1 MONITORING WELL (FEET, MSL) IN OCTOBER 2015
———	INDICATES APPROXIMATE POTENTIOMETRIC SURFACE CONTOUR IN ZONE B1 IN OCTOBER 2015
←———	APPROXIMATE GROUNDWATER FLOW DIRECTION
▒	LOW PERMEABILITY MATERIAL

ABBREVIATION

MSL	MEAN SEA LEVEL

N

0 150 300 Feet

1 " = 300 '

Former TRW Microwave Site

POTENTIOMETRIC SURFACE CONTOURS ZONE B2 OCTOBER 2015

Date 01-2016	NORTHROP GRUMMAN	Figure
Project No. 60446335		7

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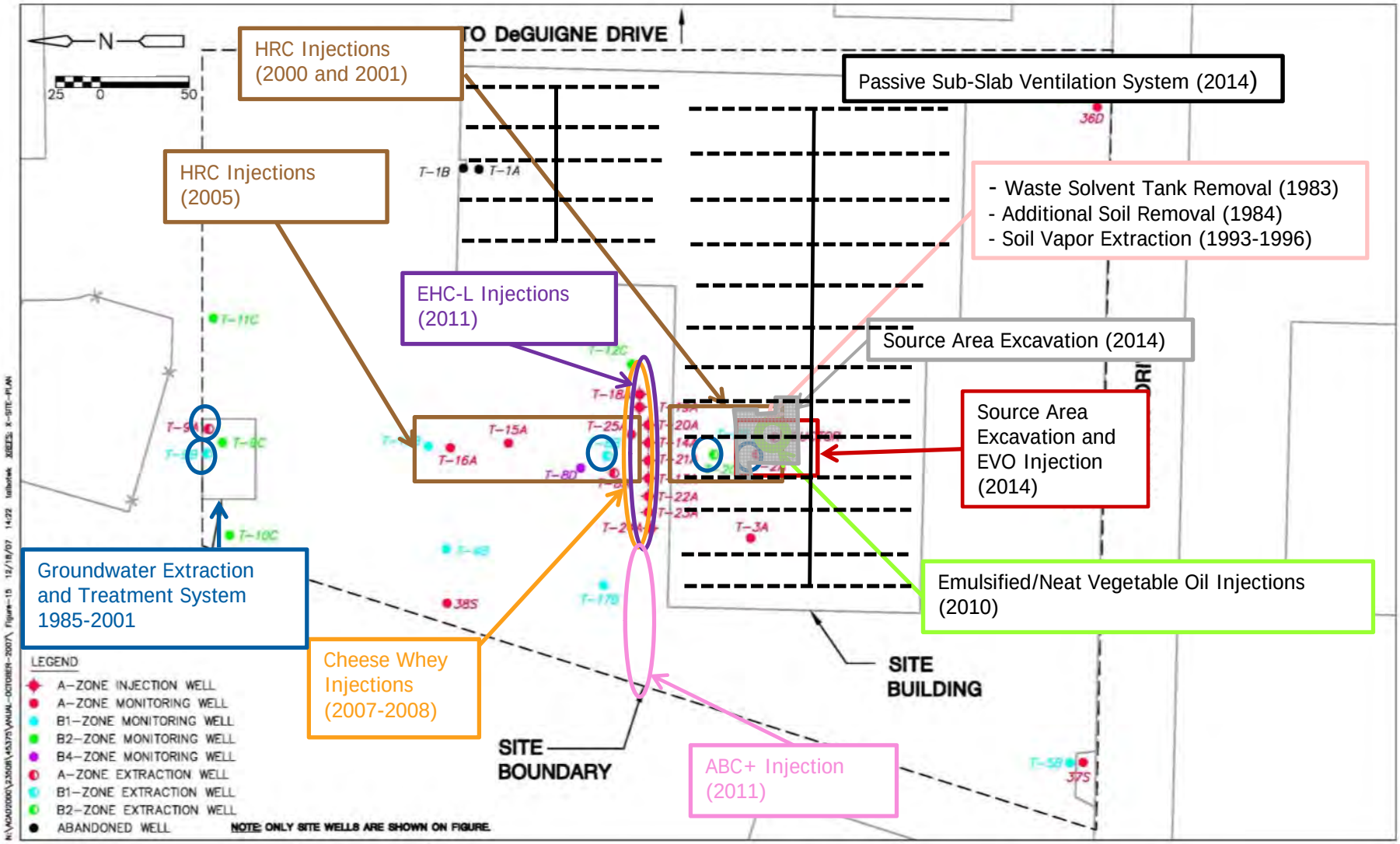

NORTHROP GRUMMAN	Former TRW Microwave Site **Previous Remedial Activities (1983-2015)**	**FIGURE 8**

T-8A			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	110	67	62
cDCE	56	81	100
VC	<0.50	5.4	2.5
Freon 113	<0.50	<0.50	<0.50

T-19A			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	<0.50	<0.50	<0.50
cDCE	15	12	13
VC	11	32	33
Freon 113	<0.50	<0.50	<0.50

T-25A			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	4	25	27
cDCE	39	61	60
VC	35	38	39
Freon 113	<0.50	<0.50	<0.50

T-14A		
Analyte	*October 2014*	*October 2015*
TCE	3.6	23
cDCE	62	56
VC	29	34
Freon 113	<0.50	<0.50

T-9A		
Analyte	*October 2014*	*October 2015*
TCE	70	69
cDCE	91	66
VC	<0.50	<0.50
Freon 113	<0.50	<0.50

T-16A		
Analyte	*October 2014*	*October 2015*
TCE	97	38
cDCE	78	72
VC	2.5	23
Freon 113	<0.50	<0.50

T-15A		
Analyte	*October 2014*	*October 2015*
TCE	140	100
cDCE	51	58
VC	<0.50	<0.50
Freon 113	<0.50	<0.50

T-7A			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	230/170	220	170/190
cDCE	75/64	83	79/90
VC	<2.5/<2.5	<0.50	<2.5/<5.0
Freon 113	<2.5/<2.5	<0.50	<2.5/<5.0

38-S		
Analyte	*October 2014*	*October 2015*
TCE	45	83
cDCE	200	98
VC	12	4.9
Freon 113	1.3	1

T-13A			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	1.4	1.7/2.1	23
cDCE	76	80/96	120
VC	33	3.3/3.9	4
Freon 113	<0.50	<0.50	<0.50

T-17A			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	62	76	63
cDCE	30	16	12
VC	<0.50	0.71	0.6
Freon 113	<0.50	<0.50	<0.50

T-23A			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	32	78	64
cDCE	51	53	61
VC	6.5	4.7	7.8
Freon 113	<0.50	<0.50	<0.50

LEGEND

- A-ZONE MONITORING WELL
- B1-ZONE MONITORING WELL
- B2-ZONE MONITORING WELL
- B3-ZONE MONITORING WELL
- B4-ZONE MONITORING WELL
- EDUCTOR - DESTROYED 2014
- MONITORING WELL - DESTROYED 2014
- MONITORING WELL - DESTROYED 2004
- PROPERTY BOUNDARY

ABBREVIATIONS

/ DENOTES DUPLICATE SAMPLE
< NOT DETECTED AT OR ABOVE THE DETECTION LIMIT SHOWN
cDCE cis-1,2-DICHLOROETHENE
TCE TRICHLOROETHENE
VC VINYL CHLORIDE

WELL	
ANALYTE	CONCENTRATION IN MICROGRAMS PER LITER

N

0 25 50 Feet

1 " = 50 '

Former TRW Microwave Site

Zone A Analytical Results October 2015

Date 03-2016

Project No. 60446335

NORTHROP GRUMMAN

Figure 9

File: W:\work\60238860_NG\GIS\Projects\Zone_A_Results_Oct2015_v1.mxd
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T-19B		
Analyte	*October 2014*	*October 2015*
TCE	52	49
cDCE	2.2	1.8
VC	<0.50	<0.50
Freon 113	1.2	1

T-18B		
Analyte	*October 2014*	*October 2015*
TCE	<0.50	<0.50
cDCE	<0.50	<0.50
VC	<0.50	<0.50
Freon 113	<0.50	<0.50

T-8B			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	10	<5.0	1.2
cDCE	270	150	29
VC	16	55	24
Freon 113	<0.50	<5.0	<0.50

T-10B		
Analyte	*October 2014*	*October 2015*
TCE	45	31
cDCE	180	97
VC	16	23
Freon 113	<0.50	<0.50

T-9B			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	390	310	150
cDCE	210	220	150
VC	<5.0	2.3	<2.5
Freon 113	<5.0	1	<2.5

T-7B			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	170/170	140/150	72/73
cDCE	11/12	10/9.8	4.8/4.8
VC	<0.50/<0.50	<0.50/<0.50	<0.50/<0.50
Freon 113	3.2/4.4	2.6/2.8	0.81/0.81

T-4B			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	5.2	4.9	4.3
cDCE	500	130	120
VC	<5.0	<0.50	<0.50
Freon 113	<5.0	<0.50	<0.50

T-17B			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	75	230	280
cDCE	400	310	290
VC	<5.0	0.5	0.5
Freon 113	<5.0	11	9.9

T-5B		
Analyte	*October 2014*	*October 2015*
TCE	1,500/1,600	1,700/1,800
cDCE	58/64	62/62
VC	<10/<25	<0.50/<0.50
Freon 113	140/160	120/130

LEGEND

- A-ZONE MONITORING WELL
- B1-ZONE MONITORING WELL
- B2-ZONE MONITORING WELL
- B3-ZONE MONITORING WELL
- B4-ZONE MONITORING WELL
- EDUCTOR - DESTROYED 2014
- MONITORING WELL - DESTROYED 2014
- MONITORING WELL - DESTROYED 2004
- PROPERTY BOUNDARY

ABBREVIATIONS

/ DENOTES DUPLICATE SAMPLE
< NOT DETECTED AT OR ABOVE THE DETECTION LIMIT SHOWN
cDCE cis-1,2-DICHLOROETHENE
TCE TRICHLOROETHENE
VC VINYL CHLORIDE

WELL	
ANALYTE	CONCENTRATION IN MICROGRAMS PER LITER

N

0 25 50 Feet
1 " = 50 '

Former TRW Microwave Site

Zone B1 Analytical Results October 2015

Date 03-2016
Project No. 60446335

NORTHROP GRUMMAN

Figure 10

File: W:\work\60238860_NG\GIS\Projects\Zone_B1_Results_Oct2015_v1.mxd
Date: Monday, March 21, 2016 11:49:30 AM

36DD(1)		
Analyte	*October 2014*	*October 2015*
TCE	<0.5	<0.5
cDCE	7.1	5.7
VC	<0.5	1.7
Freon 113	<2.0	<2.0

T-11C		
Analyte	*October 2014*	*October 2015*
TCE	310	43
cDCE	23	3.3
VC	3.6	<0.50
Freon 113	15	1.1

T-12C		
Analyte	*October 2014*	*October 2015*
TCE	140	2.4
cDCE	5.1	13
VC	<1.0	<0.50
Freon 113	1.8	<0.50

T-10C			
Analyte	*October 2014*	*June 2015*	*October 2015*
TCE	1300	690	32
cDCE	76	1,500	1,600
VC	<10	7.2	<25
Freon 113	170	190	32

LEGEND

- A-ZONE MONITORING WELL
- B1-ZONE MONITORING WELL
- B2-ZONE MONITORING WELL
- B3-ZONE MONITORING WELL
- B4-ZONE MONITORING WELL
- EDUCTOR - DESTROYED 2014
- MONITORING WELL - DESTROYED 2014
- MONITORING WELL - DESTROYED 2004
- PROPERTY BOUNDARY

ABBREVIATIONS

/ DENOTES DUPLICATE SAMPLE
< NOT DETECTED AT OR ABOVE THE DETECTION LIMIT SHOWN
cDCE cis-1,2-DICHLOROETHENE
TCE TRICHLOROETHENE
VC VINYL CHLORIDE

NOTE

(1) GROUNDWATER ANALYTICAL DATA PROVIDED BY AMD.

WELL	
ANALYTE	CONCENTRATION IN MICROGRAMS PER LITER

N

0 25 50 Feet

1 " = 50 '

Former TRW Microwave Site

Zone B2 Analytical Results October 2015

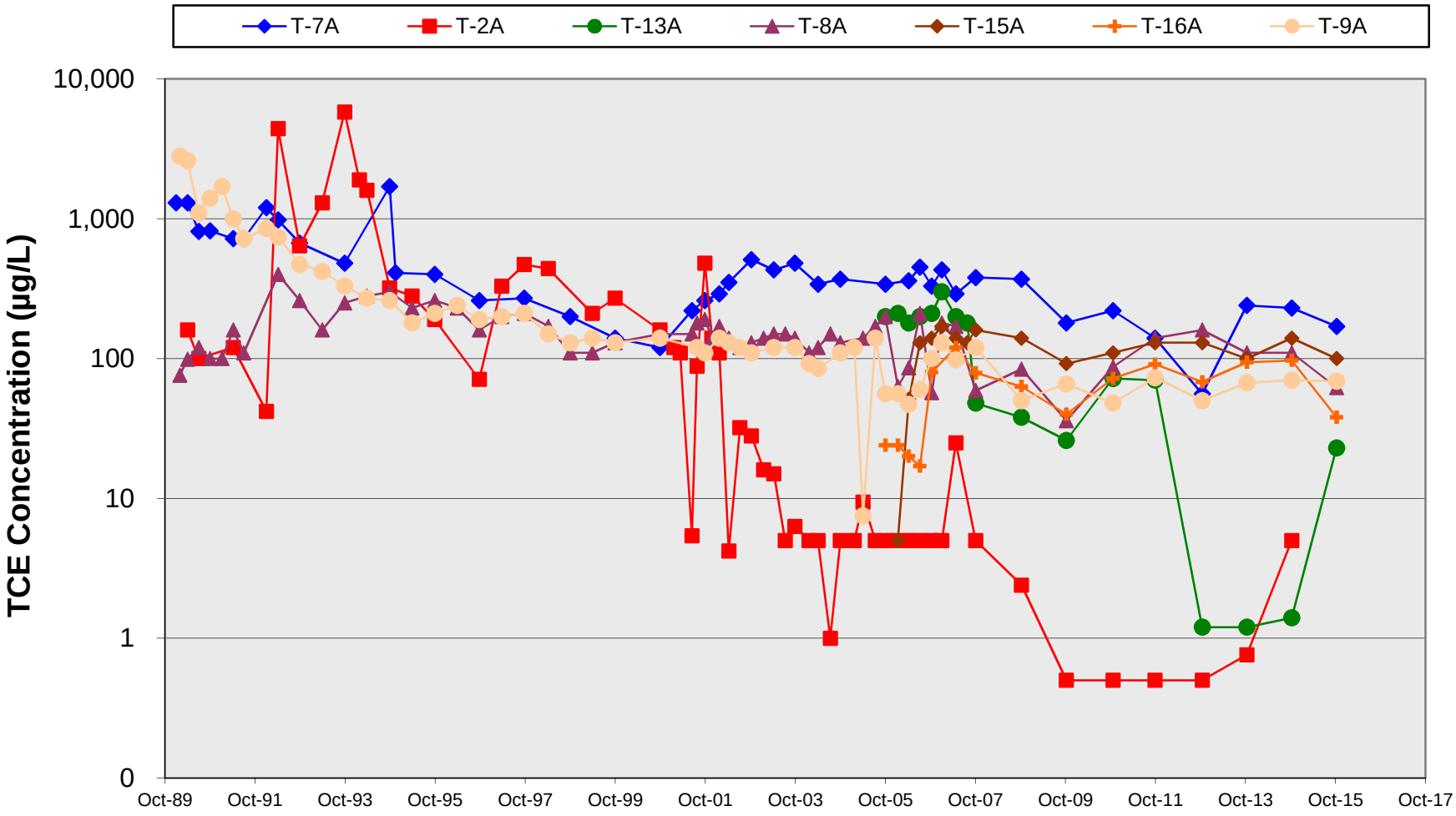
Date 03-2016

Project No. 60446335

NORTHROP GRUMMAN

Figure 11

File: W:\work\60238860_NG\GIS\Projects\Zone_B2_Results_Oct2015_v1.mxd
Date: Monday, March 21, 2016 11:49:50 AM



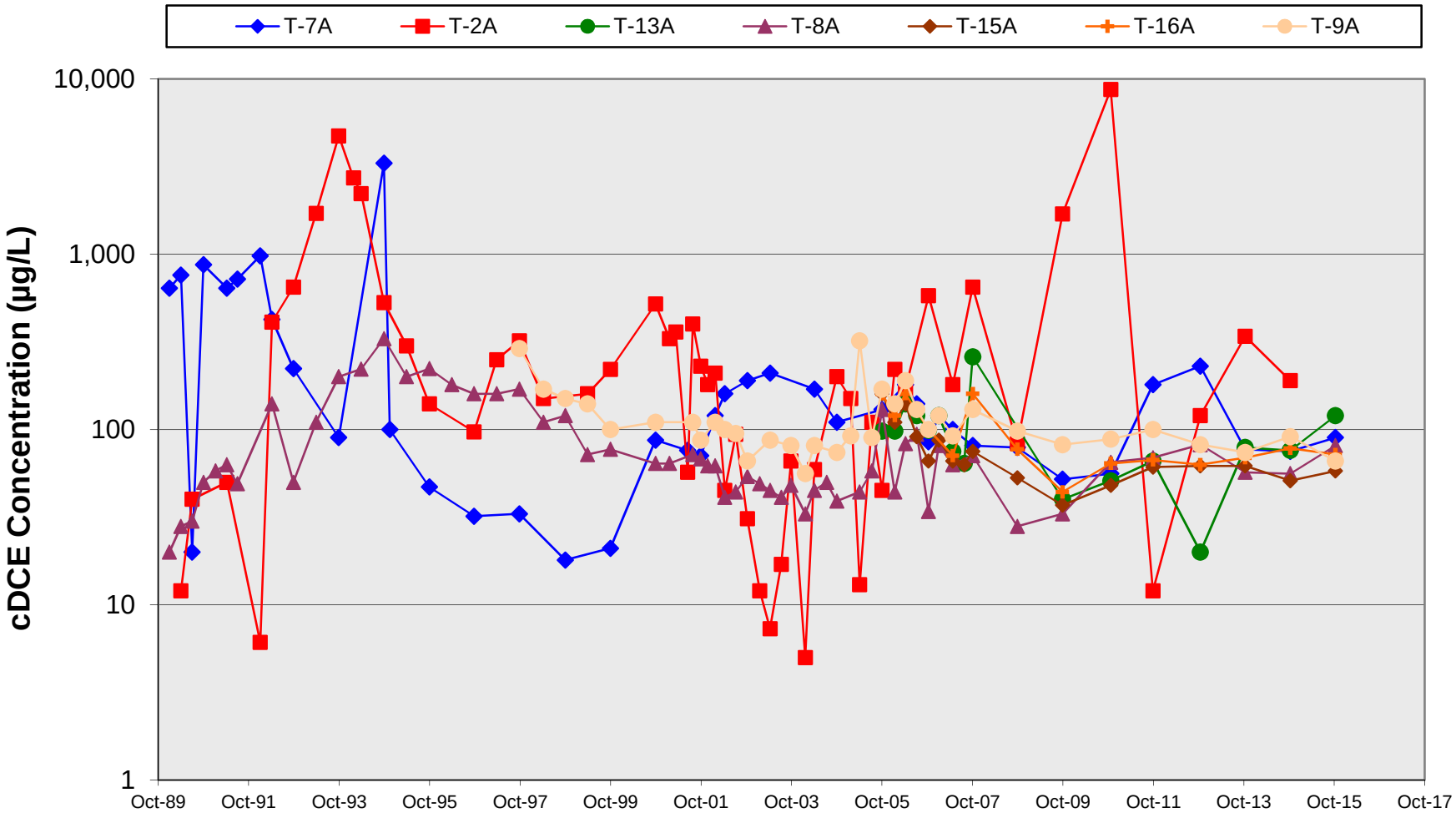
NORTHROP GRUMMAN

Former TRW Microwave Site

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

FIGURE 12



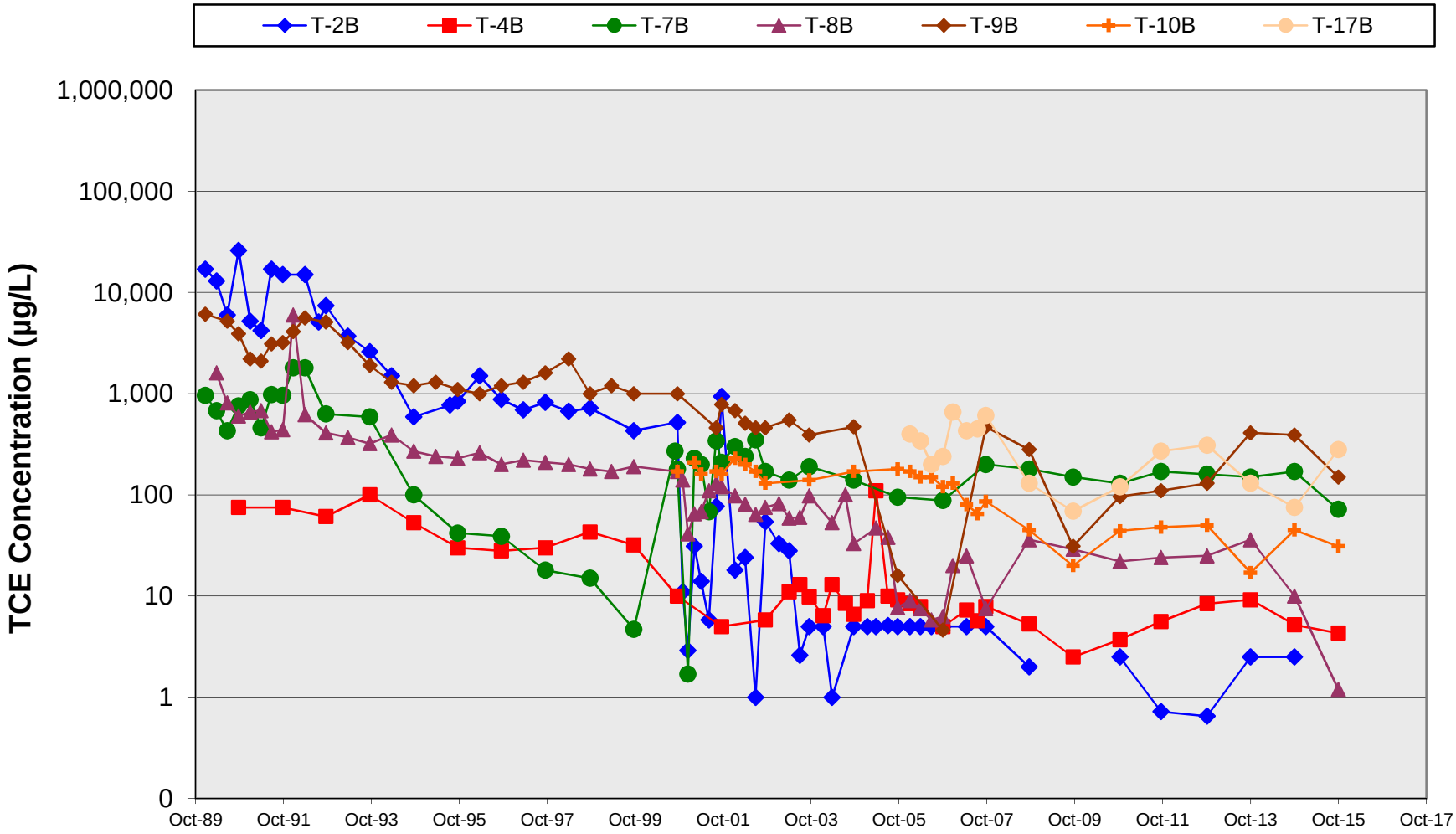
NORTHROP GRUMMAN

Former TRW Microwave Site

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

FIGURE 13



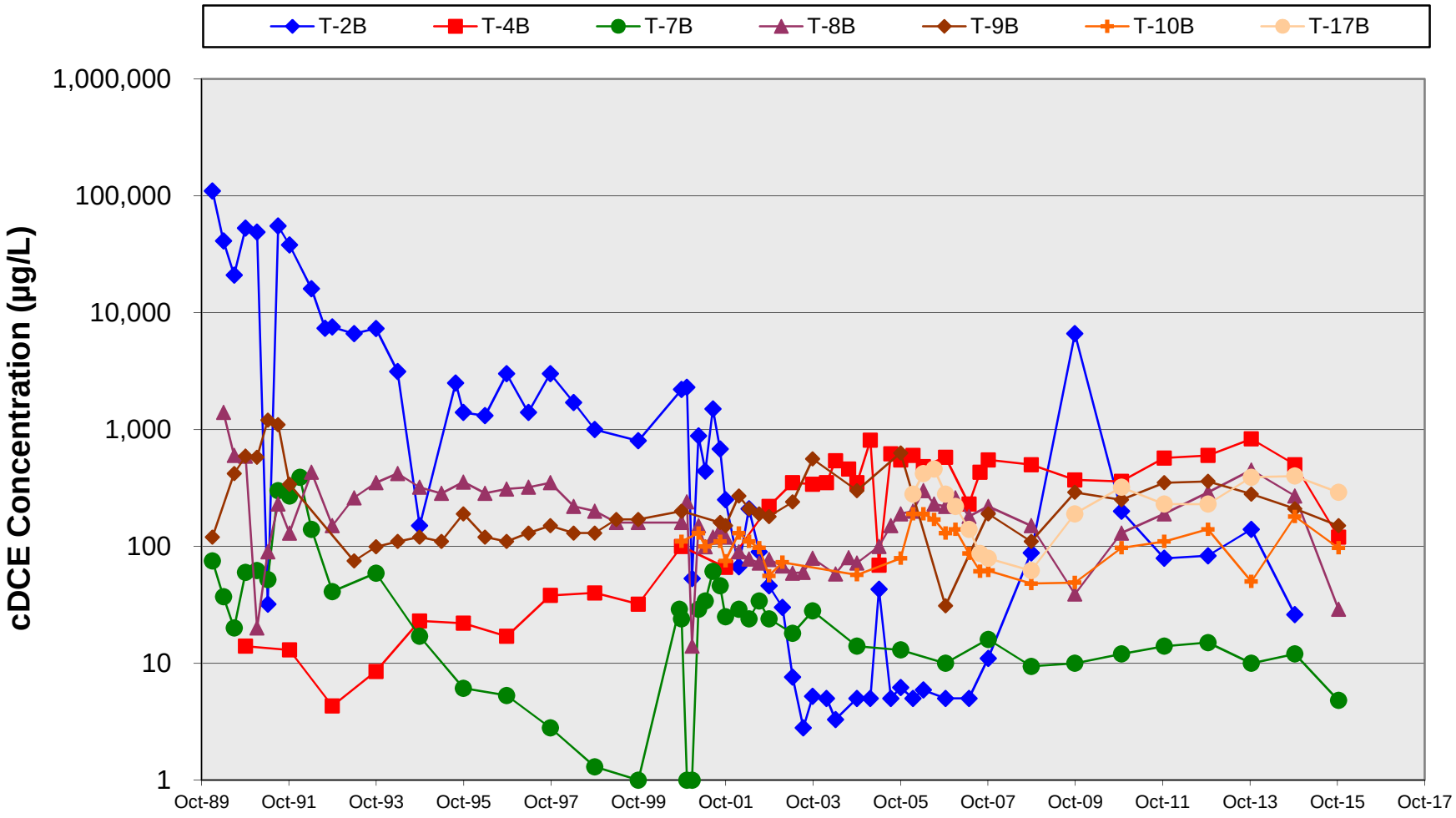
NORTHROP GRUMMAN

Former TRW Microwave Site

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

FIGURE 14



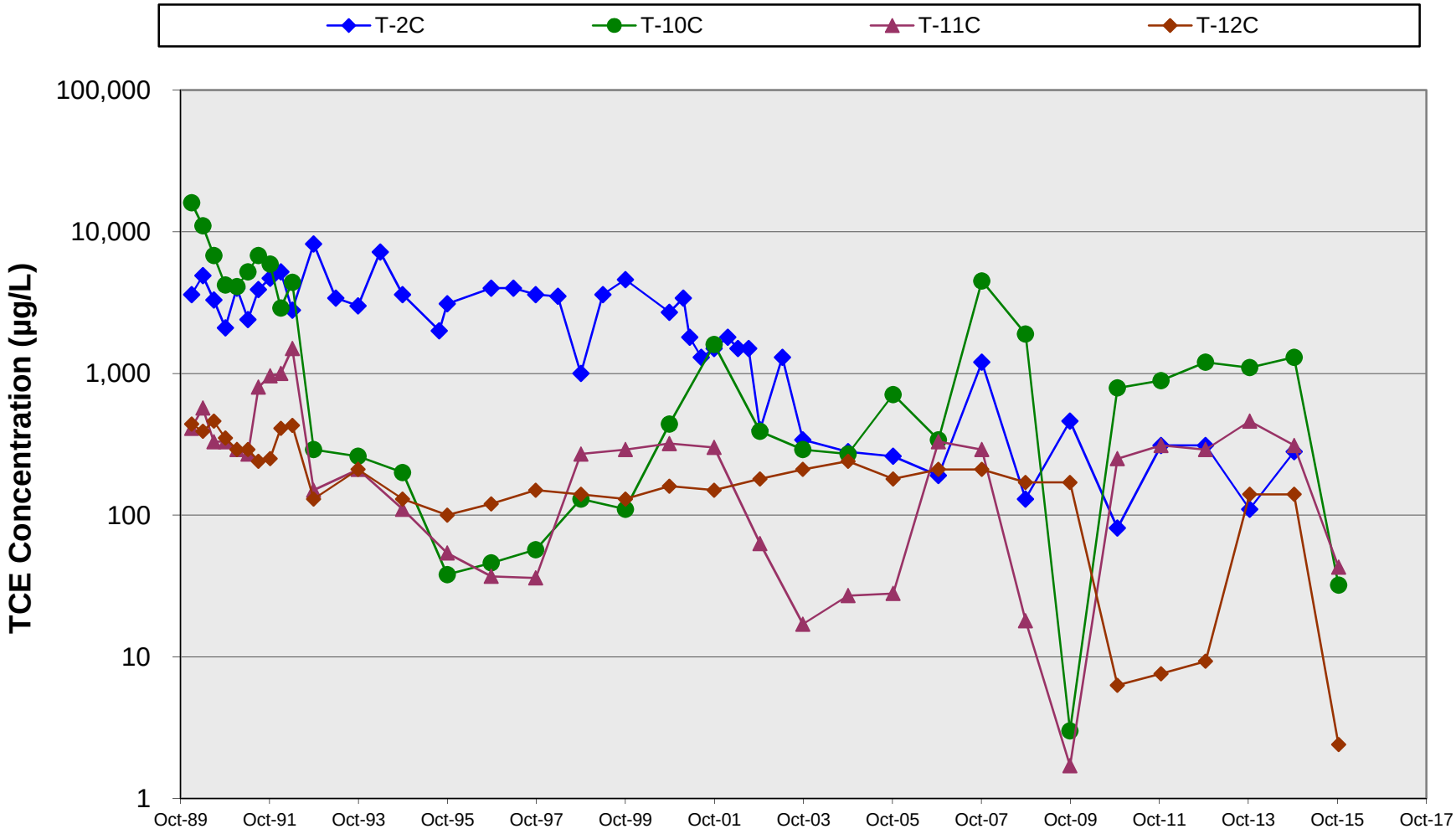
NORTHROP GRUMMAN

Former TRW Microwave Site

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

FIGURE 15



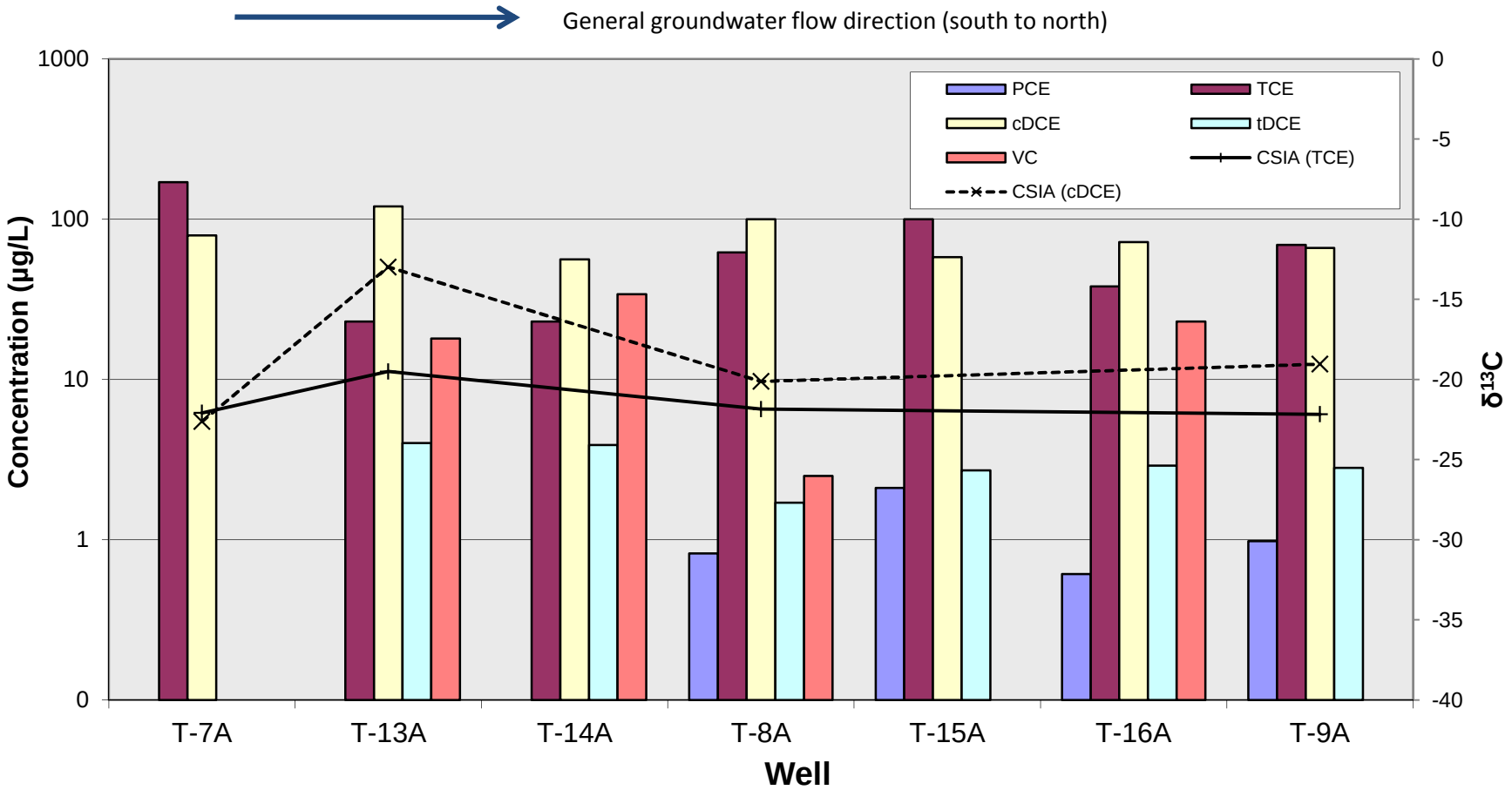
NORTHROP GRUMMAN

Former TRW Microwave Site

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

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

FIGURE 16



Note: Groundwater flow direction is generally along the wells listed above, from south to north, from onsite well T-7A to well T-9A.

NORTHROP GRUMMAN	Former TRW Microwave Site	
	Chlorinated Ethene Concentrations, Zone A - October 2015	**FIGURE 17**

Appendices

Appendix A

WELL CONSTRUCTION AND BOREHOLE LOGS

well no. 06S01W30H001

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 238733

State Well No. 06S01W30H001

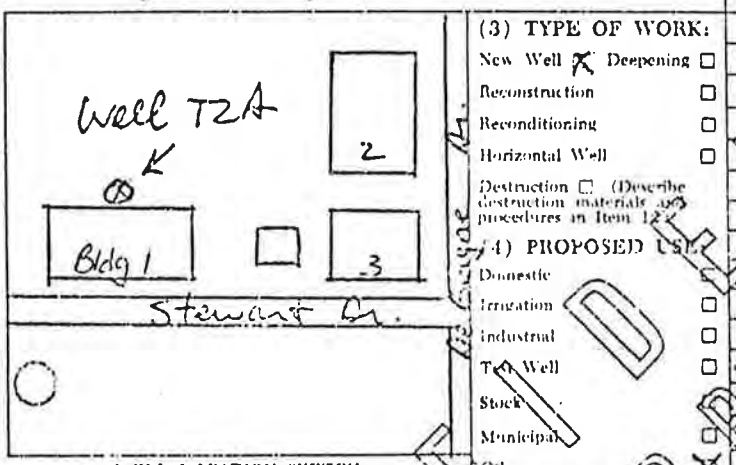
Other Well No.

Notice of Intent No.

Local Permit No. or Date 8-3W0384

(1) OWNER: Name TRW Microwave, Inc.
Address 825 Stewart Dr.
City Sunnyvale CA Zip 94086

(2) LOCATION OF WELL (See instructions):
County Santa Clara Owner's Well Number T2A
Well address if different from above
Township T5S Range R1W Section 30
Distance from cities, roads, railroads, fences, etc. Approx 200' north of Stewart Dr. and 700' west of LeGrande



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☒

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☐
Other ☒ Bucket ☐

(6) GRAVEL PACK: Yes ☒ No ☐ Size coarse sand
Diameter of bore 8"
Packed from 20 to 4 ft.

(7) CASING INSTALLED: Steel ☐ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gauge or Wall	From ft.	To ft.	Slot size
20	0	4"	SCH 40	20	10	.040"

(8) PERFORATIONS: Type of perforation or size of screen

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 4 ft.
Were strata sealed against pollution? Yes ☒ No ☐ Interval 0 to 4 ft.
Method of sealing Concrete bentonite

(10) WATER LEVELS:
Depth of first water, if known 7 ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 20 ft. Depth of completed well 20 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	15	Dark and light brown silty CLAY
15	20	Blue grey sandy CLAY and clayey SAND

Work started 7/12 1983 Completed 7/12 1983

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Signed Albert R. Clark NEW DRILLER (Well Driller)
Name All Terrain Exploration Drilling (Person, firm, or corporation) (Typed or printed)
Address 3789 Liberty Lane
City Roseville CA Zip 95678
License No. N/A Date of this report 8/17/83

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

UNOFFICIAL COPY
FOR PUBLIC USE
WATER CODE SEC. 13752

5

well no. 06S01W30H002

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

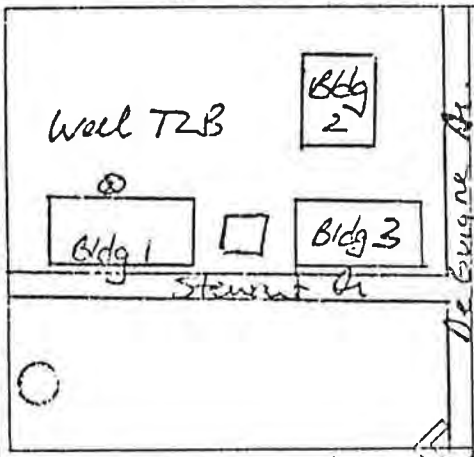
Do not fill in
No. 238732

State Well No. 06S01W30H002
Other Well No.

Notice of Intent No.
Local Permit No. or Date 83W0383

(1) OWNER: Name TRW Microwave, Inc.
Address 825 Stewart Drive
City Sunnyvale CA Zip 94086

(2) LOCATION OF WELL (See instructions):
County Santa Clara Owner's Well Number T2B
Well address if different from above
Township T6S Range R1W Section 30
Distance from cities, roads, railroads, fences, etc. Approx 200' north of Stewart Dr and 700' west of De Guigne Dr.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well X Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary X Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK: Yes X No ☐ Size coarse sand
Diameter of bore 9"
Interval from 33 to 22 ft.

(7) CASING INSTALLED: Steel ☐ Plastic X Concrete ☐

From ft.	To ft.	Dia. in.	Gauge or Wall	From ft.	To ft.	Slot size
33	0	4"	SCH40	33	23	.040"

(8) PERFORATIONS: Type of perforation or size of screen

(9) WELL SEAL:
Was surface sanitary seal provided? Yes X No ☐ If yes, to depth 22 ft.
Were strata sealed against pollution? Yes X No ☐ Interval 0-22 ft.
Method of sealing concrete bentonite

(10) WATER LEVELS:
Depth of first water, if known 7 ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No X If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 36½ ft. Depth of completed well 33 ft.

from ft.	to ft.	Formation (Describe by color, character, size of material)
0	15	Dark and light brown silty CLAY
15	20	Blue-gray sandy CLAY and clayey SAND
20	26	Blue-gray fine sandy CLAY
26	28	Light brown clayey SAND and sandy GRAVEL
28	34	Blue-gray fine sandy CLAY
34	36½	Brown fine sand, CLAY and clayey SAND

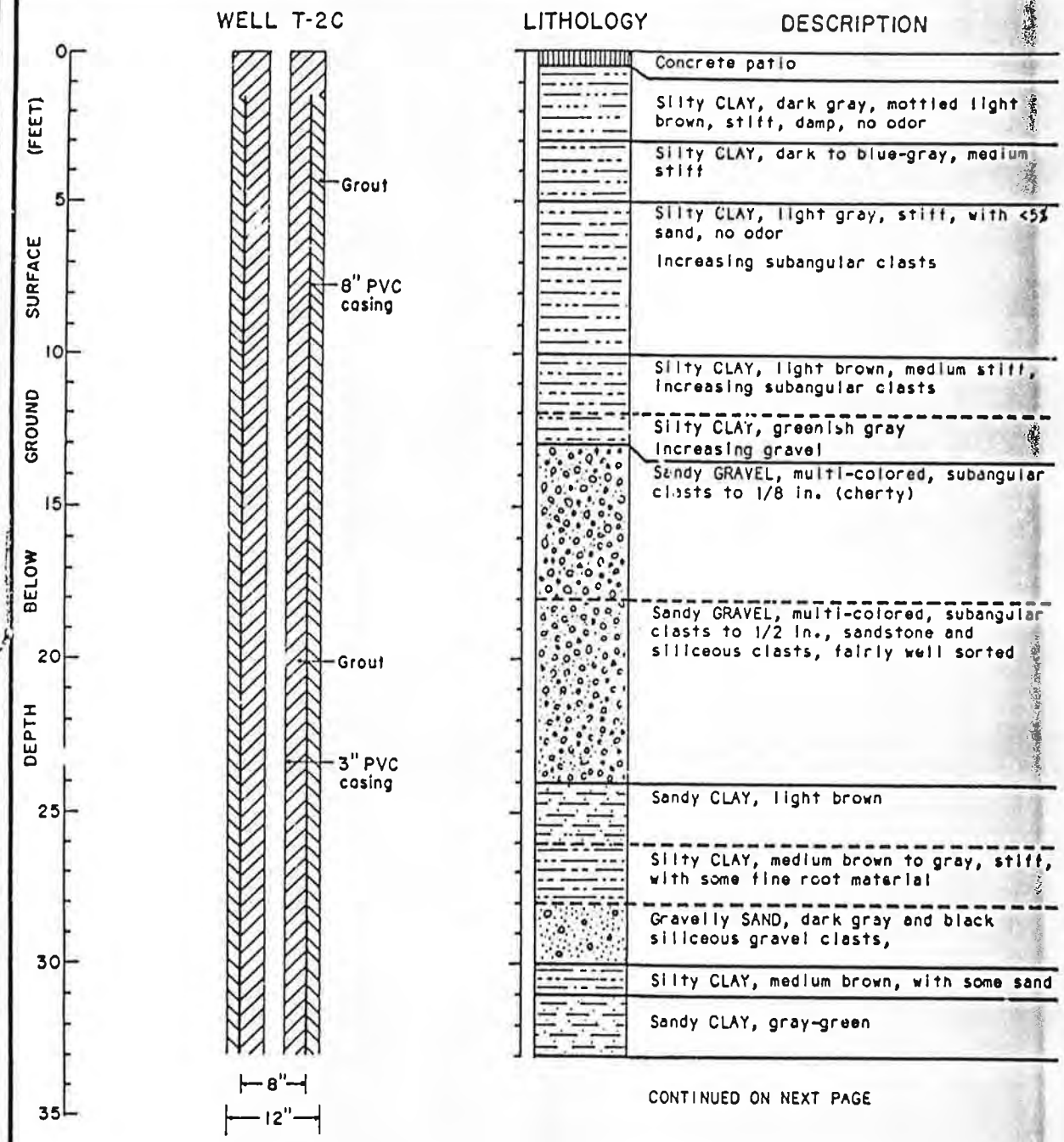
Work started 7/12 1983 Completed 7/12 1983

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Signed Robert R Clark HUNTSMAN (Well Driller)
Name All Terrain Exploration Drilling (Person, firm, or corporation) (Typed or printed)
Address 2289 Liberty Lane
City Roseville CA Zip 95678
License No. N/A Date of this report 8/16/83

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

UNOFFICIAL COPY WATER CODE SEC. 13751

5



CONTINUED ON NEXT PAGE

EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

Figure 6 - Well Construction Details and Subsurface Conditions - Well T-2C

6

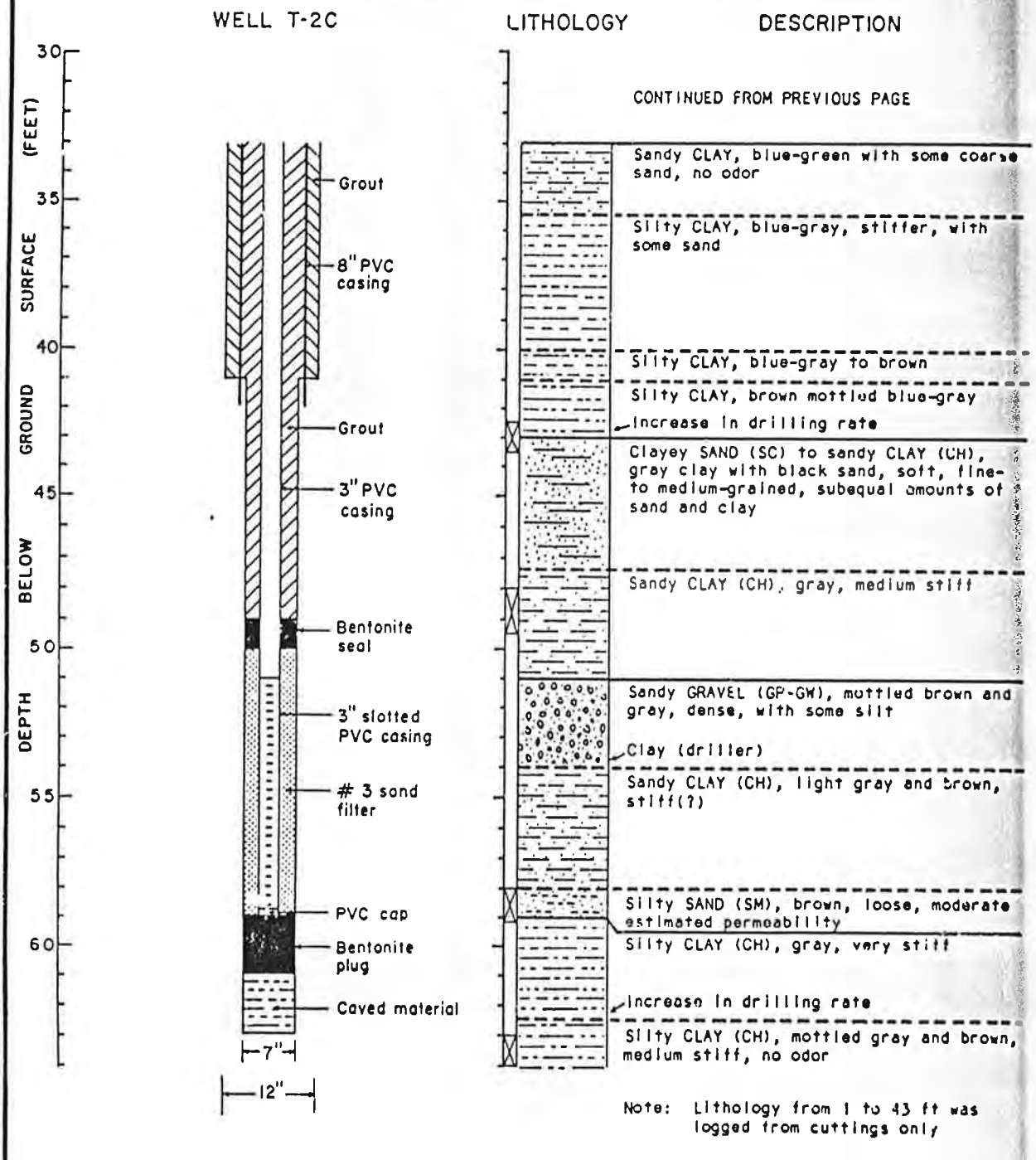


Figure 6 - Continued

Well no. 06S01W30H020

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

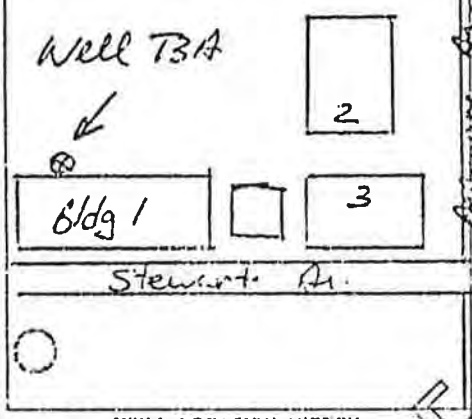
No. 238734

Notice of Intent No.
Permit No. or Date 83W0385

State Well No. 06S01W30H01 A
Other Well No. T-3A

(1) OWNER: Name TRW Microwave, Inc
Address 825 Stewart Dr.
City Sunnyvale, CA. Zip 94086

(2) LOCATION OF WELL (See instructions):
County Santa Clara Owner's Well Number T-3A
Well address if different from above
Township T6S Range R1W Section 30
Distance from cities, roads, railroads, fences, etc. Approx 250' north of Stewart Dr. and 750' west of McCarpe Dr.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☑ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic
Irrigation ☐
Industrial ☐
Test Well ☐
Stock
Municipal ☐
Other ☑

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Well T2A Air ☐
Other Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☑ Size
Diameter of bore
Depth from 20 to 9½ ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☒ Concrete

From ft.	To ft.	Dia. in.	Gauge or Wall
20	0	4	SX40

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
20	10	.040"

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 9½ ft.
Were strata sealed against pollution? Yes ☒ No ☐ Interval 0 to 9½ ft.
Method of sealing cement bentonite

(10) WATER LEVELS:
Depth of first water, if known 7 ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 20 ft. Depth of completed well 20 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	13	Dark and light brown CLAY
13	20	Brown fine, sandy CLAY and clayey fine to medium SAND

Work started 7/13 1983 Completed 7/13 1983

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed Robert R Clark HW Emcon (Well Driller)
NAME All Terrain Exploration Drilling (Person, firm, or corporation) (Typed or printed)
Address 2784 Liberty Lane
City Roseville, CA. Zip 95678
License No N/A Date of this report 8/17/83

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

DELETED FROM PUBLIC USE
WATER CODE SEC. 13752

5

well number 06S01W30B006

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

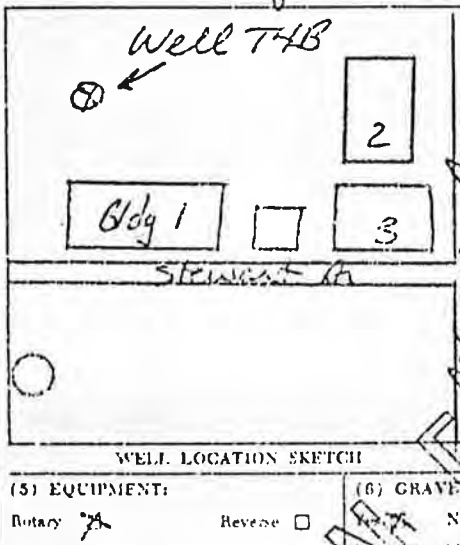
Do not fill in
No. 238735

State Well No. 06S01W30B001A
Other Well No.

Notice of Intent No.
Local Permit No. or Date 83W0386

(1) OWNER: Name TRW Microwave Inc.
Address 825 Stewart Drive
City Sunnyvale CA Zip 94086

(2) LOCATION OF WELL (See instructions):
County Santa Clara Owner's Well Number T4B
Well address if different from above
Township 7 S Range R1W Section 30
Distance from cities, roads, railroads, fences, etc. Approximately 350' north of Stewart Dr. and 750' west of De Guigne Dr.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well X Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic
Irrigation ☐
Industrial ☐
Test Well ☐
Stock
Municipal ☐
Other X

(5) EQUIPMENT:
Rotary X Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes X No ☐ Size coarse sand
Diameter of bore 9 1/4
Packed from 40 to 28 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic X Concrete ☐

From ft.	To ft.	Dia. in.	Gauge or Wall
40	0	7	SCH 40

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
40	30	.040"

(9) WELL SEAL:
Was surface sanitary seal provided? Yes X No ☐ If yes, to depth 28 ft.
Were strata sealed against pollution? Yes X No ☐ Interval 0 to 28 ft.
Method of sealing Concrete -- Bentonite

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion 7 ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No X If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 40 ft. Depth of completed well 40 ft.

from ft.	to ft.	Formation (Describe by color, character, size of material)
0	8	Brown silty CLAY
8	20	Brown clayey fine to medium SAND and sandy CLAY
20	34	Blue gray silty CLAY
34	36 1/2	Brown clayey fine SAND and sandy clayey fine GRAVEL
36 1/2	41 1/2	Brown silty CLAY

Work started 7/14 19 83 Completed 7/15 19 83

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED Robert R Clark (Well Driller)
NAME All Terrain Exploration Drilling (Person, firm, or corporation) (Typed or printed)
Address 2789 Gibraltar Lane
City Roseville CA Zip 95678
License No. Date of this report 8/24/83

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL DWR WATER LOGS
NOT A PUBLIC RECORD
SEC. 13752

5

well number 06S01W306025

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

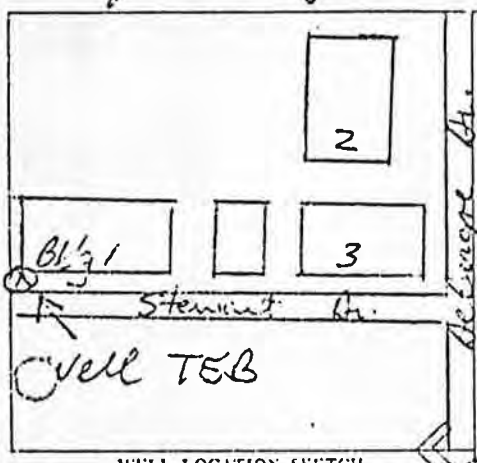
Do not fill in
No. 238736

Notice of Intent No.
Local Permit No. or Date 83W0387

State Well No. 06S01W306025
Other Well No.

(1) OWNER: Name TRW Microwave Inc
Address 825 Stewart Dr.
City Sunnyvale CA Zip 94086

(2) LOCATION OF WELL (See instructions):
County Owner's Well Number TSB
Well address if different from above
Township T6S Range R1W Section 30
Distance from cities, roads, railroads, fences, etc. Approximately 10 ft north of Stewart Dr and 750 ft west of Lawrence Dr.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic
Irrigation ☐
Industrial ☐
Test Well ☐
Stock
Municipal ☐
Other ☒

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size Sand coarse
Diameter of bore 9"
Packed from 44 to 29½ ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☒ Concrete ☐

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Dia. in.	Casing Wall	From ft.	To ft.	Slot size
44	0	4	SCH 40	44	34	.040"

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 29½ ft.
Were strata sealed against pollution? Yes ☒ No ☐ Interval 0 to 29½ ft.
Method of sealing

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion 7 ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 44+ ft. Depth of completed well 44 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	6	Brown silty CLAY
6½	9	Brown gravelly clayey fine SAND
9	16	Brown clay fine to coarse sandy fine GRAVEL
16	31	Blue gray silty CLAY
31	36	Brown clayey fine SAND and sandy CLAY
36	40	Brown fine to coarse sandy fine GRAVEL
40	44½	Lt brown sandy CLAY

Work started 7/15 19 83 Completed 7/15 19 83

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED Robert R Clark HW Foreman (Well Driller)
NAME All Terrain Exploration Drilling (Person, firm, or corporation) (Typed or printed)
Address 2789 Liberty Lane
City Roseville CA Zip 95678
License No. N/A Date of this report 8/24/83

DWR 188 (REV. 7-78) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

DELINEATED PUBLIC RECORD
WATER CODE SEC. 13752

5

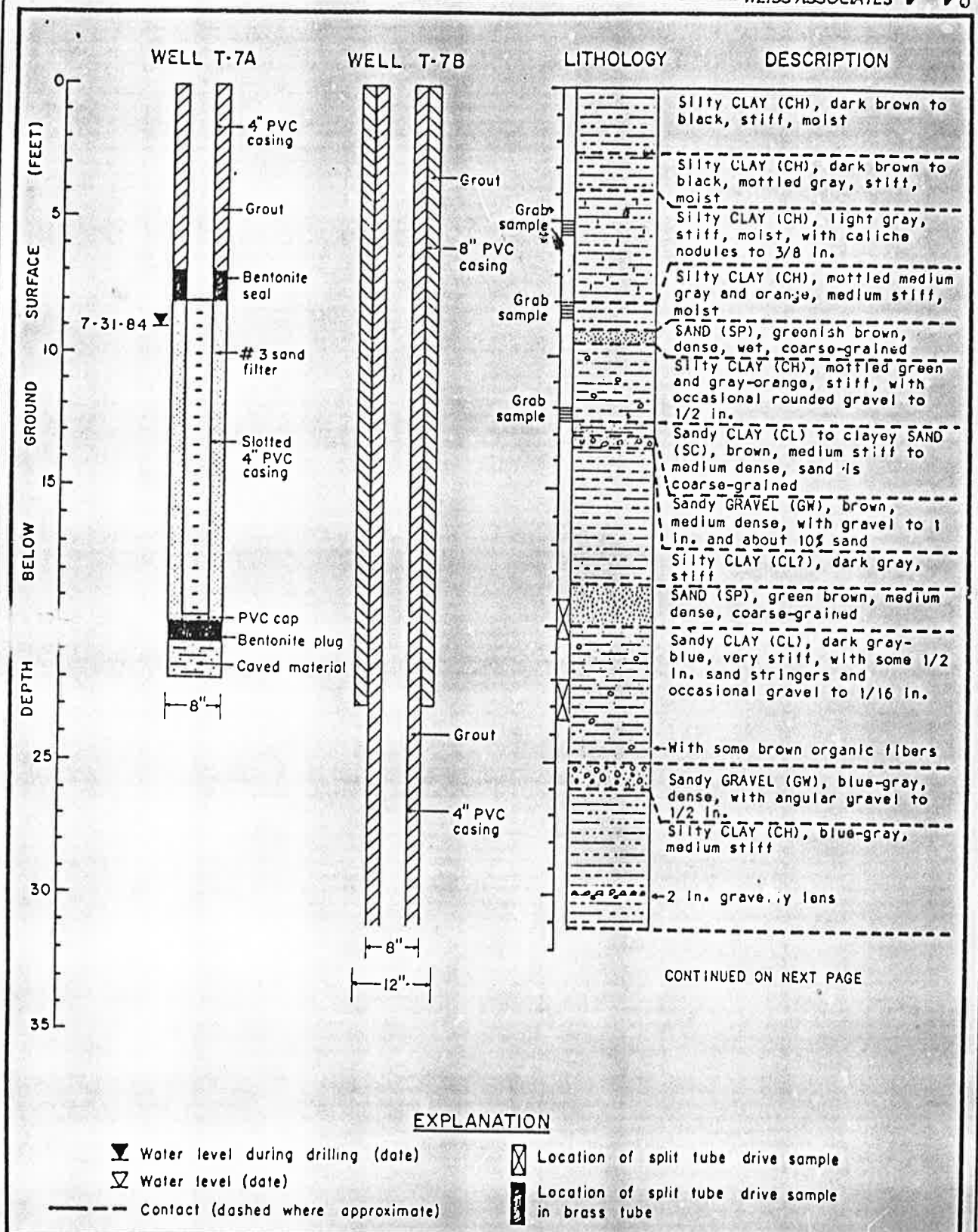


Figure 3 - Well Construction Details and Subsurface Conditions - Wells T-7 and T-7A

6

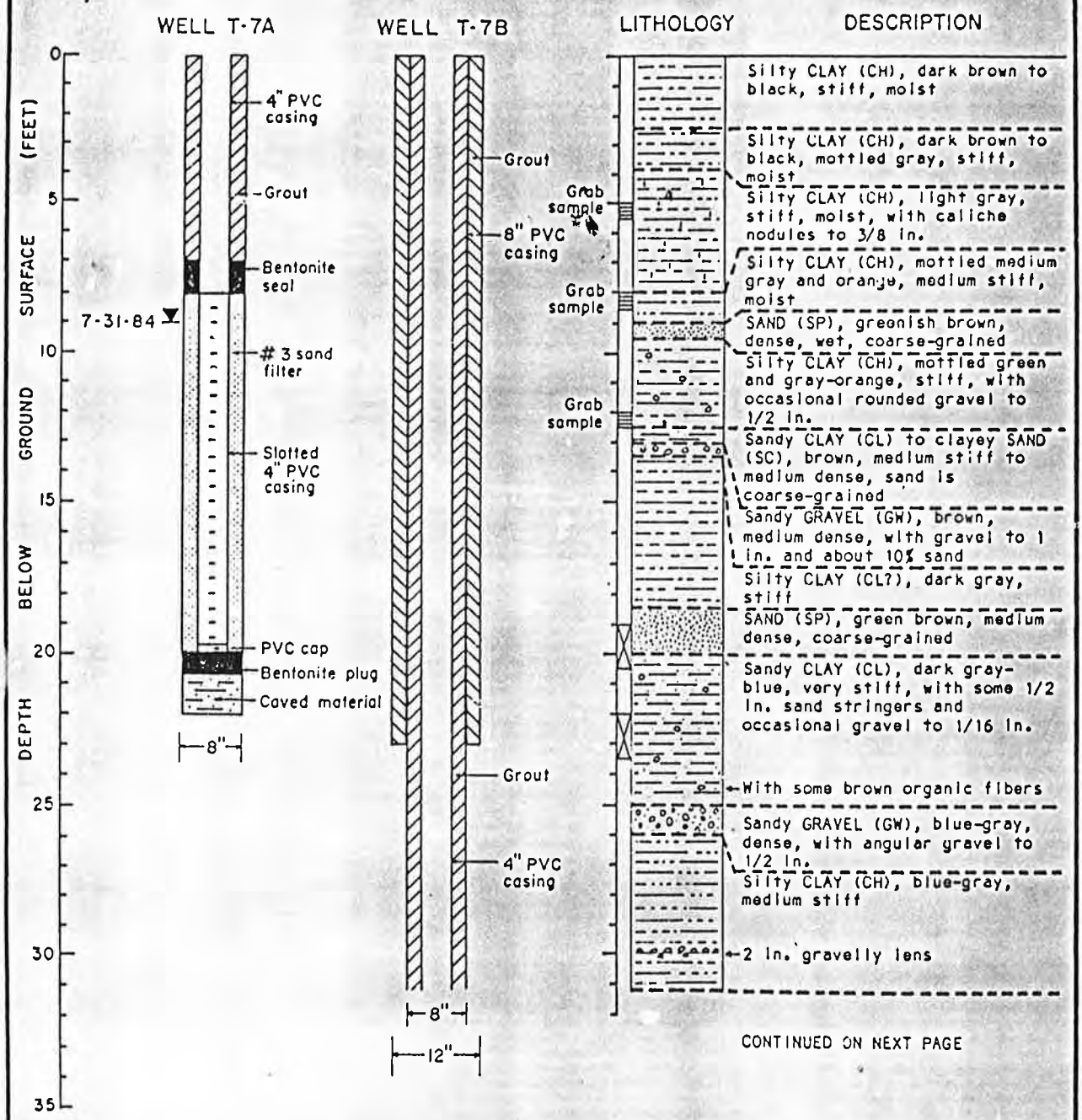


Figure 3 - Well Construction Details and Subsurface Conditions - Wells T-7 and T-7A

6

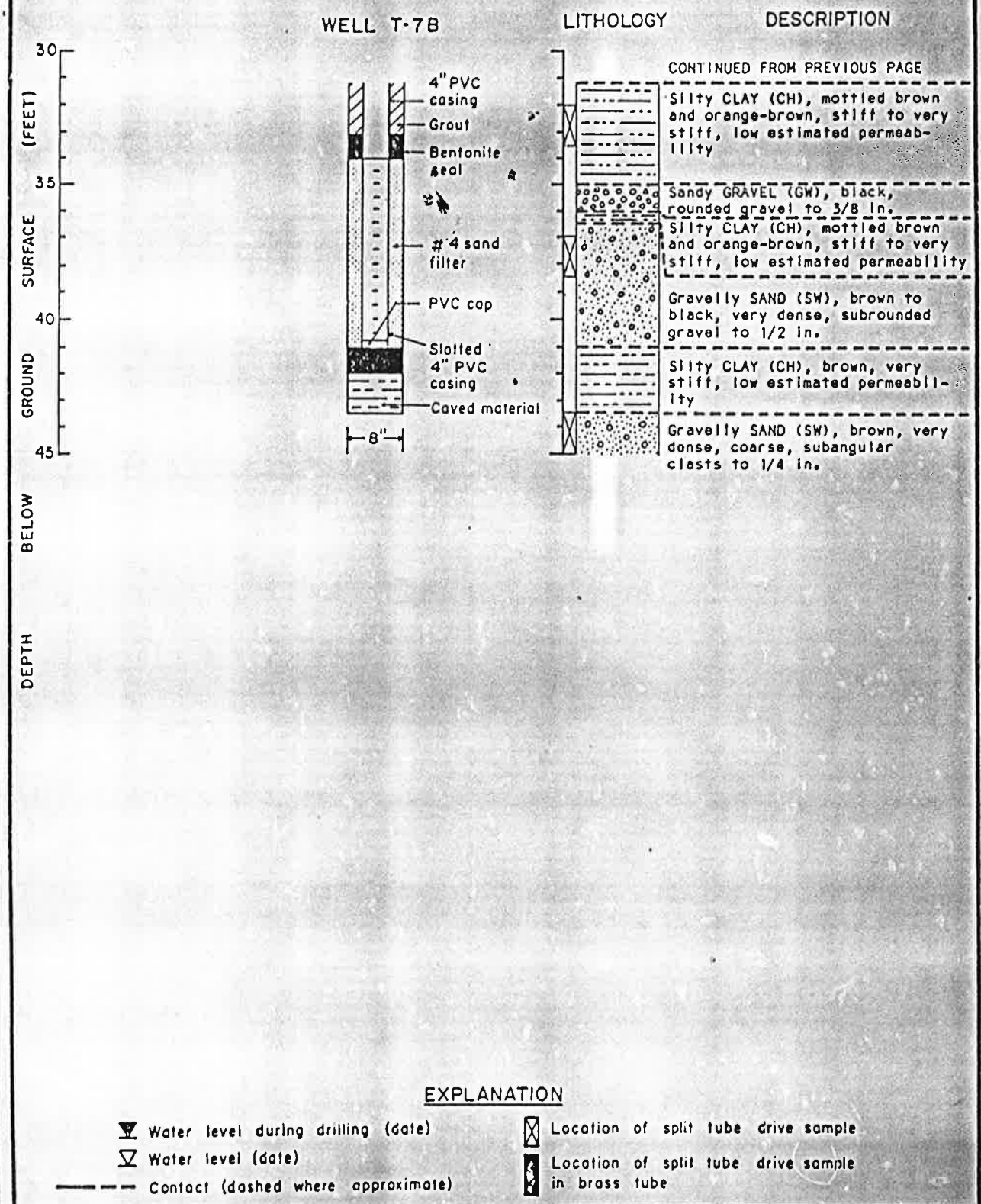


Figure 3 - Continued

7

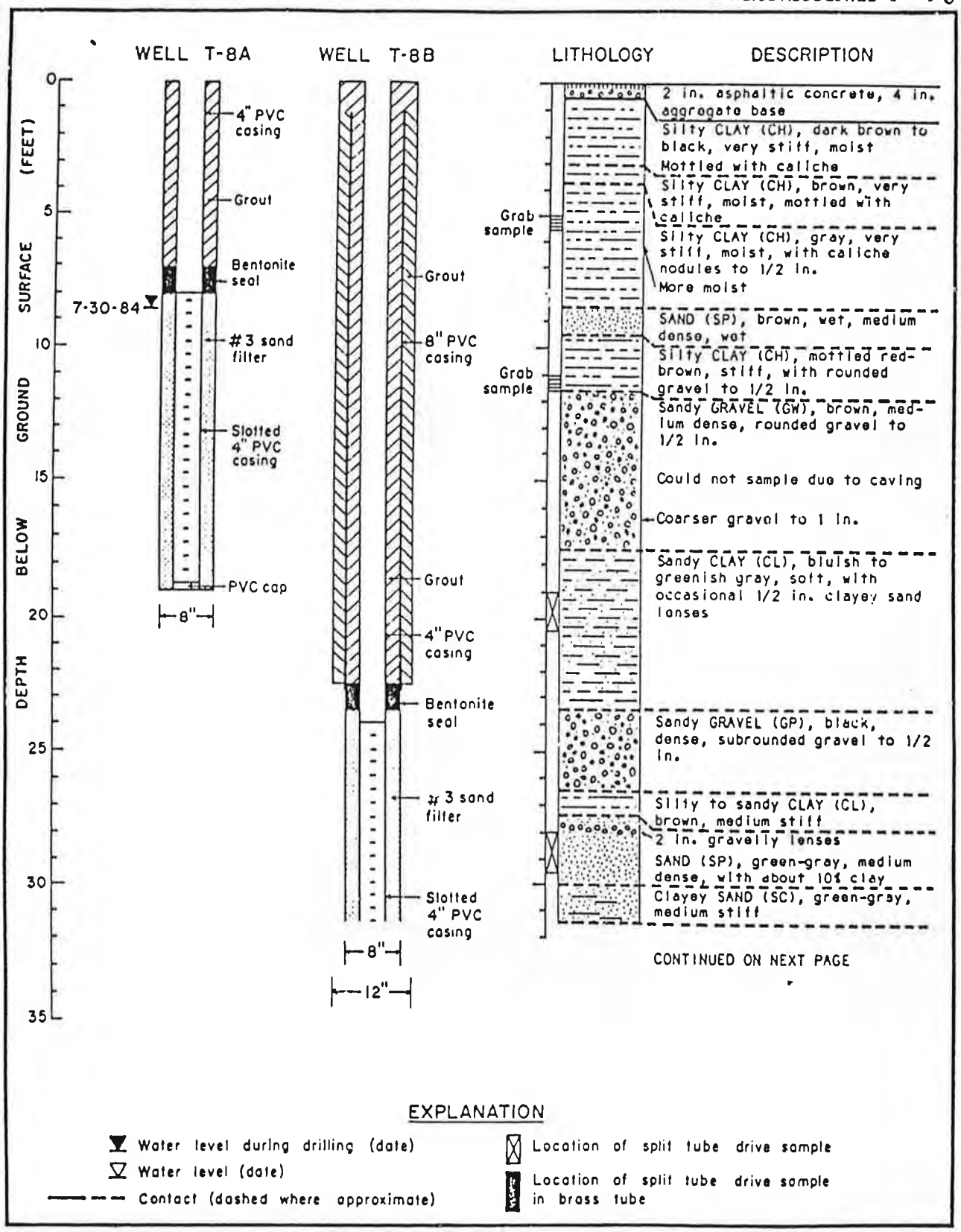


Figure 4 - Well Construction Details and Subsurface Conditions - Wells T-8 and T-8A

6

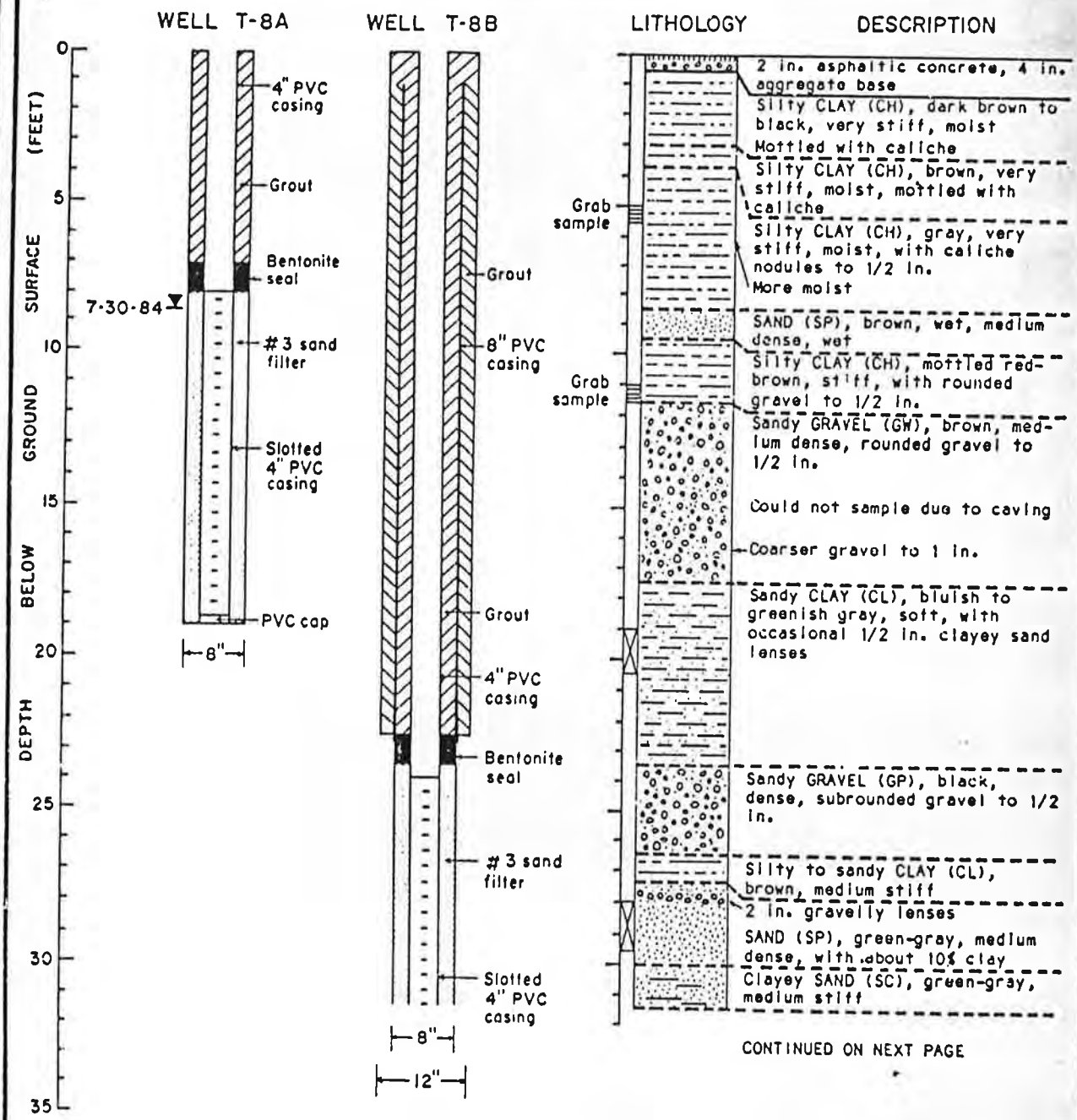


Figure 4 - Well Construction Details and Subsurface Conditions - Wells T-8 and T-8A

6

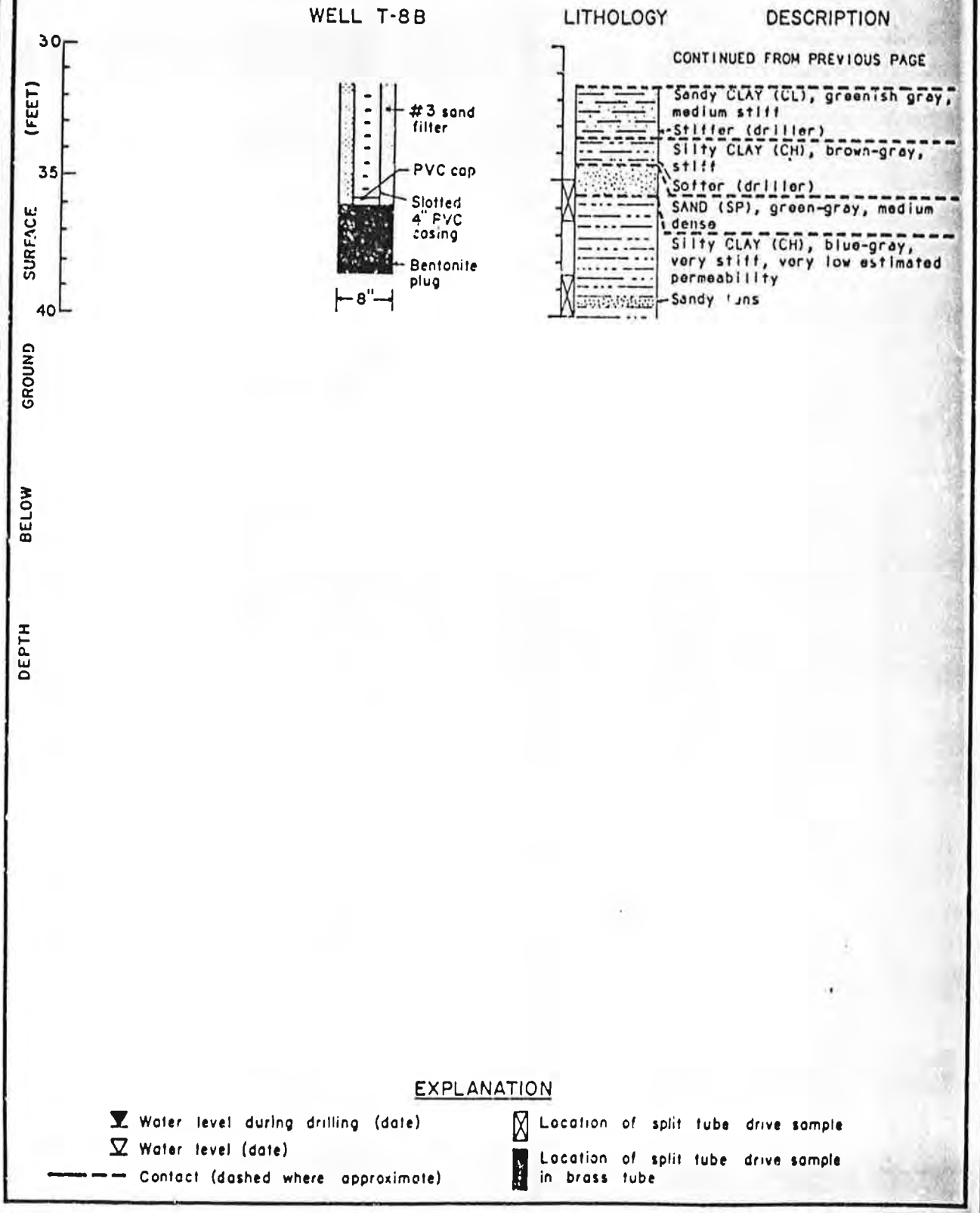
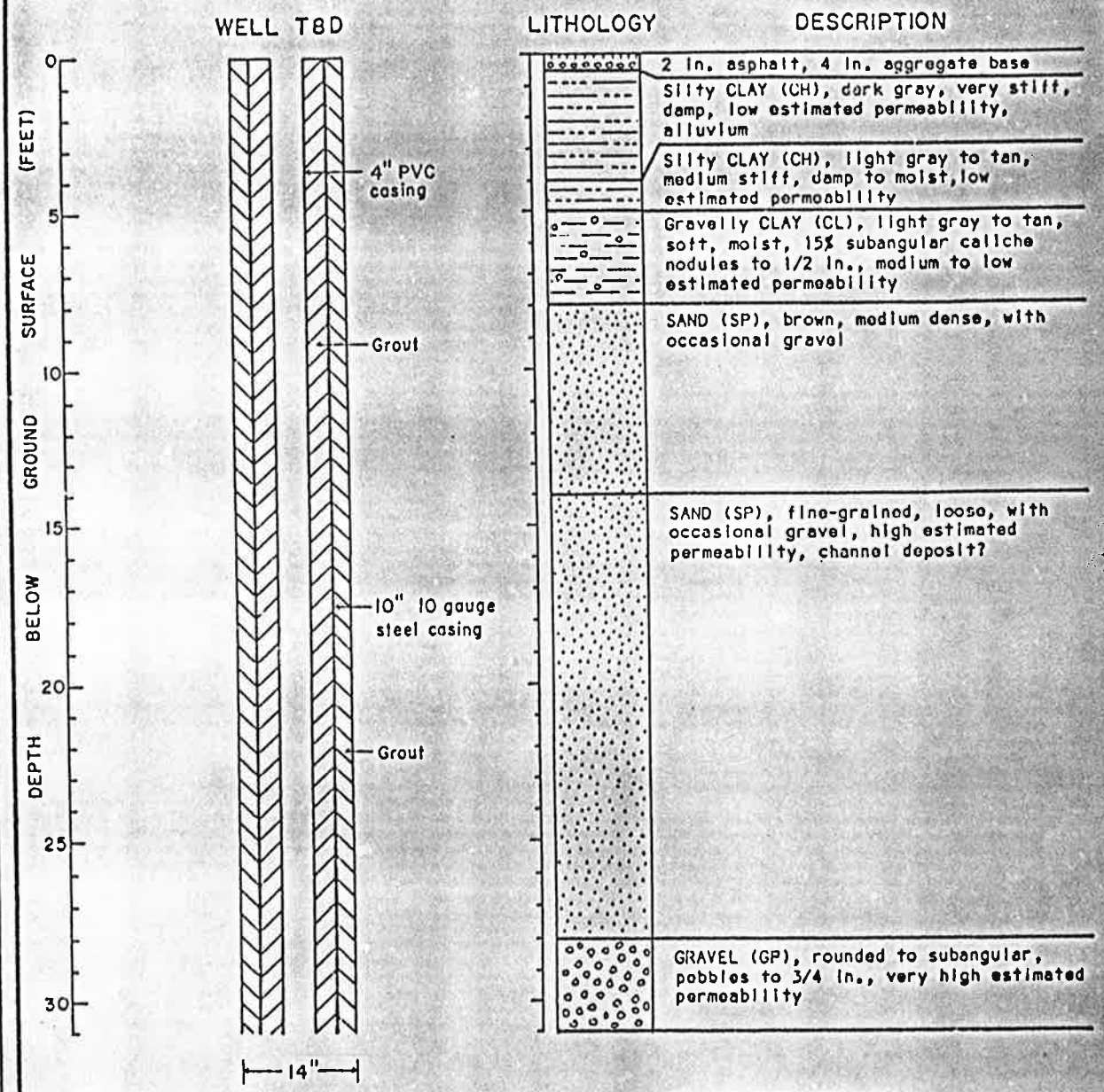


Figure 4 - Continued



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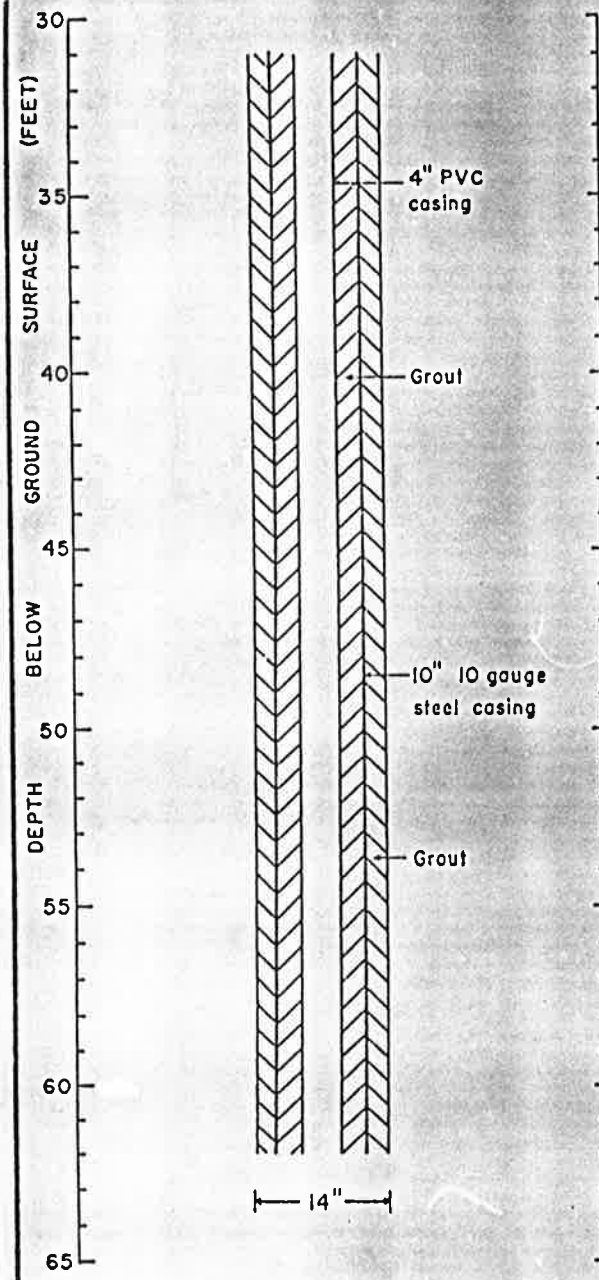
EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

Figure 2 Well Construction and Subsurface Lithology - Well T8D



LITHOLOGY	DESCRIPTION
	CONTINUED FROM PREVIOUS PAGE
	Sandy CLAY (CL), gray-green, stiff, 15% coarse sand, medium estimated permeability Decreasing sand
	Silty CLAY (CL), blue-green, stiff to very stiff, low estimated permeability, (Bay Mud?)
	Silty CLAY (CL), blue-green with brown mottling, stiff, 5% medium sand, low estimated permeability, (Bay Mud?)
	Sandy CLAY (CL), brown, stiff, 10% medium sand, medium to low estimated permeability
	Sandy CLAY (CL), orange-brown, stiff, 10 to 20% sand, medium estimated permeability
	SAND (SP), brown, medium-grained, loose, high estimated permeability
	GRAVEL (GP), brown, loose, high estimated permeability
	Silty CLAY (CH), blue-gray with brown mottling, stiff, 50% medium sand, very uniform, low estimated permeability
	Sandy CLAY (CL), tan to medium brown, stiff, 15% medium sand, medium estimated permeability
	Sandy CLAY (CL), tan to medium brown, increasing sand content and grain size with depth, caliche nodules to 1/2 in., medium estimated permeability
	CONTINUED ON NEXT PAGE

EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

Figure Continued

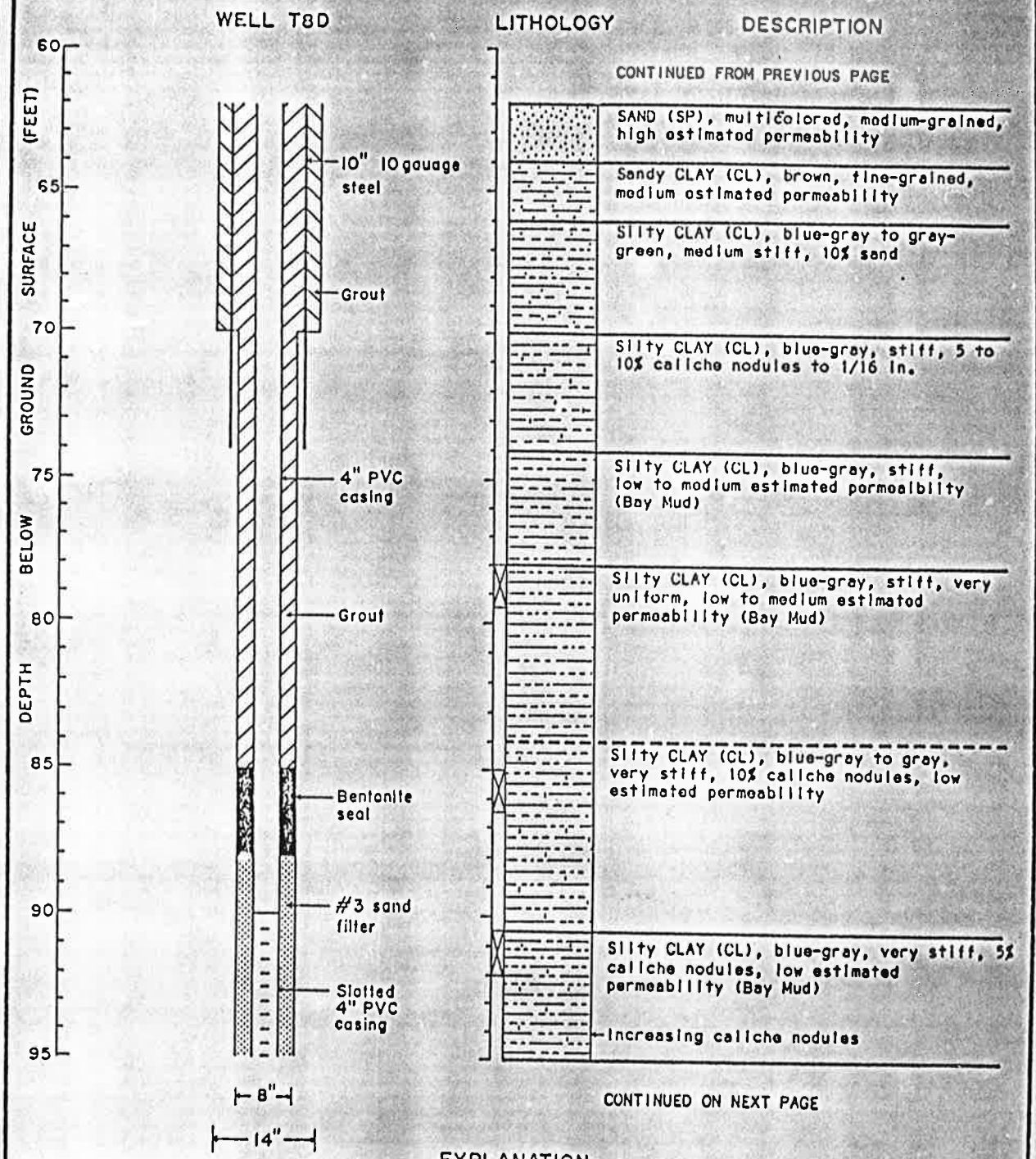
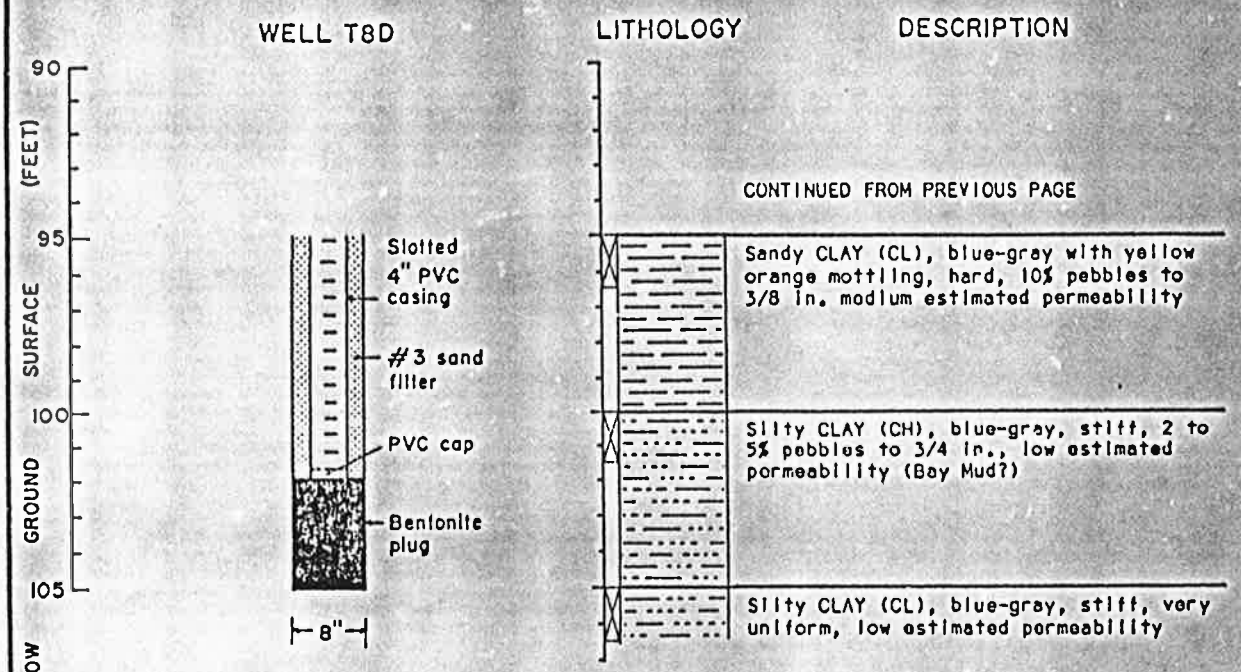


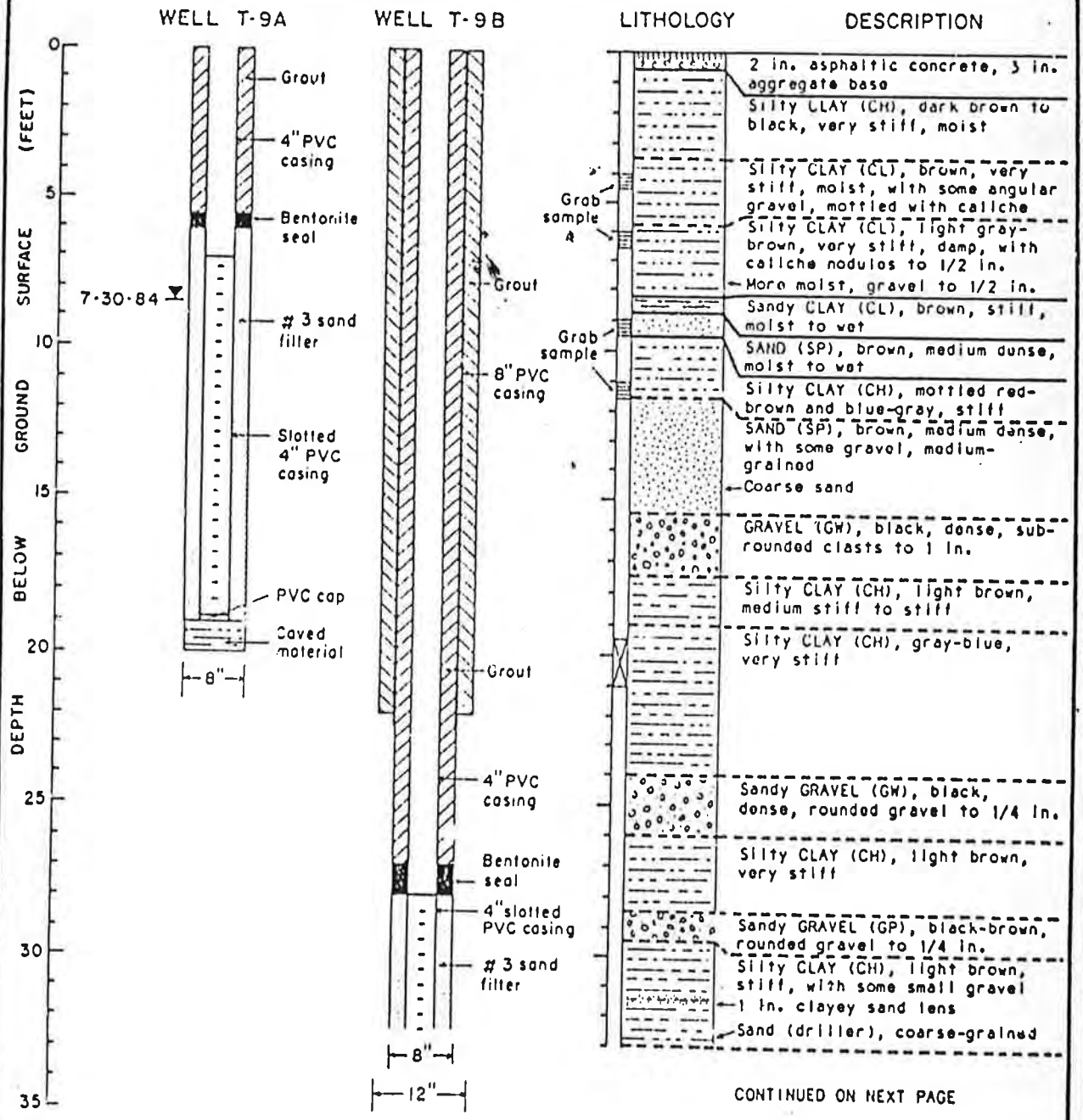
Figure 2 Continued



EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

Figure 2 Continued



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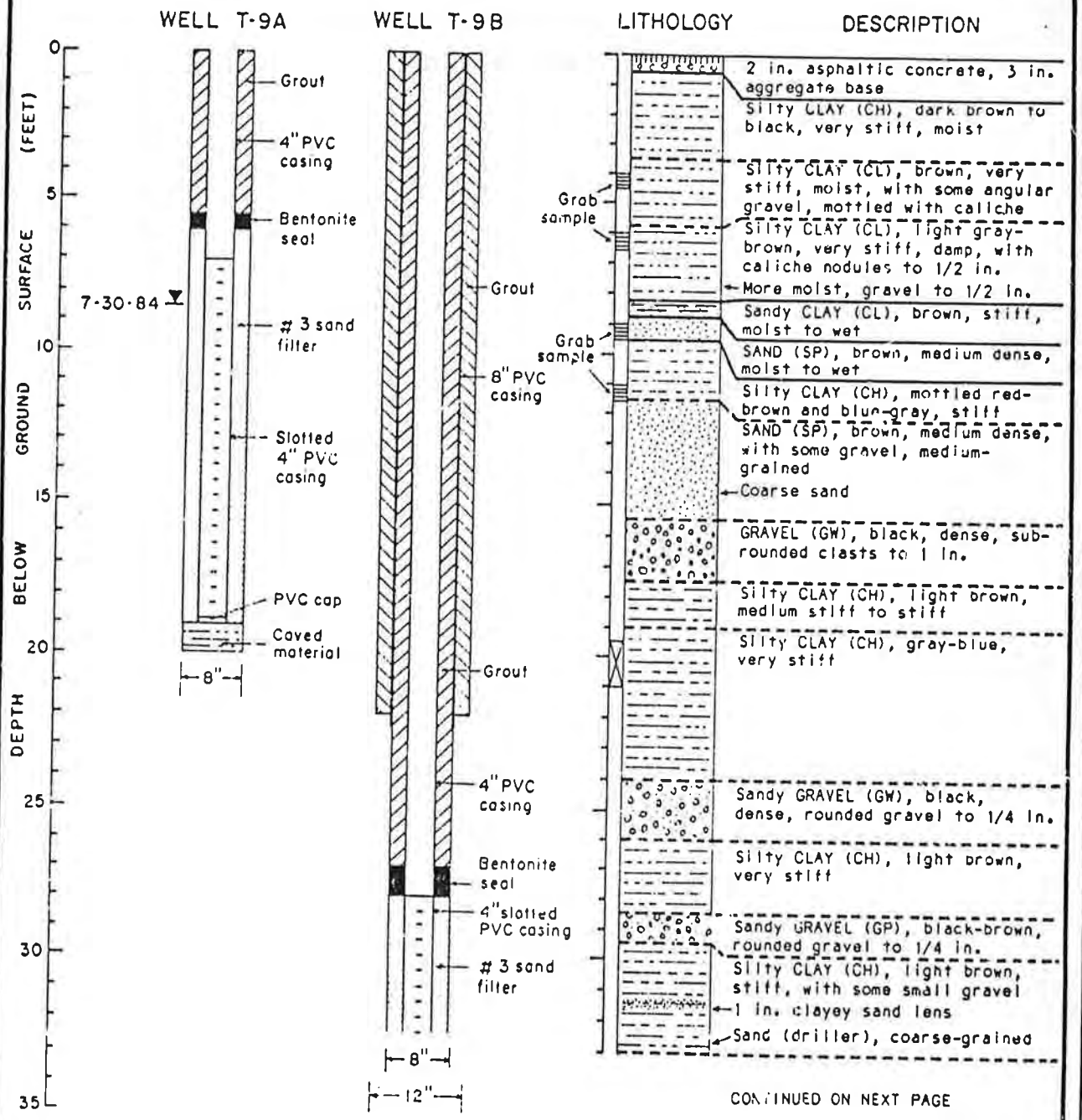
EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

Figure 5 - Well Construction Details and Subsurface Conditions - Wells T-9 and T-9A



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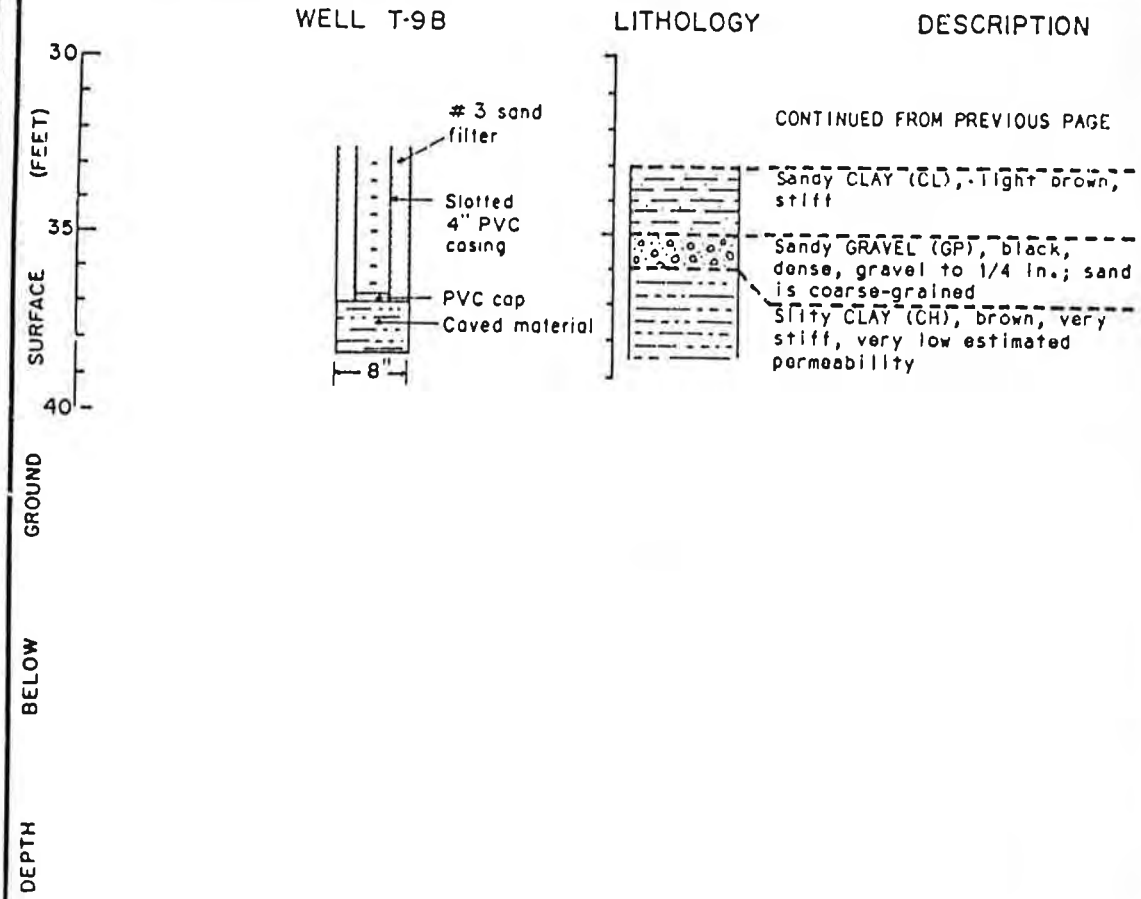
EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

Figure 5 – Well Construction Details and Subsurface Conditions – Wells T-9 and T-9A

6

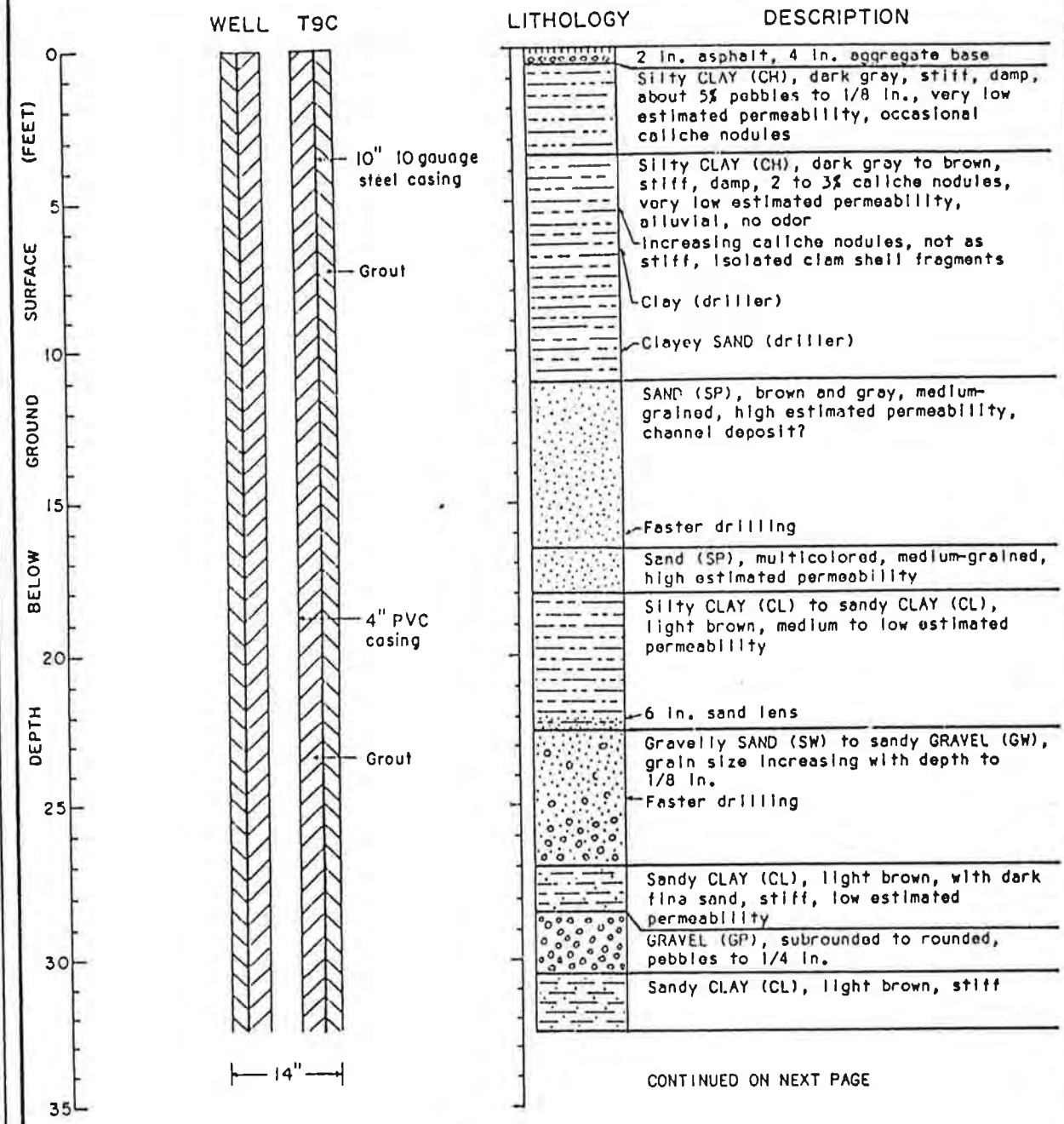


EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

Figure 5 - Continued

7



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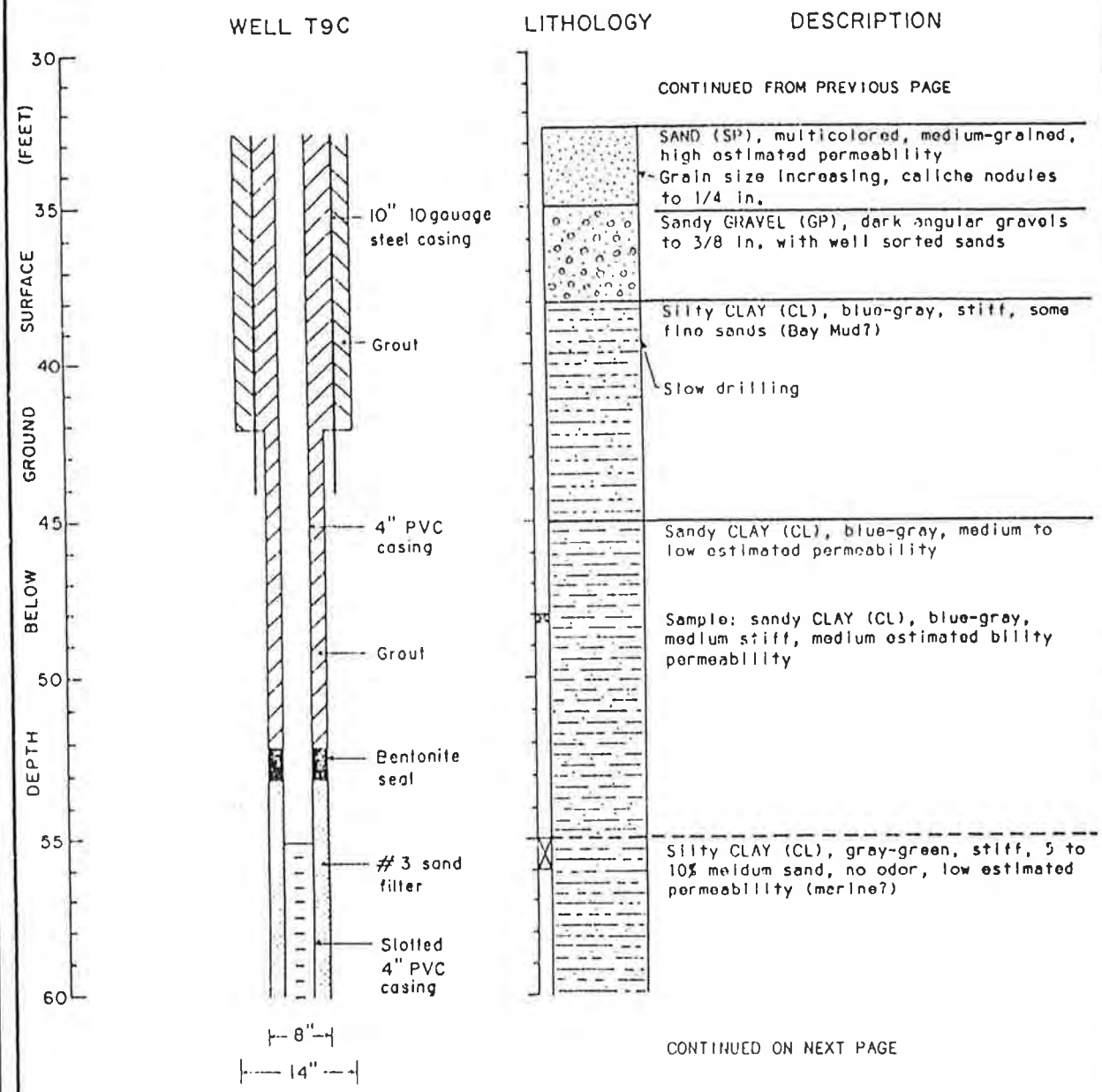
EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

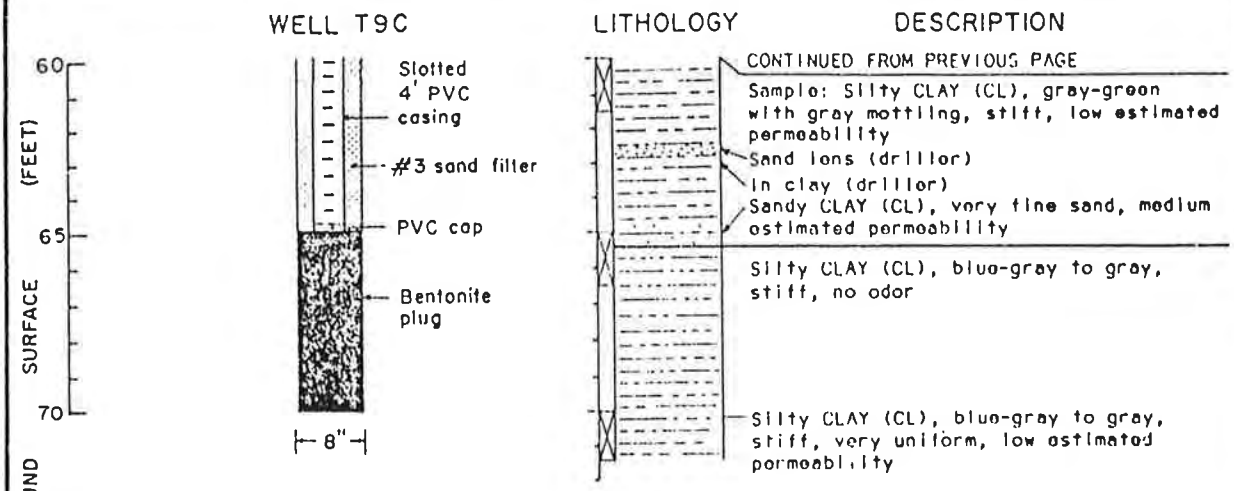
Figure 3 Well Construction and Subsurface Lithology - Well T9C



EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

Figure 3 Continued



EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube

Figure 3 Continued

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. T-10B

Date Work Began 10/6/00 Ended 10/6/00

Local Permit Agency SCVWD

Permit No. 00W00855 Permit Date 10-3-00

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 755585

DWR USE ONLY – DO NOT FILL IN
STATE WELL NO./STATION NO. 06S01W10HD84
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DRILLING METHOD GEOPROBE FLUID ___

HSA

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION (Describe material, grain size, color, etc.)
0	5	SILTY CLAY, VERY DARK BROWN (7.5YR 2/0), DAMP
5	11	~~SANDY SILT~~ SILTY SAND, STRING BROWN (7.5YR 5/6), FINE GRAINED, SOME GRAVEL, MOIST.
11	16	SANDY SILT, DARK BROWN (7.5YR 4/3), FINE SAND, MOIST. FROM 12-16' CORE STUCK IN CORE BARREL.
16	20	SAND, DARK BROWN (7.5YR 4/2) SATURATED, MEDIUM GRAINED, SOME GRAVEL, TRACE SILT.
20	24	NO RECOVERY
24	27.5	SILTY CLAY, DARK GRAY (7.5YR 4/0), DAMP, BECOMES FINE GRAINED SAND WITH DEPTH.
27.5	30	SANDY GRAVEL, DARK GRAYISH BROWN (10YR 4/2), WITH SILT, MOIST.
30	32.5	SILTY CLAY, DARK GRAY (7.5YR 4/1), DAMP
32.5	35	SILTY SAND, BROWN (7.5YR 5/4), FINE, MOIST

TOTAL DEPTH OF BORING 35 Feet

TOTAL DEPTH OF COMPLETED WELL 31 Feet

WELL OWNER

Name TRW INC.

Mailing Address 1900 RICHMOND ROAD

CLEVELAND (CITY) OH (STATE) 44124 (ZIP)

WELL LOCATION

Address 825 STEWART DR.

City SUNNYVALE, CA 94088

County SANTA CLARA

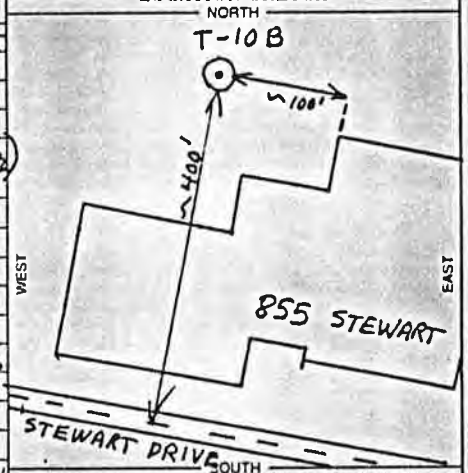
APN Book 205 Page 21 Parcel 008

Township ___ Range ___ Section ___

Latitude ___ DEG ___ MIN ___ SEC NORTH

Longitude ___ DEG. ___ MIN ___ SEC WEST

LOCATION SKETCH



Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

✓ NEW WELL

MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)

___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
___ Domestic ___ Public
___ Irrigation ___ Industrial

✓ MONITORING
___ TEST WELL
___ CATHODIC PROTECTION
___ HEAT EXCHANGE
___ DIRECT PUSH
___ INJECTION
___ VAPOR EXTRACTION
___ SPARGING
___ REMEDIATION
___ OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 7.3 (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 9.42 (Ft.) & DATE MEASURED ___

ESTIMATED YIELD * ___ (GPM) & TEST TYPE ___

TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)

** May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	26	8	X				PVC	2	SCHEDULE 40	
26	31	8		X			PVC	2	SCHEDULE 40	0.01

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE: CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	13	✓			
13	22			✓	CAVED HOLE
22	24		✓		
24	31				NO. 3 SAND

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___

ATTACH ADDITIONAL INFORMATION IF IT EXISTS

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Vironex Inc. · Camp Dresser & McKee
(PERSON, FIRM OR CORPORATION) (TYPED OR PRINTED)

23762 Foley St. Suite 7, Hayward, CA 94545
ADDRESS CITY STATE ZIP

Signed [signature]
WELL DRILLER/AUTHORIZED REPRESENTATIVE

3/13/01 DATE SIGNED

705427 C-57 LICENSE NUMBER

DWR 188 REV. 1-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

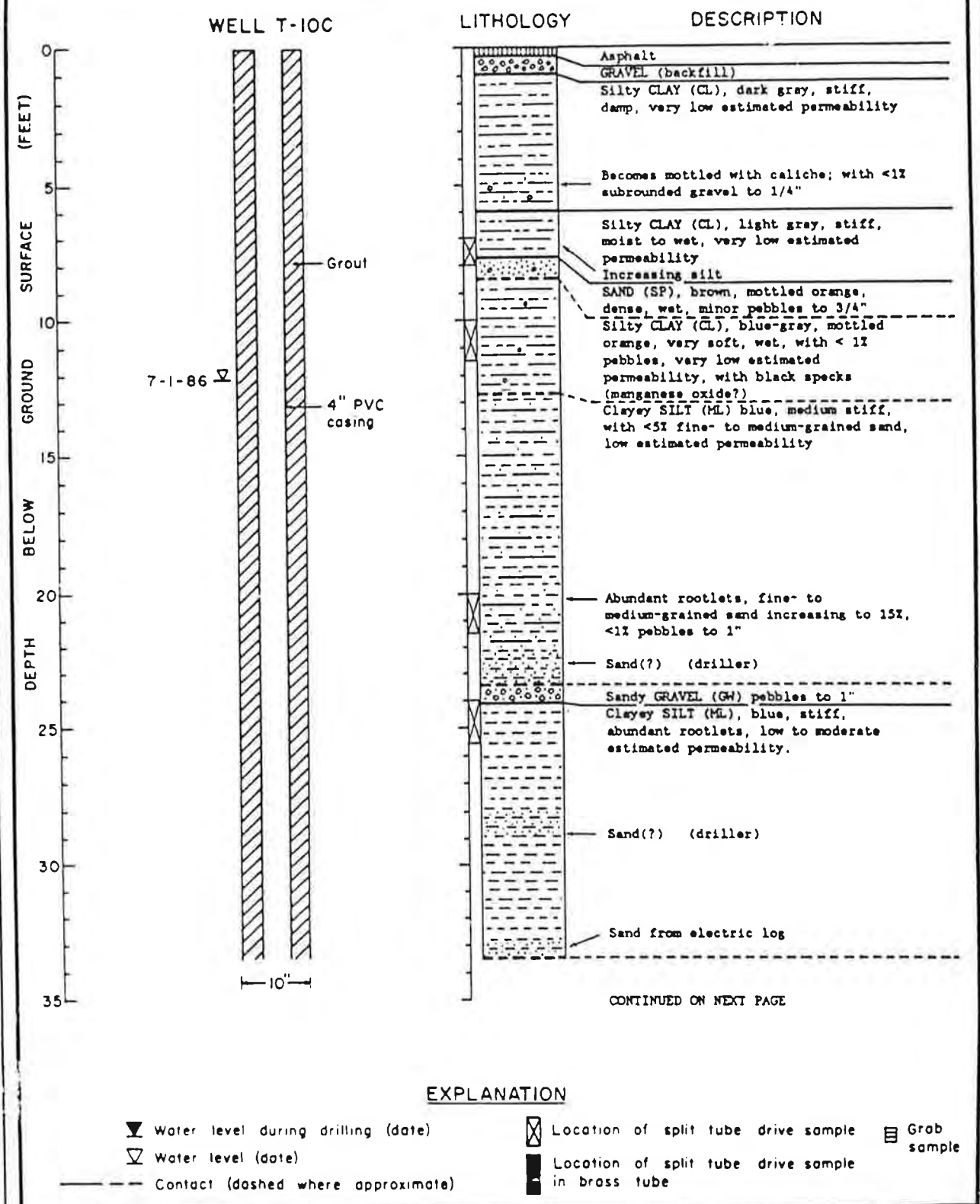


Figure 3. Well Construction Details and Subsurface Conditions - Well T-10C

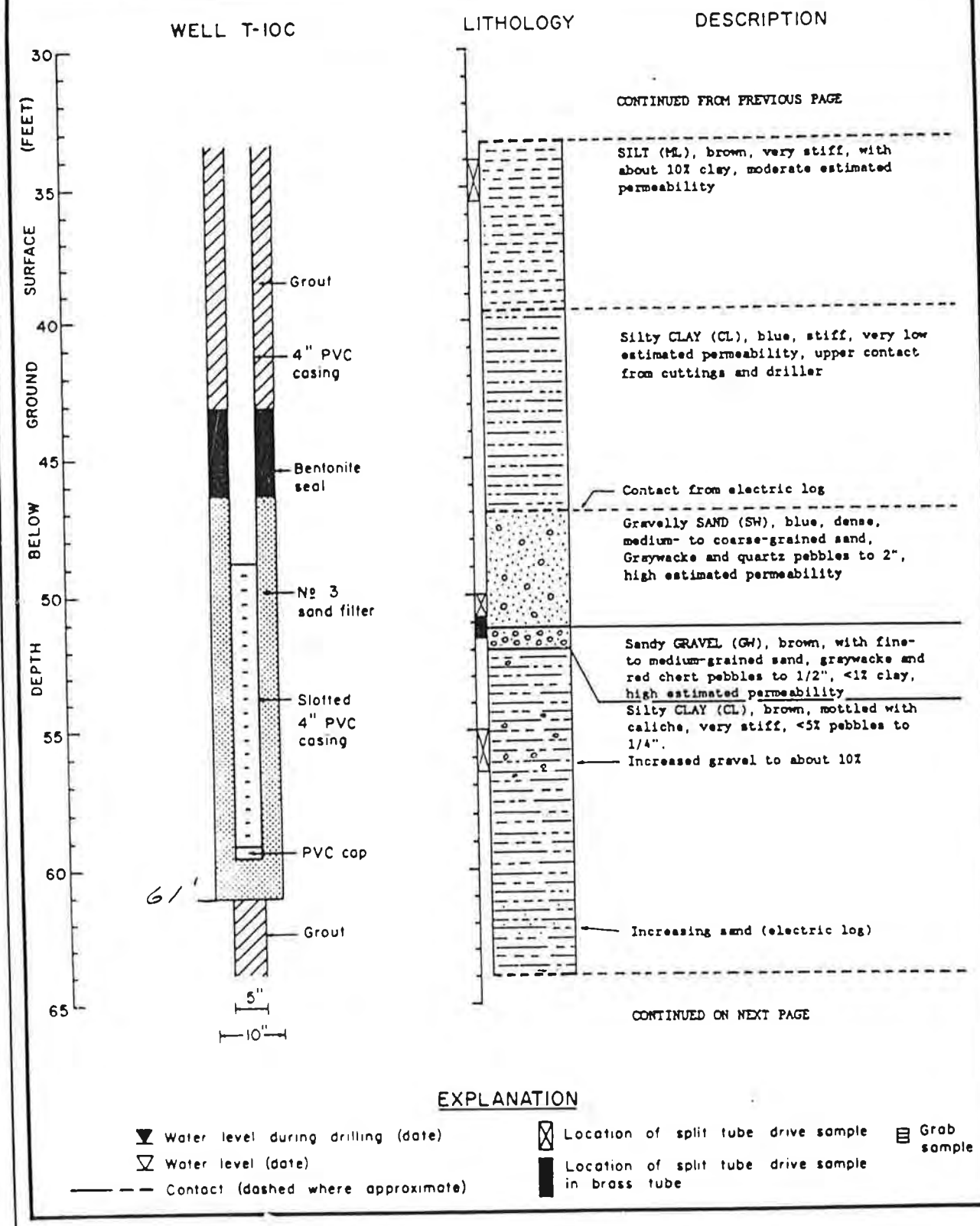
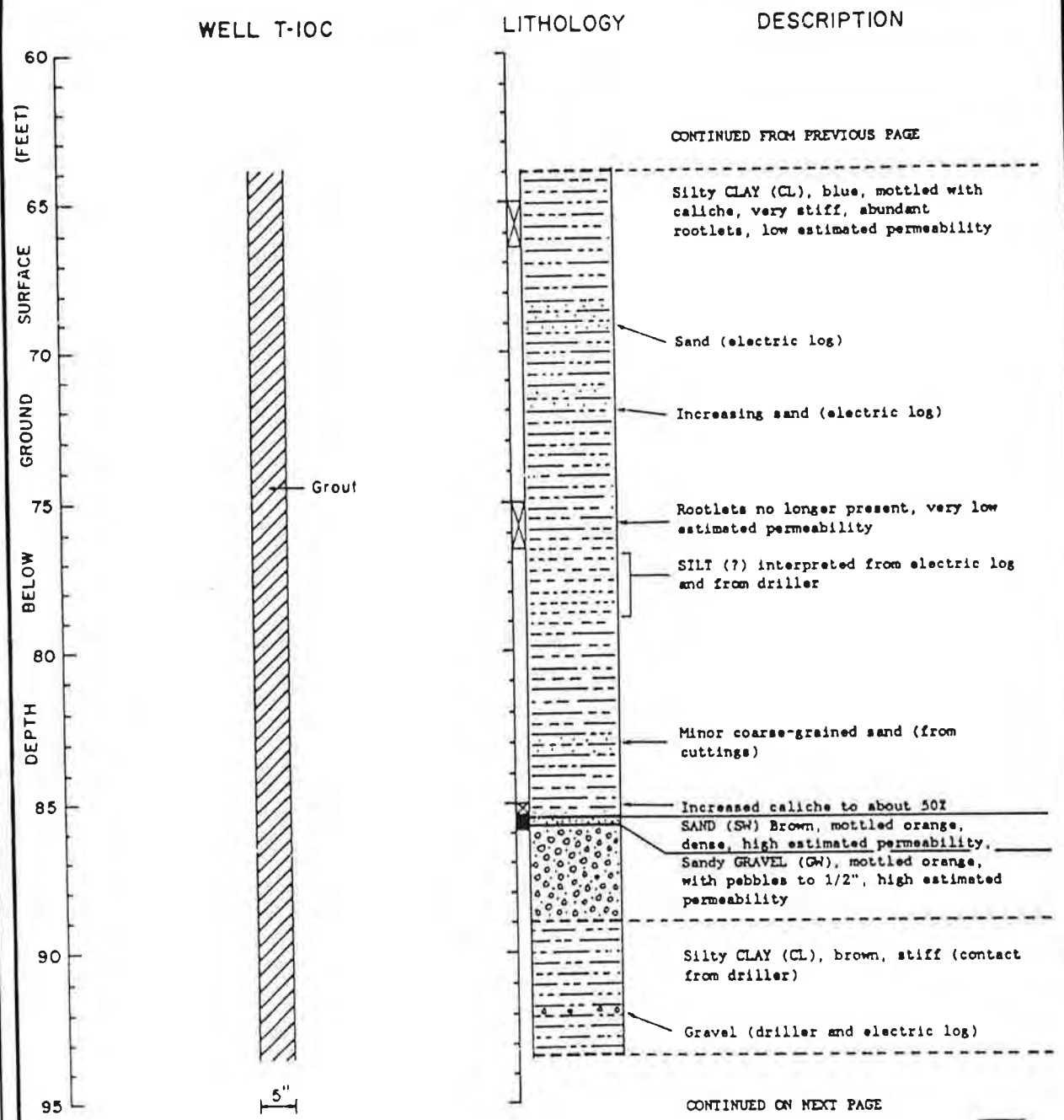


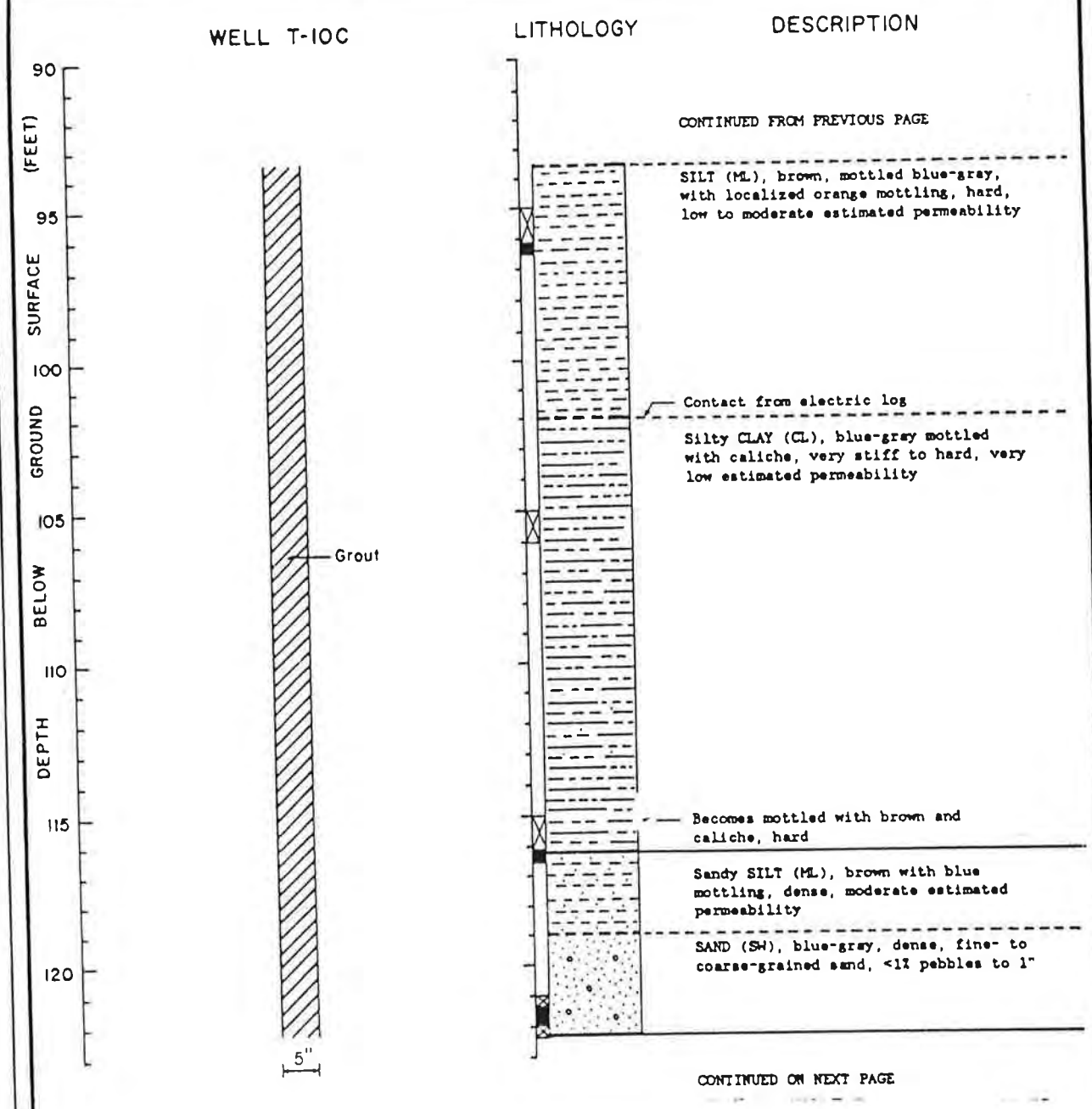
Figure 3. Well Construction Details and Subsurface Conditions - Well T-10C (continued)



EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube
- Grab sample

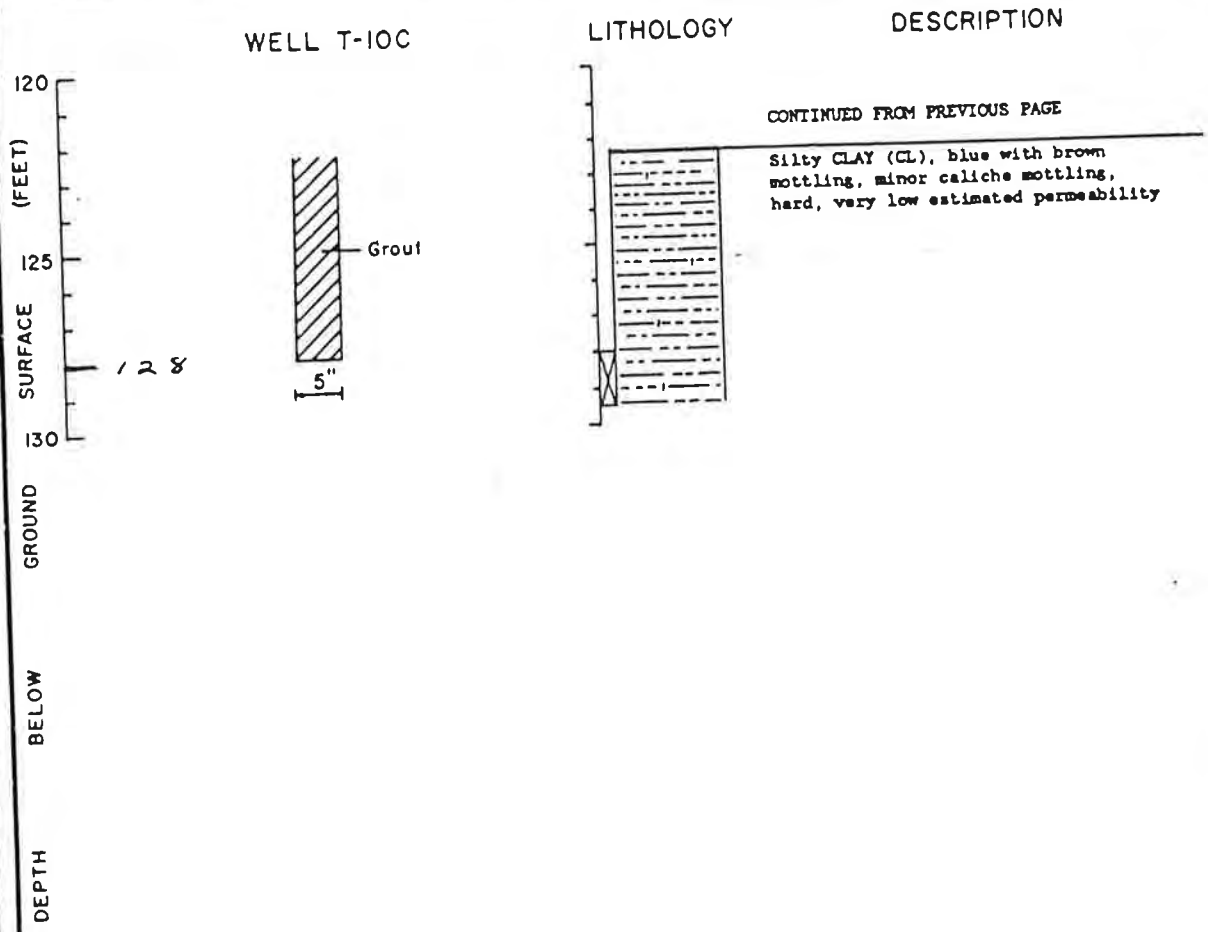
Figure 3. Well Construction Details and Subsurface Conditions - Well T-10C (continued)



EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube
- Grab sample

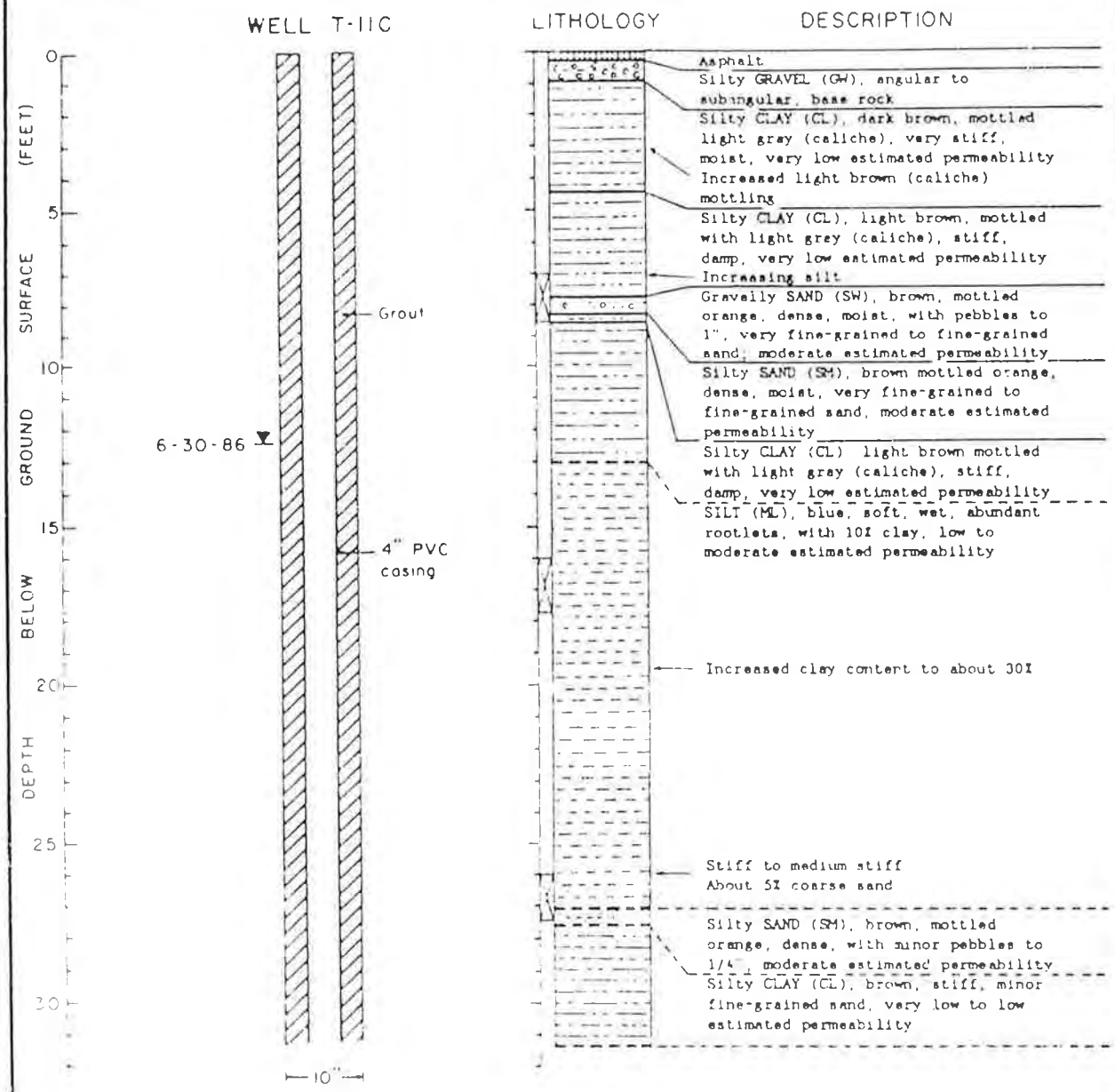
Figure 3. Well Construction Details and Subsurface Conditions - Well T-10C (continued)



EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube
- Grab sample

Figure 3. Well Construction Details and Subsurface Conditions - Well T-10C (continued)



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EXPLANATION

Water level during drilling (date)
Water level (date)
Contact (dashed where approximate)
Location of split tube drive sample
Location of split tube drive sample in brass tube
Grab sample

Figure [illegible] Well Construction Details and Subsurface Conditions Well T-11C

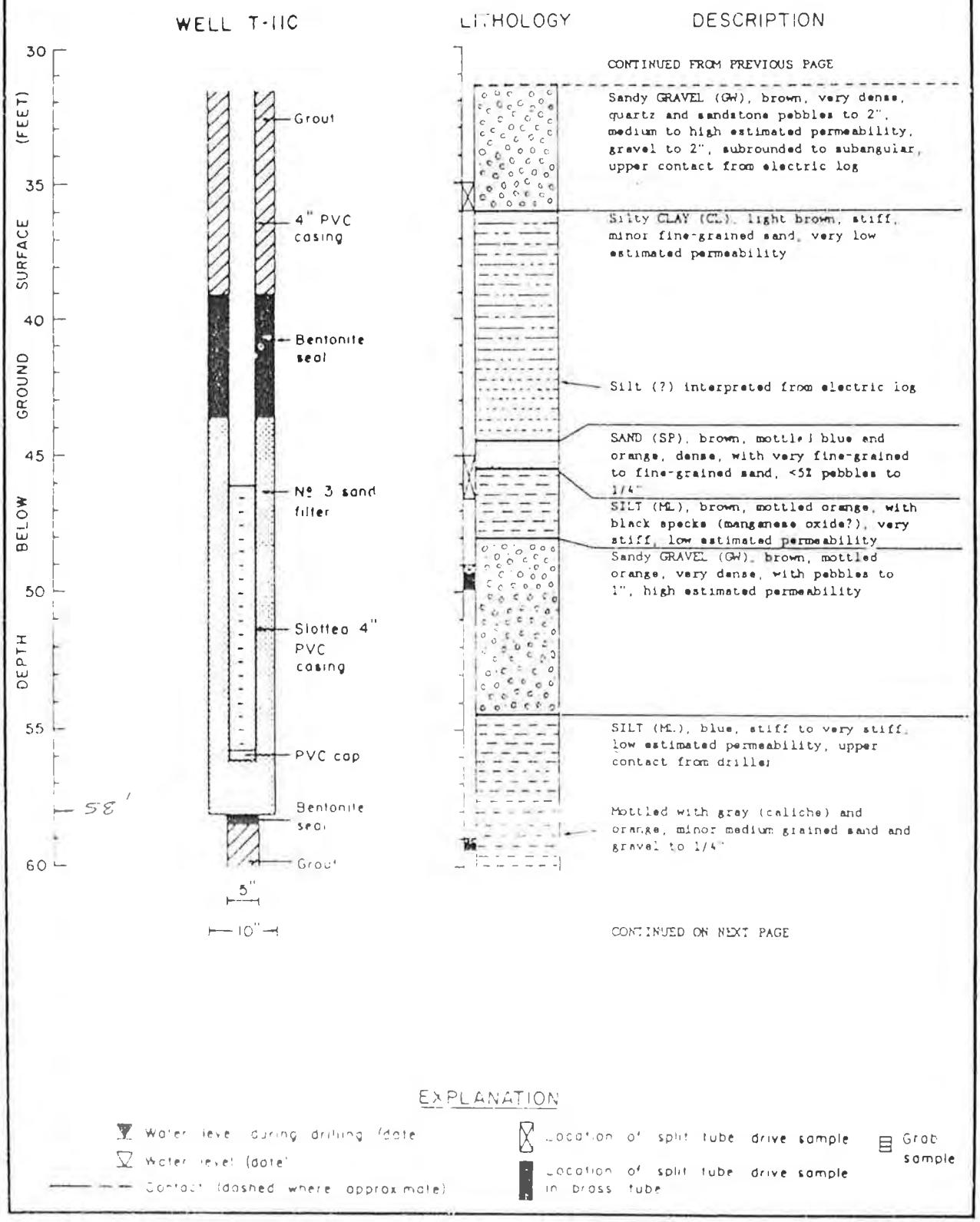
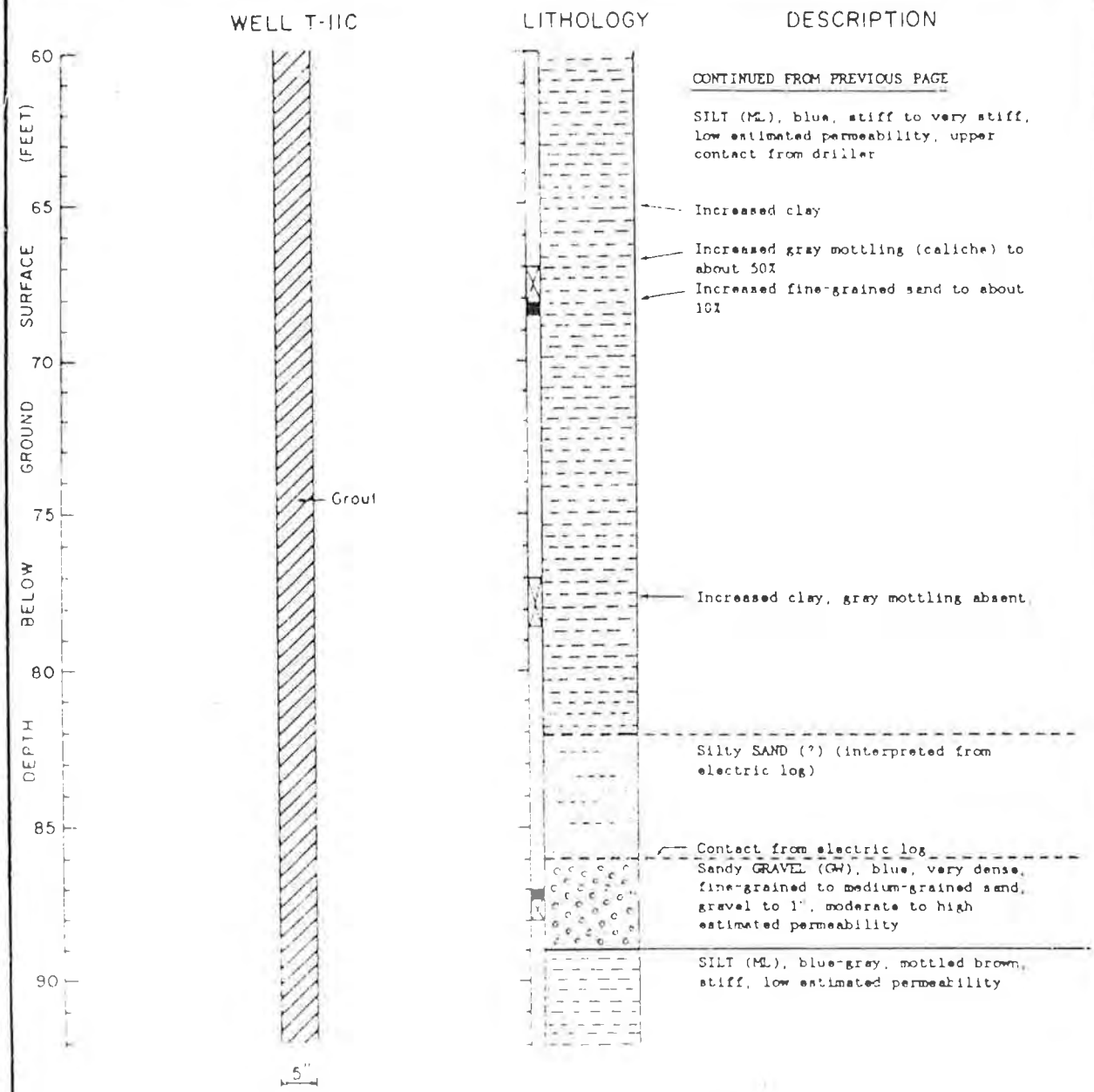


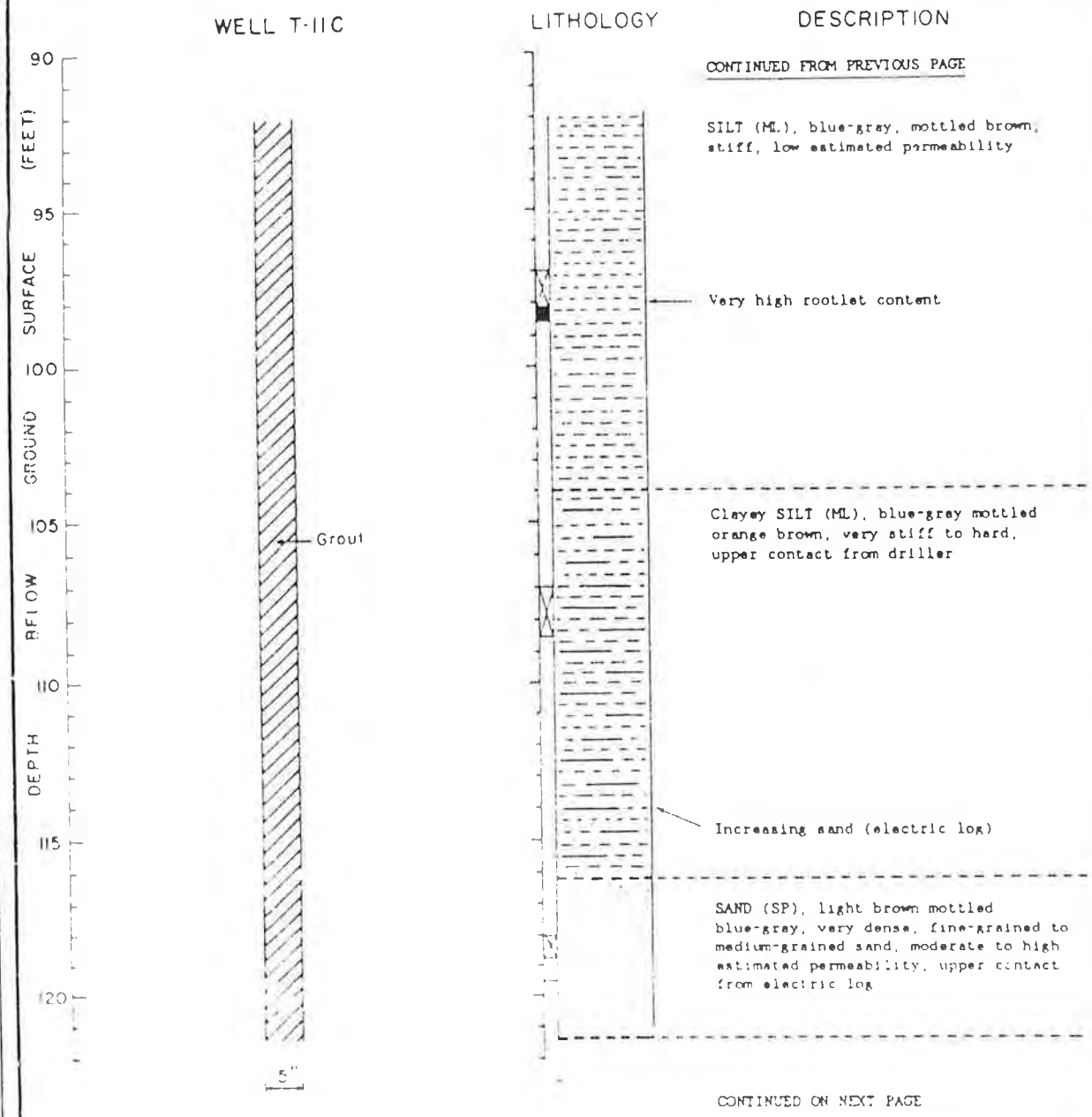
Figure 4. Well Construction Details and Subsurface Conditions - Well T-11C (continued)



EXPLANATION

Water level during drilling (date)
Water level (date)
Contact (dashed where approximate)
Location of split tube drive sample
Location of split tube drive sample in brass tube
Grab sample

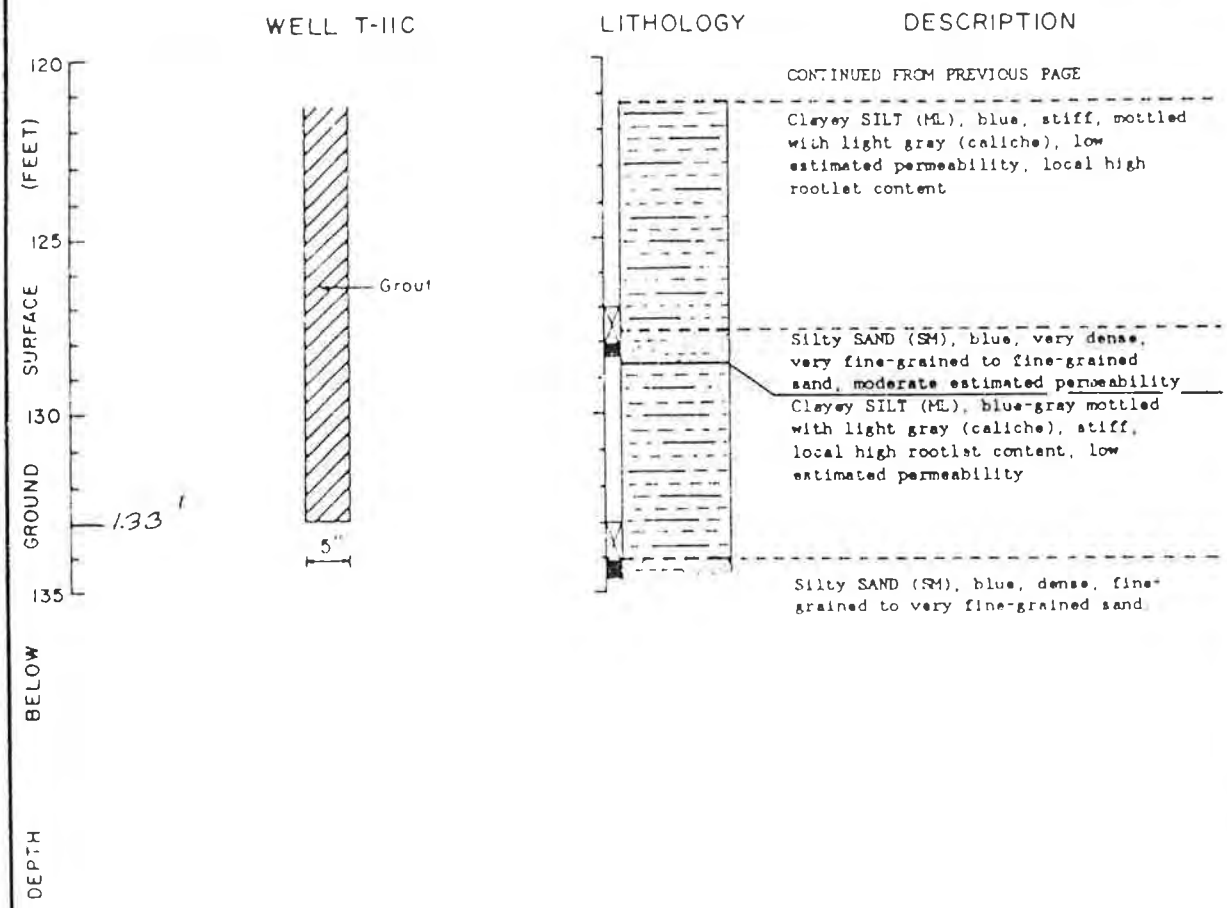
Figure [illegible] Well Construction Details and Subsurface Conditions - Well T-11C



EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube
- Grab sample

Figure [illegible] Well Construction Details and Subsurface Conditions - Well T-11C (continued)

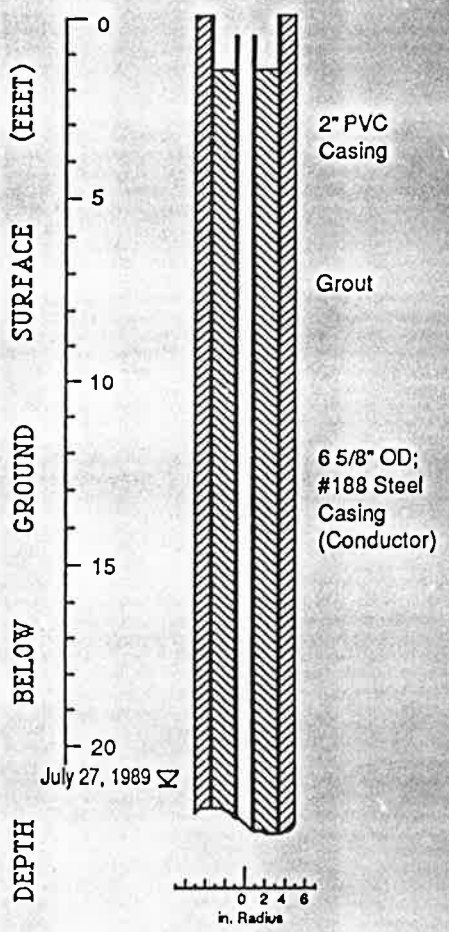


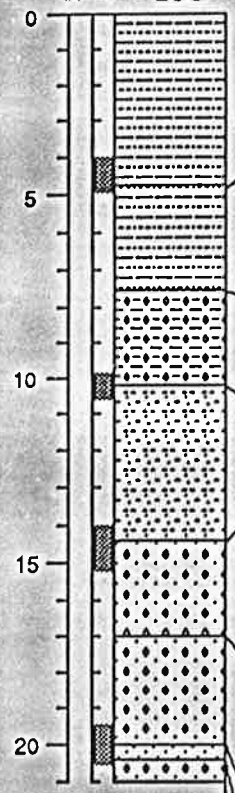
EXPLANATION

- Water level during drilling (date)
- Water level (date)
- Contact (dashed where approximate)
- Location of split tube drive sample
- Location of split tube drive sample in brass tube
- Grab sample

Figure 4 Well Construction Details and Subsurface Conditions Well T-11C continued

WELL T-12C





DESCRIPTION

Silty CLAY (CL); dark gray; medium stiff; 25-30% silt; <2% fine gravel to 1/8" diameter; very low est K

Medium gray mottled dark gray between 4.5' and 4.75'

Clayey SILT (ML); light gray; stiff; 15-20% clay; 5-10% fine sand; 2-5% fine gravel to 1/2" diameter; low est K

(Contact - driller - cuttings)

Clayey GRAVEL (GC); multicolored; loose; <10% clay; 60-70% fine gravel; 20-30% coarse gravel to 1" diameter; very high est K

Silty SAND (SM); brown; loose; 0-5% clay; 20-25% silt; very fine to medium sand; <2% fine gravel to 1/4" diameter; mod to high est K

Gravelly SAND (SW); blue-gray; loose; <5% clay; 5-10% silt; very fine to coarse sand; 20-30% fine gravel; 10-15% coarse gravel to 1" diameter; high est K

(Contact - driller - cuttings)

Sandy GRAVEL (GP); multicolored; medium dense; <5% fines; 5-10% medium to coarse subrounded sand; 10-20% fine subrounded gravel; 30-40% coarse subrounded gravel to 1 1/2" diameter; high est K

SAND (SW); brown; dense; <5% fines; very fine to coarse subangular sand; <2% fine subrounded gravel to 1/8" diameter; mod est K

Gravelly SAND (SW); brown; dense; <5% fines; very fine to very coarse sand; 30-40% fine subangular to subrounded gravel to 1/2" diameter; high est K

(Contact - driller - cuttings)

EXPLANATION

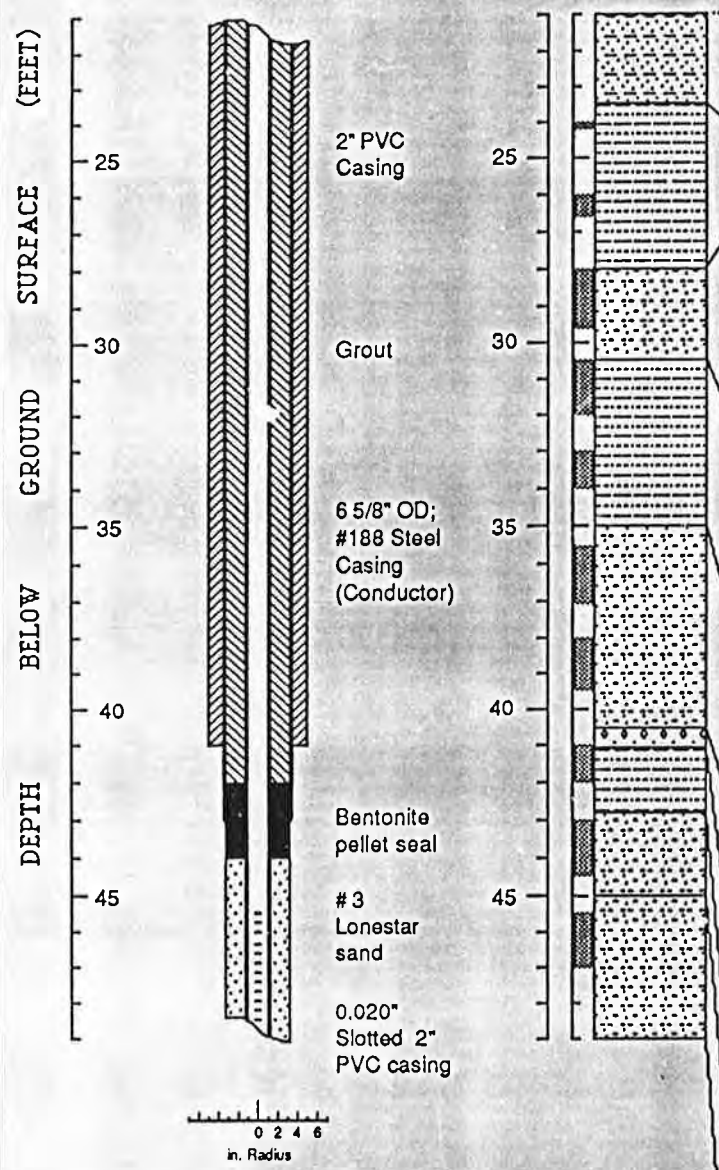
- Water level during drilling (date)
- Water level (date)
- Contact (dotted where approx.)
- Uncertain contact
- Gradational contact
- Location of recovered drive sample
- Location of drive sample sealed for chemical analysis
- Cutting sample
- K = Estimated permeability (hydraulic conductivity)

Logged by:	Jeanne Wahler
Supervisor:	Richard Weiss; EG 1112
Drilling Company:	Pitcher Drilling
Driller:	Jim Oliver
Drilling Method:	Mud rotary
Dates Drilled:	July 24 to July 26, 1989
Well Head Completion:	Locking stovepipe with traffic-rated vault
Type of sampler:	Split barrel (1.5", 2.0" ID)

Well Construction and Boring Log - Well T-12C

825 Stewart Drive
Sunnyvale, California

WELL T-12C (cont.)

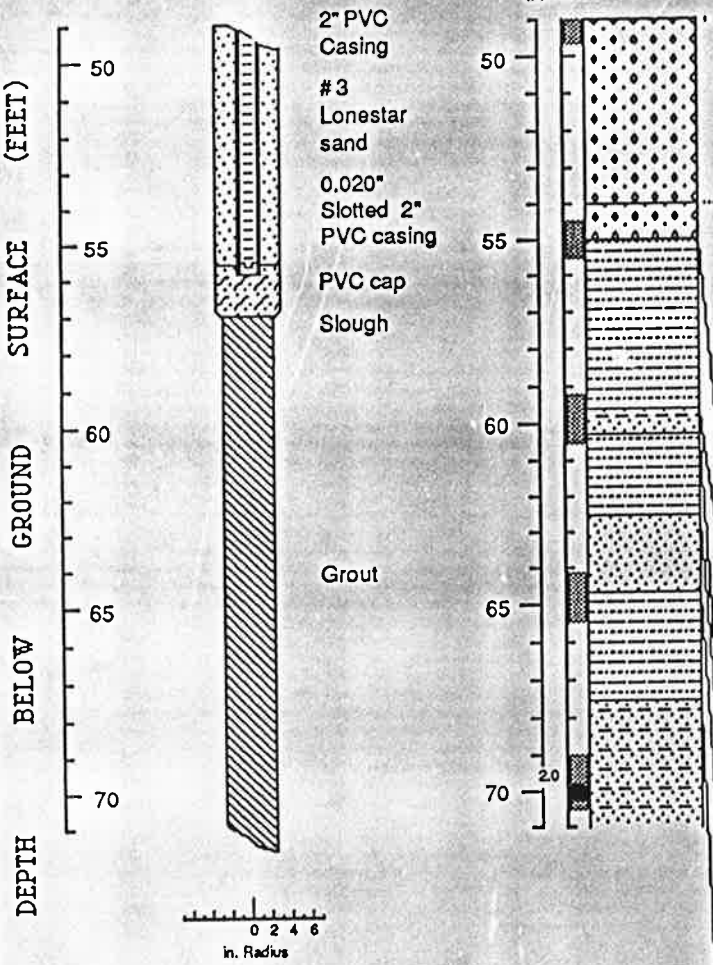


PID (ppmv)	GRAPHIC LOG	DESCRIPTION
		Clayey SAND (SC); light brown; 10-15% clay; 5-10% silt; very fine to fine sand; low est K (cuttings)
		(Contact - driller - cuttings)
		Silty CLAY (CL); blue-gray; soft to medium stiff; 20-30% silt; <5% very fine to fine sand; very low est K [Bay Mud]
		Silty SAND (SM); blue-gray; loose to medium dense; <5% clay; 20-30% silt; very fine to medium sand; mod est K
		No clay; 10-20% silt; very fine to very coarse sand below 29'
		Gravel below 29 1/2'
		Silty CLAY (CL); blue-gray; medium stiff to stiff; <5% coarse-grained material; 25-35% silt; root material; very low est K [Bay Mud]
		<2% coarse angular gravel to 1/2" diameter; no roots below 32'
		5% very fine to coarse sand below 33 1/2'
		Silty SAND (SM); brown mottled blue-gray; medium dense; <5% clay; 30-40% silt; very fine to medium sand; mod est K
		Fe02 staining between 38' and 38 1/2'
		Gravelly SAND layer 1-2" thick below 38 1/2'
		(Contact - driller - cuttings)
		Gravelly SAND (SW); brown; medium dense; <5% clay; 5-10% silt; very fine to very coarse sand; 30-40% fine subangular gravel to 1/4" diameter; high est K
		Silty CLAY (CL); brown mottled black; stiff; 30-40% silt; <5% very fine to fine sand; very low est K
		(Contact - driller - cuttings)
		Sandy SILT (ML); blue-gray; stiff; 5-10% clay; 20-30% very fine to fine sand; low est K
		Silty SAND (SM); blue-gray; medium dense; 5-10% clay; 20-30% silt; very fine to medium sand; <5% fine angular gravel to 1/8" diameter; mod est K

Well Construction and Boring Log - Well T-12C

825 Stewart Drive
Sunnyvale, California

WELL T-12C (cont.)



DESCRIPTION

Sandy GRAVEL (GP); blue-gray; dense to very dense; 5-10% clay; 10-15% silt; 20-30% very fine to very coarse sand; fine subangular to subrounded gravel to 1/2" diameter; high est K

(Contact - driller - cuttings)

Sandy GRAVEL (GP); mutlicolored; very dense; <5% fines; 10-20% medium to very coarse sand; 40-50% fine subangular to subrounded gravel; 30-40% coarse subrounded to rounded gravel to 1" diameter; very high est K

5-10% fines; 30-40% medium to very coarse sand; 40-50% fine subangular gravel; no coarse gravel below 54 3/4'

Clayey SILT (ML); very light gray; stiff to very stiff; 20-30% clay; 5-10% very fine to fine sand; <2% fine subangular gravel; low est K

Clayey SAND (SC); blue-gray mottled orange-brown; medium dense to dense; 10-15% clay; 30-40% silt; very fine to very coarse sand; <2% fine gravel to 1/8" diameter; low est K

Silty CLAY (CL); blue-gray mottled orange-brown; very stiff to hard; 30-40% silt 5-10% very fine to fine sand; very low est K

SAND (SP); blue-gray; dense; <5% fines; fine to very coarse sand; <2% fine gravel to 1/8" diameter; high est K; no odor

Silty CLAY (CL); blue-gray; very stiff; 20-30% silt; <5% very fine to fine sand; very low est K

Clayey SAND (SC); blue-gray; dense; 10-15% clay; 5-10% silt; very fine to medium coarse sand; low est K

15-20% clay below 70'

Well Construction and Boring Log - Well T-12C

825 Stewart Drive
Sunnyvale, California

Boring/Well No.: T-13A	Site/Location: TRW MICROWAVE		
Client: NORTHROP GRUMMAN CORP	Project No.: 23508.45325.E.E2		
Drill Contractor: VIRONEX	Drill Method: Geoprobe		
Date Started: 10/27/05	Date Ended: 10/27/05	Sampling Method: 2" MACROCORE	
On-Site Geologist: PEGGY BLOISA	RG who Reviewed Log:	Page 1 of 1	
Total Depth: 20 ft	Depth to Water: 6.9 ft BTOC	Date/Time of DTW Measurement: 10/28/05 1135	

Depth (feet)	Sample No.	Lab	Blows/Ft	PID FID (ppm)	REC (ft) LEC (%)	USCS	Lithology	Description	Well Construction Detail	Elevation (feet)
					~5/5	CL		0-4ft CLAY. black 10YR2/1. very stiff		
								4-5ft CLAY w/sand. soft. white 7.5YR8/1		
5					~2.2/5			@5ft SILTY CLAY. white 7.5YR8/1 @7.5ft color change to 2.5Y7/2, light gray. Nail at bottom of core barrel indicates probably binding on object thus reducing recovery		
								9.5-10 gravelly silty sand, lt yellowish brown 2.5Y6/3		
10						SM				
					~1.2/5	CL		10-14 SILTY CLAY lt yellowish brown 2.5Y6/4 WET		
								14-15 GRAVELLY SAND w/ clay		
15					~3.4/5	SW		15-20 GRAVELLY SAND w/ trace of clay color varies from lt olive brown 2.5Y5/3 to dk gray 2.5Y4/1, poorly sorted, loose, wet. gravels to 3/4" ϕ		
20								@ 20ft Driller: "didn't have to push - in soft clayey sand - gray 5Y6/1 well sorted fine grained	1" ϕ PVC prepacked screen, bentonite seal 1" ϕ PVC blank casing screen 10-20 sand 10-20 bentonite 9-10 cement 0-9	
25										
30										
35										

REC = Recovery
LEC = BTOC of bottom of sampling location

BORING LOG AND SAMPLING RECORD

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Boring/Well No.: T-14A	Site/Location: TRW MICROWAVE		
Client: NORTHRUP GRUMMAN CORP.		Project No.: 23508.45315.I.I2	
Drill Contractor: VIRONEX		Drill Method: GEOPROBE	
Date Started: 10/27/05	Date Ended: 10/27/05	Sampling Method: 2" MICROCORE	
On-Site Geologist: PEGGY BROSA	RG who Reviewed Log:	Page 1 of 1	
Total Depth: 20 FT	Depth to Water: 6.3 ft BTOC	Date/Time of DTW Measurement: 10/28/05 ~1130	

Depth (feet)	Sample No.	Lab	Blows/Ft	PID FID (ppm)	REC (ft) LEX (x)	USCS	Lithology	Description	Well Construction Detail	Elevation (feet)
					~3.5/5	CL		2.8-5ft CLAY, hard, stiff 10YR3/1 v. dk. gray in shoe CLAY, hard, stiff 7.5YR8/1 white		
5					~5/5			5-8.4ft CLAY, soft w/SILT, 7.5YR8/1 white 8.4-8.9 as above w/sand 8.9-9.1 as above w/gravel 9.1-10 GRAVELLY SAND 5GY4/1 dk gray w/clay. Poorly sorted, angular		
10					~5/5	SW		10-10.7 silt WET 10.7-11.5 SAND, p. sorted mod to csgr, dk gray 10YR4/1 11.5-13 CLAY. soft, lt olive gray 5Y6/2 13-13.7 CLAY. hard Dk olive 5Y6/4 13.7-15 GRAVELLY SAND. mod to poorly sorted 5Y4/1 dk gray		
15					~5/5	CL SW		GRAVELLY SAND. Poorly sorted. olive gray 5Y4/2 WET @ 18ft ~2in stringer of coarse sand black 5Y2.5/1		
20									1" ϕ PVC pre packed screen w/ bentonite seal 1" ϕ PVC blank casing screen 10-20 sand 0-20 bentonite 8-10 cement 0-8	
25										
30										
35										

[illegible] BTOC -- [illegible]

BORING LOG AND SAMPLING RECORD

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Boring/Well No.: T-15A	Site/Location: TRW MICROWAVE
Client: NORTHROP GRUMMAN CORP	Project No.: 23508.45375.I.I2
Drill Contractor: VIRONEX	Drill Method: GEOPROBE
Date Started: 10/27/05	Date Ended: 10/27/05
Sampling Method: 2" MACRO CORE	
On-Site Geologist: P BLOISA	RG who Reviewed Log:
Page 1 of 1	
Total Depth: 20 FT	Depth to Water: 6.67 FT BTOC
Date/Time of DTW Measurement: 10/28/05 ~1140	

Depth (feet)	Sample No.	Lab	Blows/Ft	PID FID (ppm)	REC (ft) LEK (x)	USCS	Lithology	Description	Well Construction Detail	Elevation (feet)
					5/5	CL		0-4.4 CLAY black, hard 10YR2/1		
								4.4-5 CLAY lt gray 10YR7/2		
5								5-5.3 silt		
					5/5			5.3-8 CLAY lt gray 10YR7/2		
								8-9.4 CLAYEY SAND grayish brown 2.5Y5/2		
								9.4-9.6 GRAVELLY SAND dk grayish brown 2.5Y4/2		
10						SW		9.6-10 SANDY CLAY lt olive brown 2.5Y5/3		
					4/5	CL		11-15 SANDY CLAY olive gray 5Y5/2		
15								15-15.7 NR		
					4.3/5	SW		15.7-17 SANDY CLAY dk gray 5Y4/1		
								17-20 SAND w/ gravel v. dk gray 2.5Y 2/1		
20									1" PVC prepacked screen & bentonite seal 1" ϕ PVC blank casing screen 10-20 sand 10-20 bentonite 8-10 cement 0-8	
25										
30										
35										

REC = recovery
A PID = [illegible] by A casing

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BORING LOG AND SAMPLING RECORD

Boring/Well No.: T-16A	Site/Location: TRW MICROWAVE		
Client: NORTHRUP GRUMMAN CORP.		Project No.: 23508.45375.I.I2	
Drill Contractor: HYDROTEX		Drill Method: GEOPROBE	
Date Started: 10/27/05	Date Ended: 10/27/05	Sampling Method: 2" MACROCORE	
On-Site Geologist: P BLOISA	RG who Reviewed Log:	Page 1 of 1	
Total Depth: 20 FT	Depth to Water: 6.72 FT BTOC	Date/Time of DTW Measurement: 10/28/05 ~1145	

Depth (feet)	Sample No.	Lab	Blows/Ft	PID FID (ppm)	REC (ft) ~~LEL~~ (%)	USCS	Lithology	Description	Well Construction Detail	Elevation (feet)
					5/5	CL		0-0.3 fill 0.3-5 CLAY, black, hard 2.5Y2.5/1		
5					5/5			5-5.5 as above 5.5-8.2 CLAY, lt brownish gray 2.5Y6/2, hard 8.2-10 SANDY CLAY w/gravel, lt olive brown 2.5Y5/3		
10					~4.5/5			10.5-13.8 SANDY CLAY greyish brown 2.5Y5/2 13.8-14.3 SAND c.g. 14.3-14.6 GRAVELLY SAND 14.6-15 SAND, BLACK		
15					5/5	SW		15-18.6 SAND w/gravel to 1" ϕ, poorly sorted 18.6-19.3 color change to black 19.3-20 AS AT 15-18.6		
20									1" PVC Impacked screen & bentonite seal 1" ϕ PVC blank casing screen 10-20 sand 10-20 bentonite 8-10 cement 0-8	
25										
30										
35										

REC = recovered
LBTOC = Lt below top of casing

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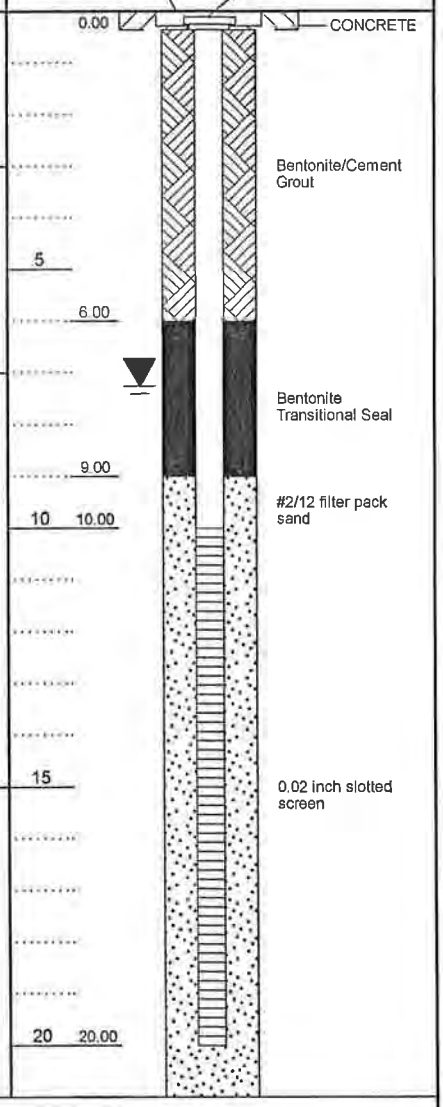
BORING LOG AND SAMPLING RECORD

AECOM	Client: Northrop Grumman Systems Corporation	Boring No. T-17A
AECOM 10461 Old Placerville Road Sacramento, CA 95827 (916) 361-6400 www.aecom.com	Project Number: 60238860.B5	
	Site Description/Location: 825 Stewart Drive, Sunnyvale, CA	Project Manager: R Mora
	Coordinates: Not Surveyed Elevation: Datum:	Sheet: 1 of 1
	Drilling Equipment/Method: D&R HB7Y85/GP7700/GeoProbe/HSA	Well Installed: Yes
	Sample Type(s): Acetate Sleeve/soil cuttings Boring Diameter: 8 IN.	Screened Interval: 10 - 20 feet bgs
Approved By: M Capps	Logged By: C Drabandt Date/Time Started: 11-12-12	Depth of Boring: 21 ft bgs
Drilling Contractor: National Drilling / G Becker	Backfill: Bentonite/cement Date/Time Finished: 11-13-12	Water Level: 7.5 ft btoc

Depth (ft)	Sample ID/Time	Sample Depth (ft)	Recovery (ft)	Blow Counts	PID Reading (ppm)	USCS	Graphic Log	Soil Boundary (ft bgs)	Visual Description Soil Type (USCS Class) - [gr%,sd%,st%,cl%]
					0.0	CL		3.0	LEAN CLAY (CL) - [0,0,10,90] black (10YR 2/1); dry; stiff; low plasticity; roots.
5					0.0	CL		7.0	LEAN CLAY WITH SAND (CL) - [0,20,30,50] black (10YR 2/1); dry; stiff; low plasticity; subangular-subrounded, well-graded fine to medium sand
			5		0.0				SANDY LEAN CLAY (CL) - [0,30,10,60] olive gray (5Y 4/2); moist; firm; low plasticity; angular-rounded, well-graded fine to coarse sand.
10									
			5		0.0	CL			@ 13 feet bgs wet.
15								15.0	
			6		0.0	SC			CLAYEY SAND (SC) - [0,60,10,30] olive (5Y 5/3); wet; loose; non-plastic; angular-rounded, well-graded fine to coarse sand; saturated.
20					0.0			21.0	

Well Diagram



Geologist terminated boring due to target depth achieved.

Notes: Borehole details for T-17A was logged from soil cuttings from the hollow-stem auger. Depths are approximate.

Hand Auger Auger Cuttings

Boring/Well No.: T-17B	Site/Location: TRW MICROWAVE
Client: NORTHROP GRUMMAN CORP.	Project No.: 23508.45375.I.I2
Drill Contractor: VIRONEX	Drill Method: GEOPROBE
Date Started: 10/28/05	Date Ended: 11/2/05
Sampling Method: 2" MACROCORE	
On-Site Geologist: PELAY SLOSA	RG who Reviewed Log:
Page 1 of 1	
Total Depth: 35 FT	Depth to Water: ATTEMPTED*
Date/Time of DTW Measurement: 10/28/05 ~1220	

Depth (feet)	Sample No.	Lab	Blows/Ft	PID FID (ppm)	REC (ft) DEL (%)	USCS	Lithology	Description	Well Construction Detail	Elevation (feet)
					5/5		CL	0-5ft CLAY, black, hard stiff, 2.5Y2.5/1		
								color change ltgrey 2.5Y7/2 softer		
5					4/5			5-10ft CLAY w/ SAND ltolive grey 5Y6/2 soft		
							SW	gravelly sand, olive 5Y4/3		
10					5/5			10-11 GRAVELLY SAND olive 5Y4/3		cement
							CL	11-14.5 CLAY 5Y4/2 olive gray, soft		
								14.5-15 CLAY 5BG4/1 dk grnish gray		
15					4/5			15-20 CLAY 5BG4/1 dk grnish gray		
20					2/5			20-25 CLAY 5BG4/1 dk greenish gray		bentonite
25					3.4/5			25-30 CLAY 5BG4/1 dk greenish gray		25 screen
30					5/5		SP	30-31 SAND w/ 5BG4/1 dk greenish grey, v f gr		
							CL	31-33.5 CLAY 5BG4/1 dk greenish gray		
								33.5-35 SANDY CLAY gradual color change to 5Y5/3 olive		
35										35

* [illegible] borehole drilled, [illegible] could not [illegible] water level [illegible] to [illegible] original [illegible] abandoned on 11/2/05 [illegible] borehole [illegible] - well [illegible] or [illegible]

1" Ø PVC
pre-packed screen
- bentonite seal
Ø PVC blank casing

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Boring/ Well No.: T-18A	Site/Location: FORMER TRW MICROWAVE		
Client: NORTHROP GRUMMAN	Project No.: 23508-45375-H-H9		Page 1 of 1
Drill Contractor: VIRONEX	Drill Method: GEOPROBE		Elevation:
Date Started: 8/29/07	Sampling Method: DIRECT PUSH		
Date Ended: 8/29/07	Total Depth: 22 feet	Remarks: 0-5 ft 6-inch core	
On-site Geologist: VM	Depth to Water:	5-22 ft 3.25-inch core	

Depth (feet)	Blows	Sample Name RECOVERY	Sample Time	PID FID (ppm)	USCS	Description	Well Construction Detail
		4/5			CL	0 to 5 ft clay, black, very stiff	
5		4/5				5 to 9 ft clay with sand some gravel, white, soft	
10					SW	9 to 12 ft gravelly sand yellowish brown, loose, wet	
		5/5			CL	12 to 15 ft silty clay with some sand, brown yellow 10YR/6/8	
15		4/5			SW	15 to 18 ft gravelly sand dark grey, loose, wet lot of water 18 to 21 ft gravelly sand yellowish brown, loose, wet	
20		1/2					
5							1-inch PVC Pre-Packed Screen & bentonite 1-inch PVC blank casing Screen: 12 to 22 Sand bentonite: 5 to 12 Cement grout: 0 to 5 ft

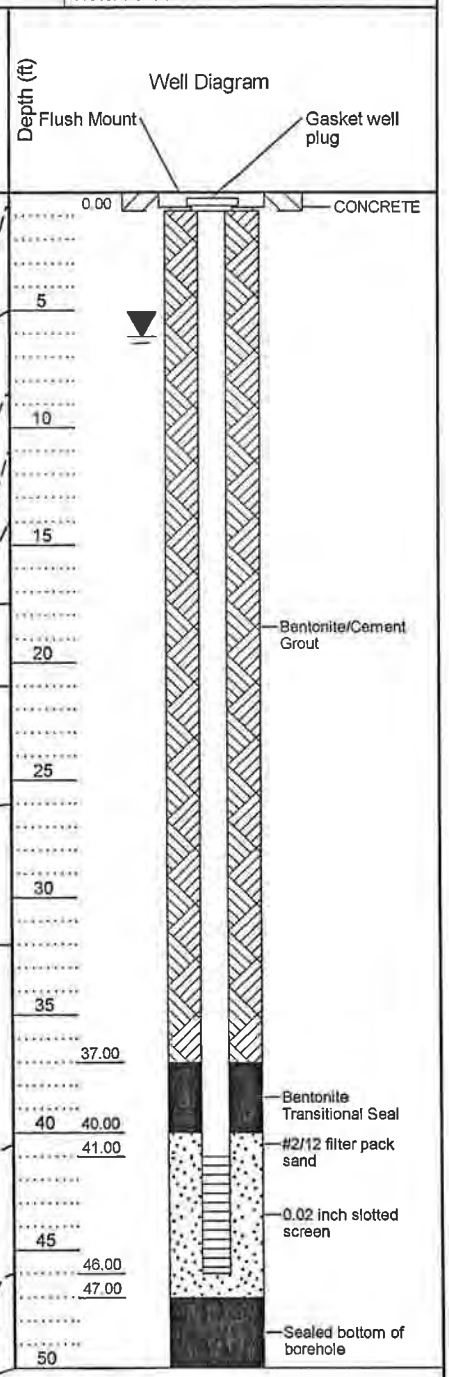
CDM

BORING LOG AND SAMPLING RECORD

AECOM	Client: Northrop Grumman Systems Corporation	Boring No. T-18B
AECOM 10461 Old Placerville Road Sacramento, CA 95827 (916) 361-6400 www.aecom.com	Project Number: 60238860.B5	
	Site Description/Location: 825 Stewart Drive, Sunnyvale, CA	Project Manager: R Mora
	Coordinates: Not Surveyed Elevation: Datum:	Sheet: 1 of 1
	Drilling Equipment/Method: D&R HB7Y85/GP7700/GeoProbe/HSA	Well Installed: Yes
	Sample Type(s): Acetate Sleeve/soil cuttings Boring Diameter: 8 IN.	Screened Interval: 41 - 46 feet bgs
Approved By: M Capps	Logged By: C Drabandt Date/Time Started: 11-12-12	Depth of Boring: 50 ft bgs
Drilling Contractor: National Drilling / G Becker	Backfill: Bentonite/cement Date/Time Finished: 11-13-12	Water Level: 6.22 ft btoc

Depth (ft)	Sample ID/Time	Sample Depth (ft)	Recovery (ft)	Blow Counts	PID Reading (ppm)	USCS	Graphic Log	Soil Boundary (ft bgs)	Visual Description Soil Type (USCS Class) - [gr%,sd%,st%,cl%]
					0.0	GM		0.5	SILTY GRAVEL WITH SAND (GM) - [40,30,20,10] olive brown (2.5Y 4/3); dry; medium dense; non-plastic; angular-rounded, fine to coarse sand; fine gravel (max 0.5"); fill.
					0.0	CL			LEAN CLAY (CL) - [10,0,20,70] very dark gray (10YR 3/1); dry; stiff; low plasticity; fine gravel (max 0.4"); little fine silt stringers; trace iron oxide staining.
5					0.0			5.0	
			5		0.0	CL			LEAN CLAY WITH SAND (CL) - [0,15,35,50] light gray (5Y 7/2); moist; firm; low plasticity; subangular-subrounded, well-graded fine to medium sand; trace iron and manganese oxide stained nodules.
					0.0			8.5	
10					0.0	CL			SANDY LEAN CLAY (CL) - [0,30,20,50] olive (5Y 5/4); wet; soft; low plasticity; subangular-subrounded, well-graded fine to medium sand.
					0.0			11.0	
			4.8		0.0	CL			LEAN CLAY (CL) - [0,0,40,60] olive brown (2.5Y 4/4); moist; firm; medium plasticity.
					0.0			14.0	
15					0.0	ML			SILT (ML) - [0,0,90,10] olive brown (2.5Y 4/3); moist; stiff; non-plastic.
			5		0.0			17.5	
					0.0	CL/ML			SILTY CLAY (CL/ML) - [0,0,50,50] dark greenish-gray (5GY 4/1); moist; stiff; low plasticity. @ 19 to 20 feet bgs interbedded silty sand (20% fine to coarse sand; 60% silt; 20% lean clay).
20					0.0			21.0	
			5		0.0	ML			SILT (ML) - [0,5,65,30] dark greenish-gray (5GY 4/1); moist; firm; low plasticity; subangular-subrounded, well-graded fine to medium sand. @ 23 to 25 feet bgs iron oxide mottled staining.
25					0.0			26.0	@ 25 to 26 feet bgs 90 % silt.
			5		0.0	CL/ML			CLAYEY SILT (CL/ML) - [0,10,45,45] dark greenish-gray (5GY 4/1); moist; firm; medium plasticity; subangular-subrounded, well-graded fine to medium sand. @ 29 to 30 feet bgs trace fine gravel.
30					0.0			32.0	@ 30 to 31 feet bgs wet; soft.
			5		0.0	ML			SILT (ML) - [0,0,70,30] dark greenish-gray (10GY 4/1); damp to moist; firm; non-plastic; transitioning confining layer. @ 34 to 35 feet bgs dry; stiff; trace fine gravel.
35					0.0				@ 35 to 36 feet bgs wet; soft.
			4.2		0.0				@ 36 to 38.5 feet bgs moist; firm.
					0.0				@ 38 to 40.5 feet bgs peat and partially decayed organics.
40					0.0			40.5	@ 38.5 to 39.5 feet bgs little fine gravel; dry; stiff; increased clay.
			5		0.0	ML			SILT WITH SAND (ML) - [0,20,50,30] dark greenish-gray (10GY 4/1); wet; soft; low plasticity; angular-rounded, well-graded fine to medium sand; saturated; water infiltrating boring.
45					0.0			46.0	@ 45 to 46 feet bgs saturated, wet silty sand (fine to coarse grained).
			5		0.0	ML			SILT (ML) - [0,0,85,15] greenish-gray (5G 5/1); dry; very stiff; non-plastic; peat and decaying organics; dendritic and broad iron oxide staining; confining layer.
50					0.0			50.0	

Geologist terminated boring due to target depth achieved.



Notes: Boring initially sampled using direct push technology to assess aquifer characteristics and depths. The boring was temporarily filled in with bentonite chips to the surface to prevent aquifer cross-over. The borehole was then reamed out with an 8-inch diameter hollow-stem auger to install the 2-inch monitoring well.

Soils were classified using the Unified Soil Classification System (USCS) except where soils could not be classified into silts or clays. American Society of Testing and Materials (ASTM) D-2488 allows for the classification of equal parts silt and clay to be termed as silty clay or clayey silt.

Hand Auger DPT Sleeve

Boring/ Well No.: T-19A		Site/Location: FORMER TRW MICRO WAVE	
Client: NORTHROP GRUMMAN		Project No.: 23508-43375-H-H9	Page ___ of ___
Drill Contractor: VIRONEX		Drill Method: GEOPROBE	Elevation:
Date Started: 8/29/07		Sampling Method: DIRECT PUSH	
Date Ended: 8/29/07		Total Depth: 22 ft	Remarks: 0-5 ft 6-inch core 5-22 ft 3.25-inch core
On-site Geologist: VM		Depth to Water:	

Depth (feet)	Blows	Sample Name / RECOVERY	Sample Time	PID FID (ppm)	USCS	Description	Well Construction Detail
		4/5			CL	0-5 ft clay, black, very stiff	
5		4/5				5-9 ft clay with sand, some gravel, white, soft	
10					SW	9 to 11 ft gravelly sand, dark gray, loose, wet	
		5/5			CL	11 to 14 ft silty clay, brown yellow, some sand, moist 10YR/6/8	
15					SW	14 to 21 gravelly sand, yellowish brown, loose, wet, lot of water	
		4/5					
20		2/2			CL	21 to 22 ft clay, olive gray 5Y/4/1	
5							1-inch PVC screen & bentonite 1-inch PVC blank casing blank: 20 to 22 ft screen: 10 to 20 ft sand bentonite: 5 to 10 cement: 0 to 5 ft grout

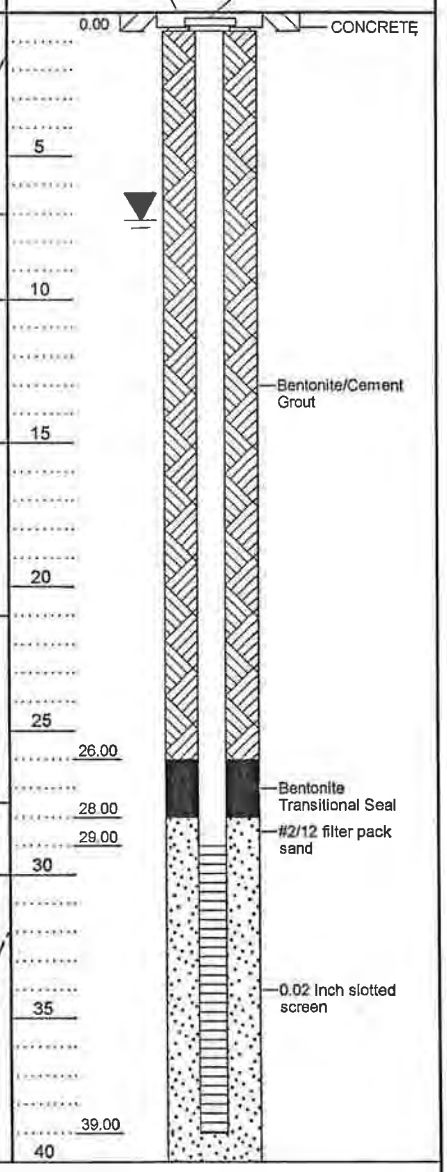
CDM

BORING LOG AND SAMPLING RECORD

AECOM	Client: Northrop Grumman Systems Corporation	Boring No. T-19B
AECOM 10461 Old Placerville Road Sacramento, CA 95827 (916) 361-6400 www.aecom.com	Project Number: 60238860.B5	
	Site Description/Location: 825 Stewart Drive, Sunnyvale, CA	Project Manager: R Mora
	Coordinates: Not Surveyed Elevation: Datum:	Sheet: 1 of 1
	Drilling Equipment/Method: D&R HB7Y85/GP7700/GeoProbe/HSA	Well Installed: Yes
	Sample Type(s): Acetate Sleeve/soil cuttings Boring Diameter: 8 IN.	Screened Interval: 29 - 39 feet bgs
Approved By: M Capps	Logged By: C Drabandt Date/Time Started: 11-12-12	Depth of Boring: 40 ft bgs
Drilling Contractor: National Drilling / G Becker	Backfill: Bentonite/cement Date/Time Finished: 11-13-12	Water Level: 7.35 ft btoc

Depth (ft)	Sample ID/Time	Sample Depth (ft)	Recovery (ft)	Blow Counts	PID Reading (ppm)	USCS	Soil Boundary (ft bgs)	Visual Description Soil Type (USCS Class) - [gr%,sd%,st%,cl%]
					0.0	GM	1.5	SILTY GRAVEL WITH SAND (GM) - [40,30,20,10] olive brown (2.5Y 4/3); dry; medium dense; non-plastic; angular-rounded, well-graded fine to coarse sand; fine gravel (max 0.5"); fill.
5					0.0	CL		LEAN CLAY (CL) - [0,0,10,90] black (10YR 2/1); dry; stiff; low plasticity; organic odor. @ 5 feet bgs trace fine gravel; 15% interbedded silt stringers.
			5		0.0	CL	7.0	LEAN CLAY WITH SAND (CL) - [0,15,35,50] light gray (5Y 7/2); moist; firm; low plasticity; subangular-subrounded, well-graded fine to coarse sand; interstitial water at 7 feet bgs.
10			5		0.0	CL/ML	10.0	SILTY CLAY (CL/ML) - [0,5,45,50] light olive brown (2.5Y 5/4); wet; soft; medium plasticity; subangular-subrounded, poorly graded fine sand.
15			5		0.0	CL/ML	15.0	SILTY CLAY (CL/ML) - [0,5,45,50] dark greenish gray (10GY 4/1); wet; soft; medium plasticity; subangular-subrounded, poorly graded fine sand; fine sand increases with depth to 30% at lower boundary (gradational). @ 15 feet bgs peat and partially decaying organics.
20			5		0.0	ML	21.0	SILT (ML) - [0,0,90,10] dark greenish gray (10GY 4/1); dry; stiff; non-plastic; partially decayed organics and peat; confining layer. @ 24 to 25 feet bgs Silty Clay (CL/ML).
25			5		0.0	CL	27.5	LEAN CLAY (CL) - [0,0,40,60] dark greenish gray (10GY 4/1); moist; firm; medium plasticity. @ 29 feet bgs 2 millimeter shell fragments.
30			5		0.0	SC	30.0	CLAYEY SAND (SC) - [0,60,10,30] dark greenish gray (10GY 4/1); wet; loose; non-plastic; angular-rounded, poorly graded fine sand; saturated; water rushed into boring to approximately 3 feet bgs.
35			3		0.0	ML	32.0	SILT (ML) - [0,0,85,15] olive (5Y 5/3); dry; stiff; non-plastic; iron oxide staining. @ 35 to 36 feet bgs interbedded wet sandy clay (fine sand). @ 36 to 37 feet bgs interbedded moist silt. @ 37 to 39 feet bgs interbedded wet sandy clay (fine sand). @ 39 feet bgs dry; very stiff; silt.
40					0.0		40.0	Geologist terminated boring due to target depth achieved.

Well Diagram



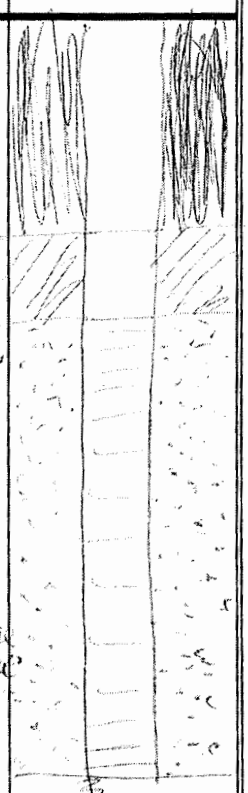
Notes: Boring initially sampled using direct push technology to assess aquifer characteristics and depths. The boring was temporarily filled in with bentonite chips to the surface to prevent aquifer cross-over. The borehole was then reamed out with an 8-inch diameter hollow-stem auger to install the 2-inch monitoring well.

Soils were classified using the Unified Soil Classification System (USCS) except where soils could not be classified into silts or clays. American Society of Testing and Materials (ASTM) D-2488 allows for the classification of equal parts silt and clay to be termed as silty clay or clayey silt.

Hand Auger DPT Sleeve

Boring/ Well No.: T-20A	Site/Location: FORMER TRW MICRO WAVE		
Client: NORTHROP GRUMMAN	Project No.: 23508-45375-H-H9		Page 1 of 1
Drill Contractor: VIRONEX	Drill Method: GEOPROBE		Elevation:
Date Started: 8/28/07	Sampling Method: DIRECT PUSH		
Date Ended: 8/28/07	Total Depth: 20	Remarks: 0-5 ft 6-inch core	
On-site Geologist: VM	Depth to Water:	5-20 ft 3.25-inch core	

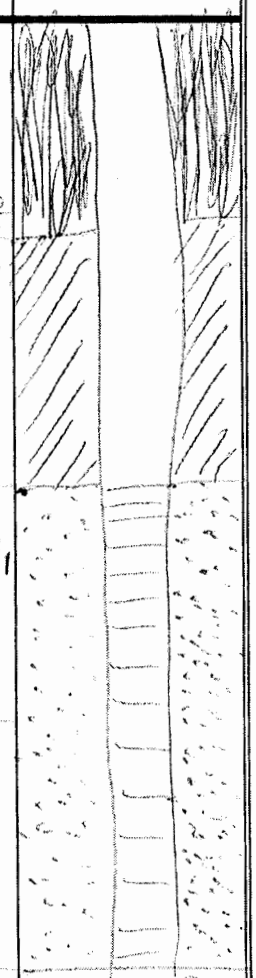
Depth (feet)	Blows	Sample Name / RECOVERY	Sample Time	PID FID (ppm)	USCS	Description	Well Construction Detail
		4/5			CL	clay, black, very stiff 0 to 4 ft	
						4 to 5 ft clay with sand, soft,	
5						5 to 7 ft white	
		4/5				7 to 9 ft clay with some gravel, light brown	
10					SW	9 to 11 ft, gravelly sand, dark gray, loose, wet	
					CL	11 to 13 ft Clay, olive gray, 5Y/4/1, moist	
		5/5				13 to 15 ft silty clay, color change to brown yellow, moist, some sand & gravel 14.5 to 15	
15					SW	15 to 19 ft gravelly sand, yellowish brown, loose, wet, lot of water	
		4/5				19 to 20 ft gravelly sand dark gray, loose, wet	1-inch PVC Pre-Packed Screen & bentonite
20						sand stuffed 17 to 20 ft while setting well, therefore well is set to 17 ft bottom. attempted twice to hold off sand stuff.	1-inch PVC blank casing Screen: 7 to 17 ft and sand bentonite: 5 to 7 ft Cement grout: 0 to 5 ft
5							



CDM

BORING LOG AND SAMPLING RECORD

Boring/ Well No.: T-21A		Site/Location: FORMER TRW MICROWAVE	
Client: NORTHROP GRUMMAN		Project No.: 23508-45375-H-H9	Page 1 of 1
Drill Contractor: VIRONEX		Drill Method: GEOPROBE	Elevation:
Date Started: 8/28/07		Sampling Method: DIRECT PUSH	
Date Ended: 8/28/07		Total Depth: 20	Remarks: 0-5 6-inch core 5 to 20 3.25-inch core
On-site Geologist: VM		Depth to Water:	

Depth (feet)	Blows	Sample Name / RECOVERY	Sample Time	PID FID (ppm)	USCS	Description	Well Construction Detail
		4/5			CL	Clay, black, very stiff 0 to 4 ft	
						4 to 5 ft clay with sand, white, soft	
5						5 to 7.5 ft clay with sand, white, soft	
		5/5				7.5 to 9 ft clay with some gravel	
10					SW	9 to 11.5 gravelly sand, yellowish brown, loose, wet	
		4/5			CL	11.5 to 13 clay, olive gray 5Y/4/1 moist	
					SW	13 to 16 ft gravelly sand gray, loose, wet	
15						16 to 20 gravelly sand yellowish brown, loose, wet, lot of water some clay at the end	
		4/5					
20							1-inch PVC screen & bentonite 1-inch PVC blank casing screen & sand: 10 to 20 ft bentonite: 5 to 10 ft cement grout: 0 to 5 ft
5							

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BORING LOG AND SAMPLING RECORD

Boring/ Well No.: T-22A	Site/Location: FORMER TRW MICROWAVE		
Client: NORTHROP GRUMMAN	Project No.: 23508-45375-H-119	Page 1 of 1	
Drill Contractor: VIRONEX	Drill Method: GEOPROBE	Elevation:	
Date Started: 8/27/07	Sampling Method: DIRECT PUSH		
Date Ended: 8/28/07	Total Depth: 20	Remarks: 0 to 5 6-inch core; 5 to 20 3.25-inch core	
On-site Geologist: VM	Depth to Water:		

Depth (feet)	Blows	Sample Name (STAFF RECOVERY)	Sample Time	PID FID (ppm)	USCS	Description	Well Construction Detail
		4/5			CL	0-4 ft clay, black, stiff	
						4 to 5 ft clay with sand, soft white	
5		5/5				5 to 9 clay with sand, soft white	
10					SM	9 to 11.5 Gravelly sand yellowish brown 10YR/6/8 wet, loose	
		5/5			CL	11.5 to 15 silty clay, moist yellowish brown	
15					SW	15 to 18 Gravelly sand yellowish brown, 10YR/6/8 wet, loose, lot of water	
		5/5			CL	18 to 20 silty clay, moist Gray olive 10Y/4/2	
20							1-inch PVC pre-packed screen & bentonite 1-inch PVC blank casing screen: 10 to 20 bentonite: 5 to 10 cement: 0 to 5 grout

5

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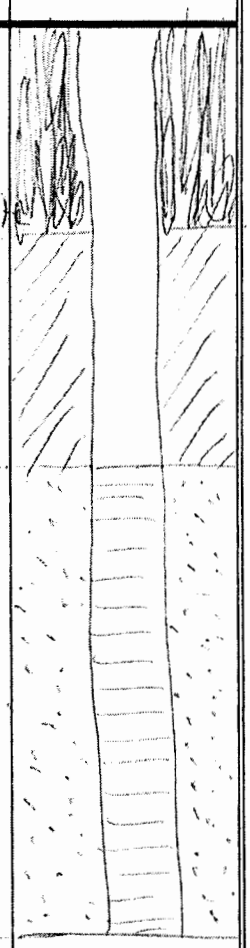
BORING LOG AND SAMPLING RECORD

Boring/ Well No.: T-23A		Site/Location: FORMER TRW MICROWAVE	
Client: NORTHROP GRUMMAN		Project No.: 23508-45375-H-HG	Page 1 of 1
Drill Contractor: VIRONEX		Drill Method: DIRECT PUSH	Elevation:
Date Started: 8/27/07		Sampling Method: GEOPROBE	
Date Ended: 8/27/07		Total Depth: 20	Remarks: 0 to 5 6-inch core 5 to 20 3.25-inch core
On-site Geologist: VM		Depth to Water:	

Depth (feet)	Blows	Sample Name (START) / Recovery	Sample Time	PID FID (ppm)	USCS	Description	Well Construction Detail
		4/5			CL	0-4.5 ft clay, black, very stiff 4 to 5 ft clay with sand, soft, white	
5		4/5				5 to 7 clay " " " " silty clay, gray @ 7 ft	
10		5/5			SM	9.5 to 12.5 ft gravelly sand yellowish brown 10YR/6/8 wet, loose	
					CL	12.5 to 15 ft silty clay yellowish brown, moist	
15		2/5			SW	15 to 17 gravelly sand yellowish brown 10YR/6/8 wet, loose, lot of water no recovery for rest	
20							1-inch PVC pre-packed screen & bentonite 1-inch PVC blank casing screen: 10 to 20 bentonite: 5 to 10 cement: 0 to 5 grout

5

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BORING LOG AND SAMPLING RECORD

Boring/ Well No.: T-24A		Site/Location: FORMER TRW MICROWAVE	
Client: NORTHROP GRUMMAN		Project No.: 23508-45375-H.H9	Page 1 of 1
Drill Contractor: VIRONEX		Drill Method: GEOPROBE	Elevation:
Date Started: 8/27/07		Sampling Method: DIRECT PUSH	
Date Ended: 8/27/07		Total Depth: 20 feet	Remarks: 0 to 5 6-inch core, 5 to 20 3.25-inch core
On-site Geologist: VM		Depth to Water:	

Depth (feet)	Blows	Sample Name & RECOVERY	Sample Time	PID FID (ppm)	USCS	Description	Well Construction Detail
		4/5	NR		CL	0-4 ft clay black very stiff	
5		4/5	NR			5 ft clay w/ sand soft, white silty clay, white	
10		5/5			SM	9 to 11.5 Gravelly sand yellowish brown 10YR4/8 wet, loose	
					CL	11.5 to 15 silty clay moist 5Y/4/1 14 ft color change to olive gray	
15		5/5			SW	15 to 16 ft Gravelly sand 10YR4/8 yellowish brown, wet, loose	
					CL	16 to 18 silty clay moist olive gray moist 10Y/4/2 18 to 20 silty clay, moist color change gray green 10GY/5/2	
20							1-inch PVC pre-packed screen & bentonite seal 1-inch PVC blank casing screen-10 to 20 sand-10 to 20 bentonite 5 to 10 cement grout 0 to 5

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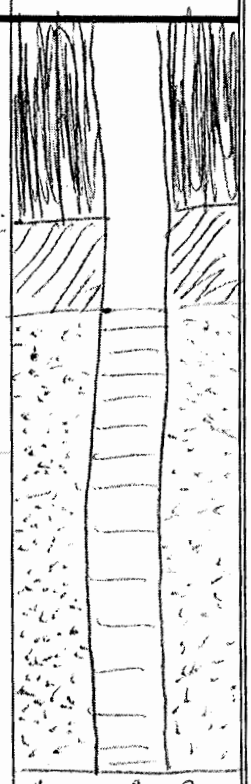
BORING LOG AND SAMPLING RECORD

Boring/ Well No.: T-25A		Site/Location: FORMER TRW MICROWAVE	
Client: NORTHROP GRUMMAN		Project No.: 23508-45375-H-H9	Page 1 of 2
Drill Contractor: VIRONEX		Drill Method: GEOPROBE	Elevation:
Date Started: 8/28/07		Sampling Method: DIRECT PUSH	
Date Ended: SEE PAGE 2		Total Depth: 20	Remarks: 0-5ft 6-inch core 5to20ft 3.25-inch core
On-site Geologist: VM		Depth to Water:	

Depth (feet)	Blows	Sample Name & RECOVERY	Sample Time	PID FID (ppm)	USCS	Description	Well Construction Detail
		0/5				Fill sand with rock 0 to 7ft	
5							
		3/5			CL	7 to 9 ft clay with sand, white, stiff	
					SW	9 to 11 ft Gravelly sand, dark gray, loose, wet	
10							
		4/5			CL	11 to 14 ft silty clay with some sand & gravel, brown	
					SW	14 to 17 gravelly sand, dark gray, loose, wet, lot of water	
15							
						17 to 20 gravelly sand, yellowish brown, loose, wet, lot of water	1-inch PVC screen & bentonite
20							1-inch PVC blank casing
						acetate sleeve for 15 to 20 feet stuck inside 2-inch core barrel. unable to get sleeve out. lithologic information gathered by pushing material out, through the sleeve.	screen: 7 to 17ft sand
						sand stuffed 17 to 20ft, same as T-20A. well set at 17ft bottom	bentonite: 5 to 7ft
						See page 2 for additional information	cement grout: 0 to 5ft
5							



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BORING LOG AND SAMPLING RECORD

Boring/Well No.: T-25A	Site/Location: FORMER TRW MICROWAVE		
Client: NORTHROP GRUMMAN	Project No.: 23503-45375-H-H4		Page 2 of 2
Drill Contractor: MRCNEY	Drill Method: HOLLOW STEM AUGER		Elevation:
Date Started:	Sampling Method:		
Date Ended: 5/30/07	Total Depth: 20	Remarks: 0-20 ft 8-inch casing	
On-site Geologist: V. M	Depth to Water:		

Depth (feet)	Blows	Sample Name	Sample Time	PID FID (ppm)	USCS	Description	Well Construction Detail
						5/23 [illegible] installed PVC [illegible] screen, due to personnel [illegible] the borehole was caved in the following sand and screen was lost.	
						PVC installation from sand [illegible] was cross-drilled using [illegible] 8-inch diameter hollow-stem augers. [illegible]	
5						[illegible] 5/30/07, which [illegible] from the initial date of drilling 5/23/07. The well was set to total depth 20 ft bgs.	
						8-inch casing [illegible] 0 to 20 ft	
						PVC sand 9 to 20 ft	
						bentonite 6 to 9 ft	
						cement grout 0 to 6 ft	
0						8-inch PVC blank casing 0 to 10 ft	
5							

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BORING LOG AND SAMPLING RECORD

ES ENGINEERING-SCIENCE

Well number 06S01W306062

CLIENT: Advanced Micro Devices

TEST HOLE NUMBER: ES-37S

LOCATION: Plant- Sunnyvale, CA.

DATE: 6/23/82

SURFACE ELEVATION:

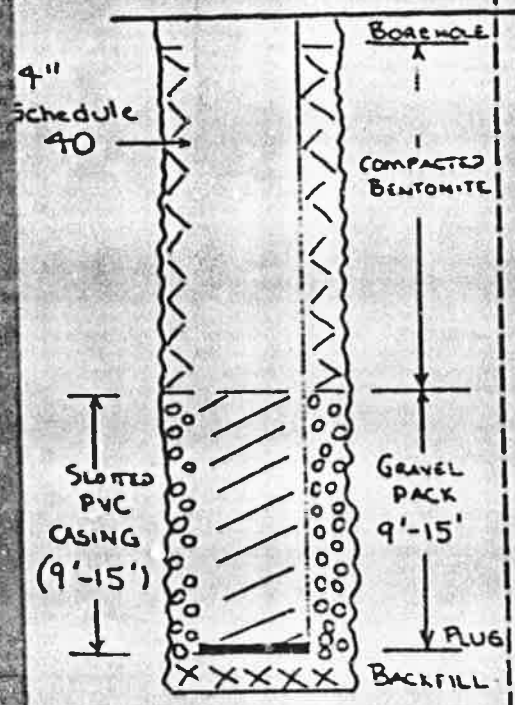
DEPTH TO WATER: 7.5 feet*

HOLE DIAMETER: 8 inch

DRILLING METHOD: Auger

DRILLER: Ladd Drilling

GEOLOGIST: Randy Rhodes



GEOLOGIC LOG

Depth Below Surface (Feet)	Lithologic Description	Sample	Blow Counts per 6" Depth (Standard Hammer)
0	Dark gray brown silty-clay		
2.0	Light brown silty clay		
4.0	Light brown gray sandy clay		
6.0			
8.0			
10.0	Gray-brown sand with 1-1/2" gravel		
12.0			
14.0	Blue-gray clayey silt		
16.0			

*Depth to water was taken during sampling on 6/24/82
Depth to water during drilling was 8.5 ft.

ES ENGINEERING-SCIENCE

well number 06S01W03H045

CLIENT Advanced Micro Devices

TEST HOLE NUMBER ES-36S

LOCATION Plant- Sunnyvale, CA.

DATE 6/23/82

SURFACE ELEVATION

DEPTH TO WATER 6.5 feet*

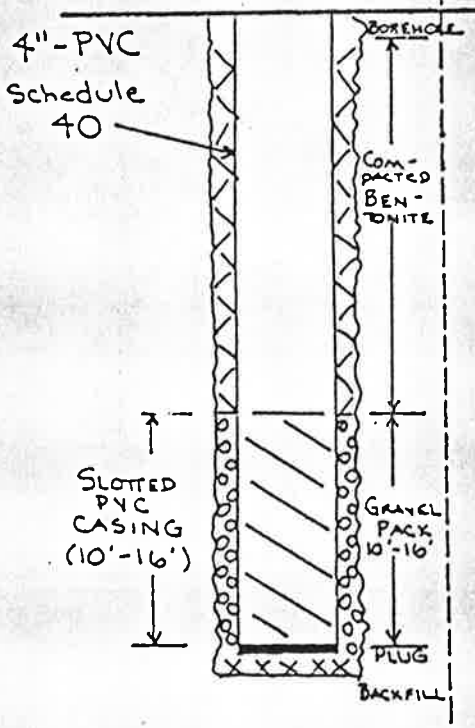
HOLE DIAMETER 8 inch

DRILLING METHOD Auger

DRILLER Ladd Drilling

GEOLOGIST Randy Rhodes

WELL CONSTRUCTION



GEOLOGIC LOG

DEPTH BELOW SURFACE (Feet)	Lithologic Description	Sample	Blow Counts per 6" Depth (Standard Hammer)
0	Dark gray/		
2.0	brown silty clay		
4.0			
6.0	Light brown gray silty clay some gravel		
8.0	Light brown sandy clay		
10.0			
12.0	Light brown clayey sand		
14.0	Blue-gray clayey silt		
16.0			

*Depth to water was taken at sampling on 6/24/82
Depth to water was 10.5 feet during drilling

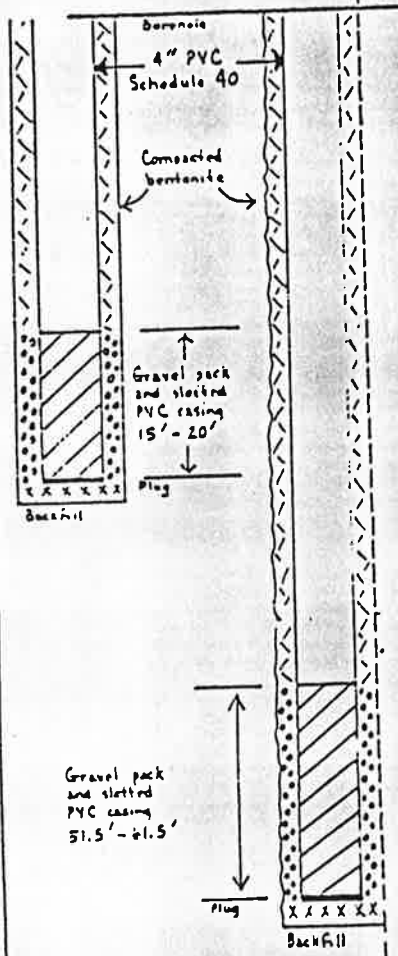
well number
06S01W30H046

ES ENGINEERING-SCIENCE

CLIENT: Advanced Micro Devices
LOCATION: Plant- Sunnyvale, CA.
SURFACE ELEVATION: /
HOLE DIAMETER: 8-inch
DRILLER: Ladd Drilling

TEST HOLE NUMBER: ES-16D, 16DD
DATE: 6/24/82
DEPTH TO WATER: 7 feet (D); 5.5 feet (DD)
DRILLING METHOD: Auger
GEOLOGIST: Randy Rhodes

WELL CONSTRUCTION



GEOLOGIC LOG

DEPTH BELOW SURFACE (Feet)	Lithologic Description	Sample	Blow Counts per 6" Depth (Standard Hammer)
0			
2.0	Dark gray brown silty clay		
4.0			
6.0	Light brown gray silty clay, some gravel		
8.0	Light brown sandy clay		
10.0			
12.0	Wet brown clayey sand		
14.0	Blue-gray clayey silt		
16.0	Coarse sand with some gravel (wet)	CA mod. sample	8-6-6-6
18.0	Blue-gray clayey silt		
20.0	Blue-gray silty sand	Split-spoon	3-2-2-3
22.0	Blue-gray clayey-silt w/some gravel		
24.0			
25.0		Split-spoon	2-2-2-2
50.0			
52.0			
54.0			
56.0	Coarse and fine sand (wet)	Split-spoon	7-9-1-2
58.0			
60.0	Brown clay Blue clayey silt		

*Depth to water was taken during sampling on 7/11/82
: Depth to water was 10.5 ft. during drilling

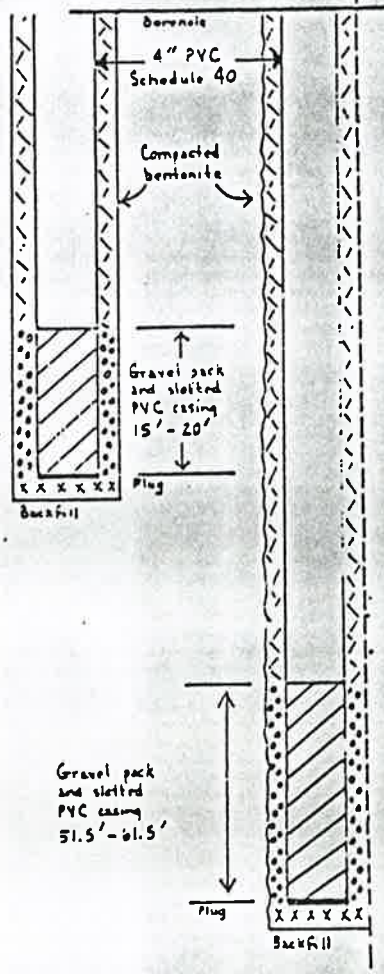
5

Well number
06S01W30H047

ES ENGINEERING-SCIENCE

CLIENT: Advanced Micro Devices
TEST BOLE NUMBER: ES-36D, 36DD
LOCATION: Plant- Sunnyvale, CA.
DATE: 6/24/82
SURFACE ELEVATION: ✓
DEPTH TO WATER: 7 feet (D); 6.5 feet (DD)
HOLE DIAMETER: 8-inch
DRILLING METHOD: Auger
DRILLER: Ladd Drilling
GEOLOGIST: Randy Rhodes

WELL CONSTRUCTION



GEOLOGIC LOG

Depth below surface (feet)	Lithologic Description	Sample	Blow Counts per 6" Depth (Standard Hammer)
0			
2.0	Dark gray brown silty clay		
4.0			
6.0	Light brown gray silty clay, some gravel		
8.0	Light brown sandy clay		
10.0			
12.0	Wet brown clayey sand		
14.0	Blue-gray clayey silt		
16.0	Coarse sand with some gravel (wet)	CA mod. sample	8-6-6-6
18.0	Blue-gray clayey silt		
20.0	Blue-gray silty sand	Split-spoon	5-2-2-3
22.0	Blue-gray clayey-silt w/some gravel		
24.0			
25.0		Split-spoon	2-2-1-2
30.0			
32.0			
34.0			
36.0	Coarse and fine sand (wet)	Split-spoon	7-9-1-2
38.0			
60.0	Brown clay Blue clayey silt		

*Depth to water was taken during sampling on 7/11/82
Depth to water was 10.5 ft. during drilling

5

well number
06S01W30H048

ES ENGINEERING-SCIENCE

CLIENT Advanced Micro Devices

TEST HOLE NUMBER ES-12S

LOCATION Plant- Sunnyvale, CA.

DATE 6/23/82

SURFACE ELEVATION /

DEPTH TO WATER 11 feet*

HOLE DIAMETER 8 inch

DRILLING METHOD Auger

DRILLER Ladd Drilling

GEOLOGIST Randy Rhodes

WELL CONSTRUCTION	DEPTH BELOW SURFACE (Feet)	GEOLOGIC LOG: Lithologic Description	Sample	Blow Counts per 6" Depth (Standard Hammer)
4"-PVC Sch. 40; Borehole	0	backfill		
	2.0	dark gray brown silty clay		
Compacted Bentonite	4.0	light gray brown silty clay with some gravel (dry)		
	6.0			
	8.0	gray brown sand with some gravel (wet)		
Slotted PVC casing (10'-15'); gravel pack 9'-15'	10.0			
	12.0			
	14.0	blue-gray clayey silt		
plug backfill	16.0			

* Depth to water was taken during sampling on 6/24/82. Depth to water was 3.5 feet during drilling.

5

Appendix B

ENVIRONMENTAL SEQUENCE STRATIGRAPHY PRESENTATION TO USEPA – DECEMBER 10, 2015

NORTHROP GRUMMAN

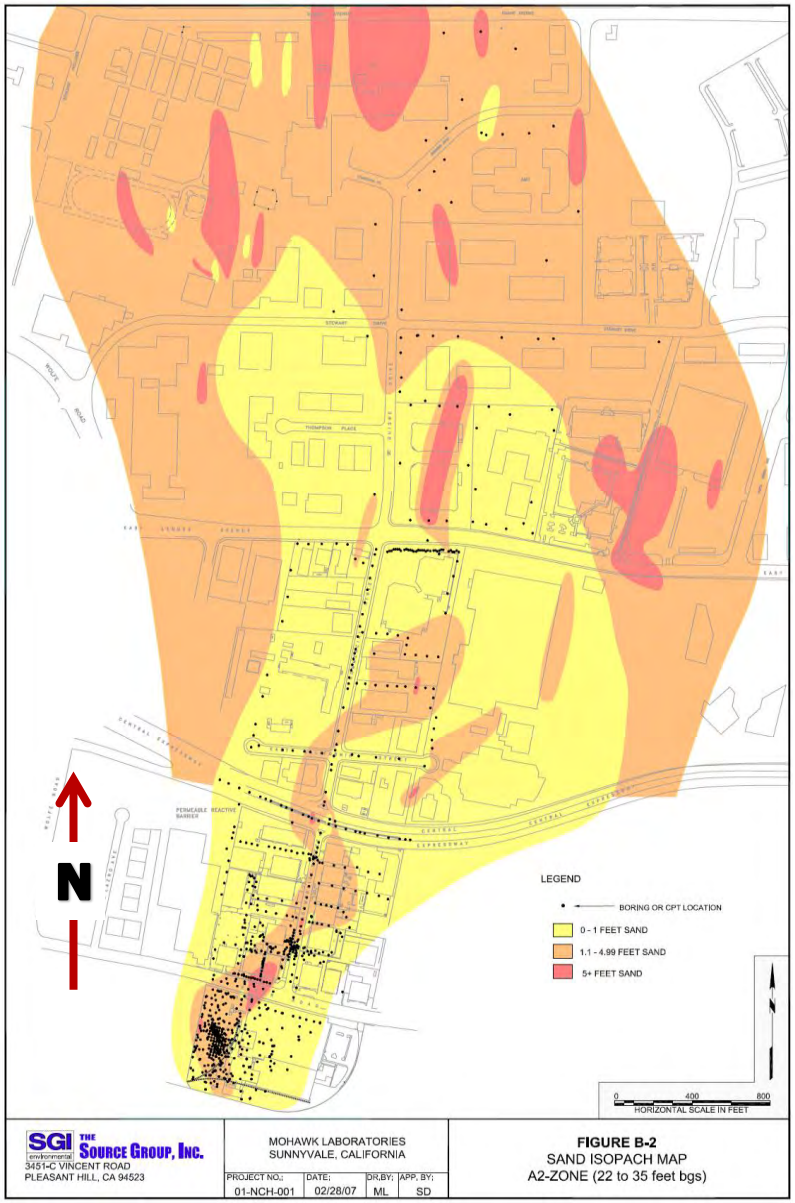
Environmental Sequence Stratigraphy Slides

from December 10, 2015 Meeting with USEPA

Guiding the Interpretation

Santa Clara Basin Hydrostratigraphy

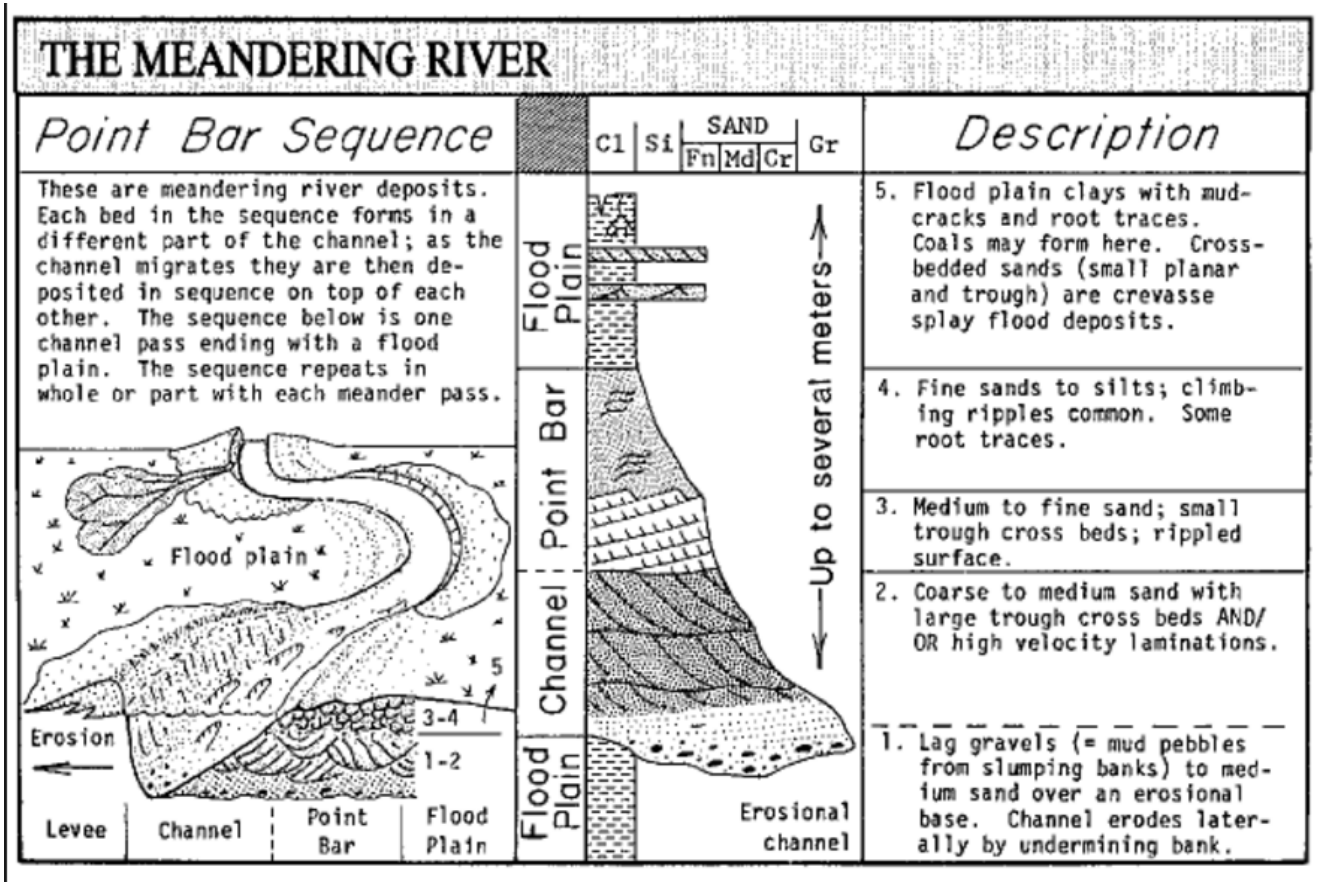
- Mohawk CPT dataset provides “high-resolution” frame of reference
- Dense lithology dataset south of Arques (CPT transects with 50’ spacing)
- Moderate to low-sinuosity channel sands and gravels encased in silt and clay
- Channel orientations N-NNE to NNW
- Thickness about 5’, width about 100’



Depositional Environment

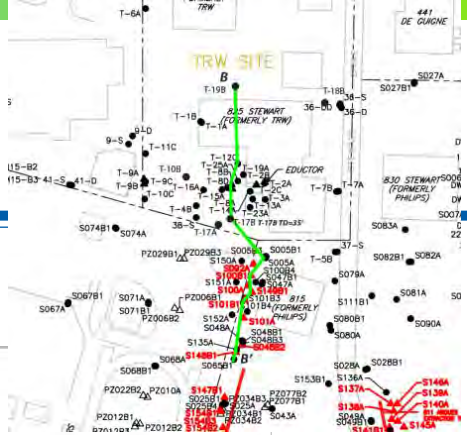
Fining-upward sequence: River channel deposit

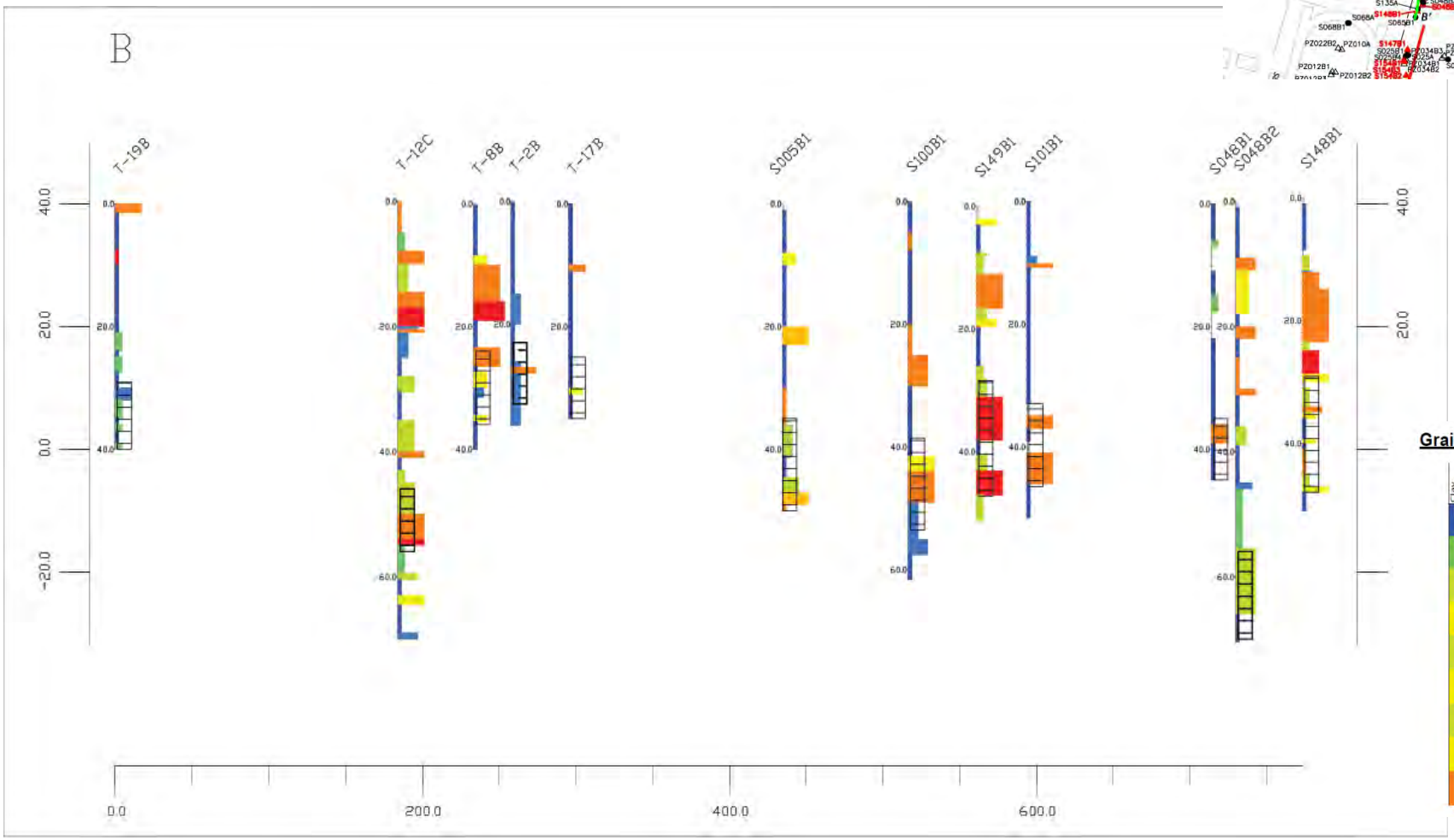
- TRW underlain by river deposits, channel and point bar deposits, splays, floodplain deposits
- Highest perm in "lag" deposits at bases of channel sequences
- Minor lateral migration, channels "confined" by floodplain deposits



Create ESS Cross Sections

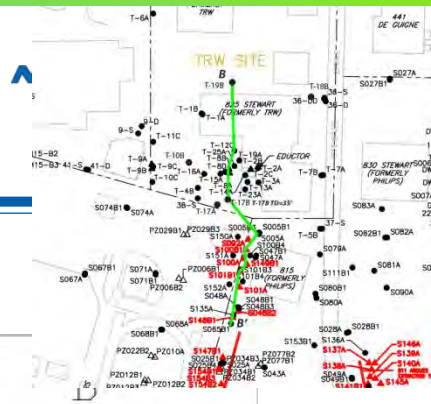
Post GSLs and well screens

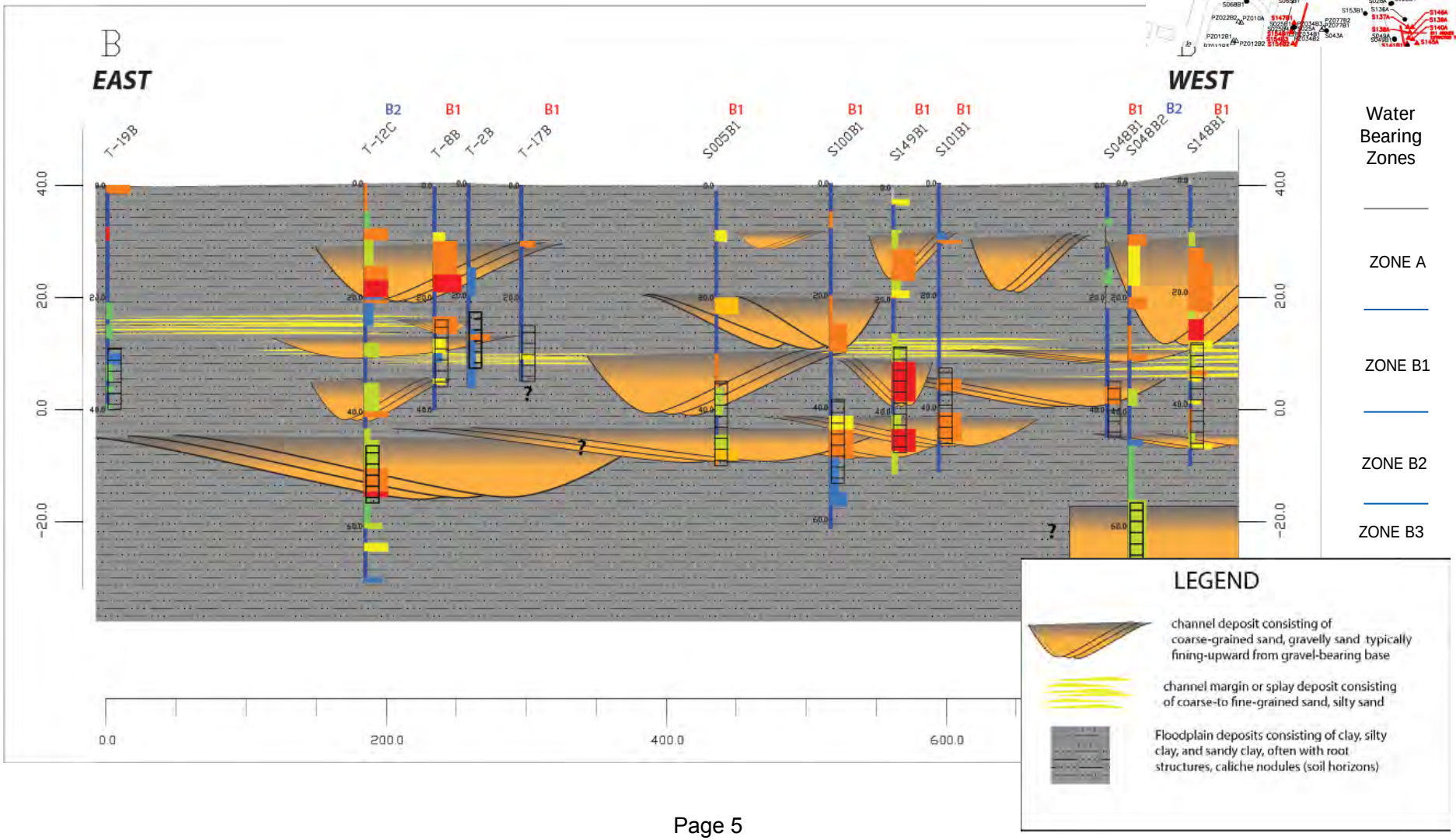




AECOM

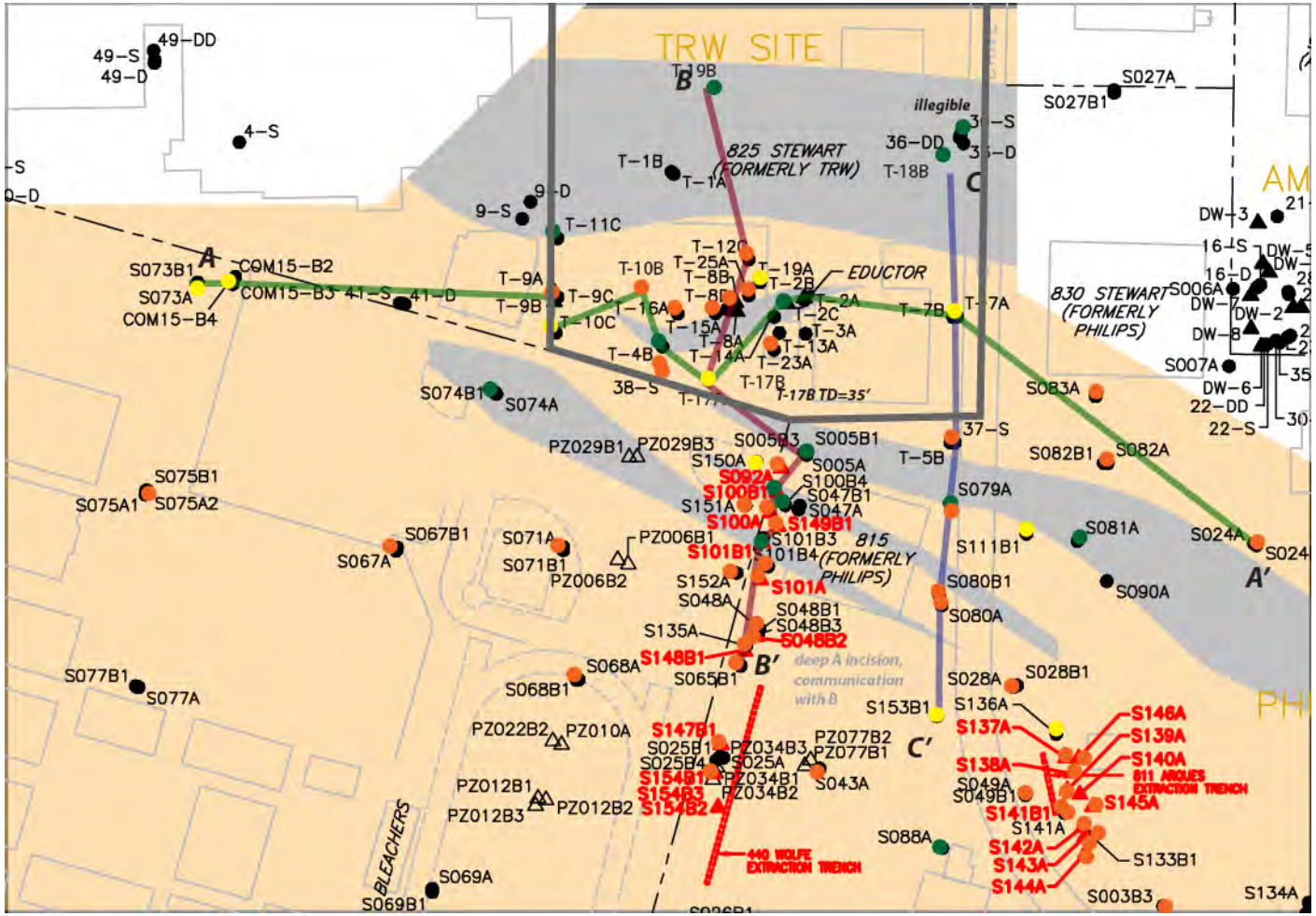
Create ESS Cross Sections





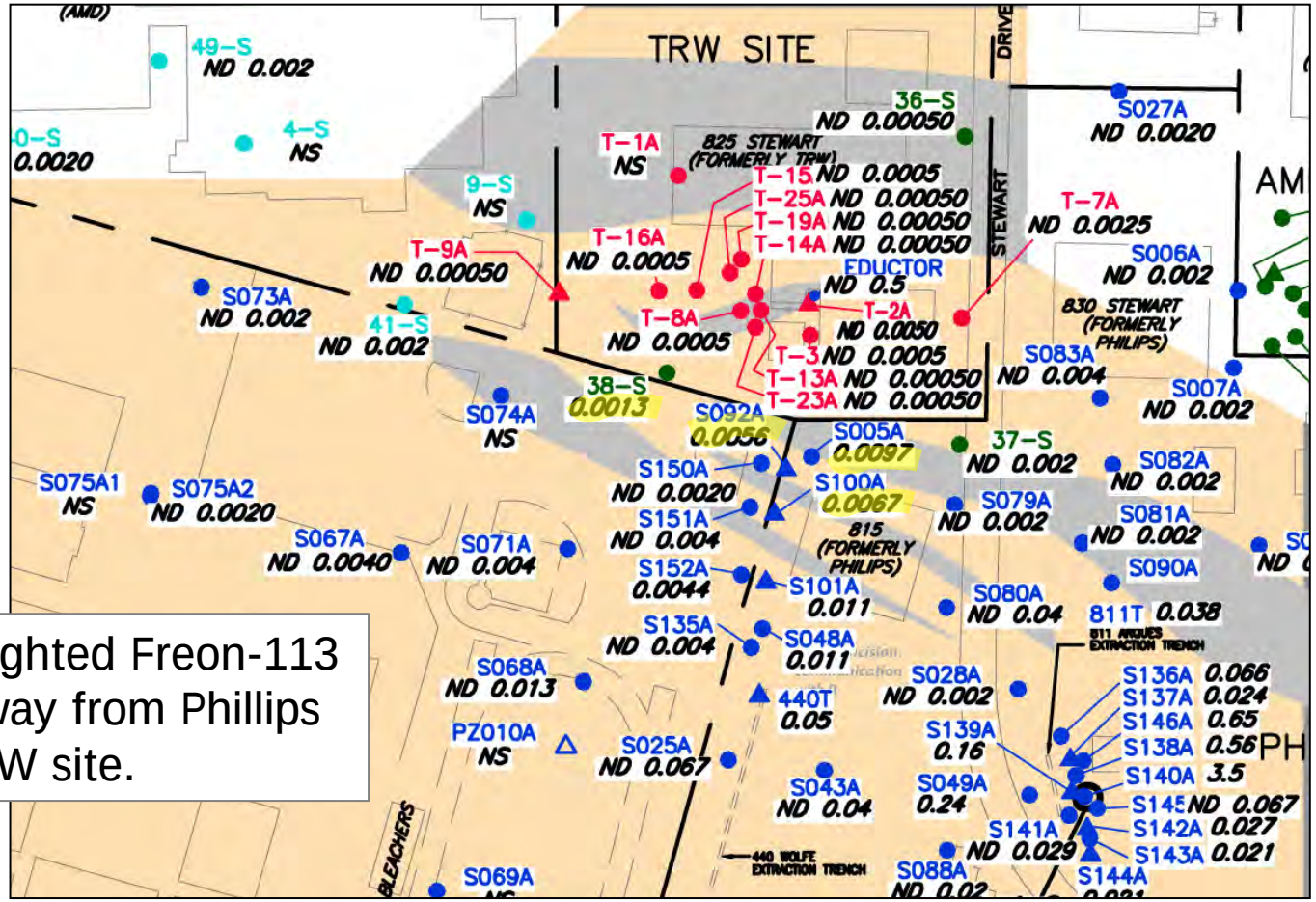
A Zone Lithology

- 10’-20’ Facies Map



A Zone Chemistry

- 10’-20’ Facies with Freon-113 concentrations



- Highlighted Freon-113 pathway from Phillips to TRW site.

Sand and gravel mixtures (channel and margin facies)

Clay and silt mixtures (floodplain facies)

A Zone Chemistry

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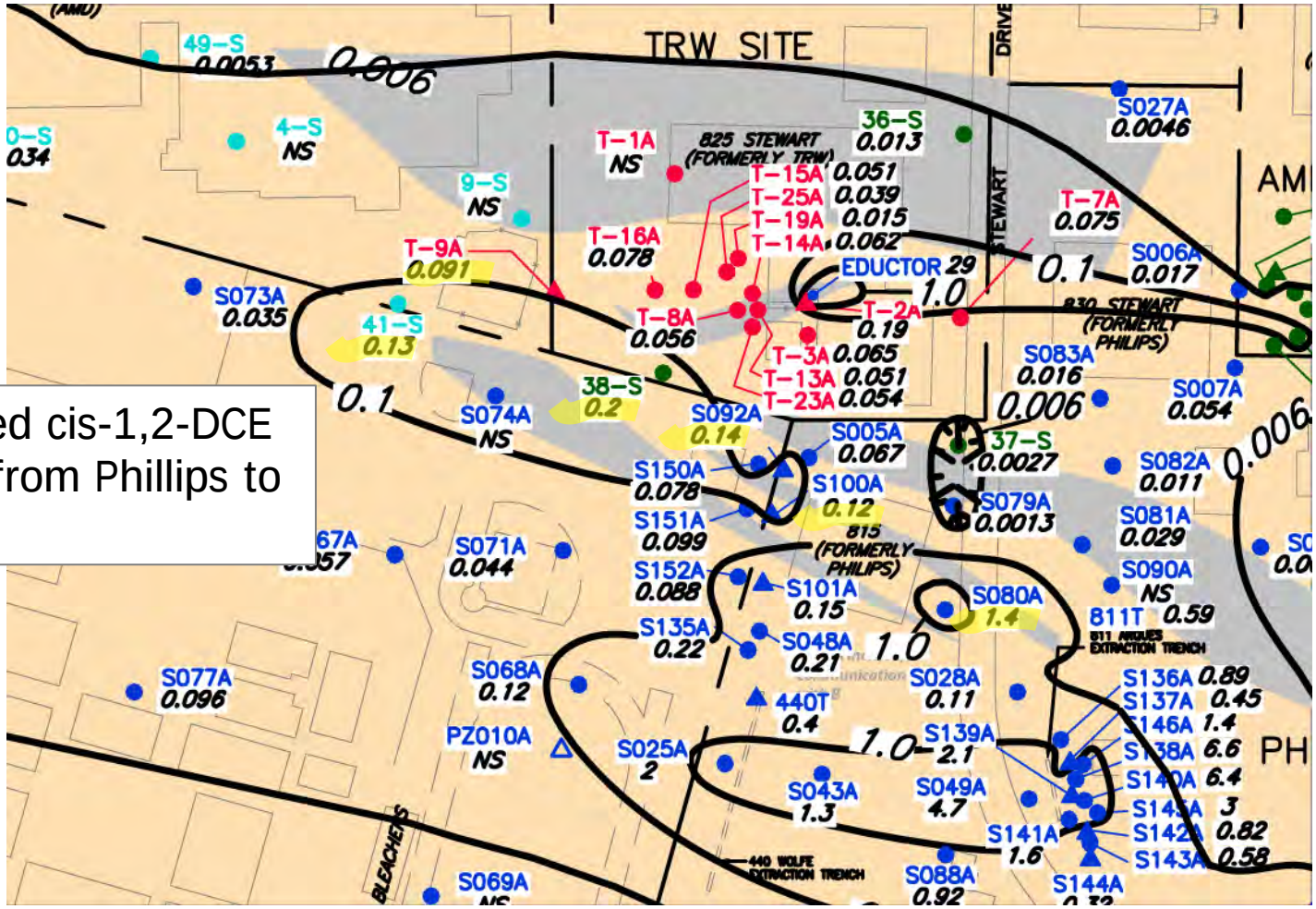
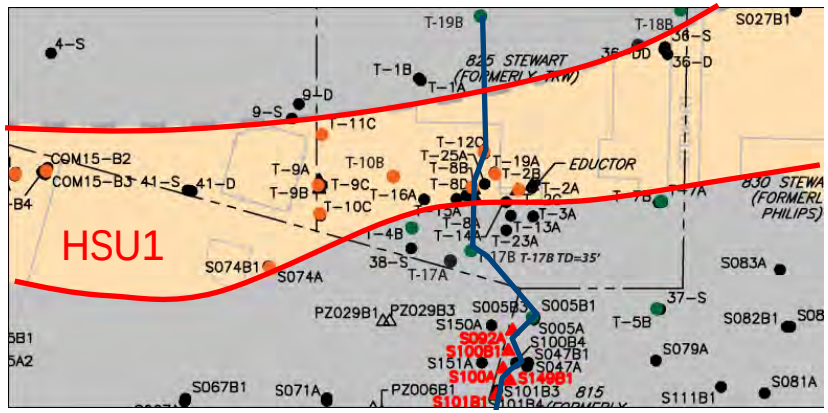
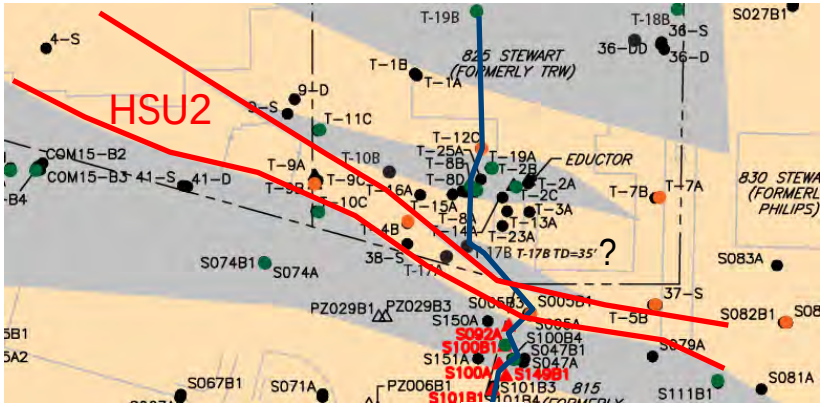
- 10’-20’ Facies with cis-1,2-DCE concentrations

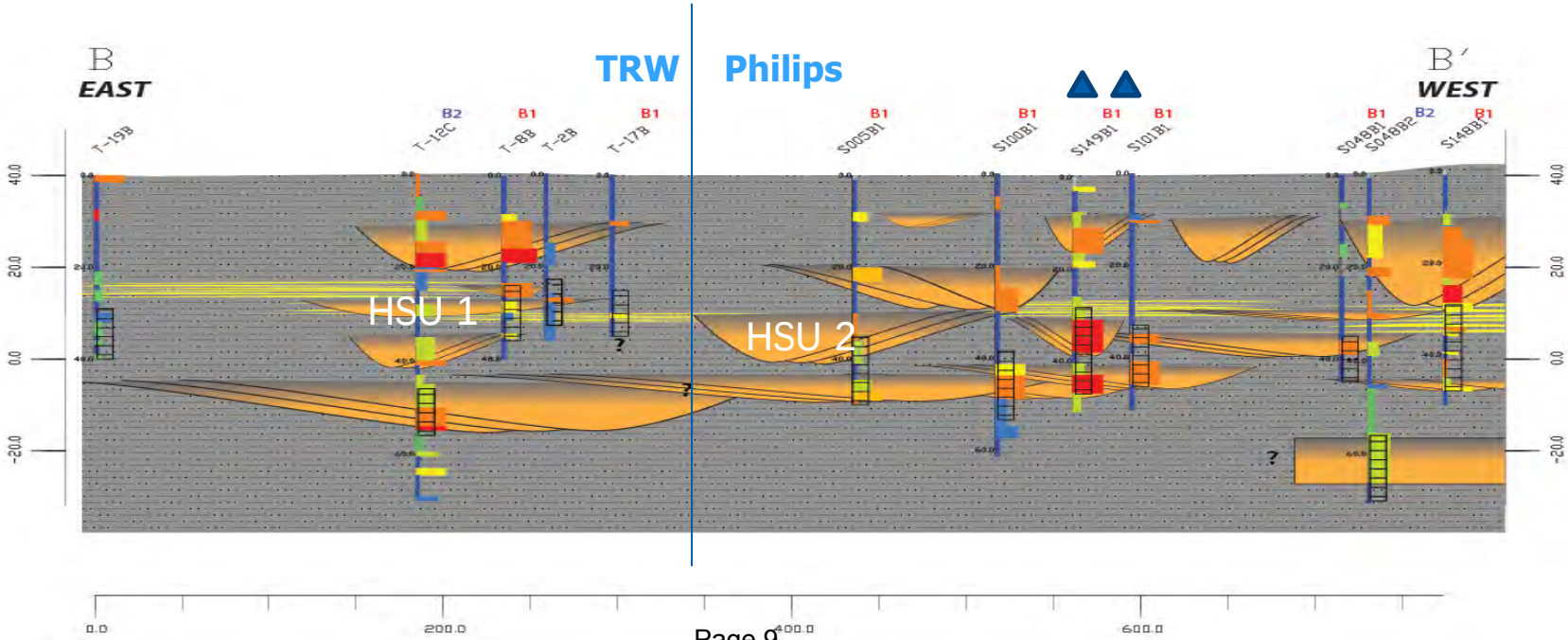


- Highlighted cis-1,2-DCE pathway from Phillips to TRW site.

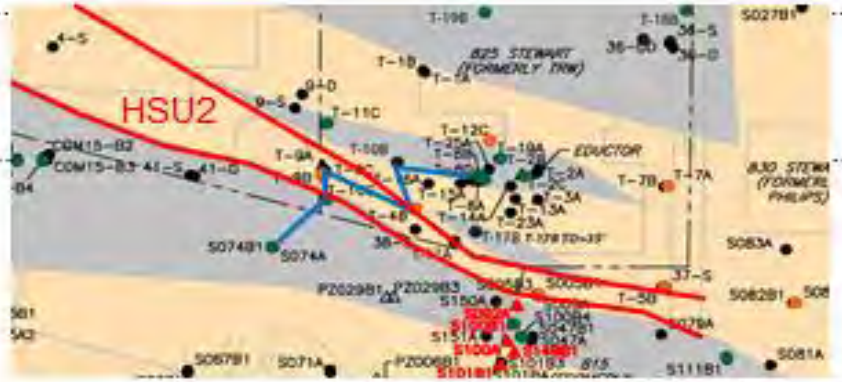
Zone B1: Identification of two hydrostratigraphic units

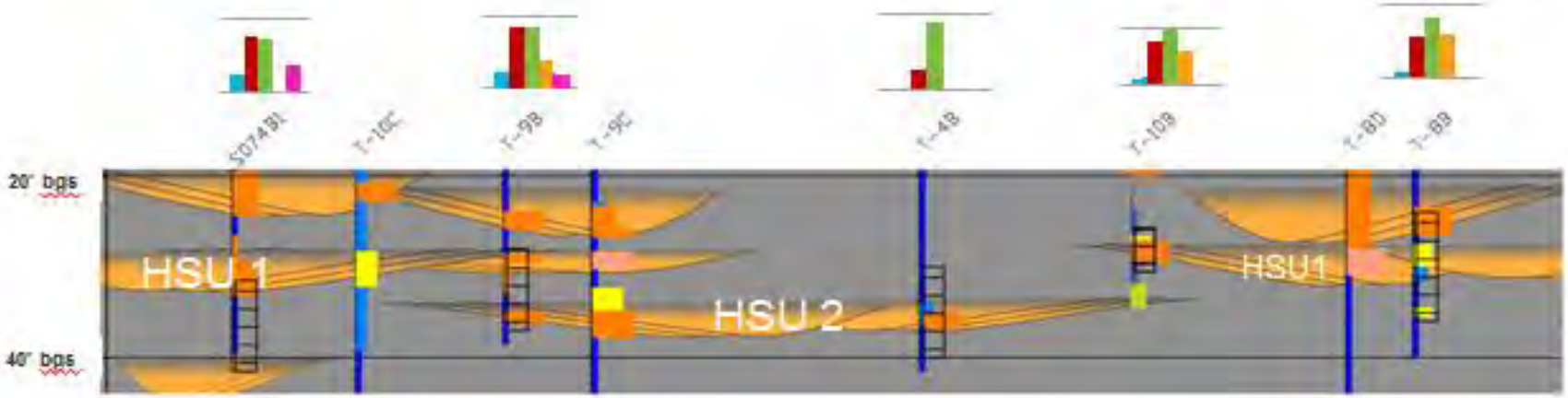






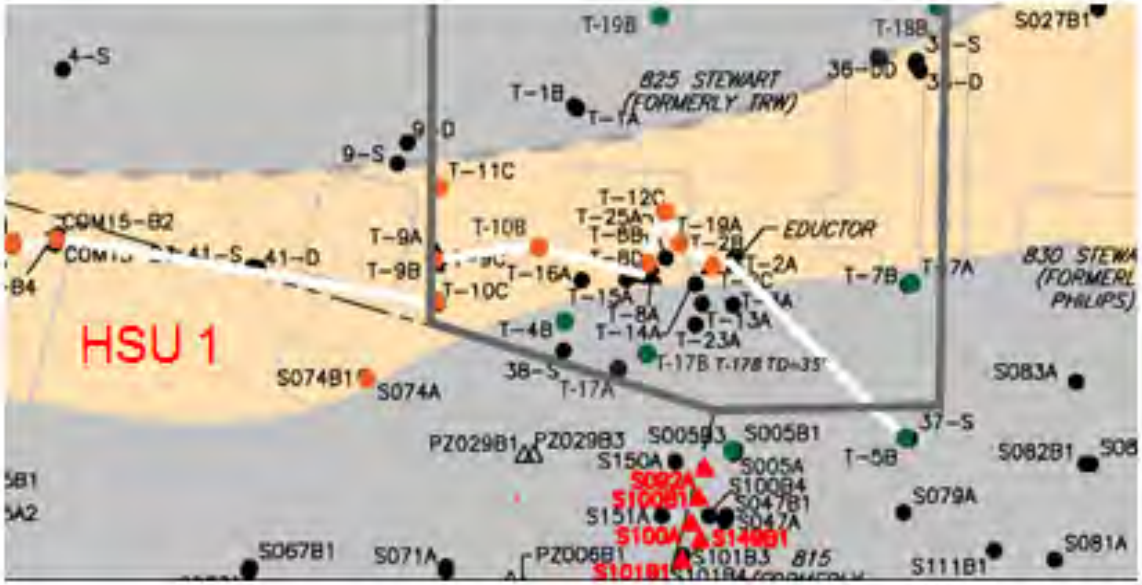
Groundwater Chemistry of HSU1, HSU2

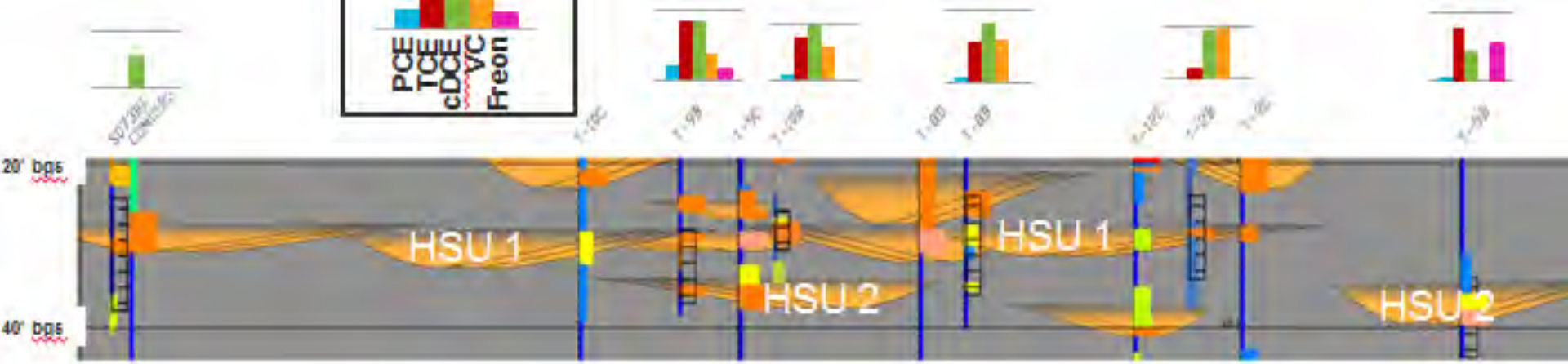




Down-channel view of HSU 1

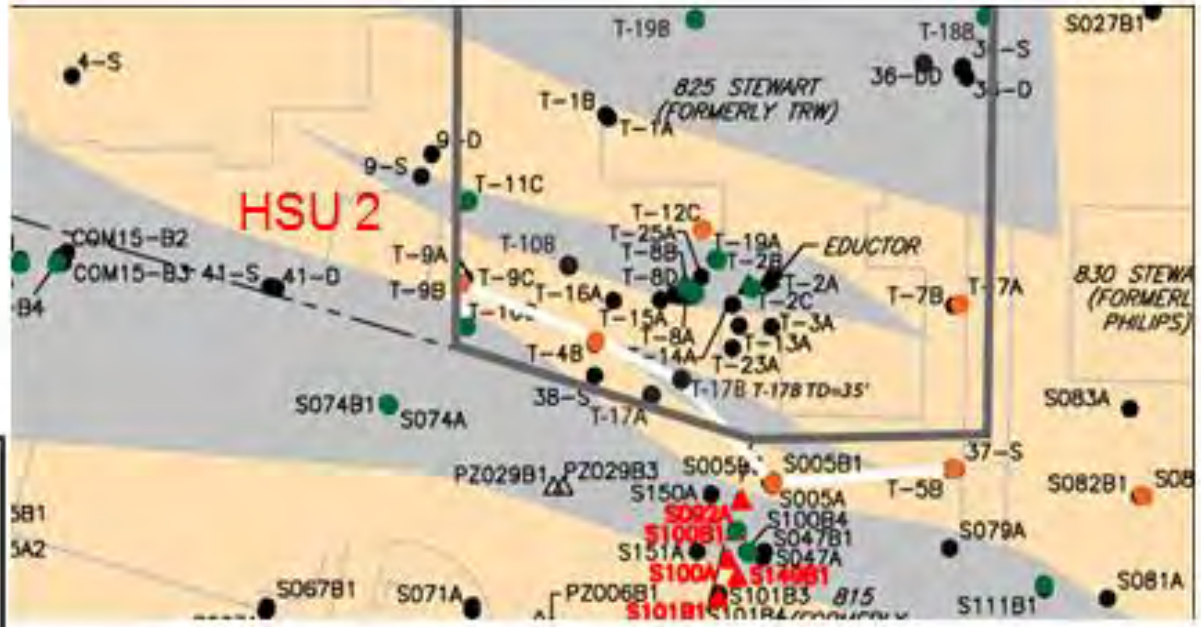
- Cross section extending down-channel from Eductor area with approx. 30-35' facies map
- All well screens shown correspond to Zone B1
- T-10B is more representative of what's coming off TRW compared to T-9B (T-9B is also screened across HSU 2)
- Potential upgradient sources due south are unmonitored





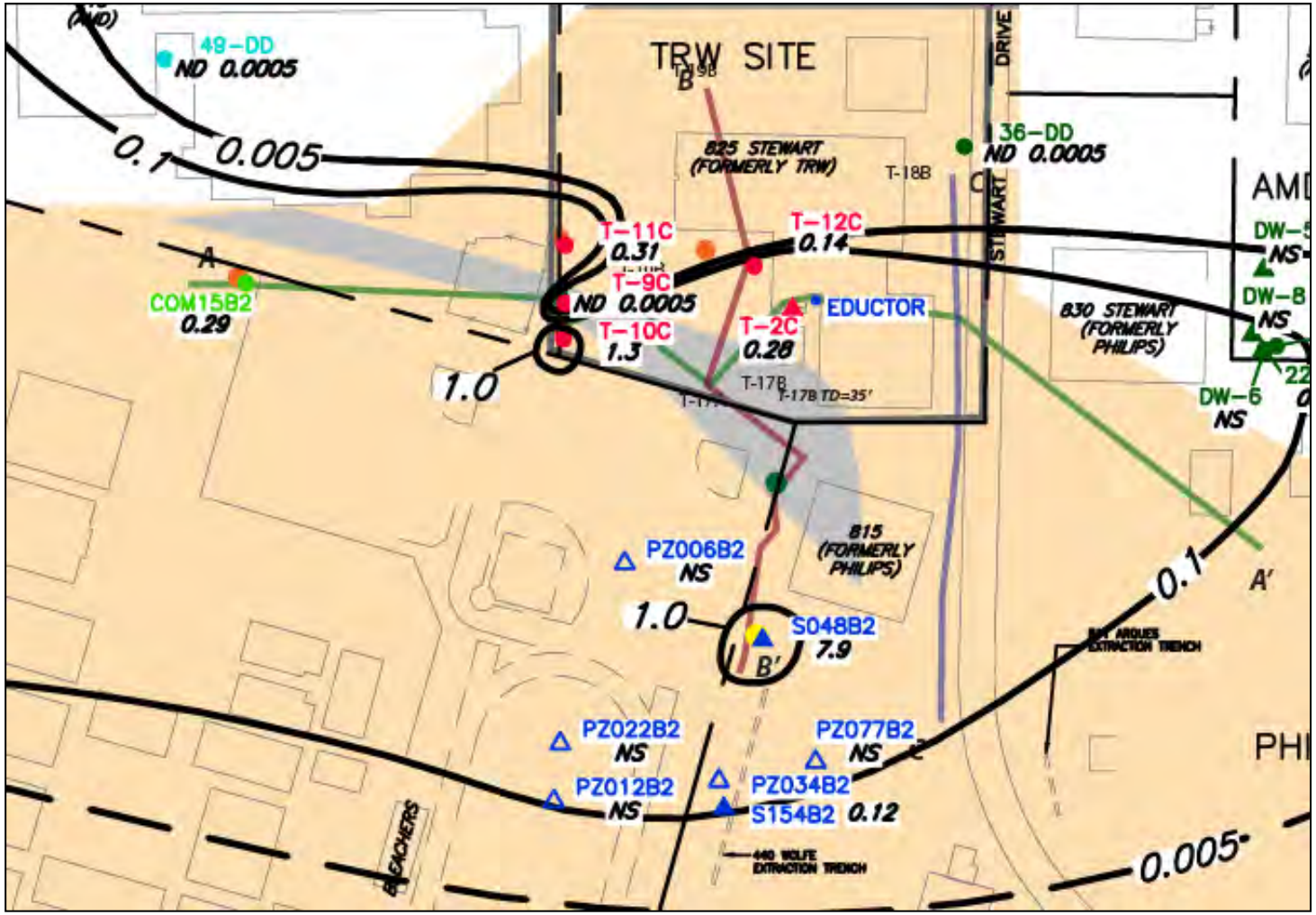
Down-channel view of HSU 2

- Down-channel cross section with facies map@ approx 35-40'
- T-17B: TD@35' tapping channel margin lateral to S005B1, may be back-diffusion impacted



B2 Zone Lithology

- 50-60' Facies Map with Zone B2 TCE Concentrations



ESS Observations and Takeaways

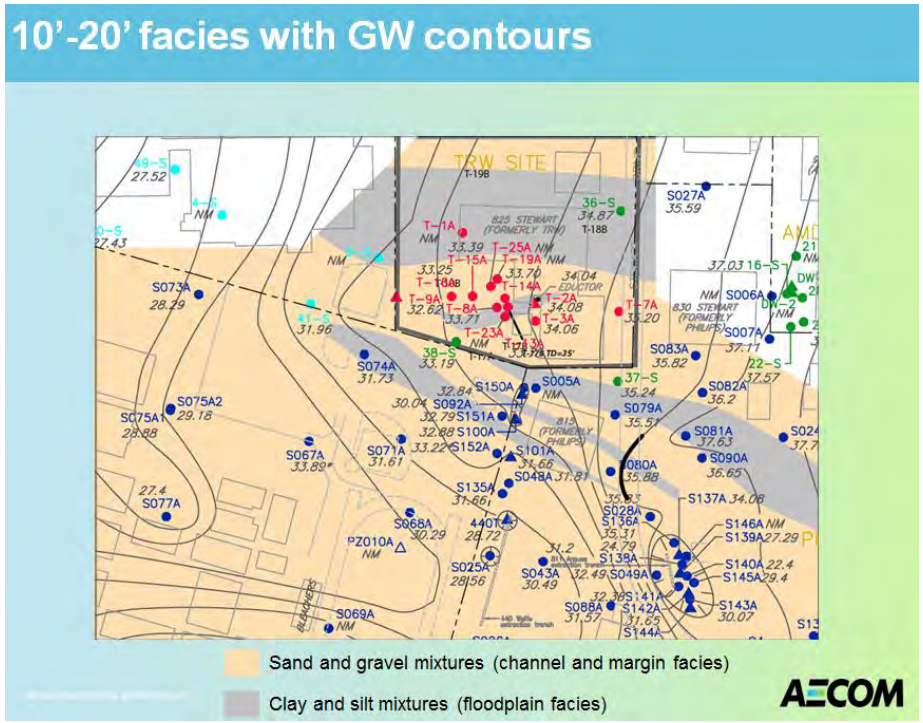
NORTHROP GRUMMAN

Summary of observations

- Complex channelized system with strong evidence for lithologic / channel control on contaminant distribution at all depth intervals
- North or North-Northeast depositional “grain”/channel orientation (permeability / porosity anisotropy) impacts GW elevation maps and contaminant distribution maps

Takeaways

- OOU aquifer designations span distinct channels (multiple channel systems at different depths)
- Contaminant pathways from offsite sources are apparent



Incorporation of ESS results into Site Strategy

NORTHROP GRUMMAN

- Impacts from off-site sources complicates evaluation of contaminant trends in onsite wells. The 2014 FYR is a perfect example.

Representative Excerpts from 2014 FYR

Ref	2014 FYR Interpretation	Revised Interpretation
p. 56, last paragraph	B1 and B2 cDCE and TCE increase downgradient, indicating onsite remedy not effective and vertical migration from onsite source.	Downgradient B1 and B2 cDCE and TCE concentrations are affected by off-site sources to the west.
p. 56, 2nd paragraph	High concentrations in Zone B2 are from the onsite source.	High concentrations in Zone B2 are likely related to off-site sources.

Incorporation of ESS results into Site Strategy

NORTHROP GRUMMAN

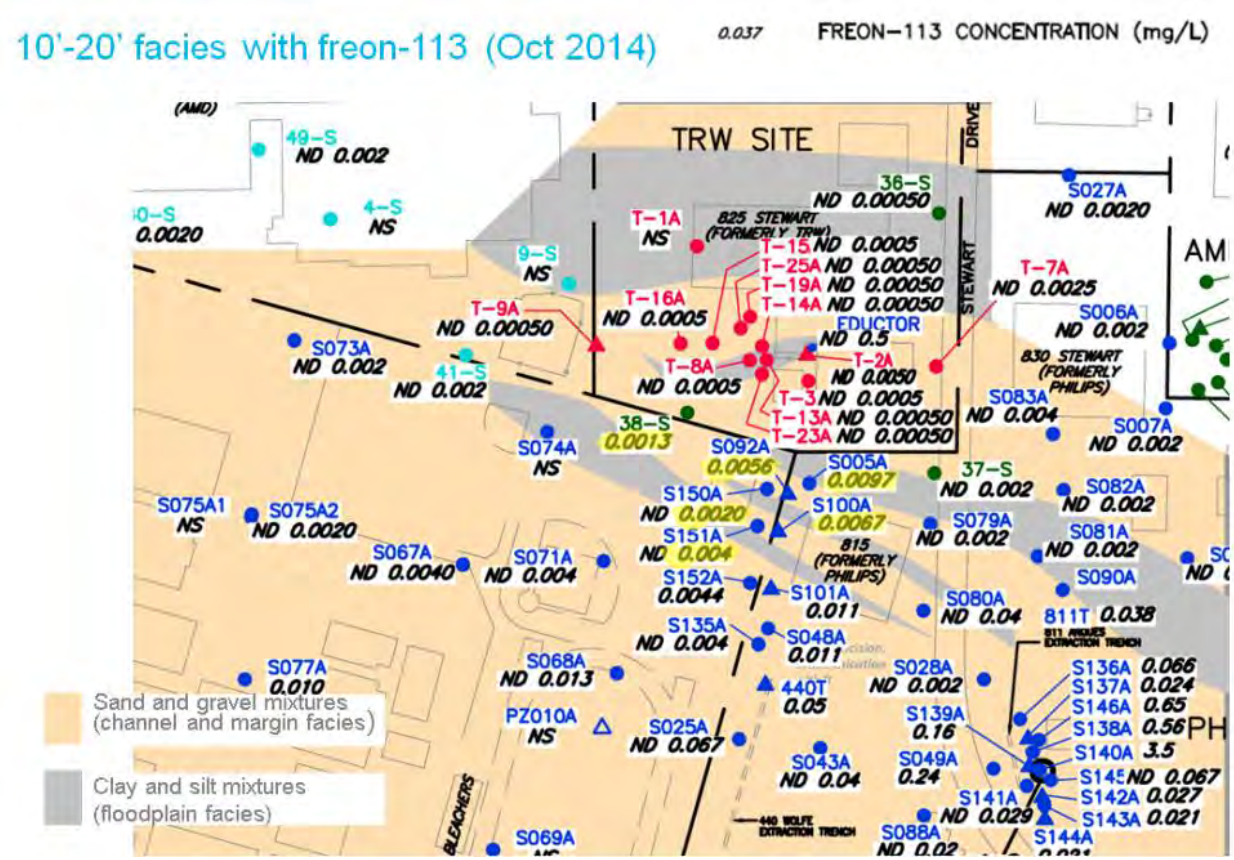
- Propose a revised groundwater monitoring strategy that more accurately monitors TRW-related impacts and effects of onsite remediation.

- Base well monitoring network on:
  - Recently refined contaminant migration pathways (HSUs)
    - Upgradient and downgradient wells along migration pathways
  - Chemistry data
    - Freon 113 as a tracer for off-site impacts
    - Vinyl chloride as a tracer for TRW impacts

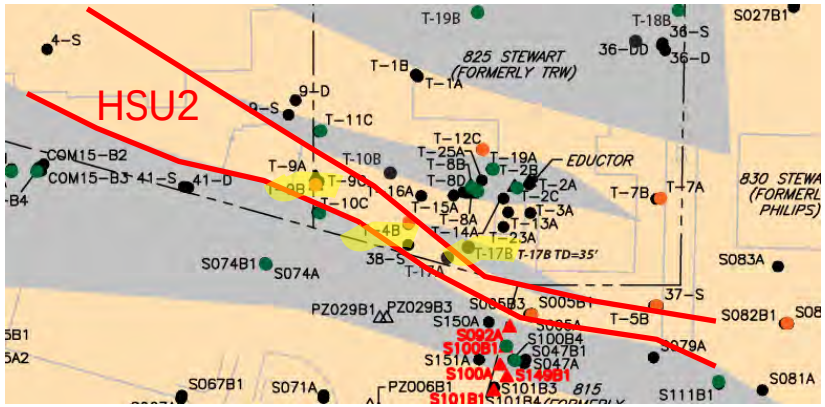
- Two types of well designations for revised monitoring network
  - TRW-related well: Use to evaluate contaminant trends and effectiveness of onsite remediation efforts.
  - Off-site related well: Monitor, but do not use for evaluating contaminant trends or effectiveness of onsite remediation efforts.

Zone A

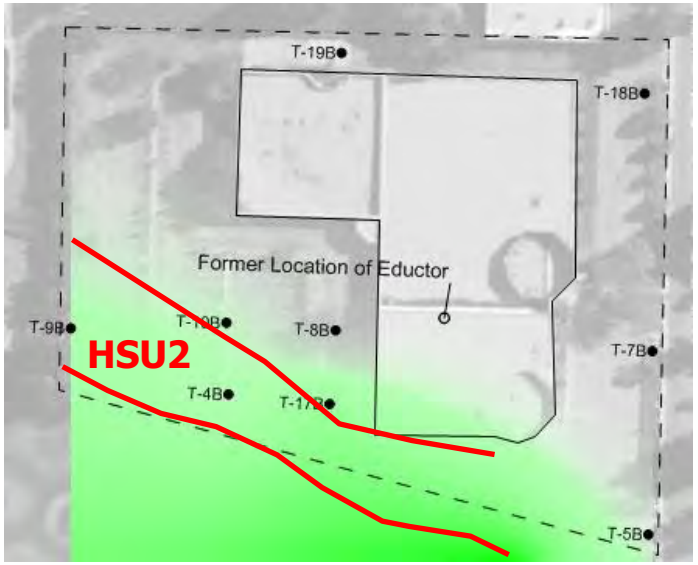
- Well 38-S is not representative of TRW-related impacts
- 38-S should be classified as an off-site related well and not used for trend analysis, etc…



Zone B1 – HSU2



2015 cDCE Concentrations in Zone B1



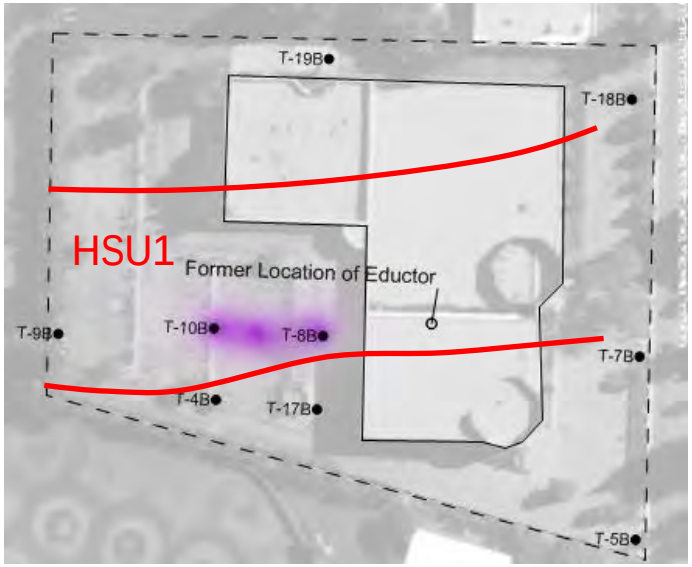
The deeper HSU2 is in communication with offsite contaminant source areas to the SW that significantly contribute to contamination found in T-17B, T-4B, and T-9B.

Based on location of HSU2 and cDCE concentrations, T-17B, T-4B, and T-9B should be classified as an off-site related well and not used in trend analysis or evaluation of remediation for TRW.

Zone B1 – HSU1

Wells screened only in HSU1 may reflect TRW and potentially other sources to the south and include T-2B*, T-8B, T-10B

2015 VC Concentrations in Zone B1



Vinyl chloride can be used as a tracer for TRW-related contamination.

Based on location of HSU1 and VC concentrations, TRW-related B1 monitoring wells include T-8B and T-10B. T-9B (located in HSUs 1 and 2) should not be used in trend analysis or evaluation of remediation for TRW.

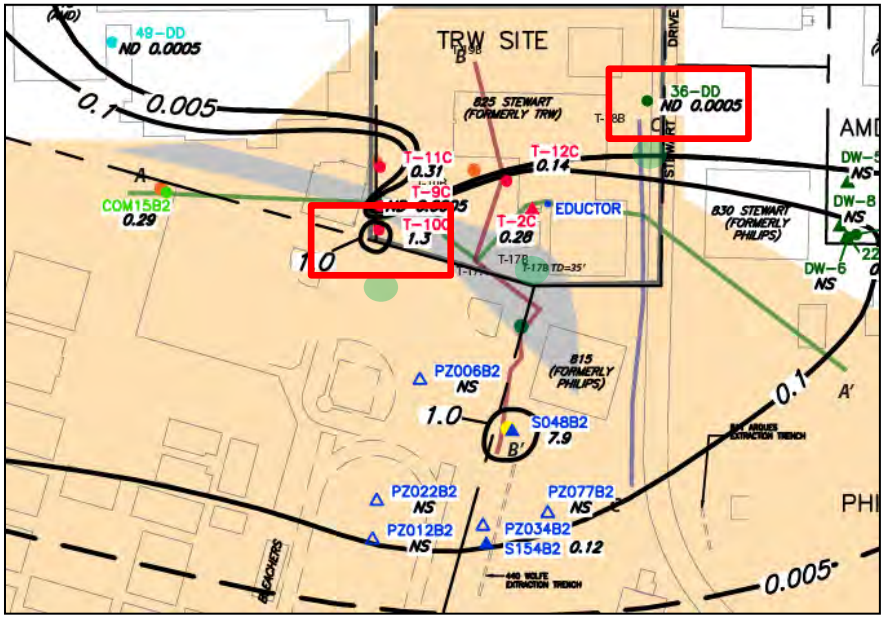
* Well was removed in late 2014 as a potential VI conduit.

Zone B2

Well T-10C is clearly associated with off-site sources and should be classified as an off-site related well.

Well T-11C is a downgradient well.

Well T-9C should be reclassified as a Zone B3 well.



In the FYR, 36-DD was used as u/g well and T-10C was used as d/g well for interpretations

Table 14. TRW Maximum 2013 Annual Groundwater Concentration by Aquifer Zone and Location

COC	Cleanup Level (µg/L)	Up-gradient			Former source area				Down-gradient		
		A	B1	B2	Eductor	A	B1	B2	A	B1	B2
1,1-DCA	5	ND	0.56	ND	ND	ND	1	ND	0.78	0.43 J	ND
1,2-DCB	600	ND	2.2	ND	**1800**	19	10	ND	0.35 J	ND	ND
cDCE	6	**81**	**73**	**11**	**160,000**	**340**	**140**	**44**	**150**	**830**	**85**
tDCE	10	1.8 J	1.8 J	0.9	ND	**86**	1.6	ND	**12**	8.8	1.5
1,1-DCE	6	ND	2.3 J	ND	ND	0.70 J	ND	ND	0.7	3.3 J	2.4 J
Freon 113	1200	ND	190	ND	ND	0.61 J	ND	ND	1.4	1.5 J	170
PCE	5	2.3	4.8 J	ND	ND	1.9	ND	ND	2	2.2 J	ND
TCE	5	**250**	**1500**	ND	**8800**	**250**	ND	**110**	**110**	**410**	**1100**
1,1,1-TCA	200	0.5	0.59	ND	ND	ND	ND	ND	0.35 J	ND	ND
Vinyl chloride	0.5	ND	0.39 J	**1.3**	**1800**	**430**	**150**	ND	**42**	**17**	**4.8**

Appendix C

HISTORIC GROUNDWATER ANALYTICAL RESULTS

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.					
			10/9/2003	9.01	29.45
			10/14/2002	10.36	28.10
			10/1/2001	10.64	27.82
			10/2/2000	11.91	26.55
			10/4/1999	10.79	27.67
			4/5/1999	10.42	28.04
			10/5/1998	10.70	27.76
			4/1/1998	9.48	28.98
		38.46	10/1/1997	11.99	26.47
			4/1/1997	10.83	28.83
			10/1/1996	12.94	26.72
			7/10/1996	12.67	26.99
			10/9/1995	11.40	28.26
			7/5/1995	NM	NA
			4/5/1995	9.48	30.18
			1/10/1995	NM	NA
			10/5/1994	10.59	29.07
			7/6/1994	10.51	29.15
			4/4/1994	11.27	28.39
			1/11/1994	14.03	25.63
			10/15/1993	NM	NA
			7/6/1993	NM	NA
			4/5/1993	17.82	21.84
			1/5/1993	19.50	20.16
			10/29/1992	19.93	19.73
			7/6/1992	20.13	19.53
			4/6/1992	19.41	20.25
			1/6/1992	20.17	19.49
			10/7/1991	21.27	18.39
			7/9/1991	22.22	17.44
			4/9/1991	19.72	19.94
			1/8/1991	21.15	18.51
			10/9/1990	20.66	19.00
			7/5/1990	19.20	20.46
			4/6/1990	18.86	20.80
			1/8/1990	20.03	19.63
			10/10/1989	18.13	21.53
			9/14/1989	17.87	21.79
			4/3/1989	18.63	21.03
		39.66	1/10/1989	15.07	24.59
			10/25/1988	15.17	22.31
			7/26/1988	14.69	22.79
			4/12/1988	12.62	24.86
			2/24/1988	11.70	25.78
			11/30/1987	11.64	25.84
			10/2/1987	9.75	27.73
			7/24/1986	8.93	28.55
			5/13/1986	8.15	29.33
			4/23/1986	8.50	28.98
			3/14/1986	6.35	31.13
		37.48	1/16/1986	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				
Per USEPA approval, well T-2A was destroyed.					
			9/24/2014	8.08	34.08
			4/14/2014	8.05	34.11
			10/14/2013	8.53	33.63
			10/8/2012	8.03	34.13
			10/10/2011	8.01	34.15
			10/11/2010	8.45	33.71
			10/12/2009	8.78	33.38
			10/13/2008	7.83	34.33
		42.16	10/8/2007	7.39	34.77
			10/16/2006	7.69	31.77
			10/10/2005	7.82	31.64
			10/4/2004	9.02	30.44
			10/9/2003	8.56	30.90
		39.46	10/1/2002	9.42	30.04
			10/1/2001	11.46	29.53
			10/2/2000	13.22	27.77
			10/4/1999	16.87	24.12
			4/5/1999	14.51	26.48
			10/5/1998	Dry	NA
			4/1/1998	12.08	28.91
		40.99	10/1/1997	16.70	24.29
			4/1/1997	17.32	22.36
			10/1/1996	12.56	27.12
			7/10/1996	17.45	22.23
			10/9/1995	18.60	21.08
			7/5/1995	19.25	20.43
			4/5/1995	17.91	21.77
			1/10/1995	18.65	21.03
			10/5/1994	Dry	NA
			7/6/1994	18.97	20.71
			4/4/1994	Dry	NA
			1/11/1994	18.47	21.21
			10/15/1993	Dry	NA
			7/6/1993	17.54	22.14
			4/5/1993	17.34	22.34
			1/5/1993	Dry	NA
			10/29/1992	16.61	23.07
			7/6/1992	15.26	24.42
			4/6/1992	16.91	22.77
			1/6/1992	16.37	23.31
			10/7/1991	17.16	22.52
			7/9/1991	16.66	23.02
			4/9/1991	NM	NA
			1/8/1991	10.18	29.50
			10/9/1990	16.64	23.04
			7/5/1990	16.06	23.62
			4/6/1990	17.40	22.28
			1/8/1990	12.88	26.80
			10/10/1989	15.77	23.91
			9/14/1989	16.31	23.37
			4/3/1989	12.55	27.13
		39.68	1/10/1989	15.50	24.18
			10/25/1988	15.88	23.77
			7/26/1988	15.59	24.06
			4/12/1988	15.32	24.33
			2/24/1988	11.74	27.91
			11/30/1987	12.15	27.50
			10/2/1987	10.67	28.98
			7/24/1986	12.73	26.92
		39.65	5/13/1986	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				
Per USEPA approval, well T-3A was destroyed.					
			9/24/2014	7.68	34.06
			4/14/2014	7.54	34.20
			10/14/2013	7.99	33.75
			10/8/2012	7.59	41.74
			10/10/2011	7.48	34.26
			10/11/2010	7.92	33.82
			10/12/2009	8.32	33.42
			10/13/2008	7.28	34.46
		41.74	10/8/2007	6.78	34.96
			10/16/2006	7.11	31.93
			10/10/2005	7.25	31.79
			10/4/2004	8.56	30.48
			10/9/2003	8.07	30.97
			10/14/2002	8.90	30.14
			10/1/2001	9.23	29.81
			10/2/2000	9.97	29.07
			10/4/1999	9.69	29.35
			4/5/1999	9.46	29.58
			10/5/1998	6.52	32.52
			4/1/1998	8.42	30.62
		39.04	10/1/1997	10.82	28.22
			4/1/1997	10.03	29.44
			10/1/1996	11.69	27.78
			7/10/1996	11.37	28.10
			10/9/1995	11.73	27.74
			7/5/1995	11.42	28.05
			4/5/1995	9.70	29.77
			1/10/1995	10.35	29.12
			10/5/1994	10.72	28.75
			7/6/1994	13.34	26.13
			4/4/1994	13.64	25.83
			1/11/1994	14.04	25.43
			10/15/1993	13.73	25.74
			7/6/1993	13.12	26.35
			4/5/1993	10.95	28.52
			1/5/1993	11.34	28.13
			10/29/1992	11.00	28.47
			7/6/1992	14.90	24.57
			4/6/1992	11.28	28.19
			1/6/1992	12.25	27.22
			10/7/1991	11.06	28.41
			7/9/1991	12.50	26.97
			4/9/1991	11.80	27.67
			1/8/1991	10.65	28.82
			10/9/1990	12.57	26.90
			7/5/1990	10.22	29.25
			4/6/1990	10.17	29.30
			1/8/1990	9.73	29.74
			10/10/1989	10.76	28.71
			9/14/1989	10.04	29.43
			4/3/1989	9.12	30.35
		39.47	1/10/1989	NM	NA
			10/25/1988	9.75	29.91
			7/26/1988	10.01	29.65
			4/12/1988	9.30	30.36
			2/24/1988	9.62	30.04
			11/30/1987	9.78	29.88
			10/2/1987	8.68	30.98
			7/24/1986	9.89	29.77
			5/13/1986	9.75	29.91
			4/23/1986	9.50	30.16
			3/14/1986	7.16	32.50
		39.66	1/15/1986	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		10/12/2015	NM	--
			10/14/2013	NM	--
			10/8/2012	NM	--
			10/10/2011	NM	--
			10/11/2010	NM	--
			10/12/2009	8.42	31.50
			10/13/2008	NM	--
		39.92	10/8/2007	8.00	31.92
			10/16/2006	8.21	29.01
			10/10/2005	8.45	28.77
			10/9/2003	7.29	29.93
			10/14/2002	8.31	28.91
			10/1/2001	8.40	28.82
			10/2/2000	10.55	26.67
			10/4/1999	10.37	26.85
			4/5/1999	9.96	27.26
			10/5/1998	10.17	27.05
			4/1/1998	9.02	28.20
		37.22	10/1/1997	11.23	25.99
			4/1/1997	10.05	27.76
			10/1/1996	11.69	26.12
			7/10/1996	11.77	26.04
			10/9/1995	11.40	26.41
			7/5/1995	11.17	26.64
			4/5/1995	8.89	28.92
			1/10/1995	10.66	27.15
			10/5/1994	10.80	27.01
			7/6/1994	11.54	26.27
			4/4/1994	11.90	25.91
			1/11/1994	12.48	25.33
			10/15/1993	11.28	26.53
			7/6/1993	12.48	25.33
			4/5/1993	11.63	26.18
			1/5/1993	12.98	24.83
			10/29/1992	13.08	24.73
			7/6/1992	14.20	23.61
			4/6/1992	14.47	23.34
			1/6/1992	16.33	21.48
			10/7/1991	15.73	22.08
			7/9/1991	14.79	23.02
			4/9/1991	15.33	22.48
			1/8/1991	16.03	21.78
			10/9/1990	16.12	21.69
			7/5/1990	NM	NA
			4/6/1990	15.29	22.52
			1/8/1990	15.44	22.37
			10/10/1989	14.92	22.89
			9/14/1989	14.76	23.05
			4/3/1989	14.34	23.47
		37.81	1/10/1989	13.42	24.39
			10/25/1988	13.35	24.64
			7/26/1988	12.95	25.04
			4/12/1988	12.61	25.38
			2/24/1988	12.15	25.84
			11/30/1987	12.30	25.69
			10/2/1987	11.63	26.36
			7/24/1986	10.14	27.85
			5/13/1986	9.85	28.14
		37.99	1/15/1986	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		10/12/2015	7.71	34.38
			10/13/2014	6.89	35.20
			10/14/2013	7.11	34.98
			10/8/2012	6.75	35.34
			10/10/2011	6.60	35.49
			10/11/2010	7.05	35.04
			10/12/2009	7.31	34.78
			10/13/2008	6.54	35.55
		42.09	10/8/2007	6.14	35.95
			10/16/2006	6.33	33.06
			10/10/2005	6.44	32.95
			10/4/2004	7.68	31.71
			10/9/2003	7.07	32.32
		39.39	10/14/2002	8.23	31.16
			10/1/2001	8.37	30.60
			10/2/2000	8.41	30.56
			10/4/1999	8.55	30.42
			4/5/1999	8.37	30.60
			10/5/1998	8.22	30.75
			4/1/1998	7.46	31.51
		38.97	10/1/1997	9.34	29.63
			4/1/1997	8.60	30.93
			10/1/1996	10.10	29.43
			7/10/1996	10.11	29.42
			10/9/1995	9.76	29.77
			7/5/1995	10.55	28.98
			4/5/1995	8.56	30.97
			1/10/1995	8.88	30.65
			10/5/1994	10.60	28.93
			7/6/1994	12.21	27.32
			4/4/1994	12.52	27.01
			1/11/1994	12.45	27.08
			10/15/1993	12.04	27.49
			7/6/1993	11.53	28.00
			4/5/1993	11.04	28.49
			1/5/1993	10.77	28.76
			10/29/1992	13.26	26.27
			7/6/1992	15.61	23.92
			4/6/1992	14.84	24.69
			1/6/1992	13.61	25.92
			10/7/1991	18.18	21.35
			7/9/1991	17.39	22.14
			4/9/1991	14.97	24.56
			1/8/1991	17.67	21.86
			10/9/1990	16.46	23.07
			7/5/1990	16.19	23.34
			4/6/1990	15.29	24.24
			1/8/1990	15.13	24.40
			10/10/1989	11.71	27.82
			9/14/1989	10.17	29.36
			4/3/1989	12.21	27.32
		39.53	1/10/1989	11.84	27.69
			10/25/1988	11.36	28.21
			7/26/1988	11.22	28.35
			4/12/1988	10.71	28.86
			2/24/1988	10.09	29.48
			11/30/1987	9.89	29.68
			10/2/1987	9.01	30.56
			7/24/1986	8.13	31.44
			5/13/1986	8.19	31.38
			4/22/1986	7.80	31.77
			3/14/1986	6.20	33.37
			3/12/1986	6.05	33.52
		39.57	1/16/1986	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		10/12/2015	7.68	32.70
			10/13/2014	6.67	33.71
			4/14/2014	6.78	33.60
			10/14/2013	7.25	33.13
			10/8/2012	6.86	33.52
			10/10/2011	6.68	33.70
			10/11/2010	6.85*	33.53
			4/5/2010	6.16	34.22
			10/12/2009	7.50	32.88
			10/13/2008	6.54	33.84
		40.38	10/8/2007	6.02	34.36
			10/16/2006	6.35	31.33
			10/10/2005	6.48	31.20
			10/4/2004	7.70	29.98
			10/9/2003	7.27	30.41
		37.68	10/1/2002	8.10	29.58
			10/1/2001	8.43	29.89
			10/2/2000	9.43	28.89
			10/4/1999	8.88	29.44
			4/5/1999	8.75	29.57
			10/5/1998	9.27	29.05
			4/1/1998	8.21	30.11
		38.32	10/1/1997	10.95	27.37
			4/1/1997	10.95	27.37
			10/1/1996	13.00	25.32
			7/10/1996	13.09	25.23
			10/9/1995	16.02	22.30
			7/5/1995	15.90	22.42
			4/5/1995	12.76	25.56
			1/10/1995	11.91	26.41
			10/5/1994	11.95	26.37
			7/6/1994	12.67	25.65
			4/4/1994	13.20	25.12
			1/11/1994	13.97	24.35
			10/15/1993	15.78	22.54
			7/6/1993	12.52	25.80
			4/5/1993	15.57	22.75
			1/5/1993	12.92	25.40
			10/29/1992	13.23	25.09
			7/6/1992	14.08	24.24
			4/6/1992	14.76	23.56
			1/6/1992	15.40	22.92
			10/7/1991	15.68	22.64
			7/9/1991	15.21	23.11
			4/9/1991	14.54	23.78
			1/8/1991	15.84	22.48
			10/9/1990	15.46	22.86
			7/5/1990	14.73	23.59
			4/6/1990	15.11	23.21
			1/8/1990	14.10	24.22
			10/10/1989	16.67	21.65
			9/14/1989	14.40	23.92
			4/3/1989	15.06	23.26
		38.32	1/10/1989	NM	NA
			10/25/1988	14.77	23.59
			7/26/1988	15.85	22.51
			4/12/1988	NM	NA
			2/24/1988	11.09	27.27
			11/30/1987	10.70	27.66
			10/2/1987	9.66	28.70
			7/24/1986	13.34	25.02
			5/13/1986	11.55	26.81
		38.36	3/10/1986	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		10/12/2015	7.90	31.32
			10/13/2014	6.60	32.62
			10/14/2013	7.71	31.51
			10/8/2012	7.26	31.96
			10/10/2011	7.07	32.15
			10/11/2010	7.53	31.69
			10/12/2009	7.89	31.33
			10/13/2008	6.80	32.42
		39.22	10/8/2007	6.33	32.89
		36.52	10/16/2006	6.77	23.02
			10/10/2005	6.53	30.68
			10/4/2004	7.84	29.37
			10/9/2003	7.51	29.70
			10/14/2002	8.27	28.94
			10/1/2001	8.67	28.54
			10/2/2000	11.30	25.91
			10/4/1999	9.94	27.27
			4/5/1999	10.07	27.14
			10/5/1998	9.17	28.04
			4/1/1998	8.57	28.64
		37.21	10/1/1997	11.29	25.92
			4/1/1997	9.88	27.34
			10/1/1996	11.03	26.19
			7/10/1996	10.67	26.55
			10/9/1995	11.33	25.89
			7/5/1995	11.00	26.22
			4/5/1995	8.84	28.38
			1/10/1995	11.12	26.10
			10/5/1994	12.72	24.50
			7/6/1994	12.85	24.37
			4/4/1994	12.93	24.29
			1/11/1994	15.20	22.02
			10/15/1993	13.26	23.96
			7/6/1993	12.80	24.42
			4/5/1993	14.12	23.10
			1/5/1993	Dry	NA
			10/29/1992	13.21	24.01
			7/6/1992	13.97	23.25
			4/6/1992	14.52	22.70
			1/6/1992	15.04	22.18
			10/7/1991	15.34	21.88
			7/9/1991	14.94	22.28
			4/9/1991	14.31	22.91
			1/8/1991	15.57	21.65
			10/9/1990	15.26	21.96
			7/5/1990	14.58	22.64
			4/6/1990	14.10	23.12
			1/8/1990	14.09	23.13
			10/10/1989	14.63	22.59
			9/14/1989	13.43	23.79
			4/3/1989	12.54	24.68
		37.22	1/10/1989	12.33	24.89
			10/25/1988	12.34	24.88
			7/26/1988	11.85	25.37
			4/12/1988	12.01	25.21
			2/24/1988	12.80	24.42
			11/30/1987	11.98	25.24
			10/2/1987	9.66	27.56
			5/13/1986	12.12	25.10
			3/17/1986	11.85	25.37
			3/14/1986	13.50	23.72
		37.22	3/12/1986	6.12	33.10

Historic Water-Level Elevation Measurements
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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		10/12/2015	8.06	32.70
			10/13/2014	7.01	33.75
			4/14/2014	7.02	33.74
			10/14/2013	7.49	33.27
			10/8/2012	7.12	33.64
			10/10/2011	7.04	33.72
			10/11/2010	7.44	33.32
			4/5/2010	6.38	34.38
			10/12/2009	7.78	32.98
			10/13/2008	6.92	33.84
		40.76	10/8/2007	6.31	34.45
		38.06	10/16/2006	6.58	31.48
T-14A	A		10/12/2015	7.93	32.69
			10/13/2014	6.92	33.70
			4/14/2014	7.01	33.61
			10/14/2013	7.46	33.16
			10/8/2012	7.07	33.55
			10/10/2011	6.93	33.69
			10/11/2010	7.38	33.24
			4/5/2010	6.28	34.34
			10/12/2009	7.71	32.91
			10/13/2008	6.73	33.89
		40.62	10/8/2007	6.30	34.32
		37.92	10/16/2006	6.52	31.40
T-15A	A		10/12/2015	7.81	32.30
			10/13/2014	6.72	33.39
			4/14/2014	6.92	33.19
			10/14/2013	7.38	32.73
			10/8/2012	6.98	33.13
			10/10/2011	6.81	33.30
			10/11/2010	7.28	32.83
			10/12/2009	7.61	32.50
			10/13/2008	6.68	33.43
		40.11	10/8/2007	6.15	33.96
		37.41	10/16/2006	6.48	30.93
T-16A	A		10/12/2015	7.83	32.19
			10/13/2014	6.77	33.25
			10/14/2013	7.56	32.46
			10/8/2012	7.11	32.91
			10/10/2011	6.91	33.11
			10/11/2010	7.36	32.66
			10/12/2009	7.74	32.28
			10/13/2008	6.75	33.27
		40.02	10/8/2007	6.30	33.72
		37.32	10/16/2006	6.60	30.72
T-17A	A		10/12/2015	8.18	30.05
			10/13/2014	7.19	31.04
			4/14/2014	7.30	30.93
		38.23	10/14/2013	7.82	30.41

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
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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		10/12/2015	7.28	34.18
			10/14/2013	DRY	--
			10/8/2012	DRY	--
			10/10/2011	6.25	35.21
			10/11/2010	6.65	34.81
			10/12/2009	6.83	34.63
			10/13/2008	6.29	35.17
		41.46	10/8/2007	5.92	35.54
			10/16/2006	6.07	32.55
			10/10/2005	6.20	32.42
			10/4/2004	6.93	31.69
			10/9/2003	6.60	32.02
			10/14/2002	7.37	31.25
			10/1/2001	7.47	31.15
			10/2/2000	7.79	30.83
			10/4/1999	7.70	30.92
			4/5/1999	7.14	31.48
			10/5/1998	7.39	31.23
			4/1/1998	6.58	32.04
		38.62	Oct-97+	8.50	30.12
			4/1/1997	7.85	31.18
			10/1/1996	9.40	29.63
			7/10/1996	9.14	29.89
			10/9/1995	9.02	30.01
			7/5/1995	9.25	29.78
			4/5/1995	7.59	31.44
			1/10/1995	7.60	31.43
			10/5/1994	9.37	29.66
			7/6/1994	10.90	28.13
			4/4/1994	11.48	27.55
			1/11/1994	11.82	27.21
			10/15/1993	11.40	27.63
			7/6/1993	10.69	28.34
			4/5/1993	9.66	29.37
			1/5/1993	11.35	27.68
			10/29/1992	11.81	27.22
			7/6/1992	11.80	27.23
			4/6/1992	9.36	29.67
			1/6/1992	12.98	26.05
			10/7/1991	14.23	24.80
			7/9/1991	13.93	25.10
			4/9/1991	13.08	25.95
			1/8/1991	Dry	NA
			10/9/1990	11.33	27.70
			7/5/1990	13.67	25.36
			4/6/1990	12.64	26.39
			1/8/1990	10.87	28.16
			10/10/1989	10.72	28.31
			9/14/1989	10.79	28.24
			4/3/1989	11.60	27.43
		39.03	1/10/1989	11.14	27.89
			10/25/1988	10.93	28.28
			7/26/1988	10.47	28.74
			4/12/1988	10.19	29.02
			2/24/1988	9.54	29.67
			11/30/1987	9.33	29.88
			10/2/1987	8.55	30.66
			7/24/1986	7.42	31.79
			5/13/1986	6.51	32.70
			4/21/1986	7.50	31.71
			3/14/1986	5.94	33.27
			3/12/1986	6.08	33.13
		39.21	1/15/1986	7.50	33.96

Historic Water-Level Elevation Measurements
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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		10/12/2015	7.04	34.22
			10/14/2013	6.44	34.82
			10/8/2012	6.20	35.06
			10/10/2011	6.03	35.23
			10/11/2010	6.43	34.83
			10/12/2009	6.61	34.65
			10/13/2008	6.02	35.24
		41.26	10/8/2007	5.67	35.59
			10/16/2006	5.82	32.58
			10/10/2005	5.96	32.44
			10/4/2004	6.72	31.68
			10/9/2003	6.40	32.00
			10/14/2002	7.12	31.28
			10/1/2001	7.24	31.16
			10/2/2000	7.52	30.88
			10/4/1999	7.43	30.97
			4/5/1999	7.17	31.23
			10/5/1998	7.19	31.21
			4/1/1998	6.38	32.02
		38.40	Oct-97+	8.20	30.20
			4/1/1997	7.61	31.27
			10/1/1996	9.16	29.72
			7/10/1996	8.89	29.99
			10/9/1995	8.71	30.17
			7/5/1995	9.03	29.85
			4/5/1995	7.41	31.47
			1/10/1995	7.57	31.31
			10/5/1994	9.02	29.86
			7/6/1994	10.76	28.12
			4/4/1994	11.26	27.62
			1/11/1994	11.62	27.26
			10/15/1993	11.26	27.62
			7/6/1993	10.60	28.28
			4/5/1993	11.00	27.88
			1/5/1993	11.67	27.21
			10/5/1992	11.40	27.48
			7/6/1992	12.52	26.36
			4/6/1992	10.68	28.20
			1/6/1992	14.37	24.51
			10/7/1991	14.51	24.37
			7/9/1991	14.28	24.60
			4/9/1991	13.66	25.22
			1/8/1991	14.83	24.05
			10/9/1990	13.26	25.62
			7/5/1990	13.93	24.95
			4/6/1990	13.55	25.33
			1/8/1990	12.51	26.37
			10/10/1989	11.68	27.20
			9/14/1989	11.71	27.17
			4/3/1989	11.35	27.53
		38.88	1/10/1989	10.95	27.93
			10/25/1988	10.74	28.32
			7/26/1988	10.23	28.83
			4/12/1988	9.96	29.10
			2/24/1988	9.35	29.71
			11/30/1987	9.08	29.98
			10/2/1987	8.32	30.74
			7/24/1986	7.32	31.74
			5/13/1986	7.37	31.69
			4/23/1986	NM	NA
			4/22/1986	7.20	31.86
			4/21/1986	NM	NA
			3/17/1986	NM	NA
			3/14/1986	5.82	33.24
			3/12/1986	5.90	33.16
			3/10/1986	NM	NA
		39.06	1/15/1986	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		10/12/2015	7.71	34.35
			10/14/2013	7.01	35.05
			10/8/2012	6.56	35.50
			10/10/2011	6.43	35.63
			10/11/2010	6.92	35.14
			10/12/2009	7.30	34.76
			10/13/2008	6.20	35.86
		42.06	10/8/2007	5.60	36.46
			10/16/2006	5.95	33.84
			10/10/2005	6.21	33.58
			10/4/2004	7.82	31.97
			10/9/2003	7.38	32.41
		39.79	10/14/2002	8.23	31.56
			10/1/2001	8.40	30.84
			10/2/2000	8.49	30.75
			10/4/1999	7.70	30.92
			10/4/1999	8.36	30.88
			4/5/1999	7.14	31.48
			4/5/1999	8.33	30.91
			10/5/1998	8.42	30.82
			4/1/1998	7.38	31.86
		39.24	Oct-97+	9.20	30.04
			4/1/1997	8.29	31.41
			10/1/1996	9.67	30.03
			7/10/1996	9.25	30.45
			10/9/1995	9.86	29.84
			7/5/1995	9.85	29.85
			4/5/1995	8.34	31.36
			1/10/1995	10.56	29.14
			10/5/1994	10.69	29.01
			7/6/1994	11.81	27.89
			4/4/1994	12.46	27.24
			1/11/1994	12.73	26.97
			10/15/1993	11.72	27.98
			7/6/1993	12.01	27.69
			4/5/1993	9.80	29.90
			1/5/1993	Dry	NA
			10/29/1992	Dry	NA
			7/6/1992	Dry	NA
			4/6/1992	Dry	NA
			1/6/1992	Dry	NA
			10/7/1991	Dry	NA
			7/9/1991	Dry	NA
			4/9/1991	Dry	NA
			1/8/1991	Dry	NA
			10/9/1990	Dry	NA
			7/5/1990	Dry	NA
			4/6/1990	Dry	NA
			1/8/1990	Dry	NA
			10/10/1989	12.20	27.50
			9/14/1989	11.73	27.97
			4/3/1989	13.00	26.70
		39.70	1/10/1989	12.47	27.23
			10/25/1988	12.03	28.16
			7/26/1988	11.92	28.27
			4/12/1988	11.24	28.95
			2/24/1988	10.65	29.54
			11/30/1987	10.64	29.55
			10/2/1987	8.53	31.66
			7/24/1986	8.53	31.66
			5/13/1986	8.54	31.65
			3/14/1986	6.44	33.75
			3/12/1986	6.42	33.77
		40.19	1/15/1986	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		10/12/2015	8.97	32.08
			10/14/2013	8.64	32.41
			10/8/2012	8.25	32.80
			10/10/2011	8.05	33.00
			10/11/2010	8.55	32.50
			10/12/2009	9.02	32.03
			10/13/2008	7.71	33.34
		41.05	10/8/2007	7.07	33.98
			10/16/2006	7.56	30.79
			10/10/2005	7.57	30.78
			10/4/2004	9.12	29.23
			10/9/2003	8.63	29.72
			10/14/2002	9.57	28.78
			10/1/2001	10.05	28.30
			10/2/2000	11.21	27.14
			10/4/1999	10.50	27.85
			4/5/1999	10.72	27.63
			10/5/1998	10.81	27.54
			4/1/1998	9.15	29.20
		38.35	Oct-97+	11.63	26.72
			4/1/1997	10.45	28.40
			10/1/1996	11.91	26.94
			7/10/1996	11.74	27.11
			10/9/1995	12.12	26.73
			7/5/1995	11.62	27.23
			4/5/1995	9.50	29.35
			1/10/1995	11.36	27.49
			10/5/1994	9.81	29.04
			7/6/1994	13.70	25.15
			4/4/1994	14.19	24.66
			1/11/1994	14.45	24.40
			10/15/1993	Dry	NA
			7/6/1993	14.30	24.55
			4/5/1993	13.08	25.77
			1/5/1993	13.97	24.88
			10/29/1992	Dry	NA
			7/6/1992	Dry	NA
			4/6/1992	Dry	NA
			1/6/1992	Dry	NA
			10/7/1991	Dry	NA
			7/9/1991	Dry	NA
			4/9/1991	Dry	NA
			1/8/1991	Dry	NA
			10/9/1990	Dry	NA
			7/5/1990	Dry	NA
			4/6/1990	Dry	NA
			1/8/1990	Dry	NA
			10/10/1989	14.32	24.53
			9/14/1989	14.53	24.32
			4/3/1989	13.97	24.88
		38.85	1/10/1989	13.68	25.17
			10/25/1988	13.62	25.52
			7/26/1988	13.12	26.02
			4/12/1988	12.68	26.46
			2/24/1988	12.55	26.59
			11/30/1987	12.68	26.46
			10/2/1987	11.49	27.65
			7/24/1986	10.52	28.62
			5/13/1986	9.95	29.19
			3/14/1986	7.34	31.80
		39.14	1/15/1986	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				
Per USEPA approval, the Eductor was destroyed.					
			9/24/2014	8.20	34.04
			4/14/2014	7.89	34.35
		*corrected for	10/14/2013	8.45*	33.79
		soybean oil	10/8/2012	8.08	34.16
			10/10/2011	8.39	33.85
			10/11/2010	8.48	33.76
			10/12/2009	8.81	33.43
			10/13/2008	7.88	34.36
		42.24	10/8/2007	7.50	34.74
			10/16/2006	7.78	31.76
			10/10/2005	7.89	31.65
			10/4/2004	9.03	30.51
			10/9/2003	8.57	30.97
		39.54	10/1/2002	9.36	30.18
			10/1/2001	11.27	29.80
			10/2/2000	16.31	24.76
			10/4/1999	15.97	25.10
			4/5/1999	16.08	24.99
			10/5/1998	11.87	29.20
			4/1/1998	16.09	24.98
		41.07	10/1/1997	16.22	24.85
			4/1/1997	15.90	24.38
			10/1/1996	NM	NA
			7/10/1996	16.37	23.91
			10/9/1995	16.25	24.03
			7/5/1995	16.08	24.20
			4/5/1995	16.11	24.17
			1/10/1995	15.98	24.30
			10/5/1994	16.24	24.04
			7/6/1994	16.35	23.93
			4/4/1994	16.56	23.72
			1/11/1994	16.50	23.78
			10/15/1993	16.54	23.74
			7/6/1993	16.37	23.91
			4/5/1993	15.08	25.20
			1/5/1993	15.54	24.74
			10/29/1992	13.92	26.36
			7/6/1992	15.60	24.68
			4/6/1992	15.13	25.15
			1/6/1992	15.25	25.03
			10/7/1991	16.72	23.56
			7/9/1991	16.04	24.24
			4/9/1991	14.99	25.29
			1/8/1991	12.66	27.62
			10/9/1990	12.76	27.52
			7/5/1990	11.72	28.56
			4/6/1990	11.89	28.39
			1/8/1990	12.07	28.21
			10/10/1989	12.40	27.88
			9/14/1989	11.55	28.73
			4/3/1989	11.63	28.65
		40.28	1/10/1989	10.59	29.69
			10/25/1988	12.33	27.95
			7/26/1988	13.30	26.98
			4/12/1988	12.95	27.33
			2/24/1988	12.74	27.54
			11/30/1987	NM	NA
			10/2/1987	11.50	28.78
		40.28	5/13/1986	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.					
			10/9/2003	9.31	29.71
			10/14/2002	10.99	28.03
			10/1/2001	11.54	27.48
			10/2/2000	13.09	25.93
			10/4/1999	11.46	27.56
			4/5/1999	11.87	27.15
			10/5/1998	11.66	27.36
			4/1/1998	10.56	28.46
		39.02	10/1/1997	12.90	26.12
		39.53	4/1/1997	11.88	27.65
			10/1/1996	14.51	25.17
			7/10/1996	13.97	25.71
			10/9/1995	12.84	26.84
			7/5/1995	13.86	25.82
			4/5/1995	10.95	28.73
			1/10/1995	12.60	27.08
			10/5/1994	12.80	26.88
			7/6/1994	13.47	26.21
			4/4/1994	15.01	24.67
			1/11/1994	16.93	22.75
			10/15/1993	13.34	26.34
			7/6/1993	19.64	20.04
			4/5/1993	18.52	21.16
			1/5/1993	20.28	19.40
			10/5/1992	18.86	20.82
			7/6/1992	20.38	19.30
			4/6/1992	19.53	20.15
			1/6/1992	20.94	18.74
			10/7/1991	21.78	17.90
			7/12/1991	21.05	18.63
			4/9/1991	20.54	19.14
			1/8/1991	21.60	18.08
			10/9/1990	21.07	18.61
			7/5/1990	19.92	19.76
			4/6/1990	19.38	20.30
			1/8/1990	20.54	19.14
			10/10/1989	18.49	21.19
			9/14/1989	18.23	21.45
			4/3/1989	18.95	20.73
		39.68	1/10/1989	15.46	24.22
			10/25/1988	15.90	21.50
			7/26/1988	15.21	22.19
			4/12/1988	14.03	23.37
			2/24/1988	12.86	24.54
			11/30/1987	12.70	24.70
			10/2/1987	10.45	26.95
			7/24/1986	9.75	27.65
			5/13/1986	8.23	29.17
			4/21/1986	9.40	28.00
			3/14/1986	7.47	29.93
			3/12/1986	6.29	31.11
		37.40	1/16/1986	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				
Per USEPA approval, well T-2B was destroyed.					
			9/24/2014	8.18	34.05
			4/14/2014	7.91	34.32
			10/13/2013	8.36	33.87
			10/8/2012	8.08	34.15
			10/10/2011	7.89	34.34
			10/11/2010	8.41	33.82
			10/12/2009	8.82	33.41
			10/13/2008	8.05	34.18
		42.23	10/8/2007	7.29	34.94
			10/16/2006	7.57	31.96
			10/10/2005	7.71	31.82
			10/4/2004	9.04	30.49
			10/9/2003	8.56	30.97
		39.53	10/1/2002	9.79	29.74
			10/1/2001	9.76	29.48
			10/2/2000	10.76	28.48
			10/4/1999	25.48	13.76
			4/5/1999	Dry	NA
			10/5/1998	11.89	27.35
			4/1/1998	25.58	13.66
		39.24	10/1/1997	NM	NA
			4/1/1997	26.15	13.52
			10/1/1996	14.08	25.59
			7/10/1996	23	16.67
			10/9/1995	25.44	14.23
			7/5/1995	22.58	17.09
			4/5/1995	10.75	28.92
			1/10/1995	26.98	12.69
			10/5/1994	25.32	14.35
			7/6/1994	21.36	18.31
			4/4/1994	26.18	13.49
			1/11/1994	21.31	18.36
			10/15/1993	22.98	16.69
			7/6/1993	26.50	13.17
			4/5/1993	24.94	14.73
			1/5/1993	24.65	15.02
			10/5/1992	26.35	13.32
			7/6/1992	15.70	23.97
			4/6/1992	27.36	12.31
			1/6/1992	16.95	22.72
			10/7/1991	29.98	9.69
			7/12/1991	24.67	15.00
			4/9/1991	24.75	14.92
			1/8/1991	24.32	15.35
			10/9/1990	23.96	15.71
			7/5/1990	29.13	10.54
			4/6/1990	24.96	14.71
			1/8/1990	22.99	16.68
			10/10/1989	23.53	16.14
			9/14/1989	23.42	16.25
			4/3/1989	23.84	15.83
		39.67	1/10/1989	26.07	13.60
			10/25/1988	26.29	13.40
			7/26/1988	23.00	16.69
			4/12/1988	24.56	15.13
			2/24/1988	26.00	13.69
			11/30/1987	25.89	13.80
			10/2/1987	20.46	19.23
			7/24/1986	19.23	20.46
			5/13/1986	26.24	13.45
		39.69	3/14/1986	9.19	33.04

Historic Water-Level Elevation Measurements
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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		10/12/2015	10.1	30.83
			10/13/2014	9.00	31.93
			10/14/2013	9.71	31.22
			10/8/2012	9.38	31.55
			10/10/2011	9.16	31.77
			10/11/2010	9.86	31.07
			10/12/2009	10.71	30.22
			10/13/2008	8.98	31.95
		40.93	10/8/2007	7.60	33.33
			10/16/2006	8.07	30.16
			10/10/2005	8.32	29.91
			10/4/2004	10.91	27.32
			10/9/2003	11.00	27.23
			10/14/2002	12.39	25.84
			10/1/2001	13.36	24.87
			10/2/2000	16.43	21.80
			10/4/1999	14.07	24.16
			4/5/1999	16.11	22.12
			10/5/1998	13.89	24.34
			4/1/1998	12.93	25.30
		38.23	10/1/1997	15.89	22.34
			4/1/1997	15.63	23.07
			10/1/1996	18.70	20.00
			7/10/1996	16.78	21.92
			10/9/1995	16.75	21.95
			7/5/1995	16.33	22.37
			4/5/1995	14.26	24.44
			1/10/1995	16.87	21.83
			10/5/1994	17.33	21.37
			7/6/1994	20.57	18.13
			4/4/1994	22.16	16.54
			1/11/1994	22.61	16.09
			10/15/1993	19.84	18.86
			7/6/1993	22.40	16.30
			4/5/1993	21.46	17.24
			1/5/1993	22.31	16.39
			10/5/1992	20.42	18.28
			7/6/1992	22.19	16.51
			4/6/1992	21.83	16.87
			1/6/1992	22.57	16.13
			10/7/1991	24.44	14.26
			7/9/1991	23.36	15.34
			4/9/1991	22.69	16.01
			1/8/1991	23.04	15.66
			10/9/1990	22.95	15.75
			7/5/1990	NM	NA
			4/6/1990	20.47	18.23
			1/8/1990	21.53	17.17
			10/10/1989	19.50	19.20
			9/14/1989	19.64	19.06
			4/3/1989	20.95	17.75
		38.70	1/10/1989	20.75	17.95
			10/25/1988	20.98	17.98
			7/26/1988	19.87	19.09
			4/12/1988	19.63	19.33
			2/24/1988	18.67	20.29
			11/30/1987	19.59	19.37
			10/2/1987	15.32	23.64
			7/24/1986	15.88	23.08
			5/13/1986	11.51	27.45
			4/21/1986	15.60	23.36
			3/14/1986	12.96	26.00
		38.96	1/16/1986	9.30	31.63

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Former TRW Microwave Facility
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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		10/12/2015	10.06	32.39
			10/13/2014	9.62	32.83
			10/14/2013	9.99	32.46
			10/8/2012	10.33	32.12
			10/10/2011	10.04	32.41
			10/11/2010	10.45	32.00
			10/12/2009	14.55	27.90
			10/13/2008	15.72	26.73
		42.45	10/8/2007	4.99	37.46
			10/16/2006	5.31	34.44
			10/10/2005	6.17	33.58
			10/4/2004	13.70	26.05
			10/9/2003	13.95	25.80
		39.75	10/14/2002	15.43	24.32
			10/1/2001	14.99	24.22
			10/2/2000	19.25	19.96
			10/4/1999	10.46	28.75
			4/5/1999	19.38	19.83
			10/5/1998	17.77	21.44
			4/1/1998	15.45	23.76
		39.21	10/1/1997	17.32	21.89
			4/1/1997	17.28	22.39
			10/1/1996	20.60	19.07
			7/10/1996	20.65	19.02
			10/9/1995	18.24	21.43
			7/5/1995	18.75	20.92
			4/5/1995	17.70	21.97
			1/10/1995	18.75	20.92
			10/5/1994	18.77	20.90
			7/6/1994	20.93	18.74
			4/4/1994	21.13	18.54
			1/11/1994	22.15	17.52
			10/15/1993	20.65	19.02
			7/6/1993	21.08	18.59
			4/5/1993	21.24	18.43
			1/5/1993	19.04	20.63
			10/5/1992	17.55	22.12
			7/6/1992	20.80	18.87
			4/6/1992	20.59	19.08
			1/6/1992	23.07	16.60
			10/7/1991	23.79	15.88
			7/12/1991	23.00	16.67
			4/9/1991	22.81	16.86
			1/8/1991	23.27	16.40
			10/9/1990	22.87	16.80
			7/5/1990	23.06	16.61
			4/6/1990	22.92	16.75
			1/8/1990	21.85	17.82
			10/10/1989	21.03	18.64
			9/14/1989	21.12	18.55
			4/3/1989	20.55	19.12
		39.67	1/10/1989	20.80	18.87
			10/25/1988	20.71	19.96
			7/26/1988	18.63	22.04
			4/12/1988	19.20	21.47
			2/24/1988	16.62	24.05
			11/30/1987	17.12	23.55
			10/2/1987	15.75	24.92
			7/24/1986	10.86	29.81
			5/13/1986	10.11	30.56
			4/23/1986	11.20	29.47
			3/14/1986	10.37	30.30
		40.67	1/16/1986	10.00	32.45

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
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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		10/12/2015	7.57	34.44
			10/13/2014	6.64	35.37
			10/14/2013	6.73	35.28
			10/8/2012	6.55	35.46
			10/10/2011	6.39	35.62
			10/11/2010	7.94*	34.07
			10/12/2009	8.47	33.54
			10/13/2008	8.76	33.25
		42.01	10/8/2007	4.93	37.08
			10/16/2006	5.14	34.17
			10/10/2005	5.61	33.70
			10/4/2004	9.35	29.96
			10/9/2003	8.62	30.69
		39.31	10/14/2002	12.24	27.07
			10/1/2001	12.67	26.20
			10/2/2000	14.68	24.19
			10/4/1999	11.31	27.56
			4/5/1999	14.74	24.13
			10/5/1998	13.62	25.25
			4/1/1998	12.54	26.33
		38.87	10/1/1997	14.34	24.53
			4/1/1997	14.22	25.22
			10/1/1996	16.68	22.76
			7/10/1996	16.35	23.09
			10/9/1995	14.50	24.94
			7/5/1995	15.71	23.73
			4/5/1995	13.99	25.45
			1/10/1995	15.45	23.99
			10/5/1994	15.67	23.77
			7/6/1994	17.76	21.68
			4/4/1994	17.90	21.54
			1/11/1994	19.20	20.24
			10/15/1993	16.60	22.84
			7/6/1993	17.95	21.49
			4/5/1993	18.53	20.91
			1/5/1993	19.15	20.29
			10/5/1992	16.52	22.92
			7/6/1992	17.63	21.81
			4/6/1992	17.20	22.24
			1/6/1992	20.98	18.46
			10/7/1991	21.77	17.67
			7/12/1991	20.77	18.67
			4/9/1991	20.48	18.96
			1/8/1991	21.01	18.43
			10/9/1990	20.79	18.65
			7/5/1990	21.16	18.28
			4/6/1990	20.37	19.07
			1/8/1990	20.56	18.88
			10/10/1989	19.60	19.84
			9/14/1989	19.35	20.09
			4/3/1989	16.99	22.45
		39.44	1/10/1989	17.82	21.62
			10/25/1988	18.16	21.27
			7/26/1988	16.37	23.06
			4/12/1988	16.83	22.60
			2/24/1988	15.21	24.22
			11/30/1987	15.75	23.68
			10/2/1987	13.98	25.45
			7/24/1986	10.75	28.68
			5/13/1986	9.65	29.78
			4/22/1986	11.00	28.43
			3/14/1986	9.90	29.53
			3/12/1986	8.16	31.27
		39.43	1/16/1986	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		10/12/2015	7.72	32.61
			10/13/2014	6.67	33.66
			10/14/2013	7.31	33.02
			10/8/2012	6.93	33.40
			10/10/2011	6.74	33.59
			10/11/2010	7.21	33.12
			10/12/2009	7.60	32.73
			10/13/2008	6.68	33.65
		40.33	10/8/2007	6.05	34.28
			10/16/2006	6.35	31.28
			10/10/2005	6.46	31.17
			10/4/2004	7.75	29.88
			10/9/2003	7.34	30.29
		37.63	10/1/2002	8.23	29.40
			10/1/2001	8.64	29.66
			10/2/2000	9.68	28.62
			10/4/1999	14.37	23.93
			4/5/1999	15.83	22.47
			10/5/1998	14.77	23.53
			4/1/1998	13.83	24.47
		38.30	10/1/1997	13.44	24.86
			4/1/1997	28.40	9.90
			10/1/1996	30.87	7.43
			7/10/1996	10.97	27.33
			10/9/1995	31.00	7.30
			7/5/1995	11.11	27.19
			4/5/1995	31.59	6.71
			1/10/1995	29.36	8.94
			10/5/1994	25.92	12.38
			7/6/1994	24.00	14.30
			4/4/1994	23.25	15.05
			1/11/1994	25.92	12.38
			10/15/1993	21.81	16.49
			7/6/1993	13.10	25.20
			4/5/1993	24.44	13.86
			1/5/1993	14.67	23.63
			10/5/1992	14.51	23.79
			7/6/1992	16.34	21.96
			4/6/1992	20.11	18.19
			1/6/1992	16.06	22.24
			10/7/1991	27.44	10.86
			7/12/1991	24.89	13.41
			4/9/1991	25.41	12.89
			1/8/1991	24.15	14.15
			10/9/1990	23.80	14.50
			7/5/1990	24.13	14.17
			4/6/1990	26.09	12.21
			1/8/1990	14.56	23.74
			10/10/1989	13.86	24.44
			9/14/1989	22.32	15.98
			4/3/1989	24.65	13.65
		38.30	1/10/1989	NM	NA
			10/25/1988	24.34	14.00
			7/26/1988	12.47	25.87
			4/12/1988	26.35	11.99
			2/24/1988	30.26	8.08
			11/30/1987	11.15	27.19
			10/2/1987	21.02	17.32
			7/24/1986	10.24	28.10
			5/13/1986	23.50	14.84
			3/17/1986	24.30	14.04
		38.34	3/10/1986	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		10/12/2015	8.91	29.98
			10/13/2014	7.91	30.98
			10/14/2013	8.61	30.28
			10/8/2012	8.30	30.59
			10/10/2011	8.14	30.75
			10/11/2010	8.69	30.20
			10/12/2009	9.43	29.46
			10/13/2008	8.87	30.02
		38.89	10/8/2007	6.97	31.92
		36.19	10/16/2006	7.50	28.69
			10/10/2005	7.65	29.67
			10/4/2004	9.68	27.64
			10/9/2003	10.20	27.12
			10/14/2002	11.31	26.01
			10/1/2001	11.73	25.59
			10/2/2000	18.41	18.91
			10/4/1999	14.94	22.38
			4/5/1999	16.40	20.92
			10/5/1998	12.62	24.70
			4/1/1998	13.83	23.49
		37.32	10/1/1997	15.82	21.50
		37.01	4/1/1997	14.57	22.44
			10/1/1996	16.98	20.13
			7/10/1996	16.43	20.68
			10/9/1995	14.82	22.29
			7/5/1995	16.40	20.71
			4/5/1995	13.00	24.11
			1/10/1995	16.34	20.77
			10/5/1994	22.64	14.47
			7/6/1994	20.45	16.66
			4/4/1994	28.23	8.88
			1/11/1994	29.42	7.69
			10/15/1993	26.50	10.61
			7/6/1993	30.58	6.53
			4/5/1993	28.91	8.20
			1/5/1993	29.41	7.70
			10/5/1992	29.77	7.34
			7/6/1992	31.47	5.64
			4/6/1992	30.91	6.20
			1/6/1992	31.80	5.31
			10/7/1991	Dry	NA
			7/12/1991	31.91	5.20
			4/9/1991	22.70	14.41
			1/8/1991	23.99	13.12
			10/9/1990	31.99	5.12
			7/5/1990	18.31	18.80
			4/6/1990	20.54	16.57
			1/8/1990	25.75	11.36
			10/10/1989	21.48	15.63
			9/14/1989	17.32	19.79
			4/3/1989	23.66	13.45
		37.11	1/10/1989	24.33	12.78
			10/25/1988	26.65	10.49
			7/26/1988	24.97	12.17
			4/12/1988	23.50	13.64
			2/24/1988	21.99	15.15
			11/30/1987	19.34	17.80
			10/2/1987	12.15	24.99
			7/24/1986	27.67	9.47
			5/13/1986	8.94	28.20
			3/17/1986	24.25	12.89
			3/14/1986	24.45	12.69
		37.14	3/12/1986	6.75	32.14

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
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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		10/14/2015	7.90	32.19
			10/13/2014	6.81	33.28
			10/14/2013	7.52	32.57
			10/8/2012	7.12	32.97
			10/10/2011	6.82	33.27
			10/11/2010	7.05*	33.04
			10/12/2009	7.76	32.33
			10/13/2008	6.81	33.28
		40.09	10/8/2007	6.19	33.90
			10/16/2006	6.56	30.83
			10/10/2005	6.62	30.77
			10/4/2004	7.86	29.53
			10/9/2003	7.41	29.98
			10/14/2002	8.44	28.95
		37.39	10/1/2001	8.81	28.58
T-17B	B1		10/12/2015	7.97	32.64
			10/13/2014	7.30	33.31
			4/14/2014	7.42	33.19
			10/14/2013	7.92	32.69
			10/8/2012	7.20	33.41
			10/10/2011	7.27	33.34
			10/11/2010	7.80	32.81
			10/12/2009	8.36	32.25
			10/13/2008	7.12	33.49
		40.61	10/8/2007	6.11	34.50
		37.91	10/16/2006	6.51	31.40
T-18B	B1		10/12/2015	7.13	31.65
			10/13/2014	6.34	32.44
		38.78	10/14/2013	6.28	32.50
T-19B	B1		10/12/2015	8.14	30.58
			10/13/2014	7.38	31.34
		38.72	10/14/2013	7.20	31.52

Historic Water-Level Elevation Measurements
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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				
Per USEPA approval, well T-2C was destroyed.					
			9/24/2014	7.50	33.88
			4/14/2014	8.62	32.76
			10/14/2013	8.98	32.40
			10/8/2012	8.75	32.63
			10/10/2011	8.36	33.02
			10/11/2010	6.69	34.69
			10/12/2009	10.56	30.82
			10/13/2008	11.58	29.80
		41.38	10/8/2007	6.39	34.99
			10/16/2006	6.83	31.85
			10/10/2005	7.53	31.15
			10/4/2004	11.01	27.67
			10/9/2003	11.66	27.02
		38.68	10/14/2002	13.91	24.77
			10/1/2001	17.50	22.01
			10/2/2000	18.40	21.11
			10/4/1999	25.18	14.33
			4/5/1999	31.50	8.01
			10/5/1998	15.45	24.06
			4/1/1998	19.25	20.26
		39.51	10/1/1997	29.50	10.01
			4/1/1997	33.65	5.72
			10/1/1996	31.00	8.37
			7/10/1996	31	8.37
			10/9/1995	31.59	7.78
			7/5/1995	35.45	3.92
			4/5/1995	18.21	21.16
			1/10/1995	34.94	4.43
			10/5/1994	31.41	7.96
			7/6/1994	35.63	3.74
			4/4/1994	40.30	-0.93
			1/11/1994	44.54	-5.17
			10/15/1993	38.82	0.55
			7/6/1993	40.11	-0.74
			4/5/1993	37.88	1.49
			1/5/1993	39.84	-0.47
			10/5/1992	42.87	-3.50
			7/6/1992	46.92	-7.55
			4/6/1992	42.57	-3.20
			1/6/1992	47.25	-7.88
			10/7/1991	47.67	-8.30
			7/12/1991	36.12	3.25
			4/9/1991	31.69	7.68
			1/8/1991	29.47	9.90
			11/13/1990	40.05	-0.68
			8/3/1990	50.84	-11.47
			4/6/1990	40.29	-0.92
			1/8/1990	31.47	7.90
			10/10/1989	33.84	5.53
			9/14/1989	44.24	-4.87
			4/3/1989	38.92	0.45
		39.37	1/10/1989	NM	NA
			10/25/1988	36.86	2.54
			7/26/1988	35.70	3.70
			4/12/1988	NM	NA
			2/24/1988	34.71	4.69
			11/30/1987	35.18	4.22
			10/29/1987	25.15	14.25
		39.40	7/24/1986	29.65	11.73

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
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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	B3		10/12/2015	9.22	29.59
			10/13/2014	8.21	30.60
			10/14/2013	8.54	30.27
			10/8/2012	8.33	30.48
			10/10/2011	7.99	30.82
			10/11/2010	9.4	29.41
			10/12/2009	9.74	29.07
			10/13/2008	11.13	27.68
		38.81	10/8/2007	6.13	32.68
			10/16/2006	6.78	29.33
			10/10/2005	7.88	28.23
			10/4/2004	10.45	25.66
			10/9/2003	11.41	24.70
			10/14/2002	12.98	23.13
			10/1/2001	15.28	20.83
			10/2/2000	17.64	18.47
			10/4/1999	12.70	23.41
			4/5/1999	18.44	17.67
			10/5/1998	14.83	21.28
			4/1/1998	13.16	22.95
		36.11	10/1/1997	17.15	18.96
		36.57	4/1/1997	15.69	20.88
			10/1/1996	22.10	14.57
			7/10/1996	20.37	16.30
			10/9/1995	18.43	18.24
			7/5/1995	20.42	16.25
			4/5/1995	18.23	18.44
			1/10/1995	20.94	15.73
			10/5/1994	18.96	17.71
			7/6/1994	22.57	14.10
			4/4/1994	23.61	13.06
			1/11/1994	24.99	11.68
			10/15/1993	23.70	12.97
			7/6/1993	23.42	13.25
			4/5/1993	22.00	14.67
			1/5/1993	22.95	13.72
			10/5/1992	19.03	17.64
			7/6/1992	21.73	14.94
			4/6/1992	21.37	15.30
			1/6/1992	23.55	13.12
			10/7/1991	25.07	11.60
			7/12/1991	23.60	13.07
			4/9/1991	23.16	13.51
			1/8/1991	23.58	13.09
			11/13/1990	23.97	12.70
			8/3/1990	23.39	13.28
			4/6/1990	23.09	13.58
			1/8/1990	22.51	14.16
			10/10/1989	21.99	14.68
			8/23/1989	22.74	13.93
			4/3/1989	22.11	14.56
		36.67	1/10/1989	21.29	15.38
			10/25/1988	20.32	16.36
			7/26/1988	18.85	17.83
			4/12/1988	19.35	17.33
			2/24/1988	17.76	18.92
			11/30/1987	18.33	18.35
			10/2/1987	17.16	19.52
			7/24/1986	11.21	25.47
			5/13/1986	9.83	26.85
			4/21/1986	10.50	26.18
		36.68	1/15/1986	7.20	31.61

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
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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	39.05	10/12/2015	10.57	28.48
			10/13/2014	10.16	29.60
			10/14/2013	11.03	28.73
			10/8/2012	10.45	29.31
			10/10/2011	9.92	29.84
			10/11/2010	11.69	28.07
			10/12/2009	12.62	27.14
			10/13/2008	14.53	25.23
		39.76	10/8/2007	6.91	32.85
			10/16/2006	7.44	29.62
			10/10/2005	8.29	28.77
			10/4/2004	13.24	23.82
			10/9/2003	14.03	23.03
			10/14/2002	15.15	21.91
			10/1/2001	16.35	20.71
			10/2/2000	21.20	15.86
			10/4/1999	13.59	23.47
			4/5/1999	22.70	14.36
			10/5/1998	17.39	19.67
			4/1/1998	15.66	21.40
		37.06	10/1/1997	19.91	17.15
		37.66	4/1/1997	20.63	17.03
			10/1/1996	25.72	11.78
			7/10/1996	24.2	13.30
			10/9/1995	19.80	17.70
			7/5/1995	24.49	13.01
			4/5/1995	21.76	15.74
			1/10/1995	25.02	12.48
			10/5/1994	21.24	16.26
			7/6/1994	26.20	11.30
			4/4/1994	27.26	10.24
			1/11/1994	28.65	8.85
			10/15/1993	26.97	10.53
			7/6/1993	27.00	10.50
			4/5/1993	25.46	12.04
			1/5/1993	23.85	13.65
			10/5/1992	20.87	16.63
			7/6/1992	24.26	13.24
			4/6/1992	24.30	13.20
			1/6/1992	26.42	11.08
			10/7/1991	27.91	9.59
			7/12/1991	26.24	11.26
			4/9/1991	25.66	11.84
			1/8/1991	25.88	11.62
			11/13/1990	26.41	11.09
			8/3/1990	25.22	12.28
			4/6/1990	24.89	12.61
			1/8/1990	23.84	13.66
			10/10/1989	23.23	14.27
			9/14/1989	24.12	13.38
			4/3/1989	23.73	13.77
		37.50	1/10/1989	23.02	14.48
			10/25/1988	22.05	15.46
			7/26/1988	20.12	17.39
			4/12/1988	20.65	16.86
			2/24/1988	18.77	18.74
			11/30/1987	19.36	18.15
			10/2/1987	18.55	18.96
		37.51	7/24/1986	11.73	28.03

Historic Water-Level Elevation Measurements
Former TRW Microwave Facility
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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		10/12/2015	9.07	29.58
			10/13/2014	8.03	30.62
			10/14/2013	8.45	30.20
			10/8/2012	8.25	30.40
			10/10/2011	7.95	30.70
			10/11/2010	9.31	29.34
			10/12/2009	9.41	29.24
			10/13/2008	10.83	27.82
		38.65	10/8/2007	6.34	32.31
			10/16/2006	6.77	29.18
			10/10/2005	7.49	28.46
			10/4/2004	10.30	25.65
			10/9/2003	11.18	24.77
			10/14/2002	12.87	23.08
			10/1/2001	14.33	21.62
			10/2/2000	16.96	18.99
			10/4/1999	12.94	23.01
			4/5/1999	17.92	18.03
			10/5/1998	14.34	21.61
			4/1/1998	13.18	22.77
		35.95	10/1/1997	16.81	19.14
		36.49	4/1/1997	17.55	18.94
			10/1/1996	21.46	15.14
			7/10/1996	19.95	16.65
			10/9/1995	17.92	18.68
			7/5/1995	19.72	16.88
			4/5/1995	17.12	19.48
			1/10/1995	19.86	16.74
			10/5/1994	18.58	18.02
			7/6/1994	21.60	15.00
			4/4/1994	22.44	14.16
			1/11/1994	23.86	12.74
			10/15/1993	22.23	14.37
			7/6/1993	22.15	14.45
			4/5/1993	20.82	15.78
			1/5/1993	22.33	14.27
			10/5/1992	18.66	17.94
			7/6/1992	NM	NA
			4/6/1992	20.38	16.22
			1/6/1992	22.71	13.89
			10/7/1991	24.19	12.41
			7/12/1991	22.91	13.69
			4/9/1991	22.30	14.30
			1/8/1991	22.84	13.76
			11/13/1990	22.30	14.30
			8/3/1990	23.03	13.57
			4/6/1990	NM	NA
			1/8/1990	22.28	14.32
			10/10/1989	21.82	14.78
			9/14/1989	22.62	13.98
			4/3/1989	21.74	14.86
			1/10/1989	20.83	15.77
			10/25/1988	19.78	16.82
			7/26/1988	18.64	17.96
			4/12/1988	19.12	17.48
			2/24/1988	17.78	18.82
			11/30/1987	18.28	18.32
			10/2/1987	17.28	19.32
		36.60	7/24/1986	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		10/12/2015	8.57	32.17
			10/13/2014	7.54	33.20
			10/14/2013	7.68	33.06
			10/8/2012	7.43	33.31
			10/10/2011	7.16	33.58
			10/11/2010	8.36	32.38
			10/12/2009	8.83	31.91
			10/13/2008	9.7	31.04
		40.74	10/8/2007	5.91	34.83
			10/16/2006	6.24	31.80
			10/10/2005	6.92	31.12
			10/4/2004	9.42	28.62
			10/9/2003	10.11	27.93
			10/14/2002	12.39	25.65
			10/1/2001	14.35	23.69
			10/2/2000	16.23	21.81
			10/4/1999	13.77	24.27
			4/5/1999	17.66	20.38
			10/5/1998	14.12	23.92
			4/1/1998	13.45	24.59
		38.04	10/1/1997	16.84	21.20
		38.56	4/1/1997	17.60	20.96
			10/1/1996	21.61	17.01
			7/10/1996	19.9	18.72
			10/9/1995	18.00	20.62
			7/5/1995	19.81	18.81
			4/5/1995	16.14	22.48
			1/10/1995	20.17	18.45
			10/5/1994	18.91	19.71
			7/6/1994	21.71	16.91
			4/4/1994	22.63	15.99
			1/11/1994	24.12	14.50
			10/15/1993	22.40	16.22
			7/6/1993	22.08	16.54
			4/5/1993	21.41	17.21
			1/5/1993	22.46	16.16
			10/5/1992	20.15	18.47
			7/6/1992	21.69	16.93
			4/6/1992	21.11	17.51
			1/6/1992	23.65	14.97
			10/7/1991	25.31	13.31
			7/12/1991	24.12	14.50
			4/9/1991	23.82	14.80
			1/8/1991	23.97	14.65
			11/13/1990	23.47	15.15
			8/3/1990	24.23	14.39
			4/6/1990	24.48	14.14
			1/8/1990	23.48	15.14
		38.62	9/14/1989	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		10/12/2015	7.11	34.47
			10/13/2014	6.2	35.38
			10/14/2013	6.05	35.53
			10/8/2012	5.91	35.67
			10/10/2011	5.72	35.86
			10/11/2010	6.55	35.03
			10/12/2009	6.85	34.73
			10/13/2008	6.76	34.82
		41.58	10/8/2007	5.45	36.13
			10/16/2006	5.76	32.98
			10/10/2005	5.92	32.82
			10/4/2004	7.07	31.67
			10/9/2003	7.03	31.71
			10/14/2002	8.64	30.10
			10/1/2001	8.91	29.83
			10/2/2000	9.40	29.34
			10/4/1999	8.75	29.99
			4/5/1999	8.72	30.02
			10/5/1998	8.75	29.99
			4/1/1998	7.87	30.87
		38.74	Oct-97+	9.62	29.12
			4/1/1997	8.89	30.31
			10/1/1996	10.56	28.64
			7/10/1996	10.19	29.01
			10/9/1995	9.52	29.68
			7/5/1995	10.08	29.12
			4/5/1995	8.46	30.74
			1/10/1995	8.69	30.51
			10/5/1994	10.75	28.45
			7/6/1994	12.80	26.40
			4/4/1994	12.58	26.62
			1/11/1994	12.83	26.37
			10/15/1993	12.46	26.74
			7/6/1993	11.47	27.73
			4/5/1993	10.88	28.32
			1/5/1993	13.19	26.01
			10/5/1992	12.50	26.70
			7/6/1992	13.40	25.80
			4/6/1992	10.95	28.25
			1/6/1992	15.03	24.17
			10/7/1991	15.80	23.40
			7/12/1991	15.59	23.61
			4/9/1991	14.69	24.51
			1/8/1991	16.12	23.08
			10/9/1990	14.46	24.74
			8/3/1990	14.30	24.90
			4/6/1990	14.75	24.45
			1/8/1990	14.06	25.14
			10/10/1989	13.25	25.95
			8/23/1989	14.14	25.06
			4/3/1989	13.18	26.02
		39.20	1/10/1989	12.82	26.38
			10/25/1988	12.36	27.01
			7/26/1988	11.79	27.58
			4/12/1988	11.52	27.85
			2/24/1988	10.94	28.43
			11/30/1987	11.08	28.29
			10/2/1987	10.21	29.16
			7/24/1986	8.23	31.14
			5/13/1986	8.11	31.26
			4/23/1986	NM	NA
			4/22/1986	NM	NA
			4/21/1986	8.10	31.27
			3/17/1986	NM	NA
			3/14/1986	6.56	32.81
			3/12/1986	6.53	32.84
			3/10/1986	NM	NA
		39.37	1/15/1986	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		10/12/2015	4.70	35.65
			10/13/2014	3.54	36.81
			10/14/2013	2.57	37.78
			10/8/2012	1.81	38.54
			10/10/2011	1.49	38.86
			10/11/2010	3.14	37.21
			10/12/2009	4.01	36.34
			10/13/2008	3.20	37.15
		40.35	10/8/2007	0.45	39.90
			10/16/2006	1.1	36.55
			10/10/2005	1.54	36.11
			10/4/2004	3.77	33.88
			10/9/2003	NM	NA
			10/14/2002	5.89	31.76
			10/1/2001	5.90	31.75
			10/2/2000	8.17	29.48
			10/4/1999	4.75	32.90
			4/5/1999	5.43	32.22
			10/5/1998	5.32	32.33
			4/1/1998	3.83	33.82
		37.65	10/1/1997	7.83	29.82
		38.19	4/1/1997	7.11	31.08
			10/1/1996	11.31	26.97
			7/10/1996	10.49	27.79
			10/9/1995	10.69	27.59
			7/5/1995	11.26	27.02
			4/5/1995	9.88	28.40
			1/10/1995	12.06	26.22
			10/5/1994	12.40	25.88
			7/6/1994	14.54	23.74
			4/4/1994	14.42	23.86
			1/11/1994	15.31	22.97
			10/15/1993	16.87	21.41
			7/6/1993	14.32	23.96
			4/5/1993	14.35	23.93
			1/5/1993	17.02	21.26
			10/5/1992	12.97	25.31
			7/6/1992	15.02	23.26
			4/6/1992	14.25	24.03
			1/6/1992	16.94	21.34
			10/7/1991	17.83	20.45
			7/9/1991	17.15	21.13
			4/9/1991	16.07	22.21
			1/8/1991	17.53	20.75
			10/9/1990	16.78	21.50
			7/5/1990	17.97	20.31
			4/6/1990	17.85	20.43
			1/8/1990	18.57	19.71
			10/10/1989	18.26	20.02
			9/14/1989	14.97	23.31
			4/3/1989	18.27	20.01
		38.28	1/10/1989	17.15	21.13
			10/25/1988	17.18	21.11
			7/26/1988	15.03	23.26
			4/12/1988	14.27	24.02
			2/24/1988	13.46	24.83
			11/30/1987	14.48	23.81
			10/2/1987	14.55	23.74
			7/24/1986	9.34	28.95
			5/13/1986	8.03	30.26
			4/23/1986	8.10	30.19
		38.29	1/15/1986	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

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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	35	--	--	--	<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	NA	NA	NA	<0.5		<0.5	NA	NA	NA	NA	NA
Aug-89	<0.5	87	--	--	--	<0.5	<0.5	<0.5	0.9	NA	NA	NA	<0.5		<0.5	NA	NA	NA	NA	NA
Feb-89	<0.5	86	--	--	--	<0.5	<0.5	<0.5	1.3	NA	NA	NA	<0.5		<0.5	NA	NA	NA	NA	NA
Nov-88	<0.5	88	--	--	--	<0.5	0.5	<0.5	2.7	NA	NA	NA	<0.5		<0.5	NA	NA	NA	NA	NA
Aug-88	<1.0	60	--	--	67	<1.0	0.9	<1.0	<1.0	NA	NA	NA	<1.0		<1.0	NA	NA	NA	NA	NA
Jun-88	<0.5	56	--	--	--	<0.5	1.5	<0.5	<0.5	NA	NA	NA	10		<0.5	NA	NA	NA	NA	NA
Jan-88	<1.0	200	--	--	--	<1.0	3.1	<1.0	1.5	NA	NA	NA	9.1		<1.0	NA	NA	NA	NA	NA
Oct-87	<2.5	160	--	--	--	<2.5	8.6	<2.5	<2.5	NA	NA	NA	<2.5		<2.5	NA	NA	NA	NA	NA
Jun-87	<1.0	190	--	--	--	<1.0	7.0	<1.0	<1.0	NA	NA	NA	<1.0		<1.0	NA	NA	NA	NA	NA
Apr-87	<2.5	160	--	--	--	<2.5	<2.5	<2.5	<2.5	NA	NA	NA	<2.5		<2.5	NA	NA	NA	NA	NA
Jan-87	<10	140	--	--	--	<10	<10	<10	<10	NA	NA	NA	<10		<10	NA	NA	NA	NA	NA
Sep-86	<2.0	420	--	--	--	<2.0	5	<2.0	<2.0	NA	NA	NA	<2.0		<2.0	NA	NA	NA	NA	NA
Jul-86	<1.0	140	--	--	--	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	<1.0		<1.0	NA	NA	NA	NA	NA
Apr-86	<2.0	340	--	--	--	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	<2.0		<2.0	NA	NA	NA	NA	NA
Jan-86	<5.0	630	--	--	490	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA		<5.0	NA	NA	NA	NA	NA
Oct-85	10	640	--	--	--	<5.0	30	<5.0	<5.0	NA	NA	NA	<5.0		<5.0	NA	NA	NA	NA	NA
Nov-84	4	930	--	--	--	NA	5	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Aug-84	5	950	--	--	360	ND	7	ND	ND	NA	NA	NA	ND		ND	NA	NA	NA	NA	NA
Mar-84	NA	680	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
Sep-83	7	1,000	--	--	--	NA	5	ND	<1.0	NA	NA	NA	ND		NA	NA	NA	NA	NA	NA
Sep-83	3	540	--	--	510	NA	3	ND	<1.0	NA	NA	NA	ND		NA	NA	NA	NA	NA	NA
Aug-83	<1.0	660	--	--	--	ND	4	<1.0	<1.0	NA	NA	NA	<1.0		ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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																				
Per United States Environmental Protection Agency approval, well T-2A was abandoned in November 2014.																				
Sep-14	<5.0	<5.0	190	50	--	590	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	19	150	NA	NA	NA	NA
Apr-14	<5.0	<5.0	850	57	--	670	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	20	120	<5.0	<5.0	<5.0	<10
Apr-14 Dup	<5.0	<5.0	680	51	--	540	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	17	110	<5.0	<5.0	<5.0	<10
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	NA	NA	NA	NA
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	NA	NA	NA	<1.0	ND	79	NA	NA	NA	NA	NA
Aug-89	41	2,300	--	--	30	<10	<10	<10	<10	NA	NA	NA	18	ND	<10	NA	NA	NA	NA	NA
May-89	140	470	--	--	500	340	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
Feb-89	220	620	--	--	240	<10	<10	<10	<10	NA	NA	NA	380	ND	<10	NA	NA	NA	NA	NA
Nov-88	260	1,300	--	--	4,200	18,000	<100	<100	<100	NA	NA	NA	<100	ND	<100	NA	NA	NA	NA	NA
Nov-88	<10	1,300	--	--	3,800	3,600	<10	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Aug-88	250	1,400	--	--	5,700	11,000	<100	<100	<100	NA	NA	NA	<100	ND	<100	NA	NA	NA	NA	NA
Jun-88	610	4,000	--	--	4,200	4,600	<50	<50	<50	NA	NA	NA	<50	ND	<50	NA	NA	NA	NA	NA
Jun-88	530	3,200	--	--	3,100	4,000	1.6	15	1.4	NA	NA	NA	<5.0	ND	32	NA	NA	NA	NA	NA
Oct-87	190	980	--	--	330	40	7.5	<5.0	<5.0	NA	NA	NA	<5.0	ND	46	NA	NA	NA	NA	NA
Jan-87	380	2,900	--	--	5,500	<50	<50	<50	<50	NA	NA	NA	<50	ND	610	NA	NA	NA	NA	NA
Jul-86	980	6,400	--	--	5,400	540	<50	<50	<50	NA	NA	NA	<50	ND	650	NA	NA	NA	NA	NA
Apr-86	1,700	10,000	--	--	30,000	740	<100	<100	<100	NA	NA	NA	<100	ND	<100	NA	NA	NA	NA	NA
Apr-86	3,700	15,000	--	--	13,000	650	<100	<100	<100	NA	NA	NA	NA	ND	<100	NA	NA	NA	NA	NA
Mar-86	<100	9,800	--	--	2,500	<100	<100	<100	<100	NA	NA	NA	NA	ND	<100	NA	NA	NA	NA	NA
Oct-85	4,600	12,000	--	--	15,000	<50	<50	<50	<50	NA	NA	NA	<50	ND	<50	NA	NA	NA	NA	NA
Nov-84	5,400	520,000	--	--	17,000	NA	<500	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	8,600	190,000	--	--	21,000	300	ND	600	ND	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA
Mar-84	NA	13,000	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Sep-83	4,000	730,000	--	--	2,000	NA	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA
Sep-83	7,000	890,000	--	--	3,000	NA	ND	ND	ND	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA
Aug-83	86,000	6,100,000	--	--	<5.0	<5.0	130	<5.0	<5.0	NA	NA	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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																				
Per United States Environmental Protection Agency approval, well T-3A was abandoned in November 2014.																				
Sep-14	1.2	130	65	1.3	--	<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
Apr-14	1.3	140	51	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-13	1.9	250	88	2.6	--	<1.0	<1.0	0.70 J	<1.0	NA	<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	NA	NA	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Aug-89	0.7	5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
May-89	<1.0	2	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	<1.0	ND	<1.0	NA	NA	NA	NA	NA
Feb-89	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Nov-88	<0.5	4	--	--	1.8	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Aug-88	0.5	5	--	--	1.1	<0.5	1.1	<0.5	<0.5	NA	NA	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
May-88	0.4	2	--	--	0.7	<0.1	0.2	<0.1	<0.1	NA	NA	NA	<0.1	ND	<0.2	NA	NA	NA	NA	NA
May-88	0.4	2	--	--	0.8	<0.1	0.2	<0.1	<0.1	NA	NA	NA	<0.1	ND	<0.1	NA	NA	NA	NA	NA
Jan-88	0.7	4	--	--	0.8	<0.5	0.6	<0.5	<0.5	NA	NA	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-88	0.5	2	--	--	0.6	<0.1	0.2	<0.1	<0.1	NA	NA	NA	<0.1	ND	<0.2	NA	NA	NA	NA	NA
Oct-87	15	460	--	--	310	<2.5	16	<2.5	<2.5	NA	NA	NA	<2.5	ND	<2.5	NA	NA	NA	NA	NA
Jun-87	24	900	--	--	720	<10	72	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Apr-87	20	920	--	--	740	<10	100	12	<10	NA	NA	NA	86	ND	<10	NA	NA	NA	NA	NA
Jan-87	<10	3,000	--	--	880	<10	<10	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Sep-86	15	560	--	--	340	<2.0	15	<2.0	<2.0	NA	NA	NA	<2.0	ND	<2.0	NA	NA	NA	NA	NA
Jul-86	180	1,800	--	--	790	<10	<10	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Apr-86	91	1,500	--	--	220	<1.0	12	<1.0	<1.0	NA	NA	NA	<1.0	ND	<1.0	NA	NA	NA	NA	NA
Oct-85	<25	2,700	--	--	1,100	<25	<25	<25	<25	NA	NA	NA	<25	ND	<25	NA	NA	NA	NA	NA
Oct-85	170	3,100	--	--	3,200	<50	95	<50	<50	NA	NA	NA	480	ND	<50	NA	NA	NA	NA	NA
Nov-84	260	1,300	--	--	1,100	NA	42	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	210	530	--	--	690	ND	13	ND	2	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA
Mar-84	NA	240	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Sep-83	560	300	--	--	91	NA	16	ND	<1.0	NA	NA	NA	52	ND	NA	NA	NA	NA	NA	NA
Sep-83	580	290	--	--	96	NA	16	NA	<1.0	NA	NA	NA	35	ND	NA	NA	NA	NA	NA	NA
Aug-83	1,100	1,600	--	--	36	<5.0	0.2	<5.0	<5.0	NA	NA	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
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	NA	NA	NA	0.7	ND	<0.5	NA	NA	NA	NA	NA
May-88	<0.5	13	--	--	1.5	<0.5	2.5	<0.5	<0.5	NA	NA	NA	2.1	ND	<0.5	NA	NA	NA	NA	NA
Jan-88	<0.5	21	--	--	1.6	<0.5	2.6	<0.5	<0.5	NA	NA	NA	2.1	ND	<0.5	NA	NA	NA	NA	NA
Jan-87	<10	52	--	--	<10	<10	<10	<10	<10	NA	NA	NA	37	ND	<10	NA	NA	NA	NA	NA
Oct-85	<0.5	68.5	--	--	10	<0.5	12	<0.5	<0.5	NA	NA	NA	21	ND	<0.5	NA	NA	NA	NA	NA
Mar-84	NA	27	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-15	<2.5	170	79	<2.5	--	<2.5	<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-15 Dup	<5.0	190	90	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	NA	NA	NA	NA
Jun-15	1	220	83	2	--	<0.50	<0.50	1	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-14	<2.5	230	75	<2.5	--	<2.5	<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-14 Dup	<2.5	170	64	<2.5	--	<2.5	<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	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	NA	NA	NA	<10	ND	<5.0	NA	NA	NA	NA	NA
Oct-89	6	820	--	--	320	<2.0	5	<2.0	<2.0	NA	NA	NA	<2.0	ND	<2.0	NA	NA	NA	NA	NA
Aug-89	<10	1,400	--	--	340	<10	38	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
May-89	5.7	1,300	--	--	320	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
Feb-89	<25	1,200	--	--	190	<25	<25	<25	<25	NA	NA	NA	<25	ND	<25	NA	NA	NA	NA	NA
Feb-89	<25	1,100	--	--	200	<25	<25	<25	<25	NA	NA	NA	<25	ND	<25	NA	NA	NA	NA	NA
Nov-88	<10	1,200	--	--	300	<10	<10	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Aug-88	<10	970	--	--	320	<10	<10	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Jun-88	<25	1,200	--	--	610	<25	<25	<25	<25	NA	NA	NA	360	ND	<25	NA	NA	NA	NA	NA
Jan-88	<50	3,200	--	--	570	<50	<50	<50	<50	NA	NA	NA	<50	ND	<50	NA	NA	NA	NA	NA
Oct-87	<25	2,700	--	--	1,600	<25	<25	<25	<25	NA	NA	NA	<25	ND	<25	NA	NA	NA	NA	NA
Jun-87	<25	3,000	--	--	3,900	<25	<25	<25	<25	NA	NA	NA	<25	ND	<25	NA	NA	NA	NA	NA
Apr-87	<25	2,800	--	--	3,500	<25	<25	59	<25	NA	NA	NA	<25	ND	<25	NA	NA	NA	NA	NA
Jan-87	<10	3,000	--	--	2,500	<10	<10	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Sep-86	<12	2,200	--	--	1,500	<12	<12	<12	<12	NA	NA	NA	<12	ND	<12	NA	NA	NA	NA	NA
Jul-86	<25	3,300	--	--	1,900	<25	<25	<25	<25	NA	NA	NA	<25	ND	<25	NA	NA	NA	NA	NA
Apr-86	<10	1,400	--	--	<10	<10	<10	1,800	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Jan-86	<25	2,500	--	--	1,400	<25	<25	<25	<25	NA	NA	NA	NA	ND	<25	NA	NA	NA	NA	NA
Oct-85	28	3,800	--	--	4,200	340	87	<50	<50	NA	NA	NA	<50	ND	<50	NA	NA	NA	NA	NA
Oct-85	<50	3,600	--	--	3,700	<50	<50	<50	<50	NA	NA	NA	690	ND	<50	NA	NA	NA	NA	NA
Nov-84	15	3,100	--	--	1,800	NA	22	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	120	6,800	--	--	2,200	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-15	0.82	62	100	1.7	--	2.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Jun-15	0.66	67	81	1.8	--	5.4	<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-14	1.7	110	56	2.6	--	<0.50	<0.50	0.55	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Apr-14	<2.5	130	63	2.8	--	<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-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	NA	NA	NA	3	ND	8	NA	NA	NA	NA	NA
Aug-89	14	340	--	--	62	<1.0	10	4	1	NA	NA	NA	5	ND	<1.0	NA	NA	NA	NA	NA
Feb-89	<10	200	--	--	24	<10	<10	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Nov-88	7	260	--	--	<2.0	<2.0	7	<2.0	<2.0	NA	NA	NA	4	ND	9	NA	NA	NA	NA	NA
Aug-88	9.0	370	--	--	180	<5.0	10	<5.0	<5.0	NA	NA	NA	25	ND	<5.0	NA	NA	NA	NA	NA
Jan-88	23	570	--	--	330	<5.0	18	<5.0	<5.0	NA	NA	NA	27	ND	<5.0	NA	NA	NA	NA	NA
Oct-87	9.8	690	--	--	350	<5.0	17	<5.0	<5.0	NA	NA	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
Oct-87	<0.5	830	--	--	290	<1.0	<0.5	<0.5	<0.5	NA	NA	NA	<1.0	ND	NA	NA	NA	NA	NA	NA
Jul-87	<10	1,700	--	--	1,000	<10	25	<10	<10	NA	NA	NA	12	ND	<10	NA	NA	NA	NA	NA
Jan-87	23	1,200	--	--	540	<5.0	24	<5.0	<5.0	NA	NA	NA	<5.0	ND	53	NA	NA	NA	NA	NA
Jul-86	<10	1,400	--	--	650	<10	<10	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Apr-86	20	1,100	--	--	<10	<10	<10	<10	<10	NA	NA	NA	<10	ND	800	NA	NA	NA	NA	NA
Oct-85	44	2,200	--	--	2,400	<25	77	<25	<25	NA	NA	NA	320	ND	<25	NA	NA	NA	NA	NA
Nov-84	37	2,200	--	--	1,300	NA	9.8	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	130	2,800	--	--	2,100	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-15	1	69	66	3	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	3	<0.50	NA	NA	NA	NA
Oct-14	1.2	70	91	3.4	--	<0.50	<0.50	0.71	0.51	<0.50	<1.0	<0.50	<0.50	<1.0	3.4	<0.50	NA	NA	NA	NA
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	NA	NA	NA	<2.0	ND	110	NA	NA	NA	NA	NA
May-88	25	1,000	--	--	710	170	26	13	<5.0	NA	NA	NA	24	ND	63	NA	NA	NA	NA	NA
Jan-88	<25	1,700	--	--	1,400	230	<25	<25	<25	NA	NA	NA	<25	ND	<25	NA	NA	NA	NA	NA
Oct-87	44	770	--	--	430	220	22	<5.0	<5.0	NA	NA	NA	55	ND	<5.0	NA	NA	NA	NA	NA
Jul-87	<10	1,000	--	--	1,400	390	13	<10	<10	NA	NA	NA	18	ND	36	NA	NA	NA	NA	NA
Jul-86	21	1,100	--	--	1,200	540	<10	<10	<10	NA	NA	NA	<10	ND	82	NA	NA	NA	NA	NA
Apr-86	<10	1,100	--	--	1,600	780	<10	<10	<10	NA	NA	NA	<10	ND	<10	NA	NA	NA	NA	NA
Mar-86	<10	2,500	--	--	2,000	<10	<10	<10	<10	NA	NA	NA	NA	ND	<10	NA	NA	NA	NA	NA
Mar-86	<10	1,700	--	--	2,100	<10	<10	<10	<10	NA	NA	NA	NA	ND	<10	NA	NA	NA	NA	NA
Mar-86	120	1,100	--	--	2,500	710	<10	<10	<10	NA	NA	NA	NA	ND	<10	NA	NA	NA	NA	NA
Oct-85	320	5,600	--	--	<50	<50	60	<50	<50	NA	NA	NA	1,200	ND	<50	NA	NA	NA	NA	NA
Nov-84	31	1,800	--	--	4,200	NA	12	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	280	2,000	--	--	7,900	3,500	ND	47	ND	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-15	<0.50	23	120	4.0	--	18	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Jun-15	<0.50	1.7	80	3.3	--	23	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Jun-15 Dup	<0.50	2.1	96	3.9	--	28	<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-14	<0.50	1.4	76	4.6	--	33	<0.50	<0.50	0.56	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-14 Dup	NA	NA	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Apr-14	<0.50	1.8	49	4.4	--	19	<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-14 Dup	<0.50	1.4	50	5.5	--	20	<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-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-15	<0.50	23	56	3.9		34	<0.50	<0.50	0.58	<0.50	<1.0	<0.50	<0.50	<1.0	2.0	<0.50	NA	NA	NA	NA
Oct-14	<0.50	3.6	62	5.1	--	29	<0.50	<0.50	0.70	<0.50	<1.0 *	<0.50 *	<0.50	<1.0	2.0	<0.50	NA	NA	NA	NA
Apr-14	<0.50	4.1	43	4.2	--	22	<0.50	<0.50	0.53	<0.50	<1.0	<0.50	<0.50	<1.0	1.5	<0.50	<0.50	<0.50	<0.50	<1.0
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-15	2.1	100	58	2.7	--	<0.50	<0.50	0.6	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.4	<0.50	NA	NA	NA	NA
Oct-14	2.2	140	51	3.4	--	<0.50	<0.50	0.83	0.54	<0.50	<1.0	<0.50	<0.50	<1.0	1.5	<0.50	NA	NA	NA	NA
Apr-14	1.9	100	49	2.7	--	<0.50	<0.50	0.59	<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-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-15	0.61	38	72	2.9	--	23	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1	<0.50	NA	NA	NA	NA
Oct-14	1.7	97	78	3.7	--	2.5	<0.50	0.70	0.58	<0.50	<1.0	<0.50	<0.50	<1.0	1.7	<0.50	NA	NA	NA	NA
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

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-17A ZA																				
Oct-15	1.1	63	12	<0.50	--	0.58	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Jun-15	1.4	76	16	0.51	--	0.71	<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-14	0.88	62	30	0.57	--	<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
Apr-14	0.87	57	16	<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-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
T-19A ZA																				
Oct-15	<0.50	<0.50	13	3.0	--	33	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.1	0.75	NA	NA	NA	NA
Jun-15	<0.50	<0.50	12	3.2	--	32	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	2.0	1.4	NA	NA	NA	NA
Oct-14	<0.50	<0.50	15	1.9	--	11	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.93	1.8	NA	NA	NA	NA
Apr-14	<0.50	<0.50	3.7	1.4	--	3.1	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.75	1.3	<0.50	<0.50	<0.50	<1.0
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-15	0.71	64	61	1.8	--	7.8	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Jun-15	0.83	78	53	2.5	--	4.7	<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-14	<0.50	32	51	3.3	--	6.5	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	NA	NA	NA	NA
Apr-14	<0.50	45	60	6.0	--	7.1	<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-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-15	0.64	27	60	3.1	--	39	<0.50	<0.50	0.57	<0.50	<1.0	<0.50	<0.50	<1.0	1.9	<0.50	NA	NA	NA	NA
Jun-15	0.71	25	61	8.8	--	38	<0.50	<0.50	0.61	<0.50	<1.0	<0.50	<0.50	<1.0	2.5	<0.50	NA	NA	NA	NA
Oct-14	<0.50	4.0	39	4.1	--	35	<0.50	<0.50	0.60	<0.50	<1.0	<0.50	<0.50	<1.0	2.3	<0.50	NA	NA	NA	NA
Apr-14	<0.50	0.50	32	4.0	--	35	<0.50	<0.50	0.59	<0.50	<1.0	<0.50	<0.50	<1.0	2.0	<0.50	<0.50	<0.50	<0.50	<1.0
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-14	2.2	73	13	0.8	--	1.7	0.6	0.6	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
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	NA	NA	NA	2	ND	<0.5	NA	NA	NA	NA	NA
May-88	3.9	140	--	--	26	<1.0	20	3.3	1.6	NA	NA	NA	13	ND	1.8	NA	NA	NA	NA	NA

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Former TRW Microwave Site
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
36S (continued)																				
Jan-88	5.8	170	--	--	15	<1.0	23	3.8	1.3	NA	NA	NA	14	ND	<1.0	NA	NA	NA	NA	NA
Oct-87	3.5	160	--	--	10	<1.0	20	2.5	1.7	NA	NA	NA	14	ND	<1.0	NA	NA	NA	NA	NA
Jun-87	<1.0	170	--	--	11	<1.0	15	1.6	<1.0	NA	NA	NA	8.2	ND	<1.0	NA	NA	NA	NA	NA
Apr-87	4	200	--	--	12	<2.5	34	6	<2.5	NA	NA	NA	19	ND	<2.5	NA	NA	NA	NA	NA
Jan-87	<10	140	--	--	<10	<10	34	<10	<10	NA	NA	NA	28	ND	<10	NA	NA	NA	NA	NA
Sep-86	5.3	200	--	--	5.75	<1.0	27.5	2.9	2.1	NA	NA	NA	16.5	ND	7.95	NA	NA	NA	NA	NA
Jul-86	3.3	59	--	--	7.7	<0.5	32	3.2	1.6	NA	NA	NA	15	ND	<0.5	NA	NA	NA	NA	NA
Apr-86	3.4	130	--	--	10	<0.5	36	3.5	1.5	NA	NA	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-86	11	190	--	--	25	<2.0	42	3.4	<2.0	NA	NA	NA	<2.0	ND	<2.0	NA	NA	NA	NA	NA
Oct-85	<5.0	250	--	--	23	<5.0	65	<5.0	<5.0	NA	NA	NA	90	ND	ND	NA	NA	NA	NA	NA
Nov-84	4.7	150	--	--	8.8	NA	19	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	8	230	--	--	12	ND	23	2	ND	NA	NA	NA	40	ND	ND	NA	NA	NA	NA	NA
Mar-84	NA	360	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-83	19	470	--	--	<1.0	ND	36	16	<1.0	NA	NA	NA	<1.0	ND	ND	NA	NA	NA	NA	NA
May-83	ND	82	--	--	ND	ND	ND	ND	ND	NA	NA	NA	ND	ND	ND	NA	NA	NA	NA	NA
Apr-83	13	400	--	--	23	ND	16	ND	ND	NA	NA	NA	12	ND	ND	NA	NA	NA	NA	NA
Aug-82	10	590	--	--	55	ND	19	<2.0	<2.0	NA	NA	NA	2	ND	ND	NA	NA	NA	NA	NA
Jun-82	18	710	--	--	<10	ND	42	<10	<10	NA	NA	NA	19	ND	ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-14	1.8	56	23	0.9	--	<0.5	<0.5	0.6	<0.5	NA	NA	NA	<2.0	NA	<0.5	NA	NA	NA	NA	NA
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	NA	ND	NA	7.4	ND	<0.5	NA	NA	NA	NA	NA
Aug-89	4	200	--	--	27	<2.0	10	6	<2.0	NA	ND	NA	7	ND	8	NA	NA	NA	NA	NA
May-89	<2.5	<2.5	--	--	<2.5	<2.5	<2.5	<2.5	<2.5	NA	ND	NA	<2.5	ND	<2.5	NA	NA	NA	NA	NA
Feb-89	<5.0	180	--	--	36	<5.0	8	<5.0	<5.0	NA	ND	NA	12	ND	<5.0	NA	NA	NA	NA	NA
Feb-89	<2.0	61	--	--	21	<2.0	4	<2.0	<2.0	NA	ND	NA	<2.0	ND	5	NA	NA	NA	NA	NA
Feb-89	<2.0	51	--	--	17	<2.0	3	<2.0	<2.0	NA	ND	NA	<2.0	ND	3	NA	NA	NA	NA	NA
Nov-88	3.2	180	--	--	37	<1.0	14	3.5	1.6	NA	ND	NA	16	ND	13	NA	NA	NA	NA	NA
Aug-88	5	150	--	--	53	<1.0	30	5.6	2.8	NA	ND	NA	34	ND	11	NA	NA	NA	NA	NA
May-88	4.2	170	--	--	47	<1.0	31	5.5	2.6	NA	ND	NA	20	ND	11	NA	NA	NA	NA	NA
Jan-88	4.1	100	--	--	20	<1.0	34	3.5	1.9	NA	ND	NA	30	ND	9.4	NA	NA	NA	NA	NA
Oct-87	3.3	68	--	--	16	<0.5	29	3.4	2.3	NA	ND	NA	22	ND	14	NA	NA	NA	NA	NA
Jun-87	5.9	170	--	--	14	<1.0	22	2.9	1.9	NA	ND	NA	21	ND	24	NA	NA	NA	NA	NA
Apr-87	3	160	--	--	13	<1.0	25	4.7	1.7	NA	ND	NA	16	ND	18	NA	NA	NA	NA	NA
Jan-87	<10	170	--	--	<10	<10	28	<10	<10	NA	ND	NA	54	ND	<10	NA	NA	NA	NA	NA
Sep-86	20	170	--	--	8.6	<1.0	40	5.1	3.5	NA	ND	NA	17	ND	18	NA	NA	NA	NA	NA
Jul-86	3.6	60	--	--	10	<0.5	43	4.8	2.3	NA	ND	NA	25	ND	<0.5	NA	NA	NA	NA	NA
Apr-86	3	130	--	--	12	<0.5	39	4.3	1.9	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Oct-85	16	220	--	--	17	<5.0	77	<5.0	<5.0	NA	ND	NA	120	ND	<5.0	NA	NA	NA	NA	NA
Nov-84	4.2	160	--	--	10	NA	26	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	6	180	--	--	12	ND	19	2	ND	NA	ND	NA	30	ND	ND	NA	NA	NA	NA	NA
Mar-84	NA	260	--	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-83	15	600	--	--	18	NA	36	13	16	NA	ND	NA	<1.0	ND	NA	NA	NA	NA	NA	NA
Jul-83	8	650	--	--	38	ND	18	2	2	NA	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA
May-83	14	9,200	--	--	ND	ND	18	ND	ND	NA	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA
Aug-82	6.8	500	--	--	52	ND	19	<2.0	<2.0	NA	ND	NA	<2.0	ND	ND	NA	NA	NA	NA	NA

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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-14	0.8	83	2.7	<0.5	--	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<2.0	NA	<5.0	NA	NA	NA	NA	NA
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	NA	NA	ND	<1.0	ND	<1.0	NA	NA	NA	NA	NA
Jan-88	<10	1,100	--	--	34	<10	<10	<10	<10	NA	NA	ND	95	ND	<10	NA	NA	NA	NA	NA
Jan-87	<5.0	600	--	--	25	<5.0	<5.0	<5.0	<5.0	NA	NA	ND	52	ND	<5.0	NA	NA	NA	NA	NA
Nov-84	6.6	1,300	--	--	32	NA	3.2	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	8	760	--	--	52	ND	4	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA
Mar-84	NA	1,400	--	--	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	NA	NA	NA	NA	NA	NA
Sep-83	37	4,200	--	--	290	NA	4	ND	ND	NA	NA	ND	190	ND	NA	NA	NA	NA	NA	NA
Sep-83	47	3,500	--	--	240	NA	5	ND	ND	NA	NA	ND	14	ND	NA	NA	NA	NA	NA	NA
Aug-83	34	41,000	--	--	4,600	5	13	2.0	1.6	NA	NA	ND	<1.0	ND	ND	NA	NA	NA	NA	NA
May-83	ND	270	--	--	17	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA
Apr-83	10	330	--	--	77	ND	ND	ND	ND	NA	NA	ND	120	ND	ND	NA	NA	NA	NA	NA
Aug-82	9	1,400	--	--	27	ND	13	<2.0	<2.0	NA	NA	ND	78	ND	ND	NA	NA	NA	NA	NA
Jun-82	<10	2,600	--	--	<10	ND	<10	<10	<10	NA	NA	ND	370	ND	ND	NA	NA	NA	NA	NA
38S ZA																				
Oct-15	1.0	83	98	0.98	--	4.9	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	1.0	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-14	<0.50	45	200	2.3	--	12	<0.50	0.9	<0.50	<0.50	<1.0	<0.50	1.3	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-13	0.93	96	150	1.7	--	7.4	<0.50	0.70	0.36 J	<0.50	<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	<0.50	<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	NA	ND	NA	95	ND	<25	NA	NA	NA	NA	NA
Jan-88	<50	2,900	--	--	240	<50	<50	<50	<50	NA	ND	NA	<50	ND	<50	NA	NA	NA	NA	NA
Oct-87	<25	2,400	--	--	270	<25	<25	<25	<25	NA	ND	NA	100	ND	<25	NA	NA	NA	NA	NA
Jun-87	260	2,200	--	--	910	<10	13	<10	<10	NA	ND	NA	83	ND	<10	NA	NA	NA	NA	NA
Apr-87	26	2,700	--	--	420	<10	74	<10	<10	NA	ND	NA	91	ND	<10	NA	NA	NA	NA	NA
Jan-87	<10	2,500	--	--	220	<10	<10	<10	<10	NA	ND	NA	180	ND	<10	NA	NA	NA	NA	NA
Sep-86	<25	4,600	--	--	120	<25	<25	<25	<25	NA	ND	NA	150	ND	<25	NA	NA	NA	NA	NA
Jul-86	<5.0	2,800	--	--	200	<5.0	<5.0	<5.0	<5.0	NA	ND	NA	250	ND	<5.0	NA	NA	NA	NA	NA
Oct-85	45	3,700	--	--	410	<25	33	<25	<25	NA	ND	NA	590	ND	<25	NA	NA	NA	NA	NA
Nov-84	28	3,200	--	--	510	NA	20	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	28	1,400	--	--	1100	ND	5	3	ND	NA	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA
Mar-84	NA	3,500	--	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Sep-83	59	2,700	--	--	970	ND	<2.0	<4.0	1	NA	ND	NA	140	ND	ND	NA	NA	NA	NA	NA
Sep-83	72	6,300	--	--	1700	ND	<2.0	4	3	NA	ND	NA	120	ND	ND	NA	NA	NA	NA	NA
May-83	23	2,000	--	--	350	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA
Aug-82	17	2,200	--	--	300	ND	<2.0	<2.0	<2.0	NA	ND	NA	35	ND	ND	NA	NA	NA	NA	NA
Aug-82	76	40,000	--	--	3100	3	6.4	2	2.6	NA	ND	NA	<1.0	ND	ND	NA	NA	NA	NA	NA
Jun-82	<10	1,250	--	--	<10	ND	<10	<10	<10	NA	ND	NA	103	ND	ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-11 ZA																				
Per United States Environmental Protection Agency approval, the Eductor was abandoned in November 2014.																				
Sep-14	<500	<500	43,000	<500	--	2,900	<500	<500	<500	<500	<1000	<500	<500	<1000	530	<500	NA	NA	NA	NA
Apr-14	<500	<500	20,000	<500	--	1,600	<500	<500	<500	<500	<1000	<500	<500	<1000	<500	<500	<500	<500	<500	<1000
Oct-13	<500	<500	29,000	<500	--	1,800	<500	<500	<500	NA	<1000	<500	<500	<1000	<500	<500	NA	NA	NA	NA
May-13	<1000	1,000	37,000	<1,000	--	2,900	<1000	<1000	<1000	NA	<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	NA	NA	NA	NA
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	NA	ND	NA	<0.5	ND	3.3	NA	NA	NA	NA	NA
May-89	51	970	--	--	120	<10	<10	<10	<10	NA	ND	NA	<10	ND	<10	NA	NA	NA	NA	NA
Feb-89	3.6	62	--	--	1.6	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Dec-87	130	62	--	--	320	<50	<50	<50	<50	NA	ND	NA	<50	ND	<50	NA	NA	NA	NA	NA
Oct-87	3,400	8,400	--	--	8,800	<1,000	<1,000	<1,000	<1,000	NA	ND	NA	<1,000	ND	<1,000	NA	NA	NA	NA	NA
Jan-87	2,700	230,000	--	--	12,000	<500	<500	<500	<500	NA	ND	NA	<500	ND	6,700	NA	NA	NA	NA	NA
Jul-86	2700	75,000	--	--	28,000	2,000	<250	<250	<250	NA	ND	NA	<250	ND	7,700	NA	NA	NA	NA	NA
Apr-86	4200	24,000	--	--	14,000	530	<100	<100	<100	NA	ND	NA	<100	ND	9,200	NA	NA	NA	NA	NA
Oct-85	13000	32,000	--	--	63,000	<250	<250	<250	<250	NA	ND	NA	<250	ND	<250	NA	NA	NA	NA	NA
EDUCTOR-15 ZA																				
Sep-14	<1,000	<1,000	120,000	<1,000		5,700	<1,000	<1,000	<1,000	<1,000	<2,000	<1,000	<1,000	<2,000	1,400	1,600	NA	NA	NA	NA
Apr-14	<1,000	<1,000	50,000	<1,000		2,400	<1,000	<1,000	<1,000	<1,000	<2,000	<1,000	<1,000	<2,000	<1,000	<1,000	<1,000	<1,000	<1,000	<2000
Oct-13	<1,000	8,800	160,000	<1,000		<1,000	<1,000	<1,000	<1,000	<1,000	<2,000	<1,000	<1,000	<2,000	1,800	<1,000	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Aug-89	<0.5	<0.5	--	--	0.6	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
May-89	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Feb-89	<0.5	<0.5	--	--	0.6	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Nov-88	<0.5	<0.5	--	--	1.4	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Aug-88	<0.5	<0.5	--	--	1.6	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
May-88	<0.5	<0.5	--	--	1.3	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-88	<0.5	<0.5	--	--	0.7	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Oct-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jun-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Apr-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Sep-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jul-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Apr-86	<0.5	1	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	NA	ND	<0.5	NA	NA	NA	NA	NA
Oct-85	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Nov-84	<0.5	<0.5	--	--	NA	NA	<0.5	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	ND	ND	--	--	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA
Mar-84	NA	<.5	--	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	NA
Aug-83	<1.0	<1.0	--	--	<1	<1.0	<1.0	<1.0	<1.0	NA	ND	NA	<1.0	ND	<1.0	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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																				
Per United States Environmental Protection Agency approval, well T-2B was abandoned in November 2014.																				
Sep-14	<2.5	<2.5	26	<2.5	--	60	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	9.3	28	NA	NA	NA	NA
Apr-14	<2.5	<2.5	12	<2.5	--	40	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	16	58	<2.5	<2.5	<2.5	<5.0
Oct-13	<0.50	<2.5	140	1.6	--	150	<0.50	<0.50	1.0	NA	<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	NA	<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	NA	NA	NA	NA
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	NA	ND	NA	<200	ND	<200	NA	NA	NA	NA	NA
Aug-89	<2,500	<2500	--	--	48,000	26,000	<2,500	<2500	<2500	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-89	<500	4,000	--	--	40,000	45,000	<500	<500	<500	NA	ND	NA	<500	ND	<500	NA	NA	NA	NA	NA
May-89	<200	1,400	--	--	34,000	32,000	<200	<200	<200	NA	ND	NA	<200	ND	<200	NA	NA	NA	NA	NA
Feb-89	<500	7,200	--	--	36,000	13,000	<500	<500	<500	NA	ND	NA	<500	ND	<500	NA	NA	NA	NA	NA
Nov-88	230	970	--	--	8,700	3,300	<100	<100	<100	NA	ND	NA	<100	ND	<100	NA	NA	NA	NA	NA
Aug-88	180	970	--	--	7,300	3,800	<100	<100	<100	NA	ND	NA	<100	ND	<100	NA	NA	NA	NA	NA
May-88	54	630	--	--	5,800	1,000	12	120	<5.	NA	ND	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
Jan-88	170	1,400	--	--	12,000	4,200	<50	<50	<50	NA	ND	NA	<50	ND	<50	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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	NA	ND	NA	<25	ND	71	NA	NA	NA	NA	NA
Jul-87	490	2,100	--	--	5,400	730	<50	<50	<50	NA	ND	NA	100	ND	<50	NA	NA	NA	NA	NA
Jan-87	800	9,100	--	--	7,000	1,100	<25	<25	<25	NA	ND	NA	<25	ND	710	NA	NA	NA	NA	NA
Jul-86	1,200	3,800	--	--	2,800	1,400	<10	<10	<10	NA	ND	NA	<10	ND	860	NA	NA	NA	NA	NA
Apr-86	580	4,000	--	--	3,600	180	<50	<50	<50	NA	ND	NA	<50	ND	<50	NA	NA	NA	NA	NA
Mar-86	1,300	5,500	--	--	3,300	750	<25	<25	<25	NA	ND	NA	NA	ND	<25	NA	NA	NA	NA	NA
Oct-85	2,700	7,500	--	--	7,700	<50	<50	<50	<50	NA	ND	NA	840	ND	<50	NA	NA	NA	NA	NA
Nov-84	2,300	52,000	--	--	7,200	NA	<130	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	1,500	11,000	--	--	650	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA
Mar-84	NA	130,000	--	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Sep-83	2,000	73,000	--	--	2,000	NA	ND	ND	ND	NA	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA
Sep-83	2,000	290,000	--	--	2,000	NA	ND	ND	ND	NA	ND	NA	ND	ND	NA	NA	NA	NA	NA	NA
Aug-83	2,800	1,100,000	--	--	160	<5.0	<5.0	<5.0	<5.0	NA	ND	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
T-4B ZB1																				
Oct-15	<0.50	4	120	0.97	--	<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
Jun-15	<0.50	5	130	<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
Oct-14	<5.0	5.2	500	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	NA	NA	NA	NA
Oct-13	<5.0	9.2	830	1.4 J	--	<5.0	<5.0	<5.0	<5.0	NA	<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	NA	ND	NA	1.8		<0.5	NA	NA	NA	NA	NA
May-88	<0.5	9	--	--	0.7	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	0.5		<0.5	NA	NA	NA	NA	NA
Jan-88	<0.5	14	--	--	0.6	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	0.6		<0.5	NA	NA	NA	NA	NA
Apr-86	<0.5	1	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5		<0.5	NA	NA	NA	NA	NA
Jan-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5		<0.5	NA	NA	NA	NA	NA
Oct-85	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5		<0.5	NA	NA	NA	NA	NA
Nov-84	<0.5	1.5	--	--	<0.5	NA	<0.5	NA	NA	NA	ND	NA	NA		NA	NA	NA	NA	NA	NA
Aug-84	ND	ND	--	--	ND	ND	ND	ND	ND	NA	ND	NA	ND		ND	NA	NA	NA	NA	NA
Mar-84	NA	4	--	--	NA	NA	NA	NA	NA	NA	ND	NA	NA		NA	NA	NA	NA	NA	NA
Aug-83	<1.0	<1.0	--	--	10	ND	<1.0	3.6	<1.0	NA	ND	NA	<1.0		ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-15	3.7	1,700	62	1.1	--	<0.50	<0.50	1.2	<0.50	<0.50	<1.0	<0.50	120	<1.0	<0.50	1	NA	NA	NA	NA
Oct-15 Dup	3.9	1,800	62	1.2	--	<0.50	<0.50	1.3	<0.50	<0.50	<1.0	<0.50	130	<1.0	<0.50	1	NA	NA	NA	NA
Oct-14	<10	1,500	58	<10	--	<10	<10	<10	<10	<10	<20	<10	140	<20	<10	<10	NA	NA	NA	NA
Oct-14 Dup	<25	1,600	64	<25	--	<25	<25	<25	<25	<25	<50	<25	160	<50	<25	<25	NA	NA	NA	NA
Oct-13	4.5 J	1,500	51	<10	--	<10	<10	<10	<10		<20	<10	150	<20	<10	<10	NA	NA	NA	NA
Oct-13 Dup	4.8 J	1,400	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	NA	ND	NA	2,700	ND	<2.0	NA	NA	NA	NA	NA
Aug-89	<50	10,000	--	--	<50	<50	<50	<50	<50	NA	ND	NA	2,100	ND	<50	NA	NA	NA	NA	NA
Aug-89	<50	9,200	--	--	<50	<50	<50	<50	<50	NA	ND	NA	2,300	ND	<50	NA	NA	NA	NA	NA
Feb-89	<250	8,000	--	--	<250	<250	<250	<250	<250	NA	ND	NA	2,000	ND	<250	NA	NA	NA	NA	NA
Nov-88	<5.0	5,500	--	--	18	<5.0	<5.0	<5.0	<5.0	NA	ND	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
Nov-88	<50	8,000	--	--	<50	<50	<50	<50	<50	NA	ND	NA	2,000	ND	<50	NA	NA	NA	NA	NA
Aug-88	<100	14,000	--	--	<100	<100	<100	<100	<100	NA	ND	NA	2,700	ND	<100	NA	NA	NA	NA	NA
Jun-88	<250	11,000	--	--	<250	<250	<250	<250	<250	NA	ND	NA	1,200	ND	<250	NA	NA	NA	NA	NA
Jun-88	18	7,400	--	--	13	<0.5	7.8	2.5	1.4	NA	ND	NA	2,500	ND	<0.5	NA	NA	NA	NA	NA
Jan-88	<250	17,000	--	--	<250	<250	<250	<250	<250	NA	ND	NA	2,800	ND	<250	NA	NA	NA	NA	NA
Oct-87	<50	7,800	--	--	<50	<50	120	<50	<50	NA	ND	NA	1,800	ND	<50	NA	NA	NA	NA	NA
Jun-87	140	5,500	--	--	25	<25	<25	<25	<25	NA	ND	NA	1,800	ND	<25	NA	NA	NA	NA	NA
Apr-87	<25	15,000	--	--	<25	<25	<25	480	<25	NA	ND	NA	1,700	ND	<25	NA	NA	NA	NA	NA
Jan-87	33	4,900	--	--	<10	<10	<10	<10	<10	NA	ND	NA	3,100	ND	<10	NA	NA	NA	NA	NA
Sep-86	<100	20,500	--	--	<100	<100	<100	<100	<100	NA	ND	NA	3,150	ND	<100	NA	NA	NA	NA	NA
Jul-86	<50	6,700	--	--	<50	<50	<50	<50	<50	NA	ND	NA	3,300	ND	<50	NA	NA	NA	NA	NA
Apr-86	<25	8,200	--	--	<25	<25	<25	<25	<25	NA	ND	NA	6,900	ND	<25	NA	NA	NA	NA	NA
Jan-86	<25	9,100	--	--	<25	<25	<25	<25	<25	NA	ND	NA	NA	ND	<25	NA	NA	NA	NA	NA
Oct-85	73	19,000	--	--	<50	<50	<50	<50	<50	NA	ND	NA	6,300	ND	<50	NA	NA	NA	NA	NA
Nov-84	19	15,000	--	--	<20	NA	17	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	ND	17,000	--	--	ND	ND	ND	ND	ND	NA	ND	NA	10,000	ND	ND	NA	NA	NA	NA	NA
Mar-84	NA	16,000	--	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-83	<1.0	3,200	--	--	14	<1.0	<1.0	<1.0	<1.0	NA	ND	NA	<1.0	ND	<1.0	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-15	<0.50	72	4.8	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	0.81	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-15 Dup	<0.50	73	4.8	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	0.81	<1.0	<0.50	<0.50	NA	NA	NA	NA
Jun-15	0.54	140	10	0.64	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	2.6	<1.0	1.1	<0.50	NA	NA	NA	NA
Jun-15 Dup	0.63	150	9.8	0.66	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	2.8	<1.0	1.3	<0.50	NA	NA	NA	NA
Oct-14	0.74	170	11	0.78	--	<0.50	<0.50	0.61	<0.50	<0.50	<1.0	<0.50	3.2	<1.0	2.1	<0.50	NA	NA	NA	NA
Oct-14 Dup	0.84	170	12	0.97	--	<0.50	0.51	0.74	0.57	<0.50	<1.0	<0.50	4.4	<1.0	2.4	<0.50	NA	NA	NA	NA
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	NA	ND	NA	20	ND	<10	NA	NA	NA	NA	NA
Aug-89	5	980	--	--	93	13	13	<2.0	<2.0	NA	ND	NA	40	ND	<2.0	NA	NA	NA	NA	NA
May-89	6.0	1,400	--	--	60	<5.0	<5.0	<5.0	<5.0	NA	ND	NA	25	ND	<5.0	NA	NA	NA	NA	NA
Feb-89	<25	1,600	--	--	<25	<25	<25	<25	<25	NA	ND	NA	420	ND	<25	NA	NA	NA	NA	NA
Nov-88	<10	1,300	--	--	<10	<10	<10	<10	<10	NA	ND	NA	50	ND	<10	NA	NA	NA	NA	NA
Aug-88	<25	1,800	--	--	<25	<25	<25	<25	<25	NA	ND	NA	69	ND	<25	NA	NA	NA	NA	NA
Jun-88	<10	1,300	--	--	32	<10	<10	<10	<10	NA	ND	NA	56	ND	<10	NA	NA	NA	NA	NA
Jan-88	<25	2,100	--	--	<25	<25	<25	<25	<25	NA	ND	NA	280	ND	<25	NA	NA	NA	NA	NA
Oct-87	<25	2,600	--	--	<25	<25	31	<25	<25	NA	ND	NA	54	ND	<25	NA	NA	NA	NA	NA
Jun-87	<25	3,200	--	--	<25	<25	<25	<25	<25	NA	ND	NA	87	ND	<25	NA	NA	NA	NA	NA
Apr-87	<25	3,800	--	--	31	<25	<25	<25	<25	NA	ND	NA	<25	ND	<25	NA	NA	NA	NA	NA
Jan-87	24	3,100	--	--	25	<10	<10	<10	<10	NA	ND	NA	360	ND	<10	NA	NA	NA	NA	NA
Sep-86	<25	5,100	--	--	<25	<25	<25	<25	<25	NA	ND	NA	660	ND	<25	NA	NA	NA	NA	NA
Jul-86	<25	5,300	--	--	<25	<25	<25	<25	<25	NA	ND	NA	370	ND	<25	NA	NA	NA	NA	NA
Apr-86	<25	3,500	--	--	<25	<25	<25	<25	<25	NA	ND	NA	<25	ND	<25	NA	NA	NA	NA	NA
Jan-86	<25	3,500	--	--	<25	<25	<25	<25	<25	NA	ND	NA	NA	ND	<25	NA	NA	NA	NA	NA
Oct-85	60	3,300	--	--	26	<25	41	<25	<25	NA	ND	NA	420	ND	<25	NA	NA	NA	NA	NA
Nov-84	16	4,400	--	--	19	NA	6.4	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	ND	3,000	--	--	ND	ND	ND	ND	ND	NA	ND	NA	100	ND	ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-15	<0.50	1	29	2.2	--	24	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	2	<0.50	NA	NA	NA	NA
Jun-15	<5.0	<5.0	150	7.8	--	55	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	NA	NA	NA	NA
Oct-14	<0.50	10	270	7.3	--	16	<0.50	1.8	0.90	<0.50	<1.0	<0.50	<0.50	<1.0	7.5	<0.50	NA	NA	NA	NA
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	NA	ND	NA	<10	ND	<10	NA	NA	NA	NA	NA
Feb-89	51	2,500	--	--	270	870	<25	<25	<25	NA	ND	NA	<25	ND	<25	NA	NA	NA	NA	NA
Nov-88	25	360	--	--	100	490	15	<5.0	<5.0	NA	ND	NA	15	ND	<5.0	NA	NA	NA	NA	NA
Aug-88	24	370	--	--	340	1,800	28	<10	<10	NA	ND	NA	36	ND	<10	NA	NA	NA	NA	NA
May-88	40	750	--	--	610	770	24	5.2	<5.0	NA	ND	NA	24	ND	41	NA	NA	NA	NA	NA
Jan-88	79	1,000	--	--	610	690	100	<10	<10	NA	ND	NA	59	ND	41	NA	NA	NA	NA	NA
Oct-87	63	610	--	--	610	460	33	4.9	<5.0	NA	ND	NA	55	ND	36	NA	NA	NA	NA	NA
Jul-87	85	720	--	--	990	260	12	<10	<10	NA	ND	NA	<10	ND	17	NA	NA	NA	NA	NA
Jan-87	170	570	--	--	560	170	19	4.8	<2.5	NA	ND	NA	<2.5	ND	90	NA	NA	NA	NA	NA
Jul-86	170	<5.0	--	--	600	<5.0	25	<5.0	<5.0	NA	ND	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
Apr-86	240	650	--	--	1,300	360	<5.0	<5.0	<5.0	NA	ND	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
Mar-86	1,100	4,300	--	--	3,200	<25	<25	<25	<25	NA	ND	NA	NA	ND	<25	NA	NA	NA	NA	NA
Mar-86	750	2,800	--	--	1,700	<10	<10	<10	<10	NA	ND	NA	NA	ND	<10	NA	NA	NA	NA	NA
Mar-86	810	2,200	--	--	1,400	<10	<10	<10	<10	NA	ND	NA	NA	ND	<10	NA	NA	NA	NA	NA
Oct-85	370	1,600	--	--	880	<25	63	<25	<25	NA	ND	NA	200	ND	<25	NA	NA	NA	NA	NA
Oct-85	330	1,600	--	--	890	<25	62	<25	<25	NA	ND	NA	250	ND	<25	NA	NA	NA	NA	NA
Nov-84	360	2,600	--	--	410	NA	6	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	260	2,300	--	--	580	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-15	<2.5	150	150	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<2.5	<5.0	<2.5	<2.5	NA	NA	NA	NA
Jun-15	2.2	310	220	3.3	--	2.3	<0.50	2.1	0.59	<0.50	<1.0	<0.50	1.0	<1.0	0.82	<0.50	NA	NA	NA	NA
Oct-14	<5.0	390	210	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	NA	NA	NA	NA
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	NA	ND	NA	50	ND	<10	NA	NA	NA	NA	NA
Aug-89	61	7,300	--	--	<50	<50	<50	<50	<50	NA	ND	NA	200	ND	<50	NA	NA	NA	NA	NA
Jun-89	39	3,500	--	--	130	73	<10	<10	<10	NA	ND	NA	150	ND	<10	NA	NA	NA	NA	NA
Feb-89	<25	6,400	--	--	45	<25	<25	<25	<25	NA	ND	NA	200	ND	<25	NA	NA	NA	NA	NA
Nov-88	50	6,900	--	--	<50	<50	80	<50	<50	NA	ND	NA	310	ND	<50	NA	NA	NA	NA	NA
Aug-88	36	5,200	--	--	85	18	13	4.7	1.5	NA	ND	NA	170	ND	8	NA	NA	NA	NA	NA
Aug-88	<50	6,000	--	--	<50	<50	<50	<50	<50	NA	ND	NA	<50	ND	<50	NA	NA	NA	NA	NA
May-88	360	12,000	--	--	710	120	180	<100	<100	NA	ND	NA	1,700	ND	<100	NA	NA	NA	NA	NA
Jan-88	50	4,800	--	--	70	<10	10	<10	<10	NA	ND	NA	180	ND	<10	NA	NA	NA	NA	NA
Jan-88	<100	12,000	--	--	<100	<100	<100	<100	<100	NA	ND	NA	<100	ND	<100	NA	NA	NA	NA	NA
Nov-87	<50	3,900	--	--	340	150	<50	<50	<50	NA	ND	NA	290	ND	NA	NA	NA	NA	NA	NA
Oct-87	<50	6,900	--	--	450	150	<50	<50	<50	NA	ND	NA	390	ND	<50	NA	NA	NA	NA	NA
Jul-87	44	1,300	--	--	1300	220	30	<10	<10	NA	ND	NA	36	ND	54	NA	NA	NA	NA	NA
Jan-87	<50	17,000	--	--	<50	<50	160	<50	<50	NA	ND	NA	620	ND	<50	NA	NA	NA	NA	NA
Jul-86	<50	7,900	--	--	<50	<50	<50	<50	<50	NA	ND	NA	<50	ND	<50	NA	NA	NA	NA	NA
Apr-86	98	7,300	--	--	<25	<25	<25	<25	<25	NA	ND	NA	<25	ND	<25	NA	NA	NA	NA	NA
Mar-86	590	14,000	--	--	<100	<100	<100	<100	<100	NA	ND	NA	NA	ND	<100	NA	NA	NA	NA	NA
Mar-86	<100	16,000	--	--	<100	<100	<100	<100	<100	NA	ND	NA	NA	ND	<100	NA	NA	NA	NA	NA
Mar-86	<100	9,600	--	--	<100	<100	<100	<100	<100	NA	ND	NA	NA	ND	<100	NA	NA	NA	NA	NA
Oct-85	320	29,000	--	--	<50	<50	<50	<50	<50	NA	ND	NA	1,200	ND	<50	NA	NA	NA	NA	NA
Nov-84	15	2,900	--	--	9	NA	<25	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	330	7,900	--	--	ND	ND	ND	ND	ND	NA	ND	NA	700	ND	ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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-15	0.84	31	97	1.8	--	23	<0.50	0.52	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	1.9	<0.50	NA	NA	NA	NA
Oct-14	2.1	45	180	3.3	--	16	<0.50	1.1	0.82	<0.50	<1.0 *	<0.50 *	<0.50	<1.0	4.8	<0.50	NA	NA	NA	NA
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-15	0.88	280	290	1.9	--	0.51	<0.50	1.1	<0.50	<0.50	<1.0	<0.50	9.9	<1.0	<0.50	<0.50	NA	NA	NA	NA
Jun-15	1.0	230	310	2.7	--	0.50	<0.50	1.7	<0.50	<0.50	<1.0	<0.50	11	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-14	<5.0	75	400	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<5.0	<10	<5.0	<5.0	NA	NA	NA	NA
Apr-14	<5.0	55	370	<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-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-15	<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	NA	NA	NA	NA
Oct-14	<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	NA	NA	NA	NA
Oct-13	<0.50	<0.50	<0.50	<0.50	--	<0.50	<0.50	<0.50	<0.50	NA	<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	NA	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
T-19B ZB1																				
Oct-15	<0.50	49	1.8	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	1.0	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-14	<0.50	52	2.2	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0 *	<0.50 *	1.2	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-13	<0.50	56	1.8	<0.50	--	<0.50	<0.50	<0.50	<0.50	NA	<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	NA	<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 Site
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																				
Sep-14	<0.50	280	120	1.6	--	8.5	<0.50	0.97	<0.50	<0.50	<1.0	<0.50	1.3	<1.0	<0.50	<0.50	NA	NA	NA	NA
Apr-14	<0.50	150	48	0.80	--	0.59	<0.50	0.65	<0.50	<0.50	<1.0	<0.50	0.94	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0
Oct-13	<0.50	110	44	<0.50	--	<0.50	<0.50	<0.50	<0.50	NA	<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	NA	ND	ND	180	ND	<20	NA	NA	NA	NA	NA
Aug-89	<25	4,300	--	--	<25	<25	25	<25	<25	NA	ND	ND	420	ND	<25	NA	NA	NA	NA	NA
May-89	<25	3,900	--	--	<25	<25	<25	<25	<25	NA	ND	ND	270	ND	<25	NA	NA	NA	NA	NA
May-89	<25	3,500	--	--	<25	<25	<25	<25	<25	NA	ND	ND	230	ND	<25	NA	NA	NA	NA	NA
Feb-89	<25	3,100	--	--	<25	<25	<25	<25	<25	NA	ND	ND	220	ND	<25	NA	NA	NA	NA	NA
Nov-88	65	3,000	--	--	<50	<50	<50	<50	<50	NA	ND	ND	440	ND	<50	NA	NA	NA	NA	NA
Aug-88	<25	3,400	--	--	<25	<25	36	<25	<25	NA	ND	ND	400	ND	<25	NA	NA	NA	NA	NA
Jun-88	<10	5,500	--	--	<10	<10	<10	<10	<10	NA	ND	ND	330	ND	<10	NA	NA	NA	NA	NA
Jan-88	<100	4,400	--	--	<100	<100	<100	<100	<100	NA	ND	ND	<100	ND	<100	NA	NA	NA	NA	NA
Oct-87	<25	3,500	--	--	<25	<25	<25	<25	<25	NA	ND	ND	240	ND	<25	NA	NA	NA	NA	NA
Jul-87	<25	4,200	--	--	<25	<25	<25	<25	<25	NA	ND	ND	220	ND	<25	NA	NA	NA	NA	NA
Jan-87	<10	3,300	--	--	<10	<10	<10	<10	<10	NA	ND	ND	170	ND	<10	NA	NA	NA	NA	NA
Jul-86	<10	2,000	--	--	<10	<10	<10	<10	<10	NA	ND	ND	650	ND	<10	NA	NA	NA	NA	NA
Apr-86	<2.0	1,200	--	--	<2	<2.0	<2.0	<2.0	<2.0	NA	ND	ND	<2.0	ND	<2.0	NA	NA	NA	NA	NA
Mar-86	49	4,200	--	--	<25	<25	<25	<25	<25	NA	ND	ND	NA	ND	<25	NA	NA	NA	NA	NA
Mar-86	<25	5,500	--	--	<25	<25	<25	<25	<25	NA	ND	ND	NA	ND	<25	NA	NA	NA	NA	NA
Oct-85	<25	4,200	--	--	31	<25	<25	<25	<25	NA	ND	ND	950	ND	<25	NA	NA	NA	NA	NA
Nov-84	8.4	4,400	--	--	13	NA	<1.0	NA	NA	NA	ND	ND	NA	ND	NA	NA	NA	NA	NA	NA
Aug-84	7.2	760	--	--	3	NA	<0.1	<0.1	NA	NA	ND	ND	39	ND	NA	NA	NA	NA	NA	NA
Aug-84	10	2,300	--	--	12	ND	ND	6	ND	NA	ND	ND	1,000	ND	ND	NA	NA	NA	NA	NA
T-10C ZB2																				
Oct-15	<25	32	1600	<25	--	<25	<25	<25	<25	<25	<50	<25	32	<50	<25	<25	NA	NA	NA	NA
Jun-15	<0.50	690	1500	14	--	7.2	<0.50	9.9	<0.50	<0.50	<1.0	20	190	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-14	<10	1300	76	<10	--	<10	<10	<10	<10	<10	<20	<10	170	<20	<10	<10	NA	NA	NA	NA
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

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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 (continued)																				
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	NA	ND	NA	3,400	ND	<50	NA	NA	NA	NA	NA
Aug-89	<50	13,000	--	--	<50	<50	200	<50	<50	NA	ND	NA	1,500	ND	<50	NA	NA	NA	NA	NA
May-89	13	14,000	--	--	10.3	<0.2	320	80	10	NA	ND	NA	1,900	ND	<0.2	NA	NA	NA	NA	NA
May-89	<50	13,000	--	--	<50	<50	250	<50	<50	NA	ND	NA	1,700	ND	<50	NA	NA	NA	NA	NA
Feb-89	<250	9,300	--	--	<250	<250	<250	<250	<250	NA	ND	NA	550	ND	<250	NA	NA	NA	NA	NA
Nov-88	<50	12,000	--	--	<50	<50	200	50	<50	NA	ND	NA	1,400	ND	<50	NA	NA	NA	NA	NA
Aug-88	<100	16,000	--	--	<100	<100	300	<100	<100	NA	ND	NA	2,300	ND	<100	NA	NA	NA	NA	NA
May-88	<50	7,100	--	--	<50	<50	100	<50	<50	NA	ND	NA	640	ND	<50	NA	NA	NA	NA	NA
Jan-88	<100	10,000	--	--	<100	<100	<100	<100	<100	NA	ND	NA	3,200	ND	<100	NA	NA	NA	NA	NA
Oct-87	<50	6,700	--	--	<50	<50	60	<50	<50	NA	ND	NA	1,700	ND	<50	NA	NA	NA	NA	NA
Jun-87	<25	4,200	--	--	<25	<25	<25	<25	<25	NA	ND	NA	460	ND	<25	NA	NA	NA	NA	NA
Apr-87	<10	2,000	--	--	<10	<10	<10	66	<10	NA	ND	NA	360	ND	<10	NA	NA	NA	NA	NA
Jan-87	<50	9,500	--	--	<50	<50	<50	<50	<50	NA	ND	NA	700	ND	<50	NA	NA	NA	NA	NA
Sep-86	130	3,600	--	--	<25	<25	<25	<25	<25	NA	ND	NA	1,100	ND	<25	NA	NA	NA	NA	NA
Jul-86	<1.0	6,800	--	--	<1.0	<1.0	44	54	<1.0	NA	ND	NA	1,600	ND	<1.0	NA	NA	NA	NA	NA
Jul-86	<25	5,400	--	--	<25	<25	<25	<25	<25	NA	ND	NA	2,700	ND	<25	NA	NA	NA	NA	NA
T-11C ZB2																				
Oct-15	<0.50	43	3.3	<0.50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	1.1	<1.0	<0.50	<0.50	NA	NA	NA	NA
Oct-14	<2.5	310	23	<2.5	--	3.6	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	15	<5.0	<2.5	<2.5	NA	NA	NA	NA
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	NA	ND	NA	70	ND	<1.0	NA	NA	NA	NA	NA
Aug-89	<2.0	680	--	--	72	<2.0	<2.0	<2.0	<2.0	NA	ND	NA	47	ND	<2.0	NA	NA	NA	NA	NA
May-89	<2.5	560	--	--	23	<2.5	<2.5	<2.5	<2.5	NA	ND	NA	49	ND	<2.5	NA	NA	NA	NA	NA
Feb-89	<25	780	--	--	<25	<25	<25	<25	<25	NA	ND	NA	42	ND	<25	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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 (continued)																				
Nov-88	<10	740	--	--	<10	<10	<10	<10	<10	NA	ND	NA	100	ND	<10	NA	NA	NA	NA	NA
Aug-88	<25	1,800	--	--	87	<25	<25	<25	<25	NA	ND	NA	230	ND	<25	NA	NA	NA	NA	NA
May-88	<5.0	1,100	--	--	40	<5.0	<5.0	<5.0	<5.0	NA	ND	NA	120	ND	<5.0	NA	NA	NA	NA	NA
Jan-88	<25	2,200	--	--	<25	<25	<25	<25	<25	NA	ND	NA	430	ND	<25	NA	NA	NA	NA	NA
Oct-87	<10	1,900	--	--	<10	<10	<10	<10	<10	NA	ND	NA	140	ND	<10	NA	NA	NA	NA	NA
Jun-87	<10	2,900	--	--	<10	<10	<10	<10	<10	NA	ND	NA	230	ND	<10	NA	NA	NA	NA	NA
Apr-87	11	1,600	--	--	87	<10	<10	12	<10	NA	ND	NA	210	ND	<10	NA	NA	NA	NA	NA
Jan-87	<10	2,200	--	--	<10	<10	<10	<10	<10	NA	ND	NA	260	ND	<10	NA	NA	NA	NA	NA
Sep-86	62	3,100	--	--	<25	<25	<25	<25	<25	NA	ND	NA	660	ND	<25	NA	NA	NA	NA	NA
Jul-86	<1.0	1,800	--	--	<1.0	<1.0	9.7	3.2	<1.0	NA	ND	NA	710	ND	<1.0	NA	NA	NA	NA	NA
Jul-86	<25	4,600	--	--	<25	<25	<25	<25	<25	NA	ND	NA	2,000	ND	<25	NA	NA	NA	NA	NA
T-12C ZB2																				
Oct-15	<0.50	2	13	<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
Oct-14	<1.0	140	5.1	<1.0	--	<1.0	<1.0	1.2	<1.0	<1.0	<2.0	<1.0	1.8	<2.0	<1.0	<1.0	NA	NA	NA	NA
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
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	NA	ND	NA	17	ND	<2.0	NA	NA	NA	NA	NA
Aug-89	<2.0	350	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	NA	ND	NA	17	ND	<2.0	NA	NA	NA	NA	NA
Aug-89	<10	260	--	--	<10	<20	<10	<10	<10	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	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	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Aug-89	<0.5	70	--	--	21	<0.5	<0.5	1.5	3.1	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
May-89	<0.5	68	--	--	18	<0.5	1.1	1	2	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Feb-89	<5.0	72	--	--	16	<5.0	<5.0	<5.0	<5.0	NA	ND	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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
36DD (continued)																				
Nov-88	<5.0	85	--	--	25	<5.0	<5.0	<5.0	<5.0	NA	ND	NA	<5.0	ND	<5.0	NA	NA	NA	NA	NA
Aug-88	<1.0	72	--	--	43	<1.0	1.6	1.4	3.7	NA	ND	NA	4.7	ND	<1.0	NA	NA	NA	NA	NA
May-88	<0.5	68	--	--	40	<0.5	1.5	1.6	5.0	NA	ND	NA	2.6	ND	<0.5	NA	NA	NA	NA	NA
Jan-88	<0.5	38	--	--	25	<0.5	1.0	<0.5	3.4	NA	ND	NA	1.9	ND	<0.5	NA	NA	NA	NA	NA
Oct-87	<0.5	40	--	--	30	<0.5	1.4	0.7	3.0	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jun-87	<0.5	32	--	--	38	<0.5	<0.5	<0.5	1.8	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Apr-87	<0.5	53	--	--	45	<0.5	2.8	1.3	2.2	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-87	<0.5	26	--	--	16	<0.5	<0.5	<0.5	2.3	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Sep-86	<0.5	20	--	--	23	<0.5	<0.5	<0.5	1.8	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jul-86	<0.5	27	--	--	22	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Apr-86	<0.5	27	--	--	2.4	<0.5	<0.5	<0.5	1.8	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-86	<0.5	31	--	--	24	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	NA	ND	<0.5	NA	NA	NA	NA	NA
Oct-85	<0.5	8.6	--	--	17	<0.5	<0.5	<0.5	<0.5	NA	ND	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Nov-84	<0.5	5.1	--	--	6.3	NA	<0.5	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Mar-84	NA	11	--	--	NA	NA	NA	NA	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA
Aug-83	<1.0	12	--	--	1.7	ND	<1.0	<1.0	<1.0	NA	ND	NA	<1.0	ND	ND	NA	NA	NA	NA	NA
May-83	ND	990	--	--	120	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA
Apr-83	20	18	--	--	2	ND	18	ND	ND	NA	ND	NA	ND	ND	ND	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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 ZB3																				
Oct-15	<0.50	0.52	<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
Oct-14	<0.50	<0.50	0.54	<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
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	NA	NA	NA	33	ND	<1.0	NA	NA	NA	NA	NA
May-88	<2.5	470	--	--	<2.5	<2.5	<2.5	<2.5	<2.5	NA	NA	NA	160	ND	<2.5	NA	NA	NA	NA	NA
Jan-88	<5.0	330	--	--	<5.0	<5.0	7.5	<5.0	<5.0	NA	NA	NA	280	ND	<5.0	NA	NA	NA	NA	NA
Jul-86	<0.5	9.2	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	32	ND	<0.5	NA	NA	NA	NA	NA
Apr-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	ND	<0.5	NA	NA	NA	NA	NA
Oct-85	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-85	<0.5	<0.5	--	--	<0.5	NA	<0.5	NA	NA	NA	NA	NA	<0.5	ND	NA	NA	NA	NA	NA	NA

Historic Groundwater Volatile Organic Compound Results
Former TRW Microwave Site
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	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Aug-89	<1.0	<1.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	NA	ND	ND	<1.0	ND	<1.0	NA	NA	NA	NA	NA
May-89	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Feb-89	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Nov-88	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Aug-88	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
May-88	<0.5	0.6	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-88	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Oct-87	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Sep-86	<0.5	2.3	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jul-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Apr-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	<0.5	ND	<0.5	NA	NA	NA	NA	NA
Jan-86	<0.5	<0.5	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	NA	ND	<0.5	NA	NA	NA	NA	NA
Oct-85	<0.5	1.1	--	--	<0.5	<0.5	<0.5	<0.5	<0.5	NA	ND	ND	55	ND	<0.5	NA	NA	NA	NA	NA
Dec-84	<0.5	<0.5	--	--	<0.5	NA	<0.5	NA	NA	NA	ND	ND	<0.5	ND	NA	NA	NA	NA	NA	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 Site
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-15	23.2	6.91	1237.00	--	39	--	--	0.57 J
	Oct-14	21.7	6.98	1.251	5	-40.1	--	--	1.8
	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	1.265	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-15	25.17	6.86	1418	--	30	--	--	--
	Jun-15	22.8	6.89	1372	--	-12.2	--	--	--
	Oct-14	21.7	7	1.301	1	68.1	--	--	--
	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	4.9	0.0	170.0	--	--	--
	Oct-09	21.40	7.01	1.7	30.8	115	--	--	--
	Oct-08	21.9	--	--	--	237	--	--	--
	Oct-07	21.3	7.34	0.162	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 Site
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 -11	Sep-14	20.4	5.62	2.46	0	14	--	--	--
	Apr-14	18.8	5.59	1.616	9	-24	--	--	634
	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	3.668	9.00	-19	--	--	49
	Apr-12	18.45	5.24	3.813	--	-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
	Mar-10[(a)]	19.79	6.25	2.47	362	-292	--	900	570
	Oct-10[(b)]	18.94	7.24	2.213	391.4	-124.4	--	--	160.0
	Oct-10[(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	0.232	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 Site
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	Sep-14	20.44	6.84	2.37	0	-84	--	--	6.5
	Apr-14	19.2	6.79	2.112	4	-84	--	--	6.4
	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	2.252	2.1	-123.2	--	--	6.5
	Apr-12	18.66	6.97	1.958	--	-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	2.5	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	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	0.257	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	2.2	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	4.227	--	-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	2.8	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	Sep-14	20.46	7.15	1.43	0.0	152	--	--	--
	Apr-14	19.6	6.98	1.376	1	-20	--	--	--
	Oct-13	20	6.71	1.303	1	134.9	--	--	
	Oct-12	20.66	6.90	1.445	0.0	122.3	--	--	--
	Oct-11	20.39	6.93	1.666	0.2	222.3	--	--	--
	Oct-10	20.10	6.90	5.499	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	--	--	--
T-8A	Oct-15	22.3	6.88	1330	--	17	--	--	0.53 J
	Jun-15	24.6	6.92	1378	--	24.5	--	--	0.68 J
	Oct-14	22.5	6.9	1.314	1	65.3	--	--	1
	Apr-14	19	6.9	1.377	5	-28	--	--	1
	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	0.159	8.1	-300	--	--	<5.0
	Apr-07	21.3	6.73	1.55	21.9	19	--	--	<5.0
	Jan-07	19.4	6.33	1.6	--	21	--	--	<5.0
	Oct-06	22.3	6.52	0.151	10	-101	--	--	<5.0
	Jul-06	22.4	6.59	0.156	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	1.4	0	143	--	--	--
	Oct-02	20.5	6.93	1.33	11	67	11	480	<5.0
	Jul-02	20.5	6.22	2	--	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	1.4	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

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

Well	Date	Temperature (^{o}C)	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-9A	Oct-15	21.8	6.82	1320	--	109.1	--	--	--
	Oct-14	23.8	6.92	1.329	1	56.5	--	--	--
	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	1.5	66	145	--	--	--
	Jul-06	20.6	6.74	0.145	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	1.4	0	194	--	420	--

Historic Groundwater General Environmental Parameter Results
Former TRW Microwave Site
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-15	21.5	6.86	1133	--	-55	--	--	0.74 J
	Jun-15	21.8	6.86	1393	--	-77	--	--	0.94 J
	Oct-14	20.6	6.93	1.332	4	-59.4	--	--	2.1
	Apr-14	19.6	6.9	1.309	12	-90	--	--	1.7
	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	1.552	--	-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	0.134	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	0.154	5	199	--	--	<5.0
	Apr-06	20.0	6.98	0.721	38	111	--	--	<5.0
	Jan-06	20.2	6.97	0.158	0	244	--	--	<5.0
	Nov-05	21.0	6.43	1.48	0	248	--	510	6.5
T-14A	Oct-15	22.0	6.84	1278	--	-56	--	--	0.68 J
	Oct-14	19.5	6.91	1.256	2	-68.6	--	--	1.2
	Apr-14	18.5	6.9	1.338	7	-92.5	--	--	1.2
	Oct-13	18.2	6.67	1.232	4	-109.9	--	--	<1
	May-13	20.1	7.21	1.393	31.2	-151	--	--	1.6
	Oct-12	20.51	6.63	1.363	3.9	-79.8	--	--	--
	Apr-12	17.8	6.71	1.413	--	-117	--	--	6.6
	Oct-11	20.03	6.77	1.455	0.9	91	--	--	1.2
	Oct-10	19.99	6.87	4.45	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	1.4	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	0.133	9.4	141	--	--	<5.0
	Apr-07	24.6	6.45	1.46	--	124	--	--	<5.0
	Oct-06	20.5	6.71	0.151	10	51	--	--	<5.0
	Apr-06	20.2	6.91	1.51	44	80	--	--	<5.0
	Jan-06	19.1	6.92	0.161	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 Site
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-15	22.8	6.83	1319	--	27	--	--	--
	Oct-14	21.2	6.91	1.277	1	93.6	--	--	--
	Apr-14	20.5	6.88	1.358	2	-33	--	--	<1
	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	1.366	0	6.47	--	--	1.6
	Apr-12	19.8	6.81	1.337	--	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	0.121	504	60	--	--	<5.0
	Jan-07	20.1	6.37	1.64	--	69	--	--	<5.0
	Oct-06	21.4	6.77	0.147	10	-15	--	--	<5.0
	Jul-06	22.3	6.64	0.147	215	-23	--	--	<5.0
	Apr-06	20.3	7.02	0.901	466	-104	--	--	<5.0
	Jan-06	20.3	7.00	0.164	54	-188	--	--	<5.0
	Nov-05	21.5	6.44	1.46	90	-125	--	580	<5.0
T-16A	Oct-15	21.9	6.84	1286	--	-45	--	--	--
	Oct-14	22.4	6.92	1.293	6	79.8	--	--	--
	Oct-13	21	6.58	1.275	26	149.2	--	--	--
	Oct-12	22.02	6.71	1.384	0.1	115.5	--	--	--
	Oct-11	21.35	6.80	1.479	-0.7	274.7	--	--	--
	Oct-10	21.26	6.82	2.996	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-15	25.3	6.88	1234	--	6	--	--	0.52 J
	Jun-15	21.3	7.12	1350	--	-39	--	--	0.62 J
	Oct-14	21.1	7.23	1.286	4	-47.1	--	--	1.1
	Apr-14	19.6	7.02	1.258	6	-42	--	--	<1
	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	1.313	4.9	147.6	--	--	<1.0
	Apr-12	18.2	6.91	1.195	--	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-15	22.60	6.9	1323	--	-112	--	--	1.6
	Jun-15	21.20	6.9	1317	--	-92	--	--	1.8
	Oct-14	21.6	6.82	1.346	4	-119.1	--	--	3.2
	Apr-14	16	6.86	1.024	7	-96	--	--	3.6
	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	2.042	11	-136.4	--	--	12
	Apr-12	16.83	6.56	2.056	--	-141	--	--	16
	Oct-11	21.15	6.88	1.326	0.6	-133	--	--	5.5
	Oct-10	19.98	6.81	4.452	0.0	-120	--	--	5.5
	Apr-10	14.80	6.90	0.714	7.2	-137	--	--	7.6
	Oct-09	22.67	6.84	1.8	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 Site
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-15	21.9	6.90	1354	--	-84	--	--	0.85 J
	Jun-15	20.4	6.96	1409	--	-64	--	--	0.89 J
	Oct-14	20.4	6.94	1.35	9	-99	--	--	3.5
	Apr-14	18.1	6.89	1.39	11	-123	--	--	1.7
	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-15	22.1	6.84	1272	--	-35	--	--	0.54 J
	Jun-15	20.7	6.82	1350	--	-20	--	--	0.70 J
	Oct-14	20.9	6.95	1.266	2	-67.2	--	--	1.2
	Apr-14	19.2	6.91	1.341	13	-97	--	--	1
	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-15	27.7	7.55	958.000	--	162	--	--	--
	Jun-15	22.2	7.26	995.000	--	14	--	--	--
	Oct-14	20.7	7.19	1.017	1	83	--	--	--
	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
Former TRW Microwave Site
825 Stewart Drive, Sunnyvale, California

Well	Date	Temperature (^{o}C)	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-2B	Sep-14	19.91	7.01	1.77	0	-125	--	--	--
	Apr-14	19.4	6.77	1.723	5	-122	--	--	1.9
	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-15	24.2	7.15	1145.00	--	278	--	--	--
	Oct-14	20.7	7.25	1.107	1	149.8	--	--	--
	Oct-13	21.5	6.88	1.15	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	1.237	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 Site
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-15	24.8	7.27	880	--	-138	--	--	--
	Jun-15	22.3	6.94	1378	--	-94	--	--	--
	Oct-14	20.8	7.02	1.339	1	-64.4	--	--	--
	Oct-13	20.6	6.63	1.338	10	-75.6	--	--	--
	Oct-12	21.73	6.77	1.432	15.6	-61.4	--	--	<1.0
	Oct-11	20.13	6.90	1.515	9.0	59.4	--	--	--
	Oct-10	20.60	6.90	6.2	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	1.5	36	-161	--	--	--
	Apr-04	21.6	6.83	1.4	15	-23	--	--	--
	Oct-03	20.5	6.94	1.5	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	1.4	0	-35	--	--	--
	Oct-02	20.4	6.91	1.41	143	-72	6.1	550	<5.0
	Jul-02	20.0	6.39	2	--	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	1.336	--	-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	1.5	0	130	1.09	500	3.1
T-9B	Oct-15	24.6	7.20	871	--	143	--	--	--
	Jun-15	21.8	6.98	1412	--	17	--	--	--
	Oct-14	19.9	7.09	1.403	1	234	--	--	--
	Oct-13	25.1	6.76	1.471	1	99.4	--	--	--
	Oct-12	20.95	6.94	1.585	1.1	42.8	--	--	<1.0
	Oct-11	20.60	7.06	1.547	0.0	-131.8	--	--	--
	Oct-10	21.53	7.04	1.591	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 Site
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-15	24.9	7.55	341	--	-159	--	--	--
	Oct-14	22.8	6.94	1.322	1	1.4		--	--
	Oct-13	18.6	6.72	1.121	2	184.8	--	--	--
	Oct-12	21.52	6.48	1.382	0.0	130.0	--	--	<1.0
	Oct-11	20.60	6.76	1.49	0.0	234.9	--	--	--
	Oct-10	20.68	6.85	5.932	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	0.108	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	1.3	462	15	--	--	5.4
T-4B	Oct-15	32.2	8.11	837	--	279	--	--	--
	Jun-15	20.9	7.80	829	--	41	--	--	--
	Oct-14	21.6	7.29	1.306	2	-53.3	--	--	--
	Oct-13	20.9	7.09	1.071	1	110	--	--	--
	Oct-12	21.42	7.07	1.418	5.5	19	--	--	--
	Oct-11	22.4	7.24	1.383	0	49.2	--	--	--
	Oct-10	21.74	7.23	5.526	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	0.1	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	1.3	--	--	--	--	--
	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-15	22.2	7.09	1176	--	-14	--	--	0.38 J
	Jun-15	22.8	7.13	1217	--	-11.2	--	--	0.43 J
	Oct-14	20	7.29	1.206	4	7.4	--	--	1.3
	Apr-14	18.4	7.21	1.248	8	-55	--	--	<1
	Oct-13	20.2	7.22	1.246	6	-14.6	--	--	<1
	May-13	22	7.2	1.313		-17	--	--	1
	Oct-12	21.15	6.84	1.23	1.4	124.6	--	--	<1.0
	Apr-12	19.08	7.12	1.152	--	34.3	--	--	0.55 J
	Oct-11	21.03	7.15	1.079	9.6	66.7	--	--	--
	Oct-10	20.08	7.22	1.321	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	0.1	205	64	--	--	--
	Jan-07	19.6	6.30	1.28	--	25	--	--	--
	Oct-06	20.3	7.86	0.819	--	-113	--	--	--
	Jul-06	23.8	6.93	0.125	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-15	20.5	8.25	825	--	122.4	--	--	--
	Oct-14	23.4	7.63	0.846	24	-76.8	--	--	--
	Oct-13	22	7.35	0.898	5	-89.5	--	--	--
	May-13	23.04	8.04	0.994	--	-175	--	--	--
T-19B	Oct-15	20.2	7.22	1033	--	133.6	--	--	--
	Oct-14	22.7	7.26	1.001	102	90.2	--	--	--
	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 Site
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	Sep-14	19.77	7.84	0.91	0	110	--	--	--
	Apr-14	19.5	5.62	0.83	7	121	--	--	--
	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	0.87	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	0.811	10	-24	2.0	320	<5.0
T-10C	Oct-15	25.2	7.59	847	--	-222	--	--	--
	Jun-15	20.8	7.32	854	--	-150	--	--	--
	Oct-14	20.7	7.68	0.756	5	77.7	--	--	--
	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-15	22.2	7.83	809	--	114	--	--	--
	Oct-14	22.2	7.38	0.903	1	37.4	--		
	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-15	22.8	8.74	586	--	24	--	--	--
	Oct-14	20.3	7.5	0.827	29	96.3	--		
	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	--	--	--
Zone B3 Aquifer Well									
T-9C	Oct-15	22.6	7.57	746	--	154	--	--	--
	Oct-14	23.1	7.85	0.723	2	14.3	--	--	--
	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	--	--	--	--

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
mS/cm = milliSiemens 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 Site
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-15	0.72	--	--	--	--	--	--	--	--	--	--
	Oct-15 Dup	0.72	--	--	--	--	--	--	--	--	--	--
	Jun-15	0.59	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.15	--	--	--	--	--	--	--	--	--	--
	Oct-13	0.34	--	--	--	--	--	--	--	--	--	--
	Oct-12[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-11	Sep-14	0.66	--	--	--	--	--	--	--	--	--	--
	Apr-14	0.15	--	40	--	--	--	--	--	2,700	14	450
	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
	Nov-10[b]	2.06	--	--	--	--	--	--	--	7,600	90	2,400
	Oct-10[c]	0.20	--	--	--	--	--	--	--	--	--	--
	Oct-10[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	Sep-14	0.85	--	--	--	--	--	--	--	--	--	--
	Apr-14	0.19	--	56	--	--	--	--	--	7,700	240	110
	Apr-14 Dup	0.19	--	58	--	--	--	--	--	7,400	230	110
	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 Site
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 (continued)	Jan-02	--	--	--	--	--	--	--	--	--	--	--
	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	Sep-14	1.41	--	--	--	--	--	--	--	--	--	--
	Apr-14	1.99	--	--	--	--	--	--	--	--	--	--
	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-15	0.21	--	170	--	--	--	--	--	5.9	0.027	0.033
	Jun-15	0.35	--	150	--	--	--	--	--	17	0.017 J	0.16
	Oct-14	0.13	--	170	--	--	--	--	--	11	0.043	0.019 J
	Apr-14	0.27	--	170	--	--	--	--	--	6.2	0.038	0.018 J
	Oct-13	0.4	--	180	--	--	--	--	--	100	0.076	0.023 J
	May-13	0.21	--	170	--	--	--	--	--	13	0.03	0.05
	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-15	0.33	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.13	--	--	--	--	--	--	--	--	--	--
	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	0.330	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-15	0.20	--	170	--	--	--	--	--	240	0.094	1.70
	Jun-15	0.90	--	170	--	--	--	--	--	660	0.17	2.50
	Jun-15 Dup	0.9	--	150	--	--	--	--	--	690	0.17	2.6
	Oct-14	0.15	--	320	--	--	--	--	--	4,100	2.2	3.1
	Oct-14 Dup	0.15	--	--	--	--	--	--	--	--	--	--
	Apr-14	0.49	--	170	--	--	--	--	--	2,900	1.2	2.2
	Apri-14 Dup	0.49	--	150	--	--	--	--	--	2,900	1.2	2.3
	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
	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

Historic Groundwater Electron Acceptor/Metabolic By-Product Results
Former TRW Microwave Site
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-13A (continued)	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
T-14A	Oct-15	0.24	--	160	--	--	--	--	--	140	0.13	2.9
	Oct-14	0.21	--	150	--	--	--	--	--	350	0.49	7.3
	Apr-14	0.35	--	160	--	--	--	--	--	770	0.79	6.6
	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-15	0.21	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.14	--	--	--	--	--	--	--	--	--	--
	Apr-14	0.4	--	170	--	--	--	--	--	1.8	0.28	0.84
	Oct-13	0.37	--	--	--	--	--	--	--	--	--	--
	May-13	0.3	--	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

Historic Groundwater Electron Acceptor/Metabolic By-Product Results
Former TRW Microwave Site
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-15A (continued)	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-15	0.25	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.1	--	--	--	--	--	--	--	--	--	--
	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-15	0.56	--	130	--	--	--	--	--	500	0.5	0.48
	Jun-15	0.28	--	120	--	--	--	--	--	920	0.64	0.47
	Oct-14	0.15	--	130	--	--	--	--	--	960	0.39	0.43
	Apr-14	0.29	--	130	--	--	--	--	--	840	0.54	0.31
	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-15	0.18	--	160	--	--	--	--	--	1600	1.7	10
	Jun-15	0.40	--	120	--	--	--	--	--	2600	2.2	7.2
	Oct-14	0.17	--	180	--	--	--	--	--	6,400	3.5	5.6
	Apr-14	0.34	--	36	--	--	--	--	--	6,300	3.5	2.7
	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-15	0.23	--	170	--	--	--	--	--	1100	1	0.71
	Jun-15	0.36	--	160	--	--	--	--	--	1100	0.87	0.42
	Oct-14	0.18	--	260	--	--	--	--	--	4,200	2.5	0.97
	Apr-14	0.24	--	140	--	--	--	--	--	2,400	1.2	0.77
	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-15	0.24	--	160	--	--	--	--	--	11	0.056	0.84
	Jun-15	0.71	--	160	--	--	--	--	--	49	0.078 J	1.6
	Oct-14	0.12	--	150	--	--	--	--	--	12	0.079	5.8
	Apr-14	0.23	--	160	--	--	--	--	--	45	0.15	7.2
	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

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		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-15	0.49	--	140	--	--	--	--	--	--	--	--
	Oct-14	0.16	--	120	--	--	--	--	--	--	--	--
	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-15	3.04	--	--	--	--	--	--	--	--	--	--
	Oct-15 Dup	3.04	--	--	--	--	--	--	--	--	--	--
	Jun-15	3.18	--	--	--	--	--	--	--	--	--	--
	Jun-15 Dup	3.18	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.2	--	--	--	--	--	--	--	--	--	--
	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	Sep-14	3.09	--	--	--	--	--	--	--	--	--	--
	Apr-14	0.9	--	120	--	--	--	--	--	13,000	110	25
	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
	Nov-10[(b)]	2.4	--	--	--	--	--	--	--	11,000	21	210
	Oct-10[(c)]	6.77	--	--	--	--	--	--	--	--	--	--
	Oct-10[(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

Historic Groundwater Electron Acceptor/Metabolic By-Product Results
Former TRW Microwave Site
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-2B (continued)	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
T-8B	Oct-15	0.17	--	--	--	--	--	--	--	--	--	--
	Jun-15	0.61	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.16	--	--	--	--	--	--	--	--	--	--
	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-15	2.13	--	--	--	--	--	--	--	--	--	--
	Jun-15	1.27	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.35	--	--	--	--	--	--	--	--	--	--
	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-15	0.17	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.15	--	--	--	--	--	--	--	--	--	--
	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-15	4.64	--	--	--	--	--	--	--	--	--	--
	Jun-15	5.91	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.2	--	--	--	--	--	--	--	--	--	--
	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 Site
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-15	0.50	--	--	--	--	--	--	--	--	--	--
	Oct-15 Dup	--	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.26	--	--	--	--	--	--	--	--	--	--
	Oct-13	0.25	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.41	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.45	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.68	--	--	--	--	--	--	--	--	--	--
	Oct-09	4.63	--	--	--	--	--	--	--	--	--	--
T-17B	Oct-15	0.22	--	130	--	--	--	--	--	87	1.3	0.14
	Jun-15	0.33	--	120	--	--	--	--	--	130	1.6	0.19
	Oct-14	0.2	--	150	--	--	--	--	--	140	1.2	0.87
	Apr-14	0.57	--	160	--	--	--	--	--	100	0.96	0.22
	Oct-13	0.77	--	150	--	--	--	--	--	170	2	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-15	0.62	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.43	--	--	--	--	--	--	--	--	--	--
	Oct-13	0.72	--	--	--	--	--	--	--	--	--	--
	May-13	0.17	--	--	--	--	--	--	--	--	--	--
T-19B	Oct-15	0.59	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.35	--	--	--	--	--	--	--	--	--	--
	Oct-13	0.32	--	--	--	--	--	--	--	--	--	--
	May-13	0.13	--	--	--	--	--	--	--	--	--	--
Zone B2 Aquifer Wells												
T-2C	Sep-14	12	--	--	--	--	--	--	--	--	--	--
	Apr-14	2.23	--	--	--	--	--	--	--	--	--	--
	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-10C	Oct-15	0.18	--	--	--	--	--	--	--	--	--	--
	Jun-15	0.65	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.22	--	--	--	--	--	--	--	--	--	--
	Oct-13	0.52	--	--	--	--	--	--	--	--	--	--
	Oct-12	3.01	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.50	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.32	--	--	--	--	--	--	--	--	--	--
	Oct-09	4.48	--	--	--	--	--	--	--	--	--	--
T-11C	Oct-15	3.78	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.15	--	--	--	--	--	--	--	--	--	--
	Oct-13	0.24	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.42	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.55	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.39	--	--	--	--	--	--	--	--	--	--
	Oct-09	0.27	--	--	--	--	--	--	--	--	--	--
T-12C	Oct-15	0.47	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.24	--	--	--	--	--	--	--	--	--	--
	Oct-13	0.34	--	--	--	--	--	--	--	--	--	--
	Oct-12	1.70	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.42	--	--	--	--	--	--	--	--	--	--
	Oct-10	0.86	--	--	--	--	--	--	--	--	--	--
	Oct-09	6.21	--	--	--	--	--	--	--	--	--	--
Zone B3 Aquifer Well												
T-9C	Oct-15	0.32	--	--	--	--	--	--	--	--	--	--
	Oct-14	0.34	--	--	--	--	--	--	--	--	--	--
	Oct-13	0.36	--	--	--	--	--	--	--	--	--	--
	Oct-12	0.51	--	--	--	--	--	--	--	--	--	--
	Oct-11	0.60	--	--	--	--	--	--	--	--	--	--
	Oct-10	1.32	--	--	--	--	--	--	--	--	--	--
	Oct-09	0.00	--	--	--	--	--	--	--	--	--	--

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 Site
825 Stewart Drive, Sunnyvale, California

		Dechlorinating Microbes	Dechlorinating Genes		
		Dehalococcodies type Microbes	*tceA*	*bvcA*	*vcrA*
Well	Date	cells/mL			
Eductor-11	4/15/2014	3.41E+03	--	--	--
	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	4/15/2014	4.16E+03	--	--	
	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	10/14/2015	3.43E+04	2.16E+03	2.84E+03	6.30E+03
	6/26/2015	2.56E+04	--	--	--
	6/26/2015	2.72E+04	--	--	--
	10/14/2014	2.68E+04	2.90E+02	9.80E+03	9.15E+02
	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	10/14/2015	3.14E+03	47.4	339	557
	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 Site
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	6/26/2015	7.38E+03	--	--	--
	10/14/2014	2.12E+03	2.01E+01	3.58E+02	2.22E+01
	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	10/14/2015	5.11E+03	315	172	1440
	6/26/2015	1.64E+04	--	--	--
	10/14/2014	1.70E+04	7.25E+02	4.26E+02	6.51E+02
	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 Site
825 Stewart Drive, Sunnyvale, California

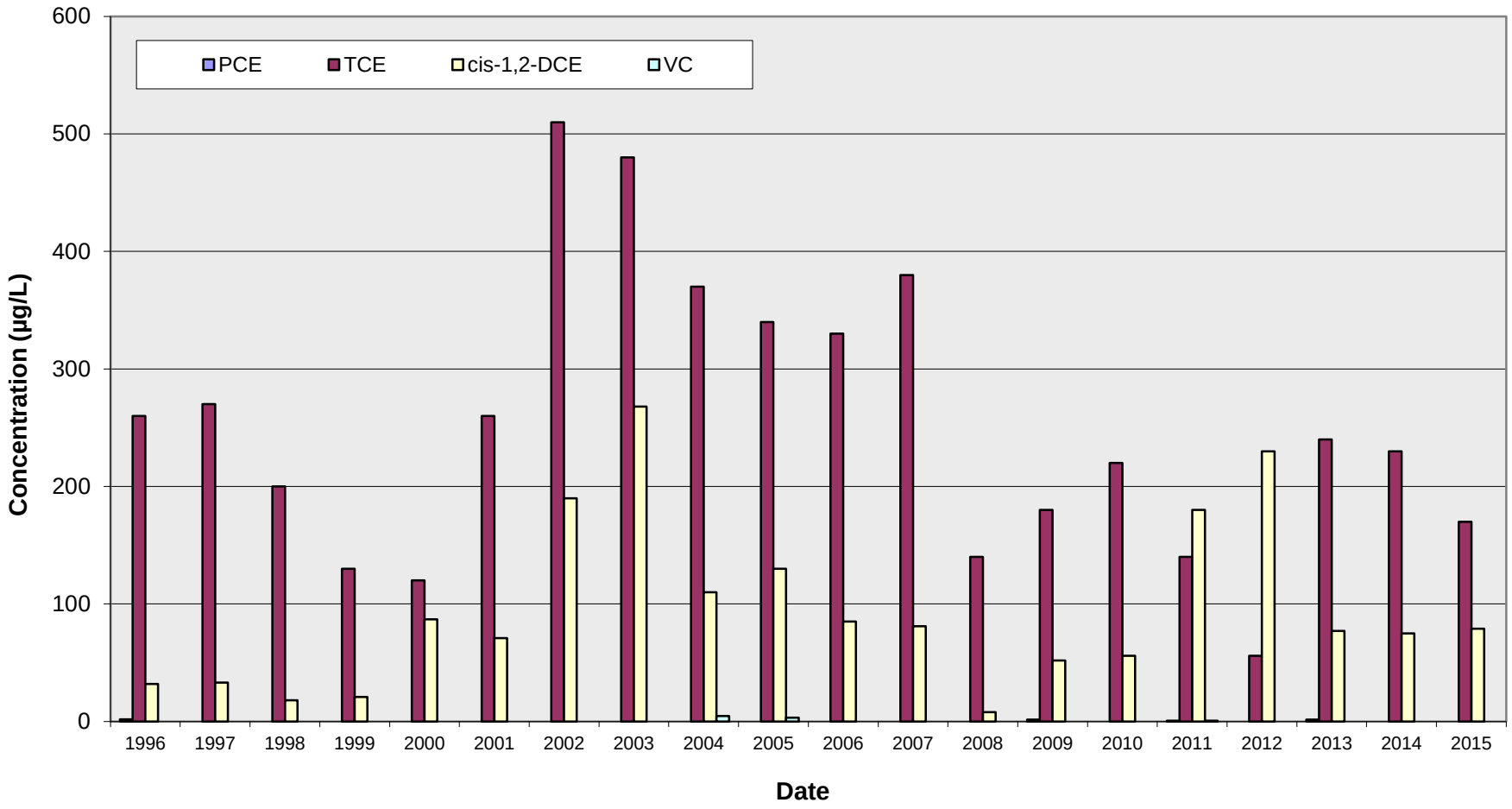
Well	Date	Concentration (µg/L)			$\delta^{13}C$ ($^{0}/_{00}$)		
		TCE	cDCE	VC	TCE	cDCE	VC
Eductor	4/15/14 - 15 feet	--	--	--	-15.57	-25.12	-25.72
(Destroyed 2014)	4/15/14 - 11 feet	--	--	--	-18.48	-25.42	-25.08
	10/17/2013	5,800	60,000	--	-18.77	-24.33	--
	10/17/2012	830	67,000	6,000	-16.82	-25.76	-26.16
	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	4/15/2014	--	--	--	--	-11.68	-31.48
(Destroyed 2014)	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	--
(Destroyed 2014)	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-6A	5/1/2007	10	20	--	-21.18	-24.28	--
T-7A	10/13/2015				-22.09	-22.63	--
	10/15/2014	220	100	--	-21.64	-22.56	--
	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	--
T-8A	10/14/2015				-21.86	-20.13	--
	10/13/2014	150	80	1	-21.74	-20.70	-35.16 J
	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-9A	10/14/2015				-22.18	-19.05	--
	10/14/2014	--	100	--	-21.87	-18.47	--
	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 Site
825 Stewart Drive, Sunnyvale, California

Well	Date	Concentration (µg/L)			$\delta^{13}C$ ($^{0}/_{00}$)		
		TCE	cDCE	VC	TCE	cDCE	VC
T-13A	10/14/2015				-19.51	-12.99	--
	10/14/2014	--	84	35	-14.90	-4.25	-21.48
	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-16A	5/1/2007	100	60	--	-22.46	-18.12	--
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	10/14/2015				-21.37	-20.65	--
	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	--
(Destroyed 2014)	10/17/2012	0.8 J	88.0	200	--	-5.03	-19.4
T-4B	10/12/2015				-3.75	-19.96	--
	10/15/2014	6	600	--	-15.01	-21.23	--
	10/16/2013	6	480	--	-11.41	-20.46	--
T-5B	10/12/2015				-20.81	-24.15	--
	10/16/2014	1,800	69	--	-19.95	-22.93	--
	10/16/2013	1,400	71	--	-20.86	-23.93	--
T-7B	10/13/2015				-22.11	-18.06	--
	10/15/2014	200	17	--	-21.63	-17.68	--
	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	10/13/2015				-17.79	-8.87	-17.48
	10/15/2014	11	350	18	-18.22	-21.24	-30.53
	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-9B	10/13/2015				-23.82	-23.86	--
	10/16/2014	370	240	4	-23.38	-24.11	-22.04
	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-10B	10/14/2015				-21.79	-18.48	--
	10/13/2014	56	190	18	-22.00	-17.43	-29.75
	10/15/2013	14	46	--	-20.20	-13.82	--
	10/16/2012	55	160	42	-22.92	-16.22	-26.51
T-17B	10/14/2015				-21.33	-21.39	
	10/16/2014	88	480	--	-19.89	-20.96	--
	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	--
T-2C	10/14/2014	390	290	46	-22.07	-26.51	-27.70

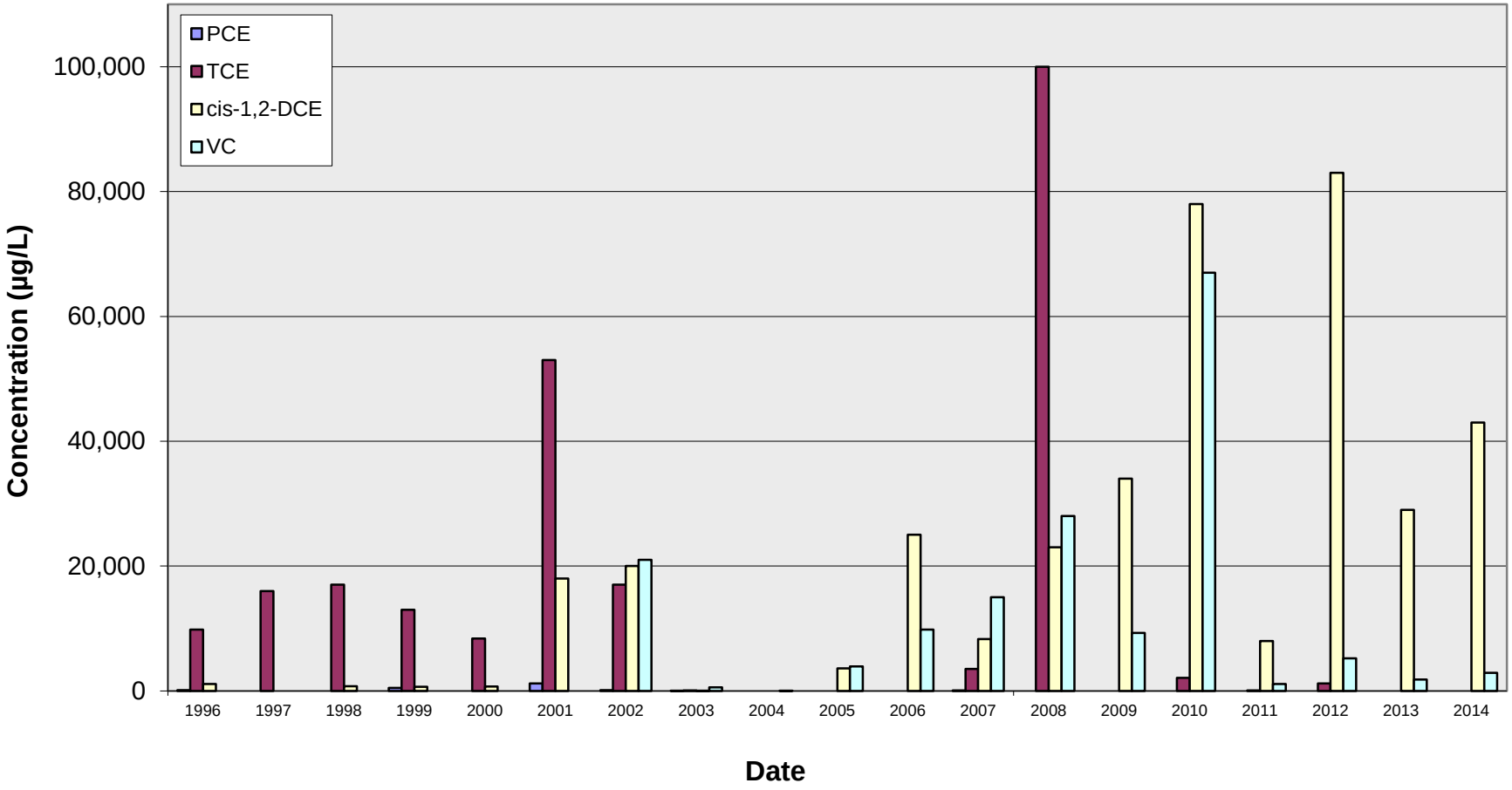
Notes:
VOC concentrations are screening-level data from CSIA laboratory
* = Concentration too low to quantify carbon-13 ratio
µg/L = Microgram per liter
$^{0}/_{00}$ = Per mil
J = Estimated value
M = Recovery/RPD poor for MS/MSD, SAMP/DUP
NE = Not estimated
-- = Not Analyzed

Chlorinated Ethene Concentration Trend Plot for Well T-7A



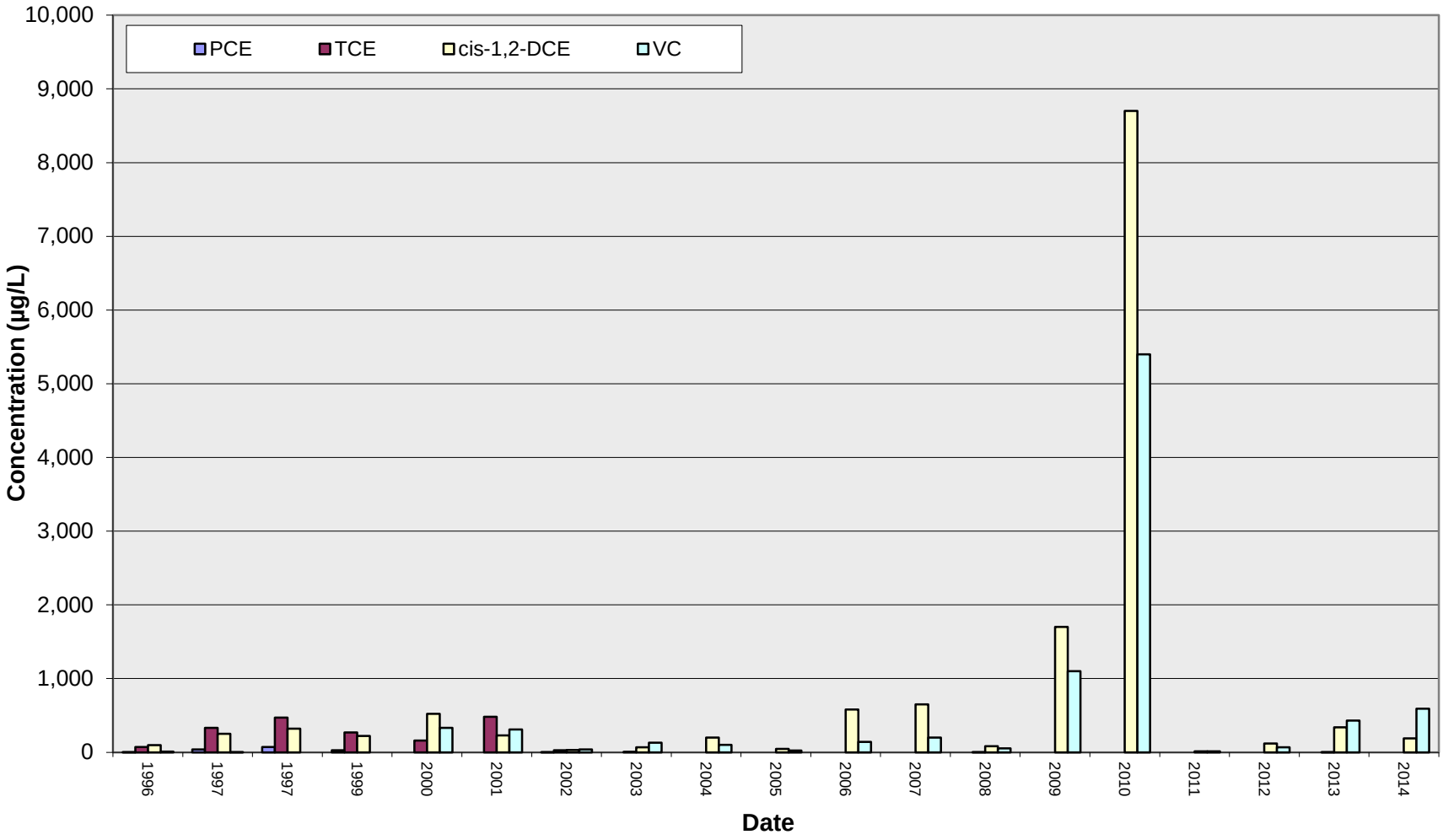
.Note: Suspension of groundwater extraction at wells Eductor, T-2A, T-8A, and T-9A occurred on April 6, 2001
.Enhanced anaerobic bioremediaiton program initiated in October 2000

Chlorinated Ethene Concentration Trend Plot for Eductor-11 Well



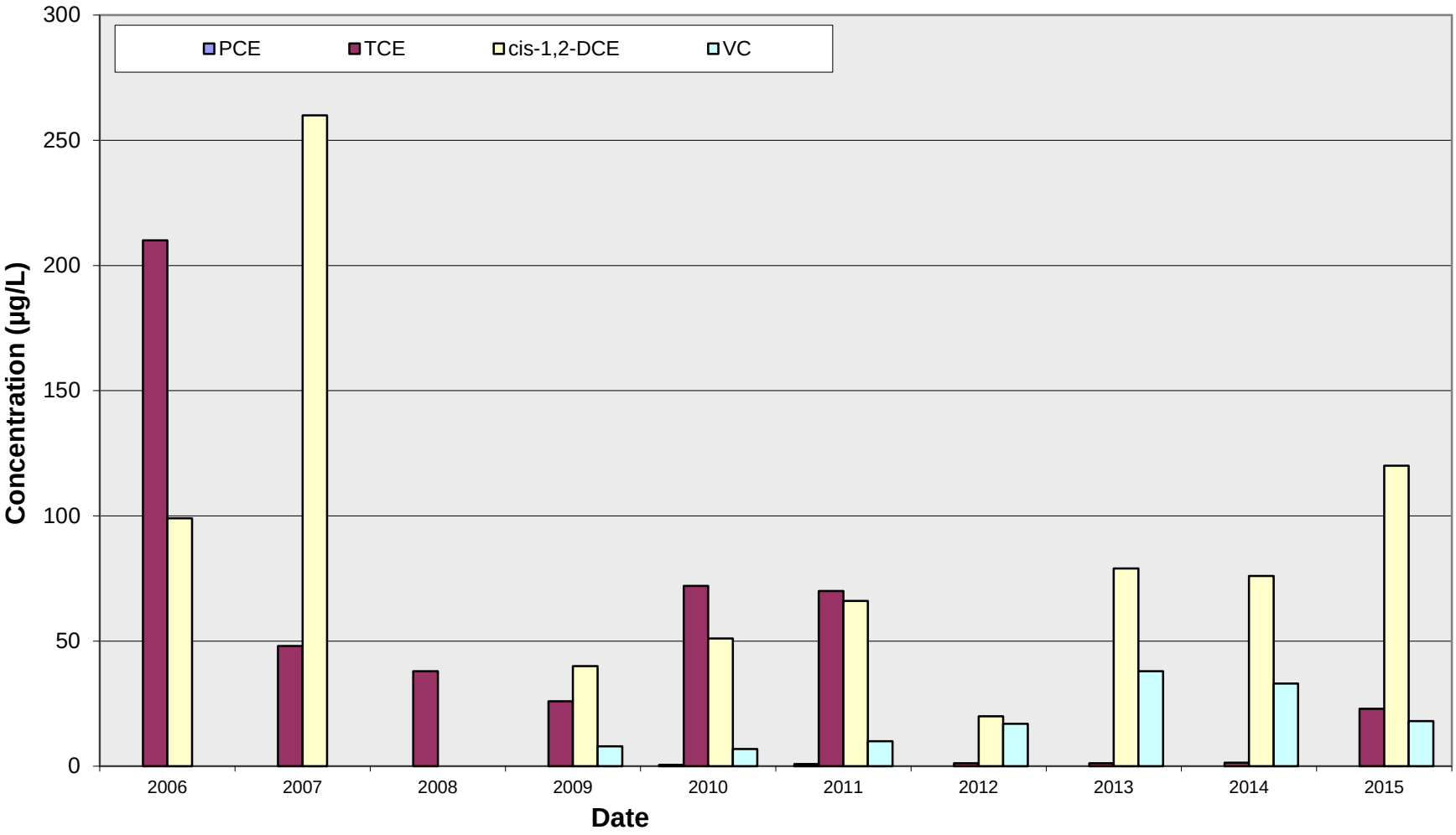
Note: Suspension of groundwater extraction at well occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-2A



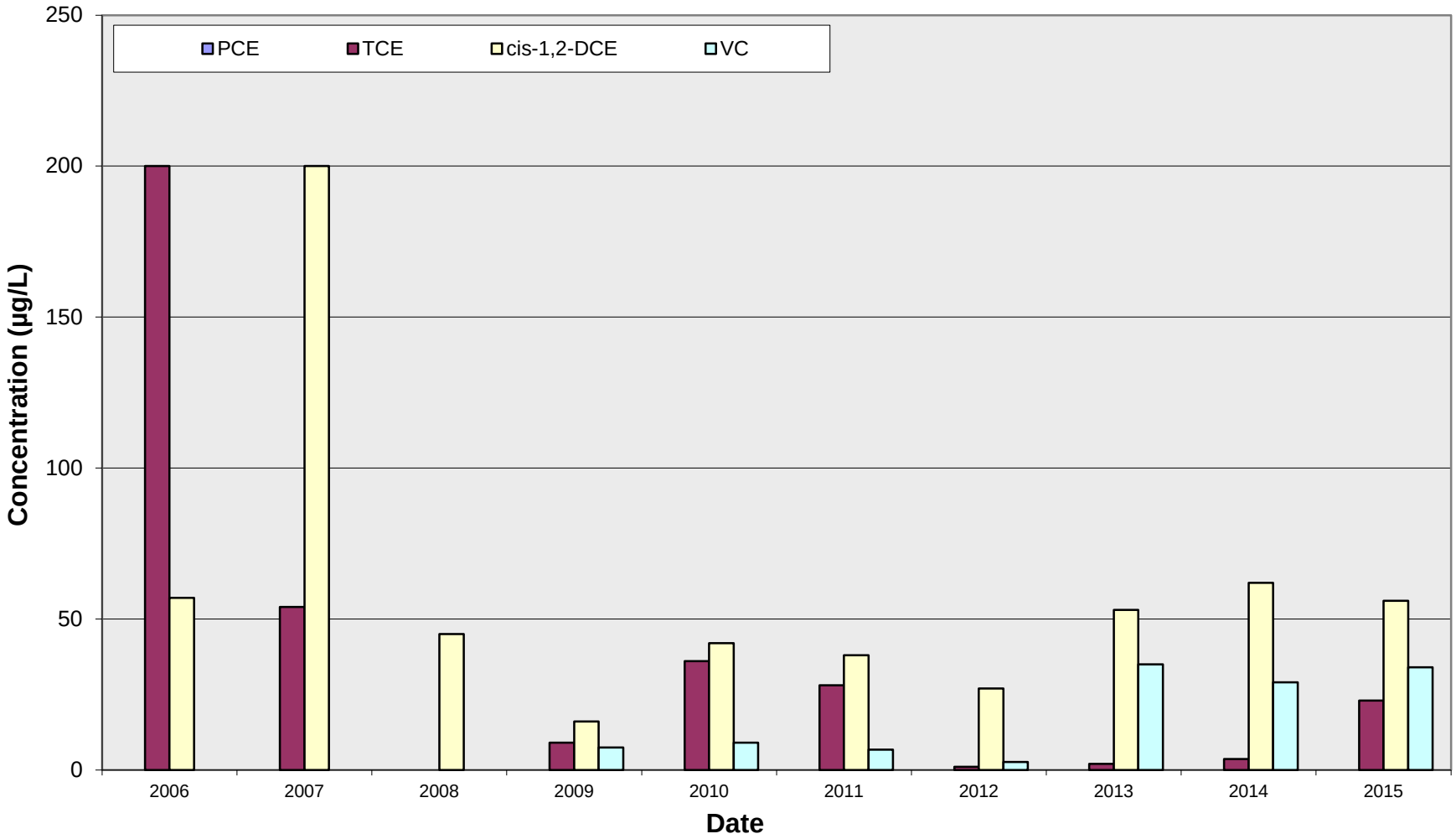
Note: Suspension of groundwater extraction at well occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000. Well destroyed in 2014.

Chlorinated Ethene Concentration Trend Plot for Well T-13A



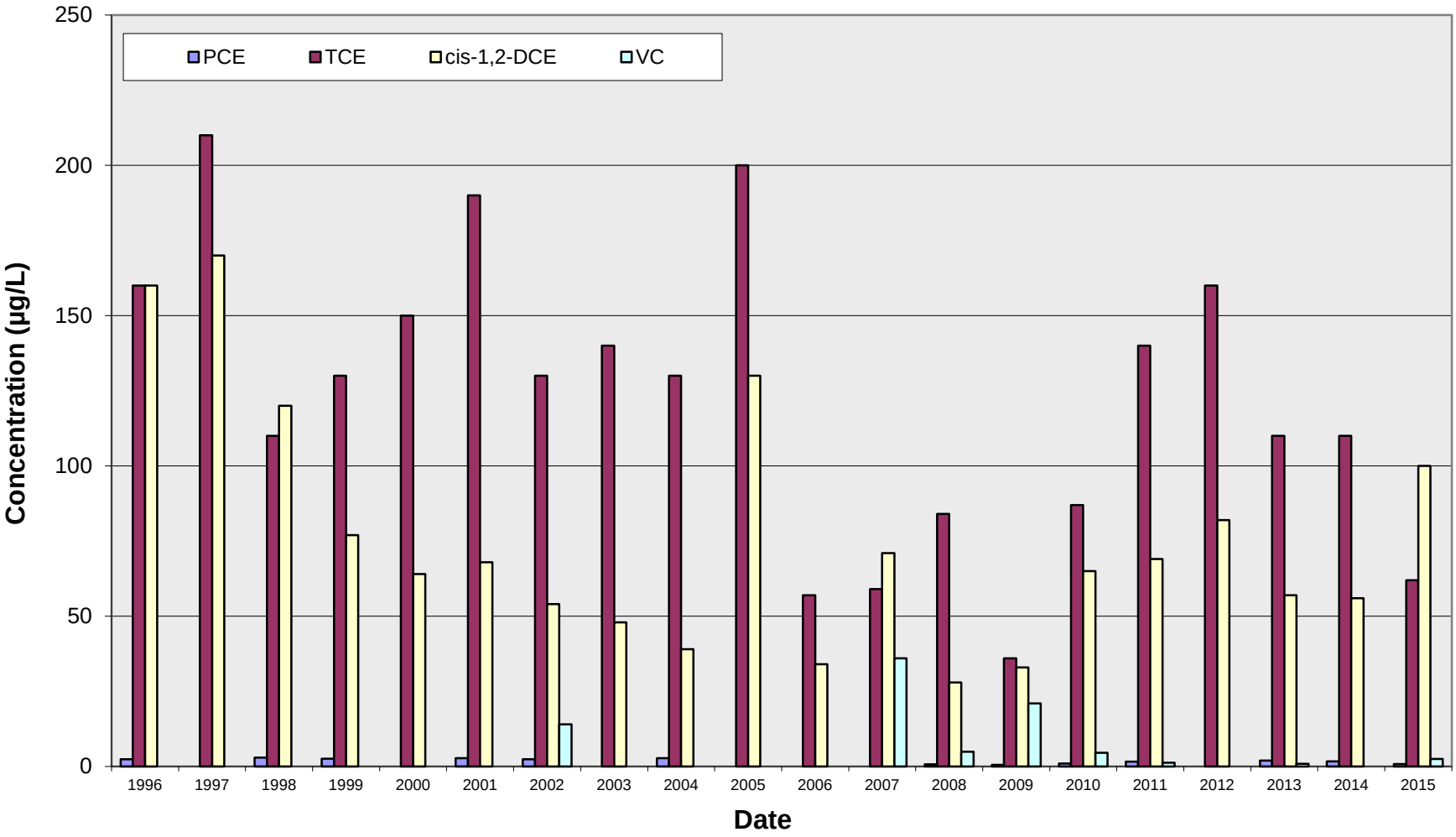
Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-14A



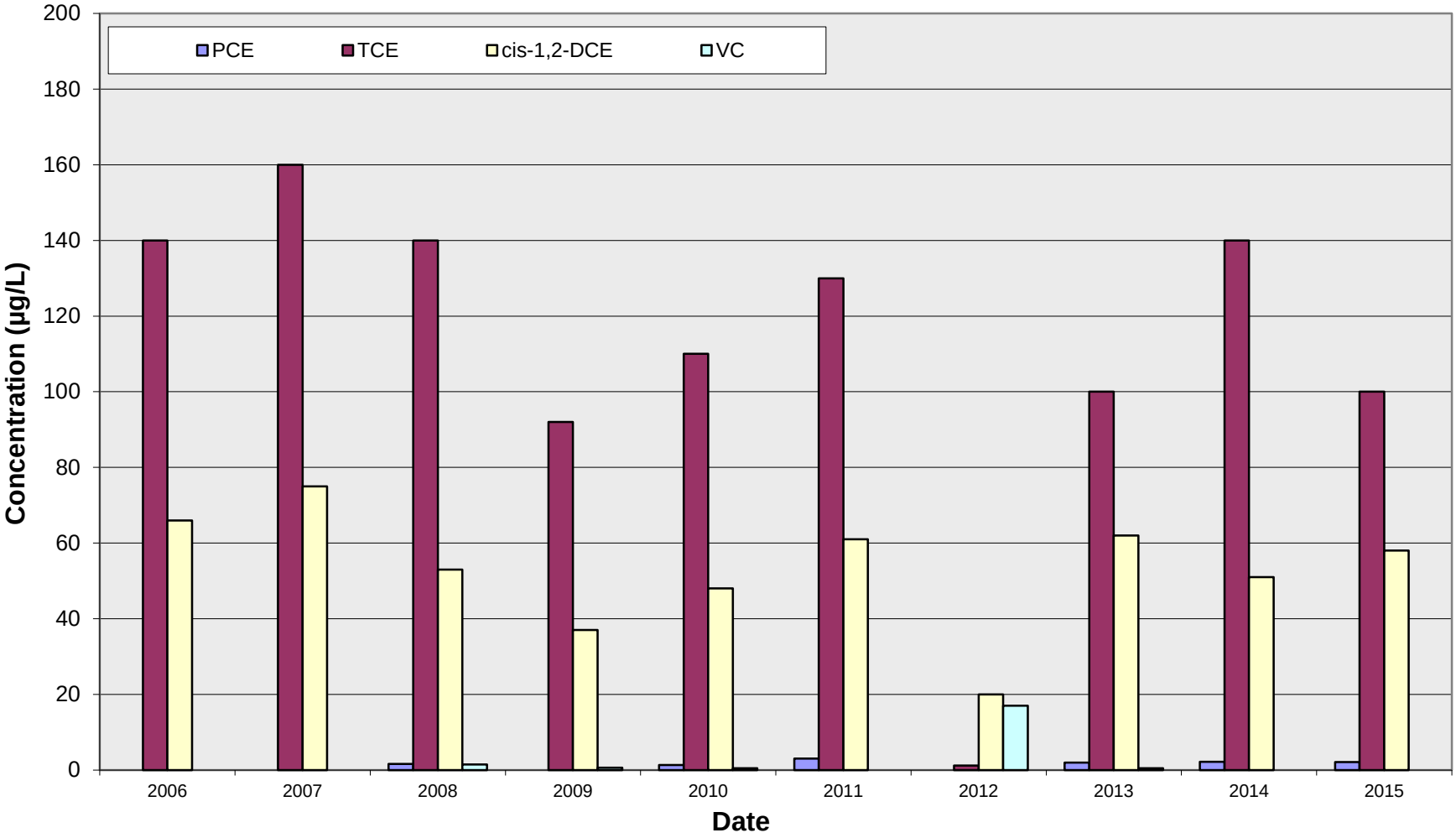
Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-8A



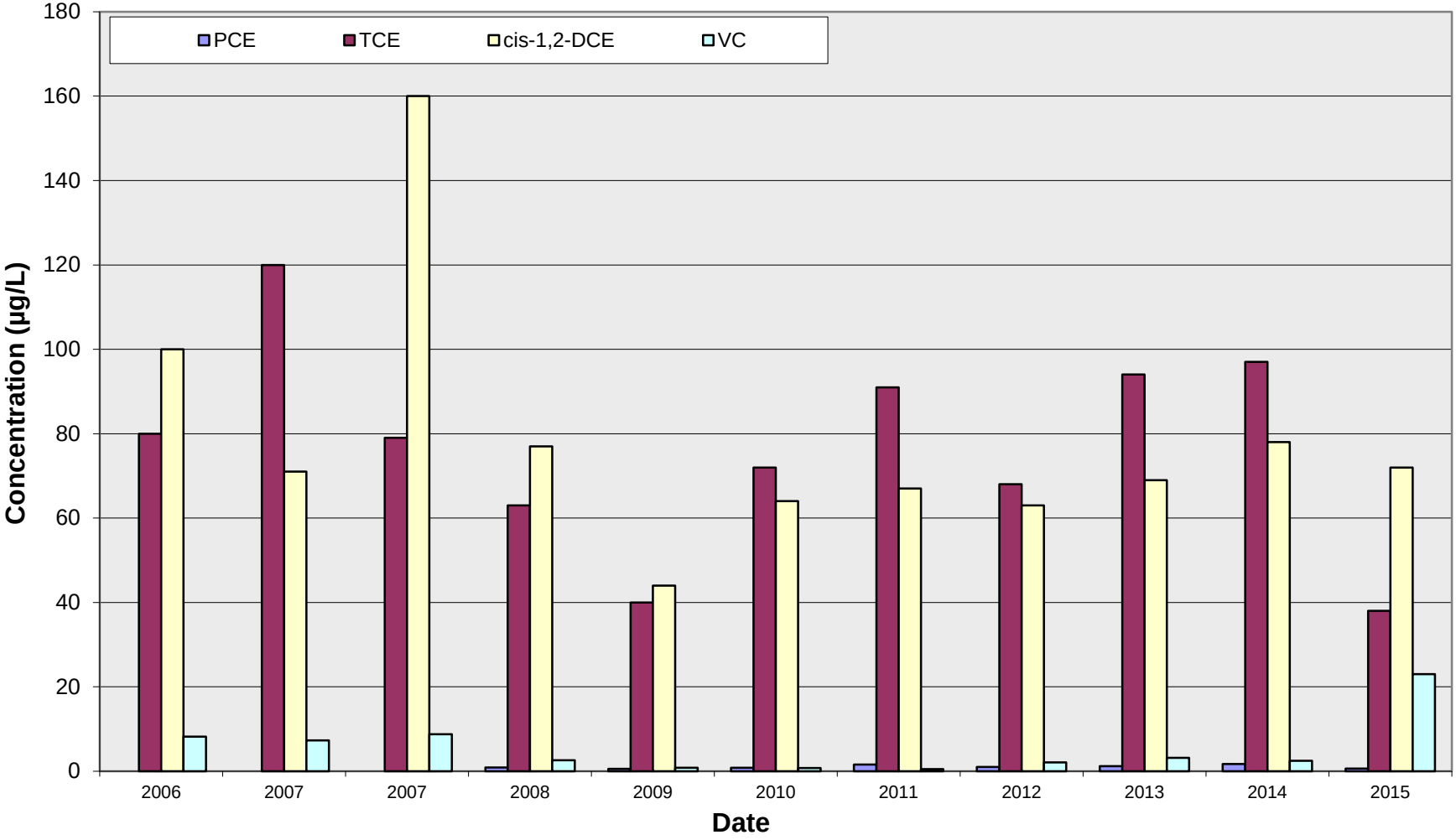
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-15A



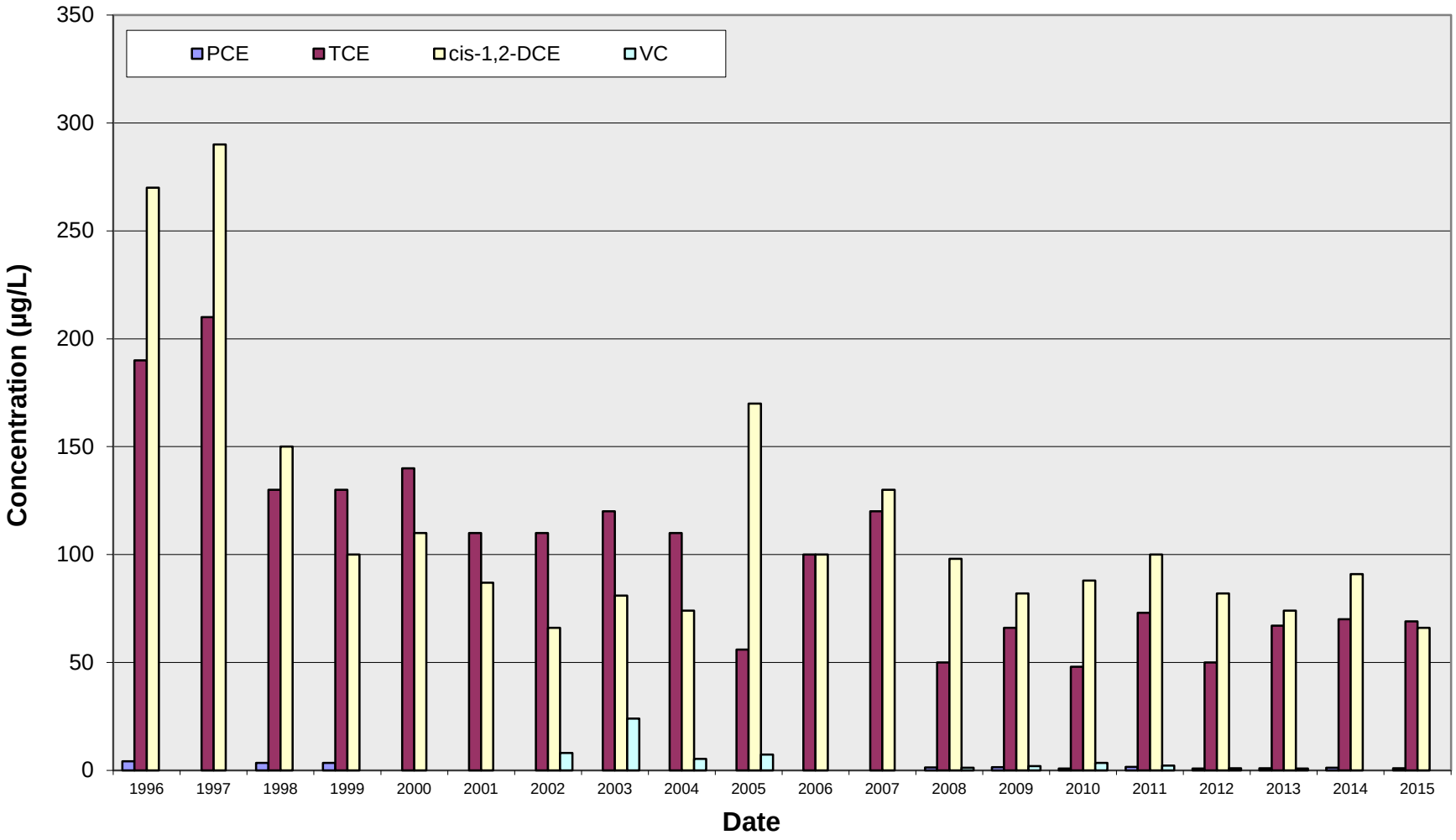
.Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-16A



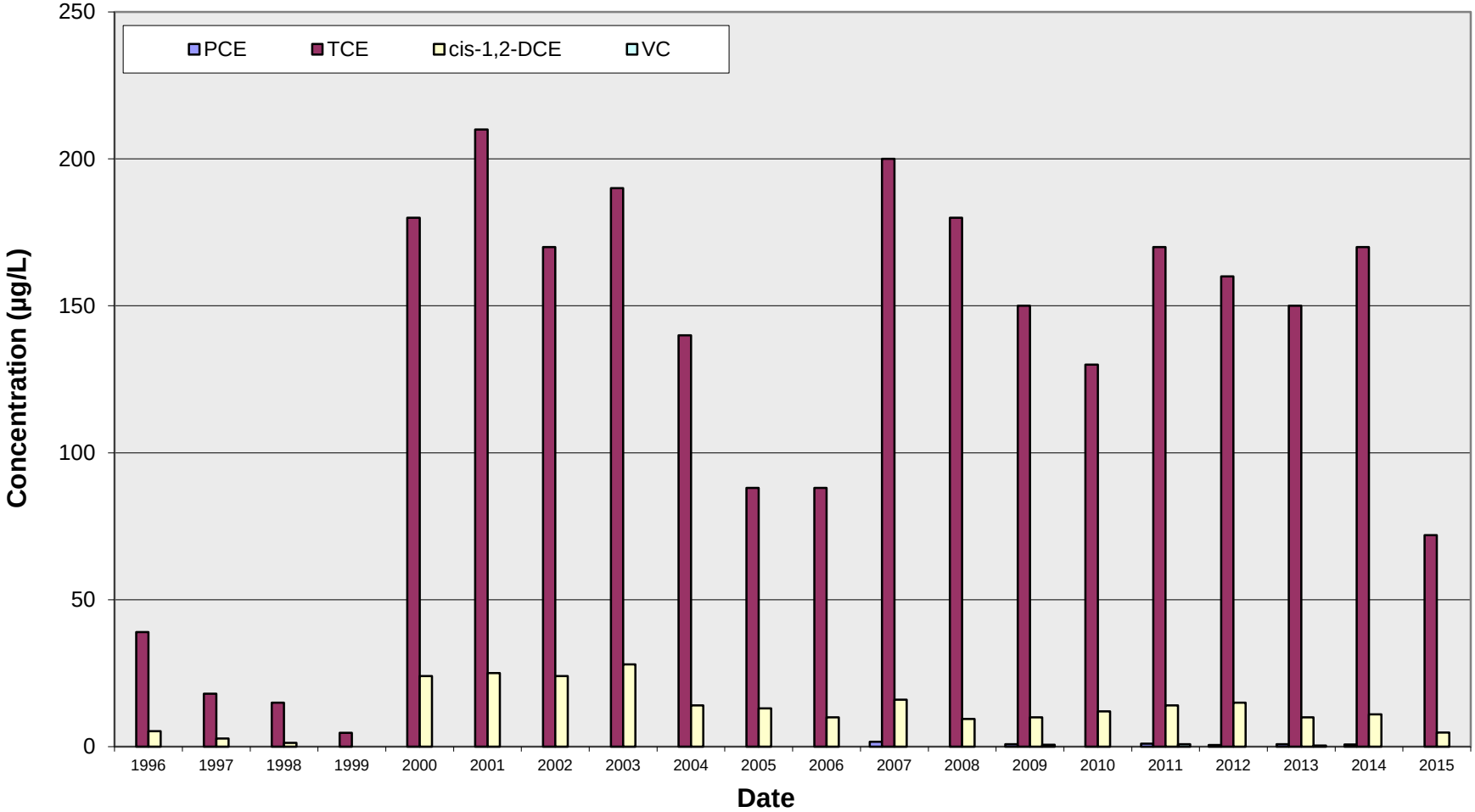
Note: Well installed in August 2005. Enhanced anaerobic reductive dechlorination program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-9A



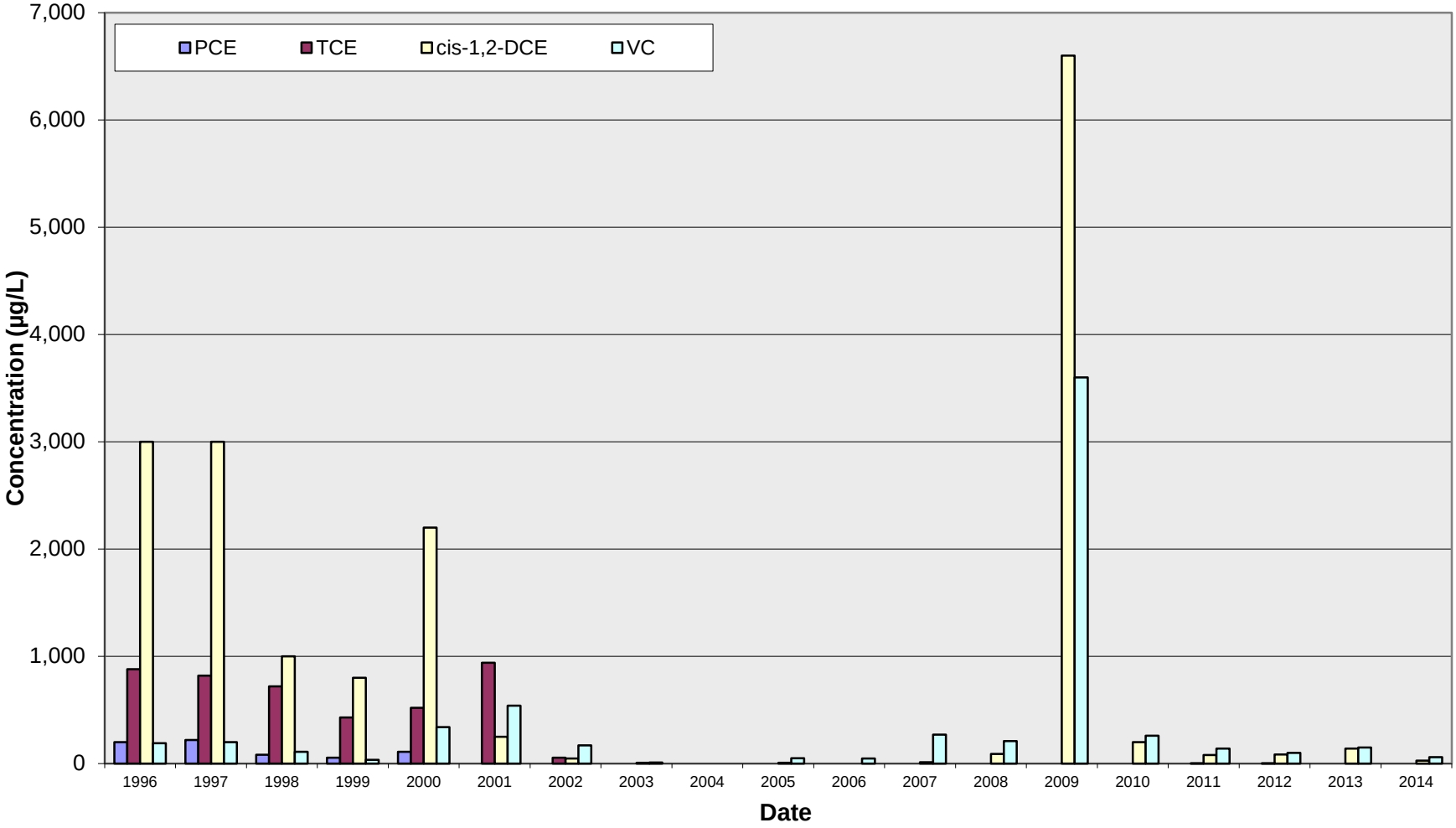
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-7B



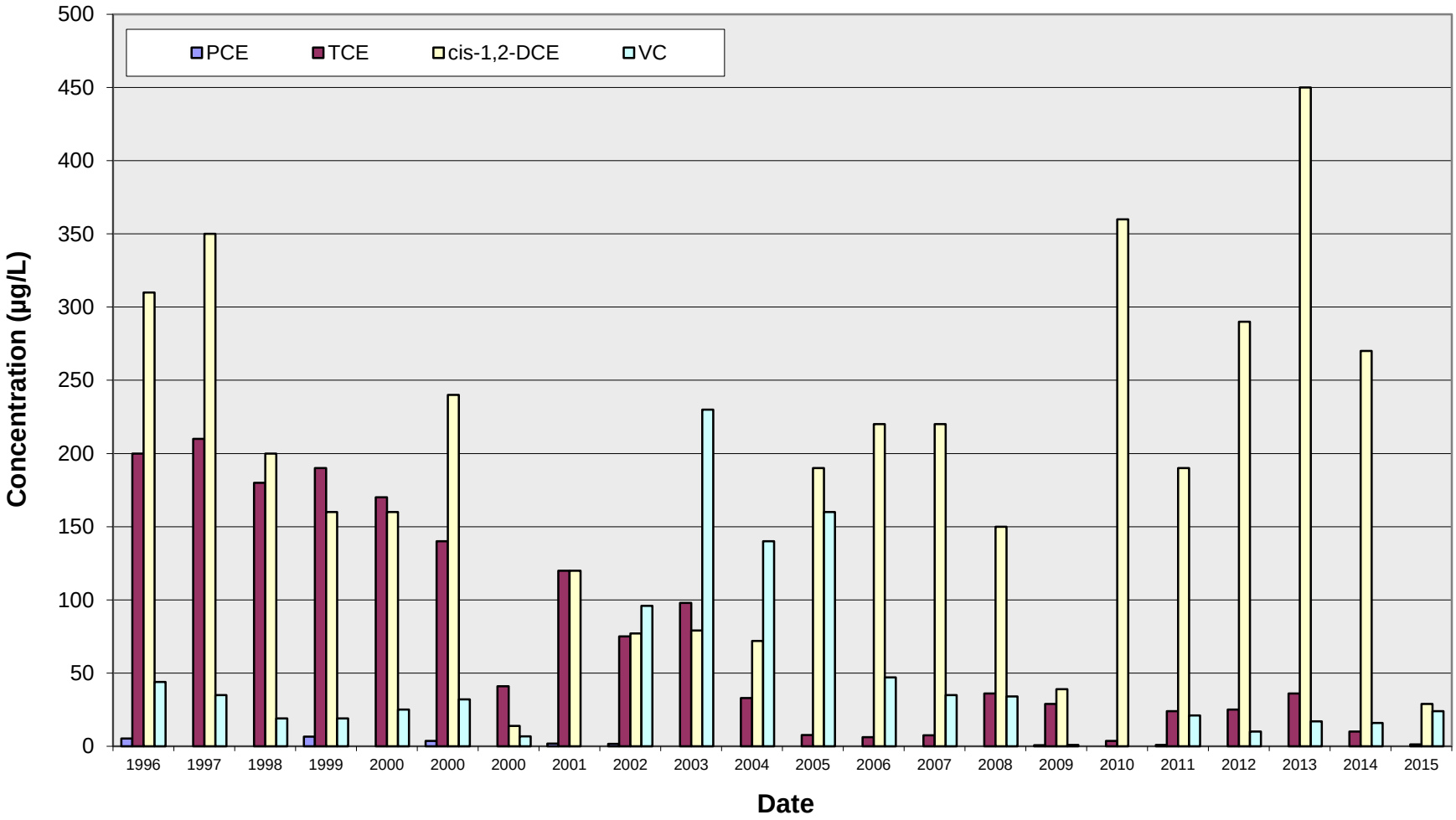
Note: Suspension of groundwater extraction at wells T-2B and T-8B occurred on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-2B



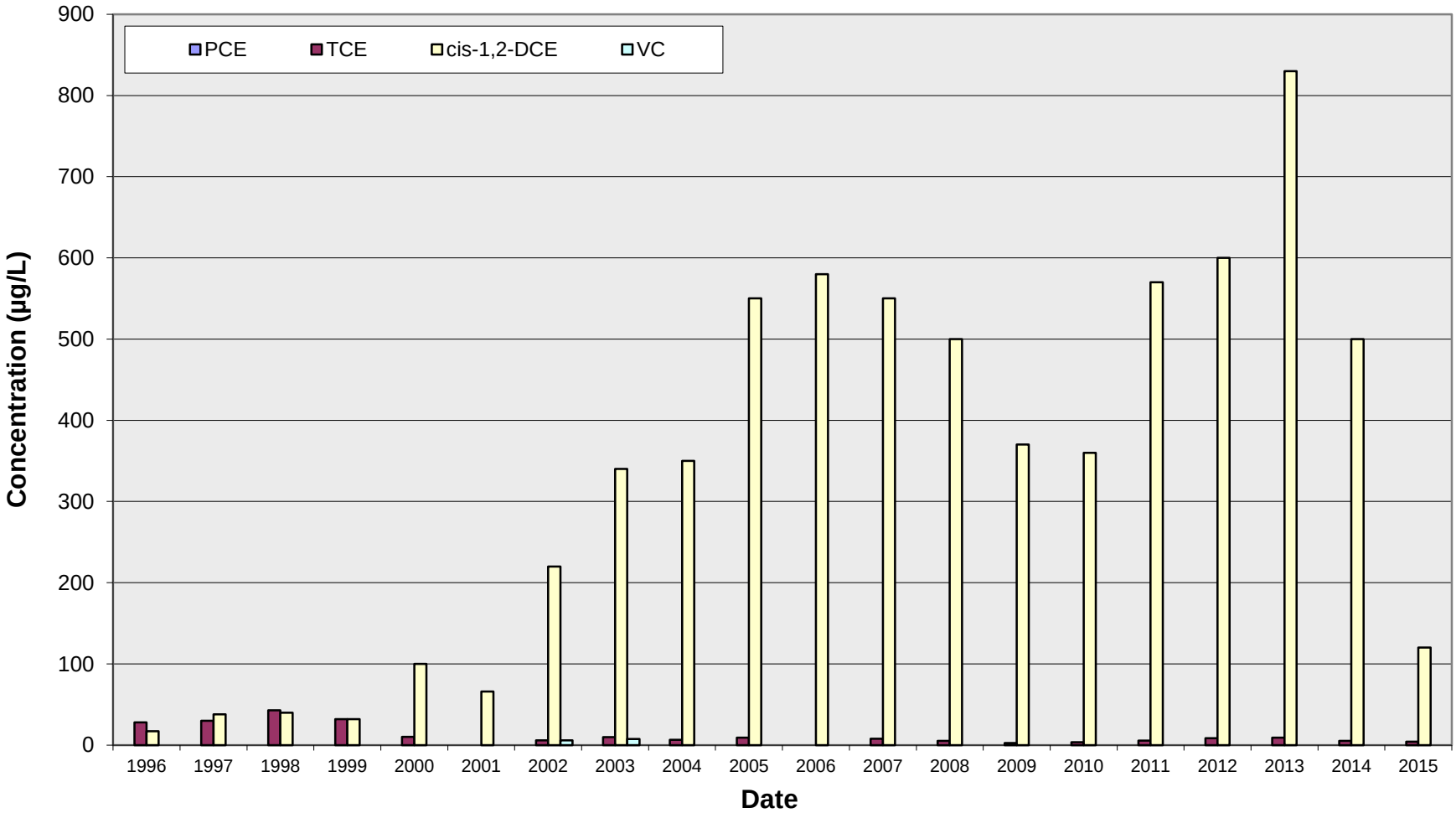
Note: Suspension of groundwater extraction on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-8B



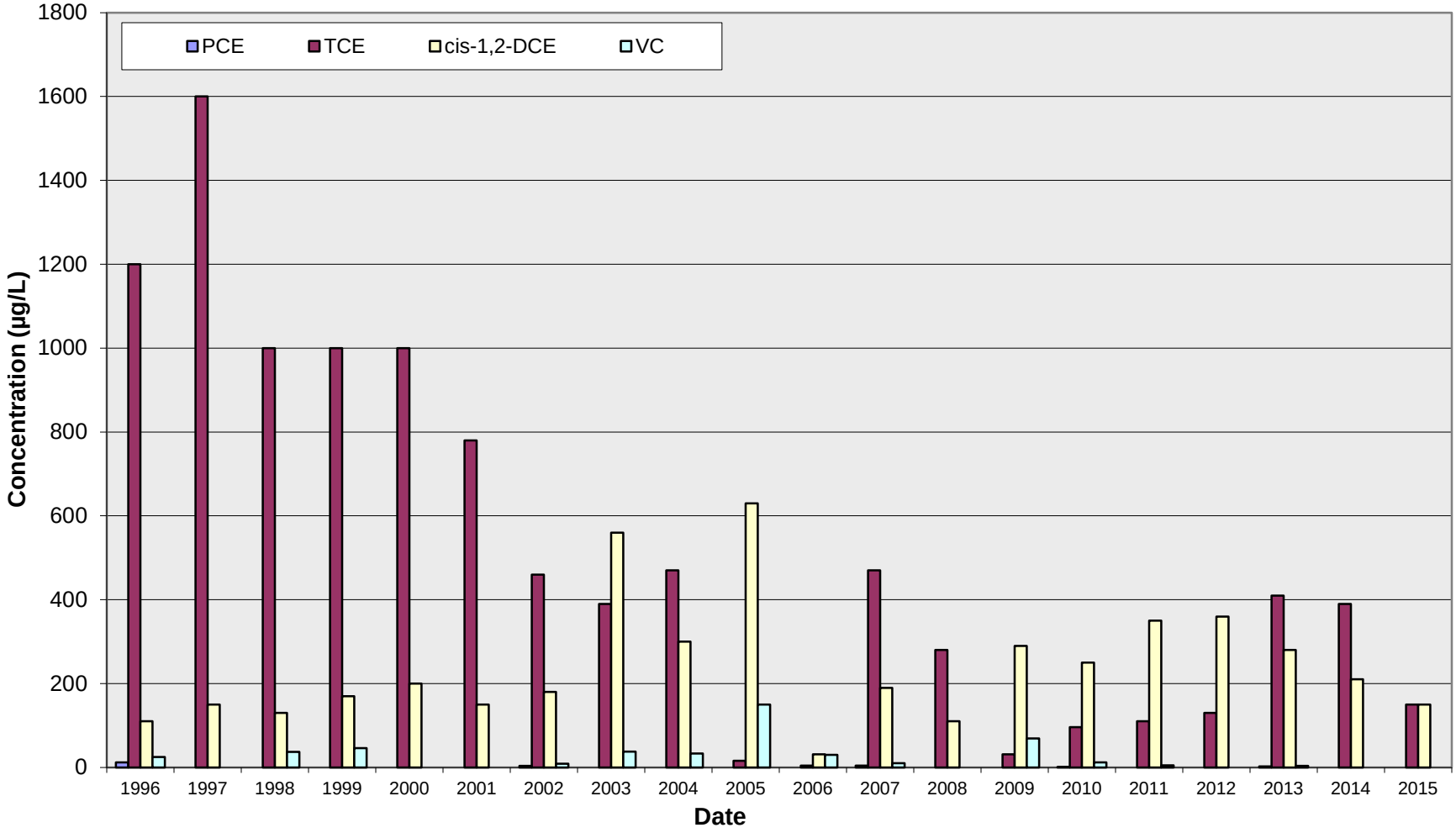
Note: Suspension of groundwater extraction on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-4B



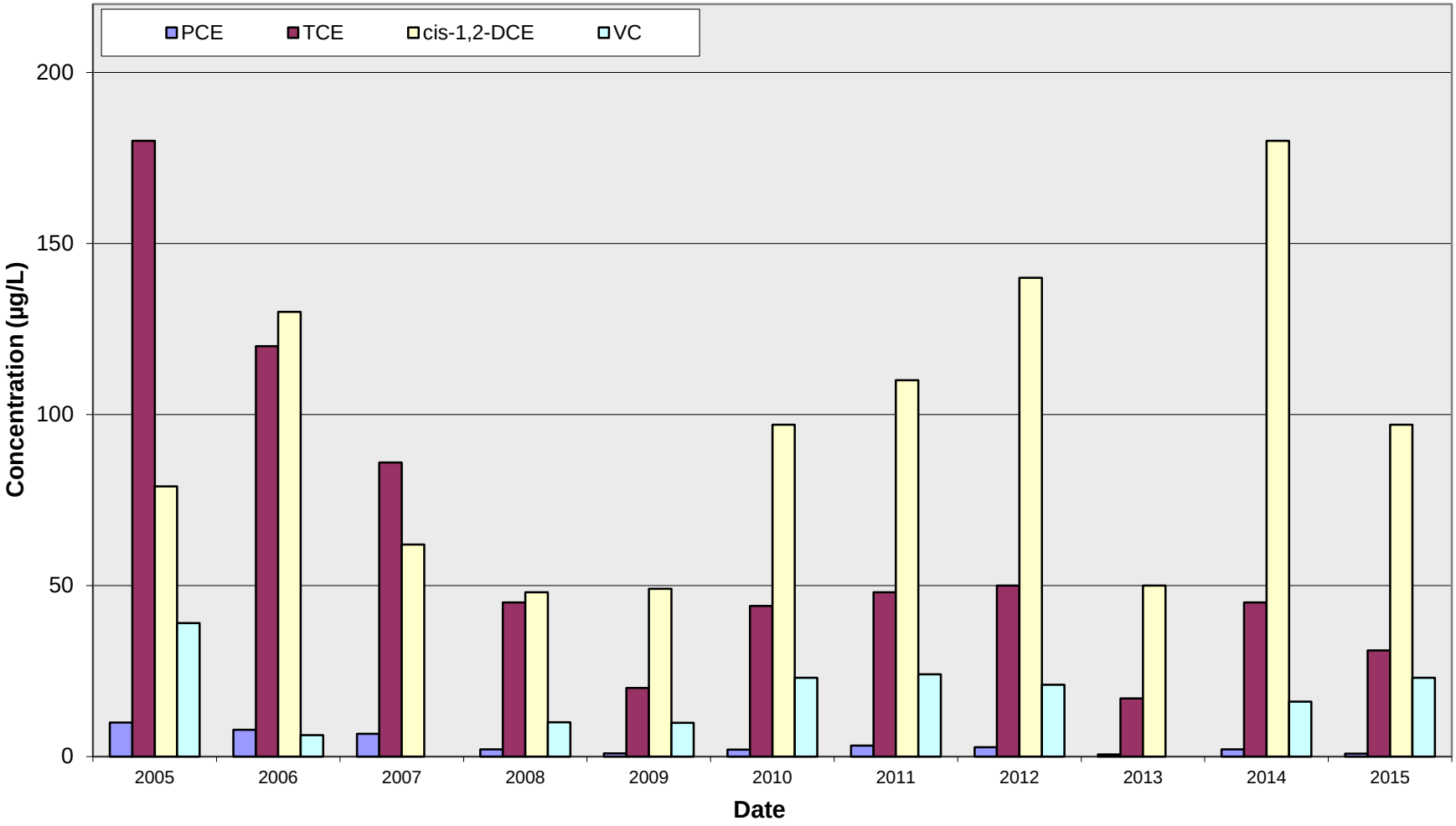
Note: Suspension of groundwater extraction at wells T-2B and T-8B occurred on August 1, 2000. Enhanced anaerobic bioremediation program inititated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-9B



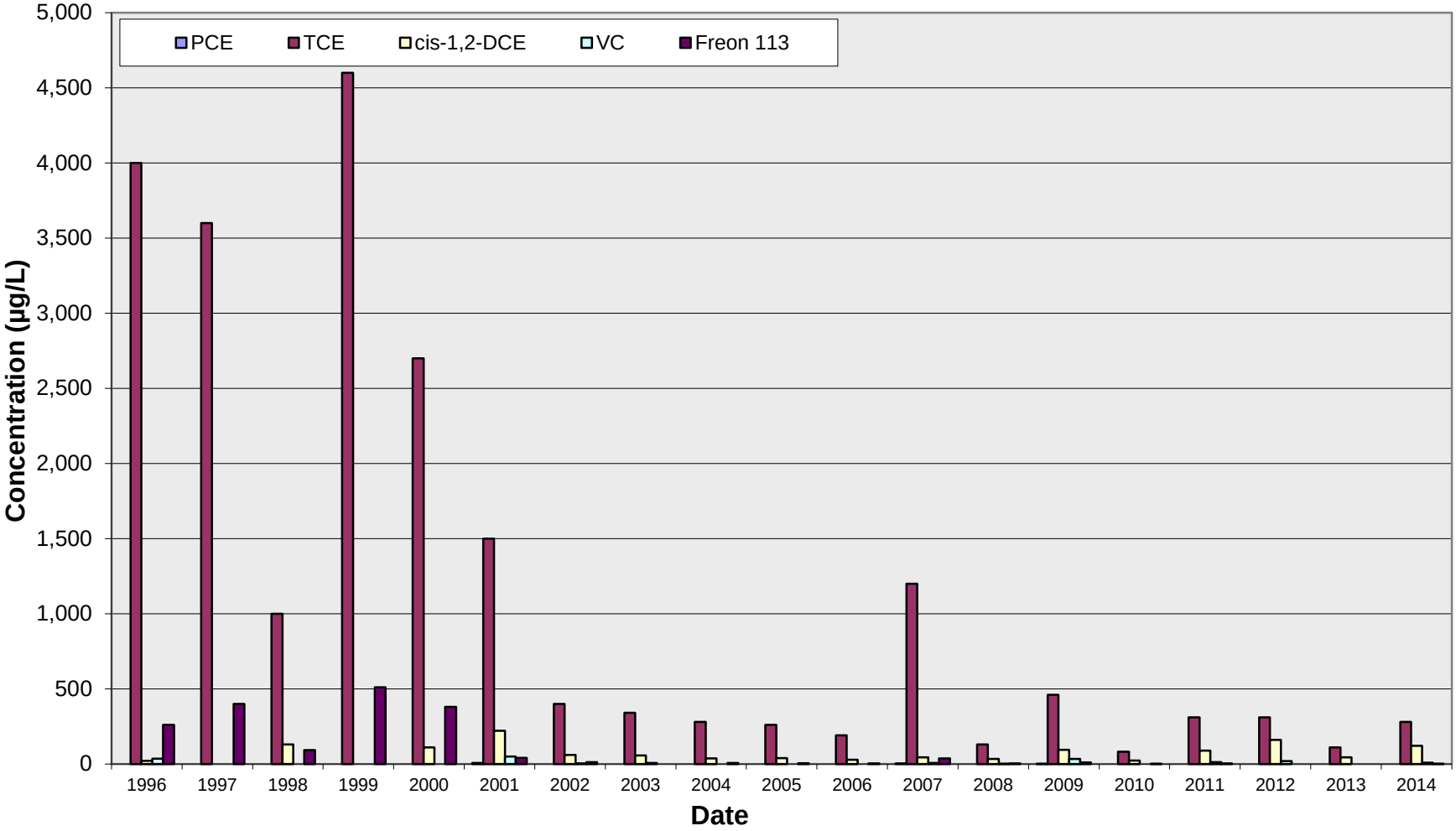
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Concentration Trend Plot for Well T-10B



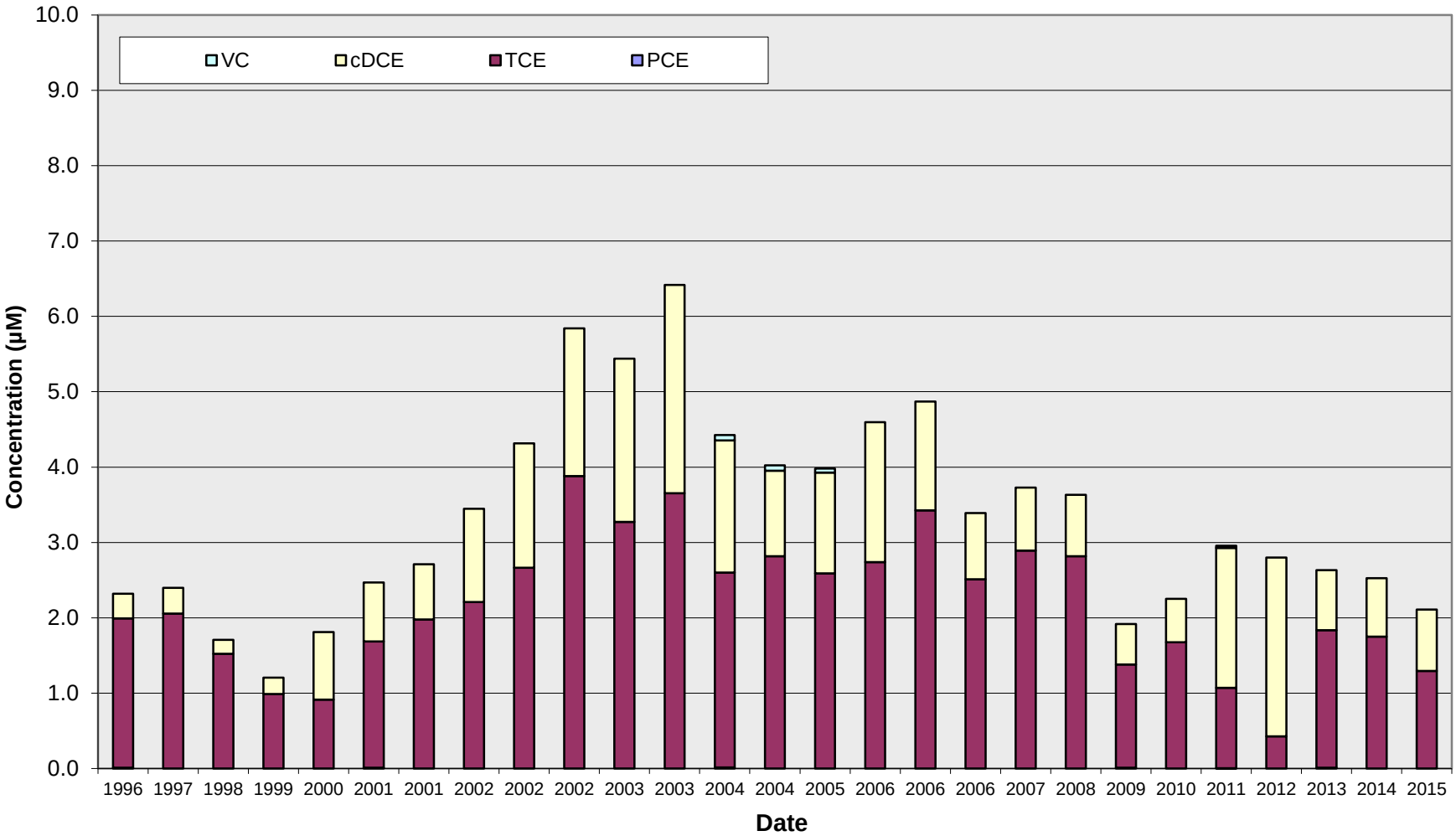
Note: Enhanced anaerobic reductive dechlorination program initiated in October 2000

Chlorinated Ethene Concentration Trend Plot for Well T-2C



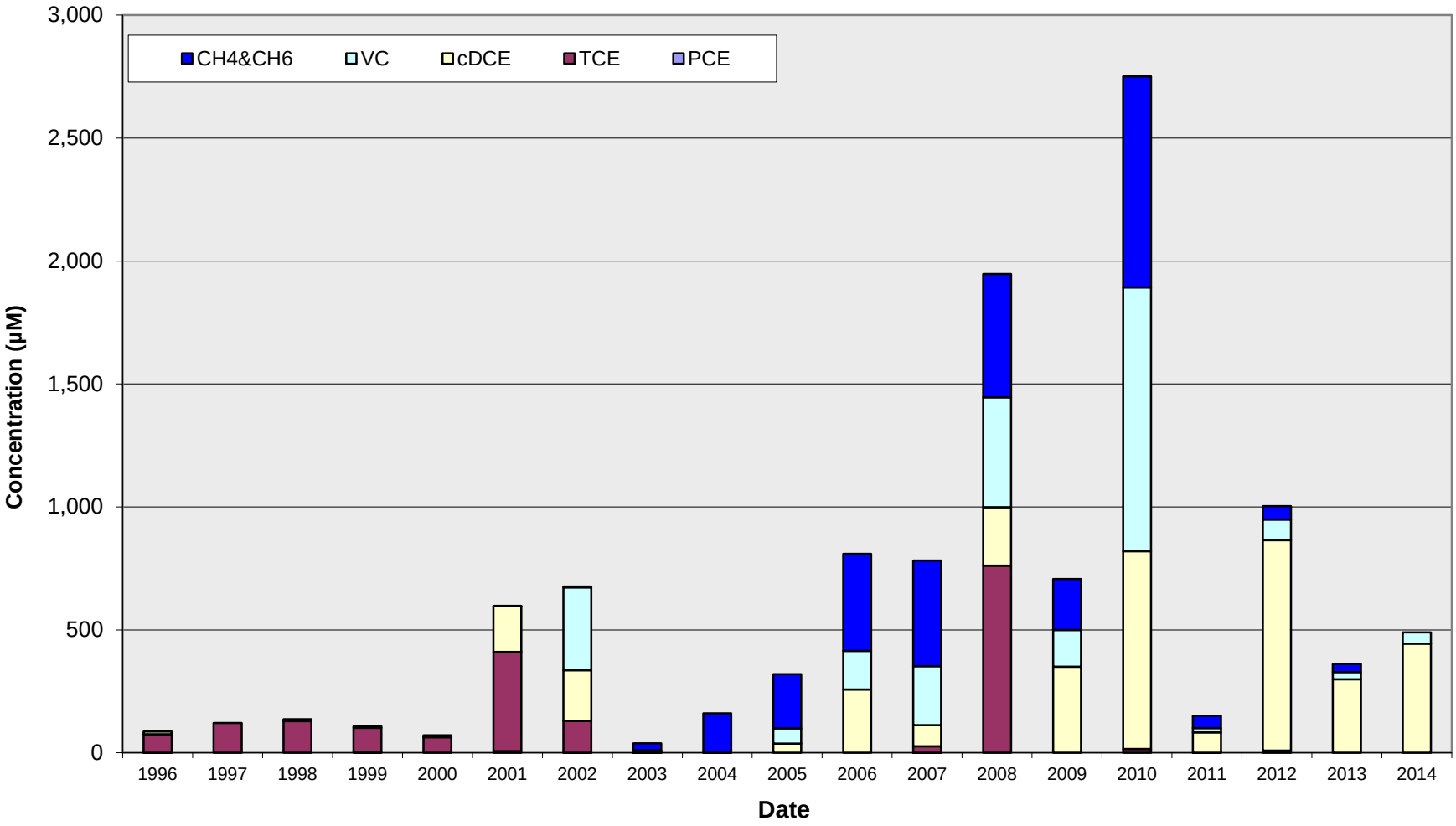
.Note: Suspension of groundwater extraction occurred on November 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000

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



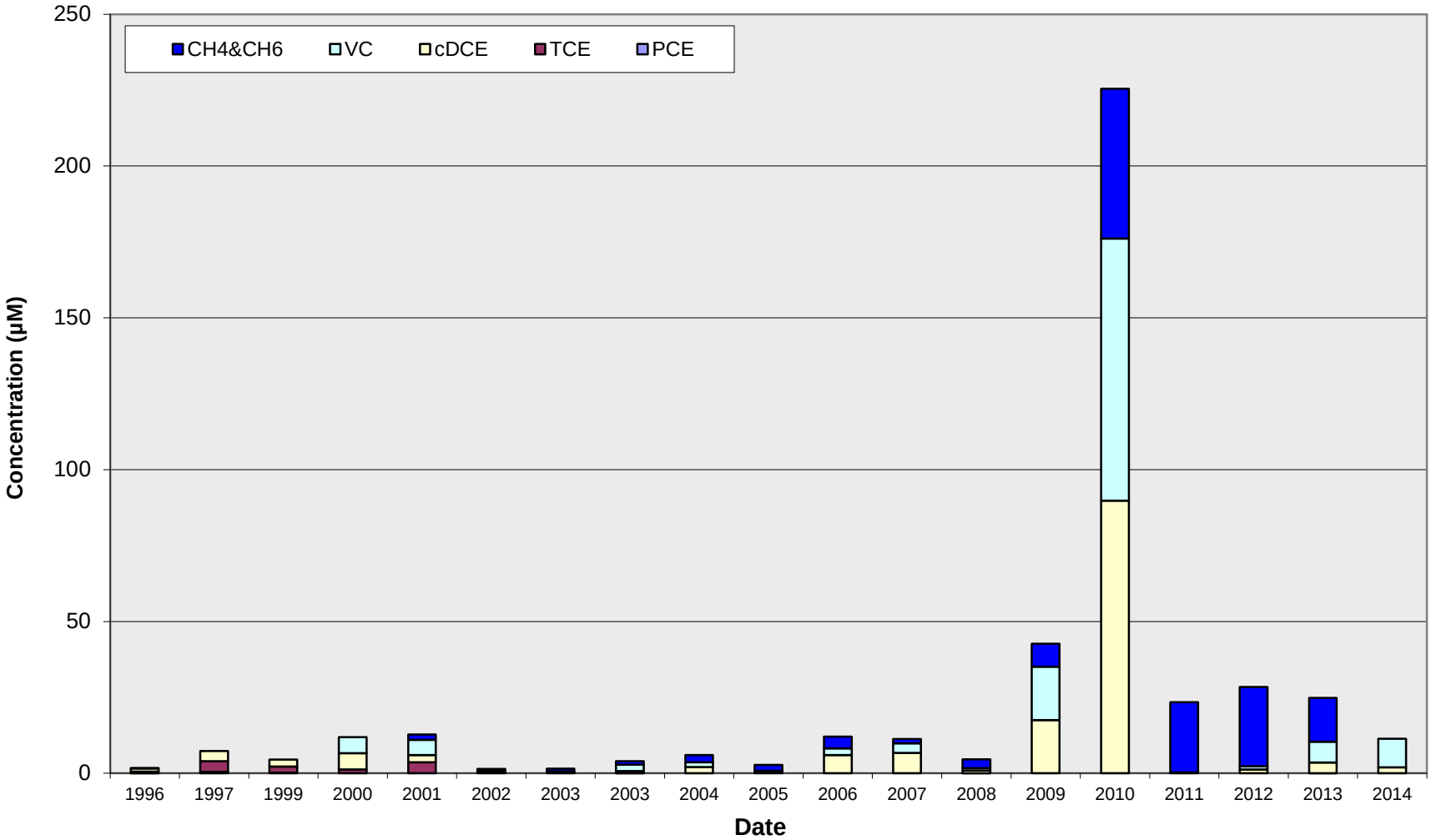
Note: Suspension of groundwater extraction at Eductor occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

Chlorinated Ethene Molar Concentration Trend Plot for Eductor-11 Well



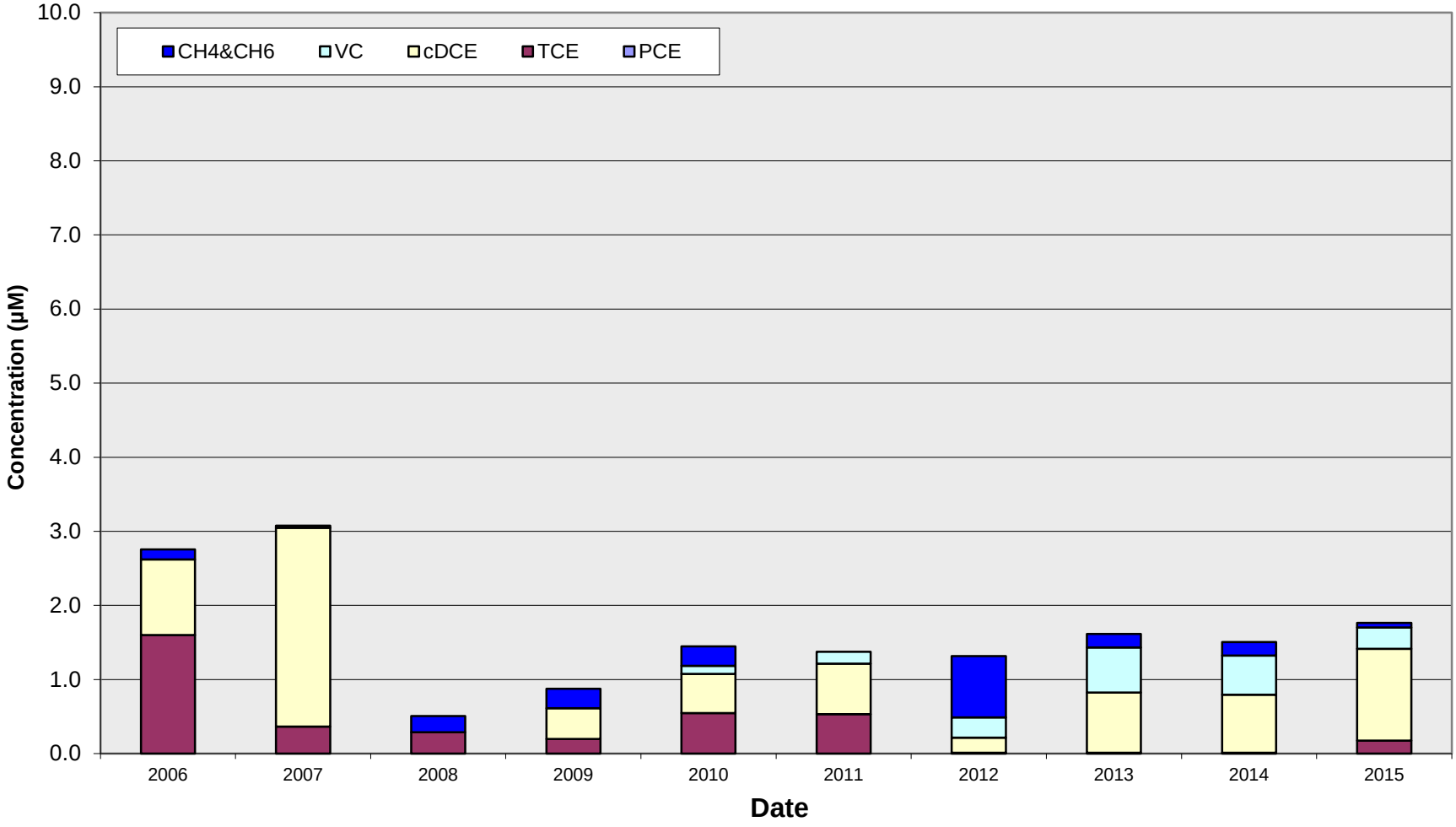
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

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



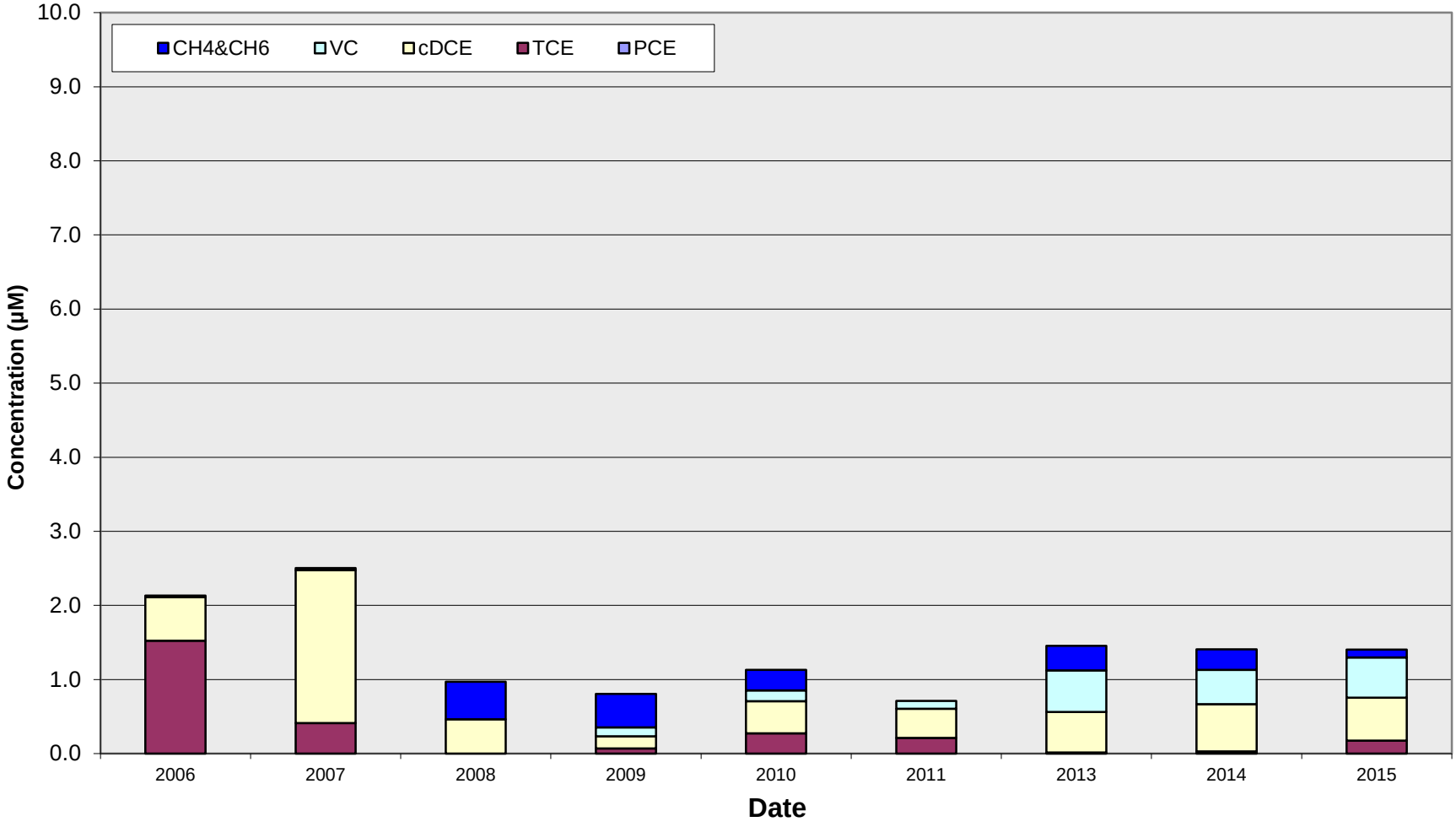
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

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



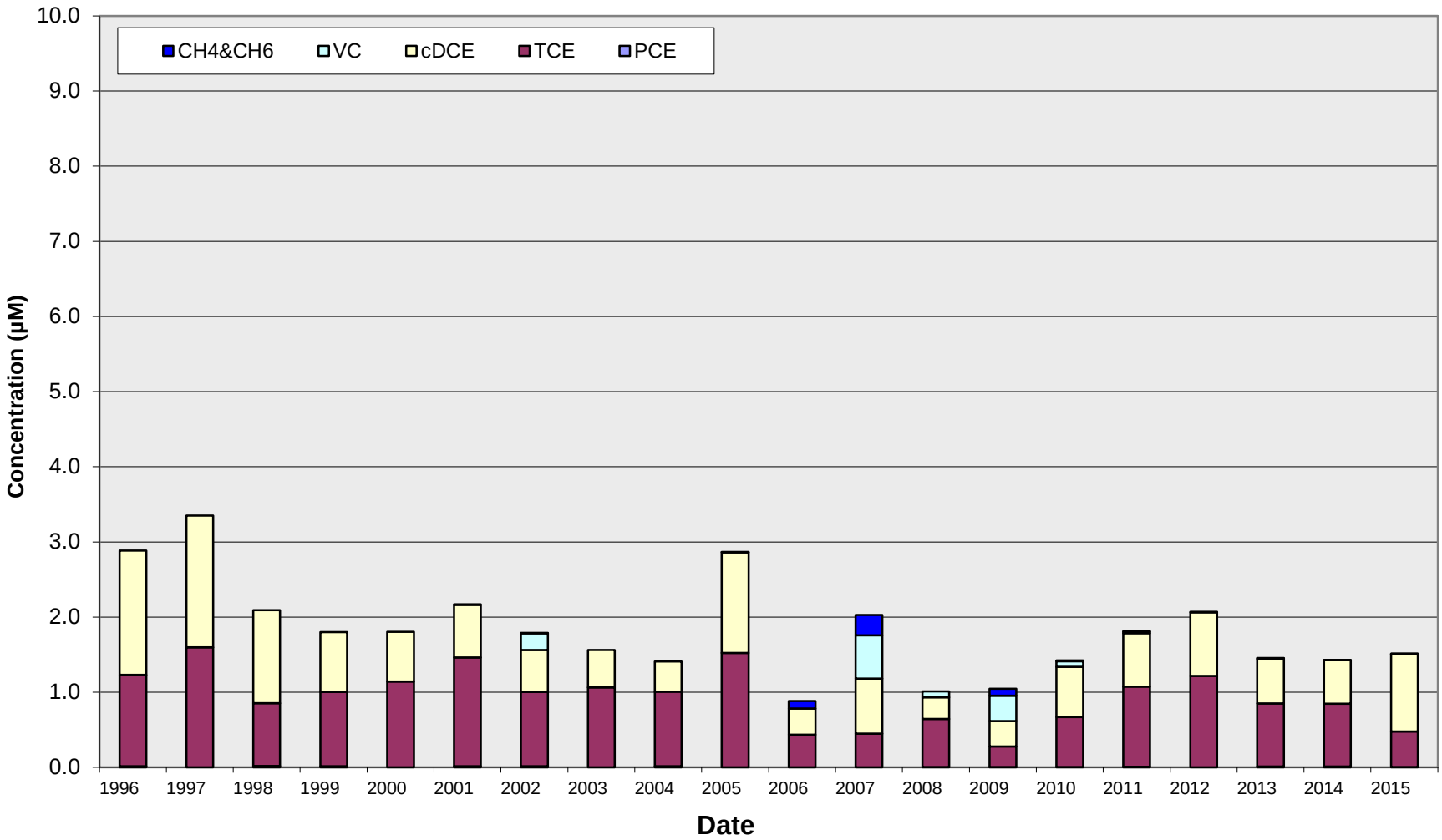
Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

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



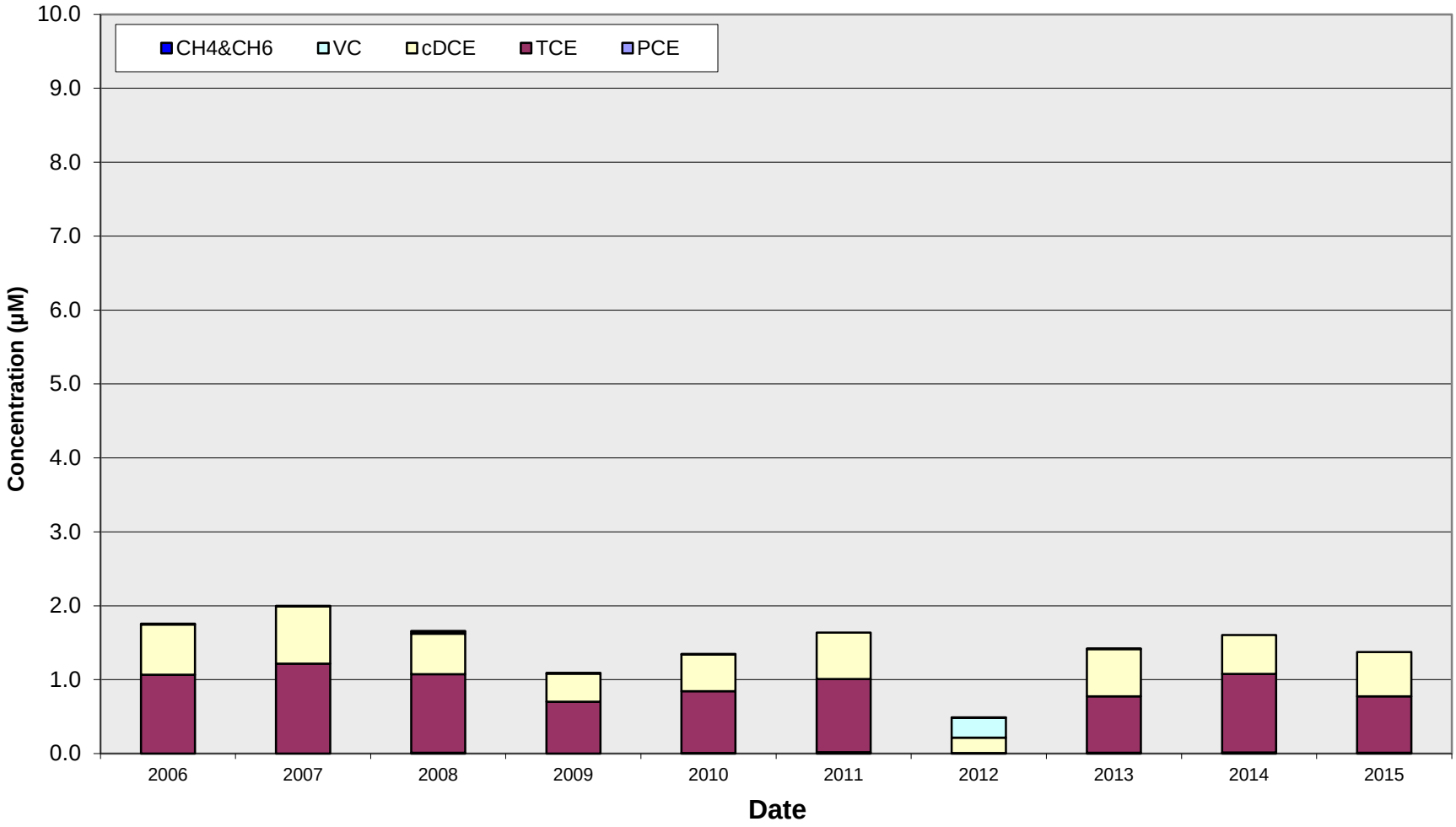
Note: Well installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

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



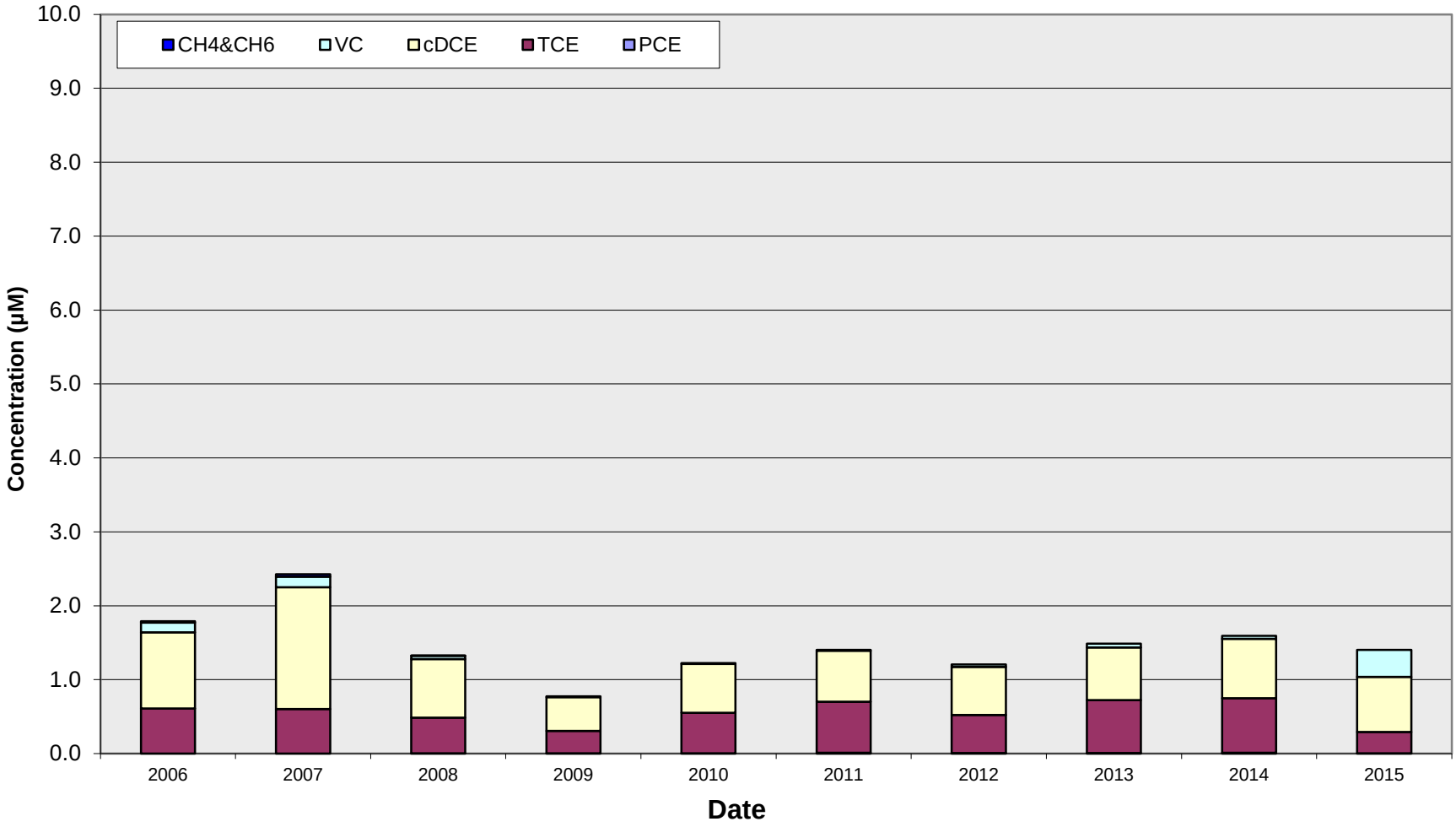
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

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



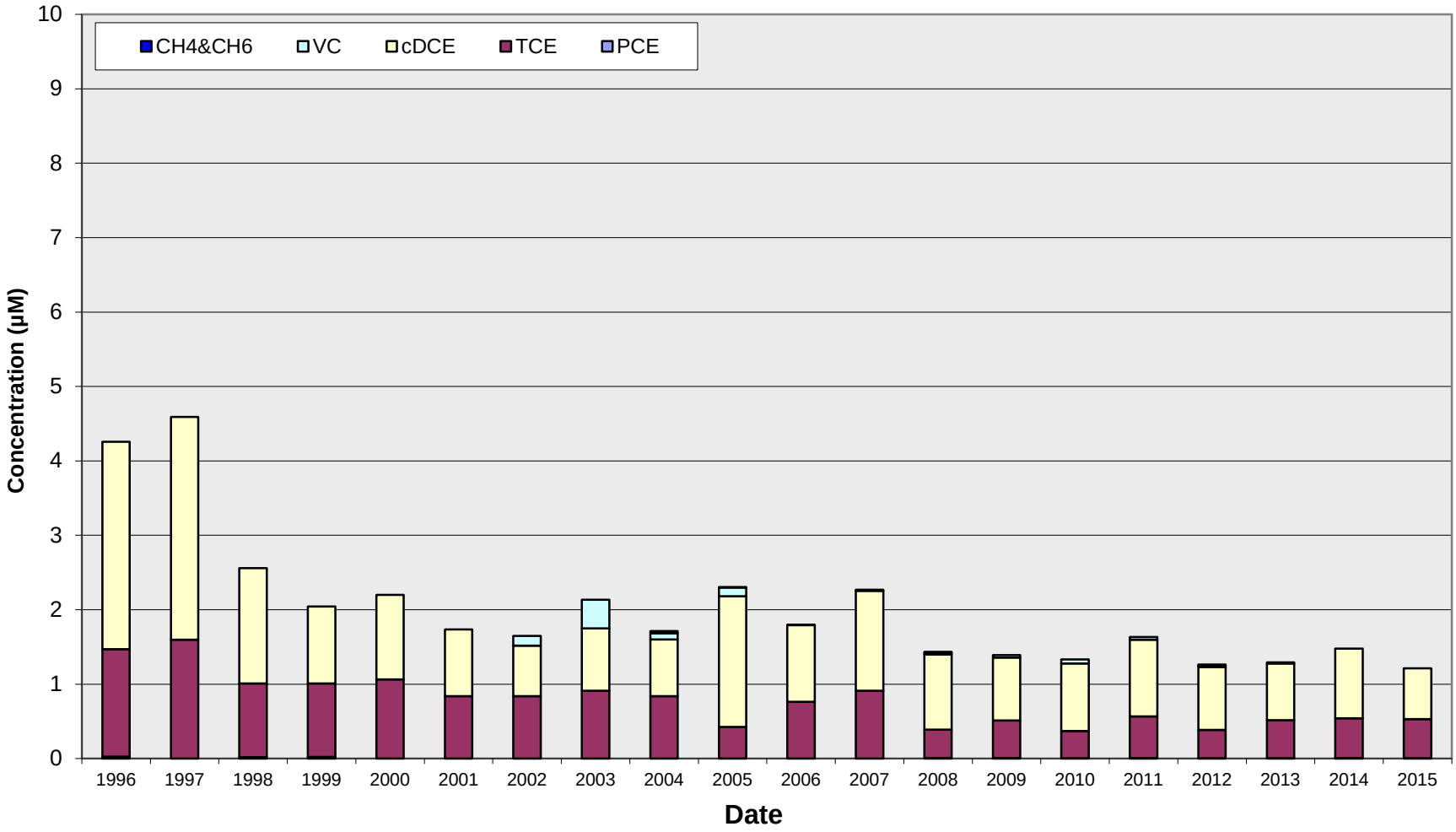
Note: Well was installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

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



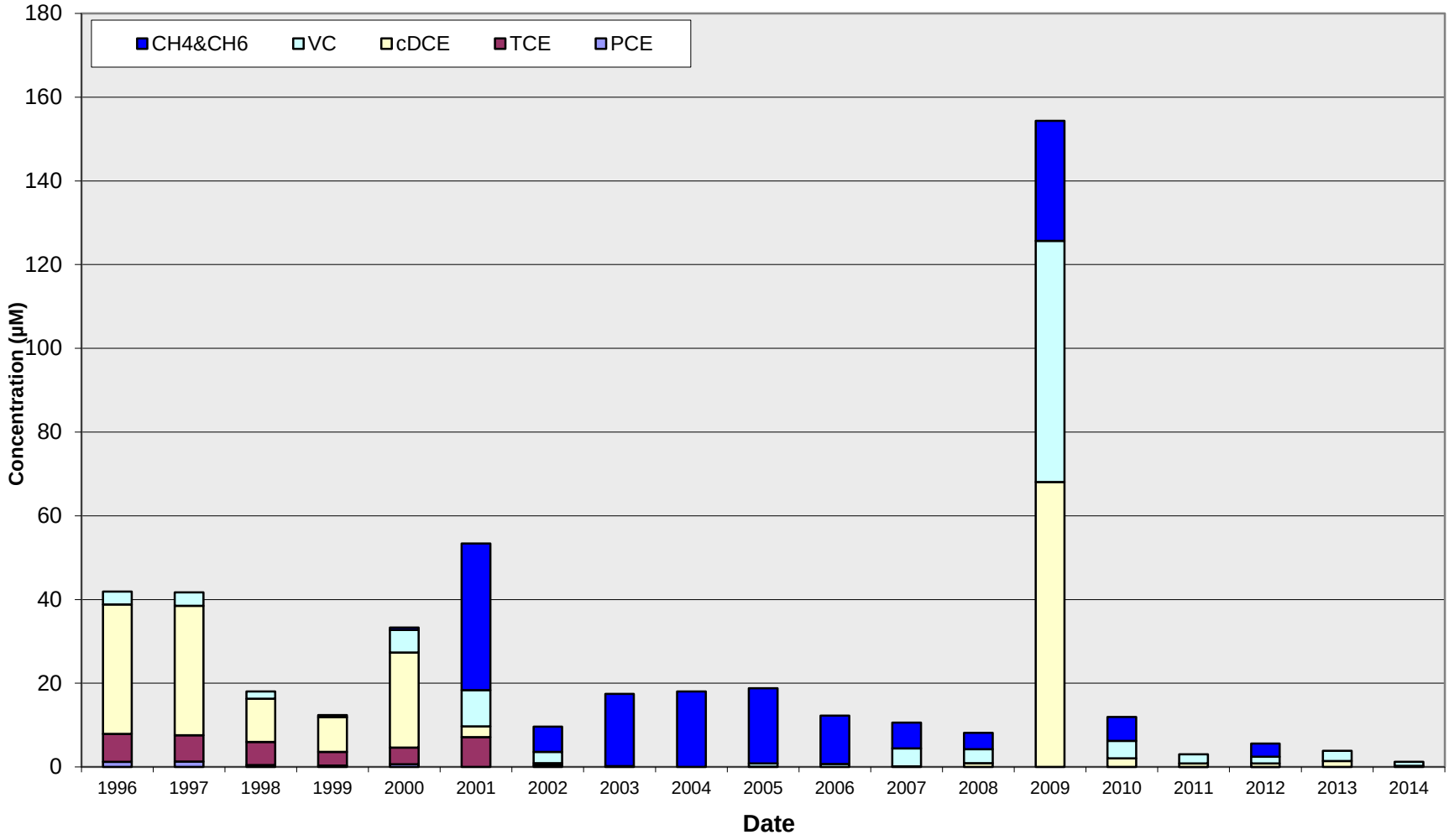
Note: Well was installed in August 2005. Enhanced anaerobic bioremediation program initiated in October 2000.

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



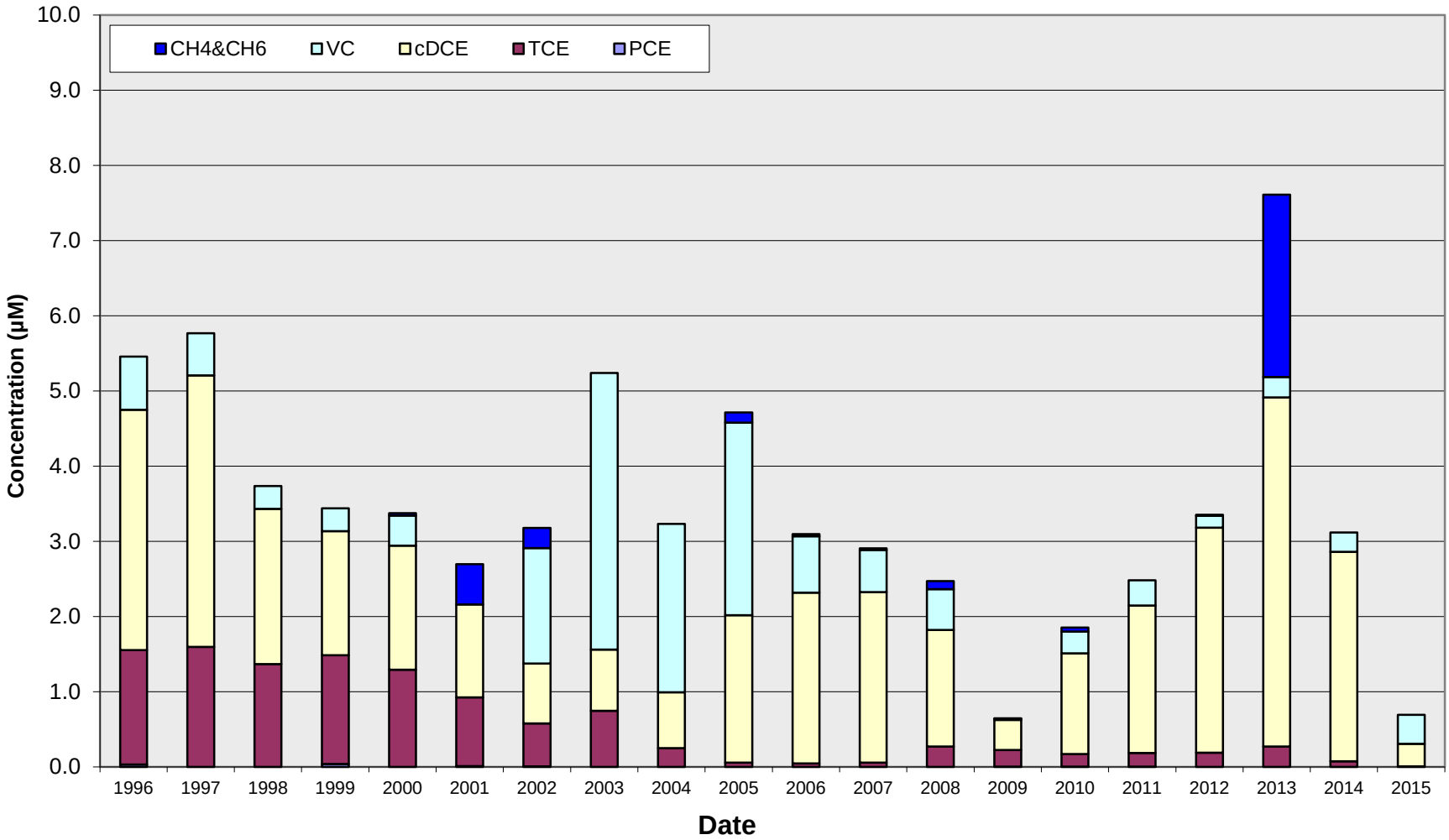
Note: Suspension of groundwater extraction occurred on April 6, 2001. Enhanced anaerobic bioremediation program initiated in October 2000.

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



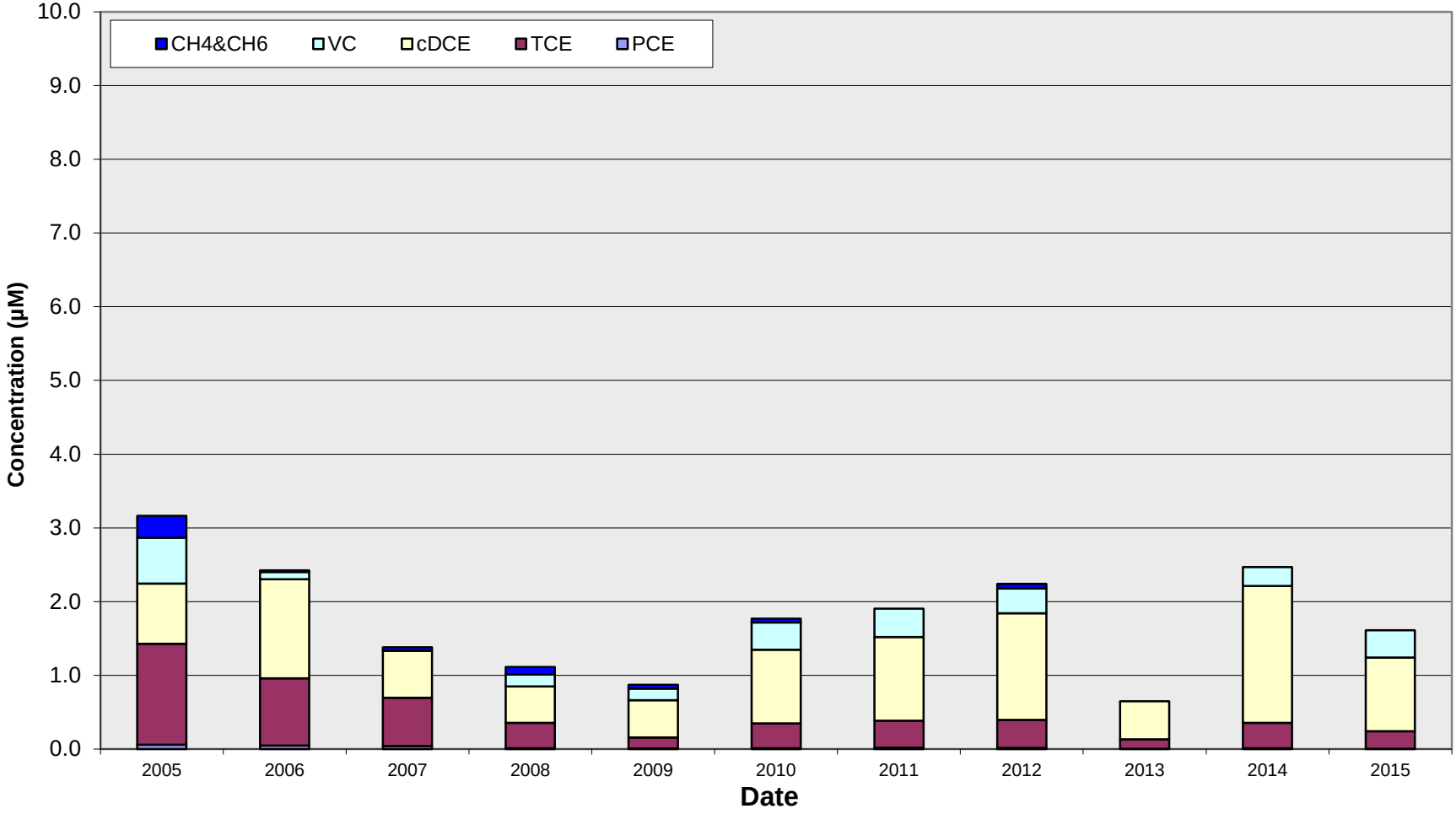
Note: Suspension of groundwater extraction occurred on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

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



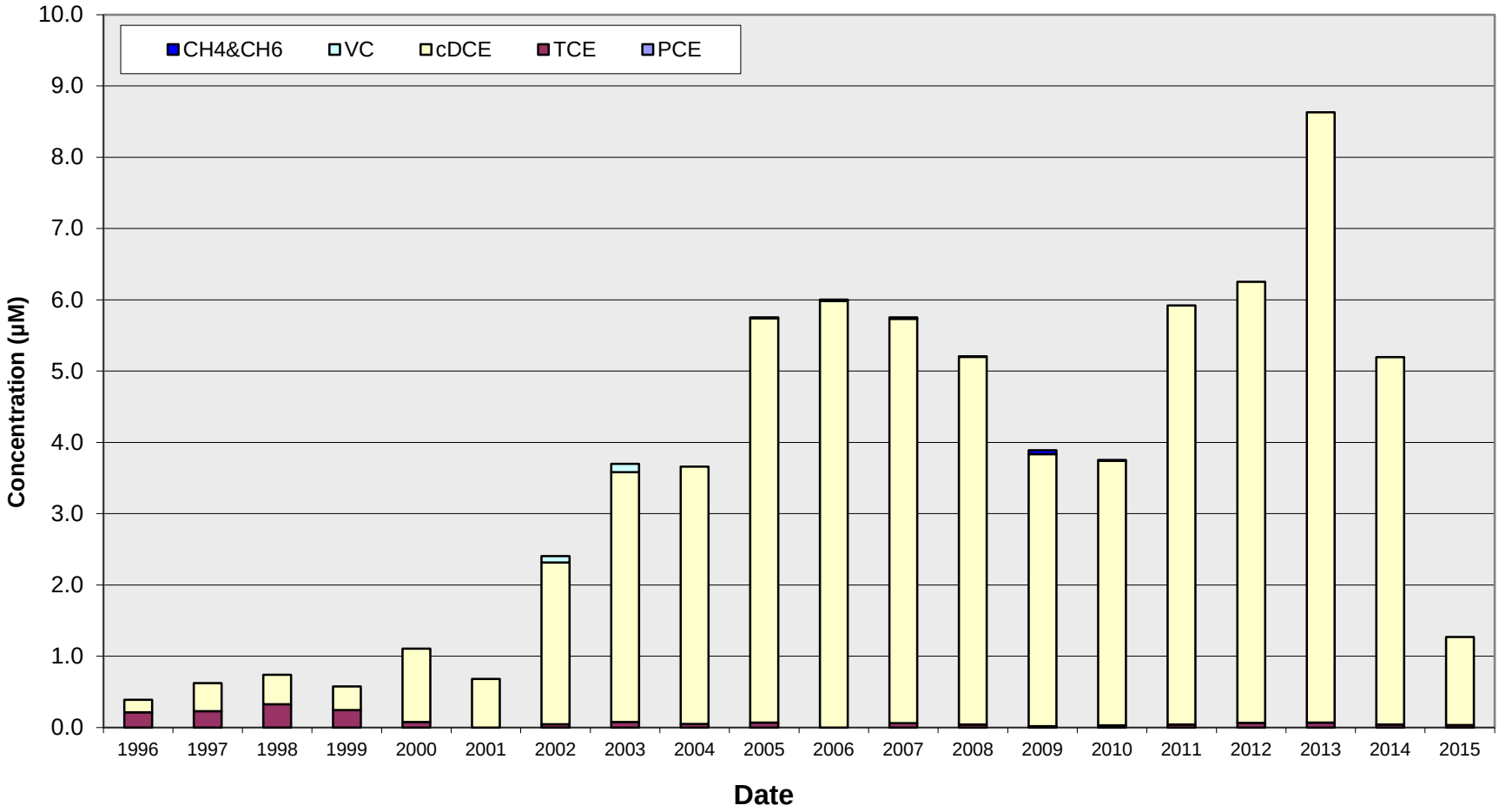
Note: Suspension of groundwater extraction occurred on August 1, 2000. Enhanced anaerobic bioremediation program initiated in October 2000.

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.