

JUNE 4, 2015

RESULTS OF GROUNDWATER MONITORING AND
GROUNDWATER EXTRACTION AND TREATMENT PILOT
TESTING

2014/2015 ANNUAL REPORT

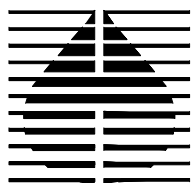
RAYTHEON COMPANY

(FORMER HUGHES AIRCRAFT COMPANY) FACILITY

1901 WEST MALVERN AVENUE

FULLERTON, CALIFORNIA

PREPARED FOR:
RAYTHEON COMPANY



HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING



HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

La Jolla Gateway
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Phone: 858.455.6500
Fax: 858.455.6533

June 4, 2015

VIA FEDERAL EXPRESS – STANDARD

Mr. William F. Jeffers, PE
Hazardous Substances Engineer
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
9211 Oakdale Avenue
Chatsworth, CA 91311-6505

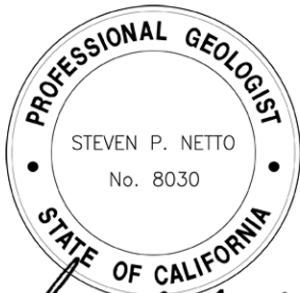
Re: Transmittal of Results of Groundwater Monitoring and Groundwater Extraction and Treatment
Pilot Testing, 2014/2015 Annual Report, Raytheon Company,
(Former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California

Dear Mr. Jeffers:

Enclosed is one hard copy with a compact disc that contains a copy of the above-referenced report. If you have any questions or require further information, please contact us at 858-455-6500.

Sincerely,

HARGIS + ASSOCIATES, INC.



Steven P. Netto
PG 8030, CHG 872
Senior Hydrogeologist



Marcos E. Rodriguez
PE M35620
Engineer

Erin J. Hunter
Hydrogeologist

SPN/MER/EJH/ama

Enclosure: 1 copy w-CD

Other Offices:
Mesa, AZ
Tucson, AZ



Mr. William F. Jeffers, PE
CALIFORNIA EPA DTSC
June 4, 2015
Page 2

cc w/encl: (1 copy w-CD)

Mr. Paul Pongetti, Department of Toxic Substances Control, Cypress
Mr. Paul E. Brewer, Raytheon Company
Mr. Carl Bernhardt, California RWQCB, Santa Ana Region
Mr. Dave Mark, Orange County Water District
Mr. Eric Silvers, Regency Centers
Mr. Jeffrey Lochner, Athena Property Management

(2 copies w-CDs)

Mr. Dave Schickling, City of Fullerton

(via CD only) (Hard Copies Provided Upon Request)

Mr. Van Xayarath, City of Fullerton
Mr. Robert Logan, RG, Kennedy/Jenks Consultants
Mr. James A. Biery, PE, TE, City of Buena Park
Ms. Jennifer Schaefer, The Morgan Group, Inc.
Rosalind McLeroy, Esq., The Morgan Group, Inc.
Mr. William Yowell, Prudential Real Estate Investors
Ms. Tizita Bekele, PE, Department of Toxic Substances Control, Cypress
Mr. Mike McGee, City of Buena Park
Ms. Carol Owens, The Morgan Group, Inc.

(via Email) (via CD if document to large)

Mr. Duc Nguyen, Orange County Public Works (County Property Permit CPP # 2013-00184)

RESULTS OF GROUNDWATER MONITORING AND
GROUNDWATER EXTRACTION AND TREATMENT PILOT TESTING
2014/2015 ANNUAL REPORT
RAYTHEON COMPANY
(FORMER HUGHES AIRCRAFT COMPANY) FACILITY
1901 WEST MALVERN AVENUE
FULLERTON, CALIFORNIA

TABLE OF CONTENTS

Section	Page
ACRONYMS AND ABBREVIATIONS.....	v
1.0 INTRODUCTION.....	1
1.1 REGIONAL HYDROGEOLOGIC FRAMEWORK	2
1.2 SITE HYDROGEOLOGY	3
2.0 GROUNDWATER MONITORING	5
2.1 WELL ACCESSIBILITY AND STATUS	5
2.1.1 Wells Installed Since Approval of the Sampling and Analysis Plan	5
2.2 GROUNDWATER LEVELS	6
2.2.1 Perched Zone Water Levels.....	6
2.2.2 Regional Groundwater System Water Levels.....	7
2.3 CHEMICAL QUALITY OF GROUNDWATER	9
2.3.1 Perched Water Zone	11
2.3.2 Regional Groundwater System	12
2.3.2.1 Volatile Organic Compounds in Regional Groundwater System Monitor and Extraction Wells.....	12
2.3.2.2 1,4-Dioxane in Regional Groundwater System Monitor and Extraction Wells	13
2.3.2.3 Groundwater Quality in Site Hydrostratigraphic Zones	14
2.3.2.4 Groundwater Quality in City of Fullerton Airport Well 9	16
2.3.3 Quality Assurance/Quality Control	16
2.3.4 Adequacy of and Proposed Optimization to the Groundwater Monitoring Program.....	17
3.0 GROUNDWATER EXTRACTION AND TREATMENT PILOT STUDY	20
3.1 SYSTEM OPERATION	20
3.2 WATER QUALITY PERFORMANCE MONITORING	21
3.3 WATER LEVEL PERFORMANCE MONITORING	22
4.0 DISCUSSION	24
5.0 STATUS OF CORRECTIVE MEASURE STUDY ACTIVITIES	31
6.0 REFERENCES.....	32

TABLE OF CONTENTS (continued)TABLES

Table

1	GROUNDWATER MONITORING PROGRAM
2	WELL CONSTRUCTION SUMMARY
3	GROUNDWATER LEVELS
4	PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER
5	OTHER VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
6	PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLING SCHEDULE
7	PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM OPERATIONAL SUMMARY
8	SELECT COMPOUNDS MONITORED IN PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES, HISTORICAL DATA

FIGURES

Figure		Drawing Number
1	SITE LOCATION	410-8281 A
2	WELL AND PIEZOMETER LOCATIONS	410-9054 A
3	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, UNIT A MONITOR WELLS	--
4	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, UNIT AB MONITOR WELLS	--
5	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, UNIT B MONITOR AND EXTRACTION WELLS	--

TABLE OF CONTENTS (continued)

Figure		Drawing Number
6	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, UNIT BC MONITOR AND EXTRACTION WELLS	--
7	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, UNIT C MONITOR WELLS	--
8	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, UNIT D MONITOR WELLS	--
9	SITE CONCEPTUAL GROUNDWATER MODEL HYDROGEOLOGIC CROSS-SECTION A-A'	310-1306 A
10	SITE CONCEPTUAL GROUNDWATER MODEL HYDROGEOLOGIC CROSS-SECTION B-B'	310-1370 A
11	REGIONAL CONCEPTUAL GROUNDWATER MODEL HYDROGEOLOGIC CROSS SECTION C-C'	310-1308 A
12	WATER LEVEL ELEVATIONS, MAY 2014 THROUGH FEBRUARY 2015	220-2274 A
13A	WATER LEVEL AND WATER QUALITY, UNIT B, MAY 2014	220-2275 A
13B	WATER LEVEL AND WATER QUALITY, UNIT B, AUGUST 2014	220-2276 A
13C	WATER LEVEL AND WATER QUALITY, UNIT B, NOVEMBER 2014	220-2277 A
13D	WATER LEVEL AND WATER QUALITY, UNIT B, FEBRUARY 2015	220-2278 A
14	PERCHED ZONE WATER LEVELS, CENTRAL PORTION OF SITE	--
15	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, MONITOR AND EXTRACTON WELL CLUSTER EW-01/MW-16/21/24/25	--
16	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, MONITOR WELL CLUSTER MW-23/26A/26B/26C	--
17	REGIONAL GROUNWATER SYSTEM WATER LEVELS, NESTED MONITOR WELLS MW-32A/32B/32C	--
18	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, NESTED MONITOR WELLS MW-30A/30B	--

TABLE OF CONTENTS (continued)

Figure		Drawing Number
19	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, MONITOR WELL CLUSTER MW-34A/34B/34C	--
20	REGIONAL GROUNDWATER SYSTEM WATER LEVELS, NESTED MONITOR WELLS MW-35A/35B/35C	--
21	1,1-DICHLOROETHYLENE, TRICHLOROETHYLENE, AND 1,4-DIOXANE IN THE REGIONAL GROUNDWATER SYSTEM, MAY 2014 THROUGH FEBRUARY 2015	210-4630 A
22	REGIONAL PRODUCTION WELLS	410-9376 B
23	F-AIRP WELL PRODUCTION AND 1,1-DICHLOROETHYLENE CONCENTRATIONS	--
24	PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM OPERATION AND EXTRACTION WELL WATER LEVELS	--
25	1,1-DICHLOROETHYLENE AND 1,4-DIOXANE CONCENTRATIONS IN EXTRACTION WELLS	--
26	1,4-DIOXANE AND BROMATE IN INFLUENT AND POST-OXIDATION SAMPLES	--
27	PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM MASS REMOVAL	--
28	WATER LEVEL AND WATER QUALITY, MONITOR WELL MW-08	--

APPENDICES

Appendix

A	LABORATORY ANALYTICAL REPORTS (<i>Provided on CD only</i>)
B	GROUNDWATER SAMPLING FIELD FORMS (<i>Provided on CD only</i>)
C	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B HYDROGRAPHS

ACRONYMS AND ABBREVIATIONS

1,1-DCA	1,1-Dichloroethane
1,2-DCE	1,2-Dichloroethane
1,1-DCE	1,1-Dichloroethylene
1,1,2-TCA	1,1,2-Trichloroethane
AGAWP	Additional Groundwater Assessment Work Plan
ATL	Advanced Technology Laboratories, Inc., Signal Hill, California
cis-1,2-DCE	cis-1,2-Dichloroethylene
CM	Conceptual Model
CMS	Corrective Measures Study
COPCs	Compounds of potential concern
DTSC	California Environmental Protection Agency, Department of Toxic Substances Control
DWR	California Department of Water Resources
EPA	United States Environmental Protection Agency
GETS	Groundwater Extraction and Treatment System
GMP	Groundwater Monitoring Program
GMWP/SAP	Groundwater Monitoring Work Plan and Sampling and Analysis Plan
gpm	Gallons per minute
H+A	Hargis + Associates, Inc.
LAS	Lower Aquifer System
MAS	Middle Aquifer System
MCL(s)	Maximum Contaminant Level(s)
msl	Mean sea level
OCGB	Orange County Groundwater Basin
PCE	Tetrachloroethylene
QA/QC	Quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SIM	Selective ion monitoring
the Site	Former Raytheon Company facility located at 1901 West Malvern Avenue, Fullerton, California
TCE	Trichloroethylene
TCFM	Trichlorofluoromethane
UAS	Upper Aquifer System
ug/l	Micrograms per liter
VOC(s)	Volatile organic compound(s)
UV-Chem/Ox	Ultra-violet light and hydrogen peroxide oxidation

RESULTS OF GROUNDWATER MONITORING AND
GROUNDWATER EXTRACTION AND TREATMENT PILOT TESTING
2014/2015 ANNUAL REPORT
RAYTHEON COMPANY
(FORMER HUGHES AIRCRAFT COMPANY) FACILITY
1901 WEST MALVERN AVENUE
FULLERTON, CALIFORNIA

1.0 INTRODUCTION

This report presents the results of groundwater monitoring and groundwater treatment pilot testing conducted during the second quarter 2014 through the first quarter 2015 at the former Raytheon Company (formerly Hughes Aircraft Company) facility located at 1901 West Malvern Avenue, Fullerton, California (the Site) (Figure 1). Previous investigations at the Site were conducted as part of the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) under the direction of the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) (Hargis + Associates, Inc. [H+A], 1998). Periodic groundwater monitoring and additional groundwater assessment have been conducted since completion of the RFI to support a Corrective Measures Study (CMS) for the Site under continuing direction of the DTSC (H+A, 2003a, 2003b, 2003c, 2003d, 2004a, 2004b, 2005a, 2008b, 2009b, 2010a, 2010c, 2011a, 2011c, 2011e, 2013a, and 2013e). As part of the CMS, an extended groundwater extraction and treatment pilot test began operation in July 2008 (H+A, 2005b, 2009c, 2011d, and 2013b).

Groundwater monitoring consists of measuring groundwater levels and collecting groundwater samples from monitor wells and piezometers at the Site (Figure 2). Quarterly water level measurements and groundwater samples were collected during this annual reporting period in May 2014, August 2014, November 2014, and February 2015 from accessible monitor wells and piezometers in general accordance with the Groundwater Monitoring Work Plan and Sampling and Analysis Plan (GMWP/SAP), and subsequent addenda except if noted herein (Section 2.1) (Tables 1 and 2) (H+A, 2003c, 2011a, and 2011e).

A summary of regional and local hydrogeologic conditions in the area and at the Site are presented in the following sections. Regional and local hydrogeologic conditions are described in greater detail in previously submitted well construction reports (H+A, 2005c, 2009a, 2010d, and 2011b).

1.1 REGIONAL HYDROGEOLOGIC FRAMEWORK

The Site is located within the Orange County Groundwater Basin (OCGB). Aquifers in the OCGB have been divided into three separate systems called the upper, middle, and lower regional groundwater systems (California Department of Water Resources [DWR], 1967).

The Upper Aquifer System (UAS) is located within the OCGB to the south of Malvern Avenue. The UAS in this area includes stream terrace and older alluvial deposits as well as the La Habra/Lakewood formation. It is believed that coarse-grained facies in the La Habra/Lakewood formation, corresponding to the upper aquifer, pinch out south of the Coyote Hills or are folded and unconformably truncated near the southern boundary of the Site (H+A, 2005c, 2009a, 2010d, and 2011b).

The Middle Aquifer System (MAS) underlies the UAS to the south of Malvern Avenue and extends to approximately -1,500 feet mean sea level (msl) in this area. The MAS is believed to include the Coyote Hills formation and the San Pedro formation and may include portions of the La Habra formation incised as channels into the underlying Coyote Hills formation.

The Lower Aquifer System (LAS) underlies the MAS and extends to the base of the freshwater zone. The LAS is believed to include portions of the Fernando group of Pliocene age. The base of the freshwater zone in the vicinity of the Site is estimated to be approximately -300 feet msl just north of the Site and -3,000 feet msl south of the Site in the OCGB (DWR, 1967). The base of the freshwater zone immediately beneath the Site has not been established.

Groundwater production in the OCGB is primarily from the lower portion of the UAS and the upper portion of the MAS between approximately -250 feet msl and -1,000 feet msl (DWR, 1967).

1.2 SITE HYDROGEOLOGY

Site hydrostratigraphic units consist of strata having similar hydraulic properties and lithologic characteristics, which have been correlated across the southern portion of the Site. The soils encountered at the Site are generally interbedded sand, silty to clayey sand, sandy silt, and sandy clay, with local gravel layers (H+A, 1998). Evaluation of strata on a relatively small scale, on the order of inches to a foot or two, indicate that soil types encountered in the subsurface are typically very discontinuous, precluding detailed correlation between boreholes. However, larger-scale correlations have been made at the Site and vicinity.

A groundwater conceptual model (CM) for the Site was developed as part of the RFI and refined after completion of additional groundwater assessment activities in 2004 and confirmed and further refined during the 2008 through 2014 well construction activities. Specific results of prior additional assessment activities were documented after discrete phases of work in several well construction and groundwater sampling reports (H+A, 2005c, 2009a, 2010d, 2011b, 2012a, 2013c, 2013d and 2014d). The following provides a general overview based on the RFI and well construction reports for the Site.

Two localized perched zones were identified under portions of the Site during the course of the RFI (H+A, 1998). Perched zones were identified based on the occurrence and behavior of groundwater, and are not clearly expressed lithologically. The perched zones do not represent a usable source of groundwater due to the limited area over which they occur and the small quantities of water flowing through these zones.

The water table in the regional groundwater system beneath the Site occurs in unconsolidated sediments ranging from sand to silt and clay (H+A, 1998). The upper portion of the regional groundwater system is heterogeneous as indicated by the differences in the lithology encountered during the construction of the groundwater monitor wells. The hydraulic conductivity of these sediments was estimated to range from approximately 0.1 foot per day to approximately 100 feet per day (H+A, 2008b).

Wells completed in lithologic intervals with varying degrees of hydraulic communication with each other and with aquifer units in the OCGB respond differently to changes in regional water

levels. Those in good communication respond rapidly to regional changes, while those in finer-grained or isolated lithologic units exhibit a dampened and delayed response to regional water level changes. This differential response may also appear as a temporary reversal of the vertical hydraulic gradients in the vicinity of paired monitor well groupings. Such reversals tend to be repeated, representing a seasonally-linked pattern of gradient reversals, from downwards during periods of expected high basin-wide groundwater extraction to upwards during the shorter winter season (Figures 3 through 8) (H+A, 2005c). Together with lithologic and geophysical data collected during the groundwater assessments, these differential responses to water level fluctuations facilitated the identification and correlation of several hydrogeologic units across the Site, informally designated with increasing depth they include: Unit A, the finer-grained intervening Unit AB, Unit B (the “Target Zone”), the finer-grained intervening Unit BC, Unit C, and Unit D.

The hydrogeology in the southern portion of the Site is interpreted to include a structural fold based on regional subsurface studies and on an evaluation of Site lithology, geophysical, water level, and water quality trends (H+A, 2005c, 2009a, 2010d, and 2011b). The groundwater CM was refined to incorporate delineation of this structural feature following subsequent phases of groundwater assessment. The primary geologic structural feature at and in the vicinity of the Site is the monoclinical fold exhibited by a local southward dip of approximately 42 degrees in the hydrogeologic units underlying terrace deposits between exploratory boring EB-1 and monitor well MW-31 (Figures 9 through 11) (H+A, 2010d, 2015). These dipping units become nearly horizontal south of Malvern Avenue, in the OCGB to the south of the Site.

The groundwater CM has been refined based on available subsurface assessment information to date. The groundwater CM is intended to be descriptive of conditions observed in the subsurface, as well as, predictive of geologic and hydrogeologic conditions likely to be encountered in the course of any additional subsurface work. The groundwater CM is intended to describe conditions at both the regional scale and at the smaller, Site-specific scale. It is expected that the groundwater CM will continue to be refined with time as it is continuously tested against additional new groundwater monitoring data and other new data that may become available.

2.0 GROUNDWATER MONITORING

Groundwater monitoring was conducted in general accordance with the DTSC-approved GMWP/SAP and subsequent addenda (DTSC, 2003, 2011, and 2013; H+A, 2003c, 2011a, 2011e, 2013c and 2013e). Groundwater monitoring included quarterly water level measurements in all Site monitor wells, piezometers, and extraction wells (Figure 12). Water levels were measured on May 19, 2014, August 18, 2014, November 4, 2014, and February 2, 2015, during this annual reporting period (Table 3). Groundwater samples were collected from piezometers and monitor wells according to the analytical schedule detailed in the GMWP/SAP (DTSC, 2013; H+A, 2003c, 2011a, 2011e, 2013c, and 2013e), as updated (Table 1). Additional groundwater monitoring was conducted as part of routine operation and monitoring of the pilot Groundwater Extraction and Treatment System (GETS) (Section 3.0).

2.1 WELL ACCESSIBILITY AND STATUS

All existing wells and piezometers at the Site were accessible during the groundwater monitoring events (Table 1). Several wells and piezometers that were installed prior to and during the RFI, and as part of earlier Site remediation activities, were previously decommissioned during property redevelopment at the Site in the early 2000s (H+A, 2002 and 2004c), and do not appear in the data tabulations compiled for this report (Tables 2 through 5).

2.1.1 Wells Installed Since Approval of the Sampling and Analysis Plan

In accordance with the Additional Groundwater Assessment Work Plan (AGAWP) Addendum 4, two monitor wells, MW-36 and MW-37, were installed and sampled in 2012 (H+A, 2011c); in accordance with the AGAWP Addendum 5, three monitor wells, MW-38, MW-39, and MW-40, were installed and sampled in 2013 (H+A, 2013a); in accordance with the AGAWP Addendum 6, one monitor well, MW-41, was installed and sampled in 2014 (H+A, 2013e). In accordance with the GMWP/SAP Addendum No. 1, monitor wells MW-36 through MW-41 have been

incorporated into the quarterly groundwater monitoring program at the Site (Tables 1 and 2; Figure 2) (DTSC, 2011; H+A, 2011a and 2011e).

2.2 GROUNDWATER LEVELS

Depth to groundwater was measured in all monitor wells, piezometers, and extraction wells. Water level elevations were calculated by subtracting the measured depth to water in each well from its surveyed reference point elevation (Table 3). Groundwater level elevations have been plotted for the northern perched zone and the regional groundwater system (Figure 12). Water level elevations in Unit B wells have been contoured (Figures 13A through 13D).

2.2.1 Perched Zone Water Levels

A hydrograph presenting historical water level data for the perched zone has been prepared (Figure 14). Water levels in the upgradient (northern) portion of the perched zone were depressed during operation of the voluntary dual-phase extraction system, but gradually recovered in 2000 and 2001 (represented by former piezometers P-02D and P-04 on Figure 14) (H+A, 2000). Since then, water levels in the northern portion of the perched zone have remained relatively stable. The water level elevation in piezometer P-09, which is located in the northern portion of the perched zone, has been stable between about 60 feet msl and 65 feet msl, fluctuating within a range of less than about 2.5 feet over its period of record since installation in mid-2003. Water levels across most of the perched zone do not appear to consistently reflect the seasonal fluctuations observed in regional groundwater system monitor wells at the Site (Section 2.2.2), indicating that the perched zone is not in direct hydraulic communication with the regional groundwater system.

Water level trends observed in the southernmost perched zone piezometer, P-07, suggest that the perched zone merges with the regional groundwater system in this area. Water level increases were observed in piezometer P-07 between December 2005 and June 2006, followed by a decline to dry conditions by September 2007 (Figure 14). Regional water levels reached historical highs within this same period in mid-2006 and began a continual decline during the last three quarters of 2007. The water level elevation in piezometer P-07 has been relatively

stable and slowly increasing between December 2007 and mid-2012 while the regional groundwater system continued to decline to historical lows in late 2008. The water level elevation in piezometer P-07 decreased by approximately 0.4 foot between February 2013 and February 2014. Trends observed in piezometer P-07 suggest that this piezometer responds to regional water level increases above a certain threshold near approximately 30 feet msl, but does not exhibit a direct hydraulic connection with the regional groundwater system under typical conditions at the Site, where regional groundwater levels are lower than 30 feet msl at the Site.

2.2.2 Regional Groundwater System Water Levels

Water level elevations decreased in all measured monitor and extraction wells between February 2014 and February 2015 (Table 3; Figures 3 through 8) (H+A, 2014a). Measured decreases from February 2014 to February 2015 ranged from approximately 0.8 feet at monitor well MW-35C to as much as 12.2 feet at monitor well MW-15. The highest water level elevation observed in wells at the Site in February 2015 was at monitor well MW-35A, at an elevation of approximately 10.1 feet above msl. The lowest static water level elevation observed in monitor wells at the Site in February 2015 was at monitor well MW-15, at an elevation of approximately - 8.1 feet below msl (Table 3; Figure 12).

Hydrographs have been prepared based on water levels measured manually during the period from January 1997 through February 2015, and on data collected automatically using pressure transducer/data-loggers in select wells during the period from November 1999 through March 2000 and January 2002 through February 2015 (Figures 3 through 8). Historical water level data from the regional groundwater system indicate an overall decline in regional groundwater levels from early 1997 through late 2002. Water levels began to recover in early 2003; following a record rainfall during the 2004-2005 season, and water level elevations in regional groundwater monitor wells at the Site reached historical highs by about the spring of 2006. Water levels then rapidly declined to historical lows by November to December 2008. Water levels then recovered to near historical highs by May 2012 and have since been declining again. Within these longer-term trends water level elevations in the regional groundwater system have generally fluctuated seasonally due to variations in groundwater production and recharge in the groundwater basin. (Figures 3 through 8) (H+A, 2005c, 2009a, 2010d, and 2011c).

Six monitor well clusters/nests are completed in the regional groundwater system, where water levels are monitored at several different vertical intervals to characterize vertical hydraulic gradients between successively deeper hydrogeologic units (EW-01/MW-16/MW-21/MW-24/MW-25, for convenience designated the “Footbridge cluster,” MW-23/MW-26A/MW-26B/MW-26C, for convenience designated the “Starbuck cluster”, MW-30A/MW-30B, designated the MW-30 nest, MW-32A/MW-32B/MW-32C, designated the MW-32 nest, MW-34A/MW-34B/MW-34C, designated the MW-34 cluster, and MW-35A/MW-35B/MW-35C, designated the MW-35 nest) (Table 2; Figures 12 and 15 through 20). The following provides a summary of vertical hydraulic gradients based on the February 2015 water level measurements at these well clusters/nests (Table 3).

- At the Footbridge cluster, the water level elevation in monitor well MW-25 was higher than the water level elevations in the other wells in that cluster. A upward vertical hydraulic gradient was observed between monitor wells MW-24 and MW-25; no vertical gradient was observed between extraction well MW-21 and monitor well MW-24; and an upward gradient was observed between inactive extraction wells EW-01 and MW-21 (Figure 15) (H+A, 2014a).
- At the Starbuck cluster, the water level elevation in monitor well MW-23 was higher than the water level elevations in the other wells in that cluster. Downward vertical gradients were observed between monitor wells MW-23 and MW-26A, and monitor wells MW-26A and MW-26B, and an upward gradient was observed between monitor wells MW-26B and MW-26C (Figure 16) (H+A, 2014a).
- At the MW-32 nest, the water level elevation in monitor well MW-32C was higher than the water level elevations in the other wells in that nest. A downward vertical gradient was observed between monitor wells MW-32A and MW-32B, and an upward vertical gradient was observed between monitor wells MW-32B and MW-32C (Figure 17) (H+A, 2014a).

- At the MW-30 nest, the water level elevation in monitor well MW-30B was higher than the water level elevation in monitor well MW-30A, indicating an upward vertical gradient (Figure 18) (H+A, 2014a).
- At the MW-34 cluster, the water level elevation in monitor well MW-34A was higher than the water level elevations in the other wells in that cluster. A downward vertical gradient was observed between monitor wells MW-34A and MW-34B, and an upward vertical gradient was observed between monitor wells MW-34B and MW-34C (Figure 19) (H+A, 2014a).
- At the MW-35 nest, the water level elevation in monitor well MW-35A was higher than the water level elevations in the other wells in that nest. Downward vertical gradients were observed between monitor wells MW-35A and MW-35B, as well as monitor wells MW-35B and MW-35C (Figure 20) (H+A, 2014b).

Occasional seasonal gradient reversals appear to reflect the variable extent of hydraulic communication between Site wells and the regional MAS of the OCGB (Figures 3 through 8). Water level data obtained from the six monitor well nests/clusters indicate that some wells (e.g., EW-01, MW-23, and MW-26C) are highly responsive to piezometric changes in the basin, whether resulting from regional or seasonal fluctuations or from local production well pumping in the northern portion of Fullerton. Other wells (e.g., MW-16, MW-21, and MW-25) appear to be in partial communication with the regional aquifer, exhibiting a dampened and delayed response to changes in the regional system or becoming seasonally isolated from the regional system. Finally, some wells (e.g., MW-24, MW-26A, and MW-26B) appear to be relatively isolated from the regional groundwater system, exhibiting relatively low amplitude and gradual seasonal variation, with high water levels typically in the late spring months and low levels in the early fall (Figures 15 and 16).

2.3 CHEMICAL QUALITY OF GROUNDWATER

Two perched zone piezometers, 29 regional groundwater monitor wells, and 4 extraction wells were sampled in February 2015 (Table 1). All groundwater samples collected during the February 2015 monitoring event were analyzed for volatile organic compounds (VOCs) using

U.S. Environmental Protection Agency (EPA) Method 8260B. Groundwater samples collected from select piezometers, monitor wells, and extraction wells were also analyzed for 1,4-dioxane using modified EPA Method 8270 in accordance with the groundwater sampling schedule (Table 1). Selective ion monitoring (SIM) was used by the primary laboratory for select analysis of 1,4-dioxane at lower-concentration wells to provide lower detection and reporting limits (EPA Method 8270 SIM). Lower reporting limits for 1,4-dioxane resulted in historical low concentrations detected at several wells and a historical high, at a relatively low concentration, at one well as described in the following sections.

Original and duplicate groundwater samples were analyzed by Advanced Technology Laboratories, Inc., Signal Hill, California (ATL) (Appendix A). Laboratory split groundwater samples were analyzed by Eurofins Calscience, Inc., Garden Grove, California (Appendix A). Chain-of-custody documentation was enclosed with each sample shipment. Results of groundwater sample VOC and 1,4-dioxane analyses have been summarized (Tables 4 and 5).

Prior to groundwater sample collection, each monitor well was purged until three casing or screen volumes were evacuated from the well, or the slow-well protocol was followed for removal of at least one casing or screen volume, as appropriate (H+A, 2003c and 2008b). One screen volume is defined as the volume of water inside the screened-interval of the well, and is typically used as the unit purge volume for wells where the submersible purge/sample pump is set near the top or within the screen interval and there is relatively low water level drawdown during purging. At deeper wells where the top of the screened interval is below the maximum submergence capacity of the pump, pumps are generally set near their maximum submergence level, and a unit purge volume is then taken as the volume of water inside the screened interval plus the volume of water inside the blank well casing below the pump. Groundwater samples were collected from the extraction wellhead(s) during operation of the pilot GETS. Extraction wells EW-01 and MW-21 were turned on temporarily for purging and sampling in February 2015, as current operation of the pilot GETS involves extraction from extraction wells MW-29 and EW-02. Field parameters, including pH, specific conductance, dissolved oxygen, turbidity, and temperature, were monitored during well purging. Groundwater sampling field forms are provided (Appendix B).

Quality assurance/quality control (QA/QC) samples collected in February 2015 consisted of trip blanks, equipment rinsate blanks, field duplicates, and laboratory split samples. Trip blanks and the water used to collect the equipment rinsate blanks were provided by ATL. Field duplicate and/or laboratory split samples were collected for analysis of VOCs and 1,4-dioxane from monitor wells MW-28, MW-32B, MW-36, and extraction well EW-01 in February 2015 (Table 4). Equipment rinsate blanks were collected at the rate of one per day when non-dedicated purging or sampling equipment was used.

The following sections describe the analytical results for VOC and 1,4-dioxane analyses of groundwater samples collected during the February 2015 groundwater monitoring event. Results from quarterly groundwater monitoring rounds conducted in May 2014, August 2014, and November 2014 were previously submitted as quarterly data submittals (H+A, 2014b, 2014c, and 2014e).

2.3.1 Perched Water Zone

Two perched zone piezometers, P-07 and P-09, were sampled during the February 2015 groundwater monitoring event (Tables 4 and 5; Figure 21). The groundwater samples collected from perched zone piezometers P-07 and P-09 were analyzed for VOCs and 1,4-dioxane. VOCs detected in the groundwater samples collected from piezometer P-07 in February 2015 include 1,1-dichloroethylene (1,1-DCE), 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane (1,2-DCA), 1,1,2-trichloroethane (1,1,2,-TCA), tetrachloroethylene (PCE), trichloroethylene (TCE), and trichlorofluoromethane (TCFM). All concentrations were within their respective historical ranges for this piezometer. 1,4-Dioxane was detected in the groundwater sample collected from piezometer P-07 at a concentration of 1,600 micrograms per liter (ug/l) within its historical range. 1,1-DCE was the only VOC detected in the groundwater sample collected from piezometer P-09 in February 2015, at a concentration of 1.2 ug/l, within its historical range at this piezometer. 1,4-Dioxane was detected at piezometer P-09 in February 2015 at a concentration of 0.29 ug/l, within its historical range (Table 4).

2.3.2 Regional Groundwater System

Twenty-nine monitor wells and four extraction wells were sampled in February 2015 (Tables 1, 4, and 5; Figure 21). Samples collected from all regional groundwater system monitor and extraction wells were analyzed for VOCs. Groundwater samples collected from select monitor and extraction wells were also analyzed for 1,4-dioxane in accordance with the Groundwater Monitoring Program (GMP).

2.3.2.1 Volatile Organic Compounds in Regional Groundwater System Monitor and Extraction Wells

1,1-DCE was the principal VOC detected in groundwater samples collected from regional groundwater system monitor wells at the Site. The additional VOCs 1,1,2-TCA, 1,1-DCA, 1,2-DCA, benzene, chloroform, cis-1,2-dichloroethylene (cis-1,2-DCE), PCE, toluene, TCE, and TCFM were detected at relatively low concentrations in groundwater samples collected in February 2015 (Table 4). The concentrations of 1,1-DCE have decreased significantly from the June 2008 historical highs of 4,900 ug/l in extraction well MW-21 and approximately 1,600 ug/l in extraction well EW-01 since operation of the pilot GETS started in July 2008. 1,1-DCE was detected in groundwater samples collected from monitor well MW-26C beginning in December 2007 through December 2009. The concentration of 1,1-DCE at monitor well MW-26C generally declined since December 2007, with no detection of 1,1-DCE in recent samples at a reporting limit of 0.5 ug/l in March 2010 through February 2015.

Historical concentration ranges were evaluated for May 2014 through February 2015. VOC concentrations were generally within their respective historical ranges with the following exceptions. In May 2014 a relatively low historical high concentration of TCFM was detected in the groundwater sample collected from extraction well EW-01 at a concentration of 0.61 ug/l. The concentration of toluene in the groundwater sample collected from monitor well MW-39 was a historical high with a detection of 1.3 ug/l. At monitor well MW-30B historical high concentrations of 1,1-DCE and cis-1,2-DCE were detected at concentrations of 22 ug/l, and 6.0 ug/l, respectively. At monitor well MW-31 historical high concentrations of 1,1-DCA, 1,1,2-TCA, and PCE were detected at concentrations of 3.7 ug/l, 1.2 ug/l, and 2.5 ug/l,

respectively. At monitor well MW-36 a historical high concentration of 1,1-DCA was detected at a concentration of 1.7 ug/l.

In August 2014 historical high concentrations of TCE were detected in groundwater samples collected from monitor wells MW-16, MW-30A, and extraction well EW-01 at concentrations of 6.4 ug/l, 1.9 ug/l, and 3.1 ug/l, respectively. A historical high concentration of PCE was detected in extraction well EW-01 at a concentrations of 3.8 ug/l. A historical low of 1,1-DCE at a concentration of 5.2 ug/l was detected in the groundwater sample collected from extraction well EW-02.

In November 2014, a historical high concentration of benzene was detected in the groundwater sample collected from extraction well MW-29 at a concentration of 0.57 ug/l. At monitor well MW-41 a historical high concentration of chloroform was detected at a concentration of 0.72 ug/l. At extraction well EW-01 historical high concentrations of PCE and TCE were detected at concentrations of 4.3 ug/l and 3.3 ug/l, respectively.

In February 2015, a relatively low historical high concentration of toluene was detected in the groundwater sample collected from monitor well MW-06 at 0.78 ug/l. Historical high concentrations of TCE were detected in groundwater samples collected from monitor wells MW-16 and MW-33 at concentrations of 7.1 ug/l and 2.0 ug/l, respectively. At monitor well MW-41 historical high concentrations of 1,1-DCA, 1,1-DCE, and 1,4-dioxane were detected at concentrations of 1.1 ug/l, 110 ug/l, and 10 ug/l, respectively.

2.3.2.2 1,4-Dioxane in Regional Groundwater System Monitor and Extraction Wells

In February 2015, 1,4-dioxane was detected in groundwater samples collected from regional groundwater system monitor wells MW-08, MW-09, MW-16, MW-28, MW-31, MW-32B, MW-34B, MW-36, and MW-41 and from extraction wells EW-01, EW-02, MW-21, and MW-29. For May 2014 through February 2015, historical high concentrations of 1,4-dioxane were detected in the groundwater samples collected from monitor wells MW-31, MW-32B, MW-36, MW-41, and extraction well EW-01, at 16 ug/l, 4.5 ug/l, 14 ug/l, 10 ug/l, and an estimated concentration of 990 ug/l, respectively.

2.3.2.3 Groundwater Quality in Site Hydrostratigraphic Zones

The following describes 1,1-DCE and 1,4-dioxane detected at the Site in February 2015 within the framework of the Site groundwater CM hydrostratigraphic zones (Tables 1 and 4; Figures 9 through 11 and 21).

- Three of eight monitor wells screened in Unit A (MW-18, MW-34A, and MW-38) were sampled for VOCs in February 2015. 1,1-DCE was not detected in groundwater samples collected from any of the three Unit A monitor wells sampled in February 2015. All three monitor wells sampled for VOCs were also sampled for 1,4-dioxane. 1,4-Dioxane was not detected in groundwater samples collected from these Unit A monitor wells.
- Three of five monitor wells screened in Unit AB (MW-13, MW-15, and MW-32A) were sampled for VOCs in February 2015. 1,1-DCE was detected in a groundwater sample collected from monitor well MW-15 in February 2015 (Table 4). Two of the three monitor wells sampled for VOCs were also sampled for 1,4-dioxane (MW-13 and MW-32A). 1,4-Dioxane was not detected in groundwater samples collected from these two Unit AB monitor wells.
- Fourteen monitor wells (MW-16, MW-26C, MW-27, MW-28, MW-30A, MW-31, MW-32B, MW-33, MW-34B, MW-35C, MW-36, MW-39, MW-40, and MW-41) and three extraction wells (MW-29, EW-01 and EW-02) screened in Unit B (Target Zone) were sampled for VOCs and 1,4-dioxane in February 2015. Monitor well MW-26C had equipment malfunction and was not sampled in February 2015. Water quality hydrographs depicting the concentrations of 1,1-DCE, TCE, and 1,4-dioxane in groundwater samples collected through February 2015 have been prepared (Appendix C). Comparison of the historical concentrations of these compounds in on-Site wells generally indicates stable or declining concentration trends at most wells with seasonal variability. Off-site monitor wells have a shorter monitoring history than On-Site monitor wells. In general, off-site monitor well MW-34B has exhibited relatively large seasonal variations in VOC and 1,4-dioxane concentrations; new monitor well MW-41, which is located to the west of and downgradient from MW-34B has also exhibited relatively large seasonal variation

during its short history of sampling to date. Both of these wells are located near the northern saturated extent of the Unit B and concentration variability at these wells may be attributed, in part, to changes in hydraulic gradients related to seasonal groundwater production in the vicinity.. In addition, the relative concentrations of 1,4-dioxane as compared to 1,1-DCE in groundwater samples collected from monitor wells along Malvern Avenue tend to be lower than on-Site monitor wells and monitor well MW-34B. TCE was also detected in monitor wells along Malvern Avenue, but at generally lower concentrations than 1,1-DCE.

- Three monitor wells, MW-08, MW-30B, and MW-34C, and one extraction well, MW-21, screened in Unit BC were sampled for VOCs and 1,4-dioxane in February 2015. 1,1-DCE was detected in extraction well MW-21 and monitor wells MW-30B and MW-08 (Table 4). TCE was also detected in monitor wells MW-30B and MW-08 and extraction well MW-21 in February 2015. 1,4-Dioxane was detected in samples collected from extraction well MW-21 and monitor well MW-08. The concentrations of 1,1-DCE and 1,4-dioxane at extraction well MW-21 had declined during the operation of the initial pilot GETS program, June 2008 through 2009, and have been more variable since the conclusion of that initial phase of pilot testing when extraction well MW-21 was routinely operated (Table 4).
- All three monitor wells screened in Unit C, MW-09, MW-24, and MW-32C, were sampled for VOCs and 1,4-dioxane in February 2015. VOCs and 1,4-dioxane were not detected in groundwater samples collected from Unit C monitor wells with the exception of a low detection of 1,4-dioxane near the laboratory detection limit in monitor well MW-09.
- Three of four monitor wells screened in Unit D, MW-06, MW-20 and MW-37, were sampled for VOCs in February 2015. 1,1-DCE and 1,4-dioxane were not detected in the groundwater samples collected from monitor wells MW-06, MW-20, and MW-37 in February 2015.

VOC and 1,4-dioxane concentrations will continue to be monitored to evaluate vertical and lateral distribution and to assess trends within and across the Site hydrostratigraphic zones.

2.3.2.4 Groundwater Quality in City of Fullerton Airport Well 9

The City of Fullerton operates a municipal water supply well, designated F-AIRP, which is located on the north side of Fullerton Municipal Airport (Figure 22). F-AIRP is located approximately 4,000 feet to the southwest of the southwest boundary of the Site and approximately 1,500 feet to the southwest of monitor well MW-33. Based on water quality results received from the Orange County Water District in January 2013, 1,1-DCE was detected for the first time in August 2002 at a concentration of 0.6 ug/l. Since 2002, 1,1-DCE has periodically been detected in F-AIRP with a maximum concentration of 2.1 ug/l in November 2008. In 2014, 1,1-DCE was detected at low levels in F-AIRP with a maximum detection of 1.6 ug/l in June and August 2014. All detections of 1,1-DCE in production well F-AIRP have been below the California maximum contaminant level (MCL) of 1,1-DCE in drinking water of 6 ug/l (Figure 23). TCE and 1,4-dioxane have not been detected in F-AIRP.

2.3.3 Quality Assurance/Quality Control

QA/QC samples, including field duplicates, laboratory split samples, equipment rinsate blanks and trip blanks, were collected and analyzed for VOCs during the February 2015 monitoring event (Appendix A). In addition, equipment rinsate blanks, field duplicates, and laboratory split samples were collected and analyzed for 1,4-dioxane in February 2015. The relative percent difference was calculated between the results of each field duplicate and each laboratory split sample with its corresponding original sample. Data quality assessment results for the May, August, and November 2014 groundwater monitoring events were previously reported in their respective groundwater monitoring data submittals (H+A, 2014b, 2014c, and 2014e). The data quality assessment for February 2015 indicated that all QA/QC results for groundwater samples were within acceptable criteria.

VOCs and 1,4-dioxane were not detected in the trip, method, or equipment rinsate blanks analyzed with groundwater samples collected during the February 2015 groundwater monitoring event (Table 4; Appendix A).

In addition QA/QC trip blanks were collected as part of the monthly and quarterly GETS sampling events in accordance with the GETS monitoring sampling schedule (Table 6). There

were no detections of analytes sampled for the GETS quarterly and monthly monitoring in the trip or method blanks.

2.3.4 Adequacy of and Proposed Optimization to the Groundwater Monitoring Program

In accordance with Amendment A of Addendum No. 1 to the GMWP/SAP, the existing GMP was reviewed for adequacy based on results collected during the past four quarters of sampling. Adequacy of the groundwater monitoring program can be evaluated both in terms of appropriate frequencies of sampling and analytical schedules for monitoring temporal changes at existing wells, and in terms of delineation of the Site-derived contaminants in groundwater for completeness of the groundwater assessment, i.e. whether additional well(s) are needed to provide delineation.

Completeness of assessment is evaluated after each new phase of monitor well installations and then confirmed during on-going groundwater monitoring. Frequency of sampling and analytical schedules was considered based on results of monitoring at existing wells. VOC and/or 1,4-dioxane concentrations did not increase above historical high concentrations for two consecutive monitoring events in monitor wells that are not already sampled quarterly (Tables 1 and 4) (H+A, 2014a). Based on this review, no increase in sampling frequency is indicated for any of the monitor wells at the Site.

The following optimization of the groundwater monitoring program is proposed based on results of groundwater monitoring over the last several quarters:

- Unit A monitor well MW-18 is located in the hydrostratigraphic zone above Unit B and has limited hydraulic communication with the deeper units. Continued collection of high-frequency water quality data from this well is no longer warranted as the VOC results from this well have exhibited detections below the California or federal MCLs during its long monitoring history. The monitoring periods for monitor well MW-18 are proposed to be reduced from semi-annual to annual sampling.
- Unit AB monitor well MW-32A and Unit C monitor well MW-32C are screened above and below, respectively, the Unit B, and provide vertical delineation of VOCs and 1,4-dioxane

detected in the Unit B at this location (monitor well MW-32B). Since their installation Unit AB monitor well MW-32A and Unit C monitor well MW-32C water quality results have been consistently non-detect, with the exception of single anomalous detections at each well of PCE and/or 1,4-dioxane at concentrations at or below the drinking water MCL and California Notification Level, respectively. In addition, Unit B is typically the low-head unit at and in the vicinity of the site, providing hydraulic vertical restraint of Site-related VOCs and 1,4-dioxane to the Unit B in the vicinity of this well. The monitoring periods for monitor wells MW-32A and MW-32C are proposed to be reduced from semi-annually to annually. The monitoring period for monitor well MW-32B will remain quarterly.

- Unit A monitor well MW-34A and Unit BC monitor well MW-34C are screened above and below, respectively, the Unit B, and provide vertical delineation of VOCs and 1,4-dioxane detected in the Unit B at this location (monitor well MW-34B). Since their installation Unit A monitor well MW-34A and Unit BC monitor well MW-34C water quality results have been consistently non-detect, with the exception of sporadic low-level detections of TCFM and/or toluene at concentrations well below drinking water MCLs. In addition, as noted above for the monitor well MW-32 nest, Unit B is typically the low-head unit at and in the vicinity of the site, providing hydraulic vertical restraint of Site-related VOCs and 1,4-dioxane to the Unit B in the vicinity of this well. The monitoring periods for monitor wells MW-34A and MW-34C are proposed to be reduced from semi-annually to annually. The monitoring period for monitor well MW-34B will remain quarterly.
- Monitor well MW-35C is screened in Unit B to the southwest of the Site and provides lateral delineation of the VOCs and 1,4-dioxane detected in groundwater monitor wells to the north and northwest of this location. Site-related contaminants have not been detected in monitor well MW-35C in the 17 quarters of sampling since installation. The only VOC detected in monitor well MW-35C was chloroform as a disinfection by-product related to use of chlorine during well development. Chloroform has not been detected in this well during the last 16 quarters of sampling. Monitor well MW-35C monitoring period is proposed to be reduced from quarterly to semi-annually.
- Unit C monitor well MW-09 and Unit D monitor well MW-06 are screened below the Unit B. Water quality results for these monitor wells have exhibited detections at or

below the California or federal MCLs during their long monitoring histories, which indicate stable concentrations and/or are relatively hydraulically isolated from the regional groundwater system. Monitor well MW-09 is proposed to be reduced from semi-annual to annual, and monitor well MW-06 is proposed to be reduced from annual to biennial.

- Unit D monitor well MW-37 is screened about 345 feet below the Unit B. Water quality results have been consistently non-detect since installation, with the exception of sporadic low-level detections of PCE and toluene at concentrations well below drinking water MCLs. The monitoring period for monitor well MW-37 is proposed to be reduced from quarterly to biennial.

3.0 GROUNDWATER EXTRACTION AND TREATMENT PILOT STUDY

This section summarizes the pilot GETS operation within the three-month period of monitoring conducted during the first quarter of 2015. The pilot GETS consists of four groundwater extraction wells, the treatment system, and the disposal system; however, the current phase of pilot testing is operating using only two extraction wells, EW-02 and MW-29. The treatment system processes extracted groundwater through an advanced oxidation unit that utilizes ultra-violet (UV) light and hydrogen peroxide chemical oxidation (UV/Chem-Ox), followed by a granular activated carbon polish prior to disposal to the sanitary sewer.

3.1 SYSTEM OPERATION

Initial startup of the pilot GETS took place on Tuesday, July 8, 2008. From July 2008 through November 2009, the pilot GETS was operated with extraction wells EW-01 and MW-21 operating at approximately 10 gallons per minute (gpm) each. Pilot GETS expansion took place between November 2009 and March 2010 in order to incorporate extraction well EW-02 into the extraction well network. The system maximum flowrate was also increased from 20 gpm to 50 gpm, which is the capacity of the on-Site sewer. Beginning in March 2010, the pilot GETS was operated at 50 gpm, entirely from extraction well EW-02. During December 2011, a synthetic media pilot test was started. The purpose of the synthetic media pilot test was to evaluate the efficacy of treating high-concentration water collected from extraction well MW-21 using a synthetic media for contaminant removal (H+A, 2012c). In order to conduct the synthetic media pilot test, extraction wells EW-02 and MW-21 were operated at approximately 40 gpm and 10 gpm, respectively. The synthetic media pilot test was completed on March 9, 2012, and operation of the pilot GETS was restored to 50 gpm, entirely from extraction well EW-02. A second phase of Pilot GETS expansion took place between March 2014 and August 2014 in order to incorporate extraction well MW-29 into the extraction well network as well as replacing an advanced oxidation unit that used ozone and hydrogen peroxide with a UV/Chem-Ox system. Extraction wells EW-01 and MW-21 are on standby for the current phase of pilot testing, but may be used for future phases of pilot testing or as part of a full scale pump-and-treat system.

During the first quarter 2015, the pilot GETS was operational approximately 50 percent of the available runtime and approximately 3,200,000 gallons of groundwater were treated and discharged to the sanitary sewer (Table 7). Downtime during the first quarter 2015 was associated with maintenance and fine-tuning after expansion and upgrades to the facility. The average monthly discharge flowrate to the sanitary sewer during December 2014 through February 2015 was approximately 25 gpm. Since startup of the pilot GETS, approximately 95,600,000 gallons of groundwater have been treated at an average flowrate of 28 gpm through the end of February 2015 (Table 7).

3.2 WATER QUALITY PERFORMANCE MONITORING

Current monthly and quarterly pilot GETS monitoring activities include collecting samples from extraction wells EW-02 and MW-29, and at treatment system sampling ports: Influent, Post Particulate Filter, Post UV/Chem-Ox, Carbon Breakthrough, and Carbon Effluent (Tables 6 and 8; Figure 25). Samples collected during these activities were sent to ATL. Analytical results of the treatment system samples have been summarized (Table 8; Appendix A).

The pilot GETS continues to remove VOCs and 1,4-dioxane from extracted groundwater. The UV/Chem-Ox advanced oxidation and carbon adsorption treatment units effectively removed VOCs from extracted groundwater. VOCs breakthrough at the carbon adsorption units was not observed in the first quarter 2015; however, while the UV/Chem-Ox treatment unit was being optimized, there were low-level detections of 1,4-dioxane in monthly effluent samples collected in December 2014, January and February 2015, at concentrations of 2.3 ug/l, 0.34 ug/l, and 0.55 ug/l, respectively, which are near the laboratory reporting limit, but below the pilot GETS permitted sewer discharge limit (Table 8). Operation of the advanced oxidation system is being optimized to eliminate breakthrough of 1,4-dioxane in post-oxidation and effluent samples (Figure 26).

During the first quarter of 2015, the pilot GETS removed approximately 2.5 pounds of VOCs and 1 pound of 1,4-dioxane from extracted groundwater. Since startup of the pilot GETS in

July 2008, approximately 130 pounds of VOCs and 26 pounds of 1,4-dioxane have been removed from groundwater through February 2015 (Figure 27).

3.3 WATER LEVEL PERFORMANCE MONITORING

The capture zone from extraction of groundwater at extraction well EW-02 during operation of the pilot GETS can be evaluated based on hydraulic properties of Unit B and from water level contours.

The width of the capture zone can be estimated based on the average extraction rate at extraction well EW-02 and an estimate of the rate of groundwater flow through a portion of Unit B as previously described in the technical memorandum regarding hydraulic testing and preliminary capture zone analysis for extraction well EW-02 (H+A, 2010b). One of the hydraulic parameters used to estimate rate of flow through Unit B is transmissivity, which generally does not change in the vicinity of extraction well EW-02. The average pumping rate and/or the hydraulic gradients do, however, vary. As a result, there will be some variation in estimated capture width as the variables change. To assess this, average extraction rates and hydraulic gradients are calculated on a quarterly basis; however, since the pilot GETS was shut down for construction of the system expansion during much of 2014, this evaluation was conducted only for the period December 2014 to February 2015 within this annual reporting period. The following table summarizes the estimated width of the capture zone during this time frame:

Time Period	Average Pumping Rate (gpm)	Hydraulic gradient ^(a)	Range in Transmissivity (square feet per day) (H+A, 2010b)	Range in Capture Width (feet)
December 2014 to February 2015	40	0.0028	2,400 – 5,400	512 – 1,153

(a) Based on water levels measured at monitor well MW-28 and extraction well EW-01 at end of time period.

The above calculation provides a rough estimate of the width of the capture zone. From a simplistic estimate, approximately one half of the width would be north of extraction well EW-02 and the balance to the south of extraction well EW-02. Given the complexity of Unit B, this is meant to provide a rough approximation of capture zone. Capture zone can also be evaluated using the quarterly water level contour maps (Figures 13A to 13D). Due to the pilot GETS being

down for system expansion from March 2014 through November 2014 there was no capture zone estimated for the quarterly periods in May 2014, August 2014, and November 2014. The width of the capture zone was calculated for February 2015, and typically varies with seasonal changes in hydraulic gradient and flow direction. In general, operation of Unit B extraction well EW-02 at an average flowrate of approximately 40 gpm develops a capture zone along a portion of the western Site boundary, however, does not appear to capture groundwater in Unit B along the southwestern-most portion of the Site, in the vicinity of monitor well MW-31. The pilot GETS was expanded between March 2014 and August 2014 to replace the AOP treatment equipment and convert monitor well MW-29 into an extraction well. Operation of extraction well MW-29 will enhance hydraulic capture in the Unit B along the western property boundary to the northwest of extraction well EW-2 in this area. The pilot GETS was put back online in December 2014, operating using extraction wells EW-02 and MW-29 at nominal flow rates of 40 gpm and 10 gpm, respectively. Capture zone evaluations for extraction wells EW-2 and MW-29 will be incorporated into future reports.

The current pilot GETS extraction rate of approximately 50 gpm from the extraction wellfield is not the maximum extraction rate the wells will sustain, but rather, is limited to the treatment capacity of the pilot GETS, and the current maximum allowable flowrate for discharge of treated groundwater to the sewer pursuant to the Orange County Sanitation District sewer discharge permit. Therefore, the observed capture zone under pilot GETS operation is somewhat arbitrary in that it is not prescribed with a particular performance goal to be measured against, but can be useful for observing the effects of changing seasonal groundwater flow directions and gradients.

4.0 DISCUSSION

Perched zone water levels have remained relatively stable over the past several years (Figure 14). Water quality data obtained from the perched zone indicate that the perched zone remediation system that operated from about late 1998 to 2000 was effective at reducing concentrations of VOCs, particularly 1,1-DCE, in perched zone water (H+A, 2000). VOC concentrations in the perched zone have apparently stabilized after a long-term decline. 1,4-Dioxane concentrations remain relatively stable in perched zone water (Table 4).

Regional groundwater system water level data obtained in February 2015 indicate a continuation of typical seasonal variations superimposed on long-term trends. The water level declines observed between mid-2006 and December 2008 represent the most rapid overall decline observed during the period of monitoring, with water levels decreasing from historical highs to historical lows in all Site regional groundwater system monitor and extraction wells, by as much as 70 feet in wells completed in Unit B (Figures 3 through 8). Water level elevations in Site monitor wells then exhibited recovery to a near historical high level by May 2012, and since have been declining.

The following conclusions have been formulated regarding the regional groundwater system based on previous investigations and recent monitoring conducted at the Site. The operations formerly conducted at the Site have impacted two areas of the regional groundwater system.

The first area starts where the perched zone merges with the regional groundwater system near monitor well MW-16 (Figures 2 and 9) and appears to extend to the west/southwest in Unit B. The compounds of potential concern (COPCs) are limited to VOCs, principally 1,1-DCE and 1,4-dioxane.

- The following provides a general discussion of water quality near the location of where the perched zone merges with the regional groundwater system.
 - o Historically, the regional groundwater level at monitor well MW-16 has been and continues to be lower than the water level at the toe of the perched zone

in piezometer P-07, except for a brief period of historical high water levels in Site monitor wells in 2006 (Figures 5, 9, and 14).

- o VOC concentrations at monitor well MW-16 have been variable, and in February 2015, concentrations remained within the historical ranges for this well with the exception of TCE, which reached a historical high at a relatively low concentration of 7.1 ug/l (Tables 4 and 5).
- o VOC concentrations at extraction well EW-01, adjacent to and screened over a greater interval than monitor well MW-16, are variable, with the initial samples collected in June and September 2005 exhibiting similar concentrations of VOCs as detected in monitor well MW-16. Concentrations of 1,1-DCE in extraction well EW-01 were lower than those detected in monitor well MW-16 from December 2005 through September 2007. In December 2007, concentrations of all VOCs detected in extraction well EW-01 were equal to or higher than those detected in monitor well MW-16. The concentrations of 1,1-DCE and 1,4-dioxane detected in groundwater samples collected from extraction well EW-01 declined after the startup of the pilot GETS in June 2008, and have been variable since extraction well EW-01 was taken off-line from the pilot GETS and put on stand-by in November 2009.
- o VOC concentrations at extraction well MW-21, which is located adjacent to and screened deeper than monitor well MW-16 and extraction well EW-01, suggest that VOC concentrations are higher several tens of feet below the water table than at the water table in this vicinity. This may be a result of the greater effectiveness of the former perched zone remediation system near the water table, or it may represent remnant VOCs at depth in this slightly less transmissive or more isolated hydrostratigraphic zone. During the initial phase of the pilot GETS operations, from July 2008 through 2009, the concentration of 1,1-DCE declined in extraction well MW-21 from its historical high of 4,900 ug/l in June 2008 to its historical low of 200 ug/l in December 2009 (Table 4). The concentration of 1,4-dioxane also declined in extraction well MW-21 during the initial phase of the pilot GETS from 370 ug/l in June of 2008 to its historical low of 11 ug/l in December 2009 (Table 4). Since the conclusion of the pilot GETS operations at this well, concentrations of VOCs

and 1,4-dioxane have been variable in extraction well MW-21; in February 2015 1,1-DCE and 1,4-dioxane were detected at concentrations of 1,100 ug/l and 290 ug/l, respectively, within historical ranges.

- o 1,4-Dioxane was detected near the detection limit in two groundwater samples collected from monitor well MW-24, in March 2007 and December 2010. 1,4-Dioxane was not detected in the sample collected in February 2015. COPCs have not been otherwise detected in groundwater samples collected from this well. The March 2007 and December 2010 detections are considered anomalous. The general lack of COPC detections in monitor well MW-24, which is located adjacent to and screened approximately 100 feet deeper than extraction well MW-21, demonstrates that the vertical extent of COPCs in groundwater at the vicinity of these wells is defined.
- The following provides a general discussion of water quality within Unit B downgradient of the location where the perched zone merges with the regional groundwater system.
 - o In December 2007, the detections of VOCs and 1,4-dioxane at monitor well MW-26C represented the first confirmed historical detections of COPCs in this Unit B well (H+A, 2008a) (Figure 9). In monthly- and quarterly-monitoring groundwater samples collected from monitor well MW-26C during 2008, concentrations of 1,1-DCE and 1,4-dioxane exhibited a generally declining trend from the concentrations detected in December 2007 at this well. The rapid change in water level elevations in this well from historically high water level elevations in mid-2006 to historically low water level elevations observed in this well since December 2007, and the accompanying historically high concentrations of VOCs and 1,4-dioxane detected in groundwater samples collected from this well in December 2007, continue to suggest that Unit B is the primary transport zone.
 - o After COPCs were initially detected in monitor well MW-26C in December 2007, additional work has been conducted to further characterize the hydrogeology and water quality of the Unit B.
 - Monitor wells MW-27, MW-28, MW-29, MW-30A, and MW-30B were installed in 2008 to delineate the distribution of COPCs in

groundwater and confirm groundwater flow direction within the Unit B in the southwestern portion of the Site.

- Monitor wells MW-31, the MW-32 nest, and extraction well EW-02 were installed in 2009 to delineate the distribution of 1,1-DCE, TCE and 1,4-dioxane in Unit B on the southern portion of the Site and to the southwest of the Site, and to increase groundwater capture and accomplish greater remediation of groundwater within the primary transport zone (H+A, 2008b, 2009b, 2009c, and 2010d).
- In July 2010, monitor well MW-33 was installed to delineate the distribution of 1,1-DCE and 1,4-dioxane southwest of the Site (H+A, 2010d).
- In December 2010 through February 2011, the monitor well MW-34 cluster and MW-35 nest were installed to delineate the distribution of 1,1-DCE and 1,4-dioxane to the west and south of the Site, respectively (H+A, 2011b).
- In December 2011 through October 2012, additional monitor wells MW-36 and MW-37 were installed to further delineate the distribution of 1,1-DCE and 1,4-dioxane to the west of the Site (H+A, 2011c, 2012a, and 2012b).
- In June and July 2013, additional monitor wells MW-39 and MW-40 were installed to further delineate the distribution of 1,1-DCE and 1,4-dioxane to the west of and the southeastern portion of the Site, respectively, and monitor well MW-38 was installed west of the Site to help correlate hydrostratigraphic units and evaluate geologic structure in the area (H+A, 2013a and 2013e).
- In August 2014, monitor well MW-41 was installed to further delineate the distribution of 1,1-DCE and 1,4-dioxane in the Unit B to the west of the Site (H+A, 2014d).

1,1-DCE and/or 1,4-dioxane have been detected in groundwater samples collected from Unit B monitor wells MW-28, MW-29, MW-30A, MW-31, MW-32B, MW-33, MW-34B, MW-36, MW-41 and extraction well EW-02 since their construction (Table 4) (H+A, 2014a). 1,1-DCE and 1,4-dioxane have historically

not been detected in monitor wells MW-27, MW-35C MW-39 and MW-40, defining the edge of groundwater impacts in these areas within the primary transport zone.

Results from groundwater assessment and groundwater treatment pilot testing outlined in respective workplans have been summarized in the following reports:

- Work proposed in Addendum No. 2A of the AGAWP and Addendum No. 4A of the Groundwater Extraction and Treatment System Pilot Testing Corrective Measures Study Work Plan was completed and was summarized in the Well Construction and Groundwater Sampling Report Additional Groundwater Assessment Primary Transport Zone and Groundwater Extraction Treatment System Pilot Testing (H+A, 2009b, 2009c, and 2010d).
- The work outlined in Addendum No. 3 of the AGAWP was completed and was summarized in the Well Construction and Groundwater Sampling Report Additional Groundwater Assessment Primary Transport Zone and Groundwater Extraction Treatment System Pilot Testing (H+A, 2010c and 2011b).
- The work outlined in Addendum No. 4 of the AGAWP was completed and was summarized in the Well Construction and Groundwater Sampling Report Additional Groundwater Assessment Primary Transport Zone and Groundwater Extraction Treatment System Pilot Testing (H+A, 2011c and 2013c).
- The work outlined in Addendum No. 5 of the AGAWP was completed and was summarized in the Well Construction and Groundwater Sampling Report Additional Groundwater Assessment Primary Transport Zone and Groundwater Extraction Treatment System Pilot Testing (H+A, 2013a and 2013d).
- The work outlined in Addendum No. 6 of the AGAWP was completed and was summarized in the Well Construction and Groundwater Sampling Report Additional Groundwater Assessment Primary Transport Zone and Groundwater Extraction Treatment System Pilot Testing (H+A, 2013e and 2014d).

The second area of impact is located away from the perched zone and exhibits sporadic detections of TCE, 1,1-DCE, and TCFM in the vicinity of monitor well MW-15; and 1,1-DCE, benzene, TCE, cis-1,2-DCE, and low concentrations of other VOCs and 1,4-dioxane at monitor well MW-08. Samples collected from monitor well MW-30B, installed in November 2008, exhibit similar proportions of TCE, 1,1-DCE, and cis-1,2-DCE as samples collected from monitor well MW-08, also screened in Unit BC (Figures 18 and 28).

- The following provides a general discussion of water quality near monitor wells MW-15 and MW-08.
 - o Historically, VOC concentrations have generally remained near or below MCLs at monitor well MW-15. 1,1-DCE was detected in groundwater samples collected from monitor well MW-15 in February 2015 at a concentration of 5.5 ug/l (Table 4).
 - o Concentrations of VOCs detected in monitor well MW-08 prior to March 2004 were generally near or below the drinking water MCLs for the respective compounds (H+A, 2004c). More recently, concentrations of 1,1-DCE and TCE detected in samples collected from monitor well MW-08 have exceeded their respective MCLs (Table 4). In June 2006, the detected concentrations of 1,1-DCE, 1,1-DCA, PCE, and 1,4-dioxane in groundwater samples collected from monitor well MW-08 represented historical high concentrations for this well (Figure 28). In February 2015, the VOCs 1,1-DCE, cis-1,2-DCE, and TCE were detected at concentrations within their respective historical ranges for monitor well MW-08. The concentrations of 1,1-DCE and TCE remains at or above California and/or Federal MCLs; the concentrations of cis-1,2-DCE in recent sampling events have dropped below the California and/or Federal MCLs. 1,4-Dioxane was detected at a concentration of 1.1 ug/l in the groundwater sample collected from monitor well MW-08 in February 2015.
- The following provides a general discussion of water quality downgradient of monitor well MW-08.
 - o The VOCs detected at monitor well MW-30B, TCE, 1,1-DCE, and cis-1,2-DCE, are similar to the VOCs detected at monitor well MW-08. In

February 2015, the VOCs TCE, 1,1-DCE, toluene, and cis-1,2-DCE were detected in groundwater samples collected from monitor well MW-30B at concentrations of 20 ug/l, 3.2 ug/l, 0.66 ug/l, and 0.86 ug/l, respectively. Both monitor wells MW-08 and MW-30B are screened in Unit BC near the western portion of the Site. 1,4-Dioxane was not detected in the groundwater sample collected from monitor well MW-30B in February 2015. Monitor wells MW-08 and MW-30B are both completed hydrostratigraphically beneath Unit B; however, monitor well MW-30B is completed closer to Unit B and, based on vertical hydraulic gradients observed from water levels measured in the monitor wells completed below Unit B and those monitor wells completed within Unit B, it is expected that the compounds detected in groundwater collected from monitor well MW-30B will migrate stratigraphically upward and merge into Unit B groundwater in areas further downgradient. TCE has been detected in groundwater collected from Unit B monitor wells MW-31, MW-32B, and MW-33 near Malvern Avenue, which suggests that groundwater from the deeper zone is merging with that of Unit B.

5.0 STATUS OF CORRECTIVE MEASURE STUDY ACTIVITIES

Periodic groundwater monitoring and additional groundwater assessment was conducted to support a CMS for the Site under continuing direction from the DTSC. As part of the CMS, multiple addenda of the AGAWP have been implemented at the Site. Monitor wells have been installed to more fully delineate the distribution of VOCs, principally 1,1-DCE and 1,4-dioxane, in the Target Zone (H+A, 2003b, 2008b, 2010c, 2011c, 2013a, 2013e, and 2014d). Results of the additional groundwater assessments completed through 2014 indicate that groundwater assessment is sufficiently complete for the purposes of completing the CMS. Ongoing groundwater treatment pilot testing indicates the current AOP treatment process is capable of meeting expected future treatment goals and hydraulic groundwater containment is feasible.

An updated conceptual site model has been submitted to the DTSC (H+A, 2015). A CMS Report is being prepared to evaluate potential full-scale Groundwater Corrective Measures alternatives for the Site. The CMS Report is expected to be submitted to the DTSC for review in June 2015.

6.0 REFERENCES

- California Department of Water Resources (DWR), 1967. Progress Report on Groundwater Geology of the Coastal Plain of Orange County. July 1967.
- California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), 2003. Letter from A. Plaza to P. Brewer, Raytheon Systems Company, re Review of Additional Groundwater Assessment Workplan and Groundwater Monitoring Workplan and Sampling and Analysis Plan. May 20, 2003.
- _____, 2011. Email from W. Jeffers, DTSC, re: Conditional Approval of Addendum No. 1 to the Ground Water Monitoring Work Plan, Raytheon Fullerton, dated June 7, 2011.
- _____, 2013. Email from W. Jeffers, DTSC, re: GSU Comments – RAYTHEON SYSTEMS CO – 2012/2013 Annual Report, Raytheon Fullerton, dated July 22, 2013.
- Hargis + Associates, Inc. (H+A), 1998. RCRA Facility Investigation, Raytheon Systems Company (formerly Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. July 10, 1998.
- _____, 2000. Dual Phase Extraction System and Soil Vapor Extraction System Final Status Report, Raytheon Company, 1901 West Malvern Avenue, Fullerton, California. November 7, 2000.
- _____, 2002. Results of Groundwater Monitoring, April 2002, Raytheon Company (formerly Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. May 21, 2002.
- _____, 2003a. Corrective Measures Study Work Plan (Revision 1.0), Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. April 25, 2003.
- _____, 2003b. Additional Groundwater Assessment Work Plan (Revision 1.0), Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. April 25, 2003.
- _____, 2003c. Groundwater Monitoring Work Plan and Sampling and Analysis Plan (Revision 1.0), Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. April 25, 2003.
- _____, 2003d. Letter from C. Ross and S. Netto to W. Jeffers, DTSC, re: Addendum No. 1 to the Corrective Measures Study Work Plan (Revision 1.0), Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California, dated June 20, 2003.

- _____, 2004a. Additional Groundwater Assessment Work Plan Addendum No. 1, Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. March 23, 2004.
- _____, 2004b. Groundwater Treatment Pilot Testing Corrective Measures Work Plan (Revision 1.0), Addendum No.2, Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. April 20, 2004.
- _____, 2004c. Results of Groundwater Monitoring, March 2004, Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. May 20, 2004.
- _____, 2005a. Letter from C. Ross to W. Jeffers, DTSC, re: Addendum 3, Groundwater Treatment Pilot Testing, Corrective Measures Study Work Plan, Former Raytheon Company Site, 1901 West Malvern Avenue, Fullerton, California, dated January 18, 2005.
- _____, 2005b. Groundwater Extraction and Treatment Pilot Testing, Corrective Measures Study Work Plan, Addendum No. 4, Raytheon Company (former Hughes Aircraft Company) 1901 West Malvern Avenue, Fullerton, California. March 11, 2005.
- _____, 2005c. Deep Boring and Well Construction and Groundwater Sampling Report, Raytheon Company, 1901 West Malvern Avenue, Fullerton, California. March 30, 2005.
- _____, 2008a. Results of Groundwater Monitoring, December 2007, Raytheon Company (formerly Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. February 1, 2008.
- _____, 2008b. Additional Groundwater Assessment Work Plan Addendum No. 2, Raytheon Company (formerly Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. February 1, 2008.
- _____, 2009a. Additional Groundwater Assessment Primary Transport Zone (Target Zone) Well Construction and Groundwater Sample Report, Raytheon Company, 1901 West Malvern Avenue, Fullerton, California. March 26, 2009.
- _____, 2009b. Additional Groundwater Assessment Work Plan Addendum No. 2A, Raytheon Company, 1901 West Malvern Avenue, Fullerton, California. March 31, 2009.
- _____, 2009c. Groundwater Extraction and Treatment System Pilot Testing Corrective Measures Study Work Plan Addendum No. 4A, Raytheon Company, 1901 West Malvern Avenue, Fullerton, California. March 31, 2009.
- _____, 2010a. Letter from C. Ross, to W. Jeffers, DTSC, re: Summary of Off-Site Monitor Well MW-32 Construction and Testing and Plan to Install and Test Proposed Off-Site Monitor Well MW-33, Task 2 of Additional Groundwater Assessment Work Plan Addendum No. 2A, Raytheon Company, (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California, dated February 9, 2010.

- _____, 2010b. Technical Memorandum re: Summary of Hydraulic Testing and Preliminary Capture Zone Analysis. February 16, 2010.
- _____, 2010c. Additional Groundwater Assessment Work Plan Addendum No. 3. Raytheon Company, 1901 West Malvern Avenue, Fullerton, California. October 15, 2010.
- _____, 2010d. Well Construction And Groundwater Sampling Report Additional Groundwater Assessment Primary Transport Zone (Target Zone) And Groundwater Extraction Treatment System Pilot Testing, Raytheon Company (Former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. November 18, 2010.
- _____, 2011a. Letter to W. Jeffers, DTSC, re: Addendum No. 1 to the *Groundwater Monitoring Work Plan and Sampling and Analysis Plan (Revision 1.0)*, by Hargis + Associates, Inc., dated April 25, 2003, for the Raytheon Company, (Former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. February 11, 2011.
- _____, 2011b. Additional Groundwater Assessment Monitor Well Construction Report (MW-34 and MW-35), Raytheon Company, 1901 West Malvern Avenue, Fullerton, California. April 4, 2011.
- _____, 2011c. Additional Groundwater Assessment Work Plan Addendum No. 4. Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. April 13, 2011.
- _____, 2011d. Groundwater Treatment Bench and Pilot Testing Corrective Measures Study Workplan, Addendum No. 5, Raytheon Company, (Former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. May 6, 2011.
- _____, 2011e. Letter to W. Jeffers, DTSC, re: Amendment A, Addendum No. 1 to the *Groundwater Monitoring Work Plan and Sampling and Analysis Plan (Revision 1.0)*, by Hargis + Associates, Inc., dated April 25, 2003, for the Raytheon Company, (Former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. June 16, 2011.
- _____, 2012a. Letter from S. Netto to W. Jeffers, DTSC, re: Transmittal of Results from Initial and Confirmation Groundwater Sampling at New Off-Site Monitor Well MW-36 along Brea Creek in Buena Park, Former Raytheon Company (Formerly Hughes Aircraft Company) Site, 1901 West Malvern Avenue, Fullerton, California. March 2, 2012.
- _____, 2012b. E-mail to W. Jeffers, DTSC re: initial sample results from monitor well MW-37. November 29, 2012.
- _____, 2012c. Groundwater Extraction and Treatment System Alternative Technology Bench and Pilot Test Summary Report, Raytheon Company, (Former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. November 30, 2012.
- _____, 2013a. Additional Groundwater Assessment Work Plan No.5, Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. February 22, 2013.

- _____, 2013b. Groundwater Extraction and Treatment System Pilot Testing Corrective Measures Study Workplan Addendum No. 6, Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. February 27, 2013.
- _____, 2013c. Additional Groundwater Assessment and Monitor Well Construction Report (MW-36 and MW-37) Raytheon Company, 1901 W. Malvern Avenue, Fullerton, California. June 13, 2013
- _____, 2013d. Additional Groundwater Assessment and Monitor Well Construction Report (MW-38, MW-39 and MW-40) Raytheon Company, 1901 W. Malvern Avenue, Fullerton, California. October 4, 2013.
- _____, 2013e. Additional Groundwater Assessment Work Plan No.6, Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. December 19, 2013.
- _____, 2014a. Results of Groundwater Monitoring and Groundwater Extraction and Treatment Pilot Testing, 2013/2014 Annual Report, Raytheon Company (former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. May 14, 2013.
- _____, 2014b. Letter from C. Ross to W. Jeffers, DTSC, re: Data Submittal for Groundwater Monitoring and Groundwater Extraction and Treatment Pilot Testing, Second Quarter 2014, Raytheon Company (Former Hughes Aircraft Company Facility), 1901 West Malvern Avenue, Fullerton California. August 27, 2014.
- _____, 2014c. Letter from C. Ross to W. Jeffers, DTSC, re: Data Submittal for Groundwater Monitoring and Groundwater Extraction and Treatment Pilot Testing, Third Quarter 2014, Raytheon Company (Former Hughes Aircraft Company Facility), 1901 West Malvern Avenue, Fullerton California. October 28, 2014.
- _____, 2014d. Additional Groundwater Assessment and Monitor Well Construction Report (MW-41) Raytheon Company, 1901 W. Malvern Avenue, Fullerton, California. December 2, 2014.
- _____, 2014e. Letter from C. Ross to W. Jeffers, DTSC, re: Data Submittal for Groundwater Monitoring and Groundwater Extraction and Treatment Pilot Testing, Fourth Quarter 2014, Raytheon Company (Former Hughes Aircraft Company Facility), 1901 West Malvern Avenue, Fullerton, California. December 30, 2014.
- _____, 2015. Technical Memorandum from S. Netto, S. Prazen and C. Ross, H+A, to W. Jeffers, DTSC, re: Conceptual Site Model and Construction of Numerical Groundwater Flow Model, Corrective Measures Study, Raytheon Company (Former Hughes Aircraft Company Facility), 1901 West Malvern Avenue, Fullerton, California. February 10, 2015.

TABLE 1
GROUNDWATER MONITORING PROGRAM

WELL IDENTIFIER	HYDROGEOLOGIC ZONE	SAMPLED FEB 2015	SAMPLING FREQUENCY			
			QUARTERLY	SEMIANNUAL	ANNUAL	BIENNIAL
			FEB, MAY, AUG, NOV	FEBRUARY, AUGUST	FEBRUARY	FEB (EVEN YEARS)
P-07	Perched	X			VOCs; 1,4-Dioxane	
P-09	Perched	X			VOCs; 1,4-Dioxane	
MW-35A	Other					VOCs; 1,4-Dioxane
MW-17	A		PIEZOMETER - WATER LEVEL MEASUREMENT ONLY			
MW-18	A	X		VOCs; 1,4-Dioxane	VOCs; 1,4-Dioxane ^(a)	
MW-19	A					VOCs
MW-22	A					VOCs; 1,4-Dioxane
MW-23	A					VOCs
MW-34A	A	X		VOCs; 1,4-Dioxane		
MW-35B	A					VOCs; 1,4-Dioxane
MW-38	A	X	VOCs; 1,4-Dioxane			
MW-13	AB	X			VOCs; 1,4-Dioxane	
MW-15	AB	X		VOCs		
MW-26A	AB		PIEZOMETER - WATER LEVEL MEASUREMENT ONLY			
MW-26B	AB		PIEZOMETER - WATER LEVEL MEASUREMENT ONLY			
MW-32A	AB	X		VOCs; 1,4-Dioxane	VOCs; 1,4-Dioxane ^(a)	
EW-01	B	X	VOCs; 1,4-Dioxane			
EW-02*	B	X	VOCs; 1,4-Dioxane			
MW-16	B	X		VOCs; 1,4-Dioxane		
MW-26C	B		VOCs; 1,4-Dioxane			
MW-27	B	X			VOCs; 1,4-Dioxane	
MW-28	B	X	VOCs; 1,4-Dioxane			
MW-29*	B	X	VOCs; 1,4-Dioxane			
MW-30A	B	X	VOCs; 1,4-Dioxane			
MW-31	B	X	VOCs; 1,4-Dioxane			
MW-32B	B	X	VOCs; 1,4-Dioxane			
MW-33	B	X	VOCs; 1,4-Dioxane			
MW-34B	B	X	VOCs; 1,4-Dioxane			
MW-35C	B	X	VOCs; 1,4-Dioxane	VOCs; 1,4-Dioxane ^(a)		
MW-36	B	X	VOCs; 1,4-Dioxane			
MW-39	B	X	VOCs; 1,4-Dioxane			
MW-40	B	X	VOCs; 1,4-Dioxane			
MW-41	B	X	VOCs; 1,4-Dioxane			
MW-21	BC	X	VOCs; 1,4-Dioxane			
MW-08	BC	X	VOCs; 1,4-Dioxane			
MW-30B	BC	X	VOCs; 1,4-Dioxane			
MW-34C	BC	X		VOCs; 1,4-Dioxane		
MW-09	C	X		VOCs; 1,4-Dioxane	VOCs; 1,4-Dioxane ^(a)	
MW-24	C	X			VOCs; 1,4-Dioxane	
MW-32C	C	X		VOCs; 1,4-Dioxane	VOCs; 1,4-Dioxane ^(a)	
MW-06	D	X			VOCs	
MW-20	D	X		VOCs; 1,4-Dioxane		
MW-25	D		WATER LEVEL MEASUREMENT ONLY			
MW-37	D	X	VOCs; 1,4-Dioxane			

FOOTNOTES

(a)= Reduced sampling schedule proposed in the 2013/1014 Annual Report (H+A, 2014)

* = Extraction well monitored monthly as part of the Groundwater Extraction and Treatment System Pilot Testing

VOCs = Volatile organic compounds

TABLE 2
WELL CONSTRUCTION SUMMARY

Well Identifier	Date Installed	Current Land Surface Elevation (feet msl)	Current Reference Point Elevation (feet msl)	Total Depth of Borehole (feet bls)	Perforated Interval (feet bls)	Screen Slot Size (inches)	Borehole Diameter (inches)	Casing Diameter (inches) (a)	Filter Pack Interval (feet bls)	Filter Pack Sand Size	Grout Filter/ Intermediate Seal Interval (feet bls) (b)	Annular Seal Interval (feet bls) (c)
<u>Regional Groundwater System Monitor Wells, Extraction Wells and Piezometers</u>												
MW-06	1/16/1997	184.96	184.70	190.9	149.6 - 189.6	0.010	8.5	2	145.4 - 190.9	#2/16	139.4 - 145.4 (d)	0 - 139.4
MW-08	1/22/1997	156.60	155.91	167.2	126.1 - 166.1	0.010	8.5	2	120.7 - 167.2	#2/16	115.7 - 120.7	0 - 115.7
MW-09	3/21/1997	180.48	180.10	194.2	152.2 - 192.2	0.010	8.5	2	146.2 - 194.2	#2/16	141.2 - 146.2	0 - 141.2
MW-13	4/16/1997	142.44	141.84	159.5	120.6 - 159.6	0.010	8.5	2	114.6 - 159.6	#2/16	109.6 - 114.6	0 - 109.6
MW-15	5/18/1998	145.54	144.95	174.7	120.8 - 170.8	0.010	8.5	2	115.8 - 174.8	#2/16	112.8 - 115.8	0 - 112.8
MW-16	11/20/1999	142.98	142.40	179.5	148.5 - 178.5	0.010	11.0	4	144.5 - 179.5	#2/16	134.5 - 144.5 (e)	0 - 134.5
MW-17	5/31/2000	142.70	142.70	203.6	173.1 - 193.1 (i)	0.020	10.0	4	159.7 - 193.1	#2/16	156.2 - 159.7 193.1 - 203.7 (j)	0 - 156.2
MW-18	5/24/2000	142.39	142.32	195.6	164.1 - 194.1	0.020	10.0	4	158.9 - 194.5	#2/16	154.2 - 158.9	0 - 154.2
MW-19	5/26/2000	142.72	142.06	205.5	184.9 - 204.9	0.020	10.0	4	177.0 - 205.3	#2/16	171.5 - 177.0	0 - 171.5
MW-20	6/26/2003	184.36	184.19	200.0	158.6 - 198.2	0.020	11.0	4 (f)	158.0 - 200.0	#2/12	151.0 - 158.0 (g)	0 - 151.1 (h)
MW-21	7/17/2003	143.34	141.18	238.3	212.1 - 232.1	0.010	8.0	4 (k)	205.0 - 234.5	#2/16	202.0 - 205.0 234.5 - 238 (j)	0 - 202.0 (h)
MW-22	8/13/2003	139.39	138.65	245.0	217.4 - 237.4	0.020	8.0	4 (l)	215.0 - 238.0	#2/12	208.0 - 215.0 (m)	0 - 208.0 (h)
MW-23	8/18/2003	137.75	137.33	235.6	215.2 - 235.2	0.020	8.0	4 (n)	209.4 - 235.6	#2/12	203.5 - 209.4 (m)	0 - 203.5 (h)
MW-24	9/15/2004	143.05	142.83	338.0	310.3 - 330.3	0.030	10.6	4 (o)	306 - 330	#3	301 - 306 (p)	0 - 301 (h)
MW-25	9/10/2004	142.97	142.64	805	449.4 - 479.8	0.010	8.5 (q)	2 (r)	429 - 485	#2/16	418 - 429	0 - 418 (h)
MW-26A (s)	10/1/2004	137.64	137.04	805	279 - 309	0.020	12.25 (q)	2 (t)	274 - 315	#2/12	266 - 274	0 - 266 (h)
MW-26B (s)	10/1/2004	137.64	137.05	805	339 - 379	0.020	12.25 (q)	2 (u)	334 - 387	#2/12	266 - 274	0 - 266 (h)
MW-26C (s)	10/1/2004	137.64	137.22	805	459 - 499	0.020	12.25 (q)	2 (v)	435 - 499	#2/12	387 - 435 (w)	0 - 266 (h)
MW-27	4/22/2008	137.60	137.16	550	475 - 505.2 (cc)	0.030	11.25 (q)	4 (z)	468 - 520	#3	457.5 - 468	0 - 457.5 (h)
MW-28	5/5/2008	141.38	140.77	425	335 - 375	0.040	12.25 (q)	4 (z)	325.4 - 377	#8	318 - 325.4	0 - 318 (h)
MW-29	8/15/2008	148.83	139.81	265.7	200 - 240	0.020	10.0 (aa)	4 (z)	185 - 246	#2/12	176 - 185	0 - 176 (h)
MW-30A(s)	11/26/2008	130.20	129.44	635 (j)	524-564	0.020	14.25	3 (y)	515.9-570.5	#2/12	495.5-515.9	0-495.5 (bb)
MW-30B(s)	11/26/2008	130.20	129.39	635 (j)	596-616	0.020	14.25	3 (y)	586.8-625	#2/12	586.8-570.5	0-495.5 (bb)
MW-31	10/2/2009	120.31	119.60	1,100 (jj)	946-996	0.020	13	6(kk)	922-1,006	#2/12	904-922	0-904
MW-32A(s)	12/10/2009	93.35	92.88	1,153 (gg)	890-905	0.020	18.5	4(dd)	880-910	#2/12	832-880	0-832
MW-32B(s)	12/10/2009	93.35	92.89	1,153 (gg)	969-999	0.020	18.5	4(dd)	960-1,004.5	#2/12	910-960	0-832
MW-32C(s)	12/10/2009	93.35	92.88	1,153 (gg)	1,070-1,090	0.020	18.5	4(dd)	1,054-1,100	#2/12	1,004.5-1,054	0-832
MW-33	7/2/2010	83.80	83.19	1,080 (hh)	980-1,020	0.020	11	4(dd)	970-1,025	#2/12	924-970	0-924 (ii)
MW-34A	2/3/2011	154.00	153.25	290	220 - 280	0.020	12.25	4(dd)	211 - 290	#2/12	175 - 211	0 - 175
MW-34B	2/1/2011	153.90	153.11	540	486 - 536	0.020	12.25	4(dd)	475 - 540	#2/12	449 - 475	0 - 449
MW-34C	1/19/2011	154.10	153.29	709 (ll)	556 - 576	0.020	12.25	4(dd)	551 - 582	#2/12	530 - 551	0 - 530
MW-35A	12/20/2010	94.30	93.57	1,101	420 - 470	0.020	18	4(dd)	401 - 482	#2/12	376 - 401	0 - 376
MW-35B	12/20/2010	94.30	93.56	1,101	745 - 805	0.020	18	4(dd)	725 - 816	#2/12	482 - 725	0 - 376
MW-35C	12/20/2010	94.30	93.55	1101 (ll)	990 - 1,040	0.020	12.25	4(dd)	980 - 1,048	#2/12	816 - 980	0 - 376
MW-36	1/3/2012	87.19	86.65	1030 (mm)	934 - 954 974 - 994	0.020	12.25	4(dd)	914 - 1,003	#2/12	95 -853 (oo), 853 - 914 (pp)	0 - 95 (qq)
MW-37	10/17/2012	156.02	155.60	916	770-820	0.020	12.25	4(dd)	755-834	#2/12	229-724 (rr) 724-755 (pp)	0-229 (ss)
MW-38	7/29/2013	155.70	154.90	203	150-200	0.020	10	4(z)	140-203	#2/12	120-140 (pp)	0-120 (qq)
MW-39	7/25/2013	84.71	84.25	1,080 (ll)	982-1,012	0.020	12.25	4(dd)	974-1,017	#2/12	156 -917 (rr) 917- 974 (pp)	0-156 (qq)
MW-40	7/2/2013	124.09	123.40	1040 (ll)	930-970	0.030	12.25	6(dd)	916-975	#3	175 -880 (rr) 880- 916 (pp)	0-175 (qq)
MW-41	8/22/2014	156.02	155.60	436.3 (mm)	385-425	0.020	12.25	4(dd)	373.5-427	#2/16	165-357 (rr) 357- 373.5 (pp)	0-165 (qq)
EW-01	5/16/2005	143.30	141.07	195	138.1-188.1	0.020	7.6	4 (x)	134.1-195	#2/12	129-134.1 (m)	0-129 (h)
EW-02	10/20/2009	136.04	132.97	473 (ee)	410-460	0.030	17.0	8 (ff)	400-465	#3	384-400	0-384
<u>Perched Zone Piezometers</u>												
P-07	6/6/1997	142.7	142.31	116.8	107.7 - 117.7	0.010	8.5	2	104.7 - 117.7	#2/16	101.7 - 104.7	0 - 101.7
P-09	6/30/2003	184.3	183.86	130.0	109.6 - 129.6	0.010	11.0	4	114.0 - 130.0	#2/16	101.0 - 108.0 (g)	0 - 101.0 (h)

TABLE 2

WELL CONSTRUCTION SUMMARY

NOTE: Refer to page 2 of this table for footnotes.

FOOTNOTES

msl = Mean sea level, City of Fullerton datum

bls = Below current land surface (October 2004)

(a) = Schedule 40 polyvinyl chloride (PVC) screen and casing, unless otherwise indicated

(b) = Medium bentonite chip seal, unless otherwise indicated

(c) = Bentonite grout annular seal unless otherwise indicated, completed at surface with vault set in concrete

(d) = No. 60 silica sand

(e) = Includes 2.0 feet of No. 60 silica sand placed above filter pack

(f) = Schedule 80 polyvinyl chloride screen and casing

(g) = Includes 2.5 to 3.0 feet of No. 60 silica sand placed above bentonite chip seal

(h) = Cement/bentonite grout, Type I/II Portland, less than 5% bentonite

(i) = Well plug, approximately 0.5-foot length, set at bottom of perforated interval

(j) = Bottom of borehole backfilled with bentonite chips

(k) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 122.0 - 212.1 feet bls; Schedule 40 mild steel casing 0 - 122.0 feet bls

(l) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 112.4 - 217.4 feet bls; Schedule 40 mild steel casing 0 - 112.4 feet bls

(m) = 1/4-inch coated bentonite pellets

(n) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 110.1 - 215.2 feet bls; Schedule 40 mild steel casing 0 - 110.1 feet bls

(o) = Mild steel wire wrap screen and Schedule 40 mild steel well casing

(p) = Includes 1 to 2 feet of #2/16 sand placed above bentonite chip seal

(q) = Below filter pack, diameter of the original pilot borehole is 5 to 6.25 inches to total depth of boring. Lower borehole backfilled with cement/bentonite grout, Type I/II Portland, less than 5% bentonite

(r) = Stainless steel wire wrap screen, Schedule 10 stainless steel casing 429.4 - 449.4 feet bls, Schedule 80 polyvinylchloride casing 429.0 - 429.4 feet bls, Schedule 40 mild steel casing 0 - 429.0 feet bls

(s) = Nested wells MW-26A, MW-26B, MW-26C, and MW-32A, MW-32B, MW-32C are constructed with three separate well casings in a single borehole; nested well MW-30A and MW-30B is constructed with two separate casings in a single borehole.

(t) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 259 - 279 feet bls and 0 - 19 feet bls; Schedule 40 mild steel casing 19 - 259 feet bls

(u) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 319 - 339 feet bls; Schedule 40 mild steel casing 0 - 319 feet bls

(v) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 439 - 459 feet bls; Schedule 40 mild steel casing 0 - 439 feet bls

(w) = #8 granular bentonite with exception of heavy mud/formational caving filling annular interval from 417 to 428 feet bls

(x) = Stainless steel wire wrap screen; Schedule 10 stainless steel casing 118.1-138.1 feet bls; Schedule 40 mild steel casing 0-118.1 feet bls

(y) = Schedule 40 Stainless steel endcaps; Schedule 10 stainless steel casing; Stainless steel wire wrap screen

(z) = Schedule 80 PVC blank and screen casing

(aa) = Below filter pack, diameter of the original pilot borehole is 8 inches to total depth of boring. Lower borehole backfilled with cement/bentonite grout, Type I/II Portland, less than 5% bentonite

(bb) = Neat cement

(cc) = Depth of screen interval adjusted to account for loss at bottom of casing due to breakage in casing wall. Original casing (515 ft bls) was sealed at 505.2 ft bls

(dd) = Schedule 40 Stainless steel endcaps; Schedule 80 polyvinyl chloride casing; Stainless steel wire wrap screen

(ee) = Pilot borehole drilled to a total depth of 493 feet bls and backfilled with 5% bentonite-cement grout seal to 465 feet bls

(ff) = Schedule 40 Stainless steel endcaps; Schedule 40 stainless steel casing; Stainless steel wire wrap screen; 2.5-foot stainless steel sump

(gg) = Pilot borehole drilled to a total depth of 1,153 feet bls and backfilled with 5% bentonite-cement grout seal to 1,100 feet bls

(hh) = Pilot borehole drilled to a total depth of 1,080 feet bls and backfilled with 5% bentonite-cement grout seal to 1,025 feet bls

(ii) = Annular seal interval is composed of cement grout with approximately 5% bentonite from 720 to 924 feet bls and bentonite grout from near land surface to 720 feet bls

(jj) = Pilot borehole drilled to a total depth of 1,100 feet bls and backfilled with 5% bentonite-cement grout seal to 1,006 feet bls

(kk) = Schedule 40 Stainless steel endcaps; Schedule 40 stainless steel casing; Stainless steel wire wrap screen; 5-foot stainless steel sump

(ll) = Bottom of borehole backfilled with approximately 5% bentonite-cement grout

(mm) = Bottom of borehole backfilled with bentonite pellets

(oo) = High solids bentonite grout

(pp) = Bentonite chips

(qq) = Portland cement with approximately 5% bentonite

(rr) = Medium bentonite chips and #2/12 Sand; 1:1 dry volume mix

(ss) = Portland cement with approximately 2.5% bentonite



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells</u>					
MW-06	01/27/97	174.27	144.62	29.65	
	02/18/97	174.27	142.26	32.01	
	02/26/97	174.27	141.97	32.30	
	03/06/97	174.27	141.52	32.75	
	03/12/97	174.27	141.24	33.03	
	03/28/97	174.27	140.90	33.37	
	05/19/97	174.27	142.85	31.42	
	10/16/97	174.27	158.05	16.22	
	05/13/98	174.27	143.00	31.27	
	05/27/98	174.27	143.49	30.78	
	06/11/98	174.27	144.43	29.84	
	07/14/98	174.27	147.46	26.81	
	11/11/98	174.27	155.60	18.67	
	11/18/98	174.27	154.82	19.45	SVE, DPE-H2O
	11/18/98	174.27	154.96	19.31	SVE, DPE-H2O
	11/19/98	174.27	154.82	19.45	SVE, DPE-H2O
	11/20/98	174.27	154.17	20.10	SVE, DPE, DPE-H2O
	11/23/98	174.27	154.43	19.84	SVE, DPE-H2O
	11/23/98	174.27	154.40	19.87	SVE, DPE-H2O
	11/24/98	174.27	154.44	19.83	SVE, DPE-H2O
	12/07/98	174.27	153.08	21.19	SVE, DPE-H2O
	12/10/98	174.27	152.56	21.71	SVE, DPE, DPE-H2O
	12/11/98	174.27	152.14	22.13	SVE, DPE, DPE-H2O
	12/14/98	174.27	151.82	22.45	SVE, DPE-H2O
	12/14/98	174.27	151.72	22.55	SVE, DPE-H2O
	12/16/98	174.27	151.73	22.54	SVE, DPE, DPE-H2O
	01/06/99	174.27	150.40	23.87	SVE, DPE, DPE-H2O
	01/20/99	174.27	149.92	24.35	
	01/25/99	174.27	149.58	24.69	DPE, DPE-H2O
	01/27/99	174.27	149.71	24.56	SVE, DPE, DPE-H2O
	02/01/99	174.27	149.37	24.90	DPE, DPE-H2O
	02/10/99	174.27	148.87	25.40	SVE, DPE, DPE-H2O
	02/23/99	174.27	148.30	25.97	
	03/01/99	174.27	148.33	25.94	DPE
	03/09/99	174.27	148.39	25.88	SVE, DPE, DPE-H2O
	03/10/99	174.27	148.35	25.92	SVE, DPE, DPE-H2O
	04/07/99	174.27	147.82	26.45	SVE, DPE-H2O
	04/23/99	174.27	147.00	27.27	SVE, DPE-H2O
	06/16/99	174.27	150.62	23.65	SVE, DPE-H2O
	06/25/99	174.27	151.91	22.36	SVE, DPE-H2O
	08/30/99	174.27	164.08	10.19	DPE-H2O
	09/27/99	174.27	166.78	7.49	
	11/02/99	174.27	169.28	4.99	
	12/06/99	174.27	158.87	15.40	
	02/07/00	174.27	164.21	10.06	
	03/08/00	174.27	160.82	13.45	
	05/08/01	174.23	155.05	19.18	
	06/26/01	174.23	161.99	12.24	
	10/24/01	188.33	DRY	--	
	01/15/02	188.33	183.41	4.92	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-06	03/19/02	188.33	177.86	10.47	
(Cont'd)	04/15/02	188.33	176.83	11.50	
	11/18/02	188.33	182.81	5.52	
	01/17/03	188.33	173.82	14.51	
	05/08/03	188.33	174.07	14.26	
	06/09/03	188.33	175.45	12.88	
	09/15/03	184.70	177.09	7.61	
	10/14/03	184.70	178.31	6.39	
	12/15/03	184.70	176.24	8.46	
	03/29/04	184.70	166.60	18.10	
	06/14/04	184.70	169.41	15.29	
	09/20/04	184.70	179.48	5.22	
	11/10/04	184.70	180.65	4.05	
	12/06/04	184.70	178.73	5.97	
	03/14/05	184.70	166.99	17.71	
	06/20/05	184.70	162.59	22.11	
	09/20/05	184.70	165.10	19.60	
	12/17/05	184.70	155.90	28.80	
	03/20/06	184.70	147.23	37.47	
	05/18/06	184.70	143.25	41.45	
	06/19/06	184.70	145.48	39.22	
	09/25/06	184.70	154.15	30.55	
	10/05/06	184.70	154.47	30.23	
	12/12/06	184.70	152.28	32.42	
	03/12/07	184.70	149.91	34.79	
	06/18/07	184.70	156.19	28.51	
	09/24/07	184.70	173.50	11.20	
	12/10/07	184.70	183.15	1.55	
	03/17/08	184.70	182.08	2.62	
	06/23/08	184.70	182.92	1.78	
	09/22/08	184.70	186.55	-1.85	
	12/15/08	184.70	188.45	-3.75	
	12/19/08	184.70	188.47	-3.77	
	03/16/09	184.70	187.58	-2.88	
	03/18/09	184.70	187.51	-2.81	
	06/22/09	184.70	186.43	-1.73	
	06/26/09	184.70	186.46	-1.76	
	08/31/09	184.70	187.31	-2.61	
	09/10/09	184.70	187.42	-2.72	
	12/07/09	184.70	187.82	-3.12	
	03/01/10	184.70	184.83	-0.13	
	03/22/10	184.70	182.35	2.35	
	06/07/10	184.70	178.27	6.43	
	09/07/10	184.70	180.20	4.50	
	12/06/10	184.70	178.75	5.95	
	03/24/11	184.70	UTM	--	
	06/20/11	184.70	164.20	20.50	
	08/01/11	184.70	160.31	24.39	
	10/31/11	184.70	153.73	30.97	
	02/06/12	184.70	150.51	34.19	

TABLE 3
GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
Regional Groundwater System Monitor and Extraction Wells (continued)					
MW-06	05/07/12	184.70	149.37	35.33	
(Cont'd)	08/06/12	184.70	154.85	29.85	
	11/05/12	184.70	161.82	22.88	
	02/04/13	184.70	157.85	26.85	
	05/13/13	184.70	158.14	26.56	
	08/12/13	184.70	167.29	17.41	
	11/11/13	184.70	175.48	9.22	
	02/03/14	184.70	174.60	10.10	
	05/19/14	184.70	177.08	7.62	
	08/18/14	184.70	184.60	0.10	
	11/04/14	184.70	186.64	-1.94	
	02/02/15	184.70	183.05	1.65	
MW-08	01/27/97	169.53	150.66	18.87	
	02/18/97	169.53	149.78	19.75	
	02/26/97	169.53	149.60	19.93	
	03/06/97	169.53	149.62	19.91	
	03/12/97	169.53	149.55	19.98	
	03/28/97	169.53	149.46	20.07	
	05/19/97	169.53	149.33	20.20	
	05/13/98	169.53	149.54	19.99	
	05/27/98	169.53	149.40	20.13	
	06/11/98	169.53	149.30	20.23	
	08/30/99	169.53	155.13	14.40	
	12/06/99	169.53	159.36	10.17	
	02/07/00	169.53	159.68	9.85	
	03/08/00	169.53	159.23	10.30	
	05/09/01	164.79	157.50	7.29	
	06/26/01	164.79	157.79	7.00	
	10/24/01	164.79	161.80	2.99	
	01/15/02	164.79	162.42	2.37	
	03/19/02	164.79	161.09	3.70	
	04/15/02	158.04	153.98	4.06	
	11/18/02	158.04	156.47	1.57	
	01/17/03	158.04	152.46	5.58	
	05/08/03	158.04	149.90	8.14	
	06/09/03	158.04	150.27	7.77	
	09/15/03	NA	UTM	--	
	10/14/03	NA	UTM	--	
	12/15/03	155.91	150.19	5.72	
	03/29/04	155.91	145.40	10.51	
	06/14/04	155.91	143.68	12.23	
	09/20/04	155.91	145.45	10.46	
	10/19/04	155.91	145.74	10.17	
	11/10/04	155.91	146.04	9.87	
	12/06/04	155.91	145.71	10.20	
	03/14/05	155.91	142.32	13.59	
	06/20/05	155.91	139.61	16.30	
	09/19/05	155.91	139.77	16.14	
	12/17/05	155.91	135.10	20.81	

DPE-H2O
3.4 inches water in vacuum



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-08	03/20/06	155.91	127.02	28.89	
(Cont'd)	05/18/06	155.91	121.53	34.38	
	06/19/06	155.91	121.31	34.60	
	09/25/06	155.91	124.38	31.53	
	10/05/06	155.91	124.56	31.35	
	12/12/06	155.91	123.83	32.08	
	03/12/07	155.91	127.24	28.67	
	06/18/07	155.91	132.36	23.55	
	09/24/07	155.91	137.96	17.95	
	12/10/07	155.91	142.65	13.26	
	03/17/08	155.91	145.83	10.08	
	06/23/08	155.91	149.00	6.91	
	09/22/08	155.91	153.53	2.38	
	12/15/08	155.91	157.03	-1.12	
	12/19/08	155.91	157.39	-1.48	
	03/16/09	155.91	157.87	-1.96	
	03/18/09	155.91	157.92	-2.01	
	06/22/09	155.91	157.63	-1.72	
	06/26/09	155.91	157.70	-1.79	
	08/31/09	155.91	159.37	-3.46	
	09/10/09	155.91	159.45	-3.54	
	10/28/09	155.91	159.75	-3.84	
	10/30/09	155.91	159.73	-3.82	
	11/04/09	155.91	159.84	-3.93	
	12/07/09	155.91	159.17	-3.26	
	03/01/10	155.91	157.11	-1.20	
	03/03/10	155.91	157.08	-1.17	
	06/07/10	155.91	152.97	2.94	
	09/07/10	155.91	151.91	4.00	
	12/06/10	155.91	152.22	3.69	
	03/24/11	155.91	146.19	9.72	
	03/25/11	155.91	145.55	10.36	
	06/20/11	155.91	141.72	14.19	
	08/01/11	155.91	139.94	15.97	
	08/05/11	155.91	139.80	16.11	
	10/31/11	155.91	136.88	19.03	
	02/06/12	155.91	136.04	19.87	
	05/07/12	155.91	127.33	28.58	
	08/06/12	155.91	130.71	25.20	
	11/05/12	155.91	136.67	19.24	
	02/04/13	155.91	135.88	20.03	
	05/13/13	155.91	134.32	21.59	
	08/12/13	155.91	137.80	18.11	
	11/11/13	155.91	141.02	14.89	
	02/03/14	155.91	140.72	15.19	
	05/19/14	155.91	141.78	14.13	
	08/18/14	155.91	146.40	9.51	
	11/04/14	155.91	150.19	5.72	
	02/02/15	155.91	149.21	6.70	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-09	03/25/97	166.42	137.58	28.84	
	03/28/97	166.42	137.34	29.08	
	05/19/97	166.42	138.31	28.11	
	05/13/98	166.42	139.18	27.24	
	05/27/98	166.42	139.57	26.85	
	06/11/98	166.42	140.03	26.39	
	07/14/98	166.42	142.56	23.86	
	11/11/98	166.42	150.98	15.44	
	11/18/98	166.42	150.72	15.70	SVE, DPE-H2O
	11/18/98	166.42	150.57	15.85	SVE, DPE-H2O
	11/19/98	166.42	150.63	15.79	SVE, DPE-H2O
	11/20/98	166.42	150.64	15.78	SVE, DPE, DPE-H2O
	11/23/98	166.42	150.47	15.95	SVE, DPE-H2O
	11/23/98	166.42	150.43	15.99	SVE, DPE-H2O
	11/24/98	166.42	150.45	15.97	SVE, DPE-H2O
	12/07/98	166.42	149.98	16.44	SVE, DPE-H2O
	12/10/98	166.42	149.67	16.75	SVE, DPE, DPE-H2O
	12/11/98	166.42	149.68	16.74	SVE, DPE, DPE-H2O
	12/14/98	166.42	149.18	17.24	SVE, DPE-H2O
	12/16/98	166.42	148.97	17.45	SVE, DPE, DPE-H2O
	01/06/99	166.42	147.76	18.66	SVE, DPE, DPE-H2O
	01/20/99	166.42	147.18	19.24	
	01/25/99	166.42	146.80	19.62	DPE, DPE-H2O
	01/27/99	166.42	146.98	19.44	SVE, DPE, DPE-H2O
	02/01/99	166.42	146.85	19.57	SVE, DPE, DPE-H2O
	02/10/99	166.42	146.43	19.99	SVE, DPE, DPE-H2O
	02/23/99	166.42	145.78	20.64	
	03/01/99	166.42	145.68	20.74	DPE
	03/09/99	166.42	145.73	20.69	SVE, DPE, DPE-H2O
	03/10/99	166.42	145.70	20.72	SVE, DPE, DPE-H2O
	03/15/99	166.42	145.57	20.85	SVE, DPE, DPE-H2O
	04/07/99	166.42	145.35	21.07	SVE, DPE-H2O
	04/23/99	166.42	144.61	21.81	SVE, DPE-H2O
	06/16/99	166.42	147.11	19.31	SVE, DPE-H2O
	06/25/99	166.42	148.10	18.32	SVE, DPE-H2O
	08/30/99	166.42	156.90	9.52	DPE-H2O
	09/27/99	166.42	159.80	6.62	
	11/02/99	166.42	163.08	3.34	
	11/09/99	166.42	163.51	2.91	
	11/10/99	166.42	163.44	2.98	
	11/23/99	166.42	163.92	2.50	
	12/06/99	166.42	163.59	2.83	
	12/07/99	166.42	163.41	3.01	
	02/07/00	166.42	160.51	5.91	
	06/29/00	166.42	UTM	--	
	10/24/01	182.15	184.16	-2.01	
	01/15/02	182.15	182.12	0.03	
	03/19/02	182.15	177.57	4.58	
	04/15/02	182.15	176.29	5.86	
	11/18/02	182.28	181.80	0.48	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-09	01/17/03	182.28	174.44	7.84	
(Cont'd)	05/08/03	182.28	172.56	9.72	
	06/09/03	182.28	173.57	8.71	
	09/15/03	182.28	178.03	4.25	
	09/24/03	182.28	178.46	3.82	
	10/14/03	182.28	179.10	3.18	
	12/15/03	182.28	178.00	4.28	
	03/29/04	180.10	166.90	13.20	
	06/14/04	180.10	168.36	11.74	
	09/20/04	180.10	176.29	3.81	
	10/19/04	180.10	178.00	2.10	
	11/10/04	180.10	177.75	2.35	
	12/06/04	180.10	176.64	3.46	
	03/14/05	180.10	167.00	13.10	
	06/20/05	180.10	162.13	17.97	
	09/19/05	180.10	164.58	15.52	
	12/17/05	180.10	156.29	23.81	
	03/20/06	180.10	146.90	33.20	
	05/18/06	180.10	142.77	37.33	
	06/19/06	180.10	144.64	35.46	
	09/25/06	180.10	151.96	28.14	
	10/05/06	180.10	152.33	27.77	
	12/19/06	180.10	150.40	29.70	
	03/12/07	180.10	148.81	31.29	
	06/18/07	180.10	UTM	--	
	09/24/07	180.10	171.33	8.77	
	12/10/07	180.10	179.73	0.37	
	03/17/08	180.10	180.71	-0.61	
	06/27/08	180.10	182.20	-2.10	
	09/22/08	180.10	187.53	-7.43	
	12/15/08	180.10	DRY	--	Dry @ 190.2 ft bls
	03/16/09	180.10	DRY	--	Dry @ 190.0 ft bls
	06/23/09	180.10	187.69	-7.59	
	08/31/09	180.10	189.34	-9.24	
	12/07/09	180.10	189.35	-9.25	
	03/02/10	180.10	186.09	-5.99	
	03/03/10	180.10	186.08	-5.98	
	06/07/10	180.10	180.11	-0.01	
	09/07/10	180.10	180.51	-0.41	
	12/06/10	180.10	179.83	0.27	
	03/24/11	180.10	170.04	10.06	
	06/20/11	180.10	165.04	15.06	
	08/01/11	180.10	161.84	18.26	
	11/01/11	180.10	155.13	24.97	
	02/06/12	180.10	150.19	29.91	
	05/07/12	180.10	147.54	32.56	
	08/06/12	180.10	152.77	27.33	
	11/05/12	180.10	160.00	20.10	
	02/04/13	180.10	156.77	23.33	
	05/13/13	180.10	155.68	24.42	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-09	08/14/13	180.10	165.03	15.07	
(Cont'd)	11/11/13	180.10	UTM	--	
	02/05/14	180.10	171.71	8.39	
	05/19/14	180.10	173.30	6.80	
	08/20/14	180.10	181.10	-1.00	
	11/04/14	180.10	180.10	0.00	
	02/02/15	180.10	182.06	-1.96	
MW-13	05/19/97	162.92	149.06	13.86	
	05/13/98	162.92	150.56	12.36	
	05/27/98	162.92	149.67	13.25	
	06/11/98	162.92	149.63	13.29	
	11/02/99	162.92	166.86	-3.94	
	11/09/99	162.92	167.25	-4.33	
	11/10/99	162.92	167.36	-4.44	
	11/11/99	162.92	167.36	-4.44	
	11/23/99	162.92	167.92	-5.00	
	12/06/99	162.92	168.35	-5.43	
	12/07/99	162.92	168.38	-5.46	
	02/07/00	162.92	167.88	-4.96	
	06/21/00	162.55	164.42	-1.87	
	07/05/00	162.55	165.68	-3.13	
	01/16/01	142.51	151.58	-9.07	
	03/19/01	142.51	149.31	-6.80	
	03/26/01	142.51	148.72	-6.21	
	04/03/01	142.51	148.30	-5.79	
	04/10/01	142.51	148.00	-5.49	
	04/17/01	142.51	147.90	-5.39	
	04/26/01	142.51	147.50	-4.99	
	05/07/01	142.51	147.14	-4.63	
	06/26/01	142.51	147.61	-5.10	
	09/10/01	142.19	151.32	-9.13	
	10/22/01	142.19	153.62	-11.43	
	10/24/01	142.19	153.68	-11.49	
	01/15/02	142.19	153.78	-11.59	
	01/15/02	142.19	153.76	-11.57	
	03/19/02	142.19	148.86	-6.67	
	04/15/02	142.19	148.29	-6.10	
	10/31/02	142.19	154.39	-12.20	
	10/31/02	142.19	154.38	-12.19	
	11/07/02	142.19	153.97	-11.78	
	11/07/02	142.19	153.95	-11.76	
	11/18/02	142.19	153.20	-11.01	
	01/17/03	142.19	142.13	0.06	
	05/08/03	142.19	138.90	3.29	
	06/09/03	142.19	140.81	1.38	
	09/15/03	142.19	146.63	-4.44	
	10/14/03	142.19	147.73	-5.54	
	12/02/03	142.19	145.21	-3.02	
	12/15/03	142.19	143.91	-1.72	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-13	03/29/04	142.19	132.94	9.25	
(Cont'd)	06/14/04	142.19	132.76	9.43	
	09/20/04	142.19	138.99	3.20	
	10/19/04	142.19	140.31	1.88	
	11/10/04	142.19	140.06	2.13	
	12/06/04	142.19	139.08	3.11	
	03/14/05	142.19	127.95	14.24	
	06/20/05	142.19	129.49	12.70	
	09/19/05	142.19	132.44	9.75	
	12/17/05	142.19	116.10	26.09	
	03/20/06	142.19	112.58	29.61	
	06/19/06	142.19	108.37	33.82	
	09/25/06	142.19	115.66	26.53	
	12/12/06	142.19	112.59	29.60	
	03/12/07	142.19	117.07	25.12	
	06/18/07	142.19	126.05	16.14	
	09/24/07	142.19	137.98	4.21	
	12/10/07	142.19	146.51	-4.32	
	03/17/08	142.19	147.13	-4.94	
	06/23/08	142.19	149.38	-7.19	
	09/22/08	142.19	153.18	-10.99	
	12/15/08	142.19	156.91	-14.72	
	03/16/09	142.19	155.95	-13.76	
	06/22/09	142.19	152.05	-9.86	
	08/31/09	142.19	154.42	-12.23	
	12/07/09	142.19	153.32	-11.13	
	03/01/10	142.19	148.41	-6.22	
	06/07/10	142.19	141.51	0.68	
	09/07/10	142.19	142.67	-0.48	
	12/06/10	142.19	144.25	-2.06	
	03/24/11	142.19	132.38	9.81	
	06/20/11	142.19	125.39	16.80	
	08/01/11	142.19	127.15	15.04	
	10/31/11	142.19	124.07	18.12	
	02/06/12	142.19	117.20	24.99	
	05/07/12	142.19	110.72	31.47	
	08/06/12	141.84	122.72	19.12	
	11/05/12	141.84	126.32	15.52	
	02/04/13	141.84	122.23	19.61	
	05/13/13	141.84	122.65	19.19	
	08/12/13	141.84	131.58	10.26	
	11/11/13	141.84	138.36	3.48	
	02/03/14	141.84	132.86	8.98	
	05/19/14	141.84	135.69	6.15	
	08/18/14	141.84	146.71	-4.87	
	11/04/14	141.84	150.59	-8.75	
	02/02/15	141.84	144.98	-3.14	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-15	05/27/98	159.20	153.83	5.37	
	06/11/98	159.20	153.16	6.04	
	11/09/99	159.20	165.47	-6.27	
	12/06/99	159.20	166.56	-7.36	
	02/07/00	159.20	167.68	-8.48	
	06/21/00	159.2	164.57	-5.37	
	07/05/00	159.2	164.94	-5.74	
	01/16/01	154.35	166.25	-11.90	
	03/19/01	154.35	165.42	-11.07	
	05/08/01	154.35	164.16	-9.81	
	06/26/01	154.35	164.09	-9.74	
	09/10/01	154.35	166.43	-12.08	
	10/24/01	154.35	168.27	-13.92	
	01/15/02	154.35	169.03	-14.68	
	03/19/02	154.35	167.33	-12.98	
	04/15/02	146.14	158.58	-12.44	
	11/18/02	146.14	160.67	-14.53	
	01/17/03	146.14	155.87	-9.73	
	05/08/03	NA	UTM	--	
	06/09/03	144.99	149.92	-4.93	
	09/15/03	144.99	152.72	-7.73	
	09/23/03	144.99	152.99	-8.00	
	10/14/03	144.99	153.64	-8.65	
	12/15/03	144.99	152.50	-7.51	
	03/29/04	144.99	146.10	-1.11	
	06/14/04	144.99	142.94	2.05	
	09/20/04	144.99	143.78	1.21	
	10/19/04	144.99	143.74	1.25	
	11/10/04	144.99	144.01	0.98	
	12/06/04	144.99	143.95	1.04	
	03/14/05	144.99	140.02	4.97	
	06/20/05	144.99	137.35	7.64	
	09/19/05	144.99	137.57	7.42	
	12/17/05	144.99	134.72	10.27	
	03/20/06	144.99	124.34	20.65	
	05/18/06	144.99	117.13	27.86	
	06/19/06	144.99	115.44	29.55	
	09/25/06	144.99	116.80	28.19	
	10/05/06	144.99	117.09	27.90	
	12/12/06	144.99	117.21	27.78	
	03/12/07	144.99	118.76	26.23	
	06/18/07	144.99	123.16	21.83	
	09/24/07	144.99	132.92	12.07	
	12/10/07	144.99	141.07	3.92	
	03/17/08	144.99	149.72	-4.73	
	06/23/08	144.99	154.59	-9.60	
	09/22/08	144.99	160.27	-15.28	
	12/15/08	144.92	164.12	-19.20	
	12/19/08	144.92	164.61	-19.69	
	03/16/09	144.92	164.01	-19.09	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-15	03/18/09	144.92	165.33	-20.41	
(Cont'd)	06/22/09	144.92	161.11	-16.19	
	06/26/09	144.92	161.17	-16.25	
	08/31/09	144.92	162.89	-17.97	
	09/10/09	144.92	163.05	-18.13	
	10/28/09	144.92	162.60	-17.68	
	10/30/09	144.92	162.66	-17.74	
	11/04/09	144.92	162.38	-17.46	
	12/07/09	144.92	161.33	-16.41	
	03/01/10	144.92	159.25	-14.33	
	03/03/10	144.92	159.08	-14.16	
	03/09/10	144.92	154.33	-9.41	
	06/07/10	144.92	154.43	-9.51	
	09/07/10	144.92	152.71	-7.79	
	12/06/10	144.92	153.09	-8.17	
	03/24/11	144.92	147.05	-2.13	
	03/25/11	144.92	146.74	-1.82	
	06/20/11	144.92	142.83	2.09	
	08/01/11	144.92	141.00	3.92	
	08/05/11	144.92	140.61	4.31	
	10/31/11	144.92	138.25	6.67	
	02/06/12	144.92	133.38	11.54	
	05/07/12	144.92	125.83	19.09	
	08/06/12	144.95	124.70	20.25	
	11/05/12	144.95	130.04	14.91	
	02/04/13	144.95	130.76	14.19	
	05/13/13	144.95	128.03	16.92	
	08/12/13	144.95	134.30	10.65	
	11/11/13	144.95	140.15	4.80	
	02/03/14	144.95	140.93	4.02	
	05/19/14	144.95	141.94	3.01	
	08/18/14	144.95	147.95	-3.00	
	11/04/14	144.95	153.31	-8.36	
	02/02/15	144.95	153.08	-8.13	
MW-16	11/09/99	164.08	170.71	-6.63	
	11/09/99	164.08	170.84	-6.76	
	11/10/99	164.08	171.00	-6.92	
	11/10/99	164.08	174.01	-9.93	
	11/22/99	164.08	163.94	0.14	
	11/23/99	164.08	164.17	-0.09	
	12/06/99	164.08	164.36	-0.28	
	12/07/99	164.08	164.32	-0.24	
	12/07/99	164.08	172.50	-8.42	
	02/07/00	164.08	162.75	1.33	
	02/18/00	164.08	162.36	1.72	
	06/21/00	164.08	160.66	3.42	
	07/05/00	164.08	161.62	2.46	
	07/06/00	164.08	161.62	2.46	
	01/16/01	146.18	148.73	-2.55	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-16	03/19/01	146.18	146.47	-0.29	
(Cont'd)	03/26/01	146.18	146.07	0.11	
	04/03/01	146.18	145.80	0.38	
	04/10/01	146.18	145.50	0.68	
	04/17/01	146.18	145.20	0.98	
	04/26/01	146.18	145.50	0.68	
	05/10/01	146.18	144.70	1.48	
	06/26/01	146.18	149.09	-2.91	
	10/24/01	146.26	151.72	-5.46	
	01/15/02	142.73	148.36	-5.63	
	03/19/02	142.73	145.53	-2.80	
	04/15/02	142.73	145.24	-2.51	
	10/31/02	142.73	149.95	-7.22	
	11/18/02	142.73	147.11	-4.38	
	01/17/03	142.73	133.43	9.30	
	01/17/03	142.73	133.44	9.29	
	05/08/03	142.73	142.24	0.49	
	06/09/03	142.73	145.96	-3.23	
	09/15/03	142.73	150.25	-7.52	
	09/19/03	142.73	150.32	-7.59	
	09/24/03	142.73	150.37	-7.64	
	09/25/03	142.73	150.26	-7.53	
	10/14/03	142.73	149.51	-6.78	
	12/02/03	142.73	143.81	-1.08	
	12/03/03	142.73	143.52	-0.79	
	12/15/03	142.73	141.50	1.23	
	03/29/04	142.73	129.17	13.56	
	04/29/04	142.73	128.89	13.84	
	06/14/04	142.73	134.28	8.45	
	09/20/04	142.73	146.47	-3.74	
	10/19/04	142.73	146.25	-3.52	
	11/10/04	142.73	144.36	-1.63	
	12/06/04	142.73	141.31	1.42	
	03/14/05	142.73	127.49	15.24	
	06/20/05	142.73	132.93	9.80	
	07/13/05	142.73	130.66	12.07	
	09/19/05	142.73	140.08	2.65	
	09/21/05	142.73	140.27	2.46	
	12/17/05	142.73	119.28	23.45	
	12/19/05	142.73	118.95	23.78	
	03/20/06	142.73	112.82	29.91	
	06/19/06	142.73	108.54	34.19	
	09/25/06	142.73	118.38	24.35	
	10/05/06	142.73	118.60	24.13	
	12/11/06	142.73	116.26	26.47	
	03/12/07	142.73	122.91	19.82	
	06/18/07	142.73	123.16	19.57	
	09/24/07	142.73	153.25	-10.52	
	12/10/07	142.73	150.10	-7.37	
	12/20/07	142.73	150.49	-7.76	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-16	03/17/08	142.73	150.44	-7.71	
(Cont'd)	06/23/08	142.73	152.46	-9.73	
	07/11/08	142.73	153.82	-11.09	
	07/14/08	142.73	153.73	-11.00	
	07/15/08	142.73	153.81	-11.08	
	07/30/08	142.73	155.17	-12.44	
	09/22/08	142.73	159.91	-17.18	
	10/22/08	142.73	162.00	-19.27	
	12/15/08	142.73	164.63	-21.90	
	12/19/08	142.73	164.07	-21.34	
	02/25/09	142.73	159.44	-16.71	
	03/16/09	142.73	159.56	-16.83	
	03/18/09	142.73	160.35	-17.62	
	04/29/09	142.73	154.63	-11.90	
	04/29/09	142.73	154.68	-11.95	
	05/27/09	142.73	156.56	-13.83	
	06/22/09	142.73	157.90	-15.17	
	06/26/09	142.73	158.59	-15.86	
	08/31/09	142.73	160.61	-17.88	
	09/10/09	142.73	161.06	-18.33	
	10/23/09	142.73	158.83	-16.10	
	10/30/09	142.73	157.98	-15.25	
	11/04/09	142.73	157.58	-14.85	
	12/07/09	142.73	156.03	-13.30	
	01/19/10	142.73	154.70	-11.97	
	03/01/10	142.73	149.08	-6.35	
	03/03/10	142.73	148.71	-5.98	
	06/07/10	142.73	144.31	-1.58	
	09/07/10	142.73	151.63	-8.90	
	12/06/10	142.73	150.27	-7.54	
	03/24/11	142.73	134.07	8.66	
	06/20/11	142.73	129.99	12.74	
	08/01/11	142.73	130.92	11.81	
	08/05/11	142.73	131.23	11.50	
	10/31/11	142.73	128.83	13.90	
	02/06/12	142.73	121.44	21.29	
	05/07/12	142.73	115.07	27.66	
	08/06/12	142.40	127.03	15.37	
	11/05/12	142.40	137.88	4.52	
	12/10/12	142.40	134.83	7.57	
	02/04/13	142.40	130.18	12.22	
	05/13/13	142.40	128.52	13.88	
	08/12/13	142.40	147.17	-4.77	
	11/11/13	142.40	148.83	-6.43	
	02/03/14	142.40	140.85	1.55	
	05/19/14	142.40	146.88	-4.48	
	08/18/14	142.40	155.65	-13.25	
	11/04/14	142.40	155.20	-12.80	
	02/02/15	142.40	147.12	-4.72	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-17	06/21/00	158.77	163.65	-4.88	
	07/05/00	158.77	166.30	-7.53	
	01/16/01	145.28	154.14	-8.86	
	03/19/01	145.28	148.20	-2.92	
	03/26/01	145.28	147.96	-2.68	
	04/03/01	145.28	148.00	-2.72	
	04/10/01	145.28	147.80	-2.52	
	04/17/01	145.28	147.70	-2.42	
	04/26/01	145.28	147.90	-2.62	
	05/08/01	145.28	148.34	-3.06	
	06/26/01	145.28	152.88	-7.60	
	09/10/01	142.49	159.11	-16.62	
	10/22/01	142.49	162.45	-19.96	
	10/24/01	142.49	162.52	-20.03	
	01/15/02	142.49	150.30	-7.81	
	03/19/02	142.49	146.31	-3.82	
	04/15/02	142.49	146.92	-4.43	
	11/18/02	142.49	145.21	-2.72	
	05/08/03	142.49	142.77	-0.28	
	06/09/03	142.49	146.12	-3.63	
	09/15/03	142.66	151.61	-8.95	
	10/14/03	142.66	152.31	-9.65	
	12/02/03	142.66	141.10	1.56	
	12/15/03	142.66	138.77	3.89	
	03/29/04	142.66	128.10	14.56	
	06/14/04	142.66	135.02	7.64	
	09/20/04	142.66	145.34	-2.68	
	10/19/04	142.66	144.94	-2.28	
	11/10/04	142.66	142.71	-0.05	
	12/06/04	142.66	138.67	3.99	
	03/14/05	142.66	125.49	17.17	
	06/20/05	142.66	132.60	10.06	
	09/19/05	142.66	137.49	5.17	
	12/17/05	142.66	116.68	25.98	
	03/20/06	142.66	113.20	29.46	
	06/19/06	142.66	108.97	33.69	
	09/25/06	142.66	116.20	26.46	
	12/12/06	142.66	113.17	29.49	
	03/12/07	142.66	117.46	25.20	
	06/18/07	142.66	129.43	13.23	
	09/24/07	142.66	149.29	-6.63	
	12/10/07	142.66	154.89	-12.23	
	03/17/08	142.66	149.19	-6.53	
	06/23/08	142.66	154.35	-11.69	
	09/22/08	142.66	162.79	-20.13	
	12/15/08	142.66	162.89	-20.23	
	03/16/09	142.66	151.39	-8.73	
	06/22/09	142.66	152.09	-9.43	
	08/31/09	142.66	156.35	-13.69	
	12/07/09	142.66	150.10	-7.44	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-17	03/01/10	142.66	145.46	-2.80	
(Cont'd)	06/07/10	142.66	139.06	3.60	
	09/08/10	142.66	145.75	-3.09	
	12/06/10	142.66	143.89	-1.23	
	03/24/11	142.66	128.87	13.79	
	06/20/11	142.66	125.84	16.82	
	08/01/11	142.66	127.11	15.55	
	10/31/11	142.66	124.34	18.32	
	02/06/12	142.66	117.62	25.04	
	05/07/12	142.66	111.26	31.40	
	08/06/12	142.70	123.10	19.60	
	11/05/12	142.70	129.72	12.98	
	02/04/13	142.70	122.55	20.15	
	05/13/13	142.70	122.90	19.80	
	08/12/13	142.70	139.22	3.48	
	11/11/13	142.70	141.18	1.52	
	02/03/14	142.70	132.71	9.99	
	05/19/14	142.70	142.29	0.41	
	08/18/14	142.70	155.51	-12.81	
	11/04/14	142.70	156.45	-13.75	
	02/02/15	142.70	140.40	2.30	
MW-18	06/15/00	161.51	166.05	-4.54	
	06/21/00	161.51	167.18	-5.67	
	07/05/00	161.51	169.55	-8.04	
	01/16/01	144.03	153.83	-9.80	
	03/19/01	144.03	147.97	-3.94	
	03/26/01	144.03	147.72	-3.69	
	04/03/01	144.03	147.70	-3.67	
	04/10/01	144.03	147.40	-3.37	
	04/17/01	144.03	147.30	-3.27	
	04/26/01	144.03	147.60	-3.57	
	05/07/01	144.03	148.07	-4.04	
	06/26/01	144.03	152.56	-8.53	
	09/10/01	142.11	159.63	-17.52	
	10/22/01	142.11	162.83	-20.72	
	10/24/01	142.11	162.88	-20.77	
	01/15/02	142.11	150.89	-8.78	
	01/15/02	142.11	150.84	-8.73	
	03/19/02	142.11	146.87	-4.76	
	04/15/02	142.11	147.46	-5.35	
	10/31/02	142.11	151.28	-9.17	
	10/31/02	142.11	151.24	-9.13	
	11/07/02	142.11	149.20	-7.09	
	11/07/02	142.11	149.17	-7.06	
	11/18/02	142.11	145.66	-3.55	
	01/17/03	142.11	131.07	11.04	
	05/08/03	142.11	143.19	-1.08	
	06/09/03	142.11	146.59	-4.48	
	09/15/03	142.11	151.93	-9.82	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-18	10/14/03	142.11	152.61	-10.50	
(Cont'd)	12/02/03	142.11	141.26	0.85	
	12/03/03	142.11	141.04	1.07	
	12/15/03	142.11	138.95	3.16	
	03/29/04	142.11	128.16	13.95	
	04/29/04	142.11	128.60	13.51	
	06/14/04	142.11	135.03	7.08	
	09/20/04	142.11	145.41	-3.30	
	10/19/04	142.11	145.00	-2.89	
	11/10/04	142.11	142.82	-0.71	
	12/06/04	142.11	138.22	3.89	
	03/14/05	142.11	125.47	16.64	
	06/20/05	142.11	131.58	10.53	
	07/13/05	142.11	128.64	13.47	
	09/19/05	142.11	137.61	4.50	
	09/21/05	142.11	137.79	4.32	
	12/17/05	142.11	116.61	25.50	
	02/24/06	142.11	108.75	33.36	
	03/20/06	142.11	112.98	29.13	
	05/18/06	142.11	106.02	36.09	
	06/19/06	142.11	108.73	33.38	
	09/25/06	142.11	116.04	26.07	
	12/12/06	142.11	112.97	29.14	
	03/12/07	142.11	117.39	24.72	
	06/18/07	142.11	129.43	12.68	
	09/24/07	142.11	149.48	-7.37	
	12/10/07	142.11	155.01	-12.90	
	03/17/08	142.11	149.46	-7.35	
	06/23/08	142.11	154.58	-12.47	
	09/22/08	142.11	162.96	-20.85	
	12/15/08	142.11	163.14	-21.03	
	03/16/09	142.11	151.76	-9.65	
	06/22/09	142.11	152.37	-10.26	
	08/31/09	142.11	156.67	-14.56	
	12/07/09	142.11	150.40	-8.29	
	03/01/10	142.11	145.68	-3.57	
	06/07/10	142.11	139.22	2.89	
	09/07/10	142.11	145.91	-3.80	
	12/06/10	142.11	144.09	-1.98	
	03/24/11	142.11	128.91	13.20	
	06/20/11	142.11	125.82	16.29	
	08/01/11	142.11	127.20	14.91	
	10/31/11	142.11	124.44	17.67	
	02/06/12	142.11	117.59	24.52	
	05/07/12	142.11	111.11	31.00	
	08/06/12	142.32	123.10	19.22	
	11/05/12	142.32	129.95	12.37	
	02/04/13	142.32	122.75	19.57	
	05/13/13	142.32	123.11	19.21	
	08/12/13	142.32	139.59	2.73	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-18	11/11/13	142.32	141.50	0.82	
(Cont'd)	02/03/14	142.32	132.93	9.39	
	05/19/14	142.32	142.72	-0.40	
	08/18/14	142.32	155.01	-12.69	
	11/04/14	142.32	156.98	-14.66	
	02/02/15	142.32	140.77	1.55	
MW-19	06/14/00	156.43	160.16	-3.73	
	06/21/00	156.43	161.53	-5.10	
	07/05/00	156.43	164.21	-7.78	
	01/16/01	145.28	UTM	--	
	03/19/01	145.28	UTM	--	
	05/08/01	145.28	148.50	-3.22	
	06/26/01	145.28	153.11	-7.83	
	09/10/01	142.55	159.50	-16.95	
	10/22/01	142.55	162.99	-20.44	
	10/24/01	142.55	162.98	-20.43	
	01/15/02	142.55	150.68	-8.13	
	03/19/02	142.55	146.60	-4.05	
	04/15/02	142.55	147.21	-4.66	
	11/18/02	142.55	145.68	-3.13	
	05/08/03	142.55	143.03	-0.48	
	06/09/03	142.55	146.39	-3.84	
	09/15/03	142.55	151.75	-9.20	
	09/19/03	142.55	151.85	-9.30	
	10/14/03	142.55	152.45	-9.90	
	12/02/03	142.55	141.40	1.15	
	12/15/03	142.72	139.07	3.65	
	03/29/04	142.72	128.10	14.62	
	06/14/04	142.72	135.09	7.63	
	09/20/04	142.72	145.55	-2.83	
	10/19/04	142.72	145.20	-2.48	
	11/10/04	142.72	142.94	-0.22	
	12/06/04	142.72	138.87	3.85	
	03/14/05	142.72	125.50	17.22	
	06/20/05	142.72	131.63	11.09	
	09/19/05	142.72	137.49	5.23	
	12/17/05	142.72	116.59	26.13	
	03/20/06	142.72	112.71	30.01	
	06/19/06	142.72	108.71	34.01	
	09/25/06	142.72	116.10	26.62	
	12/12/06	142.72	113.00	29.72	
	03/12/07	142.72	117.20	25.52	
	06/18/07	142.72	129.32	13.40	
	09/24/07	142.72	149.46	-6.74	
	12/10/07	142.72	155.15	-12.43	
	03/17/08	142.72	149.35	-6.63	
	06/23/08	142.72	154.47	-11.75	
	09/22/08	142.72	163.03	-20.31	
	12/15/08	142.72	163.18	-20.46	

TABLE 3
GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
Regional Groundwater System Monitor and Extraction Wells (continued)					
MW-19	03/16/09	142.72	151.68	-8.96	
(Cont'd)	06/22/09	142.72	152.41	-9.69	
	08/31/09	142.72	156.69	-13.97	
	12/07/09	142.72	150.42	-7.70	
	03/01/10	142.72	145.73	-3.01	
	06/07/10	142.72	139.20	3.52	
	09/08/10	142.72	145.97	-3.25	
	12/06/10	142.72	144.11	-1.39	
	03/24/11	142.72	128.79	13.93	
	06/20/11	142.72	125.82	16.90	
	08/01/11	142.72	127.06	15.66	
	10/31/11	142.72	124.19	18.53	
	02/06/12	142.72	117.41	25.31	
	05/07/12	142.72	111.03	31.69	
	08/06/12	142.06	122.99	19.07	
	11/05/12	142.06	129.73	12.33	
	02/04/13	142.06	122.49	19.57	
	05/13/13	142.06	122.76	19.30	
	08/12/13	142.06	139.28	2.78	
	11/11/13	142.06	141.43	0.63	
	02/03/14	142.06	132.91	9.15	
	05/19/14	142.06	142.39	-0.33	
	08/18/14	142.06	154.73	-12.67	
	11/04/14	142.06	156.81	-14.75	
	02/02/15	142.06	140.66	1.40	
MW-20	06/30/03	184.19	168.22	15.97	
	09/15/03	184.19	171.58	12.61	
	09/23/03	184.19	171.95	12.24	
	10/08/03	184.19	172.43	11.76	
	10/14/03	184.19	172.83	11.36	
	12/15/03	184.19	172.34	11.85	
	03/29/04	184.19	163.81	20.38	
	06/14/04	184.19	165.21	18.98	
	09/20/04	184.19	174.15	10.04	
	11/10/04	184.19	176.60	7.59	
	12/06/04	184.19	175.49	8.70	
	03/14/05	184.19	165.05	19.14	
	06/20/05	184.19	158.60	25.59	
	09/19/05	184.19	160.38	23.81	
	12/17/05	184.19	153.77	30.42	
	03/20/06	184.19	144.52	39.67	
	06/19/06	184.19	142.00	42.19	
	09/25/06	184.19	149.33	34.86	
	12/12/06	184.19	148.77	35.42	
	03/12/07	184.19	146.04	38.15	
	06/18/07	184.19	150.00	34.19	
	09/24/07	184.19	166.46	17.73	
	12/10/07	184.19	176.76	7.43	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-20	03/17/08	184.19	177.00	7.19	
(Con't)	06/23/08	184.19	176.53	7.66	
	09/22/08	184.19	182.60	1.59	
	12/15/08	184.19	185.69	-1.50	
	03/16/09	184.19	184.62	-0.43	
	06/22/09	184.19	182.07	2.12	
	08/31/09	184.19	183.50	0.69	
	12/07/09	184.19	184.31	-0.12	
	03/01/10	184.19	180.87	3.32	
	06/07/10	184.19	174.32	9.87	
	09/07/10	184.19	175.17	9.02	
	12/06/10	184.19	174.53	9.66	
	03/24/11	184.19	165.49	18.70	
	06/20/11	184.19	160.68	23.51	
	08/01/11	184.19	156.84	27.35	
	10/31/11	184.19	149.75	34.44	
	02/06/12	184.19	145.82	38.37	
	05/07/12	184.19	144.24	39.95	
	08/06/12	184.19	148.35	35.84	
	11/05/12	184.19	155.69	28.50	
	02/04/13	184.19	153.17	31.02	
	05/13/13	184.19	152.17	32.02	
	08/12/13	184.19	160.23	23.96	
	11/11/13	184.19	169.35	14.84	
	02/03/14	184.19	168.83	15.36	
	05/19/14	184.19	170.06	14.13	
	08/18/14	184.19	177.61	6.58	
	11/04/14	184.19	182.39	1.80	
	02/02/15	184.19	178.53	5.66	
MW-21	09/15/03	142.68	146.34	-3.66	
	09/19/03	142.68	146.53	-3.85	
	09/23/03	142.68	146.75	-4.07	
	09/25/03	142.68	147.05	-4.37	
	10/08/03	142.68	147.31	-4.63	
	10/14/03	142.68	147.72	-5.04	
	12/02/03	142.68	142.95	-0.27	
	12/03/03	142.68	142.65	0.03	
	12/15/03	142.68	141.34	1.34	
	03/29/04	142.68	130.83	11.85	
	04/29/04	142.68	129.48	13.20	
	06/14/04	142.68	131.21	11.47	
	09/20/04	142.68	138.15	4.53	
	10/19/04	142.68	138.75	3.93	
	11/10/04	142.68	138.82	3.86	
	12/06/04	142.68	137.64	5.04	
	03/14/05	142.68	128.64	14.04	
	06/20/05	142.68	127.83	14.85	
	07/13/05	142.68	126.82	15.86	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-21	09/19/05	142.68	131.31	11.37	
(Cont'd)	09/21/05	142.68	131.51	11.17	
	12/17/05	142.68	120.26	22.42	
	12/19/05	142.68	120.13	22.55	
	03/20/06	142.68	113.24	29.44	
	06/19/06	142.68	107.60	35.08	
	09/25/06	142.68	111.36	31.32	
	10/05/06	142.68	111.45	31.23	
	12/11/06	142.68	110.57	32.11	
	03/12/07	142.68	114.18	28.50	
	06/18/07	142.68	120.04	22.64	
	09/24/07	142.68	135.85	6.83	
	12/10/07	142.68	146.37	-3.69	
	01/21/08	142.68	148.51	-5.83	
	01/21/08	140.30	148.51	-8.2	
	03/17/08	140.30	146.90	-6.6	Pilot GETS
	05/27/08	141.23	148.71	-7.48	
	06/23/08	141.23	150.40	-9.17	
	07/09/08	141.18	160.02	-18.84	Pilot GETS
	07/11/08	141.18	153.31	-12.13	Pilot GETS
	07/14/08	141.18	152.84	-11.66	Pilot GETS
	07/15/08	141.18	161.98	-20.8	Pilot GETS
	07/30/08	141.18	162.93	-21.75	Pilot GETS
	08/14/08	141.18	165.94	-24.76	
	08/25/08	141.18	167.47	-26.29	
	09/22/08	141.18	170.65	-29.47	
	10/22/08	141.18	172.35	-31.17	
	12/15/08	141.18	168.21	-27.03	Pilot GETS
	12/19/08	141.18	166.50	-25.32	Pilot GETS
	01/07/09	141.18	161.36	-20.18	Pilot GETS
	02/25/09	141.18	165.74	-24.56	
	03/16/09	141.18	166.33	-25.15	Pilot GETS
	03/18/09	141.18	164.52	-23.34	Pilot GETS
	04/29/09	141.18	156.91	-15.73	Pilot GETS
	04/29/09	141.18	162.95	-21.77	Pilot GETS
	05/27/09	141.18	162.71	-21.53	Pilot GETS
	06/22/09	141.18	163.25	-22.07	Pilot GETS
	06/26/09	141.18	163.49	-22.31	Pilot GETS
	06/29/09	141.18	163.93	-22.75	Pilot GETS
	07/22/09	141.18	166.47	-25.29	Pilot GETS
	08/14/09	141.18	170.24	-29.06	Pilot GETS
	08/31/09	141.18	166.80	-25.62	Pilot GETS
	09/10/09	141.18	168.29	-27.11	Pilot GETS
	09/11/09	141.18	167.13	-25.95	
	10/08/09	141.18	166.65	-25.47	
	10/23/09	141.18	155.98	-14.80	
	10/30/09	141.18	154.90	-13.72	
	11/04/09	141.18	154.08	-12.90	
	12/07/09	141.18	150.92	-9.74	
	12/09/09	141.18	155.00	-13.82	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-21	03/01/10	141.18	144.78	-3.60	
(Cont'd)	03/05/10	141.18	156.41	-15.23	
	06/07/10	141.18	137.88	3.30	
	09/07/10	141.18	139.87	1.31	
	12/06/10	141.18	141.05	0.13	
	03/24/11	141.18	129.59	11.59	
	06/20/11	141.18	124.57	16.61	
	08/01/11	141.18	123.72	17.46	
	08/05/11	141.18	123.64	17.54	
	10/14/11	141.18	120.69	20.49	Pilot GETS
	10/31/11	141.18	120.89	20.29	Pilot GETS
	12/08/11	141.18	131.77	9.41	Pilot GETS
	01/05/12	141.18	133.06	8.12	Pilot GETS
	01/06/12	141.18	133.19	7.99	Pilot GETS
	01/25/12	141.18	132.89	8.29	Pilot GETS
	02/06/12	141.18	132.30	8.88	Pilot GETS
	02/08/12	141.18	132.93	8.25	Pilot GETS
	03/09/12	141.18	131.41	9.77	
	04/02/12	141.18	114.08	27.10	
	05/07/12	141.18	111.08	30.10	
	06/26/12	141.18	111.62	29.56	
	08/06/12	141.18	115.74	25.44	
	11/05/12	141.18	122.76	18.42	
	02/04/13	141.18	120.81	20.37	
	05/13/13	141.18	119.39	21.79	
	08/12/13	141.18	129.76	11.42	
	11/11/13	141.18	136.24	4.94	
	02/03/14	141.18	132.53	8.65	
	05/19/14	141.18	135.55	5.63	
	08/18/14	141.18	145.70	-4.52	
	11/04/14	141.18	150.91	-9.73	
	02/02/15	141.18	142.81	-1.63	
MW-22	09/15/03	138.65	147.40	-8.75	
	09/15/03	138.65	148.23	-9.58	
	09/19/03	138.65	147.65	-9.00	
	09/23/03	138.65	147.77	-9.12	
	09/25/03	138.65	147.92	-9.27	
	10/08/03	138.65	148.08	-9.43	
	10/14/03	138.65	148.24	-9.59	
	12/02/03	138.65	136.80	1.85	
	12/03/03	138.65	136.56	2.09	
	12/15/03	138.65	134.47	4.18	
	03/29/04	138.65	123.84	14.81	
	04/29/04	138.65	124.38	14.27	
	06/14/04	138.65	130.80	7.85	
	09/20/04	138.65	141.03	-2.38	
	10/19/04	138.65	140.81	-2.16	
	11/10/04	138.65	138.43	0.22	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-22	12/06/04	138.65	134.38	4.27	
(Cont'd)	03/14/05	138.65	121.17	17.48	
	06/20/05	138.65	127.33	11.32	
	07/13/05	138.65	124.37	14.28	
	09/19/05	138.65	133.55	5.10	
	09/21/05	138.65	133.66	4.99	
	12/17/05	138.65	112.37	26.28	
	03/20/06	138.65	109.01	29.64	
	06/19/06	138.65	104.82	33.83	
	09/25/06	138.65	112.02	26.63	
	12/12/06	138.65	108.93	29.72	
	03/12/07	138.65	113.44	25.21	
	06/18/07	138.65	125.49	13.16	
	09/24/07	138.65	145.19	-6.54	
	12/10/07	138.65	150.68	-12.03	
	12/20/07	138.65	150.54	-11.89	
	01/21/08	138.65	148.35	-9.70	
	03/17/08	138.65	145.11	-6.46	
	04/21/08	138.65	145.53	-6.88	
	05/27/08	138.65	148.00	-9.35	
	06/23/08	138.65	150.29	-11.64	
	09/22/08	138.65	158.69	-20.04	
	12/15/08	138.65	158.75	-20.10	
	03/16/09	138.65	147.07	-8.42	
	06/22/09	138.65	147.84	-9.19	
	08/31/09	138.65	152.10	-13.45	
	12/07/09	138.65	145.84	-7.19	
	03/01/10	138.65	141.12	-2.47	
	03/02/10	138.65	140.97	-2.32	
	06/07/10	138.65	134.83	3.82	
	09/07/10	138.65	141.49	-2.84	
	12/06/10	138.65	139.63	-0.98	
	03/25/11	138.65	124.60	14.05	
	06/20/11	138.65	121.60	17.05	
	08/01/11	138.65	123.01	15.64	
	10/31/11	138.65	120.38	18.27	
	02/06/12	138.65	113.56	25.09	
	05/07/12	138.65	107.13	31.52	
	08/06/12	138.65	119.55	19.10	
	11/05/12	138.65	126.01	12.64	
	02/04/13	138.65	118.83	19.82	
	05/13/13	138.65	119.39	19.26	
	08/12/13	138.65	135.75	2.90	
	11/11/13	138.65	137.31	1.34	
	02/03/14	138.65	128.85	9.80	
	05/19/14	138.65	138.75	-0.10	
	08/18/14	138.65	150.82	-12.17	
	11/04/14	138.65	152.76	-14.11	
	02/02/15	138.65	136.45	2.20	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-23	09/15/03	137.16	147.30	-10.14	
	09/19/03	137.33	147.75	-10.42	
	09/23/03	137.33	147.75	-10.42	
	09/25/03	137.33	147.87	-10.54	
	10/08/03	137.33	148.09	-10.76	
	10/14/03	137.33	148.21	-10.88	
	12/02/03	137.33	136.17	1.16	
	12/15/03	137.33	133.83	3.50	
	03/29/04	137.33	123.30	14.03	
	04/29/04	137.33	123.77	13.56	
	06/14/04	137.33	130.20	7.13	
	09/20/04	137.33	140.19	-2.86	
	10/19/04	137.33	UTM	--	
	11/10/04	137.33	137.76	-0.43	
	12/06/04	137.33	133.56	3.77	
	03/14/05	137.33	120.52	16.81	
	06/20/05	137.33	127.18	10.15	
	07/13/05	137.33	123.89	13.44	
	09/19/05	137.33	133.50	3.83	
	09/21/05	137.33	133.67	3.66	
	12/17/05	137.33	111.74	25.59	
	12/19/05	137.33	111.45	25.88	
	03/20/06	137.33	108.90	28.43	
	05/18/06	137.33	101.55	35.78	
	06/19/06	137.33	104.32	33.01	
	09/25/06	137.33	111.42	25.91	
	12/12/06	137.33	108.30	29.03	
	03/12/07	137.33	113.48	23.85	
	06/18/07	137.33	125.48	11.85	
	09/24/07	137.33	144.94	-7.61	
	12/10/07	137.33	150.40	-13.07	
	12/20/07	137.33	150.23	-12.90	
	03/17/08	137.33	145.00	-7.67	
	04/21/08	137.33	145.50	-8.17	
	06/23/08	137.33	150.33	-13.00	
	08/26/08	137.33	166.71	-29.38	
	09/22/08	137.33	158.58	-21.25	
	12/15/08	137.33	158.48	-21.15	
	03/16/09	137.33	146.43	-9.10	
	06/23/09	137.33	147.50	-10.17	
	08/31/09	137.33	151.58	-14.25	
	10/23/09	137.33	148.44	-11.11	
	10/30/09	137.33	147.82	-10.49	
	11/04/09	137.33	147.40	-10.07	
	12/07/09	137.33	145.18	-7.85	
	03/01/10	137.33	140.52	-3.19	
	03/02/10	137.33	140.20	-2.87	
	06/07/10	137.33	134.30	3.03	
	09/07/10	137.33	140.90	-3.57	
	12/06/10	137.33	139.15	-1.82	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-23	03/15/11	137.33	123.40	13.93	
(Cont'd)	03/24/11	137.33	124.57	12.76	
	06/20/11	137.33	121.15	16.18	
	08/01/11	137.33	122.97	14.36	
	08/05/11	137.33	123.90	13.43	
	10/31/11	137.33	120.60	16.73	
	01/13/12	137.33	114.41	22.92	
	01/26/12	137.33	113.42	23.91	
	02/06/12	137.33	113.49	23.84	
	05/07/12	137.33	106.79	30.54	
	06/08/12	137.33	112.15	25.18	
	06/26/12	137.33	111.39	25.94	
	08/06/12	137.33	119.31	18.02	
	11/05/12	137.33	125.95	11.38	
	02/04/13	137.33	118.72	18.61	
	05/13/13	137.33	119.47	17.86	
	08/12/13	137.33	135.83	1.50	
	09/18/13	137.33	140.36	-3.03	
	11/11/13	137.33	136.76	0.57	
	02/03/14	137.33	128.32	9.01	
	05/19/14	137.33	138.79	-1.46	
	08/18/14	137.33	150.88	-13.55	
	11/04/14	137.33	152.51	-15.18	
	02/02/15	137.33	135.90	1.43	
MW-24	09/23/04	142.83	139.35	3.48	
	10/19/04	142.83	141.09	1.74	
	11/10/04	142.83	140.60	2.23	
	12/06/04	142.83	139.34	3.49	
	03/14/05	142.83	129.12	13.71	
	06/20/05	142.83	124.62	18.21	
	07/13/05	142.83	124.60	18.23	
	09/19/05	142.83	127.51	15.32	
	09/21/05	142.83	127.00	15.83	
	12/17/05	142.83	118.37	24.46	
	12/19/05	142.83	118.32	24.51	
	03/20/06	142.83	109.25	33.58	
	06/19/06	142.83	107.30	35.53	
	09/25/06	142.83	115.04	27.79	
	10/05/06	142.83	115.35	27.48	
	12/11/06	142.83	113.61	29.22	
	03/12/07	142.83	111.60	31.23	
	06/18/07	142.83	118.08	24.75	
	09/24/07	142.83	135.15	7.68	
	12/10/07	142.83	143.56	-0.73	
	03/17/08	142.83	143.70	-0.87	
	06/23/08	142.83	145.17	-2.34	
	07/11/08	142.83	146.50	-3.67	
	07/14/08	142.83	146.72	-3.89	
	07/15/08	142.83	146.84	-4.01	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-24	09/22/08	142.83	151.29	-8.46	
(Cont'd)	10/22/08	142.83	152.72	-9.89	
	12/15/08	142.83	154.29	-11.46	
	12/19/08	142.83	154.81	-11.98	
	02/25/09	142.83	153.94	-11.11	
	03/16/09	142.83	152.94	-10.11	
	03/18/09	142.83	152.55	-9.72	
	05/27/09	142.83	150.38	-7.55	
	06/22/09	142.83	150.37	-7.54	
	06/26/09	142.83	150.42	-7.59	
	08/31/09	142.83	152.31	-9.48	
	09/10/09	142.83	152.59	-9.76	
	12/07/09	142.83	152.04	-9.21	
	02/10/10	142.83	149.58	-6.75	
	02/12/10	142.83	149.53	-6.70	
	03/01/10	142.83	148.54	-5.71	
	03/03/10	142.83	148.32	-5.49	
	06/07/10	142.83	142.20	0.63	
	09/07/10	142.83	143.41	-0.58	
	12/06/10	142.83	142.45	0.38	
	03/24/11	142.83	132.13	10.70	
	06/20/11	142.83	127.36	15.47	
	08/01/11	142.83	124.12	18.71	
	08/05/11	142.83	123.84	18.99	
	10/31/11	142.83	117.61	25.22	
	02/06/12	142.83	112.65	30.18	
	05/07/12	142.83	110.05	32.78	
	06/26/12	142.83	111.97	30.86	
	08/06/12	142.83	115.85	26.98	
	11/05/12	142.83	123.08	19.75	
	12/10/12	142.83	122.41	20.42	
	02/04/13	142.83	119.55	23.28	
	05/13/13	142.83	116.68	26.15	
	08/12/13	142.83	128.32	14.51	
	09/18/13	142.83	132.62	10.21	
	11/11/13	142.83	136.09	6.74	
	02/03/14	142.83	134.50	8.33	
	05/19/14	142.83	136.72	6.11	
	08/18/14	142.83	144.45	-1.62	
	11/04/14	142.83	149.10	-6.27	
	02/02/15	142.83	144.46	-1.63	
MW-25	09/20/04	142.64	152.87	-10.23	
	10/19/04	142.64	145.96	-3.32	
	11/10/04	142.64	143.60	-0.96	
	12/06/04	142.64	140.84	1.80	
	03/14/05	142.64	129.79	12.85	
	06/20/05	142.64	125.06	17.58	
	07/13/05	142.64	122.98	19.66	
	09/19/05	142.64	126.64	16.00	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-25	09/21/05	142.64	127.57	15.07	
(Cont'd)	12/17/05	142.64	115.32	27.32	
	12/19/05	142.64	114.25	28.39	
	03/20/06	142.64	107.47	35.17	
	06/19/06	142.64	106.28	36.36	
	09/25/06	142.64	114.63	28.01	
	10/05/06	142.64	117.63	25.01	
	12/12/06	142.64	113.90	28.74	
	03/12/07	142.64	111.03	31.61	
	06/18/07	142.64	118.13	24.51	
	09/24/07	142.64	137.17	5.47	
	12/10/07	142.64	148.21	-5.57	
	12/20/07	142.64	151.34	-8.70	
	03/17/08	142.64	146.31	-3.67	
	06/23/08	142.64	147.94	-5.30	
	09/22/08	142.64	157.18	-14.54	
	10/22/08	142.64	158.43	-15.79	
	12/15/08	142.64	158.84	-16.20	
	12/19/08	142.64	158.79	-16.15	
	02/25/09	142.64	155.58	-12.94	
	03/16/09	142.64	153.43	-10.79	
	03/18/09	142.64	154.82	-12.18	
	05/27/09	142.64	150.45	-7.81	
	06/22/09	142.64	150.68	-8.04	
	06/26/09	142.64	151.00	-8.36	
	08/31/09	142.64	154.61	-11.97	
	09/10/09	142.64	154.66	-12.02	
	12/07/09	142.64	153.57	-10.93	
	03/01/10	142.64	146.59	-3.95	
	06/07/10	142.64	140.30	2.34	
	09/07/10	142.64	144.61	-1.97	
	12/06/10	142.64	141.89	0.75	
	03/24/11	142.64	125.44	17.20	
	06/20/11	142.64	125.12	17.52	
	08/01/11	142.64	120.05	22.59	
	10/31/11	142.64	113.28	29.36	
	02/06/12	142.64	109.05	33.59	
	05/07/12	142.64	107.92	34.72	
	08/06/12	142.64	140.61	2.03	
	11/05/12	142.64	122.83	19.81	
	02/04/13	142.64	120.54	22.10	
	05/13/13	142.64	118.04	24.60	
	08/12/13	142.64	130.68	11.96	
	11/11/13	142.64	140.56	2.08	
	02/03/14	142.64	136.95	5.69	
	05/19/14	142.64	139.46	3.18	
	08/18/14	142.64	149.70	-7.06	
	11/04/14	142.64	154.67	-12.03	
	02/02/15	142.64	143.28	-0.64	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-26A	10/19/04	137.30	135.45	1.85	
	11/10/04	137.30	135.59	1.71	
	12/06/04	137.30	135.06	2.24	
	03/14/05	137.30	127.74	9.56	
	06/20/05	137.30	125.41	11.89	
	07/13/05	137.30	125.00	12.30	
	09/19/05	137.30	127.22	10.08	
	09/21/05	137.30	127.31	9.99	
	12/17/05	137.30	121.44	15.86	
	12/19/05	137.30	121.35	15.95	
	02/24/06	137.30	113.15	24.15	
	03/20/06	137.30	112.18	25.12	
	05/18/06	137.30	107.48	29.82	
	06/19/06	137.30	106.50	30.80	
	09/25/06	137.30	108.81	28.49	
	12/12/06	137.30	108.94	28.36	
	03/12/07	137.30	110.51	26.79	
	06/18/07	137.30	115.63	21.67	
	09/24/07	137.30	129.55	7.75	
	12/10/07	137.30	138.57	-1.27	
	12/20/07	137.30	139.55	-2.25	
	12/20/07	137.30	139.52	-2.22	
	01/21/08	137.30	141.21	-3.91	
	03/17/08	137.30	142.09	-4.79	
	04/21/08	137.30	142.34	-5.04	
	05/27/08	137.04	142.91	-5.87	
	06/23/08	137.04	144.94	-7.90	
	08/26/08	137.04	147.75	-10.71	
	09/22/08	137.04	149.54	-12.50	
	12/15/08	137.04	153.18	-16.14	
	03/16/09	137.04	151.38	-14.34	
	06/22/09	137.04	147.67	-10.63	
	08/31/09	137.04	150.21	-13.17	
	10/13/09	137.04	150.44	-13.40	
	10/30/09	137.04	149.92	-12.88	
	12/07/09	137.04	148.20	-11.16	
	03/01/10	137.04	145.68	-8.64	
	03/02/10	137.04	145.53	-8.49	
	03/22/10	137.04	144.06	-7.02	
	06/07/10	137.04	139.28	-2.24	
	09/07/10	137.04	139.18	-2.14	
	12/06/10	137.04	140.17	-3.13	
	03/24/11	137.04	130.88	6.16	
	06/20/11	137.04	126.68	10.36	
	08/01/11	137.04	125.09	11.95	
	10/31/11	137.04	122.65	14.39	
	02/06/12	137.04	117.96	19.08	
	05/07/12	137.04	112.82	24.22	
	08/06/12	137.04	114.42	22.62	
	11/05/12	137.04	120.59	16.45	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-26A	02/04/13	137.04	119.79	17.25	
(Cont'd)	05/13/13	137.04	117.02	20.02	
	08/12/13	137.04	125.12	11.92	
	11/11/13	137.04	133.05	3.99	
	02/03/14	137.04	130.15	6.89	
	05/19/14	137.04	131.02	6.02	
	08/18/14	137.04	139.88	-2.84	
	11/04/14	137.04	145.58	-8.54	
	02/02/15	137.04	141.81	-4.77	
MW-26B	10/19/04	137.20	136.23	0.97	
	11/10/04	137.20	136.16	1.04	
	12/06/04	137.20	136.02	1.18	
	03/14/05	137.20	131.73	5.47	
	06/20/05	137.20	129.29	7.91	
	07/13/05	137.20	129.00	8.20	
	09/19/05	137.20	129.99	7.21	
	09/21/05	137.20	130.07	7.13	
	12/17/05	137.20	126.53	10.67	
	12/19/05	137.20	126.58	10.62	
	02/24/06	137.20	119.78	17.42	
	03/20/06	137.20	118.22	18.98	
	06/19/06	137.20	110.17	27.03	
	09/25/06	137.20	110.84	26.36	
	10/05/06	137.20	111.20	26.00	
	12/12/06	137.20	111.31	25.89	
	03/12/07	137.20	113.61	23.59	
	06/18/07	137.20	117.50	19.70	
	09/24/07	137.20	127.68	9.52	
	12/10/07	137.20	135.82	1.38	
	12/20/07	137.20	136.85	0.35	
	12/20/07	137.20	136.78	0.42	
	01/21/08	137.20	139.21	-2.01	
	03/17/08	137.20	142.10	-4.90	
	05/27/08	137.05	144.96	-7.91	
	06/23/08	137.05	146.29	-9.24	
	08/26/08	137.05	150.28	-13.23	
	09/22/08	137.05	151.94	-14.89	
	12/15/08	137.05	155.64	-18.59	
	12/19/08	137.05	156.13	-19.08	
	03/16/09	137.05	155.53	-18.48	
	03/18/09	137.05	155.16	-18.11	
	06/22/09	137.05	152.80	-15.75	
	08/31/09	137.05	154.60	-17.55	
	09/10/09	137.05	154.60	-17.55	
	10/13/09	137.05	154.75	-17.70	
	10/14/09	137.05	154.80	-17.75	
	10/30/09	137.05	154.41	-17.36	
	12/07/09	137.05	153.17	-16.12	
	02/10/10	137.05	151.63	-14.58	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-26B	03/01/10	137.05	151.04	-13.99	
(Cont'd)	03/02/10	137.05	150.90	-13.85	
	05/07/10	137.05	145.37	-8.32	
	06/07/10	137.05	146.22	-9.17	
	09/07/10	137.05	144.57	-7.52	
	12/06/10	137.05	144.78	-7.73	
	03/24/11	137.05	138.67	-1.62	
	06/20/11	137.05	134.45	2.60	
	08/01/11	137.05	132.83	4.22	
	08/05/11	137.05	132.55	4.50	
	10/31/11	137.05	129.89	7.16	
	02/06/12	137.05	125.63	11.42	
	05/07/12	137.05	120.17	16.88	
	08/06/12	137.05	118.61	18.44	
	11/05/12	137.05	122.68	14.37	
	02/04/13	137.05	123.42	13.63	
	05/13/13	137.05	121.73	15.32	
	08/12/13	137.05	126.75	10.30	
	11/11/13	137.05	133.00	4.05	
	02/03/14	137.05	133.00	4.05	
	05/19/14	137.05	133.93	3.12	
	08/18/14	137.05	139.80	-2.75	
	11/04/14	137.05	145.01	-7.96	
	02/02/15	137.05	144.52	-7.47	
MW-26C	10/19/04	137.28	141.81	-4.53	
	11/10/04	137.28	139.83	-2.55	
	12/06/04	137.28	135.90	1.38	
	03/14/05	137.28	121.75	15.53	
	06/20/05	137.28	128.11	9.17	
	07/13/05	137.28	125.75	11.53	
	09/19/05	137.28	137.35	-0.07	
	09/21/05	137.28	137.45	-0.17	
	12/17/05	137.28	112.48	24.80	
	12/19/05	137.28	112.30	24.98	
	03/20/06	137.28	109.21	28.07	
	06/19/06	137.28	104.32	32.96	
	09/25/06	137.28	113.96	23.32	
	10/05/06	137.28	114.08	23.20	
	12/12/06	137.28	111.13	26.15	
	03/12/07	137.28	119.52	17.76	
	06/18/07	137.28	130.71	6.57	
	09/24/07	137.28	153.19	-15.91	
	12/10/07	137.28	160.43	-23.15	
	12/20/07	137.28	160.88	-23.60	
	01/21/08	137.28	157.99	-20.71	
	02/21/08	137.28	155.52	-18.24	
	03/17/08	137.28	154.73	-17.45	
	04/21/08	137.28	155.21	-17.93	
	05/27/08	137.06	158.25	-21.19	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-26C	06/10/08	137.06	159.70	-22.64	
(Cont'd)	06/23/08	137.06	161.15	-24.09	
	07/16/08	137.06	164.52	-27.46	
	08/26/08	137.06	169.10	-32.04	
	09/22/08	137.06	170.89	-33.83	
	10/22/08	137.06	171.58	-34.52	
	12/15/08	137.06	169.04	-31.98	
	12/19/08	137.06	169.36	-32.30	
	01/07/09	137.06	163.22	-26.16	
	03/16/09	137.06	153.10	-16.04	
	03/18/09	137.06	152.44	-15.38	
	04/29/09	137.06	148.57	-11.51	
	06/22/09	137.06	152.47	-15.41	
	06/26/09	137.06	155.40	-18.34	
	08/31/09	137.06	158.68	-21.62	
	09/10/09	137.06	161.04	-23.98	
	10/13/09	137.06	156.48	-19.42	
	10/14/09	137.06	156.42	-19.36	
	10/23/09	137.06	154.73	-17.67	
	10/30/09	137.06	154.12	-17.06	
	11/04/09	137.06	153.77	-16.71	
	12/07/09	137.06	150.92	-13.86	
	01/19/10	137.06	149.68	-12.62	
	02/10/10	137.06	145.81	-8.75	
	02/12/10	137.06	145.52	-8.46	
	03/01/10	137.06	143.18	-6.12	
	03/02/10	137.06	143.02	-5.96	
	06/07/10	137.06	140.37	-3.31	
	07/30/10	137.06	144.04	-6.98	
	09/07/10	137.22	147.97	-10.75	
	12/06/10	137.22	145.78	-8.56	
	03/01/11	137.22	128.33	8.89	
	03/24/11	137.22	130.31	6.91	
	03/25/11	137.22	129.76	7.46	
	06/20/11	137.22	125.03	12.19	
	06/23/11	137.22	125.92	11.30	
	08/01/11	137.22	127.39	9.83	
	08/05/11	137.22	127.92	9.30	
	10/31/11	137.22	125.34	11.88	
	11/01/11	137.22	125.37	11.85	
	02/06/12	137.22	117.23	19.99	
	03/09/12	137.22	115.08	22.14	
	05/07/12	137.22	110.60	26.62	
	05/09/12	137.22	110.74	26.48	
	08/06/12	137.22	124.94	12.28	
	11/05/12	137.22	134.41	2.81	
	02/04/13	137.22	126.26	10.96	
	05/13/13	137.22	126.58	10.64	
	08/12/13	137.22	145.20	-7.98	
	09/18/13	137.22	150.32	-13.10	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-26C	11/11/13	137.22	145.09	-7.87	
(Cont'd)	02/03/14	137.22	137.00	0.22	
	05/19/14	137.22	144.05	-6.83	
	08/18/14	137.22	157.33	-20.11	
	11/06/14	137.22	160.01	-22.79	
	02/02/15	137.22	142.08	-4.86	
MW-27	05/27/08	137.16	157.80	-20.64	
	06/10/08	137.16	159.22	-22.06	
	06/23/08	137.16	160.75	-23.59	
	07/16/08	137.16	164.03	-26.87	
	08/26/08	137.16	168.65	-31.49	
	09/22/08	137.16	170.52	-33.36	
	10/22/08	137.16	171.19	-34.03	
	12/15/08	137.16	168.92	-31.76	
	12/19/08	137.16	169.05	-31.89	
	01/07/09	137.16	163.06	-25.90	
	03/16/09	137.16	153.24	-16.08	
	03/18/09	137.16	152.49	-15.33	
	04/29/09	137.16	148.59	-11.43	
	06/22/09	137.16	152.42	-15.26	
	06/24/09	137.16	154.08	-16.92	
	08/31/09	137.16	158.65	-21.49	
	09/10/09	137.16	160.81	-23.65	
	10/13/09	137.16	156.43	-19.27	
	10/14/09	137.16	156.35	-19.19	
	10/23/09	137.16	154.73	-17.57	
	10/30/09	137.16	154.10	-16.94	
	11/04/09	137.16	153.77	-16.61	
	12/07/09	137.16	150.98	-13.82	
	01/19/10	137.16	149.60	-12.44	
	03/01/10	137.16	143.25	-6.09	
	03/02/10	137.16	143.05	-5.89	
	06/07/10	137.16	139.74	-2.58	
	07/30/10	137.16	143.73	-6.57	
	09/07/10	137.16	147.75	-10.59	
	12/06/10	137.16	145.39	-8.23	
	03/01/11	137.16	127.65	9.51	
	03/24/11	137.16	129.57	7.59	
	06/20/11	137.16	124.36	12.80	
	08/01/11	137.16	126.64	10.52	
	08/05/11	137.16	127.08	10.08	
	10/31/11	137.16	124.43	12.73	
	02/06/12	137.16	116.35	20.81	
	05/07/12	137.16	110.03	27.13	
	08/06/12	137.16	124.18	12.98	
	11/05/12	137.16	134.75	2.41	
	02/04/13	137.16	125.54	11.62	
	05/13/13	137.16	125.99	11.17	
	07/18/13	137.16	139.72	-2.56	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-27	07/19/13	137.16	139.21	-2.05	
(Cont'd)	08/12/13	137.16	144.52	-7.36	
	11/11/13	137.16	144.52	-7.36	
	02/03/14	137.16	136.72	0.44	
	05/19/14	137.16	143.71	-6.55	
	08/18/14	137.16	157.02	-19.86	
	11/04/14	137.16	159.09	-21.93	
	02/02/15	137.16	141.44	-4.28	
MW-28	05/16/08	140.77	160.41	-19.64	
	05/27/08	140.77	161.69	-20.92	
	06/10/08	140.77	163.08	-22.31	
	06/23/08	140.77	164.55	-23.78	
	07/16/08	140.77	167.88	-27.11	
	08/26/08	140.77	174.46	-33.69	
	09/22/08	140.77	174.45	-33.68	
	10/22/08	140.77	175.11	-34.34	
	12/15/08	140.77	172.87	-32.10	
	12/19/08	140.77	172.97	-32.20	
	01/07/09	140.77	166.82	-26.05	
	03/16/09	140.77	157.25	-16.48	
	03/18/09	140.77	156.45	-15.68	
	04/29/09	140.77	152.49	-11.72	
	06/22/09	140.77	156.45	-15.68	
	06/24/09	140.77	157.74	-16.97	
	08/31/09	140.77	162.68	-21.91	
	09/10/09	140.77	164.54	-23.77	
	10/13/09	140.77	160.35	-19.58	
	10/14/09	140.77	160.32	-19.55	
	10/23/09	140.77	158.57	-17.80	
	10/30/09	140.77	158.02	-17.25	
	11/04/09	140.77	157.61	-16.84	
	12/07/09	140.77	154.74	-13.97	
	01/19/10	140.77	153.63	-12.86	
	03/01/10	140.77	147.29	-6.52	
	03/04/10	140.77	146.78	-6.01	
	03/04/10	140.77	146.80	-6.03	
	06/07/10	140.77	143.98	-3.21	
	07/30/10	140.77	147.43	-6.66	
	09/07/10	140.77	151.67	-10.90	
	12/06/10	140.77	149.96	-9.19	
	03/01/11	140.77	132.48	8.29	
	03/24/11	140.77	133.95	6.82	
	06/20/11	140.77	129.10	11.67	
	08/01/11	140.77	131.02	9.75	
	08/05/11	140.77	131.37	9.40	
	10/31/11	140.77	129.07	11.70	
	02/06/12	140.77	120.98	19.79	
	05/07/12	140.77	114.45	26.32	
	08/06/12	140.77	128.07	12.70	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-28	11/05/12	140.77	138.26	2.51	
(Cont'd)	02/04/13	140.77	130.17	10.60	
	05/13/13	140.77	129.64	11.13	
	08/12/13	140.77	148.39	-7.62	
	11/11/13	140.77	149.28	-8.51	
	02/03/14	140.77	140.85	-0.08	
	05/19/14	140.77	147.00	-6.23	
	08/18/14	140.77	160.73	-19.96	
	11/04/14	140.77	163.51	-22.74	
	02/02/15	140.77	146.56	-5.79	
MW-29	08/15/08	142.21	174.90	-32.69	
	08/19/08	142.21	174.44	-32.23	
	08/26/08	142.21	175.21	-33.00	
	09/22/08	142.21	177.31	-35.10	
	10/22/08	142.21	178.13	-35.92	
	12/15/08	142.34	176.26	-33.92	
	01/07/09	142.34	170.00	-27.66	
	03/16/09	142.34	160.00	-17.66	
	03/18/09	142.34	159.22	-16.88	
	04/29/09	142.34	154.91	-12.57	
	06/22/09	142.34	158.97	-16.63	
	06/24/09	142.34	159.99	-17.65	
	08/31/09	142.34	165.42	-23.08	
	09/10/09	142.34	167.01	-24.67	
	10/13/09	142.34	162.76	-20.42	
	10/14/09	142.34	162.78	-20.44	
	10/23/09	142.34	161.07	-18.73	
	10/30/09	142.34	160.59	-18.25	
	11/04/09	142.34	160.05	-17.71	
	12/07/09	142.34	156.92	-14.58	
	01/19/10	142.34	156.32	-13.98	
	03/01/10	142.34	149.84	-7.50	
	03/04/10	142.34	149.36	-7.02	
	06/07/10	142.34	146.45	-4.11	
	07/30/10	142.34	149.78	-7.44	
	09/07/10	142.34	154.30	-11.96	
	12/06/10	142.34	153.12	-10.78	
	03/01/11	142.34	135.43	6.91	
	03/24/11	142.34	136.86	5.48	
	03/30/11	142.34	135.81	6.53	
	06/20/11	142.34	131.87	10.47	
	08/01/11	142.34	134.23	8.11	
	08/05/11	142.34	134.61	7.73	
	10/31/11	142.34	132.65	9.69	
	02/06/12	142.34	124.12	18.22	
	05/07/12	142.34	117.12	25.22	
	08/06/12	142.34	130.62	11.72	
	11/05/12	142.34	141.32	1.02	
	02/04/13	142.34	133.48	8.86	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-29	05/13/13	142.34	132.32	10.02	
(Cont'd)	08/12/13	142.34	151.61	-9.27	
	11/11/13	142.34	152.45	-10.11	
	02/03/14	142.34	143.46	-1.12	
	05/19/14	139.81	146.85	-7.04	
	08/18/14	139.81	160.95	-21.14	
	11/03/14	139.81	193.62	-53.81	
	11/04/14	139.81	195.90	-56.09	
	12/18/14	139.81	185.78	-45.97	
	01/19/15	139.81	189.18	-49.37	
	02/02/15	139.81	184.72	-44.91	
MW-30A	12/04/08	129.44	164.15	-34.71	
	12/05/08	129.44	164.29	-34.85	
	12/15/08	129.44	162.77	-33.33	
	12/19/08	129.44	163.02	-33.58	
	01/07/09	129.44	156.65	-27.21	
	03/16/09	129.44	145.68	-16.24	
	03/18/09	129.44	144.93	-15.49	
	04/29/09	129.44	141.29	-11.85	
	06/22/09	129.44	145.32	-15.88	
	06/24/09	129.44	148.04	-18.60	
	08/31/09	129.44	151.45	-22.01	
	09/10/09	129.44	154.83	-25.39	
	10/13/09	129.44	149.24	-19.80	
	10/14/09	129.44	149.22	-19.78	
	10/23/09	129.44	147.49	-18.05	
	10/30/09	129.44	146.87	-17.43	
	11/04/09	129.44	146.56	-17.12	
	12/07/09	129.44	143.60	-14.16	
	01/19/10	129.44	142.52	-13.08	
	03/01/10	129.44	135.95	-6.51	
	03/03/10	129.44	135.69	-6.25	
	03/03/10	129.44	135.65	-6.21	
	06/07/10	129.44	133.44	-4.00	
	07/30/10	129.44	137.11	-7.67	
	09/07/10	129.44	140.90	-11.46	
	12/06/10	129.44	138.63	-9.19	
	03/01/11	129.44	120.97	8.47	
	03/15/11	129.44	123.10	6.34	
	03/24/11	129.44	123.64	5.80	
	06/20/11	129.44	117.99	11.45	
	08/01/11	129.44	121.07	8.37	
	08/05/11	129.44	121.58	7.86	
	10/31/11	129.44	119.19	10.25	
	02/06/12	129.44	110.70	18.74	
	05/07/12	129.44	103.59	25.85	
	08/06/12	129.44	119.04	10.40	
	11/05/12	129.44	127.77	1.67	
	01/03/13	129.44	119.71	9.73	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-30A	02/04/13	129.44	119.49	9.95	
(Cont'd)	05/13/13	129.44	121.67	7.77	
	08/12/13	129.44	139.38	-9.94	
	11/11/13	129.44	137.74	-8.30	
	02/03/14	129.44	129.96	-0.52	
	05/19/14	129.44	138.05	-8.61	
	08/18/14	129.44	151.26	-21.82	
	11/04/14	129.44	152.83	-23.39	
	02/02/15	129.44	134.73	-5.29	
MW-30B	12/04/08	129.39	160.82	-31.43	
	12/05/08	129.39	161.49	-32.10	
	12/15/08	129.39	160.27	-30.88	
	01/07/09	129.39	154.82	-25.43	
	03/16/09	129.39	144.60	-15.21	
	03/18/09	129.39	143.96	-14.57	
	04/29/09	129.39	141.03	-11.64	
	06/22/09	129.39	144.02	-14.63	
	06/24/09	129.39	147.85	-18.46	
	08/31/09	129.39	149.39	-20.00	
	09/10/09	129.39	154.06	-24.67	
	10/13/09	129.39	147.92	-18.53	
	10/14/09	129.39	147.93	-18.54	
	10/23/09	129.39	146.17	-16.78	
	10/30/09	129.39	145.42	-16.03	
	11/04/09	129.39	145.25	-15.86	
	12/07/09	129.39	142.39	-13.00	
	01/19/10	129.39	140.64	-11.25	
	03/01/10	129.39	134.60	-5.21	
	06/07/10	129.39	130.92	-1.53	
	09/07/10	129.39	136.39	-7.00	
	12/06/10	129.39	133.99	-4.60	
	03/15/11	129.39	122	7.39	
	03/24/11	129.39	121.97	7.42	
	06/20/11	129.39	115.40	13.99	
	08/01/11	129.39	118.29	11.10	
	08/05/11	129.39	119.13	10.26	
	10/31/11	129.39	116.07	13.32	
	01/20/12	129.39	109.57	19.82	
	02/06/12	129.39	109.28	20.11	
	05/07/12	129.39	101.72	27.67	
	08/06/12	129.39	115.80	13.59	
	11/05/12	129.39	122.38	7.01	
	01/03/13	129.39	115.74	13.65	
	01/09/13	129.39	116.81	12.58	
	02/04/13	129.39	115.71	13.68	
	05/13/13	129.39	118.10	11.29	
	08/12/13	129.39	134.12	-4.73	
	11/11/13	129.39	132.03	-2.64	
	02/03/14	129.39	126.67	2.72	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-30B	05/19/14	129.39	136.08	-6.69	
(Cont'd)	08/18/14	129.39	147.46	-18.07	
	11/04/14	129.39	147.92	-18.53	
	02/02/15	129.39	131.23	-1.84	
MW-31	10/13/09	123.7	140.92	-17.2	
	10/14/09	123.7	140.85	-17.1	
	10/23/09	119.60	136.95	-17.35	
	10/30/09	119.60	136.26	-16.66	
	11/02/09	119.60	136.18	-16.58	
	12/07/09	119.60	133.45	-13.85	
	01/19/10	119.60	131.88	-12.28	
	02/12/10	119.60	127.51	-7.91	
	03/01/10	119.60	124.99	-5.39	
	03/03/10	119.60	125.04	-5.44	
	06/07/10	119.60	122.62	-3.02	
	07/30/10	119.60	126.69	-7.09	
	09/07/10	119.60	129.42	-9.82	
	12/06/10	119.60	125.45	-5.85	
	03/01/11	119.60	108.80	10.80	
	03/24/11	119.60	112.56	7.04	
	06/20/11	119.60	106.02	13.58	
	08/01/11	119.60	110.28	9.32	
	08/05/11	119.60	111.32	8.28	
	10/31/11	119.60	107.84	11.76	
	02/06/12	119.60	99.66	19.94	
	05/07/12	119.60	92.21	27.39	
	08/06/12	119.60	109.72	9.88	
	11/05/12	119.60	116.38	3.22	
	02/04/13	119.60	107.58	12.02	
	05/13/13	119.60	111.61	7.99	
	07/18/13	119.60	125.45	-5.85	
	07/19/13	119.60	122.71	-3.11	
	08/12/13	119.60	129.49	-9.89	
	09/18/13	119.60	133.82	-14.22	
	11/11/13	119.60	124.85	-5.25	
	02/03/14	119.60	118.31	1.29	
	05/19/14	119.60	130.33	-10.73	
	08/18/14	119.60	142.35	-22.75	
	11/04/14	119.60	140.95	-21.35	
	02/02/15	119.60	121.32	-1.72	
MW-32A	01/04/10	92.88	110.20	-17.32	
	01/19/10	92.88	107.34	-14.46	
	02/10/10	92.88	101.90	-9.02	
	02/12/10	92.88	102.03	-9.15	
	03/01/10	92.88	99.24	-6.36	
	03/04/10	92.88	99.28	-6.40	
	06/07/10	92.88	97.01	-4.13	
	09/07/10	92.88	104.02	-11.14	

TABLE 3
GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
Regional Groundwater System Monitor and Extraction Wells (continued)					
MW-32A	12/06/10	92.88	100.08	-7.20	
(Cont'd)	03/24/11	92.88	87.97	4.91	
	06/20/11	92.88	80.19	12.69	
	08/01/11	92.88	87.56	5.32	
	08/03/11	92.88	89.69	3.19	
	10/14/11	92.88	84.70	8.18	
	10/31/11	92.88	85.17	7.71	
	02/06/12	92.88	75.40	17.48	
	05/07/12	92.88	66.57	26.31	
	08/06/12	92.88	88.32	4.56	
	11/05/12	92.88	93.88	-1.00	
	02/04/13	92.88	83.24	9.64	
	05/13/13	92.88	89.69	3.19	
	08/12/13	92.88	108.43	-15.55	
	11/11/13	92.88	98.90	-6.02	
	12/10/13	92.88	93.03	-0.15	
	02/03/14	92.88	92.68	0.20	
	05/19/14	92.88	108.72	-15.84	
	08/18/14	92.88	120.55	-27.67	
	11/04/14	92.88	116.71	-23.83	
	02/02/15	92.88	94.87	-1.99	
MW-32B	01/04/10	92.89	109.29	-16.40	
	01/19/10	92.89	106.40	-13.51	
	02/10/10	92.89	101.75	-8.86	
	02/12/10	92.89	101.68	-8.79	
	03/01/10	92.89	99.18	-6.29	
	03/05/10	92.89	99.22	-6.33	
	05/07/10	92.89	94.21	-1.32	
	06/07/10	92.89	96.71	-3.82	
	07/30/10	92.89	100.91	-8.02	
	09/07/10	92.89	103.45	-10.56	
	12/06/10	92.89	99.75	-6.86	
	03/01/11	92.89	82.87	10.02	
	03/24/11	92.89	87.67	5.22	
	06/20/11	92.89	80.34	12.55	
	08/01/11	92.89	86.35	6.54	
	08/03/11	92.89	88.72	4.17	
	10/14/11	92.89	83.95	8.94	
	10/31/11	92.89	84.01	8.88	
	02/06/12	92.89	74.84	18.05	
	05/07/12	92.89	66.54	26.35	
	08/06/12	92.89	86.18	6.71	
	11/05/12	92.89	92.20	0.69	
	01/03/13	92.89	81.64	11.25	
	02/04/13	92.89	82.76	10.13	
	05/13/13	92.89	87.91	4.98	
	08/12/13	92.89	106.20	-13.31	
	11/11/13	92.89	98.62	-5.73	
	12/10/13	92.89	93.05	-0.16	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-32B	02/03/14	92.89	92.55	0.34	
(Cont'd)	05/19/14	92.89	106.96	-14.07	
	08/18/14	92.89	118.71	-25.82	
	11/04/14	92.89	116.03	-23.14	
	02/02/15	92.89	95.96	-3.07	
MW-32C	01/05/10	92.88	102.93	-10.05	
	01/19/10	92.88	102.03	-9.15	
	02/10/10	92.88	100.10	-7.22	
	02/12/10	92.88	100.03	-7.15	
	03/01/10	92.88	98.65	-5.77	
	03/05/10	92.88	98.15	-5.27	
	06/07/10	92.88	93.19	-0.31	
	09/07/10	92.88	96.89	-4.01	
	12/06/10	92.88	94.01	-1.13	
	03/24/11	92.88	81.27	11.61	
	06/20/11	92.88	77.32	15.56	
	08/01/11	92.88	74.40	18.48	
	08/03/11	92.88	201.55	-108.67	
	10/14/11	92.88	67.59	25.29	
	10/31/11	92.88	68.65	24.23	
	02/06/12	92.88	63.71	29.17	
	05/07/12	92.88	61.18	31.70	
	08/06/12	92.88	69.95	22.93	
	11/05/12	92.88	77.51	15.37	
	01/03/13	92.88	74.05	18.83	
	02/04/13	92.88	72.28	20.60	
	05/13/13	92.88	72.48	20.40	
	08/12/13	92.88	84.56	8.32	
	11/11/13	92.88	91.11	1.77	
	12/10/13	92.88	89.10	3.78	
	02/03/14	92.88	87.98	4.90	
	05/19/14	92.88	91.52	1.36	
	08/18/14	92.88	101.60	-8.72	
	11/04/14	92.88	105.10	-12.22	
	02/02/15	92.88	94.74	-1.86	
MW-33	03/01/10	83.19	73.60	9.59	
	03/15/10	83.19	85.21	-2.02	
	07/16/10	83.19	89.80	-6.61	
	07/30/10	83.19	92.32	-9.13	
	09/07/10	83.19	94.86	-11.67	
	12/06/10	83.19	90.88	-7.69	
	03/01/11	83.19	73.60	9.59	
	03/15/11	83.19	85.21	-2.02	
	03/24/11	83.19	80.03	3.16	
	06/20/11	83.19	71.50	11.69	
	08/01/11	83.19	82.56	0.63	
	08/04/11	83.19	85.88	-2.69	
	10/14/11	83.19	80.82	2.37	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-33	10/31/11	83.19	77.92	5.27	
(Cont'd)	02/06/12	83.19	68.13	15.06	
	05/07/12	83.19	57.78	25.41	
	08/06/12	83.19	83.31	-0.12	
	11/05/12	83.19	87.51	-4.32	
	12/10/12	83.19	76.87	6.32	
	01/04/13	83.19	75.02	8.17	
	02/04/13	83.19	78.41	4.78	
	05/13/13	83.19	85.06	-1.87	
	08/12/13	83.19	103.70	-20.51	
	11/11/13	83.19	89.67	-6.48	
	12/10/13	83.19	83.71	-0.52	
	02/03/14	83.19	83.47	-0.28	
	05/19/14	83.19	103.68	-20.49	
	08/18/14	83.19	115.30	-32.11	
	11/04/14	83.19	107.90	-24.71	
	02/02/15	83.19	85.81	-2.62	
MW-34A	02/25/11	153.25	142.78	10.47	
	03/10/11	153.25	142.26	10.99	
	03/15/11	153.25	143.61	9.64	
	03/24/11	153.25	144.68	8.57	
	06/20/11	153.25	140.26	12.99	
	08/01/11	153.25	143.63	9.62	
	08/04/11	153.25	144.33	8.92	
	10/14/11	153.25	140.77	12.48	
	10/31/11	153.25	141.95	11.30	
	02/06/12	153.25	134.13	19.12	
	05/07/12	153.25	126.22	27.03	
	06/26/12	153.25	130.37	22.88	
	08/06/12	153.25	139.39	13.86	
	11/05/12	153.25	146.00	7.25	
	02/04/13	153.25	138.95	14.30	
	05/13/13	153.25	139.67	13.58	
	08/12/13	153.25	156.14	-2.89	
	09/18/13	153.25	160.57	-7.32	
	11/11/13	153.25	155.60	-2.35	
	12/10/13	153.25	150.05	3.20	
	02/03/14	153.25	146.80	6.45	
	05/19/14	153.25	159.82	-6.57	
	08/18/14	153.25	171.15	-17.90	
	11/04/14	153.25	172.43	-19.18	
	02/02/15	153.25	155.22	-1.97	
MW-34B	02/25/11	153.11	146.89	6.22	
	03/01/11	153.11	146.32	6.79	
	03/10/11	153.11	146.80	6.31	
	03/15/11	153.11	147.91	5.20	
	03/24/11	153.11	148.84	4.27	
	06/20/11	153.11	142.81	10.30	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-34B	06/21/11	153.11	143.15	9.96	
(Cont'd)	08/01/11	153.11	147.20	5.91	
	08/04/11	153.11	148.27	4.84	
	09/30/11	153.11	146.12	6.99	
	10/14/11	153.11	144.55	8.56	
	10/31/11	153.11	146.19	6.92	
	02/06/12	153.11	136.92	16.19	
	05/07/12	153.11	127.89	25.22	
	06/26/12	153.11	132.73	20.38	
	08/06/12	153.11	144.08	9.03	
	11/05/12	153.11	153.67	-0.56	
	12/10/12	153.11	149.08	4.03	
	01/03/13	153.11	145.69	7.42	
	02/04/13	153.11	145.61	7.50	
	05/13/13	153.11	145.45	7.66	
	08/12/13	153.11	164.81	-11.70	
	09/18/13	153.11	169.84	-16.73	
	11/11/13	153.11	163.05	-9.94	
	12/10/13	153.11	156.82	-3.71	
	02/03/14	153.11	153.48	-0.37	
	05/19/14	153.11	163.44	-10.33	
	08/18/14	153.11	177.51	-24.40	
	11/04/14	153.11	178.79	-25.68	
	02/02/15	153.11	160.99	-7.88	
MW-34C	02/25/11	153.29	145.40	7.89	
	03/10/11	153.29	148.34	4.95	
	03/15/11	153.29	149.75	3.54	
	03/24/11	153.29	149.08	4.21	
	03/29/11	153.29	145.51	7.78	
	06/20/11	153.29	141.68	11.61	
	06/21/11	153.29	144.05	9.24	
	08/01/11	153.29	146.36	6.93	
	08/04/11	153.29	148.5	4.79	
	10/14/11	153.29	144.06	9.23	
	10/31/11	153.29	144.52	8.77	
	02/06/12	153.29	136.08	17.21	
	05/07/12	153.29	128.1	25.19	
	06/26/12	153.29	132.07	21.22	
	08/06/12	153.29	144.46	8.83	
	11/05/12	153.29	150.45	2.84	
	12/10/12	153.29	144.11	9.18	
	01/03/13	153.29	143.18	10.11	
	02/04/13	153.29	143.01	10.28	
	05/13/13	153.29	146.64	6.65	
	08/12/13	153.29	162.95	-9.66	
	09/18/13	153.29	167.07	-13.78	
	11/11/13	153.29	158.03	-4.74	
	12/10/13	153.29	153.21	0.08	
	02/03/14	153.29	152.38	0.91	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-34C	05/19/14	153.29	164.45	-11.16	
(Cont'd)	08/18/14	153.29	175.77	-22.48	
	11/04/14	153.29	174.43	-21.14	
	02/02/15	153.29	156.90	-3.61	
MW-35A	01/19/11	93.57	77.69	15.88	
	02/03/11	93.57	77.51	16.06	
	03/24/11	93.57	76.01	17.56	
	05/26/11	93.57	74.25	19.32	
	06/20/11	93.57	71.74	21.83	
	08/01/11	93.57	75.29	18.28	
	08/04/11	93.57	76.44	17.13	
	10/31/11	93.57	71.55	22.02	
	02/06/12	93.57	64.46	29.11	
	05/07/12	93.57	60.11	33.46	
	06/26/12	93.57	64.03	29.54	
	08/06/12	93.57	72.82	20.75	
	11/05/12	93.57	76.05	17.52	
	02/04/13	93.57	68.48	25.09	
	05/13/13	93.57	73.46	20.11	
	08/12/13	93.57	86.05	7.52	
	11/11/13	93.57	84.11	9.46	
	12/10/13	93.57	80.20	13.37	
	02/03/14	93.57	79.11	14.46	
	05/19/14	93.57	90.45	3.12	
	08/18/14	93.57	98.60	-5.03	
	11/04/14	93.57	97.37	-3.80	
	02/02/15	93.57	83.43	10.14	
MW-35B	01/19/11	93.56	84.50	9.06	
	02/03/11	93.56	84.59	8.97	
	03/24/11	93.56	82.95	10.61	
	06/20/11	93.56	78.82	14.74	
	06/22/11	93.56	78.80	14.76	
	08/01/11	93.56	82.78	10.78	
	08/04/11	93.56	84.05	9.51	
	10/31/11	93.56	79.67	13.89	
	02/06/12	93.56	72.06	21.50	
	05/07/12	93.56	65.67	27.89	
	06/26/12	93.56	70.36	23.20	
	08/06/12	93.56	80.68	12.88	
	11/05/12	93.56	85.02	8.54	
	02/04/13	93.56	77.70	15.86	
	05/13/13	93.56	81.25	12.31	
	08/12/13	93.56	97.17	-3.61	
	09/18/13	93.56	101.37	-7.81	
	11/11/13	93.56	94.21	-0.65	
	12/10/13	93.56	87.92	5.64	
	02/03/14	93.56	86.58	6.98	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-35B	05/19/14	93.56	100.60	-7.04	
Cont'd	08/18/14	93.56	111.30	-17.74	
	11/04/14	93.56	110.32	-16.76	
	02/02/15	93.56	92.11	1.45	
MW-35C	01/19/11	93.55	88.79	4.76	
	02/03/11	93.55	88.62	4.93	
	03/01/11	93.55	82.54	11.01	
	03/24/11	93.55	87.38	6.17	
	06/20/11	93.55	80.47	13.08	
	08/01/11	93.55	86.38	7.17	
	08/04/11	93.55	88.72	4.83	
	10/31/11	93.55	83.44	10.11	
	02/06/12	93.55	74.42	19.13	
	05/07/12	93.55	66.84	26.71	
	06/26/12	93.55	72.84	20.71	
	08/06/12	93.55	88.31	5.24	
	11/05/12	93.55	92.71	0.84	
	02/04/13	93.55	83.56	9.99	
	05/13/13	93.55	89.47	4.08	
	08/12/13	93.55	107.84	-14.29	
	09/18/13	93.55	111.67	-18.12	
	11/11/13	93.55	99.35	-5.80	
	12/10/13	93.55	93.43	0.12	
	02/03/14	93.55	93.68	-0.13	
	05/19/14	93.55	108.54	-14.99	
	08/18/14	93.55	120.07	-26.52	
	11/04/14	93.55	116.33	-22.78	
	02/02/15	93.55	94.44	-0.89	
MW-36	01/13/12	86.65	76.60	10.05	
	01/26/12	86.65	76.55	10.10	
	02/06/12	86.65	76.62	10.03	
	05/07/12	86.65	61.99	24.66	
	08/06/12	86.65	88.09	-1.44	
	11/05/12	86.65	93.33	-6.68	
	01/04/13	86.65	81.65	5.00	
	02/04/13	86.65	84.54	2.11	
	05/13/13	86.65	89.88	-3.23	
	08/12/13	86.65	108.65	-22.00	
	11/11/13	86.65	93.68	-7.03	
	02/03/14	86.65	86.85	-0.20	
	05/19/14	86.65	107.76	-21.11	
	08/18/14	86.65	120.00	-33.35	
	11/04/14	86.65	112.18	-25.53	
	02/02/15	86.65	90.73	-4.08	
MW-37	10/26/12	155.60	144.62	10.98	
	11/05/12	155.60	142.07	13.53	
	12/10/12	155.60	140.12	15.48	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
MW-37	01/03/13	155.60	137.21	18.39	
(Cont'd)	02/04/13	155.60	136.18	19.42	
	05/13/13	155.60	136.80	18.80	
	08/12/13	155.60	149.41	6.19	
	09/18/13	155.60	154.59	1.01	
	11/12/13	155.60	156.98	-1.38	
	02/03/14	155.60	153.22	2.38	
	05/19/14	155.60	157.06	-1.46	
	08/18/14	155.60	167.65	-12.05	
	11/04/14	155.60	171.21	-15.61	
	02/02/15	155.60	159.43	-3.83	
MW-38	08/07/13	154.90	156.80	-1.90	
	08/12/13	154.90	157.50	-2.60	
	09/18/13	154.90	162.55	-7.65	
	11/12/13	154.90	160.86	-5.96	
	02/03/14	154.90	150.50	4.40	
	05/19/14	154.90	159.11	-4.21	
	08/18/14	154.90	173.52	-18.62	
	11/04/14	154.90	176.59	-21.69	
	02/02/15	154.90	162.11	-7.21	
MW-39	08/08/13	84.25	106.13	-21.88	
	08/12/13	84.25	106.72	-22.47	
	11/11/13	84.25	90.90	-6.65	
	02/03/14	84.25	84.70	-0.45	
	05/19/14	84.25	106.47	-22.22	
	08/18/14	84.25	118.09	-33.84	
	11/04/14	84.25	109.61	-25.36	
	02/02/15	84.25	87.62	-3.37	
MW-40	07/19/13	123.40	124.37	-0.97	
	08/12/13	123.40	129.88	-6.48	
	11/11/13	123.40	127.22	-3.82	
	02/03/14	123.40	121.00	2.40	
	05/19/14	123.40	131.26	-7.86	
	08/18/14	123.40	143.09	-19.69	
	11/04/14	123.40	142.65	-19.25	
	02/02/15	123.40	123.10	0.30	
MW-41	08/19/14	156.02	186.17	-30.15	
	09/10/14	155.60	185.65	-30.05	
	09/24/14	155.60	186.05	-30.45	
	11/04/14	155.60	182.14	-26.54	
	02/02/15	155.60	163.12	-7.52	
EW-01	06/20/05	142.65	132.89	9.76	
	09/19/05	142.65	140.63	2.02	
	09/21/05	142.65	140.88	1.77	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
EW-01	12/17/05	142.65	119.06	23.59	
(Cont'd)	12/19/05	142.65	118.70	23.95	
	02/24/06	142.65	108.91	33.74	
	03/20/06	142.65	112.76	29.89	
	05/18/06	142.65	105.98	36.67	
	06/19/06	142.65	108.61	34.04	
	09/25/06	142.65	118.60	24.05	
	12/11/06	142.5	116.08	26.4	
	03/12/07	142.5	122.93	19.6	
	06/18/07	142.5	133.31	9.2	
	09/24/07	142.5	157.35	-14.9	
	12/10/07	142.5	164.54	-22.0	
	12/20/07	142.5	164.75	-22.3	
	01/21/08	142.5	162.41	-19.9	
	01/21/08	140.3	162.41	-22.1	
	03/17/08	140.3	156.96	-16.7	
	05/27/08	141.13	160.10	-18.97	
	06/10/08	141.13	161.48	-20.35	
	06/23/08	141.13	162.89	-21.76	Pilot GETS
	07/09/08	141.07	165.87	-24.80	
	07/11/08	141.07	165.59	-24.52	
	07/14/08	141.07	165.71	-24.64	Pilot GETS
	07/15/08	141.07	167.64	-26.57	Pilot GETS
	07/30/08	141.07	168.45	-27.38	Pilot GETS
	08/14/08	141.07	> 172.65	< -31.58	Pilot GETS
	08/25/08	141.07	171.89	-30.82	Pilot GETS
	09/22/08	141.07	> 172.65	< -31.58	Pilot GETS
	10/22/08	141.07	> 172.65	< -31.58	
	12/15/08	141.07	171.93	-30.86	
	12/19/08	141.07	171.74	-30.67	
	01/07/09	141.07	165.86	-24.79	Pilot GETS
	02/25/09	141.07	162.17	-21.10	Pilot GETS
	03/16/09	141.07	157.84	-16.77	Pilot GETS
	03/18/09	141.07	158.69	-17.62	
	04/29/09	141.07	152.31	-11.24	
	04/29/09	141.07	152.85	-11.78	Pilot GETS
	05/27/09	141.07	155.10	-14.03	Pilot GETS
	06/22/09	141.07	156.88	-15.81	Pilot GETS
	06/26/09	141.07	157.98	-16.91	Pilot GETS
	06/29/09	141.07	158.68	-17.61	Pilot GETS
	07/22/09	141.07	164.06	-22.99	Pilot GETS
	08/14/09	141.07	168.21	-27.14	Pilot GETS
	08/31/09	141.07	163.05	-21.98	Pilot GETS
	09/10/09	141.07	164.32	-23.25	Pilot GETS
	09/11/09	141.07	164.23	-23.16	Pilot GETS
	10/08/09	141.07	> 172.65	< -31.58	Pilot GETS
	10/23/09	141.07	158.25	-17.18	
	11/30/09	141.07	157.75	-16.68	
	11/04/09	141.07	157.23	-16.16	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
EW-01	12/07/09	141.07	154.56	-13.49	
(Cont'd)	12/09/09	141.07	155.28	-14.21	
	01/19/10	141.07	153.29	-12.22	
	02/10/10	141.07	142.49	-1.42	
	03/01/10	141.07	147.07	-6.00	
	03/05/10	141.07	146.63	-5.56	
	03/09/10	141.07	142.50	-1.43	
	06/07/10	141.07	142.43	-1.36	
	09/07/10	141.07	150.09	-9.02	
	12/06/10	141.07	148.66	-7.59	
	03/01/11	141.07	131.68	9.39	
	03/24/11	141.07	132.08	8.99	
	06/20/11	141.07	127.90	13.17	
	08/01/11	141.07	128.94	12.13	
	08/05/11	141.07	129.27	11.80	
	10/14/11	141.07	125.48	15.59	
	10/31/11	141.07	126.74	14.33	
	01/05/12	141.07	121.24	19.83	
	02/06/12	141.07	119.36	21.71	
	05/07/12	141.07	113.04	28.03	
	06/26/12	141.07	117.34	23.73	
	08/06/12	141.07	125.45	15.62	
	11/05/12	141.07	136.31	4.76	
	02/04/13	141.07	128.42	12.65	
	05/13/13	141.07	126.97	14.10	
	07/18/13	141.07	141.66	-0.59	
	07/19/13	141.07	141.39	-0.32	
	08/12/13	141.07	145.78	-4.71	
	09/18/13	141.07	151.02	-9.95	
	11/11/13	141.07	147.97	-6.90	
	02/03/14	141.07	139.43	1.64	
	05/19/14	141.07	145.42	-4.35	
	08/18/14	141.07	159.40	-18.33	
	11/04/14	141.07	161.72	-20.65	
	02/02/15	141.07	145.40	-4.33	
EW-02	10/23/09	137.6	137.92	-0.3	
	10/30/09	137.6	156.81	-19.2	
	10/31/09	137.6	155.97	-18.3	
	11/04/09	136.2	153.21	-17.0	
	12/07/09	132.97	UTM	--	
	02/10/10	132.97	142.49	-9.52	
	03/01/10	132.97	139.89	-6.92	Pre-Startup
	03/22/10	132.97	136.73	-3.76	Pilot GETS
	03/22/10	132.97	143.6	-10.6	Pilot GETS
	03/23/10	132.97	143.25	-10.28	Pilot GETS
	03/24/10	132.97	144.42	-11.45	Pilot GETS
	03/25/10	132.97	144.60	-11.63	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
EW-02	03/26/10	132.97	144.99	-12.02	
(Cond't)	04/01/10	132.97	143.85	-10.88	
	04/09/10	132.97	143.40	-10.43	
	04/13/10	132.97	142.63	-9.66	
	04/23/10	132.97	143.15	-10.18	
	05/25/10	132.97	142.50	-9.53	Pilot GETS
	06/07/10	132.97	143.34	-10.37	Pilot GETS
	06/10/10	132.97	143.42	-10.45	Pilot GETS
	07/08/10	132.97	144.76	-11.79	Pilot GETS
	07/30/10	132.97	145.5	-12.53	Pilot GETS
	08/02/10	132.97	146.95	-13.98	Pilot GETS
	09/02/10	132.97	150.82	-17.85	Pilot GETS
	09/07/10	132.97	150.46	-17.49	Pilot GETS
	10/07/10	132.97	153.49	-20.52	Pilot GETS
	11/11/10	132.97	153.63	-20.66	
	12/06/10	132.97	148.10	-15.13	
	12/07/10	132.97	149.05	-16.08	Pilot GETS
	12/07/10	132.97	148.62	-15.65	Pilot GETS
	01/13/11	132.97	138.52	-5.55	
	01/13/11	132.97	138.74	-5.77	Pilot GETS
	02/03/11	132.97	136.61	-3.64	Pilot GETS
	03/02/11	132.97	130.70	2.27	Pilot GETS
	03/24/11	132.97	133.23	-0.26	Pilot GETS
	04/01/11	132.97	132.74	0.23	Pilot GETS
	05/04/11	132.97	134.42	-1.45	Pilot GETS
	06/07/11	132.97	129.64	3.33	Pilot GETS
	06/20/11	132.97	128.12	4.85	Pilot GETS
	07/02/11	132.97	127.73	5.24	Pilot GETS
	08/01/11	132.97	130.41	2.56	Pilot GETS
	08/05/11	132.97	130.83	2.14	Pilot GETS
	09/09/11	132.97	131.13	1.84	
	09/30/11	132.97	128.61	4.36	Pilot GETS
	10/17/11	132.97	127.67	5.30	Pilot GETS
	10/31/11	132.97	128.83	4.14	Pilot GETS
	11/01/11	132.97	128.76	4.21	Pilot GETS
	12/07/11	132.97	122.0	10.97	Pilot GETS
	12/08/11	132.97	123.51	9.46	Pilot GETS
	01/06/12	132.97	119.6	13.37	Pilot GETS
	01/10/12	132.97	120.72	12.25	Pilot GETS
	02/06/12	132.97	118.95	14.02	Pilot GETS
	02/08/12	132.97	119.22	13.75	Pilot GETS
	03/09/12	132.97	113.25	19.72	Pilot GETS
	04/02/12	132.97	116.19	16.78	Pilot GETS
	04/16/12	132.97	114.57	18.40	Pilot GETS
	05/01/12	132.97	113.65	19.32	Pilot GETS
	05/07/12	132.97	113.55	19.42	
	06/07/12	132.97	118.65	14.32	Pilot GETS
	06/08/12	132.97	118.79	14.18	Pilot GETS
	06/26/12	132.97	118.32	14.65	Pilot GETS
	07/11/12	132.97	121.79	11.18	Pilot GETS



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Regional Groundwater System Monitor and Extraction Wells (continued)</u>					
EW-02	08/03/12	132.97	127.16	5.81	Pilot GETS
(Cond't)	08/06/12	132.97	127.42	5.55	Pilot GETS
	09/06/12	132.97	132.79	0.18	Pilot GETS
	10/15/12	132.97	156.45	-23.48	Pilot GETS
	11/05/12	132.97	137.50	-4.53	Pilot GETS
	12/10/12	132.97	133.49	-0.52	Pilot GETS
	02/04/13	132.97	129.53	3.44	Pilot GETS
	03/09/13	132.97	127.99	4.98	Pilot GETS
	04/15/13	132.97	121.61	11.36	Pilot GETS
	05/13/13	132.97	129.21	3.76	Pilot GETS
	06/13/13	132.97	136.67	-3.70	Pilot GETS
	07/02/13	132.97	139.40	-6.43	Pilot GETS
	08/12/13	132.97	147.57	-14.60	Pilot GETS
	09/03/13	132.97	150.15	-17.18	Pilot GETS
	10/05/13	132.97	153.60	-20.63	Pilot GETS
	11/11/13	132.97	148.57	-15.60	Pilot GETS
	12/11/13	132.97	142.69	-9.72	Pilot GETS
	01/17/14	132.97	139.97	-7.00	Pilot GETS
	02/03/14	132.97	140.12	-7.15	Pilot GETS
	02/11/14	132.97	139.58	-6.61	Pilot GETS
	03/04/14	132.97	137.47	-4.50	Pilot GETS
	05/21/14	132.97	140.60	-7.63	Pilot GETS
	08/18/14	132.97	153.84	-20.87	Pilot GETS
	11/03/14	132.97	161.56	-28.59	Pilot GETS
	11/04/14	132.97	162.10	-29.13	Pilot GETS
	12/18/14	150.55	145.08	5.47	Pilot GETS
	01/19/15	150.01	145.08	4.93	Pilot GETS
	02/02/15	153.84	145.08	8.76	Pilot GETS
<u>Perched Zone Water Levels</u>					
P-07	06/12/97	165.34	135.20	30.14	
	05/13/98	165.34	135.11	30.23	
	05/27/98	165.34	135.12	30.22	
	06/11/98	165.34	135.15	30.19	
	07/14/98	165.34	135.26	30.08	
	11/11/98	165.34	135.39	29.95	SVE, DPE-H2O
	11/18/98	165.34	135.42	29.92	SVE, DPE-H2O
	11/18/98	165.34	135.48	29.86	SVE, DPE-H2O
	11/19/98	165.34	135.36	29.98	SVE, DPE, DPE-H2O
	11/20/98	165.34	135.44	29.90	SVE, DPE-H2O
	11/23/98	165.34	135.36	29.98	SVE, DPE-H2O
	11/23/98	165.34	135.52	29.82	SVE, DPE-H2O
	11/24/98	165.34	135.53	29.81	SVE, DPE-H2O
	12/07/98	165.34	135.40	29.94	SVE, DPE-H2O
	12/07/98	165.34	135.52	29.82	SVE, DPE, DPE-H2O
	12/10/98	165.34	135.50	29.84	SVE, DPE, DPE-H2O
	12/11/98	165.34	135.37	29.97	SVE, DPE-H2O
	12/14/98	165.34	135.26	30.08	SVE, DPE-H2O
	12/14/98	165.34	135.27	30.07	SVE, DPE, DPE-H2O
	12/16/98	165.34	135.48	29.86	SVE, DPE, DPE-H2O



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Perched Zone Water Levels (continued)</u>					
P-07	01/06/99	165.34	135.36	29.98	
(Cont'd)	01/20/99	165.34	135.20	30.14	DPE, DPE-H2O
	01/25/99	165.34	135.50	29.84	SVE, DPE, DPE-H2O
	01/27/99	165.34	135.51	29.83	SVE, DPE, DPE-H2O
	02/01/99	165.34	135.25	30.09	SVE, DPE, DPE-H2O
	02/10/99	165.34	135.56	29.78	
	02/23/99	165.34	135.17	30.17	DPE
	03/01/99	165.34	135.55	29.79	
	03/09/99	165.34	135.19	30.15	
	03/10/99	165.34	135.57	29.77	SVE, DPE, DPE-H2O
	03/12/99	165.34	135.51	29.83	SVE, DPE, DPE-H2O
	03/15/99	165.34	135.59	29.75	SVE, DPE, DPE-H2O
	03/17/99	165.34	135.54	29.80	SVE, DPE-H2O
	03/29/99	165.34	135.34	30.00	SVE, DPE-H2O
	04/07/99	165.34	DRY	--	SVE, DPE-H2O
	04/12/99	165.34	135.58	29.76	SVE, DPE-H2O
	04/23/99	165.34	135.22	30.12	SVE, DPE-H2O
	04/29/99	165.34	DRY	--	SVE, DPE-H2O
	05/17/99	165.34	135.66	29.68	SVE, DPE-H2O
	06/16/99	165.34	135.66	29.68	SVE, DPE-H2O
	06/25/99	165.34	135.28	30.06	DPE, DPE-H2O
	07/15/99	165.34	135.57	29.77	DPE-H2O
	08/30/99	165.34	135.58	29.76	5.6 inches water in vaccum
	09/27/99	165.34	135.58	29.76	5 inches water in vaccum
	11/02/99	165.34	135.56	29.78	
	11/09/99	165.34	135.73	29.61	
	11/23/99	165.34	135.27	30.07	
	11/23/99	165.34	135.13	30.21	
	11/23/99	165.34	135.14	30.20	
	12/06/99	165.34	135.70	29.64	
	01/26/00	165.34	136.71	28.63	
	02/07/00	165.34	135.49	29.85	
	07/05/00	165.34	135.03	30.31	
	01/16/01	145.52	115.25	30.27	
	03/19/01	145.52	115.34	30.18	
	03/26/01	145.52	115.24	30.28	
	04/03/01	145.52	115.30	30.22	
	04/10/01	145.52	115.20	30.32	
	04/17/01	145.52	115.20	30.32	
	04/26/01	145.52	115.30	30.22	
	05/10/01	145.52	115.35	30.17	
	06/26/01	145.52	115.16	30.36	
	09/10/01	142.31	111.91	30.40	
	10/24/01	142.31	112.04	30.27	
	01/15/02	142.31	111.98	30.33	
	03/19/02	142.31	111.92	30.39	
	04/15/02	142.31	112.04	30.27	
	10/31/02	142.31	112.13	30.18	
	11/18/02	142.31	112.11	30.20	
	05/08/03	142.31	112.48	29.83	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Perched Zone Water Levels (continued)</u>					
P-07	06/09/03	142.31	112.94	29.37	
(Cont'd)	09/15/03	142.31	113.65	28.66	
	09/25/03	142.31	113.75	28.56	
	10/14/03	142.31	113.82	28.49	
	12/15/03	142.31	114.04	28.27	
	03/29/04	142.31	112.42	29.89	
	06/14/04	142.31	113.91	28.40	Dry to 117.4 feet bls. Water level elevation <24.9 feet msl.
	09/20/04	142.31	DRY	--	
	10/19/04	142.31	116.30	26.01	
	12/06/04	142.31	115.65	26.66	Dry @ 116.8 ft.
	03/15/05	142.31	DRY	--	
	06/20/05	142.31	114.50	27.81	Dry @ 115.0 ft bls.
	09/19/05	142.31	DRY	--	
	12/17/05	142.31	112.26	30.05	
	03/20/06	142.31	110.94	31.37	
	06/19/06	142.31	107.57	34.74	
	09/25/06	142.31	111.19	31.12	
	12/11/06	142.31	111.22	31.09	
	03/12/07	142.31	111.71	30.60	
	06/18/07	142.31	114.92	27.39	
	09/24/07	142.31	DRY	--	Dry @ 115.16 ft bls.
	12/10/07	142.31	DRY	--	
	03/17/08	142.31	114.58	27.73	
	06/23/08	142.31	114.13	28.18	
	09/22/08	142.31	113.85	28.46	
	12/15/08	142.31	113.47	28.84	
	03/16/09	142.31	113.13	29.18	
	06/22/09	142.31	112.81	29.50	
	08/31/09	142.31	112.67	29.64	
	12/07/09	142.31	112.52	29.79	
	03/01/10	142.31	112.34	29.97	
	03/03/10	142.31	112.42	29.89	
	06/07/10	142.31	112.24	30.07	
	09/07/10	142.31	112.51	29.80	
	12/06/10	142.31	112.27	30.04	
	03/24/11	142.31	111.51	30.80	
	06/20/11	142.31	111.36	30.95	
	08/01/11	142.31	111.31	31.00	
	10/31/11	142.31	111.28	31.03	
	02/06/12	142.31	111.01	31.30	
	05/07/12	142.31	110.72	31.59	
	08/06/12	142.31	111.39	30.92	
	11/05/12	142.31	112.34	29.97	
	02/04/13	142.31	111.50	30.81	
	05/13/13	142.31	111.40	30.91	
	08/12/13	142.31	113.15	29.16	
	11/11/13	142.31	112.58	29.73	
	02/03/14	142.31	112.22	30.09	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Perched Zone Water Levels (continued)</u>					
P-07	05/19/14	142.31	112.55	29.76	
(Cont'd)	08/18/14	142.31	112.83	29.48	
	11/04/14	142.31	113.00	29.31	
	02/02/15	142.31	112.81	29.50	
P-09	09/15/03	183.86	121.85	62.01	
	10/08/03	183.86	121.68	62.18	
	10/14/03	183.86	121.53	62.33	
	12/15/03	183.86	122.09	61.77	
	03/29/04	183.86	122.03	61.83	
	06/14/04	183.86	122.29	61.57	
	09/20/04	183.86	122.49	61.37	
	11/10/04	183.86	122.00	61.86	
	12/06/04	183.86	121.85	62.01	
	03/14/05	183.86	121.45	62.41	
	06/20/05	183.86	121.50	62.36	
	09/19/05	183.86	121.34	62.52	
	12/17/05	183.86	121.32	62.54	
	03/20/06	183.86	121.20	62.66	
	06/19/06	183.86	120.96	62.90	
	09/25/06	183.86	120.85	63.01	
	12/12/06	183.86	120.94	62.92	
	03/12/07	183.86	120.93	62.93	
	06/18/07	183.86	120.80	63.06	
	09/24/07	183.86	120.91	62.95	
	12/10/07	183.86	120.84	63.02	
	03/17/08	183.86	120.76	63.10	
	06/23/08	183.86	120.73	63.13	
	09/22/08	183.86	120.83	63.03	
	12/15/08	183.86	120.64	63.22	
	03/16/09	183.86	120.70	63.16	
	06/22/09	183.86	120.66	63.20	
	08/31/09	183.86	120.75	63.11	
	12/07/09	183.86	120.80	63.06	
	03/01/10	183.86	120.74	63.12	
	03/02/10	183.86	120.75	63.11	
	06/07/10	183.86	120.69	63.17	
	09/07/10	183.86	120.78	63.08	
	12/06/10	183.86	120.60	63.26	
	03/24/11	183.86	120.44	63.42	
	06/20/11	183.86	120.48	63.38	
	08/01/11	183.86	120.48	63.38	
	10/31/11	183.86	120.50	63.36	
	02/06/12	183.86	120.50	63.36	
	05/07/12	183.86	120.51	63.35	
	08/06/12	183.86	120.48	63.38	
	11/05/12	183.86	120.70	63.16	
	02/04/13	183.86	120.54	63.32	
	05/13/13	183.86	120.48	63.38	
	08/12/13	183.86	120.63	63.23	



TABLE 3

GROUNDWATER LEVELS

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
<u>Perched Zone Water Levels (continued)</u>					
P-09	11/11/13	183.86	120.80	63.06	
(Cont'd)	02/03/14	183.86	120.73	63.13	
	05/19/14	183.86	120.69	63.17	
	08/18/14	183.86	120.73	63.13	
	11/04/14	183.86	120.83	63.03	
	02/02/15	183.86	120.70	63.16	

FOOTNOTES

(a) Reference point elevations are relative to City of Fullerton datum.

(>) = Greater than

(<) = Less than

(--) = Not Calculated

bls = Below land surface

msl = Mean sea level

NA = Reference Point Not Available

SVE = Soil Vapor Extraction System On

DPE = Vapor Phase Dual Vapor Extraction System On

DPE-H2O = Water Phase Dual Vapor Extraction System On

Pilot GETS = Pilot Groundwater Extraction and Treatment System On

UTM = Unable to Measure

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

.....Concentration (micrograms per liter).....																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells																
MW-06	01/30/97	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
MW-600	01/30/97	FD	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
MW-06	02/19/97	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
MW-06	02/09/00	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-06	05/08/01	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-06	04/17/02	ORG	< 0.50	< 0.50	1.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-06	04/17/02	SPT	< 0.50	< 0.50	2.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
MW-06	11/18/02	ORG	< 0.50	< 0.50	2.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-06	06/10/03	ORG	< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-06	12/17/03	ORG	< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	06/16/04	ORG	< 0.50	< 0.50	2.2 U	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	12/09/04	ORG	< 0.50	< 0.50	2.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.1
MW-06	06/23/05	ORG	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	12/20/05	ORG	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	06/21/06	ORG	< 0.50	< 0.50	0.62	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	12/18/06	ORG	< 0.50	< 0.50	2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	06/21/07	ORG	< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	12/12/07	ORG	< 0.50	< 0.50	0.78	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	06/26/08	ORG	< 0.50	< 0.50	0.85 U	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	06/25/09	ORG	< 0.50	< 0.50	0.52	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	12/08/09	ORG	< 0.50	< 0.50	0.53	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-06	06/08/10	ORG	< 0.50	< 0.50	0.56	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	12/10/10	ORG	< 0.50	< 0.50	0.62	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-06	02/08/12	ORG	< 0.50	< 0.50	1.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-06	02/05/13	ORG	< 0.50	< 0.50	1.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-06	02/04/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-06	02/04/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.78	NA
Historical High/Low														High		
MW-06 Historical Range***			< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - 2.8	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 2.0
MW-08	01/28/97	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.3	< 1.0	< 1.0	NA
MW-08	02/19/97	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.9	< 1.0	< 1.0	NA
MW-08	02/17/00	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-08	05/09/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50	NA
MW-08	04/17/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	< 0.50	< 0.50	8.5	< 0.50	< 0.50	< 0.5
MW-08	04/17/02	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.0	< 0.50	< 0.50	< 1.0
MW-08	11/21/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.2	< 0.50	< 0.50	< 0.50	< 0.50	7.6	< 0.50	< 0.50	NA
MW-08	06/11/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.98	0.67	< 0.50	< 0.50	< 0.50	14	< 0.50	< 0.50	NA
MW-08	12/18/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.6	< 0.50	< 0.50	< 0.50	< 0.50	5.8	< 0.50	< 0.50	NA
MW-08	03/30/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	26	0.52	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	NA
MW-08	06/17/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	64	5.6	< 0.50	< 0.50	< 0.50	89	< 0.50	< 0.50	NA
MW-800	06/17/04	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	60	5.1	< 0.50	< 0.50	< 0.50	87	< 0.50	< 0.50	NA
MW-08	06/17/04	SPT	< 1	< 1	< 1	< 1	< 1	48	4.0	< 1	< 1	< 1	65	< 1	< 1	NA
MW-08	07/28/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	23 E	2.5	< 0.50	< 0.50	< 0.50	40 E	< 0.50	< 0.50	< 2
MW-800	07/28/04	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	23 E	2.1	< 0.50	< 0.50	< 0.50	39 E	< 0.50	< 0.50	< 2
MW-08	07/28/04	SPT	< 1	< 1	< 1	< 1	< 1	13 E	1.0	< 1	< 1	< 1	23 E	< 1	< 1	< 1

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-08	09/21/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.4	1.0	< 0.50	< 0.50	< 0.50	19	< 0.50	< 0.50	NA
MW-08	12/15/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.7	0.61	< 0.50	< 0.50	< 0.50	13	< 0.50	< 0.50	< 2.2
MW-08	03/16/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.7	0.65	< 0.50	< 0.50	< 0.50	15	< 0.50	< 0.50	< 2.0
MW-08	06/24/05	ORG	0.85	< 0.50	< 0.50	< 0.50	< 0.50	180	7.7	< 0.50	< 0.50	< 0.50	130	< 0.50	< 0.50	< 2.0
MW-800	06/24/05	FD	0.87	< 0.50	< 0.50	< 0.50	< 0.50	160	7.6	< 0.50	< 0.50	< 0.50	130	< 0.50	< 0.50	< 2.0
MW-08	09/22/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	45 E	3.4	< 0.50	< 0.50	< 0.50	61 E	< 0.50	< 0.50	< 2.0
MW-800	09/22/05	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22 E	2.1	< 0.50	< 0.50	< 0.50	39	< 0.50	< 0.50	20 U
MW-08	09/22/05	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	15 E	2.0	< 0.50	< 0.50	< 0.50	33 E	0.90	< 0.50	< 1.0
MW-08	12/20/05	ORG	< 0.50	< 0.50	< 0.50	2.0	< 0.50	370	3.2	0.66	< 0.50	< 0.50	82	< 0.50	< 0.50	12
MW-08	12/20/05	SPT	< 0.50	0.50	< 0.50	2.0	< 0.50	350	3.0	< 0.50	< 0.50	< 0.50	76	0.50	< 0.50	13
MW-08	03/23/06	ORG	< 0.50	< 0.50	0.76	3.6	0.92	270	2.5	0.55	< 0.50	< 0.50	55	< 0.50	< 0.50	65
MW-800	03/23/06	FD	< 0.50	< 0.50	0.82	4.7	1.0	380	2.9	0.74	< 0.50	< 0.50	65	< 0.50	< 0.50	81
MW-08	06/22/06	ORG	< 0.50	< 0.50	0.69	5.1	0.99	500	2.6	1.3	< 0.50	< 0.50	69	< 0.50	< 0.50	130
MW-800	06/22/06	FD	< 0.50	< 0.50	0.69	5.0	1.0	410	2.5	1.2	< 0.50	< 0.50	69	< 0.50	< 0.50	110
MW-08	06/22/06	SPT	< 3.0	< 3.0	< 3.0	6.0	< 3.0	380	3.0	< 3.0	< 3.0	< 3.0	50	< 3.0	< 3.0	140
MW-08	09/28/06	ORG	0.95	< 0.50	< 0.50	< 0.50	< 0.50	27	6.5	< 0.50	< 0.50	< 0.50	120	< 0.50	< 0.50	< 2.0
MW-800	09/28/06	FD	1.1	< 0.50	< 0.50	< 0.50	< 0.50	24	7.7	< 0.50	< 0.50	< 0.50	110	< 0.50	< 0.50	< 2.0
MW-08	09/28/06	SPT	1.0	< 0.50	< 0.50	< 0.50	< 0.50	28	6.2	< 0.50	< 0.50	< 0.50	130	< 0.50	< 0.50	< 1
MW-08	12/19/06	ORG	0.93	< 0.50	< 0.50	< 0.50	< 0.50	13	7.1	< 0.50	< 0.50	< 0.50	130	< 0.50	< 0.50	< 2.0
MW-800	12/19/06	FD	0.95	< 0.50	< 0.50	< 0.50	< 0.50	14	7.1	< 0.50	< 0.50	< 0.50	110	< 0.50	< 0.50	< 2.0
MW-08	03/15/07	ORG	< 0.50	< 0.50	< 0.50	0.57	< 0.50	120	4.5	< 0.50	< 0.50	< 0.50	90	< 0.50	< 0.50	26
MW-08	06/22/07	ORG	< 0.50	< 0.50	0.50	0.51	< 0.50	87	4.4	< 0.50	< 0.50	< 0.50	92	< 0.50	< 0.50	25
MW-08	09/26/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	32 E	1.5	< 0.50	< 0.50	< 0.50	25	< 0.50	< 0.50	7.7
MW-800	09/26/07	FD	< 0.50	< 0.50	< 0.50	0.52	< 0.50	47 E	1.5	< 0.50	< 0.50	< 0.50	27	< 0.50	< 0.50	8.2
MW-08	09/26/07	SPT	< 1	< 1	< 1	< 1	< 1	42 E	1.0	< 1	< 1	< 1	26	< 1	< 1	11
MW-08	12/13/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	39	1.3	< 0.50	< 0.50	< 0.50	27	< 0.50	< 0.50	6.0
MW-08	03/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	28	0.97	< 0.50	< 0.50	< 0.50	19	< 0.50	< 0.50	5.4
MW-800	03/18/08	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	30	1.1	< 0.50	< 0.50	< 0.50	20	< 0.50	< 0.50	5.3
MW-08	03/18/08	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	27	0.9	< 0.50	< 0.50	< 0.50	21	0.60	< 0.50	7.0
MW-08	06/27/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	29	1.3	< 0.50	< 0.50	< 0.50	23	< 0.50	< 0.50	5.9
MW-08	09/26/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19	1.0	< 0.50	< 0.50	< 0.50	18	< 0.50	< 0.50	3.7 BU
MW-08	12/19/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	23	0.7	< 0.50	< 0.50	< 0.50	13	< 0.50	< 0.50	3.9
MW-08	03/17/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	26	1.2	< 0.50	< 0.50	< 0.50	21	< 0.50	< 0.50	3.9
MW-08	06/25/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19	1.1	< 0.50	< 0.50	< 0.50	23	< 0.50	< 0.50	2.7
MW-08	09/01/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	17	0.56	< 0.50	< 0.50	< 0.50	14	< 0.50	< 0.50	2.4
MW-08	12/10/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22	0.68	< 0.50	< 0.50	< 0.50	15	< 0.50	< 0.50	7.2
MW-08	03/03/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	33	0.87	< 0.50	< 0.50	< 0.50	21	< 0.50	< 0.50	8.4
MW-08	06/10/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	35	7.1	< 0.50	< 0.50	< 0.50	110	< 0.50	< 0.50	< 2.0
MW-08	09/10/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	36	9.8	< 0.50	< 0.50	< 0.50	200	< 0.50	< 0.50	2.4
MW-08	12/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	32	6.0	< 0.50	< 0.50	< 0.50	110	< 0.50	< 0.50	< 2.0
MW-08	03/30/11	ORG	0.84	< 0.50	0.69	< 0.50	< 0.50	38	10	< 0.50	< 0.50	< 0.50	230	< 0.50	< 0.50	< 0.20
MW-08	06/24/11	ORG	0.57	< 0.50	0.65	< 0.50	< 0.50	67	9.4	< 0.50	< 0.50	< 0.50	210	< 0.50	< 0.50	0.75
MW-800	06/24/11	FD	0.56	< 0.50	0.67	< 0.50	< 0.50	68	9.0	< 0.50	< 0.50	< 0.50	220	< 0.50	< 0.50	0.59
MW-08	08/02/11	ORG	0.64	< 0.50	0.86	< 0.50	< 0.50	190	13	< 0.50	< 0.50	< 0.50	480	< 0.50	< 0.50	0.69
MW-08	11/04/11	ORG	< 0.50	< 0.50	0.60	< 0.50	< 0.50	39.4	9.2	< 0.50	< 0.50	< 0.50	200	< 0.50	< 0.50	0.40

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter).....																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)																Semi-VOCs
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (--/--)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (--/150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-0800	11/04/11	FD	< 0.50	< 0.50	0.60	< 0.50	< 0.50	39.5	7.6	< 0.50	< 0.50	< 0.50	170	< 0.50	< 0.50	0.40
MW-08	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	29	8.4	< 0.50	< 0.50	< 0.50	170	< 0.50	< 0.50	0.94
MW-08	05/11/12	ORG	< 1.0	< 1.0	< 1.0	1.4	< 1.0	340	5.0	1.1	< 1.0	< 1.0	120	< 1.0	< 1.0	6.3
MW-08	08/09/2012	ORG	< 0.50	< 0.50	0.67	< 0.50	< 0.50	52	6.0	< 0.50	< 0.50	< 0.50	120	< 0.50	< 0.50	0.38
MW-08	11/7/2012	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22	2.6	< 0.50	< 0.50	< 0.50	57	< 0.50	< 0.50	4.4
MW-08	2/8/2013	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	16	1.8	< 0.50	< 0.50	< 0.50	41	< 0.50	< 0.50	1.1
MW-08	05/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14	2.0	< 0.50	< 0.50	< 0.50	41	< 0.50	< 0.50	1.3
MW-08	8/15/2013	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10	1.6	< 0.50	< 0.50	< 0.50	27	< 0.50	< 0.50	1.0
MW-08	11/12/2013	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.1	0.81	< 0.50	< 0.50	< 0.50	17	< 0.50	< 0.50	0.50
MW-08	2/6/2014	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.9	0.62	< 0.50	< 0.50	< 0.50	13	< 0.50	< 0.50	0.53
MW-08	05/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.4	0.83	< 0.50	< 0.50	< 0.50	16	< 0.50	< 0.50	1.7
MW-08	08/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.7	0.62	< 0.50	< 0.50	< 0.50	15	< 0.50	< 0.50	0.31
MW-08	11/11/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.7	0.68	< 0.50	< 0.50	< 0.50	13	< 0.50	< 0.50	< 0.20
MW-08	02/05/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.8	0.98	< 0.50	< 0.50	< 0.50	21	< 0.50	< 0.50	1.1
MW-08 Historical Range***			< 0.50 - 0.95	< 0.50 - 0.50	< 0.50 - 0.86	< 0.50 - 5.1	< 0.50 - 0.99	< 0.50 - 500	< 0.50 - 13	< 0.50 - 1.3	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - 480	< 0.50 - 1.0	< 0.50 - < 5.0	< 0.20 - 130
MW-09	03/26/97	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	4.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
MW-09	04/10/97	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
MW-09	02/17/00	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-09	11/21/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.3	< 0.50	7.6
MW-900	11/21/02	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	< 0.50	7.7
MW-09	11/21/02	SPT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.0	< 1.0	6.8
MW-09	06/10/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.3	< 0.50	4.0
MW-900	06/10/03	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.1	< 0.50	7.4
MW-09	06/10/03	SPT	< 1	< 1	< 1	< 1	< 1	2.0	< 1	< 1	< 1	< 1	< 1	2.0	< 1	3.8
MW-09	09/24/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	12/18/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.81	< 0.50	< 2.0
MW-900	12/18/03	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 2.0
MW-09	03/30/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	< 0.50	< 2.0
MW-09	06/16/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	09/21/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.77	< 0.50	< 2.0
MW-09	12/08/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50	< 2.1
MW-09	03/15/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.69	< 0.50	< 2.2
MW-09	03/15/05	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.50	< 0.50	3.0
MW-09	06/23/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	09/21/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.82	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	12/20/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.85	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	03/22/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.77	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	06/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.80	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	09/28/06	ORG	< 0.50	< 0.50	< 0.50	0.79	< 0.50	32	< 0.50	< 0.50	< 0.50	< 0.50	0.96	< 0.50	< 0.50	52 E
MW-09	12/19/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0 E
MW-900	12/19/06	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.1 E
MW-09	03/14/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	09/26/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.70	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	12/12/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.75	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	03/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.65	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.0
MW-09	06/27/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	09/25/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	09/01/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	12/08/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

.....Concentration (micrograms per liter).....																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (--/1--)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (--/150)	Toulene (1,000/150)	1,4-DIOXANE (3/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-09	03/03/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	06/11/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	09/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	12/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-09	03/29/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-09	08/02/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.59
MW-09	02/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-09	08/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.52	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-09	02/08/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-09	8/14/2013	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.59	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-09	2/5/2014	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.30
MW-09	8/20/2014	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.60
MW-09	2/5/2015	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.62
MW-09 Historical Range***			< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - 0.79	< 0.50 - < 5.0	< 0.50 - 4.9	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - 0.96	< 0.50 - 5.3	< 0.50 - < 5.0	< 0.20 - 52 E
MW-13	04/22/97	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.3	< 1.0	NA
MW-13	05/21/97	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
MW-13	02/15/00	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-13	07/06/00	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 3.0
MW-13	05/07/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-13	10/24/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-13	04/17/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-13	04/17/02	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
MW-13	11/19/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.78	< 0.50	< 0.5
MW-13	06/10/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 0.5
MW-13	12/16/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.9	< 0.50	< 2.0
MW-13	06/15/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.2	< 0.50	< 2.0
MW-13	12/08/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.3	< 0.50	< 2.1
MW-13	06/23/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.60	3.8	< 0.50
MW-13	12/19/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.50	3.7	< 0.50
MW-13	06/22/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.58	3.5	< 0.50
MW-13	09/29/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.5	< 0.50	< 2.0
MW-13	09/29/06	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.50	3.0	< 0.50
MW-13	12/14/06	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.3	< 1.0	< 2.0
MW-13	06/21/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 2.0
MW-13	12/12/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-13	06/26/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.7	< 0.50	< 2.0
MW-13	12/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 2.5
MW-13	06/24/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.2	< 0.50	< 2.0
MW-13	12/08/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 2.0
MW-13	06/11/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.0	< 0.50	< 2.0
MW-13	12/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.2	< 0.50	< 2.0
MW-13	02/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.3	< 0.50	< 0.20
MW-13	02/06/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.0	< 0.50	< 0.20
MW-13	02/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.8	< 0.50	< 0.20
MW-13	02/03/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.0	< 0.50	< 0.20
MW-13 Historical Range***			< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - 0.60	< 0.50 - 5.8	< 0.50 - < 5.0	< 0.20 - 2.4

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-15	05/27/98	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5.0	< 5.0	< 5.0	NA
MW-15	06/11/98	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5.5	20	< 5.0	NA
MW-15	02/16/00	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	5.9	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	9.6	< 5.0	NA
MW-1500	02/16/00	FD	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	6.7	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	9.8	< 5.0	NA
MW-15	07/05/00	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	8.4	< 1.0	< 1.0	< 1.0	< 1.0	1.9	4.7	< 1.0	NA
MW-15	07/05/00	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	10	< 1.0	< 1.0	< 1.0	< 1.0	2.4	< 0.50	< 1.0	< 3.0
MW-15	05/08/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	< 0.50	7.8	< 0.50	< 0.50	NA
MW-15	10/25/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-15	04/18/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-15	04/18/02	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
MW-15	11/21/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14	< 0.50	< 0.50	< 0.50	< 0.50	0.53	< 0.50	< 0.50	NA
MW-15	06/11/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-15	09/23/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-15	12/18/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-15	03/30/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.60	< 0.50	NA
MW-15	06/17/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.2	5.1	< 0.50	NA
MW-15	09/21/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.6	10	< 0.50	NA
MW-15	12/15/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.7	11	< 0.50	NA
MW-15	03/15/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.0	9.4	< 0.50	NA
MW-15	03/15/05	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.0	7.5	< 0.50	NA
MW-15	06/23/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.4	11	< 0.50	NA
MW-15	09/22/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.1	13	< 0.50	NA
MW-15	12/20/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.1	9.2	< 0.50	NA
MW-15	03/22/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	11	< 0.50	NA
MW-15	06/22/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.7	10	< 0.50	NA
MW-15	09/29/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.3	< 0.50	< 0.50	NA
MW-1500	09/29/06	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.2	12	< 0.50	NA
MW-15	12/19/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.9	8.0	< 0.50	< 2.0
MW-15	03/15/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.4	5.8	< 0.50	< 2.0
MW-15	06/22/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.1	12	< 0.50	< 2.0
MW-15	09/26/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.5	5.9	< 0.50	< 2.0
MW-1500	09/26/07	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	6.6	< 0.50	< 2.0
MW-15	09/26/07	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.0	5.0	< 1	< 1
MW-15	12/13/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.50	< 0.50	2.5	7.2	< 0.50	< 2.0
MW-15	03/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.5	5.5	< 0.50	< 2.0
MW-15	06/27/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.4	< 0.50	< 0.50	< 0.50	< 0.50	2.6	5.8	< 0.50	< 2.0
MW-15	09/26/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.7	< 0.50	< 0.50	< 0.50	< 0.50	1.8	3.3	< 0.50	< 2.0
MW-15	12/16/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.8	< 0.50	< 0.50	< 0.50	< 0.50	1.3	1.9	< 0.50	NA
MW-15	03/17/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	< 0.50	< 0.50	1.4	2.6	< 0.50	NA
MW-15	06/24/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.8	< 0.50	< 0.50	< 0.50	< 0.50	1.0	1.9	< 0.50	NA
MW-15	09/01/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.4	< 0.50	< 0.50	< 0.50	< 0.50	1.2	2.1	< 0.50	NA
MW-15	12/10/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.5	< 0.50	< 0.50	< 0.50	< 0.50	0.94	2.0	< 0.50	NA
MW-15	03/03/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.2	< 0.50	< 0.50	< 0.50	< 0.50	0.73	1.6	< 0.50	NA
MW-15	06/11/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 2.0
MW-15	09/10/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50	NA
MW-15	12/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.7	< 0.50	< 0.50	< 0.50	< 0.50	0.50	1.7	< 0.50	NA

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)															Semi-VOCs	
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-15	03/28/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.88	< 0.50	< 0.50	< 0.50	< 0.50	3.4	6.8	< 0.50	NA
MW-15	08/02/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.9	7.7	< 0.50	NA
MW-15	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.0	9.1	< 0.50	NA
MW-15	08/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.1	14	< 0.50	NA
MW-15	02/07/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.0	5.8	< 0.50	NA
MW-15	08/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.4	8.6	< 0.50	NA
MW-15	02/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.9	8.4	< 0.50	NA
MW-15	08/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.9	7.0	< 0.50	NA
MW-15	02/05/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.5	< 0.50	< 0.50	< 0.50	< 0.50	1.9	6.0	< 0.50	NA
MW-15 Historical Range***			< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - 12	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - 7.8	< 0.50 - 20	< 0.50 - < 5.0	< 0.50 - < 2.0
MW-16 ^(a)	11/05/99	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	317	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-16 ^(a)	11/05/99	SPT	< 1.0	< 1.0	< 1.0	3.6	< 1.0	510	< 1.0	< 1.0	5	< 1.0	< 1.0	< 1.0	< 1.0	NA
MW-16	11/23/99	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	73	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-16 ^(b)	11/23/99	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	99	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-16	12/07/99	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	49	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-16	12/07/99	SPT	< 2	< 5.0	< 5.0	< 2	< 5.0	44	< 2	< 2	< 2	< 2	< 2	< 5.0	< 5.0	NA
MW-16	02/18/00	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	238	< 5.0	< 5.0	11	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-1600	02/18/00	FD	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	264	< 5.0	< 5.0	10	< 5.0	< 5.0	< 5.0	< 5.0	NA
MW-16	07/05/00	ORG	< 0.50	< 0.50	0.59	9.4	1.5	1,100 E	< 0.50	2.0	28 E	4.3	2.2	< 0.50	< 0.50	133
MW-1600	07/05/00	FD	0.54	< 0.50	0.56	9.2	1.5	1,100 E	< 0.50	1.7	26 E	4.0	2.0	< 0.50	< 0.50	77
MW-16	07/05/00	SPT	NA	0.80	0.80	13.4	1.9	2,400 E	NA	2.0	41.5 E	2.8	2.5	< 0.50	< 0.50	63.05
MW-1600	05/10/01	FD	< 5.0	< 5.0	< 5.0	12	2.0 J	870	< 5.0	2.0 J	20	3.0 J	2.0 J	< 5.0	< 5.0	174 E
MW-16	05/10/01	ORG	< 5.0	< 5.0	0.50 J	11	2.0 J	790	< 5.0	0.90 J	18	3.0 J	1.0 J	< 5.0	< 5.0	165 E
MW-16	05/10/01	SPT	< 5.0	< 5.0	< 5.0	9.0	< 5.0	940	< 5.0	< 5.0	20	< 5.0	< 5.0	< 5.0	< 5.0	270 E
MW-16	10/23/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	88	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 3.0
MW-16	10/23/01	SPT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	99	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.0
MW-16	04/16/02	ORG	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	190
MW-1600	04/16/02	FD	< 5.0	< 5.0	< 5.0	6.0	< 5.0	420	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	190
MW-16	04/16/02	SPT	< 3.0	< 3.0	< 3.0	5.0	< 3.0	350	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	281
MW-16	11/20/02	ORG	< 2.5	< 2.5	< 2.5	7.1	< 2.5	440	< 2.5	< 2.5	3.6	3.7	< 2.5	< 2.5	< 2.5	420
MW-16	06/11/03	ORG	< 0.50	< 0.50	< 0.50	4.1	1.1	390	< 0.50	0.72	1.1	2.3	1.0	< 0.50	< 0.50	230
MW-16	09/24/03	ORG	< 0.50	< 0.50	< 0.50	1.2	< 0.50	120	< 0.50	< 0.50	< 0.50	< 0.50	0.61	< 0.50	< 0.50	12
MW-16	12/17/03	ORG	< 0.50	< 0.50	< 0.50	2.9	< 0.50	240	< 0.50	0.58	< 0.50	1.4	1.1	< 0.50	< 0.50	45
MW-16	12/17/03	SPT	< 1.0	< 1.0	< 1.0	3	< 1.0	200	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	< 1.0	100
MW-16	03/31/04	ORG	< 0.50	< 0.50	< 0.50	8.2	< 0.50	590	< 0.50	1.9	1.8	5.6	1.9	< 0.50	< 0.50	180
MW-1600	03/31/04	FD	< 0.50	< 0.50	< 0.50	8.3	< 0.50	590	< 0.50	1.9	1.8	5.6	1.8	< 0.50	< 0.50	180
MW-16	06/18/04	ORG	< 0.50	< 0.50	0.98 U	14	< 0.50	870	0.50	2.7	2.6	10	2.8	< 0.50	< 0.50	400
MW-16	09/22/04	ORG	< 0.50	< 0.50	< 0.50	2	< 0.50	260	< 0.50	< 0.50	< 0.50	0.51	1.0	< 0.50	< 0.50	11
MW-16	12/10/04	ORG	< 0.50	< 0.50	< 0.50	3.7	< 0.50	900	< 0.50	0.61	< 0.50	1.0	1.8	< 0.50	< 0.50	26
MW-16	03/17/05	ORG	< 0.50	0.58	1.1	18	4.5	1,900	0.57	2.9	2.0	10	3.7	< 0.50	< 0.50	250
MW-1600	03/17/05	FD	< 0.50	0.58	1.1	17	4.2	1,400	0.51	2.7	1.9	9.8	3.6	< 0.50	< 0.50	290
MW-16	06/24/05	ORG	< 0.50	< 0.50	< 0.50	6.9	1.7	710	< 0.50	1.3	< 0.50	4.2	2.3	< 0.50	< 0.50	110
MW-16	09/22/05	ORG	< 0.50	< 0.50	< 0.50	2.9	< 0.50	320	< 0.50	< 0.50	< 0.50	0.88	1.7	< 0.50	< 0.50	< 2.0
MW-16	12/21/05	ORG	< 0.50	< 0.50	< 0.50	4.3	1.2	370	< 0.50	1.1	< 0.50	2.2	1.2	< 0.50	< 0.50	190
MW-1600	12/21/05	FD	< 0.50	< 0.50	< 0.50	3.8	1.1	320	< 0.50	0.99	< 0.50	1.9	1.1	< 0.50	< 0.50	180
MW-16	03/22/06	ORG	< 0.50	< 0.50	< 0.50	3.1	1.1	210	< 0.50	0.70	< 0.50	1.4	0.63	< 0.50	< 0.50	110

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (--/--)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (--/150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-16	06/22/06	ORG	< 0.50	< 0.50	< 0.50	2.7	0.85	240	< 0.50	0.95	< 0.50	1.7	0.86	< 0.50	< 0.50	140
MW-16	09/28/06	ORG	< 0.50	< 0.50	< 0.50	2.6	< 0.5	280	< 0.50	0.51	< 0.50	0.93	1.4	< 0.50	< 0.50	130
MW-16	12/15/06	ORG	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	220	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	64
MW-16	03/14/07	ORG	< 0.50	< 0.50	< 0.50	1.1	< 0.50	270	< 0.50	< 0.50	< 0.50	0.91	2.0	< 0.50	< 0.50	54
MW-16	03/14/07	SPT	< 2	< 2	< 2	2.0	< 2	270	< 2	< 2	< 2	< 2	< 2	< 2	< 2	71
MW-16	06/20/07	ORG	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	140	< 1.0	< 1.0	< 1.0	< 1.0	2.0	< 1.0	< 1.0	25
MW-16	09/27/07	ORG	< 0.50	< 0.50	< 0.50	2.4	< 0.50	330	< 0.50	< 0.50	< 0.50	< 0.50	3.2	< 0.50	< 0.50	14
MW-16	12/13/07	ORG	< 0.50	< 0.50	< 0.50	2.7	< 0.50	320	< 0.50	< 0.50	< 0.50	< 0.50	2.8	< 0.50	< 0.50	17
MW-16	03/19/08	ORG	< 0.50	< 0.50	< 0.50	2.2	< 0.50	330	< 0.50	< 0.50	< 0.50	< 0.50	2.3	< 0.50	< 0.50	30 U
MW-16	06/24/08	ORG	< 0.50	< 0.50	< 0.50	2.2	< 0.50	480	< 0.50	< 0.50	< 0.50	< 0.50	3.6	< 0.50	< 0.50	13
MW-16	09/25/08	ORG	< 0.50	< 0.50	< 0.50	5.2	< 0.50	820	< 0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50	< 0.50	19 B
MW-1600	09/25/08	FD	< 0.50	< 0.50	< 0.50	4.8	< 0.50	800	< 0.50	< 0.50	< 0.50	< 0.50	1.9	< 0.50	< 0.50	21 B
MW-16	09/25/08	SPT	< 1.0	< 1.0	< 1.0	4.0	< 1.0	880	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	26
MW-16	12/19/08	ORG	< 2.5	< 2.5	< 2.5	5.2	< 2.5	1,100	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	27
MW-1600	12/19/08	FD	< 2.5	< 2.5	< 2.5	5.4	< 2.5	1,100	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	29
MW-16	03/17/09	ORG	< 5.0	< 5.0	< 5.0	8.9	< 5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	65
MW-1600	03/17/09	FD	< 5.0	< 5.0	< 5.0	9.1	< 5.0	1,500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	62
MW-16	06/24/09	ORG	< 2.5	< 2.5	< 2.5	6.1	< 2.5	790	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	360
MW-16	09/02/09	ORG	< 2.5	< 2.5	< 2.5	7.0	< 2.5	1,100	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	73
MW-16	12/09/09	ORG	< 2.5	< 2.5	< 2.5	5.5	< 2.5	910	< 2.5	< 2.5	< 2.5	< 2.5	3.0	< 2.5	< 2.5	100
MW-16	03/03/10	ORG	< 1.0	< 1.0	< 1.0	4.8	1.5	590	< 1.0	< 1.0	< 1.0	2.1	4.3	< 1.0	< 1.0	440
MW-16	06/11/10	ORG	< 1.0	< 1.0	< 1.0	4.6	< 1.0	560	< 1.0	< 1.0	< 1.0	1.3	4.5	< 1.0	< 1.0	180
MW-16	06/11/10	SPT	< 1.0	< 1.0	< 1.0	4.0	< 1.0	620	< 1.0	< 1.0	< 1.0	1.0	4.0	< 1.0	< 1.0	210
MW-16	09/09/10	ORG	< 1.0	< 1.0	< 1.0	3.1	< 1.0	540	< 1.0	< 1.0	< 1.0	< 1.0	4.9	< 1.0	< 1.0	45
MW-16	12/09/10	ORG	< 1.0	< 1.0	< 1.0	3.0	< 1.0	630	< 1.0	< 1.0	< 1.0	< 1.0	4.0	< 1.0	< 1.0	31
MW-16	03/28/11	ORG	< 1.0	< 1.0	< 1.0	7.8	1.7	680	< 1.0	1.5	3.6	< 1.0	4.1	< 1.0	< 1.0	99
MW-16	08/05/11	ORG	< 1.0	< 1.0	< 1.0	8.9	1.5	910	< 1.0	1.1	3.6	2.9	5.3	< 1.0	< 1.0	260
MW-16	02/07/12	ORG	< 1.0	< 1.0	< 1.0	2.3	< 1.0	95	< 1.0	< 1.0	< 1.0	1.3	< 1.0	< 1.0	< 1.0	44
MW-16	08/10/12	ORG	< 0.50	< 0.50	< 0.50	3.5	< 0.50	560	< 0.50	0.57	< 0.50	0.52	4.2	< 0.50	< 0.50	24
MW-16	02/06/13	ORG	< 1.0	< 1.0	< 1.0	3.9	< 1.0	680	< 1.0	< 1.0	< 1.0	< 1.0	4.5	< 1.0	< 1.0	49
MW-16	08/14/13	ORG	< 1.2	< 1.2	< 1.2	5.2	< 1.2	770	< 1.2	< 1.2	< 1.2	< 1.2	5.7	< 1.2	< 1.2	36
MW-16	02/05/14	ORG	< 1.0	< 1.0	< 1.0	4.9	< 1.0	750	< 1.0	< 1.0	< 1.0	< 1.0	5.4	< 1.0	< 1.0	33
MW-1600	02/05/14	FD	< 0.50	< 0.50	< 0.50	4.1	0.52	630	< 0.50	0.89	< 0.50	< 0.50	6.1	< 0.50	< 0.50	33
MW-16	02/05/14	SPT	< 0.50	< 0.50	< 1.0	5.1	< 0.50	780	< 1.0	< 1.0	< 1.0	< 1.0	5.8	< 1.0	< 1.0	45
MW-16	08/20/14	ORG	< 1.0	< 1.0	< 1.0	4.0	< 0.50	820	< 1.0	< 1.0	< 1.0	< 1.0	6.4	< 1.0	< 1.0	38
MW-16	02/05/15	ORG	< 5.0	< 5.0	< 5.0	9.8	< 5.0	1,200	< 5.0	< 5.0	< 5.0	< 5.0	7.1	< 5.0	< 5.0	440
MW-16 Historical Range**			< 0.50 - < 5.0	< 0.50 - 0.58	< 0.50 - 1.1	< 0.50 - 18	< 0.50 - 4.5	49 - 1,900	< 0.50 - 0.57	< 0.50 - 2.9	< 0.50 - 28 E	< 0.50 - 10	< 0.50 - 6.4	< 0.50 - < 5.0	< 0.50 - < 5.0	< 2.0 - 440
High																
MW-17	06/15/00	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-17	06/15/00	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-17	07/06/00	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 3.0
MW-17	07/06/00	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-17	05/08/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-17	10/22/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-1700	10/22/01	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-17	04/16/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-17	04/16/02	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-17	11/20/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-17	06/09/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-17	12/16/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	06/16/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	12/08/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.1
MW-17	06/22/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	12/19/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	06/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	12/13/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	06/18/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	12/11/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	06/25/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	12/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	06/24/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	12/10/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	06/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17	12/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-17 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - < 3.0
MW-18	06/15/00	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-1800	06/15/00	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.5	< 0.50	NA
MW-18	07/06/00	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.7	< 0.50	< 3.0
MW-18	05/07/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.9	< 0.50	NA
MW-18	10/23/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-18	04/16/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.5
MW-18	04/16/02	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
MW-18	11/19/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50	< 0.5
MW-18	06/10/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.5
MW-18	12/16/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 2.0
MW-18	06/15/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.3	< 0.50	< 2.0
MW-18	12/09/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	< 0.50	< 2.0
MW-18	06/22/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.3	< 0.50	< 2.0
MW-18	12/21/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.9	< 0.50	< 2.0
MW-18	06/20/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.5	< 0.50	< 2.0
MW-18	12/15/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.5	< 0.50	< 2.0
MW-18	06/18/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 2.0
MW-18	12/12/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-18	06/24/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 2.0
MW-18	12/17/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.65	< 0.50	6.9
MW-18	06/26/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.8	< 0.50	4.6
MW-1800	06/26/08	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.7	< 0.50	5.0
MW-18	12/10/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.8	< 0.50	7.7 E
MW-1800	12/10/09	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.6	< 0.50	7.0 E
MW-18	12/10/09	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.0	< 1	1 E
MW-18	06/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.3	< 0.50	< 2.0

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-18	12/10/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.0	< 0.50	< 2.0
MW-18	08/03/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.8	< 0.50	< 0.20
MW-18	02/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.2	< 0.50	< 0.20
MW-18	08/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.5	< 0.50	< 0.20
MW-18	02/05/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.20
MW-18	08/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.2	< 0.50	< 0.20
MW-18	02/04/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.1	< 0.50	< 0.20
MW-18	08/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50	< 0.20
MW-18	02/03/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.3	< 0.50	< 0.20
MW-18 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 0.51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 6.3	< 0.50	< 0.20 - 7.7 E
MW-19	06/14/00	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-19	06/14/00	SPT	< 0.50	< 0.50	< 1.0	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	NA
MW-19	07/06/00	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 3.0
MW-19	05/08/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.64	< 0.50	NA
MW-19	10/22/01	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-19	04/16/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-19	04/16/02	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
MW-19	11/20/02	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-19	06/10/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-19	12/16/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	06/16/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	12/09/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	06/22/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	12/19/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	06/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	12/13/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	06/18/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	12/10/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	06/25/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	12/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	06/24/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	12/10/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	06/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	12/07/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-19	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-19	02/07/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-19 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 0.64	< 0.50	< 0.50 - < 3.0
MW-20	09/23/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	82	< 0.50	< 0.50	0.63	< 0.50	< 0.50	0.58	< 0.50	< 2.2
MW-20	10/08/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	68	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	12/18/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	44	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	12/29/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	06/24/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	12/21/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	06/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	12/13/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	06/21/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)													Semi-VOCs			
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-20	12/11/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	06/23/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	12/18/08	ORG	< 0.50	< 0.50	0.70	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.9
MW-20	06/25/09	ORG	< 0.50	< 0.50	0.64	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-2000	06/25/09	FD	< 0.50	< 0.50	0.61	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	12/08/09	ORG	< 0.50	< 0.50	0.78	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5
MW-20	06/10/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	12/08/10	ORG	< 0.50	< 0.50	0.59	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-20	08/05/11	ORG	< 0.50	< 0.50	0.59	< 0.50	< 0.50	0.80	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.80
MW-20	02/07/12	ORG	< 0.50	< 0.50	0.50	< 0.50	< 0.50	2.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-20	08/09/12	ORG	< 0.50	< 0.50	0.53	< 0.50	< 0.50	3.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-20	02/06/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-20	08/13/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-20	02/04/14	ORG	< 0.50	< 0.50	0.54	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-20	08/21/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-20	02/03/15	ORG	< 0.50	< 0.50	0.73	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-20 Historical Range***			< 0.50	< 0.50	< 0.50 - 0.78	< 0.50	< 0.50	< 0.50 - 82	< 0.50	< 0.50	< 0.50 - 0.63	< 0.50	< 0.50	< 0.50 - 0.58	< 0.50	< 0.20 - 3.9
MW-21-200	7/14/2003	ORG	< 0.50	< 0.50	< 0.50	4.4	< 0.50	300	< 0.50	< 0.50	< 0.50	0.99	0.96	< 0.50	< 0.50	43
MW-21	09/23/03	ORG	< 0.50	0.51	2.2	26	< 0.50	1,300	1.3	4.3	1.1	11	29	< 0.50	< 0.50	160
MW-2100	09/23/03	FD	< 0.50	0.53	2.4	26	< 0.50	1,700	1.2	4.7	1.1	12	29	< 0.50	< 0.50	160
MW-21	09/23/03	SPT	< 1.0	< 1.0	2	24	3 E	1,400	1.0	3.0	< 1.0	11	27	< 1.0	< 1.0	340
MW-21	10/08/03	ORG	< 25	< 25	< 25	< 25	< 25	1,600	< 25	< 25	< 25	< 25	30	< 25	< 25	160
MW-21	12/17/03	ORG	< 0.50	1.8	3.9	62	6.8	3,500	2.3	12	1.6	20	43	< 0.50	< 0.50	150
MW-2100	12/17/03	FD	< 0.50	1.8	4.1	64	7.0	3,500	2.4	14	1.7	21	45	< 0.50	< 0.50	150
MW-21	12/17/03	SPT	< 1.0	1.0	4.0	58	6.0	2,800	2.0	9.0	1.0	20	40	< 1.0	< 1.0	290
MW-21	03/31/04	ORG	< 5.0	< 5.0	< 5.0	30	< 5.0	2,200	< 5.0	8.1	< 5.0	8.9	23	< 5.0	< 5.0	64 E
MW-21	03/31/04	SPT	< 1.0	< 1.0	< 1.0	30	< 1.0	2,100	< 1.0	< 1.0	< 1.0	< 1.0	20	< 1.0	< 1.0	140 E
MW-21	06/18/04	ORG	< 5.0	< 5.0	< 5.0	23	< 5.0	1,600	< 5.0	6.0	< 5.0	6.6	22	< 5.0	< 5.0	40
MW-21	09/22/04	ORG	< 5.0	< 5.0	< 5.0	7.5	< 5.0	530	< 5.0	< 5.0	< 5.0	< 5.0	22	< 5.0	< 5.0	13
MW-21	12/10/04	ORG	< 5.0	< 5.0	< 5.0	26	< 5.0	1,700	< 5.0	5.3	< 5.0	8.8	30	< 5.0	< 5.0	35
MW-21	03/17/05	ORG	< 0.50	1.9	4.6	71	8.9	4,600	2.4	12	2.0	27	46	0.53	< 0.50	300
MW-2100	03/17/05	FD	< 0.50	1.8	4.3	66	8.7	4,600	2.3	12	1.9	27	44	< 0.50	< 0.50	330
MW-21	06/22/05	ORG	< 0.50	1.2	2.9	42	5.9	3,000	1.9	8.2	< 0.50	19	37	< 0.50	< 0.50	210 E
MW-21	06/22/05	SPT	< 1.0	1.1	2.9	42	6.2	2,400	1.7	7.2	1.2	18	35	< 1.0	< 1.0	1,100 JE
MW-21	09/22/05	ORG	< 0.50	0.64	1.8	26	4.4	1,700	1.4	4.0	< 0.50	12	33	< 0.50	< 0.50	250
MW-21	12/19/05	ORG	< 0.50	< 0.50	2.8	31	< 0.50	4,100	< 0.50	7.4	< 0.50	10	18	< 0.50	< 0.50	430
MW-21	03/23/06	ORG	< 5.0	< 5.0	< 5.0	52	< 5.0	4,000	< 5.0	11	< 5.0	14	30	< 5.0	< 5.0	240
MW-21	03/23/06	SPT	< 0.50	< 3.00	< 3.00	40	< 3.00	2,900	< 3.00	< 3.00	< 3.00	< 3.00	30	< 3.00	< 3.00	250
MW-21	06/22/06	ORG	< 0.50	0.89	1.6	22	2.3	2,000	1.2	8.5	< 0.50	6.9	31	< 0.50	< 0.50	120
MW-21	06/22/06	SPT	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	150
MW-21	09/27/06	ORG	< 2.5	< 2.5	< 2.5	17	< 2.5	1,400	< 2.5	3.3	< 2.5	4.2	30	< 2.5	< 2.5	1,100
MW-21	12/11/06	ORG	< 0.50	0.53	1.2	16	2.0	1,200	1.4	3.2	< 0.50	5.5	31	< 0.50	< 0.50	150
MW-21	12/11/06	SPT	< 7	< 7	< 7	10 E	< 7	1,000	< 7	< 7	< 7	< 7	30	< 7	< 7	180
MW-21	03/14/07	ORG	< 2.5	< 2.5	< 2.5	12 E	3.2	1,400	< 2.5	4.4	< 2.5	8.2	32	< 2.5	< 2.5	330
MW-2100	03/14/07	FD	< 2.5	< 2.5	< 2.5	18 E	3.2	1,400	< 2.5	4.3	< 2.5	8.6	33	< 2.5	< 2.5	320
MW-21	03/14/07	SPT	< 1.0	< 1.0	< 1.0	20 E	< 1.0	1,500	< 1.0	< 1.0	< 1.0	< 1.0	30	< 1.0	< 1.0	450

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)													Semi-VOCs			
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (--/5)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (--/150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-21	06/20/07	ORG	< 1.0	< 1.0	< 1.0	19	< 1.0	1,400	< 1.0	< 1.0	< 1.0	< 1.0	35	< 1.0	< 1.0	240
MW-21	09/27/07	ORG	< 0.50	< 0.50	< 0.50	5.6	0.72	490	1.8	1.2	< 0.50	2.0	36	< 0.50	< 0.50	51
MW-21	12/13/07	ORG	< 0.50	< 0.50	0.50 U	4.8	< 0.50	320	1.8	0.96	< 0.50	1.4	41	< 0.50	< 0.50	47
MW-2100	12/13/07	FD	< 0.50	< 0.50	0.50 U	5.0	< 0.50	620	1.7	1.0	< 0.50	1.4	42	< 0.50	< 0.50	49
MW-21	12/13/07	SPT	< 5	< 5	< 5	< 5	< 5	480	< 5	< 5	< 5	< 5	40	< 5	< 5	54
MW-21	06/25/08	ORG	< 5	< 5	< 5	60	6.9	4,900	< 5	11	< 5	20	34	< 5	< 5	370
MW-2100	06/25/08	FD	< 5	< 5	< 5	60	7.0	5,100	< 5	11	< 5	20	34	< 5	< 5	380
MW-21	06/25/08	SPT	< 5	< 5	< 5	50	6.0	3,500	< 5	10	< 5	20	30	< 5	< 5	440
MW-21	07/08/08	ORG	< 10	< 10	< 10	47	< 10	3,500	< 10	11	< 10	16	26	< 10	< 10	410
MW-21	07/09/08	ORG	< 10	< 10	< 10	54	< 10	4,200	< 10	10	< 10	17	25	< 10	< 10	360
MW-21	07/10/08	ORG	< 5	< 5	< 5	38	5.2	3,800	< 5	12	< 5	13	23	< 5	< 5	330
MW-21	07/15/08	ORG	< 5	< 5	< 5	42	< 5	3,500	< 5	12	< 5	13	30	< 5	< 5	290
MW-21	07/16/08	ORG	< 5	< 5	< 5	47	5.5	4,800	< 5	9.7	< 5	14	26	< 5	< 5	310
MW-21	07/23/08	ORG	< 10	< 10	< 10	40	< 10	3,500	< 10	< 10	< 10	13	24	< 10	< 10	220
MW-21	07/30/08	ORG	< 10	< 10	< 10	41	< 10	3,400	< 10	< 10	< 10	10	20	< 10	< 10	230
MW-21	08/06/08	ORG	< 5	< 5	< 5	32	< 5	1,500	< 5	7.0	< 5	7.7	19	< 5	< 5	230
MW-21	08/25/08	ORG	< 5	< 5	< 5	21	< 5	1,800	< 5	5.1	< 5	6.3	16	< 5	< 5	150
MW-21	09/24/08	ORG	< 2.5	< 2.5	< 2.5	15	< 2.5	1,200	< 2.5	3.4	< 2.5	4.8	16	< 2.5	< 2.5	100
MW-21	10/22/08	ORG	< 2.5	< 2.5	< 2.5	13	< 2.5	1,200	< 2.5	3.2	< 2.5	3.0	14	< 2.5	< 2.5	95
MW-21	11/26/08	ORG	< 2.5	< 2.5	< 2.5	11	< 2.5	1,100	< 2.5	2.6	< 2.5	2.5	12	< 2.5	< 2.5	74
MW-21	02/25/09	ORG	< 2.5	< 2.5	< 2.5	6.6	< 2.5	720	< 2.5	< 2.5	< 2.5	< 2.5	12	< 2.5	< 2.5	83
MW-21	03/18/09	ORG	< 2.5	< 2.5	< 2.5	7.7	< 2.5	900	< 2.5	< 2.5	< 2.5	2.5	11	< 2.5	< 2.5	54
MW-21	04/29/09	ORG	< 2.5	< 2.5	< 2.5	7.8	< 2.5	860	< 2.5	< 2.5	< 2.5	< 2.5	14	< 2.5	< 2.5	65
MW-21	05/27/09	ORG	< 2.5	< 2.5	< 2.5	8.4	< 2.5	940	< 2.5	< 2.5	< 2.5	2.5	14	< 2.5	< 2.5	71
MW-21	06/29/09	ORG	< 0.5	< 0.5	0.64	7.4	0.81	860	0.63	2.1	< 0.5	2.1	17	< 0.5	< 0.5	68
MW-21	07/22/09	ORG	< 1.0	< 1.0	< 1.0	8.4	< 1.0	870	1.0	1.6	< 1.0	1.9	16	< 1.0	< 1.0	65
MW-21	08/14/09	ORG	< 2.5	< 2.5	< 2.5	8.8	< 2.5	900	< 2.5	< 2.5	< 2.5	< 2.5	18	< 2.5	< 2.5	72
MW-21	09/11/09	ORG	< 2.5	< 2.5	< 2.5	8.3	< 2.5	1,100	< 2.5	< 2.5	< 2.5	< 2.5	14	< 2.5	< 2.5	63
MW-21	10/08/09	ORG	< 2.5	< 2.5	< 2.5	9.2	< 2.5	830	< 2.5	< 2.5	< 2.5	< 2.5	19	< 2.5	< 2.5	76
MW-21	12/09/09	ORG	< 0.50	< 0.50	< 0.50	1.7	< 0.50	200	< 0.50	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	11
MW-21	03/05/10	ORG	< 1.0	< 1.0	< 1.0	2.9	< 1.0	370	< 1.0	< 1.0	< 1.0	< 1.0	14	< 1.0	< 1.0	21
MW-21	06/11/10	ORG	< 2.0	< 2.0	< 2.0	8.6	< 2.0	800	< 2.0	< 2.0	< 2.0	< 2.0	22	< 2.0	< 2.0	40
MW-21	06/11/10	SPT	< 1	< 1	< 1	7.0	< 1	850	< 1	1.0	< 1	2.0	21	< 1	< 1	47
MW-21	09/08/10	ORG	< 2.0	< 2.0	< 2.0	12	< 2.0	1,000	< 2.0	< 2.0	< 2.0	< 2.0	21	< 2.0	< 2.0	74
MW-21	12/06/10	ORG	< 5.0	< 5.0	< 5.0	25	< 5.0	2,300	< 5.0	< 5.0	< 5.0	7.6	23	< 5.0	< 5.0	250
MW-21	12/06/10	SPT	< 5	< 5	< 5	10	< 5	1,600	< 5	< 5	5.0	< 5	10	< 5	< 5	360
MW-21	03/24/11	ORG	< 5.0	< 5.0	< 5.0	38	5.7	2,800	< 5.0	8.7	< 5.0	13	23	< 5.0	< 5.0	93 E
MW-21	03/24/11	SPT	< 1	1.0	2.0	33	4.0	2,400	2.0	6.0	< 1	13	18	2.0	< 1	560 E
MW-21	06/23/11	ORG	< 5.0	< 5.0	< 5.0	33	5.0	2,700	< 5.0	5.8	< 5.0	12	24	< 5.0	< 5.0	400
MW-21	06/23/11	SPT	< 1	< 1	2.0	27	4.0	2,300	1.0	5.0	< 1	10	20	< 1	< 1	450
MW-21	08/02/11	ORG	< 5.0	< 5.0	< 5.0	34	< 5.0	2,400	< 5.0	5.6	< 5.0	11 E	24 E	< 5.0	< 5.0	360 E
MW-2100	08/02/11	FD	< 2.5	< 2.5	< 2.5	34	4.4	2,000	< 2.5	5.4	< 2.5	11 E	23 E	< 2.5	< 2.5	340 E
MW-21	08/02/11	SPT	< 1.0	< 1.0	2.0	22	3.0	1,800	< 1.0	4.0	< 1.0	8 E	17 E	< 1.0	< 1.0	430
MW-21	11/01/11	ORG	< 2.5	< 2.5	< 2.5	29	4.9	1,600	< 2.5	5.6	< 2.5	11	22	< 2.5	< 2.5	390
MW-21	12/07/11	ORG	< 10	< 10	< 10	43	< 10	3,200	< 10	< 10	< 10	< 10	20	< 10	< 10	450

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

.....Concentration (micrograms per liter).....																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)																Semi-VOCs
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-21	01/06/12	ORG	< 10	< 10	< 10	15	< 10	1,400	< 10	< 10	< 10	< 10	13	< 10	< 10	120
MW-21	02/08/12	ORG	< 4.0	< 4.0	< 4.0	8.5	< 4.0	520	< 4.0	< 4.0	< 4.0	< 4.0	11	< 4.0	< 4.0	33
MW-21	03/09/12	ORG	< 4.0	< 4.0	< 4.0	8.6	< 4.0	860	< 4.0	< 4.0	< 4.0	< 4.0	14	< 4.0	< 4.0	61
MW-21	05/07/12	ORG	< 4.0	< 4.0	< 4.0	6.5	< 4.0	490	< 4.0	< 4.0	< 4.0	< 4.0	11	< 4.0	< 4.0	23
MW-2100	05/07/12	FD	< 4.0	< 4.0	< 4.0	6.3	< 4.0	480	< 4.0	< 4.0	< 4.0	< 4.0	12	< 4.0	< 4.0	19
MW-21	08/06/2012	ORG	< 5.0	< 5.0	< 5.0	10	< 5.0	1,300	< 5.0	< 5.0	< 5.0	< 5.0	12	< 5.0	< 5.0	60
MW-21	11/5/2012	ORG	< 5.0	< 5.0	< 5.0	24	< 5.0	2,000	< 5.0	6.1	< 5.0	6.8	16	< 5.0	< 5.0	240
MW-21	2/4/2013	ORG	< 2.5	< 2.5	< 2.5	33	5.8	1,900	< 2.5	5.1	< 2.5	12	19	< 2.5	< 2.5	480
MW-21	5/13/2013	ORG	< 2.5	< 2.5	< 2.5	23	3.4	1,600	< 2.5	4.5	< 2.5	8.8	15	< 2.5	< 2.5	450
MW-21	8/12/2013	ORG	< 2.5	< 2.5	< 2.5	19	3.5	1,500	< 2.5	3.4	< 2.5	6.1	19	< 2.5	< 2.5	370
MW-21	11/11/2013	ORG	< 2.5	< 2.5	< 2.5	21	4.2	1,000	< 2.5	3.3	< 2.5	8.8	13	< 2.5	< 2.5	430
MW-21	2/3/2013	ORG	< 2.5	< 2.5	< 2.5	29	7.2	1,300	< 2.5	5.2	< 2.5	10	17	< 2.5	< 2.5	390
MW-21	8/18/2014	ORG	< 2.5	< 2.5	< 2.5	18	3.4	1,200	< 2.5	3.6	< 2.5	7.0	18	< 2.5	< 2.5	360
MW-21	11/4/2014	ORG	< 0.50	< 0.50	< 0.50	4.6	0.72	350	1.1	0.85	< 0.50	1.5	19	< 0.50	< 0.50	54
MW-21	2/2/2015	ORG	< 2.0	< 2.0	< 2.0	17	2.8	1,100	< 2.0	3.3	< 2.0	7.6	18	< 2.0	< 2.0	290
MW-21 Historical Range***			< 0.50 - < 25	< 0.50 - 1.9	< 0.50 - 4.6	< 0.50 - 71	< 0.50 - 8.9	200 - 4,900	< 0.50 - 2.4	< 0.50 - 12	< 0.50 - 2.0	< 0.50 - 27	0.96 - 46	< 0.50 - 0.53	< 0.50 - < 10	11 - 1,100
MW-22-203	07/28/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-22	09/23/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-22	10/08/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-22	12/15/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	03/30/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	06/14/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	09/21/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	12/07/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	03/14/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	06/21/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	09/20/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	12/18/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	03/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	06/20/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	09/26/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	12/13/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	03/12/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	06/18/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	09/25/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	12/10/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	03/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	06/25/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	09/23/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	12/16/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	03/17/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	06/22/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	09/01/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	12/09/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	03/02/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	06/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	09/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

.....Concentration (micrograms per liter).....																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)															Semi-VOCs	
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-22	12/07/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	03/29/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-22	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-22	02/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-22 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.2 - < 2.0
MW-23-199	08/12/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5
MW-23	09/23/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-23	10/08/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-23	12/15/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	03/29/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	06/15/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-23	09/20/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	12/07/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	03/14/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	06/21/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	09/20/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	12/18/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	03/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	06/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	09/26/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	12/12/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	03/12/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	06/18/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	09/24/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	12/11/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	03/17/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	06/25/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	09/23/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	12/16/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	03/17/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	06/23/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	09/01/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	12/10/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	03/02/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	06/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	09/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	12/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	03/29/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23	02/05/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-23 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5 - < 2.0

TABLE 4

.....Concentration (micrograms per liter).....

[illegible]

PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

.....Concentration (micrograms per liter).....

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

.....Concentration (micrograms per liter).....																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)															Semi-VOCs	
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-26B	03/02/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-26B	06/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-26B	09/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-26B	12/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-26B	03/25/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-26B Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	10/19/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	11/10/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	12/07/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-2600C	12/07/04	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-26C	03/16/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.1
MW-26C	06/21/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	09/21/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	12/18/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	03/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	06/20/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	09/27/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	12/12/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	03/13/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.55	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	06/19/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-2600C	06/19/07	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1
MW-26C	06/19/07	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	09/25/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	12/11/07	ORG	< 0.50	< 0.50	< 0.50	1.5	< 0.50	100	< 0.50	< 0.50	< 0.50	0.61	< 0.50	< 0.50	< 0.50	57
MW-26C	12/20/07	ORG	< 0.50	< 0.50	< 0.50	1.7	< 0.50	120	< 0.50	< 0.50	< 0.50	0.72	< 0.50	< 0.50	< 0.50	55 E
MW-2600C	12/20/07	FD	< 0.50	< 0.50	< 0.50	1.7	< 0.50	120	< 0.50	< 0.50	< 0.50	0.77	< 0.50	< 0.50	< 0.50	34 U
MW-26C	12/20/07	SPT	< 0.50	< 0.50	< 0.50	2.0	< 0.50	100	< 0.50	< 0.50	< 0.50	0.80	< 0.50	< 0.50	< 0.50	76 E
MW-26C	01/21/08	ORG	< 0.50	< 0.50	< 0.50	1.3	< 0.50	110	< 0.50	< 0.50	< 0.50	0.77	< 0.50	< 0.50	< 0.50	75
MW-26C	02/21/08	ORG	< 0.50	< 0.50	< 0.50	1.0	< 0.50	71	< 0.50	0.79	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	36
MW-26C	03/19/08	ORG	< 0.50	< 0.50	< 0.50	0.61	< 0.50	46	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	37 E
MW-2600C	03/19/08	FD	< 0.50	< 0.50	< 0.50	0.59	< 0.50	46	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	31 U
MW-26C	03/19/08	SPT	< 0.50	< 0.50	< 0.50	0.60	< 0.50	44	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22 U
MW-26C	04/21/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	11
MW-26C	05/27/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	38	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13
MW-26C	06/24/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	15	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.9
MW-26C	07/16/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.3
MW-26C	08/26/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.9
MW-26C	09/25/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.1 BU
MW-26C	12/17/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	16	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.5
MW-26C	03/18/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	06/23/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	09/02/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.6
MW-26C	12/09/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.59	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	03/02/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

.....Concentration (micrograms per liter).....																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)															Semi-VOCs	
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-26C	06/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-26C	09/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.7	< 2.0
MW-26C	12/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22	< 2.0
MW-26C	03/25/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	15	0.91
MW-26C	06/24/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.9	< 0.20
MW-26C	08/04/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.7	0.34
MW-26C	11/01/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.1	< 0.20
MW-26C	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.5	< 0.20
MW-26C	05/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.6	< 0.20
MW-26C	08/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.95	< 0.20
MW-26C	11/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-26C	02/08/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-26C	05/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-26C	08/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-26C	11/12/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-26C	02/04/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-26C	08/19/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-26C	11/11/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-26C Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50 - 1.7	< 0.50	< 0.50 - 120	< 0.50	< 0.50 - 0.79	< 0.50	< 0.50 - 0.77	< 0.50	< 0.50	< 0.50 - 22	< 0.20 - 57
MW-27	05/27/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-2700	05/27/08	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	05/27/08	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1
MW-27	06/10/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	06/25/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	07/16/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	08/26/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	09/23/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	12/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	03/17/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	06/22/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	09/01/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	12/09/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	03/02/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	06/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	09/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	12/07/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-27	03/30/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.24
MW-27	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-27	02/07/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-27	02/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-27	02/06/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-27 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20 - 0.24
MW-28	05/16/08	ORG	< 0.50	< 0.50	< 0.50	0.94	< 0.50	76 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19
MW-2800	05/16/08	FD	< 0.50	< 0.50	< 0.50	0.98	< 0.50	78 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20
MW-28	05/16/08	SPT	< 0.50	< 0.50	< 0.50	0.50	< 0.50	45 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	23
MW-28	05/27/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.2

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)																Semi-VOCs
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (--/150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-28	06/27/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.3
MW-28	07/17/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.8
MW-28	08/26/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-28	09/25/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	23	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.2 BE
MW-28	12/18/08	ORG	< 0.50	< 0.50	< 0.50	0.70	< 0.50	60	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18
MW-28	03/17/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	41	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14
MW-28	06/23/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	28	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.2
MW-28	09/01/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	27	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.1
MW-2800	09/01/09	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	33	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.4
MW-28	12/10/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	32	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.5
MW-28	03/04/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.0
MW-28	06/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.1
MW-2800	06/09/10	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.0
MW-28	09/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.1
MW-28	12/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-28	03/30/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2
MW-28	06/21/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.49
MW-28	08/05/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.53
MW-28	11/03/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.30
MW-28	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.84	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-28	05/11/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.99	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.22
MW-28	08/10/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-28	11/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.2
MW-28	02/07/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-28	05/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-28	08/13/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3
MW-28	11/12/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1
MW-28	02/04/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.84	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.25
MW-28	05/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-28	08/21/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.8
MW-28	11/05/14	ORG	< 0.50	< 0.50	< 0.50	0.50	< 0.50	43	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12
MW-28	02/05/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	23	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.3
MW-2800	02/05/15	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.4
MW-28	02/05/15	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.1
MW-28 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50 - 0.94	< 0.50	< 0.50 - 76 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20 - 19
MW-29	08/26/08	ORG	< 0.50	< 0.50	< 0.50	1.5	< 0.50	150	< 0.50	< 0.50	< 0.50	0.50	0.60	< 0.50	< 0.50	54
MW-2900	08/26/08	FD	< 0.50	< 0.50	< 0.50	1.6	< 0.50	140	< 0.50	< 0.50	< 0.50	0.58	0.58	< 0.50	< 0.50	55
MW-29	08/26/08	SPT	< 1	< 1	< 1	1.0	< 1	120	< 1	< 1	< 1	< 1	< 1	< 1	< 1	67
MW-29	09/25/08	ORG	< 0.50	< 0.50	< 0.50	1.2 E	< 0.50	110 E	< 0.50	< 0.50	< 0.50	0.74 E	< 0.50	< 0.50	< 0.50	26 BE
MW-2900	09/25/08	FD	< 0.50	< 0.50	< 0.50	1.2	< 0.50	99	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 0.50	32 BE
MW-29	09/25/08	SPT	< 1	< 1	< 1	1.0	< 1	100	< 1	< 1	< 1	< 1	< 1	< 1	< 1	40 E
MW-29	12/18/08	ORG	< 1.0	< 1.0	< 1.0	4.7	1.0	400	< 1.0	1.3	< 1.0	1.4	4.3	< 1.0	< 1.0	98
MW-2900	12/18/08	FD	< 1.0	< 1.0	< 1.0	4.5	1.0	390	< 1.0	1.3	< 1.0	1.5	4.3	< 1.0	< 1.0	110
MW-29	03/17/09	ORG	< 0.50	< 0.50	0.62	5.2	1.0	530	< 0.50	1.5	< 0.50	1.9	4.0	0.81	< 0.50	110
MW-2900	03/17/09	FD	< 0.50	< 0.50	0.60	5.0	1.0	550	< 0.50	1.4	< 0.50	1.9	4.0	0.78	< 0.50	100
MW-29	06/24/09	ORG	< 0.50	< 0.50	< 0.50	2.7	0.55	320	< 0.50	1.1	< 0.50	0.91	3.3	0.60	< 0.50	84
MW-29	09/02/09	ORG	< 0.50	< 0.50	< 0.50	2.7	0.57	310	< 0.50	0.97	< 0.50	0.93	3.4	0.62	< 0.50	71
MW-2900	09/02/09	FD	< 0.50	< 0.50	< 0.50	3.0	0.64	340	< 0.50	1.0	< 0.50	0.89	3.6	0.68	< 0.50	75
MW-29	12/10/09	ORG	< 0.50	< 0.50	< 0.50	3.0	0.50	290	< 0.50	0.97	< 0.50	0.84	3.5	0.54	< 0.50	74
MW-29	03/04/10	ORG	< 0.50	< 0.50	< 0.50	3.0	0.52	340	< 0.50	1.2	< 0.50	0.73	3.6	0.61	< 0.50	95

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (--/--)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (--/150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-2900	03/04/10	FD	< 0.50	< 0.50	< 0.50	3.0	0.50	320	< 0.50	1.1	< 0.50	0.64	3.9	0.58	< 0.50	96
MW-29	06/09/10	ORG	< 0.50	< 0.50	< 0.50	2.9	< 0.50	300	< 0.50	0.85	< 0.50	0.73	3.2	0.65	< 0.50	61
MW-29	09/09/10	ORG	< 0.50	< 0.50	< 0.50	1.1	< 0.50	140	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50	< 0.50	30
MW-29	12/07/10	ORG	< 0.50	< 0.50	< 0.50	2.3	< 0.50	200	< 0.50	0.71	< 0.50	0.55	3.2	< 0.50	< 0.50	41
MW-2900	12/07/10	FD	< 0.50	< 0.50	< 0.50	2.2	< 0.50	220	< 0.50	0.71	< 0.50	0.53	3.1	< 0.50	< 0.50	43
MW-29	03/30/11	ORG	< 0.50	< 0.50	< 0.50	1.9	< 0.50	200	< 0.50	0.77	< 0.50	0.56	3.6	0.51	< 0.50	29
MW-29	06/21/11	ORG	< 0.50	< 0.50	< 0.50	2.0	< 0.50	220	< 0.50	0.85	< 0.50	0.55	4.5	0.71	< 0.50	30
MW-29	08/05/11	ORG	< 0.50	< 0.50	0.63	3.6	0.55	330	0.61	0.87	< 0.50	0.76	5.6	1.2	< 0.50	45 E
MW-2900	08/05/11	FD	< 0.50	< 0.50	0.62	3.6	0.54	370	0.57	0.84	< 0.50	0.75	5.7	1.2	< 0.50	54 E
MW-29	08/05/11	SPT	< 1.0	< 1.0	< 1.0	2.0	< 1.0	270	< 1.0	< 1.0	< 1.0	< 1.0	4.0	< 1.0	< 1.0	82 E
MW-29	11/03/11	ORG	< 0.50	< 0.50	0.80	7.8	1.4	804	0.60	1.3	< 0.50	2.3	6.0	1.0	< 0.50	301
MW-29	02/09/12	ORG	< 5.0	< 5.0	< 5.0	9.2	< 5.0	900 E	< 5.0	< 5.0	< 5.0	< 5.0	7.5	< 5.0	< 5.0	130 E
MW-2900	02/09/12	FD	< 5.0	< 5.0	< 5.0	9.0	< 5.0	910 E	< 5.0	< 5.0	< 5.0	< 5.0	7.1	< 5.0	< 5.0	120 E
MW-29	02/09/12	SPT	< 1.0	< 1.0	< 1.0	5.0	< 1.0	380 E	< 1.0	1.0	1.0	2.0	4.0	1.0	< 1.0	340 E
MW-29	05/11/12	ORG	< 4.0	< 4.0	< 4.0	8.3	< 4.0	780	< 4.0	5.7	< 4.0	< 4.0	6.2	< 4.0	< 4.0	300
MW-2900	05/11/12	FD	< 5.0	< 5.0	< 5.0	8.5	< 5.0	830	< 5.0	< 5.0	< 5.0	< 5.0	5.3	< 5.0	< 5.0	280
MW-29	05/11/12	SPT ^E	< 1	< 1	< 1	5.0	1.0	550	< 1	1.0	< 1	2.0	4.0	1.0	< 1	300
MW-29	05/11/12	SPT ^C	< 0.50	< 0.50	< 1.0	6.0	1.1	730	< 1.0	1.1	< 1.0	2.1	4.6	< 1.0	< 1.0	290
MW-29	08/06/12	ORG	< 1.0	< 1.0	< 1.0	3.8	< 1.0	440	< 1.0	1.2	< 1.0	1.1	2.2	1.0	< 1.0	110
MW-29	11/07/12	ORG	< 1.0	< 1.0	< 1.0	4.6	1.2	560	< 1.0	6.6	< 1.0	1.6	5.0	1.7	< 1.0	250
MW-29	02/07/13	ORG	< 1.0	< 1.0	< 1.0	3.8	< 1.0	410	< 1.0	1.0	< 1.0	1.2	8.3	1.9	< 1.0	130
MW-2900	02/07/13	FD	< 1.0	< 1.0	< 1.0	3.7	1.0	370	< 1.0	1.0	< 1.0	1.1	8.2	2.0	< 1.0	130
MW-29	02/07/13	SPT	< 1.0	< 1.0	< 2.0	2.6	< 1.0	290	< 2.0	< 2.0	< 2.0	3.0	7.3	< 2.0	< 2.0	160
MW-29	05/15/13	ORG	< 0.50	< 0.50	< 0.50	3.0	0.63	310	< 0.50	1.0	< 0.50	1.1	4.4	1.4	< 0.50	140
MW-29	08/15/13	ORG	< 0.50	< 0.50	< 0.50	3.6	0.59	370	< 0.50	0.97	< 0.50	1.1	3.8	1.2	< 0.50	120
MW-29	08/15/13	FD	< 0.50	< 0.50	< 0.50	3.9	0.64	400	< 0.50	0.84	< 0.50	1.1	4.0	1.3	< 0.50	120
MW-29	08/15/13	SPT	< 1.0	< 1.0	< 2.0	3.2	< 1.0	290	< 2.0	< 2.0	< 2.0	< 2.0	4.6	< 2.0	< 2.0	170
MW-29	11/13/13	ORG	< 0.50	< 0.50	0.53	3.4	0.63	260	< 0.50	0.81	< 0.50	1.1	5.9	1.8	< 0.50	99
MW-29	02/07/14	ORG	< 0.50	< 0.50	< 0.50	3.1	< 0.50	290	< 0.50	1.3	< 0.50	1.1	6.1	1.9	< 0.50	130
MW-29	08/18/14	ORG	< 0.50	< 0.50	< 0.50	1.9	< 0.50	180	< 0.50	0.58	< 0.50	0.79	4.4	1.0	< 0.50	73
MW-2900	08/18/14	DUP	< 0.50	< 0.50	< 0.50	2.0	< 0.50	170	< 0.50	0.73	< 0.50	0.80	4.3	0.99	< 0.50	74
MW-29	08/18/14	SPT	< 0.50	< 0.50	< 1.0	< 0.50	2.0	160	< 1.0	< 1.0	< 1.0	< 1.0	4.1	< 1.0	< 1.0	69 ET
MW-29	11/03/14	ORG	0.57	< 0.50	< 0.50	2.6	0.55	240	< 0.50	0.78	< 0.50	0.89	4.6	1.1	< 0.50	97
MW-29	02/13/15	ORG	< 0.50	< 0.50	0.60	4.4	0.94	460	< 0.50	1.3	< 0.50	1.5	4.8	1.9	< 0.50	180
MW-29 Historical Range***			< 0.50 - 0.57	< 0.50 - < 5.0	< 0.50 - 0.80	1.1 - 9.2	< 0.50 - 1.4	99 - 900 E	< 0.50 - 0.61	< 0.50 - 6.6	< 0.50 - < 5.0	< 0.50 - 2.3	0.50 - 8.3	< 0.50 - 1.9	< 0.50 - < 5.0	26 BE - 301
MW-30A	12/18/08	ORG	< 0.50	< 0.50	< 0.50	2.9	0.67	270	< 0.50	0.58	< 0.50	1.1	0.72	< 0.50	< 0.50	86
MW-30A	12/18/08	SPT	< 1	< 1	< 1	3.0	< 1	290	< 1	< 1	< 1	1.0	< 1	< 1	< 1	110
MW-30A	01/07/09	ORG	< 0.50	< 0.50	< 0.50	2.5	0.57	270	< 0.50	0.52	< 0.50	0.95	0.52	< 0.50	< 0.50	95
MW-30A	03/17/09	ORG	< 0.50	< 0.50	< 0.50	1.1	< 0.50	140 E	< 0.50	< 0.50	< 0.50	0.57	< 0.50	< 0.50	< 0.50	53
MW-30A	03/17/09	SPT	< 1	< 1	< 1	< 1	< 1	69 E	< 1	< 1	< 1	< 1	< 1	< 1	< 1	40
MW-30A	06/23/09	ORG	< 0.50	< 0.50	< 0.50	0.89	< 0.50	80	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	32
MW-30A	06/23/09	SPT	< 1	< 1	< 1	< 1	< 1	79	< 1	< 1	< 1	< 1	< 1	< 1	< 1	38
MW-30A	09/02/09	ORG	< 0.50	< 0.50	< 0.50	1.2	< 0.50	140	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	46
MW-30A	09/02/09	SPT	< 1	< 1	< 1	1.0	< 1	110	< 1	< 1	< 1	< 1	< 1	< 1	< 1	54
MW-30A	12/10/09	ORG	< 0.50	< 0.50	< 0.50	1.1	< 0.50	92	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	36
MW-30A	03/03/10	ORG	< 0.50	< 0.50	< 0.50	1.1	< 0.50	85 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	43
MW-3000A	03/03/10	FD	< 0.50	< 0.50	< 0.50	1.1	< 0.50	65 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	41
MW-30A	06/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	24	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13
MW-30A	09/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.6

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)													Semi-VOCs			
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-30A	12/10/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-30A	03/30/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.44
MW-30A	06/21/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.52	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.21
MW-30A	08/05/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.93	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
MW-30A	11/02/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.30
MW-30A	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.66	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-30A	05/10/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-30A	08/10/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.9	< 0.50	< 0.50	< 0.50	< 0.50	1.8	< 0.50	< 0.50	< 0.20
MW-30A	11/06/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.84	< 0.50	< 0.50	< 0.50	< 0.50	0.98	< 0.50	< 0.50	< 0.20
MW-30A	01/03/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	< 0.50	< 0.50	0.62	< 0.50	< 0.50	< 0.20
MW-30A	02/06/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-30A	02/06/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-30A	05/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.69	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-30A	08/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.50	< 0.50	1.7	< 0.50	< 0.50	< 0.20
MW-30A	11/13/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.55	< 0.50	< 0.50	< 0.20
MW-30A	02/07/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	< 0.20
MW-30A	05/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	< 0.50	0.86	< 0.50	< 0.50	< 0.20
MW-30A	08/21/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.1	< 0.50	< 0.50	< 0.50	< 0.50	1.9	< 0.50	< 0.50	2.1
MW-30A	11/05/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.8	< 0.50	< 0.50	< 0.50	< 0.50	0.60	< 0.50	< 0.50	1.9
MW-30A	02/06/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-30A Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50 - 2.9	< 0.50 - 0.67	< 0.50 - 270	< 0.50	< 0.50 - 0.58	< 0.50	< 0.50 - 1.1	< 0.50 - 1.9	< 0.50	< 0.50	< 0.20 - 95
MW-30B	12/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.1	1.3	< 0.50	< 0.50	< 0.50	26	< 0.50	< 0.50	< 2.0
MW-30B	12/18/08	SPT	< 1	< 1	< 1	< 1	< 1	4.0	1.0	< 1	< 1	< 1	24	< 1	< 1	< 1
MW-30B	01/07/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-30B	03/17/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.0	2.0	< 0.50	< 0.50	< 0.50	35	< 0.50	< 0.50	28E
MW-30B	03/17/09	SPT	< 1	< 1	< 1	< 1	< 1	5.0	2.0	< 1	< 1	< 1	30	< 1	< 1	< 1E
MW-30B	06/23/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.91	< 0.50	< 0.50	< 2.0
MW-30B	06/23/09	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-30B	09/02/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.96	< 0.50	< 0.50	< 2.0
MW-30B	09/02/09	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-30B	12/10/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.1	0.67	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	< 2.0
MW-3000B	12/10/09	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.1	0.70	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	< 2.0
MW-30B	12/10/09	SPT	< 1	< 1	< 1	< 1	< 1	1.0	< 1	< 1	< 1	< 1	10	< 1	< 1	< 1
MW-30B	03/30/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.50	< 0.50	9.4	< 0.50	< 0.50	< 2.0
MW-30B	06/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13	4.3	< 0.50	< 0.50	< 0.50	78	< 0.50	< 0.50	< 2.0
MW-30B	09/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	11	3.4	< 0.50	< 0.50	< 0.50	65	< 0.50	< 0.50	< 2.0
MW-3000B	09/08/10	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13	3.7	< 0.50	< 0.50	< 0.50	70	< 0.50	< 0.50	< 2.0
MW-30B	12/10/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.9	2.8	< 0.50	< 0.50	< 0.50	49	< 0.50	< 0.50	< 2.0
MW-30B	06/21/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14	4.3	< 0.50	< 0.50	< 0.50	87	< 0.50	3.5	0.56
MW-30B	08/05/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18 E	5.6	< 0.50	< 0.50	< 0.50	87	< 0.50	4.5	< 0.20
MW-3000B	08/05/11	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19 E	5.6	< 0.50	< 0.50	< 0.50	87	< 0.50	4.7	< 0.20
MW-30B	08/05/11	SPT	< 1	< 1	< 1	< 1	< 1	10 E	3.0	< 1	< 1	< 1	73	< 1	3.0	< 1
MW-30B	11/02/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13.6	4.2	< 0.50	< 0.50	< 0.50	80.7	< 0.50	3.2	0.40
MW-3000B	11/02/11	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13.7	4.4	< 0.50	< 0.50	< 0.50	82.6	< 0.50	2.8	0.40
MW-30B	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14	4.2	< 0.50	< 0.50	< 0.50	75	< 0.50	< 0.50	0.30
MW-30B	02/09/12	SPT	< 1	< 1	< 1	< 1	< 1	8.0	3.0	< 1	< 1	< 1	53	< 1	< 1	< 1
MW-30B	05/10/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12	3.8	< 0.50	< 0.50	< 0.50	63	< 0.50	1.8	0.27
MW-30B	08/10/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	21 E	4.4	< 0.50	< 0.50	< 0.50	88	< 0.50	2.0	< 0.20

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)													Semi-VOCs			
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-30B	08/10/12	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	11 E	3.7	< 1.0	< 1.0	< 1.0	74	< 10	1.8	< 1
MW-30B	11/06/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14	3.2	< 0.50	< 0.50	< 0.50	68	< 0.50	1.6	< 0.20
MW-30B	01/03/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18	4.5	< 0.50	< 0.50	< 0.50	93	< 0.50	2.5	< 0.20
MW-30B	05/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14	4.6	< 0.50	< 0.50	< 0.50	93	< 0.50	0.82	0.40
MW-3000B	05/15/13	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13	4.5	< 0.50	< 0.50	< 0.50	89	< 0.50	0.77	0.37
MW-30B	05/15/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	15	4.5	< 1.0	< 1.0	< 1.0	94	< 10	1.4	< 1.0
MW-30B	02/06/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	17	4.6	< 0.50	< 0.50	< 0.50	96	< 0.50	4.4	< 0.20
MW-30B	08/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20	5.9	< 0.50	< 0.50	< 0.50	100	< 0.50	1.1	0.36
MW-3000B	08/15/13	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20	5.7	< 0.50	< 0.50	< 0.50	100	< 0.50	1.0	0.29
MW-30B	08/15/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	16	5.1	< 1.0	< 1.0	< 1.0	100	< 10	1.2	< 1.0
MW-30B	11/13/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12	4.0	< 0.50	< 0.50	< 0.50	69	< 0.50	1.6	< 0.20
MW-30B	02/07/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	15	4.6	< 0.50	< 0.50	< 0.50	92	< 0.50	1.0	0.68
MW-30B	05/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22	6.0	< 0.50	< 0.50	< 0.50	98	< 0.50	0.68	< 0.20
MW-30B	08/21/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	17	4.4	< 0.50	< 0.50	< 0.50	99	< 0.50	0.84	< 0.20
MW-30B	08/21/14	DUP	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	16	4.1	< 0.50	< 0.50	< 0.50	100	< 0.50	0.78	< 0.20
MW-30B	08/21/14	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	15	4.7	< 1.0	< 1.0	< 1.0	94	< 10	< 1.0	2.1
MW-30B	11/05/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18	4.1	< 0.50	< 0.50	< 0.50	81	< 0.50	0.86	0.54
MW-30B	02/06/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.2	0.86	< 0.50	< 0.50	< 0.50	20	< 0.50	0.66	< 0.20
MW-30B Historical Range**			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 22	< 0.50 - 6.0	< 0.50	< 0.50	< 0.50	< 0.50 - 100	< 0.50	< 0.50 - 4.5	< 0.20 - 28 E
MW-31	10/13/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	74	< 0.50	< 0.50	< 0.50	< 0.50	3.7	< 0.50	< 0.50	< 2.0
MW-3100	10/13/09	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	72	< 0.50	< 0.50	< 0.50	< 0.50	3.6	< 0.50	< 0.50	< 2.0
MW-31	11/04/09	ORG	< 0.50	< 0.50	< 0.50	1.7	< 0.50	290	0.77	< 0.50	< 0.50	< 0.50	13	< 0.50	< 0.50	4.1
MW-3100	11/04/09	FD	< 0.50	< 0.50	< 0.50	1.6	< 0.50	270	0.73	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	3.9
MW-31	11/04/09	SPT	< 1	< 1	< 1	2.0	< 1	270	< 1	< 1	< 1	< 1	11	< 1	< 1	< 4
MW-31	12/10/09	ORG	< 0.50	< 0.50	< 0.50	1.6	< 0.50	240	0.73	< 0.50	< 0.50	< 0.50	10	< 0.50	< 0.50	2.8
MW-3100	12/10/09	FD	< 0.50	< 0.50	< 0.50	1.6	< 0.50	230	0.72	< 0.50	< 0.50	< 0.50	11	< 0.50	< 0.50	2.8
MW-31	12/10/09	SPT	< 1	< 1	< 1	1.0	< 1	190	< 1	< 1	< 1	< 1	8	< 1	< 1	3.0
MW-31	03/03/10	ORG	< 0.50	< 0.50	< 0.50	0.50	< 0.50	90	< 0.50	< 0.50	< 0.50	< 0.50	4.2	< 0.50	< 0.50	< 2.0
MW-31	03/03/10	SPT	< 1	< 1	< 1	< 1	< 1	87	< 1	< 1	< 1	< 1	4.0	< 1	< 1	1.0
MW-31	06/09/10	ORG	< 0.50	< 0.50	< 0.50	3.0	< 0.50	370	1.2	< 0.50	< 0.50	< 0.50	15	< 0.50	< 0.50	5.3
MW-3100	06/09/10	FD	< 0.50	< 0.50	< 0.50	2.9	< 0.50	360	1.1	< 0.50	< 0.50	< 0.50	15	< 0.50	< 0.50	5.2
MW-31	06/09/10	SPT	< 1	< 1	< 1	3.0	< 1	370	< 1	< 1	< 1	< 1	15	< 1	< 1	7.0
MW-31	09/09/10	ORG	< 1.0	< 1.0	< 1.0	3.6	< 1.0	430	1.2	< 1.0	< 1.0	< 1.0	17	< 1.0	< 1.0	5.6
MW-31	09/09/10	SPT	< 1	< 1	< 1	3.0	< 1	430	< 1	< 1	< 1	< 1	15	< 1	< 1	7.0
MW-31	12/08/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	68	< 0.50	< 0.50	< 0.50	< 0.50	2.2	< 0.50	< 0.50	< 2.0
MW-31	03/28/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	25	< 0.50	< 0.50	< 0.50	< 0.50	2.2	< 0.50	0.57	0.25
MW-3100	03/28/11	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	27	< 0.50	< 0.50	< 0.50	< 0.50	2.3	< 0.50	0.52	0.25
MW-31	06/24/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	61	< 0.50	< 0.50	< 0.50	< 0.50	5.1	< 0.50	0.83	0.51
MW-31	08/05/11	ORG	< 0.50	< 0.50	< 0.50	0.69	< 0.50	93	< 0.50	< 0.50	< 0.50	< 0.50	6.9	< 0.50	< 0.50	1.1
MW-31	11/03/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	32.6	< 0.50	< 0.50	< 0.50	< 0.50	4.4	< 0.50	0.6	< 2.0
MW-31	11/03/11	SPT	< 1	< 1	< 1	< 1	< 1	28	< 1	< 1	< 1	< 1	3.0	< 1	< 1	< 1
MW-31	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	26	< 0.50	< 0.50	< 0.50	< 0.50	3.8	< 0.50	0.52	< 0.20
MW-31	05/11/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	48	< 0.50	< 0.50	< 0.50	< 0.50	5.9	< 0.50	0.75	0.49
MW-31	08/06/12	ORG	< 0.50	< 0.50	< 0.50	1.3	< 0.50	190	0.57	< 0.50	< 0.50	< 0.50	10	< 0.50	< 0.50	0.37
MW-3100	08/06/12	FD	< 0.50	< 0.50	< 0.50	1.2	< 0.50	180	0.61	< 0.50	< 0.50	< 0.50	9.8	< 0.50	< 0.50	0.40
MW-31	11/06/12	ORG	< 0.50	< 0.50	< 0.50	0.81	< 0.50	170	< 0.50	< 0.50	< 0.50	< 0.50	9.2	< 0.50	< 0.50	2.3
MW-31	02/08/13	ORG	< 0.50	< 0.50	< 0.50	1.8	< 0.50	330	0.87	< 0.50	< 0.50	< 0.50	21	< 0.50	< 0.50	4.9
MW-31	05/14/13	ORG	< 0.50	< 0.50	< 0.50	1.2	< 0.50	130	0.55	< 0.50	< 0.50	< 0.50	9.2	< 0.50	< 0.50	2.4
MW-31	08/14/13	ORG	< 0.50	< 0.50	< 0.50	2.3	< 0.50	270	0.85	0.55	< 0.50	< 0.50	11	< 0.50	0.70	4.5
MW-31	11/12/13	ORG	< 0.50	< 0.50	< 0.50	1.2	< 0.50	110	< 0.50	< 0.50	< 0.50	< 0.50	7.6	< 0.50	1.0	4.6

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-31	02/07/14	ORG	< 0.50	< 0.50	< 0.50	3.3	< 0.50	380	1.2	0.77	< 0.50	< 0.50	19	< 0.50	< 0.50	13
MW-31	05/21/14	ORG	< 0.50	< 0.50	< 0.50	3.7	< 0.50	370	1.0	2.5	< 0.50	1.2	10	< 0.50	< 0.50	13
MW-3100	05/21/14	FD	< 0.50	< 0.50	< 0.50	3.8	< 0.50	390	0.88	1.2	< 0.50	1.2	10	< 0.50	< 0.50	13
MW-31	05/21/14	SPT	< 0.50	< 0.50	< 1.0	2.9	< 0.50	410	< 1.0	< 1.0	< 1.0	< 1.0	11	< 1.0	< 1.0	10
MW-31	08/21/14	ORG	< 0.50	< 0.50	< 0.50	3.0	< 0.50	350	0.58	0.64	< 0.50	0.75	11	< 0.50	0.81	16
MW-31	11/06/14	ORG	< 0.50	< 0.50	< 0.50	2.1	< 0.50	210	< 0.50	< 0.50	< 0.50	< 0.50	9.1	< 0.50	< 0.50	6.8
MW-31	02/05/15	ORG	< 0.50	< 0.50	< 0.50	1.6	< 0.50	160	< 0.50	< 0.50	< 0.50	< 0.50	6.7	< 0.50	< 0.50	11
MW-31 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50 - 3.7	< 0.50	25 - 430	< 0.50 - 1.2	< 0.50 - 2.5	< 0.50	< 0.50 - 1.2	2.2 - 21	< 0.50	< 0.50 - 1.0	< 0.20 - 16
MW-32A	01/04/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32A	01/04/10	DUP	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32A	01/04/10	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-32A	01/19/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32A	03/04/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32A	06/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32A	09/07/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32A	12/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32A	03/29/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	06/23/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.57
MW-32A	08/03/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	11/03/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	02/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	05/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	08/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	02/05/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	08/13/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	02/05/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	08/19/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A	02/03/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32A Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20 - 0.57
MW-32B	01/04/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	31	4.0	< 0.50	< 0.50	< 0.50	55	< 0.50	< 0.50	< 2.0
MW-32B	01/04/10	DUP	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	32	4.0	< 0.50	< 0.50	< 0.50	57	< 0.50	< 0.50	2.0
MW-32B	01/04/10	SPT	< 1	< 1	< 1	< 1	< 1	27	3.0	< 1	< 1	< 1	44	< 1	< 1	3.0
MW-32B	01/19/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	38	4.2	< 0.50	< 0.50	< 0.50	59	< 0.50	< 0.50	< 2.0
MW-32B	01/19/10	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	38	4.2	< 0.50	< 0.50	< 0.50	59	< 0.50	< 0.50	< 2.0
MW-32B	03/05/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	16	1.9	< 0.50	< 0.50	< 0.50	24	< 0.50	< 0.50	< 2.0
MW-32B	03/05/10	SPT	< 1	< 1	< 1	< 1	< 1	15	2.0	< 1	< 1	< 1	21	< 1	< 1	1.0
MW-32B	06/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19	2.3	< 0.50	< 0.50	< 0.50	27	< 0.50	< 0.50	< 2.0
MW-3200B	06/09/10	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	26	3.0	< 0.50	< 0.50	< 0.50	33	< 0.50	< 0.50	< 2.0
MW-32B	09/07/10	ORG	< 0.50	< 0.50	< 0.50	0.50	< 0.50	58	5.7	< 0.50	< 0.50	< 0.50	63	< 0.50	< 0.50	3.0
MW-32B	12/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	44	4.2	< 0.50	< 0.50	< 0.50	45	< 0.50	< 0.50	< 2.0
MW-3200B	12/09/10	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	46	4.3	< 0.50	< 0.50	< 0.50	46	< 0.50	< 0.50	2.0
MW-32B	12/09/10	SPT	< 1	< 1	< 1	< 1	< 1	27	3.0	< 1	< 1	< 1	37	< 1	< 1	3
MW-32B	03/29/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	42	4.2	< 0.50	< 0.50	< 0.50	46	< 0.50	< 0.50	0.49
MW-32B	06/23/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	35	2.4	< 0.50	< 0.50	< 0.50	31	< 0.50	< 0.50	1.6
MW-32B	08/03/11	ORG	< 0.50	< 0.50	< 0.50	0.70	< 0.50	77	5.6	< 0.50	< 0.50	< 0.50	54	< 0.50	< 0.50	2.5
MW-32B	11/03/11	ORG	< 0.50	< 0.50	< 0.50	0.6	< 0.50	69.9	4.3	< 0.50	< 0.50	< 0.50	48.6	< 0.50	< 0.50	2.3
MW-32B	02/07/12	ORG	< 0.50	< 0.50	< 0.50	0.59	< 0.50	73	4.0	< 0.50	< 0.50	< 0.50	44	< 0.50	< 0.50	1.5
MW-3200B	02/07/12	FD	< 0.50	< 0.50	< 0.50	0.61	< 0.50	74	4.0	< 0.50	< 0.50	< 0.50	46	< 0.50	< 0.50	1.6
MW-32B	05/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	39	2.8	< 0.50	< 0.50	< 0.50	30	< 0.50	< 0.50	1.4
MW-32B	08/09/12	ORG	< 0.50	< 0.50	< 0.50	0.76	< 0.50	120	5.5	< 0.50	< 0.50	< 0.50	62	< 0.50	< 0.50	0.39

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)													Semi-VOCs			
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (--/--)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (--/150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-32B	11/07/12	ORG	< 0.50	< 0.50	< 0.50	0.92	< 0.50	100	5.4	< 0.50	< 0.50	< 0.50	66	< 0.50	< 0.50	3.4
MW-32B	01/03/13	ORG	< 0.50	< 0.50	< 0.50	0.74	< 0.50	120	4.0	< 0.50	< 0.50	< 0.50	49	< 0.50	< 0.50	0.6
MW-32B	02/05/13	ORG	< 0.50	< 0.50	< 0.50	0.92	< 0.50	100	4.8	< 0.50	< 0.50	< 0.50	53	< 0.50	< 0.50	3.1
MW-3200B	02/05/13	FD	< 0.50	< 0.50	< 0.50	1.0	< 0.50	100	5.0	< 0.50	< 0.50	< 0.50	54	< 0.50	< 0.50	3.0
MW-32B	05/15/13	ORG	< 0.50	< 0.50	< 0.50	0.77	< 0.50	88	4.7	< 0.50	< 0.50	< 0.50	57	< 0.50	< 0.50	2.8
MW-32B	08/13/13	ORG	< 0.50	< 0.50	< 0.50	1.4	< 0.50	160	5.6	< 0.50	< 0.50	< 0.50	75	< 0.50	< 0.50	2.6
MW-32B	11/13/13	ORG	< 0.50	< 0.50	< 0.50	0.85	< 0.50	75	3.3	< 0.50	< 0.50	< 0.50	46	< 0.50	< 0.50	0.56E
MW-3200B	11/13/13	FD	< 0.50	< 0.50	< 0.50	0.86	< 0.50	75	3.1	< 0.50	< 0.50	< 0.50	47	< 0.50	< 0.50	0.6E
MW-32B	11/13/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	96	4.4	< 1.0	< 1.0	< 1.0	52	< 1.0	< 1.0	3.6E
MW-32B	02/05/14	ORG	< 0.50	< 0.50	< 0.50	0.62	< 0.50	66	2.7	< 0.50	< 0.50	< 0.50	35	< 0.50	< 0.50	2.7
MW-32B	05/21/14	ORG	< 0.50	< 0.50	< 0.50	1.2	< 0.50	150	5.6	< 0.50	< 0.50	< 0.50	59	< 0.50	< 0.50	0.47
MW-32B	08/19/14	ORG	< 0.50	< 0.50	< 0.50	0.88	< 0.50	97	4.5	< 0.50	< 0.50	< 0.50	64	< 0.50	< 0.50	0.62 E
MW-3200B	08/19/14	DUP	< 0.50	< 0.50	< 0.50	0.83	< 0.50	96	4.2	< 0.50	< 0.50	< 0.50	64	< 0.50	< 0.50	6.5 E
MW-32B	08/19/14	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	86	4.3	< 1.0	< 1.0	< 1.0	61	< 1.0	< 1.0	3.7 ET, E
MW-32B	11/05/14	ORG	< 0.50	< 0.50	< 0.50	0.87	< 0.50	110	4.4	< 0.50	< 0.50	< 0.50	54	< 0.50	< 0.50	4.5
MW-32B	02/03/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	43	2.1	< 0.50	< 0.50	< 0.50	26	< 0.50	< 0.50	1.8
MW-3200B	02/03/15	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	40	1.9	< 0.50	< 0.50	< 0.50	25	< 0.50	< 0.50	1.8
MW-32B	02/03/15	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	32	1.6	< 1.0	< 1.0	< 1.0	21	< 1.0	< 1.0	3.5
MW-32B Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50 - 1.4	< 0.50	16 - 160	1.9 - 5.7	< 0.50	< 0.50	< 0.50	24 - 75	< 0.50	< 0.50	0.39 - 4.5
MW-32C	01/05/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32C	01/05/10	DUP	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1
MW-32C	01/05/10	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2.0
MW-32C	01/19/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32C	03/05/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32C	06/10/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32C	09/07/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32C	12/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-32C	03/29/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	06/23/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0
MW-32C	08/03/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	11/03/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	02/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	05/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.56	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	08/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	01/03/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	02/05/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	08/13/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	02/05/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	08/19/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C	02/03/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-32C Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 0.56	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20 - 1.0
MW-33	07/16/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.6	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	1.4	< 2.0
MW-3300	07/16/10	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.8	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	1.1	< 2.0
MW-33	07/16/10	SPT	< 1	< 1	< 1	< 1	< 1	4.0	< 1	< 1	< 1	< 1	1.0	< 1	1.0	< 1
MW-33	07/30/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.4	< 0.50	< 0.50	< 0.50	< 0.50	0.55	< 0.50	0.61	< 2.0
MW-33	09/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.3	< 0.50	< 0.50	< 0.50	< 0.50	0.69	< 0.50	0.65	< 2.0
MW-3300	09/09/10	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.4	< 0.50	< 0.50	< 0.50	< 0.50	0.74	< 0.50	0.55	< 2.0
MW-33	12/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 2.0
MW-3300	12/09/10	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 2.0
MW-33	03/28/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.0	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.20
MW-33	06/22/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.4	< 0.50	< 0.50	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.20
MW-33	08/04/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.7	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.20
MW-33	11/02/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	0.50	< 0.50	< 0.50	< 0.20

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)													Semi-VOCs			
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-33	02/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-33	05/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.2	< 0.50	< 0.50	< 0.50	< 0.50	0.83	< 0.50	< 0.50	< 0.20
MW-33	08/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	< 0.50	< 0.50	< 0.50	< 0.50	0.74	< 0.50	< 0.50	< 0.20
MW-33	11/06/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.6	< 0.50	< 0.50	< 0.50	< 0.50	0.79	< 0.50	< 0.50	< 0.20
MW-33	01/04/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.5	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.20
MW-33	02/06/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.0	< 0.50	< 0.50	< 0.50	< 0.50	0.92	< 0.50	< 0.50	< 0.20
MW-33	05/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.3	< 0.50	< 0.50	< 0.50	< 0.50	0.73	< 0.50	< 0.50	< 0.20
MW-33	08/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.2	< 0.50	< 0.50	< 0.50	< 0.50	0.90	< 0.50	< 0.50	< 0.20
MW-33	11/12/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.4	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.20
MW-33	02/05/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.5	< 0.50	< 0.50	< 0.50	< 0.50	0.80	< 0.50	< 0.50	< 0.20
MW-3300	02/05/14	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.3	< 0.50	< 0.50	< 0.50	< 0.50	0.65	< 0.50	< 0.50	< 0.20
MW-33	02/05/14	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	9.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-33	05/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-33	08/21/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.4	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.20
MW-33	11/05/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.20
MW-33	02/03/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10	< 0.50	< 0.50	< 0.50	< 0.50	2.0	< 0.50	< 0.50	< 0.20
Historical High/Low													High			
MW-33 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.7 - 12	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 1.6	< 0.50	< 0.50 - 1.4	< 0.20 - < 2.0
MW-34A	02/25/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.6	1.7	< 2.0
MW-3400A	02/25/11	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	2.0	< 2.0
MW-34A	02/25/11	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.0	< 1
MW-34A	03/10/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	1.4	< 0.20
MW-34A	03/29/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0	2.8	< 0.20
MW-34A	06/21/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.5	< 0.50	< 0.20
MW-34A	08/04/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.63	0.68	< 0.20
MW-34A	11/02/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34A	02/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.75	< 0.50	< 0.20
MW-34A	05/10/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.20
MW-34A	08/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.77	< 0.50	< 0.20
MW-34A	11/06/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34A	02/05/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.70	< 0.50	< 0.20
MW-34A	05/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.91	< 0.50	< 0.20
MW-34A	08/13/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34A	02/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.20
MW-34A	08/19/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.20
MW-34A	02/05/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.50	< 0.20
MW-34A Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 1.6	< 0.50 - 2.8	< 0.20 - < 2.0
MW-34B	02/25/11	ORG	< 1.0	< 1.0	< 1.0	5.1	< 1.0	560	< 1.0	< 1.0	< 1.0	1.3	1.6	< 1.0	< 1.0	75
MW-3400B	02/25/11	FD	< 1.0	< 1.0	< 1.0	6.2	< 1.0	650	< 1.0	1.1	< 1.0	1.5	1.9	< 1.0	< 1.0	61
MW-34B	02/25/11	SPT	< 1	< 1	< 1	4.0	< 1	590	< 1	< 1	< 1	1.0	1.0	< 1	< 1	78
MW-34B	03/10/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	4.1
MW-3400B	03/10/11	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	25 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.7	4.3
MW-34B	03/10/11	SPT	< 1	< 1	< 1	< 1	< 1	12 E	< 1	< 1	< 1	< 1	< 1	< 1	2.0	6.0
MW-34B-1 ^(c)	03/15/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	28 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.0	4.9
MW-34B-1 ^(c)	03/15/11	SPT	< 1	< 1	< 1	< 1	< 1	18 E	< 1	< 1	< 1	< 1	< 1	< 1	1.0	7.0
MW-34B-2 ^(d)	03/15/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	23	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.4	NA
MW-34B-3 ^(e)	03/15/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	30	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.60	NA
MW-34B-4 ^(f)	03/15/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	31	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.57	5.0

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)															Semi-VOCs	
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (--/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-34B	03/29/11	ORG	< 0.50	< 0.50	< 0.50	0.51	< 0.50	27 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.6	9.4 E
MW-3400B	03/29/11	FD	< 0.50	< 0.50	< 0.50	0.53	< 0.50	37 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	9.4 E
MW-34B	03/29/11	SPT	< 1	< 1	< 1	< 1	< 1	31 E	< 1	< 1	< 1	< 1	< 1	< 1	< 1	13 E
MW-34B	06/21/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	21 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	8.1
MW-34B	06/21/11	SPT	< 1	< 1	< 1	< 1	< 1	10 E	< 1	< 1	< 1	< 1	< 1	< 1	< 1	11
MW-34B	08/04/11	ORG	< 0.50	< 0.50	< 0.50	4.8	0.71	410	< 0.50	< 0.50	< 0.50	1.2	0.65	< 0.50	1.5	84 E
MW-34B	11/02/11	ORG	< 0.50	< 0.50	0.50	6.3	1.2	502	< 0.50	< 0.50	< 0.50	2.1	0.70	< 0.50	< 0.50	196
MW-34B	11/02/11	SPT	< 1	< 1	< 1	4.0	< 1	340	< 1	< 1	1.0	< 1	< 1	< 1	< 1	220
MW-34B	02/08/12	ORG	< 2.5	< 2.5	< 2.5	6.0	< 2.5	550 E	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	64 E
MW-3400B	02/08/12	FD	< 2.5	< 2.5	< 2.5	6.0	< 2.5	570 E	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	66 E
MW-34B	02/08/12	SPT	< 1	< 1	< 1	3.0	< 1	250 E	< 1	< 1	< 1	1.0	< 1	< 1	< 1	190 E
MW-34B	05/10/12	ORG	< 0.50	< 0.50	< 0.50	2.3	< 0.50	120	< 0.50	< 0.50	< 0.50	0.60	< 0.50	< 0.50	< 0.50	58
MW-34B	05/10/12	SPT ^E	< 1	< 1	< 1	1.0	< 1	120	< 1	< 1	< 1	< 1	< 1	< 1	< 1	63
MW-34B	05/10/12	SPT ^C	< 0.50	< 0.50	< 1.0	1.6	< 0.50	110	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	62
MW-34B	08/10/12	ORG	< 5.0	< 5.0	< 5.0	9.8	< 5.0	1,100	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	250
MW-34B	11/07/12	ORG	< 1.0	< 1.0	< 1.0	7.9	1.7	590 E	< 1.0	< 1.0	< 1.0	2.6	1.4	< 1.0	< 1.0	260
MW-34B	11/07/12	SPT	< 0.50	< 0.50	< 1.0	6.4	1.5	180 E	< 1.0	< 1.0	< 1.0	3.0	1.4	< 1.0	< 1.0	320
MW-34B	01/03/13	ORG	< 1.0	< 1.0	< 1.0	5.3	1.1	580	< 1.0	< 1.0	< 1.0	1.8	< 1.0	< 1.0	< 1.0	68
MW-34B	01/03/13	FD	< 1.0	< 1.0	< 1.0	5.4	1.1	590	< 1.0	< 1.0	< 1.0	1.7	< 1.0	< 1.0	< 1.0	74
MW-34B	02/06/13	ORG	< 1.0	< 1.0	< 1.0	5.5	1.4	580	< 1.0	< 1.0	< 1.0	1.7	< 1.0	< 1.0	< 1.0	180
MW-34B	02/06/13	FD	< 1.0	< 1.0	< 1.0	5.6	1.4	550	< 1.0	< 1.0	< 1.0	1.7	< 1.0	< 1.0	< 1.0	170
MW-34B	02/06/13	SPT	< 0.50	< 0.50	< 1.0	4.6	1.0	440	< 1.0	< 1.0	< 1.0	2.0	< 1.0	< 1.0	< 1.0	250
MW-34B	05/14/13	ORG	< 0.50	< 0.50	< 0.50	3.6	0.87	300	< 0.50	< 0.50	< 0.50	1.3	0.65	< 0.50	< 0.50	140
MW-34B	08/13/13	ORG	< 1.0	< 1.0	< 1.0	4.9	1.1	540	< 1.0	< 1.0	< 1.0	1.8	1.3	< 1.0	< 1.0	190
MW-34B	11/13/13	ORG	< 0.50	< 0.50	< 0.50	2.4	< 0.50	150	< 0.50	< 0.50	< 0.50	1.1	0.50	< 0.50	< 0.50	73
MW-34B	02/06/14	ORG	< 0.50	< 0.50	< 0.50	3.3	0.72	290	< 0.50	< 0.50	< 0.50	1.0	0.56	< 0.50	< 0.50	130
MW-3400B	02/06/14	FD	< 0.50	< 0.50	< 0.50	3.3	0.81	230	< 0.50	< 0.50	< 0.50	0.97	0.64	< 0.50	< 0.50	110
MW-34B	02/06/14	SPT	< 1.0	< 1.0	< 2.0	2.8	< 1.0	240	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	120
MW-34B	05/21/14	ORG	< 0.50	< 0.50	< 0.50	3.6	0.90	290	< 0.50	0.54	< 0.50	1.7	0.66	< 0.50	< 0.50	110
MW-34B	08/19/14	ORG	< 0.50	< 0.50	< 0.50	2.4	0.66	200	< 0.50	< 0.50	< 0.50	1.3	0.72	< 0.50	< 0.50	99
MW-34B	11/05/14	ORG	< 0.50	< 0.50	< 0.50	2.2	< 0.50	210	< 0.50	< 0.50	< 0.50	0.97	0.66	< 0.50	< 0.50	57
MW-34B	11/05/14	DUP	< 0.50	< 0.50	< 0.50	2.1	0.55	200	< 0.50	< 0.50	< 0.50	0.82	0.56	< 0.50	< 0.50	54
MW-34B	11/05/14	SPT	< 0.50	< 0.50	< 1.0	2.0	< 0.50	180	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	54
MW-34B	02/05/15	ORG	< 0.50	< 0.50	< 0.50	1.1	< 0.50	79	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	32
MW-34B Historical Range***			< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - 0.50	< 0.50 - 9.8	< 0.50 - 1.4	20 E - 1,100	< 0.50 - < 5.0	< 0.50 - 1.1	< 0.50 - 1.0	< 0.50 - 2.6	< 0.50 - 1.6	< 0.50 - < 5.0	< 0.50 - 2.6	4.1 - 196
MW-34C	02/25/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.1	< 2.0
MW-3400C	02/25/11	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.7	< 2.0
MW-34C	02/25/11	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-34C	03/10/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.0	< 0.20
MW-34C	03/29/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.1	< 0.20
MW-34C	03/29/11	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3	< 1
MW-34C	06/21/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.1	< 0.20
MW-34C	08/04/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.6	< 0.20
MW-34C	11/02/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	02/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	05/10/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	08/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	11/06/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-34C	01/03/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	02/06/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	05/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	08/13/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	02/07/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	08/19/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C	02/05/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-34C Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 9.6	< 0.20 - < 2.0
MW-35A	01/19/11	ORG	< 0.50	< 0.50	67	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-3500A	01/19/11	FD	< 0.50	< 0.50	67	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-35A	01/19/11	SPT	< 1	< 1	50	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-35A	02/03/11	ORG	< 0.50	< 0.50	46 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-3500A	02/03/11	FD	< 0.50	< 0.50	49 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-35A	02/03/11	SPT	< 1	< 1	33 E	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-35A	03/28/11	ORG	< 0.50	< 0.50	20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	06/22/11	ORG	< 0.50	< 0.50	11	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	08/04/11	ORG	< 0.50	< 0.50	14	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	11/01/11	ORG	< 0.50	< 0.50	6.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	02/08/12	ORG	< 0.50	< 0.50	4.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	05/09/12	ORG	< 0.50	< 0.50	2.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	08/07/12	ORG	< 0.50	< 0.50	1.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	11/06/12	ORG	< 0.50	< 0.50	0.72	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	02/06/13	ORG	< 0.50	< 0.50	0.74	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	05/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	08/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A	02/07/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35A Historical Range***			< 0.50	< 0.50	< 0.50 - 67	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20 - < 2.0
MW-35B	01/19/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-3500B	01/19/11	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-35B	01/19/11	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-35B	02/03/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-3500B	02/03/11	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-35B	02/03/11	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-35B	03/28/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	06/22/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	08/04/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	11/01/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	02/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	05/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	08/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	11/06/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	02/05/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	05/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

.....Concentration (micrograms per liter).....																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)													Semi-VOCs			
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-/-)	1,1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-35B	08/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B	02/04/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35B Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20 - < 2.0
MW-35C	01/19/11	ORG	< 0.50	< 0.50	120	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-3500C	01/19/11	FD	< 0.50	< 0.50	120	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-35C	01/19/11	SPT	< 1	< 1	87	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-35C	02/03/11	ORG	< 0.50	< 0.50	0.59	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-3500C	02/03/11	FD	< 0.50	< 0.50	0.67	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
MW-35C	02/03/11	SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
MW-35C	03/28/11	ORG	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-3500C	03/28/11	FD	< 0.50	< 0.50	1.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	06/22/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	08/04/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	11/01/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	02/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	05/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	08/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	11/06/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	02/06/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	05/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	08/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	11/12/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	02/04/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	05/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	08/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	11/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C	02/04/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-35C Historical Range***			< 0.50	< 0.50	< 0.50 - 120	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20 - < 2.0
MW-36	01/13/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.9	< 0.20
MW-3600	01/13/12	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.0	< 0.20
MW-36	01/13/12	SPT	< 1	< 1	< 1	< 1	< 1	2.0	< 1	< 1	< 1	< 1	< 1	< 1	4.0	< 1
MW-36	01/26/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.3	< 0.20
MW-3600	01/26/12	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.5	< 0.20
MW-36	01/26/12	SPT	< 1	< 1	< 1	< 1	< 1	3.0	< 1	< 1	< 1	< 1	< 1	< 1	3.0	< 1
MW-36	02/08/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.2	< 0.20
MW-3600	02/08/12	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.1	< 0.20
MW-36	02/08/12	SPT	< 1	< 1	< 1	< 1	< 1	2.0	< 1	< 1	< 1	< 1	< 1	< 1	3.0	< 1
MW-36	05/10/12	ORG	< 0.50	< 0.50	< 0.50	0.52	< 0.50	45	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	2.8
MW-36	08/10/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-3600	08/10/12	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-36	08/10/12	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	9.9 E	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1.2	< 1.1
MW-36	11/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	27	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.88	1.4
MW-3600	11/07/12	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	25	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.59	1.4
MW-36	01/04/13	ORG	< 0.50	< 0.50	< 0.50	1.5	< 0.50	140	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.7
MW-36	02/07/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	28	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)															Semi-VOCs	
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-3600	02/07/13	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	26	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.5
MW-36	05/14/13	ORG	< 0.50	< 0.50	< 0.50	0.55	< 0.50	45	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.0
MW-36	08/15/13	ORG	< 0.50	< 0.50	< 0.50	1.4	< 0.50	130	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.5
MW-3600	08/15/13	FD	< 0.50	< 0.50	< 0.50	1.4	< 0.50	130	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.5
MW-36	08/15/13	SPT	< 0.50	< 0.50	< 1.0	1.2	< 0.50	110	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	9.4
MW-36	11/13/13	ORG	< 0.50	< 0.50	< 0.50	1.0	< 0.50	71	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.2E
MW-3600	11/13/13	FD	< 0.50	< 0.50	< 0.50	1.1	< 0.50	71	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.1E
MW-36	11/13/13	SPT	< 0.50	< 0.50	< 1.0	1.0	< 0.50	97	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	9.1E
MW-36	02/06/14	ORG	< 0.50	< 0.50	< 0.50	1.3	< 0.50	92	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13
MW-3600	02/06/14	FD	< 0.50	< 0.50	< 0.50	1.2	< 0.50	89	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12
MW-36	02/06/14	SPT	< 0.50	< 0.50	< 1.0	1.3	< 0.50	110	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	8.3
MW-36	05/20/14	ORG	< 0.50	< 0.50	< 0.50	1.7	< 0.50	120	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14
MW-3600	05/20/14	FD	< 0.50	< 0.50	< 0.50	1.8	< 0.50	130	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14
MW-36	05/20/14	SPT	< 0.50	< 0.50	< 1.0	1.2	< 0.50	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	11
MW-36	08/20/14	ORG	< 0.50	< 0.50	< 0.50	0.93	< 0.50	86	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.6
MW-36	11/05/14	ORG	< 0.50	< 0.50	< 0.50	1.4	< 0.50	140	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.2
MW-36	02/05/15	ORG	< 0.50	< 0.50	< 0.50	1.6	< 0.50	130	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	11
MW-3600	02/05/15	FD	< 0.50	< 0.50	< 0.50	1.6	< 0.50	120	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	11
MW-36	02/05/15	SPT	< 0.50	< 0.50	< 1.0	1.4	< 0.50	130	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	12
MW-36 Historical Range**			< 0.50	< 0.50	< 0.50	< 0.50 - 1.7	< 0.50	2.9 - 140	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 5.9	< 0.20 - 14
MW-37	10/26/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.73	< 2.0
MW-3700	10/26/12	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 2.0
MW-37	10/26/12	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.4	< 1.0
MW-37	11/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-3700	11/07/12	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-37	11/07/12	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-37	01/03/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.66	< 0.50	< 0.50	< 0.20
MW-37	01/03/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-37	02/06/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-37	02/06/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-37	05/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-3700	05/15/13	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-37	05/15/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-37	08/14/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-37	11/12/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-37	02/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-37	05/21/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-37	11/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-37	02/04/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-37 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 0.66	< 0.50	< 0.50 - 0.73	< 0.20
MW-38	08/07/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-3800	08/07/13	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-38	08/07/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-38	08/16/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-38	11/12/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-38	02/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-38	05/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-38	11/05/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-38	02/04/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-38 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)															Semi-VOCs	
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
MW-39	08/08/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-3900	08/08/13	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-39	08/08/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-39	08/16/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.69	< 0.20
MW-39	11/12/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.83	< 0.20
MW-39	02/04/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.59	< 0.20
MW-39	05/21/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 0.20
MW-39	08/20/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.99	< 0.20
MW-39	11/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.64	< 0.20
MW-39	02/04/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-39 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 1.3	< 0.20
MW-40	07/18/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-4000	07/18/13	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-40	07/18/13	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-40	08/16/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-40	11/12/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-40	02/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-40	05/21/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-40	08/21/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-40	11/06/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-40	02/03/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-40 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-41-420	08/19/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.49
MW-4100-420	08/19/14	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51
MW-41-420	08/19/14	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.3
MW-41	09/10/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.49
MW-4100	09/10/14	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.42
MW-41	09/10/14	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	1.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-41	09/24/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-4100	09/24/14	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-41	09/24/14	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-41	11/05/14	ORG	< 0.50	< 0.50	0.72	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
MW-41	02/05/15	ORG	< 0.50	< 0.50	0.64	1.1	< 0.50	110	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10
Historical High/Low						High		High								High
MW-41 Historical Range***			< 0.50	< 0.50	< 0.50 - 0.72	< 0.50 - < 1.0	< 0.50	< 0.50 - 2.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20 - 0.49
EW-01	6/22/2005	ORG	< 0.50	< 0.50	0.67	10	2.6	750	< 0.50	2.5	< 0.50	6.5	2.1	< 0.50	< 0.50	140 E
EW-100	6/22/2005	FD	< 0.50	< 0.50	0.65	11	2.6	740	< 0.50	2.5	< 0.50	6.8	2.2	< 0.50	< 0.50	150 E
EW-01	6/22/2005	SPT	< 1.0	< 1.0	< 1.0	10	2.5	600	< 1.0	2.2	< 1.0	6.3	1.9	< 1.0	< 1.0	600 E
EW-01	09/22/05	ORG	< 0.50	< 0.50	< 0.50	3.0	< 0.50	210 E	< 0.50	0.59	< 0.50	1.5	0.58	< 0.50	< 0.50	25 E
EW-100	09/22/05	FD	< 0.50	< 0.50	< 0.50	3.1	< 0.50	77 E	< 0.50	0.53	< 0.50	1.5	0.53	< 0.50	< 0.50	24 E
EW-01	09/22/05	SPT	< 0.50	< 0.50	< 0.50	2.0	< 0.50	120 E	< 0.50	0.5	< 0.50	1.0	< 0.50	< 0.50	< 0.50	73 E
EW-01	12/19/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.1
EW-100	12/19/05	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.74	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.5
EW-01	03/22/06	ORG	< 0.50	< 0.50	< 0.50	1.9	< 0.50	1.0	< 0.50	< 0.50	< 0.50	1.0	< 0.50	< 0.50	< 0.50	83
EW-100	03/22/06	FD	< 0.50	< 0.50	< 0.50	2.0	0.90	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	78
EW-01	06/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	25
EW-100	06/21/06	FD	< 0.50	< 0.50	< 0.50	0.51	< 0.50	5.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	27
EW-01	12/11/06	ORG	2.0	< 0.50	< 0.50	1.6	< 0.50	4.3 E	< 0.50	< 0.50	< 0.50	0.80	< 0.50	< 0.50	< 0.50	42
EW-01	12/11/06	SPT	2.0	< 0.50	< 0.50	1.0	< 0.50	68 E	< 0.50	< 0.50	< 0.50	0.60	< 0.50	< 0.50	0.50 U	48
EW-01	03/14/07	ORG	< 0.50	< 0.50	< 0.50	1.2	< 0.50	90	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	33
EW-100	03/14/07	FD	< 0.50	< 0.50	< 0.50	1.1	< 0.50	90	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	< 0.50	30
EW-01	06/22/07	ORG	< 0.50	< 0.50	0.57	< 0.50	< 0.50	24	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	15
EW-01	09/27/07	ORG	< 0.50	< 0.50	< 0.50	3.8	0.90	< 0.50	< 0.50	0.73	< 0.50	2.1	0.56	< 0.50	< 0.50	110
EW-01	12/13/07	ORG	< 0.50	0.53	1.2	16	4.0	820	0.52	3.3	< 0.50	10	2.8	< 0.50	< 0.50	660

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

.....Concentration (micrograms per liter).....																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)															Semi-VOCs	
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
EW-100	12/13/07	FD	< 0.50	0.55	1.1	16	4.2	710	< 0.50	3.4	< 0.50	9.7	2.7	< 0.50	< 0.50	650
EW-01	12/13/07	SPT	< 0.50	< 0.50	1.0	14	3.0	740	< 0.50	3.0	< 0.50	8.7	3.0	< 0.50	< 0.50	770
EW-01	06/25/08	ORG	< 0.50	< 0.50	0.61	9.5	2.2	1,600 E	< 0.50	2.6	< 0.50	5.7	2.0	< 0.50	4.6	710
EW-100	06/25/08	FD	< 1.0	< 1.0	< 1.0	8.8	2.2	840 E	1.1	2.6	< 1.0	5.7	1.8	< 1.0	2.8	800
EW-01	06/25/08	SPT	< 5.0	< 5.0	< 5.0	8.0	< 5.0	620 E	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	530
EW-01	07/08/08	ORG	< 2.5	< 2.5	< 2.5	8.5	< 2.5	720	< 2.5	2.6	< 2.5	5.5	< 2.5	< 2.5	< 2.5	490
EW-01	07/09/08	ORG	< 0.50	< 0.50	0.76	9.2	1.9	820	< 0.50	2.2	< 0.50	5.0	1.9	< 0.50	< 0.50	410
EW-01	07/10/08	ORG	< 0.50	< 0.50	< 0.50	6.1	1.5	580	< 0.50	2.1	< 0.50	3.2	1.3	< 0.50	< 0.50	340
EW-01	07/15/08	ORG	< 1.0	< 1.0	< 1.0	7.0	1.8	630	< 1.0	2.3	< 1.0	4.6	1.4	< 1.0	< 1.0	350
EW-01	07/16/08	ORG	< 1.0	< 1.0	< 1.0	7.2	1.7	1,000	< 1.0	1.8	< 1.0	3.9	1.9	< 1.0	< 1.0	320
EW-01	07/23/08	ORG	< 1.0	< 1.0	< 1.0	5.2	1.2	520	< 1.0	2.3	< 1.0	2.6	1.2	< 1.0	< 1.0	190
EW-01	07/30/08	ORG	< 1.0	< 1.0	< 1.0	5.5	1.1	360	< 1.0	1.2	< 1.0	2.6	1.0	< 1.0	< 1.0	200
EW-01	08/06/08	ORG	< 1.0	< 1.0	< 1.0	4.2	< 1.0	340	< 1.0	< 1.0	< 1.0	2.0	< 1.0	< 1.0	< 1.0	190
EW-01	08/25/08	ORG	< 0.50	< 0.50	< 0.50	3.0	0.62	230	< 0.50	0.84	< 0.50	1.5	0.65	< 0.50	< 0.50	130
EW-01	09/24/08	ORG	< 0.50	< 0.50	< 0.50	2.4	0.57	180	< 0.50	0.94	< 0.50	1.2	1.3	< 0.50	< 0.50	74
EW-01	10/22/08	ORG	< 0.50	< 0.50	< 0.50	2.7	0.5	200	< 0.50	0.66	< 0.50	1.2	0.54	< 0.50	< 0.50	120
EW-01	11/26/08	ORG	< 0.50	< 0.50	< 0.50	2.9	0.65	190	< 0.50	0.63	< 0.50	1.5	0.51	< 0.50	< 0.50	110
EW-01	02/25/09	ORG	< 0.50	< 0.50	< 0.50	4.8	0.93	360	< 0.50	< 0.50	< 0.50	3.0	1.0	< 0.50	< 0.50	160
EW-01	03/18/09	ORG	< 0.50	< 0.50	< 0.50	1.8	< 0.50	160	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	70
EW-01	04/29/09	ORG	< 0.50	< 0.50	< 0.50	1.6	< 0.50	150	< 0.50	0.60	< 0.50	0.86	< 0.50	< 0.50	< 0.50	80
EW-01	05/27/09	ORG	< 0.50	< 0.50	< 0.50	3.4	0.76	320	< 0.50	0.79	< 0.50	1.5	0.90	< 0.50	< 0.50	150
EW-01	06/29/09	ORG	< 0.50	< 0.50	< 0.50	2.2	0.53	200	< 0.50	0.76	< 0.50	1.2	0.58	< 0.50	< 0.50	120
EW-01	07/22/09	ORG	< 0.50	< 0.50	< 0.50	3.2	0.64	260	< 0.50	0.66	< 0.50	1.3	0.62	< 0.50	< 0.50	120
EW-01	08/14/09	ORG	< 0.50	< 0.50	< 0.50	2.2	< 0.50	190	< 0.50	< 0.50	< 0.50	0.98	< 0.50	< 0.50	< 0.50	81
EW-01	09/11/09	ORG	< 0.50	< 0.50	< 0.50	3.1	0.70	280	< 0.50	0.66	< 0.50	1.3	0.60	< 0.50	< 0.50	120
EW-01	10/08/09	ORG	< 0.50	< 0.50	< 0.50	2.0	< 0.50	150	< 0.50	< 0.50	< 0.50	0.92	< 0.50	< 0.50	< 0.50	87
EW-01	12/09/09	ORG	< 0.50	< 0.50	0.65	9.2	2.1	720	< 0.50	2.0	< 0.50	5.1	1.7	< 0.50	< 0.50	490
EW-01	03/05/10	ORG	< 1.0	< 1.0	< 1.0	6.7	1.6	500	< 1.0	1.9	< 1.0	3.2	1.6	< 1.0	< 1.0	370
EW-01	06/11/10	ORG	< 1.0	< 1.0	< 1.0	9.7	1.9	720	< 1.0	1.9	< 1.0	4.7	1.6	< 1.0	< 1.0	400
EW-01	09/08/10	ORG	< 1.0	< 1.0	< 1.0	10	2.4	720	< 1.0	2.0	< 1.0	4.7	2.0	< 1.0	< 1.0	370
EW-01	12/07/10	ORG	< 1.0	< 1.0	< 1.0	7.5	1.4	600 E	< 1.0	1.4	< 1.0	2.7	1.2	< 1.0	< 1.0	220
EW-01	12/07/10	SPT	< 5	< 5	< 5	< 5	< 5	340 E	< 5	< 5	< 5	< 5	< 5	< 5	< 5	290
EW-01	03/24/11	ORG	< 0.50	< 0.50	< 0.50	2.6	0.59	200	< 0.50	0.82	< 0.50	1.3	0.54	< 0.50	< 0.50	64
EW-01	06/23/11	ORG	< 0.50	< 0.50	< 0.50	2.1	< 0.50	180	< 0.50	0.50	< 0.50	0.83	0.52	< 0.50	< 0.50	59
EW-100	06/23/11	FD	< 0.50	< 0.50	< 0.50	2.0	< 0.50	180	< 0.50	< 0.50	< 0.50	0.96	< 0.50	< 0.50	< 0.50	68
EW-01	08/02/11	ORG	< 0.50	< 0.50	< 0.50	3.1	0.61	370	< 0.50	0.67	< 0.50	1.4	0.55	< 0.50	< 0.50	80 E
EW-01	11/01/11	ORG	< 0.50	< 0.50	< 0.50	1.6	< 0.50	82	< 0.50	< 0.50	< 0.50	0.64	< 0.50	< 0.50	< 0.50	54
EW-01	02/06/12	ORG	< 0.50	< 0.50	< 0.50	0.85	< 0.50	59	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	11
EW-01	05/07/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18	< 0.50	0.78	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.0
EW-01	08/06/12	ORG	1.0	< 0.50	< 0.50	1.2	< 0.50	94	< 0.50	< 0.50	< 0.50	0.56	< 0.50	< 0.50	< 0.50	42 E
EW-0100	08/06/12	FD	< 0.50	< 0.50	< 0.50	1.2	< 0.50	99	< 0.50	< 0.50	< 0.50	0.55	< 0.50	< 0.50	< 0.50	44 E
EW-01	08/06/12	SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	64	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	65 E
EW-01	11/05/12	ORG	< 0.50	< 0.50	< 0.50	1.8	< 0.50	190	< 0.50	< 0.50	< 0.50	0.75	< 0.50	< 0.50	< 0.50	83
EW-01	02/04/13	ORG	< 0.50	< 0.50	< 0.50	1.9	< 0.50	130	< 0.50	< 0.50	< 0.50	0.67	< 0.50	< 0.50	< 0.50	58
EW-01	05/13/13	ORG	< 0.50	< 0.50	< 0.50	0.78	< 0.50	57	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	41
EW-01	08/12/13	ORG	< 0.50	< 0.50	< 0.50	2.9	0.56	220	< 0.50	0.76	< 0.50	0.85	< 0.50	< 0.50	< 0.50	81

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (--/--)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (--/150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
EW-01	11/11/13	ORG	< 0.50	< 0.50	< 0.50	2.8	< 0.50	160	< 0.50	0.55	< 0.50	1.3	0.54	< 0.50	< 0.50	130
EW-01	02/03/14	ORG	< 0.50	< 0.50	< 0.50	3.5	1.1	190	< 0.50	1.1	< 0.50	1.4	0.81	< 0.50	< 0.50	140
EW-01	05/20/14	ORG	< 0.50	< 0.50	0.65	7.5	2.1	500	< 0.50	1.6	< 0.50	3.7	1.2	0.61	< 0.50	380
EW-01	08/18/14	ORG	< 2.5	< 2.5	< 2.5	14	4.0	950	< 2.5	3.8	< 2.5	8.4	3.1	< 2.5	< 2.5	970
EW-01	11/04/14	ORG	< 2.0	< 2.0	< 2.0	16	4.0	960	< 2.0	4.3	< 2.0	9.0	3.3	< 2.0	< 2.0	990 E
EW-01	11/04/14	FD	< 2.0	< 2.0	< 2.0	16	4.2	1,000	< 2.0	3.6	< 2.0	9.0	3.0	< 2.0	< 2.0	920 E
EW-01	11/04/14	SPT	< 0.50	0.57	1.2	16	3.6	720	< 1.0	2.3	< 1.0	8.8	2.7	< 1.0	< 1.0	1,800 E
EW-01	02/02/15	ORG	< 1.0	< 1.0	< 1.0	11	2.4	610	< 1.0	2.8	< 1.0	5.7	2.3	< 1.0	< 1.0	340
EW-0100	02/02/15	FD	< 1.0	< 1.0	< 1.0	11	2.4	670	< 1.0	2.8	< 1.0	5.4	2.3	< 1.0	< 1.0	350
EW-01	02/02/15	SPT	< 2.5	< 2.5	< 5.0	8.6	< 2.5	470	< 5.0	< 5.0	< 5.0	5.8	< 5.0	< 5.0	< 5.0	360
EW-01 Historical Range***			< 0.50 - 2.0	< 0.50 - 0.55	< 0.50 - 1.2	< 0.50 - 16	< 0.50 - 4.0	< 0.50 - 1,600 E	< 0.50 - 0.52	< 0.50 - 4.3	< 0.50 - < 2.5	< 0.50 - 10	< 0.50 - 3.3	< 0.50 - 0.61	< 0.50 - 4.6	5.1 - 990 E
EW-02	10/30/09	ORG	< 0.50	< 0.50	< 0.50	0.70	< 0.50	52	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.85	24
EW-200	10/30/09	FD	< 0.50	< 0.50	< 0.50	0.73	< 0.50	55	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.78	23
EW-02	03/22/10	ORG	< 0.50	< 0.50	< 0.50	0.92	< 0.50	82	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22
EW-02	03/23/10	ORG	< 0.50	< 0.50	< 0.50	0.94	< 0.50	82	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	24
EW-02	03/24/10	ORG	< 0.50	< 0.50	< 0.50	0.85	< 0.50	74	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	25
EW-02	03/25/10	ORG	< 0.50	< 0.50	< 0.50	0.79	< 0.50	70	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22
EW-02	03/26/10	ORG	< 0.50	< 0.50	< 0.50	0.83	< 0.50	76	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19
EW-02	04/01/10	ORG	< 0.50	< 0.50	< 0.50	0.88	< 0.50	81	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	29
EW-02	04/09/10	ORG	< 0.50	< 0.50	< 0.50	0.90	< 0.50	85	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	31
EW-02	04/13/10	ORG	< 0.50	< 0.50	< 0.50	1.4	< 0.50	120	< 0.50	< 0.50	< 0.50	0.59	< 0.50	< 0.50	< 0.50	43
EW-02	04/23/10	ORG	< 0.50	< 0.50	< 0.50	1.0	< 0.50	91	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	35
EW-02	05/25/10	ORG	< 0.50	< 0.50	< 0.50	1.1	< 0.50	100	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	38
EW-02	06/10/10	ORG	< 0.50	< 0.50	< 0.50	1.4	< 0.50	120	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	40
EW-02	07/08/10	ORG	< 0.50	< 0.50	< 0.50	1.5	< 0.50	160	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	48
EW-02	08/02/10	ORG	< 0.50	< 0.50	< 0.50	1.3	< 0.50	150	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	42
EW-02	09/02/10	ORG	< 0.50	< 0.50	< 0.50	1.4	< 0.50	160	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	42
EW-02	10/07/10	ORG	< 0.50	< 0.50	< 0.50	1.4	< 0.50	140	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	39
EW-02	11/11/10	ORG	< 0.50	< 0.50	< 0.50	1.1	< 0.50	140	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	33
EW-02	12/07/10	ORG	< 0.50	< 0.50	< 0.50	1.0	< 0.50	130	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	29
EW-02	01/13/11	ORG	< 0.50	< 0.50	< 0.50	1.0	< 0.50	99	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	29
EW-02	02/03/11	ORG	< 0.50	< 0.50	< 0.50	0.88	< 0.50	83	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22
EW-02	03/02/11	ORG	< 0.50	< 0.50	< 0.50	0.71	< 0.50	77	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	16
EW-02	04/01/11	ORG	< 0.50	< 0.50	< 0.50	0.76	< 0.50	82	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	16
EW-02	05/04/11	ORG	< 0.50	< 0.50	< 0.50	0.79	< 0.50	83	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19
EW-02	06/07/11	ORG	< 0.50	< 0.50	< 0.50	0.65	< 0.50	67	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20
EW-02	07/02/11	ORG	< 0.50	< 0.50	< 0.50	0.73	< 0.50	87	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18
EW-02	08/01/11	ORG	< 0.50	< 0.50	< 0.50	0.91	< 0.50	75	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	21
EW-02	09/09/11	ORG	< 0.50	< 0.50	< 0.50	0.82	< 0.50	90	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20
EW-02	10/17/11	ORG	< 0.50	< 0.50	< 0.50	0.62	< 0.50	67	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19
EW-02	11/01/11	ORG	< 0.50	< 0.50	< 0.50	0.69	< 0.50	55	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22
EW-02	12/07/11	ORG	< 0.50	< 0.50	< 0.50	0.62	< 0.50	62	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20
EW-02	01/06/12	ORG	< 0.50	< 0.50	< 0.50	0.53	< 0.50	85	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	15
EW-02	02/08/12	ORG	< 0.50	< 0.50	< 0.50	0.53	< 0.50	54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.4
EW-02	03/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	59	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12
EW-02	04/16/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	45	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14
EW-02	05/01/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	37	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13
EW-02	06/08/2012	ORG	< 0.50	< 0.50	< 0.50	0.62	< 0.50	67	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19
EW-02	07/11/2012	ORG	< 0.50	< 0.50	< 0.50	0.53	< 0.50	64	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19
EW-02	08/03/2012	ORG	< 0.50	< 0.50	< 0.50	0.55	< 0.50	67	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	16
EW-02	09/06/12	ORG	< 0.50	< 0.50	< 0.50	0.58	< 0.50	62	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	11
EW-02	10/15/12	ORG	< 0.50	< 0.50	< 0.50	0.74	< 0.50	75	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18
EW-02	11/05/12	ORG	< 0.50	< 0.50	< 0.50	0.52	< 0.50	63	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12
EW-02	12/10/12	ORG	< 0.50	< 0.50	< 0.50	0.68	< 0.50	72	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	17
EW-02	01/04/13	ORG	< 0.50	< 0.50	< 0.50	0.60	< 0.50	63	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
EW-02	02/09/13	ORG	< 0.50	< 0.50	< 0.50	0.52	< 0.50	39	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	25
EW-02	9/6/12	ORG	< 0.50	< 0.50	< 0.50	0.60	< 0.50	50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18
EW-02	4/15/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	32	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13
EW-02	5/7/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	46	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22
EW-02	6/13/13	ORG	< 0.50	< 0.50	< 0.50	0.64	< 0.50	54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	25
EW-02	7/2/13	ORG	< 0.50	< 0.50	< 0.50	0.72	< 0.50	64	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	27
EW-02	8/10/13	ORG	< 0.50	< 0.50	< 0.50	0.76	< 0.50	80	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	24
EW-02	9/3/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	26	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.7
EW-02	10/5/13	ORG	< 0.50	< 0.50	< 0.50	1.0	< 0.50	75	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	31
EW-02	11/1/13	ORG	< 0.50	< 0.50	< 0.50	0.64	< 0.50	54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	28
EW-02	12/11/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	49	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22
EW-02	1/17/14	ORG	< 0.50	< 0.50	< 0.50	0.55	< 0.50	34	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	21
EW-02	2/11/14	ORG	< 0.50	< 0.50	< 0.50	0.63	< 0.50	49	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	26
EW-02	03/04/14	ORG	< 0.50	< 0.50	< 0.50	0.59	< 0.50	57	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	41
EW-02	08/18/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.1
EW-02	11/03/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	22	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.3
EW-02	02/15/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.8
EW-02 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50 - 1.5	< 0.50	5.2 - 160	< 0.50	< 0.50	< 0.50	< 0.50 - 0.59	< 0.50	< 0.50	< 0.50 - 0.85	5.1 - 48
Perched Zone Piezometers																
P-07	06/23/97	ORG	< 1.0	14	8.3	154	< 1.0	23,300	5.1	52	1,400	22	39	< 1.0	< 1.0	NA
P-07	08/16/99	ORG	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000	22,600	< 1,000	< 1,000	1,180	< 1,000	< 1,000	< 1,000	< 1,000	NA
P-07	01/26/00	ORG	6.0	< 5.0	< 5.0	64	< 5.0	4,730	< 5.0	17	270	17	17	< 5.0	< 5.0	NA
P-07	05/18/00	ORG	12	7.7	5.8	98	17	13,000	< 5.0	36	355	25	37	< 5.0	< 5.0	NA
P-07	05/10/01	ORG	3.0 J	2.0 J	3.0 J	44	11	4,100	< 5.0	12	54	14	34	< 5.0	< 5.0	2,020
P-07	10/24/01	ORG	< 25	< 25	< 25	< 25	< 25	930	< 25	< 25	< 25	< 25	< 25	< 25	< 25	1,560
P-07	04/18/02	ORG	< 5.0	< 5.0	< 5.0	23	7.0	2,200	< 5.0	6.0	14	7.7	9.3	< 5.0	< 5.0	2,200 J
P-07	04/18/02	SPT	0.90	1.1	2.1	27.2	7.1	1,360	0.9	5.4	13	6.8	9.8	2.1	< 0.50	1,960
P-07	11/21/02	ORG	0.82	< 0.50	2.1	24	7.4	1,900	1.2	7.7	< 0.50	8.0	12	3.8	< 0.50	2,800
P-07	06/11/03	ORG	0.84	< 0.50	1.9	25	7.0	1,600	0.98	7.3	7.6	7.6	10	3.8	< 0.50	3,100
P-07	09/25/03	ORG	0.57	< 0.50	1.9	17	< 0.50	890	0.75	3.5	3.2	7.1	5.8	1.8	< 0.50	1,300
P-07	12/17/03	ORG	0.68	1.0	1.8	25	6.8	1,400	1.1	6.1	6.5	7.3	9.6	1.3	< 1.0	990
P-07	03/31/04	ORG	< 5.0	< 5.0	< 5.0	26	< 5.0	2,100	< 5.0	7.8	6.7	6.0	11	< 5.0	< 5.0	920
P-07	06/17/04	ORG	< 5.0	< 5.0	< 5.0	23	< 5.0	1,600	< 5.0	< 5.0	< 5.0	7.0	7.9	< 5.0	< 5.0	990
P-07	12/15/04	ORG	< 5.0	< 5.0	0.72	8.3	3.4	640	< 5.0	1.9	< 0.50	3.3	3.1	< 5.0	< 0.50	360
P-07	03/23/06	ORG	1.3	3.4	3.7	45	10	3,900	1.8	12	< 0.50	6.7	16	3.4	< 0.50	2,100
P-07	03/23/06	SPT	< 3.0	< 3.0	< 3.0	30	< 3.0	3,200	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	1,900 J
P-07	06/22/06	ORG	< 5.0	< 5.0	< 5.0	32	8.7	4,200	< 5.0	14	< 5.0	6.0	18	< 5.0	< 5.0	1,400
P-07	06/22/06	SPT	< 20	< 20	< 20	30	< 20	3,100	< 20	< 20	< 20	< 20	< 20	< 20	< 20	NA
P-07	09/28/06	ORG	< 5.0	< 5.0	< 5.0	44	< 5.0	5,300	< 5.0	12	< 5.0	6.1	17	< 5.0	< 5.0	2,300
P-07	12/19/06	ORG	< 1.0	< 1.0	< 1.0	38	< 1.0	3,600	< 1.0	13	< 1.0	< 1.0	13	< 1.0	< 1.0	2,300
P-07	03/13/07	ORG	1.1	2.4	2.8	31	8.0	3,100	1.7	10	< 0.50	7.2	13	2.4	< 0.50	2,300
P-07	03/19/08	ORG	< 2.5	< 2.5	3.9	31	8.4	3,200	< 2.5	8.4	< 2.5	7.0	11	5.2	< 2.5	2,300
P-07	06/27/08	ORG	0.95	2.6	3.8 U	36	11	4,500	1.9	9.4	< 0.50	9.3	15	10	< 0.50	2,500
P-07	09/25/08	ORG	< 5.0	< 5.0	< 5.0	30	6.8	3,000	< 5.0	7.9	< 5.0	7.1	17	17	< 5.0	2,500 B
P-07	12/18/08	ORG	< 5.0	< 5.0	< 5.0	30	8.0	2,800	< 5.0	6.8	< 5.0	8.2	8.4	< 5.0	< 5.0	2,600
P-07	03/17/09	ORG	< 10	< 10	< 10	40	< 10	3,500	< 10	< 10	< 10	12	14	< 10	< 10	2,600
P-07	06/25/09	ORG	< 10	< 10	< 10	29	< 10	3,100	< 10	< 10	< 10	11	10	< 10	< 10	2,900
P-07	09/01/09	ORG	< 5.0	< 5.0	< 5.0	27	7.0	2,500	< 5.0	7.4	< 5.0	8.7	10	< 5.0	< 5.0	2,600
P-07	12/10/09	ORG	< 5.0	< 5.0	< 5.0	37	8.8	3,300	< 5.0	9.7	< 5.0	11	11	< 5.0	< 5.0	2,800

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (-/-5)	1,2-DCA (-/-)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (-/-150)	Toulene (1,000/150)	1,4-DIOXANE (3/1**)
Perched Zone Piezometers (continued)																
P-07	03/03/10	ORG	< 5.0	< 5.0	< 5.0	35	9.8	3,500	< 5.0	9.9	< 5.0	14	12	< 5.0	< 5.0	3,100
P-07	06/11/10	ORG	< 5.0	< 5.0	< 5.0	33	7.4	2,400	< 5.0	5.6	< 5.0	12	9.7	< 5.0	< 5.0	2,500
P-07	09/10/10	ORG	< 5.0	< 5.0	< 5.0	28	7.1	1,900	< 5.0	6.7	< 5.0	7.8	13	< 5.0	< 5.0	2,500
P-07	12/10/10	ORG	< 5.0	< 5.0	< 5.0	29	6.0	2,700	< 5.0	7.1	< 5.0	9.1	8.9	< 5.0	< 5.0	2,000
P-07	03/30/11	ORG	< 5.0	< 5.0	< 5.0	29	7.9	2,400	< 5.0	9.6	< 5.0	12	11	< 5.0	< 5.0	1,000
P-07	02/09/12	ORG	< 20	< 20	< 20	33	< 20	2,800	< 20	< 20	< 20	< 20	< 20	< 20	< 20	2,200
P-07	02/07/13	ORG	< 2.5	< 2.5	< 2.5	22	6.6	1,600	< 2.5	4.8	< 2.5	7.2	5.9	2.8	< 2.5	1,900
P-07	02/14/14	ORG	< 2.0	1.1	1.6	17	4.9	1,100	< 2.0	5.7	< 2.0	5.4	4.9	3.1	< 2.0	1,400
P-07	02/05/15	ORG	< 2.0	< 2.0	< 2.0	17	4.0	1,700	< 2.0	5.3	< 2.0	6.0	6.0	5.2	< 2.0	1,600
P-07 Historical Range***			0.57 - 12	1 - 14	0.72 - 8.3	8.3 - 154	< 0.50 - 17	640 - 23,300	0.75 - 5.1	1.9 - 52	< 0.50 - 1,400	< 1.0 - 25	3.1 - 39	< 1.0 - 17	< 0.50	360 - 3,100
P-09	09/25/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	10/08/03	ORG	< 0.50	< 0.50	< 0.50	0.87	< 0.50	67	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	12/18/03	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	32	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	03/30/04	ORG	< 0.50	< 0.50	< 0.50	0.76	< 0.50	130	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	06/17/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-900	06/17/04	FD	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.2
P-09	06/17/04	SPT	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
P-09	09/21/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.1
P-09	12/15/04	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.2
P-09	03/16/05	ORG	< 0.50	< 0.50	< 0.50	0.65	< 0.50	88	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.2
P-09	06/24/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	43 E	< 0.50	< 0.50	< 0.50	< 0.50	0.58	< 0.50	< 0.50	< 2.0
P-09	09/22/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	25	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	12/20/05	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	27	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.2
P-09	12/20/05	SPT	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	29	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.0
P-09	03/22/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.8
P-09	06/21/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	09/28/06	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	19	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.2
P-09	12/18/06	ORG	< 0.50	< 0.50	< 0.50	0.53	< 0.50	37	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	03/13/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	14	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	06/21/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	09/26/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	12/12/07	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	03/18/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	06/26/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	09/26/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	12/16/08	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	17	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	03/17/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.1
P-09	06/25/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	12	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.7
P-09	09/01/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	12/08/09	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	18	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5
P-09	03/02/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	06/10/10	ORG	< 0.50	< 0.50	< 0.50	0.51	< 0.50	30	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	09/09/10	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	13	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	12/08/10	ORG	< 0.50	< 0.50	< 0.50	0.52	< 0.50	21	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
P-09	03/30/11	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.86
P-09	02/09/12	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.68
P-09	02/07/13	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
P-09	02/05/14	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.56	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.35
P-09	02/04/15	ORG	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.29
P-09 Historical Range***			< 0.50	< 0.50	< 0.50	< 0.50 - 0.87	< 0.50	0.56 - 130	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 0.58	< 0.50	< 0.50	< 0.20 - 7.1
MW-6-W-104	01/16/97	ORG	< 1.0	12	33	500	< 1.0	19,000	24	89	2,800	223	73	< 1.0	< 1.0	NA
MW-9-113-PW	03/21/97	ORG	< 1.0	10	15	210	< 1.0	27,300	8.2	65	4,500	120	48	11	< 1.0	NA

TABLE 4
PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER

Concentration (micrograms per liter)																
VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL)														Semi-VOCs		
Well Identifier / Sample Identifier	Date Sampled	QA Code	Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (--/1)	1,1-DCE (7/6)	cis-1,2-DCE (70/6)	PCE (5/5)	1,1,1-TCA (200/200)	1,1,2-TCA (5/5)	TCE (5/5)	TCFM (--/150)	Toulene (1,000/150)	1,4-DIOXANE (3*/1**)
QUALITY ASSURANCE/QUALITY CONTROL SAMPLES																
TB-030414	03/04/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-05202014A	05/20/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-05202014B	05/20/14	TB-SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
TB-05212014	05/21/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-081814A	08/18/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-081814B	08/18/14	TB-SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
RB-081814	08/18/14	RB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.25
TB-081914A	08/19/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-082014	08/20/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
RB-08202014	08/20/14	RB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
RB-08202014B	08/20/14	RB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-082114A	08/21/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-082114B	08/21/14	TB-SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
TB-091014A	09/10/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-091014B	09/10/14	TB-SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
TB-09102014A	09/24/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-09102014B	09/24/14	TB-SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
TB-110314	11/03/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-110414A	11/04/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-110414B	11/04/14	TB-SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
TB-110614	11/06/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-111114	11/11/14	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-020215A	02/02/15	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-020215B	02/02/15	TB-SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
TB-020415	02/04/15	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
RB-02042015	02/04/15	RB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20
TB-020515A	02/05/15	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-020515B	02/05/15	TB-SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	NA
RB-02052015	02/05/15	RB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0
TB-02062015	02/06/15	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA
TB-021315	2/13/15	TB	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NA

NOTE: Detections are shown in **BOLD** type.

FOOTNOTES

- (a) Reconnaissance groundwater sample; results should be considered qualitative.
 (b) Groundwater sample collected after purging two additional casing volumes.
 (c) Groundwater sample collected after standard 3 purge volumes.
 (d) Groundwater sample collected after 10 purge volumes.
 (e) Groundwater sample collected after 30 purge volumes.
 (f) Groundwater sample collected after 50 purge volumes.

1,1-DCA = 1,1-Dichloroethane
 1,2-DCA = 1,2-Dichloroethane
 1,1-DCE = 1,1-Dichloroethylene
 cis-1,2-DCE = cis-1,2-Dichloroethylene
 PCE = Tetrachloroethylene
 1,1,1-TCA = 1,1,1-Trichloroethane
 1,1,2-TCA = 1,1,2-Trichloroethane
 TCE = Trichloroethylene
 TCFM = Trichlorofluoromethane
 (<) = Less than; the value is the Limit of Detection for that compound
 (--) = Not promulgated

Semi-VOCs = Semivolatile organic compounds

E = Data qualified as estimated in accordance with quality control criteria.

NA = Not analyzed for constituent

FD = Field duplicate sample

J = Data qualified as Estimated; does not meet calibration range acceptance criteria.

ORG = Original sample

QA = Quality Assurance

RB = Rinsate blank sample

SPT = Split sample

TB = Trip blank sample

U = Data qualified as unusable in accordance with quality control criteria.

ug/l = Micrograms per liter

MCL = Maximum contaminant level

* = 1,4-Dioxane Action Level of 3 ug/l

** = California Notification Level for 1,4-dioxane of 1 ug/l

*** = Historical Range determined using original samples exclusively

B = Analyte detected in the associated Method Blank

TABLE 5
OTHER VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER

WELL IDENTIFIER	DATE SAMPLED	QUALITY ASSURANCE CODE	COMPOUNDS	CONCENTRATION (micrograms per liter)
<u>Regional Groundwater System Monitor and Extraction Wells</u>				
EW-01	12/11/2006	SPT	Methylene chloride	4
EW-01	12/13/2007	ORG	Vinyl chloride	0.58
EW-01	12/13/2007	FD	Vinyl chloride	0.6
EW-02	12/7/2011	ORG	Naphthalene	6.4
EW-02	12/10/2012	ORG	Chloromethane	1.2
MW-08	12/20/2005	SPT	Methylene chloride	3
MW-08	6/22/2006	ORG	Methylene chloride	0.62
MW-08	6/22/2006	FD	Methylene chloride	0.69
MW-16	4/16/2002	SPT	2-butanone	7
MW-16	4/16/2002	SPT	Acetone	20
MW-16	6/18/2004	ORG	Chlorobenzene	1.0
MW-16	12/10/2004	ORG	Methylene chloride	1.3
MW-18	11/19/2002	ORG	m,p-Xylene	0.54
MW-21	9/23/2003	FD	1,3-Dichloropropane	0.8
MW-21	12/17/2003	ORG	trans-1,2-Dichloroethylene	0.62
MW-21	3/17/2005	ORG	trans-1,2-Dichloroethylene	0.57
MW-21	12/11/2006	SPT	Acetone	40
MW-21	12/11/2006	SPT	Methylene chloride	50 E
MW-21	6/24/2011	SPT	1,2,2-trichlorotrifluoroethane	2
MW-21	2/3/2014	SPT	Methylene chloride	8.4
MW-26C	12/20/2007	ORG	1,1-dichloropropene	0.93
MW-26C	8/15/2013	ORG	Chloroethane	0.87
MW-28	5/27/2008	ORG	Vinyl chloride	0.58
MW-28	3/30/2011	ORG	Chloromethane	0.91
MW29	5/11/2012	SPT	Tert-Butyl Alcohol	10
MW-30B	8/5/2011	SPT	1,2,2-trichlorotrifluoroethane	2
MW-34A	2/25/2011	SPT	Acetone	6 U
MW-34B	2/25/2011	SPT	Acetone	6 U
MW-34B	3/10/2011	SPT	Acetone	6 U
MW-34C	2/25/2011	SPT	Acetone	7 U
MW-34C	11/2/2011	ORG	Chloromethane	0.5
MW-35A	1/19/2011	ORG	Bromodichloromethane	4.3
MW-35A	1/19/2011	ORG	Bromoform	1.5
MW-35A	1/19/2011	ORG	Bromomethane	0.75
MW-35A	1/19/2011	ORG	Chloromethane	0.78
MW-35A	1/19/2011	ORG	Dibromochloromethane	2.5
MW-35A	1/19/2011	FD	Bromodichloromethane	4.0
MW-35A	1/19/2011	FD	Bromoform	1.4
MW-35A	1/19/2011	FD	Chloromethane	0.73
MW-35A	1/19/2011	FD	Dibromochloromethane	2.4

TABLE 5
OTHER VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER

WELL IDENTIFIER	DATE SAMPLED	QUALITY ASSURANCE CODE	COMPOUNDS	CONCENTRATION (micrograms per liter)
<u>Regional Groundwater System Monitor and Extraction Wells (Continued)</u>				
MW-35A	1/19/2011	SPT	Bromodichloromethane	3
MW-35A	1/19/2011	SPT	Bromoform	2
MW-35A	1/19/2011	SPT	Dibromochloromethane	2
MW-35A	2/3/2011	ORG	Bromodichloromethane	3.6
MW-35A	2/3/2011	ORG	Bromoform	0.65
MW-35A	2/3/2011	ORG	Dibromochloromethane	1.7
MW-35A	2/3/2011	FD	Bromodichloromethane	4.1
MW-35A	2/3/2011	FD	Bromoform	0.69
MW-35A	2/3/2011	FD	Dibromochloromethane	2.0
MW-35A	2/3/2011	SPT	Bromodichloromethane	2
MW-35A	2/3/2011	SPT	Dibromochloromethane	1
MW-35A	3/28/2011	ORG	Bromodichloromethane	0.90
MW-35A	6/22/2011	ORG	Bromodichloromethane	0.59
MW-35A	11/1/2011	ORG	Chloromethane	0.59
MW-35C	1/19/2011	ORG	Bromodichloromethane	11 E
MW-35C	1/19/2011	ORG	Bromoform	1.1
MW-35C	1/19/2011	ORG	Bromomethane	0.52
MW-35C	1/19/2011	ORG	Dibromochloromethane	3.6
MW-35C	1/19/2011	FD	Bromodichloromethane	10 E
MW-35C	1/19/2011	FD	Bromoform	1.1
MW-35C	1/19/2011	FD	Bromomethane	0.90
MW-35C	1/19/2011	FD	Chloromethane	0.64
MW-35C	1/19/2011	FD	Dibromochloromethane	3.5
MW-35C	1/19/2011	SPT	Bromodichloromethane	8 E
MW-35C	1/19/2011	SPT	Bromoform	1
MW-35C	1/19/2011	SPT	Dibromochloromethane	3
<u>Perched Zone Piezometers</u>				
P-07	6/22/2006	ORG	Methylene chloride	7.4
P-07	3/13/2007	ORG	Vinyl chloride	1.2
P-07	6/27/2008	ORG	Vinyl chloride	1.8
P-07	9/25/2008	ORG	Vinyl chloride	7.8
P-09	12/20/2005	SPT	Methylene chloride	3 U
<u>Perched Zone Grab Samples (From Regional Groundwater System Monitor Well Boring)</u>				
MW-6-W-104	1/16/1997	ORG	1,1,1,2-tetrachloroethane	1.6
MW-6-W-104	1/16/1997	ORG	1,2-Dichloropropane	2.1
<u>Quality Assurance/Quality Control Samples</u>				
RB-08142013	8/14/2013	ORG	Methylene chloride	3.7
RB-08142013B	8/14/2013	ORG	Methylene chloride	3.4
TB-021315	2/13/2015	TB	Methylene chloride	1.0

FOOTNOTES

E = Estimated

FD = Field duplicate sample

ORG = Original sample

SPT = Split sample

U = Unusable

TABLE 6

PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLING SCHEDULE

COMPOUND(S) / CONSTITUENT				SAMPLE FREQUENCY AND LOCATION																			
				Daily Samples: Days 1-5				Weekly Samples: Weeks 1-4				Monthly Samples: Week 5+				Quarterly Samples: Week 1+							
				System Influent (INF)	Post-Filter (PF)	Post-Oxidation (POX)	Carbon Breakthrough (CBT) ²	Post-Carbon (CEFF)	System Influent (INF)	Post-Filter (PF)	Post-Oxidation (POX)	Carbon Breakthrough (CBT) ²	Post-Carbon (CEFF)	Extraction Wells (Well ID) ²	System Influent (INF)	Post-Filter (PF)	Post-Oxidation (POX)	Carbon Breakthrough (CBT) ²	Post-Carbon (CEFF)	Extraction Wells (Well ID) ²	System Influent (INF)	Post-Oxidation (POX)	Post-Carbon (CEFF)
COMPOUNDS/CONSTITUENTS NORMALLY REQUIRED AS PART OF NPDES OR WDR PERMITS, PURSUANT TO CRWQCB REGION 8 ORDER NO. R8-2003-00																							
Volatile Organic Compounds	EPA 8260B	3 - 40 mL VOA, HCl	QAPP ⁴	X	X	X	X		X	X	X	X		X	X	X	X	X					
1,4-Dioxane	EPA 8270 Modified	1 L Amber	0.002	X					X					X	X								
1,4-Dioxane	EPA 8270 SIM	1 L Amber	0.0002		X					X						X							
Total Suspended Solids	SM2540D	250 mL poly	10														X						
Total Dissolved Solids	SM2540C	250 mL poly	10																X	X	X		
SELECTED METALS																							
Dissolved Metals (Iron, Manganese, Calcium, Sodium, Magnesium)	EPA 6010B	500 mL poly	QAPP ⁴	(a)															X	X			
Selenium	EPA 6010B	500 mL poly, HNO ₃	QAPP ⁴																X	X			
SELECTED INORGANIC CONSTITUENTS																							
Hydroxide Alkalinity	SM2320B	250 mL poly	2.0	(a)											X	X			X	X			
Bicarbonate Alkalinity	SM2320B	250 mL poly	2.0	(a)											X	X			X	X			
Carbonate Alkalinity	SM2320B	250 mL poly	2.0	(a)											X	X			X	X			
Total Alkalinity	SM2320B	250 mL poly	2.0	(a)											X	X			X	X			
BROMATE EVALUATION																							
Bromate	EPA 317.0	125 mL poly	0.0005			X					X				X								
Bromide	EPA 300.0	125 mL poly	0.05	(a)						(a)					X	X							
OTHER CONSTITUENTS/COMPOUND																							
Total Organic Carbon	SM5310B	3 - 40 mL VOA, HCl	3.0	(a)											X	X			X	X	X		
Anions (Chloride, Sulfate, Nitrate, Nitrite, and Phosphate)	EPA 300.0	500 mL poly	Varies	(a)															X	X	X		
Chemical Oxygen Demand	EPA 410.4	125 mL poly, H ₂ SO ₄	5.0	(a)															X	X	X		
UV Absorption (UVA) @254nm	EPA 415.3	250 mL Amber	N/A	(a)											X				X	X	X		
Field Parameters																							
Dissolve Oxygen (DO)	N/A	N/A	N/A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Electrical Conductance (EC)	N/A	N/A	N/A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Redox Potential	N/A	N/A	N/A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Temperature	N/A	N/A	N/A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
pH	N/A	N/A	N/A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Turbidity	N/A	N/A	N/A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Flow-Meter	N/A	N/A	N/A	X					X					X	X								
Residual Hydrogen Peroxide	N/A	N/A	N/A					(a)	(a)	(a)								X	X	X			

FOOTNOTES

- (a) Only one sample to be collected during sampling period.
- 1 Daily and weekly samples collected during the first month of operation will be repeated after major modifications to system equipment or operating parameters, as detailed in the Workplan.
- 2 If more than one extraction well is in operation, combined influent samples will be collected in addition to extraction wellhead samples, with the same sampling schedule as the extraction wellheads.
- 3 Carbon breakthrough will be collected from the effluent of the first carbon unit in series; when breakthrough of the first unit is detected, the breakthrough sample will be collected from the effluent of the second carbon unit in series.
- 4 QAPP, Quality Assurance Project Plan, Appendix B of Additional Groundwater Assessment Workplan, Hargis + Associates, Inc., April 25, 2003.

CRWQCB = California Regional Water Quality Control Board, Santa Ana Region 8

NPDES = National Pollutant Discharge Elimination System

WDR = Waste Discharge Requirement

N/A = Not applicable

mL = Milliliter

VOA = Volatile organic analysis

HCl = Hydrochloric acid

HNO₃ = Nitric acidH₂SO₄ = Sulfuric acid

nm = Nanometers

EPA = U.S. Environmental Protection Agency

SIM = Selected Ion monitoring

SM = Standard Method

L = Liter

poly = High density polyethylene bottle

Amber = Amber glass bottle

TABLE 7
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM OPERATIONAL SUMMARY

OPERATIONAL PERIOD (MONTH/QUARTER/YEAR)	WELLFIELD PRODUCTION ^(a) (gallons)	AVERAGE DISCHARGE RATE ^(b) (gpm)	AVERAGE OPERATIONAL DISCHARGE RATE ^(c) (gpm)	OPERATIONAL HOURS DURING OPERATIONAL PERIOD	HOURS IN OPERATIONAL PERIOD	% OPERATIONAL
2008^(d)	3,659,562	13.8	18.2	3,358	4,416	76%
2009	5,787,848	11.0	18.1	5,319	8,760	61%
2010	14,295,261	27.2	46.4	5,131	8,760	59%
2011	20,456,899	38.9	45.8	7,442	8,760	85%
2012^(e)	19,378,122	40.2	47.2	6,850	8,040	85%
2013^(f)	21,148,029	40.2	45.7	7,713	8,760	88%
2014^(g)	7,690,471	14.6	46.8	2,740	8,760	31%
Dec-14	838,800	18.8	48.2	290	744	39%
Jan-15	1,832,578	41.1	48.4	631	744	85%
Feb-15	516,280	12.8	48.6	177	672	26%
1Q2015	3,187,658	24.6	48.4	1,098	2,160	51%
SINCE INCEPTION	95,603,850	27.3	40.2	39,651	58,416	68%

Notes:

- (a) Based on Effluent totalizer readings from CEFF, which also includes relatively small amounts of monitor well purge water from quarterly sampling events, well installations, and aquifer testing.
 - (b) Total volume of water treated during the operational period divided by the total number of minutes in that operational period.
 - (c) Total volume of water treated during the operational period divided by the minutes of operation in that operational period.
 - (d) Operational period beginning 7/1/2008 (first month of system operation).
 - (e) 2012 Calendar year is from 1/1/2012 through 11/30/2012.
 - (f) 2013 Calendar year is from 12/1/2012 through 11/30/2013.
 - (g) 2014 Calendar year is from 12/1/2013 through 11/30/2014.
- gpm = gallons per minute
Refer to previous quarterly reports for detail of 2008 thru 2014 operational summary
Treatment of groundwater from EW-02 initiated in 2010
CEFF = Carbon effluent

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
1,1,2-Trichloroethane (5 ug/L MCL)	06/22/05	ug/L	--	--	6.3	--	--	--	--	--	--
	09/22/05	ug/L	--	--	1	--	--	--	--	--	--
	12/11/06	ug/L	--	--	0.6	--	--	--	--	--	--
	12/13/07	ug/L	--	--	8.7	--	--	--	--	--	--
	06/25/08	ug/L	--	--	<5	--	--	--	--	--	--
	07/08/08	ug/L	--	--	5.5	--	10	--	8.1	<0.5	<0.50
	07/09/08	ug/L	--	--	5	--	10	--	7.8	<0.5	<0.50
	07/10/08	ug/L	--	--	3.2	--	7.8	--	5.1	<0.5	<0.50
	07/15/08	ug/L	--	--	4.6	--	7.4	--	5.4	<0.5	<0.50
	07/16/08	ug/L	--	--	3.9	--	8.8	--	5.7	<0.5	<0.50
	07/23/08	ug/L	--	--	2.6	--	<5	--	4.5	<0.5	<0.50
	07/30/08	ug/L	--	--	2.6	--	<5	--	4.4	<0.5	<0.50
	08/06/08	ug/L	--	--	2	--	<5	--	4.6	<0.5	<0.50
	08/25/08	ug/L	--	--	1.5	--	3.2	--	2.8	<0.5	<0.50
	09/24/08	ug/L	--	--	1.2	--	<2.5	--	1.8	<0.5	<0.50
	10/22/08	ug/L	--	--	1.2	--	2.3	--	1.5	<0.5	<0.50
	11/26/08	ug/L	--	--	1.5	--	2.3	--	1.7	<0.5	<0.50
	02/25/09	ug/L	<2.5	--	3	--	2.3	--	1.9	<0.5	<0.50
	03/18/09	ug/L	2.5	--	1.2	--	1.3	--	1.3	<0.5	<0.50
	04/29/09	ug/L	<2.5	--	0.86	--	1.5	--	1	<0.5	<0.50
	05/27/09	ug/L	<2.5	--	1.5	--	1.6	--	1.4	<0.5	<0.50
	06/29/09	ug/L	2.1	--	1.2	--	1.6	--	1.2	<0.5	<0.50
	07/22/09	ug/L	1.9	--	1.3	--	1.6	--	1.2	<0.5	<0.50
	08/14/09	ug/L	<2.5	--	0.98	--	1.6	--	0.97	<0.5	<0.50
	09/11/09	ug/L	<2.5	--	1.3	--	1.7	--	1	<0.5	<0.50
	10/08/09	ug/L	<2.5	--	0.92	--	1.5	--	1.2	<0.5	<0.50
	12/09/09	ug/L	<0.5	--	5.1	--	2.5	--	1.7	<0.5	<0.50
	03/05/10	ug/L	--	--	3.2	--	--	--	--	--	--
	03/22/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/25/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/26/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/01/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/09/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/13/10	ug/L	--	--	--	0.59	--	--	<0.5	<0.5	<0.5
	04/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/25/10	ug/L	--	--	--	<0.43	--	--	<0.43	<0.43	<0.43
	06/10/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/11/10	ug/L	--	--	4.7	--	--	--	--	--	--
	07/08/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/08/10	ug/L	--	--	4.7	--	--	--	--	--	--
	10/07/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/11/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	12/07/10	ug/L	--	--	2.7	<0.5	--	--	<0.5	<0.5	<0.5
	01/13/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/11	ug/L	--	--	1.3	--	--	--	--	--	--
	04/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/04/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/07/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/23/11	ug/L	--	--	0.83	--	--	--	--	--	--
	07/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/11	ug/L	--	--	1.4	--	--	--	--	--	--
	09/09/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/17/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/11	ug/L	11	--	0.64	<0.5	--	--	<0.5	<0.5	<0.5
	12/07/11	ug/L	<10	--	--	<0.5	<5	--	3	<0.5	<0.5
	01/06/12	ug/L	<10	--	--	<0.5	<0.5	--	0.98	<0.5	<0.5
	02/06/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	02/08/12	ug/L	<4	--	--	<0.5	<1	--	0.66	<0.5	<0.5
	03/09/12	ug/L	<4	--	--	<0.5	<1	--	0.58	<0.5	<0.5
	04/16/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/01/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	06/08/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	07/11/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/03/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/06/12	ug/L	--	--	0.56	--	--	--	--	--	--
	09/06/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/15/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/05/12	ug/L	--	--	0.75	<0.5	--	--	<0.5	<0.5	<0.5
	12/10/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	01/04/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/04/13	ug/L	--	--	0.67	--	--	--	--	--	--
	02/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/15/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/13/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	06/13/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	07/02/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/10/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/12/13	ug/L	--	--	0.85	--	--	--	--	--	--
	09/03/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/05/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/11/13	ug/L	--	--	1.3	--	--	--	--	--	--

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	12/11/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	01/17/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/14	ug/L	--	--	1.4	--	--	--	--	--	--
	02/11/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/04/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/20/14	ug/L	--	--	3.7	--	--	--	--	--	--
	07/30/14	ug/L	--	--	--	--	--	<0.5	<0.5	--	<0.5
	08/01/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/04/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/05/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/06/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/07/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/08/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/15/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/18/14	ug/L	--	--	8.4	--	--	--	--	--	--
	08/22/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/29/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	09/15/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	11/03/14	ug/L	--	0.89	--	<0.5	<0.5	--	<0.5	<0.5	<0.5
	11/04/14	ug/L	--	--	9	--	--	--	--	--	--
	12/11/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	12/18/14	ug/L	--	1.4	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
	01/19/15	ug/L	--	0.78	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
	02/02/15	ug/L	7.6	--	5.7	--	--	--	--	--	--
	02/13/15	ug/L	--	1.5	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
1,1-Dichloroethane (5 ug/L MCL)	07/08/08	ug/L	--	--	8.5	--	--	--	--	--	<0.50
	07/09/08	ug/L	--	--	9.2	--	--	--	--	--	<0.50
	07/10/08	ug/L	--	--	6.1	--	--	--	--	--	<0.50
	07/15/08	ug/L	--	--	7	--	--	--	--	--	<0.50
	07/16/08	ug/L	--	--	7.2	--	--	--	--	--	<0.50
	07/23/08	ug/L	--	--	5.2	--	--	--	--	--	<0.50
	07/30/08	ug/L	--	--	5.5	--	--	--	--	--	<0.50
	08/06/08	ug/L	--	--	4.2	--	--	--	--	--	<0.50
	08/25/08	ug/L	--	--	3	--	--	--	--	--	<0.50
	09/24/08	ug/L	--	--	2.4	--	--	--	--	--	<0.50
	10/22/08	ug/L	--	--	2.7	--	--	--	--	--	<0.50
	11/26/08	ug/L	--	--	2.9	--	--	--	--	--	<0.50
	02/25/09	ug/L	--	--	--	--	--	--	--	--	<0.50
	03/18/09	ug/L	--	--	--	--	--	--	--	--	<0.50
	04/29/09	ug/L	--	--	--	--	--	--	--	--	<0.50
	05/27/09	ug/L	--	--	--	--	--	--	--	--	0.6
	06/29/09	ug/L	--	--	--	--	--	--	--	--	1.1
	07/22/09	ug/L	--	--	--	--	--	--	--	--	2.1
	08/14/09	ug/L	--	--	--	--	--	--	--	--	2.7
	09/11/09	ug/L	--	--	--	--	--	--	--	--	3.4

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	10/08/09	ug/L	--	--	--	--	--	--	--	--	4.1
	12/09/09	ug/L	--	--	--	--	--	--	--	--	3.8
	12/18/14	ug/L	--	5.0	--	<0.50	1.2	--	<0.50	<0.50	<0.50
	01/19/15	ug/L	--	2.5	--	<0.50	0.70	--	0.50	<0.50	<0.50
	02/02/15	ug/L	17	--	11	--	--	--	--	--	--
	02/13/15	ug/L	--	4.4	--	<0.50	1.2	--	0.66	<0.50	<0.50
1,1-Dichloroethene (6 ug/L MCL)	06/22/05	ug/L	--	--	600	--	--	--	--	--	--
	09/22/05	ug/L	--	--	120	--	--	--	--	--	--
	12/11/06	ug/L	--	--	0.5	--	--	--	--	--	--
	12/13/07	ug/L	--	--	740	--	--	--	--	--	--
	06/25/08	ug/L	--	--	620	--	--	--	--	--	--
	07/08/08	ug/L	--	--	720	--	2100.00	--	46.00	<0.5	<0.50
	07/09/08	ug/L	--	--	820	--	3000.00	--	5.00	0.5	<0.50
	07/10/08	ug/L	--	--	580	--	2000.00	--	0.83	<0.5	<0.50
	07/15/08	ug/L	--	--	630	--	2100.00	--	<0.5	<0.5	<0.50
	07/16/08	ug/L	--	--	1000	--	2800.00	--	0.87	<0.5	<0.50
	07/23/08	ug/L	--	--	520	--	2100.00	--	0.73	<0.5	<0.50
	07/30/08	ug/L	--	--	360	--	1400.00	--	1.60	<0.5	<0.50
	08/06/08	ug/L	--	--	340	--	1500.00	--	12.00	<0.5	<0.50
	08/25/08	ug/L	--	--	230	--	1100.00	--	25.00	<0.5	<0.50
	09/24/08	ug/L	--	--	180	--	610.00	--	0.65	<0.5	<0.50
	10/22/08	ug/L	--	--	200	--	730.00	--	11.00	<0.5	<0.50
	11/26/08	ug/L	--	--	190	--	730.00	--	2.50	<0.5	<0.50
	02/25/09	ug/L	720	--	360	--	570.00	--	2.50	<0.5	<0.50
	03/18/09	ug/L	900	--	160	--	460.00	--	<0.5	<0.5	<0.50
	04/29/09	ug/L	860	--	150	--	470.00	--	<0.5	<0.5	<0.50
	05/27/09	ug/L	940	--	320	--	590.00	--	<0.5	<0.5	<0.50
	06/29/09	ug/L	860	--	200	--	510.00	--	<0.5	<0.5	<0.50
	07/22/09	ug/L	870	--	260	--	580.00	--	<0.5	<0.5	<0.50
	08/14/09	ug/L	900	--	190	--	540.00	--	<0.5	<0.5	<0.50
	09/11/09	ug/L	1100	--	280	--	610.00	--	<0.5	<0.5	<0.50
	10/08/09	ug/L	830	--	150	--	600.00	--	<0.5	<0.5	<0.50
	12/09/09	ug/L	200	--	720	--	400.00	--	1.80	<0.5	<0.50
	03/05/10	ug/L	--	--	500	--	--	--	--	--	--
	03/22/10	ug/L	--	--	--	77	--	--	<0.5	<0.5	<0.5
	03/23/10	ug/L	--	--	--	82	--	--	<0.5	<0.5	<0.5
	03/24/10	ug/L	--	--	--	74	--	--	<0.5	<0.5	<0.5
	03/25/10	ug/L	--	--	--	70	--	--	<0.5	<0.5	<0.5
	03/26/10	ug/L	--	--	--	76	--	--	<0.5	<0.5	<0.5
	04/01/10	ug/L	--	--	--	81	--	--	<0.5	<0.5	<0.5
	04/09/10	ug/L	--	--	--	85	--	--	<0.5	<0.5	<0.5
	04/13/10	ug/L	--	--	--	120	--	--	<0.5	<0.5	<0.5
	04/23/10	ug/L	--	--	--	91	--	--	<0.5	<0.5	<0.5
	05/25/10	ug/L	--	--	--	100	--	--	<0.19	<0.19	<0.19

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	06/10/10	ug/L	--	--	--	120	--	--	<0.5	<0.5	<0.5
	06/11/10	ug/L	--	--	720	--	--	--	--	--	--
	07/08/10	ug/L	--	--	--	160	--	--	<0.5	<0.5	<0.5
	08/02/10	ug/L	--	--	--	150	--	--	<0.5	<0.5	<0.5
	09/02/10	ug/L	--	--	--	160	--	--	<0.5	<0.5	<0.5
	09/08/10	ug/L	--	--	720	--	--	--	--	--	--
	10/07/10	ug/L	--	--	--	140	--	--	<0.5	<0.5	<0.5
	11/11/10	ug/L	--	--	--	140	--	--	<0.5	<0.5	<0.5
	12/07/10	ug/L	--	--	600	130	--	--	<0.5	<0.5	<0.5
	01/13/11	ug/L	--	--	--	99	--	--	<0.5	<0.5	<0.5
	02/03/11	ug/L	--	--	--	83	--	--	<0.5	<0.5	<0.5
	03/02/11	ug/L	--	--	--	77	--	--	0.50	<0.5	<0.5
	03/24/11	ug/L	--	--	200	--	--	--	--	--	--
	04/01/11	ug/L	--	--	--	82	--	--	<0.5	<0.5	<0.5
	05/04/11	ug/L	--	--	--	83	--	--	<0.5	<0.5	<0.5
	06/07/11	ug/L	--	--	--	67	--	--	0.54	<0.5	<0.5
	06/23/11	ug/L	--	--	180	--	--	--	--	--	--
	07/02/11	ug/L	--	--	--	87	--	--	<0.5	<0.5	<0.5
	08/01/11	ug/L	--	--	--	75	--	--	<0.5	<0.5	<0.5
	08/02/11	ug/L	--	--	370	--	--	--	--	--	--
	09/09/11	ug/L	--	--	--	90	--	--	<0.5	<0.5	<0.5
	10/17/11	ug/L	--	--	--	67	--	--	<0.5	<0.5	<0.5
	11/01/11	ug/L	1600	--	82	55	--	--	<0.5	<0.5	<0.5
	12/07/11	ug/L	3200	--	--	62	850.00	--	1.60	<0.5	<0.5
	01/06/12	ug/L	1400	--	--	85	450.00	--	<0.5	<0.5	<0.5
	02/06/12	ug/L	--	--	59	--	--	--	--	--	--
	02/08/12	ug/L	520	--	--	54	300.00	--	<0.5	<0.5	<0.5
	03/09/12	ug/L	860	--	--	59	210.00	--	<0.5	<0.5	<0.5
	04/16/12	ug/L	--	--	--	45	--	--	<0.5	<0.5	<0.5
	05/01/12	ug/L	--	--	--	37	--	--	<0.5	<0.5	<0.5
	05/07/12	ug/L	--	--	18	--	--	--	--	--	--
	06/08/12	ug/L	--	--	--	67	--	--	<0.5	<0.5	<0.5
	07/11/12	ug/L	--	--	--	64	--	--	<0.5	<0.5	0.75
	08/03/12	ug/L	--	--	--	67	--	--	<0.5	<0.5	<0.5
	08/06/12	ug/L	--	--	94	--	--	--	--	--	--
	09/06/12	ug/L	--	--	--	62	--	--	<0.5	<0.5	<0.5
	10/15/12	ug/L	--	--	--	75	--	--	<0.5	<0.5	<0.5
	11/05/12	ug/L	--	--	190	63	--	--	<0.5	<0.5	<0.5
	12/10/12	ug/L	--	--	--	72	--	--	<0.5	<0.5	<0.5
	01/04/13	ug/L	--	--	--	63	--	--	<0.5	<0.5	<0.5
	02/04/13	ug/L	--	--	130	--	--	--	--	--	--
	02/09/13	ug/L	--	--	--	39	--	--	<0.5	<0.5	<0.5
	03/09/13	ug/L	--	--	--	50	--	--	<0.5	<0.5	<0.5
	04/15/13	ug/L	--	--	--	32	--	--	<0.5	<0.5	<0.5

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	05/07/13	ug/L	--	--	--	46	--	--	<0.5	<0.5	<0.5
	05/13/13	ug/L	--	--	57	--	--	--	--	--	--
	05/29/13	ug/L	--	--	--	--	--	--	--	--	<0.5
	06/13/13	ug/L	--	--	--	54	--	--	<0.5	<0.5	<0.5
	07/02/13	ug/L	--	--	--	64	--	--	<0.5	<0.5	<0.5
	08/10/13	ug/L	--	--	--	80	--	--	<0.5	<0.5	<0.5
	08/12/13	ug/L	--	--	220	--	--	--	--	--	--
	09/03/13	ug/L	--	--	--	26	--	--	<0.5	<0.5	<0.5
	10/05/13	ug/L	--	--	--	75	--	--	0.92	<0.5	<0.5
	11/01/13	ug/L	--	--	--	54	--	--	<0.5	<0.5	<0.5
	11/11/13	ug/L	--	--	160	--	--	--	--	--	--
	12/11/13	ug/L	--	--	--	49	--	--	<0.5	<0.5	<0.5
	01/17/14	ug/L	--	--	--	34	--	--	1.30	<0.5	<0.5
	02/03/14	ug/L	--	--	190	--	--	--	--	--	--
	02/11/14	ug/L	--	--	--	49	--	--	<0.5	<0.5	<0.5
	03/04/14	ug/L	--	--	--	57	--	--	<0.5	<0.5	<0.5
	05/20/14	ug/L	--	--	500	--	--	--	--	--	--
	07/30/14	ug/L	--	--	--	--	--	27	<0.5	--	<0.5
	08/01/14	ug/L	--	--	--	--	21.00	--	<0.5	<0.5	<0.5
	08/04/14	ug/L	--	--	--	--	30.00	--	<0.5	<0.5	<0.5
	08/05/14	ug/L	--	--	--	--	28.00	--	<0.5	<0.5	<0.5
	08/06/14	ug/L	--	--	--	--	28.00	--	<0.5	<0.5	<0.5
	08/07/14	ug/L	--	--	--	--	30.00	--	0.54	<0.5	<0.5
	08/08/14	ug/L	--	--	--	--	23.00	--	<0.5	<0.5	<0.5
	08/15/14	ug/L	--	--	--	--	36.00	--	2.20	0.57	<0.5
	08/18/14	ug/L	--	--	950	--	--	--	--	--	--
	08/22/14	ug/L	--	--	--	--	23.00	--	<0.5	<0.5	<0.5
	08/29/14	ug/L	--	--	--	--	34.00	--	2.80	0.61	<0.5
	09/15/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	11/03/14	ug/L	--	240	--	22	66.00	--	0.87	<0.5	<0.5
	11/04/14	ug/L	--	--	960	--	--	--	--	--	--
	12/11/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	12/18/14	ug/L	--	580	--	24	120	--	<0.50	<0.50	<0.50
	01/19/15	ug/L	--	200	--	25	55	--	<0.50	<0.50	<0.50
	02/02/15	ug/L	1100	--	610	--	--	--	--	--	--
	02/13/15	ug/L	--	460	--	20	110	--	<0.50	<0.50	<0.50
1,2-Dichloroethane (0.5 ug/L MCL)	06/22/05	ug/L	--	--	2.5	--	--	--	--	--	--
	09/22/05	ug/L	--	--	<0.5	--	--	--	--	--	--
	12/11/06	ug/L	--	--	<0.5	--	--	--	--	--	--
	12/13/07	ug/L	--	--	3	--	--	--	--	--	--
	06/25/08	ug/L	--	--	<5	--	--	--	--	--	--
	07/08/08	ug/L	--	--	<2.5	--	3.80	--	2.70	<0.5	<0.50
	07/09/08	ug/L	--	--	1.9	--	<5	--	2.40	<0.5	<0.50
	07/10/08	ug/L	--	--	1.5	--	3.10	--	1.40	<0.5	<0.50

TABLE 8
SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	07/15/08	ug/L	--	--	1.8	--	<5	--	1.50	<0.5	<0.50
	07/16/08	ug/L	--	--	1.7	--	<5	--	1.50	<0.5	<0.50
	07/23/08	ug/L	--	--	1.2	--	<5	--	1.20	<0.5	<0.50
	07/30/08	ug/L	--	--	1.1	--	<5	--	1.30	<0.5	<0.50
	08/06/08	ug/L	--	--	<1.0	--	<5	--	2.10	<0.5	<0.50
	08/25/08	ug/L	--	--	0.62	--	<2.5	--	0.79	<0.5	<0.50
	09/24/08	ug/L	--	--	0.57	--	<2.5	--	0.51	<0.5	<0.50
	10/22/08	ug/L	--	--	0.5	--	<1	--	<0.5	<0.5	<0.50
	11/26/08	ug/L	--	--	0.65	--	1.00	--	0.62	<0.5	<0.50
	02/25/09	ug/L	<2.5	--	0.93	--	<1	--	0.50	<0.5	<0.50
	03/18/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	04/29/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	05/27/09	ug/L	<2.5	--	0.76	--	<1	--	0.50	<0.5	<0.50
	06/29/09	ug/L	0.81	--	0.53	--	0.68	--	0.50	0.53	<0.50
	07/22/09	ug/L	<1	--	0.64	--	<1	--	<0.5	0.57	<0.50
	08/14/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	0.59	<0.50
	09/11/09	ug/L	<2.5	--	0.7	--	<1	--	<0.5	0.62	<0.50
	10/08/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	0.66	<0.50
	12/09/09	ug/L	<0.5	--	2.1	--	1.10	--	0.61	0.57	<0.50
	03/05/10	ug/L	--	--	1.6	--	--	--	--	--	--
	03/22/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/25/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/26/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/01/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/09/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/13/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/25/10	ug/L	--	--	--	<0.16	--	--	<0.16	<0.16	<0.16
	06/10/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/11/10	ug/L	--	--	1.9	--	--	--	--	--	--
	07/08/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/08/10	ug/L	--	--	2.4	--	--	--	--	--	--
	10/07/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/11/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	12/07/10	ug/L	--	--	1.4	<0.5	--	--	<0.5	<0.5	<0.5
	01/13/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/11	ug/L	--	--	0.59	--	--	--	--	--	--
	04/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	05/04/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/07/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/23/11	ug/L	--	--	<0.5	--	--	--	--	--	--
	07/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/11	ug/L	--	--	0.61	--	--	--	--	--	--
	09/09/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/17/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/11	ug/L	4.9	--	<0.5	<0.5	--	--	<0.5	<0.5	<0.5
	12/07/11	ug/L	<10	--	--	<0.5	<5	--	1.30	<0.5	<0.5
	01/06/12	ug/L	<10	--	--	<0.5	0.58	--	<0.5	<0.5	<0.5
	02/06/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	02/08/12	ug/L	<4	--	--	<0.5	<1	--	<0.5	<0.5	<0.5
	03/09/12	ug/L	<4	--	--	<0.5	<1	--	<0.5	<0.5	<0.5
	04/16/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/01/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	06/08/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	07/11/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/03/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/06/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	09/06/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/15/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/05/12	ug/L	--	--	<0.5	<0.5	--	--	<0.5	<0.5	<0.5
	12/10/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	01/04/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/04/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	02/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/15/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/13/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	05/29/13	ug/L	--	--	--	--	--	--	--	--	<0.5
	06/13/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/17/13	ug/L	--	--	--	--	--	--	--	--	--
	07/02/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	07/03/13	ug/L	--	--	--	--	--	--	--	--	--
	08/10/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/12/13	ug/L	--	--	0.56	--	--	--	--	--	--
	09/03/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/05/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/11/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	12/11/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	01/17/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/14	ug/L	--	--	1.1	--	--	--	--	--	--
	02/11/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/04/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/20/14	ug/L	--	--	2.1	--	--	--	--	--	--
	07/30/14	ug/L	--	--	--	--	--	<0.5	<0.5	--	<0.5
	08/01/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/04/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/05/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/06/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/07/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/08/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/15/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/18/14	ug/L	--	--	4	--	--	--	--	--	--
	08/22/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/29/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	09/15/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	11/03/14	ug/L	--	0.55	--	<0.5	<0.5	--	<0.5	<0.5	<0.5
	11/04/14	ug/L	--	--	4	--	--	--	--	--	--
	12/11/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	12/18/14	ug/L	--	0.86	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
	01/19/15	ug/L	--	0.50	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
	02/02/15	ug/L	2.8	--	2.4	--	--	--	--	--	--
	02/13/15	ug/L	--	0.94	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene (6 ug/L MCL)	06/22/05	ug/L	--	--	<1	--	--	--	--	--	--
	09/22/05	ug/L	--	--	<0.5	--	--	--	--	--	--
	12/11/06	ug/L	--	--	<0.5	--	--	--	--	--	--
	12/13/07	ug/L	--	--	<0.5	--	--	--	--	--	--
	06/25/08	ug/L	--	--	<5	--	--	--	--	--	--
	07/08/08	ug/L	--	--	<2.5	--	0.95	--	<0.5	<0.5	<0.50
	07/09/08	ug/L	--	--	<0.50	--	<5	--	<0.5	<0.5	<0.50
	07/10/08	ug/L	--	--	<0.50	--	0.90	--	<0.5	<0.5	<0.50
	07/15/08	ug/L	--	--	<1.0	--	<5	--	<0.5	<0.5	<0.50
	07/16/08	ug/L	--	--	<1.0	--	<5	--	<0.5	<0.5	<0.50
	07/23/08	ug/L	--	--	<1.0	--	<5	--	<0.5	<0.5	<0.50
	07/30/08	ug/L	--	--	<1.0	--	<5	--	<0.5	<0.5	<0.50
	08/06/08	ug/L	--	--	<1.0	--	<5	--	<0.5	<0.5	<0.50
	08/25/08	ug/L	--	--	<0.50	--	<2.5	--	<0.5	<0.5	<0.50
	09/24/08	ug/L	--	--	<0.50	--	<2.5	--	<0.5	<0.5	<0.50
	10/22/08	ug/L	--	--	<0.50	--	<1	--	<0.5	<0.5	<0.50
	11/26/08	ug/L	--	--	<0.50	--	<1	--	<0.5	<0.5	<0.50
	02/25/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	03/18/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	04/29/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	05/27/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	06/29/09	ug/L	0.63	--	<0.5	--	<0.5	--	<0.5	<0.5	<0.50
	07/22/09	ug/L	1	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	08/14/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	09/11/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	10/08/09	ug/L	<2.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	12/09/09	ug/L	<0.5	--	<0.5	--	<1	--	<0.5	<0.5	<0.50
	03/05/10	ug/L	--	--	<1	--	--	--	--	--	--
	03/22/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/25/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/26/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/01/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/09/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/13/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/25/10	ug/L	--	--	--	<0.15	--	--	<0.15	<0.15	<0.15
	06/10/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/11/10	ug/L	--	--	<1	--	--	--	--	--	--
	07/08/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/08/10	ug/L	--	--	<1	--	--	--	--	--	--
	10/07/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/11/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	12/07/10	ug/L	--	--	<1	<0.5	--	--	<0.5	<0.5	<0.5
	01/13/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/11	ug/L	--	--	<0.5	--	--	--	--	--	--
	04/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/04/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/07/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/23/11	ug/L	--	--	<0.5	--	--	--	--	--	--
	07/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/11	ug/L	--	--	<0.5	--	--	--	--	--	--
	09/09/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/17/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/11	ug/L	<2.5	--	<0.5	<0.5	--	--	<0.5	<0.5	<0.5
	12/07/11	ug/L	<10	--	--	<0.5	<5	--	<0.5	<0.5	<0.5
	01/06/12	ug/L	<10	--	--	<0.5	<0.5	--	<0.5	<0.5	<0.5
	02/06/12	ug/L	--	--	<0.5	--	--	--	--	--	--

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	02/08/12	ug/L	<4	--	--	<0.5	<1	--	<0.5	<0.5	<0.5
	03/09/12	ug/L	<4	--	--	<0.5	<1	--	<0.5	<0.5	<0.5
	04/16/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/01/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	06/08/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	07/11/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/03/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/06/12	ug/L	--	--	<1	--	--	--	--	--	--
	09/06/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/15/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/05/12	ug/L	--	--	<0.5	<0.5	--	--	<0.5	<0.5	<0.5
	12/10/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	01/04/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/04/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	02/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/15/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/13/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	06/13/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	07/02/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/10/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/12/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	09/03/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/05/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/11/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	12/11/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	01/17/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/14	ug/L	--	--	<0.5	--	--	--	--	--	--
	02/11/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/04/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/20/14	ug/L	--	--	<0.5	--	--	--	--	--	--
	08/01/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/04/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/05/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/06/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/07/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/08/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/15/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/18/14	ug/L	--	--	<2.5	--	--	--	--	--	--
	08/22/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/29/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	09/15/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	11/03/14	ug/L	--	<0.5	--	<0.5	<0.5	--	<0.5	<0.5	<0.5
	11/04/14	ug/L	--	--	<1	--	--	--	--	--	--
	12/18/14	ug/L	--	0.60	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
	01/19/15	ug/L	--	<0.50	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
	02/02/15	ug/L	<2.0	--	<1.0	--	--	--	--	--	--
	02/13/15	ug/L	--	<0.50	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
Tetrachloroethene (5 ug/L MCL)	06/22/05	ug/L	--	--	2.2	--	--	--	--	--	--
	09/22/05	ug/L	--	--	0.5	--	--	--	--	--	--
	12/11/06	ug/L	--	--	<0.5	--	--	--	--	--	--
	12/13/07	ug/L	--	--	3	--	--	--	--	--	--
	06/25/08	ug/L	--	--	<5	--	--	--	--	--	--
	07/08/08	ug/L	--	--	2.6	--	7.10	--	0.84	<0.5	<0.50
	07/09/08	ug/L	--	--	2.2	--	6.60	--	0.51	<0.5	<0.50
	07/10/08	ug/L	--	--	2.1	--	6.30	--	<0.5	<0.5	<0.50
	07/15/08	ug/L	--	--	2.3	--	<5	--	<0.5	<0.5	<0.50
	07/16/08	ug/L	--	--	1.8	--	<5	--	<0.5	<0.5	<0.50
	07/23/08	ug/L	--	--	2.3	--	5.80	--	<0.5	<0.5	<0.50
	07/30/08	ug/L	--	--	1.2	--	<5	--	<0.5	<0.5	<0.50
	08/06/08	ug/L	--	--	<1.0	--	<5	--	0.66	<0.5	<0.50
	08/25/08	ug/L	--	--	0.84	--	3.00	--	<0.5	<0.5	<0.50
	09/24/08	ug/L	--	--	0.94	--	<2.5	--	<0.5	<0.5	<0.50
	10/22/08	ug/L	--	--	0.66	--	2.00	--	<0.5	<0.5	<0.50
	11/26/08	ug/L	--	--	0.63	--	1.90	--	<0.5	<0.5	<0.50
	02/25/09	ug/L	<2.5	--	1.1	--	1.60	--	<0.5	<0.5	<0.50
	03/18/09	ug/L	<2.5	--	<0.5	--	1.30	--	<0.5	<0.5	<0.50
	04/29/09	ug/L	<2.5	--	0.6	--	1.30	--	<0.5	<0.5	<0.50
	05/27/09	ug/L	<2.5	--	0.79	--	1.30	--	<0.5	<0.5	<0.50
	06/29/09	ug/L	2.1	--	0.76	--	1.20	--	<0.5	<0.5	<0.50
	07/22/09	ug/L	1.6	--	0.66	--	1.10	--	<0.5	<0.5	<0.50
	08/14/09	ug/L	<2.5	--	<0.5	--	1.10	--	<0.5	<0.5	<0.50
	09/11/09	ug/L	<2.5	--	0.66	--	1.20	--	<0.5	<0.5	<0.50
	10/08/09	ug/L	<2.5	--	<0.5	--	1.10	--	<0.5	<0.5	<0.50
	12/09/09	ug/L	<0.5	--	2	--	1.10	--	<0.5	<0.5	<0.50
	03/05/10	ug/L	--	--	1.9	--	--	--	--	--	--
	03/22/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/25/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/26/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/01/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/09/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/13/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	05/25/10	ug/L	--	--	--	<0.19	--	--	<0.19	<0.19	<0.19
	06/10/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/11/10	ug/L	--	--	1.9	--	--	--	--	--	--
	07/08/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/08/10	ug/L	--	--	2	--	--	--	--	--	--
	10/07/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/11/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	12/07/10	ug/L	--	--	1.4	<0.5	--	--	<0.5	<0.5	<0.5
	01/13/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/11	ug/L	--	--	0.82	--	--	--	--	--	--
	04/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/04/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/07/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/23/11	ug/L	--	--	0.5	--	--	--	--	--	--
	07/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/11	ug/L	--	--	0.67	--	--	--	--	--	--
	09/09/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/17/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/11	ug/L	5.6	--	<0.5	<0.5	--	--	<0.5	<0.5	<0.5
	12/07/11	ug/L	<10	--	--	<0.5	<5	--	<0.5	<0.5	<0.5
	01/06/12	ug/L	<10	--	--	<0.5	1.20	--	<0.5	<0.5	<0.5
	02/06/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	02/08/12	ug/L	<4	--	--	<0.5	<1	--	<0.5	<0.5	<0.5
	03/09/12	ug/L	<4	--	--	<0.5	<1	--	<0.5	<0.5	<0.5
	04/16/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/01/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/12	ug/L	--	--	0.78	--	--	--	--	--	--
	06/08/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	07/11/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/03/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/06/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	09/06/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/15/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/05/12	ug/L	--	--	<0.5	<0.5	--	--	<0.5	<0.5	<0.5
	12/10/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	01/04/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/04/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	02/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	04/15/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/13/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	05/29/13	ug/L	--	--	--	--	--	--	--	--	<0.5
	06/13/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/17/13	ug/L	--	--	--	--	--	--	--	--	--
	07/02/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	07/03/13	ug/L	--	--	--	--	--	--	--	--	--
	08/10/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/12/13	ug/L	--	--	0.76	--	--	--	--	--	--
	09/03/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/05/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/11/13	ug/L	--	--	0.55	--	--	--	--	--	--
	12/11/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	01/17/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/14	ug/L	--	--	1.1	--	--	--	--	--	--
	02/11/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/04/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/20/14	ug/L	--	--	1.6	--	--	--	--	--	--
	07/30/14	ug/L	--	--	--	--	--	<0.5	<0.5	--	<0.5
	08/01/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/04/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/05/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/06/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/07/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/08/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/15/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/18/14	ug/L	--	--	3.8	--	--	--	--	--	--
	08/22/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/29/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	09/15/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	11/03/14	ug/L	--	0.78	--	<0.5	<0.5	--	<0.5	<0.5	<0.5
	11/04/14	ug/L	--	--	4.3	--	--	--	--	--	--
	12/11/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	12/18/14	ug/L	--	1.1	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
	01/19/15	ug/L	--	0.97	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
	02/02/15	ug/L	3.3	--	2.8	--	--	--	--	--	--
	02/13/15	ug/L	--	1.3	--	<0.50	<0.50	--	<0.50	<0.50	<0.50
Trichloroethene (5 ug/L MCL)	06/22/05	ug/L	--	--	1.9	--	--	--	--	--	--
	09/22/05	ug/L	--	--	<0.5	--	--	--	--	--	--
	12/11/06	ug/L	--	--	<0.5	--	--	--	--	--	--
	12/13/07	ug/L	--	--	3	--	--	--	--	--	--
	06/25/08	ug/L	--	--	<5	--	--	--	--	--	--

TABLE 8
SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	07/08/08	ug/L	--	--	<2.5	--	13.00	--	0.57	<0.5	<0.50
	07/09/08	ug/L	--	--	1.9	--	15.00	--	<0.5	<0.5	<0.50
	07/10/08	ug/L	--	--	1.3	--	12.00	--	<0.5	<0.5	<0.50
	07/15/08	ug/L	--	--	1.4	--	14.00	--	<0.5	<0.5	<0.50
	07/16/08	ug/L	--	--	1.9	--	15.00	--	<0.5	<0.5	<0.50
	07/23/08	ug/L	--	--	1.2	--	12.00	--	<0.5	<0.5	<0.50
	07/30/08	ug/L	--	--	1	--	9.00	--	<0.5	<0.5	<0.50
	08/06/08	ug/L	--	--	<1.0	--	10.00	--	<0.5	<0.5	<0.50
	08/25/08	ug/L	--	--	0.65	--	8.70	--	<0.5	<0.5	<0.50
	09/24/08	ug/L	--	--	1.3	--	3.80	--	<0.5	<0.5	<0.50
	10/22/08	ug/L	--	--	0.54	--	7.30	--	<0.5	<0.5	<0.50
	11/26/08	ug/L	--	--	0.51	--	8.40	--	<0.5	<0.5	<0.50
	02/25/09	ug/L	12	--	1	--	6.70	--	<0.5	<0.5	<0.50
	03/18/09	ug/L	11	--	<0.5	--	5.60	--	<0.5	<0.5	<0.50
	04/29/09	ug/L	14	--	<0.5	--	6.70	--	<0.5	<0.5	<0.50
	05/27/09	ug/L	14	--	0.9	--	7.20	--	<0.5	<0.5	<0.50
	06/29/09	ug/L	17	--	0.58	--	8.10	--	<0.5	<0.5	<0.50
	07/22/09	ug/L	16	--	0.62	--	7.70	--	<0.5	<0.5	<0.50
	08/14/09	ug/L	18	--	<0.5	--	8.70	--	<0.5	<0.5	<0.50
	09/11/09	ug/L	14	--	0.6	--	7.50	--	<0.5	<0.5	<0.50
	10/08/09	ug/L	19	--	<0.5	--	9.40	--	<0.5	<0.5	<0.50
	12/09/09	ug/L	12	--	1.7	--	7.40	--	<0.5	<0.5	<0.50
	03/05/10	ug/L	--	--	1.6	--	--	--	--	--	--
	03/22/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/25/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/26/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/01/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/09/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/13/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/23/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/25/10	ug/L	--	--	--	<0.15	--	--	<0.15	<0.15	<0.15
	06/10/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/11/10	ug/L	--	--	1.6	--	--	--	--	--	--
	07/08/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/02/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	09/08/10	ug/L	--	--	2	--	--	--	--	--	--
	10/07/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/11/10	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	12/07/10	ug/L	--	--	1.2	<0.5	--	--	<0.5	<0.5	<0.5
	01/13/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	03/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/24/11	ug/L	--	--	0.54	--	--	--	--	--	--
	04/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/04/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/07/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/23/11	ug/L	--	--	0.52	--	--	--	--	--	--
	07/02/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/01/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/02/11	ug/L	--	--	0.55	--	--	--	--	--	--
	09/09/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/17/11	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/11	ug/L	22	--	<0.5	<0.5	--	--	<0.5	<0.5	<0.5
	12/07/11	ug/L	20	--	--	<0.5	<5	--	<0.5	<0.5	<0.5
	01/06/12	ug/L	13	--	--	<0.5	4.30	--	<0.5	<0.5	<0.5
	02/06/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	02/08/12	ug/L	11	--	--	<0.5	3.40	--	<0.5	<0.5	<0.5
	03/09/12	ug/L	14	--	--	<0.5	3.80	--	<0.5	<0.5	<0.5
	04/16/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/01/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	06/08/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	07/11/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/03/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/06/12	ug/L	--	--	<0.5	--	--	--	--	--	--
	09/06/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/15/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/05/12	ug/L	--	--	<0.5	<0.5	--	--	<0.5	<0.5	<0.5
	12/10/12	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	01/04/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/04/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	02/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/09/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	04/15/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/07/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/13/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	05/29/13	ug/L	--	--	--	--	--	--	--	--	<0.5
	06/13/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	06/17/13	ug/L	--	--	--	--	--	--	--	--	--
	07/02/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/10/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	08/12/13	ug/L	--	--	<0.5	--	--	--	--	--	--
	09/03/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	10/05/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	11/01/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	11/11/13	ug/L	--	--	0.54	--	--	--	--	--	--
	12/11/13	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	01/17/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	02/03/14	ug/L	--	--	0.81	--	--	--	--	--	--
	02/11/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	03/04/14	ug/L	--	--	--	<0.5	--	--	<0.5	<0.5	<0.5
	05/20/14	ug/L	--	--	1.2	--	--	--	--	--	--
	07/30/14	ug/L	--	--	--	--	--	<0.5	<0.5	--	<0.5
	08/01/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/04/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/05/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/06/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/07/14	ug/L	--	--	--	--	0.60	--	<0.5	<0.5	<0.5
	08/08/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/15/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/18/14	ug/L	--	--	3.1	--	--	--	--	--	--
	08/22/14	ug/L	--	--	--	--	<0.5	--	<0.5	<0.5	<0.5
	08/29/14	ug/L	--	--	--	--	0.65	--	<0.5	<0.5	<0.5
	09/15/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	11/03/14	ug/L	--	4.6	--	<0.5	0.97	--	<0.5	<0.5	<0.5
	11/04/14	ug/L	--	--	3.3	--	--	--	--	--	--
	12/11/14	ug/L	--	--	--	--	--	--	--	--	<0.5
	12/18/14	ug/L	--	6.3	--	<0.50	1.4	--	<0.50	<0.50	<0.50
	01/19/15	ug/L	--	3.4	--	<0.50	0.79	--	<0.50	<0.50	<0.50
	02/02/15	ug/L	18	--	2.3	--	--	--	--	--	--
	02/13/15	ug/L	--	4.8	--	<0.50	1.4	--	<0.50	<0.50	<0.50
1,4-Dioxane (1 ug/L California Notification Level)	06/22/05	ug/L	--	--	600	--	--	--	--	--	--
	09/22/05	ug/L	--	--	73	--	--	--	--	--	--
	12/11/06	ug/L	--	--	48	--	--	--	--	--	--
	12/13/07	ug/L	--	--	770	--	--	--	--	--	--
	06/25/08	ug/L	--	--	530	--	--	--	--	--	--
	07/08/08	ug/L	--	--	490	--	460.00	--	35.00	--	--
	07/09/08	ug/L	--	--	410	--	360.00	--	13.00	--	--
	07/10/08	ug/L	--	--	340	--	310.00	--	6.40	--	--
	07/15/08	ug/L	--	--	350	--	320.00	--	3.40	--	--
	07/16/08	ug/L	--	--	320	--	350.00	--	3.70	--	--
	07/23/08	ug/L	--	--	190	--	220.00	--	5.20	--	--
	07/30/08	ug/L	--	--	200	--	220.00	--	6.30	--	--
	08/06/08	ug/L	--	--	190	--	200.00	--	18.00	--	6.8
	08/25/08	ug/L	--	--	130	--	140.00	--	10.00	--	<0.50
	09/24/08	ug/L	--	--	74	--	91.00	--	<2	--	--
	10/22/08	ug/L	--	--	120	--	120.00	--	6.40	--	--
	11/26/08	ug/L	--	--	110	--	91.00	--	4.50	--	--
	02/25/09	ug/L	83	--	160	--	120.00	--	6.40	--	--

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	03/18/09	ug/L	54	--	70	--	69.00	--	2.00	--	--
	04/29/09	ug/L	65	--	80	--	74.00	--	2.90	--	--
	05/27/09	ug/L	71	--	150	--	110.00	--	2.50	--	--
	06/29/09	ug/L	68	--	120	--	87.00	--	2.40	--	--
	07/22/09	ug/L	65	--	120	--	100.00	--	<2	--	--
	08/14/09	ug/L	72	--	81	--	80.00	--	2.00	--	--
	09/11/09	ug/L	63	--	120	--	90.00	--	2.60	--	--
	10/08/09	ug/L	76	--	87	--	82.00	--	<2	--	--
	12/09/09	ug/L	11	--	490	--	180.00	--	4.30	--	--
	03/05/10	ug/L	--	--	370	--	--	--	--	--	--
	03/22/10	ug/L	--	--	--	22	--	--	<2	--	--
	03/23/10	ug/L	--	--	--	24	--	--	<2	--	--
	03/24/10	ug/L	--	--	--	25	--	--	<2	--	--
	03/25/10	ug/L	--	--	--	22	--	--	<2	--	--
	03/26/10	ug/L	--	--	--	19	--	--	6.10	--	--
	04/01/10	ug/L	--	--	--	29	--	--	<2	--	--
	04/09/10	ug/L	--	--	--	31	--	--	<2	--	--
	04/13/10	ug/L	--	--	--	43	--	--	<2	--	--
	04/23/10	ug/L	--	--	--	35	--	--	<2	--	--
	05/25/10	ug/L	--	--	--	38	--	--	<1.9	--	--
	06/10/10	ug/L	--	--	--	40	--	--	<2	--	--
	06/11/10	ug/L	--	--	400	--	--	--	--	--	--
	07/08/10	ug/L	--	--	--	48	--	--	<2	--	--
	08/02/10	ug/L	--	--	--	42	--	--	<2	--	--
	09/02/10	ug/L	--	--	--	42	--	--	<2	--	--
	09/08/10	ug/L	--	--	370	--	--	--	--	--	--
	10/07/10	ug/L	--	--	--	39	--	--	<2	--	--
	11/11/10	ug/L	--	--	--	33	--	--	<2	--	--
	12/07/10	ug/L	--	--	220	29	--	--	<2	--	--
	01/13/11	ug/L	--	--	--	29	--	--	6.40	--	--
	02/03/11	ug/L	--	--	--	22	--	--	<2	--	--
	03/02/11	ug/L	--	--	--	16	--	--	0.43	--	--
	03/24/11	ug/L	--	--	64	--	--	--	--	--	--
	04/01/11	ug/L	--	--	--	16	--	--	0.36	--	--
	05/04/11	ug/L	--	--	--	19	--	--	0.35	--	--
	06/07/11	ug/L	--	--	--	20	--	--	0.91	--	0.73
	06/23/11	ug/L	--	--	59	--	--	--	--	--	--
	07/02/11	ug/L	--	--	--	18	--	--	0.46	--	--
	08/01/11	ug/L	--	--	--	21	--	--	0.56	--	--
	08/02/11	ug/L	--	--	80	--	--	--	--	--	--
	09/09/11	ug/L	--	--	--	20	--	--	0.49	--	0.5
	10/17/11	ug/L	--	--	--	19	--	--	0.36	--	--
	11/01/11	ug/L	390	--	54	22	--	--	0.33	--	--
	12/07/11	ug/L	450	--	--	20	120.00	--	5.20	--	3.4

TABLE 8
SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	01/06/12	ug/L	120	--	--	15	42.00	--	1.10	--	--
	02/06/12	ug/L	--	--	11	--	--	--	--	--	--
	02/08/12	ug/L	33	--	--	6.4	10.00	--	0.64	--	--
	03/09/12	ug/L	61	--	--	12	25.00	--	0.85	--	0.84
	04/16/12	ug/L	--	--	--	14	--	--	0.27	--	--
	05/01/12	ug/L	--	--	--	13	--	--	<0.2	--	--
	05/07/12	ug/L	--	--	7	--	--	--	--	--	--
	06/08/12	ug/L	--	--	--	19	--	--	2.20	--	1.9
	07/11/12	ug/L	--	--	--	19	--	--	1.40	--	--
	08/03/12	ug/L	--	--	--	16	--	--	<0.2	--	--
	08/06/12	ug/L	--	--	42	--	--	--	--	--	--
	09/06/12	ug/L	--	--	--	11	--	--	<0.2	--	<0.2
	10/15/12	ug/L	--	--	--	18	--	--	<0.2	--	--
	11/05/12	ug/L	--	--	83	12	--	--	<0.2	--	--
	12/10/12	ug/L	--	--	--	17	--	--	<0.2	--	0.13
	01/04/13	ug/L	--	--	--	10	--	--	<0.2	--	--
	02/04/13	ug/L	--	--	58	--	--	--	--	--	--
	02/09/13	ug/L	--	--	--	25	--	--	<0.2	--	--
	03/09/13	ug/L	--	--	--	18	--	--	<0.2	--	<0.2
	04/15/13	ug/L	--	--	--	13	--	--	0.33	--	--
	05/07/13	ug/L	--	--	--	22	--	--	0.66	--	--
	05/13/13	ug/L	--	--	41	--	--	--	--	--	--
	06/13/13	ug/L	--	--	--	25	--	--	0.89	--	1.1
	06/17/13	ug/L	--	--	--	--	--	--	--	--	--
	07/02/13	ug/L	--	--	--	27	--	--	0.98	--	--
	08/10/13	ug/L	--	--	--	24	--	--	0.86	--	--
	08/12/13	ug/L	--	--	81	--	--	--	--	--	--
	09/03/13	ug/L	--	--	--	9.7	--	--	0.72	--	1.3
	10/05/13	ug/L	--	--	--	31	--	--	1.40	--	--
	11/01/13	ug/L	--	--	--	28	--	--	0.70	--	--
	11/11/13	ug/L	--	--	130	--	--	--	--	--	--
	12/11/13	ug/L	--	--	--	22	--	--	0.47	--	0.61
	01/17/14	ug/L	--	--	--	21	--	--	4.60	--	--
	02/03/14	ug/L	--	--	140	--	--	--	--	--	--
	02/11/14	ug/L	--	--	--	26	--	--	0.99	--	--
	03/04/14	ug/L	--	--	--	41	--	--	0.68	--	1
	05/20/14	ug/L	--	--	380	--	--	--	--	--	--
	07/30/14	ug/L	--	--	--	--	--	8.3	0.66	--	0.81
	08/01/14	ug/L	--	--	--	--	9.70	--	1.00	--	--
	08/04/14	ug/L	--	--	--	--	12.00	--	2.20	--	--
	08/05/14	ug/L	--	--	--	--	11.00	--	0.80	--	--
	08/06/14	ug/L	--	--	--	--	11.00	--	2.10	--	--
	08/07/14	ug/L	--	--	--	--	11.00	--	1.80	--	--
	08/08/14	ug/L	--	--	--	--	8.80	--	2.00	--	--

TABLE 8
SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	08/15/14	ug/L	--	--	--	--	13.00	--	9.80	--	--
	08/18/14	ug/L	--	--	970	--	--	--	--	--	--
	08/22/14	ug/L	--	--	--	--	8.50	--	1.20	--	--
	08/29/14	ug/L	--	--	--	--	15.00	--	11.00	--	--
	09/15/14	ug/L	--	--	--	--	--	--	--	--	<0.2
	11/03/14	ug/L	--	97	--	6.3	27.00	--	11.00	--	--
	11/04/14	ug/L	--	--	1800	--	--	--	--	--	--
	11/19/14	ug/L	--	--	--	--	--	32	<0.2	--	--
	12/11/14	ug/L	--	--	--	--	--	--	--	--	2.1
	12/18/14	ug/L	--	140	--	5.7	33	--	<0.20	--	2.3
	01/19/15	ug/L	--	90	--	12	32	--	0.28	--	0.34
	02/02/15	ug/L	290	--	340	--	--	--	--	--	--
	02/13/15	ug/L	--	180	--	7.8	48	--	1.6	--	0.55
Bromide	07/08/08	ug/L	--	--	600	--	0.83	--	0.80	--	590
	07/09/08	ug/L	--	--	460	--	--	--	--	--	610
	07/10/08	ug/L	--	--	470	--	--	--	--	--	620
	07/15/08	ug/L	--	--	450	--	--	--	--	--	760
	07/16/08	ug/L	--	--	490	--	--	--	--	--	600
	07/23/08	ug/L	--	--	670	--	1.10	--	0.83	--	960
	07/30/08	ug/L	--	--	1300	--	2.40	--	2.60	--	2700
	08/06/08	ug/L	--	--	560	--	0.59	--	0.59	--	780
	08/25/08	ug/L	--	--	390	--	0.62	--	0.59	--	580
	09/24/08	ug/L	--	--	320	--	0.51	--	0.49	--	550
	10/22/08	ug/L	--	--	610	--	0.75	--	0.70	--	700
	11/26/08	ug/L	--	--	740	--	1.00	--	1.00	--	880
	02/25/09	ug/L	2	--	--	--	0.58	--	0.58	--	570
	03/18/09	ug/L	0.9	--	--	--	0.67	--	0.66	--	610
	04/29/09	ug/L	0.96	--	--	--	0.65	--	0.65	--	720
	05/27/09	ug/L	1	--	--	--	0.66	--	0.67	--	680
	06/29/09	ug/L	1.2	--	--	--	0.56	--	0.63	--	650
	07/22/09	ug/L	1.1	--	--	--	0.87	--	0.82	--	830
	08/14/09	ug/L	1.6	--	--	--	1.10	--	1.10	--	1100
	09/11/09	ug/L	0.97	--	--	--	0.62	--	0.59	--	1000
	10/08/09	ug/L	1.1	--	--	--	0.91	--	0.77	--	820
	12/09/09	ug/L	1.4	--	--	--	0.92	--	0.88	--	980
	03/22/10	ug/L	--	--	--	0.36	--	--	0.35	--	0.36
	03/23/10	ug/L	--	--	--	0.36	--	--	0.35	--	0.33
	03/24/10	ug/L	--	--	--	0.34	--	--	0.33	--	0.32
	03/25/10	ug/L	--	--	--	0.32	--	--	0.32	--	0.32
	03/26/10	ug/L	--	--	--	0.33	--	--	0.31	--	0.31
	04/01/10	ug/L	--	--	--	0.36	--	--	0.31	--	0.34
	04/09/10	ug/L	--	--	--	0.31	--	--	0.30	--	0.29
	04/13/10	ug/L	--	--	--	0.37	--	--	0.33	--	0.32
	04/23/10	ug/L	--	--	--	0.3	--	--	0.38	--	0.3

TABLE 8
SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	05/25/10	ug/L	--	--	--	0.45	--	--	0.33	--	0.34
	06/10/10	ug/L	--	--	--	0.34	--	--	0.33	--	0.33
	07/08/10	ug/L	--	--	--	0.3	--	--	0.33	--	0.33
	08/02/10	ug/L	--	--	--	0.27	--	--	0.28	--	0.28
	09/02/10	ug/L	--	--	--	0.25	--	--	0.27	--	0.23
	10/07/10	ug/L	--	--	--	0.25	--	--	0.26	--	0.25
	11/11/10	ug/L	--	--	--	0.2	--	--	0.19	--	0.18
	12/07/10	ug/L	--	--	--	0.28	--	--	0.27	--	0.28
	01/13/11	ug/L	--	--	--	0.25	--	--	0.24	--	0.26
	02/03/11	ug/L	--	--	--	0.22	--	--	0.22	--	0.22
	03/02/11	ug/L	--	--	--	0.23	--	--	0.23	--	0.22
	04/01/11	ug/L	--	--	--	0.16	--	--	0.15	--	0.16
	05/04/11	ug/L	--	--	--	3	--	--	3.00	--	3.2
	06/07/11	ug/L	--	--	--	3.2	--	--	3.30	--	3.2
	07/02/11	ug/L	--	--	--	0.64	--	--	0.65	--	0.64
	08/01/11	ug/L	--	--	--	2.3	--	--	2.30	--	2.3
	09/09/11	ug/L	--	--	--	0.48	--	--	0.50	--	0.52
	10/17/11	ug/L	--	--	--	0.48	--	--	0.47	--	0.47
	11/01/11	ug/L	--	--	--	0.43	--	--	0.42	--	0.43
	12/07/11	ug/L	0.51	--	--	0.15	0.23	--	0.24	--	0.23
	01/06/12	ug/L	3.5	--	--	0.8	1.40	--	1.50	--	1.4
	02/08/12	ug/L	1.1	--	--	0.23	0.46	--	0.43	--	0.44
	03/09/12	ug/L	1.2	--	--	0.21	0.44	--	0.44	--	0.44
	04/16/12	ug/L	--	--	--	0.19	--	--	0.19	--	0.21
	05/01/12	ug/L	--	--	--	0.28	--	--	0.28	--	0.31
	06/08/12	ug/L	--	--	--	0.19	--	--	0.19	--	0.18
	07/11/12	ug/L	--	--	--	0.19	--	--	0.19	--	0.19
	08/03/12	ug/L	--	--	--	0.52	--	--	0.50	--	0.19
	09/06/12	ug/L	--	--	--	0.19	--	--	0.19	--	0.21
	10/15/12	ug/L	--	--	--	0.2	--	--	0.20	--	0.19
	11/05/12	ug/L	--	--	--	0.2	--	--	0.20	--	0.19
	12/10/12	ug/L	--	--	--	0.18	--	--	0.17	--	0.17
	01/04/13	ug/L	--	--	--	0.07	--	--	0.21	--	0.22
	02/09/13	ug/L	--	--	--	0.19	--	--	0.21	--	0.19
	03/09/13	ug/L	--	--	--	0.21	--	--	0.23	--	0.21
	04/15/13	ug/L	--	--	--	0.22	--	--	0.20	--	0.21
	05/07/13	ug/L	--	--	--	0.19	--	--	0.20	--	0.18
	06/13/13	ug/L	--	--	--	0.21	--	--	0.21	--	0.21
	07/02/13	ug/L	--	--	--	0.17	--	--	0.18	--	0.19
	08/10/13	ug/L	--	--	--	0.17	--	--	0.15	--	0.14
	09/03/13	ug/L	--	--	--	0.46	--	--	0.46	--	0.46
	10/05/13	ug/L	--	--	--	0.21	--	--	0.20	--	0.23
	11/01/13	ug/L	--	--	--	0.22	--	--	0.23	--	0.23
	12/11/13	ug/L	--	--	--	0.22	--	--	0.21	--	0.2

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	01/17/14	ug/L	--	--	--	0.21	--	--	0.21	--	0.21
	02/11/14	ug/L	--	--	--	0.24	--	--	0.22	--	0.2
	03/04/14	ug/L	--	--	--	0.21	--	--	0.18	--	0.19
	08/01/14	ug/L	--	--	--	--	<0.05	--	--	--	--
	08/08/14	ug/L	--	--	--	--	0.41	--	--	--	--
	11/03/14	ug/L	--	0.47	--	0.22	0.27	--	--	--	--
	12/18/14	ug/L	--	<0.01	--	<0.01	<0.01	--	--	--	--
	01/19/15	ug/L	--	0.54	--	0.27	0.33	--	--	--	--
	02/13/15	ug/L	--	0.48	--	0.19	0.25	--	--	--	--
Bromate (10 ug/L MCL)	06/22/05	ug/L	--	--	500	--	--	--	--	--	--
	07/08/08	ug/L	--	--	<4	--	--	--	--	--	<4
	07/09/08	ug/L	--	--	<4	--	--	--	--	--	<4
	07/10/08	ug/L	--	--	<4	--	--	--	--	--	18
	07/15/08	ug/L	--	--	<4	--	--	--	--	--	<4
	07/16/08	ug/L	--	--	<4	--	--	--	--	--	47
	07/23/08	ug/L	--	--	<4	--	--	--	--	--	63
	07/30/08	ug/L	--	--	<4	--	--	--	--	--	23
	08/06/08	ug/L	--	--	<4	--	--	--	--	--	<4
	08/25/08	ug/L	--	--	<5.0	--	--	--	--	--	17
	09/24/08	ug/L	--	--	<0.50	--	--	--	--	--	39
	10/22/08	ug/L	--	--	<0.50	--	--	--	--	--	<5
	10/23/08	ug/L	--	--	0.61	--	--	--	--	--	--
	11/26/08	ug/L	--	--	<4	--	--	--	--	--	<4
	02/25/09	ug/L	<4	--	<4	--	<4	--	5.00	--	<4
	03/18/09	ug/L	<4	--	<4	--	<4	--	22.00	--	7
	04/29/09	ug/L	<4	--	<4	--	6.00	--	31.00	--	34
	05/27/09	ug/L	<4	--	<4	--	<4	--	24.00	--	26
	06/29/09	ug/L	<4	--	<4	--	<4	--	18.00	--	15
	07/22/09	ug/L	<4	--	<4	--	<4	--	15.00	--	26
	08/14/09	ug/L	<4	--	<4	--	<4	--	<4	--	39
	09/11/09	ug/L	<4	--	<4	--	<4	--	9.00	--	22
	10/08/09	ug/L	<4	--	<4	--	<4	--	17.00	--	24
	12/09/09	ug/L	<4	--	<4	--	<4	--	18.00	--	23
	03/22/10	ug/L	--	--	--	<0.9	--	--	13.10	--	4.2
	03/23/10	ug/L	--	--	--	<0.5	--	--	16.40	--	30.1
	03/24/10	ug/L	--	--	--	<0.5	--	--	10.50	--	12.4
	03/25/10	ug/L	--	--	--	<0.5	--	--	11.60	--	10.3
	03/26/10	ug/L	--	--	--	<0.5	--	--	8.70	--	5.3
	04/01/10	ug/L	--	--	--	<0.5	--	--	12.70	--	<0.5
	04/09/10	ug/L	--	--	--	<0.5	--	--	9.60	--	10.5
	04/13/10	ug/L	--	--	--	<0.5	--	--	7.30	--	8.4
	04/23/10	ug/L	--	--	--	<0.5	--	--	7.40	--	7
	05/25/10	ug/L	--	--	--	<0.5	--	--	6.80	--	7
	06/10/10	ug/L	--	--	--	<0.5	--	--	7.70	--	6.6

TABLE 8
SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	07/08/10	ug/L	--	--	--	0.6	--	--	7.30	--	6.7
	08/02/10	ug/L	--	--	--	<0.5	--	--	6.80	--	6.8
	09/02/10	ug/L	--	--	--	<0.5	--	--	7.00	--	7.3
	10/07/10	ug/L	--	--	--	<0.5	--	--	10.90	--	7.1
	11/11/10	ug/L	--	--	--	<0.5	--	--	7.00	--	11
	12/07/10	ug/L	--	--	--	<0.5	--	--	4.80	--	3.5
	01/13/11	ug/L	--	--	--	<0.5	--	--	9.30	--	7.9
	02/03/11	ug/L	--	--	--	<0.5	--	--	7.20	--	7
	03/02/11	ug/L	--	--	--	--	--	--	10.20	--	8.4
	04/01/11	ug/L	--	--	--	<0.5	--	--	7.90	--	7.3
	05/04/11	ug/L	--	--	--	<0.5	--	--	8.60	--	8
	06/07/11	ug/L	--	--	--	<0.5	--	--	8.00	--	3.2
	07/02/11	ug/L	--	--	--	<0.5	--	--	6.50	--	4.1
	08/01/11	ug/L	--	--	--	<0.5	--	--	6.40	--	5.5
	09/09/11	ug/L	--	--	--	<0.5	--	--	8.10	--	11.9
	10/17/11	ug/L	--	--	--	<0.5	--	--	9.90	--	9.1
	11/01/11	ug/L	--	--	--	<0.5	--	--	11.90	--	7.9
	12/07/11	ug/L	<0.5	--	--	<0.5	<0.5	--	12.30	--	9.3
	01/06/12	ug/L	0.7	--	--	<0.5	1.00	--	14.00	--	7.3
	02/08/12	ug/L	<0.5	--	--	<0.5	<0.5	--	14.00	--	7.3
	03/09/12	ug/L	<0.5	--	--	<0.5	<0.5	--	12.00	--	12.1
	04/16/12	ug/L	--	--	--	<0.5	--	--	6.00	--	7.1
	05/01/12	ug/L	--	--	--	<0.5	--	--	8.00	--	6.3
	06/08/12	ug/L	--	--	--	<0.5	--	--	7.00	--	3.1
	07/11/12	ug/L	--	--	--	<0.5	--	--	5.00	--	4.2
	08/03/12	ug/L	--	--	--	<0.5	--	--	5.70	--	5.4
	09/06/12	ug/L	--	--	--	<0.5	--	--	6.70	--	7.1
	10/15/12	ug/L	--	--	--	<0.5	--	--	7.70	--	8.4
	11/05/12	ug/L	--	--	--	<0.5	--	--	5.40	--	6.7
	12/10/12	ug/L	--	--	--	<0.5	--	--	8.00	--	5.5
	01/04/13	ug/L	--	--	--	0.3	--	--	9.00	--	7.5
	02/09/13	ug/L	--	--	--	0.4	--	--	9.00	--	6.6
	03/09/13	ug/L	--	--	--	0.4	--	--	8.00	--	6.6
	04/15/13	ug/L	--	--	--	<0.3	--	--	7.00	--	5
	05/07/13	ug/L	--	--	--	0.3	--	--	9.00	--	6.1
	06/17/13	ug/L	--	--	--	<0.3	--	--	5.00	--	4.9
	07/03/13	ug/L	--	--	--	<0.3	--	--	5.00	--	4.2
	08/10/13	ug/L	--	--	--	0.3	--	--	6.00	--	5.1
	09/03/13	ug/L	--	--	--	0.3	--	--	5.00	--	4.8
	10/05/13	ug/L	--	--	--	0.3	--	--	8.00	--	6.2
	11/01/13	ug/L	--	--	--	0.4	--	--	6.00	--	4.9
	12/11/13	ug/L	--	--	--	0.4	--	--	8.00	--	6.5
	01/17/14	ug/L	--	--	--	0.3	--	--	5.00	--	5
	02/11/14	ug/L	--	--	--	0.3	--	--	6.00	--	5.7

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	03/04/14	ug/L	--	--	--	0.6	--	--	5.00	--	5.1
	08/01/14	ug/L	--	--	--	--	--	--	1.10	--	--
	08/04/14	ug/L	--	--	--	--	--	--	1.00	--	--
	08/05/14	ug/L	--	--	--	--	--	--	0.30	--	--
	08/06/14	ug/L	--	--	--	--	--	--	1.00	--	--
	08/07/14	ug/L	--	--	--	--	--	--	0.30	--	--
	08/08/14	ug/L	--	--	--	--	--	--	0.40	--	--
	08/15/14	ug/L	--	--	--	--	--	--	2.00	--	--
	08/22/14	ug/L	--	--	--	--	--	--	0.60	--	--
	08/29/14	ug/L	--	--	--	--	--	--	0.60	--	--
	11/03/14	ug/L	--	--	--	--	--	--	0.40	--	--
	12/18/14	ug/L	--	--	--	--	--	--	<0.3	--	--
	01/19/15	ug/L	--	--	--	--	--	--	<0.3	--	--
Total Non-Filterable Residue	07/08/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	07/09/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	07/10/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	07/15/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	07/16/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	07/23/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	07/30/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	08/06/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	08/25/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	09/24/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	10/22/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	11/26/08	mg/L	--	--	<10	--	<10	<10	--	--	--
	02/25/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	03/18/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	04/29/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	05/27/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	06/29/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	07/22/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	08/14/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	09/11/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	10/08/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	12/09/09	mg/L	<10	--	<10	--	<10	<10	--	--	--
	03/22/10	mg/L	--	--	--	<10	--	<10	--	--	--
	05/25/10	mg/L	--	--	--	<10	--	<10	--	--	--
	06/10/10	mg/L	--	--	--	<10	--	<10	--	--	--
	07/08/10	mg/L	--	--	--	<10	--	<10	--	--	--
	08/02/10	mg/L	--	--	--	<10	--	<10	--	--	--
	09/02/10	mg/L	--	--	--	<10	--	<10	--	--	--
	10/07/10	mg/L	--	--	--	<10	--	<10	--	--	--
	11/11/10	mg/L	--	--	--	<10	--	<10	--	--	--
	12/07/10	mg/L	--	--	--	<10	--	<10	--	--	--

TABLE 8
SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	01/13/11	mg/L	--	--	--	<10	--	<10	--	--	--
	02/03/11	mg/L	--	--	--	<10	--	<10	--	--	--
	03/02/11	mg/L	--	--	--	<10	--	<10	--	--	--
	04/01/11	mg/L	--	--	--	<10	--	<10	--	--	--
	05/04/11	mg/L	--	--	--	<10	--	<10	--	--	--
	06/07/11	mg/L	--	--	--	<10	--	<10	--	--	--
	07/02/11	mg/L	--	--	--	<10	--	<10	--	--	--
	08/01/11	mg/L	--	--	--	<10	--	<10	--	--	--
	09/09/11	mg/L	--	--	--	<10	--	<10	--	--	--
	10/17/11	mg/L	--	--	--	<10	--	<10	--	--	--
	11/01/11	mg/L	--	--	--	<10	--	<10	--	--	--
	12/18/14	mg/L	--	--	--	--	--	<3.7	--	--	--
	01/19/15	mg/L	--	--	--	--	--	<4.3	--	--	--
Total Filterable Residue (500 mg/L MCL)	07/08/08	mg/L	--	--	770	--	870.00	--	880.00	--	--
	07/09/08	mg/L	--	--	830	--	930.00	--	960.00	--	--
	07/10/08	mg/L	--	--	830	--	970.00	--	950.00	--	--
	07/15/08	mg/L	--	--	840	--	1000.00	--	1000.00	--	--
	07/16/08	mg/L	--	--	890	--	1100.00	--	1000.00	--	--
	07/23/08	mg/L	--	--	850	--	980.00	--	940.00	--	--
	07/30/08	mg/L	--	--	800	--	910.00	--	890.00	--	--
	08/06/08	mg/L	--	--	710	--	810.00	--	810.00	--	--
	08/25/08	mg/L	--	--	740	--	860.00	--	870.00	--	--
	09/24/08	mg/L	--	--	770	--	810.00	--	840.00	--	830
	10/22/08	mg/L	--	--	790	--	860.00	--	860.00	--	850
	11/26/08	mg/L	--	--	770	--	840.00	--	850.00	--	860
	02/25/09	mg/L	840	--	770	--	810.00	--	840.00	--	860
	03/18/09	mg/L	890	--	780	--	830.00	--	840.00	--	860
	04/29/09	mg/L	1000	--	800	--	930.00	--	910.00	--	940
	05/27/09	mg/L	1200	--	790	--	910.00	--	910.00	--	880
	06/29/09	mg/L	1100	--	740	--	920.00	--	830.00	--	880
	07/22/09	mg/L	1100	--	800	--	940.00	--	620.00	--	930
	08/14/09	mg/L	1200	--	770	--	950.00	--	920.00	--	940
	09/11/09	mg/L	1200	--	810	--	1000.00	--	940.00	--	1300
	10/08/09	mg/L	1100	--	790	--	950.00	--	940.00	--	960
	12/09/09	mg/L	1200	--	820	--	1100.00	--	1100.00	--	1100
	03/22/10	mg/L	--	--	--	760	--	--	--	--	--
	03/24/10	mg/L	--	--	--	--	--	--	--	--	680
	05/25/10	mg/L	--	--	--	660	--	--	660.00	--	650
	06/10/10	mg/L	--	--	--	670	--	--	670.00	--	660
	07/08/10	mg/L	--	--	--	660	--	--	650.00	--	660
	08/02/10	mg/L	--	--	--	660	--	--	650.00	--	660
	09/02/10	mg/L	--	--	--	650	--	--	650.00	--	640
	10/07/10	mg/L	--	--	--	700	--	--	680.00	--	700
	11/11/10	mg/L	--	--	--	660	--	--	650.00	--	660

TABLE 8

**SELECT COMPOUNDS MONITORED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
HISTORICAL DATA**

Compound	Date	Units	MW-21	MW-29	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
	12/07/10	mg/L	--	--	--	660	--	--	650.00	--	660
	01/13/11	mg/L	--	--	--	670	--	--	680.00	--	670
	02/03/11	mg/L	--	--	--	670	--	--	710.00	--	700
	03/02/11	mg/L	--	--	--	660	--	--	670.00	--	680
	04/01/11	mg/L	--	--	--	650	--	--	650.00	--	640
	05/04/11	mg/L	--	--	--	680	--	--	690.00	--	680
	06/07/11	mg/L	--	--	--	660	--	--	650.00	--	650
	07/02/11	mg/L	--	--	--	650	--	--	630.00	--	640
	08/01/11	mg/L	--	--	--	640	--	--	650.00	--	650
	09/09/11	mg/L	--	--	--	670	--	--	670.00	--	660
	10/17/11	mg/L	--	--	--	630	--	--	640.00	--	640
	11/01/11	mg/L	--	--	--	640	--	--	630.00	--	640
	12/18/14	mg/L	--	860	--	660	690	--	640	--	640

FOOTNOTES

MCL = Maximum Contaminant Level or Drinking Water Action Level, if applicable

ug/L = Micrograms per liter

mg/L = Milligrams per liter

(--) = Not scheduled for performance monitoring

(<) = Less than; the numerical value is the Limit of Detection for that compound

INF* = Influent (same as EW-02, when active)

PF = Post Particulate Filter

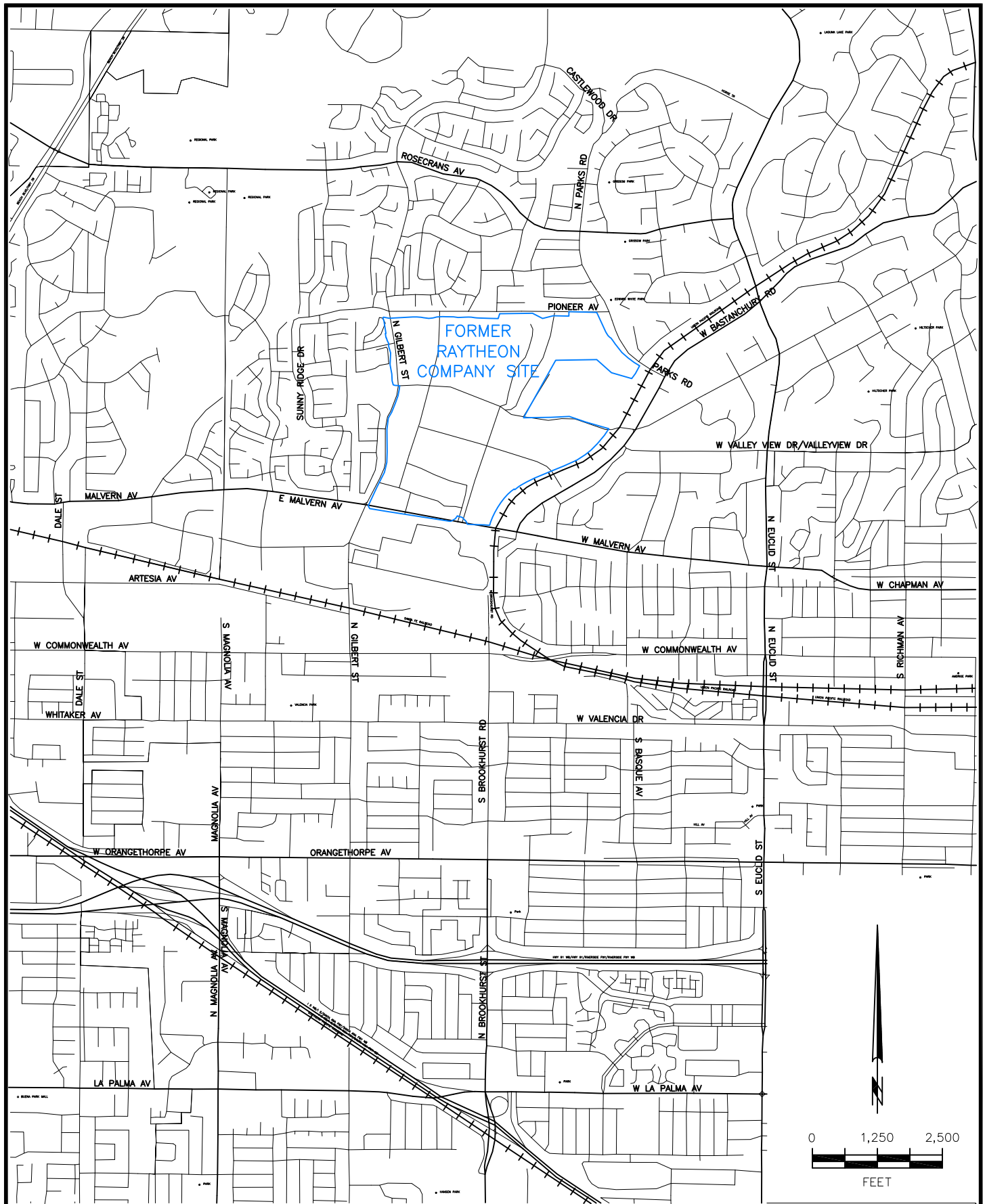
POX = Post Hipox Oxidation

CBT = Carbon Breakthrough

CEFF = Carbon Effluent

E = Data qualified as Estimated in accordance with quality control criteria

May 11, 2011 - 10:09am ADE - T: \2011\500-599\532 Raytheon\Hydrogeology\H+A Base\Maps\410-8281.dwg



HARGIS+ASSOCIATES, INC.
Hydrogeology/Engineering

5/11 | RPT NO. 532.31 | 410-8281 | A

FIGURE 1. SITE LOCATION

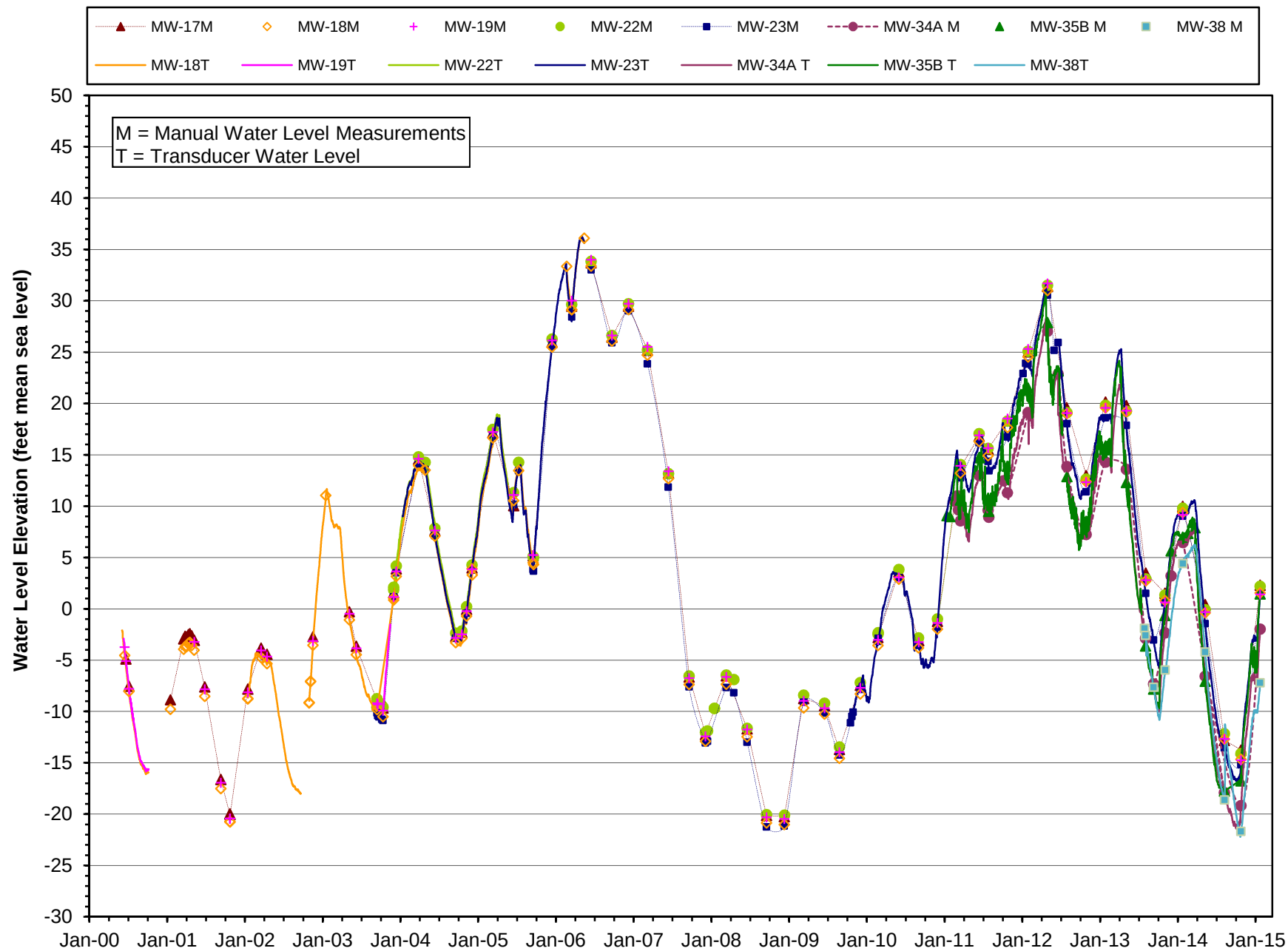


**FIGURE 3. REGIONAL GROUNDWATER SYSTEM WATER LEVELS,
UNIT A MONITOR WELLS**

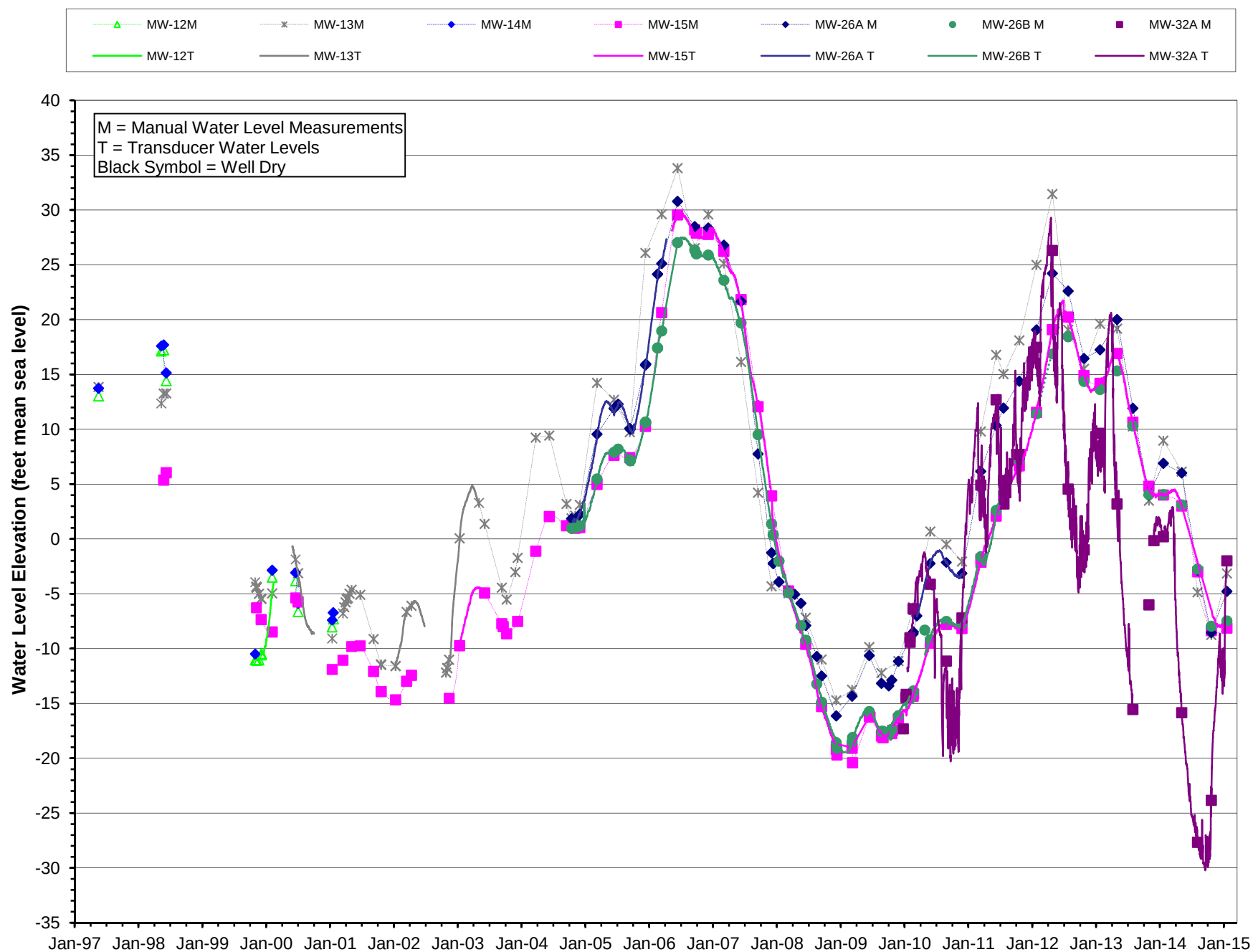


FIGURE 4. REGIONAL GROUNDWATER SYSTEM WATER LEVELS, UNIT AB MONITOR WELLS

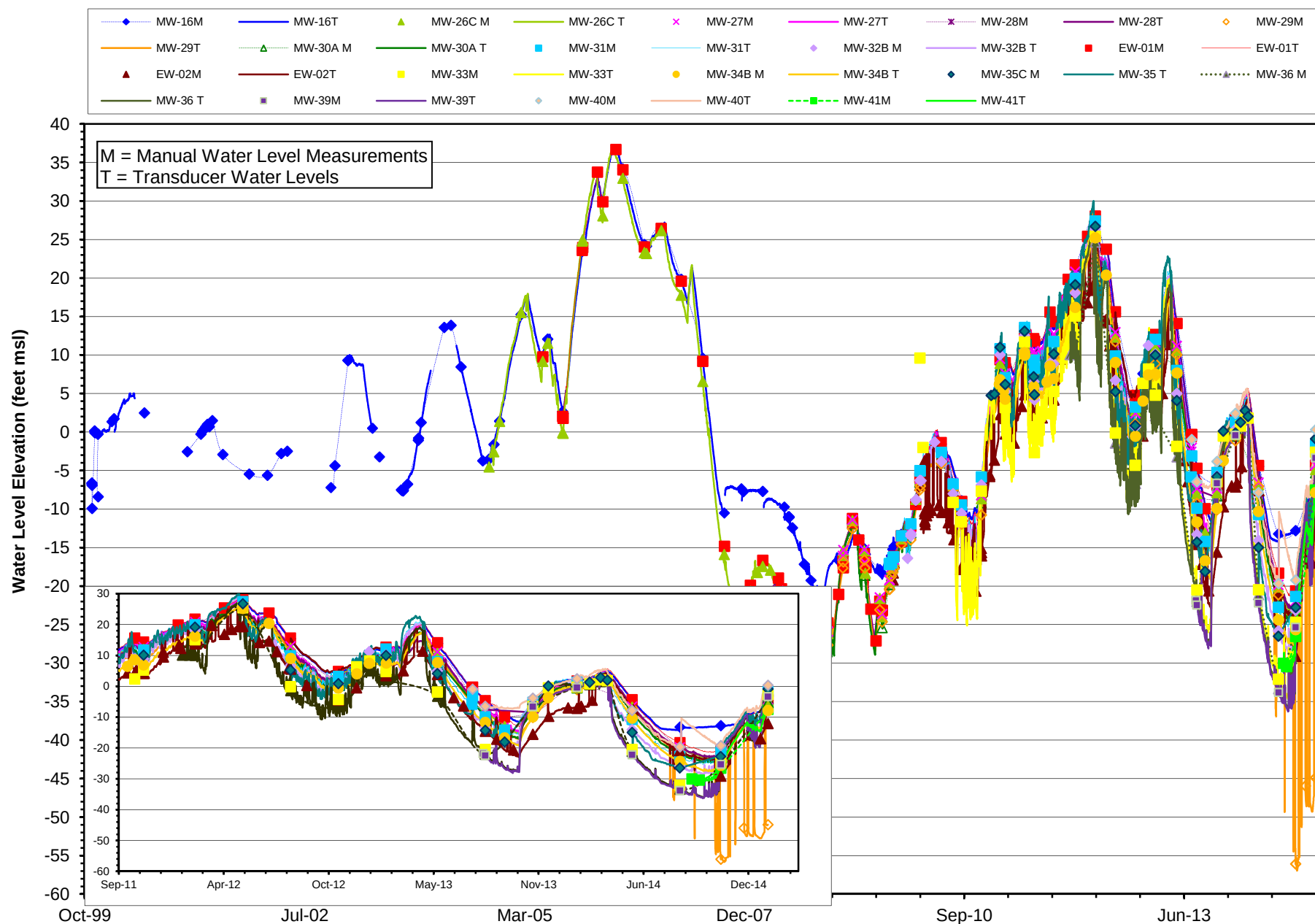


**FIGURE 5. REGIONAL GROUNDWATER SYSTEM WATER LEVELS,
UNIT B MONITOR AND EXTRACTION WELLS**

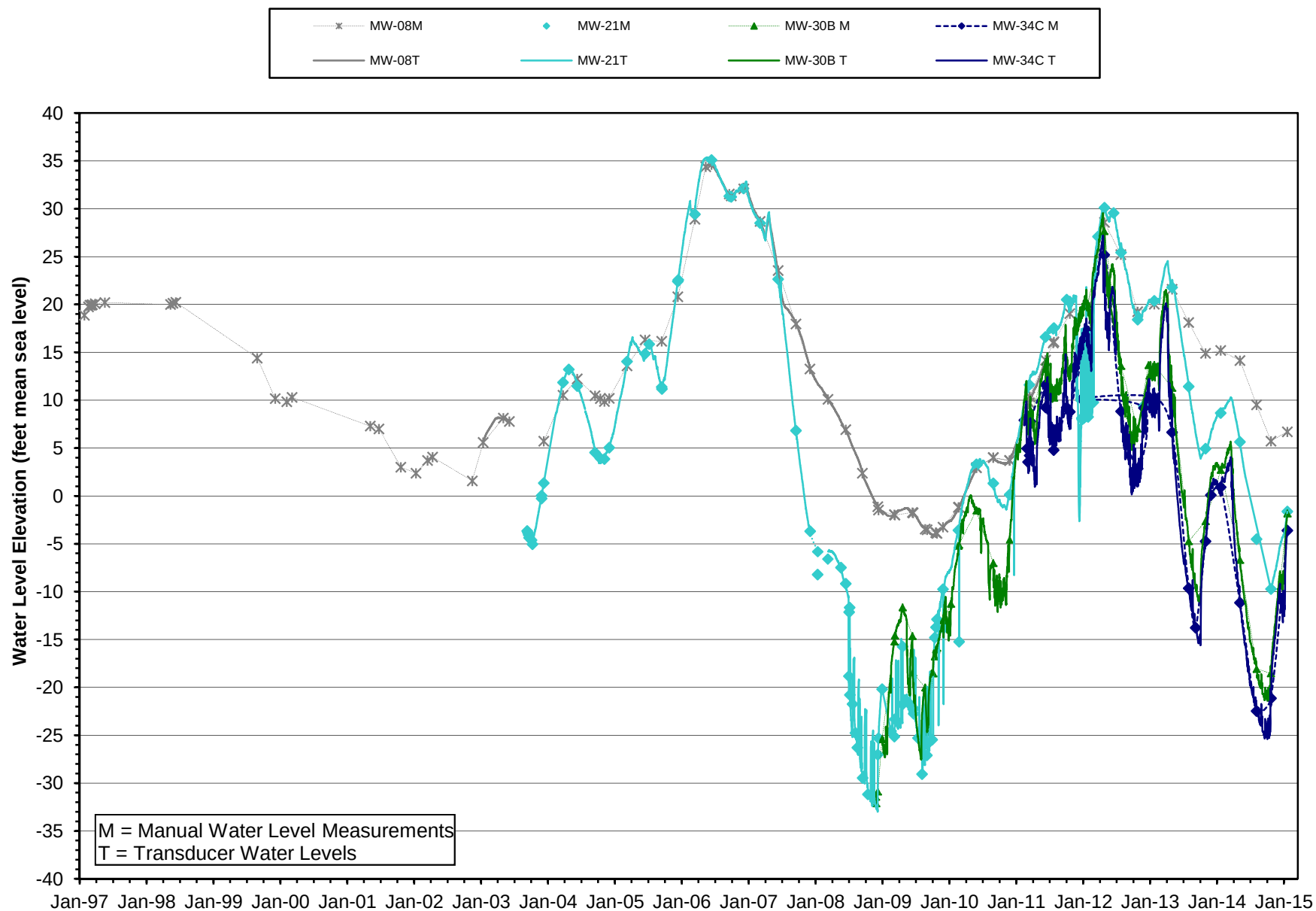


**FIGURE 6. REGIONAL GROUNDWATER SYSTEM WATER LEVELS,
UNIT BC MONITOR AND EXTRACTION WELLS**

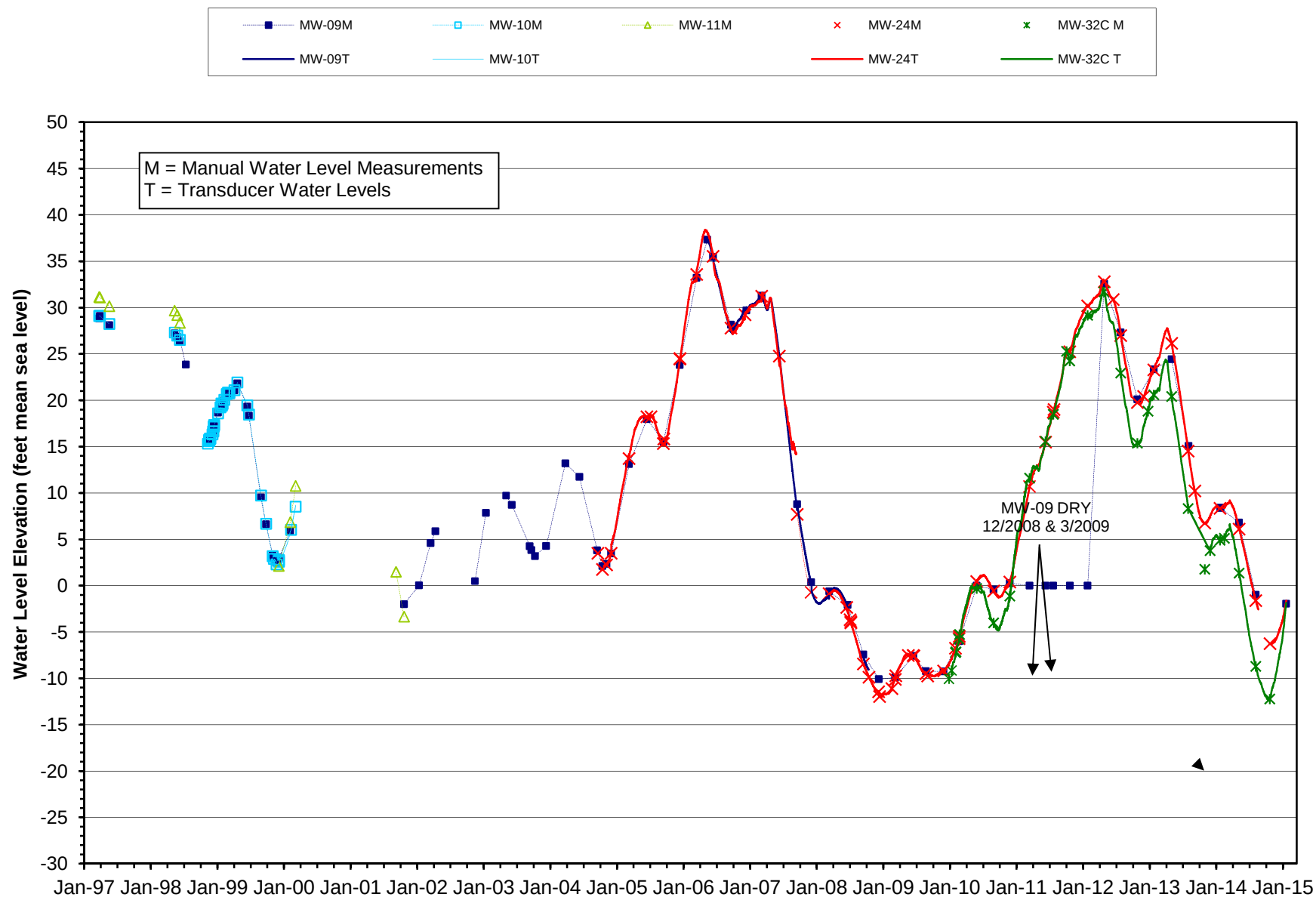


FIGURE 7. REGIONAL GROUNDWATER SYSTEM WATER LEVELS, UNIT C MONITOR WELLS

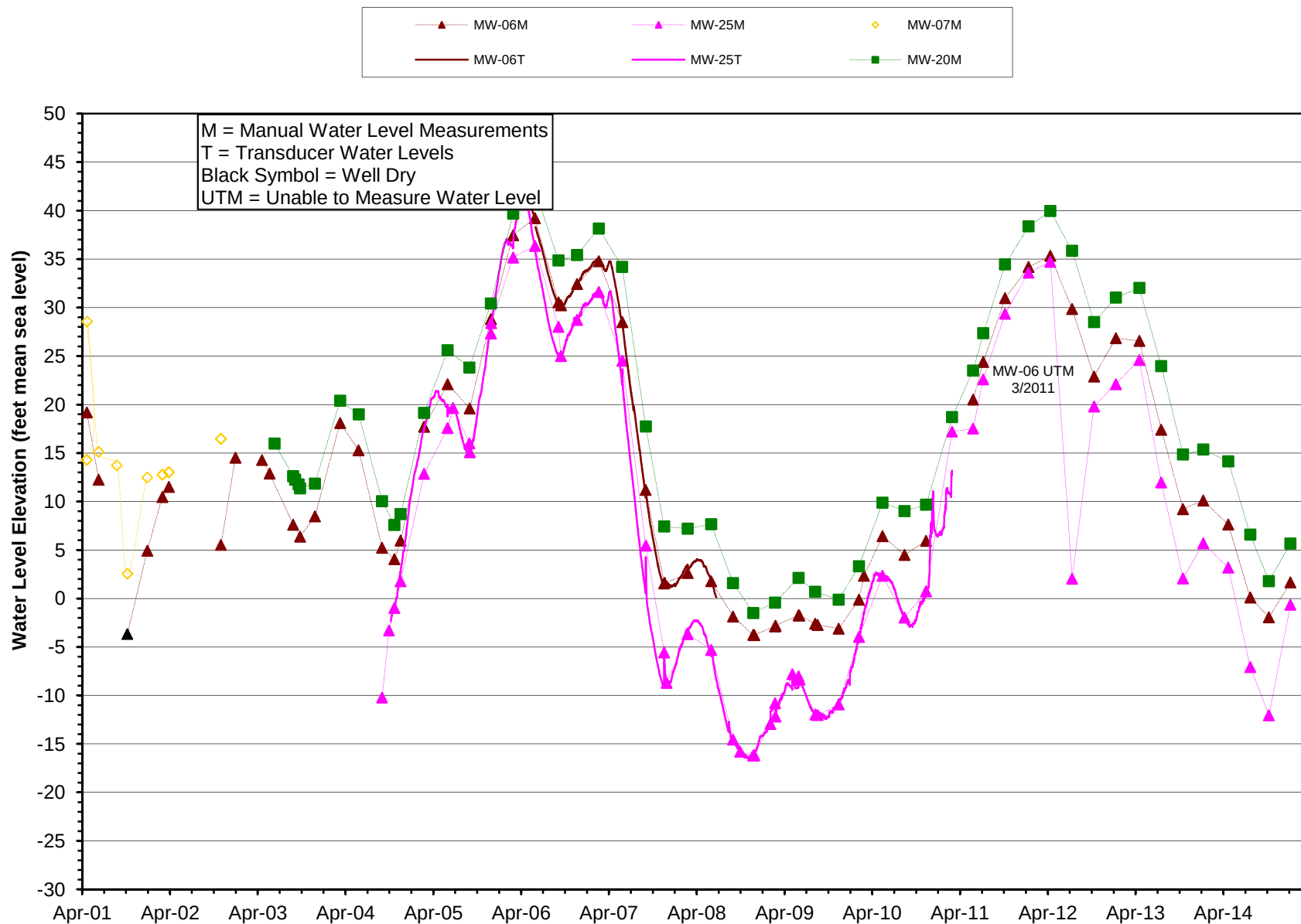
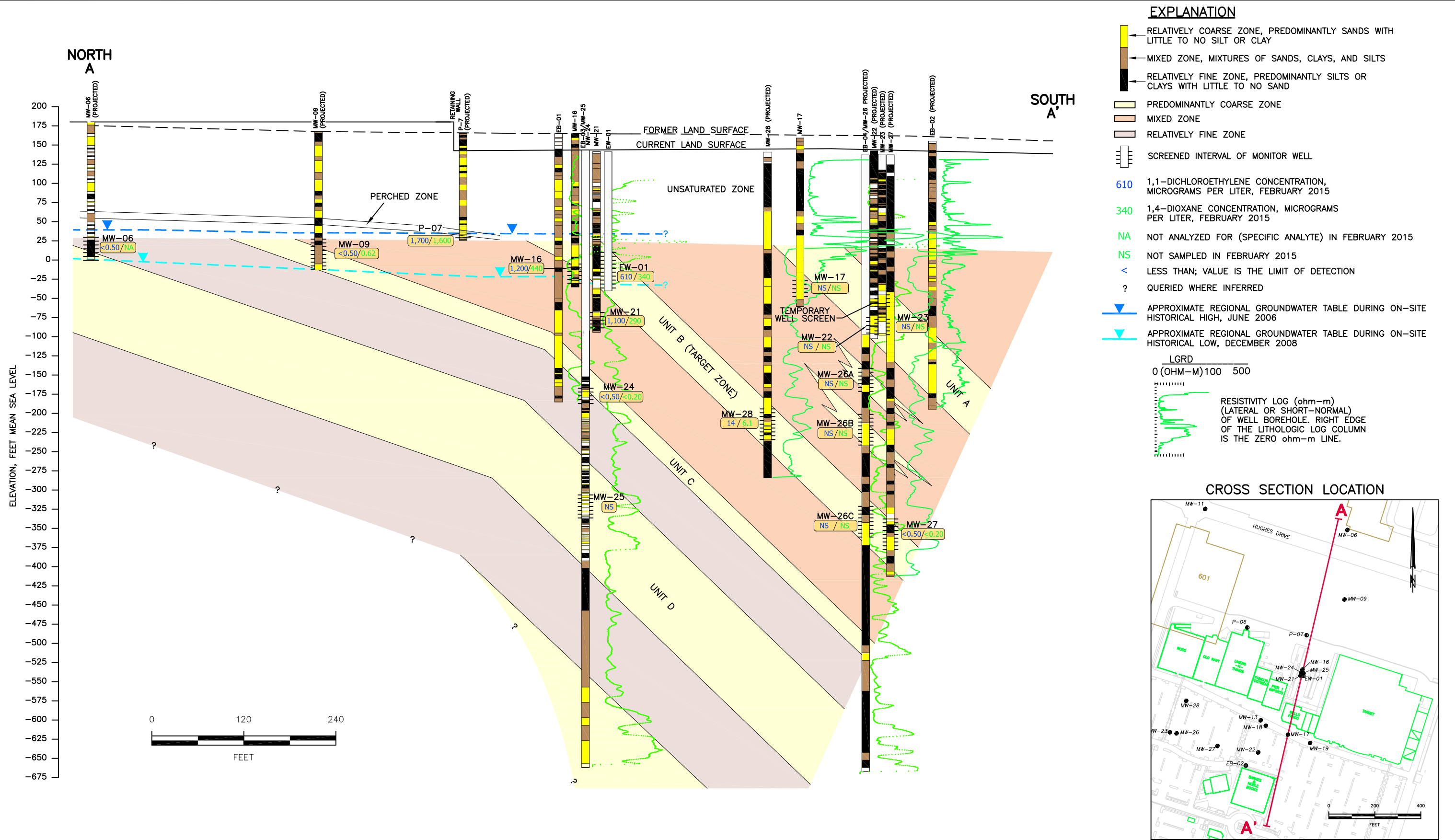


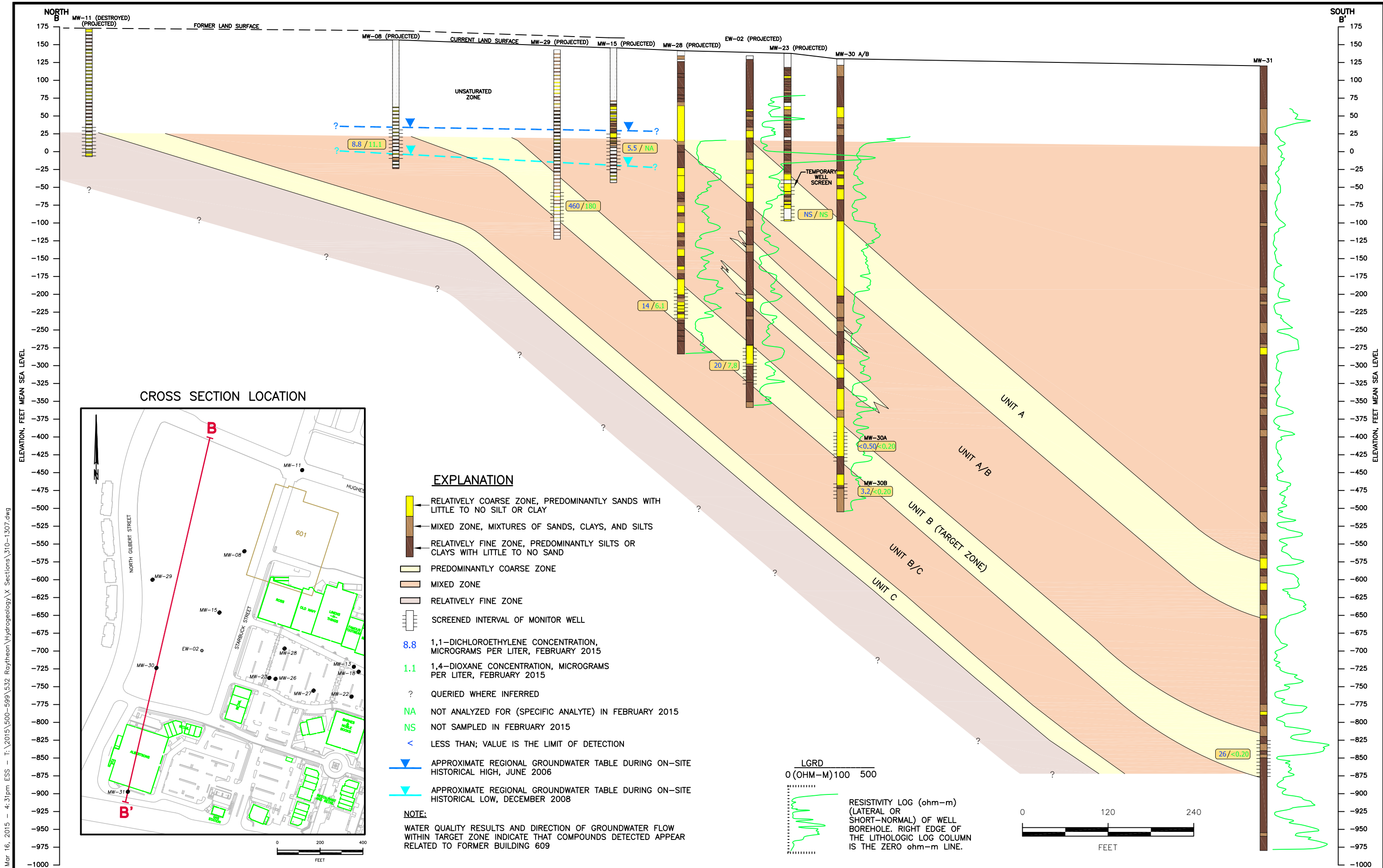
FIGURE 8. REGIONAL GROUNDWATER SYSTEM WATER LEVELS, UNIT D MONITOR WELLS

Mar 16, 2015 - 4:26pm ESS - T: \\2015\\500-599\\532 Raytheon\\Hydrogeology\\X Sections\\310-1306.dwg

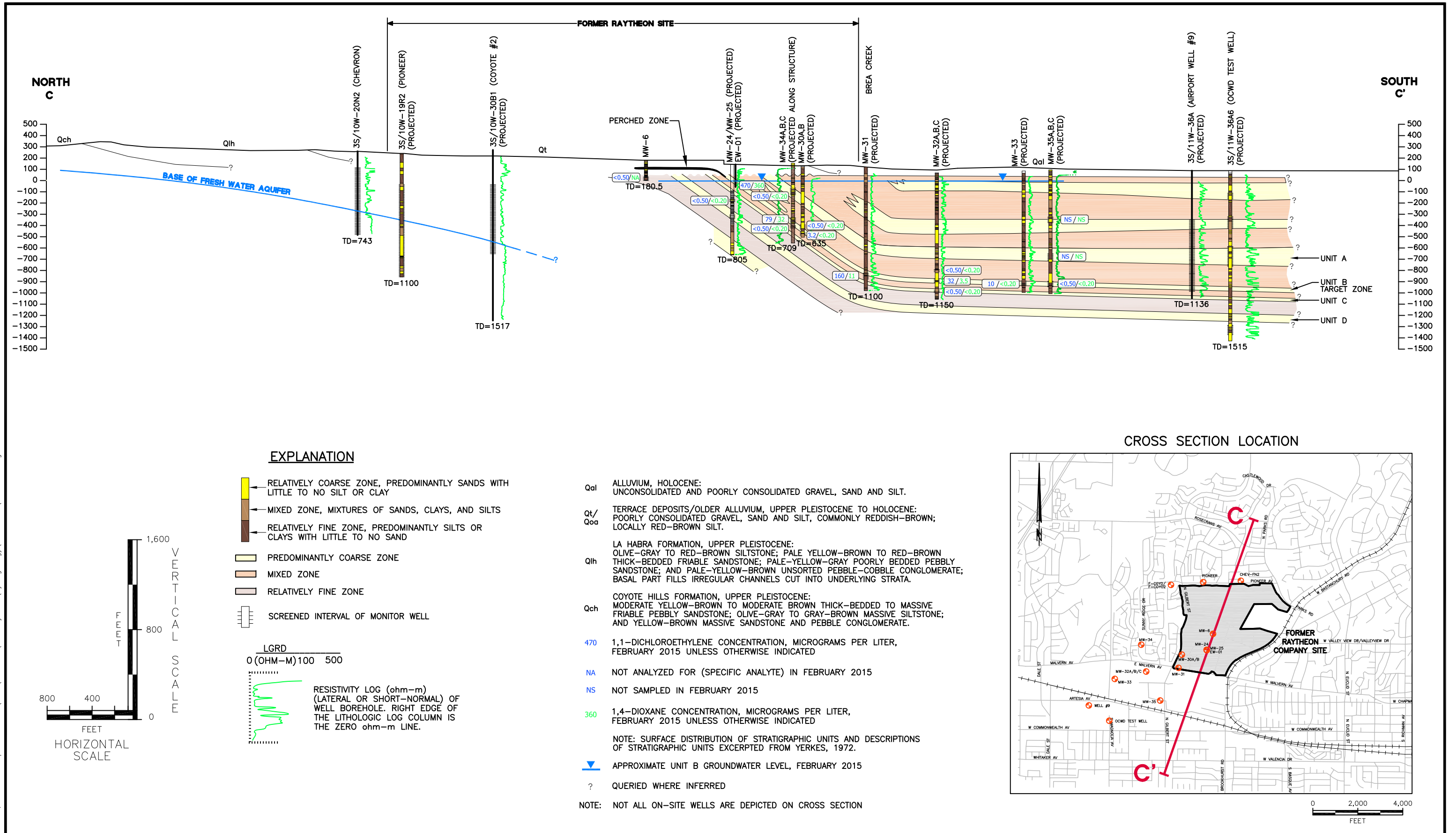


HARGIS+ASSOCIATES, INC.
Hydrogeology/Engineering

FIGURE 9.
SITE CONCEPTUAL GROUNDWATER MODEL HYDROGEOLOGIC CROSS-SECTION A-A'



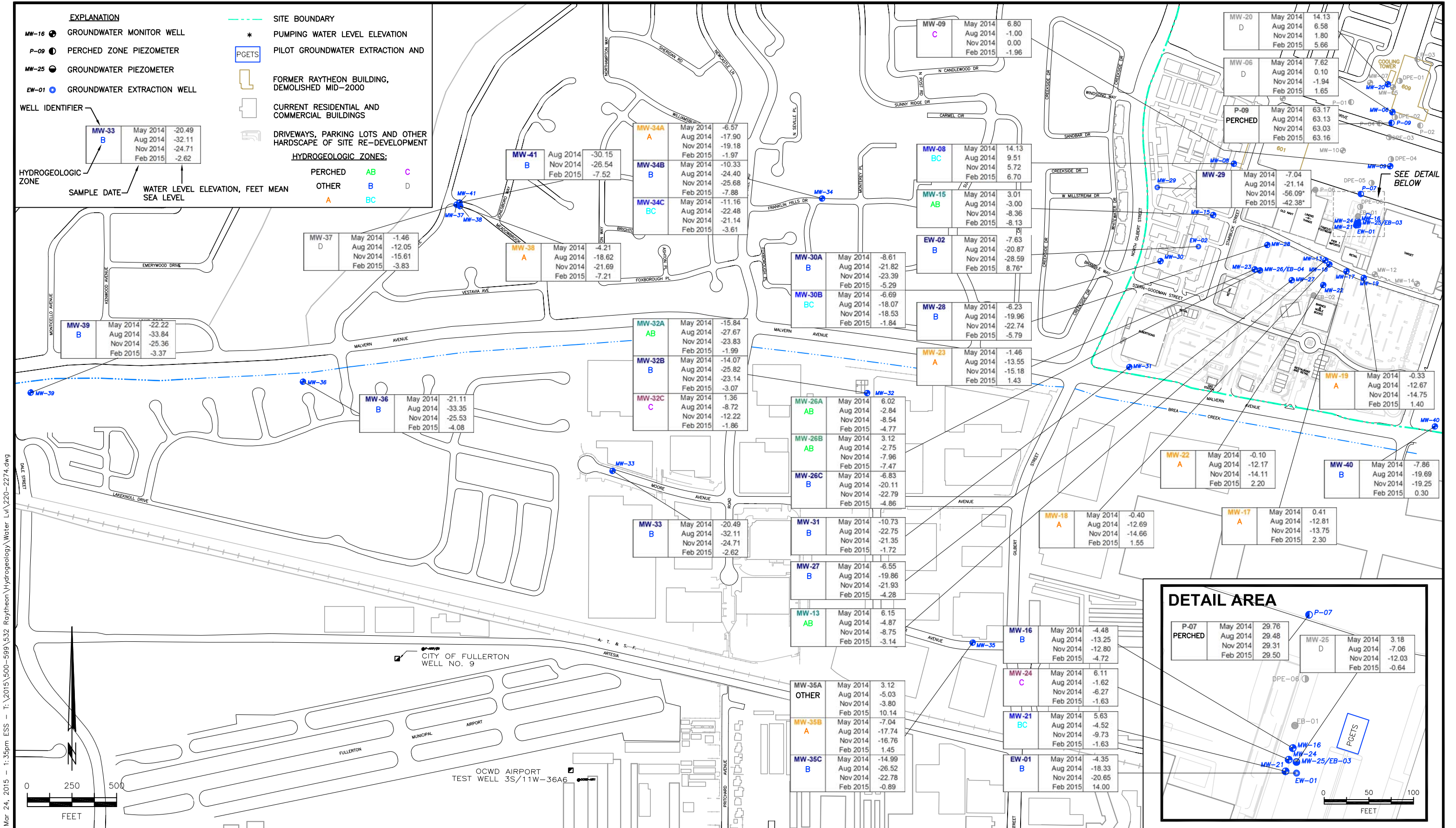
Mar 16, 2015 - 4:54pm ESS - T: \\2015\\500-599\\532 Raytheon\\Hydrogeology\\X Sections\\310-1308.dwg



HARGIS+ASSOCIATES, INC.
Hydrogeology/Engineering

FIGURE 11.

REGIONAL CONCEPTUAL GROUNDWATER MODEL HYDROGEOLOGIC CROSS-SECTION C-C'



Mar 12, 2015 - 11:03am ESS - T:\2015\500-599\532 Raytheon\Hydrogeology\Water Lvl\220-2275.dwg

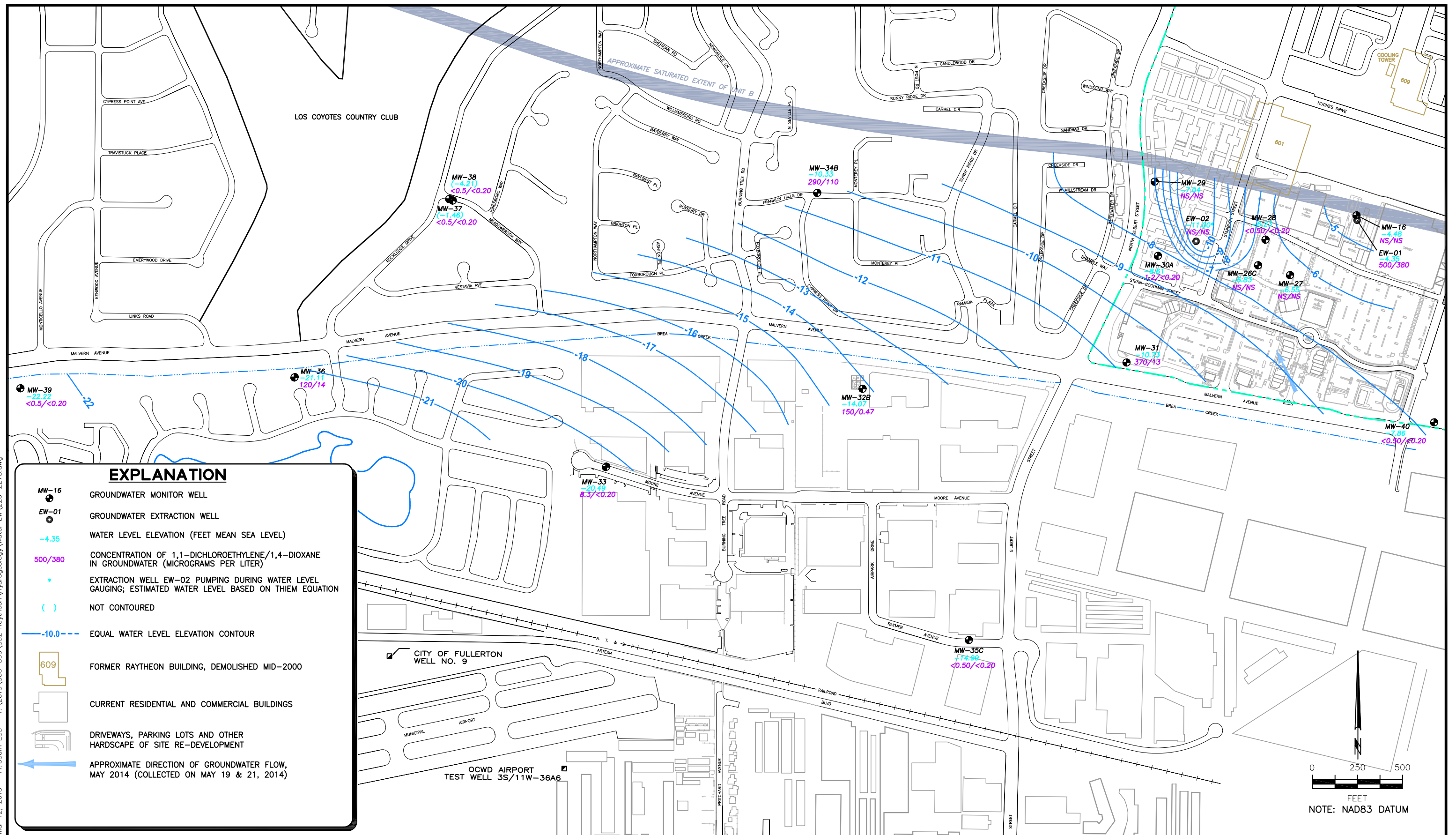


FIGURE 13A.
WATER LEVEL AND WATER QUALITY UNIT B
MAY 2014

Mar 12, 2015 - 11:04am ESS - T:\2015\500-599\532 Raytheon\Hydrogeology\Water Lvl\220-2276.dwg

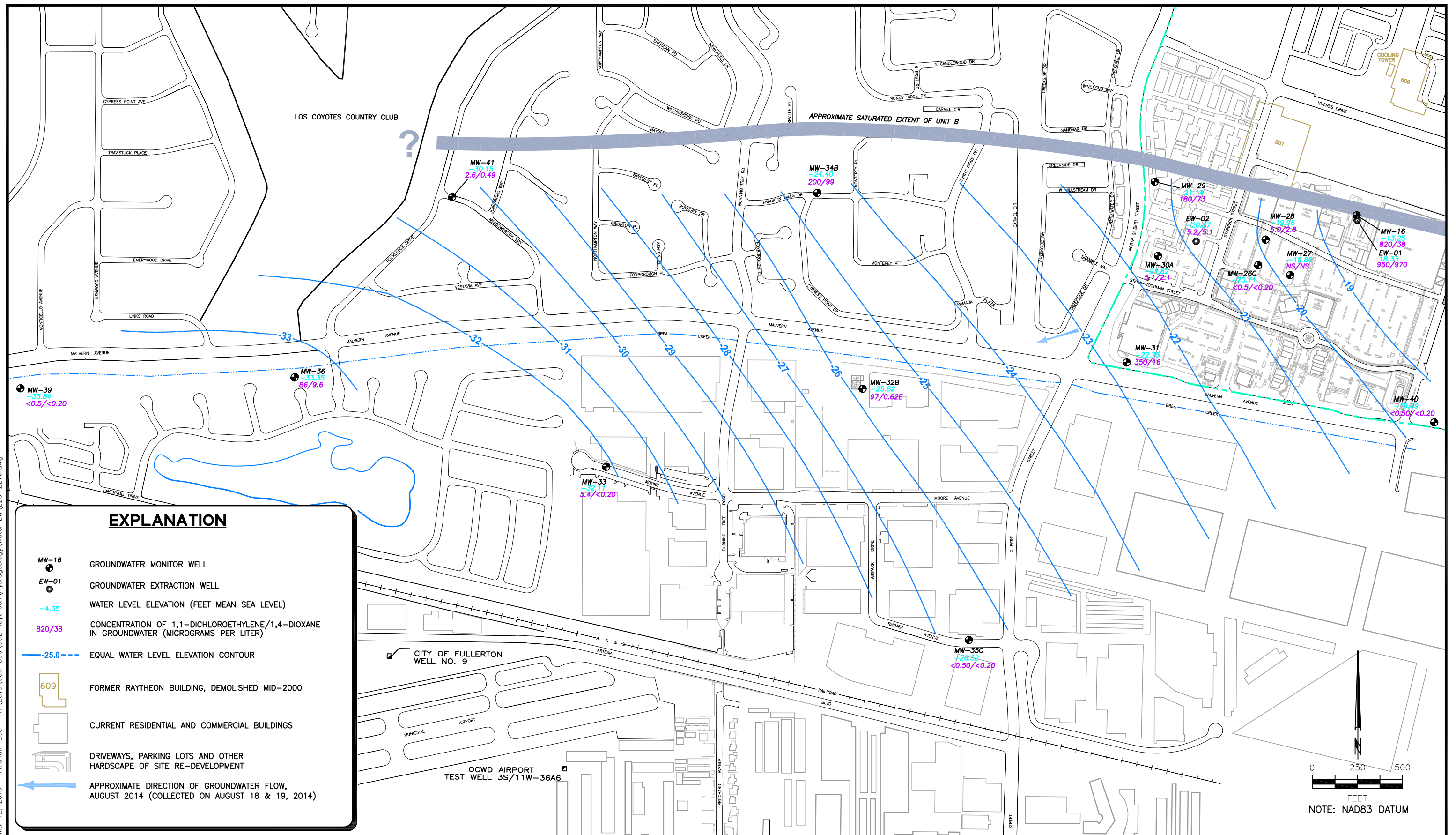
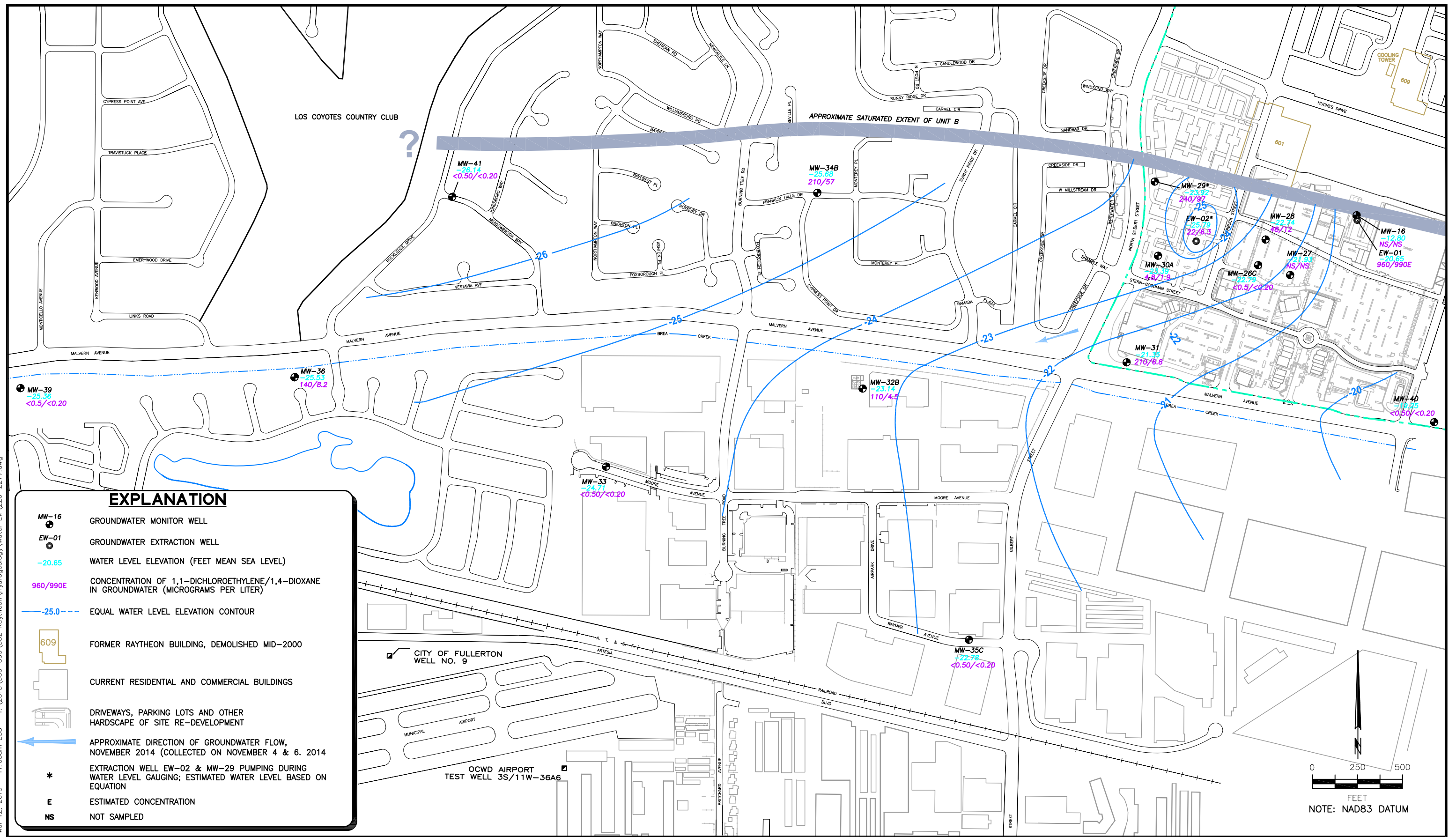


FIGURE 13B.
WATER LEVEL AND WATER QUALITY UNIT B
AUGUST 2014

Mar 12, 2015 - 11:05am ESS - T:\2015\500-599\532 Raytheon\Hydrogeology\Water Lvl\220-2277.dwg



Mar 16, 2015 - 4:41pm ESS - T: 2015\500-599\532 Raytheon\Hydrogeology\Water Lvl\220-2278.dwg

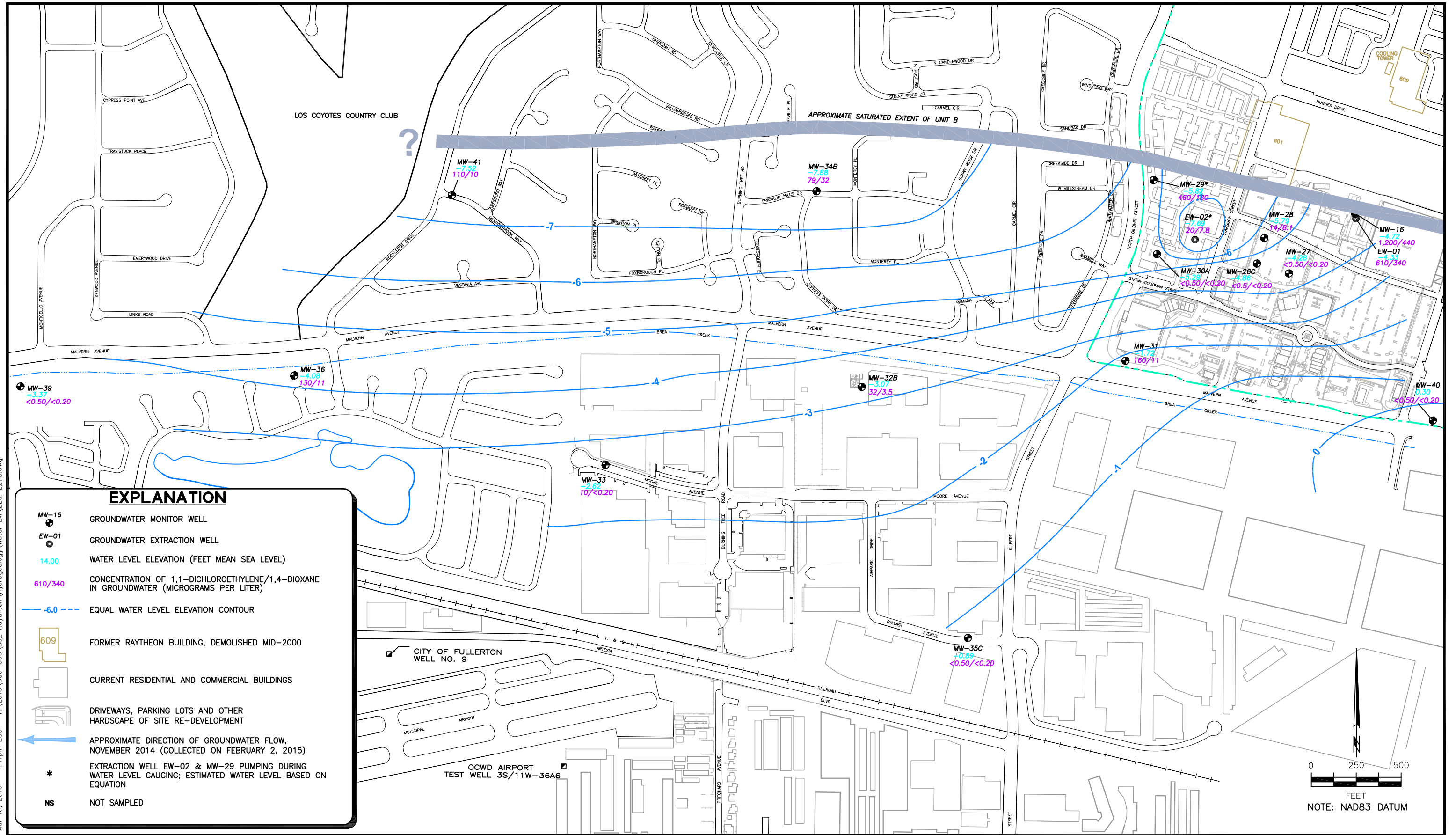


FIGURE 13D.
WATER LEVEL AND WATER QUALITY UNIT B
FEBRUARY 2015

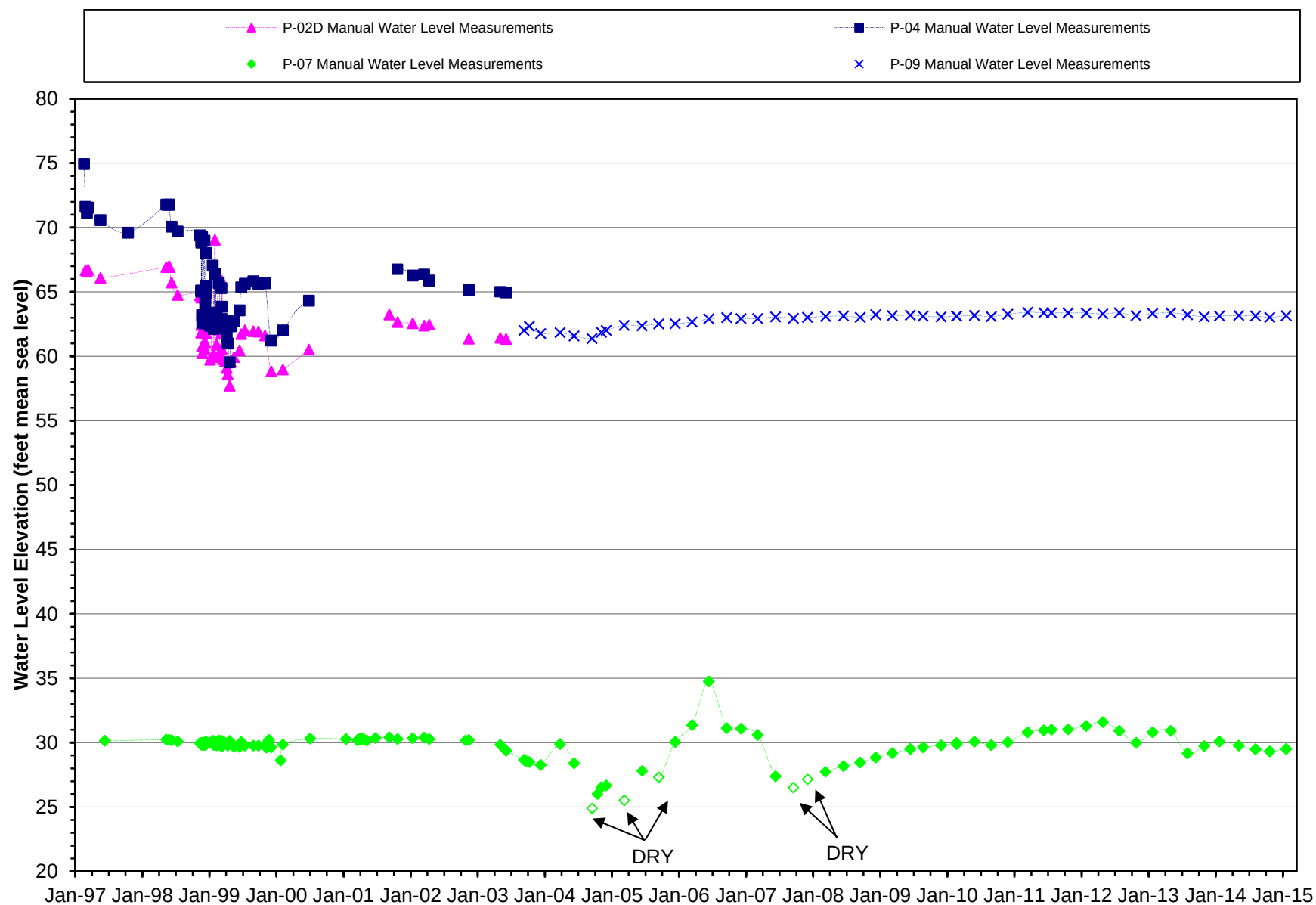


FIGURE 14. PERCHED ZONE WATER LEVELS, CENTRAL PORTION OF SITE

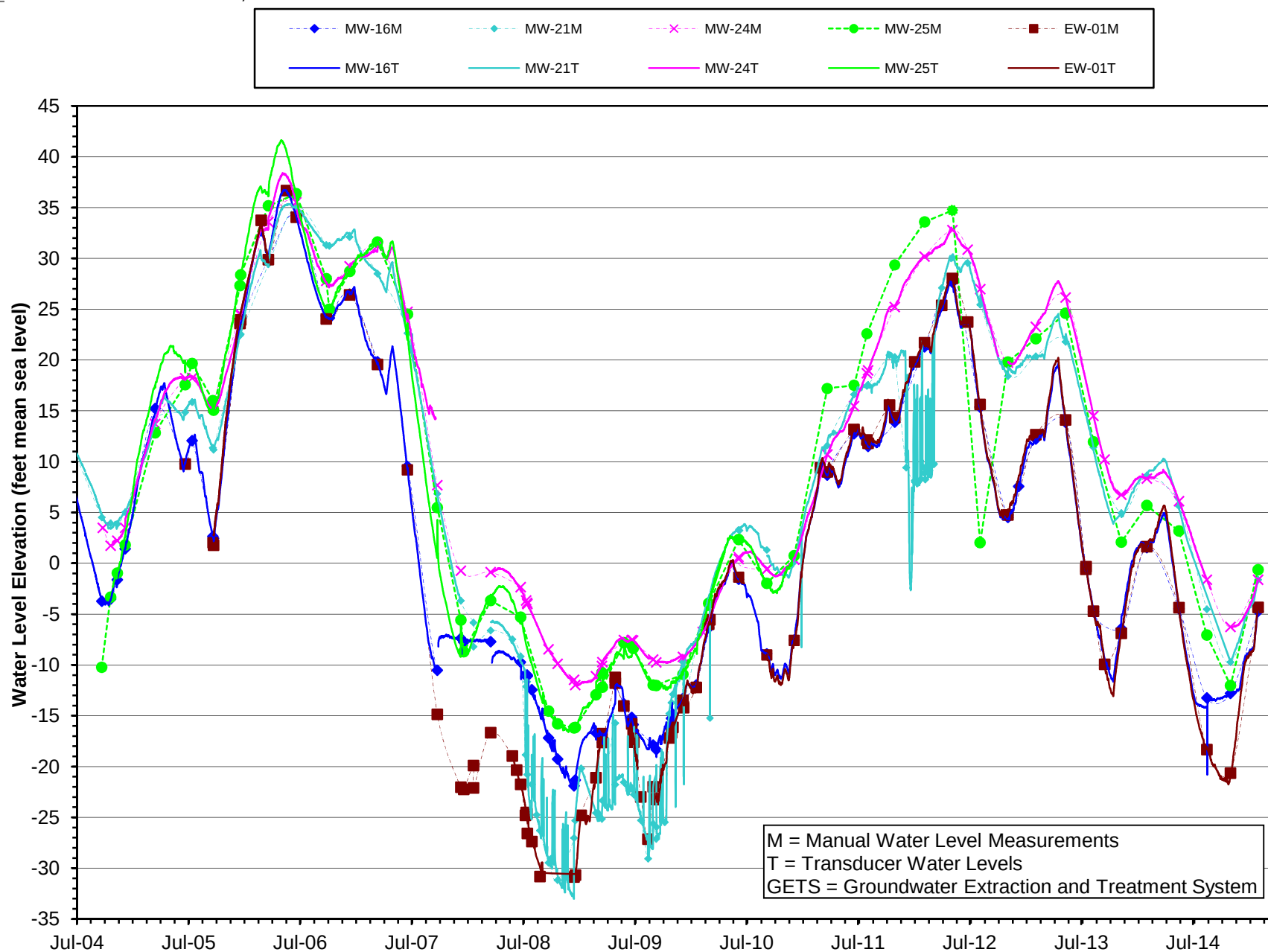


**FIGURE 15. REGIONAL GROUNDWATER SYSTEM WATER LEVELS,
MONITOR AND EXTRACTION WELL CLUSTER EW-01/MW-16/21/24/25**

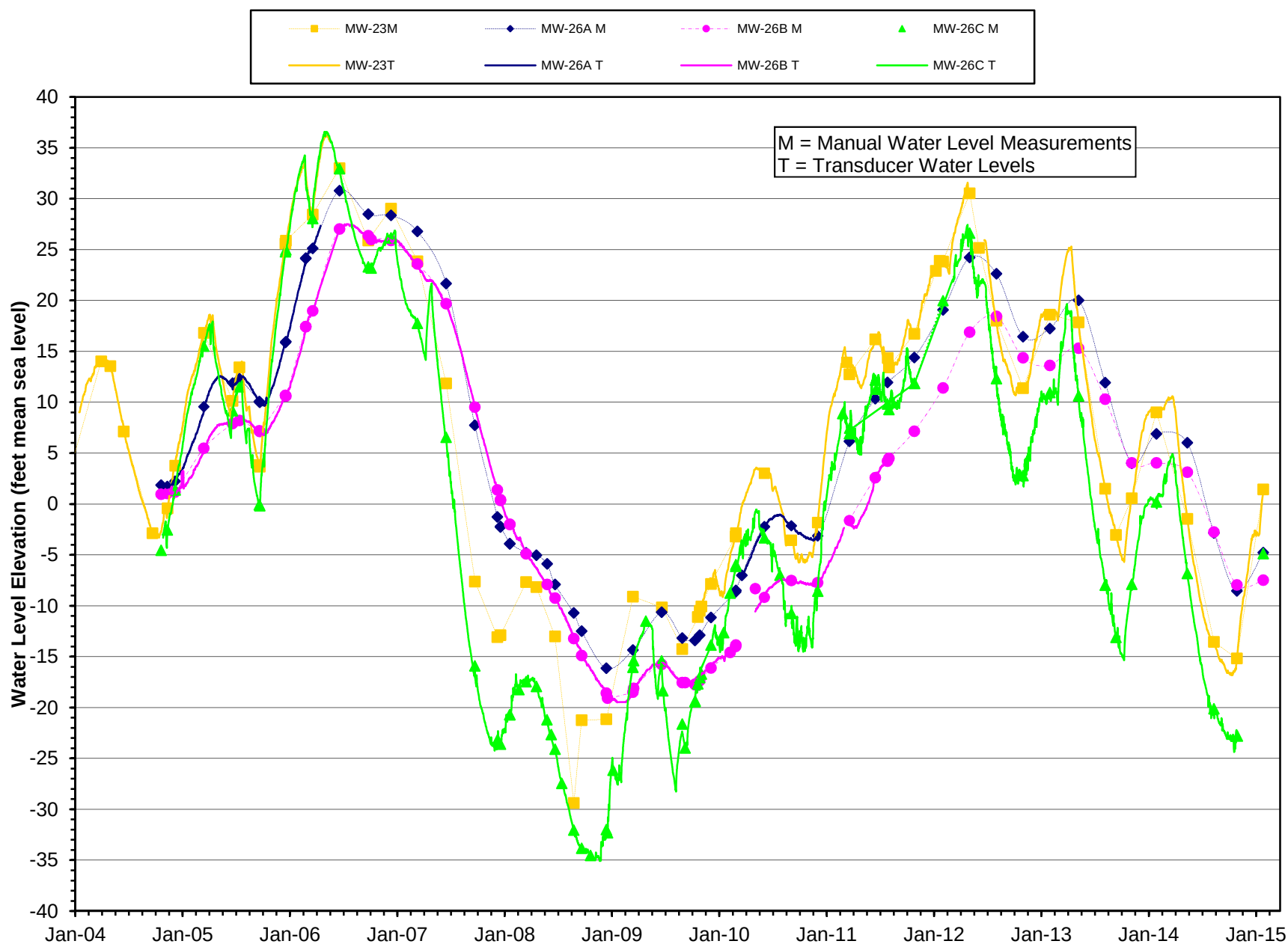


**FIGURE 16. REGIONAL GROUNDWATER SYSTEM WATER LEVELS,
MONITOR WELL CLUSTER MW-23/26A/26B/26C**

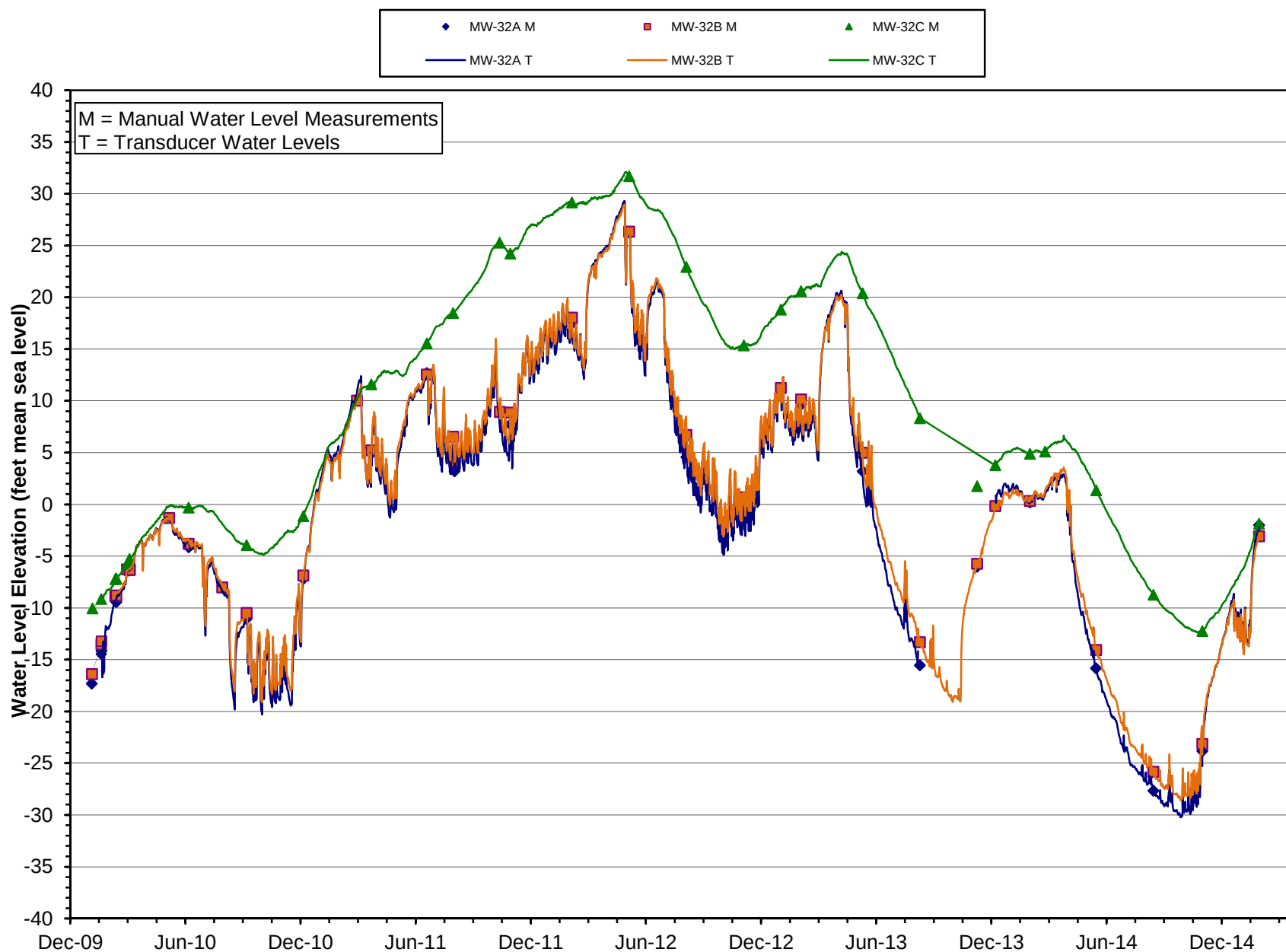


**FIGURE 17. REGIONAL GROUNDWATER SYSTEM WATER LEVELS,
NESTED MONITOR WELLS MW-32A/32B/32C**

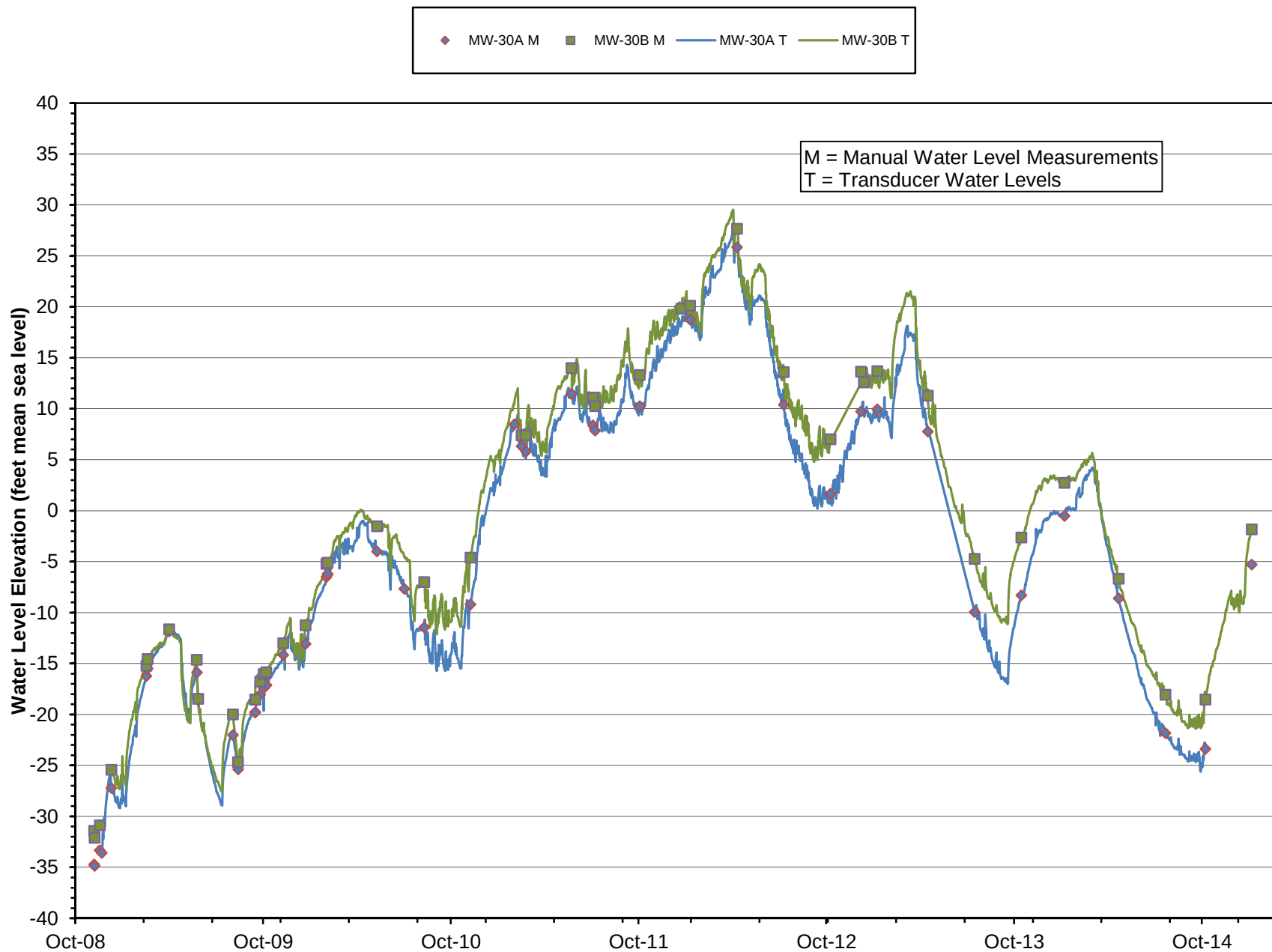


**FIGURE 18. REGIONAL GROUNDWATER SYSTEM WATER LEVELS,
NESTED MONITOR WELLS MW-30A/30B**

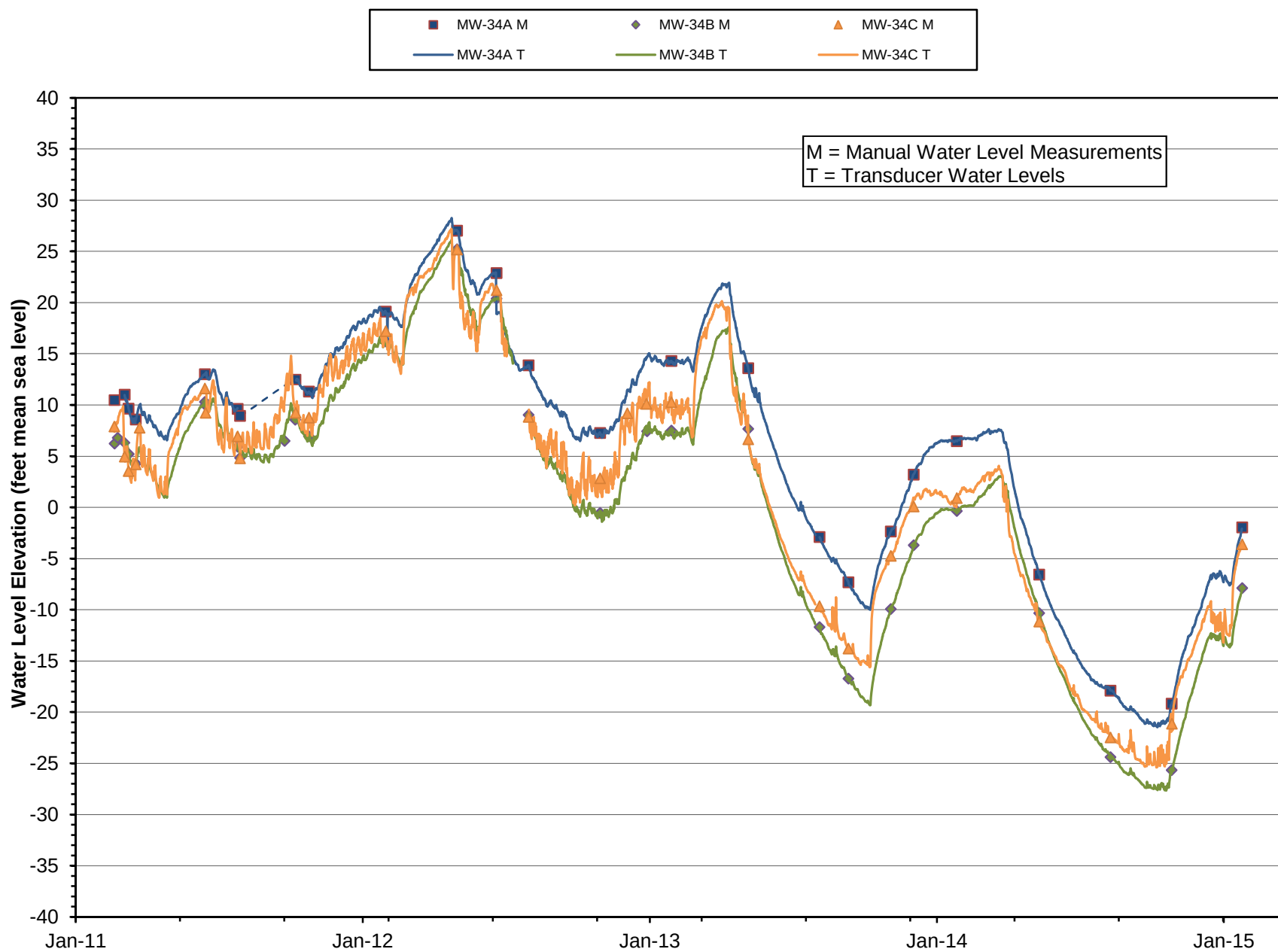


**FIGURE 19. REGIONAL GROUNDWATER SYSTEM WATER LEVELS,
MONITOR WELL CLUSTER MW-34A/34B/34C**

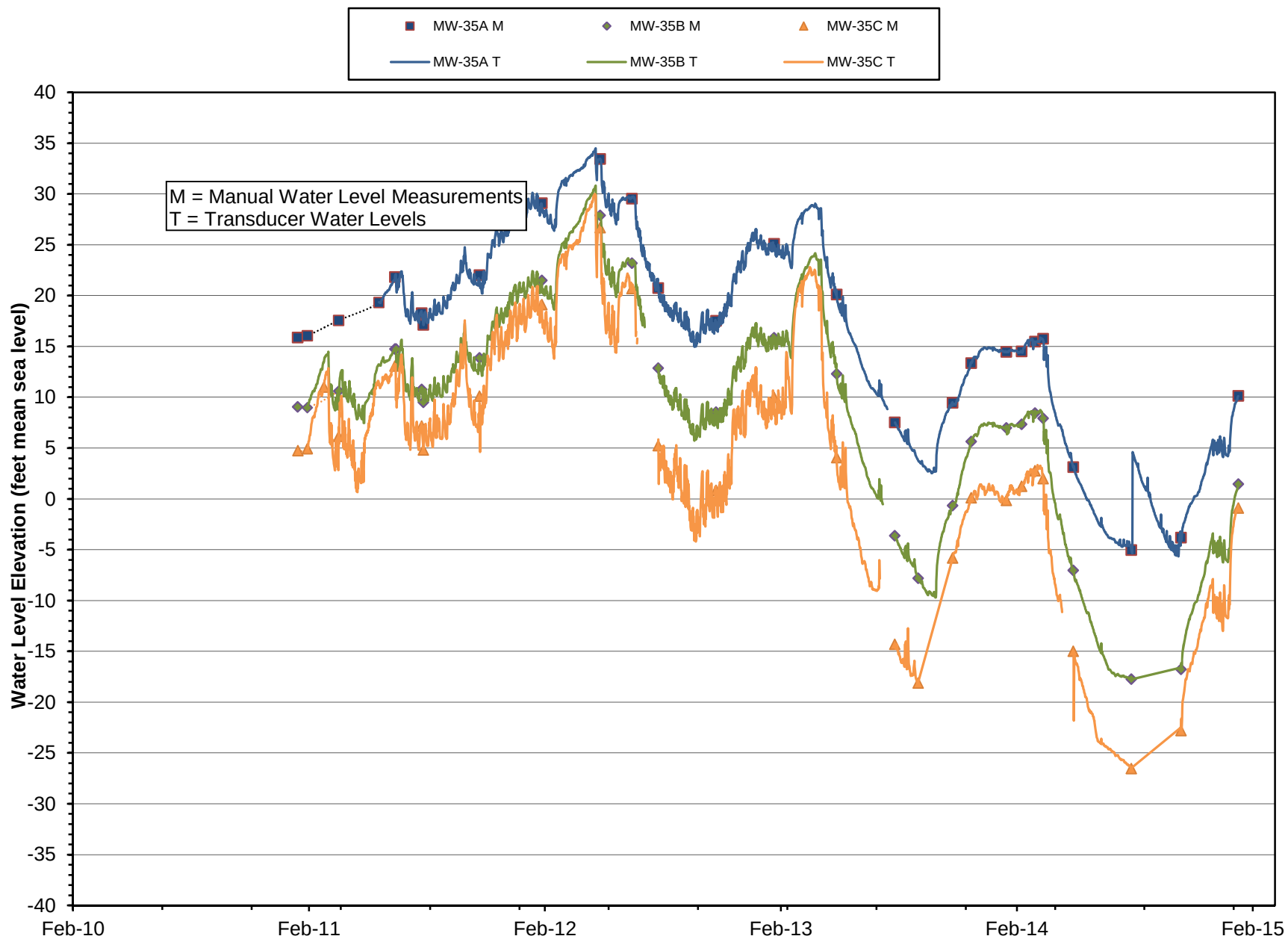
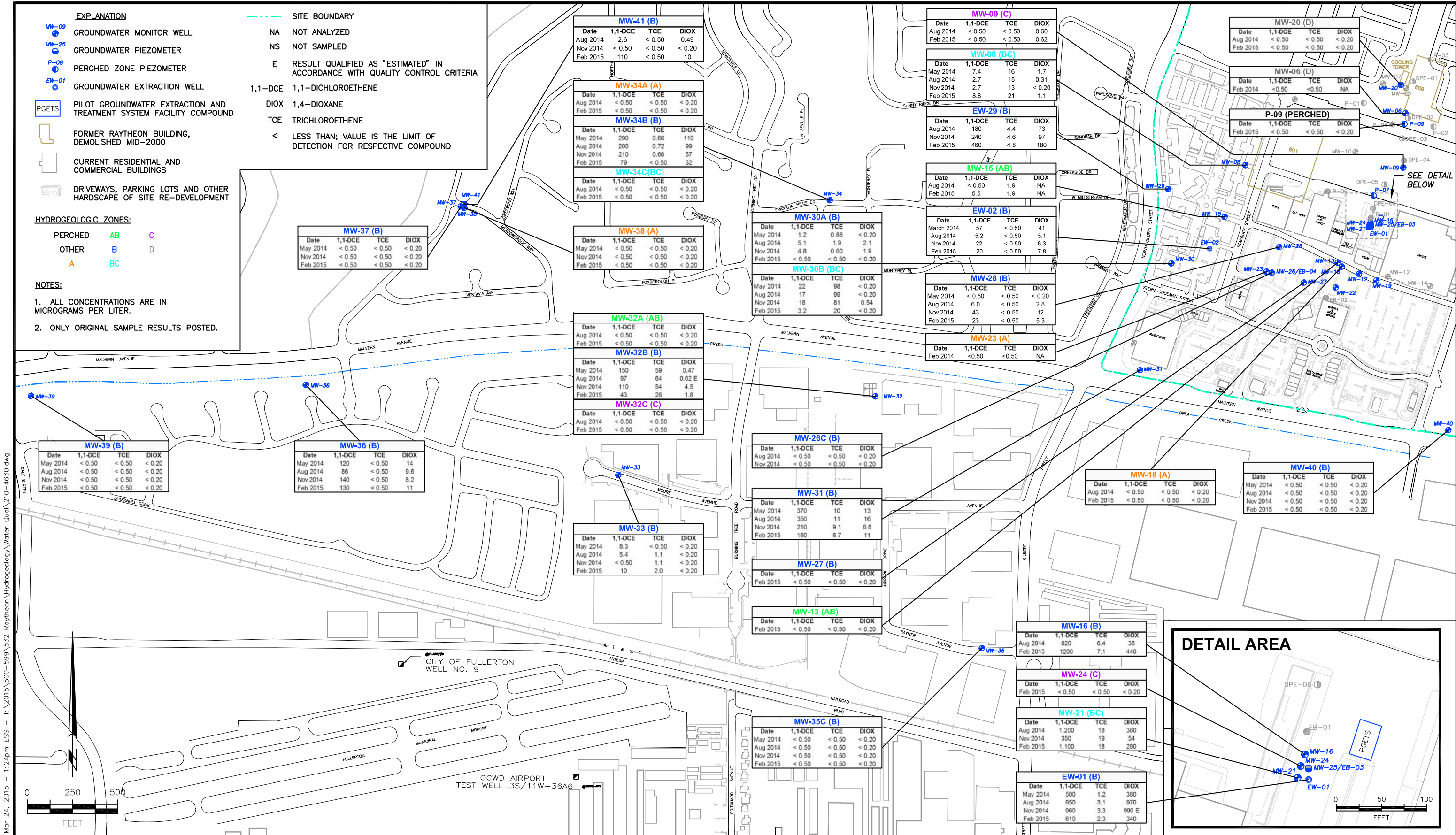


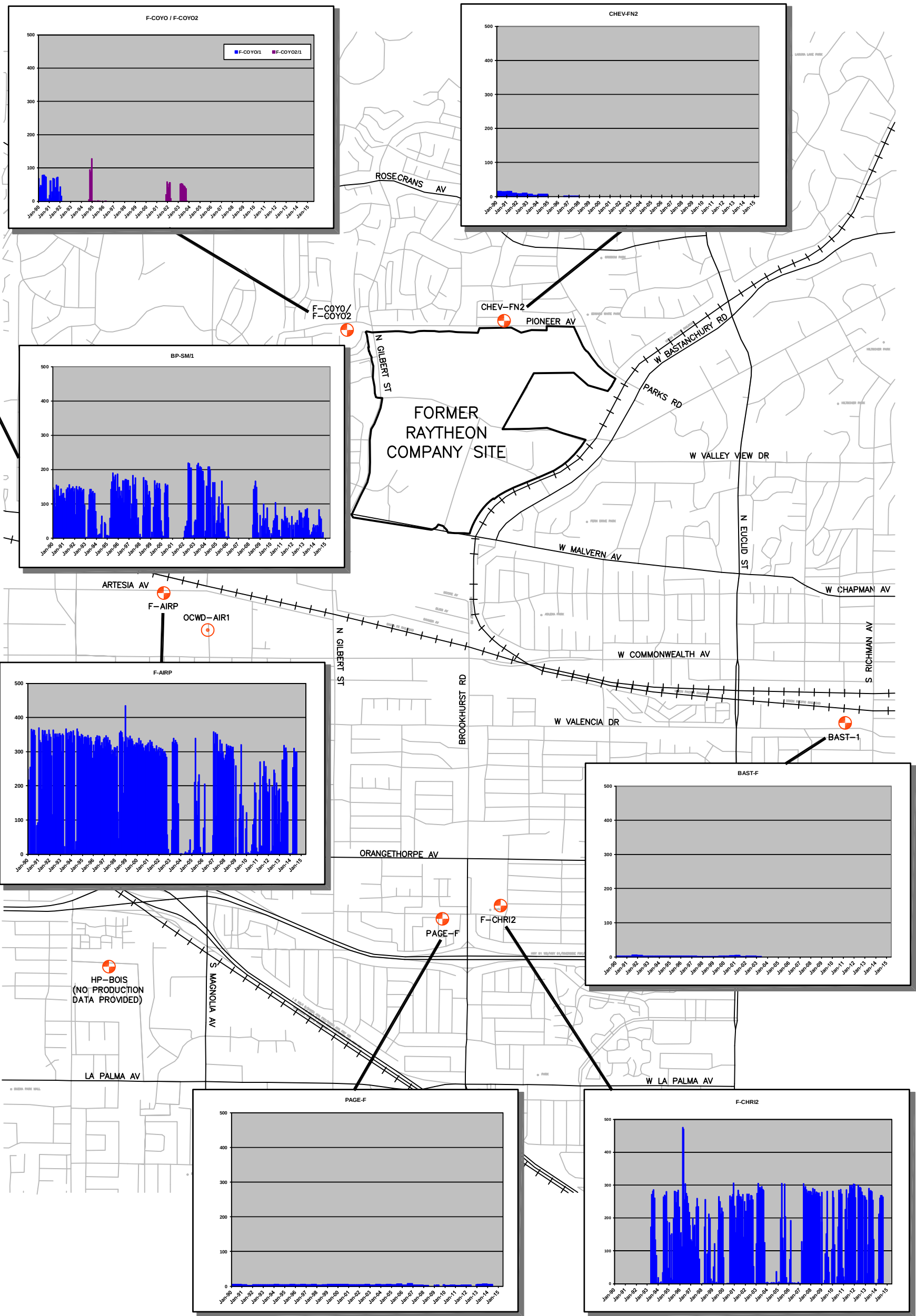
**FIGURE 20. REGIONAL GROUNDWATER SYSTEM WATER LEVELS,
NESTED MONITOR WELLS MW-35A/35B/35C**



Mar 24, 2015 - 1:24pm ESS - T: \2015\500-599\532 Raytheon\Hydrogeology\Water Qual\210-4630.dwg

FIGURE 21.
1,1-DICHLOROETHYLENE, TRICHLOROETHYLENE, AND 1,4-DIOXANE
IN THE REGIONAL GROUNDWATER SYSTEM MAY 2014 THROUGH FEBRUARY 2015

Mar 20, 2015 -- 3:44pm ESS -- T:\2015\500-599\532 Raytheon\Hydrogeology\H+A BaseMaps\410-9376.dwg



EXPLANATION

- ACTIVE OR RECENTLY ACTIVE PRODUCTION WELL
- REGIONAL OBSERVATION

NOTE: GRAPHS INDICATE MONTHLY GROUNDWATER PRODUCTION IN ACRE-FEET

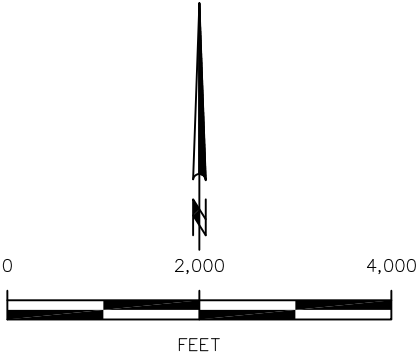
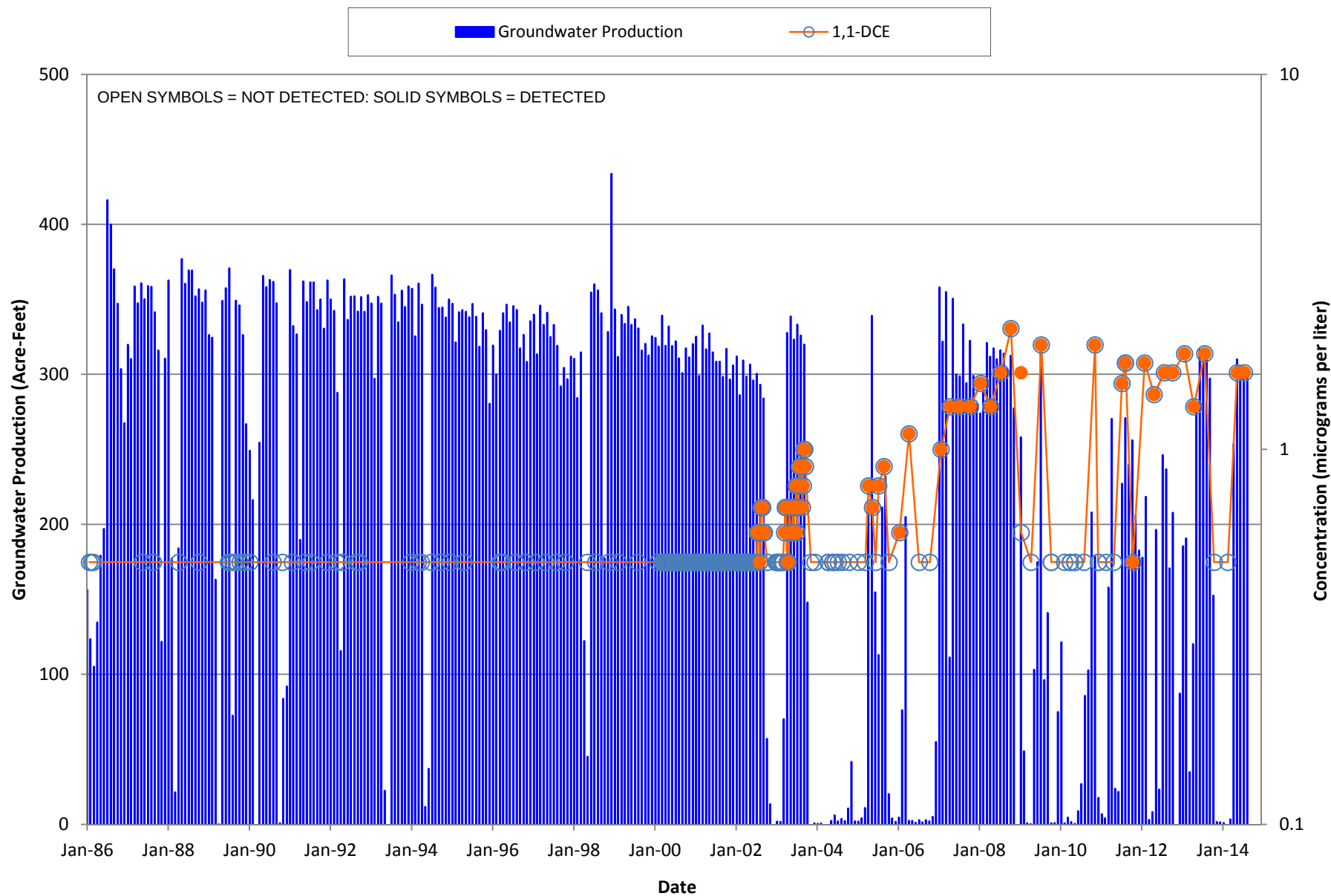


FIGURE 22.
REGIONAL PRODUCTION WELLS



FIGURE 23: F-AIRP Well Production and 1,1-Dichloroethylene Concentrations



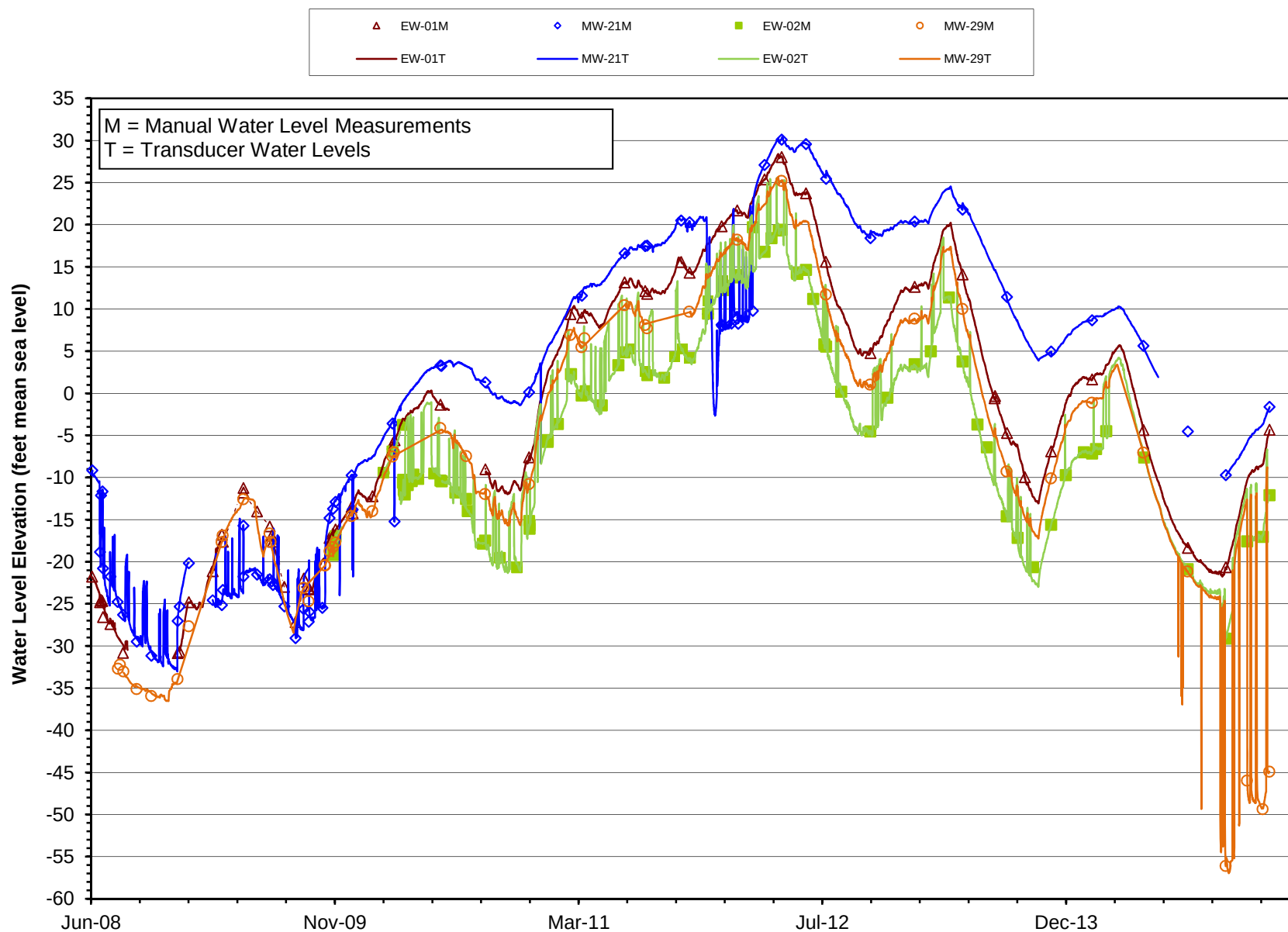


FIGURE 24.
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM OPERATION
AND EXTRACTION WELL WATER LEVELS

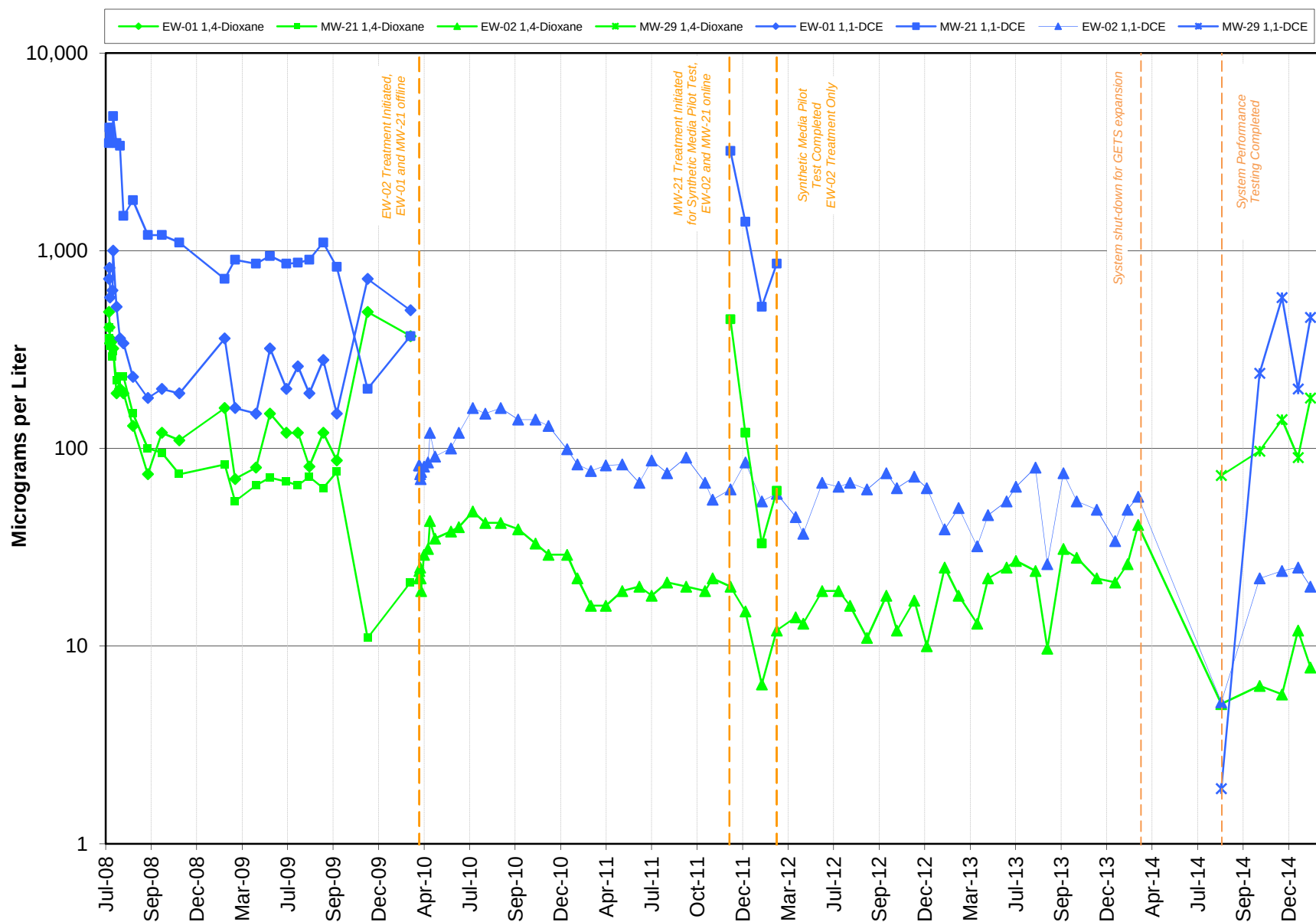
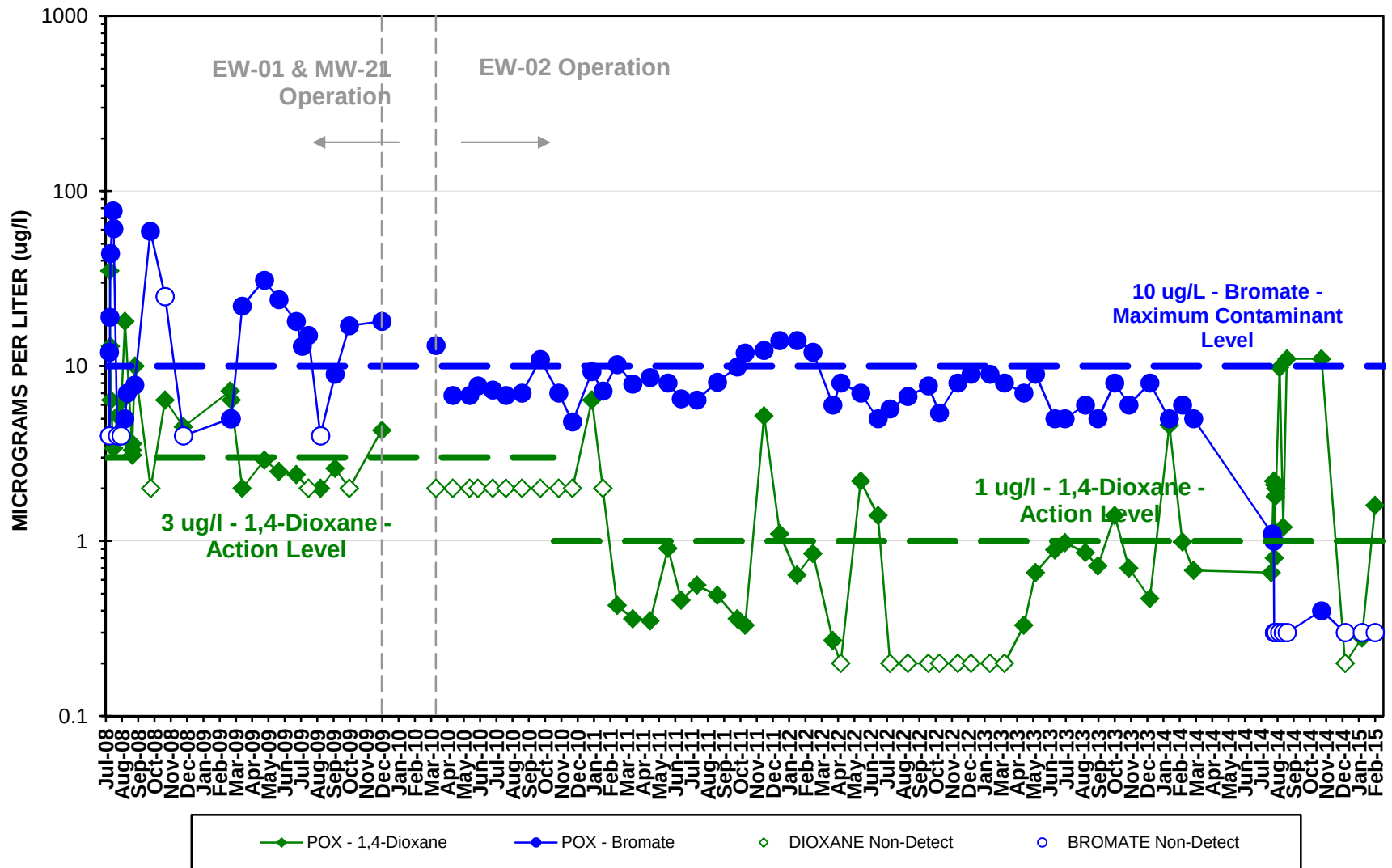


FIGURE 25.
1,1-DICHLOROETHYLENE AND 1,4-DIOXANE CONCENTRATIONS IN
EXTRACTION WELLS

1,1-DCE = 1,1-Dichloroethylene



FIGURE 26
1,4-DIOXANE AND BROMATE IN INFLUENT AND POST-OXIDATION SAMPLES
Post-Hipox (POX) Concentrations



ug/L = Micrograms per liter

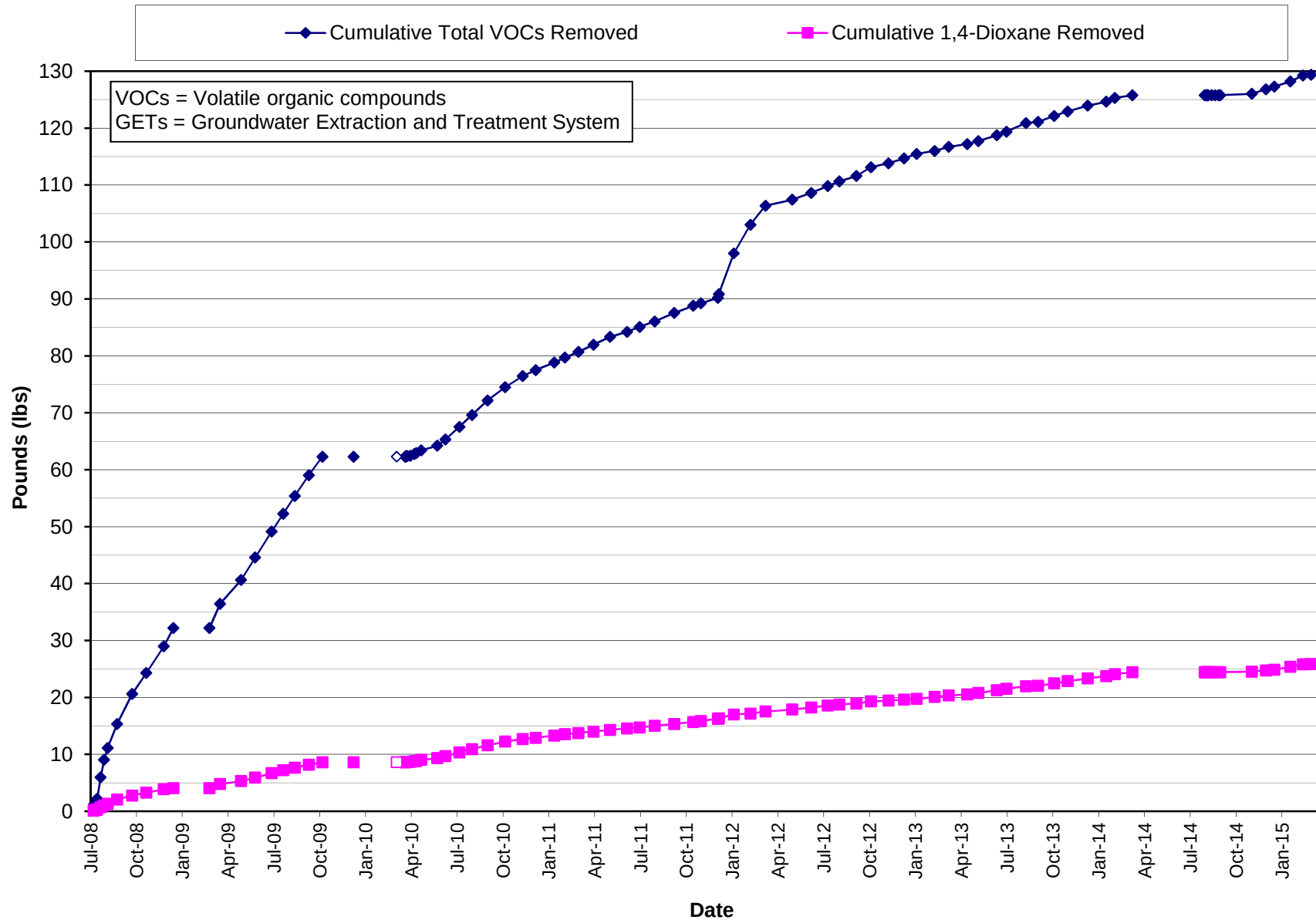


FIGURE 27.
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM MASS REMOVAL

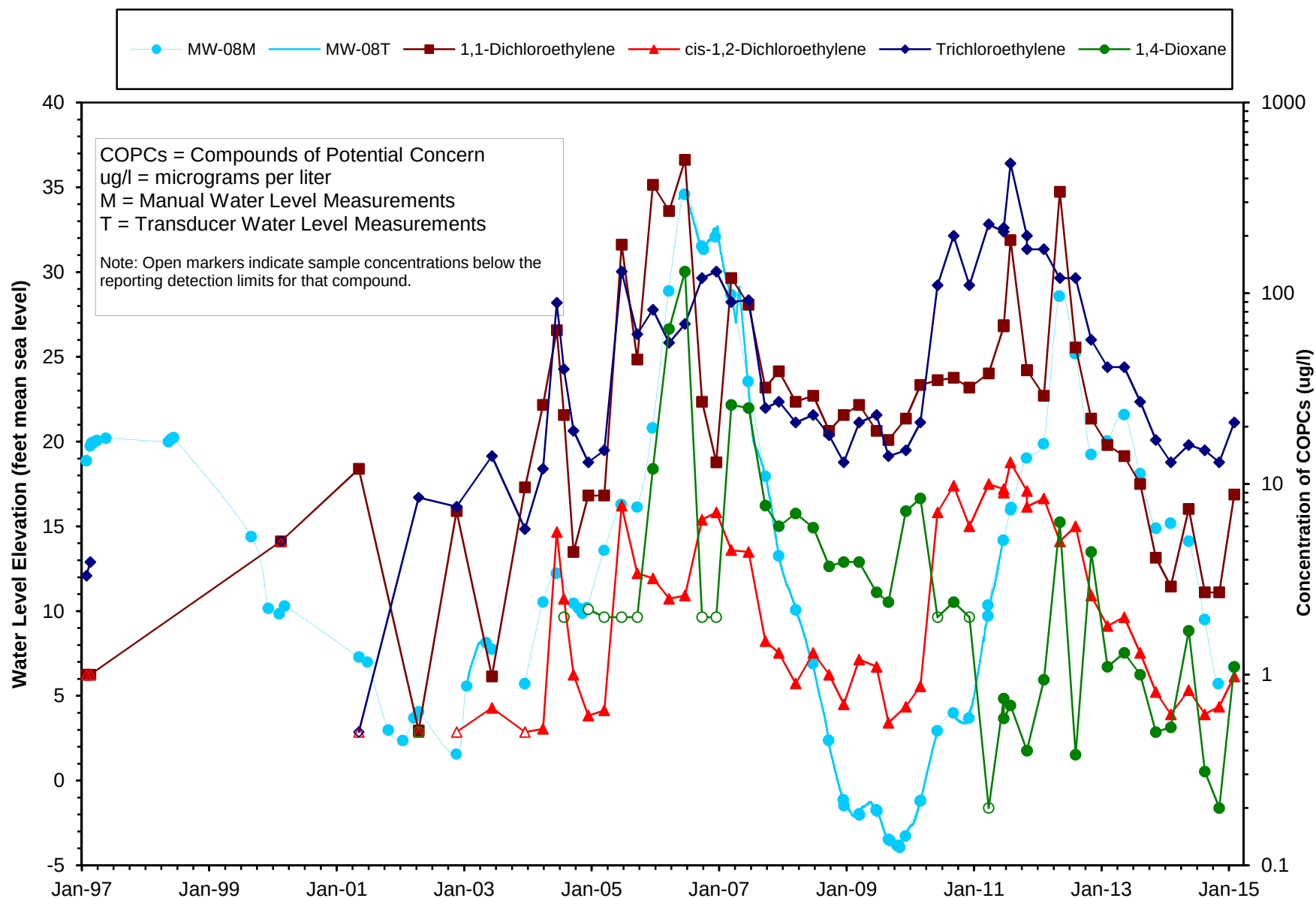


FIGURE 28. WATER LEVEL AND WATER QUALITY, MONITOR WELL MW-08



HARGIS + ASSOCIATES, INC.

APPENDIX A

LABORATORY ANALYTICAL REPORTS

GROUNDWATER ANALYTICAL RESULTS



February 11, 2015

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1500455
Client Reference : RAYTHEON, 532.30

Enclosed are the results for sample(s) received on February 03, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie Rodriguez", with a small initial "ER" to the left.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-020215A	1500455-01	Lab H2O	2/02/15 12:00	2/03/15 17:00
MW-21	1500455-02	Groundwater	2/02/15 13:45	2/03/15 17:00
EW-01	1500455-03	Groundwater	2/02/15 14:10	2/03/15 17:00
EW-0100	1500455-04	Groundwater	2/02/15 14:11	2/03/15 17:00
MW-32A	1500455-05	Groundwater	2/03/15 9:45	2/03/15 17:00
MW-32C	1500455-06	Groundwater	2/03/15 12:00	2/03/15 17:00
MW-32B	1500455-07	Groundwater	2/03/15 13:58	2/03/15 17:00
MW-3200B	1500455-08	Groundwater	2/03/15 14:00	2/03/15 17:00
MW-33	1500455-09	Groundwater	2/03/15 16:20	2/03/15 17:00



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID TB-020215A

Lab ID: 1500455-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,1,1-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,1,2-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,1-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,1-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,1-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,2,3-Trichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,2-Dibromoethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,2-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,2-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,3-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,3-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
1,4-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
2,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
2-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
4-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
4-Isopropyltoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Benzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Bromobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Bromodichloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Bromoform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Bromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Carbon tetrachloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Chlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Chloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Chloroform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Chloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Dibromochloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID TB-020215A

Lab ID: 1500455-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Dichlorodifluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Ethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Hexachlorobutadiene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Isopropylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
m,p-Xylene	ND	1.0	1	B5B0171	02/06/2015	02/06/15 15:24	
Methylene chloride	ND	1.0	1	B5B0171	02/06/2015	02/06/15 15:24	
n-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
n-Propylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Naphthalene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
o-Xylene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
sec-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Styrene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
tert-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Tetrachloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Toluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Trichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Trichlorofluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Vinyl chloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 15:24	
Surrogate: 1,2-Dichloroethane-d4	82.4 %	49 - 148		B5B0171	02/06/2015	02/06/15 15:24	
Surrogate: 4-Bromofluorobenzene	100 %	65 - 132		B5B0171	02/06/2015	02/06/15 15:24	
Surrogate: Dibromofluoromethane	83.0 %	55 - 138		B5B0171	02/06/2015	02/06/15 15:24	
Surrogate: Toluene-d8	79.1 %	60 - 120		B5B0171	02/06/2015	02/06/15 15:24	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-21

Lab ID: 1500455-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,1,1-Trichloroethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,1,2,2-Tetrachloroethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,1,2-Trichloroethane	7.6	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,1-Dichloroethane	17	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,1-Dichloroethene	1100	10	20	B5B0134	02/05/2015	02/05/15 14:24	
1,1-Dichloropropene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,2,3-Trichloropropane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,2,3-Trichlorobenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,2,4-Trichlorobenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,2,4-Trimethylbenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,2-Dibromo-3-chloropropane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,2-Dibromoethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,2-Dichlorobenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,2-Dichloroethane	2.8	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,2-Dichloropropane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,3,5-Trimethylbenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,3-Dichlorobenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,3-Dichloropropane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
1,4-Dichlorobenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
2,2-Dichloropropane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
2-Chlorotoluene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
4-Chlorotoluene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
4-Isopropyltoluene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Benzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Bromobenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Bromodichloromethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Bromoform	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Bromomethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Carbon tetrachloride	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Chlorobenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Chloroethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Chloroform	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Chloromethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
cis-1,2-Dichloroethene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
cis-1,3-Dichloropropene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Dibromochloromethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-21

Lab ID: 1500455-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Dichlorodifluoromethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Ethylbenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Hexachlorobutadiene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Isopropylbenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
m,p-Xylene	ND	4.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Methylene chloride	ND	4.0	4	B5B0134	02/05/2015	02/05/15 18:00	
n-Butylbenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
n-Propylbenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Naphthalene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
o-Xylene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
sec-Butylbenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Styrene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
tert-Butylbenzene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Tetrachloroethene	3.3	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Toluene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
trans-1,2-Dichloroethene	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Trichloroethene	18	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Trichlorofluoromethane	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
Vinyl chloride	ND	2.0	4	B5B0134	02/05/2015	02/05/15 18:00	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>88.4 %</i>	<i>49 - 148</i>		B5B0134	02/05/2015	<i>02/05/15 14:24</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>88.3 %</i>	<i>49 - 148</i>		B5B0134	02/05/2015	<i>02/05/15 18:00</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.5 %</i>	<i>65 - 132</i>		B5B0134	02/05/2015	<i>02/05/15 14:24</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>95.0 %</i>	<i>65 - 132</i>		B5B0134	02/05/2015	<i>02/05/15 18:00</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>89.5 %</i>	<i>55 - 138</i>		B5B0134	02/05/2015	<i>02/05/15 18:00</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>87.9 %</i>	<i>55 - 138</i>		B5B0134	02/05/2015	<i>02/05/15 14:24</i>	
<i>Surrogate: Toluene-d8</i>	<i>82.3 %</i>	<i>60 - 120</i>		B5B0134	02/05/2015	<i>02/05/15 18:00</i>	
<i>Surrogate: Toluene-d8</i>	<i>82.9 %</i>	<i>60 - 120</i>		B5B0134	02/05/2015	<i>02/05/15 14:24</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-21

Lab ID: 1500455-02

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	290	2.0	1	B5B0205	02/09/2015	02/10/15 12:33	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	58.9 %	42 - 106		B5B0205	02/09/2015	02/10/15 12:33	
<i>Surrogate: 2-Fluorobiphenyl</i>	67.5 %	55 - 117		B5B0205	02/09/2015	02/10/15 12:33	
<i>Surrogate: 4-Terphenyl-d14</i>	93.6 %	52 - 142		B5B0205	02/09/2015	02/10/15 12:33	
<i>Surrogate: Nitrobenzene-d5</i>	68.1 %	43 - 116		B5B0205	02/09/2015	02/10/15 12:33	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID EW-01

Lab ID: 1500455-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,1,1-Trichloroethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,1,2,2-Tetrachloroethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,1,2-Trichloroethane	5.7	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,1-Dichloroethane	11	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,1-Dichloroethene	610	25	50	B5B0134	02/05/2015	02/05/15 14:02	
1,1-Dichloropropene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,2,3-Trichloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,2,3-Trichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,2,4-Trichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,2,4-Trimethylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,2-Dibromo-3-chloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,2-Dibromoethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,2-Dichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,2-Dichloroethane	2.4	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,2-Dichloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,3,5-Trimethylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,3-Dichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,3-Dichloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
1,4-Dichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
2,2-Dichloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
2-Chlorotoluene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
4-Chlorotoluene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
4-Isopropyltoluene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Benzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Bromobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Bromodichloromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Bromoform	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Bromomethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Carbon tetrachloride	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Chlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Chloroethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Chloroform	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Chloromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
cis-1,2-Dichloroethene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
cis-1,3-Dichloropropene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Dibromochloromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID EW-01

Lab ID: 1500455-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Dichlorodifluoromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Ethylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Hexachlorobutadiene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Isopropylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
m,p-Xylene	ND	2.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Methylene chloride	ND	2.0	2	B5B0171	02/06/2015	02/06/15 13:00	
n-Butylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
n-Propylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Naphthalene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
o-Xylene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
sec-Butylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Styrene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
tert-Butylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Tetrachloroethene	2.8	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Toluene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
trans-1,2-Dichloroethene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Trichloroethene	2.3	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Trichlorofluoromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
Vinyl chloride	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:00	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>88.5 %</i>	<i>49 - 148</i>		B5B0134	02/05/2015	<i>02/05/15 14:02</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>83.9 %</i>	<i>49 - 148</i>		B5B0171	02/06/2015	<i>02/06/15 13:00</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.0 %</i>	<i>65 - 132</i>		B5B0134	02/05/2015	<i>02/05/15 14:02</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>101 %</i>	<i>65 - 132</i>		B5B0171	02/06/2015	<i>02/06/15 13:00</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>83.9 %</i>	<i>55 - 138</i>		B5B0171	02/06/2015	<i>02/06/15 13:00</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>87.3 %</i>	<i>55 - 138</i>		B5B0134	02/05/2015	<i>02/05/15 14:02</i>	
<i>Surrogate: Toluene-d8</i>	<i>79.5 %</i>	<i>60 - 120</i>		B5B0171	02/06/2015	<i>02/06/15 13:00</i>	
<i>Surrogate: Toluene-d8</i>	<i>82.3 %</i>	<i>60 - 120</i>		B5B0134	02/05/2015	<i>02/05/15 14:02</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID EW-01

Lab ID: 1500455-03

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	340	2.0	1	B5B0205	02/09/2015	02/10/15 12:59	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>58.1 %</i>	<i>42 - 106</i>		B5B0205	02/09/2015	<i>02/10/15 12:59</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>67.1 %</i>	<i>55 - 117</i>		B5B0205	02/09/2015	<i>02/10/15 12:59</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>92.1 %</i>	<i>52 - 142</i>		B5B0205	02/09/2015	<i>02/10/15 12:59</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>68.7 %</i>	<i>43 - 116</i>		B5B0205	02/09/2015	<i>02/10/15 12:59</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID EW-0100

Lab ID: 1500455-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,1,1-Trichloroethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,1,2,2-Tetrachloroethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,1,2-Trichloroethane	5.4	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,1-Dichloroethane	11	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,1-Dichloroethene	670	10	20	B5B0203	02/09/2015	02/09/15 11:39	
1,1-Dichloropropene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,2,3-Trichloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,2,3-Trichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,2,4-Trichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,2,4-Trimethylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,2-Dibromo-3-chloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,2-Dibromoethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,2-Dichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,2-Dichloroethane	2.4	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,2-Dichloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,3,5-Trimethylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,3-Dichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,3-Dichloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
1,4-Dichlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
2,2-Dichloropropane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
2-Chlorotoluene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
4-Chlorotoluene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
4-Isopropyltoluene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Benzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Bromobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Bromodichloromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Bromoform	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Bromomethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Carbon tetrachloride	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Chlorobenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Chloroethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Chloroform	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Chloromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
cis-1,2-Dichloroethene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
cis-1,3-Dichloropropene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Dibromochloromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID EW-0100

Lab ID: 1500455-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Dichlorodifluoromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Ethylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Hexachlorobutadiene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Isopropylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
m,p-Xylene	ND	2.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Methylene chloride	ND	2.0	2	B5B0171	02/06/2015	02/06/15 13:25	
n-Butylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
n-Propylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Naphthalene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
o-Xylene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
sec-Butylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Styrene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
tert-Butylbenzene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Tetrachloroethene	2.8	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Toluene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
trans-1,2-Dichloroethene	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Trichloroethene	2.3	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Trichlorofluoromethane	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
Vinyl chloride	ND	1.0	2	B5B0171	02/06/2015	02/06/15 13:25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>94.8 %</i>	<i>49 - 148</i>		B5B0203	02/09/2015	<i>02/09/15 11:39</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>82.0 %</i>	<i>49 - 148</i>		B5B0171	02/06/2015	<i>02/06/15 13:25</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>88.0 %</i>	<i>65 - 132</i>		B5B0203	02/09/2015	<i>02/09/15 11:39</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>97.4 %</i>	<i>65 - 132</i>		B5B0171	02/06/2015	<i>02/06/15 13:25</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>81.2 %</i>	<i>55 - 138</i>		B5B0171	02/06/2015	<i>02/06/15 13:25</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>91.5 %</i>	<i>55 - 138</i>		B5B0203	02/09/2015	<i>02/09/15 11:39</i>	
<i>Surrogate: Toluene-d8</i>	<i>76.7 %</i>	<i>60 - 120</i>		B5B0171	02/06/2015	<i>02/06/15 13:25</i>	
<i>Surrogate: Toluene-d8</i>	<i>84.3 %</i>	<i>60 - 120</i>		B5B0203	02/09/2015	<i>02/09/15 11:39</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID EW-0100

Lab ID: 1500455-04

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	350	2.0	1	B5B0205	02/09/2015	02/10/15 13:53	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>58.8 %</i>	<i>42 - 106</i>		B5B0205	02/09/2015	<i>02/10/15 13:53</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>67.1 %</i>	<i>55 - 117</i>		B5B0205	02/09/2015	<i>02/10/15 13:53</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>94.9 %</i>	<i>52 - 142</i>		B5B0205	02/09/2015	<i>02/10/15 13:53</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>70.0 %</i>	<i>43 - 116</i>		B5B0205	02/09/2015	<i>02/10/15 13:53</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-32A

Lab ID: 1500455-05

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,1,1-Trichloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,1,2-Trichloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,1-Dichloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,1-Dichloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,1-Dichloropropene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,2,3-Trichloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,2-Dibromoethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,2-Dichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,2-Dichloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,2-Dichloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,3-Dichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,3-Dichloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
1,4-Dichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
2,2-Dichloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
2-Chlorotoluene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
4-Chlorotoluene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
4-Isopropyltoluene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Benzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Bromobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Bromodichloromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Bromoform	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Bromomethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Carbon tetrachloride	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Chlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Chloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Chloroform	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Chloromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Dibromochloromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-32A

Lab ID: 1500455-05

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Dichlorodifluoromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Ethylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Hexachlorobutadiene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Isopropylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
m,p-Xylene	ND	1.0	1	B5B0134	02/05/2015	02/05/15 17:08	
Methylene chloride	ND	1.0	1	B5B0134	02/05/2015	02/05/15 17:08	
n-Butylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
n-Propylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Naphthalene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
o-Xylene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
sec-Butylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Styrene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
tert-Butylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Tetrachloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Toluene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Trichloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Trichlorofluoromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Vinyl chloride	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:08	
Surrogate: 1,2-Dichloroethane-d4	89.2 %	49 - 148		B5B0134	02/05/2015	02/05/15 17:08	
Surrogate: 4-Bromofluorobenzene	94.8 %	65 - 132		B5B0134	02/05/2015	02/05/15 17:08	
Surrogate: Dibromofluoromethane	88.2 %	55 - 138		B5B0134	02/05/2015	02/05/15 17:08	
Surrogate: Toluene-d8	82.7 %	60 - 120		B5B0134	02/05/2015	02/05/15 17:08	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-32A

Lab ID: 1500455-05

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/06/15 14:48	
Surrogate: 1,2-Dichlorobenzene-d4	70.9 %	47 - 117		B5B0184	02/06/2015	02/06/15 14:48	
Surrogate: 2-Fluorobiphenyl	76.9 %	48 - 121		B5B0184	02/06/2015	02/06/15 14:48	
Surrogate: 4-Terphenyl-d14	84.5 %	58 - 142		B5B0184	02/06/2015	02/06/15 14:48	
Surrogate: Nitrobenzene-d5	72.2 %	27 - 151		B5B0184	02/06/2015	02/06/15 14:48	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-32C

Lab ID: 1500455-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,1,1-Trichloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,1,2-Trichloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,1-Dichloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,1-Dichloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,1-Dichloropropene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,2,3-Trichloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,2-Dibromoethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,2-Dichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,2-Dichloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,2-Dichloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,3-Dichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,3-Dichloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
1,4-Dichlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
2,2-Dichloropropane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
2-Chlorotoluene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
4-Chlorotoluene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
4-Isopropyltoluene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Benzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Bromobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Bromodichloromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Bromoform	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Bromomethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Carbon tetrachloride	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Chlorobenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Chloroethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Chloroform	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Chloromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Dibromochloromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-32C

Lab ID: 1500455-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Dichlorodifluoromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Ethylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Hexachlorobutadiene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Isopropylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
m,p-Xylene	ND	1.0	1	B5B0134	02/05/2015	02/05/15 17:34	
Methylene chloride	ND	1.0	1	B5B0134	02/05/2015	02/05/15 17:34	
n-Butylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
n-Propylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Naphthalene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
o-Xylene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
sec-Butylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Styrene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
tert-Butylbenzene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Tetrachloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Toluene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Trichloroethene	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Trichlorofluoromethane	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Vinyl chloride	ND	0.50	1	B5B0134	02/05/2015	02/05/15 17:34	
Surrogate: 1,2-Dichloroethane-d4	89.8 %	49 - 148		B5B0134	02/05/2015	02/05/15 17:34	
Surrogate: 4-Bromofluorobenzene	97.4 %	65 - 132		B5B0134	02/05/2015	02/05/15 17:34	
Surrogate: Dibromofluoromethane	90.4 %	55 - 138		B5B0134	02/05/2015	02/05/15 17:34	
Surrogate: Toluene-d8	83.8 %	60 - 120		B5B0134	02/05/2015	02/05/15 17:34	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-32C

Lab ID: 1500455-06

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/06/15 15:15	
Surrogate: 1,2-Dichlorobenzene-d4	64.9 %	47 - 117		B5B0184	02/06/2015	02/06/15 15:15	
Surrogate: 2-Fluorobiphenyl	71.8 %	48 - 121		B5B0184	02/06/2015	02/06/15 15:15	
Surrogate: 4-Terphenyl-d14	69.8 %	58 - 142		B5B0184	02/06/2015	02/06/15 15:15	
Surrogate: Nitrobenzene-d5	69.0 %	27 - 151		B5B0184	02/06/2015	02/06/15 15:15	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-32B

Lab ID: 1500455-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,1,1-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,1,2-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,1-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,1-Dichloroethene	43	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,1-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,2,3-Trichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,2-Dibromoethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,2-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,2-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,3-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,3-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
1,4-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
2,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
2-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
4-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
4-Isopropyltoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Benzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Bromobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Bromodichloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Bromoform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Bromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Carbon tetrachloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Chlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Chloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Chloroform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Chloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
cis-1,2-Dichloroethene	2.1	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Dibromochloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-32B

Lab ID: 1500455-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Dichlorodifluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Ethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Hexachlorobutadiene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Isopropylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
m,p-Xylene	ND	1.0	1	B5B0171	02/06/2015	02/06/15 14:14	
Methylene chloride	ND	1.0	1	B5B0171	02/06/2015	02/06/15 14:14	
n-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
n-Propylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Naphthalene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
o-Xylene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
sec-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Styrene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
tert-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Tetrachloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Toluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Trichloroethene	26	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Trichlorofluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
Vinyl chloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:14	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>83.7 %</i>	<i>49 - 148</i>		B5B0171	02/06/2015	<i>02/06/15 14:14</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>99.0 %</i>	<i>65 - 132</i>		B5B0171	02/06/2015	<i>02/06/15 14:14</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>83.3 %</i>	<i>55 - 138</i>		B5B0171	02/06/2015	<i>02/06/15 14:14</i>	
<i>Surrogate: Toluene-d8</i>	<i>76.6 %</i>	<i>60 - 120</i>		B5B0171	02/06/2015	<i>02/06/15 14:14</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-32B

Lab ID: 1500455-07

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	1.8	0.20	1	B5B0184	02/06/2015	02/06/15 15:42	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>64.7 %</i>	<i>47 - 117</i>		B5B0184	02/06/2015	<i>02/06/15 15:42</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>72.3 %</i>	<i>48 - 121</i>		B5B0184	02/06/2015	<i>02/06/15 15:42</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>75.8 %</i>	<i>58 - 142</i>		B5B0184	02/06/2015	<i>02/06/15 15:42</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>69.1 %</i>	<i>27 - 151</i>		B5B0184	02/06/2015	<i>02/06/15 15:42</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-3200B

Lab ID: 1500455-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,1,1-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,1,2-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,1-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,1-Dichloroethene	40	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,1-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,2,3-Trichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,2-Dibromoethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,2-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,2-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,3-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,3-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
1,4-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
2,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
2-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
4-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
4-Isopropyltoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Benzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Bromobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Bromodichloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Bromoform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Bromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Carbon tetrachloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Chlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Chloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Chloroform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Chloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
cis-1,2-Dichloroethene	1.9	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Dibromochloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-3200B

Lab ID: 1500455-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Dichlorodifluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Ethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Hexachlorobutadiene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Isopropylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
m,p-Xylene	ND	1.0	1	B5B0171	02/06/2015	02/06/15 14:36	
Methylene chloride	ND	1.0	1	B5B0171	02/06/2015	02/06/15 14:36	
n-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
n-Propylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Naphthalene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
o-Xylene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
sec-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Styrene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
tert-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Tetrachloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Toluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Trichloroethene	25	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Trichlorofluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
Vinyl chloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 14:36	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>83.9 %</i>	<i>49 - 148</i>		B5B0171	02/06/2015	<i>02/06/15 14:36</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>99.8 %</i>	<i>65 - 132</i>		B5B0171	02/06/2015	<i>02/06/15 14:36</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>83.0 %</i>	<i>55 - 138</i>		B5B0171	02/06/2015	<i>02/06/15 14:36</i>	
<i>Surrogate: Toluene-d8</i>	<i>78.3 %</i>	<i>60 - 120</i>		B5B0171	02/06/2015	<i>02/06/15 14:36</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-3200B

Lab ID: 1500455-08

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	1.8	0.20	1	B5B0184	02/06/2015	02/06/15 16:09	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>69.3 %</i>	<i>47 - 117</i>		B5B0184	02/06/2015	<i>02/06/15 16:09</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>75.0 %</i>	<i>48 - 121</i>		B5B0184	02/06/2015	<i>02/06/15 16:09</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>77.0 %</i>	<i>58 - 142</i>		B5B0184	02/06/2015	<i>02/06/15 16:09</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>73.8 %</i>	<i>27 - 151</i>		B5B0184	02/06/2015	<i>02/06/15 16:09</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-33

Lab ID: 1500455-09

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,1,1-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,1,2-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,1-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,1-Dichloroethene	10	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,1-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,2,3-Trichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,2-Dibromoethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,2-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,2-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,3-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,3-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
1,4-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
2,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
2-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
4-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
4-Isopropyltoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Benzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Bromobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Bromodichloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Bromoform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Bromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Carbon tetrachloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Chlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Chloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Chloroform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Chloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Dibromochloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-33

Lab ID: 1500455-09

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Dichlorodifluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Ethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Hexachlorobutadiene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Isopropylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
m,p-Xylene	ND	1.0	1	B5B0171	02/06/2015	02/06/15 10:19	
Methylene chloride	ND	1.0	1	B5B0171	02/06/2015	02/06/15 10:19	
n-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
n-Propylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Naphthalene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
o-Xylene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
sec-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Styrene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
tert-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Tetrachloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Toluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Trichloroethene	2.0	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Trichlorofluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
Vinyl chloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:19	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>78.9 %</i>	<i>49 - 148</i>		B5B0171	02/06/2015	<i>02/06/15 10:19</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>99.1 %</i>	<i>65 - 132</i>		B5B0171	02/06/2015	<i>02/06/15 10:19</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>82.0 %</i>	<i>55 - 138</i>		B5B0171	02/06/2015	<i>02/06/15 10:19</i>	
<i>Surrogate: Toluene-d8</i>	<i>78.9 %</i>	<i>60 - 120</i>		B5B0171	02/06/2015	<i>02/06/15 10:19</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-33

Lab ID: 1500455-09

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/06/15 16:36	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>69.5 %</i>	<i>47 - 117</i>		B5B0184	02/06/2015	<i>02/06/15 16:36</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>75.8 %</i>	<i>48 - 121</i>		B5B0184	02/06/2015	<i>02/06/15 16:36</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>80.1 %</i>	<i>58 - 142</i>		B5B0184	02/06/2015	<i>02/06/15 16:36</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>72.9 %</i>	<i>27 - 151</i>		B5B0184	02/06/2015	<i>02/06/15 16:36</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0134 - MSVOA_LL_W

Blank (B5B0134-BLK1)

Prepared: 2/5/2015 Analyzed: 2/5/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR
1,1,1-Trichloroethane	ND	0.50			NR
1,1,2,2-Tetrachloroethane	ND	0.50			NR
1,1,2-Trichloroethane	ND	0.50			NR
1,1-Dichloroethane	ND	0.50			NR
1,1-Dichloroethene	ND	0.50			NR
1,1-Dichloropropene	ND	0.50			NR
1,2,3-Trichloropropane	ND	0.50			NR
1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes

Batch B5B0134 - MSVOA_LL_W (continued)

Blank (B5B0134-BLK1) - Continued

Prepared: 2/5/2015 Analyzed: 2/5/2015

Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	22.98		25.0000		91.9	49 - 148			
Surrogate: 4-Bromofluorobenzene	24.81		25.0000		99.2	65 - 132			
Surrogate: Dibromofluoromethane	23.32		25.0000		93.3	55 - 138			
Surrogate: Toluene-d8	22.45		25.0000		89.8	60 - 120			

LCS (B5B0134-BS1)

Prepared: 2/5/2015 Analyzed: 2/5/2015

1,1-Dichloroethene	17.4600	0.50	20.0000		87.3	61 - 136			
Benzene	37.5700	0.50	40.0000		93.9	72 - 127			
Chlorobenzene	19.2100	0.50	20.0000		96.0	78 - 125			
MTBE	18.7300	0.50	20.0000		93.6	60 - 132			
Toluene	38.9300	0.50	40.0000		97.3	59 - 140			
Trichloroethene	18.5200	0.50	20.0000		92.6	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	21.47		25.0000		85.9	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.33		25.0000		93.3	65 - 132			
Surrogate: Dibromofluoromethane	21.27		25.0000		85.1	55 - 138			
Surrogate: Toluene-d8	21.68		25.0000		86.7	60 - 120			

LCS Dup (B5B0134-BSD1)

Prepared: 2/5/2015 Analyzed: 2/5/2015

1,1-Dichloroethene	17.7200	0.50	20.0000		88.6	61 - 136	1.48	20	
Benzene	39.3900	0.50	40.0000		98.5	72 - 127	4.73	20	
Chlorobenzene	20.5300	0.50	20.0000		103	78 - 125	6.64	20	
MTBE	19.9700	0.50	20.0000		99.8	60 - 132	6.41	20	
Toluene	41.0200	0.50	40.0000		103	59 - 140	5.23	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0134 - MSVOA_LL_W (continued)

LCS Dup (B5B0134-BSD1) - Continued

Prepared: 2/5/2015 Analyzed: 2/5/2015

Trichloroethene	19.9100	0.50	20.0000		99.6	67 - 130	7.23	20	
Surrogate: 1,2-Dichloroethane-d4	20.91		25.0000		83.6	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.99		25.0000		92.0	65 - 132			
Surrogate: Dibromofluoromethane	21.19		25.0000		84.8	55 - 138			
Surrogate: Toluene-d8	21.83		25.0000		87.3	60 - 120			

Duplicate (B5B0134-DUP1)

Source: 1500438-04

Prepared: 2/5/2015 Analyzed: 2/5/2015

1,1-Dichloroethene	ND	0.50		ND	NR			20	
Benzene	56.9000	0.50		53.6800	NR		5.82	20	
Chlorobenzene	ND	0.50		ND	NR			20	
MTBE	ND	0.50		ND	NR			20	
Toluene	ND	0.50		ND	NR			20	
Trichloroethene	0.420000	0.50		0.380000	NR		10.0	20	
Surrogate: 1,2-Dichloroethane-d4	22.11		25.0000		88.4	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.46		25.0000		93.8	65 - 132			
Surrogate: Dibromofluoromethane	21.84		25.0000		87.4	55 - 138			
Surrogate: Toluene-d8	20.74		25.0000		83.0	60 - 120			

Matrix Spike (B5B0134-MS1)

Source: 1500455-02

Prepared: 2/5/2015 Analyzed: 2/5/2015

1,1-Dichloroethene	72.3500	0.50	20.0000	1087.00	-5070	61 - 136			M3
Benzene	42.8800	0.50	40.0000	ND	107	72 - 127			
Chlorobenzene	21.1900	0.50	20.0000	ND	106	78 - 125			
MTBE	19.3900	0.50	20.0000	ND	97.0	60 - 132			
Toluene	44.5000	0.50	40.0000	ND	111	59 - 140			
Trichloroethene	22.3400	0.50	20.0000	18.8000	17.7	67 - 130			M3
Surrogate: 1,2-Dichloroethane-d4	21.54		25.0000		86.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	24.17		25.0000		96.7	65 - 132			
Surrogate: Dibromofluoromethane	21.90		25.0000		87.6	55 - 138			
Surrogate: Toluene-d8	21.77		25.0000		87.1	60 - 120			

Matrix Spike Dup (B5B0134-MSD1)

Source: 1500455-02

Prepared: 2/5/2015 Analyzed: 2/5/2015

1,1-Dichloroethene	71.4200	0.50	20.0000	1087.00	-5080	61 - 136	1.29	20	M3
Benzene	40.2900	0.50	40.0000	ND	101	72 - 127	6.23	20	
Chlorobenzene	19.8200	0.50	20.0000	ND	99.1	78 - 125	6.68	20	
MTBE	18.2400	0.50	20.0000	ND	91.2	60 - 132	6.11	20	
Toluene	41.4200	0.50	40.0000	ND	104	59 - 140	7.17	20	
Trichloroethene	21.2700	0.50	20.0000	18.8000	12.4	67 - 130	4.91	20	M3
Surrogate: 1,2-Dichloroethane-d4	21.29		25.0000		85.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.47		25.0000		93.9	65 - 132			
Surrogate: Dibromofluoromethane	21.15		25.0000		84.6	55 - 138			
Surrogate: Toluene-d8	21.38		25.0000		85.5	60 - 120			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0171 - MSVOA_LL_W

Blank (B5B0171-BLK1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR
1,1,1-Trichloroethane	ND	0.50			NR
1,1,2,2-Tetrachloroethane	ND	0.50			NR
1,1,2-Trichloroethane	ND	0.50			NR
1,1-Dichloroethane	ND	0.50			NR
1,1-Dichloroethene	ND	0.50			NR
1,1-Dichloropropene	ND	0.50			NR
1,2,3-Trichloropropane	ND	0.50			NR
1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR
Ethylbenzene	ND	0.50			NR
Hexachlorobutadiene	ND	0.50			NR
Isopropylbenzene	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0171 - MSVOA_LL_W (continued)

Blank (B5B0171-BLK1) - Continued

Prepared: 2/6/2015 Analyzed: 2/6/2015

m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				

Surrogate: 1,2-Dichloroethane-d4	20.62		25.0000		82.5	49 - 148			
Surrogate: 4-Bromofluorobenzene	25.97		25.0000		104	65 - 132			
Surrogate: Dibromofluoromethane	21.22		25.0000		84.9	55 - 138			
Surrogate: Toluene-d8	21.02		25.0000		84.1	60 - 120			

LCS (B5B0171-BS1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,1-Dichloroethene	18.3200	0.50	20.0000		91.6	61 - 136			
Benzene	36.3900	0.50	40.0000		91.0	72 - 127			
Chlorobenzene	18.2700	0.50	20.0000		91.4	78 - 125			
MTBE	17.1400	0.50	20.0000		85.7	60 - 132			
Toluene	37.5200	0.50	40.0000		93.8	59 - 140			
Trichloroethene	18.3800	0.50	20.0000		91.9	67 - 130			

Surrogate: 1,2-Dichloroethane-d4	19.43		25.0000		77.7	49 - 148			
Surrogate: 4-Bromofluorobenzene	24.78		25.0000		99.1	65 - 132			
Surrogate: Dibromofluoromethane	19.88		25.0000		79.5	55 - 138			
Surrogate: Toluene-d8	20.63		25.0000		82.5	60 - 120			

LCS Dup (B5B0171-BS1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,1-Dichloroethene	20.1500	0.50	20.0000		101	61 - 136	9.51	20	
Benzene	39.1800	0.50	40.0000		98.0	72 - 127	7.38	20	
Chlorobenzene	20.1000	0.50	20.0000		100	78 - 125	9.54	20	
MTBE	18.0300	0.50	20.0000		90.2	60 - 132	5.06	20	
Toluene	40.9700	0.50	40.0000		102	59 - 140	8.79	20	
Trichloroethene	20.1200	0.50	20.0000		101	67 - 130	9.04	20	

Surrogate: 1,2-Dichloroethane-d4	18.69		25.0000		74.8	49 - 148			
Surrogate: 4-Bromofluorobenzene	24.06		25.0000		96.2	65 - 132			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0171 - MSVOA_LL_W (continued)

LCS Dup (B5B0171-BSD1) - Continued

Prepared: 2/6/2015 Analyzed: 2/6/2015

Surrogate: Dibromofluoromethane	19.30		25.0000		77.2	55 - 138			
Surrogate: Toluene-d8	20.26		25.0000		81.0	60 - 120			

Batch B5B0203 - MSVOA_LL_W

Blank (B5B0203-BLK1)

Prepared: 2/9/2015 Analyzed: 2/9/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,2-Dichloroethene	ND	0.50			NR				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0203 - MSVOA_LL_W (continued)

Blank (B5B0203-BLK1) - Continued

Prepared: 2/9/2015 Analyzed: 2/9/2015

cis-1,3-Dichloropropene	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				

Surrogate: 1,2-Dichloroethane-d4	23.80		25.0000		95.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.61		25.0000		94.4	65 - 132			
Surrogate: Dibromofluoromethane	23.60		25.0000		94.4	55 - 138			
Surrogate: Toluene-d8	22.62		25.0000		90.5	60 - 120			

LCS (B5B0203-BS1)

Prepared: 2/9/2015 Analyzed: 2/9/2015

1,1-Dichloroethene	17.4200	0.50	20.0000		87.1	61 - 136			
Benzene	38.2700	0.50	40.0000		95.7	72 - 127			
Chlorobenzene	19.3500	0.50	20.0000		96.8	78 - 125			
MTBE	17.6800	0.50	20.0000		88.4	60 - 132			
Toluene	38.7200	0.50	40.0000		96.8	59 - 140			
Trichloroethene	18.6900	0.50	20.0000		93.4	67 - 130			

Surrogate: 1,2-Dichloroethane-d4	23.51		25.0000		94.0	49 - 148			
Surrogate: 4-Bromofluorobenzene	21.86		25.0000		87.4	65 - 132			
Surrogate: Dibromofluoromethane	23.16		25.0000		92.6	55 - 138			
Surrogate: Toluene-d8	22.61		25.0000		90.4	60 - 120			

LCS Dup (B5B0203-BSD1)

Prepared: 2/9/2015 Analyzed: 2/9/2015

1,1-Dichloroethene	17.7200	0.50	20.0000		88.6	61 - 136	1.71	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0203 - MSVOA_LL_W (continued)

LCS Dup (B5B0203-BSD1) - Continued

Prepared: 2/9/2015 Analyzed: 2/9/2015

Benzene	38.3800	0.50	40.0000		96.0	72 - 127	0.287	20	
Chlorobenzene	19.4500	0.50	20.0000		97.2	78 - 125	0.515	20	
MTBE	18.4900	0.50	20.0000		92.4	60 - 132	4.48	20	
Toluene	39.5400	0.50	40.0000		98.8	59 - 140	2.10	20	
Trichloroethene	18.8600	0.50	20.0000		94.3	67 - 130	0.905	20	
Surrogate: 1,2-Dichloroethane-d4	23.83		25.0000		95.3	49 - 148			
Surrogate: 4-Bromofluorobenzene	21.83		25.0000		87.3	65 - 132			
Surrogate: Dibromofluoromethane	22.81		25.0000		91.2	55 - 138			
Surrogate: Toluene-d8	22.38		25.0000		89.5	60 - 120			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0205 - MSSEMI_W

Blank (B5B0205-BLK1)

Prepared: 2/9/2015 Analyzed: 2/11/2015

1,4-Dioxane	ND	2.0			NR				
Surrogate: 1,2-Dichlorobenzene-d4	67.86		100.000		67.9	42 - 106			
Surrogate: 2-Fluorobiphenyl	77.01		100.000		77.0	55 - 117			
Surrogate: 4-Terphenyl-d14	92.18		100.000		92.2	52 - 142			
Surrogate: Nitrobenzene-d5	82.82		100.000		82.8	43 - 116			

LCS (B5B0205-BS1)

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	106.620	2.0	100.000		107	62 - 127			
Surrogate: 1,2-Dichlorobenzene-d4	57.26		100.000		57.3	42 - 106			
Surrogate: 2-Fluorobiphenyl	69.70		100.000		69.7	55 - 117			
Surrogate: 4-Terphenyl-d14	91.00		100.000		91.0	52 - 142			
Surrogate: Nitrobenzene-d5	68.61		100.000		68.6	43 - 116			

Matrix Spike (B5B0205-MS1)

Source: 1500455-02

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	417.340	2.0	100.000	286.610	131	62 - 127			M3
Surrogate: 1,2-Dichlorobenzene-d4	59.34		100.000		59.3	42 - 106			
Surrogate: 2-Fluorobiphenyl	69.64		100.000		69.6	55 - 117			
Surrogate: 4-Terphenyl-d14	85.16		100.000		85.2	52 - 142			
Surrogate: Nitrobenzene-d5	70.61		100.000		70.6	43 - 116			

Matrix Spike (B5B0205-MS2)

Source: 1500488-05

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	119.190	2.0	100.000	11.2900	108	62 - 127			
Surrogate: 1,2-Dichlorobenzene-d4	53.23		100.000		53.2	42 - 106			
Surrogate: 2-Fluorobiphenyl	62.63		100.000		62.6	55 - 117			
Surrogate: 4-Terphenyl-d14	75.09		100.000		75.1	52 - 142			
Surrogate: Nitrobenzene-d5	62.22		100.000		62.2	43 - 116			

Matrix Spike Dup (B5B0205-MSD1)

Source: 1500455-02

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	421.080	2.0	100.000	286.610	134	62 - 127	0.892	20	M3
Surrogate: 1,2-Dichlorobenzene-d4	61.83		100.000		61.8	42 - 106			
Surrogate: 2-Fluorobiphenyl	70.89		100.000		70.9	55 - 117			
Surrogate: 4-Terphenyl-d14	91.46		100.000		91.5	52 - 142			
Surrogate: Nitrobenzene-d5	71.56		100.000		71.6	43 - 116			

Matrix Spike Dup (B5B0205-MSD2)

Source: 1500488-05

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	116.190	2.0	100.000	11.2900	105	62 - 127	2.55	20	
Surrogate: 1,2-Dichlorobenzene-d4	57.80		100.000		57.8	42 - 106			
Surrogate: 2-Fluorobiphenyl	66.46		100.000		66.5	55 - 117			
Surrogate: 4-Terphenyl-d14	72.69		100.000		72.7	52 - 142			
Surrogate: Nitrobenzene-d5	66.82		100.000		66.8	43 - 116			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0184 - MSSEMI_W

Blank (B5B0184-BLK1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	ND	0.20		NR					
Surrogate: 1,2-Dichlorobenzene-d4	0.6167		1.00000	61.7	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7011		1.00000	70.1	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7650		1.00000	76.5	58 - 142				
Surrogate: Nitrobenzene-d5	0.6336		1.00000	63.4	27 - 151				

LCS (B5B0184-BS1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.18383	0.20	1.00000	118	58 - 151				
Surrogate: 1,2-Dichlorobenzene-d4	0.6304		1.00000	63.0	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7043		1.00000	70.4	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7422		1.00000	74.2	58 - 142				
Surrogate: Nitrobenzene-d5	0.6208		1.00000	62.1	27 - 151				

Matrix Spike (B5B0184-MS1)

Source: 1500474-02

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.20006	0.20	1.00000	ND	120	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.6005		1.00000	60.0	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.6642		1.00000	66.4	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7344		1.00000	73.4	58 - 142				
Surrogate: Nitrobenzene-d5	0.6064		1.00000	60.6	27 - 151				

Matrix Spike Dup (B5B0184-MSD1)

Source: 1500474-02

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.22465	0.20	1.00000	ND	122	58 - 151	2.03	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.6821		1.00000	68.2	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7630		1.00000	76.3	48 - 121				
Surrogate: 4-Terphenyl-d14	0.8142		1.00000	81.4	58 - 142				
Surrogate: Nitrobenzene-d5	0.6718		1.00000	67.2	27 - 151				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Notes and Definitions

M3	Matrix spike recovery outside of acceptance limit due to disproportionate concentration of the analyte to spike level. The analytical batch was validated by the laboratory control sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 2/2/15 PAGE 1 OF 2

PROJECT NAME RAYTHEON		PROJECT No./TASK No. 532.30		SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION							
PROJECT MANAGER STEVE NETTO		Phone No. 858-455-6500										ATL							
QA MANAGER		Fax No. 858-455-6533										Attn: Rachelle Arada							
SAMPLER (SIGNATURE) 		SAMPLER (PRINTED) Tyler Evans, Arielle Fisher Erin Hunter																	
LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX		PRESERVATION		40 ml VOA	1 L Amber	VOCs 8260B	1,4-Dioxane 8270 MOD	1,4-Dioxane 8270 SIM	0-10	10-100	100-1,000	1,000-10,000	>10,000	STANDARD TAT	REMARKS
		Date	Time	Soil	Ground water	Surface water	Lab #												
	TB-020215A	2/2/2015	1200					X											
	MW-21		1345	X				X											
	MW-21		1345	X					3		X			X					
	EW-01		1410	X					3		X				X				
	EW-01		1410	X					1		X				X				
	EW-0100		1411	X					3		X				X				
	EW-0100		1411	X					1		X				X				
	MW-32A	2/3/2015	945	X					3		X			X					
	MW-32A		945	X					1			X		X					
	MW-32C		1200	X					3		X			X					
	MW-32C		1200	X					1			X		X					
	MW-32B		1358	X					3		X				X				
	MW-32B		1358	X					1			X		X					
	MW-3200B		1400	X					3		X				X				
Total number of Containers per analysis:								21	8									Total No. of Containers:	
Relinquished by: 		Date 2/3/15	Received by: 		Date 2/3/15	INSTRUCTIONS												Shipment Method: courier	
Company HHA		Time 1700	Company ATL		Time 1700	- Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness. - Complete in ballpoint pen. Draw one line through errors, initial and date correction. - Indicate number of sample containers in analysis request space; indicate choice with ✓ or x. - Note applicable preservatives, special instructions, and deviations from typical environmental samples. - Consult project QA documents for specific instructions.												Send Results to: STEVE NETTO	
Relinquished by: 		Date 2/3/15	Received by: 		Date 2/3/15	Sample Receipt: ☐ No. of containers correct ☒ Temp. @ receipt <u>4.4</u> °C ☐ custody seals secure ☒ received good condition/cold ☐ conforms to COC document												☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500 ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 209 MESA, AZ 85204 (480) 345-0888 ☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300	
Company ATL		Time 1759	Company ATL		Time 1759													Send invoice to San Diego, CA Attn: Accounts Payable	



DATE 2/2/2015 PAGE 2 OF 2

[illegible]



February 11, 2015

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1500456
Client Reference : RAYTHEON, 532.30

Enclosed are the results for sample(s) received on February 03, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "E Rodriguez", is placed above the printed name.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-18	1500456-01	Groundwater	2/03/15 8:30	2/03/15 17:00
MW-13	1500456-02	Groundwater	2/03/15 9:12	2/03/15 17:00
MW-40	1500456-03	Groundwater	2/03/15 10:40	2/03/15 17:00
MW-20	1500456-04	Groundwater	2/03/15 14:40	2/03/15 17:00



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-18

Lab ID: 1500456-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,1,1-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,1,2-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,1-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,1-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,1-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,2,3-Trichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,2-Dibromoethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,2-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,2-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,3-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,3-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
1,4-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
2,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
2-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
4-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
4-Isopropyltoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Benzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Bromobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Bromodichloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Bromoform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Bromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Carbon tetrachloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Chlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Chloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Chloroform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Chloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Dibromochloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-18

Lab ID: 1500456-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Dichlorodifluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Ethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Hexachlorobutadiene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Isopropylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
m,p-Xylene	ND	1.0	1	B5B0171	02/06/2015	02/06/15 10:41	
Methylene chloride	ND	1.0	1	B5B0171	02/06/2015	02/06/15 10:41	
n-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
n-Propylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Naphthalene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
o-Xylene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
sec-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Styrene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
tert-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Tetrachloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Toluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Trichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Trichlorofluoromethane	3.3	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
Vinyl chloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 10:41	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>80.3 %</i>	<i>49 - 148</i>		B5B0171	02/06/2015	<i>02/06/15 10:41</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>99.2 %</i>	<i>65 - 132</i>		B5B0171	02/06/2015	<i>02/06/15 10:41</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>82.4 %</i>	<i>55 - 138</i>		B5B0171	02/06/2015	<i>02/06/15 10:41</i>	
<i>Surrogate: Toluene-d8</i>	<i>80.2 %</i>	<i>60 - 120</i>		B5B0171	02/06/2015	<i>02/06/15 10:41</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-18

Lab ID: 1500456-01

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/06/15 17:03	
Surrogate: 1,2-Dichlorobenzene-d4	64.8 %	47 - 117		B5B0184	02/06/2015	02/06/15 17:03	
Surrogate: 2-Fluorobiphenyl	72.0 %	48 - 121		B5B0184	02/06/2015	02/06/15 17:03	
Surrogate: 4-Terphenyl-d14	81.7 %	58 - 142		B5B0184	02/06/2015	02/06/15 17:03	
Surrogate: Nitrobenzene-d5	67.8 %	27 - 151		B5B0184	02/06/2015	02/06/15 17:03	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-13

Lab ID: 1500456-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,1,1-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,1,2-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,1-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,1-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,1-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,2,3-Trichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,2-Dibromoethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,2-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,2-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,3-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,3-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
1,4-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
2,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
2-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
4-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
4-Isopropyltoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Benzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Bromobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Bromodichloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Bromoform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Bromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Carbon tetrachloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Chlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Chloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Chloroform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Chloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Dibromochloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-13

Lab ID: 1500456-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Dichlorodifluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Ethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Hexachlorobutadiene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Isopropylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
m,p-Xylene	ND	1.0	1	B5B0171	02/06/2015	02/06/15 11:04	
Methylene chloride	ND	1.0	1	B5B0171	02/06/2015	02/06/15 11:04	
n-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
n-Propylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Naphthalene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
o-Xylene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
sec-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Styrene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
tert-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Tetrachloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Toluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Trichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Trichlorofluoromethane	3.0	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
Vinyl chloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:04	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>80.5 %</i>	<i>49 - 148</i>		B5B0171	02/06/2015	<i>02/06/15 11:04</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>99.8 %</i>	<i>65 - 132</i>		B5B0171	02/06/2015	<i>02/06/15 11:04</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>81.9 %</i>	<i>55 - 138</i>		B5B0171	02/06/2015	<i>02/06/15 11:04</i>	
<i>Surrogate: Toluene-d8</i>	<i>79.7 %</i>	<i>60 - 120</i>		B5B0171	02/06/2015	<i>02/06/15 11:04</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-13

Lab ID: 1500456-02

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/06/15 17:29	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>67.0 %</i>	<i>47 - 117</i>		B5B0184	02/06/2015	<i>02/06/15 17:29</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>75.2 %</i>	<i>48 - 121</i>		B5B0184	02/06/2015	<i>02/06/15 17:29</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>81.8 %</i>	<i>58 - 142</i>		B5B0184	02/06/2015	<i>02/06/15 17:29</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>70.1 %</i>	<i>27 - 151</i>		B5B0184	02/06/2015	<i>02/06/15 17:29</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-40

Lab ID: 1500456-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,1,1-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,1,2-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,1-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,1-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,1-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,2,3-Trichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,2-Dibromoethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,2-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,2-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,3-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,3-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
1,4-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
2,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
2-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
4-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
4-Isopropyltoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Benzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Bromobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Bromodichloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Bromoform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Bromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Carbon tetrachloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Chlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Chloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Chloroform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Chloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Dibromochloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-40

Lab ID: 1500456-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Dichlorodifluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Ethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Hexachlorobutadiene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Isopropylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
m,p-Xylene	ND	1.0	1	B5B0171	02/06/2015	02/06/15 11:26	
Methylene chloride	ND	1.0	1	B5B0171	02/06/2015	02/06/15 11:26	
n-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
n-Propylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Naphthalene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
o-Xylene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
sec-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Styrene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
tert-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Tetrachloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Toluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Trichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Trichlorofluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Vinyl chloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:26	
Surrogate: 1,2-Dichloroethane-d4	79.2 %	49 - 148		B5B0171	02/06/2015	02/06/15 11:26	
Surrogate: 4-Bromofluorobenzene	99.6 %	65 - 132		B5B0171	02/06/2015	02/06/15 11:26	
Surrogate: Dibromofluoromethane	82.4 %	55 - 138		B5B0171	02/06/2015	02/06/15 11:26	
Surrogate: Toluene-d8	79.6 %	60 - 120		B5B0171	02/06/2015	02/06/15 11:26	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-40

Lab ID: 1500456-03

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/06/15 17:56	
Surrogate: 1,2-Dichlorobenzene-d4	66.9 %	47 - 117		B5B0184	02/06/2015	02/06/15 17:56	
Surrogate: 2-Fluorobiphenyl	71.9 %	48 - 121		B5B0184	02/06/2015	02/06/15 17:56	
Surrogate: 4-Terphenyl-d14	76.7 %	58 - 142		B5B0184	02/06/2015	02/06/15 17:56	
Surrogate: Nitrobenzene-d5	72.6 %	27 - 151		B5B0184	02/06/2015	02/06/15 17:56	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-20

Lab ID: 1500456-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,1,1-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,1,2-Trichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,1-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,1-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,1-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,2,3-Trichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,2-Dibromoethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,2-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,2-Dichloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,3-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,3-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
1,4-Dichlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
2,2-Dichloropropane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
2-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
4-Chlorotoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
4-Isopropyltoluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Benzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Bromobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Bromodichloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Bromoform	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Bromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Carbon tetrachloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Chlorobenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Chloroethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Chloroform	0.73	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Chloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Dibromochloromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-20

Lab ID: 1500456-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Dichlorodifluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Ethylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Hexachlorobutadiene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Isopropylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
m,p-Xylene	ND	1.0	1	B5B0171	02/06/2015	02/06/15 11:50	
Methylene chloride	ND	1.0	1	B5B0171	02/06/2015	02/06/15 11:50	
n-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
n-Propylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Naphthalene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
o-Xylene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
sec-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Styrene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
tert-Butylbenzene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Tetrachloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Toluene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Trichloroethene	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Trichlorofluoromethane	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Vinyl chloride	ND	0.50	1	B5B0171	02/06/2015	02/06/15 11:50	
Surrogate: 1,2-Dichloroethane-d4	85.2 %	49 - 148		B5B0171	02/06/2015	02/06/15 11:50	
Surrogate: 4-Bromofluorobenzene	103 %	65 - 132		B5B0171	02/06/2015	02/06/15 11:50	
Surrogate: Dibromofluoromethane	85.5 %	55 - 138		B5B0171	02/06/2015	02/06/15 11:50	
Surrogate: Toluene-d8	83.1 %	60 - 120		B5B0171	02/06/2015	02/06/15 11:50	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Client Sample ID MW-20

Lab ID: 1500456-04

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/06/15 18:23	
Surrogate: 1,2-Dichlorobenzene-d4	64.7 %	47 - 117		B5B0184	02/06/2015	02/06/15 18:23	
Surrogate: 2-Fluorobiphenyl	71.7 %	48 - 121		B5B0184	02/06/2015	02/06/15 18:23	
Surrogate: 4-Terphenyl-d14	81.1 %	58 - 142		B5B0184	02/06/2015	02/06/15 18:23	
Surrogate: Nitrobenzene-d5	69.2 %	27 - 151		B5B0184	02/06/2015	02/06/15 18:23	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0171 - MSVOA_LL_W

Blank (B5B0171-BLK1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR
1,1,1-Trichloroethane	ND	0.50			NR
1,1,2,2-Tetrachloroethane	ND	0.50			NR
1,1,2-Trichloroethane	ND	0.50			NR
1,1-Dichloroethane	ND	0.50			NR
1,1-Dichloroethene	ND	0.50			NR
1,1-Dichloropropene	ND	0.50			NR
1,2,3-Trichloropropane	ND	0.50			NR
1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0171 - MSVOA_LL_W (continued)

Blank (B5B0171-BLK1) - Continued

Prepared: 2/6/2015 Analyzed: 2/6/2015

Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	20.62		25.0000		82.5	49 - 148			
Surrogate: 4-Bromofluorobenzene	25.97		25.0000		104	65 - 132			
Surrogate: Dibromofluoromethane	21.22		25.0000		84.9	55 - 138			
Surrogate: Toluene-d8	21.02		25.0000		84.1	60 - 120			

LCS (B5B0171-BS1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,1-Dichloroethene	18.3200	0.50	20.0000		91.6	61 - 136			
Benzene	36.3900	0.50	40.0000		91.0	72 - 127			
Chlorobenzene	18.2700	0.50	20.0000		91.4	78 - 125			
MTBE	17.1400	0.50	20.0000		85.7	60 - 132			
Toluene	37.5200	0.50	40.0000		93.8	59 - 140			
Trichloroethene	18.3800	0.50	20.0000		91.9	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	19.43		25.0000		77.7	49 - 148			
Surrogate: 4-Bromofluorobenzene	24.78		25.0000		99.1	65 - 132			
Surrogate: Dibromofluoromethane	19.88		25.0000		79.5	55 - 138			
Surrogate: Toluene-d8	20.63		25.0000		82.5	60 - 120			

LCS Dup (B5B0171-BS1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,1-Dichloroethene	20.1500	0.50	20.0000		101	61 - 136	9.51	20	
Benzene	39.1800	0.50	40.0000		98.0	72 - 127	7.38	20	
Chlorobenzene	20.1000	0.50	20.0000		100	78 - 125	9.54	20	
MTBE	18.0300	0.50	20.0000		90.2	60 - 132	5.06	20	
Toluene	40.9700	0.50	40.0000		102	59 - 140	8.79	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0171 - MSVOA_LL_W (continued)

LCS Dup (B5B0171-BSD1) - Continued

Prepared: 2/6/2015 Analyzed: 2/6/2015

Trichloroethene	20.1200	0.50	20.0000		101	67 - 130	9.04	20	
Surrogate: 1,2-Dichloroethane-d4	18.69		25.0000		74.8	49 - 148			
Surrogate: 4-Bromofluorobenzene	24.06		25.0000		96.2	65 - 132			
Surrogate: Dibromofluoromethane	19.30		25.0000		77.2	55 - 138			
Surrogate: Toluene-d8	20.26		25.0000		81.0	60 - 120			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0184 - MSSEMI_W

Blank (B5B0184-BLK1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	ND	0.20		NR					
Surrogate: 1,2-Dichlorobenzene-d4	0.6167		1.00000	61.7	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7011		1.00000	70.1	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7650		1.00000	76.5	58 - 142				
Surrogate: Nitrobenzene-d5	0.6336		1.00000	63.4	27 - 151				

LCS (B5B0184-BS1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.18383	0.20	1.00000	118	58 - 151				
Surrogate: 1,2-Dichlorobenzene-d4	0.6304		1.00000	63.0	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7043		1.00000	70.4	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7422		1.00000	74.2	58 - 142				
Surrogate: Nitrobenzene-d5	0.6208		1.00000	62.1	27 - 151				

Matrix Spike (B5B0184-MS1)

Source: 1500474-02

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.20006	0.20	1.00000	ND	120	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.6005		1.00000	60.0	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.6642		1.00000	66.4	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7344		1.00000	73.4	58 - 142				
Surrogate: Nitrobenzene-d5	0.6064		1.00000	60.6	27 - 151				

Matrix Spike Dup (B5B0184-MSD1)

Source: 1500474-02

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.22465	0.20	1.00000	ND	122	58 - 151	2.03	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.6821		1.00000	68.2	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7630		1.00000	76.3	48 - 121				
Surrogate: 4-Terphenyl-d14	0.8142		1.00000	81.4	58 - 142				
Surrogate: Nitrobenzene-d5	0.6718		1.00000	67.2	27 - 151				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/11/2015

Notes and Definitions

ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 2/3/15 PAGE 1 OF 1

PROJECT NAME RAYTHEON		PROJECT No./TASK No. 532.30		SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION			
PROJECT MANAGER STEVE NETTO		Phone No. 858-455-6500										ATL			
QA MANAGER		Fax No. 858-455-6533										Attn: Rachelle Arada			
SAMPLER (SIGNATURE) <i>[Signature]</i>		SAMPLER (PRINTED) D. MORA													
M. HALL															
LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX		PRESERVATION		40 ml VOA	1 L AMBER	VOCS 8260B	1,4-DIOXANE 8270 MOD	1,4-DIOXAMNE 8270 sim	0-10 10-100 100-1,000 1,000-10,000 >10,000 Standard TAT	REMARKS	
		Date	Time	Soil Ground - water Surface water	HCl HNO ₃ NaOH H ₂ SO ₄ Ice										
	MW-1B	2/3/15	830	X	X	X		3		X			X		
	MW-1B		830	X		X		1			X		X		
	MW-13		912	X	X	X		3		X			X		
	MW-13		912	X		X		1			X		X		
	MW-40		1040	X	X	X		3		X			X		
	MW-40		1040	X		X		1			X		X		
	MW-20		1440	X	X	X		3		X			X		
	MW-20		1440	X		X		1			X		X		
Total number of Containers per analysis: <u>12</u> <u>4</u>														Total No. of Containers: <u>16</u>	
Relinquished by: <i>[Signature]</i> HFA		Date: <u>2/3/15</u>	Received by: <i>[Signature]</i> ATL		Date: <u>2/3/15</u>	Time: <u>1700</u>		INSTRUCTIONS 1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness. 2. Complete in ballpoint pen. Draw one line through errors, initial and date correction. 3. Indicate number of sample containers in analysis request space; indicate choice with ✓ or x. 4. Note applicable preservatives, special instructions, and deviations from typical environmental samples. 5. Consult project QA documents for specific instructions.						Shipment Method: <u>courier</u>	
Company		Time: <u>1700</u>	Company		Time: <u>1700</u>		Send Results to: <u>Steve Netto</u>								
Relinquished by: <i>[Signature]</i> ATL		Date: <u>2/3/15</u>	Received by: <i>[Signature]</i> ATL		Date: <u>2/3/15</u>	Time: <u>1759</u>		Sample Receipt: ☐ No. of containers correct ☐ custody seals secure ☒ Temp. @ receipt <u>10</u> °C ☒ received good condition/cold ☐ conforms to COC document						☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500 ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 209 MESA, AZ 85204 (480) 345-0888 ☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300	
Company		Time: <u>1759</u>	Company		Time: <u>1759</u>		Send invoice to San Diego, CA Attn: Accounts Payable								



February 12, 2015

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1500474
Client Reference : RAYTHEON, 532.30

Enclosed are the results for sample(s) received on February 04, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "E Rodriguez", is placed above the printed name.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-020415	1500474-01	LAB H2O	2/04/15 7:30	2/04/15 19:10
MW-35C	1500474-02	Groundwater	2/04/15 10:10	2/04/15 19:10
MW-39	1500474-03	Groundwater	2/04/15 13:20	2/04/15 19:10
MW-38	1500474-04	Groundwater	2/04/15 15:08	2/04/15 19:10
MW-37	1500474-05	Groundwater	2/04/15 16:03	2/04/15 19:10



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID TB-020415

Lab ID: 1500474-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,1,1-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,1,2-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,1-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,1-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,1-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,2,3-Trichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,2-Dibromoethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,2-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,2-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,3-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,3-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
1,4-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
2,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
2-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
4-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
4-Isopropyltoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Benzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Bromobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Bromodichloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Bromoform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Bromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Carbon tetrachloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Chlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Chloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Chloroform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Chloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Dibromochloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID TB-020415

Lab ID: 1500474-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Dichlorodifluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Ethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Hexachlorobutadiene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Isopropylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
m,p-Xylene	ND	1.0	1	B5B0198	02/07/2015	02/07/15 02:56	
Methylene chloride	ND	1.0	1	B5B0198	02/07/2015	02/07/15 02:56	
n-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
n-Propylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Naphthalene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
o-Xylene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
sec-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Styrene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
tert-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Tetrachloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Toluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Trichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Trichlorofluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Vinyl chloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 02:56	
Surrogate: 1,2-Dichloroethane-d4	103 %	49 - 148		B5B0198	02/07/2015	02/07/15 02:56	
Surrogate: 4-Bromofluorobenzene	89.4 %	65 - 132		B5B0198	02/07/2015	02/07/15 02:56	
Surrogate: Dibromofluoromethane	98.6 %	55 - 138		B5B0198	02/07/2015	02/07/15 02:56	
Surrogate: Toluene-d8	89.0 %	60 - 120		B5B0198	02/07/2015	02/07/15 02:56	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-35C

Lab ID: 1500474-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,1,1-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,1,2-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,1-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,1-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,1-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,2,3-Trichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,2-Dibromoethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,2-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,2-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,3-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,3-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
1,4-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
2,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
2-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
4-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
4-Isopropyltoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Benzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Bromobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Bromodichloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Bromoform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Bromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Carbon tetrachloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Chlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Chloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Chloroform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Chloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Dibromochloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-35C

Lab ID: 1500474-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Dichlorodifluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Ethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Hexachlorobutadiene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Isopropylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
m,p-Xylene	ND	1.0	1	B5B0198	02/07/2015	02/07/15 03:20	
Methylene chloride	ND	1.0	1	B5B0198	02/07/2015	02/07/15 03:20	
n-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
n-Propylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Naphthalene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
o-Xylene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
sec-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Styrene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
tert-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Tetrachloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Toluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Trichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Trichlorofluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Vinyl chloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:20	
Surrogate: 1,2-Dichloroethane-d4	104 %	49 - 148		B5B0198	02/07/2015	02/07/15 03:20	
Surrogate: 4-Bromofluorobenzene	89.2 %	65 - 132		B5B0198	02/07/2015	02/07/15 03:20	
Surrogate: Dibromofluoromethane	94.5 %	55 - 138		B5B0198	02/07/2015	02/07/15 03:20	
Surrogate: Toluene-d8	89.9 %	60 - 120		B5B0198	02/07/2015	02/07/15 03:20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-35C

Lab ID: 1500474-02

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/06/15 18:49	
Surrogate: 1,2-Dichlorobenzene-d4	69.9 %	47 - 117		B5B0184	02/06/2015	02/06/15 18:49	
Surrogate: 2-Fluorobiphenyl	74.9 %	48 - 121		B5B0184	02/06/2015	02/06/15 18:49	
Surrogate: 4-Terphenyl-d14	84.8 %	58 - 142		B5B0184	02/06/2015	02/06/15 18:49	
Surrogate: Nitrobenzene-d5	72.8 %	27 - 151		B5B0184	02/06/2015	02/06/15 18:49	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-39

Lab ID: 1500474-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,1,1-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,1,2-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,1-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,1-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,1-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,2,3-Trichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,2-Dibromoethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,2-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,2-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,3-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,3-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
1,4-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
2,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
2-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
4-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
4-Isopropyltoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Benzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Bromobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Bromodichloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Bromoform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Bromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Carbon tetrachloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Chlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Chloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Chloroform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Chloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Dibromochloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-39

Lab ID: 1500474-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Dichlorodifluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Ethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Hexachlorobutadiene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Isopropylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
m,p-Xylene	ND	1.0	1	B5B0198	02/07/2015	02/07/15 03:45	
Methylene chloride	ND	1.0	1	B5B0198	02/07/2015	02/07/15 03:45	
n-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
n-Propylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Naphthalene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
o-Xylene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
sec-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Styrene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
tert-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Tetrachloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Toluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Trichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Trichlorofluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Vinyl chloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 03:45	
Surrogate: 1,2-Dichloroethane-d4	105 %	49 - 148		B5B0198	02/07/2015	02/07/15 03:45	
Surrogate: 4-Bromofluorobenzene	88.8 %	65 - 132		B5B0198	02/07/2015	02/07/15 03:45	
Surrogate: Dibromofluoromethane	97.8 %	55 - 138		B5B0198	02/07/2015	02/07/15 03:45	
Surrogate: Toluene-d8	89.1 %	60 - 120		B5B0198	02/07/2015	02/07/15 03:45	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-39

Lab ID: 1500474-03

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/06/15 19:16	
Surrogate: 1,2-Dichlorobenzene-d4	64.1 %	47 - 117		B5B0184	02/06/2015	02/06/15 19:16	
Surrogate: 2-Fluorobiphenyl	70.6 %	48 - 121		B5B0184	02/06/2015	02/06/15 19:16	
Surrogate: 4-Terphenyl-d14	79.7 %	58 - 142		B5B0184	02/06/2015	02/06/15 19:16	
Surrogate: Nitrobenzene-d5	68.3 %	27 - 151		B5B0184	02/06/2015	02/06/15 19:16	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-38

Lab ID: 1500474-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,1,1-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,1,2-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,1-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,1-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,1-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,2,3-Trichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,2-Dibromoethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,2-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,2-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,3-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,3-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
1,4-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
2,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
2-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
4-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
4-Isopropyltoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Benzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Bromobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Bromodichloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Bromoform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Bromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Carbon tetrachloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Chlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Chloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Chloroform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Chloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Dibromochloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-38

Lab ID: 1500474-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Dichlorodifluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Ethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Hexachlorobutadiene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Isopropylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
m,p-Xylene	ND	1.0	1	B5B0198	02/07/2015	02/07/15 04:09	
Methylene chloride	ND	1.0	1	B5B0198	02/07/2015	02/07/15 04:09	
n-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
n-Propylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Naphthalene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
o-Xylene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
sec-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Styrene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
tert-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Tetrachloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Toluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Trichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Trichlorofluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Vinyl chloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:09	
Surrogate: 1,2-Dichloroethane-d4	101 %	49 - 148		B5B0198	02/07/2015	02/07/15 04:09	
Surrogate: 4-Bromofluorobenzene	87.4 %	65 - 132		B5B0198	02/07/2015	02/07/15 04:09	
Surrogate: Dibromofluoromethane	95.0 %	55 - 138		B5B0198	02/07/2015	02/07/15 04:09	
Surrogate: Toluene-d8	88.3 %	60 - 120		B5B0198	02/07/2015	02/07/15 04:09	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-38

Lab ID: 1500474-04

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/09/15 11:20	
Surrogate: 1,2-Dichlorobenzene-d4	67.7 %	47 - 117		B5B0184	02/06/2015	02/09/15 11:20	
Surrogate: 2-Fluorobiphenyl	74.2 %	48 - 121		B5B0184	02/06/2015	02/09/15 11:20	
Surrogate: 4-Terphenyl-d14	81.7 %	58 - 142		B5B0184	02/06/2015	02/09/15 11:20	
Surrogate: Nitrobenzene-d5	76.3 %	27 - 151		B5B0184	02/06/2015	02/09/15 11:20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-37

Lab ID: 1500474-05

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,1,1-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,1,2-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,1-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,1-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,1-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,2,3-Trichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,2-Dibromoethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,2-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,2-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,3-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,3-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
1,4-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
2,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
2-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
4-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
4-Isopropyltoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Benzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Bromobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Bromodichloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Bromoform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Bromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Carbon tetrachloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Chlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Chloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Chloroform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Chloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Dibromochloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-37

Lab ID: 1500474-05

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Dichlorodifluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Ethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Hexachlorobutadiene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Isopropylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
m,p-Xylene	ND	1.0	1	B5B0198	02/07/2015	02/07/15 04:35	
Methylene chloride	ND	1.0	1	B5B0198	02/07/2015	02/07/15 04:35	
n-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
n-Propylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Naphthalene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
o-Xylene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
sec-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Styrene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
tert-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Tetrachloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Toluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Trichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Trichlorofluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Vinyl chloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 04:35	
Surrogate: 1,2-Dichloroethane-d4	103 %	49 - 148		B5B0198	02/07/2015	02/07/15 04:35	
Surrogate: 4-Bromofluorobenzene	89.2 %	65 - 132		B5B0198	02/07/2015	02/07/15 04:35	
Surrogate: Dibromofluoromethane	100 %	55 - 138		B5B0198	02/07/2015	02/07/15 04:35	
Surrogate: Toluene-d8	89.1 %	60 - 120		B5B0198	02/07/2015	02/07/15 04:35	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-37

Lab ID: 1500474-05

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/09/15 09:59	
Surrogate: 1,2-Dichlorobenzene-d4	67.6 %	47 - 117		B5B0184	02/06/2015	02/09/15 09:59	
Surrogate: 2-Fluorobiphenyl	74.0 %	48 - 121		B5B0184	02/06/2015	02/09/15 09:59	
Surrogate: 4-Terphenyl-d14	77.0 %	58 - 142		B5B0184	02/06/2015	02/09/15 09:59	
Surrogate: Nitrobenzene-d5	73.2 %	27 - 151		B5B0184	02/06/2015	02/09/15 09:59	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0198 - MSVOA_LL_W

Blank (B5B0198-BLK1)

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR
1,1,1-Trichloroethane	ND	0.50			NR
1,1,2,2-Tetrachloroethane	ND	0.50			NR
1,1,2-Trichloroethane	ND	0.50			NR
1,1-Dichloroethane	ND	0.50			NR
1,1-Dichloroethene	ND	0.50			NR
1,1-Dichloropropene	ND	0.50			NR
1,2,3-Trichloropropane	ND	0.50			NR
1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0198 - MSVOA_LL_W (continued)

Blank (B5B0198-BLK1) - Continued

Prepared: 2/7/2015 Analyzed: 2/7/2015

Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	25.47		25.0000		102	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.69		25.0000		94.8	65 - 132			
Surrogate: Dibromofluoromethane	24.71		25.0000		98.8	55 - 138			
Surrogate: Toluene-d8	23.46		25.0000		93.8	60 - 120			

LCS (B5B0198-BS1)

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1-Dichloroethene	18.3000	0.50	20.0000		91.5	61 - 136			
Benzene	39.0200	0.50	40.0000		97.6	72 - 127			
Chlorobenzene	19.7000	0.50	20.0000		98.5	78 - 125			
MTBE	19.0400	0.50	20.0000		95.2	60 - 132			
Toluene	40.6600	0.50	40.0000		102	59 - 140			
Trichloroethene	19.5800	0.50	20.0000		97.9	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	24.50		25.0000		98.0	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.27		25.0000		89.1	65 - 132			
Surrogate: Dibromofluoromethane	23.24		25.0000		93.0	55 - 138			
Surrogate: Toluene-d8	23.32		25.0000		93.3	60 - 120			

LCS Dup (B5B0198-BSD1)

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1-Dichloroethene	19.1300	0.50	20.0000		95.6	61 - 136	4.43	20	
Benzene	39.4000	0.50	40.0000		98.5	72 - 127	0.969	20	
Chlorobenzene	20.0000	0.50	20.0000		100	78 - 125	1.51	20	
MTBE	18.9300	0.50	20.0000		94.6	60 - 132	0.579	20	
Toluene	40.3700	0.50	40.0000		101	59 - 140	0.716	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0198 - MSVOA_LL_W (continued)

LCS Dup (B5B0198-BS1) - Continued

Prepared: 2/7/2015 Analyzed: 2/7/2015

Trichloroethene	19.3600	0.50	20.0000		96.8	67 - 130	1.13	20	
Surrogate: 1,2-Dichloroethane-d4	24.55		25.0000		98.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.46		25.0000		89.8	65 - 132			
Surrogate: Dibromofluoromethane	23.93		25.0000		95.7	55 - 138			
Surrogate: Toluene-d8	23.16		25.0000		92.6	60 - 120			

Matrix Spike (B5B0198-MS1)

Source: 1500474-02

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1-Dichloroethene	20.9300	0.50	20.0000	ND	105	61 - 136			
Benzene	40.6400	0.50	40.0000	ND	102	72 - 127			
Chlorobenzene	19.6600	0.50	20.0000	ND	98.3	78 - 125			
MTBE	18.1700	0.50	20.0000	ND	90.8	60 - 132			
Toluene	41.6600	0.50	40.0000	ND	104	59 - 140			
Trichloroethene	19.8700	0.50	20.0000	ND	99.4	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	25.45		25.0000		102	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.32		25.0000		89.3	65 - 132			
Surrogate: Dibromofluoromethane	23.84		25.0000		95.4	55 - 138			
Surrogate: Toluene-d8	23.13		25.0000		92.5	60 - 120			

Matrix Spike Dup (B5B0198-MSD1)

Source: 1500474-02

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1-Dichloroethene	21.8500	0.50	20.0000	ND	109	61 - 136	4.30	20	
Benzene	42.3700	0.50	40.0000	ND	106	72 - 127	4.17	20	
Chlorobenzene	20.3600	0.50	20.0000	ND	102	78 - 125	3.50	20	
MTBE	18.2400	0.50	20.0000	ND	91.2	60 - 132	0.385	20	
Toluene	43.3800	0.50	40.0000	ND	108	59 - 140	4.05	20	
Trichloroethene	20.8600	0.50	20.0000	ND	104	67 - 130	4.86	20	
Surrogate: 1,2-Dichloroethane-d4	25.53		25.0000		102	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.49		25.0000		90.0	65 - 132			
Surrogate: Dibromofluoromethane	23.49		25.0000		94.0	55 - 138			
Surrogate: Toluene-d8	23.49		25.0000		94.0	60 - 120			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0184 - MSSEMI_W

Blank (B5B0184-BLK1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	ND	0.20		NR					
Surrogate: 1,2-Dichlorobenzene-d4	0.6167		1.00000	61.7	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7011		1.00000	70.1	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7650		1.00000	76.5	58 - 142				
Surrogate: Nitrobenzene-d5	0.6336		1.00000	63.4	27 - 151				

LCS (B5B0184-BS1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.18383	0.20	1.00000	118	58 - 151				
Surrogate: 1,2-Dichlorobenzene-d4	0.6304		1.00000	63.0	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7043		1.00000	70.4	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7422		1.00000	74.2	58 - 142				
Surrogate: Nitrobenzene-d5	0.6208		1.00000	62.1	27 - 151				

Matrix Spike (B5B0184-MS1)

Source: 1500474-02

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.20006	0.20	1.00000	ND	120	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.6005		1.00000	60.0	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.6642		1.00000	66.4	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7344		1.00000	73.4	58 - 142				
Surrogate: Nitrobenzene-d5	0.6064		1.00000	60.6	27 - 151				

Matrix Spike Dup (B5B0184-MSD1)

Source: 1500474-02

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.22465	0.20	1.00000	ND	122	58 - 151	2.03	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.6821		1.00000	68.2	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7630		1.00000	76.3	48 - 121				
Surrogate: 4-Terphenyl-d14	0.8142		1.00000	81.4	58 - 142				
Surrogate: Nitrobenzene-d5	0.6718		1.00000	67.2	27 - 151				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Notes and Definitions

ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



February 12, 2015

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1500475
Client Reference : RAYTHEON, 532.30

Enclosed are the results for sample(s) received on February 04, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "E Rodriguez", is placed above the printed name.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
RB-02042015	1500475-01	LAB WATER	2/04/15 8:20	2/04/15 19:10
P-09	1500475-02	Groundwater	2/04/15 9:27	2/04/15 19:10
MW-06	1500475-03	Groundwater	2/04/15 15:10	2/04/15 19:10



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID RB-02042015

Lab ID: 1500475-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,1,1-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,1,2-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,1-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,1-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,1-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,2,3-Trichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,2-Dibromoethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,2-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,2-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,3-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,3-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
1,4-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
2,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
2-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
4-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
4-Isopropyltoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Benzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Bromobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Bromodichloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Bromoform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Bromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Carbon tetrachloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Chlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Chloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Chloroform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Chloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Dibromochloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID RB-02042015

Lab ID: 1500475-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Dichlorodifluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Ethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Hexachlorobutadiene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Isopropylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
m,p-Xylene	ND	1.0	1	B5B0198	02/07/2015	02/07/15 05:00	
Methylene chloride	ND	1.0	1	B5B0198	02/07/2015	02/07/15 05:00	
n-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
n-Propylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Naphthalene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
o-Xylene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
sec-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Styrene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
tert-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Tetrachloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Toluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Trichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Trichlorofluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Vinyl chloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:00	
Surrogate: 1,2-Dichloroethane-d4	107 %	49 - 148		B5B0198	02/07/2015	02/07/15 05:00	
Surrogate: 4-Bromofluorobenzene	89.5 %	65 - 132		B5B0198	02/07/2015	02/07/15 05:00	
Surrogate: Dibromofluoromethane	101 %	55 - 138		B5B0198	02/07/2015	02/07/15 05:00	
Surrogate: Toluene-d8	89.9 %	60 - 120		B5B0198	02/07/2015	02/07/15 05:00	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID RB-02042015

Lab ID: 1500475-01

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0184	02/06/2015	02/09/15 10:26	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>66.0 %</i>	<i>47 - 117</i>		B5B0184	02/06/2015	<i>02/09/15 10:26</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>73.9 %</i>	<i>48 - 121</i>		B5B0184	02/06/2015	<i>02/09/15 10:26</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>79.8 %</i>	<i>58 - 142</i>		B5B0184	02/06/2015	<i>02/09/15 10:26</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>71.8 %</i>	<i>27 - 151</i>		B5B0184	02/06/2015	<i>02/09/15 10:26</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID P-09

Lab ID: 1500475-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,1,1-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,1,2-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,1-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,1-Dichloroethene	1.2	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,1-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,2,3-Trichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,2-Dibromoethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,2-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,2-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,3-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,3-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
1,4-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
2,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
2-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
4-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
4-Isopropyltoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Benzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Bromobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Bromodichloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Bromoform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Bromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Carbon tetrachloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Chlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Chloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Chloroform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Chloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Dibromochloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID P-09

Lab ID: 1500475-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Dichlorodifluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Ethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Hexachlorobutadiene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Isopropylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
m,p-Xylene	ND	1.0	1	B5B0198	02/07/2015	02/07/15 05:25	
Methylene chloride	ND	1.0	1	B5B0198	02/07/2015	02/07/15 05:25	
n-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
n-Propylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Naphthalene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
o-Xylene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
sec-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Styrene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
tert-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Tetrachloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Toluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Trichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Trichlorofluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Vinyl chloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:25	
Surrogate: 1,2-Dichloroethane-d4	106 %	49 - 148		B5B0198	02/07/2015	02/07/15 05:25	
Surrogate: 4-Bromofluorobenzene	89.3 %	65 - 132		B5B0198	02/07/2015	02/07/15 05:25	
Surrogate: Dibromofluoromethane	99.5 %	55 - 138		B5B0198	02/07/2015	02/07/15 05:25	
Surrogate: Toluene-d8	89.7 %	60 - 120		B5B0198	02/07/2015	02/07/15 05:25	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID P-09

Lab ID: 1500475-02

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	0.29	0.20	1	B5B0184	02/06/2015	02/09/15 10:53	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>66.1 %</i>	<i>47 - 117</i>		B5B0184	02/06/2015	<i>02/09/15 10:53</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>70.8 %</i>	<i>48 - 121</i>		B5B0184	02/06/2015	<i>02/09/15 10:53</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>82.5 %</i>	<i>58 - 142</i>		B5B0184	02/06/2015	<i>02/09/15 10:53</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>73.6 %</i>	<i>27 - 151</i>		B5B0184	02/06/2015	<i>02/09/15 10:53</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-06

Lab ID: 1500475-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,1,1-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,1,2-Trichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,1-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,1-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,1-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,2,3-Trichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,2-Dibromoethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,2-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,2-Dichloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,3-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,3-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
1,4-Dichlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
2,2-Dichloropropane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
2-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
4-Chlorotoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
4-Isopropyltoluene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Benzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Bromobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Bromodichloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Bromoform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Bromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Carbon tetrachloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Chlorobenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Chloroethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Chloroform	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Chloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Dibromochloromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Client Sample ID MW-06

Lab ID: 1500475-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Dichlorodifluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Ethylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Hexachlorobutadiene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Isopropylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
m,p-Xylene	ND	1.0	1	B5B0198	02/07/2015	02/07/15 05:50	
Methylene chloride	ND	1.0	1	B5B0198	02/07/2015	02/07/15 05:50	
n-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
n-Propylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Naphthalene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
o-Xylene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
sec-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Styrene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
tert-Butylbenzene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Tetrachloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Toluene	0.78	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Trichloroethene	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Trichlorofluoromethane	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
Vinyl chloride	ND	0.50	1	B5B0198	02/07/2015	02/07/15 05:50	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>106 %</i>	<i>49 - 148</i>		B5B0198	02/07/2015	<i>02/07/15 05:50</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>88.4 %</i>	<i>65 - 132</i>		B5B0198	02/07/2015	<i>02/07/15 05:50</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>99.3 %</i>	<i>55 - 138</i>		B5B0198	02/07/2015	<i>02/07/15 05:50</i>	
<i>Surrogate: Toluene-d8</i>	<i>89.8 %</i>	<i>60 - 120</i>		B5B0198	02/07/2015	<i>02/07/15 05:50</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0198 - MSVOA_LL_W

Blank (B5B0198-BLK1)

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1,1,2-Tetrachloroethane	ND	0.50		NR
1,1,1-Trichloroethane	ND	0.50		NR
1,1,2,2-Tetrachloroethane	ND	0.50		NR
1,1,2-Trichloroethane	ND	0.50		NR
1,1-Dichloroethane	ND	0.50		NR
1,1-Dichloroethene	ND	0.50		NR
1,1-Dichloropropene	ND	0.50		NR
1,2,3-Trichloropropane	ND	0.50		NR
1,2,3-Trichlorobenzene	ND	0.50		NR
1,2,4-Trichlorobenzene	ND	0.50		NR
1,2,4-Trimethylbenzene	ND	0.50		NR
1,2-Dibromo-3-chloropropane	ND	0.50		NR
1,2-Dibromoethane	ND	0.50		NR
1,2-Dichlorobenzene	ND	0.50		NR
1,2-Dichloroethane	ND	0.50		NR
1,2-Dichloropropane	ND	0.50		NR
1,3,5-Trimethylbenzene	ND	0.50		NR
1,3-Dichlorobenzene	ND	0.50		NR
1,3-Dichloropropane	ND	0.50		NR
1,4-Dichlorobenzene	ND	0.50		NR
2,2-Dichloropropane	ND	0.50		NR
2-Chlorotoluene	ND	0.50		NR
4-Chlorotoluene	ND	0.50		NR
4-Isopropyltoluene	ND	0.50		NR
Benzene	ND	0.50		NR
Bromobenzene	ND	0.50		NR
Bromodichloromethane	ND	0.50		NR
Bromoform	ND	0.50		NR
Bromomethane	ND	0.50		NR
Carbon tetrachloride	ND	0.50		NR
Chlorobenzene	ND	0.50		NR
Chloroethane	ND	0.50		NR
Chloroform	ND	0.50		NR
Chloromethane	ND	0.50		NR
cis-1,2-Dichloroethene	ND	0.50		NR
cis-1,3-Dichloropropene	ND	0.50		NR
Dibromochloromethane	ND	0.50		NR
Dibromomethane	ND	0.50		NR
Dichlorodifluoromethane	ND	0.50		NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes

Batch B5B0198 - MSVOA_LL_W (continued)

Blank (B5B0198-BLK1) - Continued

Prepared: 2/7/2015 Analyzed: 2/7/2015

Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	25.47		25.0000		102	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.69		25.0000		94.8	65 - 132			
Surrogate: Dibromofluoromethane	24.71		25.0000		98.8	55 - 138			
Surrogate: Toluene-d8	23.46		25.0000		93.8	60 - 120			

LCS (B5B0198-BS1)

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1-Dichloroethene	18.3000	0.50	20.0000		91.5	61 - 136			
Benzene	39.0200	0.50	40.0000		97.6	72 - 127			
Chlorobenzene	19.7000	0.50	20.0000		98.5	78 - 125			
MTBE	19.0400	0.50	20.0000		95.2	60 - 132			
Toluene	40.6600	0.50	40.0000		102	59 - 140			
Trichloroethene	19.5800	0.50	20.0000		97.9	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	24.50		25.0000		98.0	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.27		25.0000		89.1	65 - 132			
Surrogate: Dibromofluoromethane	23.24		25.0000		93.0	55 - 138			
Surrogate: Toluene-d8	23.32		25.0000		93.3	60 - 120			

LCS Dup (B5B0198-BSD1)

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1-Dichloroethene	19.1300	0.50	20.0000		95.6	61 - 136	4.43	20	
Benzene	39.4000	0.50	40.0000		98.5	72 - 127	0.969	20	
Chlorobenzene	20.0000	0.50	20.0000		100	78 - 125	1.51	20	
MTBE	18.9300	0.50	20.0000		94.6	60 - 132	0.579	20	
Toluene	40.3700	0.50	40.0000		101	59 - 140	0.716	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0198 - MSVOA_LL_W (continued)

LCS Dup (B5B0198-BS1) - Continued

Prepared: 2/7/2015 Analyzed: 2/7/2015

Trichloroethene	19.3600	0.50	20.0000		96.8	67 - 130	1.13	20	
Surrogate: 1,2-Dichloroethane-d4	24.55		25.0000		98.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.46		25.0000		89.8	65 - 132			
Surrogate: Dibromofluoromethane	23.93		25.0000		95.7	55 - 138			
Surrogate: Toluene-d8	23.16		25.0000		92.6	60 - 120			

Matrix Spike (B5B0198-MS1)

Source: 1500474-02

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1-Dichloroethene	20.9300	0.50	20.0000	ND	105	61 - 136			
Benzene	40.6400	0.50	40.0000	ND	102	72 - 127			
Chlorobenzene	19.6600	0.50	20.0000	ND	98.3	78 - 125			
MTBE	18.1700	0.50	20.0000	ND	90.8	60 - 132			
Toluene	41.6600	0.50	40.0000	ND	104	59 - 140			
Trichloroethene	19.8700	0.50	20.0000	ND	99.4	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	25.45		25.0000		102	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.32		25.0000		89.3	65 - 132			
Surrogate: Dibromofluoromethane	23.84		25.0000		95.4	55 - 138			
Surrogate: Toluene-d8	23.13		25.0000		92.5	60 - 120			

Matrix Spike Dup (B5B0198-MSD1)

Source: 1500474-02

Prepared: 2/7/2015 Analyzed: 2/7/2015

1,1-Dichloroethene	21.8500	0.50	20.0000	ND	109	61 - 136	4.30	20	
Benzene	42.3700	0.50	40.0000	ND	106	72 - 127	4.17	20	
Chlorobenzene	20.3600	0.50	20.0000	ND	102	78 - 125	3.50	20	
MTBE	18.2400	0.50	20.0000	ND	91.2	60 - 132	0.385	20	
Toluene	43.3800	0.50	40.0000	ND	108	59 - 140	4.05	20	
Trichloroethene	20.8600	0.50	20.0000	ND	104	67 - 130	4.86	20	
Surrogate: 1,2-Dichloroethane-d4	25.53		25.0000		102	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.49		25.0000		90.0	65 - 132			
Surrogate: Dibromofluoromethane	23.49		25.0000		94.0	55 - 138			
Surrogate: Toluene-d8	23.49		25.0000		94.0	60 - 120			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0184 - MSSEMI_W

Blank (B5B0184-BLK1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	ND	0.20		NR					
Surrogate: 1,2-Dichlorobenzene-d4	0.6167		1.00000	61.7	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7011		1.00000	70.1	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7650		1.00000	76.5	58 - 142				
Surrogate: Nitrobenzene-d5	0.6336		1.00000	63.4	27 - 151				

LCS (B5B0184-BS1)

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.18383	0.20	1.00000	118	58 - 151				
Surrogate: 1,2-Dichlorobenzene-d4	0.6304		1.00000	63.0	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7043		1.00000	70.4	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7422		1.00000	74.2	58 - 142				
Surrogate: Nitrobenzene-d5	0.6208		1.00000	62.1	27 - 151				

Matrix Spike (B5B0184-MS1)

Source: 1500474-02

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.20006	0.20	1.00000	ND	120	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.6005		1.00000	60.0	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.6642		1.00000	66.4	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7344		1.00000	73.4	58 - 142				
Surrogate: Nitrobenzene-d5	0.6064		1.00000	60.6	27 - 151				

Matrix Spike Dup (B5B0184-MSD1)

Source: 1500474-02

Prepared: 2/6/2015 Analyzed: 2/6/2015

1,4-Dioxane	1.22465	0.20	1.00000	ND	122	58 - 151	2.03	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.6821		1.00000	68.2	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7630		1.00000	76.3	48 - 121				
Surrogate: 4-Terphenyl-d14	0.8142		1.00000	81.4	58 - 142				
Surrogate: Nitrobenzene-d5	0.6718		1.00000	67.2	27 - 151				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/12/2015

Notes and Definitions

ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



February 13, 2015

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1500487
Client Reference : RAYTHEON, 532.30

Enclosed are the results for sample(s) received on February 05, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "E Rodriguez", is written over a light blue horizontal line.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P-07	1500487-01	Groundwater	2/05/15 8:50	2/05/15 19:30
MW-08	1500487-02	Groundwater	2/05/15 10:30	2/05/15 19:30
MW-15	1500487-03	Groundwater	2/05/15 11:10	2/05/15 19:30
MW-09	1500487-04	Groundwater	2/05/15 12:35	2/05/15 19:30
MW-16	1500487-05	Groundwater	2/05/15 16:05	2/05/15 19:30
RB-02052015	1500487-06	Groundwater	2/05/15 13:05	2/05/15 19:30
MW-34A	1500487-07	Groundwater	2/05/15 17:05	2/05/15 19:30
MW-34C	1500487-08	Groundwater	2/05/15 17:32	2/05/15 19:30
MW-34B	1500487-09	Groundwater	2/05/15 18:21	2/05/15 19:30



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID P-07

Lab ID: 1500487-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,1,1-Trichloroethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,1,2,2-Tetrachloroethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,1,2-Trichloroethane	6.0	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,1-Dichloroethane	17	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,1-Dichloroethene	1700	25	50	B5B0268	02/11/2015	02/11/15 18:35	
1,1-Dichloropropene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,2,3-Trichloropropane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,2,3-Trichlorobenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,2,4-Trichlorobenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,2,4-Trimethylbenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,2-Dibromo-3-chloropropane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,2-Dibromoethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,2-Dichlorobenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,2-Dichloroethane	4.0	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,2-Dichloropropane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,3,5-Trimethylbenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,3-Dichlorobenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,3-Dichloropropane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
1,4-Dichlorobenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
2,2-Dichloropropane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
2-Chlorotoluene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
4-Chlorotoluene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
4-Isopropyltoluene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Benzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Bromobenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Bromodichloromethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Bromoform	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Bromomethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Carbon tetrachloride	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Chlorobenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Chloroethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Chloroform	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Chloromethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
cis-1,2-Dichloroethene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
cis-1,3-Dichloropropene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Dibromochloromethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID P-07

Lab ID: 1500487-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Dichlorodifluoromethane	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Ethylbenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Hexachlorobutadiene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Isopropylbenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
m,p-Xylene	ND	4.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Methylene chloride	ND	4.0	4	B5B0268	02/11/2015	02/11/15 18:11	
n-Butylbenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
n-Propylbenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Naphthalene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
o-Xylene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
sec-Butylbenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Styrene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
tert-Butylbenzene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Tetrachloroethene	5.3	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Toluene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
trans-1,2-Dichloroethene	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Trichloroethene	6.0	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Trichlorofluoromethane	5.2	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	
Vinyl chloride	ND	2.0	4	B5B0268	02/11/2015	02/11/15 18:11	

Surrogate: 1,2-Dichloroethane-d4	102 %	49 - 148	B5B0268	02/11/2015	02/11/15 18:35
Surrogate: 1,2-Dichloroethane-d4	105 %	49 - 148	B5B0268	02/11/2015	02/11/15 18:11
Surrogate: 4-Bromofluorobenzene	88.5 %	65 - 132	B5B0268	02/11/2015	02/11/15 18:35
Surrogate: 4-Bromofluorobenzene	90.2 %	65 - 132	B5B0268	02/11/2015	02/11/15 18:11
Surrogate: Dibromofluoromethane	99.2 %	55 - 138	B5B0268	02/11/2015	02/11/15 18:11
Surrogate: Dibromofluoromethane	99.0 %	55 - 138	B5B0268	02/11/2015	02/11/15 18:35
Surrogate: Toluene-d8	85.5 %	60 - 120	B5B0268	02/11/2015	02/11/15 18:35
Surrogate: Toluene-d8	86.8 %	60 - 120	B5B0268	02/11/2015	02/11/15 18:11



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID P-07

Lab ID: 1500487-01

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	1600	2.0	1	B5B0205	02/09/2015	02/10/15 14:47	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>47.5 %</i>	<i>42 - 106</i>		B5B0205	02/09/2015	<i>02/10/15 14:47</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>61.3 %</i>	<i>55 - 117</i>		B5B0205	02/09/2015	<i>02/10/15 14:47</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>84.2 %</i>	<i>52 - 142</i>		B5B0205	02/09/2015	<i>02/10/15 14:47</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>58.5 %</i>	<i>43 - 116</i>		B5B0205	02/09/2015	<i>02/10/15 14:47</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-08

Lab ID: 1500487-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,1-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,1-Dichloroethene	8.8	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
cis-1,2-Dichloroethene	0.98	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-08

Lab ID: 1500487-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 16:33	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 16:33	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Trichloroethene	21	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:33	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>110 %</i>	<i>49 - 148</i>		B5B0268	02/11/2015	<i>02/11/15 16:33</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.3 %</i>	<i>65 - 132</i>		B5B0268	02/11/2015	<i>02/11/15 16:33</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>106 %</i>	<i>55 - 138</i>		B5B0268	02/11/2015	<i>02/11/15 16:33</i>	
<i>Surrogate: Toluene-d8</i>	<i>86.8 %</i>	<i>60 - 120</i>		B5B0268	02/11/2015	<i>02/11/15 16:33</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-08

Lab ID: 1500487-02

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	1.1	0.20	1	B5B0250	02/10/2015	02/11/15 12:13	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>76.4 %</i>	<i>47 - 117</i>		B5B0250	02/10/2015	<i>02/11/15 12:13</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>74.2 %</i>	<i>48 - 121</i>		B5B0250	02/10/2015	<i>02/11/15 12:13</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>76.8 %</i>	<i>58 - 142</i>		B5B0250	02/10/2015	<i>02/11/15 12:13</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>76.4 %</i>	<i>27 - 151</i>		B5B0250	02/10/2015	<i>02/11/15 12:13</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-15

Lab ID: 1500487-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,1-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,1-Dichloroethene	5.5	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-15

Lab ID: 1500487-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 16:58	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 16:58	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Trichloroethene	1.9	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Trichlorofluoromethane	6.0	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 16:58	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>107 %</i>	<i>49 - 148</i>		B5B0268	02/11/2015	<i>02/11/15 16:58</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.6 %</i>	<i>65 - 132</i>		B5B0268	02/11/2015	<i>02/11/15 16:58</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>106 %</i>	<i>55 - 138</i>		B5B0268	02/11/2015	<i>02/11/15 16:58</i>	
<i>Surrogate: Toluene-d8</i>	<i>90.5 %</i>	<i>60 - 120</i>		B5B0268	02/11/2015	<i>02/11/15 16:58</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-09

Lab ID: 1500487-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,1-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,1-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-09

Lab ID: 1500487-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 17:22	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 17:22	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Trichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:22	
Surrogate: 1,2-Dichloroethane-d4	102 %	49 - 148		B5B0268	02/11/2015	02/11/15 17:22	
Surrogate: 4-Bromofluorobenzene	88.1 %	65 - 132		B5B0268	02/11/2015	02/11/15 17:22	
Surrogate: Dibromofluoromethane	101 %	55 - 138		B5B0268	02/11/2015	02/11/15 17:22	
Surrogate: Toluene-d8	86.2 %	60 - 120		B5B0268	02/11/2015	02/11/15 17:22	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-09

Lab ID: 1500487-04

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	0.62	0.20	1	B5B0250	02/10/2015	02/11/15 12:41	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>70.2 %</i>	<i>47 - 117</i>		B5B0250	02/10/2015	<i>02/11/15 12:41</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>72.8 %</i>	<i>48 - 121</i>		B5B0250	02/10/2015	<i>02/11/15 12:41</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>80.2 %</i>	<i>58 - 142</i>		B5B0250	02/10/2015	<i>02/11/15 12:41</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>72.4 %</i>	<i>27 - 151</i>		B5B0250	02/10/2015	<i>02/11/15 12:41</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-16

Lab ID: 1500487-05

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,1,1-Trichloroethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,1,2,2-Tetrachloroethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,1,2-Trichloroethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,1-Dichloroethane	9.8	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,1-Dichloroethene	1200	25	50	B5B0268	02/11/2015	02/11/15 18:59	
1,1-Dichloropropene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,2,3-Trichloropropane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,2,3-Trichlorobenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,2,4-Trichlorobenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,2,4-Trimethylbenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,2-Dibromo-3-chloropropane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,2-Dibromoethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,2-Dichlorobenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,2-Dichloroethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,2-Dichloropropane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,3,5-Trimethylbenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,3-Dichlorobenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,3-Dichloropropane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
1,4-Dichlorobenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
2,2-Dichloropropane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
2-Chlorotoluene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
4-Chlorotoluene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
4-Isopropyltoluene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Benzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Bromobenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Bromodichloromethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Bromoform	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Bromomethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Carbon tetrachloride	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Chlorobenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Chloroethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Chloroform	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Chloromethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
cis-1,2-Dichloroethene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
cis-1,3-Dichloropropene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Dibromochloromethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-16

Lab ID: 1500487-05

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Dichlorodifluoromethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Ethylbenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Hexachlorobutadiene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Isopropylbenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
m,p-Xylene	ND	10	10	B5B0268	02/11/2015	02/11/15 14:33	
Methylene chloride	ND	10	10	B5B0268	02/11/2015	02/11/15 14:33	
n-Butylbenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
n-Propylbenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Naphthalene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
o-Xylene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
sec-Butylbenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Styrene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
tert-Butylbenzene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Tetrachloroethene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Toluene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
trans-1,2-Dichloroethene	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Trichloroethene	7.1	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Trichlorofluoromethane	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
Vinyl chloride	ND	5.0	10	B5B0268	02/11/2015	02/11/15 14:33	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>105 %</i>	<i>49 - 148</i>		B5B0268	02/11/2015	<i>02/11/15 14:33</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>105 %</i>	<i>49 - 148</i>		B5B0268	02/11/2015	<i>02/11/15 18:59</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.9 %</i>	<i>65 - 132</i>		B5B0268	02/11/2015	<i>02/11/15 14:33</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>89.7 %</i>	<i>65 - 132</i>		B5B0268	02/11/2015	<i>02/11/15 18:59</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>101 %</i>	<i>55 - 138</i>		B5B0268	02/11/2015	<i>02/11/15 18:59</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>102 %</i>	<i>55 - 138</i>		B5B0268	02/11/2015	<i>02/11/15 14:33</i>	
<i>Surrogate: Toluene-d8</i>	<i>87.3 %</i>	<i>60 - 120</i>		B5B0268	02/11/2015	<i>02/11/15 18:59</i>	
<i>Surrogate: Toluene-d8</i>	<i>91.2 %</i>	<i>60 - 120</i>		B5B0268	02/11/2015	<i>02/11/15 14:33</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-16

Lab ID: 1500487-05

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	440	2.0	1	B5B0205	02/09/2015	02/10/15 15:13	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>62.6 %</i>	<i>42 - 106</i>		B5B0205	02/09/2015	<i>02/10/15 15:13</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>69.4 %</i>	<i>55 - 117</i>		B5B0205	02/09/2015	<i>02/10/15 15:13</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>82.2 %</i>	<i>52 - 142</i>		B5B0205	02/09/2015	<i>02/10/15 15:13</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>72.4 %</i>	<i>43 - 116</i>		B5B0205	02/09/2015	<i>02/10/15 15:13</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID RB-02052015

Lab ID: 1500487-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,1-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,1-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID RB-02052015

Lab ID: 1500487-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 10:38	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 10:38	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Trichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:38	
Surrogate: 1,2-Dichloroethane-d4	98.7 %	49 - 148		B5B0268	02/11/2015	02/11/15 10:38	
Surrogate: 4-Bromofluorobenzene	87.5 %	65 - 132		B5B0268	02/11/2015	02/11/15 10:38	
Surrogate: Dibromofluoromethane	95.7 %	55 - 138		B5B0268	02/11/2015	02/11/15 10:38	
Surrogate: Toluene-d8	84.8 %	60 - 120		B5B0268	02/11/2015	02/11/15 10:38	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID RB-02052015

Lab ID: 1500487-06

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	2.0	1	B5B0205	02/09/2015	02/10/15 15:40	
Surrogate: 1,2-Dichlorobenzene-d4	54.6 %	42 - 106		B5B0205	02/09/2015	02/10/15 15:40	
Surrogate: 2-Fluorobiphenyl	65.8 %	55 - 117		B5B0205	02/09/2015	02/10/15 15:40	
Surrogate: 4-Terphenyl-d14	90.9 %	52 - 142		B5B0205	02/09/2015	02/10/15 15:40	
Surrogate: Nitrobenzene-d5	64.9 %	43 - 116		B5B0205	02/09/2015	02/10/15 15:40	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-34A

Lab ID: 1500487-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,1-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,1-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-34A

Lab ID: 1500487-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 17:47	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 17:47	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Trichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Trichlorofluoromethane	1.3	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 17:47	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>101 %</i>	<i>49 - 148</i>		B5B0268	02/11/2015	<i>02/11/15 17:47</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>88.6 %</i>	<i>65 - 132</i>		B5B0268	02/11/2015	<i>02/11/15 17:47</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>101 %</i>	<i>55 - 138</i>		B5B0268	02/11/2015	<i>02/11/15 17:47</i>	
<i>Surrogate: Toluene-d8</i>	<i>85.0 %</i>	<i>60 - 120</i>		B5B0268	02/11/2015	<i>02/11/15 17:47</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-34A

Lab ID: 1500487-07

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0250	02/10/2015	02/11/15 13:08	
Surrogate: 1,2-Dichlorobenzene-d4	75.6 %	47 - 117		B5B0250	02/10/2015	02/11/15 13:08	
Surrogate: 2-Fluorobiphenyl	72.9 %	48 - 121		B5B0250	02/10/2015	02/11/15 13:08	
Surrogate: 4-Terphenyl-d14	78.8 %	58 - 142		B5B0250	02/10/2015	02/11/15 13:08	
Surrogate: Nitrobenzene-d5	80.9 %	27 - 151		B5B0250	02/10/2015	02/11/15 13:08	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-34C

Lab ID: 1500487-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,1,1-Trichloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,1,2-Trichloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,1-Dichloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,1-Dichloroethene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,1-Dichloropropene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,2,3-Trichloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,2-Dibromoethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,2-Dichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,2-Dichloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,2-Dichloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,3-Dichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,3-Dichloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
1,4-Dichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
2,2-Dichloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
2-Chlorotoluene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
4-Chlorotoluene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
4-Isopropyltoluene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Benzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Bromobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Bromodichloromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Bromoform	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Bromomethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Carbon tetrachloride	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Chlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Chloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Chloroform	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Chloromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Dibromochloromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-34C

Lab ID: 1500487-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Dichlorodifluoromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Ethylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Hexachlorobutadiene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Isopropylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
m,p-Xylene	ND	1.0	1	B5B0312	02/12/2015	02/12/15 02:07	
Methylene chloride	ND	1.0	1	B5B0312	02/12/2015	02/12/15 02:07	
n-Butylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
n-Propylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Naphthalene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
o-Xylene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
sec-Butylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Styrene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
tert-Butylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Tetrachloroethene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Toluene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Trichloroethene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Trichlorofluoromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Vinyl chloride	ND	0.50	1	B5B0312	02/12/2015	02/12/15 02:07	
Surrogate: 1,2-Dichloroethane-d4	95.3 %	49 - 148		B5B0312	02/12/2015	02/12/15 02:07	
Surrogate: 4-Bromofluorobenzene	91.9 %	65 - 132		B5B0312	02/12/2015	02/12/15 02:07	
Surrogate: Dibromofluoromethane	94.0 %	55 - 138		B5B0312	02/12/2015	02/12/15 02:07	
Surrogate: Toluene-d8	83.8 %	60 - 120		B5B0312	02/12/2015	02/12/15 02:07	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-34C

Lab ID: 1500487-08

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0250	02/10/2015	02/11/15 13:36	
Surrogate: 1,2-Dichlorobenzene-d4	65.4 %	47 - 117		B5B0250	02/10/2015	02/11/15 13:36	
Surrogate: 2-Fluorobiphenyl	65.5 %	48 - 121		B5B0250	02/10/2015	02/11/15 13:36	
Surrogate: 4-Terphenyl-d14	69.4 %	58 - 142		B5B0250	02/10/2015	02/11/15 13:36	
Surrogate: Nitrobenzene-d5	69.8 %	27 - 151		B5B0250	02/10/2015	02/11/15 13:36	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-34B

Lab ID: 1500487-09

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,1,1-Trichloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,1,2-Trichloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,1-Dichloroethane	1.1	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,1-Dichloroethene	79	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,1-Dichloropropene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,2,3-Trichloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,2-Dibromoethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,2-Dichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,2-Dichloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,2-Dichloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,3-Dichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,3-Dichloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
1,4-Dichlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
2,2-Dichloropropane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
2-Chlorotoluene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
4-Chlorotoluene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
4-Isopropyltoluene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Benzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Bromobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Bromodichloromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Bromoform	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Bromomethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Carbon tetrachloride	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Chlorobenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Chloroethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Chloroform	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Chloromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Dibromochloromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-34B

Lab ID: 1500487-09

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Dichlorodifluoromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Ethylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Hexachlorobutadiene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Isopropylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
m,p-Xylene	ND	1.0	1	B5B0312	02/12/2015	02/12/15 01:16	
Methylene chloride	ND	1.0	1	B5B0312	02/12/2015	02/12/15 01:16	
n-Butylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
n-Propylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Naphthalene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
o-Xylene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
sec-Butylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Styrene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
tert-Butylbenzene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Tetrachloroethene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Toluene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Trichloroethene	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Trichlorofluoromethane	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Vinyl chloride	ND	0.50	1	B5B0312	02/12/2015	02/12/15 01:16	
Surrogate: 1,2-Dichloroethane-d4	91.8 %	49 - 148		B5B0312	02/12/2015	02/12/15 01:16	
Surrogate: 4-Bromofluorobenzene	91.5 %	65 - 132		B5B0312	02/12/2015	02/12/15 01:16	
Surrogate: Dibromofluoromethane	91.9 %	55 - 138		B5B0312	02/12/2015	02/12/15 01:16	
Surrogate: Toluene-d8	82.0 %	60 - 120		B5B0312	02/12/2015	02/12/15 01:16	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-34B

Lab ID: 1500487-09

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	32	2.0	1	B5B0205	02/09/2015	02/10/15 16:07	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>47.9 %</i>	<i>42 - 106</i>		B5B0205	02/09/2015	<i>02/10/15 16:07</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>57.8 %</i>	<i>55 - 117</i>		B5B0205	02/09/2015	<i>02/10/15 16:07</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>81.7 %</i>	<i>52 - 142</i>		B5B0205	02/09/2015	<i>02/10/15 16:07</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>56.2 %</i>	<i>43 - 116</i>		B5B0205	02/09/2015	<i>02/10/15 16:07</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0268 - MSVOA_LL_W

Blank (B5B0268-BLK1)

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR
1,1,1-Trichloroethane	ND	0.50			NR
1,1,2,2-Tetrachloroethane	ND	0.50			NR
1,1,2-Trichloroethane	ND	0.50			NR
1,1-Dichloroethane	ND	0.50			NR
1,1-Dichloroethene	ND	0.50			NR
1,1-Dichloropropene	ND	0.50			NR
1,2,3-Trichloropropane	ND	0.50			NR
1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0268 - MSVOA_LL_W (continued)

Blank (B5B0268-BLK1) - Continued

Prepared: 2/11/2015 Analyzed: 2/11/2015

Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	25.84		25.0000		103	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.11		25.0000		92.4	65 - 132			
Surrogate: Dibromofluoromethane	24.87		25.0000		99.5	55 - 138			
Surrogate: Toluene-d8	22.55		25.0000		90.2	60 - 120			

LCS (B5B0268-BS1)

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	18.3800	0.50	20.0000		91.9	61 - 136			
Benzene	39.5400	0.50	40.0000		98.8	72 - 127			
Chlorobenzene	20.6500	0.50	20.0000		103	78 - 125			
MTBE	17.7200	0.50	20.0000		88.6	60 - 132			
Toluene	42.0100	0.50	40.0000		105	59 - 140			
Trichloroethene	19.8500	0.50	20.0000		99.2	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	23.42		25.0000		93.7	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.83		25.0000		91.3	65 - 132			
Surrogate: Dibromofluoromethane	23.03		25.0000		92.1	55 - 138			
Surrogate: Toluene-d8	23.04		25.0000		92.2	60 - 120			

LCS Dup (B5B0268-BS1)

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	18.5200	0.50	20.0000		92.6	61 - 136	0.759	20	
Benzene	38.0700	0.50	40.0000		95.2	72 - 127	3.79	20	
Chlorobenzene	19.8100	0.50	20.0000		99.0	78 - 125	4.15	20	
MTBE	17.0800	0.50	20.0000		85.4	60 - 132	3.68	20	
Toluene	40.0200	0.50	40.0000		100	59 - 140	4.85	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0268 - MSVOA_LL_W (continued)

LCS Dup (B5B0268-BS1) - Continued

Prepared: 2/11/2015 Analyzed: 2/11/2015

Trichloroethene	19.4700	0.50	20.0000		97.4	67 - 130	1.93	20	
Surrogate: 1,2-Dichloroethane-d4	22.54		25.0000		90.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.45		25.0000		89.8	65 - 132			
Surrogate: Dibromofluoromethane	22.50		25.0000		90.0	55 - 138			
Surrogate: Toluene-d8	22.18		25.0000		88.7	60 - 120			

Matrix Spike (B5B0268-MS1)

Source: 1500488-05

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	354.200	5.0	20.0000	160.400	969	61 - 136			M3
Benzene	39.5900	0.50	40.0000	ND	99.0	72 - 127			
Chlorobenzene	19.7600	0.50	20.0000	ND	98.8	78 - 125			
MTBE	16.7300	0.50	20.0000	ND	83.6	60 - 132			
Toluene	42.0000	0.50	40.0000	ND	105	59 - 140			
Trichloroethene	20.6300	0.50	20.0000	3.70000	84.6	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	23.91		25.0000		95.6	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.46		25.0000		89.8	65 - 132			
Surrogate: Dibromofluoromethane	22.88		25.0000		91.5	55 - 138			
Surrogate: Toluene-d8	22.50		25.0000		90.0	60 - 120			

Matrix Spike Dup (B5B0268-MSD1)

Source: 1500488-05

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	375.000	5.0	20.0000	160.400	1070	61 - 136	5.70	20	M3
Benzene	42.2100	0.50	40.0000	ND	106	72 - 127	6.41	20	
Chlorobenzene	21.3300	0.50	20.0000	ND	107	78 - 125	7.64	20	
MTBE	18.1000	0.50	20.0000	ND	90.5	60 - 132	7.87	20	
Toluene	44.2800	0.50	40.0000	ND	111	59 - 140	5.29	20	
Trichloroethene	22.2000	0.50	20.0000	3.70000	92.5	67 - 130	7.33	20	
Surrogate: 1,2-Dichloroethane-d4	23.29		25.0000		93.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.67		25.0000		90.7	65 - 132			
Surrogate: Dibromofluoromethane	23.03		25.0000		92.1	55 - 138			
Surrogate: Toluene-d8	22.44		25.0000		89.8	60 - 120			

Batch B5B0312 - MSVOA_LL_W

Blank (B5B0312-BLK1)

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes

Batch B5B0312 - MSVOA_LL_W (continued)

Blank (B5B0312-BLK1) - Continued

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR
Ethylbenzene	ND	0.50			NR
Hexachlorobutadiene	ND	0.50			NR
Isopropylbenzene	ND	0.50			NR
m,p-Xylene	ND	1.0			NR
Methylene chloride	ND	1.0			NR
n-Butylbenzene	ND	0.50			NR
n-Propylbenzene	ND	0.50			NR
Naphthalene	ND	0.50			NR
o-Xylene	ND	0.50			NR
sec-Butylbenzene	ND	0.50			NR
Styrene	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0312 - MSVOA_LL_W (continued)

Blank (B5B0312-BLK1) - Continued

Prepared: 2/11/2015 Analyzed: 2/11/2015

tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				

Surrogate: 1,2-Dichloroethane-d4	24.19		25.0000		96.8	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.39		25.0000		93.6	65 - 132			
Surrogate: Dibromofluoromethane	24.51		25.0000		98.0	55 - 138			
Surrogate: Toluene-d8	21.84		25.0000		87.4	60 - 120			

LCS (B5B0312-BS1)

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	19.7900	0.50	20.0000		99.0	61 - 136			
Benzene	39.3100	0.50	40.0000		98.3	72 - 127			
Chlorobenzene	19.9100	0.50	20.0000		99.6	78 - 125			
MTBE	17.0800	0.50	20.0000		85.4	60 - 132			
Toluene	40.1700	0.50	40.0000		100	59 - 140			
Trichloroethene	20.1600	0.50	20.0000		101	67 - 130			

Surrogate: 1,2-Dichloroethane-d4	22.67		25.0000		90.7	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.52		25.0000		90.1	65 - 132			
Surrogate: Dibromofluoromethane	22.98		25.0000		91.9	55 - 138			
Surrogate: Toluene-d8	22.13		25.0000		88.5	60 - 120			

LCS Dup (B5B0312-BSD1)

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	18.4000	0.50	20.0000		92.0	61 - 136	7.28	20	
Benzene	38.4300	0.50	40.0000		96.1	72 - 127	2.26	20	
Chlorobenzene	19.5000	0.50	20.0000		97.5	78 - 125	2.08	20	
MTBE	17.6000	0.50	20.0000		88.0	60 - 132	3.00	20	
Toluene	39.5500	0.50	40.0000		98.9	59 - 140	1.56	20	
Trichloroethene	19.8300	0.50	20.0000		99.2	67 - 130	1.65	20	

Surrogate: 1,2-Dichloroethane-d4	22.54		25.0000		90.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.76		25.0000		91.0	65 - 132			
Surrogate: Dibromofluoromethane	22.79		25.0000		91.2	55 - 138			
Surrogate: Toluene-d8	22.14		25.0000		88.6	60 - 120			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0205 - MSSEMI_W

Blank (B5B0205-BLK1)

Prepared: 2/9/2015 Analyzed: 2/11/2015

1,4-Dioxane	ND	2.0			NR				
Surrogate: 1,2-Dichlorobenzene-d4	67.86		100.000		67.9	42 - 106			
Surrogate: 2-Fluorobiphenyl	77.01		100.000		77.0	55 - 117			
Surrogate: 4-Terphenyl-d14	92.18		100.000		92.2	52 - 142			
Surrogate: Nitrobenzene-d5	82.82		100.000		82.8	43 - 116			

LCS (B5B0205-BS1)

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	106.620	2.0	100.000		107	62 - 127			
Surrogate: 1,2-Dichlorobenzene-d4	57.26		100.000		57.3	42 - 106			
Surrogate: 2-Fluorobiphenyl	69.70		100.000		69.7	55 - 117			
Surrogate: 4-Terphenyl-d14	91.00		100.000		91.0	52 - 142			
Surrogate: Nitrobenzene-d5	68.61		100.000		68.6	43 - 116			

Matrix Spike (B5B0205-MS1)

Source: 1500455-02

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	417.340	2.0	100.000	286.610	131	62 - 127			M3
Surrogate: 1,2-Dichlorobenzene-d4	59.34		100.000		59.3	42 - 106			
Surrogate: 2-Fluorobiphenyl	69.64		100.000		69.6	55 - 117			
Surrogate: 4-Terphenyl-d14	85.16		100.000		85.2	52 - 142			
Surrogate: Nitrobenzene-d5	70.61		100.000		70.6	43 - 116			

Matrix Spike (B5B0205-MS2)

Source: 1500488-05

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	119.190	2.0	100.000	11.2900	108	62 - 127			
Surrogate: 1,2-Dichlorobenzene-d4	53.23		100.000		53.2	42 - 106			
Surrogate: 2-Fluorobiphenyl	62.63		100.000		62.6	55 - 117			
Surrogate: 4-Terphenyl-d14	75.09		100.000		75.1	52 - 142			
Surrogate: Nitrobenzene-d5	62.22		100.000		62.2	43 - 116			

Matrix Spike Dup (B5B0205-MSD1)

Source: 1500455-02

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	421.080	2.0	100.000	286.610	134	62 - 127	0.892	20	M3
Surrogate: 1,2-Dichlorobenzene-d4	61.83		100.000		61.8	42 - 106			
Surrogate: 2-Fluorobiphenyl	70.89		100.000		70.9	55 - 117			
Surrogate: 4-Terphenyl-d14	91.46		100.000		91.5	52 - 142			
Surrogate: Nitrobenzene-d5	71.56		100.000		71.6	43 - 116			

Matrix Spike Dup (B5B0205-MSD2)

Source: 1500488-05

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	116.190	2.0	100.000	11.2900	105	62 - 127	2.55	20	
Surrogate: 1,2-Dichlorobenzene-d4	57.80		100.000		57.8	42 - 106			
Surrogate: 2-Fluorobiphenyl	66.46		100.000		66.5	55 - 117			
Surrogate: 4-Terphenyl-d14	72.69		100.000		72.7	52 - 142			
Surrogate: Nitrobenzene-d5	66.82		100.000		66.8	43 - 116			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0250 - MSSEMI_W

Blank (B5B0250-BLK1)

Prepared: 2/10/2015 Analyzed: 2/11/2015

1,4-Dioxane	ND	0.20		NR					
Surrogate: 1,2-Dichlorobenzene-d4	0.6206		1.00000	62.1	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.6397		1.00000	64.0	48 - 121				
Surrogate: 4-Terphenyl-d14	0.6717		1.00000	67.2	58 - 142				
Surrogate: Nitrobenzene-d5	0.6180		1.00000	61.8	27 - 151				

LCS (B5B0250-BS1)

Prepared: 2/10/2015 Analyzed: 2/11/2015

1,4-Dioxane	1.31809	0.20	1.00000	132	58 - 151				
Surrogate: 1,2-Dichlorobenzene-d4	0.7236		1.00000	72.4	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7552		1.00000	75.5	48 - 121				
Surrogate: 4-Terphenyl-d14	0.7722		1.00000	77.2	58 - 142				
Surrogate: Nitrobenzene-d5	0.7607		1.00000	76.1	27 - 151				

LCS Dup (B5B0250-BSD1)

Prepared: 2/10/2015 Analyzed: 2/11/2015

1,4-Dioxane	1.40201	0.20	1.00000	140	58 - 151	6.17	20		
Surrogate: 1,2-Dichlorobenzene-d4	0.7521		1.00000	75.2	47 - 117				
Surrogate: 2-Fluorobiphenyl	0.7716		1.00000	77.2	48 - 121				
Surrogate: 4-Terphenyl-d14	0.8046		1.00000	80.5	58 - 142				
Surrogate: Nitrobenzene-d5	0.7913		1.00000	79.1	27 - 151				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Notes and Definitions

M3	Matrix spike recovery outside of acceptance limit due to disproportionate concentration of the analyte to spike level. The analytical batch was validated by the laboratory control sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 2/5/15 PAGE 1 OF 2

PROJECT NAME RAYTHEON		PROJECT No./TASK No. 532.30		SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION	
PROJECT MANAGER STEVEN NETTO		Phone No. 858-455-6500		40 ml VOA 1 L AMBER VOCs 8260B 1,4-Dioxane 8270 MOD 1,4-dioxane 8270 SIM		0-10 10-100 100-1,000 1,000-10,000 >10,000		STANDARD NTAT		ATL Attn: ~~Steve Netto~~ Pamela Arora			
QA MANAGER E. HUNTER		Fax No. 858-455-6533											
SAMPLER (SIGNATURE) <i>[Signature]</i>		SAMPLER (PRINTED) D. MORA M. HALL											
LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX		PRESERVATION							
		Date	Time	Soil	Ground water	Surface water	HCl	HNO ₃	NaOH	H ₂ SO ₄	Ice		
190487-1	P-07	2/5/15	850	X			X				X	3	X
	P-07		850	X							X	1	X
2	MW-08		1030	X			X				X	3	X
	MW-08		1030	X							X	1	X
3	MW-15		1110	X			X				X	3	X
4	MW-09		1235	X			X				X	3	X
	MW-09		1235	X							X	1	X
5	MW-16		1605	X			X				X	3	X
	MW-16		1605	X							X	1	X
6	RB-02052015		1305				X	X				3	X
	RB-02052015		1305				X				X	1	X
7	MW-34A		1705	X			X					3	X
	MW-34A		1705	X							X	1	X

Total number of Containers per analysis:

Relinquished by: *[Signature]*
HTA
Company

Date: 2/5/15
Time: 1930

Received by: *[Signature]*
ATL
Company

Date: 7-2-15
Time: 1930

INSTRUCTIONS

- Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness.
- Complete in ballpoint pen. Draw one line through errors, initial and date correction.
- Indicate number of sample containers in analysis request space; indicate choice with ✓ or x.
- Note applicable preservatives, special instructions, and deviations from typical environmental samples.
- Consult project QA documents for specific instructions.

Sample Receipt:

☒ No. of containers correct
 ☐ received good condition/cold

☐ custody seals secure
 ☐ conforms to COC document

Shipment Method: courier

Send Results to: Steve Netto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375
SAN DIEGO, CA 92122 (858) 455-6500
 ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 209
MESA, AZ 85204 (480) 345-0888
 ☐ 1820 EAST RIVER ROAD, SUITE 220
TUCSON, AZ 85718 (520) 881-7300

Send invoice to San Diego, CA
Attn: Accounts Payable

Page 38 of 38



February 13, 2015

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1500488
Client Reference : Raytheon, 532.30

Enclosed are the results for sample(s) received on February 05, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "E Rodriguez", is placed above the printed name.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-020515A	1500488-01	Lab H2O	2/05/15 7:45	2/05/15 19:30
MW-41	1500488-02	Groundwater	2/05/15 8:40	2/05/15 19:30
MW-28	1500488-03	Groundwater	2/05/15 9:30	2/05/15 19:30
MW-2800	1500488-04	Groundwater	2/05/15 9:31	2/05/15 19:30
MW-31	1500488-05	Groundwater	2/05/15 11:11	2/05/15 19:30
MW-24	1500488-06	Groundwater	2/05/15 13:13	2/05/15 19:30
MW-36	1500488-07	Groundwater	2/05/15 15:20	2/05/15 19:30
MW-3600	1500488-08	Groundwater	2/05/15 15:21	2/05/15 19:30



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID TB-020515A

Lab ID: 1500488-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,1-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,1-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID TB-020515A

Lab ID: 1500488-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 10:15	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 10:15	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Trichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 10:15	
Surrogate: 1,2-Dichloroethane-d4	103 %	49 - 148		B5B0268	02/11/2015	02/11/15 10:15	
Surrogate: 4-Bromofluorobenzene	93.0 %	65 - 132		B5B0268	02/11/2015	02/11/15 10:15	
Surrogate: Dibromofluoromethane	102 %	55 - 138		B5B0268	02/11/2015	02/11/15 10:15	
Surrogate: Toluene-d8	91.5 %	60 - 120		B5B0268	02/11/2015	02/11/15 10:15	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-41

Lab ID: 1500488-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,1-Dichloroethane	1.1	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,1-Dichloroethene	110	5.0	10	B5B0315	02/12/2015	02/12/15 13:06	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Chloroform	0.64	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-41

Lab ID: 1500488-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 14:57	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 14:57	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Trichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 14:57	
Surrogate: 1,2-Dichloroethane-d4	91.4 %	49 - 148		B5B0315	02/12/2015	02/12/15 13:06	
Surrogate: 1,2-Dichloroethane-d4	103 %	49 - 148		B5B0268	02/11/2015	02/11/15 14:57	
Surrogate: 4-Bromofluorobenzene	101 %	65 - 132		B5B0315	02/12/2015	02/12/15 13:06	
Surrogate: 4-Bromofluorobenzene	88.8 %	65 - 132		B5B0268	02/11/2015	02/11/15 14:57	
Surrogate: Dibromofluoromethane	97.5 %	55 - 138		B5B0268	02/11/2015	02/11/15 14:57	
Surrogate: Dibromofluoromethane	92.5 %	55 - 138		B5B0315	02/12/2015	02/12/15 13:06	
Surrogate: Toluene-d8	84.6 %	60 - 120		B5B0315	02/12/2015	02/12/15 13:06	
Surrogate: Toluene-d8	86.9 %	60 - 120		B5B0268	02/11/2015	02/11/15 14:57	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-41

Lab ID: 1500488-02

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	10	1.0	5	B5B0250	02/10/2015	02/12/15 13:20	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	82.0 %	47 - 117		B5B0250	02/10/2015	02/12/15 13:20	
<i>Surrogate: 2-Fluorobiphenyl</i>	66.2 %	48 - 121		B5B0250	02/10/2015	02/12/15 13:20	
<i>Surrogate: 4-Terphenyl-d14</i>	72.5 %	58 - 142		B5B0250	02/10/2015	02/12/15 13:20	
<i>Surrogate: Nitrobenzene-d5</i>	61.5 %	27 - 151		B5B0250	02/10/2015	02/12/15 13:20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-28

Lab ID: 1500488-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,1-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,1-Dichloroethene	23	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-28

Lab ID: 1500488-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 15:22	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 15:22	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Trichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:22	
Surrogate: 1,2-Dichloroethane-d4	101 %	49 - 148		B5B0268	02/11/2015	02/11/15 15:22	
Surrogate: 4-Bromofluorobenzene	90.6 %	65 - 132		B5B0268	02/11/2015	02/11/15 15:22	
Surrogate: Dibromofluoromethane	101 %	55 - 138		B5B0268	02/11/2015	02/11/15 15:22	
Surrogate: Toluene-d8	85.8 %	60 - 120		B5B0268	02/11/2015	02/11/15 15:22	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-28

Lab ID: 1500488-03

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	5.3	2.0	1	B5B0205	02/09/2015	02/10/15 16:34	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>58.2 %</i>	<i>42 - 106</i>		<i>B5B0205</i>	<i>02/09/2015</i>	<i>02/10/15 16:34</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>71.0 %</i>	<i>55 - 117</i>		<i>B5B0205</i>	<i>02/09/2015</i>	<i>02/10/15 16:34</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>88.0 %</i>	<i>52 - 142</i>		<i>B5B0205</i>	<i>02/09/2015</i>	<i>02/10/15 16:34</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>67.4 %</i>	<i>43 - 116</i>		<i>B5B0205</i>	<i>02/09/2015</i>	<i>02/10/15 16:34</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-2800

Lab ID: 1500488-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,1-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,1-Dichloroethene	22	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-2800

Lab ID: 1500488-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 15:44	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 15:44	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Trichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 15:44	
Surrogate: 1,2-Dichloroethane-d4	101 %	49 - 148		B5B0268	02/11/2015	02/11/15 15:44	
Surrogate: 4-Bromofluorobenzene	88.5 %	65 - 132		B5B0268	02/11/2015	02/11/15 15:44	
Surrogate: Dibromofluoromethane	98.6 %	55 - 138		B5B0268	02/11/2015	02/11/15 15:44	
Surrogate: Toluene-d8	85.9 %	60 - 120		B5B0268	02/11/2015	02/11/15 15:44	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-2800

Lab ID: 1500488-04

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	5.4	2.0	1	B5B0205	02/09/2015	02/10/15 17:00	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>58.2 %</i>	<i>42 - 106</i>		<i>B5B0205</i>	<i>02/09/2015</i>	<i>02/10/15 17:00</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>67.2 %</i>	<i>55 - 117</i>		<i>B5B0205</i>	<i>02/09/2015</i>	<i>02/10/15 17:00</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>86.5 %</i>	<i>52 - 142</i>		<i>B5B0205</i>	<i>02/09/2015</i>	<i>02/10/15 17:00</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>67.0 %</i>	<i>43 - 116</i>		<i>B5B0205</i>	<i>02/09/2015</i>	<i>02/10/15 17:00</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-31

Lab ID: 1500488-05

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,1-Dichloroethane	1.6	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,1-Dichloroethene	160	5.0	10	B5B0268	02/11/2015	02/11/15 12:14	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-31

Lab ID: 1500488-05

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 11:52	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 11:52	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Trichloroethene	6.7	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 11:52	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>105 %</i>	<i>49 - 148</i>		B5B0268	02/11/2015	<i>02/11/15 12:14</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>101 %</i>	<i>49 - 148</i>		B5B0268	02/11/2015	<i>02/11/15 11:52</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>89.6 %</i>	<i>65 - 132</i>		B5B0268	02/11/2015	<i>02/11/15 12:14</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>87.0 %</i>	<i>65 - 132</i>		B5B0268	02/11/2015	<i>02/11/15 11:52</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>99.7 %</i>	<i>55 - 138</i>		B5B0268	02/11/2015	<i>02/11/15 12:14</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>101 %</i>	<i>55 - 138</i>		B5B0268	02/11/2015	<i>02/11/15 11:52</i>	
<i>Surrogate: Toluene-d8</i>	<i>87.9 %</i>	<i>60 - 120</i>		B5B0268	02/11/2015	<i>02/11/15 12:14</i>	
<i>Surrogate: Toluene-d8</i>	<i>83.3 %</i>	<i>60 - 120</i>		B5B0268	02/11/2015	<i>02/11/15 11:52</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-31

Lab ID: 1500488-05

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	11	2.0	1	B5B0205	02/09/2015	02/10/15 13:26	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	75.6 %	42 - 106		B5B0205	02/09/2015	02/10/15 13:26	
<i>Surrogate: 2-Fluorobiphenyl</i>	80.8 %	55 - 117		B5B0205	02/09/2015	02/10/15 13:26	
<i>Surrogate: 4-Terphenyl-d14</i>	93.0 %	52 - 142		B5B0205	02/09/2015	02/10/15 13:26	
<i>Surrogate: Nitrobenzene-d5</i>	85.3 %	43 - 116		B5B0205	02/09/2015	02/10/15 13:26	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-24

Lab ID: 1500488-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,1,1-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,1,2-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,1-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,1-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,1-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,2,3-Trichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,2-Dibromoethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,2-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,2-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,3-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,3-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
1,4-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
2,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
2-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
4-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
4-Isopropyltoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Benzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Bromobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Bromodichloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Bromoform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Bromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Carbon tetrachloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Chlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Chloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Chloroform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Chloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Dibromochloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-24

Lab ID: 1500488-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Dichlorodifluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Ethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Hexachlorobutadiene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Isopropylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
m,p-Xylene	ND	1.0	1	B5B0315	02/12/2015	02/12/15 12:20	
Methylene chloride	ND	1.0	1	B5B0315	02/12/2015	02/12/15 12:20	
n-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
n-Propylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Naphthalene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
o-Xylene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
sec-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Styrene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
tert-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Tetrachloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Toluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Trichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Trichlorofluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Vinyl chloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 12:20	
Surrogate: 1,2-Dichloroethane-d4	91.1 %	49 - 148		B5B0315	02/12/2015	02/12/15 12:20	
Surrogate: 4-Bromofluorobenzene	95.4 %	65 - 132		B5B0315	02/12/2015	02/12/15 12:20	
Surrogate: Dibromofluoromethane	93.4 %	55 - 138		B5B0315	02/12/2015	02/12/15 12:20	
Surrogate: Toluene-d8	82.2 %	60 - 120		B5B0315	02/12/2015	02/12/15 12:20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-24

Lab ID: 1500488-06

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0250	02/10/2015	02/11/15 14:31	
Surrogate: 1,2-Dichlorobenzene-d4	73.1 %	47 - 117		B5B0250	02/10/2015	02/11/15 14:31	
Surrogate: 2-Fluorobiphenyl	79.6 %	48 - 121		B5B0250	02/10/2015	02/11/15 14:31	
Surrogate: 4-Terphenyl-d14	76.3 %	58 - 142		B5B0250	02/10/2015	02/11/15 14:31	
Surrogate: Nitrobenzene-d5	79.9 %	27 - 151		B5B0250	02/10/2015	02/11/15 14:31	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-36

Lab ID: 1500488-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,1-Dichloroethane	1.6	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,1-Dichloroethene	130	5.0	10	B5B0315	02/12/2015	02/12/15 13:29	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-36

Lab ID: 1500488-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 12:40	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 12:40	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Trichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 12:40	
Surrogate: 1,2-Dichloroethane-d4	82.2 %	49 - 148		B5B0315	02/12/2015	02/12/15 13:29	
Surrogate: 1,2-Dichloroethane-d4	107 %	49 - 148		B5B0268	02/11/2015	02/11/15 12:40	
Surrogate: 4-Bromofluorobenzene	102 %	65 - 132		B5B0315	02/12/2015	02/12/15 13:29	
Surrogate: 4-Bromofluorobenzene	89.5 %	65 - 132		B5B0268	02/11/2015	02/11/15 12:40	
Surrogate: Dibromofluoromethane	103 %	55 - 138		B5B0268	02/11/2015	02/11/15 12:40	
Surrogate: Dibromofluoromethane	79.7 %	55 - 138		B5B0315	02/12/2015	02/12/15 13:29	
Surrogate: Toluene-d8	78.8 %	60 - 120		B5B0315	02/12/2015	02/12/15 13:29	
Surrogate: Toluene-d8	88.4 %	60 - 120		B5B0268	02/11/2015	02/11/15 12:40	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-36

Lab ID: 1500488-07

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	11	2.0	1	B5B0205	02/09/2015	02/10/15 17:27	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	68.4 %	42 - 106		B5B0205	02/09/2015	02/10/15 17:27	
<i>Surrogate: 2-Fluorobiphenyl</i>	74.4 %	55 - 117		B5B0205	02/09/2015	02/10/15 17:27	
<i>Surrogate: 4-Terphenyl-d14</i>	85.8 %	52 - 142		B5B0205	02/09/2015	02/10/15 17:27	
<i>Surrogate: Nitrobenzene-d5</i>	76.1 %	43 - 116		B5B0205	02/09/2015	02/10/15 17:27	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-3600

Lab ID: 1500488-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,1,1-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,1,2-Trichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,1-Dichloroethane	1.6	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,1-Dichloroethene	120	5.0	10	B5B0315	02/12/2015	02/12/15 14:11	
1,1-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,2,3-Trichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,2-Dibromoethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,2-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,2-Dichloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,3-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,3-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
1,4-Dichlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
2,2-Dichloropropane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
2-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
4-Chlorotoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
4-Isopropyltoluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Benzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Bromobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Bromodichloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Bromoform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Bromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Carbon tetrachloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Chlorobenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Chloroethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Chloroform	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Chloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Dibromochloromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-3600

Lab ID: 1500488-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Dichlorodifluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Ethylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Hexachlorobutadiene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Isopropylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
m,p-Xylene	ND	1.0	1	B5B0268	02/11/2015	02/11/15 13:05	
Methylene chloride	ND	1.0	1	B5B0268	02/11/2015	02/11/15 13:05	
n-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
n-Propylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Naphthalene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
o-Xylene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
sec-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Styrene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
tert-Butylbenzene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Tetrachloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Toluene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Trichloroethene	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Trichlorofluoromethane	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Vinyl chloride	ND	0.50	1	B5B0268	02/11/2015	02/11/15 13:05	
Surrogate: 1,2-Dichloroethane-d4	88.9 %	49 - 148		B5B0315	02/12/2015	02/12/15 14:11	
Surrogate: 1,2-Dichloroethane-d4	107 %	49 - 148		B5B0268	02/11/2015	02/11/15 13:05	
Surrogate: 4-Bromofluorobenzene	99.3 %	65 - 132		B5B0315	02/12/2015	02/12/15 14:11	
Surrogate: 4-Bromofluorobenzene	91.8 %	65 - 132		B5B0268	02/11/2015	02/11/15 13:05	
Surrogate: Dibromofluoromethane	103 %	55 - 138		B5B0268	02/11/2015	02/11/15 13:05	
Surrogate: Dibromofluoromethane	86.4 %	55 - 138		B5B0315	02/12/2015	02/12/15 14:11	
Surrogate: Toluene-d8	88.3 %	60 - 120		B5B0268	02/11/2015	02/11/15 13:05	
Surrogate: Toluene-d8	80.9 %	60 - 120		B5B0315	02/12/2015	02/12/15 14:11	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-3600

Lab ID: 1500488-08

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	11	2.0	1	B5B0205	02/09/2015	02/10/15 17:54	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>66.4 %</i>	<i>42 - 106</i>		B5B0205	02/09/2015	<i>02/10/15 17:54</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>73.2 %</i>	<i>55 - 117</i>		B5B0205	02/09/2015	<i>02/10/15 17:54</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>83.7 %</i>	<i>52 - 142</i>		B5B0205	02/09/2015	<i>02/10/15 17:54</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>76.3 %</i>	<i>43 - 116</i>		B5B0205	02/09/2015	<i>02/10/15 17:54</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0268 - MSVOA_LL_W

Blank (B5B0268-BLK1)

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR			
1,1,1-Trichloroethane	ND	0.50			NR			
1,1,2,2-Tetrachloroethane	ND	0.50			NR			
1,1,2-Trichloroethane	ND	0.50			NR			
1,1-Dichloroethane	ND	0.50			NR			
1,1-Dichloroethene	ND	0.50			NR			
1,1-Dichloropropene	ND	0.50			NR			
1,2,3-Trichloropropane	ND	0.50			NR			
1,2,3-Trichlorobenzene	ND	0.50			NR			
1,2,4-Trichlorobenzene	ND	0.50			NR			
1,2,4-Trimethylbenzene	ND	0.50			NR			
1,2-Dibromo-3-chloropropane	ND	0.50			NR			
1,2-Dibromoethane	ND	0.50			NR			
1,2-Dichlorobenzene	ND	0.50			NR			
1,2-Dichloroethane	ND	0.50			NR			
1,2-Dichloropropane	ND	0.50			NR			
1,3,5-Trimethylbenzene	ND	0.50			NR			
1,3-Dichlorobenzene	ND	0.50			NR			
1,3-Dichloropropane	ND	0.50			NR			
1,4-Dichlorobenzene	ND	0.50			NR			
2,2-Dichloropropane	ND	0.50			NR			
2-Chlorotoluene	ND	0.50			NR			
4-Chlorotoluene	ND	0.50			NR			
4-Isopropyltoluene	ND	0.50			NR			
Benzene	ND	0.50			NR			
Bromobenzene	ND	0.50			NR			
Bromodichloromethane	ND	0.50			NR			
Bromoform	ND	0.50			NR			
Bromomethane	ND	0.50			NR			
Carbon tetrachloride	ND	0.50			NR			
Chlorobenzene	ND	0.50			NR			
Chloroethane	ND	0.50			NR			
Chloroform	ND	0.50			NR			
Chloromethane	ND	0.50			NR			
cis-1,2-Dichloroethene	ND	0.50			NR			
cis-1,3-Dichloropropene	ND	0.50			NR			
Dibromochloromethane	ND	0.50			NR			
Dibromomethane	ND	0.50			NR			
Dichlorodifluoromethane	ND	0.50			NR			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0268 - MSVOA_LL_W (continued)

Blank (B5B0268-BLK1) - Continued

Prepared: 2/11/2015 Analyzed: 2/11/2015

Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	25.84		25.0000		103	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.11		25.0000		92.4	65 - 132			
Surrogate: Dibromofluoromethane	24.87		25.0000		99.5	55 - 138			
Surrogate: Toluene-d8	22.55		25.0000		90.2	60 - 120			

LCS (B5B0268-BS1)

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	18.3800	0.50	20.0000		91.9	61 - 136			
Benzene	39.5400	0.50	40.0000		98.8	72 - 127			
Chlorobenzene	20.6500	0.50	20.0000		103	78 - 125			
MTBE	17.7200	0.50	20.0000		88.6	60 - 132			
Toluene	42.0100	0.50	40.0000		105	59 - 140			
Trichloroethene	19.8500	0.50	20.0000		99.2	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	23.42		25.0000		93.7	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.83		25.0000		91.3	65 - 132			
Surrogate: Dibromofluoromethane	23.03		25.0000		92.1	55 - 138			
Surrogate: Toluene-d8	23.04		25.0000		92.2	60 - 120			

LCS Dup (B5B0268-BSD1)

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	18.5200	0.50	20.0000		92.6	61 - 136	0.759	20	
Benzene	38.0700	0.50	40.0000		95.2	72 - 127	3.79	20	
Chlorobenzene	19.8100	0.50	20.0000		99.0	78 - 125	4.15	20	
MTBE	17.0800	0.50	20.0000		85.4	60 - 132	3.68	20	
Toluene	40.0200	0.50	40.0000		100	59 - 140	4.85	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0268 - MSVOA_LL_W (continued)

LCS Dup (B5B0268-BS1) - Continued

Prepared: 2/11/2015 Analyzed: 2/11/2015

Trichloroethene	19.4700	0.50	20.0000		97.4	67 - 130	1.93	20	
Surrogate: 1,2-Dichloroethane-d4	22.54		25.0000		90.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.45		25.0000		89.8	65 - 132			
Surrogate: Dibromofluoromethane	22.50		25.0000		90.0	55 - 138			
Surrogate: Toluene-d8	22.18		25.0000		88.7	60 - 120			

Matrix Spike (B5B0268-MS1)

Source: 1500488-05

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	354.200	5.0	20.0000	160.400	969	61 - 136			M3
Benzene	39.5900	0.50	40.0000	ND	99.0	72 - 127			
Chlorobenzene	19.7600	0.50	20.0000	ND	98.8	78 - 125			
MTBE	16.7300	0.50	20.0000	ND	83.6	60 - 132			
Toluene	42.0000	0.50	40.0000	ND	105	59 - 140			
Trichloroethene	20.6300	0.50	20.0000	3.70000	84.6	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	23.91		25.0000		95.6	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.46		25.0000		89.8	65 - 132			
Surrogate: Dibromofluoromethane	22.88		25.0000		91.5	55 - 138			
Surrogate: Toluene-d8	22.50		25.0000		90.0	60 - 120			

Matrix Spike Dup (B5B0268-MSD1)

Source: 1500488-05

Prepared: 2/11/2015 Analyzed: 2/11/2015

1,1-Dichloroethene	375.000	5.0	20.0000	160.400	1070	61 - 136	5.70	20	M3
Benzene	42.2100	0.50	40.0000	ND	106	72 - 127	6.41	20	
Chlorobenzene	21.3300	0.50	20.0000	ND	107	78 - 125	7.64	20	
MTBE	18.1000	0.50	20.0000	ND	90.5	60 - 132	7.87	20	
Toluene	44.2800	0.50	40.0000	ND	111	59 - 140	5.29	20	
Trichloroethene	22.2000	0.50	20.0000	3.70000	92.5	67 - 130	7.33	20	
Surrogate: 1,2-Dichloroethane-d4	23.29		25.0000		93.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.67		25.0000		90.7	65 - 132			
Surrogate: Dibromofluoromethane	23.03		25.0000		92.1	55 - 138			
Surrogate: Toluene-d8	22.44		25.0000		89.8	60 - 120			

Batch B5B0315 - MSVOA_LL_W

Blank (B5B0315-BLK1)

Prepared: 2/12/2015 Analyzed: 2/12/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0315 - MSVOA_LL_W (continued)

Blank (B5B0315-BLK1) - Continued

Prepared: 2/12/2015 Analyzed: 2/12/2015

1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR
Ethylbenzene	ND	0.50			NR
Hexachlorobutadiene	ND	0.50			NR
Isopropylbenzene	ND	0.50			NR
m,p-Xylene	ND	1.0			NR
Methylene chloride	ND	1.0			NR
n-Butylbenzene	ND	0.50			NR
n-Propylbenzene	ND	0.50			NR
Naphthalene	ND	0.50			NR
o-Xylene	ND	0.50			NR
sec-Butylbenzene	ND	0.50			NR
Styrene	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0315 - MSVOA_LL_W (continued)

Blank (B5B0315-BLK1) - Continued

Prepared: 2/12/2015 Analyzed: 2/12/2015

tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				
<i>Surrogate: 1,2-Dichloroethane-d4</i>	22.27		25.0000		89.1	49 - 148			
<i>Surrogate: 4-Bromofluorobenzene</i>	25.14		25.0000		101	65 - 132			
<i>Surrogate: Dibromofluoromethane</i>	21.87		25.0000		87.5	55 - 138			
<i>Surrogate: Toluene-d8</i>	21.46		25.0000		85.8	60 - 120			

LCS (B5B0315-BS1)

Prepared: 2/12/2015 Analyzed: 2/12/2015

1,1-Dichloroethene	17.0800	0.50	20.0000		85.4	61 - 136			
Benzene	36.9200	0.50	40.0000		92.3	72 - 127			
Chlorobenzene	19.2100	0.50	20.0000		96.0	78 - 125			
MTBE	16.4800	0.50	20.0000		82.4	60 - 132			
Toluene	38.2500	0.50	40.0000		95.6	59 - 140			
Trichloroethene	18.4000	0.50	20.0000		92.0	67 - 130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	20.29		25.0000		81.2	49 - 148			
<i>Surrogate: 4-Bromofluorobenzene</i>	23.23		25.0000		92.9	65 - 132			
<i>Surrogate: Dibromofluoromethane</i>	20.78		25.0000		83.1	55 - 138			
<i>Surrogate: Toluene-d8</i>	20.84		25.0000		83.4	60 - 120			

LCS Dup (B5B0315-BSD1)

Prepared: 2/12/2015 Analyzed: 2/12/2015

1,1-Dichloroethene	17.4200	0.50	20.0000		87.1	61 - 136	1.97	20	
Benzene	38.6100	0.50	40.0000		96.5	72 - 127	4.48	20	
Chlorobenzene	19.6700	0.50	20.0000		98.4	78 - 125	2.37	20	
MTBE	16.5400	0.50	20.0000		82.7	60 - 132	0.363	20	
Toluene	39.5900	0.50	40.0000		99.0	59 - 140	3.44	20	
Trichloroethene	19.3500	0.50	20.0000		96.8	67 - 130	5.03	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	19.97		25.0000		79.9	49 - 148			
<i>Surrogate: 4-Bromofluorobenzene</i>	22.85		25.0000		91.4	65 - 132			
<i>Surrogate: Dibromofluoromethane</i>	20.77		25.0000		83.1	55 - 138			
<i>Surrogate: Toluene-d8</i>	20.76		25.0000		83.0	60 - 120			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0205 - MSSEMI_W

Blank (B5B0205-BLK1)

Prepared: 2/9/2015 Analyzed: 2/11/2015

1,4-Dioxane	ND	2.0			NR				
Surrogate: 1,2-Dichlorobenzene-d4	67.86		100.000		67.9	42 - 106			
Surrogate: 2-Fluorobiphenyl	77.01		100.000		77.0	55 - 117			
Surrogate: 4-Terphenyl-d14	92.18		100.000		92.2	52 - 142			
Surrogate: Nitrobenzene-d5	82.82		100.000		82.8	43 - 116			

LCS (B5B0205-BS1)

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	106.620	2.0	100.000		107	62 - 127			
Surrogate: 1,2-Dichlorobenzene-d4	57.26		100.000		57.3	42 - 106			
Surrogate: 2-Fluorobiphenyl	69.70		100.000		69.7	55 - 117			
Surrogate: 4-Terphenyl-d14	91.00		100.000		91.0	52 - 142			
Surrogate: Nitrobenzene-d5	68.61		100.000		68.6	43 - 116			

Matrix Spike (B5B0205-MS1)

Source: 1500455-02

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	417.340	2.0	100.000	286.610	131	62 - 127			M3
Surrogate: 1,2-Dichlorobenzene-d4	59.34		100.000		59.3	42 - 106			
Surrogate: 2-Fluorobiphenyl	69.64		100.000		69.6	55 - 117			
Surrogate: 4-Terphenyl-d14	85.16		100.000		85.2	52 - 142			
Surrogate: Nitrobenzene-d5	70.61		100.000		70.6	43 - 116			

Matrix Spike (B5B0205-MS2)

Source: 1500488-05

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	119.190	2.0	100.000	11.2900	108	62 - 127			
Surrogate: 1,2-Dichlorobenzene-d4	53.23		100.000		53.2	42 - 106			
Surrogate: 2-Fluorobiphenyl	62.63		100.000		62.6	55 - 117			
Surrogate: 4-Terphenyl-d14	75.09		100.000		75.1	52 - 142			
Surrogate: Nitrobenzene-d5	62.22		100.000		62.2	43 - 116			

Matrix Spike Dup (B5B0205-MSD1)

Source: 1500455-02

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	421.080	2.0	100.000	286.610	134	62 - 127	0.892	20	M3
Surrogate: 1,2-Dichlorobenzene-d4	61.83		100.000		61.8	42 - 106			
Surrogate: 2-Fluorobiphenyl	70.89		100.000		70.9	55 - 117			
Surrogate: 4-Terphenyl-d14	91.46		100.000		91.5	52 - 142			
Surrogate: Nitrobenzene-d5	71.56		100.000		71.6	43 - 116			

Matrix Spike Dup (B5B0205-MSD2)

Source: 1500488-05

Prepared: 2/9/2015 Analyzed: 2/10/2015

1,4-Dioxane	116.190	2.0	100.000	11.2900	105	62 - 127	2.55	20	
Surrogate: 1,2-Dichlorobenzene-d4	57.80		100.000		57.8	42 - 106			
Surrogate: 2-Fluorobiphenyl	66.46		100.000		66.5	55 - 117			
Surrogate: 4-Terphenyl-d14	72.69		100.000		72.7	52 - 142			
Surrogate: Nitrobenzene-d5	66.82		100.000		66.8	43 - 116			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0250 - MSSEMI_W

Blank (B5B0250-BLK1)

Prepared: 2/10/2015 Analyzed: 2/11/2015

1,4-Dioxane	ND	0.20			NR				
Surrogate: 1,2-Dichlorobenzene-d4	0.6206		1.00000		62.1	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.6397		1.00000		64.0	48 - 121			
Surrogate: 4-Terphenyl-d14	0.6717		1.00000		67.2	58 - 142			
Surrogate: Nitrobenzene-d5	0.6180		1.00000		61.8	27 - 151			

LCS (B5B0250-BS1)

Prepared: 2/10/2015 Analyzed: 2/11/2015

1,4-Dioxane	1.31809	0.20	1.00000		132	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.7236		1.00000		72.4	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.7552		1.00000		75.5	48 - 121			
Surrogate: 4-Terphenyl-d14	0.7722		1.00000		77.2	58 - 142			
Surrogate: Nitrobenzene-d5	0.7607		1.00000		76.1	27 - 151			

LCS Dup (B5B0250-BSD1)

Prepared: 2/10/2015 Analyzed: 2/11/2015

1,4-Dioxane	1.40201	0.20	1.00000		140	58 - 151	6.17	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.7521		1.00000		75.2	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.7716		1.00000		77.2	48 - 121			
Surrogate: 4-Terphenyl-d14	0.8046		1.00000		80.5	58 - 142			
Surrogate: Nitrobenzene-d5	0.7913		1.00000		79.1	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Notes and Definitions

M3	Matrix spike recovery outside of acceptance limit due to disproportionate concentration of the analyte to spike level. The analytical batch was validated by the laboratory control sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



DATE 2/5/15 PAGE 1 OF 2

PROJECT NAME Raytheon			PROJECT No./TASK No. 532.30			SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION			
PROJECT MANAGER Steve Netto			Phone No. 858-455-6500											ATL			
QA MANAGER			Fax No. 858-455-6533											V. P. Netto			
SAMPLER (SIGNATURE) [Signature]			SAMPLER (PRINTED) Tyler Evans											ATL			
LAB ID		SAMPLE ID		SAMPLE COLLECTION		MATRIX		PRESERVATION									
				Date	Time	Soil	Ground-water	Surface water	Leachate	HCl	HNO3	NaOH	H2SO4	Ice			
15M48-1		TB-020515A		2/5/15	0745				X	X			X		2		
2		MU-41			0840	X			X				X		3		
		↓			↓	X							X		1		
3		MW-28			0930	X			X				X		3		
		↓			↓	X							X		1		
4		MW-2800			0931	X			X				X		3		
		↓			↓	X							X		1		
5		MW-31			1111	X			X				X		9		
		↓			↓	X							X		3		
6		MW-24			1313	X			X				X		1		
		↓			↓	X							X		1		
7		MW-36			1570	X			X				X		3		
		↓			↓	X							X		1		
8		MW-3600			1521	X			X				X		3		
Total number of Containers per analysis:															Total No. of Containers:		
Relinquished by: [Signature]		Date: 2/5/15		Received by: [Signature]		Date: 2-5-15		INSTRUCTIONS 1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness. 2. Complete in ballpoint pen. Draw one line through errors, initial and date correction. 3. Indicate number of sample containers in analysis request space; indicate choice with ✓ or x. 4. Note applicable preservatives, special instructions, and deviations from typical environmental samples. 5. Consult project QA documents for specific instructions.								Shipment Method:	
Company: HHA		Time: 1930		Company: ATL		Time: 1930										Send Results to: Steve Netto	
Relinquished by: [Signature]		Date: 2-5-15		Received by: [Signature]		Date: 2-5-15		Sample Receipt: ☐ No. of containers correct ☐ custody seals secure								Temp. @ receipt 4.1 °C	
Company: ATL		Time: 2020		Company: [Signature]		Time: 2020										☒ received good condition/cold ☐ conforms to COC document	
															9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500		
															1640 SOUTH STAPLEY DRIVE, SUITE 209 MESA, AZ 85204 (480) 345-0888		
															1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300		
															Send invoice to San Diego, CA Attn: Accounts Payable		



February 13, 2015

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1500496
Client Reference : RAYTHEON, 532.30

Enclosed are the results for sample(s) received on February 06, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "E Rodriguez", written in a cursive style.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-02062015	1500496-01	LAB H2O	2/06/15 8:00	2/06/15 12:30
MW-27	1500496-02	Groundwater	2/06/15 8:03	2/06/15 12:30
MW-30B	1500496-03	Groundwater	2/06/15 8:50	2/06/15 12:30
MW-30A	1500496-04	Groundwater	2/06/15 9:10	2/06/15 12:30



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID TB-02062015

Lab ID: 1500496-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,1,1-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,1,2-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,1-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,1-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,1-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,2,3-Trichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,2-Dibromoethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,2-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,2-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,3-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,3-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
1,4-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
2,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
2-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
4-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
4-Isopropyltoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Benzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Bromobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Bromodichloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Bromoform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Bromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Carbon tetrachloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Chlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Chloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Chloroform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Chloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Dibromochloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID TB-02062015

Lab ID: 1500496-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Dichlorodifluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Ethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Hexachlorobutadiene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Isopropylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
m,p-Xylene	ND	1.0	1	B5B0315	02/12/2015	02/12/15 14:56	
Methylene chloride	ND	1.0	1	B5B0315	02/12/2015	02/12/15 14:56	
n-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
n-Propylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Naphthalene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
o-Xylene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
sec-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Styrene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
tert-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Tetrachloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Toluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Trichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Trichlorofluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Vinyl chloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 14:56	
Surrogate: 1,2-Dichloroethane-d4	95.7 %	49 - 148		B5B0315	02/12/2015	02/12/15 14:56	
Surrogate: 4-Bromofluorobenzene	96.4 %	65 - 132		B5B0315	02/12/2015	02/12/15 14:56	
Surrogate: Dibromofluoromethane	93.4 %	55 - 138		B5B0315	02/12/2015	02/12/15 14:56	
Surrogate: Toluene-d8	82.8 %	60 - 120		B5B0315	02/12/2015	02/12/15 14:56	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-27

Lab ID: 1500496-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,1,1-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,1,2-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,1-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,1-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,1-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,2,3-Trichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,2-Dibromoethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,2-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,2-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,3-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,3-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
1,4-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
2,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
2-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
4-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
4-Isopropyltoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Benzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Bromobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Bromodichloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Bromoform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Bromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Carbon tetrachloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Chlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Chloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Chloroform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Chloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Dibromochloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-27

Lab ID: 1500496-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Dichlorodifluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Ethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Hexachlorobutadiene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Isopropylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
m,p-Xylene	ND	1.0	1	B5B0315	02/12/2015	02/12/15 10:37	
Methylene chloride	ND	1.0	1	B5B0315	02/12/2015	02/12/15 10:37	
n-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
n-Propylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Naphthalene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
o-Xylene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
sec-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Styrene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
tert-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Tetrachloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Toluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Trichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Trichlorofluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Vinyl chloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 10:37	
Surrogate: 1,2-Dichloroethane-d4	94.1 %	49 - 148		B5B0315	02/12/2015	02/12/15 10:37	
Surrogate: 4-Bromofluorobenzene	97.3 %	65 - 132		B5B0315	02/12/2015	02/12/15 10:37	
Surrogate: Dibromofluoromethane	94.4 %	55 - 138		B5B0315	02/12/2015	02/12/15 10:37	
Surrogate: Toluene-d8	84.0 %	60 - 120		B5B0315	02/12/2015	02/12/15 10:37	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-27

Lab ID: 1500496-02

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0250	02/10/2015	02/11/15 14:59	
Surrogate: 1,2-Dichlorobenzene-d4	61.5 %	47 - 117		B5B0250	02/10/2015	02/11/15 14:59	
Surrogate: 2-Fluorobiphenyl	66.5 %	48 - 121		B5B0250	02/10/2015	02/11/15 14:59	
Surrogate: 4-Terphenyl-d14	73.5 %	58 - 142		B5B0250	02/10/2015	02/11/15 14:59	
Surrogate: Nitrobenzene-d5	71.8 %	27 - 151		B5B0250	02/10/2015	02/11/15 14:59	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-30B

Lab ID: 1500496-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,1,1-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,1,2-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,1-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,1-Dichloroethene	3.2	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,1-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,2,3-Trichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,2-Dibromoethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,2-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,2-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,3-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,3-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
1,4-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
2,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
2-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
4-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
4-Isopropyltoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Benzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Bromobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Bromodichloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Bromoform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Bromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Carbon tetrachloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Chlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Chloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Chloroform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Chloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
cis-1,2-Dichloroethene	0.86	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Dibromochloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-30B

Lab ID: 1500496-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Dichlorodifluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Ethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Hexachlorobutadiene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Isopropylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
m,p-Xylene	ND	1.0	1	B5B0315	02/12/2015	02/12/15 11:01	
Methylene chloride	ND	1.0	1	B5B0315	02/12/2015	02/12/15 11:01	
n-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
n-Propylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Naphthalene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
o-Xylene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
sec-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Styrene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
tert-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Tetrachloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Toluene	0.66	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Trichloroethene	20	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Trichlorofluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
Vinyl chloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:01	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>97.2 %</i>	<i>49 - 148</i>		B5B0315	02/12/2015	<i>02/12/15 11:01</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>101 %</i>	<i>65 - 132</i>		B5B0315	02/12/2015	<i>02/12/15 11:01</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>97.8 %</i>	<i>55 - 138</i>		B5B0315	02/12/2015	<i>02/12/15 11:01</i>	
<i>Surrogate: Toluene-d8</i>	<i>84.9 %</i>	<i>60 - 120</i>		B5B0315	02/12/2015	<i>02/12/15 11:01</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-30B

Lab ID: 1500496-03

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0250	02/10/2015	02/11/15 15:27	
Surrogate: 1,2-Dichlorobenzene-d4	74.2 %	47 - 117		B5B0250	02/10/2015	02/11/15 15:27	
Surrogate: 2-Fluorobiphenyl	74.7 %	48 - 121		B5B0250	02/10/2015	02/11/15 15:27	
Surrogate: 4-Terphenyl-d14	83.8 %	58 - 142		B5B0250	02/10/2015	02/11/15 15:27	
Surrogate: Nitrobenzene-d5	81.5 %	27 - 151		B5B0250	02/10/2015	02/11/15 15:27	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-30A

Lab ID: 1500496-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,1,1-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,1,2-Trichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,1-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,1-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,1-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,2,3-Trichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,2-Dibromoethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,2-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,2-Dichloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,3-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,3-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
1,4-Dichlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
2,2-Dichloropropane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
2-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
4-Chlorotoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
4-Isopropyltoluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Benzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Bromobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Bromodichloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Bromoform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Bromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Carbon tetrachloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Chlorobenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Chloroethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Chloroform	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Chloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Dibromochloromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-30A

Lab ID: 1500496-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Dichlorodifluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Ethylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Hexachlorobutadiene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Isopropylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
m,p-Xylene	ND	1.0	1	B5B0315	02/12/2015	02/12/15 11:25	
Methylene chloride	ND	1.0	1	B5B0315	02/12/2015	02/12/15 11:25	
n-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
n-Propylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Naphthalene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
o-Xylene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
sec-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Styrene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
tert-Butylbenzene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Tetrachloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Toluene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Trichloroethene	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Trichlorofluoromethane	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Vinyl chloride	ND	0.50	1	B5B0315	02/12/2015	02/12/15 11:25	
Surrogate: 1,2-Dichloroethane-d4	92.2 %	49 - 148		B5B0315	02/12/2015	02/12/15 11:25	
Surrogate: 4-Bromofluorobenzene	95.7 %	65 - 132		B5B0315	02/12/2015	02/12/15 11:25	
Surrogate: Dibromofluoromethane	91.8 %	55 - 138		B5B0315	02/12/2015	02/12/15 11:25	
Surrogate: Toluene-d8	82.1 %	60 - 120		B5B0315	02/12/2015	02/12/15 11:25	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Client Sample ID MW-30A

Lab ID: 1500496-04

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B5B0250	02/10/2015	02/11/15 15:55	
Surrogate: 1,2-Dichlorobenzene-d4	73.3 %	47 - 117		B5B0250	02/10/2015	02/11/15 15:55	
Surrogate: 2-Fluorobiphenyl	76.7 %	48 - 121		B5B0250	02/10/2015	02/11/15 15:55	
Surrogate: 4-Terphenyl-d14	76.6 %	58 - 142		B5B0250	02/10/2015	02/11/15 15:55	
Surrogate: Nitrobenzene-d5	80.4 %	27 - 151		B5B0250	02/10/2015	02/11/15 15:55	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0315 - MSVOA_LL_W

Blank (B5B0315-BLK1)

Prepared: 2/12/2015 Analyzed: 2/12/2015

1,1,1,2-Tetrachloroethane	ND	0.50				NR			
1,1,1-Trichloroethane	ND	0.50				NR			
1,1,2,2-Tetrachloroethane	ND	0.50				NR			
1,1,2-Trichloroethane	ND	0.50				NR			
1,1-Dichloroethane	ND	0.50				NR			
1,1-Dichloroethene	ND	0.50				NR			
1,1-Dichloropropene	ND	0.50				NR			
1,2,3-Trichloropropane	ND	0.50				NR			
1,2,3-Trichlorobenzene	ND	0.50				NR			
1,2,4-Trichlorobenzene	ND	0.50				NR			
1,2,4-Trimethylbenzene	ND	0.50				NR			
1,2-Dibromo-3-chloropropane	ND	0.50				NR			
1,2-Dibromoethane	ND	0.50				NR			
1,2-Dichlorobenzene	ND	0.50				NR			
1,2-Dichloroethane	ND	0.50				NR			
1,2-Dichloropropane	ND	0.50				NR			
1,3,5-Trimethylbenzene	ND	0.50				NR			
1,3-Dichlorobenzene	ND	0.50				NR			
1,3-Dichloropropane	ND	0.50				NR			
1,4-Dichlorobenzene	ND	0.50				NR			
2,2-Dichloropropane	ND	0.50				NR			
2-Chlorotoluene	ND	0.50				NR			
4-Chlorotoluene	ND	0.50				NR			
4-Isopropyltoluene	ND	0.50				NR			
Benzene	ND	0.50				NR			
Bromobenzene	ND	0.50				NR			
Bromodichloromethane	ND	0.50				NR			
Bromoform	ND	0.50				NR			
Bromomethane	ND	0.50				NR			
Carbon tetrachloride	ND	0.50				NR			
Chlorobenzene	ND	0.50				NR			
Chloroethane	ND	0.50				NR			
Chloroform	ND	0.50				NR			
Chloromethane	ND	0.50				NR			
cis-1,2-Dichloroethene	ND	0.50				NR			
cis-1,3-Dichloropropene	ND	0.50				NR			
Dibromochloromethane	ND	0.50				NR			
Dibromomethane	ND	0.50				NR			
Dichlorodifluoromethane	ND	0.50				NR			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0315 - MSVOA_LL_W (continued)

Blank (B5B0315-BLK1) - Continued

Prepared: 2/12/2015 Analyzed: 2/12/2015

Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	22.27		25.0000		89.1	49 - 148			
Surrogate: 4-Bromofluorobenzene	25.14		25.0000		101	65 - 132			
Surrogate: Dibromofluoromethane	21.87		25.0000		87.5	55 - 138			
Surrogate: Toluene-d8	21.46		25.0000		85.8	60 - 120			

LCS (B5B0315-BS1)

Prepared: 2/12/2015 Analyzed: 2/12/2015

1,1-Dichloroethene	17.0800	0.50	20.0000		85.4	61 - 136			
Benzene	36.9200	0.50	40.0000		92.3	72 - 127			
Chlorobenzene	19.2100	0.50	20.0000		96.0	78 - 125			
MTBE	16.4800	0.50	20.0000		82.4	60 - 132			
Toluene	38.2500	0.50	40.0000		95.6	59 - 140			
Trichloroethene	18.4000	0.50	20.0000		92.0	67 - 130			
Surrogate: 1,2-Dichloroethane-d4	20.29		25.0000		81.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.23		25.0000		92.9	65 - 132			
Surrogate: Dibromofluoromethane	20.78		25.0000		83.1	55 - 138			
Surrogate: Toluene-d8	20.84		25.0000		83.4	60 - 120			

LCS Dup (B5B0315-BSD1)

Prepared: 2/12/2015 Analyzed: 2/12/2015

1,1-Dichloroethene	17.4200	0.50	20.0000		87.1	61 - 136	1.97	20	
Benzene	38.6100	0.50	40.0000		96.5	72 - 127	4.48	20	
Chlorobenzene	19.6700	0.50	20.0000		98.4	78 - 125	2.37	20	
MTBE	16.5400	0.50	20.0000		82.7	60 - 132	0.363	20	
Toluene	39.5900	0.50	40.0000		99.0	59 - 140	3.44	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0315 - MSVOA_LL_W (continued)

LCS Dup (B5B0315-bsd1) - Continued

Prepared: 2/12/2015 Analyzed: 2/12/2015

Trichloroethene	19.3500	0.50	20.0000		96.8	67 - 130	5.03	20	
Surrogate: 1,2-Dichloroethane-d4	19.97		25.0000		79.9	49 - 148			
Surrogate: 4-Bromofluorobenzene	22.85		25.0000		91.4	65 - 132			
Surrogate: Dibromofluoromethane	20.77		25.0000		83.1	55 - 138			
Surrogate: Toluene-d8	20.76		25.0000		83.0	60 - 120			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0250 - MSSEMI_W

Blank (B5B0250-BLK1)

Prepared: 2/10/2015 Analyzed: 2/11/2015

1,4-Dioxane	ND	0.20			NR				
Surrogate: 1,2-Dichlorobenzene-d4	0.6206		1.00000		62.1	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.6397		1.00000		64.0	48 - 121			
Surrogate: 4-Terphenyl-d14	0.6717		1.00000		67.2	58 - 142			
Surrogate: Nitrobenzene-d5	0.6180		1.00000		61.8	27 - 151			

LCS (B5B0250-BS1)

Prepared: 2/10/2015 Analyzed: 2/11/2015

1,4-Dioxane	1.31809	0.20	1.00000		132	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.7236		1.00000		72.4	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.7552		1.00000		75.5	48 - 121			
Surrogate: 4-Terphenyl-d14	0.7722		1.00000		77.2	58 - 142			
Surrogate: Nitrobenzene-d5	0.7607		1.00000		76.1	27 - 151			

LCS Dup (B5B0250-BSD1)

Prepared: 2/10/2015 Analyzed: 2/11/2015

1,4-Dioxane	1.40201	0.20	1.00000		140	58 - 151	6.17	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.7521		1.00000		75.2	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.7716		1.00000		77.2	48 - 121			
Surrogate: 4-Terphenyl-d14	0.8046		1.00000		80.5	58 - 142			
Surrogate: Nitrobenzene-d5	0.7913		1.00000		79.1	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON, 532.30

Report To : Steve Netto

Reported : 02/13/2015

Notes and Definitions

ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



DATE 2/6/15 PAGE 1 OF 1

PROJECT NAME		PROJECT NO./TASK No.						SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION					
RAYTHEON		532.30														ATL					
PROJECT MANAGER S. NETTO		Phone No. 858455 6500																			
QA MANAGER C. HUNTER		Fax No.																			
SAMPLER (SIGNATURE)		SAMPLER (PRINTED)																			
D. MORA P. FERBER M. HALL		TYLER EVANS																			
LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX	PRESERVATION							VOL. 40ml VOA	IL AMBER	VOL. 80ml B	1,4 DIOXANE SIM	1,4 DIOXANE MOD	0-10 10-100 100-1000 1000-10,000	STAT	REMARKS		
		Date	Time		Soil	Ground water	Surface water	HCl	HNO ₃	NaOH	H ₂ SO ₄									Ice	
1500495 -1	B-02067015	2/6/15	800				X				X	2		X			X				
-2	MW-27		803	X			X				X	3		X			X				
	MW-27		803	X							X		1		X		X				
-3	MW-30B		850	X			X				X	3		X			X				
	MW-30B		850	X							X		1		X		X				
-4	MW-30A		910	X			X				X	3		X			X				
	MW-30A		910	X							X		1		X		X				
Total number of Containers per analysis:												11	3						Total No. of Containers:	14	
Relinquished by:		Date	Received by:		Date	INSTRUCTIONS														Shipment Method:	
HHA		2/6/15				1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness. 2. Complete in ballpoint pen. Draw one line through errors, initial and date correction. 3. Indicate number of sample containers in analysis request space; indicate choice with ✓ or x. 4. Note applicable preservatives, special instructions, and deviations from typical environmental samples. 5. Consult project QA documents for specific instructions.															
Company		Time	Company		Time															Send Results to:	
		1230																		☐ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500	
Relinquished by:		Date	Received by:		Date															☐ 1640 SOUTH STAPLEY DRIVE, SUITE 209 MESA, AZ 85204 (480) 345-0888	
			TPJWA		2/6/15															☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300	
Company		Time	Company		Time															Send invoice to San Diego, CA Attn: Accounts Payable	
			ATL		1230																
Sample Receipt:						Temp. @ receipt 2.8 °C															
☐ No. of containers correct						☒ received good condition/cold															
☐ custody seals secure						☐ conforms to COC document															



WORK ORDER NUMBER: 15-02-0176

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Hargis + Associates, Inc.

Client Project Name: Raytheon / 532.30

Attention: Steve Netto

9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

A handwritten signature in black ink, enclosed in a hand-drawn oval. The signature appears to read "Virendra R. Patel".

Approved for release on 02/10/2015 by:
Virendra Patel
Project Manager

ResultLink ▶

Email your PM ▶



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Contents

Client Project Name: Raytheon / 532.30
Work Order Number: 15-02-0176

1	Work Order Narrative.	3
2	Sample Summary.	4
3	Detections Summary.	5
4	Client Sample Data.	6
	4.1 1,4-Dioxane by EPA 8270C (M) Isotope Dilution (Aqueous).	6
	4.2 EPA 8260B Volatile Organics (Aqueous).	7
5	Quality Control Sample Data.	15
	5.1 MS/MSD.	15
	5.2 LCS/LCSD.	17
6	Sample Analysis Summary.	19
7	Glossary of Terms and Qualifiers.	20
8	Chain-of-Custody/Sample Receipt Form.	21

Work Order Narrative

Work Order: 15-02-0176

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 02/03/15. They were assigned to Work Order 15-02-0176.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



Calscience

Sample Summary

Client: Hargis + Associates, Inc.	Work Order: 15-02-0176
9171 Towne Centre Drive, Suite 375	Project Name: Raytheon / 532.30
San Diego, CA 92122-6215	PO Number:
	Date/Time Received: 02/03/15 17:12
	Number of Containers: 10

Attn: Steve Netto

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
TB-020215B	15-02-0176-1	02/02/15 12:00	2	Aqueous
EW-01	15-02-0176-2	02/02/15 14:10	4	Aqueous
MW-32B	15-02-0176-3	02/03/15 13:58	4	Aqueous


Return to Contents



Calscience

Detections Summary

Client: Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Work Order: 15-02-0176
Project Name: Raytheon / 532.30
Received: 02/03/15

Attn: Steve Netto

Page 1 of 1

Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
EW-01 (15-02-0176-2)						
1,1-Dichloroethane	8.6		5.0	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	470		5.0	ug/L	EPA 8260B	EPA 5030C
1,1,2-Trichloroethane	5.8		5.0	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	360		10	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
MW-32B (15-02-0176-3)						
1,1-Dichloroethene	32		1.0	ug/L	EPA 8260B	EPA 5030C
c-1,2-Dichloroethene	1.6		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	21		1.0	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	3.5		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

* MDL is shown



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 3510C
Method: EPA 8270C (M) Isotope Dilution
Units: ug/L

Project: Raytheon / 532.30

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EW-01	15-02-0176-2-D	02/02/15 14:10	Aqueous	GC/MS DDD	02/04/15	02/06/15 16:18	150204L04

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dioxane	360	10	10.0	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Nitrobenzene-d5	97	56-123	
1,4-Dioxane-d8(IDS-IS)	47	30-120	

MW-32B	15-02-0176-3-D	02/03/15 13:58	Aqueous	GC/MS DDD	02/04/15	02/04/15 16:54	150204L04

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dioxane	3.5	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Nitrobenzene-d5	108	56-123	
1,4-Dioxane-d8(IDS-IS)	48	30-120	

Method Blank	099-16-216-360	N/A	Aqueous	GC/MS DDD	02/04/15	02/04/15 14:46	150204L04

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dioxane	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Nitrobenzene-d5	103	56-123	
1,4-Dioxane-d8(IDS-IS)	52	30-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TB-020215B	15-02-0176-1-A	02/02/15 12:00	Aqueous	GC/MS Z	02/05/15	02/05/15 15:58	150205L005

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 2 of 8

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	101	80-120	
Dibromofluoromethane	105	78-126	
1,2-Dichloroethane-d4	105	75-135	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
EW-01	15-02-0176-2-A	02/02/15 14:10	Aqueous	GC/MS Z	02/05/15	02/05/15 21:18	150205L005

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acetone	ND	100	5.00	
Benzene	ND	2.5	5.00	
Bromobenzene	ND	5.0	5.00	
Bromochloromethane	ND	5.0	5.00	
Bromodichloromethane	ND	5.0	5.00	
Bromoform	ND	5.0	5.00	
Bromomethane	ND	50	5.00	
2-Butanone	ND	50	5.00	
n-Butylbenzene	ND	5.0	5.00	
sec-Butylbenzene	ND	5.0	5.00	
tert-Butylbenzene	ND	5.0	5.00	
Carbon Disulfide	ND	50	5.00	
Carbon Tetrachloride	ND	2.5	5.00	
Chlorobenzene	ND	5.0	5.00	
Chloroethane	ND	25	5.00	
Chloroform	ND	5.0	5.00	
Chloromethane	ND	50	5.00	
2-Chlorotoluene	ND	5.0	5.00	
4-Chlorotoluene	ND	5.0	5.00	
Dibromochloromethane	ND	5.0	5.00	
1,2-Dibromo-3-Chloropropane	ND	25	5.00	
1,2-Dibromoethane	ND	5.0	5.00	
Dibromomethane	ND	5.0	5.00	
1,2-Dichlorobenzene	ND	5.0	5.00	
1,3-Dichlorobenzene	ND	5.0	5.00	
1,4-Dichlorobenzene	ND	5.0	5.00	
Dichlorodifluoromethane	ND	5.0	5.00	
1,1-Dichloroethane	8.6	5.0	5.00	
1,2-Dichloroethane	ND	2.5	5.00	
1,1-Dichloroethene	470	5.0	5.00	
c-1,2-Dichloroethene	ND	5.0	5.00	
t-1,2-Dichloroethene	ND	5.0	5.00	
1,2-Dichloropropane	ND	5.0	5.00	
1,3-Dichloropropane	ND	5.0	5.00	
2,2-Dichloropropane	ND	5.0	5.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 4 of 8

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	5.0	5.00	
c-1,3-Dichloropropene	ND	2.5	5.00	
t-1,3-Dichloropropene	ND	2.5	5.00	
Ethylbenzene	ND	5.0	5.00	
2-Hexanone	ND	50	5.00	
Isopropylbenzene	ND	5.0	5.00	
p-Isopropyltoluene	ND	5.0	5.00	
Methylene Chloride	ND	50	5.00	
4-Methyl-2-Pentanone	ND	50	5.00	
Naphthalene	ND	50	5.00	
n-Propylbenzene	ND	5.0	5.00	
Styrene	ND	5.0	5.00	
1,1,1,2-Tetrachloroethane	ND	5.0	5.00	
1,1,2,2-Tetrachloroethane	ND	5.0	5.00	
Tetrachloroethene	ND	5.0	5.00	
Toluene	ND	5.0	5.00	
1,2,3-Trichlorobenzene	ND	5.0	5.00	
1,2,4-Trichlorobenzene	ND	5.0	5.00	
1,1,1-Trichloroethane	ND	5.0	5.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	50	5.00	
1,1,2-Trichloroethane	5.8	5.0	5.00	
Trichloroethene	ND	5.0	5.00	
Trichlorofluoromethane	ND	50	5.00	
1,2,3-Trichloropropane	ND	25	5.00	
1,2,4-Trimethylbenzene	ND	5.0	5.00	
1,3,5-Trimethylbenzene	ND	5.0	5.00	
Vinyl Acetate	ND	50	5.00	
Vinyl Chloride	ND	2.5	5.00	
p/m-Xylene	ND	5.0	5.00	
o-Xylene	ND	5.0	5.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	5.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	102	80-120	
Dibromofluoromethane	101	78-126	
1,2-Dichloroethane-d4	102	75-135	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 5 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-32B	15-02-0176-3-A	02/03/15 13:58	Aqueous	GC/MS Z	02/05/15	02/05/15 21:47	150205L005

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	32	1.0	1.00	
c-1,2-Dichloroethene	1.6	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 6 of 8

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	21	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	100	80-120	
Dibromofluoromethane	101	78-126	
1,2-Dichloroethane-d4	104	75-135	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-16339	N/A	Aqueous	GC/MS Z	02/05/15	02/05/15 14:31	150205L005

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 8 of 8

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	102	80-120	
Dibromofluoromethane	107	78-126	
1,2-Dichloroethane-d4	103	75-135	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Quality Control - Spike/Spike Duplicate

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 3510C
Method: EPA 8270C (M) Isotope Dilution

Project: Raytheon / 532.30

Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-02-0189-6	Sample	Aqueous	GC/MS DDD	02/04/15	02/04/15 15:48	150204S04
15-02-0189-6	Matrix Spike	Aqueous	GC/MS DDD	02/04/15	02/04/15 15:17	150204S04
15-02-0189-6	Matrix Spike Duplicate	Aqueous	GC/MS DDD	02/04/15	02/04/15 15:33	150204S04

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	78.03	20.00	88.24	51	88.50	52	50-130	0	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B

Project: Raytheon / 532.30

Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-02-0027-6	Sample	Aqueous	GC/MS Z	02/05/15	02/05/15 16:27	150205S003
15-02-0027-6	Matrix Spike	Aqueous	GC/MS Z	02/05/15	02/05/15 16:56	150205S003
15-02-0027-6	Matrix Spike Duplicate	Aqueous	GC/MS Z	02/05/15	02/05/15 17:25	150205S003

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	5.351	50.00	52.71	95	51.42	92	74-122	2	0-21	
Carbon Tetrachloride	ND	50.00	48.83	98	50.36	101	60-144	3	0-21	
Chlorobenzene	ND	50.00	52.33	105	51.57	103	73-120	1	0-22	
1,2-Dibromoethane	ND	50.00	51.10	102	49.04	98	80-122	4	0-20	
1,2-Dichlorobenzene	ND	50.00	52.55	105	52.25	105	70-120	1	0-26	
1,2-Dichloroethane	ND	50.00	56.84	114	53.37	107	64-142	6	0-20	
1,1-Dichloroethene	ND	50.00	53.02	106	51.04	102	52-136	4	0-21	
Ethylbenzene	ND	50.00	50.93	102	49.42	99	77-125	3	0-24	
Toluene	ND	50.00	51.25	102	49.22	98	72-126	4	0-23	
Trichloroethene	ND	50.00	50.05	100	49.39	99	74-128	1	0-22	
Vinyl Chloride	ND	50.00	44.41	89	46.12	92	67-133	4	0-20	
p/m-Xylene	ND	100.0	97.27	97	90.50	91	63-129	7	0-25	
o-Xylene	ND	50.00	49.95	100	47.54	95	62-128	5	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	43.12	86	43.98	88	68-134	2	0-21	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 3510C
Method: EPA 8270C (M) Isotope Dilution

Project: Raytheon / 532.30

Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-360	LCS	Aqueous	GC/MS DDD	02/04/15	02/04/15 15:01	150204L04

<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
1,4-Dioxane	20.00	20.66	103	50-130	

Return to Contents



Calscience

Quality Control - LCS

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/03/15
Work Order: 15-02-0176
Preparation: EPA 5030C
Method: EPA 8260B

Project: Raytheon / 532.30

Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-001-16339	LCS	Aqueous	GC/MS Z	02/05/15	02/05/15 13:28	150205L005
Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	48.23	96	80-120	73-127	
Carbon Tetrachloride	50.00	51.35	103	67-139	55-151	
Chlorobenzene	50.00	52.98	106	78-120	71-127	
1,2-Dibromoethane	50.00	51.88	104	80-120	73-127	
1,2-Dichlorobenzene	50.00	52.78	106	63-129	52-140	
1,2-Dichloroethane	50.00	55.62	111	70-130	60-140	
1,1-Dichloroethene	50.00	51.93	104	66-126	56-136	
Ethylbenzene	50.00	51.41	103	80-123	73-130	
Toluene	50.00	51.24	102	80-120	73-127	
Trichloroethene	50.00	50.45	101	80-122	73-129	
Vinyl Chloride	50.00	54.65	109	70-130	60-140	
p/m-Xylene	100.0	100.7	101	75-123	67-131	
o-Xylene	50.00	51.20	102	74-122	66-130	
Methyl-t-Butyl Ether (MTBE)	50.00	44.14	88	69-129	59-139	

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

Sample Analysis Summary Report

Work Order: 15-02-0176

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 8260B	EPA 5030C	867	GC/MS Z	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1


Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

Glossary of Terms and Qualifiers

Work Order: 15-02-0176

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDS or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 2/2/15 PAGE 1 OF 1

PROJECT NAME RAYTHEON				PROJECT No./TASK No. 532.30				SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION						
PROJECT MANAGER STEVE NETTO				Phone No. 858-455-6500				15-02-0176		VOCs: 8260-B 1,4-Dioxane 8270 MOD		0-10 10-100 100-1,000 1,000-10,000 >10,000		STANDARD IAT		Eurofins, CalScieng Attn: Virendra Patel						
QA MANAGER				Fax No. 858-455-6533																		
SAMPLER (SIGNATURE) 				SAMPLER (PRINTED) Tyler Evans Erin Hunter																		
LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX			PRESERVATION			40 ml VOA	1 L amber							REMARKS				
		Date	Time	Soil	Ground water	Surface water	Lab H ₂ O	HCl	HNO ₃										NaOH	H ₂ SO ₄	Ice	
1	TB-020215B	2/2/2015	1200				X	X				X										
2	EW-01	L	1410		X			X				X										
3	EW-01	L	1410		X								X									
3	MW-32B	2/3/2015	1358		X			X				X										
	MW-32B	2/3/2015	1358		X								X									
Total number of Containers per analysis:								8	2									Total No. of Containers: <u>10/10</u>				
Relinquished by: 		Date 2/3/15	Received by: 		Date 2/3/15	INSTRUCTIONS 1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness. 2. Complete in ballpoint pen. Draw one line through errors, initial and date correction. 3. Indicate number of sample containers in analysis request space; indicate choice with ✓ or x. 4. Note applicable preservatives, special instructions, and deviations from typical environmental samples. 5. Consult project QA documents for specific instructions.													Shipment Method: <u>courier</u>			
Company HHA		Time 1633	Company ECI		Time 1633														Send Results to: <u>STEVE NETTO</u>			
Relinquished by: 		Date 2/3/15	Received by: 		Date 2/3/15	Sample Receipt: ☐ No. of containers correct ☐ custody seals secure													☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500 ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 209 MESA, AZ 85204 (480) 345-0888 ☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300		Send invoice to San Diego, CA Attn: Accounts Payable	
Company ECI		Time 1712	Company ECI		Time 1712														Temp. @ receipt _____ °C ☐ received good condition/cold ☐ conforms to COC document			

Calscience

WORK ORDER #: 15-02-0176

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Hargis

DATE: 02/03/15

TEMPERATURE: Thermometer ID: SC4 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C + 0.2 °C (CF) = 2.4 °C ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 15

CUSTODY SEALS INTACT:

☐ Cooler ☐ _____ ☐ No (Not Intact) ☒ Not Present ☐ N/A Checked by: 15
☐ Sample ☐ _____ ☐ No (Not Intact) ☒ Not Present Checked by: 619

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☒	☐	☐
COC document(s) received complete.....	☒	☐	☐

☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.

☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.

Sampler's name indicated on COC.....	☒	☐	☐

Sample container label(s) consistent with COC.....	☒	☐	☐

Sample container(s) intact and good condition.....	☒	☐	☐

Proper containers and sufficient volume for analyses requested.....	☒	☐	☐

Analyses received within holding time.....	☒	☐	☐

Aqueous samples received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen..... ☐ ☐ ☒

Proper preservation noted on COC or sample container.....	☒	☐	☐

☐ Unpreserved vials received for Volatiles analysis

Volatile analysis container(s) free of headspace.....	☒	☐	☐

Tedlar bag(s) free of condensation.....	☐	☐	☒

CONTAINER TYPE:

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® ☐ TerraCores® ☐ _____

Aqueous: ☐ VOA ☒ VOAh ☐ VOAna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs

☐ 500AGB ☐ 500AGJ ☐ 500AGJs ☐ 250AGB ☐ 250CGB ☐ 250CGBs ☐ 1PB ☐ 1PBna ☐ 500PB

☐ 250PB ☐ 250PBn ☐ 125PB ☐ 125PBznna ☐ 100PJ ☐ 100PJna₂ ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar® ☐ Canister Other: ☐ _____ Trip Blank Lot#: N/A Labeled/Checked by: 619

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 778

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH f: Filtered Scanned by: 778



WORK ORDER NUMBER: 15-02-0415

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Hargis + Associates, Inc.

Client Project Name: Raytheon / 532.30

Attention: Steve Netto

9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

A handwritten signature in black ink, enclosed in a hand-drawn oval. The signature appears to read "Virendra Patel".

Approved for release on 02/13/2015 by:
Virendra Patel
Project Manager

ResultLink ▶

Email your PM ▶



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Contents

Client Project Name: Raytheon / 532.30
Work Order Number: 15-02-0415

1	Work Order Narrative.	3
2	Sample Summary.	4
3	Detections Summary.	5
4	Client Sample Data.	6
	4.1 1,4-Dioxane by EPA 8270C (M) Isotope Dilution (Aqueous).	6
	4.2 EPA 8260B Volatile Organics (Aqueous).	7
5	Quality Control Sample Data.	17
	5.1 MS/MSD.	17
	5.2 LCS/LCSD.	20
6	Sample Analysis Summary.	23
7	Glossary of Terms and Qualifiers.	24
8	Chain-of-Custody/Sample Receipt Form.	25

Work Order: 15-02-0415Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 02/05/15. They were assigned to Work Order 15-02-0415.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



Calscience

Sample Summary

Client:	Hargis + Associates, Inc.	Work Order:	15-02-0415
	9171 Towne Centre Drive, Suite 375	Project Name:	Raytheon / 532.30
	San Diego, CA 92122-6215	PO Number:	
		Date/Time Received:	02/05/15 16:41
		Number of Containers:	10

Attn: Steve Netto

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
MW-28	15-02-0415-1	02/05/15 09:30	4	Aqueous
MW-36	15-02-0415-2	02/05/15 15:20	4	Aqueous
TB-020515B	15-02-0415-3	02/05/15 07:45	2	Aqueous


Return to Contents



Calscience

Detections Summary

Client: Hargis + Associates, Inc.
 9171 Towne Centre Drive, Suite 375
 San Diego, CA 92122-6215

Work Order: 15-02-0415
 Project Name: Raytheon / 532.30
 Received: 02/05/15

Attn: Steve Netto

Page 1 of 1

Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
MW-28 (15-02-0415-1)						
1,1-Dichloroethene	14		1.0	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	6.1		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C
MW-36 (15-02-0415-2)						
1,1-Dichloroethane	1.4		1.0	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	130		1.0	ug/L	EPA 8260B	EPA 5030C
1,4-Dioxane	12		1.0	ug/L	EPA 8270C (M) Isotope Dilution	EPA 3510C

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

* MDL is shown



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 3510C
Method: EPA 8270C (M) Isotope Dilution
Units: ug/L

Project: Raytheon / 532.30

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-28	15-02-0415-1-D	02/05/15 09:30	Aqueous	GC/MS DDD	02/10/15	02/11/15 19:34	150210L06

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dioxane	6.1	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Nitrobenzene-d5	119	56-123	
1,4-Dioxane-d8(IDS-IS)	46	30-120	

MW-36	15-02-0415-2-D	02/05/15 15:20	Aqueous	GC/MS DDD	02/10/15	02/11/15 19:50	150210L06

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dioxane	12	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Nitrobenzene-d5	104	56-123	
1,4-Dioxane-d8(IDS-IS)	49	30-120	

Method Blank	099-16-216-363	N/A	Aqueous	GC/MS DDD	02/10/15	02/11/15 13:37	150210L06

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dioxane	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Nitrobenzene-d5	115	56-123	
1,4-Dioxane-d8(IDS-IS)	59	30-120	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-28	15-02-0415-1-B	02/05/15 09:30	Aqueous	GC/MS LL	02/10/15	02/10/15 18:56	150210L014

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	14	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 2 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	93	80-120	
Dibromofluoromethane	104	78-126	
1,2-Dichloroethane-d4	112	75-135	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-36	15-02-0415-2-B	02/05/15 15:20	Aqueous	GC/MS LL	02/10/15	02/10/15 19:24	150210L014

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	1.4	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	130	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 4 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	96	80-120	
Dibromofluoromethane	108	78-126	
1,2-Dichloroethane-d4	113	75-135	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TB-020515B	15-02-0415-3-A	02/05/15 07:45	Aqueous	GC/MS LL	02/06/15	02/06/15 20:36	150206L029

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 6 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	91	80-120	
Dibromofluoromethane	113	78-126	
1,2-Dichloroethane-d4	119	75-135	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 7 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-16350	N/A	Aqueous	GC/MS LL	02/06/15	02/06/15 15:20	150206L029

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 8 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	94	80-120	
Dibromofluoromethane	107	78-126	
1,2-Dichloroethane-d4	112	75-135	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-16364	N/A	Aqueous	GC/MS LL	02/10/15	02/10/15 14:42	150210L014

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	10	1.00	
2-Butanone	ND	10	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	1.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon / 532.30

Page 10 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	1.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	1.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	94	80-120	
Dibromofluoromethane	105	78-126	
1,2-Dichloroethane-d4	112	75-135	
Toluene-d8	99	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Quality Control - Spike/Spike Duplicate

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 3510C
Method: EPA 8270C (M) Isotope Dilution

Project: Raytheon / 532.30

Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-02-0282-1	Sample	Aqueous	GC/MS DDD	02/10/15	02/11/15 15:29	150210S06
15-02-0282-1	Matrix Spike	Aqueous	GC/MS DDD	02/10/15	02/11/15 14:56	150210S06
15-02-0282-1	Matrix Spike Duplicate	Aqueous	GC/MS DDD	02/10/15	02/11/15 15:12	150210S06

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	454.6	20.00	461.7	35	468.3	68	50-130	1	0-20	3

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B

Project: Raytheon / 532.30

Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
15-02-0450-1	Sample	Aqueous	GC/MS LL	02/06/15	02/06/15 16:52	150206S012				
15-02-0450-1	Matrix Spike	Aqueous	GC/MS LL	02/06/15	02/06/15 17:20	150206S012				
15-02-0450-1	Matrix Spike Duplicate	Aqueous	GC/MS LL	02/06/15	02/06/15 17:48	150206S012				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	52.95	106	50.72	101	74-122	4	0-21	
Carbon Tetrachloride	ND	50.00	47.53	95	45.58	91	60-144	4	0-21	
Chlorobenzene	ND	50.00	51.67	103	49.28	99	73-120	5	0-22	
1,2-Dibromoethane	ND	50.00	52.81	106	50.77	102	80-122	4	0-20	
1,2-Dichlorobenzene	ND	50.00	49.81	100	48.55	97	70-120	3	0-26	
1,2-Dichloroethane	ND	50.00	51.73	103	49.75	99	64-142	4	0-20	
1,1-Dichloroethene	ND	50.00	46.58	93	44.37	89	52-136	5	0-21	
Ethylbenzene	ND	50.00	52.61	105	50.23	100	77-125	5	0-24	
Toluene	ND	50.00	52.06	104	50.12	100	72-126	4	0-23	
Trichloroethene	ND	50.00	49.26	99	46.54	93	74-128	6	0-22	
Vinyl Chloride	ND	50.00	48.16	96	49.42	99	67-133	3	0-20	
p/m-Xylene	ND	100.0	109.2	109	103.0	103	63-129	6	0-25	
o-Xylene	ND	50.00	52.74	105	50.61	101	62-128	4	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	46.37	93	45.25	91	68-134	2	0-21	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B

Project: Raytheon / 532.30

Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-02-0516-1	Sample	Aqueous	GC/MS LL	02/10/15	02/10/15 16:36	150210S013
15-02-0516-1	Matrix Spike	Aqueous	GC/MS LL	02/10/15	02/10/15 17:04	150210S013
15-02-0516-1	Matrix Spike Duplicate	Aqueous	GC/MS LL	02/10/15	02/10/15 17:32	150210S013

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	16.30	50.00	66.01	99	64.52	96	74-122	2	0-21	
Carbon Tetrachloride	ND	50.00	48.40	97	48.25	97	60-144	0	0-21	
Chlorobenzene	ND	50.00	53.17	106	52.30	105	73-120	2	0-22	
1,2-Dibromoethane	ND	50.00	51.69	103	51.26	103	80-122	1	0-20	
1,2-Dichlorobenzene	ND	50.00	52.49	105	50.88	102	70-120	3	0-26	
1,2-Dichloroethane	ND	50.00	50.48	101	49.60	99	64-142	2	0-20	
1,1-Dichloroethene	ND	50.00	49.73	99	47.38	95	52-136	5	0-21	
Ethylbenzene	ND	50.00	53.49	107	52.63	105	77-125	2	0-24	
Toluene	6.816	50.00	57.72	102	56.69	100	72-126	2	0-23	
Trichloroethene	ND	50.00	50.22	100	48.67	97	74-128	3	0-22	
Vinyl Chloride	ND	50.00	49.99	100	49.04	98	67-133	2	0-20	
p/m-Xylene	2.045	100.0	111.9	110	110.0	108	63-129	2	0-25	
o-Xylene	1.671	50.00	56.77	110	56.04	109	62-128	1	0-24	
Methyl-t-Butyl Ether (MTBE)	2.460	50.00	48.49	92	47.72	91	68-134	2	0-21	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 3510C
Method: EPA 8270C (M) Isotope Dilution

Project: Raytheon / 532.30

Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-16-216-363	LCS	Aqueous	GC/MS DDD	02/10/15	02/11/15 13:53	150210L06

<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
1,4-Dioxane	20.00	22.04	110	50-130	

Return to Contents



Calscience

Quality Control - LCS

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B

Project: Raytheon / 532.30

Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-001-16350	LCS	Aqueous	GC/MS LL	02/06/15	02/06/15 13:43	150206L029
Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	51.75	103	80-120	73-127	
Carbon Tetrachloride	50.00	47.68	95	67-139	55-151	
Chlorobenzene	50.00	49.99	100	78-120	71-127	
1,2-Dibromoethane	50.00	48.87	98	80-120	73-127	
1,2-Dichlorobenzene	50.00	48.02	96	63-129	52-140	
1,2-Dichloroethane	50.00	51.12	102	70-130	60-140	
1,1-Dichloroethene	50.00	49.37	99	66-126	56-136	
Ethylbenzene	50.00	51.16	102	80-123	73-130	
Toluene	50.00	52.00	104	80-120	73-127	
Trichloroethene	50.00	50.25	100	80-122	73-129	
Vinyl Chloride	50.00	54.83	110	70-130	60-140	
p/m-Xylene	100.0	106.9	107	75-123	67-131	
o-Xylene	50.00	52.02	104	74-122	66-130	
Methyl-t-Butyl Ether (MTBE)	50.00	44.38	89	69-129	59-139	

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents



Calscience

Quality Control - LCS

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 02/05/15
Work Order: 15-02-0415
Preparation: EPA 5030C
Method: EPA 8260B

Project: Raytheon / 532.30

Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-14-001-16364	LCS	Aqueous	GC/MS LL	02/10/15	02/10/15 13:18	150210L014
Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	50.00	49.09	98	80-120	73-127	
Carbon Tetrachloride	50.00	45.48	91	67-139	55-151	
Chlorobenzene	50.00	49.71	99	78-120	71-127	
1,2-Dibromoethane	50.00	49.61	99	80-120	73-127	
1,2-Dichlorobenzene	50.00	49.15	98	63-129	52-140	
1,2-Dichloroethane	50.00	46.77	94	70-130	60-140	
1,1-Dichloroethene	50.00	46.13	92	66-126	56-136	
Ethylbenzene	50.00	51.08	102	80-123	73-130	
Toluene	50.00	49.11	98	80-120	73-127	
Trichloroethene	50.00	48.77	98	80-122	73-129	
Vinyl Chloride	50.00	56.14	112	70-130	60-140	
p/m-Xylene	100.0	104.7	105	75-123	67-131	
o-Xylene	50.00	51.38	103	74-122	66-130	
Methyl-t-Butyl Ether (MTBE)	50.00	44.20	88	69-129	59-139	

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

Sample Analysis Summary Report

Work Order: 15-02-0415

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 8260B	EPA 5030C	626	GC/MS LL	2
EPA 8270C (M) Isotope Dilution	EPA 3510C	928	GC/MS DDD	1


Return to Contents

Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

Glossary of Terms and Qualifiers

Work Order: 15-02-0415

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 2/5/15 PAGE 1 OF 1

PROJECT NAME <u>Raytheon</u>				PROJECT No./TASK No. <u>532.30</u>				SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION	
PROJECT MANAGER <u>Steve Netto</u>				Phone No. <u>858-455-6500</u>				40mL VOA 1 L Amber VOCs by 8240B 1,4-Dioxane 8270 MOD		0-10 10-100 100-1,000 1,000-10,000 10,000		Standard THT		Eurofins / Calscreen Attn: Vivandrea Patel			
QA MANAGER				Fax No. <u>858-455-6533</u>													
SAMPLER (SIGNATURE) <u>[Signature]</u>				SAMPLER (PRINTED) <u>Tyler Evans</u> <u>Arielle Fedor</u>													
LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX			PRESERVATION					REMARKS					
		Date	Time	Soil	Ground water	Surface water	Lab H ₂ O	HCl	HNO ₃	NaOH	H ₂ SO ₄			Ice			
1	MW-28	2/5/15	0930	X			X				X						
	↓		↓	X							X						
2	MW-36		1520	X			X				X						
	↓		↓	X							X						
3	TB-020515B		0745				X	X			X						
Total number of Containers per analysis:								8		2		Total No. of Containers:		10			

Relinquished by: <u>[Signature]</u> HFA Company	Date <u>2/5/15</u> Time <u>1611</u>	Received by: <u>[Signature]</u> EC1 Company	Date <u>2/5/15</u> Time <u>1611</u>
Relinquished by: <u>[Signature]</u> EC1 Company	Date <u>2/5/15</u> Time <u>1641</u>	Received by: <u>[Signature]</u> Dannyle Company	Date <u>2/5/15</u> Time <u>1624</u>

INSTRUCTIONS

- Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness.
- Complete in ballpoint pen. Draw one line through errors, initial and date correction.
- Indicate number of sample containers in analysis request space; indicate choice with ✓ or x.
- Note applicable preservatives, special instructions, and deviations from typical environmental samples.
- Consult project QA documents for specific instructions.

Sample Receipt:

☐ No. of containers correct

☐ custody seals secure

Temp. @ receipt _____ °C

☐ received good condition/cold

☐ conforms to COC document

Shipment Method: _____

Send Results to: Steve Netto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375
SAN DIEGO, CA 92122 (858) 455-6500

☐ 1640 SOUTH STAPLEY DRIVE, SUITE 209
MESA, AZ 85204 (480) 345-0888

☐ 1820 EAST RIVER ROAD, SUITE 220
TUCSON, AZ 85718 (520) 881-7300

Send invoice to San Diego, CA
Attn: Accounts Payable

Calscience

WORK ORDER #: 15-02-0415

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: H + A

DATE: 02/05/15

TEMPERATURE: Thermometer ID: SC4 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.1 °C + 0.2 °C (CF) = 3.3 °C ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter

Checked by: [Signature]

CUSTODY SEALS INTACT:

☐ Cooler ☐ _____ ☐ No (Not Intact) ☒ Not Present ☐ N/A Checked by: [Signature]

☐ Sample ☐ _____ ☐ No (Not Intact) ☒ Not Present Checked by: 977

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	☒	☐	☐
COC document(s) received complete.....	☒	☐	☐

☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.

☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.

Sampler's name indicated on COC.....	☒	☐	☐

Sample container label(s) consistent with COC.....	☒	☐	☐

Sample container(s) intact and good condition.....	☒	☐	☐

Proper containers and sufficient volume for analyses requested.....	☒	☐	☐

Analyses received within holding time.....	☒	☐	☐

Aqueous samples received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen..... ☐ ☐ ☒

Proper preservation noted on COC or sample container.....	☒	☐	☐

☐ Unpreserved vials received for Volatiles analysis

Volatile analysis container(s) free of headspace.....	☒	☐	☐

Tedlar bag(s) free of condensation.....	☐	☐	☒

CONTAINER TYPE:

Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® ☐ TerraCores® ☐ _____

Aqueous: ☐ VOA ☒ VOA³ ☐ VOAna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 1AGB ☐ 1AGBna₂ ☐ 1AGBs

☐ 500AGB ☐ 500AGJ ☐ 500AGJs ☐ 250AGB ☐ 250CGB ☐ 250CGBs ☐ 1PB ☐ 1PBna ☐ 500PB

☐ 250PB ☐ 250PBn ☐ 125PB ☐ 125PBznna ☐ 100PJ ☐ 100PJna₂ ☒ 1AGJ ☐ _____ ☐ _____

Air: ☐ Tedlar® ☐ Canister Other: ☐ _____ Trip Blank Lot#: N/A Labeled/Checked by: 977

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 681

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH f: Filtered Scanned by: 681

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM RESULTS



December 18, 2014

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1403945
Client Reference : Raytheon Main, Fullerton OCSD, 532.15

Enclosed are the results for sample(s) received on December 11, 2014 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "E Rodriguez", written in a cursive style.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-121114	1403945-01	LAB H2O	12/11/14 8:00	12/11/14 14:30
CEFF	1403945-02	Groundwater	12/11/14 11:15	12/11/14 14:30



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

Client Sample ID TB-121114

Lab ID: 1403945-01

Volatile Organic Compounds by EPA 624

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1-Trichloroethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
1,1,2-Trichloroethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
1,1-Dichloroethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
1,1-Dichloroethene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
1,2-Dichlorobenzene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
1,2-Dichloroethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
1,2-Dichloropropane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
1,3-Dichlorobenzene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
1,4-Dichlorobenzene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
2-Chloroethyl vinyl ether	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Acrolein	ND	10	1	B4L0480	12/17/2014	12/17/14 07:37	
Acrylonitrile	ND	10	1	B4L0480	12/17/2014	12/17/14 07:37	
Benzene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Bromodichloromethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Bromoform	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Bromomethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Carbon tetrachloride	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Chlorobenzene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Chloroethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Chloroform	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Chloromethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
cis-1,3-Dichloropropene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Dibromochloromethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Ethylbenzene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
m,p-Xylene	ND	1.0	1	B4L0480	12/17/2014	12/17/14 07:37	
Methylene chloride	1.3	1.0	1	B4L0480	12/17/2014	12/17/14 07:37	
o-Xylene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Tetrachloroethene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Toluene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
trans-1,2-Dichloroethene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
trans-1,3-Dichloropropene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Trichloroethene	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Trichlorofluoromethane	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	
Vinyl chloride	ND	0.50	1	B4L0480	12/17/2014	12/17/14 07:37	

Surrogate: 1,2-Dichloroethane-d4

129 %

64 - 146

B4L0480

12/17/2014

12/17/14 07:37

Surrogate: 4-Bromofluorobenzene

95.4 %

60 - 128

B4L0480

12/17/2014

12/17/14 07:37



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

Client Sample ID TB-121114

Lab ID: 1403945-01

Volatile Organic Compounds by EPA 624

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
<i>Surrogate: Dibromofluoromethane</i>	<i>116 %</i>	<i>72 - 141</i>		B4L0480	12/17/2014	<i>12/17/14 07:37</i>	
<i>Surrogate: Toluene-d8</i>	<i>110 %</i>	<i>61 - 124</i>		B4L0480	12/17/2014	<i>12/17/14 07:37</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

Client Sample ID CEFF

Lab ID: 1403945-02

Volatile Organic Compounds by EPA 624

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1-Trichloroethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
1,1,2-Trichloroethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
1,1-Dichloroethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
1,1-Dichloroethene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
1,2-Dichlorobenzene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
1,2-Dichloroethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
1,2-Dichloropropane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
1,3-Dichlorobenzene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
1,4-Dichlorobenzene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
2-Chloroethyl vinyl ether	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Acrolein	ND	10	1	B4L0457	12/16/2014	12/16/14 16:52	
Acrylonitrile	ND	10	1	B4L0457	12/16/2014	12/16/14 16:52	
Benzene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Bromodichloromethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Bromoform	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Bromomethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Carbon tetrachloride	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Chlorobenzene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Chloroethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Chloroform	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Chloromethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
cis-1,3-Dichloropropene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Dibromochloromethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Ethylbenzene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
m,p-Xylene	ND	1.0	1	B4L0457	12/16/2014	12/16/14 16:52	
Methylene chloride	ND	1.0	1	B4L0457	12/16/2014	12/16/14 16:52	
o-Xylene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Tetrachloroethene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Toluene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
trans-1,2-Dichloroethene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
trans-1,3-Dichloropropene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Trichloroethene	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Trichlorofluoromethane	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	
Vinyl chloride	ND	0.50	1	B4L0457	12/16/2014	12/16/14 16:52	

Surrogate: 1,2-Dichloroethane-d4

124 %

64 - 146

B4L0457

12/16/2014

12/16/14 16:52

Surrogate: 4-Bromofluorobenzene

99.4 %

60 - 128

B4L0457

12/16/2014

12/16/14 16:52



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

Client Sample ID CEFF

Lab ID: 1403945-02

Volatile Organic Compounds by EPA 624

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
<i>Surrogate: Dibromofluoromethane</i>	80.9 %	72 - 141		B4L0457	12/16/2014	12/16/14 16:52	
<i>Surrogate: Toluene-d8</i>	110 %	61 - 124		B4L0457	12/16/2014	12/16/14 16:52	

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	2.1	0.20	1	B4L0511	12/17/2014	12/17/14 16:27	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	82.8 %	47 - 117		B4L0511	12/17/2014	12/17/14 16:27	
<i>Surrogate: 2-Fluorobiphenyl</i>	87.6 %	48 - 121		B4L0511	12/17/2014	12/17/14 16:27	
<i>Surrogate: 4-Terphenyl-d14</i>	97.8 %	58 - 142		B4L0511	12/17/2014	12/17/14 16:27	
<i>Surrogate: Nitrobenzene-d5</i>	89.2 %	27 - 151		B4L0511	12/17/2014	12/17/14 16:27	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 624 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0457 - MSVOA_LL_W

Blank (B4L0457-BLK1)

Prepared: 12/16/2014 Analyzed: 12/16/2014

1,1,1-Trichloroethane	ND	0.50				NR			
1,1,2,2-Tetrachloroethane	ND	0.50				NR			
1,1,2-Trichloroethane	ND	0.50				NR			
1,1-Dichloroethane	ND	0.50				NR			
1,1-Dichloroethene	ND	0.50				NR			
1,2-Dichlorobenzene	ND	0.50				NR			
1,2-Dichloroethane	ND	0.50				NR			
1,2-Dichloropropane	ND	0.50				NR			
1,3-Dichlorobenzene	ND	0.50				NR			
1,4-Dichlorobenzene	ND	0.50				NR			
2-Chloroethyl vinyl ether	ND	0.50				NR			
Acrolein	ND	10				NR			
Acrylonitrile	ND	10				NR			
Benzene	ND	0.50				NR			
Bromodichloromethane	ND	0.50				NR			
Bromoform	ND	0.50				NR			
Bromomethane	ND	0.50				NR			
Carbon tetrachloride	ND	0.50				NR			
Chlorobenzene	ND	0.50				NR			
Chloroethane	ND	0.50				NR			
Chloroform	ND	0.50				NR			
Chloromethane	ND	0.50				NR			
cis-1,3-Dichloropropene	ND	0.50				NR			
Dibromochloromethane	ND	0.50				NR			
Ethylbenzene	ND	0.50				NR			
m,p-Xylene	ND	1.0				NR			
Methylene chloride	ND	1.0				NR			
o-Xylene	ND	0.50				NR			
Tetrachloroethene	ND	0.50				NR			
Toluene	ND	0.50				NR			
trans-1,2-Dichloroethene	ND	0.50				NR			
trans-1,3-Dichloropropene	ND	0.50				NR			
Trichloroethene	ND	0.50				NR			
Trichlorofluoromethane	ND	0.50				NR			
Vinyl chloride	ND	0.50				NR			

Surrogate: 1,2-Dichloroethane-d4	26.18	25.0000	105	64 - 146
Surrogate: 4-Bromofluorobenzene	24.36	25.0000	97.4	60 - 128
Surrogate: Dibromofluoromethane	26.69	25.0000	107	72 - 141
Surrogate: Toluene-d8	26.94	25.0000	108	61 - 124



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

Volatile Organic Compounds by EPA 624 - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0457 - MSVOA_LL_W (continued)

LCS (B4L0457-BS1)

Prepared: 12/16/2014 Analyzed: 12/16/2014

1,1-Dichloroethene	22.4000	0.50	20.0000		112	56 - 131			
Benzene	54.6600	0.50	40.0000		137	69 - 139			
Chlorobenzene	20.1700	0.50	20.0000		101	73 - 127			
Toluene	39.8900	0.50	40.0000		99.7	62 - 133			
Trichloroethene	20.2300	0.50	20.0000		101	72 - 139			
Surrogate: 1,2-Dichloroethane-d4	29.29		25.0000		117	64 - 146			
Surrogate: 4-Bromofluorobenzene	24.97		25.0000		99.9	60 - 128			
Surrogate: Dibromofluoromethane	29.40		25.0000		118	72 - 141			
Surrogate: Toluene-d8	27.22		25.0000		109	61 - 124			

LCS Dup (B4L0457-BS1)

Prepared: 12/16/2014 Analyzed: 12/16/2014

1,1-Dichloroethene	22.1700	0.50	20.0000		111	56 - 131	1.03	20	
Benzene	54.7700	0.50	40.0000		137	69 - 139	0.201	20	
Chlorobenzene	19.5800	0.50	20.0000		97.9	73 - 127	2.97	20	
Toluene	39.1000	0.50	40.0000		97.8	62 - 133	2.00	20	
Trichloroethene	19.5400	0.50	20.0000		97.7	72 - 139	3.47	20	
Surrogate: 1,2-Dichloroethane-d4	29.32		25.0000		117	64 - 146			
Surrogate: 4-Bromofluorobenzene	24.83		25.0000		99.3	60 - 128			
Surrogate: Dibromofluoromethane	29.45		25.0000		118	72 - 141			
Surrogate: Toluene-d8	26.91		25.0000		108	61 - 124			

Batch B4L0480 - MSVOA_LL_W

Blank (B4L0480-BLK1)

Prepared: 12/17/2014 Analyzed: 12/17/2014

1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2-Chloroethyl vinyl ether	ND	0.50			NR				
Acrolein	ND	10			NR				
Acrylonitrile	ND	10			NR				
Benzene	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

Volatile Organic Compounds by EPA 624 - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0480 - MSVOA_LL_W (continued)

Blank (B4L0480-BLK1) - Continued

Prepared: 12/17/2014 Analyzed: 12/17/2014

Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
o-Xylene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
trans-1,3-Dichloropropene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				
Surrogate: 1,2-Dichloroethane-d4	29.23		25.0000		117	64 - 146			
Surrogate: 4-Bromofluorobenzene	24.45		25.0000		97.8	60 - 128			
Surrogate: Dibromofluoromethane	25.09		25.0000		100	72 - 141			
Surrogate: Toluene-d8	26.51		25.0000		106	61 - 124			

LCS (B4L0480-BS1)

Prepared: 12/17/2014 Analyzed: 12/17/2014

1,1-Dichloroethene	23.0900	0.50	20.0000		115	56 - 131			
Benzene	38.3700	0.50	40.0000		95.9	69 - 139			
Chlorobenzene	21.1000	0.50	20.0000		106	73 - 127			
Toluene	41.3300	0.50	40.0000		103	62 - 133			
Trichloroethene	21.9600	0.50	20.0000		110	72 - 139			
Surrogate: 1,2-Dichloroethane-d4	29.20		25.0000		117	64 - 146			
Surrogate: 4-Bromofluorobenzene	24.92		25.0000		99.7	60 - 128			
Surrogate: Dibromofluoromethane	26.03		25.0000		104	72 - 141			
Surrogate: Toluene-d8	27.05		25.0000		108	61 - 124			

LCS Dup (B4L0480-BSD1)

Prepared: 12/17/2014 Analyzed: 12/17/2014

1,1-Dichloroethene	20.9300	0.50	20.0000		105	56 - 131	9.81	20	
Benzene	33.6400	0.50	40.0000		84.1	69 - 139	13.1	20	
Chlorobenzene	18.6500	0.50	20.0000		93.2	73 - 127	12.3	20	
Toluene	37.3200	0.50	40.0000		93.3	62 - 133	10.2	20	
Trichloroethene	20.4800	0.50	20.0000		102	72 - 139	6.97	20	
Surrogate: 1,2-Dichloroethane-d4	27.50		25.0000		110	64 - 146			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

Volatile Organic Compounds by EPA 624 - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0480 - MSVOA_LL_W (continued)

LCS Dup (B4L0480-BSD1) - Continued

Prepared: 12/17/2014 Analyzed: 12/17/2014

Surrogate: 4-Bromofluorobenzene	24.98		25.0000		99.9	60 - 128			
Surrogate: Dibromofluoromethane	26.03		25.0000		104	72 - 141			
Surrogate: Toluene-d8	26.45		25.0000		106	61 - 124			

Duplicate (B4L0480-DUP1)

Source: 1403912-01

Prepared: 12/17/2014 Analyzed: 12/17/2014

1,1-Dichloroethene	ND	0.50		ND	NR			20	
Benzene	ND	0.50		ND	NR			20	
Chlorobenzene	ND	0.50		ND	NR			20	
Toluene	1.22000	0.50		1.26000	NR		3.23	20	
Trichloroethene	ND	0.50		ND	NR			20	

Surrogate: 1,2-Dichloroethane-d4	31.12		25.0000		124	64 - 146			
Surrogate: 4-Bromofluorobenzene	24.40		25.0000		97.6	60 - 128			
Surrogate: Dibromofluoromethane	26.52		25.0000		106	72 - 141			
Surrogate: Toluene-d8	27.50		25.0000		110	61 - 124			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0511 - MSSEMI_ISOTOPEDILN

Blank (B4L0511-BLK1)

Prepared: 12/17/2014 Analyzed: 12/17/2014

1,4-Dioxane	ND	0.20			NR				
Surrogate: 1,2-Dichlorobenzene-d4	0.7971		1.00000		79.7	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.8260		1.00000		82.6	48 - 121			
Surrogate: 4-Terphenyl-d14	0.9786		1.00000		97.9	58 - 142			
Surrogate: Nitrobenzene-d5	0.8659		1.00000		86.6	27 - 151			

LCS (B4L0511-BS1)

Prepared: 12/17/2014 Analyzed: 12/17/2014

1,4-Dioxane	1.15785	0.20	1.00000		116	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.7808		1.00000		78.1	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.8402		1.00000		84.0	48 - 121			
Surrogate: 4-Terphenyl-d14	0.9262		1.00000		92.6	58 - 142			
Surrogate: Nitrobenzene-d5	0.8554		1.00000		85.5	27 - 151			

LCS Dup (B4L0511-BSD1)

Prepared: 12/17/2014 Analyzed: 12/17/2014

1,4-Dioxane	1.14976	0.20	1.00000		115	58 - 151	0.701	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.7671		1.00000		76.7	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.8243		1.00000		82.4	48 - 121			
Surrogate: 4-Terphenyl-d14	0.8983		1.00000		89.8	58 - 142			
Surrogate: Nitrobenzene-d5	0.8096		1.00000		81.0	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main, Fullerton OCSD, 532.15

Report To : Steve Netto

Reported : 12/18/2014

Notes and Definitions

ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



December 31, 2014

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1404038

Client Reference : RAYTHEON MAIN GETS QUARTERLY, 532.15

Enclosed are the results for sample(s) received on December 18, 2014 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eddie Rodriguez', followed by the initials 'Ar'.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CEFF	1404038-01	Groundwater	12/18/14 13:40	12/18/14 17:00
POX	1404038-02	Groundwater	12/18/14 13:54	12/18/14 17:00
EW-02	1404038-03	Groundwater	12/18/14 14:39	12/18/14 17:00
MW-29	1404038-04	Groundwater	12/18/14 15:05	12/18/14 17:00
INF	1404038-05	Groundwater	12/18/14 14:12	12/18/14 17:00

CASE NARRATIVE

The samples for EPA 300 (Anions) analysis were subcontracted to AETL with ELAP Cert.# 1541.

Sample Receiving/General Comments:

The following analytes lists were taken from sample containers:

Alkalinity - Hydroxide, Bicarbonate, Carbonate, and Total

Dissolved metals - Se, Fe, Mn, Ca, Na, Mg

Anions - Cl, SO4, NO3, NO2, PO4



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID CEFF

Lab ID: 1404038-01

Total Dissolved Solids (Residue, Filterable) by SM 2540C

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	640	10	1	B4L0712	12/22/2014	12/23/14 09:00	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID POX

Lab ID: 1404038-02

UV Absorption by EPA 415.3

Analyst: PT

Analyte	Result (1/cm)	PQL (1/cm)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
UV Absorption	ND	0.01	1	B4L0625	12/19/2014	12/19/14 18:15	

Total Dissolved Solids (Residue, Filterable) by SM 2540C

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	640	10	1	B4L0712	12/22/2014	12/23/14 09:00	

Chemical Oxygen Demand by EPA 410.4

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chemical Oxygen Demand	ND	5.0	1	B4L0677	12/23/2014	12/24/14 07:51	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID EW-02

Lab ID: 1404038-03

UV Absorption by EPA 415.3

Analyst: PT

Analyte	Result (1/cm)	PQL (1/cm)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
UV Absorption	ND	0.01	1	B4L0625	12/19/2014	12/19/14 18:15	

Alkalinity, Speciated by SM 2320B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Alkalinity, Bicarbonate (as CaCO ₃)	250	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Total (as CaCO ₃)	250	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	

Total Dissolved Solids (Residue, Filterable) by SM 2540C

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	660	10	1	B4L0712	12/22/2014	12/23/14 09:00	

Total Organic Carbon by SM 5310B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Organic Carbon, Total	3.1	3.0	1	B4L0657	12/22/2014	12/22/14 21:46	

Chemical Oxygen Demand by EPA 410.4

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chemical Oxygen Demand	ND	5.0	1	B4L0677	12/23/2014	12/24/14 07:51	

Total Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Selenium	ND	0.010	1	B4L0724	12/26/2014	12/26/14 15:23	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID EW-02

Lab ID: 1404038-03

Dissolved Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Calcium	93	0.50	1	B4L0723	12/26/2014	12/26/14 15:02	
Iron	ND	0.50	1	B4L0723	12/26/2014	12/26/14 15:02	
Magnesium	30	0.10	1	B4L0723	12/26/2014	12/26/14 15:02	
Manganese	ND	0.50	1	B4L0723	12/26/2014	12/26/14 15:02	
Selenium	ND	0.010	1	B4L0723	12/26/2014	12/26/14 15:02	
Sodium	91	1.0	1	B4L0723	12/26/2014	12/26/14 15:02	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID MW-29

Lab ID: 1404038-04

UV Absorption by EPA 415.3

Analyst: PT

Analyte	Result (1/cm)	PQL (1/cm)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
UV Absorption	ND	0.01	1	B4L0625	12/19/2014	12/19/14 18:15	

Alkalinity, Speciated by SM 2320B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Alkalinity, Bicarbonate (as CaCO ₃)	270	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Total (as CaCO ₃)	270	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	

Total Dissolved Solids (Residue, Filterable) by SM 2540C

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	860	10	1	B4L0712	12/22/2014	12/23/14 09:00	

Total Organic Carbon by SM 5310B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Organic Carbon, Total	ND	3.0	1	B4L0657	12/22/2014	12/22/14 22:06	

Chemical Oxygen Demand by EPA 410.4

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chemical Oxygen Demand	ND	5.0	1	B4L0677	12/23/2014	12/24/14 07:51	

Total Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Selenium	ND	0.010	1	B4L0724	12/26/2014	12/26/14 15:29	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID MW-29

Lab ID: 1404038-04

Dissolved Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Calcium	130	0.50	1	B4L0723	12/26/2014	12/26/14 15:11	
Iron	ND	0.50	1	B4L0723	12/26/2014	12/26/14 15:11	
Magnesium	39	0.10	1	B4L0723	12/26/2014	12/26/14 15:11	
Manganese	ND	0.50	1	B4L0723	12/26/2014	12/26/14 15:11	
Selenium	ND	0.010	1	B4L0723	12/26/2014	12/26/14 15:11	
Sodium	120	1.0	1	B4L0723	12/26/2014	12/26/14 15:11	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID INF

Lab ID: 1404038-05

UV Absorption by EPA 415.3

Analyst: PT

Analyte	Result (1/cm)	PQL (1/cm)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
UV Absorption	ND	0.01	1	B4L0625	12/19/2014	12/19/14 18:15	

Alkalinity, Speciated by SM 2320B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Alkalinity, Bicarbonate (as CaCO ₃)	250	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Total (as CaCO ₃)	250	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	

Total Dissolved Solids (Residue, Filterable) by SM 2540C

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	690	10	1	B4L0712	12/22/2014	12/23/14 09:00	

Total Organic Carbon by SM 5310B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Organic Carbon, Total	ND	3.0	1	B4L0657	12/22/2014	12/22/14 22:27	

Chemical Oxygen Demand by EPA 410.4

Analyst: LA

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chemical Oxygen Demand	ND	5.0	1	B4L0677	12/23/2014	12/24/14 07:51	

Total Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Selenium	ND	0.010	1	B4L0724	12/26/2014	12/26/14 15:32	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID INF

Lab ID: 1404038-05

Dissolved Metals by ICP-AES EPA 6010B

Analyst: RR

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Calcium	100	0.50	1	B4L0723	12/26/2014	12/26/14 15:13	
Iron	ND	0.50	1	B4L0723	12/26/2014	12/26/14 15:13	
Magnesium	32	0.10	1	B4L0723	12/26/2014	12/26/14 15:13	
Manganese	ND	0.50	1	B4L0723	12/26/2014	12/26/14 15:13	
Selenium	ND	0.010	1	B4L0723	12/26/2014	12/26/14 15:13	
Sodium	91	1.0	1	B4L0723	12/26/2014	12/26/14 15:13	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

QUALITY CONTROL SECTION

UV Absorption by EPA 415.3 - Quality Control

Analyte	Result (1/cm)	PQL (1/cm)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0625 - No_Prep_II_W

Blank (B4L0625-BLK1)

Prepared: 12/19/2014 Analyzed: 12/19/2014

UV Absorption

ND

0.01

NR

Duplicate (B4L0625-DUP1)

Source: 1404040-05

Prepared: 12/19/2014 Analyzed: 12/19/2014

UV Absorption

ND

0.01

ND

NR

20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Alkalinity, Speciated by SM 2320B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0652 - No_Prep_WC1_W

Blank (B4L0652-BLK1)

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Bicarbonate (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Total (as CaCO ₃)	ND	5.0			NR				

LCS (B4L0652-BS1)

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Carbonate (as CaCO ₃)	86.9600	5.0	99.9580		87.0	80 - 120			
Alkalinity, Total (as CaCO ₃)	101.780	5.0	99.9580		102	80 - 120			

Duplicate (B4L0652-DUP1)

Source: 1403991-01

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Carbonate (as CaCO ₃)	ND	5.0		ND	NR			20	
Alkalinity, Total (as CaCO ₃)	19.7600	5.0		19.7600	NR		0.00	20	

Matrix Spike (B4L0652-MS1)

Source: 1403991-01

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Carbonate (as CaCO ₃)	69.1700	5.0	99.9580	ND	69.2	80 - 120			M1
Alkalinity, Total (as CaCO ₃)	124.510	5.0	99.9580	19.7600	105	80 - 120			

Matrix Spike Dup (B4L0652-MSD1)

Source: 1403991-01

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Carbonate (as CaCO ₃)	71.1500	5.0	99.9580	ND	71.2	80 - 120	2.82	20	M1
Alkalinity, Total (as CaCO ₃)	125.490	5.0	99.9580	19.7600	106	80 - 120	0.784	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Total Dissolved Solids (Residue, Filterable) by SM 2540C - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0712 - No_Prep_WC1_W

Blank (B4L0712-BLK1)

Prepared: 12/22/2014 Analyzed: 12/23/2014

Residue, Dissolved

ND

10

NR

LCS (B4L0712-BS1)

Prepared: 12/22/2014 Analyzed: 12/23/2014

Residue, Dissolved

992.000

10

970.000

102

80 - 120

Duplicate (B4L0712-DUP1)

Source: 1404047-01

Prepared: 12/22/2014 Analyzed: 12/23/2014

Residue, Dissolved

473.000

10

475.000

NR

0.422

10



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Total Organic Carbon by SM 5310B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0657 - No_Prep_II_W

Blank (B4L0657-BLK1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

Organic Carbon, Total

ND

3.0

NR

LCS (B4L0657-BS1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

Organic Carbon, Total

9.69600

3.0

10.0000

97.0

80 - 120

LCS Dup (B4L0657-BSD1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

Organic Carbon, Total

9.56300

3.0

10.0000

95.6

80 - 120

1.38

20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Chemical Oxygen Demand by EPA 410.4 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0677 - Prep_WC1_W

Blank (B4L0677-BLK1)

Prepared: 12/23/2014 Analyzed: 12/24/2014

Chemical Oxygen Demand

ND

5.0

NR

LCS (B4L0677-BS1)

Prepared: 12/23/2014 Analyzed: 12/24/2014

Chemical Oxygen Demand

479.215

5.0

501.500

95.6

80 - 120

Matrix Spike (B4L0677-MS1)

Source: 1404010-01

Prepared: 12/23/2014 Analyzed: 12/24/2014

Chemical Oxygen Demand

573.812

5.0

501.500

106.670

93.1

80 - 120

Matrix Spike Dup (B4L0677-MSD1)

Source: 1404010-01

Prepared: 12/23/2014 Analyzed: 12/24/2014

Chemical Oxygen Demand

583.951

5.0

501.500

106.670

95.2

80 - 120

1.75

20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Total Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0724 - EPA 3010A_W

Blank (B4L0724-BLK1)

Prepared: 12/26/2014 Analyzed: 12/26/2014

Selenium ND 0.010 NR

LCS (B4L0724-BS1)

Prepared: 12/26/2014 Analyzed: 12/26/2014

Selenium 0.910510 0.010 1.00000 91.1 80 - 120

Matrix Spike (B4L0724-MS1)

Source: 1404038-03

Prepared: 12/26/2014 Analyzed: 12/26/2014

Selenium 1.87015 0.010 2.50000 0.005064 74.6 75 - 121 M1

Matrix Spike Dup (B4L0724-MSD1)

Source: 1404038-03

Prepared: 12/26/2014 Analyzed: 12/26/2014

Selenium 1.89302 0.010 2.50000 0.005064 75.5 75 - 121 1.22 20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Dissolved Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0723 - EPA 3010A_W

Blank (B4L0723-BLK1)

Prepared: 12/26/2014 Analyzed: 12/26/2014

Calcium	ND	0.50			NR				
Iron	ND	0.50			NR				
Magnesium	ND	0.10			NR				
Manganese	ND	0.50			NR				
Selenium	ND	0.010			NR				
Sodium	ND	1.0			NR				

LCS (B4L0723-BS1)

Prepared: 12/26/2014 Analyzed: 12/26/2014

Calcium	20.0245	0.50	20.0000		100	80 - 120			
Iron	19.5757	0.50	20.0000		97.9	80 - 120			
Magnesium	20.4918	0.10	20.0000		102	80 - 120			
Manganese	9.67574	0.50	10.0000		96.8	80 - 120			
Selenium	0.950000	0.010	1.00000		95.0	80 - 120			
Sodium	21.2720	1.0	20.0000		106	80 - 120			

Matrix Spike (B4L0723-MS1)

Source: 1404038-03

Prepared: 12/26/2014 Analyzed: 12/26/2014

Calcium	116.960	0.50	20.0000	92.5814	122	31 - 175			
Iron	24.0326	0.50	20.0000	ND	120	69 - 135			
Magnesium	52.9004	0.10	20.0000	30.2782	113	58 - 148			
Manganese	11.2834	0.50	10.0000	ND	113	77 - 120			
Selenium	1.86161	0.010	2.50000	0.005894	74.2	75 - 121			M1
Sodium	106.455	1.0	20.0000	91.0293	77.1	25 - 192			

Matrix Spike Dup (B4L0723-MSD1)

Source: 1404038-03

Prepared: 12/26/2014 Analyzed: 12/26/2014

Calcium	116.826	0.50	20.0000	92.5814	121	31 - 175	0.115	20	
Iron	24.2353	0.50	20.0000	ND	121	69 - 135	0.840	20	
Magnesium	53.0792	0.10	20.0000	30.2782	114	58 - 148	0.338	20	
Manganese	11.7830	0.50	10.0000	ND	118	77 - 120	4.33	20	
Selenium	1.86695	0.010	2.50000	0.005894	74.4	75 - 121	0.287	20	M1
Sodium	106.628	1.0	20.0000	91.0293	78.0	25 - 192	0.162	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS QUARTERLY

Report To : Steve Netto

Reported : 12/31/2014

Notes and Definitions

M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Number of Pages 2
Date Received 12/19/2014
Date Reported 12/30/2014

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
75460	12/19/2014	ATL

Project ID: 1404038
Project Name: PO# SC09104

Enclosed please find results of analyses of 4 water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By:

Approved By:

Cyrus Razmara, Ph.D.
Laboratory Director



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181

Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Page: 1 A

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Project ID: 1404038

Date Received 12/19/2014

Date Reported 12/30/2014

Telephone: (562) 989-4045

Attention: Rachelle Arada

Job Number	Order Date	Client
75460	12/19/2014	ATL

CERTIFICATE OF ANALYSIS

CASE NARRATIVE

AETL received 4 samples with the following specification on 12/19/2014.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers	
75460.01	1404038-02	12/18/2014	Aqueous	1	
75460.02	1404038-03	12/18/2014	Aqueous	1	
75460.03	1404038-04	12/18/2014	Aqueous	1	
75460.04	1404038-05	12/18/2014	Aqueous	1	
	Method ^ Submethod	Req Date	Priority	TAT	Units
	300.0 ^ CNNSP	12/26/2014	2	Normal	mg/L

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Checked By: 

Approved By: 

Cyrus Razmara, Ph.D.
Laboratory Director

Page 20 of 27



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045

Attn: Rachelle Arada

Page: 2

Project ID: 1404038

Project Name: PO# SC09104

AETL Job Number	Submitted	Client
75460	12/19/2014	ATL

Method: 300.0, Determination of Inorganic Anion in water by IC

QC Batch No: 121914-1

Our Lab I.D.			Method Blank	75460.01	75460.02	75460.03	75460.04
Client Sample I.D.				1404038-02	1404038-03	1404038-04	1404038-05
Date Sampled				12/18/2014	12/18/2014	12/18/2014	12/18/2014
Date Prepared			12/19/2014	12/19/2014	12/19/2014	12/19/2014	12/19/2014
Preparation Method			300.0	300.0	300.0	300.0	300.0
Date Analyzed			12/19/2014	12/19/2014	12/19/2014	12/19/2014	12/19/2014
Matrix			Aqueous	Aqueous	Aqueous	Aqueous	Aqueous
Units			mg/L	mg/L	mg/L	mg/L	mg/L
Dilution Factor			1	1	1	1	1
Analytes	MDL	PQL	Results	Results	Results	Results	Results
Chloride	0.02	0.20	ND	106	107	288	141
Nitrate	0.02	0.20	ND	27.7	28.1	33.9	29.0
Nitrite	0.02	0.20	ND	ND	ND	ND	ND
Phosphate	0.02	0.20	ND	ND	ND	ND	ND
Sulfate	0.02	0.20	ND	133	133	104	128

QUALITY CONTROL REPORT

QC Batch No: 121914-1; LCS: Clean Water; LCS Prepared: 12/19/2014; LCS Analyzed: 12/19/2014; Units: mg/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit
Chloride	20.0	16.2	81.0	20.0	16.1	80.5	<1	80-120	<20
Nitrate	2.00	2.04	102	2.00	2.06	103	<1	80-120	<20
Nitrite	2.00	2.24	112	2.00	2.24	112	<1	80-120	<20
Phosphate	2.00	2.04	102	2.00	2.04	102	<1	80-120	<20
Sulfate	20.0	19.7	98.5	20.0	19.7	98.5	<1	80-120	<20



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected. However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY
LABORATORIES

SUBCONTRACT ORDER

Work Order: 1404038

75460

SENDING LABORATORY:

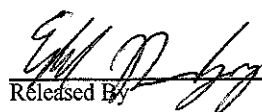
Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)

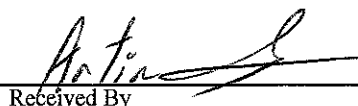
RECEIVING LABORATORY:

AETL
2834 North Naomi Street
Burbank, CA 91504
Phone: (818) 845-8200
Fax: (818) 845-8840
PO#: SC09104- STANDARD TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1404038-02 / POX	75460.01	Groundwater	12/18/14 13:54	FOR ALL SAMPLES: Analyze for Cl, NO2, NO3, PO4, & SO4 by EPA 300
300_Anion_Scan [Anions by Ion Chromatography] 1-Poly Unpres - 125mL	12/29/14 17:00	12/20/14 13:54		
ATL Lab#: 1404038-03 / EW-02	75460.02	Groundwater	12/18/14 14:39	
300_Anion_Scan [Anions by Ion Chromatography] 1-Poly Unpres - 125mL	12/29/14 17:00	12/20/14 14:39		
ATL Lab#: 1404038-04 / MW-29	75460.03	Groundwater	12/18/14 15:05	
300_Anion_Scan [Anions by Ion Chromatography] 1-Poly Unpres - 125mL	12/29/14 17:00	12/20/14 15:05		
ATL Lab#: 1404038-05 / INF	75460.04	Groundwater	12/18/14 14:12	
300_Anion_Scan [Anions by Ion Chromatography] 1-Poly Unpres - 125mL	12/29/14 17:00	12/20/14 14:12		

Released By  Date 12-19-14

Received By  Date 12/19/14 0910

Released By

Date

Received By

Date



DATE 12/10/14 PAGE 1 OF 1

[illegible]

Carmen Aguila

From: Marcos Rodriguez [MRODRIGUEZ@HARGIS.COM]
Sent: Friday, December 19, 2014 11:01 AM
To: Carmen Aguila
Cc: Rachelle Arada
Subject: Re: RAYTHEON MAIN GETS QUARTERLY, 532.15

Hi Carmen-

That is correct. Sorry that I ran out of space with my large handwriting.

Thank you and sorry about the inconvenience.

Marcos Rodriguez, PE
HARGIS + ASSOCIATES, INC.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Phone: (858) 455-6500
Fax: (858) 410-7455

> On Dec 19, 2014, at 10:54 AM, Carmen Aguila <Carmen@atlglobal.com> wrote:

>

> Hi Marcos,

>

> We just noticed that you have the following indicated on the sample bottles, anions (Cl, NO3, NO2, SO4 P04). Is this the selection you need?

>

>

> Thank you,

> Carmen

>

> -----Original Message-----

> From: Marcos Rodriguez [<mailto:MRODRIGUEZ@HARGIS.COM>]

> Sent: Friday, December 19, 2014 10:50 AM

> To: Carmen Aguila

> Cc: Rachelle Arada

> Subject: Re: RAYTHEON MAIN GETS QUARTERLY, 532.15

>

> Carmen-

>

> I am out of the office right now but will be back in the afternoon. Can I confirm the anion selection before 1pm?

>

> Thanks.

>

> Marcos Rodriguez, PE

> HARGIS + ASSOCIATES, INC.

> 9171 Towne Centre Drive, Suite 375

> San Diego, CA 92122

> Phone: (858) 455-6500

> Fax: (858) 410-7455

>

> On Dec 19, 2014, at 9:44 AM, Carmen Aguila

> <Carmen@atlglobal.com<<mailto:Carmen@atlglobal.com>>> wrote:

>

> Hi Marcos,
>
> We would like to check the anion selection that you need for the samples received on the project above. Please advise.
> Attached is the CoC received.
>
>
> Thank you,
> Carmen Aguila
> Sample Control
> <image001.jpg>Advanced Technology Laboratories www.atlglobal.com<<http://www.atlglobal.com>>
> Tel: (562) 989-4045 ext. 245
> Fax: (562) 989-4040
> Advanced Technology Laboratories is a full-service environmental lab providing organic and inorganic analyses of soil, water, wastewater, storm water and hazardous waste samples. ATL is accredited by the State of California, NELAP and State of Oregon (Air) and holds various SBE, DBE and MBE certificates and a USDA soil permit. ATL takes pride in providing our customers with quick turnaround time, excellent customer service and defensible data while offering very competitive rates. Advanced Technology Labs - Your Partner for Quality Environmental Testing
This message is intended for the use of the individual or entity to which it is addressed. This may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and delete the original message. Thank you.
>
> <1404038_COC_01.pdf>



December 31, 2014

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1404040

Client Reference : RAYTHEON MAIN GETS MONTHLY, 532.15

Enclosed are the results for sample(s) received on December 18, 2014 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie Rodriguez", followed by the letters "Ar" in a smaller, less legible script.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-121814	1404040-01	Lab H2O	12/18/14 10:30	12/18/14 17:00
CEFF	1404040-02	Groundwater	12/18/14 13:40	12/18/14 17:00
CBT	1404040-03	Groundwater	12/18/14 13:49	12/18/14 17:00
POX	1404040-04	Groundwater	12/18/14 13:54	12/18/14 17:00
PF	1404040-05	Groundwater	12/18/14 14:02	12/18/14 17:00
EW-02	1404040-06	Groundwater	12/18/14 14:39	12/18/14 17:00
MW-29	1404040-07	Groundwater	12/18/14 15:05	12/18/14 17:00
INF	1404040-08	Groundwater	12/18/14 14:12	12/18/14 17:00

CASE NARRATIVE

The sample for EPA 317 (Bromate) analysis was subcontracted to Exova, Inc. with ELAP Cert.# 2652.

The samples for EPA 300 (Bromide) analysis were subcontracted to AETL with ELAP Cert.# 1541.

Sample Receiving/General Comments:

The following analytes lists were taken from sample containers:

Alkalinity - Hydroxide, Bicarbonate, Carbonate, and Total



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID TB-121814

Lab ID: 1404040-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,1,1-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,1,2-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,1-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,1-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,1-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,2,3-Trichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,2,3-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,2,4-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,2,4-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,2-Dibromoethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,2-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,2-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,3,5-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,3-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,3-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
1,4-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
2,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
2-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
4-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
4-Isopropyltoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Benzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Bromobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Bromodichloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Bromoform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Bromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Carbon tetrachloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Chlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Chloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Chloroform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Chloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
cis-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
cis-1,3-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Dibromochloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID TB-121814

Lab ID: 1404040-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Dichlorodifluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Ethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Hexachlorobutadiene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Isopropylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
m,p-Xylene	ND	1.0	1	B4L0266	12/22/2014	12/22/14 14:19	
Methylene chloride	ND	1.0	1	B4L0266	12/22/2014	12/22/14 14:19	
n-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
n-Propylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Naphthalene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
o-Xylene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
sec-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Styrene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
tert-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Tetrachloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Toluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
trans-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Trichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Trichlorofluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Vinyl chloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 14:19	
Surrogate: 1,2-Dichloroethane-d4	107 %	64 - 146		B4L0266	12/22/2014	12/22/14 14:19	
Surrogate: 4-Bromofluorobenzene	89.8 %	60 - 128		B4L0266	12/22/2014	12/22/14 14:19	
Surrogate: Dibromofluoromethane	108 %	72 - 141		B4L0266	12/22/2014	12/22/14 14:19	
Surrogate: Toluene-d8	90.1 %	61 - 124		B4L0266	12/22/2014	12/22/14 14:19	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID CEFF

Lab ID: 1404040-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,1,1-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,1,2-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,1-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,1-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,1-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,2,3-Trichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,2,3-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,2,4-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,2,4-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,2-Dibromoethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,2-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,2-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,3,5-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,3-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,3-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
1,4-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
2,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
2-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
4-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
4-Isopropyltoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Benzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Bromobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Bromodichloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Bromoform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Bromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Carbon tetrachloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Chlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Chloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Chloroform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Chloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
cis-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
cis-1,3-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Dibromochloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID CEFF

Lab ID: 1404040-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Dichlorodifluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Ethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Hexachlorobutadiene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Isopropylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
m,p-Xylene	ND	1.0	1	B4L0266	12/22/2014	12/22/14 15:05	
Methylene chloride	ND	1.0	1	B4L0266	12/22/2014	12/22/14 15:05	
n-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
n-Propylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Naphthalene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
o-Xylene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
sec-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Styrene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
tert-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Tetrachloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Toluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
trans-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Trichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Trichlorofluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Vinyl chloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:05	
Surrogate: 1,2-Dichloroethane-d4	105 %	64 - 146		B4L0266	12/22/2014	12/22/14 15:05	
Surrogate: 4-Bromofluorobenzene	87.9 %	60 - 128		B4L0266	12/22/2014	12/22/14 15:05	
Surrogate: Dibromofluoromethane	111 %	72 - 141		B4L0266	12/22/2014	12/22/14 15:05	
Surrogate: Toluene-d8	90.6 %	61 - 124		B4L0266	12/22/2014	12/22/14 15:05	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID CEFF

Lab ID: 1404040-02

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	2.3	0.20	1	B4L0689	12/23/2014	12/24/14 10:31	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>57.0 %</i>	<i>47 - 117</i>		B4L0689	12/23/2014	<i>12/24/14 10:31</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>65.7 %</i>	<i>48 - 121</i>		B4L0689	12/23/2014	<i>12/24/14 10:31</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>79.9 %</i>	<i>58 - 142</i>		B4L0689	12/23/2014	<i>12/24/14 10:31</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>72.6 %</i>	<i>27 - 151</i>		B4L0689	12/23/2014	<i>12/24/14 10:31</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID CBT

Lab ID: 1404040-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,1,1-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,1,2-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,1-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,1-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,1-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,2,3-Trichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,2,3-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,2,4-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,2,4-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,2-Dibromoethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,2-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,2-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,3,5-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,3-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,3-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
1,4-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
2,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
2-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
4-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
4-Isopropyltoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Benzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Bromobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Bromodichloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Bromoform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Bromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Carbon tetrachloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Chlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Chloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Chloroform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Chloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
cis-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
cis-1,3-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Dibromochloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID CBT

Lab ID: 1404040-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Dichlorodifluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Ethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Hexachlorobutadiene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Isopropylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
m,p-Xylene	ND	1.0	1	B4L0266	12/22/2014	12/22/14 15:27	
Methylene chloride	ND	1.0	1	B4L0266	12/22/2014	12/22/14 15:27	
n-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
n-Propylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Naphthalene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
o-Xylene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
sec-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Styrene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
tert-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Tetrachloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Toluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
trans-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Trichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Trichlorofluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Vinyl chloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:27	
Surrogate: 1,2-Dichloroethane-d4	113 %	64 - 146		B4L0266	12/22/2014	12/22/14 15:27	
Surrogate: 4-Bromofluorobenzene	89.2 %	60 - 128		B4L0266	12/22/2014	12/22/14 15:27	
Surrogate: Dibromofluoromethane	112 %	72 - 141		B4L0266	12/22/2014	12/22/14 15:27	
Surrogate: Toluene-d8	91.4 %	61 - 124		B4L0266	12/22/2014	12/22/14 15:27	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID POX

Lab ID: 1404040-04

Alkalinity, Speciated by SM 2320B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Alkalinity, Bicarbonate (as CaCO ₃)	250	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Total (as CaCO ₃)	250	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	

Total Organic Carbon by SM 5310B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Organic Carbon, Total	ND	3.0	1	B4L0657	12/22/2014	12/22/14 22:45	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,1,1-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,1,2-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,1-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,1-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,1-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,2,3-Trichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,2,3-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,2,4-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,2,4-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,2-Dibromoethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,2-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,2-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,3,5-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,3-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,3-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
1,4-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
2,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
2-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID POX

Lab ID: 1404040-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
4-Isopropyltoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Benzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Bromobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Bromodichloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Bromoform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Bromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Carbon tetrachloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Chlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Chloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Chloroform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Chloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
cis-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
cis-1,3-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Dibromochloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Dibromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Dichlorodifluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Ethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Hexachlorobutadiene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Isopropylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
m,p-Xylene	ND	1.0	1	B4L0266	12/22/2014	12/22/14 15:51	
Methylene chloride	ND	1.0	1	B4L0266	12/22/2014	12/22/14 15:51	
n-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
n-Propylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Naphthalene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
o-Xylene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
sec-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Styrene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
tert-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Tetrachloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Toluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
trans-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Trichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Trichlorofluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	
Vinyl chloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 15:51	

Surrogate: 1,2-Dichloroethane-d4

115 %

64 - 146

B4L0266

12/22/2014

12/22/14 15:51

Surrogate: 4-Bromofluorobenzene

93.6 %

60 - 128

B4L0266

12/22/2014

12/22/14 15:51



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID POX

Lab ID: 1404040-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	121 %	72 - 141		B4L0266	12/22/2014	12/22/14 15:51	
Surrogate: Toluene-d8	93.6 %	61 - 124		B4L0266	12/22/2014	12/22/14 15:51	

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	1	B4L0689	12/23/2014	12/24/14 10:58	
Surrogate: 1,2-Dichlorobenzene-d4	74.5 %	47 - 117		B4L0689	12/23/2014	12/24/14 10:58	
Surrogate: 2-Fluorobiphenyl	82.3 %	48 - 121		B4L0689	12/23/2014	12/24/14 10:58	
Surrogate: 4-Terphenyl-d14	83.2 %	58 - 142		B4L0689	12/23/2014	12/24/14 10:58	
Surrogate: Nitrobenzene-d5	92.5 %	27 - 151		B4L0689	12/23/2014	12/24/14 10:58	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID PF

Lab ID: 1404040-05

UV Absorption by EPA 415.3

Analyst: PT

Analyte	Result (1/cm)	PQL (1/cm)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
UV Absorption	ND	0.01	1	B4L0625	12/19/2014	12/19/14 18:15	

Alkalinity, Speciated by SM 2320B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Alkalinity, Bicarbonate (as CaCO ₃)	250	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	
Alkalinity, Total (as CaCO ₃)	250	5.0	1	B4L0652	12/23/2014	12/23/14 08:00	

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D

Analyst: AM/PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Suspended	ND	3.7	1	B4L0632	12/22/2014	12/22/14 12:30	

Total Organic Carbon by SM 5310B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Organic Carbon, Total	3.6	3.0	1	B4L0657	12/22/2014	12/22/14 23:53	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID EW-02

Lab ID: 1404040-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,1,1-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,1,2-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,1-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,1-Dichloroethene	24	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,1-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,2,3-Trichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,2,3-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,2,4-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,2,4-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,2-Dibromoethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,2-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,2-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,3,5-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,3-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,3-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
1,4-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
2,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
2-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
4-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
4-Isopropyltoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Benzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Bromobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Bromodichloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Bromoform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Bromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Carbon tetrachloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Chlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Chloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Chloroform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Chloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
cis-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
cis-1,3-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Dibromochloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID EW-02

Lab ID: 1404040-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Dichlorodifluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Ethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Hexachlorobutadiene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Isopropylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
m,p-Xylene	ND	1.0	1	B4L0266	12/22/2014	12/22/14 16:15	
Methylene chloride	ND	1.0	1	B4L0266	12/22/2014	12/22/14 16:15	
n-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
n-Propylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Naphthalene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
o-Xylene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
sec-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Styrene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
tert-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Tetrachloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Toluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
trans-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Trichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Trichlorofluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Vinyl chloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:15	
Surrogate: 1,2-Dichloroethane-d4	116 %	64 - 146		B4L0266	12/22/2014	12/22/14 16:15	
Surrogate: 4-Bromofluorobenzene	91.0 %	60 - 128		B4L0266	12/22/2014	12/22/14 16:15	
Surrogate: Dibromofluoromethane	119 %	72 - 141		B4L0266	12/22/2014	12/22/14 16:15	
Surrogate: Toluene-d8	93.4 %	61 - 124		B4L0266	12/22/2014	12/22/14 16:15	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID EW-02

Lab ID: 1404040-06

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	5.7	2.0	1	B4L0582	12/19/2014	12/22/14 17:29	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>62.6 %</i>	<i>42 - 106</i>		<i>B4L0582</i>	<i>12/19/2014</i>	<i>12/22/14 17:29</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>71.5 %</i>	<i>55 - 117</i>		<i>B4L0582</i>	<i>12/19/2014</i>	<i>12/22/14 17:29</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>95.0 %</i>	<i>52 - 142</i>		<i>B4L0582</i>	<i>12/19/2014</i>	<i>12/22/14 17:29</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>71.4 %</i>	<i>43 - 116</i>		<i>B4L0582</i>	<i>12/19/2014</i>	<i>12/22/14 17:29</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID MW-29

Lab ID: 1404040-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,1,1-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,1,2-Trichloroethane	1.4	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,1-Dichloroethane	5.0	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,1-Dichloroethene	580	5.0	10	B4L0266	12/22/2014	12/22/14 17:28	
1,1-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,2,3-Trichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,2,3-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,2,4-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,2,4-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,2-Dibromoethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,2-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,2-Dichloroethane	0.86	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,3,5-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,3-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,3-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
1,4-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
2,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
2-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
4-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
4-Isopropyltoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Benzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Bromobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Bromodichloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Bromoform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Bromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Carbon tetrachloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Chlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Chloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Chloroform	0.79	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Chloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
cis-1,2-Dichloroethene	0.60	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
cis-1,3-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Dibromochloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID MW-29

Lab ID: 1404040-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Dichlorodifluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Ethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Hexachlorobutadiene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Isopropylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
m,p-Xylene	ND	1.0	1	B4L0266	12/22/2014	12/22/14 17:03	
Methylene chloride	ND	1.0	1	B4L0266	12/22/2014	12/22/14 17:03	
n-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
n-Propylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Naphthalene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
o-Xylene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
sec-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Styrene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
tert-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Tetrachloroethene	1.1	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Toluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
trans-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Trichloroethene	6.3	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Trichlorofluoromethane	2.7	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	
Vinyl chloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 17:03	

Surrogate: 1,2-Dichloroethane-d4	116 %	64 - 146		B4L0266	12/22/2014	12/22/14 17:28
Surrogate: 1,2-Dichloroethane-d4	119 %	64 - 146		B4L0266	12/22/2014	12/22/14 17:03
Surrogate: 4-Bromofluorobenzene	89.2 %	60 - 128		B4L0266	12/22/2014	12/22/14 17:28
Surrogate: 4-Bromofluorobenzene	93.3 %	60 - 128		B4L0266	12/22/2014	12/22/14 17:03
Surrogate: Dibromofluoromethane	122 %	72 - 141		B4L0266	12/22/2014	12/22/14 17:03
Surrogate: Dibromofluoromethane	122 %	72 - 141		B4L0266	12/22/2014	12/22/14 17:28
Surrogate: Toluene-d8	92.0 %	61 - 124		B4L0266	12/22/2014	12/22/14 17:28
Surrogate: Toluene-d8	92.8 %	61 - 124		B4L0266	12/22/2014	12/22/14 17:03



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID MW-29

Lab ID: 1404040-07

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	140	2.0	1	B4L0582	12/19/2014	12/22/14 17:56	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>55.7 %</i>	<i>42 - 106</i>		B4L0582	12/19/2014	<i>12/22/14 17:56</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>65.4 %</i>	<i>55 - 117</i>		B4L0582	12/19/2014	<i>12/22/14 17:56</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>87.1 %</i>	<i>52 - 142</i>		B4L0582	12/19/2014	<i>12/22/14 17:56</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>63.4 %</i>	<i>43 - 116</i>		B4L0582	12/19/2014	<i>12/22/14 17:56</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID INF

Lab ID: 1404040-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,1,1-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,1,2-Trichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,1-Dichloroethane	1.2	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,1-Dichloroethene	120	5.0	10	B4L0635	12/23/2014	12/23/14 10:47	
1,1-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,2,3-Trichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,2,3-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,2,4-Trichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,2,4-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,2-Dibromoethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,2-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,2-Dichloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,3,5-Trimethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,3-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,3-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
1,4-Dichlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
2,2-Dichloropropane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
2-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
4-Chlorotoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
4-Isopropyltoluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Benzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Bromobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Bromodichloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Bromoform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Bromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Carbon tetrachloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Chlorobenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Chloroethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Chloroform	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Chloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
cis-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
cis-1,3-Dichloropropene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Dibromochloromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID INF

Lab ID: 1404040-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Dichlorodifluoromethane	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Ethylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Hexachlorobutadiene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Isopropylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
m,p-Xylene	ND	1.0	1	B4L0266	12/22/2014	12/22/14 16:39	
Methylene chloride	ND	1.0	1	B4L0266	12/22/2014	12/22/14 16:39	
n-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
n-Propylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Naphthalene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
o-Xylene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
sec-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Styrene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
tert-Butylbenzene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Tetrachloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Toluene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
trans-1,2-Dichloroethene	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Trichloroethene	1.4	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Trichlorofluoromethane	0.74	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
Vinyl chloride	ND	0.50	1	B4L0266	12/22/2014	12/22/14 16:39	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>86.0 %</i>	<i>64 - 146</i>		B4L0635	12/23/2014	<i>12/23/14 10:47</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>119 %</i>	<i>64 - 146</i>		B4L0266	12/22/2014	<i>12/22/14 16:39</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>108 %</i>	<i>60 - 128</i>		B4L0635	12/23/2014	<i>12/23/14 10:47</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>92.2 %</i>	<i>60 - 128</i>		B4L0266	12/22/2014	<i>12/22/14 16:39</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>123 %</i>	<i>72 - 141</i>		B4L0266	12/22/2014	<i>12/22/14 16:39</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>90.4 %</i>	<i>72 - 141</i>		B4L0635	12/23/2014	<i>12/23/14 10:47</i>	
<i>Surrogate: Toluene-d8</i>	<i>93.2 %</i>	<i>61 - 124</i>		B4L0266	12/22/2014	<i>12/22/14 16:39</i>	
<i>Surrogate: Toluene-d8</i>	<i>80.9 %</i>	<i>61 - 124</i>		B4L0635	12/23/2014	<i>12/23/14 10:47</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Client Sample ID INF

Lab ID: 1404040-08

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	33	2.0	1	B4L0582	12/19/2014	12/22/14 18:24	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>59.7 %</i>	<i>42 - 106</i>		<i>B4L0582</i>	<i>12/19/2014</i>	<i>12/22/14 18:24</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>69.0 %</i>	<i>55 - 117</i>		<i>B4L0582</i>	<i>12/19/2014</i>	<i>12/22/14 18:24</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>88.9 %</i>	<i>52 - 142</i>		<i>B4L0582</i>	<i>12/19/2014</i>	<i>12/22/14 18:24</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>67.7 %</i>	<i>43 - 116</i>		<i>B4L0582</i>	<i>12/19/2014</i>	<i>12/22/14 18:24</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

QUALITY CONTROL SECTION

UV Absorption by EPA 415.3 - Quality Control

Analyte	Result (1/cm)	PQL (1/cm)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0625 - No_Prep_II_W

Blank (B4L0625-BLK1)

Prepared: 12/19/2014 Analyzed: 12/19/2014

UV Absorption

ND

0.01

NR

Duplicate (B4L0625-DUP1)

Source: 1404040-05

Prepared: 12/19/2014 Analyzed: 12/19/2014

UV Absorption

ND

0.01

ND

NR

20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Alkalinity, Speciated by SM 2320B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0652 - No_Prep_WC1_W

Blank (B4L0652-BLK1)

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Bicarbonate (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Total (as CaCO ₃)	ND	5.0			NR				

LCS (B4L0652-BS1)

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Carbonate (as CaCO ₃)	86.9600	5.0	99.9580		87.0	80 - 120			
Alkalinity, Total (as CaCO ₃)	101.780	5.0	99.9580		102	80 - 120			

Duplicate (B4L0652-DUP1)

Source: 1403991-01

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Carbonate (as CaCO ₃)	ND	5.0		ND	NR			20	
Alkalinity, Total (as CaCO ₃)	19.7600	5.0		19.7600	NR		0.00	20	

Matrix Spike (B4L0652-MS1)

Source: 1403991-01

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Carbonate (as CaCO ₃)	69.1700	5.0	99.9580	ND	69.2	80 - 120			M1
Alkalinity, Total (as CaCO ₃)	124.510	5.0	99.9580	19.7600	105	80 - 120			

Matrix Spike Dup (B4L0652-MSD1)

Source: 1403991-01

Prepared: 12/23/2014 Analyzed: 12/23/2014

Alkalinity, Carbonate (as CaCO ₃)	71.1500	5.0	99.9580	ND	71.2	80 - 120	2.82	20	M1
Alkalinity, Total (as CaCO ₃)	125.490	5.0	99.9580	19.7600	106	80 - 120	0.784	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0632 - No_Prep_WC1_W

Blank (B4L0632-BLK1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

Residue, Suspended

ND

1.0

NR

LCS (B4L0632-BS1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

Residue, Suspended

100.000

10

96.6000

104

80 - 120

Duplicate (B4L0632-DUP1)

Source: 1404052-01

Prepared: 12/22/2014 Analyzed: 12/22/2014

Residue, Suspended

25.4546

4.5

25.9091

NR

1.77

10



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Total Organic Carbon by SM 5310B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0657 - No_Prep_II_W

Blank (B4L0657-BLK1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

Organic Carbon, Total

ND

3.0

NR

LCS (B4L0657-BS1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

Organic Carbon, Total

9.69600

3.0

10.0000

97.0

80 - 120

LCS Dup (B4L0657-BSD1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

Organic Carbon, Total

9.56300

3.0

10.0000

95.6

80 - 120

1.38

20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes

Batch B4L0266 - MSVOA_LL_W

Blank (B4L0266-BLK1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

1,1,1,2-Tetrachloroethane	ND	0.50			NR
1,1,1-Trichloroethane	ND	0.50			NR
1,1,2,2-Tetrachloroethane	ND	0.50			NR
1,1,2-Trichloroethane	ND	0.50			NR
1,1-Dichloroethane	ND	0.50			NR
1,1-Dichloroethene	ND	0.50			NR
1,1-Dichloropropene	ND	0.50			NR
1,2,3-Trichloropropane	ND	0.50			NR
1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR
Ethylbenzene	ND	0.50			NR
Hexachlorobutadiene	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0266 - MSVOA_LL_W (continued)

Blank (B4L0266-BLK1) - Continued

Prepared: 12/22/2014 Analyzed: 12/22/2014

Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				

Surrogate: 1,2-Dichloroethane-d4	24.52		25.0000		98.1	64 - 146			
Surrogate: 4-Bromofluorobenzene	23.58		25.0000		94.3	60 - 128			
Surrogate: Dibromofluoromethane	23.78		25.0000		95.1	72 - 141			
Surrogate: Toluene-d8	22.98		25.0000		91.9	61 - 124			

LCS (B4L0266-BS1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

1,1-Dichloroethene	16.6700	0.50	20.0000		83.4	56 - 131			
Benzene	37.0200	0.50	40.0000		92.6	69 - 139			
Chlorobenzene	18.3800	0.50	20.0000		91.9	73 - 127			
MTBE	22.7700	0.50	20.0000		114	68 - 133			
Toluene	38.9100	0.50	40.0000		97.3	62 - 133			
Trichloroethene	17.8700	0.50	20.0000		89.4	72 - 139			

Surrogate: 1,2-Dichloroethane-d4	21.16		25.0000		84.6	64 - 146			
Surrogate: 4-Bromofluorobenzene	22.44		25.0000		89.8	60 - 128			
Surrogate: Dibromofluoromethane	21.43		25.0000		85.7	72 - 141			
Surrogate: Toluene-d8	22.63		25.0000		90.5	61 - 124			

LCS Dup (B4L0266-BSD1)

Prepared: 12/22/2014 Analyzed: 12/22/2014

1,1-Dichloroethene	14.9600	0.50	20.0000		74.8	56 - 131	10.8	20	
Benzene	35.7900	0.50	40.0000		89.5	69 - 139	3.38	20	
Chlorobenzene	17.9400	0.50	20.0000		89.7	73 - 127	2.42	20	
MTBE	22.9900	0.50	20.0000		115	68 - 133	0.962	20	
Toluene	38.2100	0.50	40.0000		95.5	62 - 133	1.82	20	
Trichloroethene	16.9500	0.50	20.0000		84.8	72 - 139	5.28	20	

Surrogate: 1,2-Dichloroethane-d4	21.05		25.0000		84.2	64 - 146			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0266 - MSVOA_LL_W (continued)

LCS Dup (B4L0266-BSD1) - Continued

Prepared: 12/22/2014 Analyzed: 12/22/2014

Surrogate: 4-Bromofluorobenzene	22.16	25.0000	88.6	60 - 128
Surrogate: Dibromofluoromethane	20.75	25.0000	83.0	72 - 141
Surrogate: Toluene-d8	22.27	25.0000	89.1	61 - 124

Batch B4L0635 - MSVOA_LL_W

Blank (B4L0635-BLK1)

Prepared: 12/23/2014 Analyzed: 12/23/2014

1,1,1,2-Tetrachloroethane	ND	0.50	NR
1,1,1-Trichloroethane	ND	0.50	NR
1,1,2,2-Tetrachloroethane	ND	0.50	NR
1,1,2-Trichloroethane	ND	0.50	NR
1,1-Dichloroethane	ND	0.50	NR
1,1-Dichloroethene	ND	0.50	NR
1,1-Dichloropropene	ND	0.50	NR
1,2,3-Trichloropropane	ND	0.50	NR
1,2,3-Trichlorobenzene	ND	0.50	NR
1,2,4-Trichlorobenzene	ND	0.50	NR
1,2,4-Trimethylbenzene	ND	0.50	NR
1,2-Dibromo-3-chloropropane	ND	0.50	NR
1,2-Dibromoethane	ND	0.50	NR
1,2-Dichlorobenzene	ND	0.50	NR
1,2-Dichloroethane	ND	0.50	NR
1,2-Dichloropropane	ND	0.50	NR
1,3,5-Trimethylbenzene	ND	0.50	NR
1,3-Dichlorobenzene	ND	0.50	NR
1,3-Dichloropropane	ND	0.50	NR
1,4-Dichlorobenzene	ND	0.50	NR
2,2-Dichloropropane	ND	0.50	NR
2-Chlorotoluene	ND	0.50	NR
4-Chlorotoluene	ND	0.50	NR
4-Isopropyltoluene	ND	0.50	NR
Benzene	ND	0.50	NR
Bromobenzene	ND	0.50	NR
Bromodichloromethane	ND	0.50	NR
Bromoform	ND	0.50	NR
Bromomethane	ND	0.50	NR
Carbon tetrachloride	ND	0.50	NR
Chlorobenzene	ND	0.50	NR
Chloroethane	ND	0.50	NR
Chloroform	ND	0.50	NR
Chloromethane	ND	0.50	NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0635 - MSVOA_LL_W (continued)

Blank (B4L0635-BLK1) - Continued

Prepared: 12/23/2014 Analyzed: 12/23/2014

cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				

Surrogate: 1,2-Dichloroethane-d4	22.68		25.0000		90.7	64 - 146
Surrogate: 4-Bromofluorobenzene	26.78		25.0000		107	60 - 128
Surrogate: Dibromofluoromethane	25.00		25.0000		100	72 - 141
Surrogate: Toluene-d8	22.66		25.0000		90.6	61 - 124

LCS (B4L0635-BS1)

Prepared: 12/23/2014 Analyzed: 12/23/2014

1,1-Dichloroethene	21.8200	0.50	20.0000		109	56 - 131
Benzene	39.0500	0.50	40.0000		97.6	69 - 139
Chlorobenzene	18.2200	0.50	20.0000		91.1	73 - 127
MTBE	26.3600	0.50	20.0000		132	68 - 133
Toluene	40.8900	0.50	40.0000		102	62 - 133
Trichloroethene	18.4600	0.50	20.0000		92.3	72 - 139

Surrogate: 1,2-Dichloroethane-d4	24.05		25.0000		96.2	64 - 146
Surrogate: 4-Bromofluorobenzene	23.74		25.0000		95.0	60 - 128
Surrogate: Dibromofluoromethane	25.56		25.0000		102	72 - 141
Surrogate: Toluene-d8	23.68		25.0000		94.7	61 - 124

LCS Dup (B4L0635-BSD1)

Prepared: 12/23/2014 Analyzed: 12/23/2014



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0635 - MSVOA_LL_W (continued)

LCS Dup (B4L0635-BSD1) - Continued

Prepared: 12/23/2014 Analyzed: 12/23/2014

1,1-Dichloroethene	19.2600	0.50	20.0000		96.3	56 - 131	12.5	20	
Benzene	36.5600	0.50	40.0000		91.4	69 - 139	6.59	20	
Chlorobenzene	17.4800	0.50	20.0000		87.4	73 - 127	4.15	20	
MTBE	26.4500	0.50	20.0000		132	68 - 133	0.341	20	
Toluene	38.8300	0.50	40.0000		97.1	62 - 133	5.17	20	
Trichloroethene	17.4000	0.50	20.0000		87.0	72 - 139	5.91	20	
Surrogate: 1,2-Dichloroethane-d4	22.23		25.0000		88.9	64 - 146			
Surrogate: 4-Bromofluorobenzene	23.13		25.0000		92.5	60 - 128			
Surrogate: Dibromofluoromethane	23.87		25.0000		95.5	72 - 141			
Surrogate: Toluene-d8	22.44		25.0000		89.8	61 - 124			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0582 - MSSEMI_ISOTOPEDILN

Blank (B4L0582-BLK1)

Prepared: 12/19/2014 Analyzed: 12/22/2014

1,4-Dioxane	ND	2.0			NR				
Surrogate: 1,2-Dichlorobenzene-d4	63.30		100.000		63.3	42 - 106			
Surrogate: 2-Fluorobiphenyl	72.31		100.000		72.3	55 - 117			
Surrogate: 4-Terphenyl-d14	91.80		100.000		91.8	52 - 142			
Surrogate: Nitrobenzene-d5	79.09		100.000		79.1	43 - 116			

LCS (B4L0582-BS1)

Prepared: 12/19/2014 Analyzed: 12/22/2014

1,4-Dioxane	105.060	2.0	100.000		105	62 - 127			
Surrogate: 1,2-Dichlorobenzene-d4	60.66		100.000		60.7	42 - 106			
Surrogate: 2-Fluorobiphenyl	71.40		100.000		71.4	55 - 117			
Surrogate: 4-Terphenyl-d14	84.43		100.000		84.4	52 - 142			
Surrogate: Nitrobenzene-d5	83.20		100.000		83.2	43 - 116			

LCS Dup (B4L0582-BSD1)

Prepared: 12/19/2014 Analyzed: 12/22/2014

1,4-Dioxane	101.870	2.0	100.000		102	62 - 127	3.08	20	
Surrogate: 1,2-Dichlorobenzene-d4	65.16		100.000		65.2	42 - 106			
Surrogate: 2-Fluorobiphenyl	77.13		100.000		77.1	55 - 117			
Surrogate: 4-Terphenyl-d14	88.65		100.000		88.6	52 - 142			
Surrogate: Nitrobenzene-d5	89.79		100.000		89.8	43 - 116			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes

Batch B4L0689 - MSSEMI_ISOTOPEDILN

Blank (B4L0689-BLK1)

Prepared: 12/23/2014 Analyzed: 12/24/2014

1,4-Dioxane	ND	0.20		NR					
Surrogate: 1,2-Dichlorobenzene-d4	0.7948		1.00000		79.5	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.8600		1.00000		86.0	48 - 121			
Surrogate: 4-Terphenyl-d14	0.8899		1.00000		89.0	58 - 142			
Surrogate: Nitrobenzene-d5	0.9742		1.00000		97.4	27 - 151			

LCS (B4L0689-BS1)

Prepared: 12/23/2014 Analyzed: 12/24/2014

1,4-Dioxane	1.25846	0.20	1.00000		126	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.7952		1.00000		79.5	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.8179		1.00000		81.8	48 - 121			
Surrogate: 4-Terphenyl-d14	0.8708		1.00000		87.1	58 - 142			
Surrogate: Nitrobenzene-d5	0.9996		1.00000		100	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B4L0689 - MSSEMI_ISOTOPEDILN (continued)

LCS Dup (B4L0689-BSD1)

Prepared: 12/23/2014 Analyzed: 12/24/2014

1,4-Dioxane	1.26958	0.20	1.00000		127	58 - 151	0.880	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.7916		1.00000		79.2	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.8652		1.00000		86.5	48 - 121			
Surrogate: 4-Terphenyl-d14	0.8870		1.00000		88.7	58 - 142			
Surrogate: Nitrobenzene-d5	0.9878		1.00000		98.8	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 12/31/2014

Notes and Definitions

M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.

Client: Advanced Technology Laboratories
Job No.: 162894

Bromate by EPA 317.0
Ion Chromatography/Post Column Reaction-Visible Absorption Spectroscopy

Column: Dionex AS9-HC 4 mm x 250 mm, AG9-HC Guard 4 mm x 50 mm
Eluent: 10 mM Na₂CO₃
Flow: 1.2 mL/min
Injection: 250 µL
Detection: Visible, 450 nm

Sample preparation: The undiluted sample was treated with a 2.5 mL Dionex OnGuard II H cartridge to remove excess basic cations.

Parts Per Billion (µg/L)

<u>Sample ID</u>	<u>Result</u>
ATL Lab#: 1404040-04 / POX	ND
Method Blank	ND
Detection Limit	0.3
Date Analyzed:	12-29-14

Quality Control Summary

Sample ID:	Batch QC						
<u>Analyte</u>	<u>Sample Result</u>	<u>Spike Conc</u>	<u>Spike Result</u>	<u>Spike % Rec</u>	<u>Spike Duplicate Result</u>	<u>Spike Duplicate % Rec</u>	<u>RPD</u>
Bromate	ND	1000	960	96	960	96	0
QC Guidelines				75-125		75-125	NMT 10

Exova Inc – Santa Fe Springs – 562-948-2225
The above data is considered preliminary and may not reflect final reported values.
A final signed report will be mailed to you.

ADVANCED TECHNOLOGY
LABORATORIES

SUBCONTRACT ORDER

Work Order: 1404040

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)

RECEIVING LABORATORY:

Exova Inc.
9240 Santa Fe Springs Road
Santa Fe Springs, CA 90670
Phone : (562) 948-2225
Fax: (562) 948-5850
PO#: SC09107- STANDARD TAT

RA

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1404040-04 / POX 317.0_SUB [Bromate] 1-Poly Unpres - 125mL	01/06/15 17:00	Groundwater 12/19/14 13:54	12/18/14 13:54	

Released By	Date	Received By	Date

Released By	Date	Received By	Date



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Number of Pages 2
Date Received 12/22/2014
Date Reported 12/30/2014

Telephone: (562)989-4045
Attention: Rachelle Arada

Job Number	Order Date	Client
75488	12/22/2014	ATL

Project ID: 1404040
Project Name: PO# SC09107

Enclosed please find results of analyses of 3 ground water samples which were analyzed as specified on the attached chain of custody. If there are any questions, please do not hesitate to call.

Checked By: _____

Approved By: _____

Cyrus Razmara, Ph.D.
Laboratory Director



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181

Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Page: 1 A

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Project ID: 1404040

Date Received 12/22/2014

Date Reported 12/30/2014

Telephone: (562) 989-4045

Attention: Rachelle Arada

Job Number	Order Date	Client
75488	12/22/2014	ATL

CERTIFICATE OF ANALYSIS CASE NARRATIVE

AETL received 3 samples with the following specification on 12/22/2014.

Lab ID	Sample ID	Sample Date	Matrix	Quantity Of Containers
75488.01	1404040-06	12/18/2014	Aqueous	1
75488.02	1404040-07	12/18/2014	Aqueous	1
75488.03	1404040-08	12/18/2014	Aqueous	1

Method ^ Submethod	Req Date	Priority	TAT	Units
300.0 ^ BROMIDE	12/29/2014	2	Normal	mg/L

The samples were analyzed as specified on the enclosed chain of custody.
No analytical non-conformances were encountered.

Checked By: 

Approved By: 

Cyrus Razmara, Ph.D.

Laboratory Director



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

ANALYTICAL RESULTS

Ordered By

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225

Telephone: (562)989-4045

Attn: Rachelle Arada

Page: 2

Project ID: 1404040

Project Name: PO# SC09107

AETL Job Number	Submitted	Client
75488	12/22/2014	ATL

Method: 300.0, Determination of Inorganic Anion in water by IC

QC Batch No: 122214-1

Our Lab I.D.		Method Blank	75488.01	75488.02	75488.03	
Client Sample I.D.			1404040-06	1404040-07	1404040-08	
Date Sampled			12/18/2014	12/18/2014	12/18/2014	
Date Prepared		12/22/2014	12/22/2014	12/22/2014	12/22/2014	
Preparation Method		300.0	300.0	300.0	300.0	
Date Analyzed		12/22/2014	12/22/2014	12/22/2014	12/22/2014	
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	
Units		mg/L	mg/L	mg/L	mg/L	
Dilution Factor		1	1	1	1	
Analytes	MDL	PQL	Results	Results	Results	Results
Bromide	0.01	0.10	ND	ND	ND	ND

QUALITY CONTROL REPORT

QC Batch No: 122214-1; Dup or Spiked Sample: 75485.01; LCS: Clean Water; LCS Prepared: 12/22/2014; LCS Analyzed: 12/22/2014;

Units: mg/L

Analytes	LCS Concen	LCS Recov	LCS % REC	LCS DUP Concen	LCS DUP Recov	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit	
Bromide	2.00	1.67	83.5	2.00	1.68	84.0	<1	80-120	<20	



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

Data Qualifier:

#:	Recovery is not within acceptable control limits.
*:	In the QC section, sample results have been taken directly from the ICP reading. No preparation factor has been applied.
B:	Analyte was present in the Method Blank.
D:	Result is from a diluted analysis.
E:	Result is beyond calibration limits and is estimated.
H:	Analysis was performed over the allowed holding time due to circumstances which were beyond laboratory control.
J:	Analyte was detected . However, the analyte concentration is an estimated value, which is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL).
M:	Matrix spike recovery is outside control limits due to matrix interference. Laboratory Control Sample recovery was acceptable.
MCL:	Maximum Contaminant Level
NS:	No Standard Available
S6:	Surrogate recovery is outside control limits due to matrix interference.
S8:	The analysis of the sample required a dilution such that the surrogate concentration was diluted below the method acceptance criteria.
X:	Results represent LCS and LCSD data.

Definition:

%Limi:	Percent acceptable limits.
%REC:	Percent recovery.
Con.L:	Acceptable Control Limits
Conce:	Added concentration to the sample.
LCS:	Laboratory Control Sample
MDL:	Method Detection Limit is a statistically derived number which is specific for each instrument, each method, and each compound. It indicates a distinctively detectable quantity with 99% probability.



American Environmental Testing Laboratory Inc.

2834 & 2908 North Naomi Street, Burbank, CA 91504 • DOHS NO: 1541, LACSD NO: 10181
Tel: (888) 288-AETL • (818) 845-8200 • Fax: (818) 845-8840 • www.aetlab.com

Data Qualifiers and Descriptors

MS:	Matrix Spike
MS DU:	Matrix Spike Duplicate
ND:	Analyte was not detected in the sample at or above MDL.
PQL:	Practical Quantitation Limit or ML (Minimum Level as per RWQCB) is the minimum concentration that can be quantified with more than 99% confidence. Taking into account all aspects of the entire analytical instrumentation and practice.
Recov:	Recovered concentration in the sample.
RPD:	Relative Percent Difference

ADVANCED TECHNOLOGY
 LABORATORIES

SUBCONTRACT ORDER

Work Order: 1404040

75488

SENDING LABORATORY:

Advanced Technology Laboratories
 3275 Walnut Avenue
 Signal Hill, CA 90755
 Phone: 562.989.4045
 Fax: 562.989.6348
 Project Manager: Rachelle Arada (Rachelle@atlglobal.com)

RECEIVING LABORATORY:

AETL
 2834 North Naomi Street
 Burbank, CA 91504
 Phone: (818) 845-8200
 Fax: (818) 845-8840
 PO#: SC09107- STANDARD TAT

RA

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1404040-06 / EW-02 300_Bromide [Bromide by Ion Chromatography] 1-Poly Unpres - 125mL	12/30/14 17:00	Groundwater 01/15/15 14:39	12/18/14 14:39	75488.01
ATL Lab#: 1404040-07 / MW-29 300_Bromide [Bromide by Ion Chromatography] 1-Poly Unpres - 125mL	12/30/14 17:00	Groundwater 01/15/15 15:05	12/18/14 15:05	75488.02
ATL Lab#: 1404040-08 / INF 300_Bromide [Bromide by Ion Chromatography] 1-Poly Unpres - 125mL	12/30/14 17:00	Groundwater 01/15/15 14:12	12/18/14 14:12	75488.03

Released By

Date

Received By

Date

Released By

Date

Received By

Date

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 12/18/14 PAGE 1 OF 2

PROJECT NAME RAYTHEON MAIN GETS MONTHLY		PROJECT No./TASK No. S32.15		SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION		
PROJECT MANAGER STEVE NETTO		Phone No. 858-455-6500										ADVANCED TECHNOLOGY LABORATORIES		
QA MANAGER MARCOS RODRIGUEZ		Fax No. 858-455-6533										ATTN: RALPHIE MIRADA		
SAMPLER (SIGNATURE)		SAMPLER (PRINTED)												
LAB ID		SAMPLE ID		SAMPLE COLLECTION		MATRIX		PRESERVATION						
				Date	Time	Soil	Ground - water	Surface water	LAB H ₂ O	HCl	HNO ₃	NaOH	H ₂ SO ₄	Ice
1404043-1	TB-12/18/14	12/18/14	10:30											
-2	CEFF		13:40	X										
-3	CBT		13:49	X										
-4	POX		13:54	X										
-5	PF		14:02	X										
-6	EW-02		14:39	X										
-7	MW-29		15:05	X										
-8	INF		14:12	X										
Total number of Containers per analysis:				26 1 3 5 1				Total No. of Containers: 36						
Relinquished by:		Date		Received by:		Date		INSTRUCTIONS		Shipment Method:		Send Results to:		
HTA		12/18/14		TPD		12/18/14		1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness.		DELIVER		STEVE NETTO		
Company		Time		Company		Time		2. Complete in ballpoint pen. Draw one line through errors, initial and date correction.		☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 MESA, AZ 85204 (858) 455-6500				
		17:00		AP		17:00		3. Indicate number of sample containers in analysis request space; indicate choice with ✓ or x.		☐ 1640 SOUTH STAPLEY DRIVE, SUITE 209 MESA, AZ 85204 (480) 345-0888				
Relinquished by:		Date		Received by:		Date		4. Note applicable preservatives, special instructions, and deviations from typical environmental samples.		☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300				
		Time				Time		5. Consult project QA documents for specific instructions.						
Company				Company				Sample Receipt:		Temp. @ receipt _____ °C		Send invoice to San Diego, CA		
								☐ No. of containers correct		☒ received good condition/cold		Attn: Accounts Payable		
								☐ custody seals secure		☐ conforms to COC document				



DATE 12/18/14 PAGE 2 OF 2

PROJECT NAME		PROJECT No./TASK No.						SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION					
RAYTHEON MAIN GETS MONTHLY		S32.15														ADVANCED TECHNOLOGY LABORATORIES ATTN: RACHAEL ARADA					
PROJECT MANAGER STEVE NETTO		Phone No. 858-455-6500																			
QA MANAGER MARCOS RODRIGUEZ		Fax No. 858-455-6533																			
SAMPLER (SIGNATURE)		SAMPLER (PRINTED)																			
		MARCO RODRIGUEZ																			
		KEVIN FONG																			
		GREG PETERSEN																			
LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX			PRESERVATION					125 mL POLY	EPA 300 BROMIDE								
		Date	Time	Soil	Ground water	Surface water	HCl	HNO ₃	NaOH	H ₂ SO ₄	Ice										
	EW-02	12/10/14	14:39	X						X	1	X									
	MW-29	↓	15:05	X						X	1	X									
	INF	↓	14:12	X						X	1	X									
Total number of Containers per analysis:							3								Total No. of Containers: 3						
Relinquished by:		Date	Received by:		Date	INSTRUCTIONS 1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness. 2. Complete in ballpoint pen. Draw one line through errors, initial and date correction. 3. Indicate number of sample containers in analysis request space; indicate choice with ✓ or x. 4. Note applicable preservatives, special instructions, and deviations from typical environmental samples. 5. Consult project QA documents for specific instructions.												Shipment Method: DELIVER		Send Results to: STEVE NETTO	
		12/10/14	FONG		12/14/14																
Company		Time	Company		Time	Sample Receipt: ☐ No. of containers correct ☐ received good condition/cold ☐ custody seals secure ☐ conforms to COC document												Temp. @ receipt _____ °C		Send invoice to San Diego, CA Attn: Accounts Payable	
Relinquished by:		Date	Received by:		Date																
		12/10/14			12/14/14																
Company		Time	Company		Time																



February 02, 2015

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No. : T104704502

Re: ATL Work Order Number : 1500225
Client Reference : RAYTHEON MAIN GETS MONTHLY, 532.15

Enclosed are the results for sample(s) received on January 19, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eddie Rodriguez', with a small 'ER' monogram to the left.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-01192015	1500225-01	Lab H2O	1/19/15 9:00	1/19/15 12:30
CEFF	1500225-02	Groundwater	1/19/15 9:25	1/19/15 12:30
CBT	1500225-03	Groundwater	1/19/15 9:40	1/19/15 12:30
POX	1500225-04	Groundwater	1/19/15 9:50	1/19/15 12:30
PF	1500225-05	Groundwater	1/19/15 10:00	1/19/15 12:30
EW-02	1500225-06	Groundwater	1/19/15 11:10	1/19/15 12:30
MW-29	1500225-07	Groundwater	1/19/15 10:45	1/19/15 12:30
INF	1500225-08	Groundwater	1/19/15 10:15	1/19/15 12:30

CASE NARRATIVE

The sample for EPA 317 (Bromate) analysis was subcontracted to Exova, Inc. with ELAP Cert.# 2652.

Sample Receiving/General Comments:

The following analytes lists were taken from sample containers:

Alkalinity - Hydroxide, Bicarbonate, Carbonate, and Total



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID TB-01192015

Lab ID: 1500225-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,1,1-Trichloroethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,1,2-Trichloroethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,1-Dichloroethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,1-Dichloroethene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,1-Dichloropropene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,2,3-Trichloropropane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,2,3-Trichlorobenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,2,4-Trichlorobenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,2,4-Trimethylbenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,2-Dibromoethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,2-Dichlorobenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,2-Dichloroethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,2-Dichloropropane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,3,5-Trimethylbenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,3-Dichlorobenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,3-Dichloropropane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
1,4-Dichlorobenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
2,2-Dichloropropane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
2-Chlorotoluene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
4-Chlorotoluene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
4-Isopropyltoluene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Benzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Bromobenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Bromodichloromethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Bromoform	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Bromomethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Carbon tetrachloride	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Chlorobenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Chloroethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Chloroform	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Chloromethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
cis-1,2-Dichloroethene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
cis-1,3-Dichloropropene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Dibromochloromethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID TB-01192015

Lab ID: 1500225-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Dichlorodifluoromethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Ethylbenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Hexachlorobutadiene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Isopropylbenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
m,p-Xylene	ND	1.0	1	B5A0569	01/26/2015	01/26/15 13:15	
Methylene chloride	ND	1.0	1	B5A0569	01/26/2015	01/26/15 13:15	
n-Butylbenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
n-Propylbenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Naphthalene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
o-Xylene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
sec-Butylbenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Styrene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
tert-Butylbenzene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Tetrachloroethene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Toluene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
trans-1,2-Dichloroethene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Trichloroethene	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Trichlorofluoromethane	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Vinyl chloride	ND	0.50	1	B5A0569	01/26/2015	01/26/15 13:15	
Surrogate: 1,2-Dichloroethane-d4	90.8 %	64 - 146		B5A0569	01/26/2015	01/26/15 13:15	
Surrogate: 4-Bromofluorobenzene	84.6 %	60 - 128		B5A0569	01/26/2015	01/26/15 13:15	
Surrogate: Dibromofluoromethane	94.2 %	72 - 141		B5A0569	01/26/2015	01/26/15 13:15	
Surrogate: Toluene-d8	86.6 %	61 - 124		B5A0569	01/26/2015	01/26/15 13:15	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID CEFF

Lab ID: 1500225-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,1,1-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,1,2-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,1-Dichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,1-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,1-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,2,3-Trichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,2,3-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,2,4-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,2,4-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,2-Dibromoethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,2-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,2-Dichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,3,5-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,3-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,3-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
1,4-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
2,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
2-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
4-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
4-Isopropyltoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Benzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Bromobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Bromodichloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Bromoform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Bromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Carbon tetrachloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Chlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Chloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Chloroform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Chloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
cis-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
cis-1,3-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Dibromochloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID CEFF

Lab ID: 1500225-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Dichlorodifluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Ethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Hexachlorobutadiene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Isopropylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
m,p-Xylene	ND	1.0	1	B5A0530	01/22/2015	01/22/15 20:10	
Methylene chloride	ND	1.0	1	B5A0530	01/22/2015	01/22/15 20:10	
n-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
n-Propylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Naphthalene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
o-Xylene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
sec-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Styrene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
tert-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Tetrachloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Toluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
trans-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Trichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Trichlorofluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Vinyl chloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 20:10	
Surrogate: 1,2-Dichloroethane-d4	83.4 %	64 - 146		B5A0530	01/22/2015	01/22/15 20:10	
Surrogate: 4-Bromofluorobenzene	83.7 %	60 - 128		B5A0530	01/22/2015	01/22/15 20:10	
Surrogate: Dibromofluoromethane	85.9 %	72 - 141		B5A0530	01/22/2015	01/22/15 20:10	
Surrogate: Toluene-d8	64.5 %	61 - 124		B5A0530	01/22/2015	01/22/15 20:10	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID CEFF

Lab ID: 1500225-02

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	0.34	0.20	1	B5A0421	01/19/2015	01/20/15 18:21	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>59.2 %</i>	<i>47 - 117</i>		B5A0421	01/19/2015	<i>01/20/15 18:21</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>66.3 %</i>	<i>48 - 121</i>		B5A0421	01/19/2015	<i>01/20/15 18:21</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>73.8 %</i>	<i>58 - 142</i>		B5A0421	01/19/2015	<i>01/20/15 18:21</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>87.8 %</i>	<i>27 - 151</i>		B5A0421	01/19/2015	<i>01/20/15 18:21</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID CBT

Lab ID: 1500225-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,1,1-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,1,2-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,1-Dichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,1-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,1-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,2,3-Trichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,2,3-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,2,4-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,2,4-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,2-Dibromoethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,2-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,2-Dichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,3,5-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,3-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,3-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
1,4-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
2,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
2-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
4-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
4-Isopropyltoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Benzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Bromobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Bromodichloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Bromoform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Bromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Carbon tetrachloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Chlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Chloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Chloroform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Chloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
cis-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
cis-1,3-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Dibromochloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID CBT

Lab ID: 1500225-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Dichlorodifluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Ethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Hexachlorobutadiene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Isopropylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
m,p-Xylene	ND	1.0	1	B5A0530	01/22/2015	01/22/15 19:44	
Methylene chloride	ND	1.0	1	B5A0530	01/22/2015	01/22/15 19:44	
n-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
n-Propylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Naphthalene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
o-Xylene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
sec-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Styrene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
tert-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Tetrachloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Toluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
trans-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Trichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Trichlorofluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Vinyl chloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:44	
Surrogate: 1,2-Dichloroethane-d4	80.9 %	64 - 146		B5A0530	01/22/2015	01/22/15 19:44	
Surrogate: 4-Bromofluorobenzene	112 %	60 - 128		B5A0530	01/22/2015	01/22/15 19:44	
Surrogate: Dibromofluoromethane	83.2 %	72 - 141		B5A0530	01/22/2015	01/22/15 19:44	
Surrogate: Toluene-d8	80.8 %	61 - 124		B5A0530	01/22/2015	01/22/15 19:44	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID POX

Lab ID: 1500225-04

Alkalinity, Speciated by SM 2320B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Alkalinity, Bicarbonate (as CaCO ₃)	240	5.0	1	B5A0555	01/22/2015	01/22/15 12:46	
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0	1	B5A0555	01/22/2015	01/22/15 12:46	
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0	1	B5A0555	01/22/2015	01/22/15 12:46	
Alkalinity, Total (as CaCO ₃)	240	5.0	1	B5A0555	01/22/2015	01/22/15 12:46	

Total Organic Carbon by SM 5310B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Organic Carbon, Total	ND	3.0	1	B5A0512	01/21/2015	01/21/15 13:21	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,1,1-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,1,2-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,1-Dichloroethane	0.50	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,1-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,1-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,2,3-Trichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,2,3-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,2,4-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,2,4-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,2-Dibromoethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,2-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,2-Dichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,3,5-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,3-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,3-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
1,4-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
2,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
2-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID POX

Lab ID: 1500225-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
4-Isopropyltoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Benzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Bromobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Bromodichloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Bromoform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Bromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Carbon tetrachloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Chlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Chloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Chloroform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Chloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
cis-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
cis-1,3-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Dibromochloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Dibromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Dichlorodifluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Ethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Hexachlorobutadiene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Isopropylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
m,p-Xylene	ND	1.0	1	B5A0530	01/22/2015	01/22/15 19:19	
Methylene chloride	ND	1.0	1	B5A0530	01/22/2015	01/22/15 19:19	
n-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
n-Propylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Naphthalene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
o-Xylene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
sec-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Styrene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
tert-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Tetrachloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Toluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
trans-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Trichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Trichlorofluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	
Vinyl chloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 19:19	

Surrogate: 1,2-Dichloroethane-d4

83.7 %

64 - 146

B5A0530

01/22/2015

01/22/15 19:19

Surrogate: 4-Bromofluorobenzene

109 %

60 - 128

B5A0530

01/22/2015

01/22/15 19:19



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID POX

Lab ID: 1500225-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	86.2 %	72 - 141		B5A0530	01/22/2015	01/22/15 19:19	
Surrogate: Toluene-d8	84.9 %	61 - 124		B5A0530	01/22/2015	01/22/15 19:19	

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	0.28	0.20	1	B5A0421	01/19/2015	01/21/15 13:22	
Surrogate: 1,2-Dichlorobenzene-d4	61.1 %	47 - 117		B5A0421	01/19/2015	01/21/15 13:22	
Surrogate: 2-Fluorobiphenyl	67.0 %	48 - 121		B5A0421	01/19/2015	01/21/15 13:22	
Surrogate: 4-Terphenyl-d14	76.4 %	58 - 142		B5A0421	01/19/2015	01/21/15 13:22	
Surrogate: Nitrobenzene-d5	92.2 %	27 - 151		B5A0421	01/19/2015	01/21/15 13:22	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID PF

Lab ID: 1500225-05

UV Absorption by EPA 415.3

Analyst: PT

Analyte	Result (1/cm)	PQL (1/cm)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
UV Absorption	ND	0.01	1	B5A0469	01/20/2015	01/20/15 16:30	

Alkalinity, Speciated by SM 2320B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Alkalinity, Bicarbonate (as CaCO ₃)	240	5.0	1	B5A0555	01/22/2015	01/22/15 12:46	
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0	1	B5A0555	01/22/2015	01/22/15 12:46	
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0	1	B5A0555	01/22/2015	01/22/15 12:46	
Alkalinity, Total (as CaCO ₃)	240	5.0	1	B5A0555	01/22/2015	01/22/15 12:46	

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Suspended	ND	4.3	1	B5A0546	01/21/2015	01/21/15 15:30	

Total Organic Carbon by SM 5310B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Organic Carbon, Total	ND	3.0	1	B5A0512	01/21/2015	01/21/15 13:40	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID EW-02

Lab ID: 1500225-06

Bromide by Ion Chromatography EPA 300

Analyst: QD

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	0.27	0.05	1	B5A0582	01/22/2015	01/22/15 10:37	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,1,1-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,1,2-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,1-Dichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,1-Dichloroethene	25	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,1-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,2,3-Trichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,2,3-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,2,4-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,2,4-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,2-Dibromoethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,2-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,2-Dichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,3,5-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,3-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,3-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
1,4-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
2,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
2-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
4-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
4-Isopropyltoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Benzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Bromobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Bromodichloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Bromoform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Bromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Carbon tetrachloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Chlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID EW-02

Lab ID: 1500225-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Chloroform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Chloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
cis-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
cis-1,3-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Dibromochloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Dibromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Dichlorodifluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Ethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Hexachlorobutadiene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Isopropylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
m,p-Xylene	ND	1.0	1	B5A0530	01/22/2015	01/22/15 18:55	
Methylene chloride	ND	1.0	1	B5A0530	01/22/2015	01/22/15 18:55	
n-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
n-Propylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Naphthalene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
o-Xylene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
sec-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Styrene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
tert-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Tetrachloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Toluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
trans-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Trichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Trichlorofluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Vinyl chloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:55	
Surrogate: 1,2-Dichloroethane-d4	83.0 %	64 - 146		B5A0530	01/22/2015	01/22/15 18:55	
Surrogate: 4-Bromofluorobenzene	82.6 %	60 - 128		B5A0530	01/22/2015	01/22/15 18:55	
Surrogate: Dibromofluoromethane	82.4 %	72 - 141		B5A0530	01/22/2015	01/22/15 18:55	
Surrogate: Toluene-d8	64.1 %	61 - 124		B5A0530	01/22/2015	01/22/15 18:55	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID EW-02

Lab ID: 1500225-06

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	12	2.0	1	B5A0407	01/19/2015	01/20/15 20:41	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>60.8 %</i>	<i>42 - 106</i>		B5A0407	01/19/2015	<i>01/20/15 20:41</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>74.0 %</i>	<i>55 - 117</i>		B5A0407	01/19/2015	<i>01/20/15 20:41</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>87.2 %</i>	<i>52 - 142</i>		B5A0407	01/19/2015	<i>01/20/15 20:41</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>62.9 %</i>	<i>43 - 116</i>		B5A0407	01/19/2015	<i>01/20/15 20:41</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID MW-29

Lab ID: 1500225-07

Bromide by Ion Chromatography EPA 300

Analyst: QD

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	0.54	0.05	1	B5A0582	01/22/2015	01/22/15 10:49	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,1,1-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,1,2-Trichloroethane	0.78	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,1-Dichloroethane	2.5	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,1-Dichloroethene	200	5.0	10	B5A0530	01/22/2015	01/22/15 17:18	
1,1-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,2,3-Trichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,2,3-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,2,4-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,2,4-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,2-Dibromoethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,2-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,2-Dichloroethane	0.50	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,3,5-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,3-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,3-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
1,4-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
2,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
2-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
4-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
4-Isopropyltoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Benzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Bromobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Bromodichloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Bromoform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Bromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Carbon tetrachloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Chlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID MW-29

Lab ID: 1500225-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Chloroform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Chloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
cis-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
cis-1,3-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Dibromochloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Dibromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Dichlorodifluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Ethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Hexachlorobutadiene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Isopropylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
m,p-Xylene	ND	1.0	1	B5A0530	01/22/2015	01/22/15 17:42	
Methylene chloride	ND	1.0	1	B5A0530	01/22/2015	01/22/15 17:42	
n-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
n-Propylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Naphthalene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
o-Xylene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
sec-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Styrene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
tert-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Tetrachloroethene	0.97	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Toluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
trans-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Trichloroethene	3.4	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Trichlorofluoromethane	0.67	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
Vinyl chloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 17:42	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>83.2 %</i>	<i>64 - 146</i>		B5A0530	01/22/2015	<i>01/22/15 17:18</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>77.8 %</i>	<i>64 - 146</i>		B5A0530	01/22/2015	<i>01/22/15 17:42</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>92.5 %</i>	<i>60 - 128</i>		B5A0530	01/22/2015	<i>01/22/15 17:18</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>103 %</i>	<i>60 - 128</i>		B5A0530	01/22/2015	<i>01/22/15 17:42</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>80.7 %</i>	<i>72 - 141</i>		B5A0530	01/22/2015	<i>01/22/15 17:42</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>88.2 %</i>	<i>72 - 141</i>		B5A0530	01/22/2015	<i>01/22/15 17:18</i>	
<i>Surrogate: Toluene-d8</i>	<i>67.6 %</i>	<i>61 - 124</i>		B5A0530	01/22/2015	<i>01/22/15 17:18</i>	
<i>Surrogate: Toluene-d8</i>	<i>76.3 %</i>	<i>61 - 124</i>		B5A0530	01/22/2015	<i>01/22/15 17:42</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID MW-29

Lab ID: 1500225-07

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	90	2.0	1	B5A0407	01/19/2015	01/20/15 21:08	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>67.0 %</i>	<i>42 - 106</i>		B5A0407	01/19/2015	<i>01/20/15 21:08</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>76.3 %</i>	<i>55 - 117</i>		B5A0407	01/19/2015	<i>01/20/15 21:08</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>88.0 %</i>	<i>52 - 142</i>		B5A0407	01/19/2015	<i>01/20/15 21:08</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>69.6 %</i>	<i>43 - 116</i>		B5A0407	01/19/2015	<i>01/20/15 21:08</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID INF

Lab ID: 1500225-08

Bromide by Ion Chromatography EPA 300

Analyst: QD

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	0.33	0.05	1	B5A0582	01/22/2015	01/22/15 11:03	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,1,1-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,1,2-Trichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,1-Dichloroethane	0.70	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,1-Dichloroethene	55	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,1-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,2,3-Trichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,2,3-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,2,4-Trichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,2,4-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,2-Dibromoethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,2-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,2-Dichloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,3,5-Trimethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,3-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,3-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
1,4-Dichlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
2,2-Dichloropropane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
2-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
4-Chlorotoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
4-Isopropyltoluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Benzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Bromobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Bromodichloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Bromoform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Bromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Carbon tetrachloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Chlorobenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID INF

Lab ID: 1500225-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Chloroform	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Chloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
cis-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
cis-1,3-Dichloropropene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Dibromochloromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Dibromomethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Dichlorodifluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Ethylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Hexachlorobutadiene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Isopropylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
m,p-Xylene	ND	1.0	1	B5A0530	01/22/2015	01/22/15 18:06	
Methylene chloride	ND	1.0	1	B5A0530	01/22/2015	01/22/15 18:06	
n-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
n-Propylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Naphthalene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
o-Xylene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
sec-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Styrene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
tert-Butylbenzene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Tetrachloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Toluene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
trans-1,2-Dichloroethene	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Trichloroethene	0.79	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Trichlorofluoromethane	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
Vinyl chloride	ND	0.50	1	B5A0530	01/22/2015	01/22/15 18:06	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>81.2 %</i>	<i>64 - 146</i>		B5A0530	01/22/2015	<i>01/22/15 18:06</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>111 %</i>	<i>60 - 128</i>		B5A0530	01/22/2015	<i>01/22/15 18:06</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>83.2 %</i>	<i>72 - 141</i>		B5A0530	01/22/2015	<i>01/22/15 18:06</i>	
<i>Surrogate: Toluene-d8</i>	<i>83.0 %</i>	<i>61 - 124</i>		B5A0530	01/22/2015	<i>01/22/15 18:06</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Client Sample ID INF

Lab ID: 1500225-08

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: BD

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	32	2.0	1	B5A0407	01/19/2015	01/20/15 21:36	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>66.9 %</i>	<i>42 - 106</i>		B5A0407	01/19/2015	<i>01/20/15 21:36</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>74.7 %</i>	<i>55 - 117</i>		B5A0407	01/19/2015	<i>01/20/15 21:36</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>87.4 %</i>	<i>52 - 142</i>		B5A0407	01/19/2015	<i>01/20/15 21:36</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>68.3 %</i>	<i>43 - 116</i>		B5A0407	01/19/2015	<i>01/20/15 21:36</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

QUALITY CONTROL SECTION

Bromide by Ion Chromatography EPA 300 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0582 - No_Prep_IC1_W

Blank (B5A0582-BLK1)

Prepared: 1/22/2015 Analyzed: 1/22/2015

Bromide ND 0.05 NR

LCS (B5A0582-BS1)

Prepared: 1/22/2015 Analyzed: 1/22/2015

Bromide 0.978000 0.05 1.00000 97.8 90 - 110

Duplicate (B5A0582-DUP1)

Source: 1500205-01

Prepared: 1/23/2015 Analyzed: 1/22/2015

Bromide 3.42500 2.5 3.45500 NR 0.872 20 R2

Matrix Spike (B5A0582-MS1)

Source: 1500205-01

Prepared: 1/22/2015 Analyzed: 1/22/2015

Bromide 3.17000 2.5 2.50000 3.45500 -11.4 80 - 120 M2

Matrix Spike Dup (B5A0582-MSD1)

Source: 1500205-01

Prepared: 1/22/2015 Analyzed: 1/22/2015

Bromide 2.98500 2.5 2.50000 3.45500 -18.8 80 - 120 6.01 20 M2



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

UV Absorption by EPA 415.3 - Quality Control

Analyte	Result (1/cm)	PQL (1/cm)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0469 - No_Prep_II_W

Blank (B5A0469-BLK1)

Prepared: 1/20/2015 Analyzed: 1/20/2015

UV Absorption

ND

0.01

NR

Duplicate (B5A0469-DUP1)

Source: 1500225-05

Prepared: 1/20/2015 Analyzed: 1/20/2015

UV Absorption

ND

0.01

ND

NR

20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Alkalinity, Speciated by SM 2320B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0555 - No_Prep_WC1_W

Blank (B5A0555-BLK1)

Prepared: 1/22/2015 Analyzed: 1/22/2015

Alkalinity, Bicarbonate (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Total (as CaCO ₃)	ND	5.0			NR				

LCS (B5A0555-BS1)

Prepared: 1/22/2015 Analyzed: 1/22/2015

Alkalinity, Carbonate (as CaCO ₃)	87.3000	5.0	99.9580		87.3	80 - 120			
Alkalinity, Total (as CaCO ₃)	102.180	5.0	99.9580		102	80 - 120			

Duplicate (B5A0555-DUP1)

Source: 1500225-04

Prepared: 1/22/2015 Analyzed: 1/22/2015

Alkalinity, Carbonate (as CaCO ₃)	ND	5.0		ND	NR			20	
Alkalinity, Total (as CaCO ₃)	243.060	5.0		244.050	NR		0.406	20	

Matrix Spike (B5A0555-MS1)

Source: 1500225-04

Prepared: 1/22/2015 Analyzed: 1/22/2015

Alkalinity, Carbonate (as CaCO ₃)	63.4900	5.0	99.9580	ND	63.5	80 - 120			M1
Alkalinity, Total (as CaCO ₃)	355.160	5.0	99.9580	244.050	111	80 - 120			

Matrix Spike Dup (B5A0555-MSD1)

Source: 1500225-04

Prepared: 1/22/2015 Analyzed: 1/22/2015

Alkalinity, Carbonate (as CaCO ₃)	63.4900	5.0	99.9580	ND	63.5	80 - 120	0.00	20	M1
Alkalinity, Total (as CaCO ₃)	356.150	5.0	99.9580	244.050	112	80 - 120	0.278	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0546 - No_Prep_WC1_W

Blank (B5A0546-BLK1)

Prepared: 1/21/2015 Analyzed: 1/21/2015

Residue, Suspended

ND

1.0

NR

LCS (B5A0546-BS1)

Prepared: 1/21/2015 Analyzed: 1/21/2015

Residue, Suspended

90.0000

10

96.6000

93.2

80 - 120

Duplicate (B5A0546-DUP1)

Source: 1500243-01

Prepared: 1/21/2015 Analyzed: 1/21/2015

Residue, Suspended

213.000

10

214.000

NR

0.468

10



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Total Organic Carbon by SM 5310B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0512 - No_Prep_II_W

Blank (B5A0512-BLK1)

Prepared: 1/21/2015 Analyzed: 1/21/2015

Organic Carbon, Total

ND

3.0

NR

LCS (B5A0512-BS1)

Prepared: 1/21/2015 Analyzed: 1/21/2015

Organic Carbon, Total

20.6000

3.0

20.0000

103

80 - 120

LCS Dup (B5A0512-BSD1)

Prepared: 1/21/2015 Analyzed: 1/21/2015

Organic Carbon, Total

20.8400

3.0

20.0000

104

80 - 120

1.16

20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0530 - MSVOA_LL_W

Blank (B5A0530-BLK1)

Prepared: 1/22/2015 Analyzed: 1/22/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR
1,1,1-Trichloroethane	ND	0.50			NR
1,1,2,2-Tetrachloroethane	ND	0.50			NR
1,1,2-Trichloroethane	ND	0.50			NR
1,1-Dichloroethane	ND	0.50			NR
1,1-Dichloroethene	ND	0.50			NR
1,1-Dichloropropene	ND	0.50			NR
1,2,3-Trichloropropane	ND	0.50			NR
1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR
Ethylbenzene	ND	0.50			NR
Hexachlorobutadiene	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0530 - MSVOA_LL_W (continued)

Blank (B5A0530-BLK1) - Continued

Prepared: 1/22/2015 Analyzed: 1/22/2015

Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				

Surrogate: 1,2-Dichloroethane-d4	19.49		25.0000		78.0	64 - 146			
Surrogate: 4-Bromofluorobenzene	21.43		25.0000		85.7	60 - 128			
Surrogate: Dibromofluoromethane	20.76		25.0000		83.0	72 - 141			
Surrogate: Toluene-d8	21.71		25.0000		86.8	61 - 124			

LCS (B5A0530-BS1)

Prepared: 1/22/2015 Analyzed: 1/22/2015

1,1-Dichloroethene	14.4300	0.50	20.0000		72.2	56 - 131			
Benzene	42.7900	0.50	40.0000		107	69 - 139			
Chlorobenzene	20.3700	0.50	20.0000		102	73 - 127			
MTBE	15.0100	0.50	20.0000		75.0	68 - 133			
Toluene	44.0200	0.50	40.0000		110	62 - 133			
Trichloroethene	21.0800	0.50	20.0000		105	72 - 139			

Surrogate: 1,2-Dichloroethane-d4	17.62		25.0000		70.5	64 - 146			
Surrogate: 4-Bromofluorobenzene	16.13		25.0000		64.5	60 - 128			
Surrogate: Dibromofluoromethane	18.88		25.0000		75.5	72 - 141			
Surrogate: Toluene-d8	21.64		25.0000		86.6	61 - 124			

LCS Dup (B5A0530-BSD1)

Prepared: 1/22/2015 Analyzed: 1/22/2015

1,1-Dichloroethene	14.2200	0.50	20.0000		71.1	56 - 131	1.47	20	
Benzene	44.8300	0.50	40.0000		112	69 - 139	4.66	20	
Chlorobenzene	21.5500	0.50	20.0000		108	73 - 127	5.63	20	
MTBE	16.0600	0.50	20.0000		80.3	68 - 133	6.76	20	
Toluene	46.1300	0.50	40.0000		115	62 - 133	4.68	20	
Trichloroethene	21.7100	0.50	20.0000		109	72 - 139	2.94	20	

Surrogate: 1,2-Dichloroethane-d4	17.67		25.0000		70.7	64 - 146			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes

Batch B5A0530 - MSVOA_LL_W (continued)

LCS Dup (B5A0530-BSD1) - Continued

Prepared: 1/22/2015 Analyzed: 1/22/2015

Surrogate: 4-Bromofluorobenzene	16.89	25.0000	67.6	60 - 128
Surrogate: Dibromofluoromethane	19.62	25.0000	78.5	72 - 141
Surrogate: Toluene-d8	22.33	25.0000	89.3	61 - 124

Batch B5A0569 - MSVOA_LL_W

Blank (B5A0569-BLK1)

Prepared: 1/26/2015 Analyzed: 1/26/2015

1,1,1,2-Tetrachloroethane	ND	0.50	NR
1,1,1-Trichloroethane	ND	0.50	NR
1,1,2,2-Tetrachloroethane	ND	0.50	NR
1,1,2-Trichloroethane	ND	0.50	NR
1,1-Dichloroethane	ND	0.50	NR
1,1-Dichloroethene	ND	0.50	NR
1,1-Dichloropropene	ND	0.50	NR
1,2,3-Trichloropropane	ND	0.50	NR
1,2,3-Trichlorobenzene	ND	0.50	NR
1,2,4-Trichlorobenzene	ND	0.50	NR
1,2,4-Trimethylbenzene	ND	0.50	NR
1,2-Dibromo-3-chloropropane	ND	0.50	NR
1,2-Dibromoethane	ND	0.50	NR
1,2-Dichlorobenzene	ND	0.50	NR
1,2-Dichloroethane	ND	0.50	NR
1,2-Dichloropropane	ND	0.50	NR
1,3,5-Trimethylbenzene	ND	0.50	NR
1,3-Dichlorobenzene	ND	0.50	NR
1,3-Dichloropropane	ND	0.50	NR
1,4-Dichlorobenzene	ND	0.50	NR
2,2-Dichloropropane	ND	0.50	NR
2-Chlorotoluene	ND	0.50	NR
4-Chlorotoluene	ND	0.50	NR
4-Isopropyltoluene	ND	0.50	NR
Benzene	ND	0.50	NR
Bromobenzene	ND	0.50	NR
Bromodichloromethane	ND	0.50	NR
Bromoform	ND	0.50	NR
Bromomethane	ND	0.50	NR
Carbon tetrachloride	ND	0.50	NR
Chlorobenzene	ND	0.50	NR
Chloroethane	ND	0.50	NR
Chloroform	ND	0.50	NR
Chloromethane	ND	0.50	NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0569 - MSVOA_LL_W (continued)

Blank (B5A0569-BLK1) - Continued

Prepared: 1/26/2015 Analyzed: 1/26/2015

cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				

Surrogate: 1,2-Dichloroethane-d4	24.80		25.0000		99.2	64 - 146			
Surrogate: 4-Bromofluorobenzene	22.17		25.0000		88.7	60 - 128			
Surrogate: Dibromofluoromethane	24.15		25.0000		96.6	72 - 141			
Surrogate: Toluene-d8	22.69		25.0000		90.8	61 - 124			

LCS (B5A0569-BS1)

Prepared: 1/26/2015 Analyzed: 1/26/2015

1,1-Dichloroethene	21.9700	0.50	20.0000		110	56 - 131			
Benzene	39.3800	0.50	40.0000		98.4	69 - 139			
Chlorobenzene	20.5400	0.50	20.0000		103	73 - 127			
MTBE	19.1100	0.50	20.0000		95.6	68 - 133			
Toluene	37.6500	0.50	40.0000		94.1	62 - 133			
Trichloroethene	20.9300	0.50	20.0000		105	72 - 139			

Surrogate: 1,2-Dichloroethane-d4	22.11		25.0000		88.4	64 - 146			
Surrogate: 4-Bromofluorobenzene	21.63		25.0000		86.5	60 - 128			
Surrogate: Dibromofluoromethane	22.23		25.0000		88.9	72 - 141			
Surrogate: Toluene-d8	22.44		25.0000		89.8	61 - 124			

LCS Dup (B5A0569-BSD1)

Prepared: 1/26/2015 Analyzed: 1/26/2015



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0569 - MSVOA_LL_W (continued)

LCS Dup (B5A0569-BSD1) - Continued

Prepared: 1/26/2015 Analyzed: 1/26/2015

1,1-Dichloroethene	22.6700	0.50	20.0000		113	56 - 131	3.14	20	
Benzene	39.5400	0.50	40.0000		98.8	69 - 139	0.405	20	
Chlorobenzene	20.4600	0.50	20.0000		102	73 - 127	0.390	20	
MTBE	19.0100	0.50	20.0000		95.0	68 - 133	0.525	20	
Toluene	37.6700	0.50	40.0000		94.2	62 - 133	0.0531	20	
Trichloroethene	21.0100	0.50	20.0000		105	72 - 139	0.381	20	

Surrogate: 1,2-Dichloroethane-d4 21.90 25.0000 87.6 64 - 146

Surrogate: 4-Bromofluorobenzene 21.27 25.0000 85.1 60 - 128

Surrogate: Dibromofluoromethane 22.32 25.0000 89.3 72 - 141

Surrogate: Toluene-d8 22.22 25.0000 88.9 61 - 124



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0407 - MSSEMI_ISOTOPEDILN

Blank (B5A0407-BLK1)

Prepared: 1/19/2015 Analyzed: 1/20/2015

1,4-Dioxane	ND	2.0		NR					
Surrogate: 1,2-Dichlorobenzene-d4	66.21		100.000	66.2	42 - 106				
Surrogate: 2-Fluorobiphenyl	78.47		100.000	78.5	55 - 117				
Surrogate: 4-Terphenyl-d14	88.66		100.000	88.7	52 - 142				
Surrogate: Nitrobenzene-d5	70.01		100.000	70.0	43 - 116				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0407 - MSSEMI_ISOTOPEDILN (continued)

LCS (B5A0407-BS1)

Prepared: 1/19/2015 Analyzed: 1/20/2015

1,4-Dioxane	106.730	2.0	100.000		107	62 - 127			
Surrogate: 1,2-Dichlorobenzene-d4	64.44		100.000		64.4	42 - 106			
Surrogate: 2-Fluorobiphenyl	78.00		100.000		78.0	55 - 117			
Surrogate: 4-Terphenyl-d14	87.85		100.000		87.8	52 - 142			
Surrogate: Nitrobenzene-d5	77.93		100.000		77.9	43 - 116			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0407 - MSSEMI_ISOTOPEDILN (continued)

LCS Dup (B5A0407-BSD1)

Prepared: 1/19/2015 Analyzed: 1/20/2015

1,4-Dioxane	107.430	2.0	100.000		107	62 - 127	0.654	20	
Surrogate: 1,2-Dichlorobenzene-d4	66.28		100.000		66.3	42 - 106			
Surrogate: 2-Fluorobiphenyl	79.62		100.000		79.6	55 - 117			
Surrogate: 4-Terphenyl-d14	88.53		100.000		88.5	52 - 142			
Surrogate: Nitrobenzene-d5	76.13		100.000		76.1	43 - 116			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0421 - MSSEMI_W

Blank (B5A0421-BLK1)

Prepared: 1/19/2015 Analyzed: 1/19/2015

1,4-Dioxane	ND	0.20		NR					
Surrogate: 1,2-Dichlorobenzene-d4	0.7461		1.00000		74.6	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.8356		1.00000		83.6	48 - 121			
Surrogate: 4-Terphenyl-d14	0.8872		1.00000		88.7	58 - 142			
Surrogate: Nitrobenzene-d5	1.195		1.00000		119	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0421 - MSSEMI_W (continued)

LCS (B5A0421-BS1)

Prepared: 1/19/2015 Analyzed: 1/19/2015

1,4-Dioxane	1.08609	0.20	1.00000		109	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.6624		1.00000		66.2	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.7271		1.00000		72.7	48 - 121			
Surrogate: 4-Terphenyl-d14	0.9366		1.00000		93.7	58 - 142			
Surrogate: Nitrobenzene-d5	1.066		1.00000		107	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5A0421 - MSSEMI_W (continued)

LCS Dup (B5A0421-BSD1)

Prepared: 1/19/2015 Analyzed: 1/19/2015

1,4-Dioxane	1.14390	0.20	1.00000		114	58 - 151	5.18	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.6779		1.00000		67.8	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.7547		1.00000		75.5	48 - 121			
Surrogate: 4-Terphenyl-d14	0.9779		1.00000		97.8	58 - 142			
Surrogate: Nitrobenzene-d5	1.120		1.00000		112	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : RAYTHEON MAIN GETS MONTHLY, 5

Report To : Steve Netto

Reported : 02/02/2015

Notes and Definitions

R2	RPD value outside acceptance criteria due to possible matrix interference.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.

Bromate by EPA 317.0
Ion Chromatography/Post Column Reaction-Visible Absorption Spectroscopy

Column: Dionex AS9-HC 4 mm x 250 mm, AG9-HC Guard 4 mm x 50 mm
Eluent: 10 mM Na₂CO₃
Flow: 1.2 mL/min
Injection: 250 µL
Detection: Visible, 450 nm

Sample preparation: The undiluted sample was treated with a 2.5 mL Dionex OnGuard II H cartridge to remove excess basic cations.

Parts Per Billion (µg/L)

<u>Sample ID</u>	<u>Result</u>
ATL Lab#: 1500225-04 / POX	ND

Method Blank	ND

Detection Limit	0.3

Date Analyzed:	01-30-15

Quality Control Summary

Sample ID:	ATL Lab#: 1500225-04 / POX

<u>Analyte</u>	<u>Sample Result</u>	<u>Spike Conc</u>	<u>Spike Result</u>	<u>Spike % Rec</u>	<u>Spike Duplicate Result</u>	<u>Spike Duplicate % Rec</u>	<u>RPD</u>
Bromate	ND	20.0	19.1	96	18.6	93	3
QC Guidelines				75-125		75-125	NMT 10

ADVANCED TECHNOLOGY
LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500225

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)

RECEIVING LABORATORY:

Exova Inc.
9240 Santa Fe Springs Road
Santa Fe Springs, CA 90670
Phone : (562) 948-2225
Fax: (562) 948-5850
PO#: SC09178- STANDARD TAT 

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500225-04 / POX 317.0_SUB [Bromate] 1-Poly Unpres - 125mL	02/02/15 17:00	Groundwater 01/20/15 09:50	01/19/15 09:50	

Released By <i>ASWIN MANOJATHAS</i>	Date <i>1/20/15</i>	Received By <i>[Signature]</i>	Date <i>1/20/15 9:30</i>
Released By <i>[Signature]</i>	Date <i>1/20/15 10:56</i>	Received By <i>[Signature]</i>	Date <i>EXOVA 01-20-15 4:10:56</i>

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 1/19/15 PAGE 1 OF 2

PROJECT NAME		PROJECT No./TASK No.		SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION	
RAYTOWN MAIN BETS MONTHLY		532.15										ADVANCED TECHNOLOGY LABORATORIES ATTN: DAMELE ARADA	
PROJECT MANAGER STEVE NETTO		Phone No. 858-455-6500											
QA MANAGER MARCOS RODRIGUEZ		Fax No. 858-455-6533											
SAMPLER (SIGNATURE)		SAMPLER (PRINTED)											
		MARCOS RODRIGUEZ											
LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX		PRESERVATION							
		Date	Time	Soil	Ground - water	Surface water	LAB NO.	HCl	HNO ₃	NaOH	H ₂ SO ₄	Ice	
1500225-1	TB-01/19/15	1/19/15	09:00										
-2	CEFF		09:25	X		X							
-3	CBT		09:40	X		X							
-4	FOX		09:50	X		X							
-5	PF		10:00	X		X							
-6	EW-02		11:10	X		X							
-7	MW-2A		10:45	X		X							
-8	INF		10:15	X		X							
Total number of Containers per analysis:				41351				Total No. of Containers: 36					
Relinquished by:		Date	Received by:	Date	INSTRUCTIONS				Shipment Method: <u>DELIVER</u> Send Results to: <u>STEVE NETTO</u> ☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500 ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 209 MESA, AZ 85204 (480) 345-0888 ☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300				
Company		Time	Company	Time									
Relinquished by:		Date	Received by:	Date	1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness. 2. Complete in ballpoint pen. Draw one line through errors, initial and date correction. 3. Indicate number of sample containers in analysis request space; indicate choice with ✓ or x. 4. Note applicable preservatives, special instructions, and deviations from typical environmental samples. 5. Consult project QA documents for specific instructions.				Send invoice to San Diego, CA Attn: Accounts Payable				
Company		Time	Company	Time									
					Sample Receipt: ☐ No. of containers correct ☐ custody seals secure				Temp. @ receipt <u>4.2</u> °C ☒ received good condition/cold ☐ conforms to COC document				



DATE 1/19/14 PAGE 2 OF 2

Page 43 of 43



February 24, 2015

Steve Netto
Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122
Tel: (619) 249-3166
Fax: (858) 455-6533

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Re: ATL Work Order Number : 1500590
Client Reference : Raytheon Main GETs Monthly, 532.15

Enclosed are the results for sample(s) received on February 13, 2015 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

A handwritten signature in black ink, appearing to read "Eddie Rodriguez", with a small "ER" monogram to the left.

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. Test results contained within this data package meet the requirements of applicable state-specific certification programs. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-021315	1500590-01	Lab H2O	2/13/15 7:00	2/13/15 10:37
CEFF	1500590-02	Groundwater	2/13/15 8:28	2/13/15 10:37
CBT	1500590-03	Groundwater	2/13/15 8:39	2/13/15 10:37
POX	1500590-04	Groundwater	2/13/15 8:55	2/13/15 10:37
PF	1500590-05	Groundwater	2/13/15 9:06	2/13/15 10:37
EW-02	1500590-06	Groundwater	2/13/15 9:48	2/13/15 10:37
MW-29	1500590-07	Groundwater	2/13/15 10:12	2/13/15 10:37
INF	1500590-08	Groundwater	2/13/15 9:13	2/13/15 10:37

CASE NARRATIVE

The sample for EPA 317 (Bromate) analysis was subcontracted to Exova, Inc. with ELAP Cert.# 2652.

Sample Receiving/General Comments:

The following analytes lists were taken from sample containers: Alkalinity - Hydroxide, Bicarbonate, Carbonate, and Total.



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID TB-021315

Lab ID: 1500590-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,1,1-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,1,2-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,1-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,1-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,1-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,2,3-Trichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,2-Dibromoethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,2-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,2-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,3-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,3-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
1,4-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
2,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
2-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
4-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
4-Isopropyltoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Benzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Bromobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Bromodichloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Bromoform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Bromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Carbon tetrachloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Chlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Chloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Chloroform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Chloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Dibromochloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID TB-021315

Lab ID: 1500590-01

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Dichlorodifluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Ethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Hexachlorobutadiene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Isopropylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
m,p-Xylene	ND	1.0	1	B5B0438	02/17/2015	02/17/15 15:46	
Methylene chloride	1.0	1.0	1	B5B0438	02/17/2015	02/17/15 15:46	
n-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
n-Propylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Naphthalene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
o-Xylene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
sec-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Styrene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
tert-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Tetrachloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Toluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Trichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Trichlorofluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
Vinyl chloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 15:46	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>102 %</i>	<i>49 - 148</i>		B5B0438	02/17/2015	<i>02/17/15 15:46</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>99.9 %</i>	<i>65 - 132</i>		B5B0438	02/17/2015	<i>02/17/15 15:46</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>101 %</i>	<i>55 - 138</i>		B5B0438	02/17/2015	<i>02/17/15 15:46</i>	
<i>Surrogate: Toluene-d8</i>	<i>89.8 %</i>	<i>60 - 120</i>		B5B0438	02/17/2015	<i>02/17/15 15:46</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID CEFF

Lab ID: 1500590-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,1,1-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,1,2-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,1-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,1-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,1-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,2,3-Trichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,2-Dibromoethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,2-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,2-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,3-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,3-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
1,4-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
2,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
2-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
4-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
4-Isopropyltoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Benzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Bromobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Bromodichloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Bromoform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Bromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Carbon tetrachloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Chlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Chloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Chloroform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Chloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Dibromochloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID CEFF

Lab ID: 1500590-02

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Dichlorodifluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Ethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Hexachlorobutadiene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Isopropylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
m,p-Xylene	ND	1.0	1	B5B0438	02/17/2015	02/17/15 16:12	
Methylene chloride	ND	1.0	1	B5B0438	02/17/2015	02/17/15 16:12	
n-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
n-Propylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Naphthalene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
o-Xylene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
sec-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Styrene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
tert-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Tetrachloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Toluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Trichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Trichlorofluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Vinyl chloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:12	
Surrogate: 1,2-Dichloroethane-d4	96.2 %	49 - 148		B5B0438	02/17/2015	02/17/15 16:12	
Surrogate: 4-Bromofluorobenzene	92.6 %	65 - 132		B5B0438	02/17/2015	02/17/15 16:12	
Surrogate: Dibromofluoromethane	97.8 %	55 - 138		B5B0438	02/17/2015	02/17/15 16:12	
Surrogate: Toluene-d8	83.8 %	60 - 120		B5B0438	02/17/2015	02/17/15 16:12	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID CEFF

Lab ID: 1500590-02

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: MFR

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	0.55	0.20	1	B5B0401	02/16/2015	02/16/15 14:34	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>68.3 %</i>	<i>47 - 117</i>		B5B0401	02/16/2015	<i>02/16/15 14:34</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>73.6 %</i>	<i>48 - 121</i>		B5B0401	02/16/2015	<i>02/16/15 14:34</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>76.7 %</i>	<i>58 - 142</i>		B5B0401	02/16/2015	<i>02/16/15 14:34</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>74.0 %</i>	<i>27 - 151</i>		B5B0401	02/16/2015	<i>02/16/15 14:34</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID CBT

Lab ID: 1500590-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,1,1-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,1,2-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,1-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,1-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,1-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,2,3-Trichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,2-Dibromoethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,2-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,2-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,3-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,3-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
1,4-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
2,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
2-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
4-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
4-Isopropyltoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Benzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Bromobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Bromodichloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Bromoform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Bromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Carbon tetrachloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Chlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Chloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Chloroform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Chloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Dibromochloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID CBT

Lab ID: 1500590-03

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Dichlorodifluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Ethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Hexachlorobutadiene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Isopropylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
m,p-Xylene	ND	1.0	1	B5B0438	02/17/2015	02/17/15 16:38	
Methylene chloride	ND	1.0	1	B5B0438	02/17/2015	02/17/15 16:38	
n-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
n-Propylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Naphthalene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
o-Xylene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
sec-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Styrene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
tert-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Tetrachloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Toluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Trichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Trichlorofluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Vinyl chloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 16:38	
Surrogate: 1,2-Dichloroethane-d4	99.2 %	49 - 148		B5B0438	02/17/2015	02/17/15 16:38	
Surrogate: 4-Bromofluorobenzene	94.3 %	65 - 132		B5B0438	02/17/2015	02/17/15 16:38	
Surrogate: Dibromofluoromethane	101 %	55 - 138		B5B0438	02/17/2015	02/17/15 16:38	
Surrogate: Toluene-d8	85.8 %	60 - 120		B5B0438	02/17/2015	02/17/15 16:38	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID POX

Lab ID: 1500590-04

Alkalinity, Speciated by SM 2320B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Alkalinity, Bicarbonate (as CaCO ₃)	240	5.0	1	B5B0561	02/19/2015	02/19/15 12:00	
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0	1	B5B0561	02/19/2015	02/19/15 12:00	
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0	1	B5B0561	02/19/2015	02/19/15 12:00	
Alkalinity, Total (as CaCO ₃)	240	5.0	1	B5B0561	02/19/2015	02/19/15 12:00	

Total Organic Carbon by SM 5310B

Analyst: QD

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Organic Carbon, Total	ND	3.0	1	B5B0516	02/17/2015	02/17/15 12:20	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,1,1-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,1,2-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,1-Dichloroethane	0.66	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,1-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,1-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,2,3-Trichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,2-Dibromoethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,2-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,2-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,3-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,3-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
1,4-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
2,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
2-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID POX

Lab ID: 1500590-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
4-Isopropyltoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Benzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Bromobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Bromodichloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Bromoform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Bromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Carbon tetrachloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Chlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Chloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Chloroform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Chloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Dibromochloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Dibromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Dichlorodifluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Ethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Hexachlorobutadiene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Isopropylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
m,p-Xylene	ND	1.0	1	B5B0438	02/17/2015	02/17/15 17:03	
Methylene chloride	ND	1.0	1	B5B0438	02/17/2015	02/17/15 17:03	
n-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
n-Propylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Naphthalene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
o-Xylene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
sec-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Styrene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
tert-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Tetrachloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Toluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Trichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Trichlorofluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	
Vinyl chloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:03	

Surrogate: 1,2-Dichloroethane-d4

99.5 %

49 - 148

B5B0438

02/17/2015

02/17/15 17:03

Surrogate: 4-Bromofluorobenzene

94.6 %

65 - 132

B5B0438

02/17/2015

02/17/15 17:03



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID POX

Lab ID: 1500590-04

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: Dibromofluoromethane	98.2 %	55 - 138		B5B0438	02/17/2015	02/17/15 17:03	
Surrogate: Toluene-d8	84.7 %	60 - 120		B5B0438	02/17/2015	02/17/15 17:03	

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique

Analyst: MFR

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	1.6	0.20	1	B5B0401	02/16/2015	02/16/15 15:01	
Surrogate: 1,2-Dichlorobenzene-d4	67.7 %	47 - 117		B5B0401	02/16/2015	02/16/15 15:01	
Surrogate: 2-Fluorobiphenyl	71.0 %	48 - 121		B5B0401	02/16/2015	02/16/15 15:01	
Surrogate: 4-Terphenyl-d14	70.7 %	58 - 142		B5B0401	02/16/2015	02/16/15 15:01	
Surrogate: Nitrobenzene-d5	73.8 %	27 - 151		B5B0401	02/16/2015	02/16/15 15:01	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID PF

Lab ID: 1500590-05

UV Absorption by EPA 415.3

Analyst: PT

Analyte	Result (1/cm)	PQL (1/cm)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
UV Absorption	ND	0.01	1	B5B0370	02/13/2015	02/13/15 20:57	

Alkalinity, Speciated by SM 2320B

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Alkalinity, Bicarbonate (as CaCO ₃)	240	5.0	1	B5B0561	02/19/2015	02/19/15 12:00	
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0	1	B5B0561	02/19/2015	02/19/15 12:00	
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0	1	B5B0561	02/19/2015	02/19/15 12:00	
Alkalinity, Total (as CaCO ₃)	240	5.0	1	B5B0561	02/19/2015	02/19/15 12:00	

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Suspended	ND	4.0	1	B5B0508	02/17/2015	02/17/15 16:30	

Total Organic Carbon by SM 5310B

Analyst: QD

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Organic Carbon, Total	ND	3.0	1	B5B0516	02/17/2015	02/17/15 12:36	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID EW-02

Lab ID: 1500590-06

Bromide by Ion Chromatography EPA 300

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	0.19	0.05	1	B5B0559	02/19/2015	02/19/15 11:03	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,1,1-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,1,2-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,1-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,1-Dichloroethene	20	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,1-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,2,3-Trichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,2-Dibromoethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,2-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,2-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,3-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,3-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
1,4-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
2,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
2-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
4-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
4-Isopropyltoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Benzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Bromobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Bromodichloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Bromoform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Bromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Carbon tetrachloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Chlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID EW-02

Lab ID: 1500590-06

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Chloroform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Chloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Dibromochloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Dibromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Dichlorodifluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Ethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Hexachlorobutadiene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Isopropylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
m,p-Xylene	ND	1.0	1	B5B0438	02/17/2015	02/17/15 17:51	
Methylene chloride	ND	1.0	1	B5B0438	02/17/2015	02/17/15 17:51	
n-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
n-Propylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Naphthalene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
o-Xylene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
sec-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Styrene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
tert-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Tetrachloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Toluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Trichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Trichlorofluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Vinyl chloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 17:51	
Surrogate: 1,2-Dichloroethane-d4	97.6 %	49 - 148		B5B0438	02/17/2015	02/17/15 17:51	
Surrogate: 4-Bromofluorobenzene	93.5 %	65 - 132		B5B0438	02/17/2015	02/17/15 17:51	
Surrogate: Dibromofluoromethane	96.9 %	55 - 138		B5B0438	02/17/2015	02/17/15 17:51	
Surrogate: Toluene-d8	85.1 %	60 - 120		B5B0438	02/17/2015	02/17/15 17:51	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID EW-02

Lab ID: 1500590-06

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: MFR

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	7.8	2.0	1	B5B0439	02/17/2015	02/17/15 13:50	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>58.2 %</i>	<i>42 - 106</i>		<i>B5B0439</i>	<i>02/17/2015</i>	<i>02/17/15 13:50</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>69.8 %</i>	<i>55 - 117</i>		<i>B5B0439</i>	<i>02/17/2015</i>	<i>02/17/15 13:50</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>79.2 %</i>	<i>52 - 142</i>		<i>B5B0439</i>	<i>02/17/2015</i>	<i>02/17/15 13:50</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>67.3 %</i>	<i>43 - 116</i>		<i>B5B0439</i>	<i>02/17/2015</i>	<i>02/17/15 13:50</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID MW-29

Lab ID: 1500590-07

Bromide by Ion Chromatography EPA 300

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	0.48	0.05	1	B5B0559	02/19/2015	02/19/15 11:15	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,1,1-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,1,2-Trichloroethane	1.5	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,1-Dichloroethane	4.4	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,1-Dichloroethene	460	5.0	10	B5B0438	02/17/2015	02/17/15 19:08	
1,1-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,2,3-Trichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,2-Dibromoethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,2-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,2-Dichloroethane	0.94	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,3-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,3-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
1,4-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
2,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
2-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
4-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
4-Isopropyltoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Benzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Bromobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Bromodichloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Bromoform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Bromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Carbon tetrachloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Chlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID MW-29

Lab ID: 1500590-07

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Chloroform	0.60	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Chloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Dibromochloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Dibromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Dichlorodifluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Ethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Hexachlorobutadiene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Isopropylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
m,p-Xylene	ND	1.0	1	B5B0438	02/17/2015	02/17/15 18:43	
Methylene chloride	ND	1.0	1	B5B0438	02/17/2015	02/17/15 18:43	
n-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
n-Propylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Naphthalene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
o-Xylene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
sec-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Styrene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
tert-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Tetrachloroethene	1.3	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Toluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Trichloroethene	4.8	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Trichlorofluoromethane	1.9	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
Vinyl chloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:43	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>100 %</i>	<i>49 - 148</i>		B5B0438	02/17/2015	<i>02/17/15 19:08</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>98.8 %</i>	<i>49 - 148</i>		B5B0438	02/17/2015	<i>02/17/15 18:43</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.2 %</i>	<i>65 - 132</i>		B5B0438	02/17/2015	<i>02/17/15 19:08</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.0 %</i>	<i>65 - 132</i>		B5B0438	02/17/2015	<i>02/17/15 18:43</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>98.7 %</i>	<i>55 - 138</i>		B5B0438	02/17/2015	<i>02/17/15 18:43</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>98.8 %</i>	<i>55 - 138</i>		B5B0438	02/17/2015	<i>02/17/15 19:08</i>	
<i>Surrogate: Toluene-d8</i>	<i>86.5 %</i>	<i>60 - 120</i>		B5B0438	02/17/2015	<i>02/17/15 19:08</i>	
<i>Surrogate: Toluene-d8</i>	<i>84.8 %</i>	<i>60 - 120</i>		B5B0438	02/17/2015	<i>02/17/15 18:43</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID MW-29

Lab ID: 1500590-07

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: MFR

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	180	2.0	1	B5B0439	02/17/2015	02/17/15 14:16	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	<i>57.9 %</i>	<i>42 - 106</i>		B5B0439	02/17/2015	<i>02/17/15 14:16</i>	
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>71.4 %</i>	<i>55 - 117</i>		B5B0439	02/17/2015	<i>02/17/15 14:16</i>	
<i>Surrogate: 4-Terphenyl-d14</i>	<i>79.4 %</i>	<i>52 - 142</i>		B5B0439	02/17/2015	<i>02/17/15 14:16</i>	
<i>Surrogate: Nitrobenzene-d5</i>	<i>65.8 %</i>	<i>43 - 116</i>		B5B0439	02/17/2015	<i>02/17/15 14:16</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID INF

Lab ID: 1500590-08

Bromide by Ion Chromatography EPA 300

Analyst: PT

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	0.25	0.05	1	B5B0559	02/19/2015	02/19/15 11:26	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,1,1-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,1,2-Trichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,1-Dichloroethane	1.2	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,1-Dichloroethene	110	2.5	5	B5B0482	02/18/2015	02/18/15 13:16	
1,1-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,2,3-Trichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,2,3-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,2,4-Trichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,2,4-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,2-Dibromoethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,2-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,2-Dichloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,3,5-Trimethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,3-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,3-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
1,4-Dichlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
2,2-Dichloropropane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
2-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
4-Chlorotoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
4-Isopropyltoluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Benzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Bromobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Bromodichloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Bromoform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Bromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Carbon tetrachloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Chlorobenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID INF

Lab ID: 1500590-08

Volatile Organic Compounds by EPA 8260B

Analyst: SL

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chloroethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Chloroform	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Chloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
cis-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
cis-1,3-Dichloropropene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Dibromochloromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Dibromomethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Dichlorodifluoromethane	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Ethylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Hexachlorobutadiene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Isopropylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
m,p-Xylene	ND	1.0	1	B5B0438	02/17/2015	02/17/15 18:19	
Methylene chloride	ND	1.0	1	B5B0438	02/17/2015	02/17/15 18:19	
n-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
n-Propylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Naphthalene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
o-Xylene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
sec-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Styrene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
tert-Butylbenzene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Tetrachloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Toluene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
trans-1,2-Dichloroethene	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Trichloroethene	1.4	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Trichlorofluoromethane	0.60	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
Vinyl chloride	ND	0.50	1	B5B0438	02/17/2015	02/17/15 18:19	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>99.1 %</i>	<i>49 - 148</i>		B5B0482	02/18/2015	<i>02/18/15 13:16</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>101 %</i>	<i>49 - 148</i>		B5B0438	02/17/2015	<i>02/17/15 18:19</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>93.2 %</i>	<i>65 - 132</i>		B5B0482	02/18/2015	<i>02/18/15 13:16</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>96.4 %</i>	<i>65 - 132</i>		B5B0438	02/17/2015	<i>02/17/15 18:19</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>98.6 %</i>	<i>55 - 138</i>		B5B0482	02/18/2015	<i>02/18/15 13:16</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>105 %</i>	<i>55 - 138</i>		B5B0438	02/17/2015	<i>02/17/15 18:19</i>	
<i>Surrogate: Toluene-d8</i>	<i>87.3 %</i>	<i>60 - 120</i>		B5B0438	02/17/2015	<i>02/17/15 18:19</i>	
<i>Surrogate: Toluene-d8</i>	<i>85.0 %</i>	<i>60 - 120</i>		B5B0482	02/18/2015	<i>02/18/15 13:16</i>	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Client Sample ID INF

Lab ID: 1500590-08

1,4-Dioxane by EPA 8270: Isotope Dilution Technique

Analyst: MFR

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	48	2.0	1	B5B0439	02/17/2015	02/17/15 14:43	
<i>Surrogate: 1,2-Dichlorobenzene-d4</i>	58.8 %	42 - 106		B5B0439	02/17/2015	02/17/15 14:43	
<i>Surrogate: 2-Fluorobiphenyl</i>	72.3 %	55 - 117		B5B0439	02/17/2015	02/17/15 14:43	
<i>Surrogate: 4-Terphenyl-d14</i>	79.8 %	52 - 142		B5B0439	02/17/2015	02/17/15 14:43	
<i>Surrogate: Nitrobenzene-d5</i>	68.0 %	43 - 116		B5B0439	02/17/2015	02/17/15 14:43	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

QUALITY CONTROL SECTION

Bromide by Ion Chromatography EPA 300 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0559 - No_Prep_IC1_W

Blank (B5B0559-BLK1)

Prepared: 2/19/2015 Analyzed: 2/19/2015

Bromide ND 0.05 NR

LCS (B5B0559-BS1)

Prepared: 2/19/2015 Analyzed: 2/19/2015

Bromide 0.973400 0.05 1.00000 97.3 90 - 110

Duplicate (B5B0559-DUP1)

Source: 1500590-08

Prepared: 2/19/2015 Analyzed: 2/19/2015

Bromide 0.249900 0.05 0.251100 NR 0.479 20

Matrix Spike (B5B0559-MS1)

Source: 1500590-08

Prepared: 2/19/2015 Analyzed: 2/19/2015

Bromide 2.48960 0.05 2.50000 0.251100 89.5 80 - 120

Matrix Spike Dup (B5B0559-MSD1)

Source: 1500590-08

Prepared: 2/19/2015 Analyzed: 2/19/2015

Bromide 2.46000 0.05 2.50000 0.251100 88.4 80 - 120 1.20 20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

UV Absorption by EPA 415.3 - Quality Control

Analyte	Result (1/cm)	PQL (1/cm)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0370 - No_Prep_II_W

Blank (B5B0370-BLK1)

Prepared: 2/13/2015 Analyzed: 2/13/2015

UV Absorption

ND

0.01

NR

Duplicate (B5B0370-DUP1)

Source: 1500590-05

Prepared: 2/13/2015 Analyzed: 2/13/2015

UV Absorption

ND

0.01

ND

NR

20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Alkalinity, Speciated by SM 2320B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0561 - No_Prep_WC1_W

Blank (B5B0561-BLK1)

Prepared: 2/19/2015 Analyzed: 2/19/2015

Alkalinity, Bicarbonate (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Carbonate (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Hydroxide (as CaCO ₃)	ND	5.0			NR				
Alkalinity, Total (as CaCO ₃)	ND	5.0			NR				

LCS (B5B0561-BS1)

Prepared: 2/19/2015 Analyzed: 2/19/2015

Alkalinity, Carbonate (as CaCO ₃)	81.6700	5.0	99.9580		81.7	80 - 120			
Alkalinity, Total (as CaCO ₃)	100.600	5.0	99.9580		101	80 - 120			

Duplicate (B5B0561-DUP1)

Source: 1500590-04

Prepared: 2/19/2015 Analyzed: 2/19/2015

Alkalinity, Carbonate (as CaCO ₃)	ND	5.0		ND	NR			20	
Alkalinity, Total (as CaCO ₃)	240.040	5.0		239.040	NR		0.417	20	

Matrix Spike (B5B0561-MS1)

Source: 1500590-04

Prepared: 2/19/2015 Analyzed: 2/19/2015

Alkalinity, Carbonate (as CaCO ₃)	79.6800	5.0	99.9580	ND	79.7	80 - 120			M1
Alkalinity, Total (as CaCO ₃)	348.610	5.0	99.9580	239.040	110	80 - 120			

Matrix Spike Dup (B5B0561-MSD1)

Source: 1500590-04

Prepared: 2/19/2015 Analyzed: 2/19/2015

Alkalinity, Carbonate (as CaCO ₃)	81.6700	5.0	99.9580	ND	81.7	80 - 120	2.47	20	
Alkalinity, Total (as CaCO ₃)	348.610	5.0	99.9580	239.040	110	80 - 120	0.00	20	



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0508 - No_Prep_WC1_W

Blank (B5B0508-BLK1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

Residue, Suspended

ND

1.0

NR

LCS (B5B0508-BS1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

Residue, Suspended

88.0000

10

96.6000

91.1

80 - 120

Duplicate (B5B0508-DUP1)

Source: 1500584-01

Prepared: 2/17/2015 Analyzed: 2/17/2015

Residue, Suspended

208.000

10

205.000

NR

1.45

10



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Total Organic Carbon by SM 5310B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0516 - No_Prep_II_W

LCS (B5B0516-BS1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

Organic Carbon, Total	20.8900	3.0	20.0000	104	80 - 120

LCS Dup (B5B0516-BSD1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

Organic Carbon, Total	20.7000	3.0	20.0000	104	80 - 120	0.914	20



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes

Batch B5B0438 - MSVOA_LL_W

Blank (B5B0438-BLK1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR
1,1,1-Trichloroethane	ND	0.50			NR
1,1,2,2-Tetrachloroethane	ND	0.50			NR
1,1,2-Trichloroethane	ND	0.50			NR
1,1-Dichloroethane	ND	0.50			NR
1,1-Dichloroethene	ND	0.50			NR
1,1-Dichloropropene	ND	0.50			NR
1,2,3-Trichloropropane	ND	0.50			NR
1,2,3-Trichlorobenzene	ND	0.50			NR
1,2,4-Trichlorobenzene	ND	0.50			NR
1,2,4-Trimethylbenzene	ND	0.50			NR
1,2-Dibromo-3-chloropropane	ND	0.50			NR
1,2-Dibromoethane	ND	0.50			NR
1,2-Dichlorobenzene	ND	0.50			NR
1,2-Dichloroethane	ND	0.50			NR
1,2-Dichloropropane	ND	0.50			NR
1,3,5-Trimethylbenzene	ND	0.50			NR
1,3-Dichlorobenzene	ND	0.50			NR
1,3-Dichloropropane	ND	0.50			NR
1,4-Dichlorobenzene	ND	0.50			NR
2,2-Dichloropropane	ND	0.50			NR
2-Chlorotoluene	ND	0.50			NR
4-Chlorotoluene	ND	0.50			NR
4-Isopropyltoluene	ND	0.50			NR
Benzene	ND	0.50			NR
Bromobenzene	ND	0.50			NR
Bromodichloromethane	ND	0.50			NR
Bromoform	ND	0.50			NR
Bromomethane	ND	0.50			NR
Carbon tetrachloride	ND	0.50			NR
Chlorobenzene	ND	0.50			NR
Chloroethane	ND	0.50			NR
Chloroform	ND	0.50			NR
Chloromethane	ND	0.50			NR
cis-1,2-Dichloroethene	ND	0.50			NR
cis-1,3-Dichloropropene	ND	0.50			NR
Dibromochloromethane	ND	0.50			NR
Dibromomethane	ND	0.50			NR
Dichlorodifluoromethane	ND	0.50			NR
Ethylbenzene	ND	0.50			NR
Hexachlorobutadiene	ND	0.50			NR



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes

Batch B5B0438 - MSVOA_LL_W (continued)

Blank (B5B0438-BLK1) - Continued

Prepared: 2/17/2015 Analyzed: 2/17/2015

Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				

Surrogate: 1,2-Dichloroethane-d4	20.75		25.0000		83.0	49 - 148			
Surrogate: 4-Bromofluorobenzene	25.74		25.0000		103	65 - 132			
Surrogate: Dibromofluoromethane	21.89		25.0000		87.6	55 - 138			
Surrogate: Toluene-d8	20.82		25.0000		83.3	60 - 120			

LCS (B5B0438-BS1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

1,1-Dichloroethene	18.4700	0.50	20.0000		92.4	61 - 136			
Benzene	38.6100	0.50	40.0000		96.5	72 - 127			
Chlorobenzene	18.8100	0.50	20.0000		94.0	78 - 125			
MTBE	17.2400	0.50	20.0000		86.2	60 - 132			
Toluene	38.3500	0.50	40.0000		95.9	59 - 140			
Trichloroethene	20.6000	0.50	20.0000		103	67 - 130			

Surrogate: 1,2-Dichloroethane-d4	20.22		25.0000		80.9	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.60		25.0000		94.4	65 - 132			
Surrogate: Dibromofluoromethane	20.86		25.0000		83.4	55 - 138			
Surrogate: Toluene-d8	21.06		25.0000		84.2	60 - 120			

LCS Dup (B5B0438-BSD1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

1,1-Dichloroethene	19.3500	0.50	20.0000		96.8	61 - 136	4.65	20	
Benzene	41.0800	0.50	40.0000		103	72 - 127	6.20	20	
Chlorobenzene	20.1600	0.50	20.0000		101	78 - 125	6.93	20	
MTBE	18.1600	0.50	20.0000		90.8	60 - 132	5.20	20	
Toluene	40.8700	0.50	40.0000		102	59 - 140	6.36	20	
Trichloroethene	22.1000	0.50	20.0000		110	67 - 130	7.03	20	

Surrogate: 1,2-Dichloroethane-d4	20.83		25.0000		83.3	49 - 148			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes

Batch B5B0438 - MSVOA_LL_W (continued)

LCS Dup (B5B0438-BSD1) - Continued

Prepared: 2/17/2015 Analyzed: 2/17/2015

Surrogate: 4-Bromofluorobenzene	24.62		25.0000		98.5	65 - 132			
Surrogate: Dibromofluoromethane	21.47		25.0000		85.9	55 - 138			
Surrogate: Toluene-d8	21.73		25.0000		86.9	60 - 120			

Batch B5B0482 - MSVOA_LL_W

Blank (B5B0482-BLK1)

Prepared: 2/18/2015 Analyzed: 2/18/2015

1,1,1,2-Tetrachloroethane	ND	0.50			NR				
1,1,1-Trichloroethane	ND	0.50			NR				
1,1,2,2-Tetrachloroethane	ND	0.50			NR				
1,1,2-Trichloroethane	ND	0.50			NR				
1,1-Dichloroethane	ND	0.50			NR				
1,1-Dichloroethene	ND	0.50			NR				
1,1-Dichloropropene	ND	0.50			NR				
1,2,3-Trichloropropane	ND	0.50			NR				
1,2,3-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trichlorobenzene	ND	0.50			NR				
1,2,4-Trimethylbenzene	ND	0.50			NR				
1,2-Dibromo-3-chloropropane	ND	0.50			NR				
1,2-Dibromoethane	ND	0.50			NR				
1,2-Dichlorobenzene	ND	0.50			NR				
1,2-Dichloroethane	ND	0.50			NR				
1,2-Dichloropropane	ND	0.50			NR				
1,3,5-Trimethylbenzene	ND	0.50			NR				
1,3-Dichlorobenzene	ND	0.50			NR				
1,3-Dichloropropane	ND	0.50			NR				
1,4-Dichlorobenzene	ND	0.50			NR				
2,2-Dichloropropane	ND	0.50			NR				
2-Chlorotoluene	ND	0.50			NR				
4-Chlorotoluene	ND	0.50			NR				
4-Isopropyltoluene	ND	0.50			NR				
Benzene	ND	0.50			NR				
Bromobenzene	ND	0.50			NR				
Bromodichloromethane	ND	0.50			NR				
Bromoform	ND	0.50			NR				
Bromomethane	ND	0.50			NR				
Carbon tetrachloride	ND	0.50			NR				
Chlorobenzene	ND	0.50			NR				
Chloroethane	ND	0.50			NR				
Chloroform	ND	0.50			NR				
Chloromethane	ND	0.50			NR				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0482 - MSVOA_LL_W (continued)

Blank (B5B0482-BLK1) - Continued

Prepared: 2/18/2015 Analyzed: 2/18/2015

cis-1,2-Dichloroethene	ND	0.50			NR				
cis-1,3-Dichloropropene	ND	0.50			NR				
Dibromochloromethane	ND	0.50			NR				
Dibromomethane	ND	0.50			NR				
Dichlorodifluoromethane	ND	0.50			NR				
Ethylbenzene	ND	0.50			NR				
Hexachlorobutadiene	ND	0.50			NR				
Isopropylbenzene	ND	0.50			NR				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				
n-Propylbenzene	ND	0.50			NR				
Naphthalene	ND	0.50			NR				
o-Xylene	ND	0.50			NR				
sec-Butylbenzene	ND	0.50			NR				
Styrene	ND	0.50			NR				
tert-Butylbenzene	ND	0.50			NR				
Tetrachloroethene	ND	0.50			NR				
Toluene	ND	0.50			NR				
trans-1,2-Dichloroethene	ND	0.50			NR				
Trichloroethene	ND	0.50			NR				
Trichlorofluoromethane	ND	0.50			NR				
Vinyl chloride	ND	0.50			NR				

Surrogate: 1,2-Dichloroethane-d4	24.33		25.0000		97.3	49 - 148			
Surrogate: 4-Bromofluorobenzene	24.50		25.0000		98.0	65 - 132			
Surrogate: Dibromofluoromethane	24.99		25.0000		100	55 - 138			
Surrogate: Toluene-d8	22.23		25.0000		88.9	60 - 120			

LCS (B5B0482-BS1)

Prepared: 2/18/2015 Analyzed: 2/18/2015

1,1-Dichloroethene	20.1600	0.50	20.0000		101	61 - 136			
Benzene	40.7800	0.50	40.0000		102	72 - 127			
Chlorobenzene	20.0800	0.50	20.0000		100	78 - 125			
MTBE	17.0300	0.50	20.0000		85.2	60 - 132			
Toluene	40.9800	0.50	40.0000		102	59 - 140			
Trichloroethene	22.0100	0.50	20.0000		110	67 - 130			

Surrogate: 1,2-Dichloroethane-d4	21.55		25.0000		86.2	49 - 148			
Surrogate: 4-Bromofluorobenzene	23.46		25.0000		93.8	65 - 132			
Surrogate: Dibromofluoromethane	21.70		25.0000		86.8	55 - 138			
Surrogate: Toluene-d8	22.06		25.0000		88.2	60 - 120			

LCS Dup (B5B0482-BSD1)

Prepared: 2/18/2015 Analyzed: 2/18/2015



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0482 - MSVOA_LL_W (continued)

LCS Dup (B5B0482-BSD1) - Continued

Prepared: 2/18/2015 Analyzed: 2/18/2015

1,1-Dichloroethene	18.4000	0.50	20.0000		92.0	61 - 136	9.13	20	
Benzene	38.5600	0.50	40.0000		96.4	72 - 127	5.60	20	
Chlorobenzene	19.0600	0.50	20.0000		95.3	78 - 125	5.21	20	
MTBE	16.1900	0.50	20.0000		81.0	60 - 132	5.06	20	
Toluene	38.6000	0.50	40.0000		96.5	59 - 140	5.98	20	
Trichloroethene	20.8400	0.50	20.0000		104	67 - 130	5.46	20	

Surrogate: 1,2-Dichloroethane-d4 21.27 25.0000 85.1 49 - 148

Surrogate: 4-Bromofluorobenzene 23.77 25.0000 95.1 65 - 132

Surrogate: Dibromofluoromethane 21.42 25.0000 85.7 55 - 138

Surrogate: Toluene-d8 21.98 25.0000 87.9 60 - 120



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0439 - MSSEMI_W

Blank (B5B0439-BLK1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

1,4-Dioxane	ND	2.0		NR					
Surrogate: 1,2-Dichlorobenzene-d4	64.55		100.000	64.6	42 - 106				
Surrogate: 2-Fluorobiphenyl	73.97		100.000	74.0	55 - 117				
Surrogate: 4-Terphenyl-d14	78.83		100.000	78.8	52 - 142				
Surrogate: Nitrobenzene-d5	71.89		100.000	71.9	43 - 116				



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0439 - MSSEMI_W (continued)

LCS (B5B0439-BS1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

1,4-Dioxane	105.140	2.0	100.000		105	62 - 127			
Surrogate: 1,2-Dichlorobenzene-d4	66.16		100.000		66.2	42 - 106			
Surrogate: 2-Fluorobiphenyl	78.05		100.000		78.0	55 - 117			
Surrogate: 4-Terphenyl-d14	78.05		100.000		78.0	52 - 142			
Surrogate: Nitrobenzene-d5	76.60		100.000		76.6	43 - 116			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

1,4-Dioxane by EPA 8270: Isotope Dilution Technique - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0439 - MSSEMI_W (continued)

LCS Dup (B5B0439-BSD1)

Prepared: 2/17/2015 Analyzed: 2/17/2015

1,4-Dioxane	106.010	2.0	100.000		106	62 - 127	0.824	20	
Surrogate: 1,2-Dichlorobenzene-d4	62.08		100.000		62.1	42 - 106			
Surrogate: 2-Fluorobiphenyl	76.65		100.000		76.6	55 - 117			
Surrogate: 4-Terphenyl-d14	76.37		100.000		76.4	52 - 142			
Surrogate: Nitrobenzene-d5	72.35		100.000		72.4	43 - 116			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0401 - MSSEMI_W

Blank (B5B0401-BLK1)

Prepared: 2/16/2015 Analyzed: 2/16/2015

1,4-Dioxane	ND	0.20		NR					
Surrogate: 1,2-Dichlorobenzene-d4	0.7248		1.00000		72.5	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.7566		1.00000		75.7	48 - 121			
Surrogate: 4-Terphenyl-d14	0.8019		1.00000		80.2	58 - 142			
Surrogate: Nitrobenzene-d5	0.7344		1.00000		73.4	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0401 - MSSEMI_W (continued)

LCS (B5B0401-BS1)

Prepared: 2/16/2015 Analyzed: 2/16/2015

1,4-Dioxane	1.47855	0.20	1.00000		148	58 - 151			
Surrogate: 1,2-Dichlorobenzene-d4	0.7094		1.00000		70.9	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.7470		1.00000		74.7	48 - 121			
Surrogate: 4-Terphenyl-d14	0.7402		1.00000		74.0	58 - 142			
Surrogate: Nitrobenzene-d5	0.7752		1.00000		77.5	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

1,4-Dioxane by EPA 8270/SIM: Isotope Dilution Technique - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes

Batch B5B0401 - MSSEMI_W (continued)

LCS Dup (B5B0401-BS01)

Prepared: 2/16/2015 Analyzed: 2/16/2015

1,4-Dioxane	1.41608	0.20	1.00000		142	58 - 151	4.32	20	
Surrogate: 1,2-Dichlorobenzene-d4	0.6856		1.00000		68.6	47 - 117			
Surrogate: 2-Fluorobiphenyl	0.7241		1.00000		72.4	48 - 121			
Surrogate: 4-Terphenyl-d14	0.7292		1.00000		72.9	58 - 142			
Surrogate: Nitrobenzene-d5	0.7455		1.00000		74.6	27 - 151			



Certificate of Analysis

Hargis & Associates, Inc.

9171 Towne Centre Drive, Suite 375

San Diego , CA 92122

Project Number : Raytheon Main GETs Monthly, 532.15

Report To : Steve Netto

Reported : 02/24/2015

Notes and Definitions

M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.

Bromate by EPA 317.0
Ion Chromatography/Post Column Reaction-Visible Absorption Spectroscopy

Column: Dionex AS9-HC 4 mm x 250 mm, AG9-HC Guard 4 mm x 50 mm
Eluent: 10 mM Na₂CO₃
Flow: 1.2 mL/min
Injection: 250 µL
Detection: Visible, 450 nm

Sample preparation: The undiluted sample was treated with a 2.5 mL Dionex OnGuard II H cartridge to remove excess basic cations.

Parts Per Billion (µg/L)

<u>Sample ID</u>	<u>Result</u>
ATL Lab#: 1500590-04 / POX	ND
Method Blank	ND
Detection Limit	0.3
Date Analyzed:	02-23-15

Quality Control Summary

Sample ID: Batch QC

<u>Analyte</u>	<u>Sample Result</u>	<u>Sample Duplicate Result</u>	<u>Sample RPD</u>	<u>Spike Conc</u>	<u>Spike Result</u>	<u>Spike % Rec</u>
Bromate	6600	6900	4	20000	26700	101
QC Guidelines			NMT 10			75-125

* Based on the result of the first sample (sample spiked).

ADVANCED TECHNOLOGY
LABORATORIES

SUBCONTRACT ORDER

Work Order: 1500590

SENDING LABORATORY:

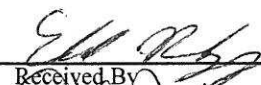
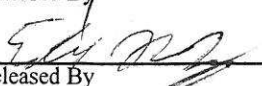
Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Rachelle Arada (Rachelle@atlglobal.com)

RECEIVING LABORATORY:

Exova Inc.
9240 Santa Fe Springs Road
Santa Fe Springs, CA 90670
Phone: (562) 948-2225
Fax: (562) 948-5850
PO#: SC09353- STANDARD TAT (RA)

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1500590-04 / POX 317.0_SUB [Bromate] 1-Poly Unpres - 125mL	02/27/15 17:00	Groundwater 02/14/15 08:55	02/13/15 08:55	

Released By 	2/16/15 10:41	Received By 	2-16-15 10:41
Released By 	2-16-15 12:03	Received By 	02-16-15 12:03 pm



DATE 2/13/15 PAGE 1 OF 2

[illegible]



DATE 2/13/15 PAGE 2 OF 2

PROJECT NAME Raytheon Main GETS Monthly		PROJECT No./TASK No. 532.15		SAMPLE CONTAINERS		ANALYSIS REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S		SPECIAL HANDLING		LABORATORY INFORMATION	
PROJECT MANAGER Steve Netto		Phone No. 858.455.6500										Advanced Technology Laboratory Attn: Rachelle Arada	
QA MANAGER Marcos Rodriguez		Fax No. 858.455.6533											
SAMPLER (SIGNATURE) Kevin Fong		SAMPLER (PRINTED) Kevin Fong										REMARKS	
LAB ID	SAMPLE ID	SAMPLE COLLECTION		MATRIX			PRESERVATION						
		Date	Time	Soil	Ground water	Surface water	HCl	HNO3	NaOH	H2SO4	Ice		
	EW-02	2/13/15	9:48	X			X				X		
	MW-29	↓	10:12	X			X				X		
	INF	↓	9:13	X			X				X		
Total number of Containers per analysis:				3								Total No. of Containers: 3	
Relinquished by: Kevin Fong HHA Company		Date 2/13/15 Time 10:37	Received by: Joel Arico ATL Company		Date 2/13/15 Time 10:37	INSTRUCTIONS 1. Fill out form completely except for shaded areas (lab use only); sign only after verified for completeness. 2. Complete in ballpoint pen. Draw one line through errors, initial and date correction. 3. Indicate number of sample containers in analysis request space; indicate choice with ✓ or x. 4. Note applicable preservatives, special instructions, and deviations from typical environmental samples. 5. Consult project QA documents for specific instructions.						Shipment Method: Send Results to: Steve Netto ☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500 ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 209 MESA, AZ 85204 (480) 345-0888 ☐ 1820 EAST RIVER ROAD, SUITE 220 TUCSON, AZ 85718 (520) 881-7300	
Relinquished by: Joel Arico ATL Company		Date 2/13/15 Time 1749	Received by: FPD ATL Company		Date 2/13/15 Time 1749	Sample Receipt: ☐ No. of containers correct ☐ custody seals secure Temp. @ receipt 2.1 °C ☒ received good condition/cold ☐ conforms to COC document						Send invoice to San Diego, CA Attn: Accounts Payable	



HARGIS + ASSOCIATES, INC.

APPENDIX B

GROUNDWATER SAMPLING FIELD FORMS

GROUNDWATER SAMPLING INFORMATION

DATE: 02/02/2015TASK: 532.30WELL ID: EW-01

Time <u>1248</u> Static DTW (ft below reference point)	<u>145.40</u>	Casing Volume (CV) (gallons) <u>28</u> 3 CV (gallons) <u>84</u>	Weather Conditions	Initials: <u>EJH / TJE</u>
Casing Total Depth (ft below reference point)	<u>188</u>	Purging Device <u>ded. pump</u> Sampling Device <u>ded. sample</u>	Time <u>1310</u> Temp. <u>75</u>	Begin Purge <u>1355</u> End Purge <u>1424</u>
Water Column (feet)	<u>42.6</u>	Pump: Depth (ft brp) _____ Type _____ Voltage: <u>240</u> HP	Skies <u>sunny</u>	Gallons Purged <u>150</u> CVs Purged <u>5.4</u>
Casing Capacity (Diameter <u>4</u> ") (gallons per foot)	<u>0.66</u>	Monitor Well Recharge Rate: Slow _____ Fast <u>X</u>	Wind (mph) <u>2</u> From <u>NW</u>	DTW (ft brp) <u>14540</u> Time <u>1248</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1355	145.40	0	0	—	—	pump	ON	—	—	—	TOT: 276.865
1358	145.21	30	1.1	24.1	7.52	1690	83.9	4.63	33.2	—	~ 10 gpm TOT: not working
1406	145.32	110	3.9	24.2	7.37	1660	70.5	5.53	22.3	—	~ 10 gpm
1410	—	—	—	—	—	—	—	—	—	—	pump turned off
1412	—	—	—	—	—	—	—	—	—	—	pump back off
1424	NM	~~240~~ 150	5.3	—	—	pump	off	—	—	—	pump would turn off after ~ 1 min of pumping during sampling

SAMPLE COLLECTION SAMPLE TIME <u>1410</u>	
ANALYSIS	QUANTITY TYPE
8260B VOCs	<u>9</u> 40 ml VOA
8270-SIM 1,4 dioxane	<u>1</u> L Amber
8270 MOD 1,4 dioxane	<u>3</u> 1 L Amber
DUPLICATES / SPLITS / BLANKS? <u>(Y)</u> N	
If yes, complete appropriate forms.	

AIR MONITORING RID/EID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

Target TOT: 276.949

SPT: EW-01 @ 1410

DUP: EW-0100 @ 1411

GROUNDWATER SAMPLING INFORMATION

DATE: 2/4/15

TASK: 532.30

WELL ID: NW-06

Time <u>1440</u> Static DTW (ft below reference point) <u>182.80</u>	Casing Volume (CV) (gallons) <u>18</u> 3 CV (gallons) <u>2.4</u>	Weather Conditions	Initials: <u>JM/MEH</u>
Casing Total Depth (ft below reference point) <u>188</u>	Purging Device <u>QUICKY BAILER</u> Sampling Device <u>DEP BAILER</u>	Time <u>1442</u> Temp. <u>78</u>	Begin Purge <u>1446</u> End Purge <u>1515</u>
Water Column (feet) <u>5.2</u>	Pump: Depth (ft brp) <u>NA</u> Type <u>NA</u> Voltage <u>NA</u> HP <u>NA</u>	Skies <u>Clear</u>	Gallons Purged <u>2.4</u> CVs Purged <u>3.2</u>
Casing Capacity (Diameter <u>2"</u>) (gallons per foot) <u>1.17</u>	Monitor Well Recharge Rate: Slow <u>X</u> Fast	Wind (mph) <u>0-3</u> From <u>E</u>	DTW (ft brp) <u>NM</u> Time <u>—</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	FIELD PARAMETERS....						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (S/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1446	START BAILING									NA	
1448	NM	.25	0.3	20.80	8.24	740	63.6	NM	5.1		
1454	NM	.75	0.9	19.94	7.95	388	92.2	8.72	85		
1457	NM	1.25	1.6	20.05	7.94	765	73.2	4.09	230		
1502	NM	1.75	2.2	20.46	7.89	724	65.7	3.0	350		
1504	NM	2.25	2.8	20.50	7.73	741	71.3	2.94	550		
1508	NM	2.6	3.3	20.49	7.73	781	70.8	2.26	450		
1510	SAMPLE										

SAMPLE COLLECTION SAMPLE TIME <u>1510</u>			AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)		
8260B VOCs	<u>3</u>	40 ml VOA			
8270 SIM 1,4 dioxane	<u>1</u>	1 L Amber			
8270 MOD 1,4 dioxane		1 L Amber			
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>N</u> If yes, complete appropriate forms.					

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/15

TASK: 532-30

WELL ID: MW-08

Time <u>1010</u> Static DTW (ft below reference point) <u>149.20</u>	Casing Volume (CV) (gallons) <u>2.3</u> 3 CV (gallons) <u>7.1</u>	Weather Conditions Time <u>11M</u> Temp. <u>—</u> Skies <u>—</u> Wind (mph) <u>—</u> From <u>—</u>	Initials: <u>Dm/meh</u> Begin Purge <u>1015</u> End Purge <u>1029</u> Gallons Purged <u>7.4</u> CVs Purged <u>3.1</u> DTW (ft brp) <u>149.20</u> Time <u>1010</u>
Casing Total Depth (ft below reference point) <u>163</u>	Purging Device <u>2" Grandpos/red 190</u> Sampling Device <u>ded. tubing</u>		
Water Column (feet) <u>17.8</u>	Pump: Depth (ft brp) <u>160</u> Type <u>Grandpos</u> Voltage <u>115</u> HP <u>0.5</u>		
Casing Capacity (Diameter <u>2</u> ") (gallons per foot) <u>117</u>	Monitor Well Recharge Rate: Slow <u>—</u> Fast <u>X</u>		

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1015	NM	Start Pumping				1573				285	~.6 gpm
1019	NM	2.4	1.0	19.37	7.50	1533	-25	2.36	141	285	~.5 gpm
1021	NM	3.4	1.5	19.48	7.48	1534	10.3	1.97	114	285	~.5 gpm
1023	NM	4.4	1.9	19.57	7.49	1527	18.5	1.87	64.6	285	~.5 gpm
1025	NM	5.4	2.4	19.69	7.51	1525	26.3	1.78	43.2	285	~.5 gpm
1027	NM	6.4	2.8	20.29	7.54	1504	39.1	1.32	22.8	285	~.5 gpm
1029	NM	7.4	3.2	20.45	7.57	1534	42.6	1.17	18.6	285	~.5 gpm
1030	—	SAMPLE	—								
1032	—	STOP PUMPING	—								

SAMPLE COLLECTION SAMPLE TIME <u>1030</u> ANALYSIS QUANTITY TYPE 8260B VOCs <u>3</u> 40 ml VOA 8270 SIM 1,4 dioxane <u>1</u> 1 L Amber 8270 MOD 1,4 dioxane <u>—</u> 1 L Amber _____ _____ _____	AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.) <u>Pesticides small amount MW-08</u> _____ _____ _____
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>(N)</u> If yes, complete appropriate forms.	

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/15

TASK: 532.30

WELL ID: MW-09

Time 801 Static DTW (ft below reference point) 181.90	Casing Volume (CV) (gallons) 1.5 3 CV (gallons) 4.5	Weather Conditions	Initials: DM/MSH
Casing Total Depth (ft below reference point) 191	Purging Device QUICK Sampling Device DEID SAMPLER	Time NM Temp. NM	Begin Purge 813 End Purge
Water Column (feet) 9.1	Pump: Depth (ft brp) NA Type NA Voltage NA HP NA	Skies	Gallons Purged 1.6 CVs Purged 1.1
Casing Capacity (Diameter 2") (gallons per foot) 117	Monitor Well Recharge Rate: Slow X Fast	Wind (mph) From	DTW (ft brp) NM Time

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
813	UTM	START	PURGE								
815	UTM	.2	.1	17.05	7.68	552	84.7	554.64	1.8	NA	
819	UTM	.5	.3	17.30	7.58	595	90.6	3.32	45	NA	
823	UTM	.7	.5	19.43	7.67	593	96.4	3.36	45	NA	
829	UTM	1.3	.9	19.62	7.63	597	86.6	2.24	65		
832		DAY 1.6	1.1	ANALYSIS 2nd run sample							
1235	181.73	—	—	20.49	7.64	640	72.2	2.32	56.2		SAMPLE PARAMETER
1238	END	URGENT	SAMPLE								

SAMPLE COLLECTION SAMPLE TIME 1235			AIR MONITORING PID/FID ppm. VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA			
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)			
8260B VOCs	3	40 ml VOA				
8270 SIM 1,4 dioxane	1	1 L Amber				
8270 MOD 1,4 dioxane	1	1 L Amber				
DUPLICATES / SPLITS / BLANKS? Y (N)						
If yes, complete appropriate forms.						

GROUNDWATER SAMPLING INFORMATION

DATE: 2/3/15

TASK: 572.30

WELL ID: MW-13

Time 851 Static DTW (ft below reference point)	144.87	Casing Volume (CV) (gallons) 2.5	3 CV (gallons) 7.5	Weather Conditions	Initials: Du/MEH
Casing Total Depth (ft below reference point)	159.67	Purging Device Groundwater Pump	Sampling Device DDT-10B	Time 859 Temp. 80	Begin Purge 858 End Purge 914
Water Column (feet)	14.8	Pump: Depth (ft brp) 157' Type	Voltage HP .5	Skies Cloudy	Gallons Purged 10.9 CVs Purged 4.4
Casing Capacity (Diameter ") (gallons per foot)	0.17	Monitor Well Recharge Rate: Slow	Fast X	Wind (mph) 0-5 From E	DTW (ft brp) 144.87 Time 851

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	... FIELD PARAMETERS ...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
858	START	PURGE									
890	UTM	3	1.2	20.46	7.36	5.19	85.4	4.96	nm		~.75
905	UTM	5.25	2.5	20.63	7.38	1017	76.0	4.54	15.0		
907	UTM	6.75	2.7	20.88	7.40	983	71.4	4.23	8.27		
909	UTM	7.25	2.9	21.02	7.41	972	69	4.08	6.19		
911	UTM	8.75	3.5	21.22	7.42	969	68	4.06	6.5		
912	SAMPLE										
914	END	PURGE									

SAMPLE COLLECTION SAMPLE TIME 912			AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA			
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)			
8260B VOCs	3	40 ml VOA				
8270 SIM 1,4 dioxane	1	1 L Amber				
8270 MOD 1,4 dioxane		1 L Amber				
DUPLICATES / SPLITS / BLANKS? Y						
If yes, complete appropriate forms.						

GROUNDWATER SAMPLING INFORMATION

DATE: 2/4/15

TASK: 532.30

WELL ID: MW-15

Time <u>1554</u> Static DTW (ft below reference point) <u>152.96</u>	Casing Volume (CV) (gallons) <u>2.3</u> 3 CV (gallons) <u>6.9</u>	Weather Conditions	Initials: <u>DM/MEH</u>
Casing Total Depth (ft below reference point) <u>166.8</u>	Purging Device <u>QUICKET BAILER</u> Sampling Device <u>RED BAILER</u>	Time <u>NM</u> Temp. _____	Begin Purge <u>1555</u> End Purge <u>1611</u>
Water Column (feet) <u>13.84</u>	Pump: Depth (ft brp) <u>NA</u> Type <u>NA</u> Voltage <u>NA</u> HP <u>NA</u>	Skies _____	Gallons Purged <u>2.4</u> CVs Purged <u>1</u>
Casing Capacity (Diameter ") (gallons per foot) <u>.17</u>	Monitor Well Recharge Rate: Slow <u>X</u> Fast _____	Wind (mph) _____ From _____	DTW (ft brp) <u>NM</u> Time _____

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	FIELD PARAMETERS....						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
<u>1555</u>	<u>NM</u>	<u>START</u>									
<u>1558</u>	<u>NM</u>	<u>.2</u>	<u>0.1</u>	<u>20.09</u>	<u>7.13</u>	<u>1495</u>	<u>101.2</u>	<u>4.52</u>	<u>95</u>		
<u>1603</u>	<u>NM</u>	<u>1.5</u>	<u>0.65</u>	<u>19.97</u>	<u>7.12</u>	<u>1501</u>	<u>96.6</u>	<u>4.46</u>	<u>320</u>		
<u>1610</u>	<u>NM</u>	<u>2.4</u>	<u>1.0</u>	<u>19.79</u>	<u>7.10</u>	<u>1504</u>	<u>97.6</u>	<u>3.99</u>	<u>290</u>		
<u>1611</u>			<u>dry/wat</u>		<u>2 hrs</u>						
<u>1110</u>	<u>152.81</u>			<u>19.28</u>	<u>7.73</u>	<u>1305</u>	<u>84.5</u>	<u>NM</u>	<u>11.7</u>		<u>2/5/15 SAMPLE PARAMETERS</u>

SAMPLE COLLECTION SAMPLE TIME <u>1110</u>			AIR MONITORING PID/FID ppm: <u>VAULT NA</u> <u>BKGD NA</u> <u>BREATHING ZONE NA</u> <u>DISCHARGE WATER NA</u>		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)		
8260B VOCs	<u>3</u>	40 ml VOA			
8270 SIM 1,4 dioxane		1 L Amber			
8270 MOD 1,4 dioxane		1 L Amber			
DUPLICATES / SPLITS / BLANKS? Y <u>N</u>					

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/15

TASK: 532.30

WELL ID: MW-16

Time <u>1307</u> Static DTW (ft below reference point) <u>146.33</u>	Casing Volume (CV) (gallons) <u>21.3</u> 3 CV (gallons) <u>63.9</u>	Weather Conditions	Initials: <u>DM/MEH</u>
Casing Total Depth (ft below reference point) <u>178.50</u>	Purging Device <u>rediplo gander</u> Sampling Device <u>ded. tubing</u>	Time <u>NM</u> Temp. <u>—</u>	Begin Purge <u>1520</u> End Purge <u>1609</u>
Water Column (feet) <u>32.17</u>	Pump: Depth (ft brp) <u>176.5</u> Type <u>gander</u> Voltage <u>115</u> HP <u>0.5</u>	Skies <u>—</u>	Gallons Purged <u>69.9</u> CVs Purged <u>3.3</u>
Casing Capacity (Diameter <u>4</u> ") (gallons per foot) <u>166</u>	Monitor Well Recharge Rate: Slow <u>—</u> Fast <u>X</u>	Wind (mph) <u>—</u> From <u>—</u>	DTW (ft brp) <u>NM</u> Time <u>—</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1520	146.33	START	PURGE								
1523	UTM	4.8	.23	21.58	7.47	946	57.3	4.41	19.4	313	~1.6 GPM
1531	UTM	17.6	.82	21.81	7.42	925	59.3	4.22	7.4	313	~1.5 ^{PM} 1.6 GPM
1539	UTM	28.8	1.35	21.79	7.48	1047	62.5	3.98	4.79	313	~1.4
1548	UTM	40.5	1.9	21.80	7.44	1080	64.9	4.05	6.1	313	~1.3
1556	UTM	51.7	2.4	21.84	7.45	1099	62.1	4.17	1.5	313	~1.4
1605	UTM	64.3	3.01	21.86	7.45	1118	69.0	4.17	1.2	313	
1609	STOP	69.9	3.28								

SAMPLE COLLECTION SAMPLE TIME <u>1605</u>			AIR MONITORING PID/FID ppm: VAULT <u>NA</u> BKGD <u>NA</u> BREATHING ZONE <u>NA</u> DISCHARGE WATER <u>NA</u>		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)		
8260B VOCs	<u>3</u>	40 ml VOA			
8270 SIM 1,4 dioxane	<u>1</u>	1 L Amber			
8270 MOD 1,4 dioxane	<u>1</u>	1 L Amber			
DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms. <u>15-02052015 OP305</u>					

GROUNDWATER SAMPLING INFORMATION

DATE: 2/3/15

TASK: 532.30

WELL ID: MW-18

Time <u>700</u> Static DTW (ft below reference point) <u>140.51</u>	Casing Volume (CV) (gallons) <u>35.4</u> 3 CV (gallons) <u>106.2</u>	Weather Conditions Time <u>714</u> Temp. <u>~80</u>	Initials: <u>Dm / MEH</u>
Casing Total Depth (ft below reference point) <u>194.1</u>	Purging Device <u>Granufos</u> Sampling Device <u>Per Turbine</u>	Skies <u>cloudy</u>	Begin Purge <u>715</u> End Purge <u>833</u>
Water Column (feet) <u>53.59</u>	Pump: Depth (ft brp) <u>192</u> Type _____ Voltage _____ HP <u>.5</u>	Wind (mph) <u>0-5</u> From <u>E</u>	Gallons Purged <u>609.5</u> CVs Purged <u>3.1</u>
Casing Capacity (Diameter <u>4"</u>) (gallons per foot) <u>0.66</u>	Monitor Well Recharge Rate: Slow _____ Fast <u>X</u>	DTW (ft brp) <u>NM</u> Time _____	

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
<u>715</u>	<u>START</u>	<u>Per 605</u>									
<u>717</u>	<u>145.73</u>	<u>3.6</u>	<u>.1</u>	<u>19.25</u>	<u>7.31</u>	<u>1120</u>	<u>100.9</u>	<u>7.45</u>	<u>9.81</u>	<u>367</u>	<u>~1.8 GPM</u>
<u>727</u>	<u>152.82</u>	<u>21.6</u>	<u>.6</u>	<u>21.02</u>	<u>7.29</u>	<u>1000</u>	<u>89.7</u>	<u>5.57</u>	<u>5.58</u>	<u>307</u>	<u>~1.8 GPM</u>
<u>737</u>	<u>154.4</u>	<u>38.6</u>	<u>1.09</u>	<u>21.19</u>	<u>7.29</u>	<u>1069</u>	<u>92.8</u>	<u>6.68</u>	<u>2.55</u>	<u>307</u>	<u>~1.7</u>
<u>747</u>	<u>154.68</u>	<u>54.6</u>	<u>1.5</u>	<u>21.22</u>	<u>7.29</u>	<u>1171</u>	<u>95.5</u>	<u>7.21</u>	<u>1.44</u>	<u>307</u>	<u>~1.6</u>
<u>757</u>	<u>154.83</u>	<u>69.6</u>	<u>1.97</u>	<u>21.24</u>	<u>7.28</u>	<u>1199</u>	<u>97.3</u>	<u>7.01</u>	<u>1.10</u>	<u>307</u>	<u>~1.5</u>
<u>807</u>	<u>154.87</u>	<u>74.6</u>	<u>2.10</u>	<u>21.23</u>	<u>7.27</u>	<u>1208</u>	<u>98</u>	<u>6.62</u>	<u>0.86</u>	<u>307</u>	<u>~1.5</u>
<u>817</u>	<u>154.94</u>	<u>89.6</u>	<u>2.6</u>	<u>21.24</u>	<u>7.26</u>	<u>1217</u>	<u>98.8</u>	<u>6.63</u>	<u>0.65</u>	<u>307</u>	<u>~1.5</u>
<u>829</u>	<u>154.96</u>	<u>105</u>	<u>3</u>	<u>21.26</u>	<u>7.26</u>	<u>1217</u>	<u>99.4</u>	<u>6.54</u>	<u>0.54</u>	<u>307</u>	<u>~1.5</u>
<u>830</u>	<u>SAMPLE</u>										
<u>833</u>											

SAMPLE COLLECTION SAMPLE TIME <u>830</u> ANALYSIS _____ QUANTITY _____ TYPE _____ 8260B VOCs <u>3</u> 40 ml VOA _____ 8270 SIM 1,4 dioxane <u>1</u> 1 L Amber _____ 8270 MOD 1,4 dioxane _____ 1 L Amber _____ _____ _____ _____	AIR MONITORING PID/FID ppm: <u>VAULT NA</u> <u>BKOD NA</u> <u>BREATHING ZONE NA</u> <u>DISCHARGE WATER NA</u> NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.) _____ _____ _____ _____
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>0</u> If yes, complete appropriate forms.	

GROUNDWATER SAMPLING INFORMATION

DATE: _____

TASK: 532.70

WELL ID: MW-20

Time <u>1320</u> Static DTW (ft below reference point) <u>178.53</u>	Casing Volume (CV) (gallons) <u>10.3</u> 3 CV (gallons) <u>30.9</u>	Weather Conditions	Initials: <u>AM/MBH</u>
Casing Total Depth (ft below reference point) <u>194</u>	Purging Device <u>GALPER'S PUMP</u> Sampling Device <u>DED TUB</u>	Time <u>1334</u> Temp. <u>80</u>	Begin Purge <u>1335</u> End Purge <u>1445</u>
Water Column (feet) <u>15.5</u>	Pump: Depth (ft brp) <u>192</u> Type _____ Voltage _____ HP <u>.5</u>	Skies <u>cloudy</u>	Gallons Purged <u>51.7</u> CVs Purged <u>5</u>
Casing Capacity (Diameter <u>4"</u>) (gallons per foot) <u>166</u>	Monitor Well Recharge Rate: Slow _____ Fast <u>X</u>	Wind (mph) <u>0-5</u> From <u>E</u>	DTW (ft brp) <u>nm</u> Time _____

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	FIELD PARAMETERS....						Pump Frequency Hz	COMMENTS
				Temp. (°)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1335	UTM	START								325	
1337		2.2	.2	24.19	7.74	1139	28.6	5.53	97.5	325	1.1 GPM
1342		7.7	.74	23.64	7.62	1133	51.7	4.78	109		
1347		13.2	1.3	23.67	7.59	1132	58.6	4.55	90.9		~1.1 GPM
1352		18.7	1.81	23.86	7.58	1137	62.4	4.49	34.6		
1357		24.2	2.35	24.11	7.58	SCOP	DMY			↓	
1402											
1415											
1420		24.2	2.3	23.74	7.59	1137	61.4	5.47		325	
1422		26.4	DMY							↓	
1435											

SAMPLE COLLECTION SAMPLE TIME <u>1440</u>			AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead sampling apparatus, etc.)		
8260B VOCs	<u>3</u>	40 ml VOA	<u>51099 5010</u>		
8270 SIM 1,4 dioxane	<u>1</u>	1 L Amber			
8270 MOD 1,4 dioxane		1 L Amber			
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>(N)</u>					



GROUNDWATER SAMPLING INFORMATION

DATE: 2/3/15

TASK: 532.30

WELL ID: Mw-20

[illegible]

SAMPLE COLLECTION SAMPLE TIME			AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA			
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)			
8260B VOCs	3	40 ml VOA				
8270 SIM 1,4 dioxane	1	1 L Amber				
8270 MOD 1,4 dioxane		1 L Amber				
DUPLICATES / SPLITS / BLANKS?		Y	(N)			
If yes, complete appropriate forms.						



TASK: 532.30

DATE: 02/02/2015

WELL ID: MW-21

Time <u>1243</u>	Static DTW (ft below reference point)	<u>142.81</u>	Casing Volume (CV) (gallons)	<u>589</u>	3 CV (gallons)	<u>1766</u>	Weather Conditions	Initials: <u>EDH/TJE</u>
Casing Total Depth (ft below reference point)	<u>232</u>	Purging Device	<u>ded pump</u>	Sampling Device	<u>ded sample</u>	Time	<u>1308</u>	Temp. <u>75</u>
Water Column (feet)	<u>89.19</u>	Pump: Depth (ft brp)	Type	Voltage	HP	Skies	<u>sunny</u>	Begin Purge <u>1334</u> End Purge <u>1345</u>
Casing Capacity (Diameter <u>4"</u>) (gallons per foot)	<u>0.66</u>	Monitor Well Recharge Rate: Slow	Fast			Wind (mph)	<u>2</u>	From <u>NW</u>
								Gallons Purged <u>271</u> CVs Purged <u>154</u>
								DTW (ft brp) <u>142.81</u> Time <u>1334</u>

[illegible]

SAMPLE COLLECTION		SAMPLE TIME
ANALYSIS	QUANTITY	TYPE
8260B VOCs	9	40 ml VOA
8270 SIM 1,4 dioxane		1 L Amber
8270 MOD 1,4 dioxane	5	1 L Amber
DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms.		Y N

AIR MONITORING PID/EID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

Target TOT: 559,588

MS/MS.D (9 VOLS/3 Ambers)

GROUNDWATER SAMPLING INFORMATION

DATE: 02/05/15

TASK: 532.30

WELL ID: MW-24

Time 1233 Static DTW (ft below reference point)	144.10	Casing Volume (CV) (gallons) 111 3 CV (gallons) 333	Weather Conditions	Initials: ASF/TJE
Casing Total Depth (ft below reference point)	330	Purging Device groundwater pump Sampling Device ND pipetstand	Time 12:15 Temp. 75°F	Begin Purge 1234 End Purge 1313
Water Column (feet)	185.9	Pump: Depth (ft brp) Type groundwater Voltage 240 HP	Skies SUNNY	Gallons Purged 342 CVs Purged 3.1
Casing Capacity (Diameter 4") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow Fast X	Wind (mph) 0 From N/A	DTW (ft brp) 146.35 Time 1317

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	... FIELD PARAMETERS ...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1234	144.10	0	0	A	begin purge				1	NA	
1235	149.09	9	0.08	22.7	9.90	0.388	0.5	0.25	10.52		Q ≈ 9 GPM
1240	149.45	55	0.50	21.9	8.50	0.55	-221.3	0.10	1.93		Q ≈ 9 GPM
1247	149.61	114	1.03	22.0	8.10	0.57	-199.5	0.06	0.77		Q ≈ 9 GPM
1253	149.68	172	1.55	22.0	8.02	0.57	-192.7	0.05	0.52		Q ≈ 9 GPM
1256	149.71	226	2.04	22.0	7.98	0.57	-189.7	0.05	0.44		Q ≈ 9 GPM
1302	149.72	261	2.35	22.0	7.96	0.57	-188.1	0.05	0.25		Q ≈ 5.8 GPM
1311	149.73	333	3	22.0	7.93	0.57	-186.2	0.05	0.27		Q ≈ 9 GPM
1313	146.35	342			end pump				+		

SAMPLE COLLECTION SAMPLE TIME 1313		
ANALYSIS	QUANTITY	TYPE
8260B VOCs	3	40 ml VOA
8270 SIM 1,4 dioxane	1	1 L Amber
8270 MOD 1,4 dioxane		1 L Amber
DUPLICATES / SPLITS / BLANKS? Y (N)		
If yes, complete appropriate forms.		

AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)



GROUNDWATER SAMPLING INFORMATION

DATE: 2/3/15

TASK: 532.30

WELL ID: MW-26C

Time <u>1204</u> Static DTW (ft below reference point)	<u>140.69</u>	Casing Volume (CV) (gallons)	<u>60.9</u> 3 CV (gallons)	<u>182.6</u>	<u>Weather Conditions</u>		Initials: <u>DM/MEH</u>
Casing Total Depth (ft below reference point)	<u>499</u>	Purging Device	<u>RED Pump</u>	Sampling Device	<u>RED Turbine</u>	Time <u> </u> Temp. <u> </u>	Begin Purge <u> </u> End Purge <u> </u>
Water Column (feet)	<u>358</u>	Pump: Depth (ft brp)	<u>200</u>	Type	<u>MP1</u>	Skies <u> </u>	Gallons Purged <u> </u> Cvs Purged <u> </u>
Casing Capacity (Diameter <u>2</u> ") (gallons per foot)	<u>0.17</u>	Monitor Well Recharge Rate: Slow	Fast	<u>X</u>	Wind (mph) <u> </u> From <u> </u>	DTW (ft brp) <u> </u> Time <u> </u>	

[illegible]

SAMPLE COLLECTION		SAMPLE TIME	AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA				
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)				
8260B VOCs	40 ml VOA						
8270 SIM 1,4 dioxane	1 L Amber						
8270 MOD 1,4 dioxane	1 L Amber						
DUPLICATES / SPLITS / BLANKS?		Y	N				
If yes, complete appropriate forms.							

GROUNDWATER SAMPLING INFORMATION

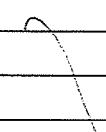
DATE: 2/6/15

TASK: 532.30

WELL ID: MW-27

Time <u>740</u> Static DTW (ft below reference point) <u>141.63</u>	Casing Volume <u>SV</u> (gallons) <u>29.7</u> <u>SV</u> 3 CV (gallons) <u>89.1</u>	Weather Conditions	Initials: <u>DLI/MEH</u>
Casing Total Depth (ft below reference point) <u>515</u>	Purging Device <u>ded pump</u> Sampling Device <u>NO Pipestand</u>	Time <u>NM</u> Temp. <u>—</u>	Begin Purge <u>748</u> End Purge <u>805</u>
Water Column (feet) <u>373</u>	Pump: Depth (ft brp) <u>470</u> Type <u>gunders</u> Voltage <u>240</u> HP	Skies <u>—</u>	Gallons Purged <u>104</u> CVs Purged <u>404</u>
Casing Capacity (Diameter <u>4"</u>) (gallons per foot) <u>1.66</u>	Monitor Well Recharge Rate: Slow <u>—</u> Fast <u>X</u>	Wind (mph) <u>—</u> From <u>—</u>	DTW (ft brp) <u>141.63</u> Time <u>740</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	FIELD PARAMETERS						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
748	—	PUMP	ON	—	—	—	—	—	—	NA	
751	NM	18	.6	20.56	7.66	730	-62.1	1.47	0.0		~ 6 GPM
754	NM	36	1.2	20.55	7.78	832	-182	2.85	0.0		
757	NM	54	1.8	20.27	7.66	848	-98.4	3.14	0.2		
800	NM	72	2.4	20.28	7.64	850	-78.5	3.09	4.4		~ 5.7
803	NM	90	3	20.29	7.63	850	-61.2	3.06	1.76		
805	—	END PUMP	—	—	—	—	—	—	—		

SAMPLE COLLECTION SAMPLE TIME <u>803</u>			AIR MONITORING BID/PIU DATA: <u>FAULT NA</u> <u>BIKED NA</u> <u>BREATHING ZONE NA</u> <u>DISCHARGE WATER NA</u>			
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)			
8260B VOCs	<u>3</u>	40 ml VOA				
8270 SIM 1,4 dioxane	<u>1</u>	1 L Amber				
8270 MOD 1,4 dioxane	<u>1</u>	1 L Amber				
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>(N)</u> If yes, complete appropriate forms.						

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/15

TASK: 532.30

WELL ID: MW-28

Time <u>9:15</u> Static DTW (ft below reference point) <u>145.95</u>	Casing Volume <u>SV</u> (gallons) <u>27</u> 3 CV (gallons) <u>81</u>	Weather Conditions	Initials: <u>ASE/TJE</u>
Casing Total Depth (ft below reference point) <u>375</u>	Purging Device <u>ded pump</u> Sampling Device <u>10-100 ded. pipe stand</u>	Time <u>9:15</u> Temp. <u>65°F</u>	Begin Purge <u>9:17</u> End Purge <u>9:33</u>
Water Column (feet) <u>45</u>	Pump: Depth (ft brp) <u>330</u> Type <u>groundfos</u> Voltage <u>240</u> HP	Skies <u>SUNNY</u>	Gallons Purged <u>103</u> CVs Purged <u>4</u>
Casing Capacity (Diameter <u>4"</u>) (gallons per foot) <u>0.6</u>	Monitor Well Recharge Rate: Slow _____ Fast <u>X</u>	Wind (mph) <u>8</u> From <u>NA</u>	DTW (ft brp) <u>147.81</u> Time <u>9:33</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
917	145.95	0	0	1	begin	purge				NA	
918	151.47	5	0.19	22.1	7.38	1.45	79.5	4.51	0		Q ≈ 5 gpm
920	152.31	16	0.59	21.4	7.29	1.40	78.1	3.66	0		Q ≈ 5 gpm
922	152.38	29	1.07	21.5	7.27	1.42	66.5	5.33	0		Q ≈ 7 gpm
924	152.38	44	1.69	21.6	7.28	1.43	73.3	5.89	0		Q ≈ 7 gpm
927	152.41	63	2.33	21.6	7.31	1.43	82.6	7.02	0		Q ≈ 6 gpm
930	152.43	81	3.0	21.6	7.32	1.43	87.2	6.88	0.35		Q ≈ 6 gpm
933	147.81	103	—	end	purge						

SAMPLE COLLECTION SAMPLE TIME 930

ANALYSIS	QUANTITY	TYPE
8260B VOCs	<u>90</u>	40 ml VOA
8270 SIM 1,4 dioxane	<u>3</u>	1 L Amber
8270 MOD 1,4 dioxane	<u>3</u>	1 L Amber

DUPLICATES ☒ SPLITS ☒ BLANKS? ☒
If yes, complete appropriate forms.

AIR MONITORING PID/FID ppm: VAULT NA BRGD NA BREATHING ZONE NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

SP/DUP collected

Pop = MW-2800 collected @ 931

SP = MW-28 @ 930

GROUNDWATER SAMPLING INFORMATION

DATE: 2/6/15

TASK: 532.30

WELL ID: MW-304

Time <u>857</u> Static DTW (ft below reference point)	<u>134.27</u>	<u>528</u>	Weather Conditions	Initials: <u>ASF TJE</u>
Casing Total Depth (ft below reference point)	<u>504</u>	<u>528</u>	Time <u>0908</u> Temp. <u>65</u>	Begin Purge <u>859</u> End Purge <u>911</u>
<u>504</u> Water Column (feet)	<u>44</u>	<u>>100</u>	Skies <u>clear</u>	Gallons Purged <u>632</u> CVs Purged <u>32</u>
Casing Capacity (Diameter <u>3"</u>) (gallons per foot)	<u>0.4</u>	<u>520</u>	Wind (mph) <u>0</u> From <u>0</u>	DTW (ft brp) <u>134.27</u> Time <u>859</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	... FIELD PARAMETERS ...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
859	134.27	0	0							NA	begin purge
9:00	135.98	8	0.5	21.1	7.04	0.82	87.9	0.24	0.62		
9:03	136.00	26	1.5	21.2	7.65	0.77	4.8	0.42	4.45		G ≈ 6 GPM
9:04	136.00	31.5	1.8	21.3	7.65	0.77	2.8	0.51	0.51		
9:06	136.00	38	2.2	21.4	7.63	0.77	-3.6	0.56	0		
9:08	136.03	46.8	2.7	21.4	7.62	0.77	22.5	0.58	0.39		
9:10	136.03	52.8	3	21.5	7.62	0.77	27.0	0.59	0		
9:11	135.01	63.2	3.7								end purge

SAMPLE COLLECTION SAMPLE TIME 910
 ANALYSIS QUANTITY TYPE

8260B VOCs 3 40 ml VOA
 8270 SIM 1,4 dioxane 1 1 L Amber
 8270 MOD 1,4 dioxane 1 1 L Amber

DUPLICATES / SPLITS / BLANKS? Y N
 If yes, complete appropriate forms.

AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA
 NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

GROUNDWATER SAMPLING INFORMATION

DATE: 2/10/15

TASK: 532-30

WELL ID: MN-30B

Time <u>755</u> Static DTW (ft below reference point)	131.00	Screen (SV) <u>40</u> (SV) <u>120</u>	Weather Conditions	Initials: <u>ASF/TJE</u>
Casing Total Depth (ft below reference point)	619	Purging Device <u>bed pump</u> Sampling Device <u>0-10</u>	Time <u>8:00</u> Temp. <u>100°F</u>	Begin Purge <u>816</u> End Purge <u>852</u>
<u>PUMP TO SCREEN</u> Water Column (feet)	99	Pump: Depth (ft brp) <u>520</u> Type <u>Grundfos</u> Voltage <u>240</u> HP	Skies <u>SUNNY</u>	Gallons Purged <u>148</u> CVs Purged <u>35</u>
Casing Capacity (Diameter <u>3"</u>) (gallons per foot)	0.4	Monitor Well Recharge Rate: Slow Fast <u>X</u>	Wind (mph) <u>0</u> From <u>—</u>	DTW (ft brp) <u>131.00</u> Time <u>816</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
816	131.00	0	0	begin			purge			NA	
817	144.13	6	0.15	20.2	7.55	1.10	45.8	0.81	3.54		Q ≈ 6 gpm
821	148.64	25	0.63	21.0	10.54	0.83	61.5	0.12	2.65		Q ≈ 5 gpm
826											pump off to recalibrate YSI
829											
830	146.29	53	1.33	21.2	9.76	0.71	12.7	0.16	9.88		YSI ok, begin purge again
836	149.33	87	2.2	21.3	8.23	0.65	21.4	0.10	6.47		Q ≈ 5.5 GPM
842	152.15	109	2.73	21.4	8.05	0.65	12.0	0.08	3.07		Q ≈ 4 GPM
848	152.90	131	3.2	21.5	7.96	0.65	0.2	0.07	3.60		
852	149.97	148	3.7								end purge

SAMPLE COLLECTION SAMPLE TIME <u>850</u>		
ANALYSIS	QUANTITY	TYPE
8260B VOCs	<u>3</u>	40 ml VOA
8270 SIM 1,4 dioxane	<u>1</u>	1 L Amber
8270 MOD 1,4 dioxane	<u>1</u>	1 L Amber
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>(N)</u>		
If yes, complete appropriate forms.		

AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

pH probe not reading correctly

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/15

TASK: 532.30

WELL ID: MW-31

Time 10:20 Static DTW (ft below reference point)	121.43	Screen (SV) 01	SV 243	Weather Conditions	Initials: ASF/TJE
Casing Total Depth (ft below reference point)	990	Purging Device ded. pump	Sampling Device 700 ded. pipe stand	Time 10:15 Temp. 65°F	Begin Purge 10:15 End Purge 11:14
PUMP TO SCREEN Water Column (feet)	54	Pump: Depth (ft brp) 942	Type Cinders Voltage 240 HP	Skies SUNNY	Gallons Purged 380 CVs Purged 3.5
Casing Capacity (Diameter 0") (gallons per foot)	1.5	Monitor Well Recharge Rate: Slow	Fast X	Wind (mph) 0 From N/A	DTW (ft brp) 121.43 Time 10:15

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1045	121.43	0	0	START	PUMPING						
1046	123.55	4	0.05	21.9	7.72	1.16	142.1	3.64	6.01	NA	Q ≈ 4 GPM
1050	123.61	49	0.6	21.0	7.69	1.11	129.9	0.31	6.61		Q ≈ 11 GPM
1054	123.59	87	1.07	21.3	7.97	1.40	82.1	0.13	19.1		Q ≈ 10 GPM
1057	123.59	114	1.48	21.4	7.70	1.34	86.7	0.13	12.8		Q ≈ 10 GPM
1100	123.59	142	1.75	21.4	7.70	1.28	81.0	0.23	6.93		Q ≈ 10 GPM
1103	123.59	173	2.14	21.4	7.64	1.23	79.3	0.37	4.28		Q ≈ 10 GPM
1108	123.59	222	2.74	21.5	7.62	1.17	76.8	0.54	2.17		Q ≈ 10 GPM
1110	123.59	243	3	21.5	7.58	1.15	76.7	0.60	2.15		Q ≈ 10 GPM
1114	NM	280	3.5	end	purge						

SAMPLE COLLECTION SAMPLE TIME 1111		
ANALYSIS	QUANTITY	TYPE
8260B VOCs	4	40 ml VOA
8270 SIM 1,4 dioxane	1	1 L Amber
8270 MOD 1,4 dioxane	3	1 L Amber
DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms.		

AIR MONITORING PID/FID ppm: VAULT NA	BKGD NA	BREATHING ZONE NA	DISCHARGE WATER NA
NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.) MC/MSD collected			

GROUNDWATER SAMPLING INFORMATION

DATE: 2/03/15

TASK: 532.30

WELL ID: MW-32A

Time 8:10 Static DTW (ft below reference point) 195.01	SCREEN Casing Volume (CV) (gallons) 207	3 CV (gallons) 021	Weather Conditions	Initials: ASF/TJE
SCREEN Casing Total Depth (ft below reference point) 905	Purging Device ded. pump	Sampling Device ND ded. pipestand	Time 8:10 Temp. 54°F	Begin Purge 8:42 End Purge 9:45
SCREEN Water Column (feet) 345	Pump: Depth (ft brp) 500	Type ARUNDOS Voltage 240 HP	Skies FOG	Gallons Purged 645 CVs Purged
Casing Capacity (Diameter 4") (gallons per foot) 0.60	Monitor Well Recharge Rate: Slow	Fast X	Wind (mph) 0-5 From W	DTW (ft brp) 95.00 Time 9:45

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
8:42	95.01	0	0	BEGIN PUMPING						1	
8:43	95.79	10	0.05	20.5	7.19	0.94	224.3	4.39	59.3	NA	Q ≈ 10.5 GPM
8:54	95.95	130	0.07	20.9	7.39	0.95	-27.5	0.45	4.38		Q ≈ 10.0 GPM
9:05	96.01	237	1.14	21.0	7.42	0.96	9.9	1.39	4.08		Q ≈ 9.9 GPM
9:10	96.01	301	1.74	21.0	7.41	0.96	28.0	2.41	4.08		Q ≈ 11.3 GPM
9:27	96.01	401	2.23	21.0	7.43	0.96	30.0	1.56	0		Q ≈ 9.1 GPM
9:41	96.08	021	3.0	21.1	7.43	0.96	36.5	1.57	4.58		Q ≈
9:45	95.00	645	3.18	END PUMPING							645 total gallons sample

SAMPLE COLLECTION SAMPLE TIME 9:45		
ANALYSIS	QUANTITY	TYPE
8260B VOCs	3	40 ml VOA
8270 SIM 1,4 dioxane	1	1 L Amber
8270 MOD 1,4 dioxane		1 L Amber
DUPLICATES / SPLITS / BLANKS? Y N		

AIR MONITORING PID/FID ppm: VAULT NA BKGD-NA BREATHING ZONE-NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

GROUNDWATER SAMPLING INFORMATION

DATE: _____

TASK: 532.30WELL ID: MW-32B

Time <u>12:29</u> Static DTW (ft below reference point)	<u>95.00</u>	Screen <u>SV 2635</u>	<u>790.5</u>	Weather Conditions	Initials: <u>TJE/ASF/MJL</u> Begin Purge <u>12:35</u> End Purge <u>13:59</u> Gallons Purged <u>796</u> CVs Purged <u>3.1</u> DTW (ft brp) <u>95.00</u> Time <u>12:39</u>
Casing Total Depth (ft below reference point)	<u>999</u>	Casing Volume (CV) (gallons) <u>267</u>	3 CV (gallons) <u>627</u>	Time <u>12:30</u> Temp. <u>70</u>	
Pump to screen Water Column (feet)	<u>439</u>	Purging Device <u>ded pump</u>	Sampling Device <u>>100 steel</u>	Skies <u>clear</u>	
Casing Capacity (Diameter <u>4</u> ") (gallons per foot)	<u>0.60</u>	Pump: Depth (ft brp) <u>560</u> Type <u>grinder</u> Voltage <u>120</u> HP		Wind (mph) <u>0</u> From <u>0</u>	
		Monitor Well Recharge Rate: Slow _____ Fast <u>X</u>			

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µm S/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
<u>12:39</u>											
<u>12:35</u>	<u>95.00</u>	<u>0</u>	<u>0</u>								
<u>12:40</u>	<u>106.25</u>	<u>65</u>	<u>0.25</u>	<u>21.0</u>	<u>7.62</u>	<u>1.09</u>	<u>-187.5</u>	<u>0.26</u>	<u>0</u>	<u>NA</u>	<u>Q ≈ 13 gpm</u>
<u>12:50</u>	<u>108.56</u>	<u>134</u>	<u>0.51</u>	<u>21.0</u>	<u>7.69</u>	<u>1.03</u>	<u>-192.13</u>	<u>0.14</u>	<u>4.29</u>		<u>Q ≈ 12 gpm</u>
<u>13:08</u>	<u>108.85</u>	<u>306</u>	<u>1.16</u>	<u>21.4</u>	<u>7.90</u>	<u>0.79</u>	<u>-175.1</u>	<u>0.08</u>	<u>0</u>		<u>Q ≈ 18 gpm</u>
<u>13:15</u>	<u>109.01</u>	<u>380</u>	<u>1.44</u>	<u>21.4</u>	<u>7.88</u>	<u>0.80</u>	<u>-168.5</u>	<u>0.27</u>	<u>1.96</u>		<u>Q ≈ 10 gpm</u>
<u>13:26</u>	<u>109.00</u>	<u>488</u>	<u>1.85</u>	<u>21.4</u>	<u>7.87</u>	<u>0.83</u>	<u>-168.5</u>	<u>0.08</u>	<u>0</u>		<u>Q ≈ 10 gpm</u>
<u>13:38</u>	<u>109.08</u>	<u>610</u>	<u>2.31</u>	<u>21.4</u>	<u>7.85</u>	<u>0.86</u>	<u>-169.3</u>	<u>0.06</u>	<u>0</u>		<u>Q ≈ 10 gpm</u>
<u>13:49</u>	<u>109.10</u>	<u>718</u>	<u>2.72</u>	<u>21.4</u>	<u>7.83</u>	<u>0.89</u>	<u>-166.5</u>	<u>0.30</u>	<u>0</u>		<u>Q ≈ 10 gpm</u>
<u>13:57</u>	<u>109.12</u>	<u>791</u>	<u>3.0</u>	<u>21.4</u>	<u>7.82</u>	<u>0.90</u>	<u>-168.3</u>	<u>0.08</u>	<u>0</u>		<u>Q ≈ 10 gpm</u>
<u>13:59</u>	<u>NM</u>	<u>796</u>	<u>3.02</u>								<u>Sample</u>

SAMPLE COLLECTION SAMPLE TIME <u>13:58</u>		AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA	
ANALYSIS	QUANTITY	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)	
8260B VOCs	40 ml VOA <u>9</u>	<u>SP/DUP collected</u> <u>DUP = MW-3200B @ 14:00</u> <u>SP = MW-32 @ 13:58</u>	
8270 SIM 1,4 dioxane	1 L Amber <u>3</u>		
8270 MOD 1,4 dioxane	1 L Amber		
DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms. <u>Y</u> N			

GROUNDWATER SAMPLING INFORMATION

DATE: 2/03/15TASK: 532.20WELL ID: MW-32C

Time <u>9:55</u> Static DTW (ft below reference point)	<u>94.44</u> <u>GREEN</u> <u>SV</u>	Casing Volume (<u>SV</u>) (gallons) <u>310</u> 3 CV (gallons) <u>954</u>	Weather Conditions	Initials: <u>ASF/TJE</u>
<u>GREEN</u> Casing Total Depth (ft below reference point)	<u>1090</u>	Purging Device <u>ded. pump</u> Sampling Device <u>NS ded. pipestand</u>	Time <u>10:00</u> Temp. <u>60</u>	Begin Purge <u>10:03</u> End Purge <u>12:00</u>
<u>GREEN</u> Water Column (feet)	<u>530</u>	Pump: Depth (ft brp) <u>500</u> Type <u>grundfos</u> Voltage <u>240</u> HP	Skies <u>SUNNY</u>	Gallons Purged <u>1003</u> CVs Purged <u>3.15</u>
Casing Capacity (Diameter <u>4</u> ") (gallons per foot)	<u>0.00</u>	Monitor Well Recharge Rate: Slow Fast <u>X</u>	Wind (mph) <u>0-5</u> From <u>W</u>	DTW (ft brp) <u>94.44</u> Time <u>10:03</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
10:03	94.44	0	0	BEGIN PUMPING							
10:05	110.35	18	0.00	20.0	8.27	0.538	-191.0	0.32	0	NA	Q ≈ 9 GPM
10:25	148.85	19.7	0.02	21.0	8.09	0.55	-223	0.00	1.03		Q ≈ 9 GPM
10:40	153.45	38.4	1.21	21.5	8.16	0.54	-208	0.00	3.07		Q ≈ 9 GPM
11:07	157.73	50.2	1.70	21.5	8.10	0.54	-198	0.51	3.23		Q ≈ 9 GPM
11:27	150.90	73.0	2.30	21.5	8.18	0.54	-207	0.00	1.87		Q ≈ 8 GPM
11:48	158.20	92.8	2.91	21.0	8.17	0.54	-198	0.30	0.11		
11:58	NM	99.0	3.11	21.6	8.19	0.54	-209	0.06	0.11		
12:00	NM	100.3	3.15	pump off							sample

SAMPLE COLLECTION SAMPLE TIME <u>1200</u>		
ANALYSIS	QUANTITY	TYPE
8260B VOCs	<u>3</u>	40 ml VOA
8270 SIM 1,4 dioxane	<u>1</u>	1 L Amber
8270 MOD 1,4 dioxane		1 L Amber
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>(N)</u>		

AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

transducer pulled @ 9:50

transducer put back @ 12:05

GROUNDWATER SAMPLING INFORMATION

DATE: 2/3/15

TASK: 532.30

WELL ID: MW-33

Time <u>1452</u> Static DTW (ft below reference point) <u>85.55</u>	Screen Casing Volume (CV) (gallons) <u>291</u> 3 CV (gallons) <u>873</u>	Weather Conditions	Initials: <u>TJE/ASF</u>
Casing Total Depth (ft below reference point) <u>1020</u>	Purging Device <u>Ded pump</u> Sampling Device <u>pipe stand</u>	Time <u>1500</u> Temp. <u>70</u>	Begin Purge <u>1500</u> End Purge <u>1617</u>
pump to screen Water Column (feet) <u>485</u>	Pump: Depth (ft brp) <u>535</u> Type <u>Grundfor</u> Voltage <u>240</u> HP	Skies <u>clear</u>	Gallons Purged <u>881</u> CVs Purged <u>3</u>
Casing Capacity (Diameter <u>4"</u>) (gallons per foot) <u>0.6</u>	Monitor Well Recharge Rate: Slow _____ Fast <u>X</u>	Wind (mph) <u>0</u> From <u>0</u>	DTW (ft brp) <u>85.55</u> Time <u>1500</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1500	85.55	0	0								
1501	80.71	14	0.05	19.7	7.67	0.70	34.5	0.30	0	NA	Q ≈ 14 gpm
15:11	80.75	134	0.46	20.6	7.71	0.70	-100.1	0.10	11.8		Q ≈ 12 gpm
15:21	86.79	244	0.84	20.8	7.74	0.70	-142.1	0.17	0		Q ≈ 11 gpm
15:35	80.80	407	1.40	20.9	7.73	0.72	-121.7	0.72	0		Q ≈ 12 gpm
15:46	86.85	558	1.92	20.9	7.71	0.71	-112.7	0.50	0		Q ≈ 12 gpm
1600	86.86	690	2.37	20.9	7.70	0.71	-102.6	0.50	0		Q ≈ 11 gpm
1611	86.85	874	3	20.9	7.69	0.71	-95.6	0.63	0.80		Q ≈ 11 gpm
1616	85.75	881	3.1								
1617											

SAMPLE COLLECTION SAMPLE TIME <u>1620</u>			AIR MONITORING PID/FID ppm: VAULT NA _____ BKGB NA _____ BREATHING ZONE NA _____ DISCHARGE WATER NA _____		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)		
8260B VOCs	40 ml VOA	3			
8270 SIM 1,4 dioxane	1 L Amber	1			
8270 MOD 1,4 dioxane	1 L Amber				
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>(N)</u> If yes, complete appropriate forms.					

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/15TASK: 532.30WELL ID: MW-30/A

Time <u>1640</u> Static DTW (ft below reference point) <u>159.34</u>	Casing Volume <u>51</u> (gallons) <u>48</u> <u>51</u> (gallons) <u>178143</u>	Weather Conditions	Initials: <u>DM/MEH</u>
Casing Total Depth (ft below reference point) <u>280</u>	Purging Device <u>DeD Pump</u> Sampling Device <u>DeD Sump 1074</u>	Time <u>NM</u> Temp. <u>—</u>	Begin Purge <u>1653</u> End Purge <u>1708</u>
PUMP TO SCREEN Water Column (feet) <u>80</u>	Pump: Depth (ft brp) <u>200</u> Type <u>60003</u> Voltage <u>240</u> HP <u>—</u>	Skies <u>—</u>	Gallons Purged <u>141</u> CVs Purged <u>41</u>
Casing Capacity (Diameter <u>4</u> ") (gallons per foot) <u>160</u>	Monitor Well Recharge Rate: Slow <u>—</u> Fast <u>X</u>	Wind (mph) <u>—</u> From <u>—</u>	DTW (ft brp) <u>NM</u> Time <u>—</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1653	START		PURGE							N/A	
1655	NM	26	.56	20.04	7.29	1196	87.2	7.50	206		~136pm
1657	166.43	52	1.13	20.08	7.29	1179	73.5	7.89	68.4		
1659	166.49	78	1.7	20.12	7.30	1202	69.5	7.42	31.1		
1701	166.49	104	2.3	20.12	7.30	1205	69.9	7.29	18.3		
1703	166.49	130	2.8	20.12	7.30	1205	70.0	7.36	11.2		
1704	166.49	143	3.0	20.13	7.30	1205	70.3	7.19	10.9		
1705	—	SAMPLE									↓
1708	END	PURGE									

SAMPLE COLLECTION SAMPLE TIME 1705
 ANALYSIS QUANTITY TYPE

8260B VOCs 3 40 ml VOA
 8270 SIM 1,4 dioxane 1 1 L Amber
 8270 MOD 1,4 dioxane — 1 L Amber

DUPLICATES / SPLITS / BLANKS? Y (N)
 If yes, complete appropriate forms.

AIR MONITORING PID/PID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA
 NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

WATER IS OFF TASTE

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/15

TASK: E32.30

WELL ID: MW-34B

Time 1804 Static DTW (ft below reference point) 160.00	Casing Volume (CV) (gallons) 46263.5 3 CV (gallons) 138790.5	Weather Conditions	Initials: DM MEH
Casing Total Depth (ft below reference point) 536	Purging Device DED Pump Sampling Device DED Pump	Time NM Temp. —	Begin Purge 1805 End Purge 1825
PUMP TO SCREEN Water Column (feet) 76	Pump: Depth (ft brp) 460 Type Voltage HP	Skies —	Gallons Purged 180 CVs Purged 3.9
Casing Capacity (Diameter 4") (gallons per foot) 0.60	Monitor Well Recharge Rate: Slow Fast X	Wind (mph) — From —	DTW (ft brp) NM Time —

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1805	—	START								NA	
1809	161.91	36	.7	20.30	7.53	691	21.1	2.31	63.9		~96pm
1811	162.00	54	1.2	20.46	7.55	899	33.5	3.88	23.2		
1813	162.01	72	1.6	20.47	7.55	898	34.6	3.87	24.1		
1815	162.04	90	1.9	20.49	7.54	896	35.5	3.96	9.4		~96pm
1817	162.08	108	2.3	20.48	7.54	899	37.3	4.29	11.5		
1821	162.11	144	3.1	20.48	7.54	888	40.8	4.78	10.1		
1825	END	PRGCE									

SAMPLE COLLECTION SAMPLE TIME 1821			AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)		
8260B VOCs	3	40 ml VOA			
8270 SIM 1,4 dioxane		1 L Amber			
8270 MOD 1,4 dioxane	1	1 L Amber			
DUPLICATES / SPLITS / BLANKS? Y (N)					
If yes, complete appropriate forms.					

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/2015TASK: 532.30WELL ID: MW-34C

Time <u>1715</u> Static DTW (ft below reference point) <u>156.56</u>	Casing Volume <u>3.4</u> (gallons) <u>57.7</u> <u>3.0</u> (gallons) <u>173</u>	Weather Conditions Time <u>NM</u> Temp. <u>—</u>	Initials: <u>DM/MEH</u>
Casing Total Depth (ft below reference point) <u>576</u>	Purging Device <u>DED Pump</u> Sampling Device <u>DED Pipe Stand</u>	Skies <u>—</u>	Begin Purge <u>1718</u> End Purge <u>1735</u>
Pump To Screen Water Column (feet) <u>96 to 82 ft</u>	Pump: Depth (ft brp) <u>480</u> Type <u>Gandhis</u> Voltage <u>540</u> HP <u>—</u>	Wind (mph) <u>—</u> From <u>—</u>	Gallons Purged <u>266</u> CVs Purged <u>2.7</u>
Casing Capacity (Diameter ") (gallons per foot) <u>0.60</u>	Monitor Well Recharge Rate: Slow <u>—</u> Fast <u>X</u>	DTW (ft brp) <u>NM</u> Time <u>—</u>	

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1718	—	START	Purge	—	—	—	—	—	—	—	
1720	174.08	24	.4	20.26	7.84	438	-188.7	0.93	0.1	NA	~12 GPM 96' PUMP SCREEN TO NEAR
1722	174.09	48	.8	20.49	7.98	441	-162.3	0.82	0.31		
1724	174.99	72	1.2	20.58	7.96	574	-106.2	0.76	0.0		
1726	175.71	96	1.7	20.58	7.96	572	-104.1	0.77	0.0		
1728	175.93	120	2.1	20.59	7.96	573	-107.1	0.89	0.3		
1730	175.96	156	2.7	20.59	7.95	574	-98	0.76	0.1		
1732	176.02	180	3.03	20.60	7.95	574	-95.9	0.71	0.0		
1735	END	Purge	—	—	—	—	—	—	—		

SAMPLE COLLECTION SAMPLE TIME <u>1732</u>		
ANALYSIS	QUANTITY	TYPE
8260B VOCs	<u>3</u>	40 ml VOA
8270 SIM 1,4 dioxane	<u>—</u>	1 L Amber
8270 MOD 1,4 dioxane	<u>1</u>	1 L Amber
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>C</u>		
If yes, complete appropriate forms.		

AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

GROUNDWATER SAMPLING INFORMATION

DATE: 2/4/2015

TASK: 532.30

WELL ID: MW-35C

Time 842 Static DTW (ft below reference point)	94.46	Screen (SV) 378 3 CV (gallons) 1134	Weather Conditions	Initials: TJE, ASF, MJZ
Casing Total Depth (ft below reference point)	1040	Purging Device: ded pump Sampling Device: ND pre sta	Time 0900 Temp. 60	Begin Purge 853 End Purge 1011
Water Column (feet)	630	Pump: Depth (ft brp) 410 Type: Grundfos Voltage 240HP	Skies: overcast	Gallons Purged 1185 CVs Purged 3
Casing Capacity (Diameter 4" (gallons per foot))	0.60	Monitor Well Recharge Rate: Slow Fast X	Wind (mph) 0 From 0	DTW (ft brp) 94.60 Time 1011

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
853	94.46	0	0	24.9	7.54	0.80	103.2	1.98	0.14	NA	
854	97.32	215	0.57	20.4	7.41	1.00	77.8	0.95	0		Q ≈ 14 GPM
9:20	97.25	416	1.10	20.6	7.51	0.90	32.7	1.77	0		Q ≈ 15 GPM
9:32	97.25	588	1.56	20.6	7.55	0.86	48.9	2.60	0.73		Q ≈ 14 GPM
9:45	97.27	785	2.08	20.6	7.57	0.84	47.9	2.45	3.40		Q ≈ 14 GPM
9:57	97.31	974	2.58	20.6	7.58	0.82	51.6	2.45	2.07		Q ≈ 14 GPM
10:08	97.37	1134	3.00	20.7	7.57	0.82	55.5	3.00	0		Q ≈
1010											Sample
1011	94.60	1185									

SAMPLE COLLECTION SAMPLE TIME 10:10		AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA	
ANALYSIS	QUANTITY TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)	
8260B VOCs	40 ml VOA 9	MS/MSD collected	
8270 SIM 1,4 dioxane	1 L Amber 3		
8270 MOD 1,4 dioxane	1 L Amber		
DUPLICATES / SPLITS / BLANKS? Y (N)			

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/15

TASK: 532.30

WELL ID: MW-36

Time <u>1345</u> Static DTW (ft below reference point)	<u>90.37</u> ~~SCREEN~~ ^{SCREEN}	Casing Volume (CV) (gallons) <u>320.4</u> ^{3 CV} (gallons) <u>901</u>	Weather Conditions
~~SCREEN~~ Casing Total Depth (ft below reference point)	<u>994</u>	Purging Device <u>ded. pump</u> Sampling Device <u>>100' pipe stand</u>	Time <u>13:40</u> Temp. <u>70°F</u>
~~PUMP TO SCREEN~~ Water Column (feet)	<u>534</u>	Pump: Depth (ft brp) <u>400</u> Type <u>peristaltic</u> Voltage <u>240</u> HP	Skies <u>SUNNY</u>
Casing Capacity (Diameter <u>4"</u>) (gallons per foot)	<u>0.6</u>	Monitor Well Recharge Rate: Slow Fast <u>X</u>	Wind (mph) <u>0-5</u> From <u>W</u>
			Initials: <u>ASF/TJE</u>
			Begin Purge <u>1352</u> End Purge <u>1521</u>
			Gallons Purged <u>869</u> CVs Purged <u>3.03</u>
			DTW (ft brp) <u>90.37</u> Time <u>1345</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1352	90.37	0	0	20.4	7.75	0.71	-139.5	0.50	27.2	TE	begin purge
1353	91.95	12	0.04	20.4	7.75	0.71	-139.5	0.50	27.2	NA	Q ≈ 12 gpm
1409	92.89	184	0.58	21.3	7.75	0.72	-159.4	0.07	0		Q ≈ 11 gpm
1425	92.90	358	1.12	21.8	7.81	0.75	-149.8	0.32	0		Q ≈ 11 gpm
1439	92.90	512	1.6	21.9	7.82	0.75	-146.1	0.06	1.02		Q ≈ 11 gpm
1453	92.92	669	2.1	21.9	7.82	0.75	-142.2	0.06	1.89		Q ≈ 11 gpm
1505	92.93	801	2.5	21.9	7.80	0.75	-136.4	0.22	2.52		Q ≈ 9 gpm
1520	92.93	961	3.0	21.9	7.80	0.75	-133.3	0.07	5.46		Q ≈ 10 gpm
1521	90.91	969	3.02								end purge

SAMPLE COLLECTION SAMPLE TIME 1520

ANALYSIS	QUANTITY	TYPE
8260B VOCs	<u>9</u>	40 ml VOA
8270 SIM 1,4 dioxane	<u>0</u>	1 L Amber
8270 MOD 1,4 dioxane	<u>3</u>	1 L Amber
DUPLICATES / SPLITS / BLANKS? <u>Y</u> N		

If yes, complete appropriate forms.

AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

WP = MW-3600 - 1521

CP = MW-36 @ 1520

GROUNDWATER SAMPLING INFORMATION

DATE: 2/4/15

TASK: 532.30

WELL ID: MW-37

Time <u>1518</u> Static DTW (ft below reference point) <u>159.10</u>	<u>Screen</u> Casing Volume (CV) (gallons) <u>180</u> <u>SV</u> 3 CV (gallons) <u>540</u>	Weather Conditions Time <u>1520</u> Temp. <u>70</u>	Initials: <u>TJE/ASF</u>
Casing Total Depth (ft below reference point) <u>820</u>	Purging Device <u>Ded pump</u> Sampling Device <u>ND p.m.s.t.</u>	Skies <u>clear</u>	Begin Purge <u>1521</u> End Purge <u>1604</u>
Pump to screen Water Column (feet) <u>300</u>	Pump: Depth (ft brp) <u>520</u> Type <u>Grundfos</u> Voltage <u>240</u> HP	Wind (mph) <u>0</u> From <u>0</u>	Gallons Purged <u>562</u> CVs Purged <u>3.1</u>
Casing Capacity (Diameter <u>4</u> ") (gallons per foot) <u>0.60</u>	Monitor Well Recharge Rate: Slow _____ Fast <u>X</u>		DTW (ft brp) <u>159.10</u> Time <u>1521</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
<u>1521</u>	<u>159.10</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>begin</u>	<u>purge</u>					
<u>1524</u>	<u>162.27</u>	<u>30</u>	<u>0.10</u>	<u>21.5</u>	<u>7.96</u>	<u>0.468</u>	<u>-150.3</u>	<u>0.12</u>	<u>2.73</u>	<u>NA</u>	<u>Q ≈ 10 gpm</u>
<u>1531</u>	<u>162.42</u>	<u>136</u>	<u>0.75</u>	<u>22.7</u>	<u>7.96</u>	<u>0.463</u>	<u>-236.2</u>	<u>0.06</u>	<u>1.28</u>		<u>Q ≈ 15 gpm</u>
<u>1537</u>	<u>162.43</u>	<u>207</u>	<u>1.15</u>	<u>22.9</u>	<u>7.88</u>	<u>0.74</u>	<u>-184.0</u>	<u>0.26</u>	<u>0</u>		<u>Q ≈ 12 gpm</u>
<u>1545</u>	<u>162.47</u>	<u>320</u>	<u>1.78</u>	<u>22.9</u>	<u>7.89</u>	<u>0.71</u>	<u>-132.1</u>	<u>0.29</u>	<u>0.29</u>		<u>Q ≈ 14 gpm</u>
<u>1553</u>	<u>162.47</u>	<u>427</u>	<u>2.37</u>	<u>22.9</u>	<u>7.89</u>	<u>0.71</u>	<u>-112.6</u>	<u>0.37</u>	<u>8.88</u>		<u>Q ≈ 14 gpm</u>
<u>1602</u>	<u>162.49</u>	<u>540</u>	<u>3</u>	<u>22.9</u>	<u>7.88</u>	<u>0.71</u>	<u>-103.8</u>	<u>0.29</u>	<u>9.09</u>		<u>Q = 14 gpm</u>
<u>1604</u>	<u>159.52</u>	<u>562</u>	<u>3.1</u>	<u>1</u>	<u>pump</u>	<u>off</u>					

SAMPLE COLLECTION SAMPLE TIME <u>1603</u>			AIR MONITORING PID/FID ppm: VAULT NA _____ BKGD NA _____ BREATHING ZONE NA _____ DISCHARGE WATER NA _____		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)		
8260B VOCs	<u>3</u>	40 ml VOA			
8270 SIM 1,4 dioxane	<u>1</u>	1 L Amber			
8270 MOD 1,4 dioxane		1 L Amber			
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>(N)</u> If yes, complete appropriate forms.					

DATE: 2/4/15

GROUNDWATER SAMPLING INFORMATION

TASK: 532.30

WELL ID: MW-38

Time <u>1434</u> Static DTW (ft below reference point) <u>161.55</u>	Casing Volume (CV) (gallons) <u>284</u> 3 CV (gallons) <u>762</u>	Weather Conditions	Initials: <u>TJE / ASF</u>
Casing Total Depth (ft below reference point) <u>200</u>	Purging Device <u>Ded pump</u> Sampling Device <u>MD pipe</u>	Time <u>1430</u> Temp. <u>70</u>	Begin Purge <u>1440</u> End Purge <u>1508</u>
Water Column (feet) <u>38.45</u>	Pump: Depth (ft brp) <u>190</u> Type <u>gndfs</u> Voltage <u>940</u> HP	Skies <u>clear</u>	Gallons Purged <u>94</u> CVs Purged <u>3.7</u>
Casing Capacity (Diameter <u>4"</u>) (gallons per foot) <u>0.66</u>	Monitor Well Recharge Rate: Slow _____ Fast <u>X</u>	Wind (mph) <u>2</u> From <u>east</u>	DTW (ft brp) <u>161.55</u> Time <u>1434</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
1440	161.55	0	0	24.0	7.30	1.38	-809	4.23		NA	Q ≈ 2 gpm
1443	161.95	7.5	0.30	24.0	7.30	1.38	-809	4.23	54.5		Q ≈ 2.5 gpm
1448	161.95	25.3	1.0	22.1	7.25	1.52	40.5	3.10	52.3		Q ≈ 3.5 gpm
1452	161.94	39.0	1.54	22.1	7.25	1.53	57.0	2.98	41.1		Q ≈ 3.5 gpm
1458	161.94	58.0	2.28	22.1	7.25	1.53	68.5	2.88	41.1	33.1	Q ≈ 3.5 gpm
1502	161.97	74.0	2.95	22.1	7.24	2.54	72.9	2.84	2.82		Q ≈ 3.5 gpm
1506	162.00	85.1	3.35	22.1	7.24	1.53	77.8	2.84	0		Q ≈ 3.5 gpm
1508	161.81	93.9	3.70	—	end	purge	—	—	—	—	

SAMPLE COLLECTION SAMPLE TIME <u>1508</u>			AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)		
8260B VOCs	<u>3</u>	40 ml VOA			
8270 SIM 1,4 dioxane	<u>1</u>	1 L Amber			
8270 MOD 1,4 dioxane		1 L Amber			
DUPLICATES / SPLITS / BLANKS? <u>Y</u> N					

GROUNDWATER SAMPLING INFORMATION

DATE: 2/4/15

TASK: 532-30

WELL ID: MW-39

Time 12:10 Static DTW (ft below reference point)	87.40	Screen Volume (SV) 271	SV 3.0V (gallons) 814	Weather Conditions	Initials: ASF/TJE/MJL
Casing Total Depth (ft below reference point)	1020	Purging Device ded. pump	Sampling Device No ded pip stand	Time 12:10 Temp. 70°F	Begin Purge 12:24 End Purge 13:22
Water Column (feet)	452	Pump: Depth (ft brp) 500	Type grand pump Voltage 240 HP	Skies SUNNY	Gallons Purged 877 CVs Purged 3.2
Casing Capacity (Diameter 4" (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow	Fast X	Wind (mph) 0-5 From W	DTW (ft brp) 87.52 Time 13:22

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
12:24	87.40	0	0	BEGIN PUMPING						1	
12:25	97.27	14	0.05	21.1	8.70	0.450	-199.5	2.89	0	NA	Q ≈ 14 gpm
12:35	97.71	181	0.67	21.7	9.03	0.482	-200.3	0.30	0		
12:45	97.82	362	1.34	22.4	9.45	0.427	-205.1	0.12	0		
12:55	98.15	480	1.77	22.5	9.11	0.441	-175.3	0.50	0		
13:05	98.23	622	2.29	22.5	8.99	0.440	-193.9	0.23	0		
13:15	98.24	774	2.86	22.5	8.90	0.450	-153.0	0.78	0		
13:18	98.26	834	3.08	22.5	8.91	0.451	-154.0	0.73	0		
13:22	98.52	877	3.24	END PUMPING						1	

SAMPLE COLLECTION SAMPLE TIME 13:20			AIR MONITORING PID/PID ppm: VAULT NA			BKGD NA			BREATHING ZONE NA			DISCHARGE WATER NA		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)											
8260B VOCs	3	40 ml VOA												
8270 SIM 1,4 dioxane	1	1 L Amber												
8270 MOD 1,4 dioxane		1 L Amber												
DUPLICATES / SPLITS / BLANKS?														
If yes, complete appropriate forms.														

GROUNDWATER SAMPLING INFORMATION

DATE: 2/3/15

TASK: AA 532.30

WELL ID: MCW-40

Time 950	Static DTW (ft below reference point) 122.41	Casing Volume (CV) (gallons) 75	50 (gallons) 225	Weather Conditions	Initials: DM/MEH
Casing Total Depth (ft below reference point) 970	Purging Device DED Pump	Sampling Device LIVE STAND	Time 1011	Temp. 80	Begin Purge 1010
Water Column (feet) 50	Pump: Depth (ft brp) 920	Type GROUNDWATER Voltage 240 HP	Skies Clear		End Purge 1043
Casing Capacity (Diameter 6") (gallons per foot) 1.5	Monitor Well Recharge Rate: Slow	Fast X	Wind (mph) 0-5	From E	Gallons Purged 204
					CVs Purged 35
					DTW (ft brp) NM
					Time

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
Temp. (C.)	pH	EC (uS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)						
1005											8 GPM
1010											
1015	123.40	40	1.53	19.58	7.78	694	120	1.97	1.8	N/A	8 GPM
1020	123.42	80	1.06	19.81	7.88	654	-143	0.75	2.1	N/A	
1025	123.42	120	1.4	20.06	7.82	676	-154	0.60	1.37	N/A	
1030	123.44	160	2.1	20.14	7.73	701	-158	0.62	1.24	N/A	
1035	123.44	200	2.7	20.18	7.70	700	-157	0.60	1.89	N/A	
1038	123.45	240	3.2	20.18	7.69	696	-153	0.59	1.1	N/A	
1040											Sample
1043											End Purge

SAMPLE COLLECTION SAMPLE TIME 1040	AIR MONITORING PID/PID ppm: VAULT NA	BKGD NA	BREATHING ZONE NA	DISCHARGE WATER NA
ANALYSIS QUANTITY TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)			
8260B VOCs 3 40 ml VOA	STINKY WATER			
8270 SIM 1.4 dioxane 1 1 L Amber				
8270 MOD 1.4 dioxane 1 1 L Amber				
DUPLICATES / SPLITS / BLANKS? Y				

GROUNDWATER SAMPLING INFORMATION

DATE: 2/5/14

TASK: 532-30

WELL ID: MW-41

Time <u>807</u> Static DTW (ft below reference point) <u>161.31</u>	Screen (SV) <u>39</u> SV (gallons) <u>117</u>	Weather Conditions	Initials: <u>TJE ASB</u>
Casing Total Depth (ft below reference point) <u>425</u>	Purging Device <u>deck pump</u> Sampling Device <u>MD pipe star</u>	Time <u>800</u> Temp. <u>65</u>	Begin Purge <u>813</u> End Purge <u>842</u>
Water Column (feet) <u>65</u>	Pump: Depth (ft brp) <u>360</u> Type <u>garden</u> Voltage <u>240</u> HP	Skies <u>clear</u>	Gallons Purged <u>232</u> CVs Purged <u>5.9</u>
Casing Capacity (Diameter <u>4"</u>) (gallons per foot) <u>0.60</u>	Monitor Well Recharge Rate: Slow _____ Fast <u>X</u>	Wind (mph) <u>0</u> From <u>0</u>	DTW (ft brp) <u>161.32</u> Time <u>813</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
813	161.31	0	0		beg m	purge				NA	Q ≈ 8 gpm
814	169.65	8	0.2	21.5	6.90	2.17	131.4	2.89	0		Q ≈ 10 gpm
817	170.04	38	1	21.9	7.00	2.05	22.5	1.64	331		Q ≈ 7 gpm
821	170.14	65	1.67	21.9	6.99	2.07	42.8	2.50	218		Q ≈ 7 gpm
825	170.14	92	2.35	22.0	6.99	2.07	49.8	2.57	124		Q ≈ 7 gpm
828	170.16	117	3	22.0	6.99	2.07	48.7	2.55	43.7		Q ≈ 8 gpm
832	170.28	148	3.59	22.0	6.99	2.07	49.2	2.51	22.4		Q ≈ 7 gpm
836	170.28	180	4.62	22.0	6.98	2.07	50.8	2.68	13.8		Q ≈ 7 gpm
839	170.29	204		22.0	6.98	2.07	51.9	2.73	9.09		Q ≈ 7 gpm
842	162.97	232	5.94		end	purge					

SAMPLE COLLECTION SAMPLE TIME <u>840</u>		
ANALYSIS	QUANTITY	TYPE
8260B VOCs	<u>3</u>	40 ml VOA
8270 SIM 1,4 dioxane	<u>1</u>	1 L Amber
8270 MOD 1,4 dioxane		1 L Amber
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>(N)</u> If yes, complete appropriate forms.		

AIR MONITORING PID/EID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA

NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)

GROUNDWATER SAMPLING INFORMATION

DATE: 2/4/15

TASK: 532.30

WELL ID: P-07

Time <u>1633</u> Static DTW (ft below reference point) <u>112.85</u>	Casing Volume (CV) (gallons) <u>.6</u> 3 CV (gallons) <u>1.8</u>	Weather Conditions	Initials: <u>DM/MEH</u>
Casing Total Depth (ft below reference point) <u>116.38</u>	Purging Device <u>QUICKY BAKER</u> Sampling Device <u>DED. BAKER</u>	Time <u>NM</u> Temp. <u>—</u>	Begin Purge <u>1637</u> End Purge <u>1645</u>
Water Column (feet) <u>3.53</u>	Pump: Depth (ft brp) <u>NA</u> Type <u>NA</u> Voltage <u>NA</u> HP <u>NA</u>	Skies <u>—</u>	Gallons Purged <u>8</u> CVs Purged <u>1</u>
Casing Capacity (Diameter <u>2"</u>) (gallons per foot) <u>.17</u>	Monitor Well Recharge Rate: Slow <u>X</u> Fast <u>—</u>	Wind (mph) <u>—</u> From <u>—</u>	DTW (ft brp) <u>NM</u> Time <u>—</u>

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	FIELD PARAMETERS						Pump Frequency Hz	COMMENTS
				Temp. (°)	pH	EC (S/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
<u>1637</u>	<u>NM</u>	<u>.2</u>	<u>0.3</u>	<u>20.23</u>	<u>7.26</u>	<u>2190</u>	<u>93.7</u>	<u>5.35</u>	<u>150</u>	<u>N/A</u>	
<u>1640</u>	<u>NM</u>	<u>.4</u>	<u>0.6</u>	<u>19.60</u>	<u>7.26</u>	<u>2202</u>	<u>90.6</u>	<u>5.56</u>	<u>130</u>		
<u>1644</u>	<u>NM</u>	<u>.7</u>	<u>1.1</u>	<u>20.04</u>	<u>7.22</u>	<u>2258</u>	<u>83.7</u>	<u>5.01</u>	<u>150</u>		
<u>1645</u>	<u>NM</u>										
<u>850</u>	<u>112.90</u>	<u>—</u>	<u>—</u>	<u>19.06</u>	<u>7.23</u>	<u>2102</u>	<u>93.6</u>	<u>5.33</u>	<u>17.0</u>		<u>2/5/15</u> <u>SAMPLE PARAMETERS</u>

SAMPLE COLLECTION SAMPLE TIME <u>850</u>			AIR MONITORING PID/FID ppm: <u>VAULT NA</u> <u>BKGD NA</u> <u>BREATHING ZONE NA</u> <u>DISCHARGE WATER NA</u>		
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)		
8260B VOCs	<u>3</u>	40 ml VOA			
8270 SIM 1,4 dioxane		1 L Amber			
8270 MOD 1,4 dioxane	<u>1</u>	1 L Amber			
DUPLICATES / SPLITS / BLANKS? <u>Y</u> <u>(N)</u> If yes, complete appropriate forms.					

GROUNDWATER SAMPLING INFORMATION

DATE: 2/4/2015

TASK: 532.30

WELL ID: P-09

Time 815 Static DTW (ft below reference point)	120.70	Casing Volume (CV) (gallons) 6.2	3 CV (gallons) 18.6	Weather Conditions	Initials: DM/MEH
Casing Total Depth (ft below reference point)	130	Purging Device Composites	Sampling Device 200 TBS ml	Time 820 Temp. 80	Begin Purge 860 End Purge 929
Water Column (feet)	9.3	Pump: Depth (ft brp) 123	Type API	Skies clear	Gallons Purged 21 CVs Purged 34
Casing Capacity (Diameter 4") (gallons per foot)	6.6	Monitor Well Recharge Rate: Slow	Fast X	Wind (mph) 0-3	From E
				DTW (ft brp) NM	Time

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	...FIELD PARAMETERS...						Pump Frequency Hz	COMMENTS
				Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)		
850	nm	START								259	.6 GPM
852	nm	1.2	START								
856	nm	continue									
859	nm	2.4	0.4	18.65	7.02	3169	93.3	5.26	3.3	259	.6 GPM
901	121.94	4.2	.6	19.96	6.98	3226	72.4	5.07	4.6		
907	122.59	7.8	1.3	21.88	6.98	3225	92.1	4.56	1.2		.6 GPM
913	123.00	11.4	1.8	22.07	6.97	3333	90.0	4.30	3.6		
919	123.38	15.0	2.4	22.30	6.97	3348	90.4	3.95	1.2		.6 GPM
925	123	19.2	3.1	22.75	6.96	3352	90.8	3.86	0.6		
927	SAMPLE										
929	STOP										

SAMPLE COLLECTION SAMPLE TIME 927			AIR MONITORING PID/FID ppm: VAULT NA BKGD NA BREATHING ZONE NA DISCHARGE WATER NA			
ANALYSIS	QUANTITY	TYPE	NOTES (Color, odor, sand and silt content, factors possibly affecting samples, condition of vault, wellhead, sampling apparatus, etc.)			
8250B VOCs	3	40 ml VOA				
8270 SIM 1,4 dioxane	1	1 L Amber				
8270 MOD 1,4 dioxane		1 L Amber				
DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms.			RB-02042015 0920			



HARGIS + ASSOCIATES, INC.

APPENDIX C

CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER UNIT B HYDROGRAPHS

APPENDIX C

CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER
UNIT B HYDROGRAPHSTABLE OF CONTENTSFigure

C-1	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, EW-01
C-2	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, EW-02
C-3	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-16
C-4	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-26C
C-5	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-27
C-6	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-28
C-7	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-29
C-8	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-30A
C-9	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-31
C-10	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-32B
C-11	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-33

TABLE OF CONTENTS (continued)Figure

C-12	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-34B
C-13	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-35C
C-14	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-36
C-15	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-37
C-16	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-39
C-17	CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-40



FIGURE C-1: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, EW-01

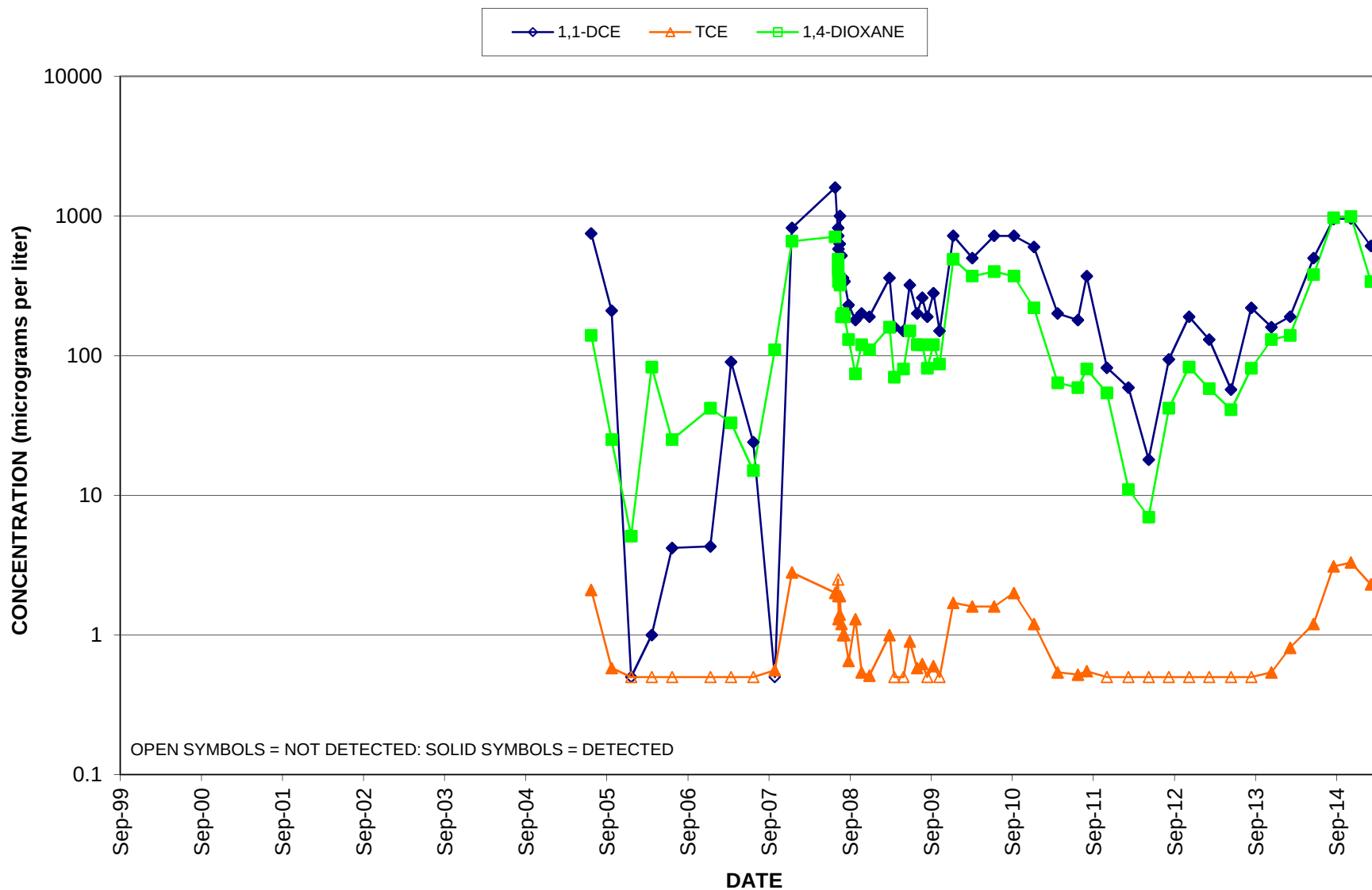




FIGURE C-2: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, EW-02

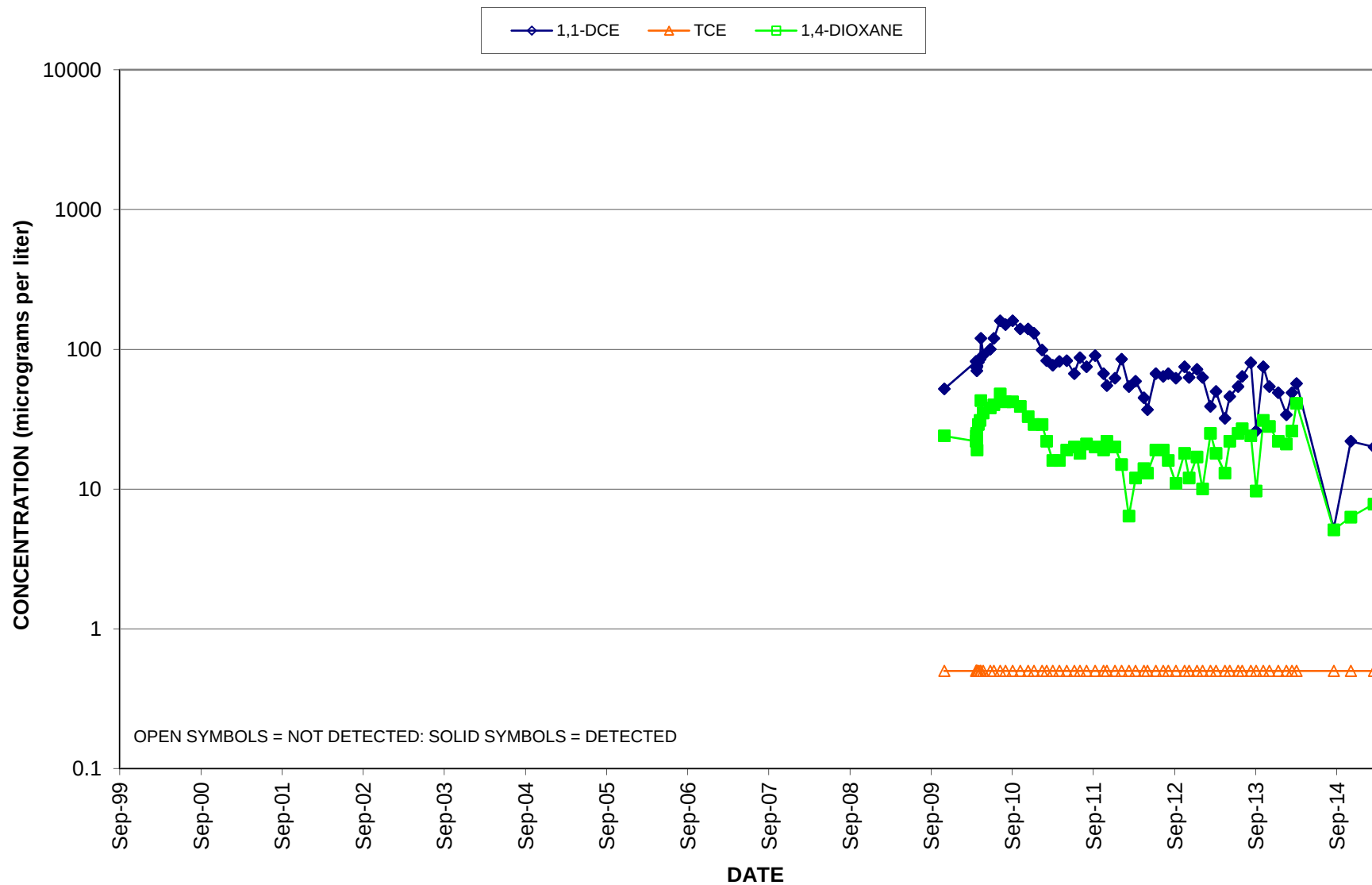




FIGURE C-3: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-16

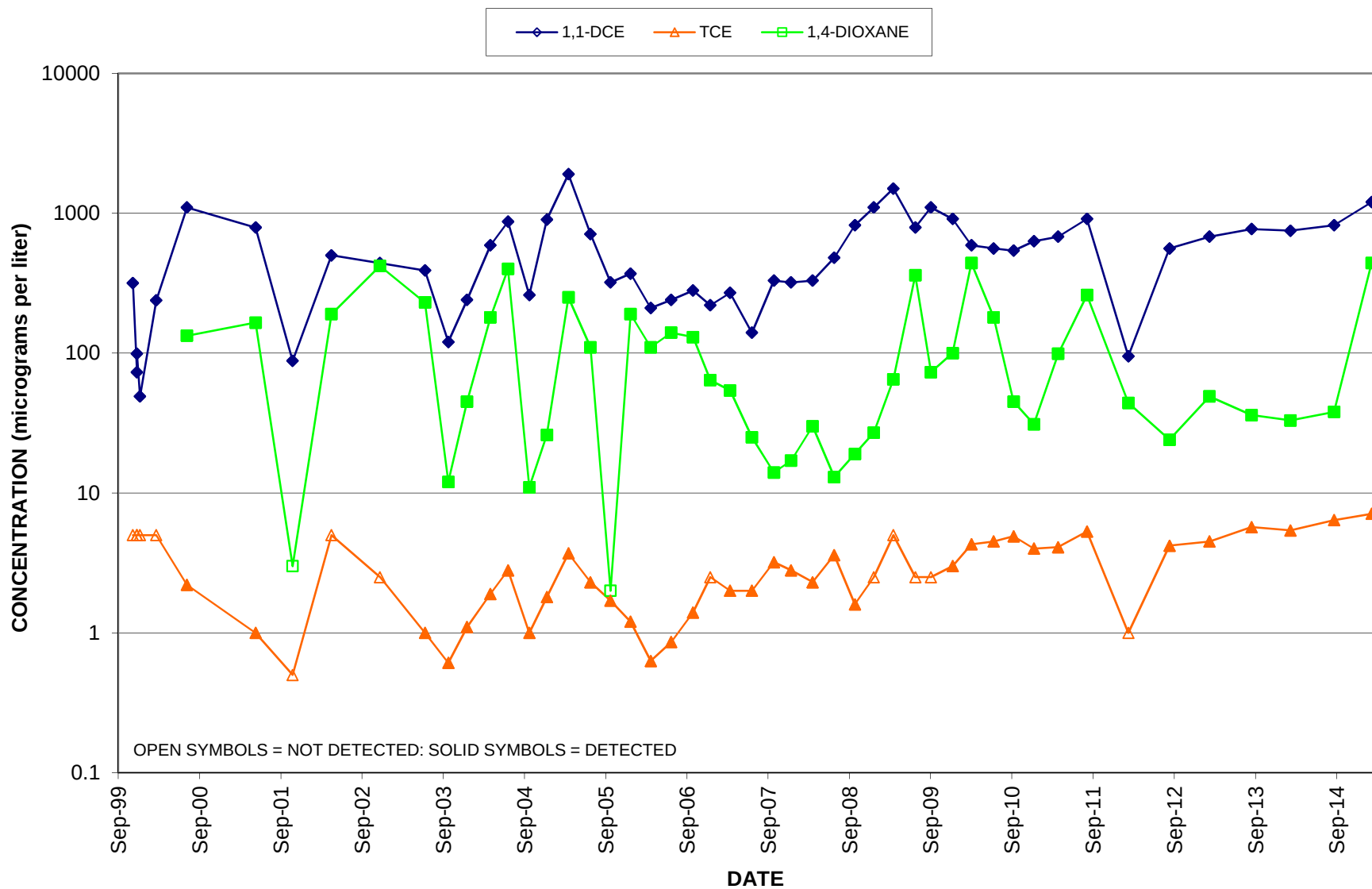




FIGURE C-4: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER,
UNIT B, MW-26C

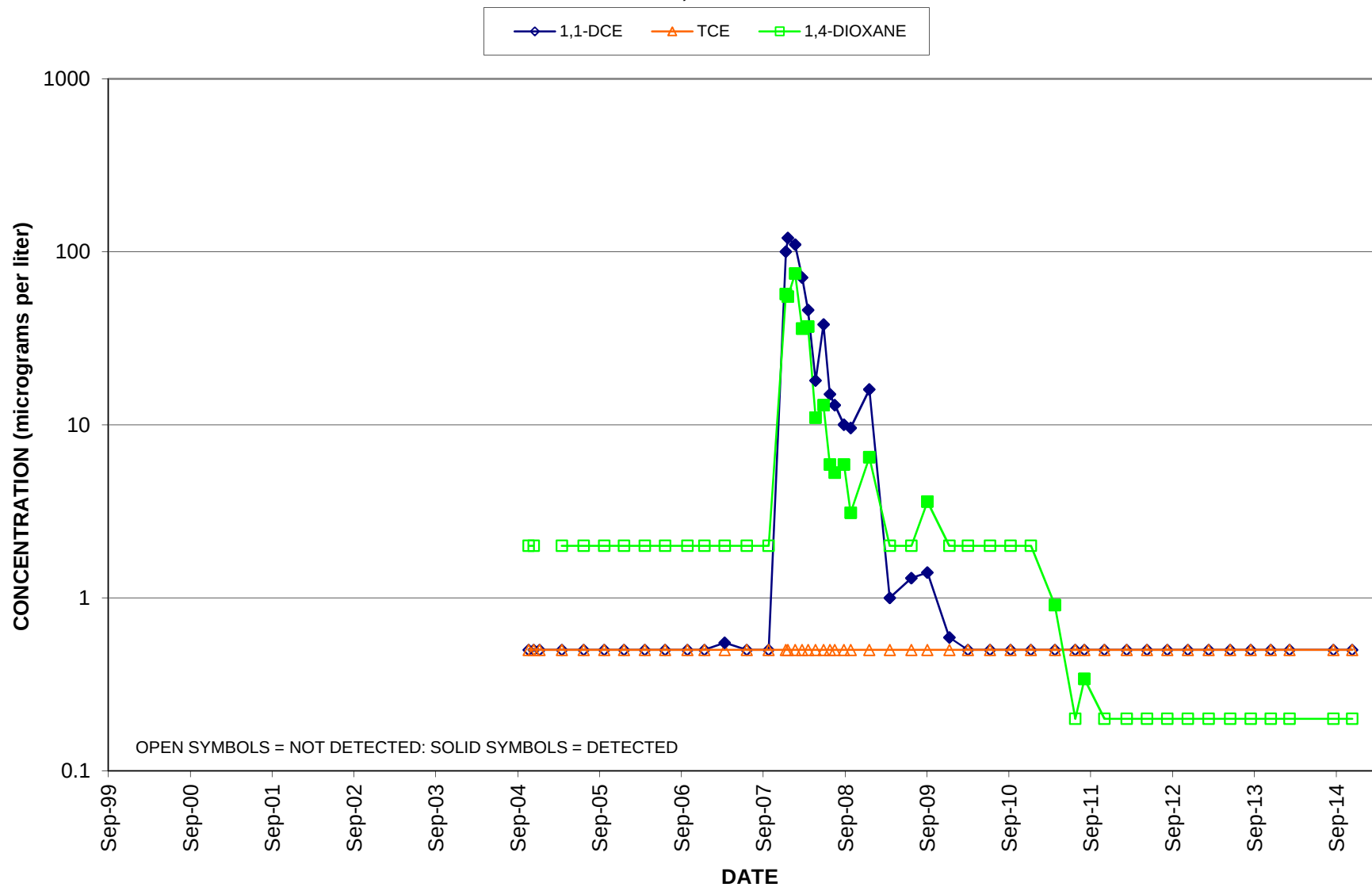




FIGURE C-5: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-27

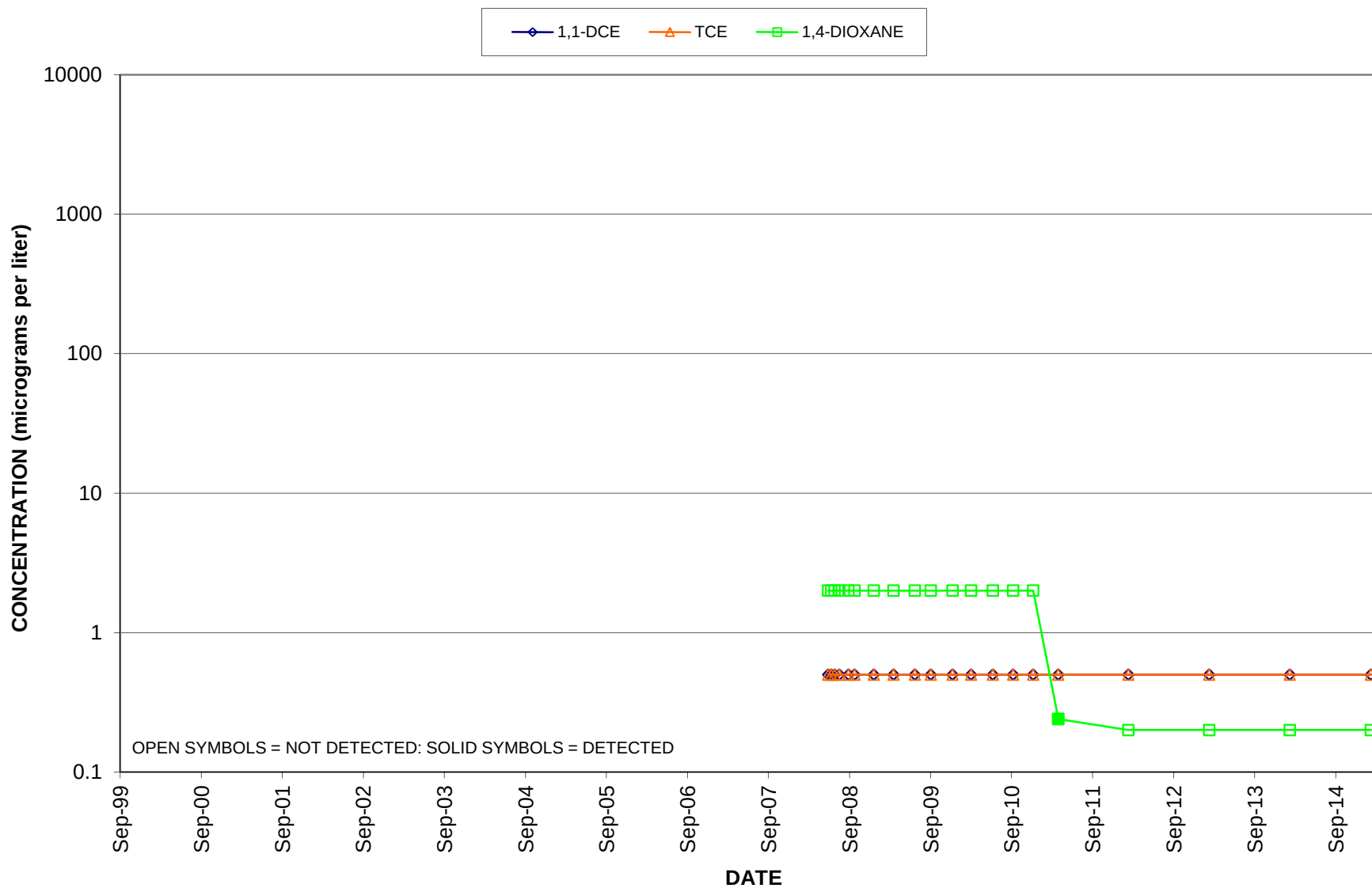




FIGURE C-6: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-28

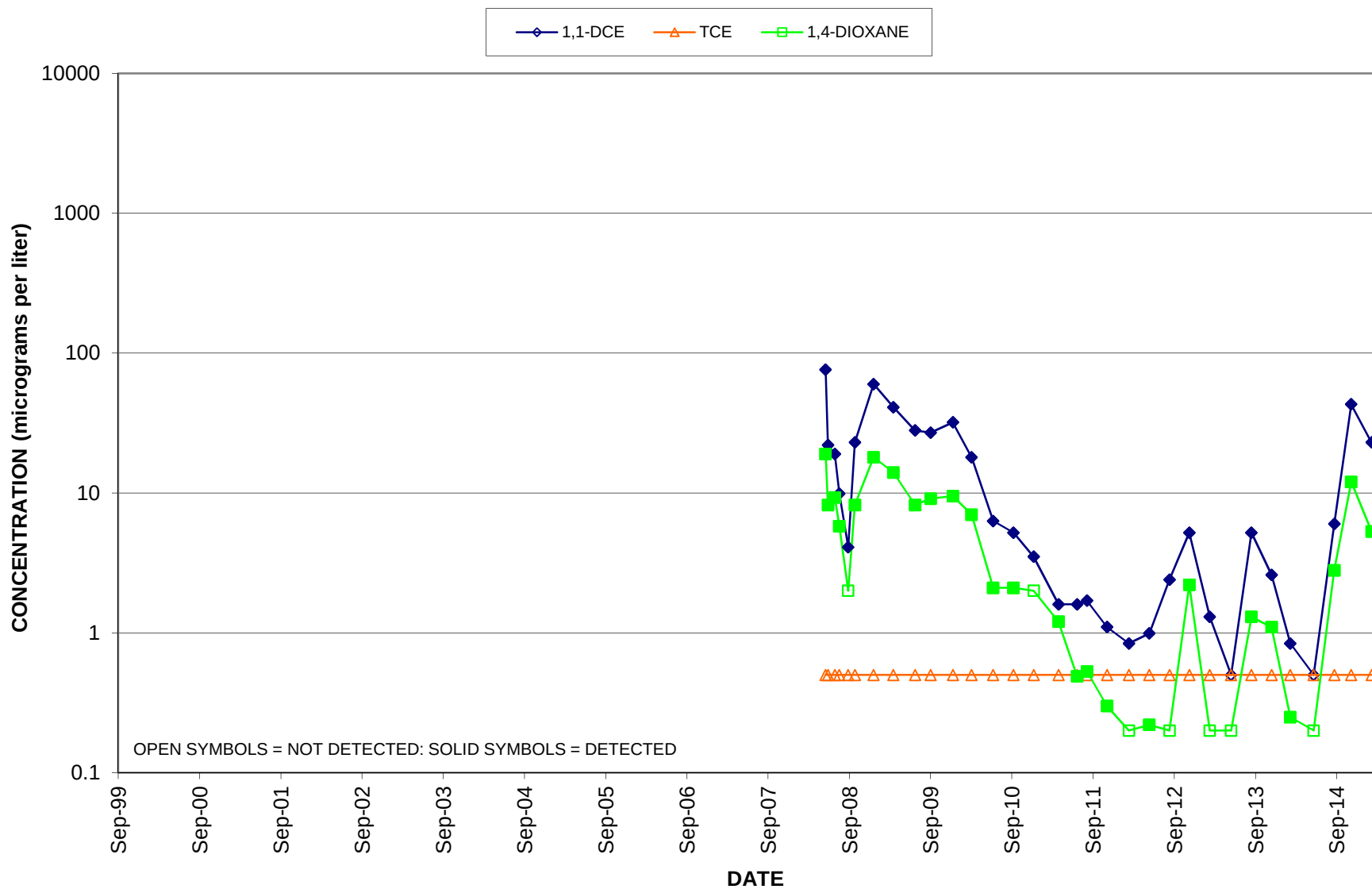




FIGURE C-7: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-29

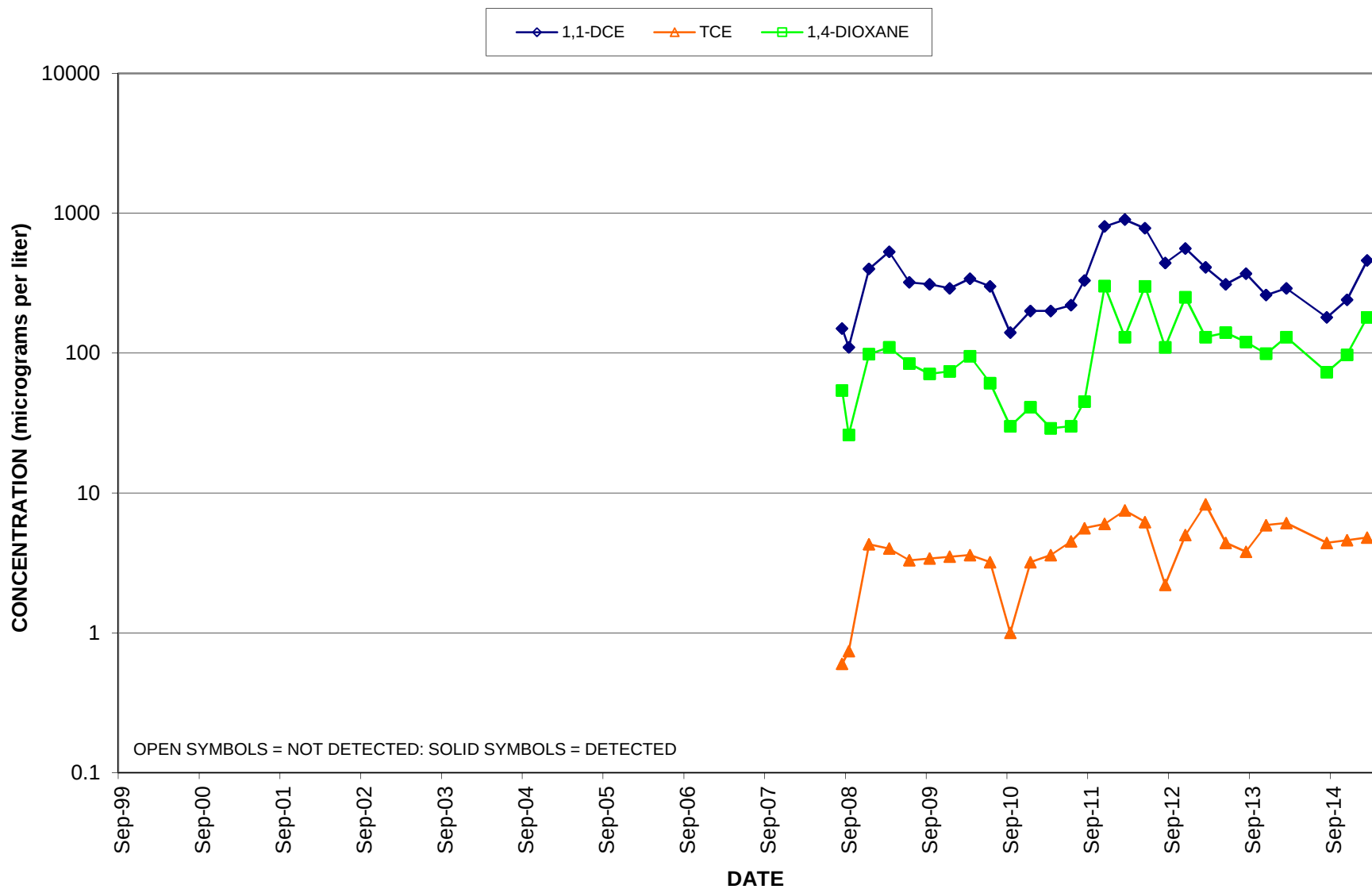




FIGURE C-8: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER,
UNIT B, MW-30A

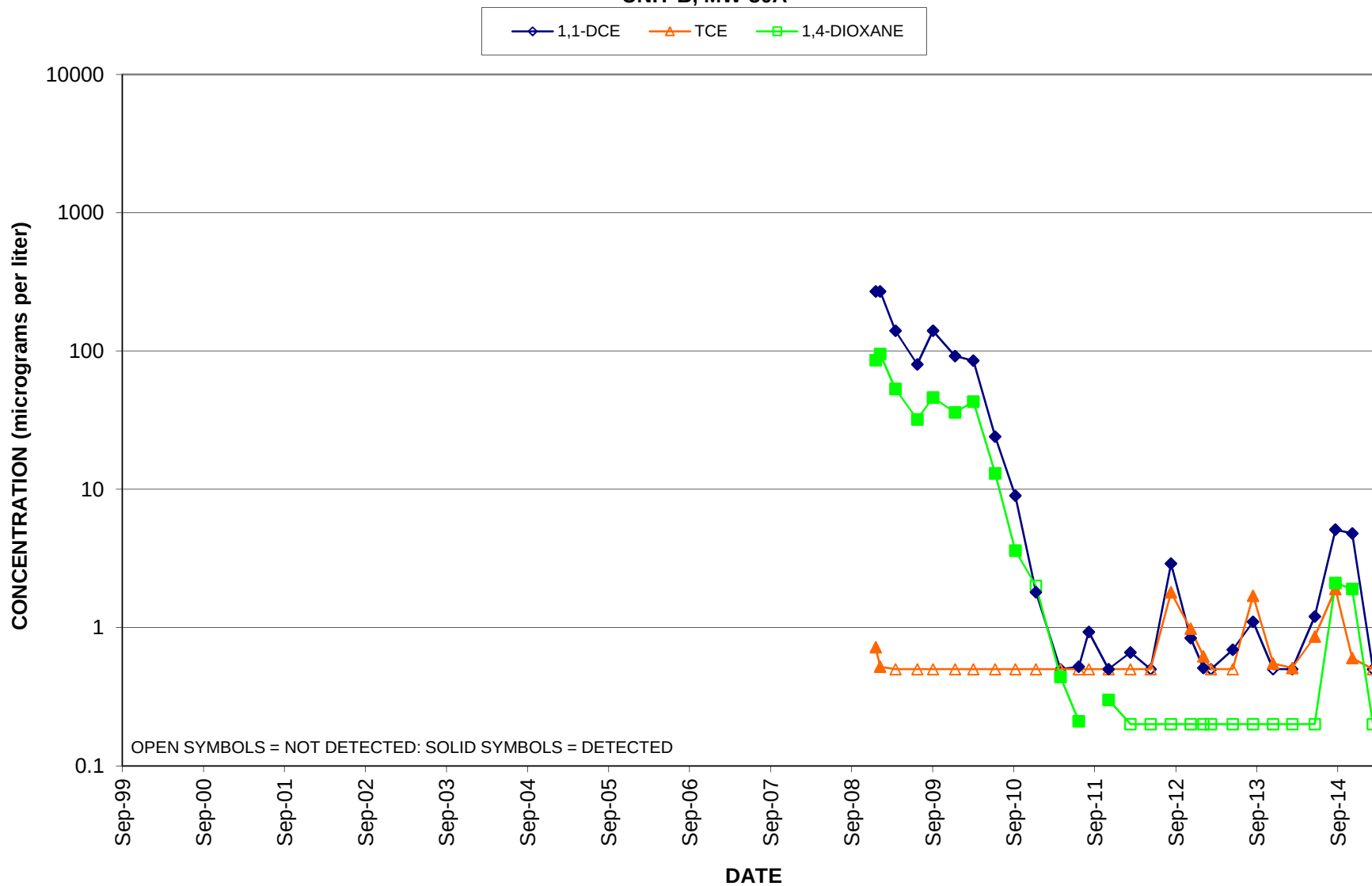


FIGURE C-9: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-31

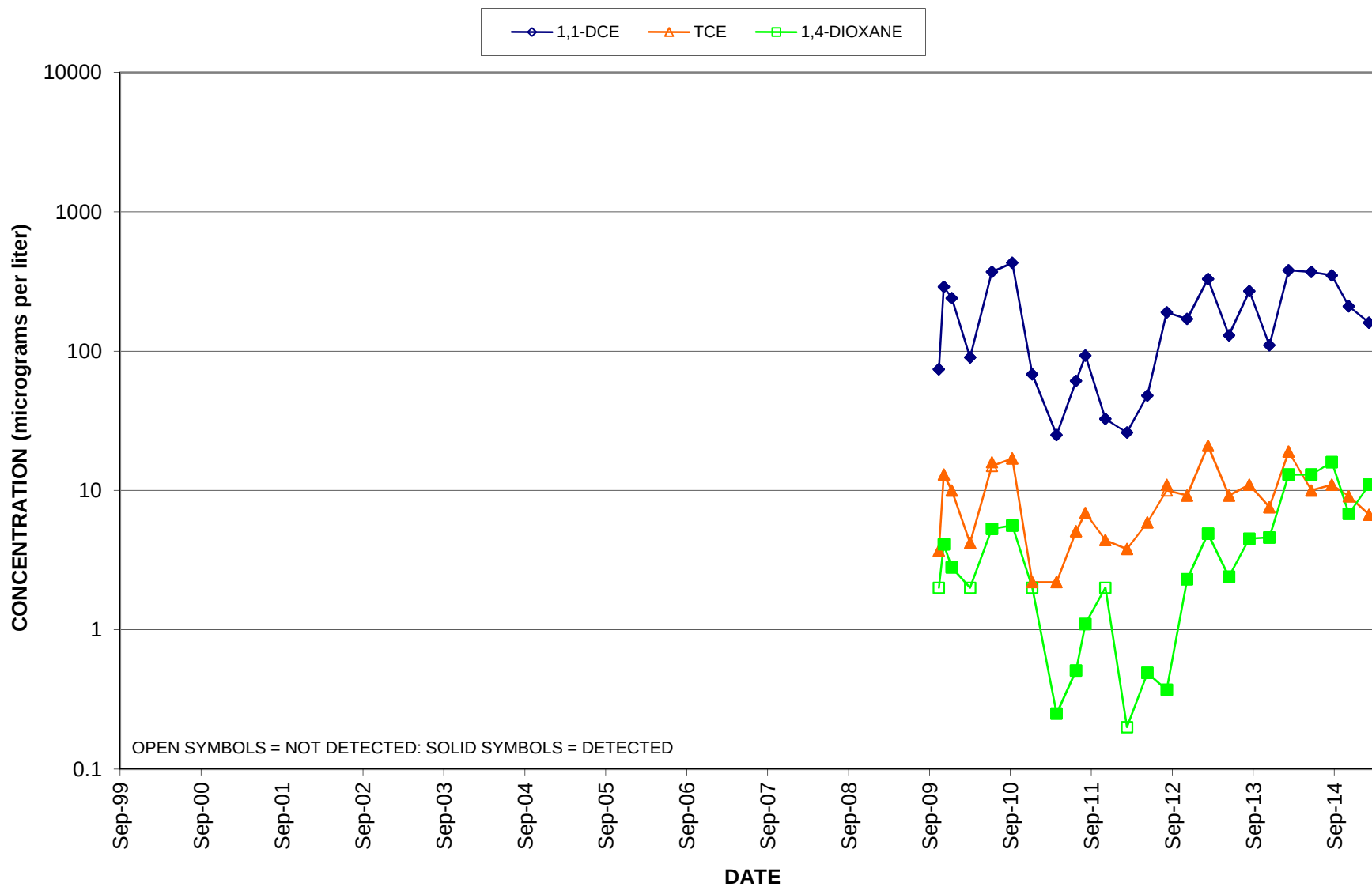




FIGURE C-10: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-32B

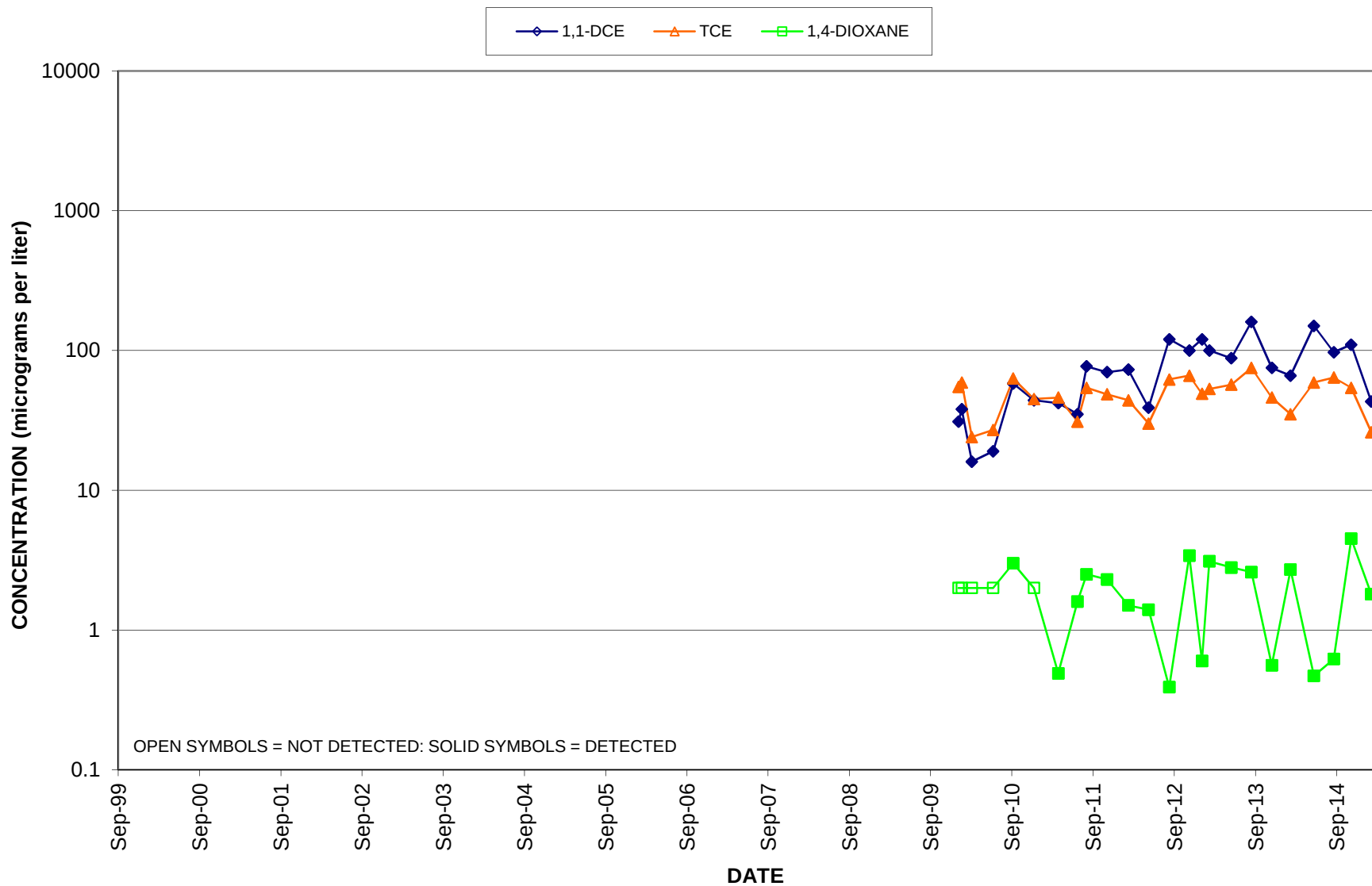




FIGURE C-11: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-33

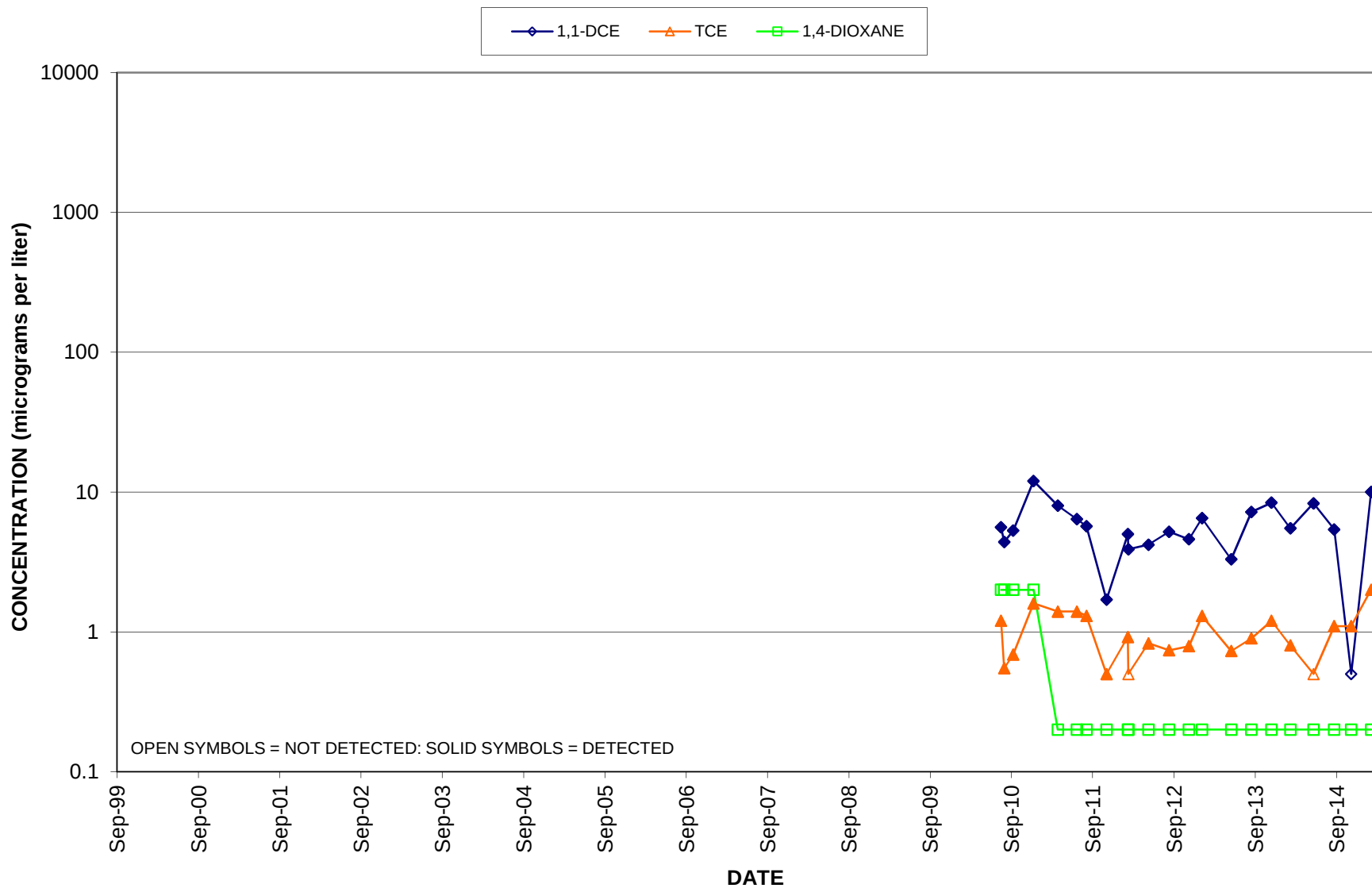




FIGURE C-12: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-34B

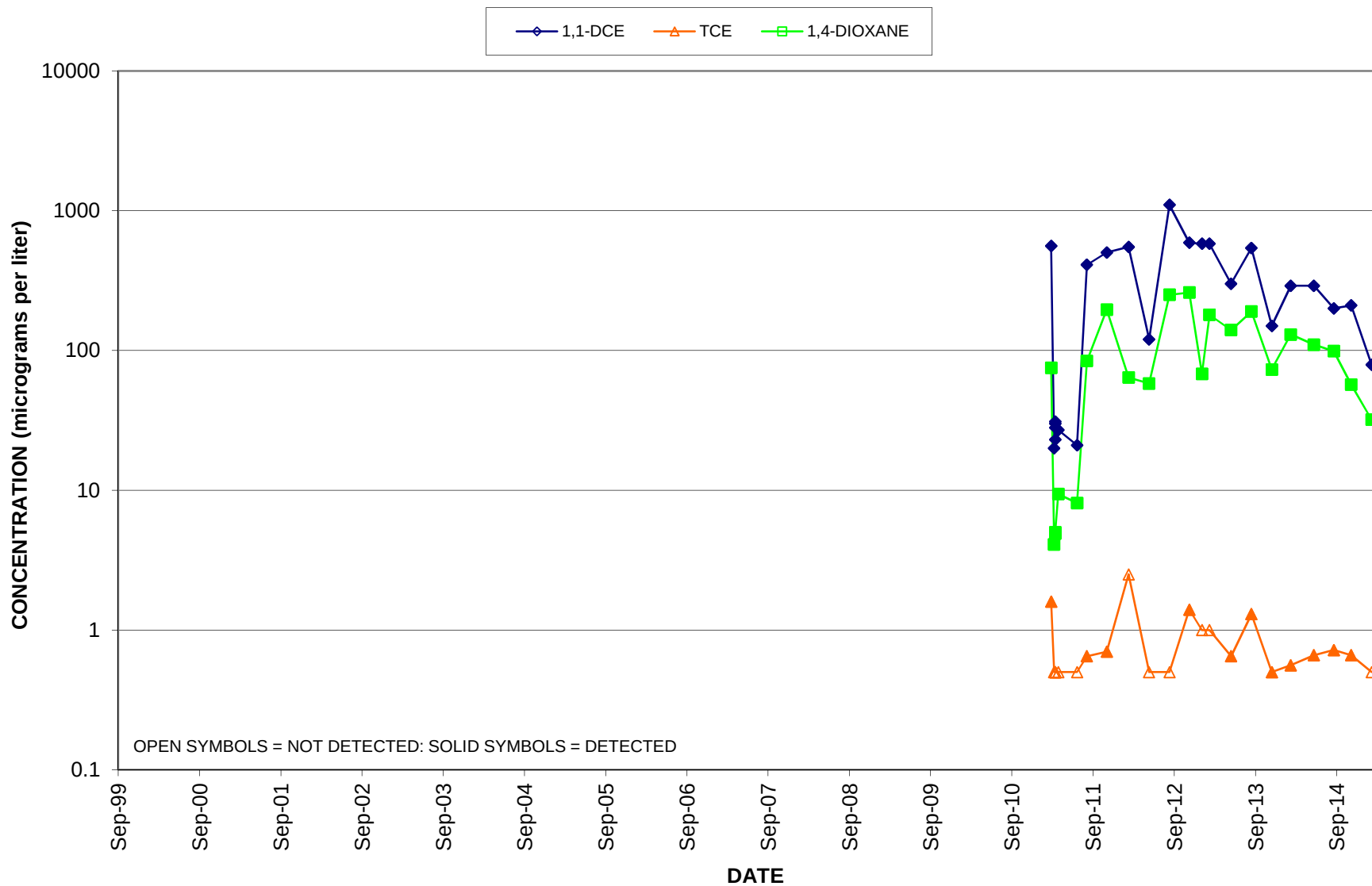




FIGURE C-13: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-35C

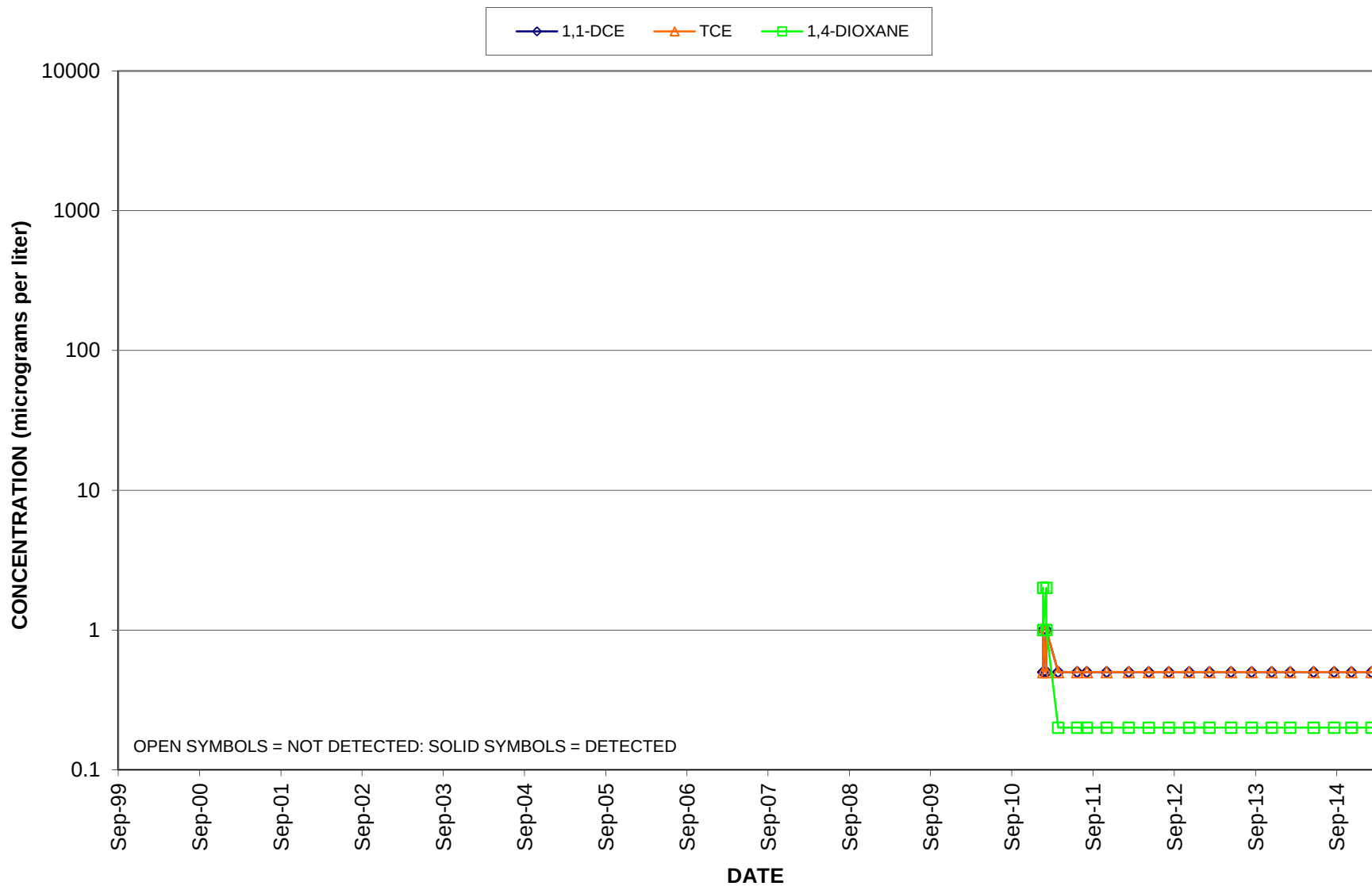




FIGURE C-14: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-36

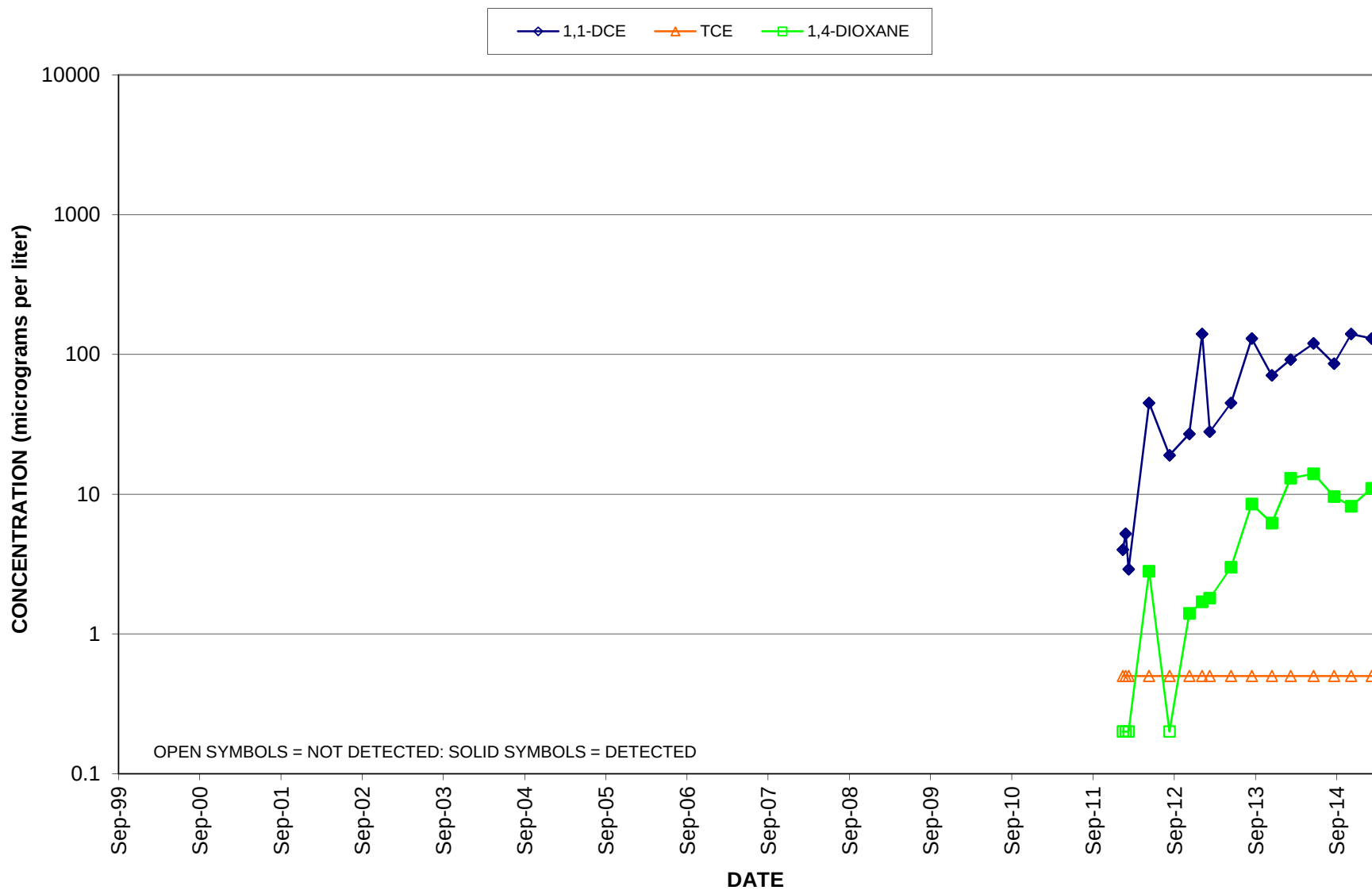




FIGURE C-15: CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-37

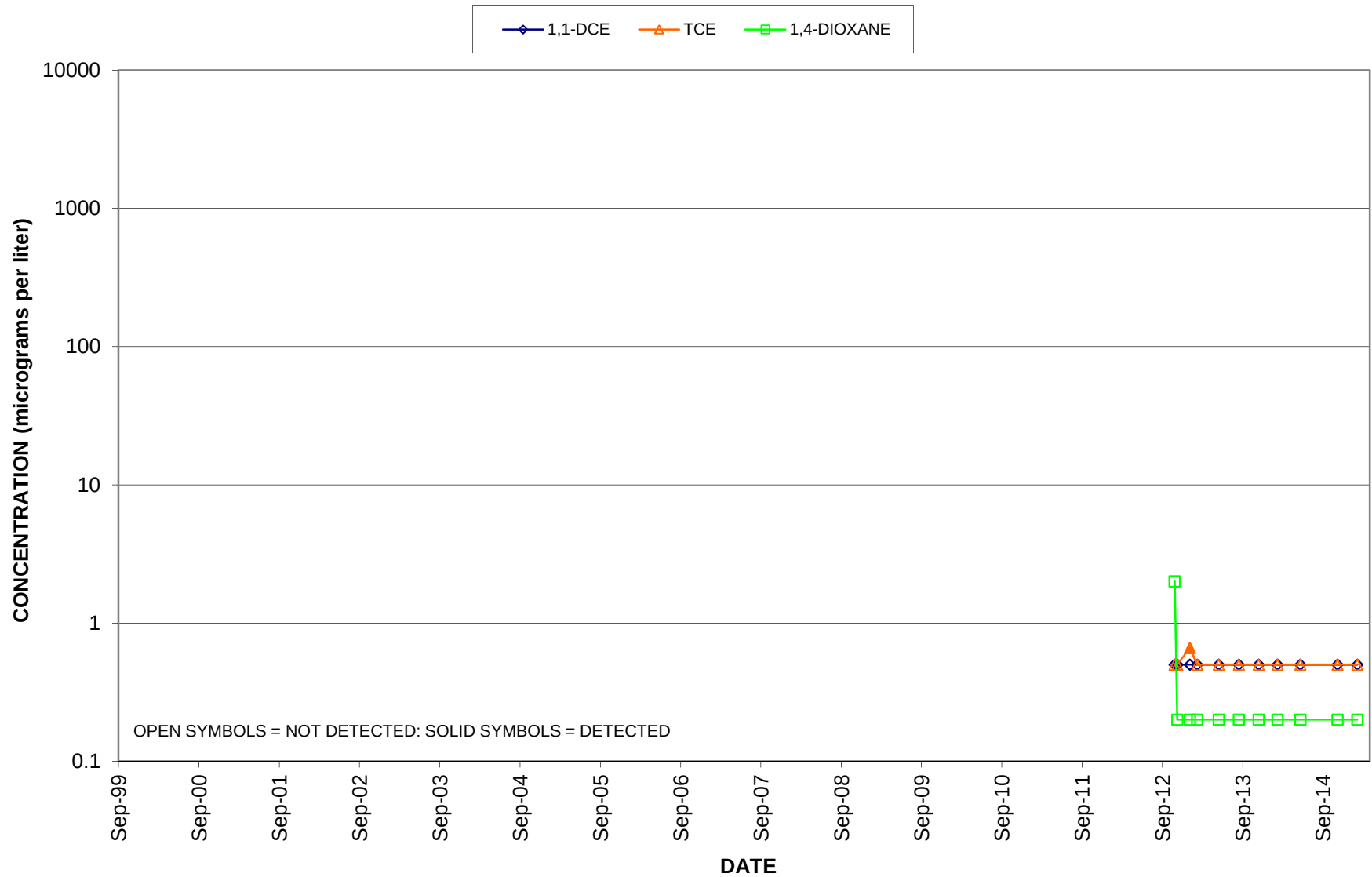


FIGURE C-16
CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-39

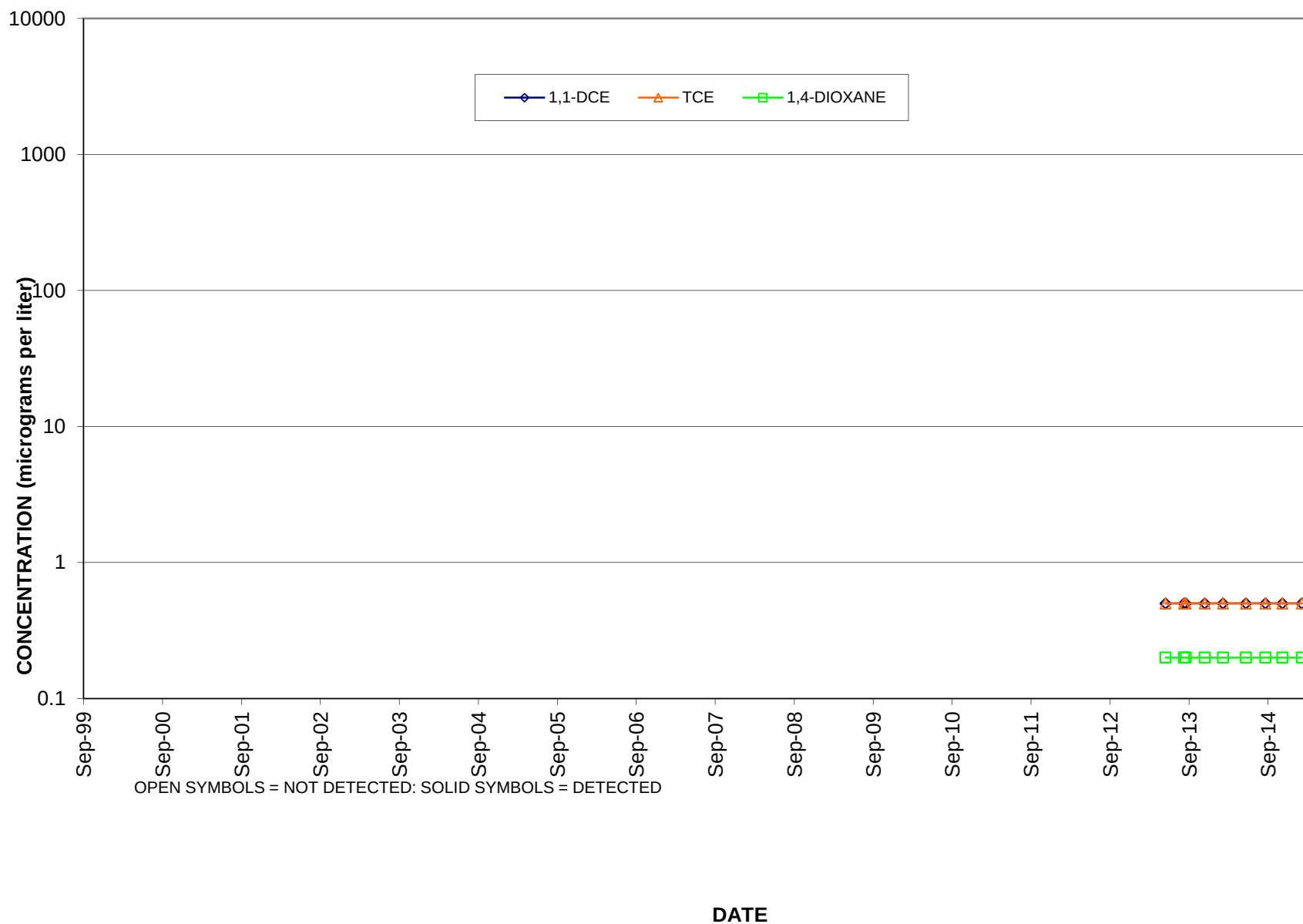




FIGURE C-17

CONCENTRATIONS OF SELECT COMPOUNDS OF CONCERN IN GROUNDWATER, UNIT B, MW-40

