HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

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August 1, 2012

VIA FEDERAL EXPRESS STANDARD

Mr. William F. Jeffers, PE
Hazardous Substances Engineer
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
Southern California Region
9211 Oakdale Avenue
Chatsworth, CA 91311-6520

Re: Data Submittal for Groundwater Monitoring and Groundwater Extraction and Treatment Pilot Testing, Second Quarter 2012, Raytheon Company (Former Hughes Aircraft Company Facility), 1901 West Malvern Avenue, Fullerton, California

Dear Mr. Jeffers:

This letter has been prepared for the submittal of groundwater monitoring and groundwater treatment pilot testing data collected during the second quarter 2012 for the former Raytheon Company site located at 1901 West Malvern Avenue, Fullerton, California (the Site) (Figure 1). Groundwater monitoring activities were completed in general accordance with the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC)-approved Groundwater Monitoring Workplan and Sampling and Analysis Plan (GMWPSAP) and subsequent addenda (DTSC, 2003 and 2011; Hargis + Associates, Inc. [H+A], 2003, 2011a, and 2011b). Groundwater treatment pilot testing continued throughout the second quarter 2012 in general accordance with the DTSC-approved Groundwater Extraction and Treatment Pilot Testing, Corrective Measures Study Workplan Addendum No. 4A (DTSC, 2009; H+A, 2009a and 2009b). The results of the second quarter 2012 quarterly groundwater monitoring and pilot groundwater extraction and treatment system (GETS) operation from April through May 2012 are included in this data submittal.

GROUNDWATER MONITORING

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 in May 2012 at all monitor wells and piezometers in general accordance with the GMWPSAP and Addendum No.1 (Table 1).

Water Level Measurement and Groundwater Sample Collection

Groundwater monitoring included water level measurements in all Site monitor wells, piezometers, and extraction wells (Figures 2 and 3). Water levels were measured on May 7, 2012 (Table 2).

Groundwater samples were collected during the period from May 7 through May 11, 2012 (Appendix A). Analytical results are summarized in Table 3 and provided in Appendix B. Additional groundwater monitoring was conducted as part of routine operation and monitoring of the pilot GETS. A summary of the pilot GETS operation and monitoring is provided separately below.

Original and field duplicate groundwater samples were analyzed by Advanced Technology Laboratories, Inc., Signal Hill, California (ATL) (Appendix B). Laboratory split groundwater samples were analyzed by Exova, formerly Bodycote Testing Group, Santa Fe Springs, California, as well as, Calscience, Garden Grove,

California (Appendix B). Calscience has replaced Exova as the secondary laboratory (split samples), ATL will remain the primary laboratory (original and duplicate samples). Chain-of-custody documentation was enclosed with each sample shipment. Results of groundwater sample volatile organic compound (VOC) and 1,4-dioxane analyses have been summarized (Table 3).

Quality Assurance/Quality Control

Quality assurance/quality control (QA/QC) samples collected in May 2012 consisted of trip blanks, field duplicates, and laboratory split samples. Trip blanks were provided by ATL and Calscience. Field duplicate and/or laboratory split samples were collected for analysis of VOCs and 1,4-dioxane from extraction well MW-21, as well as monitor wells MW-29 and MW-34B in May 2012 (Table 3). The relative percent difference was calculated between the results of each field duplicate and each laboratory split sample with its corresponding original sample. This data quality assessment indicated that all QA/QC results for groundwater samples are within acceptable criteria.

There were no detections of VOCs or 1,4-dioxane in the trip and/or laboratory method blanks analyzed with groundwater samples collected during the May 2012 groundwater monitoring event (Table 3; Appendix B).

The data quality assessment also included review of laboratory QA/QC results. Laboratory QA/QC results are within acceptable criteria.

GROUNDWATER EXTRACTION AND TREATMENT PILOT STUDY

This section summarizes the pilot GETS operation within the two-month period of monitoring conducted during the second quarter of 2012. The pilot GETS consists of three groundwater extraction wells, the treatment system, and the disposal system; however, the current phase of pilot testing is operating using one extraction well, EW-02. The treatment system processes extracted groundwater through an advanced oxidation unit that utilizes ozone and hydrogen peroxide (HiPOx), followed by a granular activated carbon polish prior to disposal to the sanitary sewer. A graphical representation of the system operational time in relation to water level measurements at current extraction wells EW-02 and the previously utilized extraction wells MW-21 and EW-01 have been provided (Figure 4).

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 recently installed extraction well EW 02 into the extraction well network. The system maximum flowrate was also increased from 20 gpm to 50 gpm. 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 is to evaluate the efficacy of treating water collected from extraction well MW-21 using a synthetic media for contaminant removal. 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. 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 second quarter 2012, the pilot GETS was operational approximately 84 percent of the available runtime and approximately 3,541,543 gallons of groundwater were treated and discharged to the sanitary sewer (Table 4). The average monthly discharge flowrate to the sanitary sewer during April through May 2012 was

approximately 40.3 gpm. Since startup of the pilot GETS, approximately 53,002,396 gallons of groundwater have been treated at an average flowrate of 25.7 gpm through the end of May 2012 (Table 4).

Current monthly and quarterly pilot GETS monitoring activities include collecting samples from extraction well EW-02 in addition to collecting samples at treatment system sampling ports: Extraction Well EW-02, Influent, Post Particulate Filter, Post HiPOx Oxidation, Carbon Breakthrough, and Carbon Effluent (Tables 5 and 6; Figure 5). Samples collected during these activities were sent to ATL. Analytical results of the treatment system samples have been summarized (Table 6; Appendix B).

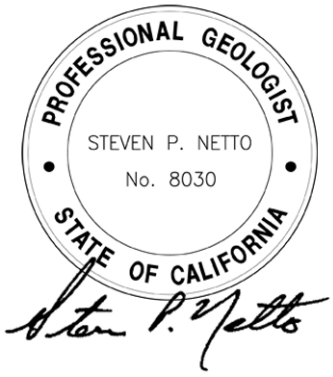
The pilot GETS continues to remove VOCs and 1,4-dioxane from extracted groundwater. The HiPOx ozone/peroxide advanced oxidation and carbon adsorption treatment units effectively removed VOCs from extracted groundwater. Breakthrough of low-level detections of VOCs was not observed in the second quarter 2012 monitoring samples with the exception of detections of 1,1-dichloroethane at concentrations ranging from 1.2 micrograms per liter (ug/l) to 0.89 ug/l which are just above the laboratory reporting limit, but below the pilot GETS permitted sewer discharge limit. The effluent sample collected from the HiPOx advanced oxidation treatment unit contained low-level detections of bromate, a secondary by-product, during operations in the second quarter 2012. Carbon adsorption does not effectively remove this compound; however, this compound was detected at concentrations below the pilot GETS permitted sewer discharge limit. The operation of the advanced oxidation system continues to be optimized in an attempt to minimize the formation of bromate (Figure 6).

During the second quarter of 2012, the pilot GETS removed approximately 1.27 pounds of VOCs and 0.44 pounds of 1,4-dioxane from extracted groundwater. Since startup of the pilot GETS in July 2008, approximately 108.1 pounds of VOCs and 18.1 pounds of 1,4-dioxane have been removed from groundwater through May 2012 (Figure 7).

If you have any questions or require additional information, please contact us at 858-455-6500.

Sincerely,

HARGIS + ASSOCIATES, INC.



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REFERENCES

California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), 2003. Letter to P. Brewer, Raytheon Systems Company, from A. Plaza, DTSC, re Review of Additional Groundwater Assessment Workplan and Groundwater Monitoring Workplan and Sampling and Analysis Plan. May 20, 2003.

_____, 2009. Letter to P. Brewer, Raytheon Systems Company, from W. Jeffers, DTSC, re Conditional Approval of Groundwater Extraction and Treatment System Pilot Testing, Corrective Measures Study Workplan Addendum No. 4A, Raytheon Company (Former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. June 1, 2009.

_____, 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.

Hargis + Associates, Inc. (H+A), 2003. 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.

_____, 2009a. Groundwater Extraction and Treatment System Pilot Testing, Corrective Measures Study Workplan Addendum No. 4A, Raytheon Company (Former Hughes Aircraft Company), 1901 West Malvern Avenue, Fullerton, California. March 31, 2009.

_____, 2009b. Letter to W. Jeffers, DTSC, from C. Ross and S. Netto, H+A, re Response to DTSC Comments to Addendums to Workplans. July 27, 2009.

_____, 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. 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.

Enclosures

Tables

Table 1. Groundwater Monitoring Program
Table 2. Groundwater Levels, Second Quarter 2012
Table 3. Prevalent Volatile Organic Compounds and 1,4-Dioxane in Groundwater, Second Quarter 2012
Table 4. Pilot Groundwater Extraction and Treatment System Operational Summary
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Figure 3. Water Level and Water Quality, Unit B, May 2012
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Figure 6. 1,4-Dioxane and Bromate in Influent and Post-Ox. Samples
Figure 7. Pilot Groundwater Extraction and Treatment System Mass Removal

Appendices

Appendix A. Groundwater Sampling Field Forms (Provided on CD only)
Appendix B. Laboratory Analytical Reports (Provided on CD only)

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. Duc Nguyen, Orange County Public Works
Mr. Eric Silvers, Regency Centers
Ms. Denise Gerstenberg, Cushman & Wakefield of California, Inc.

(2 copies w-CDs)
Mr. Dave Schickling, City of Fullerton

(1 CD only)
Mr. Chad Blais, City of Fullerton
Mr. Robert Logan, RG, Kennedy/Jenks Consultants
Mr. Harris Sanders, Gateway Environmental Management LLC
Ms. Jennifer Schaefer, The Morgan Group, Inc.
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Mr. Michael Payne, Prudential Real Estate Investors
Ms. Tizita Bekele, PE, Department of Toxic Substances Control, Cypress
Mr. Steve Liao, City of Buena Park

TABLE 1

GROUNDWATER MONITORING PROGRAM

WELL IDENTIFIER	HYDROGEOLOGIC ZONE	SAMPLED FEB 2012	SAMPLING FREQUENCY			
			QUARTERLY FEB, MAY, AUG, NOV	SEMIANNUAL FEBRUARY, AUGUST	ANNUAL FEBRUARY	BIENNIAL FEB (EVEN YEARS)
P-07	Perched	X			VOCs; 1,4-Dioxane	
P-09	Perched	X			VOCs; 1,4-Dioxane	
MW-35A	Other	X	VOCs; 1,4-Dioxane			
MW-17	A		PIEZOMETER - WATER LEVEL MEASUREMENT ONLY			
MW-18	A	X		VOCs; 1,4-Dioxane		
MW-19	A	X				VOCs
MW-22	A	X				VOCs; 1,4-Dioxane
MW-23	A	X				VOCs
MW-34A	A	X	VOCs; 1,4-Dioxane			
MW-35B	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			
$MW\text{-}32A_1$	AB	X	VOCs; 1,4-Dioxane	---------->	*VOCs; 1,4-Dioxane*	
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	X	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			
MW-36	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		
MW-24	C	X			VOCs; 1,4-Dioxane	
$MW\text{-}32C_1$	C	X	VOCs; 1,4-Dioxane	---------->	*VOCs; 1,4-Dioxane*	
MW-06	D	X			VOCs	
MW-20	D	X		VOCs; 1,4-Dioxane		
MW-25	D		WATER LEVEL MEASUREMENT ONLY			

FOOTNOTES

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

1= New sampling frequency proposed shown in italics; current frequency shown in gray.

VOCs = Volatile organic compounds

TABLE 2

GROUNDWATER LEVELS
SECOND QUARTER 2012

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					
MW-06	05/07/12	184.70	149.37	35.33	
MW-08	05/07/12	155.91	127.33	28.58	
MW-09	05/07/12	180.10	147.54	32.56	
MW-13	05/07/12	142.19	110.72	31.47	
MW-15	05/07/12	144.92	125.83	19.09	
MW-16	05/07/12	142.73	115.07	27.66	
MW-17	05/07/12	142.66	111.26	31.40	
MW-18	05/07/12	142.11	111.11	31.00	
MW-19	05/07/12	142.72	111.03	31.69	
MW-20	05/07/12	184.19	144.24	39.95	
MW-21	04/02/12	141.18	114.08	27.10	
	05/07/12	141.18	111.08	30.10	
MW-22	05/07/12	138.65	107.13	31.52	
MW-23	05/07/12	137.33	106.79	30.54	
MW-24	05/07/12	142.83	110.05	32.78	
MW-25	05/07/12	142.64	107.92	34.72	
MW-26A	05/07/12	137.04	112.82	24.22	
MW-26B	05/07/12	137.05	120.17	16.88	
MW-26C	05/07/12	137.22	110.60	26.62	
MW-27	05/07/12	137.16	110.03	27.13	
MW-28	05/07/12	140.77	114.45	26.32	
MW-29	05/07/12	142.34	117.12	25.22	
MW-30A	05/07/12	129.44	103.59	25.85	
MW-30B	05/07/12	129.39	101.72	27.67	

TABLE 2

GROUNDWATER LEVELS
SECOND QUARTER 2012

Well Identifier	Date Measured	Reference Point Elevation (a) (feet msl)	Depth to Water (feet bls)	Water Level Elevation (feet msl)	Remediation System On
Reginal Groundwater System Monitor and Extraction Wells (continued)					
MW-31	05/07/12	119.60	92.21	27.39	
MW-32A	05/07/12	92.88	66.57	26.31	
MW-32B	05/07/12	92.89	66.54	26.35	
MW-32C	05/07/12	92.88	61.18	31.70	
MW-33	05/07/12	83.19	57.78	25.41	
MW-34A	05/07/12	153.25	126.22	27.03	
MW-34B	05/07/12	153.11	127.89	25.22	
MW-34C	05/07/12	153.29	128.10	25.19	
MW-35A	05/07/12	93.57	60.11	33.46	
MW-35B	05/07/12	93.56	65.67	27.89	
MW-35C	05/07/12	93.55	66.84	26.71	
MW-36	05/07/12	86.65	61.99	24.66	
EW-01	05/07/12	141.07	113.04	28.03	
EW-02	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	Pilot GETS
Perched Zone Water Levels					
P-07	05/07/12	142.31	110.72	31.59	
P-09	05/07/12	183.86	120.57	63.35	

FOOTNOTES

(a) Reference point elevations are relative to City of Fullerton datum.
bls = Below land surface
msl = Mean sea level
Pilot GETS = Pilot Groundwater Extraction and Treatment System On

TABLE 3

PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER
SECOND QUARTER 2012

Concentration (micrograms per liter)

Well Identifier / Sample Identifier	Date Sampled	QA Code	VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL) Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (5/0.5)	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)	Semi-VOCs 1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells																
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 Historical Range* **			< 0.50 - 0.95	< 0.50	< 0.50 - 0.86	< 0.50 - 5.1	< 0.50 - 0.99	< 0.50 - 500	< 0.50 - 10	< 0.50 - 1.3	< 0.50 - < 5.0	< 0.50 - < 5.0	< 0.50 - 480	< 0.50 - 1.0	< 0.50	< 0.5 - 130
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 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	< 0.50 - 46	< 0.50 - 0.53	< 0.50 - < 10	11 - 1,100
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 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 - 55 E
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 Historical Range* **			< 0.50	< 0.50	< 0.50	< 0.50 - 0.94	< 0.50	0.84 - 76 E	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.20 - 19
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**	**1**	**550**	< 1	**1**	< 1	**2**	**4**	**1**	< 1	**300**
Note: Tert-Butyl Alcohol was detected in the Exova Split sample collected at MW-29 on 5/11/12 at 10 ug/l.																
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**	< 10	< 1.0	**290**
MW-29 Historical Range* **			< 0.50 - < 1.0	< 0.50 - < 1.0	< 0.50 - 0.80	1 - 9.2	< 0.50 - 1.4	99 - 900 E	< 0.50 - < 0.61	< 0.50 - 1.5	< 0.50 - < 1.0	< 0.50 - 2.3	0.58 - 7.5	< 0.50 - 1.2	< 0.50	29 - 301
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 Historical Range* **			< 0.50	< 0.50	< 0.50	< 0.50 - 3	< 0.50 - 0.67	< 0.50 - 290	< 0.50	< 0.50 - 0.58	< 0.50	< 0.50 - 1.1	< 0.50 - 0.72	< 0.50	< 0.50	< 0.20 - 110
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 Historical Range* **			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50 - 18 E	< 0.50 - 5.6	< 0.50	< 0.50	< 0.50	< 0.50 - 87	< 0.50	< 0.50- 4.5	<0.20 - 28 E
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 Historical Range* **			< 0.50	< 0.50	< 0.50	< 0.50 - 3.6	< 0.50	25 - 430	< 0.50 - 1.2	< 0.50	< 0.50	< 0.50	2.2 - 17	< 0.50	< 0.50 - 0.83	0.25 - 7
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 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	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 Historical Range* **			< 0.50	< 0.50	< 0.50	< 0.50 - 0.70	< 0.50	16 - 77	1.9 - 5.7	< 0.50	< 0.50	< 0.50	24 - 63	< 0.50	< 0.50	0.49 - 3.0
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
Historical High/Low										**HIGH**						
MW-32C 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 - 1.0
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 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	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 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

TABLE 3

PREVALENT VOLATILE ORGANIC COMPOUNDS AND 1,4-DIOXANE IN GROUNDWATER
SECOND QUARTER 2012

Concentration (micrograms per liter)

Well Identifier / Sample Identifier	Date Sampled	QA Code	VOLATILE ORGANIC COMPOUNDS (FEDERAL MCL/CALIFORNIA MCL) Benzene (5/1)	Carbon Tetrachloride (5/0.5)	Chloroform (80/80)	1,1-DCA (--/5)	1,2-DCA (5/0.5)	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)	Semi-VOCs 1,4-DIOXANE (3*/1**)
Regional Groundwater System Monitor and Extraction Wells (cont'd)																
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**	< 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	< 10	< 1.0	**62**
MW-34B Historical Range* **			< 0.50 - < 1.0	< 0.50 - < 1.0	< 0.50 - < 1.0	< 0.50 - 6.3	< 0.50 - < 1.0	20 - 560	< 0.50 - < 1.0	< 0.50 - < 1.0	< 0.50 - < 1.0	< 0.50 - 1.3	< 0.50 - 1.6	< 0.50 - < 1.0	< 0.50 - 2.6	4.1 - 196
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 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	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
Historical High/Low					**LOW**											
MW-35A Historical Range* **			< 0.50	< 0.50	4.4 - 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	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 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	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 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	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**
Historical High/Low						**HIGH**		**HIGH**							**LOW**	**HIGH**
MW-36 Historical Range* **			< 0.50	< 0.50	< 0.50 - 120	< 0.50	< 0.50	2.9 - 5.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	4.2 - 5.9	< 0.20
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 Historical Range* **			< 0.50 - 2	< 0.50 - 0.55	< 0.50 - 1.2	< 0.50 - 16	< 0.50 - 4.2	< 0.50 - 1,600 E	< 0.50 - 0.52	< 0.50 - 3.3	< 0.50 - < 2.5	< 0.50 - 10	< 0.50 - 2.8	< 0.50 - < 5.0	< 0.50 - 4.6	5.1 - 710
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**
Historical High/Low								**LOW**								
EW-02 Historical Range* **			< 0.50	< 0.50	< 0.50	< 0.50 - 1.5	< 0.50	52 - 160	< 0.50	< 0.50	< 0.50	< 0.50 - 0.59	< 0.50	< 0.50	< 0.50 - 0.85	6.4 - 48
QUALITY ASSURANCE/QUALITY CONTROL SAMPLES																
TB-041612	04/16/12	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-050712	05/07/12	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-050812	05/08/12	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-050912	05/09/12	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-051012	05/10/12	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-051012A	05/10/12	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-051012B	05/10/12	TB-SPT	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	NA
TB-051012C	05/10/12	TB-SPT	< 0.50	< 0.50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 1.0	NA
TB-051112	05/11/12	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-051112	05/11/12	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

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

FOOTNOTES

1,1-DCA = 1,1-Dichloroethane
1,2-DCA = 1,2-Dichloroethane
1,1-DCE = 1,1-Dichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
PCE = Tetrachloroethene
1,1,1-TCA = 1,1,1-Trichloroethane
1,1,2-TCA = 1,1,2-Trichloroethane
TCE = Trichloroethene
TCFM = Trichlorofluoromethane
(<) = Less than; the value is the Limit of Detection for that compound
* = 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
Semi-VOCs = Semivolatile organic compounds
NA = Not analyzed for constituent
FD = Field duplicate sample
ORG = Original sample
QA = Quality Assurance
SPT[E] = Split sample; analysis by Exova
SPT[C] = Split sample; analysis by Calscience
RB = Rinsate blank sample
TB = Trip blank sample
ug/l = Micrograms per liter
MCL = Maximum contaminant level

TABLE 4

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%
Jan-12	1,782,817	39.9	45.2	658	744	88%
Feb-12	1,916,256	45.9	48.1	663	696	95%
Mar-12	1,562,211	35.0	48.2	541	744	73%
1Q2012	5,261,283	40.2	47.1	1,862	2,184	85%
Apr-12	1,833,137	42.4	48.1	636	720	88%
May-12	1,708,406	38.3	48.1	592	744	80%
2Q2012	3,541,543	40.3	48.1	1,228	1,464	84%
SINCE INCEPTION	53,002,396	25.7	36.3	24,339	34,344	71%

Notes:

(a) Based on Effluent totalizer readings from CEFF.

(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).

gpm = gallons per minute

Refer to previous quarterly reports for detail of 2008 thru 2011 operational summary

Treatment of groundwater from EW-02 initiated in 2010

CEFF = Carbon effluent

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TABLE 5
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLING SCHEDULE

COMPOUND(S) / CONSITITUENT	ANALYTICAL METHOD	SAMPLE CONTAINER	REPORTING DETECTION LIMITS (milligrams per liter)	SAMPLE FREQUENCY AND LOCATION: Daily Samples[1]: Days 1-5 — Extraction Well head (EW-02)[2]	Post-Filter (PF)	Post-Oxidation (POX)	Carbon Breakthrough (CBT)[3]	Post-Carbon (CEFF)	Weekly Samples[1]: Weeks 1-4 — Extraction Well head (EW-02)[2]	Post-Filter (PF)	Post-Oxidation (POX)	Carbon Breakthrough (CBT)[3]	Post-Carbon (CEFF)	Monthly Samples: Week 5+ — Extraction Well head (EW-02)[2]	Post-Filter (PF)	Post-Oxidation (POX)	Carbon Breakthrough (CBT)[3]	Post-Carbon (CEFF)	Quarterly Samples: Week 1+ — Extraction Well head (EW-02)[2]	Post-Oxidation (POX)
COMPOUNDS/CONSTITUENTS NORMALLY REQUIRED AS PART OF NPDES OR WDR PERMITS, PURSUANT TO CRWQCB REGION 8 ORDER NO. R8-2003-0085																				
Volatile Organic Compounds	8260B	3 - 40 mL VOA, HCl	QAPP[4]	X		X	X	X	X		X	X	X	X		X	X	X		
1,4-Dioxane	8270 Modified	1 L Amber	0.002	X					X					X						
1,4-Dioxane	8270 SIM	1L Amber	0.0002			X					X					X				
Total Suspended Solids	SM2540D	250 mL poly	10	(a)	(a)									X	X					
Total Dissolved Solids	SM2540C	250 mL poly	10	(a)										X		X		X		
SELECTED METALS																				
Dissolved Metals (Iron, Manganese, Calcium, Sodium, Magnesium)	6010B	500 mL poly	QAPP[4]	(a)															X	
Selenium	6010B	500 mL poly, HNO_3	QAPP[4]																X	
SELECTED INORGANIC CONSTITUENTS																				
Hydroxide Alkalinity	SM2320B	250 mL poly	2.0	(a)															X	
Bicarbonate Alkalinity	SM2320B	250 mL poly	2.0	(a)															X	
Carbonate Alkalinity	SM2320B	250 mL poly	2.0	(a)															X	
Total Alkalinity	SM2320B	250 mL poly	2.0	(a)															X	
BROMATE EVALUATION																				
Bromate	317.0	125 mL poly	0.0005	X		X		X	X		X		X	X		X		X		
Bromide	300.0	125 mL poly	0.05	X		X		X	X		X		X	X		X		X		
OTHER CONSTITUENTS/COMPOUNDS																				
Total Organic Carbon	SM5310B	3 - 40 mL VOA, HCl	3.0	(a)															X	X
Anions (Chloride, Sulfate, Nitrate, Nitrite, and Phosphate)	300.0	500 mL poly	Varies	(a)															X	X
Chemical Oxygen Demand	410.4	125 mL poly, H_2SO_4	5.0	(a)															X	X
Field Parameters																				
Dissolve Oxygen (DO)	N/A	N/A	N/A	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		
Redox Potential	N/A	N/A	N/A	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		
pH	N/A	N/A	N/A	X		X		X	X		X		X	X		X	X	X		
Turbidity	N/A	N/A	N/A	X	X				X	X				X	X					
Flow-Meter	N/A	N/A	N/A	X				X	X				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.

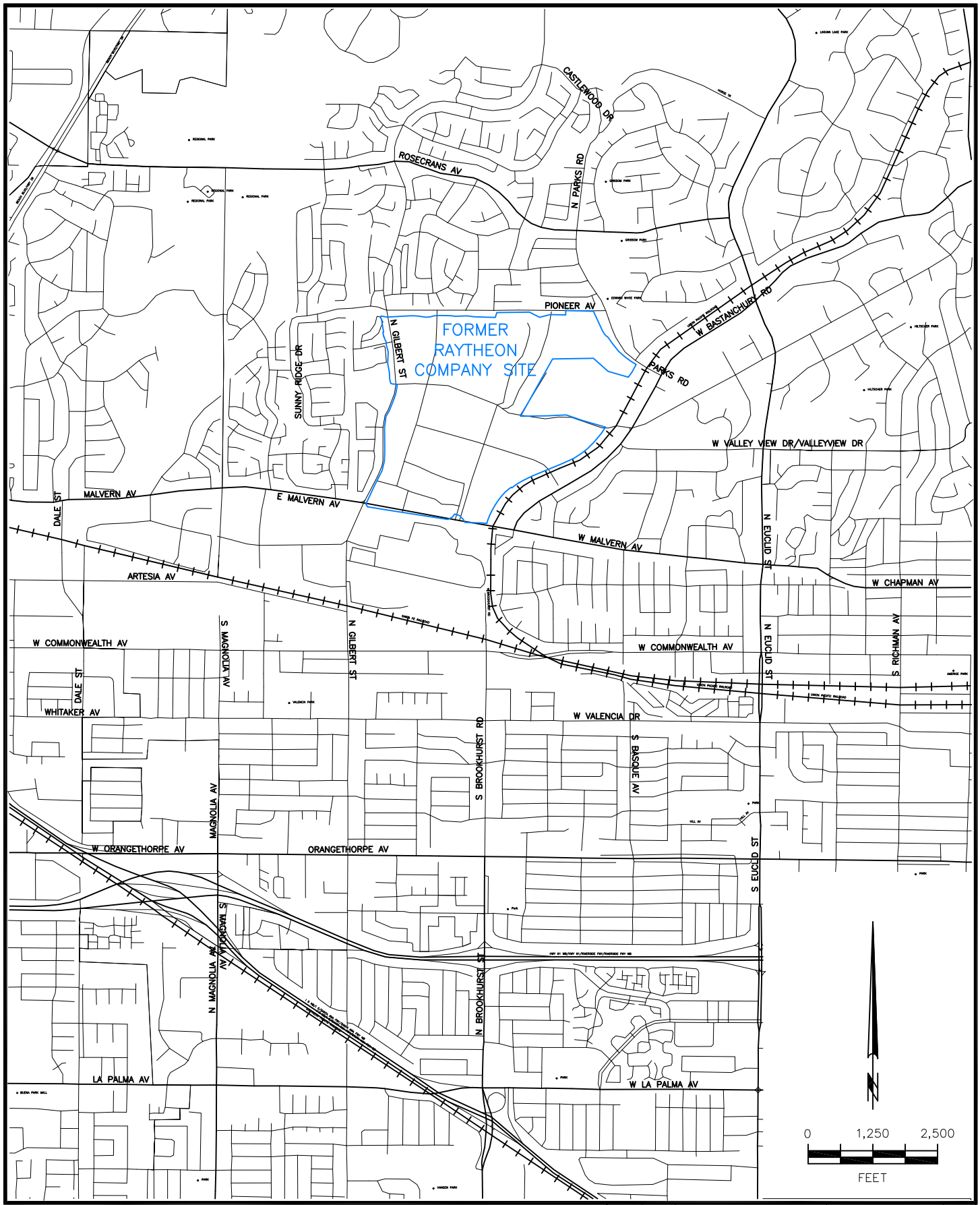
CRWQCB = California Regional Water Quality Control Board, Santa Ana Region 8
NPDES = National Pollutant Discharge Elimination System
WDR = Waste Discharge Requirement
N/A = Not applicable
mL = Milliliter
VOA = Volatile organic analysis
HCl = Hydrochloric acid
HNO_3 = Nitric acid
H_2SO_4 = Sulfuric acid

TABLE 6

SUMMARY OF SELECT COMPOUNDS DETECTED IN
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SAMPLES
SECOND QUARTER 2012

Compound	Date	Units	MW-21	EW-01	EW-02	INF*	PF	POX	CBT	CEFF
1,1,2-Trichloroethane	04/16/12	ug/L	--	--	< 0.50	--	--	<0.50	<0.50	<0.50
(5 ug/L MCL)	05/01/12	ug/L	--	--	< 0.50	--	--	<0.50	<0.50	<0.50
	05/07/12	ug/L	< 4.0	< 0.50	--	--	--	--	--	--
1,1-Dichloroethane	04/16/12	ug/L	--	--	< 0.50		--	< 0.50	0.73	1.2
(5 ug/L MCL)	05/01/12	ug/L	--	--	< 0.50		--	< 0.50	0.56	0.89
	05/07/12	ug/L	6.5	< 0.50	--	--	--	--	--	--
1,1-Dichloroethene	04/16/12	ug/L	--	--	45	--	--	< 0.50	< 0.50	< 0.50
(6 ug/L MCL)	05/01/12	ug/L	--	--	37	--	--	< 0.50	< 0.50	< 0.50
	05/07/12	ug/L	490	18	--	--	--	--	--	--
1,2-Dichloroethane	04/16/12	ug/L	--	--	< 0.50	--	--	< 0.50	< 0.50	< 0.50
(0.5 ug/L MCL)	05/01/12	ug/L	--	--	< 0.50	--	--	< 0.50	< 0.50	< 0.50
	05/07/12	ug/L	< 4.0	< 0.50	--	--	--	--	--	--
cis-1,2-Dichloroethene	04/16/12	ug/L	--	--	< 0.50	--	--	< 0.50	< 0.50	< 0.50
(6 ug/L MCL)	05/01/12	ug/L	--	--	< 0.50	--	--	< 0.50	< 0.50	< 0.50
	05/07/12	ug/L	< 4.0	< 0.50	--	--	--	--	--	--
Tetrachloroethene	04/16/12	ug/L	--	--	< 0.50	--	--	< 0.50	< 0.50	< 0.50
(5 ug/L MCL)	05/01/12	ug/L	--	--	< 0.50	--	--	< 0.50	< 0.50	< 0.50
	05/07/12	ug/L	< 4.0	0.78	--	--	--	--	--	--
Trichloroethene	04/16/12	ug/L	--	--	< 0.50	--	--	< 0.50	< 0.50	< 0.50
(5 ug/L MCL)	05/01/12	ug/L	--	--	< 0.50	--	--	< 0.50	< 0.50	< 0.50
	05/07/12	ug/L	11	< 0.50	--	--	--	--	--	--
1,4-Dioxane	04/16/12	ug/L	--	--	14	--	--	0.27	--	--
(1 ug/L California Notification Level)	05/01/12	ug/L	--	--	13	--	--	<0.13	--	--
	05/07/12	ug/L	23	7.0	--	--	--	--	--	--
Bromide	04/16/12	ug/L	--	--	190	--	--	190	--	210
	05/01/12	ug/L	--	--	280	--	--	280	--	310
Bromate	04/16/12	ug/L	--	--	< 0.5	--	--	6	--	7.1
(10 ug/L MCL)	05/01/12	ug/L	--	--	< 0.5	--	--	8	--	6.3
Total Non-Filterable Residue	04/16/12	mg/L	--	--	< 10	--	< 10	--	--	--
	05/01/12	mg/L	--	--	< 10	--	< 10	--	--	--
Total Filterable Residue	04/16/12	mg/L	--	--	620	--	--	630	--	660
(500 mg/L MCL)	05/01/12	mg/L	--	--	600	--	--	600	--	600

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

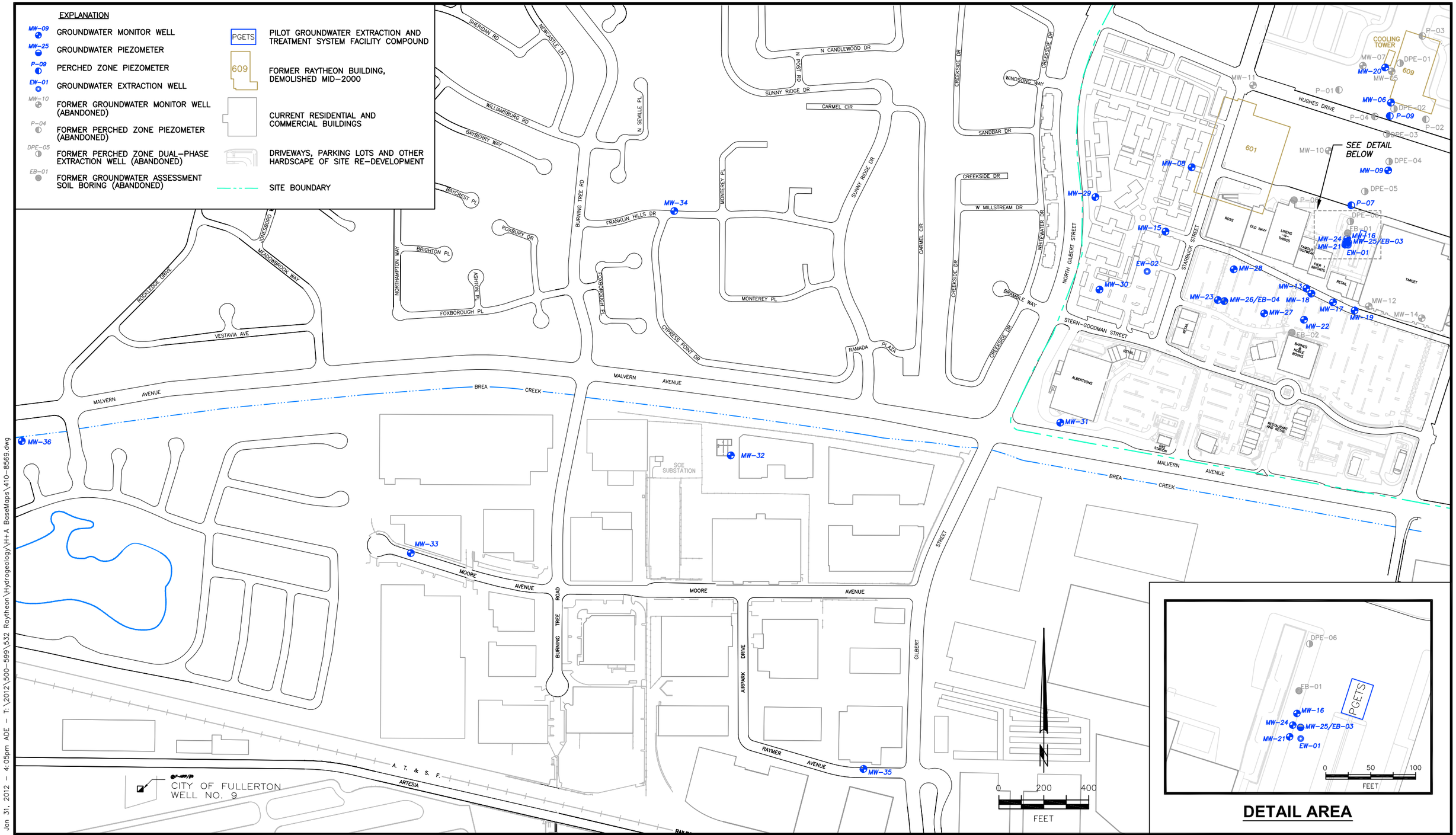


May 11, 2011 - 10:09am ADE - T:\2011\500-599\532 Raytheon\Hydrogeology\H+A BaseMaps\410-8281.dwg

HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

5/11	RPT NO. 532.31	410-8281	A

FIGURE 1. SITE LOCATION

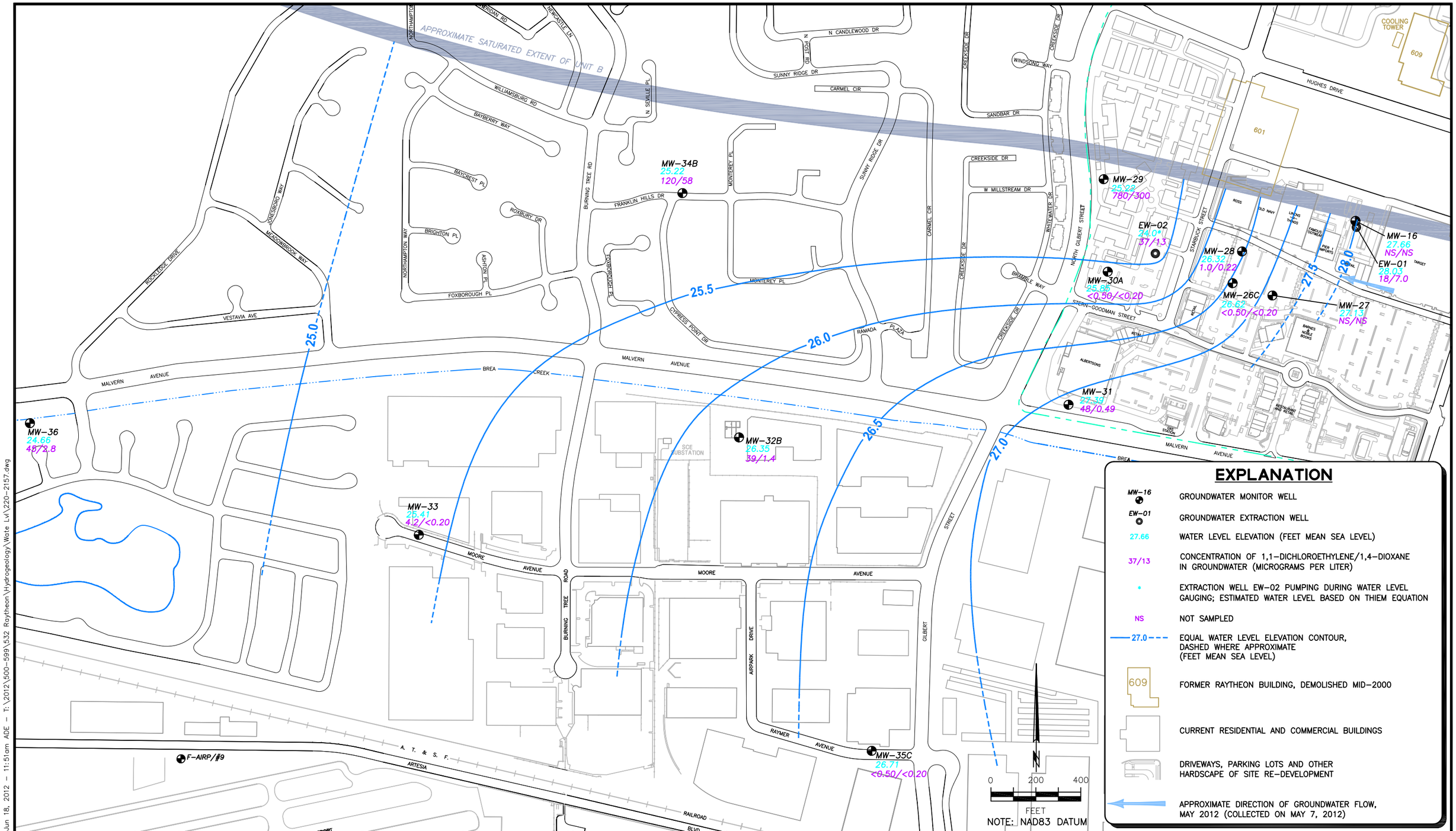


Jan 31, 2012 - 4:05pm ADE - T:\2012\500-599\532 Raytheon\Hydrogeology\H+A BaseMaps\410-8569.dwg

HARGIS + ASSOCIATES, INC
Hydrogeology/Engineering

01/12 | RPT NO. 532.03 | 410-8569 | A

FIGURE 2.
WELL AND PIEZOMETER LOCATIONS



Jun 18, 2012 - 11:51am ADE - T:\2012\500-599\532 Raytheon\Hydrogeology\Wate Lvl\220-2157.dwg

HARGIS + ASSOCIATES, INC.
Hydrogeology/Engineering

06/12 | RPT NO. 532.31 | 220-2157 | A

FIGURE 3.
WATER LEVEL AND WATER QUALITY UNIT B
MAY 2012

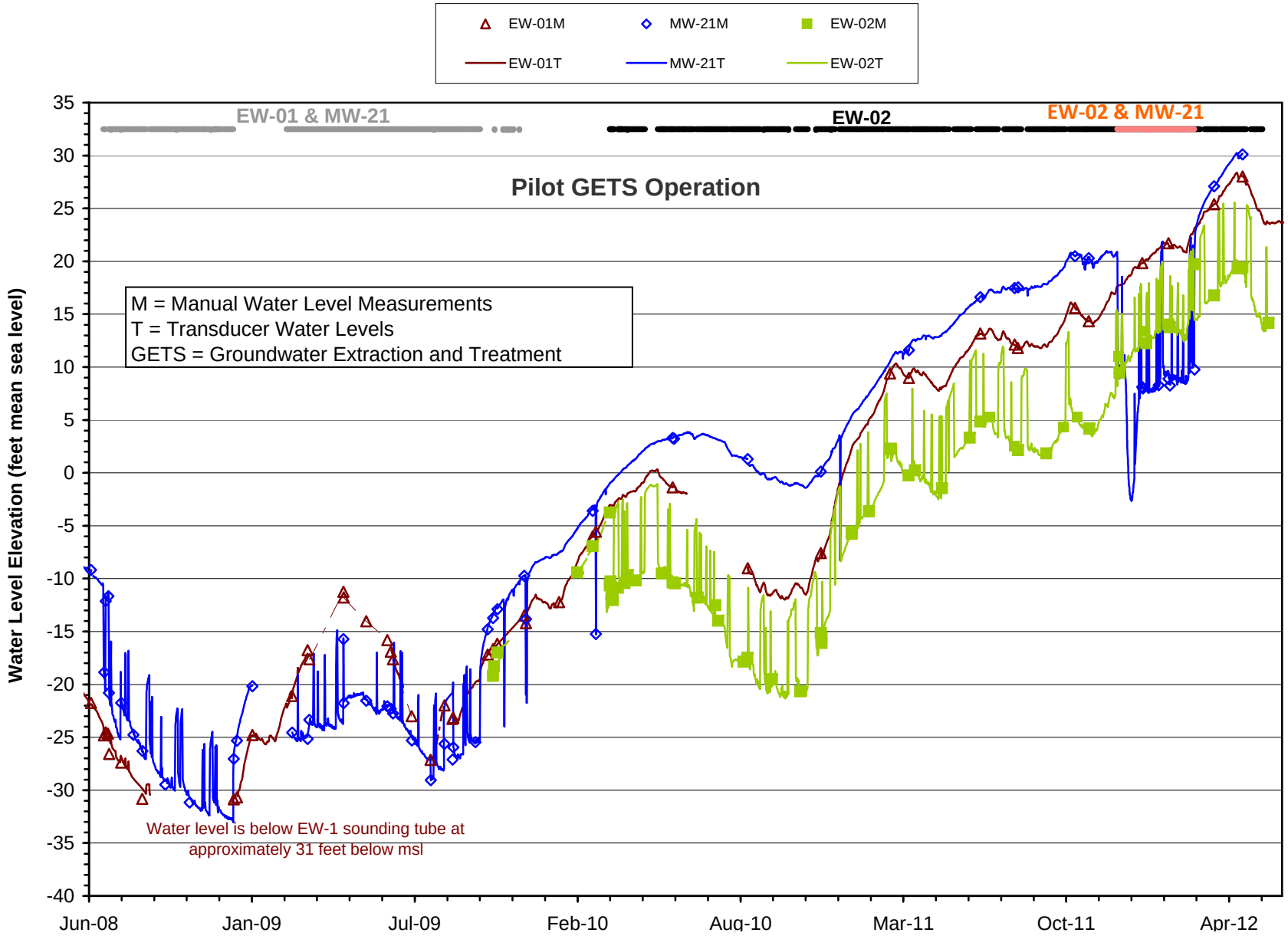


FIGURE 4.
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM OPERATION AND EXTRACTION WELL WATER LEVELS

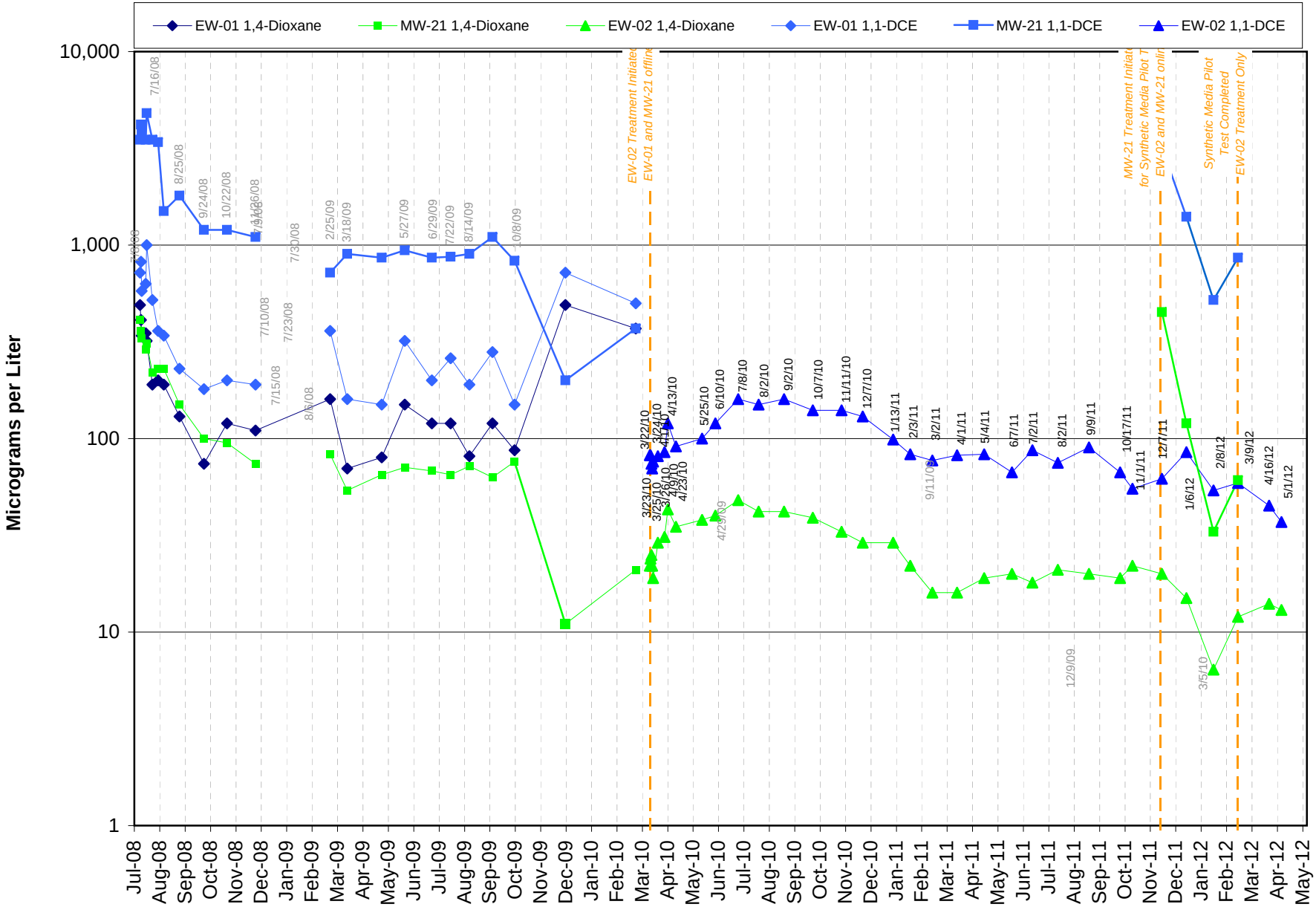
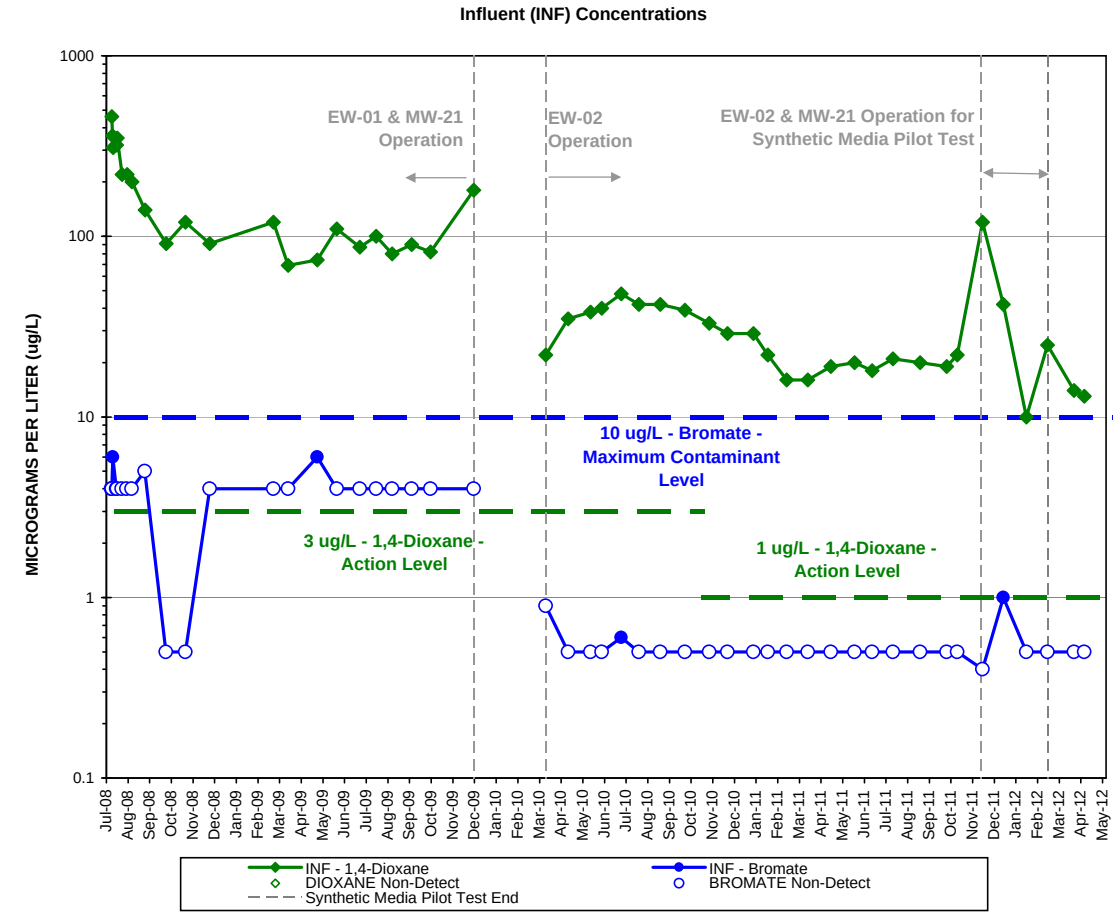


FIGURE 5.
1,1-DICHLOROETHYLENE AND 1,4-DIOXANE IN EXTRACTION WELLS EW-01, MW-21, AND EW-02

532 H01_2012-3_FIG5.xls



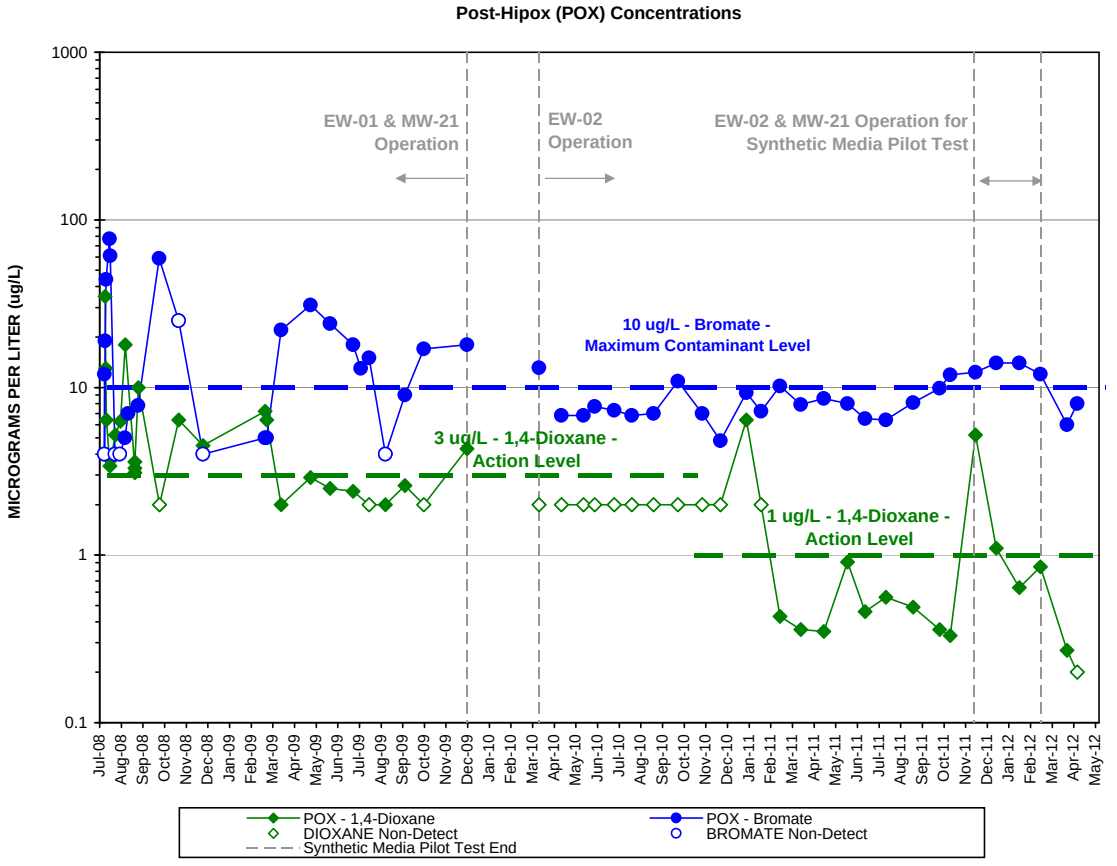


FIGURE 6.
1,4-DIOXANE AND BROMATE IN INFLUENT AND POST-OX. SAMPLES

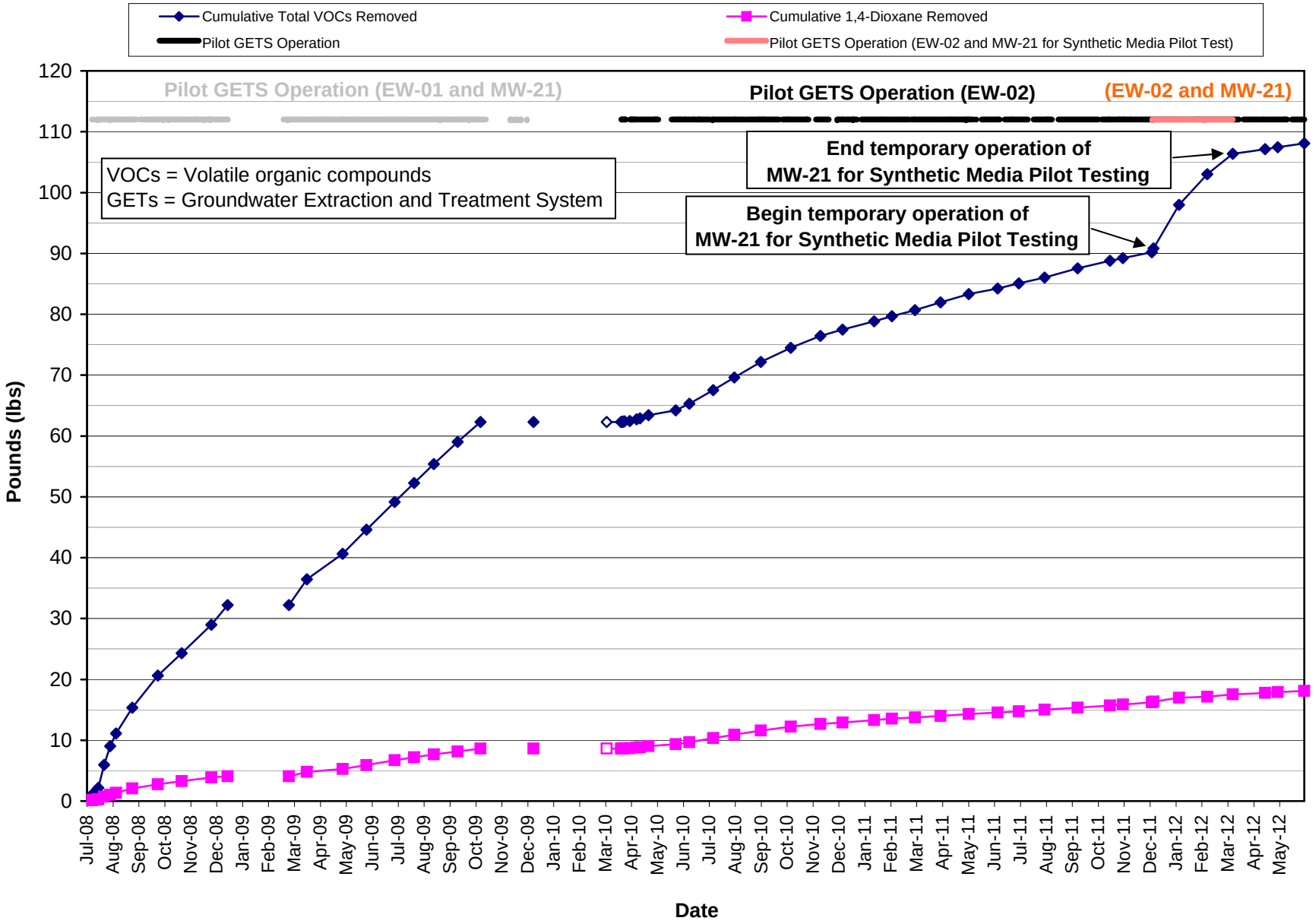


FIGURE 7.
PILOT GROUNDWATER EXTRACTION AND TREATMENT SYSTEM MASS REMOVAL

APPENDIX A

GROUNDWATER SAMPLING FIELD FORMS

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/7/12 113.04 **TASK:** 532.30 **WELL ID:** EW-01

Time 1256 Static DTW (ft below reference point)	~~113.57~~ AMB	Casing Volume (CV) (gallons) 54.0	3 CV (gallons) 162.3
Casing Total Depth (ft below reference point)	195	Purging Device ded. pump	Sampling Device ded. sample port
Water Column (feet)	81.96	Pump: Depth (ft brp) NA ~~Type~~	Voltage HP
Casing Capacity (Diameter 4 ") (gallons per foot)	0.66	Monitor Well Recharge Rate: Slow	Fast X

Weather Conditions: Time ~1540 Temp. ~75° Skies Clear Wind (mph) 1-4 From S-SW

Initials AMB & DM: Begin Purge 1537 End Purge 1632 Gallons Purged 69.7 CVs Purged 12.9 DTW (ft brp) 131.00 Time 1634

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1257	113.04										273702
1537	PUMP	ON									12.44 GPM
1632	131.53	69.7	12.9	24.03	7.46	1.397	205.2	4.77	1.009		274399 12.171 GPM
1639	PUMP OFF										~~V~~ = 131.00 274466

SAMPLE COLLECTION SAMPLE TIME 1637

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? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/11/12 12734@1248 **TASK:** 532.30 **WELL ID:** MW08

Time 1026 Static DTW (ft below reference point)	127.52	Casing Volume (CV) (gallons) ~~4 Tier~~ 6 Tier 2 3 CV (gallons) 18.6	Weather Conditions
Casing Total Depth (ft below reference point)	163.79	Purging Device grundfos pump Sampling Device ded. tubing	Time 1230 Temp. 75°
Water Column (feet) 36.43 ~~36.27~~	~~27.66~~	Pump: Depth (ft brp) ~162 Type redi flo Voltage 240 HP	Skies Clear, sunny
Casing Capacity (Diameter 2 ") (gallons per foot)	0.17	Monitor Well Recharge Rate: Slow ____ Fast X	Wind (mph) 0-3 From S-SW

Initials AMB & DM

Begin Purge 1255 End Purge 1316

Gallons Purged 19 CVs Purged 3.1

DTW (ft brp) 127.49 Time 1329

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS 127.56 @ 1329 (SL
1255	PUMP ON										1 gpm
1258	UTM	1	0.2	23.04	7.54	1.623	156.1	4.85	8.65		
1301	UTM	4	0.6	22.54	7.38	1.600	148.5	5.02	43.1		1 gpm
1305	UTM	6.5	1.0	22.81	7.36	1,544	138.7	5.03	23.2		
1308	UTM	12	1.9	23.16	7.35	1.476	145.9	5.27	6.42		1 gpm
1312	UTM	16	2.6	23.23	7.37	1.467	134.3	5.26	3.15		1 gpm
1316	UTM	19	3.1	22.94	7.36	1.456	130.5	5.09	4.19		1 gpm Collect Samples

SAMPLE COLLECTION SAMPLE TIME 1316

ANALYSIS	QUANTITY	TYPE
8260B VOCs	3+3	40 ml VOA
8270 SIM 1,4 dioxane	1+1	1 L Amber
8270 MOD 1,4 dioxane	2	1 L Amber

DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms (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.)

Pump, previously bailed - on the border (WL increased 8ft over last quarter)

Previously bailed w/ dedicated bailer

RB-051112@1240 for VOC & 1,4-dioxane

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/7/12 **TASK:** 532.30 **WELL ID:** MW-21

Time 1448 Static DTW (ft below reference point)	111.08	Casing Volume (CV) (gallons) 83	3 CV (gallons) 251	Weather Conditions	Initials AMB & DM
Casing Total Depth (ft below reference point)	238.	Purging Device ded pump	Sampling Device ded. Sample pump	Time ~1500 Temp. ~78°	Begin Purge 1538 End Purge 1615
Water Column (feet)	126.9	Pump: Depth (ft brp) NA Type	Voltage HP	Skies Clear	Gallons Purged 715 CVs Purged 8.6
Casing Capacity (Diameter 4 ") (gallons per foot)	0.66	Monitor Well Recharge Rate: Slow	Fast X	Wind (mph) 1-3 From SW	DTW (ft brp) 114.68 ~~1625~~ Time 1625

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°)	pH	EC (S/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1448	111.08	NA									553358 pump off
1538	Pump on										18.965 gpm
1615	123.48	715	8.6	22.70	7.30	2.005	216.3	4.58	0.93		554073
1625	114.68	Pump off									554263

SAMPLE COLLECTION SAMPLE TIME 1615

ANALYSIS	QUANTITY	TYPE
8260B VOCs	3+3	40 ml VOA
8270 SIM 1,4 dioxane	1	1 L Amber
8270 MOD 1,4 dioxane	1+1	1 L Amber

DUPLICATES / SPLITS / BLANKS? (Y) (N) Trip B
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.)

MW-21DUP, 1645

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/9/12 **TASK:** 532.30 **WELL ID:** MW-260

Time 1440 Static DTW (ft below reference point)	109.93	Casing Volume (CV) (gallons) 66	3 CV (gallons) 198	Weather Conditions	Initials AMB & DM
Casing Total Depth (ft below reference point)	499	Purging Device ded. pump	Sampling Device ded. sample	Time 1440 Temp. ~78	Begin Purge 1448 End Purge 1612
Water Column (feet)	389	Pump: Depth (ft brp) ~300' Type grundfos Voltage 240 HP		Skies clear, sunny	Gallons Purged 201 CVs Purged 3.0
Casing Capacity (Diameter 2") (gallons per foot)	0.17	Monitor Well Recharge Rate: Slow ____ Fast X		Wind (mph) 1-4 From S-SW	DTW (ft brp) 110.85 Time 1626

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC mS/cm	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1448	PUMP	ON								313	2.4 gpm
1451	110.73	7.2	0.1	22.12	9.33	0.471	-222.1	0.22	22.1	313	2.4 gpm
1505	110.73	~~77.6~~ 40.8	0.6	22.16	7.75	0.765	-151.2	0.20	0.69	313	2.4 gpm 40.8 gal purged
1519	110.73	74.4	1.1	22.21	7.69	0.889	-67.6	1.24	2.97	313	2.4 gpm
1533	110.73	108	1.6	22.22	7.74	0.888	-54.4	1.38	1.19	313	2.4 gpm
1547	110.73	141	2.1	22.23	7.74	0.888	-48.8	1.40	0.26	313	2.4 gpm
1601	111.30	174.6	2.6	22.21	7.74	0.894	-47.2	1.74	0.23	313	2.4 gpm
1612	111.44	201	3.0	22.22	7.74	0.895	-44.9	1.45	0.31	313	2.4 gpm

SAMPLE COLLECTION SAMPLE TIME 1612

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? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/11/12 **TASK:** 532.30 **WELL ID:** MW-28

Time 715 Static DTW (ft below reference point)	115.73	Screen SV Casing Volume (CV) (gallons) 27 3 CV (gallons) 81	Weather Conditions: Time 715 Temp. ~65°
Casing Total Depth (ft below reference point)	375	Purging Device ded. pump Sampling Device ded. 0-10	Skies Cloudy
pump to Screen Water Column (feet)	45	Pump: Depth (ft brp) 330 Type grundfos Voltage 240 Pipe Stand HP	Wind (mph) 0-2 From S-SW
Casing Capacity (Diameter 4") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow ____ Fast X	Initials AMB & DM; Begin Purge 716 End Purge 727; Gallons Purged 83 CVs Purged 3.0; DTW (ft brp) 150.91 Time 732

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
716	PUMP	ON									
717	122.15	7	0.3	21.48	7.60	1.089	107.1	5.28	1.92		7.7 gpm
719	123.31	18	0.7	21.28	7.63	1.044	156.6	5.36	0.07		7.6 gpm
721	123.48	31	1.1	21.35	7.65	1.053	146.0	5.56	1.31		7.6 gpm
723	123.50	50	1.8	21.40	7.63	1.071	136.2	5.74	~~33.9~~ 1.23 NTU		1.23 NTU
725	123.53	71	2.6	21.40	7.64	1.074	123.0	5.76	12.2		7.6 gpm
727	123.53	93	3.0	21.40	7.64	1.073	117.4	5.85	0.66		7.6 gpm, Collect sample

SAMPLE COLLECTION SAMPLE TIME 727

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? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/11/12 **TASK:** 532.30 **WELL ID:** MW-29

Time 749 Static DTW (ft below reference point)	118.05	Casing Volume (CV) (gallons) 30	3 CV (gallons) 90
Casing Total Depth (ft below reference point)	240	Purging Device Ded. pump	Sampling Device Stainless steel bailer
Water Column (feet)	50	Pump: Depth (ft brp) 190 Type grundfos	Voltage 240 HP
Casing Capacity (Diameter 4") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow	Fast X

Weather Conditions: Time 750 Temp. 76° Skies Cloudy Wind (mph) 0-3 From S-SW

Initials AMB & DM

Begin Purge 754 End Purge 816

Gallons Purged 94 CVs Purged 3.1

DTW (ft brp) 118.31 Time 824

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
754	PUMP	ON									4.5 gpm
756	125.34	5	0.2	20.94	7.43	1.375	25.3	5.35	1.16		4.5 gpm
758	125.88	15	0.5	21.26	7.47	1.348	32.4	5.91	2.94		4.5 gpm
800	125.91	25	0.8	21.35	7.46	1.348	53.9	6.33	2.47		4.4 gpm
802	125.96	33	1.1	21.40	7.46	1.365	69.5	6.63	2.96		4.4 gpm
804	125.96	43	1.4	21.42	7.43	1.385	78.7	6.96	3.02		4.4 gpm
807	125.94	56	1.9	21.43	7.42	1.391	85.1	7.47	3.51		4.4 gpm
811	125.95	75	2.5	21.42	7.39	1.398	86.0	~~7.39~~	2.12		4.4 gpm
816	126.08	94	3.1	21.41	7.39	1.395	82.6	8.19	1.46		

SAMPLE COLLECTION SAMPLE TIME 816

ANALYSIS	QUANTITY	TYPE
8260B VOCs	3+3+3+3	40 ml VOA
8270 SIM 1,4 dioxane	2	1 L Amber
8270 MOD 1,4 dioxane	(+)(+)(+)	1 L Amber

DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms. (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.)

Dup MW-2900 at 836 sample time 8pt (Cal science) 5pt (Enova) @ 816

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/10/12 **TASK:** 532.30 **WELL ID:** MW-30A

Time 1716 Static DTW (ft below reference point)	105.5	Casing Volume (CV) (gallons) 17.2	3 CV (gallons) 51.5
Casing Total Depth (ft below reference point)	564'	Purging Device Ded. pump	Sampling Device 0-10 pipestart
Pump to Screen Water Column (feet)	44	Pump: Depth (ft brp) 520 Type grundfos	Voltage 240 HP
Casing Capacity (Diameter 3 ") (gallons per foot)	0.39	Monitor Well Recharge Rate: Slow ____ Fast X	

Weather Conditions: Time 1715 Temp. 75° Skies Clear, sunny Wind (mph) 1-2 From S-SW

Initials AMB & DM

Begin Purge 1721 End Purge 1732 Gallons Purged 52 CVs Purged 3.0 DTW (ft brp) 105.75 Time 1733

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1721	PUMP	ON									4.8 gpm
1722	107.25	5	0.3	22.19	7.93	0.736	101.0	3.06	2.51		4.8 gpm
1724	107.25	10	0.6	20.93	8.84	0.765	-158.8	1.02	1.30		4.8 gpm
1726	107.35	20	1.1	21.06	7.48	0.742	-82.6	0.37	4.23		5 gpm
1728	107.29	31	1.6	21.25	7.15	0.737	-37.4	0.35	1.56		5 gpm
1730	107.31	41	2.4	21.28	7.18	0.735	-24.0	0.39	2.15		5 gpm
1732	107.32	52	3.0	21.28	7.22	0.734	-16.2	0.40	1.18		Collect sample

SAMPLE COLLECTION SAMPLE TIME 1732

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? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/10/12 **TASK:** 532.30 **WELL ID:** MW-38B

Time 1742 Static DTW (ft below reference point)	103.7	Screen SV Casing Volume (CV) (gallons) 37 3 CV (gallons) 112.3	Weather Conditions	Initials AMB & DM
Casing Total Depth (ft below reference point)	616	Purging Device ded pump Sampling Device 10-100 ppm Grundfos	Time 1750 Temp. ~75°	Begin Purge 1742 End Purge 1809
Screen to pump Water Column (feet)	96	Pump: Depth (ft brp) 520 Type Grundfos Voltage 240 HP	Skies clear, sunny	Gallons Purged 114 CVs Purged 3.5 ~~1000 gal~~
Casing Capacity (Diameter 3") (gallons per foot)	0.39	Monitor Well Recharge Rate: Slow ____ Fast X	Wind (mph) 1-3 From S-SW	DTW (ft brp) 112.22 Time 1814

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1742	Pump ON										
1743	112.86	5	0.1	21.37	7.55	1.128	-135.9	2.26	36.7		5.2 gpm
1746	119.30	13	0.4	20.89	7.59	1.018	-157.0	0.73	12.5		4.9 gpm
1749	122.17	27	0.7	21.10	7.67	0.990	-185.2	0.30	8.30		5 gpm
1753	124.19	52	1.4	21.26	7.51	1.020	-158.2	0.10	7.98		5 gpm
1757	124.93	67	1.8	21.29	7.53	1.043	-152.4	0.08	2.30		5 gpm
1801	126.0	93	2.5	21.32	7.53	1.042	-147.2	0.08	5.33		4.9 gpm
1805	126.38	114	3.0	21.34	7.53	1.024	-142.9	0.09	5.81		4.9 gpm
1809	127.17	130	3.5	21.36	7.51	1.014	-137.1	0.10	1.27		4.9 gpm

SAMPLE COLLECTION SAMPLE TIME 1809

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? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: ~~8/7 AMB~~ 5/11/12 TASK: 532.30 WELL ID: MW-31

Time 848 Static DTW (ft below reference point)	96.95	Casing Volume (CV) (gallons) 79.4	3 CV (gallons) 238
Casing Total Depth (ft below reference point)	996	Purging Device Ded. Pump	Sampling Device ded. ID-100 pipestand
pump-screen Water Column (feet)	54	Pump: Depth (ft brp) 945 Type grundfos	Voltage 240 HP
Casing Capacity (Diameter 6 ") (gallons per foot)	1.5	Monitor Well Recharge Rate: Slow	Fast X

Weather Conditions: Time 1310 Temp. 75°F; Skies Sunny; Wind (mph) 0-5 From SW

Initials AMB & DM: Begin Purge 849 End Purge 910; Gallons Purged 240 CVs Purged 3.0; DTW (ft brp) 97.10 ~~96.96~~ Time 917

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
849	PUMP	ON									~~16 gpm~~ 11.5 gpm
850	98.77	15	0.2	20.77	7.97	0.793	111.6	0.51	4.43	~~4.43 Hz~~	
853	98.83	50	0.6	20.72	8.03	0.789	94.6	0.25	185		11.5 gpm
856	98.91	92	1.1	21.03	8.79	1.220	-27.2	0.52	49.3		9.8 gpm
859	98.88	117	1.5	21.11	7.94	1.040	20.3	1.0	22.0		10 gpm
903	98.90	156	2.00	21.15	7.91	0.963	34.8	1.32	13.4		10 gpm
906	98.93	186	2.4	21.16	7.99	0.928	29.1	1.44	12.4		10 gpm
910	98.94	240	3.0	21.16	7.92	0.898	32.2	1.56	4.4		

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	~~2~~	1 L Amber

DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/8/12 **TASK:** 532.30 **WELL ID:** MW-32A

Time 900 Static DTW (ft below reference point)	66.47	Screen 5V Casing Volume (~~CV~~) (gallons) 207 3 ~~CV~~ 5V (gallons) 621	Weather Conditions
Casing Total Depth (ft below reference point)	905	Purging Device Ded Pump Sampling Device ded ND pipestand	Time ~900 Temp. ~68°
pump to Screen bottom Water Column (feet)	305	Pump: Depth (ft brp) 560' Type grundfos Voltage 240 HP	Skies Partly Cloudy
Casing Capacity (Diameter 4") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow Fast X	Wind (mph) ~~W~~ 0-2 From W

Initials AMB & DM

Begin Purge 903 End Purge 956

Gallons Purged ~~702~~ CVs Purged >3

DTW (ft brp) 66.54 Time 1015

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
903	BEGIN PUMPING										~12 gpm
905	67.90	24	0.1	20.51	7.58	0.919	-31.9	1.71	~~8.51~~ AMB		2.27 NTU
914	67.96	132	0.6	20.69	7.55	0.918	27.9	1.36	15.5		~12 GPM
923	67.96	240	1.2	20.86	7.56	0.922	5.5	1.72	10.84		
932	67.97	348	1.7	20.88	7.57	0.924	21.1	1.91	2.64		12GPM
941	67.97	456	2.2	20.88	7.55	0.921	-64.4	2.21	2.50		
950	67.97	564	2.7	20.88	7.53	0.919	6.3	2.42	2.50		
956	67.97	630	3.0	20.88	7.53	0.920	10.1	2.17	5.03		Collect sample
1002	NM	702	PUMP	OFF							

SAMPLE COLLECTION SAMPLE TIME 956

ANALYSIS	QUANTITY	TYPE
8260B VOCs	3	40 ml VOA
8270 SIM 1,4 dioxane	~~6~~ 6	1 L Amber
8270 MOD 1,4 dioxane	~~6~~	1 L Amber

DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/8/12 **TASK:** 532.30 **WELL ID:** MW-32B

Time 1312 Static DTW (ft below reference point)	66.70	Screen ~~Casing~~ Volume (CV) (gallons) 263.4 3 CV (gallons) 790.2	Weather Conditions
Casing Total Depth (ft below reference point)	999	Purging Device Ded. pump Sampling Device ded. >100 ft pump	Time 1310 Temp. 80
Screen - Pump Water Column (feet)	439	Pump: Depth (ft brp) 560 Type Grundfos Voltage ~~230~~ 240 HP	Skies Clear, sunny
Casing Capacity (Diameter 4") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow ____ Fast X	Wind (mph) 1-4 From S-SW DTW (ft brp) 67.82 Time 1438

Initials AMB & DM

Begin Purge 1313 End Purge 1429

Gallons Purged 803 CVs Purged 3.0

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1313	BEGIN	PUMPING									11.6 gpm
1315	85.2	23.2	0.1	20.68	7.87	0.934 ~~0.4mS~~	-173	2.32	4.53		EC not stabilizing, odor in water sulfur
1327	87.0	155.2	0.6	20.78	7.91	0.876	-192.0	1.73	0.31		11 gpm @ 1321
1339	87.70	287	1.1	20.61	7.96	0.750	-126.0	0.38	10.75		~11 gpm
1352	88.0	422	1.6	21.11	7.96	0.831	-129.0	0.22	1.74		10.4 gpm
1404	88.21	546	2.1	21.13	7.96	0.858	-146.0	0.02	~~15 NTU~~		5.54 NTU ~10.4 gpm
1416	88.34	689	2.5	21.14	7.94	0.867	-136.6	0.16	7.41		10.3 gpm
1429	88.44	803	3.0	21.12	7.95	0.888	-135.2	0.25	4.32		10.3 gpm

SAMPLE COLLECTION SAMPLE TIME 1429

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? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: MW-32C 5/8/12 **TASK:** 532.30 **WELL ID:** MW-32C

Time 1018 Static DTW (ft below reference point)	61.08	Screen SV Casing Volume (CV) (gallons) 318 3 CV (gallons) 954	Weather Conditions
Casing Total Depth (ft below reference point)	1090	Purging Device ded Pump Sampling Device ded. NO Pipe stand	Time 1030 Temp. ~76
Screen to pump Water Column (feet)	530	Pump: Depth (ft brp) 560 Type Grundfos Voltage 240 HP	Skies clear, sunny
Casing Capacity (Diameter 4") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow ~~X~~ AMB Fast X	Wind (mph) 0-2 From W

Initials AMB & DM

Begin Purge 1028 End Purge 1247

Gallons Purged 104 CVs Purged 3.3

DTW (ft brp) 77 Time 1253

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1028	BEGIN PUMPING										
1030	112.80	22	0.1	20.53	8.22	0.552	-288.2	0.10	36.4		~11 gpm @ 1030
1038	159.86	110	0.3	20.66	8.05	0.552	-329.6	0.12	26.3		~10 gpm
1050	199.55	215	0.7	20.77	8.02	0.551	-283.6	0.05	6.17		~7.6 gpm Sulfur odor in purge water
1105	210	329	1.0	21.02	8.13	0.550	-240.7	0.11	2.71		~7.6 gpm
1123	214.6	453.	1.4	21.28	8.22	0.549	-226.8	0.12	5.38		~7.0 gpm
1138	217.53	558	1.7	21.35	8.27	0.549	-215.6	0.04	5.26		~7.0 gpm
1156	219.63	684	2.1	21.39	8.26	0.549	-203	0.04	4.98		~7.0 gpm
1212	220.69	796	2.5	21.40	8.22	0.549	-143	0.37	3.12		~2 gpm DO equilibrating
1236	221.95	964	3.0	21.41	8.27	0.549	-176.4	0.03	4.00		~7 gpm
1247	222.45	1041	3.3	21.40	8.28	0.549	-176.4	0.03	1.70		

SAMPLE COLLECTION SAMPLE TIME 1247

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? If yes, complete appropriate forms. 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.)

clear out @ 1020, Purged over 3 casings to account for losses from drawdown. ducr in at 1257 x = 129.05

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/8/12 **TASK:** 532.30 **WELL ID:** MW-33

Time 1553 Static DTW (ft below reference point) 59.02
Casing Total Depth (ft below reference point) 1020
Screen to pump Water Column (feet) 483.4
Casing Capacity (Diameter 4 ") (gallons per foot) 0.60

Screen ~~Casing~~ Volume (CV) (gallons) 240 3 CV (gallons) 873
Purging Device Bed pump Sampling Device dedicated 0-10 Pipe stand
Pump: Depth (ft brp) 535 Type Grundfos Voltage 240 HP
Monitor Well Recharge Rate: Slow ____ Fast X

Weather Conditions
Time 1545 Temp. ~80°
Skies Clear, Sunny
Wind (mph) 1-2 From S-SW

Initials AMB & DM
Begin Purge 1606 End Purge 1711
Gallons Purged 876 CVs Purged 3.0
DTW (ft brp) 58.96 Time ~~1550~~ 1714

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (µS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1606	BEGIN PUMPING										14 gpm
1607	60.37	14	0.05	19.55	7.84	0.718	65.9	0.21	1.03		
1617	60.4	154	0.5	20.40	7.61	0.726	-150.1	0.06	3.86		14 gpm
1627	60.39	294	1.0	20.63	7.10	0.730	-122.6	0.06	4.95		14 gpm
1637	60.40	434	1.5	20.71	7.41	0.724	-112.1	0.68	0.88		13 gpm
1647	60.37	564	2.0	20.73	7.57	0.727	-123.8	0.68	1.60		13 gpm
1657	60.33	694	2.5	20.74	7.53	0.727	-114.9	0.73	4.87		13 gpm
1711	60.38	876	3.0	20.77	7.41	0.728	-94.3	2.45	1.38		

SAMPLE COLLECTION SAMPLE TIME 1711

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? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/10/12 **TASK:** 532.30 **WELL ID:** MW-34A

Time 959 Static DTW (ft below reference point)	129.09	Screen SV Casing Volume (SV) (gallons) 40 3 SV (gallons) 144	Weather Conditions Time 959 Temp.
Casing Total Depth (ft below reference point)	280	Purging Device ded pump Sampling Device ND pipe stored	Skies Part cloud
screen to pump Water Column (feet)	80	Pump: Depth (ft brp) 200' Type grundfos Voltage 240 HP	Wind (mph) 0-2 From S-SW
Casing Capacity (Diameter 4") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow Fast X	Initials AMB & DM GDP
			Begin Purge 1010 End Purge 1020
			Gallons Purged 150 CVs Purged 3.0
			DTW (ft brp) 127.16 Time 1025

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1009	Pump ON										14.1 gpm
1010	129.09	21.4	0.4	21.19	7.42	1.241	-135.4	4.74	484		
1012	129.11	47	1.0	21.21	7.43	1.241	-130.5	5.09	114		14.0 gpm
1014	~~129.5~~ 129.10	60	1.25	21.23	7.43	1.241	-102.3	5.34	139		14.1 gpm 129.1 ▽
1016	129.12	88	1.8	21.24	7.43	1.242	-75.6	5.40	56.1		14.1
1018	129.13	122	2.5	21.25	7.42	1.241	-62.3	5.56	191		14.1 GPM
1020	129.14	150	3.0	21.26	7.41	1.242	-34.1	5.69	254		14.1 GPM
1022	PUMP	OFF									

SAMPLE COLLECTION SAMPLE TIME 1020

ANALYSIS	QUANTITY	TYPE
8260B VOCs	2	40 ml VOA
8270 SIM 1,4 dioxane	1	1 L Amber
8270 MOD 1,4 dioxane	~~1~~	1 L Amber

DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/10/12 **TASK:** 532.30 **WELL ID:** MW-34B

Time 1040 Static DTW (ft below reference point)	129.51	Casing Volume (CV) (gallons) 46	3 CV (gallons) 137	Weather Conditions Time 1040 Temp. ~	Initials AMB & DM & GDP
Casing Total Depth (ft below reference point)	536	Purging Device deep pump	Sampling Device >100 pipe stand	Skies clear, sunny	Begin Purge 1043 End Purge
screen to pump Water Column (feet)	76	Pump: Depth (ft brp) 480' Type Grundfos	Voltage 240 HP	Wind (mph) 0-3 From S-SW	Gallons Purged 130 CVs Purged 3.0
Casing Capacity (Diameter 4 ") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow	Fast X		DTW (ft brp) 131.05 Time 1057

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	Q.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1043	PUMP	ON									
1044	131.28	7.7	0.2	20.98	7.65	1.101	37.9	2.50	27.3		13.4 gpm
1046	131.30	22.1	0.5	21.40	7.68	0.969	-120.2	2.41	704		13.4 gpm
1048	131.37	49	1.1	21.60	7.67	0.973	-66.0	2.89	139		13.5 gpm
1050	131.47	75	1.6	21.63	7.66	0.972	-57.3	2.92	92.5		13.5 gpm
1052	131.50	107	2.3	21.64	7.64	0.974	-51.4	2.92	37.3		13.5 gpm
1055	131.52	138	3.0	21.65	7.62	0.973	-43.6	2.91	36.6		13.5 gpm
1059	PUMP	OFF									

SAMPLE COLLECTION SAMPLE TIME 1055

ANALYSIS	QUANTITY	TYPE
8260B VOCs	9	40 ml VOA w/HCl
8270 SIM 1,4 dioxane	3	1 L Amber
8270 MOD 1,4 dioxane	3	1 L Amber

DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms. (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.)

Splits @ 1055 - 6 VOAs w/HCl & 2 1L Ambers

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/10/12 **TASK:** 532.30 **WELL ID:** MW-24C

Time 857 Static DTW (ft below reference point)	131.84	Casing Volume (CV) (gallons) 57.7 3 CV (gallons) 173	Weather Conditions	Initials AMB & DM	GDP
Casing Total Depth (ft below reference point)	576	Purging Device ded pump Sampling Device ded ND pump	Time 950 Temp. ~75°	Begin Purge 928 End Purge 942	
Water Column (feet)	96	Pump: Depth (ft brp) 480' Type grundfos Voltage 240 HP	Skies Clear	Gallons Purged 181 CVs Purged 3.1	
Casing Capacity (Diameter 4 ") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow Fast X	Wind (mph) 0-3 From W-SW	DTW (ft brp) 140.05 Time 945	

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	Temp.* (°C)	pH*	EC* (mS/cm)	Q.R.P.* (mV)	D.O.* (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
928	PUMP ON										
929	146.45	10	0.3	20.99	7.82	0.757	-199.6	1.05	3.24		12.9 gpm
931	149.45	33	0.6	21.50	8.21	0.576	-261.5	0.25	2.38		12.7 gpm
933	150.92	61	1.0	21.67	8.22	0.645	-255.7	NM	4.23		12.6 gpm sulfur odor
935	150.22	89	1.5	21.73	7.81	0.754	-213.8	.10	5.47		12.5 gpm
937	151.88	112	2.0	21.74	7.8	0.755	-207.5	0.08	0.91		12.5 gpm
939	151.99	134	2.3	21.75	7.79	0.756	-201.9	0.05	1.22		12.4 gpm
942	152.41	181	3.1	21.75	7.78	0.757	-198.0	0.04	0.51		12.4 gpm collect sample
944	Pump off										

SAMPLE COLLECTION SAMPLE TIME 9:42

ANALYSIS	QUANTITY	TYPE
8260B VOCs	3	40 ml VOA
8270 SIM 1,4 dioxane	1	1 L Amber
8270 MOD 1,4 dioxane	0	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.)

ducer out at 926, ducer in at 955

Purge over 3 casing volumes (drawdown)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/9/12 TASK: 532.30 WELL ID: MW-35A

Time 906 Static DTW (ft below reference point) 60.34
Casing Total Depth (ft below reference point) 470
Pump-screen Water Column (feet) 70
Casing Capacity (Diameter 4") (gallons per foot) 0.60
Screen ~~Casing~~ Volume (SV) (gallons) 42 3 SV (gallons) 126
Purging Device Bkd. pump Sampling Device ded, ND pump
Pump: Depth (ft brp) 400 Type grundfos Voltage 240 HP
Monitor Well Recharge Rate: Slow ____ Fast X

Weather Conditions: Time 1000 Temp. 75° Skies Clear, sunny Wind (mph) 0-3 From S-SW

Initials AMB & DM
Begin Purge 936 End Purge 957
Gallons Purged 210 CVs Purged 5.0
DTW (ft brp) 98R Time 1005

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
936	BEGIN PUMPING										
937	80.7	10	0.2	19.82	7.51	1.019	-103.4	0.80	34.2		11.57 gpm (flow meter digital) 11.2
941	128.93	51	1.2	19.96	7.48	1.023	-194.6	1.02	18.8		10.3 gpm (manual)
943	142.6	75.8	1.8	20.02	7.46	1.021	-172.9	1.08	3.20		9.8
945	150.65	85	8.8	20.04	7.46	1.032	-172.1	6.88	6.86		9.7
947	157	100	2.4	20.05	7.45	1.038	-170.2	0.86	2.55		9.6 gpm
949	163.55	126	3.0	20.07	7.42	1.032	-163.4	0.79	4.85		9.4
952	168.6	147	3.5	20.09	7.40	1.031	-155.6	0.68	3.14		9.2
957	174.3	210	5.0	20.11	7.38	1.032	-142.0	0.66	3.79		9.2 gpm
959	NM	220	PUMP OFF								

SAMPLE COLLECTION SAMPLE TIME 957

ANALYSIS	QUANTITY	TYPE
8260B VOCs	3	40 ml VOA
8270 SIM 1,4 dioxane	~~3~~ 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.)
ducer out @ 908
Purged over 3 casing volumes to account for drawdown losses

08. New GW Sampling Info - Casing Volume

Page ____ of ____

Company ☐ No. of containers correct ☐ received good condition/cold Attn: Accounts Payable

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/9/12 **TASK:** 532.30 **WELL ID:** MW-35B

Time 1014 Static DTW (ft below reference point) 66.49
Casing Total Depth (ft below reference point) 805
Pump, Screen Water Column (feet) 345
Casing Capacity (Diameter 4") (gallons per foot) 0.60

Screen SV Casing Volume (CV) (gallons) 207 SV 3.0 CV (gallons) 621
Purging Device ded pump Sampling Device ded ND pipe stand
Pump: Depth (ft brp) 460' Type grundfos Voltage 240 HP
Monitor Well Recharge Rate: Slow Fast X

Weather Conditions
Time 1015 Temp. 75°
Skies Clear, sunny
Wind (mph) 0-4 From SW

Initials AMB & DM
Begin Purge 1016 End Purge 1056
Gallons Purged 704 CVs Purged 5.0
DTW (ft brp) 66.95 Time 1109

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1016	PUMP ON										
1018	70.37	29	0.1	19.83	7.75	1.013	-199.7	0.11	2.77		15.5 gpm
1624	70.54	122	0.6	20.18	7.70	0.848	-148.2	0.30	1.09		15.5 gpm
1030	70.62	240	1.1	20.28	7.53	1.107	-90.3	1.83	174		15.5 gpm
1036	70.65	316	1.5	20.28	7.54	1.122	-71.8	1.67	172		15.5 gpm
1042	70.70	408	2.0	20.29	7.53	1.137	-57.8	1.56	206		15.5 gpm
1048	70.73	501	2.4	20.29	7.52	1.147	-49.7	1.52	27.0		15.5 gpm
1056	70.80	625	3.0	20.30	7.51	1.154	-46.1	1.49	8.25		15.5 gpm
1059	NM	704	PUMP OFF								

SAMPLE COLLECTION SAMPLE TIME 1056

ANALYSIS	QUANTITY	TYPE
8260B VOCs	3	40 ml VOA
8270 SIM 1,4 dioxane	1	1 L Amber
8270 MOD 1,4 dioxane	Ø	1 L Amber

DUPLICATES / SPLITS / BLANKS? If yes, complete appropriate forms. 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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/9/12 **TASK:** 532.30 **WELL ID:** MW-350

Time 1115 Static DTW (ft below reference point)	68.56	Screen SV Casing Volume (CV) (gallons) 348 3 CV (gallons) 1044	Weather Conditions
Casing Total Depth (ft below reference point)	990	Purging Device ded. pump Sampling Device ND pipe stem	Time 1100 Temp. ~75°
Pump to Screen Water Column (feet)	580	Pump: Depth (ft brp) 1040 Type grundfos Voltage 240 HP	Skies Clear, Sunny
Casing Capacity (Diameter 4 ") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow Fast X	Wind (mph) 1-5 From S-SW

Initials AMB & DM

Begin Purge 1120 End Purge 3.0

Gallons Purged 1091 CVs Purged >3.0

DTW (ft brp) 69.22R Time 1234

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1120	BEGIN PUMPING										
1121	71.10	16	0.1	19.81	7.49	0.948	-71.8	1.19	82.4		15.3 gpm
1131	71.40	159	0.5	20.27	7.24	1.013	-9.8	0.91	4.32		15.4 GPM
1141	71.45	318	0.9	20.34	7.21	0.954	-1.5	NM	9.14		15.2 gpm
1151	71.59	499	1.4	20.44	7.21	0.821	53.4	3.6	23.0		15.2 gpm
1201	71.60	627	1.8	20.44	7.27	0.821	58.0	~~41.0~~ AB	15.2		15.2 gpm DO = 3.69 mg/L
1213	71.70	808	2.3	20.45	7.21	0.820	66.6	3.64	6.53		15.2 GPM
1225	71.81	993	2.8	20.46	7.30	0.821	38.9	3.60	12.2		15.3 gpm
1229	71.85	1079	3.0	20.46	7.43	0.821	3.2	3.53	0.68		15.3 GPM
1232	71.89	1091	PUMP OFF								

SAMPLE COLLECTION SAMPLE TIME 1229

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.)

HARGIS + ASSOCIATES, INC.

GROUNDWATER SAMPLING INFORMATION

DATE: 5/1/12 **TASK:** 532.30 **WELL ID:** MW-36

Time 1348 Static DTW (ft below reference point)	71.60	Casing Volume (CV) (gallons) 320	3 CV (gallons) 960	Weather Conditions	Initials AMB & DM
Casing Total Depth (ft below reference point)	994.3	Purging Device ded pump	Sampling Device ded. HDPE pipe stand	Time 1345 Temp. 80°	Begin Purge 1358 End Purge 1537
Screen to pump Water Column (feet)	553.3	Pump: Depth (ft brp) 460 Type grundfos Voltage 240 HP		Skies clear	Gallons Purged 963 CVs Purged 3.0
Casing Capacity (Diameter 4") (gallons per foot)	0.60	Monitor Well Recharge Rate: Slow	Fast X	Wind (mph) 1-3 From E-SE	DTW (ft brp) 71.95 Time 1540

Time	Depth to Water	Volume Purged (Gallons)	Casing Volumes Purged	....FIELD PARAMETERS.... Temp. (°C)	pH	EC (mS/cm)	O.R.P. (mV)	D.O. (mg/L)	Turbidity (NTU)	Pump Frequency Hz	COMMENTS
1350	Pump	ON									Pump off @ 1359
1400	Pump	ON									9.5 gpm Sulfur odor
1401	73.63	10.0	0.1	20.39	7.81	0.593	-169.0	0.81	2.11		9.5 gpm
1417	73.58	171	0.5	21.35	7.64	0.588	-173.6	0.96	3.15		9.6 gpm Sulfur odor
1433	73.64	325	1.0	21.82	7.92	0.631	-93.6	2.40	4.27		9.6 gpm
1449	73.76	476	1.5	21.87	7.98	0.630	-88.6	2.22	1.82		9.6 gpm
1505	73.82	631	2.0	21.87	7.98	0.629	-78.4	2.47	1.05		9.6 gpm
1521	73.87	785	2.5	21.87	7.35	0.629	-77.0	0.64	1.76		9.6 gpm
1537	73.91	963	3.0	22.27	7.94	0.629	-75.9	2.26	1.24		9.6 gpm
1538	Pump	OFF									

SAMPLE COLLECTION SAMPLE TIME 1537

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? If yes, complete appropriate forms. 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.)

APPENDIX B

LABORATORY ANALYTICAL REPORTS

GROUNDWATER SAMPLING ANALYTICAL RESULTS

ADVANCED TECHNOLOGY LABORATORIES

May 17, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

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

Re: ATL Work Order Number : 1201701
Client Reference : Raytheon, 532.30

Enclosed are the results for sample(s) received on May 08, 2012 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,

Eddie Rodriguez
Laboratory Director

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/17/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-050712	1201701-01	LAB H2O	5/07/12 16:00	5/08/12 9:38
MW-21	1201701-02	Groundwater	5/07/12 16:15	5/08/12 9:38
MW-2100	1201701-03	Groundwater	5/07/12 16:45	5/08/12 9:38
EW-01	1201701-04	Groundwater	5/07/12 16:32	5/08/12 9:38

CASE NARRATIVE

Sample Receiving / General Comments

Headspace >5-6mm was noted on one voa vial for sample MW-21.

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/17/2012

Client Sample ID TB-050712

Lab ID: 1201701-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
2-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
4-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Benzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Bromobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Bromodichloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Bromoform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Bromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Carbon tetrachloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Chlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Chloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Chloroform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Chloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/17/2012

Client Sample ID TB-050712

Lab ID: 1201701-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Dibromochloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Dibromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Ethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Isopropylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
m,p-Xylene	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Methylene chloride	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
n-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
n-Propylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Naphthalene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
o-Xylene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
sec-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Styrene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
tert-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Tetrachloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Toluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Trichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Vinyl chloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:00	
Surrogate: 1,2-Dichloroethane-d4	*96.2 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 00:00*	
Surrogate: 4-Bromofluorobenzene	*97.1 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 00:00*	
Surrogate: Dibromofluoromethane	*98.6 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 00:00*	
Surrogate: Toluene-d8	*98.1 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 00:00*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/17/2012

Client Sample ID MW-21

Lab ID: 1201701-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,1,1-Trichloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,1,2,2-Tetrachloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,1,2-Trichloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,1-Dichloroethane	**6.5**	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,1-Dichloroethene	**490**	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,1-Dichloropropene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,2,3-Trichloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,2,3-Trichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,2,4-Trichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,2,4-Trimethylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,2-Dibromo-3-chloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,2-Dibromoethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,2-Dichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,2-Dichloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,2-Dichloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,3,5-Trimethylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,3-Dichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,3-Dichloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
1,4-Dichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
2,2-Dichloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
2-Chlorotoluene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
4-Chlorotoluene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
4-Isopropyltoluene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Benzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Bromobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Bromodichloromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Bromoform	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Bromomethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Carbon tetrachloride	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Chlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Chloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Chloroform	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Chloromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/17/2012

Client Sample ID MW-21

Lab ID: 1201701-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
cis-1,3-Dichloropropene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Dibromochloromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Dibromomethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Dichlorodifluoromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Ethylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Hexachlorobutadiene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Isopropylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
m,p-Xylene	ND	8.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Methylene chloride	ND	8.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
n-Butylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
n-Propylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Naphthalene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
o-Xylene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
sec-Butylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Styrene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
tert-Butylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Tetrachloroethene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Toluene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
trans-1,2-Dichloroethene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Trichloroethene	**11**	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Trichlorofluoromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Vinyl chloride	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 14:42	D4
Surrogate: 1,2-Dichloroethane-d4	*81.8 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 14:42*	
Surrogate: 4-Bromofluorobenzene	*98.1 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 14:42*	
Surrogate: Dibromofluoromethane	*93.0 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 14:42*	
Surrogate: Toluene-d8	*99.5 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 14:42*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/17/2012

Client Sample ID MW-21

Lab ID: 1201701-02

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**23**	2.0	NA	1	B2E0386	05/14/2012	05/15/12 15:15	
Surrogate: 1,2-Dichlorobenzene-d4	*79.8 %*	*37 - 93*			B2E0386	05/14/2012	*05/15/12 15:15*	
Surrogate: 2-Fluorobiphenyl	*86.0 %*	*51 - 100*			B2E0386	05/14/2012	*05/15/12 15:15*	
Surrogate: 4-Terphenyl-d14	*128 %*	*58 - 113*			B2E0386	05/14/2012	*05/15/12 15:15*	S8
Surrogate: Nitrobenzene-d5	*86.5 %*	*39 - 95*			B2E0386	05/14/2012	*05/15/12 15:15*	

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9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/17/2012

Client Sample ID MW-2100

Lab ID: 1201701-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,1,1-Trichloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,1,2,2-Tetrachloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,1,2-Trichloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,1-Dichloroethane	**6.3**	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,1-Dichloroethene	**480**	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,1-Dichloropropene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,2,3-Trichloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,2,3-Trichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,2,4-Trichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,2,4-Trimethylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,2-Dibromo-3-chloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,2-Dibromoethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,2-Dichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,2-Dichloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,2-Dichloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,3,5-Trimethylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,3-Dichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,3-Dichloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
1,4-Dichlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
2,2-Dichloropropane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
2-Chlorotoluene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
4-Chlorotoluene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
4-Isopropyltoluene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Benzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Bromobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Bromodichloromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Bromoform	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Bromomethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Carbon tetrachloride	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Chlorobenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Chloroethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Chloroform	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Chloromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4

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Lab ID: 1201701-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
cis-1,3-Dichloropropene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Dibromochloromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Dibromomethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Dichlorodifluoromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Ethylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Hexachlorobutadiene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Isopropylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
m,p-Xylene	ND	8.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Methylene chloride	ND	8.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
n-Butylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
n-Propylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Naphthalene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
o-Xylene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
sec-Butylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Styrene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
tert-Butylbenzene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Tetrachloroethene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Toluene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
trans-1,2-Dichloroethene	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Trichloroethene	**12**	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Trichlorofluoromethane	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Vinyl chloride	ND	4.0	NA	1	B2E0301	05/10/2012	05/10/12 15:02	D4
Surrogate: 1,2-Dichloroethane-d4	*84.1 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 15:02*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 15:02*	
Surrogate: Dibromofluoromethane	*94.1 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 15:02*	
Surrogate: Toluene-d8	*101 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 15:02*	

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Lab ID: 1201701-03

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**19**	2.0	NA	1	B2E0386	05/14/2012	05/15/12 15:43	
Surrogate: 1,2-Dichlorobenzene-d4	*82.3 %*	*37 - 93*			B2E0386	05/14/2012	*05/15/12 15:43*	
Surrogate: 2-Fluorobiphenyl	*89.4 %*	*51 - 100*			B2E0386	05/14/2012	*05/15/12 15:43*	
Surrogate: 4-Terphenyl-d14	*139 %*	*58 - 113*			B2E0386	05/14/2012	*05/15/12 15:43*	S8
Surrogate: Nitrobenzene-d5	*88.9 %*	*39 - 95*			B2E0386	05/14/2012	*05/15/12 15:43*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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San Diego , CA 92122	Reported : 05/17/2012

Client Sample ID EW-01

Lab ID: 1201701-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,1-Dichloroethene	**18**	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
2-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
4-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Benzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Bromobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Bromodichloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Bromoform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Bromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Carbon tetrachloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Chlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Chloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Chloroform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Chloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	

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Lab ID: 1201701-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Dibromochloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Dibromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Ethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Isopropylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
m,p-Xylene	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Methylene chloride	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
n-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
n-Propylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Naphthalene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
o-Xylene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
sec-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Styrene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
tert-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Tetrachloroethene	**0.78**	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Toluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Trichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Vinyl chloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 02:42	
Surrogate: 1,2-Dichloroethane-d4	*99.2 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 02:42*	
Surrogate: 4-Bromofluorobenzene	*98.5 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 02:42*	
Surrogate: Dibromofluoromethane	*101 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 02:42*	
Surrogate: Toluene-d8	*101 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 02:42*	

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Lab ID: 1201701-04

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**7.0**	2.0	NA	1	B2E0386	05/14/2012	05/15/12 16:11	
Surrogate: 1,2-Dichlorobenzene-d4	*95.5 %*	*37 - 93*			B2E0386	05/14/2012	*05/15/12 16:11*	S8
Surrogate: 2-Fluorobiphenyl	*101 %*	*51 - 100*			B2E0386	05/14/2012	*05/15/12 16:11*	S8
Surrogate: 4-Terphenyl-d14	*143 %*	*58 - 113*			B2E0386	05/14/2012	*05/15/12 16:11*	S8
Surrogate: Nitrobenzene-d5	*107 %*	*39 - 95*			B2E0386	05/14/2012	*05/15/12 16:11*	S8

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QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0285 - MSVOAW_LL									
Blank (B2E0285-BLK1)				Prepared: 5/9/2012 Analyzed: 5/9/2012					
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				

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0285 - MSVOAW_LL (continued)									
Blank (B2E0285-BLK1) - Continued				Prepared: 5/9/2012 Analyzed: 5/9/2012					
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*		*25.0*		*93.9*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*25*		*25.0*		*101*	*70 - 130*			
Surrogate: Dibromofluoromethane	*24*		*25.0*		*97.9*	*70 - 130*			
Surrogate: Toluene-d8	*25*		*25.0*		*98.8*	*70 - 130*			
LCS (B2E0285-BS1)				Prepared: 5/9/2012 Analyzed: 5/9/2012					
1,1-Dichloroethene	19	0.50	20.0		94.8	70 - 130			
Benzene	41	0.50	40.0		103	70 - 130			
Chlorobenzene	21	0.50	20.0		105	70 - 130			
MTBE	22	0.50	20.0		108	70 - 130			
Toluene	42	0.50	40.0		104	70 - 130			
Trichloroethene	20	0.50	20.0		100	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*25*		*25.0*		*99.8*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*26*		*25.0*		*105*	*70 - 130*			
Surrogate: Dibromofluoromethane	*25*		*25.0*		*101*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*102*	*70 - 130*			
LCS Dup (B2E0285-BSD1)				Prepared: 5/9/2012 Analyzed: 5/9/2012					
1,1-Dichloroethene	19	0.50	20.0		95.6	70 - 130	0.735	20	
Benzene	42	0.50	40.0		104	70 - 130	0.628	20	
Chlorobenzene	22	0.50	20.0		108	70 - 130	3.28	20	
MTBE	21	0.50	20.0		107	70 - 130	1.35	20	
Toluene	42	0.50	40.0		105	70 - 130	0.668	20	

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0285 - MSVOAW_LL (continued)									
LCS Dup (B2E0285-BSD1) - Continued				Prepared: 5/9/2012 Analyzed: 5/9/2012					
Trichloroethene	20	0.50	20.0		102	70 - 130	1.49	20	
Surrogate: 1,2-Dichloroethane-d4	*25*		*25.0*		*99.4*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*27*		*25.0*		*107*	*70 - 130*			
Surrogate: Dibromofluoromethane	*26*		*25.0*		*102*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*103*	*70 - 130*			
Batch B2E0301 - MSVOAW_LL									
Blank (B2E0301-BLK1)				Prepared: 5/10/2012 Analyzed: 5/10/2012					
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				

Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego , CA 92122

Project Number : Raytheon, 532.30
Report To : Steve Netto
Reported : 05/17/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0301 - MSVOAW_LL (continued)									
Blank (B2E0301-BLK1) - Continued				Prepared: 5/10/2012 Analyzed: 5/10/2012					
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				
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	*28*		*25.0*		*112*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*30*		*25.0*		*121*	*70 - 130*			
Surrogate: Dibromofluoromethane	*29*		*25.0*		*116*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*120*	*70 - 130*			
LCS (B2E0301-BS1)				Prepared: 5/10/2012 Analyzed: 5/10/2012					
1,1-Dichloroethene	20	0.50	20.0		100	70 - 130			
Benzene	42	0.50	40.0		106	70 - 130			
Chlorobenzene	21	0.50	20.0		107	70 - 130			
MTBE	20	0.50	20.0		102	70 - 130			
Toluene	42	0.50	40.0		106	70 - 130			
Trichloroethene	20	0.50	20.0		101	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*25*		*25.0*		*100*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*26*		*25.0*		*104*	*70 - 130*			
Surrogate: Dibromofluoromethane	*25*		*25.0*		*101*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*103*	*70 - 130*			

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0301 - MSVOAW_LL (continued)									
LCS Dup (B2E0301-BSD1)				Prepared: 5/10/2012 Analyzed: 5/10/2012					
1,1-Dichloroethene	20	0.50	20.0		102	70 - 130	1.83	20	
Benzene	43	0.50	40.0		107	70 - 130	1.55	20	
Chlorobenzene	22	0.50	20.0		109	70 - 130	1.53	20	
MTBE	21	0.50	20.0		107	70 - 130	5.18	20	
Toluene	43	0.50	40.0		109	70 - 130	2.35	20	
Trichloroethene	22	0.50	20.0		108	70 - 130	6.08	20	
Surrogate: 1,2-Dichloroethane-d4	*26*		*25.0*		*103*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*27*		*25.0*		*107*	*70 - 130*			
Surrogate: Dibromofluoromethane	*26*		*25.0*		*104*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*105*	*70 - 130*			
Matrix Spike (B2E0301-MS1)		**Source: 1201715-02**		Prepared: 5/10/2012 Analyzed: 5/10/2012					
1,1-Dichloroethene	22	0.50	20.0	ND	111	70 - 130			
Benzene	49	0.50	40.0	ND	122	70 - 130			
Chlorobenzene	25	0.50	20.0	ND	124	70 - 130			
MTBE	29	0.50	20.0	ND	146	70 - 130			M2
Toluene	49	0.50	40.0	ND	121	70 - 130			
Trichloroethene	23	0.50	20.0	ND	117	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*29*		*25.0*		*114*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*32*		*25.0*		*129*	*70 - 130*			
Surrogate: Dibromofluoromethane	*29*		*25.0*		*116*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*122*	*70 - 130*			
Matrix Spike Dup (B2E0301-MSD1)		**Source: 1201715-02**		Prepared: 5/10/2012 Analyzed: 5/10/2012					
1,1-Dichloroethene	22	0.50	20.0	ND	110	70 - 130	0.633	20	
Benzene	45	0.50	40.0	ND	113	70 - 130	7.79	20	
Chlorobenzene	23	0.50	20.0	ND	113	70 - 130	9.39	20	
MTBE	21	0.50	20.0	ND	106	70 - 130	31.2	20	R
Toluene	46	0.50	40.0	ND	114	70 - 130	6.09	20	
Trichloroethene	23	0.50	20.0	ND	113	70 - 130	3.21	20	
Surrogate: 1,2-Dichloroethane-d4	*23*		*25.0*		*92.7*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*26*		*25.0*		*105*	*70 - 130*			
Surrogate: Dibromofluoromethane	*24*		*25.0*		*96.8*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*103*	*70 - 130*			

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/17/2012

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 B2E0386 - MSSEMI_ISOTOPEDILN									
Blank (B2E0386-BLK2)					Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	ND	2.0			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*76*		*100*		*76.0*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*85*		*100*		*85.2*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*120*		*100*		*118*	*58 - 113*			S1
Surrogate: Nitrobenzene-d5	*87*		*100*		*86.7*	*39 - 95*			
LCS (B2E0386-BS2)					Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	100	2.0	100		102	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*82*		*100*		*81.9*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*90*		*100*		*90.1*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*110*		*100*		*110*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*90*		*100*		*90.2*	*39 - 95*			
Matrix Spike (B2E0386-MS2)		**Source: 1201761-04**			Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	160	2.0	100	58	104	0 - 200			
Surrogate: 1,2-Dichlorobenzene-d4	*87*		*100*		*86.7*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*89*		*100*		*89.2*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*110*		*100*		*110*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*94*		*100*		*94.1*	*39 - 95*			
Matrix Spike Dup (B2E0386-MSD2)		**Source: 1201761-04**			Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	150	2.0	100	58	88.6	0 - 200	10.1	200	
Surrogate: 1,2-Dichlorobenzene-d4	*86*		*100*		*85.8*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*94*		*100*		*93.8*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*110*		*100*		*112*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*96*		*100*		*95.5*	*39 - 95*			S8

Hargis & Associates, Inc.		Project Number :	Raytheon, 532.30
9171 Towne Centre Drive, Suite 375		Report To :	Steve Netto
San Diego , CA 92122		Reported :	05/17/2012

Notes and Definitions

S8	Surrogate recovery was above laboratory acceptance limit. See CAR for details.
S1	Surrogate recovery was above laboratory acceptance limit. No target analyte was detected in the sample.
R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
D4	Reporting limits adjusted to reflect sample amount analyzed.
ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 5/7/12 PAGE 1 OF 1

PROJECT NAME	PROJECT No./TASK No.
Raytheon	532.30
PROJECT MANAGER Steve Netto	**Phone No.** 858-455-6500
QA MANAGER	**Fax No.** 858-455-6533
SAMPLER (SIGNATURE)	**SAMPLER (PRINTED)** Daniel Mora, Amanda Beam

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX Soil	Ground-water	Surface water	LAB H2O	PRESERVATION HCl	HNO3	NaOH	H2SO4	Ice	SAMPLE CONTAINERS 40 ml VOA	1L AMber	ANALYSIS REQUESTED VOCs 8260B	1,4-Dioxane 8270 MOD	1,4-Dioxane 8270 SIM	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S 0-10	10-100	100-1,000	1,000-10,000	>10,000	SPECIAL HANDLING 24 TAT	48 TAT	Standard TAT
1201701-01	TB-050712	5/7/12	1600				X	X				X	2		X										
2	MW-21		1615		X			X				X	3		X					X					
	↓		↓		X							X		1		X									
3	MW-2100		1645		X			X				X	3		X					X					
	↓		↓		X							X		1		X									
4	EW-01		1632		X			X				X	3		X				X						
	↓	5/7/12	↓		X							X		1		X									
Total number of Containers per analysis:													11	3											

Total No. of Containers: 14

SPECIAL HANDLING: 24 TAT / 48 TAT / Standard TAT

LABORATORY INFORMATION: ATL

REMARKS

Relinquished by:	Date	Time	Received by:	Date	Time
	5/8/12	0820		5/8/12	0820
H+A (Company)			ATL (Company)		
Relinquished by:	Date	Time	Received by:	Date	Time
	5/8/12	1738		5/8/12	1934
ATL (Company)			ATL (Company)		

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.

Sample Receipt:
- ☑ No. of containers correct
- ☐ custody seals secure
- **Temp. @ receipt** 2.4 °C
- ☑ received good condition/cold
- ☑ conforms to COC document

Shipment Method: Courier Pick up

Send Results to: Steve Netto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375
SAN DIEGO, CA 92122 (858) 455-6500

☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124
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

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

ADVANCED TECHNOLOGY LABORATORIES

May 18, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

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

Re: ATL Work Order Number : 1201715

Client Reference : Raytheon, 532.30

Enclosed are the results for sample(s) received on May 08, 2012 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,

Eddie Rodriguez
Laboratory Director

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-050812	1201715-01	LAB H2O	5/08/12 8:00	5/08/12 18:05
MW-32A	1201715-02	Groundwater	5/08/12 9:56	5/08/12 18:05
MW-32C	1201715-03	Groundwater	5/08/12 12:47	5/08/12 18:05
MW-32B	1201715-04	Groundwater	5/08/12 14:29	5/08/12 18:05
MW-33	1201715-05	Groundwater	5/08/12 17:11	5/08/12 18:05

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID TB-050812

Lab ID: 1201715-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
2-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
4-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Benzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Bromobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Bromodichloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Bromoform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Bromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Carbon tetrachloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Chlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Chloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Chloroform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Chloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID TB-050812

Lab ID: 1201715-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Dibromochloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Dibromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Ethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Isopropylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
m,p-Xylene	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Methylene chloride	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
n-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
n-Propylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Naphthalene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
o-Xylene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
sec-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Styrene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
tert-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Tetrachloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Toluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Trichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Vinyl chloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 00:40	
Surrogate: 1,2-Dichloroethane-d4	*120 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 00:40*	
Surrogate: 4-Bromofluorobenzene	*122 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 00:40*	
Surrogate: Dibromofluoromethane	*122 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 00:40*	
Surrogate: Toluene-d8	*122 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 00:40*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID MW-32A

Lab ID: 1201715-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
2-Chlorotoluene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
4-Chlorotoluene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Benzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Bromobenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Bromodichloromethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Bromoform	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Bromomethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Carbon tetrachloride	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Chlorobenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Chloroethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Chloroform	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Chloromethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID MW-32A

Lab ID: 1201715-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Dibromochloromethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Dibromomethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Ethylbenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Isopropylbenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
m,p-Xylene	ND	1.0	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Methylene chloride	ND	1.0	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
n-Butylbenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
n-Propylbenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Naphthalene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
o-Xylene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
sec-Butylbenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Styrene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
tert-Butylbenzene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Tetrachloroethene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Toluene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Trichloroethene	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Vinyl chloride	ND	0.50	NA	1	B2E0301	05/10/2012	05/10/12 12:00	
Surrogate: 1,2-Dichloroethane-d4	*110 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 12:00*	
Surrogate: 4-Bromofluorobenzene	*116 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 12:00*	
Surrogate: Dibromofluoromethane	*113 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 12:00*	
Surrogate: Toluene-d8	*115 %*	*70 - 130*			B2E0301	05/10/2012	*05/10/12 12:00*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID MW-32A

Lab ID: 1201715-02

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	0.13	1	B2E0430	05/15/2012	05/16/12 13:12	
Surrogate: 1,2-Dichlorobenzene-d4	*93.2 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 13:12*	
Surrogate: 2-Fluorobiphenyl	*84.4 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 13:12*	
Surrogate: 4-Terphenyl-d14	*101 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 13:12*	
Surrogate: Nitrobenzene-d5	*71.4 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 13:12*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID MW-32C

Lab ID: 1201715-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
2-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
4-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Benzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Bromobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Bromodichloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Bromoform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Bromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Carbon tetrachloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Chlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Chloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Chloroform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Chloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID MW-32C

Lab ID: 1201715-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Dibromochloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Dibromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Ethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Isopropylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
m,p-Xylene	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Methylene chloride	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
n-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
n-Propylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Naphthalene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
o-Xylene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
sec-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Styrene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
tert-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Tetrachloroethene	**0.56**	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Toluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Trichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Vinyl chloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:02	
Surrogate: 1,2-Dichloroethane-d4	*101 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 03:02*	
Surrogate: 4-Bromofluorobenzene	*99.8 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 03:02*	
Surrogate: Dibromofluoromethane	*101 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 03:02*	
Surrogate: Toluene-d8	*100 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 03:02*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID MW-32C

Lab ID: 1201715-03

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	0.13	1	B2E0430	05/15/2012	05/16/12 13:42	
Surrogate: 1,2-Dichlorobenzene-d4	*86.9 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 13:42*	
Surrogate: 2-Fluorobiphenyl	*77.0 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 13:42*	
Surrogate: 4-Terphenyl-d14	*93.5 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 13:42*	
Surrogate: Nitrobenzene-d5	*67.0 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 13:42*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID MW-32B

Lab ID: 1201715-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,1-Dichloroethene	**39**	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
2-Chlorotoluene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
4-Chlorotoluene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Benzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Bromobenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Bromodichloromethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Bromoform	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Bromomethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Carbon tetrachloride	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Chlorobenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Chloroethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Chloroform	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Chloromethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	

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Lab ID: 1201715-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	**2.8**	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Dibromochloromethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Dibromomethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Ethylbenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Isopropylbenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
m,p-Xylene	ND	1.0	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Methylene chloride	ND	1.0	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
n-Butylbenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
n-Propylbenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Naphthalene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
o-Xylene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
sec-Butylbenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Styrene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
tert-Butylbenzene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Tetrachloroethene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Toluene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Trichloroethene	**30**	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Vinyl chloride	ND	0.50	NA	1	B2E0343	05/11/2012	05/11/12 14:03	
Surrogate: 1,2-Dichloroethane-d4	*99.2 %*		*70 - 130*		B2E0343	05/11/2012	*05/11/12 14:03*	
Surrogate: 4-Bromofluorobenzene	*115 %*		*70 - 130*		B2E0343	05/11/2012	*05/11/12 14:03*	
Surrogate: Dibromofluoromethane	*110 %*		*70 - 130*		B2E0343	05/11/2012	*05/11/12 14:03*	
Surrogate: Toluene-d8	*113 %*		*70 - 130*		B2E0343	05/11/2012	*05/11/12 14:03*	

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Client Sample ID MW-32B

Lab ID: 1201715-04

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**1.4**	0.20	0.13	1	B2E0430	05/15/2012	05/16/12 14:11	
Surrogate: 1,2-Dichlorobenzene-d4	*86.1 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 14:11*	
Surrogate: 2-Fluorobiphenyl	*80.4 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 14:11*	
Surrogate: 4-Terphenyl-d14	*96.6 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 14:11*	
Surrogate: Nitrobenzene-d5	*69.4 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 14:11*	

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Lab ID: 1201715-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,1-Dichloroethene	**4.2**	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
2-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
4-Chlorotoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Benzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Bromobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Bromodichloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Bromoform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Bromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Carbon tetrachloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Chlorobenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Chloroethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Chloroform	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Chloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	

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Lab ID: 1201715-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Dibromochloromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Dibromomethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Ethylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Isopropylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
m,p-Xylene	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Methylene chloride	ND	1.0	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
n-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
n-Propylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Naphthalene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
o-Xylene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
sec-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Styrene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
tert-Butylbenzene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Tetrachloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Toluene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Trichloroethene	**0.83**	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Vinyl chloride	ND	0.50	NA	1	B2E0285	05/10/2012	05/10/12 03:22	
Surrogate: 1,2-Dichloroethane-d4	*102 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 03:22*	
Surrogate: 4-Bromofluorobenzene	*99.8 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 03:22*	
Surrogate: Dibromofluoromethane	*105 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 03:22*	
Surrogate: Toluene-d8	*101 %*	*70 - 130*			B2E0285	05/10/2012	*05/10/12 03:22*	

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	0.13	1	B2E0430	05/15/2012	05/16/12 14:39	
Surrogate: 1,2-Dichlorobenzene-d4	*74.9 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 14:39*	
Surrogate: 2-Fluorobiphenyl	*66.1 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 14:39*	
Surrogate: 4-Terphenyl-d14	*91.5 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 14:39*	
Surrogate: Nitrobenzene-d5	*60.9 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 14:39*	

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QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0285 - MSVOAW_LL									
Blank (B2E0285-BLK1)				Prepared: 5/9/2012 Analyzed: 5/9/2012					
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				

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0285 - MSVOAW_LL (continued)									
Blank (B2E0285-BLK1) - Continued				Prepared: 5/9/2012 Analyzed: 5/9/2012					
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*		*25.0*		*93.9*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*25*		*25.0*		*101*	*70 - 130*			
Surrogate: Dibromofluoromethane	*24*		*25.0*		*97.9*	*70 - 130*			
Surrogate: Toluene-d8	*25*		*25.0*		*98.8*	*70 - 130*			
LCS (B2E0285-BS1)				Prepared: 5/9/2012 Analyzed: 5/9/2012					
1,1-Dichloroethene	19	0.50	20.0		94.8	70 - 130			
Benzene	41	0.50	40.0		103	70 - 130			
Chlorobenzene	21	0.50	20.0		105	70 - 130			
MTBE	22	0.50	20.0		108	70 - 130			
Toluene	42	0.50	40.0		104	70 - 130			
Trichloroethene	20	0.50	20.0		100	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*25*		*25.0*		*99.8*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*26*		*25.0*		*105*	*70 - 130*			
Surrogate: Dibromofluoromethane	*25*		*25.0*		*101*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*102*	*70 - 130*			
LCS Dup (B2E0285-BSD1)				Prepared: 5/9/2012 Analyzed: 5/9/2012					
1,1-Dichloroethene	19	0.50	20.0		95.6	70 - 130	0.735	20	
Benzene	42	0.50	40.0		104	70 - 130	0.628	20	
Chlorobenzene	22	0.50	20.0		108	70 - 130	3.28	20	
MTBE	21	0.50	20.0		107	70 - 130	1.35	20	
Toluene	42	0.50	40.0		105	70 - 130	0.668	20	

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0285 - MSVOAW_LL (continued)									
LCS Dup (B2E0285-BSD1) - Continued				Prepared: 5/9/2012 Analyzed: 5/9/2012					
Trichloroethene	20	0.50	20.0		102	70 - 130	1.49	20	
Surrogate: 1,2-Dichloroethane-d4	*25*		*25.0*		*99.4*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*27*		*25.0*		*107*	*70 - 130*			
Surrogate: Dibromofluoromethane	*26*		*25.0*		*102*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*103*	*70 - 130*			
Batch B2E0301 - MSVOAW_LL									
Blank (B2E0301-BLK1)				Prepared: 5/10/2012 Analyzed: 5/10/2012					
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				

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0301 - MSVOAW_LL (continued)									
Blank (B2E0301-BLK1) - Continued				Prepared: 5/10/2012 Analyzed: 5/10/2012					
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				
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	*28*		*25.0*		*112*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*30*		*25.0*		*121*	*70 - 130*			
Surrogate: Dibromofluoromethane	*29*		*25.0*		*116*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*120*	*70 - 130*			
LCS (B2E0301-BS1)				Prepared: 5/10/2012 Analyzed: 5/10/2012					
1,1-Dichloroethene	20	0.50	20.0		100	70 - 130			
Benzene	42	0.50	40.0		106	70 - 130			
Chlorobenzene	21	0.50	20.0		107	70 - 130			
MTBE	20	0.50	20.0		102	70 - 130			
Toluene	42	0.50	40.0		106	70 - 130			
Trichloroethene	20	0.50	20.0		101	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*25*		*25.0*		*100*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*26*		*25.0*		*104*	*70 - 130*			
Surrogate: Dibromofluoromethane	*25*		*25.0*		*101*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*103*	*70 - 130*			

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San Diego , CA 92122	Reported : 05/18/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0301 - MSVOAW_LL (continued)									
LCS Dup (B2E0301-BSD1)				Prepared: 5/10/2012 Analyzed: 5/10/2012					
1,1-Dichloroethene	20	0.50	20.0		102	70 - 130	1.83	20	
Benzene	43	0.50	40.0		107	70 - 130	1.55	20	
Chlorobenzene	22	0.50	20.0		109	70 - 130	1.53	20	
MTBE	21	0.50	20.0		107	70 - 130	5.18	20	
Toluene	43	0.50	40.0		109	70 - 130	2.35	20	
Trichloroethene	22	0.50	20.0		108	70 - 130	6.08	20	
Surrogate: 1,2-Dichloroethane-d4	*26*		*25.0*		*103*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*27*		*25.0*		*107*	*70 - 130*			
Surrogate: Dibromofluoromethane	*26*		*25.0*		*104*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*105*	*70 - 130*			
Matrix Spike (B2E0301-MS1)		**Source: 1201715-02**		Prepared: 5/10/2012 Analyzed: 5/10/2012					
1,1-Dichloroethene	22	0.50	20.0	ND	111	70 - 130			
Benzene	49	0.50	40.0	ND	122	70 - 130			
Chlorobenzene	25	0.50	20.0	ND	124	70 - 130			
MTBE	29	0.50	20.0	ND	146	70 - 130			M2
Toluene	49	0.50	40.0	ND	121	70 - 130			
Trichloroethene	23	0.50	20.0	ND	117	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*29*		*25.0*		*114*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*32*		*25.0*		*129*	*70 - 130*			
Surrogate: Dibromofluoromethane	*29*		*25.0*		*116*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*122*	*70 - 130*			
Matrix Spike Dup (B2E0301-MSD1)		**Source: 1201715-02**		Prepared: 5/10/2012 Analyzed: 5/10/2012					
1,1-Dichloroethene	22	0.50	20.0	ND	110	70 - 130	0.633	20	
Benzene	45	0.50	40.0	ND	113	70 - 130	7.79	20	
Chlorobenzene	23	0.50	20.0	ND	113	70 - 130	9.39	20	
MTBE	21	0.50	20.0	ND	106	70 - 130	31.2	20	R
Toluene	46	0.50	40.0	ND	114	70 - 130	6.09	20	
Trichloroethene	23	0.50	20.0	ND	113	70 - 130	3.21	20	
Surrogate: 1,2-Dichloroethane-d4	*23*		*25.0*		*92.7*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*26*		*25.0*		*105*	*70 - 130*			
Surrogate: Dibromofluoromethane	*24*		*25.0*		*96.8*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*103*	*70 - 130*			
Batch B2E0343 - MSVOAW_LL									
Blank (B2E0343-BLK1)				Prepared: 5/11/2012 Analyzed: 5/11/2012					
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				

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0343 - MSVOAW_LL (continued)									
Blank (B2E0343-BLK1) - Continued				Prepared: 5/11/2012 Analyzed: 5/11/2012					
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				
m,p-Xylene	ND	1.0			NR				
Methylene chloride	ND	1.0			NR				
n-Butylbenzene	ND	0.50			NR				

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0343 - MSVOAW_LL (continued)									
Blank (B2E0343-BLK1) - Continued					Prepared: 5/11/2012 Analyzed: 5/11/2012				
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*		*25.0*		*97.0*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*30*		*25.0*		*120*	*70 - 130*			
Surrogate: Dibromofluoromethane	*28*		*25.0*		*112*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*122*	*70 - 130*			
LCS (B2E0343-BS1)					Prepared: 5/11/2012 Analyzed: 5/11/2012				
1,1-Dichloroethene	19	0.50	20.0		93.2	70 - 130			
Benzene	41	0.50	40.0		104	70 - 130			
Chlorobenzene	21	0.50	20.0		107	70 - 130			
MTBE	20	0.50	20.0		102	70 - 130			
Toluene	42	0.50	40.0		106	70 - 130			
Trichloroethene	21	0.50	20.0		104	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*23*		*25.0*		*92.1*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*26*		*25.0*		*103*	*70 - 130*			
Surrogate: Dibromofluoromethane	*25*		*25.0*		*98.0*	*70 - 130*			
Surrogate: Toluene-d8	*25*		*25.0*		*102*	*70 - 130*			
LCS Dup (B2E0343-BSD1)					Prepared: 5/11/2012 Analyzed: 5/11/2012				
1,1-Dichloroethene	19	0.50	20.0		95.0	70 - 130	1.97	20	
Benzene	42	0.50	40.0		105	70 - 130	1.44	20	
Chlorobenzene	22	0.50	20.0		108	70 - 130	0.186	20	
MTBE	21	0.50	20.0		104	70 - 130	1.31	20	
Toluene	43	0.50	40.0		108	70 - 130	2.02	20	
Trichloroethene	21	0.50	20.0		104	70 - 130	0.434	20	
Surrogate: 1,2-Dichloroethane-d4	*23*		*25.0*		*92.0*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*25*		*25.0*		*101*	*70 - 130*			
Surrogate: Dibromofluoromethane	*25*		*25.0*		*98.4*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*102*	*70 - 130*			

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0343 - MSVOAW_LL (continued)									
Matrix Spike (B2E0343-MS1)		**Source: 1201713-04**		Prepared: 5/11/2012 Analyzed: 5/11/2012					
1,1-Dichloroethene	41	0.50	20.0	ND	204	70 - 130			M2
Benzene	67	0.50	40.0	0.56	166	70 - 130			M2
Chlorobenzene	78	0.50	20.0	31	235	70 - 130			M2
MTBE	43	0.50	20.0	ND	214	70 - 130			M2
Toluene	70	0.50	40.0	ND	174	70 - 130			M2
Trichloroethene	46	0.50	20.0	ND	229	70 - 130			M2
Surrogate: 1,2-Dichloroethane-d4	*26*		*25.0*		*106*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*32*		*25.0*		*126*	*70 - 130*			
Surrogate: Dibromofluoromethane	*28*		*25.0*		*111*	*70 - 130*			
Surrogate: Toluene-d8	*31*		*25.0*		*123*	*70 - 130*			
Matrix Spike Dup (B2E0343-MSD1)		**Source: 1201713-04**		Prepared: 5/11/2012 Analyzed: 5/11/2012					
1,1-Dichloroethene	37	0.50	20.0	ND	184	70 - 130	10.8	20	M2
Benzene	61	0.50	40.0	0.56	152	70 - 130	8.71	20	M2
Chlorobenzene	73	0.50	20.0	31	208	70 - 130	7.19	20	M2
MTBE	40	0.50	20.0	ND	202	70 - 130	5.50	20	M2
Toluene	64	0.50	40.0	ND	159	70 - 130	9.27	20	M2
Trichloroethene	42	0.50	20.0	ND	211	70 - 130	8.41	20	M2
Surrogate: 1,2-Dichloroethane-d4	*22*		*25.0*		*86.1*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*25*		*25.0*		*102*	*70 - 130*			
Surrogate: Dibromofluoromethane	*22*		*25.0*		*89.9*	*70 - 130*			
Surrogate: Toluene-d8	*25*		*25.0*		*99.4*	*70 - 130*			

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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 B2E0430 - MSSEMI_ISOTOPEDILN									
Blank (B2E0430-BLK1)					Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	ND	0.20			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*0.89*		*1.00*		*89.2*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.79*		*1.00*		*79.1*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.96*		*1.00*		*96.1*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.51*		*1.00*		*51.1*	*36 - 130*			
LCS (B2E0430-BS1)					Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	1.0	0.20	1.00		101	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*0.93*		*1.00*		*93.3*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.80*		*1.00*		*79.8*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.88*		*1.00*		*88.2*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.59*		*1.00*		*58.8*	*36 - 130*			
Matrix Spike (B2E0430-MS1)		**Source: 1201715-02**			Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	0.98	0.20	1.00	ND	98.5	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*0.91*		*1.00*		*91.0*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.78*		*1.00*		*77.6*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.85*		*1.00*		*85.4*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.60*		*1.00*		*60.4*	*36 - 130*			
Matrix Spike Dup (B2E0430-MSD1)		**Source: 1201715-02**			Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	0.96	0.20	1.00	ND	95.9	70 - 130	2.65	20	
Surrogate: 1,2-Dichlorobenzene-d4	*0.92*		*1.00*		*92.1*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.76*		*1.00*		*76.0*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.78*		*1.00*		*78.2*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.65*		*1.00*		*64.9*	*36 - 130*			

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San Diego , CA 92122		Reported :	05/18/2012

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

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PROJECT NAME Raytheon	**PROJECT No./TASK No.** 532.30
PROJECT MANAGER Steve Netto	**Phone No.** 858-455-6500
QA MANAGER	**Fax No.** 858-455-6533
SAMPLER (SIGNATURE)	**SAMPLER (PRINTED)** Daniel MOra, Amanda Beam

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX: Soil	Ground-water	Surface water	LAB FILT'D	PRESERVATION: HCl	HNO3	NaOH	H2SO4	Ice	SAMPLE CONTAINERS: 40 ml VOA	1L AMber	ANALYSIS REQUESTED: VOCs 8260B	1,4-Dioxane 8270 MOD	1,4-Dioxane 8270 SIM	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-10	10-100	100-1,000	1,000-10,000	>10,000	SPECIAL HANDLING: 24 TAT	48 TAT	Standard TAT	MS & MSD reduced	LABORATORY INFORMATION / REMARKS
																											ATL
120715-01	TB-050812	5/8/12	800				X	X				X	2		X			X							X		
2	MW-32A		956		X			X				X	3		X			X							X	X	6 VOAs
	↓		956		X							X		1			X								X	X	~~6 VOAs~~ 2 1L
3	MW-32C		1247		X			X				X	3		X			X							X	X	~~3 1L~~
	↓		1247		X							X		1			X								X		
4	MW-32B		1429		X			X				X	3		X			~~X~~	X						X		
	↓		↓		X							X		1			X								X		
5	MW-33		1711		X			X				X	3		X			X							X		
	↓		1711		X							X		1			X								X		
Total number of Containers per analysis:													14	4													**Total No. of Containers:** 18 + 8 = 26

Relinquished by:	Date	Time	Company	Received by:	Date	Time	Company
D. [signature]	5/8/12	1720	HHA	[signature]	5/9/12	1726	ATL
[signature]	5/8/12	1805	ATL	FPDHL	5/8/12	1901	DTL

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.

Sample Receipt:
- ☐ No. of containers correct
- ☐ custody seals secure
- **Temp. @ receipt** 4.7 °C
- ☐ received good condition/cold
- ☐ conforms to COC document

Shipment Method: Courier Pick UP

Send Results to: Steve Netto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375
SAN DIEGO, CA 92122 (858) 455-6500

☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124
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

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

ADVANCED TECHNOLOGY LABORATORIES

May 21, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

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

Re: ATL Work Order Number : 1201735

Client Reference : Raytheon, 532.30

Enclosed are the results for sample(s) received on May 09, 2012 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,

Eddie Rodriguez
Laboratory Director

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-050912	1201735-01	LAB H2O	5/09/12 7:00	5/09/12 17:50
MW-35A	1201735-02	Groundwater	5/09/12 9:57	5/09/12 17:50
MW-35B	1201735-03	Groundwater	5/09/12 10:56	5/09/12 17:50
MW-35C	1201735-04	Groundwater	5/09/12 12:29	5/09/12 17:50
MW-26C	1201735-05	Groundwater	5/09/12 16:12	5/09/12 17:50

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID TB-050912

Lab ID: 1201735-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
2-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
4-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Benzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Bromobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Bromodichloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Bromoform	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Bromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Carbon tetrachloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Chlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Chloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Chloroform	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Chloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID TB-050912

Lab ID: 1201735-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Dibromochloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Dibromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Ethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Isopropylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
m,p-Xylene	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Methylene chloride	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
n-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
n-Propylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Naphthalene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
o-Xylene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
sec-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Styrene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
tert-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Tetrachloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Toluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Trichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Vinyl chloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:28	
Surrogate: 1,2-Dichloroethane-d4	*91.4 %*		*70 - 130*		B2E0366	05/12/2012	*05/12/12 01:28*	
Surrogate: 4-Bromofluorobenzene	*96.1 %*		*70 - 130*		B2E0366	05/12/2012	*05/12/12 01:28*	
Surrogate: Dibromofluoromethane	*95.6 %*		*70 - 130*		B2E0366	05/12/2012	*05/12/12 01:28*	
Surrogate: Toluene-d8	*96.6 %*		*70 - 130*		B2E0366	05/12/2012	*05/12/12 01:28*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-35A

Lab ID: 1201735-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
2-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
4-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Benzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Bromobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Bromodichloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Bromoform	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Bromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Carbon tetrachloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Chlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Chloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Chloroform	**2.1**	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Chloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-35A

Lab ID: 1201735-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Dibromochloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Dibromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Ethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Isopropylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
m,p-Xylene	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Methylene chloride	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
n-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
n-Propylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Naphthalene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
o-Xylene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
sec-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Styrene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
tert-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Tetrachloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Toluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Trichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Vinyl chloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 01:48	
Surrogate: 1,2-Dichloroethane-d4	*114 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 01:48*	
Surrogate: 4-Bromofluorobenzene	*116 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 01:48*	
Surrogate: Dibromofluoromethane	*116 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 01:48*	
Surrogate: Toluene-d8	*117 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 01:48*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-35A

Lab ID: 1201735-02

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	0.13	1	B2E0430	05/15/2012	05/16/12 15:07	
Surrogate: 1,2-Dichlorobenzene-d4	*89.4 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 15:07*	
Surrogate: 2-Fluorobiphenyl	*80.8 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 15:07*	
Surrogate: 4-Terphenyl-d14	*97.1 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 15:07*	
Surrogate: Nitrobenzene-d5	*72.1 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 15:07*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-35B

Lab ID: 1201735-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
2-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
4-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Benzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Bromobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Bromodichloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Bromoform	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Bromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Carbon tetrachloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Chlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Chloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Chloroform	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Chloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-35B

Lab ID: 1201735-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Dibromochloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Dibromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Ethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Isopropylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
m,p-Xylene	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Methylene chloride	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
n-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
n-Propylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Naphthalene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
o-Xylene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
sec-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Styrene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
tert-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Tetrachloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Toluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Trichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Vinyl chloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:09	
Surrogate: 1,2-Dichloroethane-d4	*119 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 02:09*	
Surrogate: 4-Bromofluorobenzene	*123 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 02:09*	
Surrogate: Dibromofluoromethane	*123 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 02:09*	
Surrogate: Toluene-d8	*122 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 02:09*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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Client Sample ID MW-35B

Lab ID: 1201735-03

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	0.13	1	B2E0430	05/15/2012	05/16/12 15:35	
Surrogate: 1,2-Dichlorobenzene-d4	*89.2 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 15:35*	
Surrogate: 2-Fluorobiphenyl	*79.6 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 15:35*	
Surrogate: 4-Terphenyl-d14	*94.3 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 15:35*	
Surrogate: Nitrobenzene-d5	*70.5 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 15:35*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-35C

Lab ID: 1201735-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
2-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
4-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Benzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Bromobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Bromodichloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Bromoform	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Bromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Carbon tetrachloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Chlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Chloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Chloroform	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Chloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-35C

Lab ID: 1201735-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Dibromochloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Dibromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Ethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Isopropylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
m,p-Xylene	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Methylene chloride	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
n-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
n-Propylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Naphthalene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
o-Xylene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
sec-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Styrene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
tert-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Tetrachloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Toluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Trichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Vinyl chloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:29	
Surrogate: 1,2-Dichloroethane-d4	*120 %*		*70 - 130*		B2E0366	05/12/2012	*05/12/12 02:29*	
Surrogate: 4-Bromofluorobenzene	*121 %*		*70 - 130*		B2E0366	05/12/2012	*05/12/12 02:29*	
Surrogate: Dibromofluoromethane	*123 %*		*70 - 130*		B2E0366	05/12/2012	*05/12/12 02:29*	
Surrogate: Toluene-d8	*122 %*		*70 - 130*		B2E0366	05/12/2012	*05/12/12 02:29*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-35C

Lab ID: 1201735-04

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	0.13	1	B2E0430	05/15/2012	05/16/12 16:05	
Surrogate: 1,2-Dichlorobenzene-d4	*87.6 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 16:05*	
Surrogate: 2-Fluorobiphenyl	*76.3 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 16:05*	
Surrogate: 4-Terphenyl-d14	*98.9 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 16:05*	
Surrogate: Nitrobenzene-d5	*69.1 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 16:05*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-26C

Lab ID: 1201735-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
2-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
4-Chlorotoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Benzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Bromobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Bromodichloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Bromoform	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Bromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Carbon tetrachloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Chlorobenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Chloroethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Chloroform	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Chloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

Client Sample ID MW-26C

Lab ID: 1201735-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Dibromochloromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Dibromomethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Ethylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Isopropylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
m,p-Xylene	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Methylene chloride	ND	1.0	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
n-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
n-Propylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Naphthalene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
o-Xylene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
sec-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Styrene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
tert-Butylbenzene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Tetrachloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Toluene	**6.6**	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Trichloroethene	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Vinyl chloride	ND	0.50	NA	1	B2E0366	05/12/2012	05/12/12 02:49	
Surrogate: 1,2-Dichloroethane-d4	*96.6 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 02:49*	
Surrogate: 4-Bromofluorobenzene	*94.6 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 02:49*	
Surrogate: Dibromofluoromethane	*99.0 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 02:49*	
Surrogate: Toluene-d8	*96.7 %*	*70 - 130*			B2E0366	05/12/2012	*05/12/12 02:49*	

Hargis & Associates, Inc.		Project Number :	Raytheon, 532.30
9171 Towne Centre Drive, Suite 375		Report To :	Steve Netto
San Diego , CA 92122		Reported :	05/21/2012

Client Sample ID MW-26C

Lab ID: 1201735-05

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	0.13	1	B2E0430	05/15/2012	05/16/12 16:34	
Surrogate: 1,2-Dichlorobenzene-d4	*86.4 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 16:34*	
Surrogate: 2-Fluorobiphenyl	*76.9 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 16:34*	
Surrogate: 4-Terphenyl-d14	*96.1 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 16:34*	
Surrogate: Nitrobenzene-d5	*71.6 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 16:34*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0366 - MSVOAW_LL									
Blank (B2E0366-BLK1)				Prepared: 5/11/2012 Analyzed: 5/11/2012					
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				

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0366 - MSVOAW_LL (continued)									
Blank (B2E0366-BLK1) - Continued				Prepared: 5/11/2012 Analyzed: 5/11/2012					
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	*27*		*25.0*		*109*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*31*		*25.0*		*122*	*70 - 130*			
Surrogate: Dibromofluoromethane	*29*		*25.0*		*116*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*121*	*70 - 130*			
LCS (B2E0366-BS1)				Prepared: 5/11/2012 Analyzed: 5/11/2012					
1,1-Dichloroethene	21	0.50	20.0		104	70 - 130			
Benzene	43	0.50	40.0		108	70 - 130			
Chlorobenzene	22	0.50	20.0		110	70 - 130			
MTBE	21	0.50	20.0		104	70 - 130			
Toluene	44	0.50	40.0		110	70 - 130			
Trichloroethene	21	0.50	20.0		107	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*24*		*25.0*		*97.9*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*26*		*25.0*		*102*	*70 - 130*			
Surrogate: Dibromofluoromethane	*25*		*25.0*		*101*	*70 - 130*			
Surrogate: Toluene-d8	*26*		*25.0*		*103*	*70 - 130*			
LCS Dup (B2E0366-BSD1)				Prepared: 5/11/2012 Analyzed: 5/11/2012					
1,1-Dichloroethene	19	0.50	20.0		94.5	70 - 130	9.14	20	
Benzene	42	0.50	40.0		106	70 - 130	1.81	20	
Chlorobenzene	22	0.50	20.0		108	70 - 130	1.19	20	
MTBE	21	0.50	20.0		105	70 - 130	1.10	20	
Toluene	43	0.50	40.0		107	70 - 130	2.03	20	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0366 - MSVOAW_LL (continued)									
LCS Dup (B2E0366-BSD1) - Continued					Prepared: 5/11/2012 Analyzed: 5/11/2012				
Trichloroethene	20	0.50	20.0		102	70 - 130	3.92	20	
Surrogate: 1,2-Dichloroethane-d4	*24*		*25.0*		*95.2*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*25*		*25.0*		*101*	*70 - 130*			
Surrogate: Dibromofluoromethane	*25*		*25.0*		*100*	*70 - 130*			
Surrogate: Toluene-d8	*25*		*25.0*		*102*	*70 - 130*			
Matrix Spike (B2E0366-MS1)		**Source: 1201735-05**			Prepared: 5/12/2012 Analyzed: 5/12/2012				
1,1-Dichloroethene	15	0.50	20.0	ND	76.8	70 - 130			
Benzene	30	0.50	40.0	ND	74.6	70 - 130			
Chlorobenzene	14	0.50	20.0	ND	71.5	70 - 130			
MTBE	13	0.50	20.0	ND	67.1	70 - 130			
Toluene	36	0.50	40.0	6.6	74.1	70 - 130			
Trichloroethene	14	0.50	20.0	ND	70.4	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*23*		*25.0*		*92.8*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*24*		*25.0*		*96.8*	*70 - 130*			
Surrogate: Dibromofluoromethane	*23*		*25.0*		*93.6*	*70 - 130*			
Surrogate: Toluene-d8	*23*		*25.0*		*93.9*	*70 - 130*			
Matrix Spike Dup (B2E0366-MSD1)		**Source: 1201735-05**			Prepared: 5/12/2012 Analyzed: 5/12/2012				
1,1-Dichloroethene	23	0.50	20.0	ND	116	70 - 130	40.4	20	R
Benzene	49	0.50	40.0	ND	122	70 - 130	47.9	20	R
Chlorobenzene	24	0.50	20.0	ND	120	70 - 130	50.6	20	R
MTBE	27	0.50	20.0	ND	133	70 - 130	65.8	20	M2, R
Toluene	54	0.50	40.0	6.6	119	70 - 130	39.5	20	R
Trichloroethene	23	0.50	20.0	ND	114	70 - 130	47.7	20	R
Surrogate: 1,2-Dichloroethane-d4	*28*		*25.0*		*113*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*31*		*25.0*		*124*	*70 - 130*			
Surrogate: Dibromofluoromethane	*29*		*25.0*		*116*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*119*	*70 - 130*			

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/21/2012

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 B2E0430 - MSSEMI_ISOTOPEDILN									
Blank (B2E0430-BLK1)					Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	ND	0.20			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*0.89*		*1.00*		*89.2*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.79*		*1.00*		*79.1*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.96*		*1.00*		*96.1*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.51*		*1.00*		*51.1*	*36 - 130*			
LCS (B2E0430-BS1)					Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	1.0	0.20	1.00		101	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*0.93*		*1.00*		*93.3*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.80*		*1.00*		*79.8*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.88*		*1.00*		*88.2*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.59*		*1.00*		*58.8*	*36 - 130*			
Matrix Spike (B2E0430-MS1)		**Source: 1201715-02**			Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	0.98	0.20	1.00	ND	98.5	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*0.91*		*1.00*		*91.0*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.78*		*1.00*		*77.6*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.85*		*1.00*		*85.4*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.60*		*1.00*		*60.4*	*36 - 130*			
Matrix Spike Dup (B2E0430-MSD1)		**Source: 1201715-02**			Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	0.96	0.20	1.00	ND	95.9	70 - 130	2.65	20	
Surrogate: 1,2-Dichlorobenzene-d4	*0.92*		*1.00*		*92.1*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.76*		*1.00*		*76.0*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.78*		*1.00*		*78.2*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.65*		*1.00*		*64.9*	*36 - 130*			

Hargis & Associates, Inc.		Project Number :	Raytheon, 532.30
9171 Towne Centre Drive, Suite 375		Report To :	Steve Netto
San Diego , CA 92122		Reported :	05/21/2012

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 5/9/12 PAGE 1 OF 1

PROJECT NAME: Raytheon
PROJECT No./TASK No.: 532.30
PROJECT MANAGER: Steve Netto
Phone No.: 858-455-6500
QA MANAGER:
Fax No.: 858-455-6533
SAMPLER (SIGNATURE): [signatures]
SAMPLER (PRINTED): Daniel MOra, Amanda Beam

LABORATORY INFORMATION: ATL

LAB ID	SAMPLE ID	Date	Time	Soil	Ground-water	Surface water	LAB H2O	HCl	HNO_3	NaOH	H_2SO_4	Ice	40 ml VOA	1L 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	24 TAT	48 TAT	Standard TAT	MS & MSD collected	REMARKS
1201735-01	TB-050912	5/9/12	700				X	X				X	2		X			X							X		
2	MW-35A	↓	957		X			X				X	3		X			X							X		
	↓		↓		X							X	~~3~~ AB	1			X	X							X		
3	MW-35B		1056		X							X		1			X								X		
	↓		↓		X			X				X	3		X			X							X		
4	MW-35C		1229		X			X				X	3		X			X							X		
	↓		↓		X							X		1			X								X		
5	MW-26C		1612		X			X				X	3		X			X							X	X	6VOAs
↓	↓	↓	↓		X							X		1			X								X	X	2 1L Ambers

Total number of Containers per analysis: 14 | 4

Total No. of Containers: 18+8=26

Relinquished by:	Date	Received by:	Date
[signature]	5/9/12	[signature]	5/9/12
Company: H+A, INC	Time: 1715	Company: ATL	Time: 1715
Relinquished by: [signature]	Date: 5/9/12	Received by: [signature]	Date: 5/9/12
Company: ATL	Time: 1750	Company: ATL	Time: 1750

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.

Sample Receipt: Temp. @ receipt 2.0 °C

- ☐ No. of containers correct
- ☐ received good condition/cold
- ☐ custody seals secure
- ☐ conforms to COC document

Shipment Method: Courier pick up
Send Results to: Steve Netto

- ☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500
- ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124 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

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

ADVANCED TECHNOLOGY LABORATORIES

May 22, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

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

Re: ATL Work Order Number : 1201761

Client Reference : Raytheon, 532.30

Enclosed are the results for sample(s) received on May 10, 2012 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,

Eddie Rodriguez
Laboratory Director

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-051012A	1201761-01	LAB H2O	5/10/12 7:00	5/10/12 17:00
MW-34C	1201761-02	Groundwater	5/10/12 9:42	5/10/12 17:00
MW-34A	1201761-03	Groundwater	5/10/12 10:20	5/10/12 17:00
MW-34B	1201761-04	Groundwater	5/10/12 10:55	5/10/12 17:00
MW-36	1201761-05	Groundwater	5/10/12 15:37	5/10/12 17:00

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID TB-051012A

Lab ID: 1201761-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
2-Chlorotoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
4-Chlorotoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Benzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Bromobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Bromodichloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Bromoform	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Bromomethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Carbon tetrachloride	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Chlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Chloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Chloroform	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Chloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID TB-051012A

Lab ID: 1201761-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Dibromochloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Dibromomethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Ethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Isopropylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
m,p-Xylene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Methylene chloride	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
n-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
n-Propylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Naphthalene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
o-Xylene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
sec-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Styrene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
tert-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Tetrachloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Toluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Trichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Vinyl chloride	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:17	
Surrogate: 1,2-Dichloroethane-d4	*78.8 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 13:17*	
Surrogate: 4-Bromofluorobenzene	*95.9 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 13:17*	
Surrogate: Dibromofluoromethane	*90.9 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 13:17*	
Surrogate: Toluene-d8	*95.8 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 13:17*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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Client Sample ID MW-34C

Lab ID: 1201761-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
2-Chlorotoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
4-Chlorotoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Benzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Bromobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Bromodichloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Bromoform	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Bromomethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Carbon tetrachloride	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Chlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Chloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Chloroform	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Chloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-34C

Lab ID: 1201761-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Dibromochloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Dibromomethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Ethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Isopropylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
m,p-Xylene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Methylene chloride	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
n-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
n-Propylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Naphthalene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
o-Xylene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
sec-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Styrene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
tert-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Tetrachloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Toluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Trichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Vinyl chloride	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:38	
Surrogate: 1,2-Dichloroethane-d4	*88.8 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 13:38*	
Surrogate: 4-Bromofluorobenzene	*104 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 13:38*	
Surrogate: Dibromofluoromethane	*98.5 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 13:38*	
Surrogate: Toluene-d8	*104 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 13:38*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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Client Sample ID MW-34C

Lab ID: 1201761-02

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	NA	1	B2E0430	05/15/2012	05/16/12 17:03	
Surrogate: 1,2-Dichlorobenzene-d4	*96.8 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 17:03*	
Surrogate: 2-Fluorobiphenyl	*81.2 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 17:03*	
Surrogate: 4-Terphenyl-d14	*104 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 17:03*	
Surrogate: Nitrobenzene-d5	*81.5 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 17:03*	

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Client Sample ID MW-34A

Lab ID: 1201761-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
2-Chlorotoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
4-Chlorotoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Benzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Bromobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Bromodichloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Bromoform	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Bromomethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Carbon tetrachloride	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Chlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Chloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Chloroform	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Chloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
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Client Sample ID MW-34A

Lab ID: 1201761-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Dibromochloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Dibromomethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Ethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Isopropylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
m,p-Xylene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Methylene chloride	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
n-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
n-Propylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Naphthalene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
o-Xylene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
sec-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Styrene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
tert-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Tetrachloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Toluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Trichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Trichlorofluoromethane	**1.1**	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Vinyl chloride	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 13:58	
Surrogate: 1,2-Dichloroethane-d4	*99.2 %*		*70 - 130*		B2E0539	05/18/2012	*05/18/12 13:58*	
Surrogate: 4-Bromofluorobenzene	*119 %*		*70 - 130*		B2E0539	05/18/2012	*05/18/12 13:58*	
Surrogate: Dibromofluoromethane	*111 %*		*70 - 130*		B2E0539	05/18/2012	*05/18/12 13:58*	
Surrogate: Toluene-d8	*118 %*		*70 - 130*		B2E0539	05/18/2012	*05/18/12 13:58*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-34A

Lab ID: 1201761-03

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	NA	1	B2E0430	05/15/2012	05/16/12 17:31	
Surrogate: 1,2-Dichlorobenzene-d4	*91.4 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 17:31*	
Surrogate: 2-Fluorobiphenyl	*78.6 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 17:31*	
Surrogate: 4-Terphenyl-d14	*96.6 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 17:31*	
Surrogate: Nitrobenzene-d5	*74.0 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 17:31*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-34B

Lab ID: 1201761-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,1,2-Trichloroethane	**0.60**	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,1-Dichloroethane	**2.3**	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,1-Dichloroethene	**120**	5.0	NA	1	B2E0539	05/18/2012	05/18/12 18:42	D4
1,1-Dichloropropene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
2-Chlorotoluene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
4-Chlorotoluene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Benzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Bromobenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Bromodichloromethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Bromoform	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Bromomethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Carbon tetrachloride	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Chlorobenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Chloroethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Chloroform	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Chloromethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-34B

Lab ID: 1201761-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Dibromochloromethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Dibromomethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Ethylbenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Isopropylbenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
m,p-Xylene	ND	1.0	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Methylene chloride	ND	1.0	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
n-Butylbenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
n-Propylbenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Naphthalene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
o-Xylene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
sec-Butylbenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Styrene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
tert-Butylbenzene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Tetrachloroethene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Toluene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Trichloroethene	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Vinyl chloride	ND	0.50	NA	1	B2E0614	05/21/2012	05/21/12 12:37	
Surrogate: 1,2-Dichloroethane-d4	*108 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 18:42*	
Surrogate: 1,2-Dichloroethane-d4	*105 %*	*70 - 130*			B2E0614	05/21/2012	*05/21/12 12:37*	
Surrogate: 4-Bromofluorobenzene	*118 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 18:42*	
Surrogate: 4-Bromofluorobenzene	*106 %*	*70 - 130*			B2E0614	05/21/2012	*05/21/12 12:37*	
Surrogate: Dibromofluoromethane	*107 %*	*70 - 130*			B2E0614	05/21/2012	*05/21/12 12:37*	
Surrogate: Dibromofluoromethane	*117 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 18:42*	
Surrogate: Toluene-d8	*105 %*	*70 - 130*			B2E0614	05/21/2012	*05/21/12 12:37*	
Surrogate: Toluene-d8	*118 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 18:42*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-34B

Lab ID: 1201761-04

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**58**	2.0	NA	1	B2E0386	05/14/2012	05/15/12 16:39	
Surrogate: 1,2-Dichlorobenzene-d4	*84.8 %*	*37 - 93*			B2E0386	05/14/2012	*05/15/12 16:39*	
Surrogate: 2-Fluorobiphenyl	*95.3 %*	*51 - 100*			B2E0386	05/14/2012	*05/15/12 16:39*	
Surrogate: 4-Terphenyl-d14	*133 %*	*58 - 113*			B2E0386	05/14/2012	*05/15/12 16:39*	S8
Surrogate: Nitrobenzene-d5	*92.4 %*	*39 - 95*			B2E0386	05/14/2012	*05/15/12 16:39*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-36

Lab ID: 1201761-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,1-Dichloroethane	**0.52**	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,1-Dichloroethene	**45**	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
2-Chlorotoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
4-Chlorotoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Benzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Bromobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Bromodichloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Bromoform	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Bromomethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Carbon tetrachloride	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Chlorobenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Chloroethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Chloroform	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Chloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-36

Lab ID: 1201761-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Dibromochloromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Dibromomethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Ethylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Isopropylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
m,p-Xylene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Methylene chloride	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
n-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
n-Propylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Naphthalene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
o-Xylene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
sec-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Styrene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
tert-Butylbenzene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Tetrachloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Toluene	**1.1**	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Trichloroethene	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Vinyl chloride	ND	0.50	NA	1	B2E0539	05/18/2012	05/18/12 14:18	
Surrogate: 1,2-Dichloroethane-d4	*103 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 14:18*	
Surrogate: 4-Bromofluorobenzene	*118 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 14:18*	
Surrogate: Dibromofluoromethane	*113 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 14:18*	
Surrogate: Toluene-d8	*117 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 14:18*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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San Diego , CA 92122	Reported : 05/22/2012

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Lab ID: 1201761-05

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**2.8**	0.20	NA	1	B2E0430	05/15/2012	05/16/12 18:00	
Surrogate: 1,2-Dichlorobenzene-d4	*95.3 %*	*36 - 107*			B2E0430	05/15/2012	*05/16/12 18:00*	
Surrogate: 2-Fluorobiphenyl	*76.5 %*	*42 - 120*			B2E0430	05/15/2012	*05/16/12 18:00*	
Surrogate: 4-Terphenyl-d14	*96.7 %*	*67 - 142*			B2E0430	05/15/2012	*05/16/12 18:00*	
Surrogate: Nitrobenzene-d5	*74.9 %*	*36 - 130*			B2E0430	05/15/2012	*05/16/12 18:00*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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San Diego , CA 92122	Reported : 05/22/2012

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0539 - MSVOAW_LL									
Blank (B2E0539-BLK1)				Prepared: 5/18/2012 Analyzed: 5/18/2012					
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				

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0539 - MSVOAW_LL (continued)									
Blank (B2E0539-BLK1) - Continued				Prepared: 5/18/2012 Analyzed: 5/18/2012					
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*		*25.0*		*95.0*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*30*		*25.0*		*118*	*70 - 130*			
Surrogate: Dibromofluoromethane	*27*		*25.0*		*109*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*118*	*70 - 130*			
LCS (B2E0539-BS1)				Prepared: 5/18/2012 Analyzed: 5/18/2012					
1,1-Dichloroethene	17	0.50	20.0		85.6	70 - 130			
Benzene	41	0.50	40.0		104	70 - 130			
Chlorobenzene	21	0.50	20.0		107	70 - 130			
MTBE	21	0.50	20.0		104	70 - 130			
Toluene	42	0.50	40.0		106	70 - 130			
Trichloroethene	20	0.50	20.0		100	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*21*		*25.0*		*83.8*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*24*		*25.0*		*94.9*	*70 - 130*			
Surrogate: Dibromofluoromethane	*23*		*25.0*		*92.0*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*95.8*	*70 - 130*			
LCS Dup (B2E0539-BSD1)				Prepared: 5/18/2012 Analyzed: 5/18/2012					
1,1-Dichloroethene	17	0.50	20.0		86.8	70 - 130	1.33	20	
Benzene	42	0.50	40.0		105	70 - 130	1.44	20	
Chlorobenzene	22	0.50	20.0		108	70 - 130	1.02	20	
MTBE	21	0.50	20.0		107	70 - 130	3.41	20	
Toluene	43	0.50	40.0		107	70 - 130	0.470	20	

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San Diego , CA 92122

Project Number : Raytheon, 532.30
Report To : Steve Netto
Reported : 05/22/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0539 - MSVOAW_LL (continued)									
LCS Dup (B2E0539-BSD1) - Continued				Prepared: 5/18/2012 Analyzed: 5/18/2012					
Trichloroethene	20	0.50	20.0		102	70 - 130	1.38	20	
Surrogate: 1,2-Dichloroethane-d4	*21*		*25.0*		*83.7*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*23*		*25.0*		*93.2*	*70 - 130*			
Surrogate: Dibromofluoromethane	*23*		*25.0*		*91.1*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*95.8*	*70 - 130*			
Matrix Spike (B2E0539-MS1)		**Source: 1201761-02**		Prepared: 5/18/2012 Analyzed: 5/18/2012					
1,1-Dichloroethene	20	0.50	20.0	ND	101	70 - 130			
Benzene	46	0.50	40.0	ND	115	70 - 130			
Chlorobenzene	23	0.50	20.0	ND	116	70 - 130			
MTBE	23	0.50	20.0	ND	114	70 - 130			
Toluene	47	0.50	40.0	ND	118	70 - 130			
Trichloroethene	23	0.50	20.0	ND	116	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*25*		*25.0*		*98.9*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*30*		*25.0*		*121*	*70 - 130*			
Surrogate: Dibromofluoromethane	*27*		*25.0*		*109*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*118*	*70 - 130*			
Matrix Spike Dup (B2E0539-MSD1)		**Source: 1201761-02**		Prepared: 5/18/2012 Analyzed: 5/18/2012					
1,1-Dichloroethene	19	0.50	20.0	ND	94.0	70 - 130	6.99	20	
Benzene	44	0.50	40.0	ND	110	70 - 130	4.09	20	
Chlorobenzene	22	0.50	20.0	ND	112	70 - 130	3.52	20	
MTBE	22	0.50	20.0	ND	108	70 - 130	4.87	20	
Toluene	45	0.50	40.0	ND	112	70 - 130	5.00	20	
Trichloroethene	22	0.50	20.0	ND	110	70 - 130	5.23	20	
Surrogate: 1,2-Dichloroethane-d4	*24*		*25.0*		*94.7*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*30*		*25.0*		*120*	*70 - 130*			
Surrogate: Dibromofluoromethane	*27*		*25.0*		*107*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*118*	*70 - 130*			
Batch B2E0614 - MSVOAW_LL									
Blank (B2E0614-BLK1)				Prepared: 5/21/2012 Analyzed: 5/21/2012					
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				

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San Diego , CA 92122

Project Number : Raytheon, 532.30
Report To : Steve Netto
Reported : 05/22/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0614 - MSVOAW_LL (continued)									
Blank (B2E0614-BLK1) - Continued				Prepared: 5/21/2012 Analyzed: 5/21/2012					
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				

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Project Number : Raytheon, 532.30
Report To : Steve Netto
Reported : 05/22/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0614 - MSVOAW_LL (continued)									
Blank (B2E0614-BLK1) - Continued				Prepared: 5/21/2012 Analyzed: 5/21/2012					
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	*28*		*25.0*		*111*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*30*		*25.0*		*119*	*70 - 130*			
Surrogate: Dibromofluoromethane	*29*		*25.0*		*118*	*70 - 130*			
Surrogate: Toluene-d8	*29*		*25.0*		*116*	*70 - 130*			
LCS (B2E0614-BS1)				Prepared: 5/21/2012 Analyzed: 5/21/2012					
1,1-Dichloroethene	19	0.50	20.0		95.2	70 - 130			
Benzene	43	0.50	40.0		107	70 - 130			
Chlorobenzene	21	0.50	20.0		105	70 - 130			
MTBE	20	0.50	20.0		101	70 - 130			
Toluene	43	0.50	40.0		106	70 - 130			
Trichloroethene	20	0.50	20.0		97.8	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*22*		*25.0*		*89.3*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*23*		*25.0*		*93.2*	*70 - 130*			
Surrogate: Dibromofluoromethane	*23*		*25.0*		*91.4*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*94.2*	*70 - 130*			
LCS Dup (B2E0614-BSD1)				Prepared: 5/21/2012 Analyzed: 5/21/2012					
1,1-Dichloroethene	21	0.50	20.0		103	70 - 130	8.21	20	
Benzene	45	0.50	40.0		113	70 - 130	5.03	20	
Chlorobenzene	22	0.50	20.0		110	70 - 130	4.79	20	
MTBE	22	0.50	20.0		108	70 - 130	6.42	20	
Toluene	45	0.50	40.0		112	70 - 130	5.35	20	
Trichloroethene	21	0.50	20.0		106	70 - 130	7.63	20	
Surrogate: 1,2-Dichloroethane-d4	*23*		*25.0*		*90.8*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*24*		*25.0*		*94.8*	*70 - 130*			
Surrogate: Dibromofluoromethane	*23*		*25.0*		*92.0*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*94.7*	*70 - 130*			

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

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 B2E0386 - MSSEMI_ISOTOPEDILN									
Blank (B2E0386-BLK2)					Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	ND	2.0			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*76*		*100*		*76.0*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*85*		*100*		*85.2*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*120*		*100*		*118*	*58 - 113*			S1
Surrogate: Nitrobenzene-d5	*87*		*100*		*86.7*	*39 - 95*			
LCS (B2E0386-BS2)					Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	100	2.0	100		102	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*82*		*100*		*81.9*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*90*		*100*		*90.1*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*110*		*100*		*110*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*90*		*100*		*90.2*	*39 - 95*			
Matrix Spike (B2E0386-MS2)		**Source: 1201761-04**			Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	160	2.0	100	58	104	0 - 200			
Surrogate: 1,2-Dichlorobenzene-d4	*87*		*100*		*86.7*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*89*		*100*		*89.2*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*110*		*100*		*110*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*94*		*100*		*94.1*	*39 - 95*			
Matrix Spike Dup (B2E0386-MSD2)		**Source: 1201761-04**			Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	150	2.0	100	58	88.6	0 - 200	10.1	200	
Surrogate: 1,2-Dichlorobenzene-d4	*86*		*100*		*85.8*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*94*		*100*		*93.8*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*110*		*100*		*112*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*96*		*100*		*95.5*	*39 - 95*			S8

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

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 B2E0430 - MSSEMI_ISOTOPEDILN									
Blank (B2E0430-BLK1)					Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	ND	0.20			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*0.89*		*1.00*		*89.2*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.79*		*1.00*		*79.1*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.96*		*1.00*		*96.1*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.51*		*1.00*		*51.1*	*36 - 130*			
LCS (B2E0430-BS1)					Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	1.0	0.20	1.00		101	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*0.93*		*1.00*		*93.3*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.80*		*1.00*		*79.8*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.88*		*1.00*		*88.2*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.59*		*1.00*		*58.8*	*36 - 130*			
Matrix Spike (B2E0430-MS1)		**Source: 1201715-02**			Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	0.98	0.20	1.00	ND	98.5	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*0.91*		*1.00*		*91.0*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.78*		*1.00*		*77.6*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.85*		*1.00*		*85.4*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.60*		*1.00*		*60.4*	*36 - 130*			
Matrix Spike Dup (B2E0430-MSD1)		**Source: 1201715-02**			Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	0.96	0.20	1.00	ND	95.9	70 - 130	2.65	20	
Surrogate: 1,2-Dichlorobenzene-d4	*0.92*		*1.00*		*92.1*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.76*		*1.00*		*76.0*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.78*		*1.00*		*78.2*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.65*		*1.00*		*64.9*	*36 - 130*			

Hargis & Associates, Inc.		Project Number :	Raytheon, 532.30
9171 Towne Centre Drive, Suite 375		Report To :	Steve Netto
San Diego , CA 92122		Reported :	05/22/2012

Notes and Definitions

S8	Surrogate recovery was above laboratory acceptance limit. See CAR for details.
S1	Surrogate recovery was above laboratory acceptance limit. No target analyte was detected in the sample.
D4	Reporting limits adjusted to reflect sample amount analyzed.
ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 5/10/12 PAGE 1 OF 1

PROJECT NAME Raytheon	**PROJECT No./TASK No.** 532.30
PROJECT MANAGER Steve Netto	**Phone No.** 858-455-6500
QA MANAGER	**Fax No.** 858-455-6533
SAMPLER (SIGNATURE)	**SAMPLER (PRINTED)** Daniel Mora, Amanda Beam

LABORATORY INFORMATION: ATL, ATTN: RACHELLE ARADA

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX: Soil	Ground-water	Surface water	LAB H2O	PRESERVATION: HCl	HNO3	NaOH	H2SO4	Ice	SAMPLE CONTAINERS: 40 ml VOA	1L Amber	ANALYSIS REQUESTED: VOCs 8260B	1,4-Dioxane 8270 MOD	1,4-Dioxane 8270 SIM	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-10	10-100	100-1,000	1,000-10,000	>10,000	SPECIAL HANDLING: 24 TAT	48 TAT	Standard TAT	MSD collected	MS collected	REMARKS
120702-01	TB-051012A	5/10/12	700				X	X				X	2		X			X							X			
2	MW-34C		942		X			X				X	3		X			X							X			
	↓		↓		X							X		1			X								X			
3	MW-34A		1020		X			X				X	3		X			X							X			
	↓		↓		X							X		1			X								X			
4	MW-34B		1055		X			X				X	3		X					X					X			
	↓		↓		X							X		1		X									X	X	X	2 x 1L Amber
5	MW-36		1537		X			X				X	3		X			X							X			
	↓	↓	↓									X		1		?	X								X			
Total number of Containers per analysis:													14	4										Total No. of Containers: 20				

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	5/10/12	1700	[signature]	5/10/12	1700
HYA, INC (Company)			ATL (Company)		
[signature]	5/10/12	1800	[signature]	5/10/12	1800
ATL (Company)			AT (Company)		

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.

Sample Receipt:
☐ No. of containers correct ☐ received good condition/cold
☐ custody seals secure ☐ conforms to COC document
Temp. @ receipt 3.5 °C

Shipment Method: Courier pick up
Send Results to: Steve Netto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375, SAN DIEGO, CA 92122 (858) 455-6500
☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124, 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

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

ADVANCED TECHNOLOGY LABORATORIES

May 22, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

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

Re: ATL Work Order Number : 1201771

Client Reference : Raytheon, 532.30

Enclosed are the results for sample(s) received on May 11, 2012 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,

Eddie Rodriguez
Laboratory Director

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-30A	1201771-01	Groundwater	5/10/12 17:32	5/11/12 15:47
MW-30B	1201771-02	Groundwater	5/10/12 18:09	5/11/12 15:47
TB-051112	1201771-03	Lab H2O	5/11/12 6:00	5/11/12 15:47
MW-28	1201771-04	Groundwater	5/11/12 7:27	5/11/12 15:47
MW-29	1201771-05	Groundwater	5/11/12 8:16	5/11/12 15:47
MW-2900	1201771-06	Groundwater	5/11/12 8:36	5/11/12 15:47
MW-31	1201771-07	Groundwater	5/11/12 9:10	5/11/12 15:47
MW-08	1201771-08	Groundwater	5/11/12 13:16	5/11/12 15:47
RB-051112	1201771-09	Lab H2O	5/11/12 12:40	5/11/12 15:47

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-30A

Lab ID: 1201771-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
2-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
4-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Benzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Bromobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Bromodichloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Bromoform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Bromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Carbon tetrachloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Chlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Chloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Chloroform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Chloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-30A

Lab ID: 1201771-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Dibromochloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Dibromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Ethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Isopropylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
m,p-Xylene	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Methylene chloride	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
n-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
n-Propylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Naphthalene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
o-Xylene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
sec-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Styrene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
tert-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Tetrachloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Toluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Trichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Vinyl chloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:29	
Surrogate: 1,2-Dichloroethane-d4	*114 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 01:29*	
Surrogate: 4-Bromofluorobenzene	*119 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 01:29*	
Surrogate: Dibromofluoromethane	*120 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 01:29*	
Surrogate: Toluene-d8	*117 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 01:29*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-30A

Lab ID: 1201771-01

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	NA	1	B2E0430	05/15/2012	05/16/12 18:30	
Surrogate: 1,2-Dichlorobenzene-d4	*67.7 %*		*36 - 107*		B2E0430	05/15/2012	*05/16/12 18:30*	
Surrogate: 2-Fluorobiphenyl	*51.1 %*		*42 - 120*		B2E0430	05/15/2012	*05/16/12 18:30*	
Surrogate: 4-Terphenyl-d14	*85.1 %*		*67 - 142*		B2E0430	05/15/2012	*05/16/12 18:30*	
Surrogate: Nitrobenzene-d5	*56.6 %*		*36 - 130*		B2E0430	05/15/2012	*05/16/12 18:30*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-30B

Lab ID: 1201771-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,1-Dichloroethene	**12**	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
2-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
4-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Benzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Bromobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Bromodichloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Bromoform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Bromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Carbon tetrachloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Chlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Chloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Chloroform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Chloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-30B

Lab ID: 1201771-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	**3.8**	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Dibromochloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Dibromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Ethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Isopropylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
m,p-Xylene	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Methylene chloride	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
n-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
n-Propylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Naphthalene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
o-Xylene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
sec-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Styrene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
tert-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Tetrachloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Toluene	**1.8**	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Trichloroethene	**63**	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Vinyl chloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:30	
Surrogate: 1,2-Dichloroethane-d4	*114 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 02:30*	
Surrogate: 4-Bromofluorobenzene	*116 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 02:30*	
Surrogate: Dibromofluoromethane	*120 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 02:30*	
Surrogate: Toluene-d8	*111 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 02:30*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-30B

Lab ID: 1201771-02

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**0.27**	0.20	NA	1	B2E0430	05/15/2012	05/16/12 18:59	
Surrogate: 1,2-Dichlorobenzene-d4	*63.9 %*	*36 - 107*			B2E0430	05/15/2012	*05/16/12 18:59*	
Surrogate: 2-Fluorobiphenyl	*54.8 %*	*42 - 120*			B2E0430	05/15/2012	*05/16/12 18:59*	
Surrogate: 4-Terphenyl-d14	*80.3 %*	*67 - 142*			B2E0430	05/15/2012	*05/16/12 18:59*	
Surrogate: Nitrobenzene-d5	*60.7 %*	*36 - 130*			B2E0430	05/15/2012	*05/16/12 18:59*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID TB-051112

Lab ID: 1201771-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
2-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
4-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Benzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Bromobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Bromodichloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Bromoform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Bromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Carbon tetrachloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Chlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Chloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Chloroform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Chloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID TB-051112

Lab ID: 1201771-03

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Dibromochloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Dibromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Ethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Isopropylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
m,p-Xylene	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Methylene chloride	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
n-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
n-Propylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Naphthalene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
o-Xylene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
sec-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Styrene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
tert-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Tetrachloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Toluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Trichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Vinyl chloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 01:50	
Surrogate: 1,2-Dichloroethane-d4	*115 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 01:50*	
Surrogate: 4-Bromofluorobenzene	*120 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 01:50*	
Surrogate: Dibromofluoromethane	*121 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 01:50*	
Surrogate: Toluene-d8	*120 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 01:50*	

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San Diego , CA 92122	Reported : 05/22/2012

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Lab ID: 1201771-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,1-Dichloroethene	**0.99**	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
2-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
4-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Benzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Bromobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Bromodichloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Bromoform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Bromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Carbon tetrachloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Chlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Chloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Chloroform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Chloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	

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Lab ID: 1201771-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Dibromochloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Dibromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Ethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Isopropylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
m,p-Xylene	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Methylene chloride	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
n-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
n-Propylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Naphthalene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
o-Xylene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
sec-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Styrene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
tert-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Tetrachloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Toluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Trichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Vinyl chloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 00:49	
Surrogate: 1,2-Dichloroethane-d4	*112 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 00:49*	
Surrogate: 4-Bromofluorobenzene	*119 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 00:49*	
Surrogate: Dibromofluoromethane	*119 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 00:49*	
Surrogate: Toluene-d8	*117 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 00:49*	

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**0.22**	0.20	NA	1	B2E0430	05/15/2012	05/16/12 19:27	
Surrogate: 1,2-Dichlorobenzene-d4	*82.8 %*	*36 - 107*			B2E0430	05/15/2012	*05/16/12 19:27*	
Surrogate: 2-Fluorobiphenyl	*73.1 %*	*42 - 120*			B2E0430	05/15/2012	*05/16/12 19:27*	
Surrogate: 4-Terphenyl-d14	*97.3 %*	*67 - 142*			B2E0430	05/15/2012	*05/16/12 19:27*	
Surrogate: Nitrobenzene-d5	*69.5 %*	*36 - 130*			B2E0430	05/15/2012	*05/16/12 19:27*	

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Lab ID: 1201771-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,1,1-Trichloroethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,1,2,2-Tetrachloroethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,1,2-Trichloroethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,1-Dichloroethane	**8.3**	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,1-Dichloroethene	**780**	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:12	D4
1,1-Dichloropropene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,2,3-Trichloropropane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,2,3-Trichlorobenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,2,4-Trichlorobenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,2,4-Trimethylbenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,2-Dibromo-3-chloropropane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,2-Dibromoethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,2-Dichlorobenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,2-Dichloroethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,2-Dichloropropane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,3,5-Trimethylbenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,3-Dichlorobenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,3-Dichloropropane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
1,4-Dichlorobenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
2,2-Dichloropropane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
2-Chlorotoluene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
4-Chlorotoluene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
4-Isopropyltoluene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Benzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Bromobenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Bromodichloromethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Bromoform	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Bromomethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Carbon tetrachloride	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Chlorobenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Chloroethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Chloroform	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Chloromethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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Lab ID: 1201771-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
cis-1,3-Dichloropropene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Dibromochloromethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Dibromomethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Dichlorodifluoromethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Ethylbenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Hexachlorobutadiene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Isopropylbenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
m,p-Xylene	ND	8.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Methylene chloride	ND	8.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
n-Butylbenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
n-Propylbenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Naphthalene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
o-Xylene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
sec-Butylbenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Styrene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
tert-Butylbenzene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Tetrachloroethene	**5.7**	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Toluene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
trans-1,2-Dichloroethene	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Trichloroethene	**6.2**	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Trichlorofluoromethane	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Vinyl chloride	ND	4.0	NA	1	B2E0539	05/18/2012	05/18/12 19:23	D4
Surrogate: 1,2-Dichloroethane-d4	*109 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 19:23*	
Surrogate: 1,2-Dichloroethane-d4	*103 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:12*	
Surrogate: 4-Bromofluorobenzene	*117 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 19:23*	
Surrogate: 4-Bromofluorobenzene	*110 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:12*	
Surrogate: Dibromofluoromethane	*111 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:12*	
Surrogate: Dibromofluoromethane	*117 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 19:23*	
Surrogate: Toluene-d8	*111 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:12*	
Surrogate: Toluene-d8	*118 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 19:23*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-29

Lab ID: 1201771-05

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**300**	2.0	NA	1	B2E0386	05/14/2012	05/15/12 17:37	
Surrogate: 1,2-Dichlorobenzene-d4	*75.5 %*	*37 - 93*			B2E0386	05/14/2012	*05/15/12 17:37*	
Surrogate: 2-Fluorobiphenyl	*84.6 %*	*51 - 100*			B2E0386	05/14/2012	*05/15/12 17:37*	
Surrogate: 4-Terphenyl-d14	*129 %*	*58 - 113*			B2E0386	05/14/2012	*05/15/12 17:37*	S8
Surrogate: Nitrobenzene-d5	*81.0 %*	*39 - 95*			B2E0386	05/14/2012	*05/15/12 17:37*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
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Client Sample ID MW-2900

Lab ID: 1201771-06

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,1,1-Trichloroethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,1,2,2-Tetrachloroethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,1,2-Trichloroethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,1-Dichloroethane	**8.5**	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,1-Dichloroethene	**830**	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,1-Dichloropropene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,2,3-Trichloropropane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,2,3-Trichlorobenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,2,4-Trichlorobenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,2,4-Trimethylbenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,2-Dibromo-3-chloropropane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,2-Dibromoethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,2-Dichlorobenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,2-Dichloroethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,2-Dichloropropane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,3,5-Trimethylbenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,3-Dichlorobenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,3-Dichloropropane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
1,4-Dichlorobenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
2,2-Dichloropropane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
2-Chlorotoluene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
4-Chlorotoluene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
4-Isopropyltoluene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Benzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Bromobenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Bromodichloromethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Bromoform	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Bromomethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Carbon tetrachloride	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Chlorobenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Chloroethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Chloroform	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Chloromethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-2900

Lab ID: 1201771-06

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
cis-1,3-Dichloropropene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Dibromochloromethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Dibromomethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Dichlorodifluoromethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Ethylbenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Hexachlorobutadiene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Isopropylbenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
m,p-Xylene	ND	10	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Methylene chloride	ND	10	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
n-Butylbenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
n-Propylbenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Naphthalene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
o-Xylene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
sec-Butylbenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Styrene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
tert-Butylbenzene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Tetrachloroethene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Toluene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
trans-1,2-Dichloroethene	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Trichloroethene	**5.3**	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Trichlorofluoromethane	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Vinyl chloride	ND	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:33	D4
Surrogate: 1,2-Dichloroethane-d4	*114 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:33*	
Surrogate: 4-Bromofluorobenzene	*118 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:33*	
Surrogate: Dibromofluoromethane	*121 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:33*	
Surrogate: Toluene-d8	*117 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:33*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
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San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-2900

Lab ID: 1201771-06

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**280**	2.0	NA	1	B2E0386	05/14/2012	05/15/12 18:05	
Surrogate: 1,2-Dichlorobenzene-d4	*81.2 %*	*37 - 93*			B2E0386	05/14/2012	*05/15/12 18:05*	
Surrogate: 2-Fluorobiphenyl	*91.6 %*	*51 - 100*			B2E0386	05/14/2012	*05/15/12 18:05*	
Surrogate: 4-Terphenyl-d14	*126 %*	*58 - 113*			B2E0386	05/14/2012	*05/15/12 18:05*	S8
Surrogate: Nitrobenzene-d5	*85.0 %*	*39 - 95*			B2E0386	05/14/2012	*05/15/12 18:05*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-31

Lab ID: 1201771-07

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,1-Dichloroethene	**48**	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
2-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
4-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Benzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Bromobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Bromodichloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Bromoform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Bromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Carbon tetrachloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Chlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Chloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Chloroform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Chloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-31

Lab ID: 1201771-07

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Dibromochloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Dibromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Ethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Isopropylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
m,p-Xylene	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Methylene chloride	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
n-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
n-Propylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Naphthalene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
o-Xylene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
sec-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Styrene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
tert-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Tetrachloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Toluene	**0.75**	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Trichloroethene	**5.9**	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Vinyl chloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:50	
Surrogate: 1,2-Dichloroethane-d4	*118 %*		*70 - 130*		B2E0530	05/18/2012	*05/18/12 02:50*	
Surrogate: 4-Bromofluorobenzene	*118 %*		*70 - 130*		B2E0530	05/18/2012	*05/18/12 02:50*	
Surrogate: Dibromofluoromethane	*122 %*		*70 - 130*		B2E0530	05/18/2012	*05/18/12 02:50*	
Surrogate: Toluene-d8	*115 %*		*70 - 130*		B2E0530	05/18/2012	*05/18/12 02:50*	

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Lab ID: 1201771-07

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**0.49**	0.20	NA	1	B2E0430	05/15/2012	05/16/12 19:56	
Surrogate: 1,2-Dichlorobenzene-d4	*78.5 %*	*36 - 107*			B2E0430	05/15/2012	*05/16/12 19:56*	
Surrogate: 2-Fluorobiphenyl	*65.4 %*	*42 - 120*			B2E0430	05/15/2012	*05/16/12 19:56*	
Surrogate: 4-Terphenyl-d14	*92.7 %*	*67 - 142*			B2E0430	05/15/2012	*05/16/12 19:56*	
Surrogate: Nitrobenzene-d5	*75.4 %*	*36 - 130*			B2E0430	05/15/2012	*05/16/12 19:56*	

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San Diego , CA 92122	Reported : 05/22/2012

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Lab ID: 1201771-08

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,1,1-Trichloroethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,1,2,2-Tetrachloroethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,1,2-Trichloroethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,1-Dichloroethane	**1.4**	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,1-Dichloroethene	**340**	5.0	NA	1	B2E0530	05/18/2012	05/18/12 05:53	D4
1,1-Dichloropropene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,2,3-Trichloropropane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,2,3-Trichlorobenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,2,4-Trichlorobenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,2,4-Trimethylbenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,2-Dibromo-3-chloropropane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,2-Dibromoethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,2-Dichlorobenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,2-Dichloroethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,2-Dichloropropane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,3,5-Trimethylbenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,3-Dichlorobenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,3-Dichloropropane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
1,4-Dichlorobenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
2,2-Dichloropropane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
2-Chlorotoluene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
4-Chlorotoluene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
4-Isopropyltoluene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Benzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Bromobenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Bromodichloromethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Bromoform	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Bromomethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Carbon tetrachloride	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Chlorobenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Chloroethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Chloroform	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Chloromethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-08

Lab ID: 1201771-08

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	**5.0**	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
cis-1,3-Dichloropropene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Dibromochloromethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Dibromomethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Dichlorodifluoromethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Ethylbenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Hexachlorobutadiene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Isopropylbenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
m,p-Xylene	ND	2.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Methylene chloride	ND	2.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
n-Butylbenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
n-Propylbenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Naphthalene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
o-Xylene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
sec-Butylbenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Styrene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
tert-Butylbenzene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Tetrachloroethene	**1.1**	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Toluene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
trans-1,2-Dichloroethene	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Trichloroethene	**120**	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Trichlorofluoromethane	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Vinyl chloride	ND	1.0	NA	1	B2E0539	05/18/2012	05/18/12 19:46	D4
Surrogate: 1,2-Dichloroethane-d4	*114 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:53*	
Surrogate: 1,2-Dichloroethane-d4	*106 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 19:46*	
Surrogate: 4-Bromofluorobenzene	*117 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:53*	
Surrogate: 4-Bromofluorobenzene	*116 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 19:46*	
Surrogate: Dibromofluoromethane	*115 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 19:46*	
Surrogate: Dibromofluoromethane	*118 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:53*	
Surrogate: Toluene-d8	*112 %*	*70 - 130*			B2E0539	05/18/2012	*05/18/12 19:46*	
Surrogate: Toluene-d8	*114 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 05:53*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID MW-08

Lab ID: 1201771-08

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**6.3**	0.20	NA	1	B2E0430	05/15/2012	05/16/12 20:26	
Surrogate: 1,2-Dichlorobenzene-d4	*86.4 %*	*36 - 107*			B2E0430	05/15/2012	*05/16/12 20:26*	
Surrogate: 2-Fluorobiphenyl	*78.1 %*	*42 - 120*			B2E0430	05/15/2012	*05/16/12 20:26*	
Surrogate: 4-Terphenyl-d14	*90.6 %*	*67 - 142*			B2E0430	05/15/2012	*05/16/12 20:26*	
Surrogate: Nitrobenzene-d5	*78.2 %*	*36 - 130*			B2E0430	05/15/2012	*05/16/12 20:26*	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID RB-051112

Lab ID: 1201771-09

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
2-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
4-Chlorotoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Benzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Bromobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Bromodichloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Bromoform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Bromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Carbon tetrachloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Chlorobenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Chloroethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Chloroform	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Chloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID RB-051112

Lab ID: 1201771-09

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Dibromochloromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Dibromomethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Ethylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Isopropylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
m,p-Xylene	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Methylene chloride	ND	1.0	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
n-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
n-Propylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Naphthalene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
o-Xylene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
sec-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Styrene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
tert-Butylbenzene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Tetrachloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Toluene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Trichloroethene	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Vinyl chloride	ND	0.50	NA	1	B2E0530	05/18/2012	05/18/12 02:10	
Surrogate: 1,2-Dichloroethane-d4	*108 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 02:10*	
Surrogate: 4-Bromofluorobenzene	*106 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 02:10*	
Surrogate: Dibromofluoromethane	*111 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 02:10*	
Surrogate: Toluene-d8	*107 %*	*70 - 130*			B2E0530	05/18/2012	*05/18/12 02:10*	

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San Diego , CA 92122	Reported : 05/22/2012

Client Sample ID RB-051112

Lab ID: 1201771-09

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	2.0	NA	1	B2E0386	05/14/2012	05/15/12 18:34	
Surrogate: 1,2-Dichlorobenzene-d4	*87.9 %*	*37 - 93*			B2E0386	05/14/2012	*05/15/12 18:34*	
Surrogate: 2-Fluorobiphenyl	*103 %*	*51 - 100*			B2E0386	05/14/2012	*05/15/12 18:34*	S1
Surrogate: 4-Terphenyl-d14	*137 %*	*58 - 113*			B2E0386	05/14/2012	*05/15/12 18:34*	S1
Surrogate: Nitrobenzene-d5	*102 %*	*39 - 95*			B2E0386	05/14/2012	*05/15/12 18:34*	S1

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0530 - MSVOAW_LL									
Blank (B2E0530-BLK1)				Prepared: 5/18/2012 Analyzed: 5/18/2012					
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				

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0530 - MSVOAW_LL (continued)									
Blank (B2E0530-BLK1) - Continued				Prepared: 5/18/2012 Analyzed: 5/18/2012					
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	*28*		*25.0*		*110*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*30*		*25.0*		*120*	*70 - 130*			
Surrogate: Dibromofluoromethane	*29*		*25.0*		*117*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*120*	*70 - 130*			
LCS (B2E0530-BS1)				Prepared: 5/18/2012 Analyzed: 5/18/2012					
1,1-Dichloroethene	19	0.50	20.0		96.4	70 - 130			
Benzene	42	0.50	40.0		105	70 - 130			
Chlorobenzene	22	0.50	20.0		108	70 - 130			
MTBE	21	0.50	20.0		104	70 - 130			
Toluene	43	0.50	40.0		109	70 - 130			
Trichloroethene	21	0.50	20.0		103	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*21*		*25.0*		*85.6*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*24*		*25.0*		*95.6*	*70 - 130*			
Surrogate: Dibromofluoromethane	*23*		*25.0*		*92.4*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*97.4*	*70 - 130*			
LCS Dup (B2E0530-BSD1)				Prepared: 5/17/2012 Analyzed: 5/17/2012					
1,1-Dichloroethene	20	0.50	20.0		99.8	70 - 130	3.42	20	
Benzene	43	0.50	40.0		108	70 - 130	2.18	20	
Chlorobenzene	21	0.50	20.0		107	70 - 130	0.746	20	
MTBE	21	0.50	20.0		105	70 - 130	0.335	20	
Toluene	43	0.50	40.0		109	70 - 130	0.0230	20	

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0530 - MSVOAW_LL (continued)									
LCS Dup (B2E0530-BSD1) - Continued					Prepared: 5/17/2012 Analyzed: 5/17/2012				
Trichloroethene	20	0.50	20.0		102	70 - 130	0.832	20	
Surrogate: 1,2-Dichloroethane-d4	*24*		*25.0*		*94.9*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*24*		*25.0*		*95.6*	*70 - 130*			
Surrogate: Dibromofluoromethane	*24*		*25.0*		*94.9*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*96.3*	*70 - 130*			
Matrix Spike (B2E0530-MS1)		**Source: 1201771-04**			Prepared: 5/17/2012 Analyzed: 5/17/2012				
1,1-Dichloroethene	21	0.50	20.0	0.99	98.4	70 - 130			
Benzene	41	0.50	40.0	ND	102	70 - 130			
Chlorobenzene	20	0.50	20.0	ND	101	70 - 130			
MTBE	19	0.50	20.0	ND	97.0	70 - 130			
Toluene	41	0.50	40.0	ND	102	70 - 130			
Trichloroethene	20	0.50	20.0	ND	97.8	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*27*		*25.0*		*108*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*31*		*25.0*		*124*	*70 - 130*			
Surrogate: Dibromofluoromethane	*28*		*25.0*		*113*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*118*	*70 - 130*			
Matrix Spike Dup (B2E0530-MSD1)		**Source: 1201771-04**			Prepared: 5/17/2012 Analyzed: 5/17/2012				
1,1-Dichloroethene	21	0.50	20.0	0.99	101	70 - 130	2.58	20	
Benzene	43	0.50	40.0	ND	108	70 - 130	5.50	20	
Chlorobenzene	21	0.50	20.0	ND	107	70 - 130	6.06	20	
MTBE	22	0.50	20.0	ND	111	70 - 130	13.1	20	
Toluene	43	0.50	40.0	ND	106	70 - 130	4.54	20	
Trichloroethene	21	0.50	20.0	ND	103	70 - 130	5.23	20	
Surrogate: 1,2-Dichloroethane-d4	*27*		*25.0*		*107*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*31*		*25.0*		*124*	*70 - 130*			
Surrogate: Dibromofluoromethane	*28*		*25.0*		*113*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*119*	*70 - 130*			
Batch B2E0539 - MSVOAW_LL									
Blank (B2E0539-BLK1)					Prepared: 5/18/2012 Analyzed: 5/18/2012				
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				

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0539 - MSVOAW_LL (continued)									
Blank (B2E0539-BLK1) - Continued				Prepared: 5/18/2012 Analyzed: 5/18/2012					
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				

Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego , CA 92122

Project Number : Raytheon, 532.30
Report To : Steve Netto
Reported : 05/22/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0539 - MSVOAW_LL (continued)									
Blank (B2E0539-BLK1) - Continued				Prepared: 5/18/2012 Analyzed: 5/18/2012					
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*		*25.0*		*95.0*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*30*		*25.0*		*118*	*70 - 130*			
Surrogate: Dibromofluoromethane	*27*		*25.0*		*109*	*70 - 130*			
Surrogate: Toluene-d8	*30*		*25.0*		*118*	*70 - 130*			
LCS (B2E0539-BS1)				Prepared: 5/18/2012 Analyzed: 5/18/2012					
1,1-Dichloroethene	17	0.50	20.0		85.6	70 - 130			
Benzene	41	0.50	40.0		104	70 - 130			
Chlorobenzene	21	0.50	20.0		107	70 - 130			
MTBE	21	0.50	20.0		104	70 - 130			
Toluene	42	0.50	40.0		106	70 - 130			
Trichloroethene	20	0.50	20.0		100	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*21*		*25.0*		*83.8*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*24*		*25.0*		*94.9*	*70 - 130*			
Surrogate: Dibromofluoromethane	*23*		*25.0*		*92.0*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*95.8*	*70 - 130*			
LCS Dup (B2E0539-BSD1)				Prepared: 5/18/2012 Analyzed: 5/18/2012					
1,1-Dichloroethene	17	0.50	20.0		86.8	70 - 130	1.33	20	
Benzene	42	0.50	40.0		105	70 - 130	1.44	20	
Chlorobenzene	22	0.50	20.0		108	70 - 130	1.02	20	
MTBE	21	0.50	20.0		107	70 - 130	3.41	20	
Toluene	43	0.50	40.0		107	70 - 130	0.470	20	
Trichloroethene	20	0.50	20.0		102	70 - 130	1.38	20	
Surrogate: 1,2-Dichloroethane-d4	*21*		*25.0*		*83.7*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*23*		*25.0*		*93.2*	*70 - 130*			
Surrogate: Dibromofluoromethane	*23*		*25.0*		*91.1*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*95.8*	*70 - 130*			

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

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 B2E0386 - MSSEMI_ISOTOPEDILN									
Blank (B2E0386-BLK2)					Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	ND	2.0			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*76*		*100*		*76.0*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*85*		*100*		*85.2*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*120*		*100*		*118*	*58 - 113*			S1
Surrogate: Nitrobenzene-d5	*87*		*100*		*86.7*	*39 - 95*			
LCS (B2E0386-BS2)					Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	100	2.0	100		102	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*82*		*100*		*81.9*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*90*		*100*		*90.1*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*110*		*100*		*110*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*90*		*100*		*90.2*	*39 - 95*			
Matrix Spike (B2E0386-MS2)		**Source: 1201761-04**			Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	160	2.0	100	58	104	0 - 200			
Surrogate: 1,2-Dichlorobenzene-d4	*87*		*100*		*86.7*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*89*		*100*		*89.2*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*110*		*100*		*110*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*94*		*100*		*94.1*	*39 - 95*			
Matrix Spike Dup (B2E0386-MSD2)		**Source: 1201761-04**			Prepared: 5/14/2012 Analyzed: 5/15/2012				
1,4-Dioxane	150	2.0	100	58	88.6	0 - 200	10.1	200	
Surrogate: 1,2-Dichlorobenzene-d4	*86*		*100*		*85.8*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*94*		*100*		*93.8*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*110*		*100*		*112*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*96*		*100*		*95.5*	*39 - 95*			S8

Hargis & Associates, Inc.	Project Number : Raytheon, 532.30
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/22/2012

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 B2E0430 - MSSEMI_ISOTOPEDILN									
Blank (B2E0430-BLK1)					Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	ND	0.20			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*0.89*		*1.00*		*89.2*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.79*		*1.00*		*79.1*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.96*		*1.00*		*96.1*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.51*		*1.00*		*51.1*	*36 - 130*			
LCS (B2E0430-BS1)					Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	1.0	0.20	1.00		101	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*0.93*		*1.00*		*93.3*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.80*		*1.00*		*79.8*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.88*		*1.00*		*88.2*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.59*		*1.00*		*58.8*	*36 - 130*			
Matrix Spike (B2E0430-MS1)		**Source: 1201715-02**			Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	0.98	0.20	1.00	ND	98.5	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*0.91*		*1.00*		*91.0*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.78*		*1.00*		*77.6*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.85*		*1.00*		*85.4*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.60*		*1.00*		*60.4*	*36 - 130*			
Matrix Spike Dup (B2E0430-MSD1)		**Source: 1201715-02**			Prepared: 5/15/2012 Analyzed: 5/16/2012				
1,4-Dioxane	0.96	0.20	1.00	ND	95.9	70 - 130	2.65	20	
Surrogate: 1,2-Dichlorobenzene-d4	*0.92*		*1.00*		*92.1*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.76*		*1.00*		*76.0*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.78*		*1.00*		*78.2*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.65*		*1.00*		*64.9*	*36 - 130*			

Hargis & Associates, Inc.		Project Number :	Raytheon, 532.30
9171 Towne Centre Drive, Suite 375		Report To :	Steve Netto
San Diego , CA 92122		Reported :	05/22/2012

Notes and Definitions

S8	Surrogate recovery was above laboratory acceptance limit. See CAR for details.
S1	Surrogate recovery was above laboratory acceptance limit. No target analyte was detected in the sample.
D4	Reporting limits adjusted to reflect sample amount analyzed.
ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 5/11/12 PAGE 1 OF 2

PROJECT NAME	Raytheon
PROJECT No./TASK No.	532.30
PROJECT MANAGER	Steve Netto
Phone No.	858-455-6500
QA MANAGER	
Fax No.	858-455-6533
SAMPLER (SIGNATURE)	Amanda Beam
SAMPLER (PRINTED)	Daniel Mora, Amanda Beam

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX Soil	Ground-water	Surface water	Lab H2O	PRESERVATION HCl	HNO3	NaOH	H2SO4	Ice	SAMPLE CONTAINERS 40 ml VOA	1L Amber	ANALYSIS REQUESTED VOCs 8260B	1,4-Dioxane 8270 MOD	1,4-Dioxane 8270 SIM	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S 0-10	10-100	100-1,000	1,000-10,000	>10,000	SPECIAL HANDLING 24 TAT	48 TAT	Standard TAT	MS collected	MSD collected	REMARKS
1201771-01	MW-30A	5/10/11	1732		X			X				X	3		X			X							X			
	↓	↓	↓		X							X		1			X								X			
-02	MW-30B		1809		X			X				X	3		X		/		X						X			
	↓	↓	↓		X							X		1			X								X			
-03	TB-051112	5/11/12	0600		X		X	X				X	2		X			X							X			
-04	MW-28		727		X			X				X	3		X										X	X	X	6 VOAs
	↓		↓		X							X		1			X	X							X	X	X	2 1L Ambers
-05	MW-29		816		X			X				X	3		X					X					X			
	↓		↓		X							X		1		X									X			
-06	MW-2900		836		X			X				X	3		X					X					X			
	↓		↓		X							X		1		X									X			
-07	MW-31		910		X			X				X	3		X				X						X			
	↓		↓		X							X		1			X								X			
-08	MW-08	↓	1316		X			X					3		X					X					X			
Total number of Containers per analysis:													23	6											**Total No. of Containers:** 37 of 42			

Relinquished by:	Date	Time	Company	Received by:	Date	Time	Company
Amanda Beam	5/11/12	1547	H+A, Inc	FPDHL	5/11/12	1547	ASL
Relinquished by:	Date	Time	Company	Received by:	Date	Time	Company

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.

Sample Receipt:
- ☐ No. of containers correct
- ☐ custody seals secure
- ☑ received good condition/cold
- ☐ conforms to COC document

Temp. @ receipt 3.4 °C

Shipment Method: Drop-off

Send Results to: Steve Netto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375, SAN DIEGO, CA 92122 (858) 455-6500

☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124, 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

LABORATORY INFORMATION: ATL, ATTN: RACHELLE ARADA

REMARKS: 6 VOAs, 2 1L Ambers

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 5/11/12 PAGE 2 OF 2

PROJECT NAME Raytheon	**PROJECT No./TASK No.** 532.30
PROJECT MANAGER Steve Netto	**Phone No.** 858-455-6500
QA MANAGER	**Fax No.** 858-455-6533
SAMPLER (SIGNATURE) Amanda Beam	**SAMPLER (PRINTED)** Daniel Mora, Amanda Beam

LAB ID	SAMPLE ID (cont'd)	SAMPLE COLLECTION Date	Time	MATRIX Soil	Ground-water	Surface water	Lab H2O	PRESERVATION HCl	HNO_3	NaOH	H_2SO_4	Ice	SAMPLE CONTAINERS 40 ml VOA	1L Amber	ANALYSIS REQUESTED VOCs 8260B	1,4-Dioxane 8270 MOD	1,4-Dioxane 8270 SIM	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S 0-10	10-100	100-1,000	1,000-10,000	>10,000	SPECIAL HANDLING 24 TAT	48 TAT	Standard TAT
120771 -01	MW-08	5/11/12	1316		X							X		1		~~X~~	X								X
-09	RB-051112	5/11/12	1240				X	X				X	3		X	~~X~~		X		X	M				X
↓	↓	5/11/12	↓				X					X		1		X									X

Total number of Containers per analysis: 3 1

Total No. of Containers: 5 of 42

LABORATORY INFORMATION: ATL

REMARKS

Relinquished by:	Date	Received by:	Date
Amanda Beam	5/11/12	FEDEX	5/11/12
H+A, Inc. Company	Time 1547	ATL Company	Time 1547
Relinquished by:	Date	Received by:	Date
Company	Time	Company	Time

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.

Sample Receipt: Temp. @ receipt _____ °C

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

☐ custody seals secure ☐ conforms to COC document

Shipment Method: Drop off

Send Results to: Steve Netto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375, SAN DIEGO, CA 92122 (858) 455-6500

☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124, 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

ORIGINAL - LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

Rachelle Arada

From: Carmen Aguila [carmen@atlglobal.com]
Sent: Wednesday, May 16, 2012 1:56 PM
To: Rachelle Arada
Cc: Ed Caballero; Eddie Rodriguez; Edgar Morrison
Subject: FW: 532.30 COC

Confirmation wo# 1201771.

From: Amanda Beam [mailto:ABeam@HARGIS.COM]
Sent: Wednesday, May 16, 2012 1:54 PM
To: Carmen Aguila
Cc: Daniel Mora
Subject: 532.30 COC

Carmen,

This is a follow-up email per our conversation for request of 8260B VOC analysis for the sample collected on 5/11/12 for MW-08 that was not marked on the COC for analysis. Please run the VOA's for VOC analysis.

Thank you,

Amanda Beam
Hydrogeologist

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, California 92122
ph: 858-455-6500 ext. 145
fax: 858-410-7440
abeam@hargis.com

Calscience Environmental Laboratories, Inc.

Supplemental Report 2

Additional requested analyses are reported as a stand-alone report.

CALSCIENCE

WORK ORDER NUMBER: 12-05-0853

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Hargis + Associates, Inc.

Client Project Name: Raytheon Main / 532.30

Attention: Steve Netto
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Approved for release on 06/15/2012 by:
Virendra Patel
Project Manager

ResultLink

Email your PM

Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: Raytheon Main / 532.30
Work Order Number: 12-05-0853

Calscience Environmental Laboratories, Inc.

Client:	Hargis + Associates, Inc. 9171 Towne Centre Drive, Suite 375 San Diego, CA 92122-6215	Work Order:	12-05-0853
		Project name:	Raytheon Main / 532.30
		Received:	05/11/12 13:00
Attn:	Steve Netto		

DETECTIONS SUMMARY

Client Sample ID Analyte	Result	Qualifiers	Reporting Limit	Units	Method	Extraction
MW-34B (12-05-0853-2)						
1,4-Dioxane	**62**		1.0	ug/L	EPA 8260 SIM	EPA 5030C
1,1-Dichloroethane	**1.6**		1.0	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	**110**		1.0	ug/L	EPA 8260B	EPA 5030C
MW-29 (12-05-0853-3)						
1,4-Dioxane	**290**		5.0	ug/L	EPA 8260 SIM	EPA 5030C
1,1-Dichloroethane	**6.0**		1.0	ug/L	EPA 8260B	EPA 5030C
1,2-Dichloroethane	**1.1**		0.50	ug/L	EPA 8260B	EPA 5030C
1,1-Dichloroethene	**730**		10	ug/L	EPA 8260B	EPA 5030C
Tetrachloroethene	**1.1**		1.0	ug/L	EPA 8260B	EPA 5030C
1,1,2-Trichloroethane	**2.1**		1.0	ug/L	EPA 8260B	EPA 5030C
Trichloroethene	**4.6**		1.0	ug/L	EPA 8260B	EPA 5030C

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

*MDL is shown.

Calscience Environmental Laboratories, Inc.

Analytical Report

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 05/11/12
Work Order No: 12-05-0853
Preparation: EPA 5030C
Method: EPA 8260 SIM

Project: Raytheon Main / 532.30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-34B	**12-05-0853-2-C**	**05/10/12 10:55**	**Aqueous**	**GC/MS M**	**05/22/12**	**05/22/12 18:46**	**120522L01**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	62	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
N,N-Dimethylformamide-d7	67	50-150	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-29	**12-05-0853-3-C**	**05/11/12 08:16**	**Aqueous**	**GC/MS M**	**05/22/12**	**05/22/12 19:13**	**120522L01**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	290	5.0	5		ug/L

Surrogates:	REC (%)	Control Limits	Qual
N,N-Dimethylformamide-d7	62	50-150	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-118-9**	**N/A**	**Aqueous**	**GC/MS M**	**05/22/12**	**05/22/12 18:19**	**120522L01**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
N,N-Dimethylformamide-d7	71	50-150	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-118-10**	**N/A**	**Aqueous**	**GC/MS M**	**05/22/12**	**05/23/12 02:30**	**120522L02**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
N,N-Dimethylformamide-d7	52	50-150	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.	Date Received:	05/11/12
9171 Towne Centre Drive, Suite 375	Work Order No:	12-05-0853
San Diego, CA 92122-6215	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L

Project: Raytheon Main / 532.30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TB-051012C	**12-05-0853-1-A**	**05/10/12 07:00**	**Aqueous**	**GC/MS CC**	**05/12/12**	**05/12/12 17:13**	**120512L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	20	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	5.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	93	80-120			Dibromofluoromethane	105	80-126		
1,2-Dichloroethane-d4	100	80-134			Toluene-d8	98	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.	Date Received:	05/11/12
9171 Towne Centre Drive, Suite 375	Work Order No:	12-05-0853
San Diego, CA 92122-6215	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L

Project: Raytheon Main / 532.30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-34B	**12-05-0853-2-A**	**05/10/12 10:55**	**Aqueous**	**GC/MS CC**	**05/12/12**	**05/12/12 17:41**	**120512L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	20	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	5.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	1.6	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	110	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	94	80-120			Dibromofluoromethane	106	80-126		
1,2-Dichloroethane-d4	103	80-134			Toluene-d8	98	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.		Date Received:	05/11/12
9171 Towne Centre Drive, Suite 375		Work Order No:	12-05-0853
San Diego, CA 92122-6215		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L

Project: Raytheon Main / 532.30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-29	**12-05-0853-3-A**	**05/11/12 08:16**	**Aqueous**	**GC/MS CC**	**05/12/12**	**05/12/12 18:10**	**120512L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	20	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	5.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	1.1	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	2.1	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	4.6	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	6.0	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	1.1	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	730	10	10		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,4-Bromofluorobenzene	94	80-120			Dibromofluoromethane	105	80-126		
1,2-Dichloroethane-d4	99	80-134			Toluene-d8	98	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.		Date Received:	05/11/12
9171 Towne Centre Drive, Suite 375		Work Order No:	12-05-0853
San Diego, CA 92122-6215		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L

Project: Raytheon Main / 532.30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-7,779**	**N/A**	**Aqueous**	**GC/MS CC**	**05/12/12**	**05/12/12 11:58**	**120512L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	20	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	5.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	94	80-120			Dibromofluoromethane	103	80-126		
1,2-Dichloroethane-d4	104	80-134			Toluene-d8	97	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 05/11/12
Work Order No: 12-05-0853
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Raytheon Main / 532.30

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-14-001-7,789**	**N/A**	**Aqueous**	**GC/MS CC**	**05/14/12**	**05/14/12 15:29**	**120514L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Acetone	ND	20	1		1,3-Dichloropropane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropropane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropropene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloropropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichloropropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene	ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone	ND	10	1	
2-Butanone	ND	10	1		Isopropylbenzene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltoluene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chloride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pentanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene	ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzene	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene	ND	1.0	1	
Chloroethane	ND	5.0	1		1,1,1,2-Tetrachloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrachloroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene	ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorobenzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorobenzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloroethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloroethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoromethane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloropropane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethylbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethylbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate	ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride	ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene	ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene	ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	96	80-120			Dibromofluoromethane	115	80-126		
1,2-Dichloroethane-d4	108	80-134			Toluene-d8	99	80-120		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 05/11/12
Work Order No: 12-05-0853
Preparation: EPA 5030C
Method: EPA 8260B

Project Raytheon Main / 532.30

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-05-0880-1	**Aqueous**	**GC/MS CC**	**05/12/12**	**05/12/12**	**120512S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	49.62	99	42.92	86	78-120	14	0-20	
Carbon Tetrachloride	ND	50.00	58.10	116	49.55	99	67-139	16	0-20	
Chlorobenzene	ND	50.00	49.33	99	43.27	87	80-120	13	0-20	
1,2-Dibromoethane	ND	50.00	46.56	93	43.14	86	80-123	8	0-20	
1,2-Dichlorobenzene	ND	50.00	49.08	98	43.14	86	76-120	13	0-20	
1,2-Dichloroethane	ND	50.00	50.92	102	45.29	91	76-130	12	0-20	
1,1-Dichloroethene	ND	50.00	50.30	101	42.76	86	70-130	16	0-27	
Ethylbenzene	ND	50.00	53.61	107	46.61	93	73-127	14	0-20	
Toluene	ND	50.00	52.84	106	45.62	91	72-126	15	0-20	
Trichloroethene	ND	50.00	51.26	103	43.46	87	74-122	16	0-20	
Vinyl Chloride	ND	50.00	51.45	103	45.12	90	65-131	13	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	45.62	91	41.49	83	69-123	9	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 05/11/12
Work Order No: 12-05-0853
Preparation: EPA 5030C
Method: EPA 8260B

Project Raytheon Main / 532.30

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-05-0922-1	**Aqueous**	**GC/MS CC**	**05/14/12**	**05/14/12**	**120514S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	ND	50.00	48.20	96	44.21	88	78-120	9	0-20	
Carbon Tetrachloride	ND	50.00	55.86	112	52.66	105	67-139	6	0-20	
Chlorobenzene	ND	50.00	45.24	90	45.31	91	80-120	0	0-20	
1,2-Dibromoethane	ND	50.00	42.93	86	41.98	84	80-123	2	0-20	
1,2-Dichlorobenzene	ND	50.00	45.78	92	46.40	93	76-120	1	0-20	
1,2-Dichloroethane	ND	50.00	48.08	96	45.56	91	76-130	5	0-20	
1,1-Dichloroethene	ND	50.00	46.59	93	45.11	90	70-130	3	0-27	
Ethylbenzene	ND	50.00	48.94	98	48.82	98	73-127	0	0-20	
Toluene	ND	50.00	49.06	98	47.62	95	72-126	3	0-20	
Trichloroethene	ND	50.00	46.76	94	45.72	91	74-122	2	0-20	
Vinyl Chloride	ND	50.00	51.12	102	50.87	102	65-131	1	0-24	
Methyl-t-Butyl Ether (MTBE)	ND	50.00	42.92	86	42.00	84	69-123	2	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: 05/11/12
Work Order No: 12-05-0853
Preparation: EPA 5030C
Method: SRL 524M-TCP

Project Raytheon Main / 532.30

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-05-1388-5	**Aqueous**	**GC/MS M**	**05/22/12**	**05/23/12**	**120522S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	ND	0.02000	0.01160	58	0.01100	55	80-120	5	0-20	3
1,4-Dioxane	88.91	20.00	99.85	55	111.1	111	80-120	11	0-20	3

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego, CA 92122-6215

Date Received: N/A
Work Order No: 12-05-0853
Preparation: EPA 5030C
Method: EPA 8260B

Project: Raytheon Main / 532.30

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-7,779	**Aqueous**	**GC/MS CC**	**05/12/12**	**05/12/12**	**120512L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	50.00	42.62	85	44.47	89	80-120	73-127	4	0-20	
Carbon Tetrachloride	50.00	51.26	103	52.52	105	66-138	54-150	2	0-20	
Chlorobenzene	50.00	43.46	87	45.08	90	80-120	73-127	4	0-20	
1,2-Dibromoethane	50.00	43.53	87	45.29	91	80-120	73-127	4	0-20	
1,2-Dichlorobenzene	50.00	44.47	89	45.98	92	80-120	73-127	3	0-20	
1,2-Dichloroethane	50.00	44.95	90	47.22	94	80-129	72-137	5	0-20	
1,1-Dichloroethene	50.00	44.00	88	45.51	91	71-131	61-141	3	0-20	
Ethylbenzene	50.00	47.08	94	49.03	98	80-123	73-130	4	0-20	
Toluene	50.00	45.57	91	48.20	96	79-121	72-128	6	0-20	
Trichloroethene	50.00	43.99	88	47.18	94	80-120	73-127	7	0-20	
Vinyl Chloride	50.00	43.00	86	46.52	93	70-136	59-147	8	0-20	
Methyl-t-Butyl Ether (MTBE)	50.00	41.79	84	43.88	88	72-126	63-135	5	0-22	

Total number of LCS compounds : 12
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.		Date Received:	N/A
9171 Towne Centre Drive, Suite 375		Work Order No:	12-05-0853
San Diego, CA 92122-6215		Preparation:	EPA 5030C
		Method:	EPA 8260B

Project: Raytheon Main / 532.30

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-14-001-7,789	**Aqueous**	**GC/MS CC**	**05/14/12**	**05/14/12**	**120514L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	50.00	41.46	83	42.47	85	80-120	73-127	2	0-20	
Carbon Tetrachloride	50.00	49.10	98	50.34	101	66-138	54-150	2	0-20	
Chlorobenzene	50.00	41.84	84	42.38	85	80-120	73-127	1	0-20	
1,2-Dibromoethane	50.00	40.29	81	41.33	83	80-120	73-127	3	0-20	
1,2-Dichlorobenzene	50.00	42.94	86	42.96	86	80-120	73-127	0	0-20	
1,2-Dichloroethane	50.00	44.41	89	45.18	90	80-129	72-137	2	0-20	
1,1-Dichloroethene	50.00	43.00	86	43.74	87	71-131	61-141	2	0-20	
Ethylbenzene	50.00	45.03	90	45.55	91	80-123	73-130	1	0-20	
Toluene	50.00	44.34	89	45.52	91	79-121	72-128	3	0-20	
Trichloroethene	50.00	42.56	85	44.20	88	80-120	73-127	4	0-20	
Vinyl Chloride	50.00	45.80	92	47.78	96	70-136	59-147	4	0-20	
Methyl-t-Butyl Ether (MTBE)	50.00	41.20	82	42.04	84	72-126	63-135	2	0-22	

Total number of LCS compounds : 12
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.		Date Received:	N/A
9171 Towne Centre Drive, Suite 375		Work Order No:	12-05-0853
San Diego, CA 92122-6215		Preparation:	EPA 5030C
		Method:	EPA 8260 SIM

Project: Raytheon Main / 532.30

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-118-9	**Aqueous**	**GC/MS M**	**05/22/12**	**05/22/12**	**120522L01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.02310	116	0.01940	97	80-120	17	0-20	
1,4-Dioxane	20.00	18.90	94	19.83	99	80-120	5	0-20	

Return to Contents

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Hargis + Associates, Inc.		Date Received:	N/A
9171 Towne Centre Drive, Suite 375		Work Order No:	12-05-0853
San Diego, CA 92122-6215		Preparation:	EPA 5030C
		Method:	EPA 8260 SIM

Project: Raytheon Main / 532.30

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-118-10	**Aqueous**	**GC/MS M**	**05/22/12**	**05/23/12**	**120522L02**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2,3-Trichloropropane	0.02000	0.01870	94	0.01850	92	80-120	1	0-20	
1,4-Dioxane	20.00	21.22	106	22.91	115	80-120	8	0-20	

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RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

ACCREDITED IN ACCORDANCE WITH nelac

Work Order Number: 12-05-0853

Qualifier	Definition
*	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 matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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.
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.
ME	LCS/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
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.
MPN - Most Probable Number

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Revised COC received 05/21/2012 at 12:05

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 5/10/12 PAGE 1 OF 1

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY · ENGINEERING

PROJECT NAME: Raytheon Main
PROJECT No./TASK No.: 532.30
PROJECT MANAGER: Steve Nitto
Phone No.: 858-455-6500
QA MANAGER
Fax No.: 858-455-6533
SAMPLER (SIGNATURE): Daniel Mora, Amanda Beam
SAMPLER (PRINTED): Daniel Mora, Amanda Beam

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX: Soil	Ground-water	Surface water	DAS field	PRESERVATION: HCl	HNO3	NaOH	H2SO4	Ice	SAMPLE CONTAINERS: 40ml VOA	1 L Amber	ANALYSIS REQUESTED: 8260B VOCs	8270C (M)	8260 SIM for 1,4-dioxane (1 ug/L DL)	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-10	10-100	100-1,000	SPECIAL HANDLING: STAT DAYS	TAT
1	TB-051012C	5/10/12	700				X	X				X	2		X			X				X
2	MW-34B		1055		X			X				X	3		X					X		X
	MW-34B		1055		X							X		1		X	X					X
3	MW-29	5/11/12	816		X			X				X	3		X					X		X
	MW-29		816		X							X		1		X	X					X

LABORATORY INFORMATION: CalScience ATTN: Virendra

12-05-0853

REMARKS

Total No. of Containers: 10

Total number of Containers per analysis: 8 2

Relinquished by:	Date	Time	Company	Received by:	Date	Time	Company
Amanda Beam	5/11/12	1040	HGA Inc		5/11/12	10:40	CALSCIENCE
	5/11/12	13:00	CALSCIENCE	Dannyle	5/11/12	@ 13:00	CH

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.

Sample Receipt: ☐ No. of containers correct ☐ custody seals secure — Temp. @ receipt _____ °C ☐ received good condition/cold ☐ conforms to COC document

Shipment Method: Courier Pickup
Send Results to: Steve Nitto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500
☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124 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

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

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HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 5/10/12 PAGE 1 OF 1

PROJECT NAME Raytheon Main
PROJECT No./TASK No. 532.30
PROJECT MANAGER Steve Netto
Phone No. 858-455-6500
QA MANAGER
Fax No. 858-455-6533
SAMPLER (SIGNATURE) [signature] Amanda Beam
SAMPLER (PRINTED) Daniel Mora, Amanda Beam

LABORATORY INFORMATION: CalScience ATTN: Virendra

12-05-0853

LAB ID	SAMPLE ID	Date	Time	Soil	Ground-water	Surface water	LAB H2O	HCl	HNO_3	NaOH	H_2SO_4	Ice	40ml VOA	1L Amber	8260B VOCs	8270C (M)	0-10	10-100	100-1,000	STANDARD TAT	REMARKS
1	TB-051012C	5/10/12	700				X	X				X	2		X		X			X	
2	MW-34B	↓	1055		X			X				X	3		X				X	X	
	MW-34B	↓	1055		X							X		1		X				X	
3	MW-29	5/11/12	816		X			X				✓	3		X				X	X	
	MW-29	↓	816		X							✓		1		X				X	

Total number of Containers per analysis: 40ml VOA: 8; 1L Amber: 2

Total No. of Containers: 10

Relinquished by:	Date	Received by:	Date
Amanda Beam	5/11/12	[signature]	5/11/12
Company: H+A Inc	Time: 1040	Company: CALSCIENCE	Time: 10:40
[signature]	5/11/12	Danuyle	5/11/12
Company: CALSCIENCE	Time: 13:00	Company: CEL	Time: ~~12~~ 13:00

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.

Sample Receipt: **Temp. @ receipt** ________ °C

- ☐ **No. of containers correct**
- ☐ **received good condition/cold**
- ☐ **custody seals secure**
- ☐ **conforms to COC document**

Shipment Method: Courier Pickup
Send Results to: Steve Netto

- ☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500
- ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124 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

ORIGINAL: [...]ATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-05-0853

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: HARGIS + ASSOCIATES, INC. DATE: 05/11/12

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.0 °C - 0.3 °C (CF) = 2.7 °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 Initial: DEE

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: DEE

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: RS

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	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
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® ☐_____

Water: ☐VOA ☑VOAh ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☑1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☐1PBna ☐500PB ☐250PB ☐250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:** 120427A **Labeled/Checked by:** RS

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** WS

Preservative: h: HCL n: HNO_3 na_2:$Na_2S_2O_3$ na: NaOH p: H_3PO_4 s: H_2SO_4 u: Ultra-pure znna: $ZnAc_2$+NaOH f: Filtered **Scanned by:** RS

Return to Contents

Exova
9240 Santa Fe Springs Road
Santa Fe Springs
California
USA
90670

T: +1 (562) 948-2225
F: +1 (562) 948-5850
E: info400@exova.com
W: www.exova.com

Testing. Advising. Assuring.

Certificate of Analysis

May 31, 2012

Hargis+Associates Inc
9171 Towne Centre Dr
Ste 375
San Diego, CA 92122

Attn: Steve Netto

Exova Job No: 139654
Purchase Order: 532.30
Project Name: Raytheon
Samples Received: Ten (10) Sample(s)
Date Received: 05/11/2012

Analysis	RGC Page
Volatile Organics by EPA 624/8260B	2 - 8
1,4-Dioxane by Modified EPA 8270	9

Michael Shelton
Technical Director

Patricia Metzger
Senior Chemist

EXOVA

Volatile Organics by EPA 624/8260B

Sample: MW-29

Parts Per Billion (µg/L)

Compound	Result	Detection Limit	Blank Result	Detection Limit
Acetone	ND	5	ND	5
tert-Amyl Methyl Ether	ND	1	ND	1
Benzene	ND	1	ND	1
Bromodichloromethane	ND	1	ND	1
Bromoform	ND	1	ND	1
Bromomethane	ND	5	ND	5
2-Butanone (MEK)	ND	2	ND	2
tert-Butyl Alcohol	10	5	ND	5
tert-Butyl Ethyl Ether	ND	1	ND	1
Carbon Disulfide	ND	1	ND	1
Carbon Tetrachloride	ND	1	ND	1
Chlorobenzene	ND	1	ND	1
Chloroethane	ND	1	ND	1
Chloroform	ND	1	ND	1
Chloromethane	ND	2	ND	2
2-Chlorotoluene	ND	1	ND	1
4-Chlorotoluene	ND	1	ND	1
Dibromochloromethane	ND	1	ND	1
1,2-Dichlorobenzene	ND	1	ND	1
1,3-Dichlorobenzene	ND	1	ND	1
1,4-Dichlorobenzene	ND	1	ND	1
1,1-Dichloroethane	5	1	ND	1
1,2-Dichloroethane	1	1	ND	1
1,1-Dichloroethylene	550	1	ND	1
cis-1,2-Dichloroethylene	ND	1	ND	1
trans-1,2-Dichloroethylene	ND	1	ND	1
1,2-Dichloropropane	ND	1	ND	1
cis-1,3-Dichloropropene	ND	1	ND	1
trans-1,3-Dichloropropene	ND	1	ND	1
Diisopropyl Ether	ND	1	ND	1
Ethylbenzene	ND	1	ND	1
Ethylene Dibromide	ND	1	ND	1
Freon-TF	ND	1	ND	1
2-Hexanone	ND	1	ND	1
Methylene Chloride	ND	5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND	1	ND	1
Methyl t-Butyl Ether	ND	2	ND	2
Styrene	ND	1	ND	1

EXOVA

Volatile Organics by EPA 624/8260B

Sample: MW-29 (continued)

Parts Per Billion (µg/L)

Compound	Result	Detection Limit	Blank Result	Detection Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	1	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	ND	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	2	1	ND	1
Trichloroethylene	4	1	ND	1
Trichlorofluoromethane	1	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 05-16-12
Date analyzed: 05-16-12

Surrogate	QC Limits	Sample Percent Recovery	Blank Percent Recovery
Dibromofluoromethane	75-125	96	97
1,2-Dichloroethane-d_4	82-121	90	93
Toluene-d_8	87-110	103	104
Bromofluorobenzene	76-113	112	116**

* Surrogate recovery was outside control limits. All surrogate recoveries in the sample are within control limits; no action taken.

EXOVA

Volatile Organics by EPA 624/8260B

Sample: MW-34B

Parts Per Billion (µg/L)

Compound	Result	Detection Limit	Blank Result	Detection Limit
Acetone	ND	5	ND	5
tert-Amyl Methyl Ether	ND	1	ND	1
Benzene	ND	1	ND	1
Bromodichloromethane	ND	1	ND	1
Bromoform	ND	1	ND	1
Bromomethane	ND	5	ND	5
2-Butanone (MEK)	ND	2	ND	2
tert-Butyl Alcohol	ND	5	ND	5
tert-Butyl Ethyl Ether	ND	1	ND	1
Carbon Disulfide	ND	1	ND	1
Carbon Tetrachloride	ND	1	ND	1
Chlorobenzene	ND	1	ND	1
Chloroethane	ND	1	ND	1
Chloroform	ND	1	ND	1
Chloromethane	ND	2	ND	2
2-Chlorotoluene	ND	1	ND	1
4-Chlorotoluene	ND	1	ND	1
Dibromochloromethane	ND	1	ND	1
1,2-Dichlorobenzene	ND	1	ND	1
1,3-Dichlorobenzene	ND	1	ND	1
1,4-Dichlorobenzene	ND	1	ND	1
1,1-Dichloroethane	1	1	ND	1
1,2-Dichloroethane	ND	1	ND	1
1,1-Dichloroethylene	120	1	ND	1
cis-1,2-Dichloroethylene	ND	1	ND	1
trans-1,2-Dichloroethylene	ND	1	ND	1
1,2-Dichloropropane	ND	1	ND	1
cis-1,3-Dichloropropene	ND	1	ND	1
trans-1,3-Dichloropropene	ND	1	ND	1
Diisopropyl Ether	ND	1	ND	1
Ethylbenzene	ND	1	ND	1
Ethylene Dibromide	ND	1	ND	1
Freon-TF	ND	1	ND	1
2-Hexanone	ND	1	ND	1
Methylene Chloride	ND	5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND	1	ND	1
Methyl t-Butyl Ether	ND	2	ND	2
Styrene	ND	1	ND	1

EXOVA

Volatile Organics by EPA 624/8260B

Sample: MW-34B (continued)

Parts Per Billion (µg/L)

Compound	Result	Detection Limit	Blank Result	Detection Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	ND	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	ND	1	ND	1
Trichloroethylene	ND	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 05-16-12
Date analyzed: 05-16-12

Surrogate	QC Limits	Sample Percent Recovery	Blank Percent Recovery
Dibromofluoromethane	75-125	96	97
1,2-Dichloroethane-d_4	82-121	91	93
Toluene-d_8	87-110	102	104
Bromofluorobenzene	76-113	112	116**

* Surrogate recovery was outside control limits. All surrogate recoveries in the sample are within control limits; no action taken.

EXOVA

Volatile Organics by EPA 624/8260B

Sample: TB-051012B

Parts Per Billion (µg/L)

Compound	Result	Detection Limit	Blank Result	Detection Limit
Acetone	ND	5	ND	5
tert-Amyl Methyl Ether	ND	1	ND	1
Benzene	ND	1	ND	1
Bromodichloromethane	ND	1	ND	1
Bromoform	ND	1	ND	1
Bromomethane	ND	5	ND	5
2-Butanone (MEK)	ND	2	ND	2
tert-Butyl Alcohol	ND	5	ND	5
tert-Butyl Ethyl Ether	ND	1	ND	1
Carbon Disulfide	ND	1	ND	1
Carbon Tetrachloride	ND	1	ND	1
Chlorobenzene	ND	1	ND	1
Chloroethane	ND	1	ND	1
Chloroform	ND	1	ND	1
Chloromethane	ND	2	ND	2
2-Chlorotoluene	ND	1	ND	1
4-Chlorotoluene	ND	1	ND	1
Dibromochloromethane	ND	1	ND	1
1,2-Dichlorobenzene	ND	1	ND	1
1,3-Dichlorobenzene	ND	1	ND	1
1,4-Dichlorobenzene	ND	1	ND	1
1,1-Dichloroethane	ND	1	ND	1
1,2-Dichloroethane	ND	1	ND	1
1,1-Dichloroethylene	ND	1	ND	1
cis-1,2-Dichloroethylene	ND	1	ND	1
trans-1,2-Dichloroethylene	ND	1	ND	1
1,2-Dichloropropane	ND	1	ND	1
cis-1,3-Dichloropropene	ND	1	ND	1
trans-1,3-Dichloropropene	ND	1	ND	1
Diisopropyl Ether	ND	1	ND	1
Ethylbenzene	ND	1	ND	1
Ethylene Dibromide	ND	1	ND	1
Freon-TF	ND	1	ND	1
2-Hexanone	ND	1	ND	1
Methylene Chloride	ND	5	ND	5
4-Methyl-2-Pentanone (MIBK)	ND	1	ND	1
Methyl t-Butyl Ether	ND	2	ND	2
Styrene	ND	1	ND	1

EXOVA

Volatile Organics by EPA 624/8260B

Sample: TB-051012B (continued)

Parts Per Billion (µg/L)

Compound	Result	Detection Limit	Blank Result	Detection Limit
1,1,2,2-Tetrachloroethane	ND	1	ND	1
Tetrachloroethylene	ND	1	ND	1
Tetrahydrofuran	ND	1	ND	1
Toluene	ND	1	ND	1
1,1,1-Trichloroethane	ND	1	ND	1
1,1,2-Trichloroethane	ND	1	ND	1
Trichloroethylene	ND	1	ND	1
Trichlorofluoromethane	ND	1	ND	1
Vinyl Chloride	ND	1	ND	1
m/p-Xylenes	ND	1	ND	1
o-Xylene	ND	1	ND	1

Date extracted: 05-16-12
Date analyzed: 05-16-12

Surrogate	QC Limits	Sample Percent Recovery	Blank Percent Recovery
Dibromofluoromethane	75-125	93	97
1,2-Dichloroethane-d_4	82-121	86	93
Toluene-d_8	87-110	104	104
Bromofluorobenzene	76-113	109	116**

* Surrogate recovery was outside control limits. All surrogate recoveries in the sample are within control limits; no action taken.

EXOVA

Quality Control Summary

Batch ID: 051612WV

Compound	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Dup Result	Spike Dup % Rec	Spike RPD
Benzene	ND	50.0	49.4	99	49.2	98	0
Chlorobenzene	ND	50.0	48.9	98	48.8	98	0
1,1-Dichloroethylene	ND	50.0	50.7	101	50.6	101	0
Toluene	387	50.0	449	NR	451	NR	0
Trichloroethylene	ND	50.0	48.5	97	47.9	96	1

NR - Not Reported; the sample result exceeds the amount spiked. Analysis of a Laboratory Fortified Blank gave acceptable recoveries for toluene.

Sample ID: Method Blank

Compound	Sample Result	Spike Conc	Spike Result	Spike % Rec
Toluene	ND	50.0	53.3	107

Quality Control Limits

Compound	% Recovery	RPD
Benzene	77-127	10
Chlorobenzene	80-116	9
1,1-Dichloroethylene	66-125	11
Toluene	81-118	10
Trichloroethylene	72-119	11

EXOVA

1,4-Dioxane by Modified EPA 8270
Gas Chromatography/Mass Spectrometry

Sample ID	Parts Per Billion (µg/L)
MW-29	300
MW-34B	63
Method Blank	ND
Detection Limit	1

Date Extracted: 05-16-12
Dates Analyzed: 05-29-12

Quality Control Summary

Sample ID: 051612WO

Analyte	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Duplicate Result	Spike Duplicate % Rec	Spike RPD
1,4-Dioxane	ND	20.0	20.8	104	21.4	107	3

Quality Control Guidelines

Analyte	% Recovery	RPD
1,4-Dioxane	85 - 113	NMT 11

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 5/10/12 PAGE 1 OF 1

PROJECT NAME Raytheon	**PROJECT No./TASK No.** 532.30
PROJECT MANAGER Steve Netto	**Phone No.** 858-455-6500
QA MANAGER	**Fax No.** 858-455-6533
SAMPLER (SIGNATURE)	**SAMPLER (PRINTED)** Dan Mora, Amanda Beam

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX: Soil	Ground-water	Surface water	Lab H2O	PRESERVATION: HCl	HNO3	NaOH	H2SO4	Ice	SAMPLE CONTAINERS: 40 ml VOA	1L Amber	ANALYSIS REQUESTED: VOCs 8260B	1,4-Dioxane 8270 MOD	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-10	10-100	100-1,000	1,000-10,000	>10,000	SPECIAL HANDLING: 24 TAT	48 TAT	Standard TAT
	TB-051012B	5/10/12	700				X	X				X	2		X		X							X
	MW-34B		1055		X			X				X	3		X				X					X
	MW-34B		1055		X							X		1		X								X
	MW-29	5/11/12	816		X			X				X	3		X				X					X
	MW-29		816		X							X		1		X								X
Total number of Containers per analysis:													8	2								**Total No. of Containers:** 10		

LABORATORY INFORMATION: EKOVA

REMARKS

Relinquished by: D	Date 5/10/12	Received by:	Date
Company H+A	Time 1133	Company	Time
Relinquished by:	Date	Received by:	Date 05-11-12
Company	Time	Company EKOVA	Time 11:22

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.

Sample Receipt:
- ☑ No. of containers correct
- ☐ custody seals secure
- Temp. @ receipt 6 °C
- ☑ received good condition/cold
- ☑ conforms to COC document

Shipment Method: Drop off

Send Results to: Steve Netto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375
SAN DIEGO, CA 92122 (858) 455-6500

☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124
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

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

139654

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM ANALYTICAL RESULTS

ADVANCED TECHNOLOGY LABORATORIES

May 01, 2012

ACCREDITED IN ACCORDANCE WITH nelac

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

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

Re: ATL Work Order Number : 1201389

Client Reference : RAYTHEON FULLERTON-MONTHLY, 532.15

Enclosed are the results for sample(s) received on April 16, 2012 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,

Eddie Rodriguez
Laboratory Director

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-041612	1201389-01	Lab H2O	4/16/12 8:00	4/16/12 12:24
EW-02	1201389-02	Groundwater	4/16/12 10:12	4/16/12 12:24
PF	1201389-03	Groundwater	4/16/12 9:00	4/16/12 12:24
POX	1201389-04	Groundwater	4/16/12 9:10	4/16/12 12:24
CBT	1201389-05	Groundwater	4/16/12 9:27	4/16/12 12:24
CEFF	1201389-06	Groundwater	4/16/12 9:37	4/16/12 12:24

CASE NARRATIVE

The samples for EPA 317 (Bromate) analysis were subcontracted to Exova, Inc. with ELAP Cert.# 2652.

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID TB-041612

Lab ID: 1201389-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,1-Dichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,1-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,1-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,2-Dibromoethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,2-Dichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,3-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
2,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
2-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
4-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
4-Isopropyltoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Benzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Bromobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Bromodichloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Bromoform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Bromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Carbon tetrachloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Chlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Chloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Chloroform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Chloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID TB-041612

Lab ID: 1201389-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Dibromochloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Dibromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Dichlorodifluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Ethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Hexachlorobutadiene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Isopropylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
m,p-Xylene	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Methylene chloride	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
n-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
n-Propylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Naphthalene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
o-Xylene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
sec-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Styrene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
tert-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Tetrachloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Toluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Trichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Trichlorofluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Vinyl chloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 11:32	
Surrogate: 1,2-Dichloroethane-d4	*91.9 %*	*70 - 130*			B2D0584	04/17/2012	*04/17/12 11:32*	
Surrogate: 4-Bromofluorobenzene	*93.4 %*	*70 - 130*			B2D0584	04/17/2012	*04/17/12 11:32*	
Surrogate: Dibromofluoromethane	*93.6 %*	*70 - 130*			B2D0584	04/17/2012	*04/17/12 11:32*	
Surrogate: Toluene-d8	*97.3 %*	*70 - 130*			B2D0584	04/17/2012	*04/17/12 11:32*	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID EW-02

Lab ID: 1201389-02

Anions by Ion Chromatography EPA 300.0 — **Analyst: Phali**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	**0.19**	0.05	NA	1	B2D0667	04/18/2012	04/18/12 09:36	

Total Dissolved Solids (Residue, Filterable) by SM 2540C — **Analyst: AG**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	**620**	10	NA	1	B2D0680	04/17/2012	04/18/12 07:04	

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D — **Analyst: PT**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Suspended	ND	10	NA	1	B2D0653	04/17/2012	04/18/12 07:00	

Volatile Organic Compounds by EPA 8260 — **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,1-Dichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,1-Dichloroethene	**45**	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,1-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,2-Dibromoethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,2-Dichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID EW-02

Lab ID: 1201389-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,3-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,3-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
2,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
2-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
4-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
4-Isopropyltoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Benzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Bromobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Bromodichloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Bromoform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Bromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Carbon tetrachloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Chlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Chloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Chloroform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Chloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Dibromochloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Dibromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Dichlorodifluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Ethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Hexachlorobutadiene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Isopropylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
m,p-Xylene	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Methylene chloride	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
n-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
n-Propylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Naphthalene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
o-Xylene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
sec-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Styrene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
tert-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID EW-02

Lab ID: 1201389-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Tetrachloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Toluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Trichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Trichlorofluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Vinyl chloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:28	
Surrogate: 1,2-Dichloroethane-d4	*98.7 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 15:28*	
Surrogate: 4-Bromofluorobenzene	*94.2 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 15:28*	
Surrogate: Dibromofluoromethane	*99.0 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 15:28*	
Surrogate: Toluene-d8	*100 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 15:28*	

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**14**	2.0	NA	1	B2D0636	04/18/2012	04/18/12 23:12	
Surrogate: 1,2-Dichlorobenzene-d4	*88.1 %*		*37 - 93*		B2D0636	04/18/2012	*04/18/12 23:12*	
Surrogate: 2-Fluorobiphenyl	*96.2 %*		*51 - 100*		B2D0636	04/18/2012	*04/18/12 23:12*	
Surrogate: 4-Terphenyl-d14	*128 %*		*58 - 113*		B2D0636	04/18/2012	*04/18/12 23:12*	S8
Surrogate: Nitrobenzene-d5	*84.5 %*		*39 - 95*		B2D0636	04/18/2012	*04/18/12 23:12*	

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Lab ID: 1201389-03

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D **Analyst: PT**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Suspended	ND	10	NA	1	B2D0653	04/17/2012	04/18/12 07:00	

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San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID POX
Lab ID: 1201389-04

Anions by Ion Chromatography EPA 300.0

Analyst: Phali

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	**0.19**	0.05	NA	1	B2D0667	04/18/2012	04/18/12 09:48	

Total Dissolved Solids (Residue, Filterable) by SM 2540C

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	**630**	10	NA	1	B2D0680	04/17/2012	04/18/12 07:06	

Volatile Organic Compounds by EPA 8260

Analyst: DC

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,1-Dichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,1-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,1-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,2-Dibromoethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,2-Dichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,3-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
2,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
2-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
4-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	

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San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID POX

Lab ID: 1201389-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4-Isopropyltoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Benzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Bromobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Bromodichloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Bromoform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Bromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Carbon tetrachloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Chlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Chloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Chloroform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Chloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Dibromochloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Dibromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Dichlorodifluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Ethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Hexachlorobutadiene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Isopropylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
m,p-Xylene	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Methylene chloride	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
n-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
n-Propylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Naphthalene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
o-Xylene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
sec-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Styrene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
tert-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Tetrachloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Toluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Trichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Trichlorofluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	
Vinyl chloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:28	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID POX

Lab ID: 1201389-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 1,2-Dichloroethane-d4	*98.5 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 14:28*	
Surrogate: 4-Bromofluorobenzene	*98.2 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 14:28*	
Surrogate: Dibromofluoromethane	*101 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 14:28*	
Surrogate: Toluene-d8	*104 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 14:28*	

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**0.27**	0.20	NA	1	B2D0744	04/20/2012	04/20/12 20:44	
Surrogate: 1,2-Dichlorobenzene-d4	*95.4 %*		*36 - 107*		B2D0744	04/20/2012	*04/20/12 20:44*	
Surrogate: 2-Fluorobiphenyl	*89.8 %*		*42 - 120*		B2D0744	04/20/2012	*04/20/12 20:44*	
Surrogate: 4-Terphenyl-d14	*99.8 %*		*67 - 142*		B2D0744	04/20/2012	*04/20/12 20:44*	
Surrogate: Nitrobenzene-d5	*100 %*		*36 - 130*		B2D0744	04/20/2012	*04/20/12 20:44*	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID CBT

Lab ID: 1201389-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,1-Dichloroethane	**0.73**	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,1-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,1-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,2-Dibromoethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,2-Dichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,3-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
2,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
2-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
4-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
4-Isopropyltoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Benzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Bromobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Bromodichloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Bromoform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Bromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Carbon tetrachloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Chlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Chloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Chloroform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Chloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	

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San Diego , CA 92122	Reported : 05/01/2012

Client Sample ID CBT

Lab ID: 1201389-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Dibromochloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Dibromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Dichlorodifluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Ethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Hexachlorobutadiene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Isopropylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
m,p-Xylene	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Methylene chloride	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
n-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
n-Propylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Naphthalene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
o-Xylene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
sec-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Styrene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
tert-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Tetrachloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Toluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Trichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Trichlorofluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Vinyl chloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 14:48	
Surrogate: 1,2-Dichloroethane-d4	*100 %*	*70 - 130*			B2D0584	04/17/2012	*04/17/12 14:48*	
Surrogate: 4-Bromofluorobenzene	*100 %*	*70 - 130*			B2D0584	04/17/2012	*04/17/12 14:48*	
Surrogate: Dibromofluoromethane	*103 %*	*70 - 130*			B2D0584	04/17/2012	*04/17/12 14:48*	
Surrogate: Toluene-d8	*106 %*	*70 - 130*			B2D0584	04/17/2012	*04/17/12 14:48*	

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Client Sample ID CEFF

Lab ID: 1201389-06

Anions by Ion Chromatography EPA 300.0 — **Analyst: Phali**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	**0.21**	0.05	NA	1	B2D0667	04/18/2012	04/18/12 09:59	

Total Dissolved Solids (Residue, Filterable) by SM 2540C — **Analyst: AG**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	**660**	10	NA	1	B2D0680	04/17/2012	04/18/12 07:08	

Volatile Organic Compounds by EPA 8260 — **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,1-Dichloroethane	**1.2**	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,1-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,1-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,2-Dibromoethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,2-Dichloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,3-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
2,2-Dichloropropane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
2-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
4-Chlorotoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	

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Client Sample ID CEFF

Lab ID: 1201389-06

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4-Isopropyltoluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Benzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Bromobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Bromodichloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Bromoform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Bromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Carbon tetrachloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Chlorobenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Chloroethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Chloroform	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Chloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Dibromochloromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Dibromomethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Dichlorodifluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Ethylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Hexachlorobutadiene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Isopropylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
m,p-Xylene	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Methylene chloride	ND	1.0	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
n-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
n-Propylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Naphthalene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
o-Xylene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
sec-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Styrene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
tert-Butylbenzene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Tetrachloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Toluene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Trichloroethene	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Trichlorofluoromethane	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	
Vinyl chloride	ND	0.50	NA	1	B2D0584	04/17/2012	04/17/12 15:08	

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Lab ID: 1201389-06

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 1,2-Dichloroethane-d4	*97.0 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 15:08*	
Surrogate: 4-Bromofluorobenzene	*92.5 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 15:08*	
Surrogate: Dibromofluoromethane	*99.6 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 15:08*	
Surrogate: Toluene-d8	*101 %*		*70 - 130*		B2D0584	04/17/2012	*04/17/12 15:08*	

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QUALITY CONTROL SECTION

Anions by Ion Chromatography EPA 300.0 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2D0667 - No_Prep_IC_1									
Blank (B2D0667-BLK1)				Prepared: 4/18/2012 Analyzed: 4/18/2012					
Bromide	ND	0.05			NR				
LCS (B2D0667-BS1)				Prepared: 4/18/2012 Analyzed: 4/18/2012					
Bromide	0.95	0.05	1.00		95	90 - 110			
Matrix Spike (B2D0667-MS1)		**Source: 1201391-01**		Prepared: 4/18/2012 Analyzed: 4/18/2012					
Bromide	2.6		2.50	ND	105	80 - 120			
Matrix Spike (B2D0667-MS2)		**Source: 1201423-01**		Prepared: 4/18/2012 Analyzed: 4/18/2012					
Bromide	2.6		2.50	0.01	102	80 - 120			
Matrix Spike Dup (B2D0667-MSD1)		**Source: 1201391-01**		Prepared: 4/18/2012 Analyzed: 4/18/2012					
Bromide	2.6		2.50	ND	102	80 - 120	2	20	
Matrix Spike Dup (B2D0667-MSD2)		**Source: 1201423-01**		Prepared: 4/18/2012 Analyzed: 4/18/2012					
Bromide	2.6		2.50	0.01	103	80 - 120	0.6	20	

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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 B2D0680 - No_Prep_WC_1									
Blank (B2D0680-BLK1)				Prepared: 4/17/2012 Analyzed: 4/18/2012					
Residue, Dissolved	ND	10			NR				
LCS (B2D0680-BS1)				Prepared: 4/17/2012 Analyzed: 4/18/2012					
Residue, Dissolved	1000	10	970		104	80 - 120			
Duplicate (B2D0680-DUP1)		**Source: 1201334-01**		Prepared: 4/17/2012 Analyzed: 4/18/2012					
Residue, Dissolved	500	10		510	NR		2	10	

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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 B2D0653 - No_Prep_WC_1									
Blank (B2D0653-BLK1)				Prepared: 4/17/2012 Analyzed: 4/18/2012					
Residue, Suspended	ND	10			NR				
LCS (B2D0653-BS1)				Prepared: 4/17/2012 Analyzed: 4/18/2012					
Residue, Suspended	88	10	96.6		91	80 - 120			
Duplicate (B2D0653-DUP1)		**Source: 1201355-01**		Prepared: 4/17/2012 Analyzed: 4/18/2012					
Residue, Suspended	230	10		240	NR		3	10	

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2D0584 - MSVOAW_LL									
Blank (B2D0584-BLK1)				Prepared: 4/17/2012 Analyzed: 4/17/2012					
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				

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2D0584 - MSVOAW_LL (continued)									
Blank (B2D0584-BLK1) - Continued				Prepared: 4/17/2012 Analyzed: 4/17/2012					
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*		*25.0*		*100*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*26*		*25.0*		*105*	*70 - 130*			
Surrogate: Dibromofluoromethane	*26*		*25.0*		*104*	*70 - 130*			
Surrogate: Toluene-d8	*27*		*25.0*		*109*	*70 - 130*			
LCS (B2D0584-BS1)				Prepared: 4/17/2012 Analyzed: 4/17/2012					
1,1-Dichloroethene	17	0.50	20.0		85.0	70 - 130			
Benzene	34	0.50	40.0		85.8	70 - 130			
Chlorobenzene	20	0.50	20.0		101	70 - 130			
MTBE	19	0.50	20.0		96.7	70 - 130			
Toluene	39	0.50	40.0		97.0	70 - 130			
Trichloroethene	19	0.50	20.0		94.2	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*22*		*25.0*		*87.9*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*23*		*25.0*		*90.2*	*70 - 130*			
Surrogate: Dibromofluoromethane	*22*		*25.0*		*87.2*	*70 - 130*			
Surrogate: Toluene-d8	*22*		*25.0*		*89.4*	*70 - 130*			
LCS Dup (B2D0584-BSD1)				Prepared: 4/17/2012 Analyzed: 4/17/2012					
1,1-Dichloroethene	17	0.50	20.0		83.8	70 - 130	1.42	20	
Benzene	35	0.50	40.0		86.9	70 - 130	1.27	20	
Chlorobenzene	20	0.50	20.0		101	70 - 130	0.198	20	
MTBE	20	0.50	20.0		100	70 - 130	3.80	20	
Toluene	39	0.50	40.0		98.4	70 - 130	1.43	20	
Trichloroethene	19	0.50	20.0		96.7	70 - 130	2.57	20	
Surrogate: 1,2-Dichloroethane-d4	*21*		*25.0*		*85.6*	*70 - 130*			

Hargis & Associates, Inc.
9171 Towne Centre Drive, Suite 375
San Diego , CA 92122

Project Number : RAYTHEON FULLERTON-MONTHLY,
Report To : Steve Netto
Reported : 05/01/2012

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2D0584 - MSVOAW_LL (continued)									
LCS Dup (B2D0584-BSD1) - Continued				Prepared: 4/17/2012 Analyzed: 4/17/2012					
Surrogate: 4-Bromofluorobenzene	*22*		*25.0*		*88.3*	*70 - 130*			
Surrogate: Dibromofluoromethane	*21*		*25.0*		*85.5*	*70 - 130*			
Surrogate: Toluene-d8	*22*		*25.0*		*88.5*	*70 - 130*			

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

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 B2D0636 - MSSEMI_ISOTOPEDILN									
Blank (B2D0636-BLK1)				Prepared: 4/18/2012 Analyzed: 4/18/2012					
1,4-Dioxane	ND	2.0			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*86*		*100*		*85.5*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*91*		*100*		*90.8*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*120*		*100*		*123*	*58 - 113*			S1
Surrogate: Nitrobenzene-d5	*87*		*100*		*86.7*	*39 - 95*			
LCS (B2D0636-BS1)				Prepared: 4/18/2012 Analyzed: 4/18/2012					
1,4-Dioxane	100	2.0	100		105	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*82*		*100*		*81.8*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*85*		*100*		*84.7*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*100*		*100*		*102*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*81*		*100*		*80.8*	*39 - 95*			
LCS Dup (B2D0636-BSD1)				Prepared: 4/18/2012 Analyzed: 4/18/2012					
1,4-Dioxane	110	2.0	100		106	70 - 130	1.83	20	
Surrogate: 1,2-Dichlorobenzene-d4	*78*		*100*		*78.1*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*87*		*100*		*86.7*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*99*		*100*		*99.2*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*80*		*100*		*80.0*	*39 - 95*			

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/01/2012

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 B2D0744 - MSSEMI_ISOTOPEDILN									
Blank (B2D0744-BLK1)				Prepared: 4/20/2012 Analyzed: 4/20/2012					
1,4-Dioxane	ND	0.20			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*0.99*		*1.00*		*98.6*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.91*		*1.00*		*90.6*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*1.0*		*1.00*		*103*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*1.1*		*1.00*		*107*	*36 - 130*			
LCS (B2D0744-BS1)				Prepared: 4/20/2012 Analyzed: 4/20/2012					
1,4-Dioxane	1.2	0.20	1.00		119	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*1.0*		*1.00*		*101*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.92*		*1.00*		*91.8*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.97*		*1.00*		*96.7*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*1.1*		*1.00*		*112*	*36 - 130*			
LCS Dup (B2D0744-BSD1)				Prepared: 4/20/2012 Analyzed: 4/20/2012					
1,4-Dioxane	1.1	0.20	1.00		108	70 - 130	9.54	20	
Surrogate: 1,2-Dichlorobenzene-d4	*0.96*		*1.00*		*95.5*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.84*		*1.00*		*84.4*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.96*		*1.00*		*96.1*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*1.0*		*1.00*		*102*	*36 - 130*			

Hargis & Associates, Inc.		Project Number :	RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375		Report To :	Steve Netto
San Diego , CA 92122		Reported :	05/01/2012

Notes and Definitions

S8	Surrogate recovery was above laboratory acceptance limit. See CAR for details.
S1	Surrogate recovery was above laboratory acceptance limit. No target analyte was detected in the sample.
ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Bromate by EPA 317
Ion Chromatography with Post-Column Derivatization-Visible Absorption

Column: Dionex AS9-HC/AG9-HSC
Eluent: 30 mM Na_2CO_3
Flow: 1.0 mL/min
Injection: 250 µL
Detection: Post-column derivatization, Visible detection, 450 nm

Sample preparation: The undiluted samples were treated with a Dionex OnGuard II H cartridge to remove excess basic cations. One sample required dilution with water due to an interfering peak. The detection limit is adjusted for the dilution necessary for analysis.

Parts Per Billion (µg/L)

Sample ID	Result	Detection Limit
1201389-02 / EW-02	ND	0.5
1201389-04 / POX	6	5
1201389-06 / CEFF	7.1	0.5
Method Blank	ND	0.5

Date Analyzed: 04-30-12

Quality Control Summary

Sample ID: 1201389-06 / CEFF

Analyte	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Duplicate Result	Spike Duplicate % Rec	Spike RPD
	7.1	11.1	18.3	101	18.2	100	1
QC Guidelines				75 - 125		75 - 125	NMT 10

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1201389

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Rachelle Arada

RECEIVING LABORATORY:

Exova Inc.
9240 Santa Fe Springs Road
Santa Fe Springs, CA 90670
Phone :(562) 948-2225
Fax: (562) 948-5850
PO#: SC07191 Standard TAT (RA)

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1201389-02	**/ EW-02**	**Groundwater**	**04/16/12 10:12**	
317.0	04/30/12 17:00	04/17/12 10:12		Report Bromate
ATL Lab#: 1201389-04	**/ POX**	**Groundwater**	**04/16/12 09:10**	
317.0	04/30/12 17:00	04/17/12 09:10		Report Bromate
ATL Lab#: 1201389-06	**/ CEFF**	**Groundwater**	**04/16/12 09:37**	
317.0	04/30/12 17:00	04/17/12 09:37		Report Bromate

Released By _____ Date 4/16/12 Received By _____ Date 4/17/12 9:15

Released By _____ Date 4/17/12 1450 Received By _____ Date Exova 04-17-12 P2:44

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 4/16/12 PAGE 1 OF 1

PROJECT NAME	RAYTHEON FULLERTON-MONTHLY
PROJECT No./TASK No.	532.15
PROJECT MANAGER	CHRIS ROSS
Phone No.	858-455-6500
QA MANAGER	STEVE HETTO
Fax No.	858-455-6533
SAMPLER (SIGNATURE)	
SAMPLER (PRINTED)	MARCOS RODRIGUEZ, TRAVIS ARCIAGA

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	Time	MATRIX: Soil	Ground-water	Surface water	Lab H2O	PRESERVATION: HCl	HNO3	NaOH	H2SO4	Ice	SAMPLE CONTAINERS: 40 ml Glass VOA	125 ml Poly	250 ml Poly	500 ml Poly	1 L Amber	ANALYSIS REQUESTED: VOCs by EPA 8260B	1,4-Dioxane by EPA 8270 SIM	Bromate by 317	TDS by SM2540C	TSS by SM2540D	Bromide by 300	1,4-Dioxane by EPA 8270 MOD	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-10	10-100	100-1,000	>1,000
1201389-01	TB-041612 EW-02	4/16/12	08:00				X	X				X	2					X							X			
2			10:12		X			X				X	3	2	2		1	X		X	X	X	X	X		X		
3	PF		9:00		X							X			1							X				X		
4	POX		9:10		X			X				X	3	2	1		1	X	X	X	X		X		X			
5	CBT		9:27		X			X				X	3					X							X			
6	CEFF		9:37		X			X				X	3	2	1			X		X	X		X		X			

Total number of Containers per analysis: 4 6 5 2

Total No. of Containers: 27

SPECIAL HANDLING

LABORATORY INFORMATION

ALT
C/O Rachelle Arada
3275 Walnut Ave.
Signal Hill, CA
90807
562-908-4945

REMARKS

Please include
mrodriguez@hargis.com
in lab report
distribution list
set 1,4-Dioxane
MDL to 1.0 ppm

Relinquished by:	Date	Time	Received by:	Date	Time
	4/16/2012	12:24		4/16/12	1320
H+A (Company)			A/C (Company)		
Relinquished by:	Date		Received by:	Date	
Company	Time		Company	Time	

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.

Sample Receipt: 4.4

☐ No. of containers correct ☐ received good condition/cold
☐ custody seals secure ☐ conforms to COC document

Shipment Method: DELIVER
Send Results to: Steve Hetto

☒ 9171 TOWNE CENTRE DRIVE, SUITE 375
SAN DIEGO, CA 92122 (858) 455-6500

☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124
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

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER

ADVANCED TECHNOLOGY LABORATORIES

May 18, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

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

Re: ATL Work Order Number : 1201610

Client Reference : RAYTHEON FULLERTON-MONTHLY, 532.15

Enclosed are the results for sample(s) received on May 01, 2012 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,

Eddie Rodriguez
Laboratory Director

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-050112	1201610-01	Lab H2O	5/01/12 9:00	5/01/12 12:55
EW-02	1201610-02	Groundwater	5/01/12 11:20	5/01/12 12:55
PF	1201610-03	Groundwater	5/01/12 9:56	5/01/12 12:55
POX	1201610-04	Groundwater	5/01/12 10:05	5/01/12 12:55
CBT	1201610-05	Groundwater	5/01/12 10:27	5/01/12 12:55
CEFF	1201610-06	Groundwater	5/01/12 10:35	5/01/12 12:55

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID TB-050112

Lab ID: 1201610-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
2-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
4-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Benzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Bromobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Bromodichloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Bromoform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Bromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Carbon tetrachloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Chlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Chloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Chloroform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Chloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID TB-050112

Lab ID: 1201610-01

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Dibromochloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Dibromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Ethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Isopropylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
m,p-Xylene	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Methylene chloride	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
n-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
n-Propylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Naphthalene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
o-Xylene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
sec-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Styrene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
tert-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Tetrachloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Toluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Trichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Vinyl chloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:38	
Surrogate: 1,2-Dichloroethane-d4	*75.1 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:38*	
Surrogate: 4-Bromofluorobenzene	*89.8 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:38*	
Surrogate: Dibromofluoromethane	*84.4 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:38*	
Surrogate: Toluene-d8	*93.6 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:38*	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID EW-02

Lab ID: 1201610-02

Anions by Ion Chromatography EPA 300.0 — **Analyst: Phali**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	**0.28**	0.05	NA	1	B2E0148	05/03/2012	05/03/12 08:58	

Total Dissolved Solids (Residue, Filterable) by SM 2540C — **Analyst: AG**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	**600**	10	10	1	B2E0154	05/02/2012	05/02/12 15:06	

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D — **Analyst: AG**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Suspended	ND	10	10	1	B2E0136	05/02/2012	05/02/12 13:43	

Volatile Organic Compounds by EPA 8260 — **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,1-Dichloroethene	**37**	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID EW-02

Lab ID: 1201610-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
2-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
4-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Benzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Bromobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Bromodichloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Bromoform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Bromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Carbon tetrachloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Chlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Chloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Chloroform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Chloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Dibromochloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Dibromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Ethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Isopropylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
m,p-Xylene	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Methylene chloride	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
n-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
n-Propylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Naphthalene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
o-Xylene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
sec-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Styrene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
tert-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID EW-02

Lab ID: 1201610-02

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Tetrachloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Toluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Trichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Vinyl chloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:59	
Surrogate: 1,2-Dichloroethane-d4	*78.3 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:59*	
Surrogate: 4-Bromofluorobenzene	*93.5 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:59*	
Surrogate: Dibromofluoromethane	*89.1 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:59*	
Surrogate: Toluene-d8	*96.3 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:59*	

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	**13**	2.0	1.7	1	B2E0088	05/02/2012	05/03/12 15:28	
Surrogate: 1,2-Dichlorobenzene-d4	*96.6 %*		*37 - 93*		B2E0088	05/02/2012	*05/03/12 15:28*	S8
Surrogate: 2-Fluorobiphenyl	*102 %*		*51 - 100*		B2E0088	05/02/2012	*05/03/12 15:28*	S8
Surrogate: 4-Terphenyl-d14	*145 %*		*58 - 113*		B2E0088	05/02/2012	*05/03/12 15:28*	S8
Surrogate: Nitrobenzene-d5	*108 %*		*39 - 95*		B2E0088	05/02/2012	*05/03/12 15:28*	S8

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
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Client Sample ID PF

Lab ID: 1201610-03

Total Suspended Solids (Residue, Non-Filtrable) by SM 2540D **Analyst: AG**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Suspended	ND	10	10	1	B2E0136	05/02/2012	05/02/12 13:45	

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Client Sample ID POX
Lab ID: 1201610-04

Anions by Ion Chromatography EPA 300.0

Analyst: Phali

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	**0.28**	0.05	NA	1	B2E0148	05/03/2012	05/03/12 09:09	

Total Dissolved Solids (Residue, Filterable) by SM 2540C

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	**600**	10	10	1	B2E0154	05/02/2012	05/02/12 15:08	

Volatile Organic Compounds by EPA 8260

Analyst: DC

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,1-Dichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
2-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
4-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID POX

Lab ID: 1201610-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4-Isopropyltoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Benzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Bromobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Bromodichloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Bromoform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Bromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Carbon tetrachloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Chlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Chloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Chloroform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Chloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Dibromochloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Dibromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Ethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Isopropylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
m,p-Xylene	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Methylene chloride	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
n-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
n-Propylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Naphthalene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
o-Xylene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
sec-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Styrene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
tert-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Tetrachloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Toluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Trichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	
Vinyl chloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:38	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID POX

Lab ID: 1201610-04

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 1,2-Dichloroethane-d4	*83.0 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 17:38*	
Surrogate: 4-Bromofluorobenzene	*104 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 17:38*	
Surrogate: Dibromofluoromethane	*95.4 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 17:38*	
Surrogate: Toluene-d8	*107 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 17:38*	

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

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,4-Dioxane	ND	0.20	0.13	1	B2E0087	05/02/2012	05/02/12 21:01	
Surrogate: 1,2-Dichlorobenzene-d4	*84.2 %*		*36 - 107*		B2E0087	05/02/2012	*05/02/12 21:01*	
Surrogate: 2-Fluorobiphenyl	*83.1 %*		*42 - 120*		B2E0087	05/02/2012	*05/02/12 21:01*	
Surrogate: 4-Terphenyl-d14	*103 %*		*67 - 142*		B2E0087	05/02/2012	*05/02/12 21:01*	
Surrogate: Nitrobenzene-d5	*90.5 %*		*36 - 130*		B2E0087	05/02/2012	*05/02/12 21:01*	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID CBT

Lab ID: 1201610-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,1-Dichloroethane	**0.56**	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
2-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
4-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
4-Isopropyltoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Benzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Bromobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Bromodichloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Bromoform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Bromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Carbon tetrachloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Chlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Chloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Chloroform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Chloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID CBT

Lab ID: 1201610-05

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Dibromochloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Dibromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Ethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Isopropylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
m,p-Xylene	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Methylene chloride	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
n-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
n-Propylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Naphthalene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
o-Xylene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
sec-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Styrene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
tert-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Tetrachloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Toluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Trichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Vinyl chloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 17:58	
Surrogate: 1,2-Dichloroethane-d4	*75.8 %*	*70 - 130*			B2E0007	05/01/2012	*05/01/12 17:58*	
Surrogate: 4-Bromofluorobenzene	*94.9 %*	*70 - 130*			B2E0007	05/01/2012	*05/01/12 17:58*	
Surrogate: Dibromofluoromethane	*88.4 %*	*70 - 130*			B2E0007	05/01/2012	*05/01/12 17:58*	
Surrogate: Toluene-d8	*97.0 %*	*70 - 130*			B2E0007	05/01/2012	*05/01/12 17:58*	

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9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

Client Sample ID CEFF
Lab ID: 1201610-06

Anions by Ion Chromatography EPA 300.0

Analyst: Phali

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromide	**0.31**	0.05	NA	1	B2E0148	05/03/2012	05/03/12 09:20	

Total Dissolved Solids (Residue, Filterable) by SM 2540C

Analyst: AG

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Residue, Dissolved	**600**	10	10	1	B2E0154	05/02/2012	05/02/12 15:10	

Volatile Organic Compounds by EPA 8260

Analyst: DC

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,1,1-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,1,2,2-Tetrachloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,1,2-Trichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,1-Dichloroethane	**0.89**	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,1-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,1-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,2,3-Trichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,2,3-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,2,4-Trichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,2,4-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,2-Dibromo-3-chloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,2-Dibromoethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,2-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,2-Dichloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,3,5-Trimethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,3-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,3-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
1,4-Dichlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
2,2-Dichloropropane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
2-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
4-Chlorotoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	

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Client Sample ID CEFF

Lab ID: 1201610-06

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
4-Isopropyltoluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Benzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Bromobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Bromodichloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Bromoform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Bromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Carbon tetrachloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Chlorobenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Chloroethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Chloroform	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Chloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
cis-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
cis-1,3-Dichloropropene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Dibromochloromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Dibromomethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Dichlorodifluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Ethylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Hexachlorobutadiene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Isopropylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
m,p-Xylene	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Methylene chloride	ND	1.0	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
n-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
n-Propylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Naphthalene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
o-Xylene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
sec-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Styrene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
tert-Butylbenzene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Tetrachloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Toluene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
trans-1,2-Dichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Trichloroethene	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Trichlorofluoromethane	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	
Vinyl chloride	ND	0.50	NA	1	B2E0007	05/01/2012	05/01/12 18:18	

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Client Sample ID CEFF

Lab ID: 1201610-06

Volatile Organic Compounds by EPA 8260 **Analyst: DC**

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Surrogate: 1,2-Dichloroethane-d4	*89.6 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:18*	
Surrogate: 4-Bromofluorobenzene	*111 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:18*	
Surrogate: Dibromofluoromethane	*103 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:18*	
Surrogate: Toluene-d8	*113 %*		*70 - 130*		B2E0007	05/01/2012	*05/01/12 18:18*	

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QUALITY CONTROL SECTION

Anions by Ion Chromatography EPA 300.0 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0148 - No_Prep_IC_1									
Blank (B2E0148-BLK1)				Prepared: 5/3/2012 Analyzed: 5/3/2012					
Bromide	ND	0.05			NR				
LCS (B2E0148-BS1)				Prepared: 5/3/2012 Analyzed: 5/3/2012					
Bromide	0.96	0.05	1.00		96	90 - 110			
Duplicate (B2E0148-DUP1)		**Source: 1201631-01**		Prepared: 5/3/2012 Analyzed: 5/3/2012					
Bromide	ND	25		3.5	NR			20	
Matrix Spike (B2E0148-MS1)		**Source: 1201631-01**		Prepared: 5/3/2012 Analyzed: 5/3/2012					
Bromide	2.5		2.50	0.007	101	80 - 120			
Matrix Spike Dup (B2E0148-MSD1)		**Source: 1201631-01**		Prepared: 5/3/2012 Analyzed: 5/3/2012					
Bromide	2.5		2.50	0.007	101	80 - 120	0.7	20	

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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 B2E0154 - No_Prep_WC_1									
Blank (B2E0154-BLK1)				Prepared: 5/2/2012 Analyzed: 5/2/2012					
Residue, Dissolved	ND	10			NR				
LCS (B2E0154-BS1)				Prepared: 5/2/2012 Analyzed: 5/2/2012					
Residue, Dissolved	980	10	970		101	80 - 120			
Duplicate (B2E0154-DUP1)		**Source: 1201610-06**		Prepared: 5/2/2012 Analyzed: 5/2/2012					
Residue, Dissolved	600	10		600	NR		0.3	10	

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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 B2E0136 - No_Prep_WC_1									
Blank (B2E0136-BLK1)				Prepared: 5/2/2012 Analyzed: 5/2/2012					
Residue, Suspended	ND	10			NR				
LCS (B2E0136-BS1)				Prepared: 5/2/2012 Analyzed: 5/2/2012					
Residue, Suspended	100	10	96.6		104	80 - 120			
Duplicate (B2E0136-DUP1)		**Source: 1201560-01**		Prepared: 5/2/2012 Analyzed: 5/2/2012					
Residue, Suspended	19	10		18	NR		5	10	

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Volatile Organic Compounds by EPA 8260 - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0007 - MSVOAW_LL									
Blank (B2E0007-BLK1)				Prepared: 5/1/2012 Analyzed: 5/1/2012					
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				

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0007 - MSVOAW_LL (continued)									
Blank (B2E0007-BLK1) - Continued				Prepared: 5/1/2012 Analyzed: 5/1/2012					
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	*18*		*25.0*		*73.0*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*23*		*25.0*		*91.7*	*70 - 130*			
Surrogate: Dibromofluoromethane	*21*		*25.0*		*85.4*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*94.7*	*70 - 130*			
LCS (B2E0007-BS1)				Prepared: 5/1/2012 Analyzed: 5/1/2012					
1,1-Dichloroethene	16	0.50	20.0		78.0	70 - 130			
Benzene	39	0.50	40.0		96.5	70 - 130			
Chlorobenzene	21	0.50	20.0		103	70 - 130			
MTBE	17	0.50	20.0		84.4	70 - 130			
Toluene	40	0.50	40.0		101	70 - 130			
Trichloroethene	20	0.50	20.0		99.9	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*19*		*25.0*		*74.1*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*23*		*25.0*		*90.8*	*70 - 130*			
Surrogate: Dibromofluoromethane	*21*		*25.0*		*84.9*	*70 - 130*			
Surrogate: Toluene-d8	*24*		*25.0*		*95.4*	*70 - 130*			
LCS Dup (B2E0007-BSD1)				Prepared: 5/1/2012 Analyzed: 5/1/2012					
1,1-Dichloroethene	15	0.50	20.0		77.1	70 - 130	1.16	20	
Benzene	38	0.50	40.0		94.0	70 - 130	2.65	20	
Chlorobenzene	20	0.50	20.0		100	70 - 130	2.47	20	
MTBE	18	0.50	20.0		88.6	70 - 130	4.86	20	
Toluene	39	0.50	40.0		97.5	70 - 130	3.67	20	
Trichloroethene	19	0.50	20.0		95.0	70 - 130	5.08	20	
Surrogate: 1,2-Dichloroethane-d4	*19*		*25.0*		*75.0*	*70 - 130*			

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

Analyte	Result (ug/L)	PQL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0007 - MSVOAW_LL (continued)									
LCS Dup (B2E0007-BSD1) - Continued				Prepared: 5/1/2012 Analyzed: 5/1/2012					
Surrogate: 4-Bromofluorobenzene	*23*		*25.0*		*90.2*	*70 - 130*			
Surrogate: Dibromofluoromethane	*21*		*25.0*		*84.7*	*70 - 130*			
Surrogate: Toluene-d8	*23*		*25.0*		*93.1*	*70 - 130*			
Matrix Spike (B2E0007-MS1)		**Source: 1201594-24RE2**		Prepared: 5/1/2012 Analyzed: 5/1/2012					
1,1-Dichloroethene	19	0.50	20.0	ND	93.6	70 - 130			
Benzene	41	0.50	40.0	0.24	103	70 - 130			
Chlorobenzene	21	0.50	20.0	ND	107	70 - 130			
MTBE	320	0.50	20.0	300	65.5	70 - 130			M2
Toluene	43	0.50	40.0	0.29	106	70 - 130			
Trichloroethene	21	0.50	20.0	ND	106	70 - 130			
Surrogate: 1,2-Dichloroethane-d4	*24*		*25.0*		*95.4*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*29*		*25.0*		*116*	*70 - 130*			
Surrogate: Dibromofluoromethane	*26*		*25.0*		*106*	*70 - 130*			
Surrogate: Toluene-d8	*29*		*25.0*		*115*	*70 - 130*			
Matrix Spike Dup (B2E0007-MSD1)		**Source: 1201594-24RE2**		Prepared: 5/1/2012 Analyzed: 5/1/2012					
1,1-Dichloroethene	21	0.50	20.0	ND	104	70 - 130	10.9	20	
Benzene	48	0.50	40.0	0.24	118	70 - 130	13.7	20	
Chlorobenzene	25	0.50	20.0	ND	125	70 - 130	15.4	20	
MTBE	300	0.50	20.0	300	-27.6	70 - 130	6.09	20	M2
Toluene	49	0.50	40.0	0.29	122	70 - 130	14.0	20	
Trichloroethene	24	0.50	20.0	ND	119	70 - 130	11.9	20	
Surrogate: 1,2-Dichloroethane-d4	*23*		*25.0*		*93.2*	*70 - 130*			
Surrogate: 4-Bromofluorobenzene	*29*		*25.0*		*115*	*70 - 130*			
Surrogate: Dibromofluoromethane	*25*		*25.0*		*102*	*70 - 130*			
Surrogate: Toluene-d8	*28*		*25.0*		*114*	*70 - 130*			

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

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 B2E0088 - MSSEMI_ISOTOPEDILN									
Blank (B2E0088-BLK1)					Prepared: 5/2/2012 Analyzed: 5/2/2012				
1,4-Dioxane	ND	2.0			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*80*		*100*		*80.4*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*88*		*100*		*88.2*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*120*		*100*		*122*	*58 - 113*			S1
Surrogate: Nitrobenzene-d5	*91*		*100*		*91.0*	*39 - 95*			
LCS (B2E0088-BS1)					Prepared: 5/2/2012 Analyzed: 5/2/2012				
1,4-Dioxane	97	2.0	100		97.4	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*83*		*100*		*82.7*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*91*		*100*		*91.4*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*100*		*100*		*101*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*89*		*100*		*89.2*	*39 - 95*			
LCS Dup (B2E0088-BSD1)					Prepared: 5/2/2012 Analyzed: 5/2/2012				
1,4-Dioxane	94	2.0	100		94.3	70 - 130	3.18	20	
Surrogate: 1,2-Dichlorobenzene-d4	*82*		*100*		*81.5*	*37 - 93*			
Surrogate: 2-Fluorobiphenyl	*92*		*100*		*91.5*	*51 - 100*			
Surrogate: 4-Terphenyl-d14	*100*		*100*		*101*	*58 - 113*			
Surrogate: Nitrobenzene-d5	*93*		*100*		*92.6*	*39 - 95*			

Hargis & Associates, Inc.	Project Number : RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375	Report To : Steve Netto
San Diego , CA 92122	Reported : 05/18/2012

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 B2E0087 - MSSEMI_ISOTOPEDILN									
Blank (B2E0087-BLK1)					Prepared: 5/2/2012 Analyzed: 5/2/2012				
1,4-Dioxane	ND	0.20			NR				
Surrogate: 1,2-Dichlorobenzene-d4	*0.82*		*1.00*		*82.2*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.77*		*1.00*		*77.2*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.94*		*1.00*		*94.4*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.85*		*1.00*		*84.8*	*36 - 130*			
LCS (B2E0087-BS1)					Prepared: 5/2/2012 Analyzed: 5/2/2012				
1,4-Dioxane	0.95	0.20	1.00		95.1	70 - 130			
Surrogate: 1,2-Dichlorobenzene-d4	*0.80*		*1.00*		*80.1*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.74*		*1.00*		*73.8*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.88*		*1.00*		*88.3*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.87*		*1.00*		*87.1*	*36 - 130*			
LCS Dup (B2E0087-BSD1)					Prepared: 5/2/2012 Analyzed: 5/2/2012				
1,4-Dioxane	0.92	0.20	1.00		91.8	70 - 130	3.55	20	
Surrogate: 1,2-Dichlorobenzene-d4	*0.74*		*1.00*		*74.0*	*36 - 107*			
Surrogate: 2-Fluorobiphenyl	*0.71*		*1.00*		*71.4*	*42 - 120*			
Surrogate: 4-Terphenyl-d14	*0.77*		*1.00*		*76.8*	*67 - 142*			
Surrogate: Nitrobenzene-d5	*0.85*		*1.00*		*85.2*	*36 - 130*			

Hargis & Associates, Inc.		Project Number :	RAYTHEON FULLERTON-MONTHLY,
9171 Towne Centre Drive, Suite 375		Report To :	Steve Netto
San Diego , CA 92122		Reported :	05/18/2012

Notes and Definitions

S8	Surrogate recovery was above laboratory acceptance limit. See CAR for details.
S1	Surrogate recovery was above laboratory acceptance limit. No target analyte was detected in the sample.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

Client: Advanced Technology Laboratories
Job No. 139411

Bromate by EPA 317
Ion Chromatography with Post-Column Derivatization-Visible Absorption

Column: Dionex AS9-HC/AG9-HSC
Eluent: 30 mM Na_2CO_3
Flow: 1.0 mL/min
Injection: 250 µL
Detection: Post-column derivatization, Visible detection, 450 nm

Sample preparation: The undiluted samples were treated with a Dionex OnGuard II H cartridge to remove excess basic cations. One sample required dilution with water due to an interfering peak. The detection limit is adjusted for the dilution necessary for analysis.

Parts Per Billion (µg/L)

Sample ID	Result	Detection Limit
1201610-02 / EW-02	ND	0.5
1201610-04 / POX	8	5
1201610-06 / CEFF	6.3	0.5
Method Blank	ND	0.5

Date Analyzed: 05-15-12

Quality Control Summary

Sample ID: 1201610-06 / CEFF

Analyte	Sample Result	Spike Conc	Spike Result	Spike % Rec	Spike Duplicate Result	Spike Duplicate % Rec	Spike RPD
Bromate	6.3	11.1	17.8	104	17.4	100	2
QC Guidelines				75 - 125		75 - 125	NMT 10

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 1201610

SENDING LABORATORY:	**RECEIVING LABORATORY:**
Advanced Technology Laboratories	Exova Inc.
3275 Walnut Avenue	9240 Santa Fe Springs Road
Signal Hill, CA 90755	Santa Fe Springs, CA 90670
Phone: 562.989.4045	Phone :(562) 948-2225
Fax: 562.989.6348	Fax: (562) 948-5850
Project Manager: Rachelle Arada	PO#: SC07238 - Standard TAT (RA)

IMPORTANT : Please include Work Order # and PO # in your invoice.

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 1201610-02	**/ EW-02**	**Groundwater**	**05/01/12 11:20**	
317.0	05/15/12 17:00	05/02/12 11:20		BROMATE
ATL Lab#: 1201610-04	**/ POX**	**Groundwater**	**05/01/12 10:05**	
317.0	05/15/12 17:00	05/02/12 10:05		
ATL Lab#: 1201610-06	**/ CEFF**	**Groundwater**	**05/01/12 10:35**	
317.0	05/15/12 17:00	05/02/12 10:35		

Released By	5/1/12 Date	Received By	5/2/12 9:17 Date
Released By	5/2/12 1235 Date	Received By	EXOVA 05-02-12 Date

HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM

DATE 5/1/12 PAGE 1 OF 1

PROJECT NAME	RAYTHEON FULLERTON-MONTHLY
PROJECT No./TASK No.	532.15
PROJECT MANAGER	CHRIS ROSS
Phone No.	858-455-6500
QA MANAGER	STEVE NETTO
Fax No.	858-455-6533
SAMPLER (SIGNATURE)	
SAMPLER (PRINTED)	Marlos Rodriguez, Travis Arciaga

LAB ID	SAMPLE ID	SAMPLE COLLECTION Date	SAMPLE COLLECTION Time	MATRIX: Soil	Groundwater	Surface water	Lab H2O	PRESERVATION: HCl	HNO3	NaOH	H2SO4	Ice	SAMPLE CONTAINERS: 40 ml Glass VOA	125 ml Poly	250 ml Poly	500 ml Poly	1 L Amber	ANALYSIS REQUESTED: VOCs by EPA 8260B	1,4-Dioxane by EPA 8270 SIM	Bromate by 317	TDS by SM2540C	TSS by SM2540D	Bromide by 300	1,4-Dioxane by EPA 8270 SIM	ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA'S: 0-10	10-100	100-1,000	>1,000
1201610-01	TB-050112	5/1/12	9:00				X	X				X	2					X							X			
-2	EW-02	"	11:20		X			X				X	3	2	2		1	X		X	X	X	X	X		X		
-3	PF		9:56		X							X			1							X				X		
-4	POX		10:05		X			X				X	3	2	1		1	X	X	X	X		X		X			
-5	CBT		10:27		X			X				X	3					X							X			
-6	CEFF	↓	10:35		X			X				X	3	2	1			X		X	X		X		X			
Total number of Containers per analysis:													14	6	5		2											

SPECIAL HANDLING

LABORATORY INFORMATION

ALT
C/O Rachelle Arada
3276 Walnut Ave.
Signal Hill, CA
90807
562-908-4045

REMARKS

Please include
mrodriguez@hargis.com
in lab report
distribution list
set 1,4-Dioxane
MDL to 1.0 ppm

Total No. of Containers: 27

Relinquished by:	Date 5/1/12	Received by:	Date 5/1/12
Company: H+A	Time 12:15	Company: H+A	Time 12:15
Relinquished by:	Date 5/1/12	Received by: FEDEX	Date 5/1/12
Company: H+A	Time 12:55	Company: ATL	Time 1255

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.

Sample Receipt:

- ☐ No. of containers correct
- ☐ custody seals secure
- ☑ received good condition/cold 4.9
- ☐ conforms to COC document

Shipment Method: DELIVER
Send Results to: Steve Netto

- ☒ 9171 TOWNE CENTRE DRIVE, SUITE 375 SAN DIEGO, CA 92122 (858) 455-6500
- ☐ 1640 SOUTH STAPLEY DRIVE, SUITE 124 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

ORIGINAL: LABORATORY YELLOW: QA MANAGER PINK: FIELD/TASK MANAGER